

Review of BC Transit

**INTERNAL AUDIT
AND ADVISORY SERVICES**



**Ministry of
Finance**

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**Internal Audit & Advisory Services
Ministry of Finance**

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Abbreviations

<i>Act</i>	<i>British Columbia Transit Act</i>
BC	British Columbia
BC Transit	British Columbia Transit
BCTMS	British Columbia Transit Management Services
Board	British Columbia Transit Board of Directors
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CNG	Compressed Natural Gas
CUTA	Canadian Urban Transit Association
EII	Enterprise Investment Initiative
ERP	Enterprise Resource Planning
FTE	Full Time Equivalent
IT	Information Technology
KPIs	Key Performance Indicators
MOTI	Ministry of Transportation and Infrastructure
Province	Government of British Columbia
PSEC	Public Sector Employer's Council

Executive Summary

British Columbia Transit (BC Transit) is a Crown corporation reporting to the Minister of Transportation and Infrastructure. It is the provincial Crown corporation charged with coordinating the delivery of public transportation across British Columbia, with the exception of those areas serviced by TransLink (Metro Vancouver). More than 1.6 million British Columbians in over 130 communities across the province have access to BC Transit local and regional transit services.

BC Transit operates under the *British Columbia Transit Act* which provides it with a mandate to implement, maintain, and operate public transportation systems which support growth, community planning, and economic development. Under the *Act*, transit funding comes from three main sources: provincial government grants, local government grants, and fare and advertising revenues.

As part of the Government of British Columbia's (the Province) commitment to review Crown corporations, Internal Audit & Advisory Services conducted a review of BC Transit to assess whether it is being well managed and adhering to the Province's mandate. Internal Audit & Advisory Services, working with a Deputy Ministers' Committee, evaluated BC Transit's operations, planning and forecasting, and financial performance and other matters that arose during the course of the review.

Throughout the province (excluding Victoria), conventional transit services are operated by third-party transit operators or by the local government itself. In Victoria, BC Transit is the operator of conventional transit for the Victoria Regional Transit System. Custom transit services (handyDART) are provided by transit operators for the entire province.

BC Transit uses a shared service model to support the transit systems, transit operators, and local governments in an effort to provide the most efficient and effective delivery of transit services across the province.

BC Transit has a seven member Board of Directors appointed by the Province responsible for setting the long-term strategic direction and providing overall governance. BC Transit has a Senior Leadership Team composed of six executives and approximately 860 full time equivalent employees.

Management
Information

During the review, the limitations of BC Transit’s management information made it difficult to assess performance. BC Transit has opportunities for cost savings as well as improving effectiveness and efficiency across the business; however, its current systems make the necessary analysis difficult.

Capital Assets

BC Transit manages a fixed asset portfolio of vehicles, facilities, infrastructure, and equipment with a net book value in excess of \$320 million. BC Transit maintains a capital plan and underlying schedules though reporting and analysis is currently a labour intensive process requiring information from a variety of systems.

Lease fees are charged to local governments based on the age of the buses being used. Lease fees increase when a newer bus is deployed. Moving to standardized lease fees would simplify matters for both BC Transit staff as well as provide more certainty to local governments.

BC Transit owns or leases twelve bus facilities across the province and one administration office in Victoria. BC Transit develops a facility master plan when it has determined there is a demand for an expanded or new facility; implementation of these plans is contingent on funding and support from the local governments.

Fleet
Management

BC Transit’s bus fleet consists of 1,107 buses across the province. There are four types of buses, based on size and passenger capacity, made up of 13 models from eight manufacturers. BC Transit advises that it is working towards standardizing buses across its provincial fleet.

To ensure service continuity, each transit system is allocated extra buses (spare) beyond its peak service requirement. While BC Transit tracks kilometres by bus and service hours by system, they do not track service hours or idle and maintenance time for individual buses. As a result, BC Transit was not able to demonstrate whether its number of spare buses was appropriate. Optimizing the number of buses could save in capital costs.

BC Transit is responsible for setting fleet maintenance standards, servicing the Victoria conventional fleet, and ensuring regional transit operators are maintaining buses to BC Transit standards. Each regional transit operator is responsible for ensuring the safe operation and maintenance of all buses used to deliver service. Under its Fleet Inspection Program, BC Transit inspects buses at each location at least annually.

Service Delivery

BC Transit delivers transit services to communities as small as 1,000 people. In 2013, no other communities in Canada with a population of fewer than 10,000 people were served by public transit according to the Canadian Urban Transit Association.

In Victoria, where BC Transit is the operator of the conventional transit system, it has recently signed a new collective agreement the drivers' and mechanics' union. Under the new collective agreement, the standard shift length increased, resulting in a projected annual savings of \$500,000 in overtime pay.

To achieve further savings, BC Transit has two additional opportunities. Victoria Regional Transit System staff continue to be paid Sunday premiums for regular hours worked. Eliminating this would save approximately \$700,000 annually. In addition, BC Transit's collective agreement requires a minimum number of spare drivers with operational requirements historically being less than what the agreement requires. Optimizing the number of spare drivers could save BC Transit approximately \$475,000 annually.

In the rest of the province, BC Transit is responsible for monitoring the performance of regional transit operators and working with them and the local governments to resolve any service delivery issues. In February 2015, BC Transit implemented a program to review the performance of each transit system. BC Transit tracks recommendations made in these reviews and follows up on them.

While BC Transit provides recommendations on routes and fares, local governments retain responsibility for deciding on specific routes, service levels, and fares. BC Transit does not perform post-implementation analysis on changes made as a result of these recommendations to determine whether anticipated benefits have been achieved.

Ridership

Ridership on BC Transit's conventional systems overall is comparable to Canada-wide averages from the Canadian Urban Transit Association. However, 17% of the routes in BC Transit's larger systems average less than ten passengers an hour and two routes did not carry any passengers during the sampling period.

BC Transit's passenger data has limitations and systems with fewer than 20,000 annual service hours are only measured infrequently.

In 2012 BC Transit began developing minimum ridership standards to help identify routes in Victoria and its larger systems that are not meeting expectations. In 2014/15, at least 22% of those routes were operating below the standards. Establishing and enforcing route specific ridership standards could provide opportunities to optimize the routes and increase ridership.

Transit Funding

In 2014/15, BC Transit reported total revenues of \$281 million. Provincial grants accounted for 34% of the revenues of BC Transit with a further 24% of revenues coming from fares and advertising. Local government grants made up 27% of revenues for the year.

There are no minimum population, transit ridership, or cost recovery requirements to receive provincial funding for public transit; the only condition has been that the local government must be able to fund its portion of costs. Local governments have the final word in route selection and fare structure which are key factors in determining ridership and cost recovery.

While BC Transit does generate advertising and commercial venture revenue, they have opportunities to increase these which would reduce the overall costs to taxpayers.

Procurement

BC Transit is reviewing its current procedures with the assistance of the Province's Procurement Services Branch to ensure alignment with the spirit and intent of government policy and trade agreements.

In late 2015, BC Transit entered into a new fuel contract that was tendered using the joint volumes of BC Transit and TransLink and estimates its savings from this new contract to be \$275,000 per year. There are opportunities to include other provincial organizations in this contract resulting in further savings.

BC Transit spends approximately \$13 million per year on parts through a centralized parts procurement and inventory system. BC Transit has opportunities to improve policies and procedures and to more clearly demonstrate value for money.

Financial Management

The regional transit systems including Victoria are responsible for paying the costs of BC Transit's shared corporate functions. BC Transit has opportunities to review and improve the transparency of the amounts charged for shared services.

Compensation

Total compensation paid by BC Transit has grown from \$60 million to \$69 million (14.5%) over the past five fiscal years. The majority of the growth in salaries has been a result of two factors: increased service hours and increased wages under union contracts.

Executive compensation at BC Transit is generally comparable with compensation for executives in similar sized Crown corporations in British Columbia. BC Transit's Chief Executive Officer's compensation plan includes a bonus rather than a holdback, as required by the Public Sector Employer's Council's Crown Corporation Executive Compensation Policy. BC Transit and PSEC are working to bring the contract into compliance.

Information
Technology

The review also identified issues in a number of information technology areas including insufficient policies, the lack of a formal disaster recovery plan, and inadequate user account management practices. BC Transit recognizes these deficiencies and is taking steps to address them.

BC Transit is planning improvements to its information technology environment over the next several years including an upgraded enterprise resource planning system. These planned improvements will enhance the quality and timeliness of management information for better decision making.

* * *

We would like to thank the management and staff of BC Transit as well as the other stakeholders who participated in and contributed to this review, for their cooperation and assistance.



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Introduction

British Columbia Transit (BC Transit) is a Crown corporation reporting to the Minister of Transportation and Infrastructure. It is the provincial Crown corporation responsible for delivering public transportation across British Columbia (BC) with the exception of those areas serviced by TransLink (Metro Vancouver). More than 1.6 million British Columbians in over 130 communities have access to BC Transit local and regional transit services. BC Transit provided over 2.2 million bus service hours to 51 million riders in 2014/15.

BC Transit (then known as the Urban Transit Authority) was created in 1978 under the *Urban Transit Authority Act* to manage the public transit program across the province. In 1999, the Greater Vancouver Transportation Authority (TransLink) was created with responsibility for Greater Vancouver's public transit services. BC Transit's role within the rest of the province was unchanged.

BC Transit operates under the *British Columbia Transit Act (Act)* with the mandate to implement, maintain, and operate public transportation systems which support growth, community planning, and economic development. Under the *Act*, transit funding comes from three main sources: provincial government grants, local government grants, and fare and advertising revenues.

BC Transit has three types of transit services:

- Conventional transit: fixed-route service for use by the general public;
- Custom transit (handyDART): door-to-door services for those with difficulty accessing fixed route services due to disability; and
- Paratransit: a combination of fixed-route and door-to-door services.

There are 78 transit systems across the province responsible for operating and maintaining the buses in their service area through a service provider. BC Transit owns all of the over 1,100 buses used in the province and sets the standards for service delivery. In Victoria, BC Transit is the operator of the conventional transit service. In the rest of the province, services are delivered through an operating agreement either by a third party operator or by the municipality.

BC Transit uses a shared service model to support the transit systems, transit operators, and local governments in an effort to provide the most efficient and effective delivery of transit services across the province. Examples of the shared services provided by BC Transit include Finance, Scheduling, and Procurement.

Purpose and Objectives

The purpose of the review was to examine BC Transit's operations, planning and forecasting, and financial performance.

The review evaluated and, as appropriate, made recommendations relating to the following:

1. BC Transit's operations, including:
 - a) agreements and relationships with its partners and clients;
 - b) procurement, including fuel, operating supplies and capital assets;
 - c) human resources strategies; and
 - d) information technology.
2. BC Transit's planning and forecasting, including:
 - a) reliability of fiscal forecasts to help plan, budget and manage costs; and
 - b) service level planning, including ridership, scheduling and capacity utilization.
3. BC Transit's financial performance, including:
 - a) operating costs, administrative costs, employee compensation and incentive programs;
 - b) cost mitigation strategies, including the identification of potential operating efficiencies;
 - c) revenue generation and profit margins;
 - d) debt and financial management; and
 - e) capital asset management and utilization.
4. Examination of other matters that arose over the course of the review deemed appropriate by the review team.

Approach

Internal Audit & Advisory Services conducted a broad review of BC Transit, working with an Executive Steering Committee. BC Transit's governance structure was the subject of 2012's "Report of the BC Transit Independent Review Panel: Modernizing the Partnership" and, as a result, was out of scope for this review.

The approach included:

- conducting interviews with key management and staff across BC Transit and related stakeholders;
- reviewing and analyzing legislation and policies;
- researching comparable information from other relevant organizations and other jurisdictions;
- reviewing and analyzing financial reports and variance reports; and
- reviewing and analyzing key operations, processes and information technology systems.

A copy of the full report can be found on the Government of British Columbia's website at: <http://www.fin.gov.bc.ca/ias.htm>

Overall Conclusion

As a result of government direction and the overall level of funding, BC Transit is able to deliver transit services to more than 130 communities outside of Metro Vancouver, including 66 communities with a population of fewer than 10,000 people. In 2013, no other communities in Canada with a population of fewer than 10,000 people were served by public transit according to the Canadian Urban Transit Association (CUTA). While this has been good for many communities, BC Transit should now prioritize improving how it manages and delivers these services to ensure that taxpayers are obtaining the best value for their money.

Transit routes and systems vary in their ridership and service levels around the province with some routes having very low ridership. There is an opportunity to increase the efficiency and effectiveness of transit by optimizing routes and scheduling to maximize service across all systems.

Local governments hold the final decision on service delivery areas such as routes, schedules, and fare structures as well as capital spending. These decisions determine the amount of service hours, which in turn drive operating expenses. Local government funding, net of fare and advertising revenues, makes up 27% of BC Transit's revenues.

The current funding and governance structure limits the degree to which BC Transit can drive efficiencies on its own and, in actuality, allows the partner with the smallest contribution the ability to drive most of the costs. The Province could look at its transit policy and direction to confirm the desired structure necessary to support transit in the future.

Management information systems at BC Transit are not able to provide the information needed for timely decision making, if at all. Because of this lack of information, Internal Audit & Advisory Services was unable to determine whether key processes are operating in an efficient, effective and economical manner.

This review has also identified opportunities for strengthening BC Transit's operations including fleet management, information technology, procurement, and commercial venture and advertising revenue generation.

1.0 Board of Directors and Organizational Structure

BC Transit has a seven member British Columbia Transit Board of Directors (Board) appointed by the Province and, as directed by the Act, must be composed of:

- two individuals who are members of the regional transit commission for the greater Victoria metropolitan area;
- two individuals, each of whom is:
 - a mayor of a municipality that has a transit service agreement; or
 - a chair of a regional district that has a transit service agreement; and
- three other individuals.

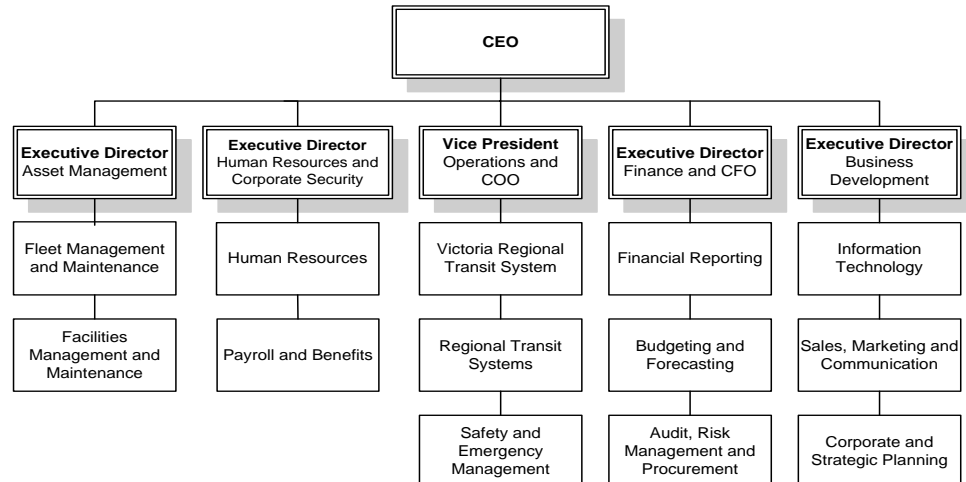
The Board is responsible for setting the long-term strategic direction of BC Transit, approving business plans, approving operating and capital budgets and major capital projects, appointing the Chief Executive Officer (CEO), and monitoring the performance of management.

Corporate budget submissions are approved by the Board and forwarded to the Minister of Transportation and Infrastructure who reviews and presents it to Treasury Board. Once provincial funding is approved, local funding requirements are submitted for the endorsement of the appropriate local government partner.

The Board has one sub-committee, the Audit, Finance, and Risk Management Committee which holds meetings on the same day as the Board meetings. These meetings are scheduled to minimize time and travel costs for Board members. Currently, multiple meeting fees are paid for committee and board meetings held on the same day. This is not in alignment with Treasury Board Directive, which states “only one meeting fee will be paid to any appointee for each 24 hour day in respect of work carried out for a Crown Agency Board”.

Organizational Structure

BC Transit's Senior Leadership Team is composed of six executives as shown in the following organizational chart (with areas of responsibility) and appears appropriate given the size and mandate of BC Transit:



Source: Information from BC Transit

BC Transit has approximately 860 full time equivalent (FTE) employees delivering transit services across the province. Approximately 600 employees are directly involved in operations with the majority responsible for the day-to-day operation of Victoria's conventional bus service. This does not include the employees of regional transit operators.

Recommendation:

- (1) **BC Transit should align the Board of Directors remuneration practices with Treasury Board Directives.**

2.0 Business Planning and Performance Management

Planning

BC Transit has a strategic planning process which incorporates Ministry of Transportation and Infrastructure (MOTI), Board, executive, and divisional input. The process includes a Strategic Plan, a Service Plan as well as internal Corporate Priorities and Divisional Plans.

BC Transit receives its direction through Government's Mandate Letter which lays out the accountabilities that BC Transit then aligns its service and strategic plans and key performance indicators (KPIs) with. The strategic plans of BC Transit also incorporate the transit priorities outlined in MOTI's Ten Year Transportation Plan.

The Corporate Strategic Plan outlines the five major corporate objectives:

- Develop Financial Sustainability
- Support and Shape Livable Communities
- Change the Perception of Transit
- Deliver Operational Excellence
- Strengthen our People and Partnerships

These same objectives are reflected throughout BC Transit's strategic planning. Each piece of the planning aligns short term strategic plans and performance reporting into one of the five corporate objectives.

The strategic planning process has evolved since 2011/12 as BC Transit has sought to improve and streamline strategic planning processes. Though there are defined roles and responsibilities, there are no formal policies or procedures to guide strategic planning.

Performance Measurement

BC Transit has 15 KPIs, aligned with the company's five corporate objectives that are published and tracked in the Annual Report and Service Plan.

KPIs are set within the context of expected available funding, anticipated operating environment, historical results, and changes to processes, and are reviewed and approved at both the corporate and Board level.

For 2014/15, BC Transit revised their KPIs to include seven new or updated measures and met all of its KPI targets. Two financial KPIs (Operating Cost per Passenger Trip and Operating Cost Recovery) have consistently met/exceeded their targets for the past five fiscal years. BC Transit advised that financial targets are set more conservatively as any shortfalls would negatively impact local government finances.

Management
Information

Management information could be improved at BC Transit with several processes (including asset management, parts management, contract management, and multiple finance processes) relying on spreadsheets and manual workarounds. BC Transit has identified that they have difficulty in:

- planning and managing the life cycle activities of assets;
- ensuring that assets are inspected and maintenance activities are conducted; and
- recognizing problem trends.

During the review, the lack of readily available information in these areas made it difficult to assess performance. BC Transit has opportunities for cost savings as well as improving effectiveness and efficiency across the business; however, its current systems make the necessary analysis difficult.

Recommendations:

- (2) **BC Transit should ensure its key performance indicators are the appropriate measures and are sufficiently challenging.**
- (3) **BC Transit should ensure they have the systems and information necessary to effectively manage their operations.**

3.0 Capital Assets

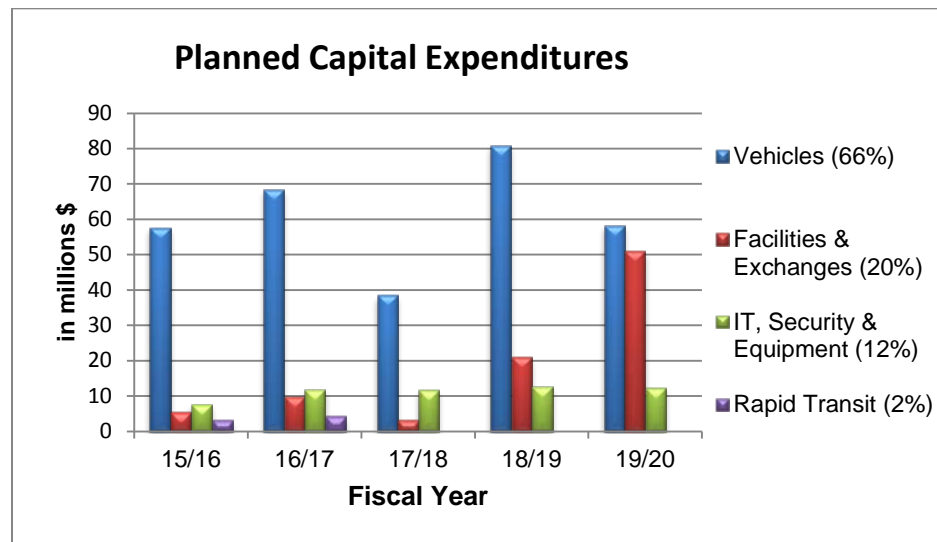
Capital Asset Management

BC Transit manages a fixed asset portfolio of vehicles, facilities, infrastructure, and equipment with a net book value in excess of \$320 million. In the last five fiscal years, capital spending has grown from \$39.2 million in 2010/11 to \$71.8 million in 2014/15. BC Transit annually prepares a ten year capital plan, which includes a three year capital budget approved by the Province and the Board.

Cost sharing for capital costs between the Province and local governments is based on the formula that was set out in the *Act* and accompanying regulation but is now contained in the annual operating agreements between BC Transit and the municipalities.

Over the last five fiscal years, BC Transit has underspent its capital budget by \$258 million (51%). The lower than anticipated expenditures are attributed to project deferrals (66%), project cancelations (19%), and projects completed under budget (15%).

In the next five years, BC Transit has planned capital spending of \$456 million, presented by asset type in the graph below. 72% of the expenditures will be used to maintain the existing transit systems. The remainder is for vehicle and facility expansions.



Source: Data per BC Transit's 2015/16 Capital Plan

BC Transit maintains a capital plan and underlying schedules, though, reporting and analysis is currently a labour intensive process requiring information from a variety of systems. BC Transit is currently implementing a capital asset management system that will address these issues.

BC Transit has documented capital project lifecycle guidelines that it follows and these are aligned with the overall principles and intent of the Province's Capital Asset Management Framework.

BC Transit negotiates project details with local governments during regular transit planning sessions prior to, and during project business case development. The involvement of local governments adds a layer of oversight to BC Transit's capital projects.

Five capital programs from the 2015/16 capital plan were tested and found to be aligned with BC Transit's strategic plan. Capital needs were identified from regulatory requirements, asset replacement, expansion and maintenance strategies, and corporate initiatives.

While capital project needs were clearly identified in the business cases reviewed, alternative options were not well analyzed and served primarily to highlight the preferred option. BC Transit indicated that, due to the long lead times required in obtaining funding from local governments, significant options analysis and conceptual design occurs at the early stages of projects. This analysis of alternatives is not always reflected in the final business case though it should be.

BC Transit takes advantage of available external funding (for example, from the federal government). At the time of the review, all projects tested were completed, or anticipated to be completed at or under budget. This variance was, on average, 15% of the total project budget indicating an opportunity to be more accurate in budgeting. While this approach to budgeting helps to ensure adequate project funding, it places a hold on funds that could have otherwise been allocated to additional capital projects.

When capital projects are in progress, project specific indicators such as key milestone deliverables, timelines and budgets are regularly monitored and reported to BC Transit's Capital Program and Budgeting Committee.

BC Transit does not develop service-level targets in its business cases and benefits realization is not monitored or reported in the years after project completion. BC Transit's ability to monitor benefits realization is hampered due to the age and lack of integration of its systems.

Lease Fees

The local government share of capital costs incurred by BC Transit is recovered through lease fees. For facilities owned by BC Transit, lease fees are based on the capital cost of the facility used by the system.

For buses, BC Transit has two lease fee models depending on the type of vehicle:

- Average Lease Fee Model (Medium Duty, Heavy Duty, and High Capacity Buses), with fees based on a class of buses of the same year and model.
- Single-Asset Lease Fee Model (Light Duty Buses), with fees calculated and applied separately for each bus.

Lease fees can represent an area of significant cost variability as fleets are renewed, especially for local governments with smaller systems. Under the Average Lease Fee Model, BC Transit charges lease fees to local governments based on the age of the buses being used which increase when a newer bus is deployed. In some cases, local governments advise that they have chosen to defer capital projects (fleet expansions, new facilities, or infrastructure projects) due to the forecasted increase in lease fees.

The current method of determining lease fee billings places an administrative burden on BC Transit's staff. If BC Transit adopted a single lease fee for all buses of a single type (e.g., heavy duty) regardless of make or age, the variability of lease fee costs and the administration required could be reduced.

Recommendations:

- (4) BC Transit should improve the accuracy of its project budgets.**
- (5) BC Transit should include expected benefits in business cases and perform post-completion monitoring.**
- (6) BC Transit should work with local governments to standardize lease fees.**

4.0 Facilities

Facilities Management

BC Transit owns or leases twelve bus maintenance and repair facilities across the province and one administration office in Victoria. Transit operators have additional facilities that BC Transit is not responsible for.

BC Transit develops a facility master plan when it has determined there is a demand for an expanded or new facility; implementation of these plans is contingent on funding and support from the local governments. While these facilities are necessary for operating a transit system they can represent a significant increase in transit costs (in the form of lease fees) for local governments, without necessarily resulting in a direct increase in current service hours.

In some cases, BC Transit has undertaken efforts to identify replacement sites and design facilities only to lose the local government support for the project. As a result, the site may become unavailable and the process must begin again.

Currently, seven of the twelve bus facilities leased or owned by BC Transit are at or over capacity with two more approaching capacity. BC Transit has previously developed facilities master plans for these sites but has yet to receive the approval of its funding partners.

Facilities Maintenance

BC Transit is responsible for the maintenance of facilities used by the Victoria conventional system. These facilities are monitored throughout the year by BC Transit staff. For the remaining facilities owned by BC Transit, the regional transit operators are responsible for maintaining the facilities.

In 2013, BC Transit introduced the Facilities Preventative Maintenance Program which was designed to ensure BC Transit-owned facilities are maintained to an acceptable standard. Currently, as a result of staff vacancies, the facilities maintenance plan is no longer being maintained and there are no regularly scheduled facility inspections though BC Transit performs inspections on an ad hoc basis. BC Transit has not tracked the results of previous inspections nor followed-up on outstanding issues.

BC Transit has a four year rolling program for environmental site inspections for all owned or leased facilities to determine if environmental conditions have substantially changed. In addition:

- For the facilities managed by BC Transit, regular, ongoing environmental inspections are conducted.
- Regional transit operators provide quarterly environmental compliance reports for eight of the ten BC Transit-owned regional facilities. BC Transit is looking to expand these inspections to the remaining two operators.

Recommendations:

- (7) **BC Transit should ensure that the Facilities Preventative Maintenance Plan is fully implemented.**
- (8) **BC Transit should ensure that all regional transit operators are performing quarterly environmental site inspections.**

5.0 Fleet

5.1 Fleet Management

BC Transit's fleet consists of 1,107 buses across the province. There are four types of buses based on size and passenger capacity:

Fleet Inventory					
Bus Type	Number of Buses	% of Fleet	Average Age (years)	Passenger Capacity	Comments
High Capacity	69	6%	10.3	102	Double decker buses used on some fixed routes in Victoria and Kelowna transit systems
Heavy Duty	527	48%	11.1	81	Most common type of buses used on fixed routes
Medium Duty	147	13%	13.6	57	
Light Duty	364	33%	3.5	30	Smaller buses used for handyDART services and fixed routes with fewer passengers. Commonly found in smaller systems.
Totals	1,107	100%	8.8		

Source: BCT Fleet Plan at May 2015

The average age of BC Transit's fleet is 8.8 years which is consistent with the average age of public transit fleets across Canada of nine years.

As at May 2015, the active fleet of four types was composed of 13 different models from eight manufacturers. BC Transit stated that while it does not have a formal plan for fleet standardization, as additional buses are purchased they do attempt to standardize bus models. This standardization is expected to lead to efficiencies and decreased costs due to:

- Simplified and reduced parts inventories.
- Simplified work and training for mechanics.
- Reduced driver training time.

When buses are renewed in a specific regional transit system, BC Transit looks for opportunities to continue standardizing bus makes within that system.

Spare Buses

Buses regularly require preventative maintenance so to ensure service continuity, each transit system is allocated extra buses (spare buses) beyond its peak service requirement. These spare buses are used on an everyday basis and are not distinguished from the main fleet. The spare ratio is the percentage of buses in a fleet above the peak service bus requirement.

Spare bus ratios vary depending on the size of system and the age of buses. While there is no widely recognized Canadian standard, the current US DOT standard is 20% for fleets greater than 50 buses.

As of May 2015, the BC Transit spare bus ratio was 24% across the province. This ratio will be higher in small systems (e.g., two-bus systems) requiring at least one spare bus. Within Victoria, the conventional buses and light duty buses had spare ratios of 22% and 62% respectively.

While BC Transit tracks kilometres by bus and service hours by system, they do not track service hours or idle and maintenance time for individual buses. As a result, BC Transit was not able to demonstrate whether the extra buses that make up its spare ratio are necessary.

If BC Transit were able to reduce the spare ratio in Victoria to match the US standard of 20%, it could eliminate four heavy duty and nine light duty buses with a combined replacement cost of \$4 million.

In addition to spare buses that are used as a regular part of the operational fleet, all BC Transit systems also have access to a provincial contingency bus fleet. The contingency fleet (37 buses as of May 2015), consisting of buses nearing the end of their useful lives, is designed to support transit systems experiencing an unexpected shortage of buses due to planned and unplanned events (e.g., a major retrofit or an accident takes a bus out of service for a prolonged period of time). BC Transit is unable to demonstrate whether the size of its contingency fleet is appropriate.

CNG Bus Fleet

To support the Province's Natural Gas Strategy, BC Transit is piloting compressed natural gas (CNG) buses in Nanaimo and Kamloops. The results of the Nanaimo pilot (25 buses) project that each CNG bus will realize \$269,000 in savings versus diesel buses over their 13-year useful life. While there is a higher capital cost for CNG buses, savings will be achieved through lower fuel and maintenance costs. As a result, the Nanaimo system will be moving to a full CNG fleet which is expected to save \$1 million per year. The pilot in Kamloops is still ongoing.

Recommendations:

- (9) BC Transit should develop a Fleet Standardization Plan.**
- (10) BC Transit should monitor and optimize the size of its spare and contingency fleets.**

5.2 Fleet Maintenance

BC Transit is responsible for setting fleet maintenance standards, servicing the Victoria conventional fleet, and ensuring regional transit operators are maintaining buses to BC Transit standards. BC Transit's policies, procedures, and standards for fleet maintenance and inspections comply with Provincial and Federal regulatory requirements and standards.

BC Transit uses qualified trades workers to carry out fleet maintenance and inspections. Turnover among mechanics has declined since 2011, from 24% to 7%. To ensure they have qualified mechanics, BC Transit has worked with the Industry Training Association to provide a BC Transit bus-specific curriculum in BC trade schools and to provide trades apprenticeships at BC Transit.

Annually, BC Transit organizes a three day maintenance workshop for all Victoria mechanics and regional transit operators. The workshop provides training and updates on fleet maintenance and issues, fleet standards planning, and fleet engineering. When BC Transit adds a new vehicle model in its fleet, the fleet inspection team and manufacturer provide training about the new vehicle.

Total fleet maintenance costs have increased 19% over the past five years, from \$31 million to \$37 million. BC Transit advises that costs have increased, in part, as a result of the aging fleet across the province. Maintenance costs per kilometre appear reasonable when compared with other similarly sized Canadian transit systems.

While BC Transit provided some high-level explanations for the variances in maintenance costs across the various systems, it lacks the ability to track the costs of its fleet at a bus or sub-fleet level on an ongoing basis. BC Transit is currently implementing a capital asset management system that will address these issues.

Fleet Inspections

Each regional transit operator is responsible for ensuring the safe operation and maintenance of all buses used to deliver service. All regional transit operators are required to provide monthly certificates indicating they are complying with BC Transit standards. The certification provides assurance to BC Transit that all buses comply with vehicle standards and that all preventive maintenance was completed on time, within standards, by licensed mechanics.

Under its Fleet Inspection Program, BC Transit inspects buses at each location at least annually. The purpose of these inspections is to verify that bus preventative maintenance programs, trip inspections, and commercial vehicle inspections are being carried out as required to ensure the buses are safe and in good condition.

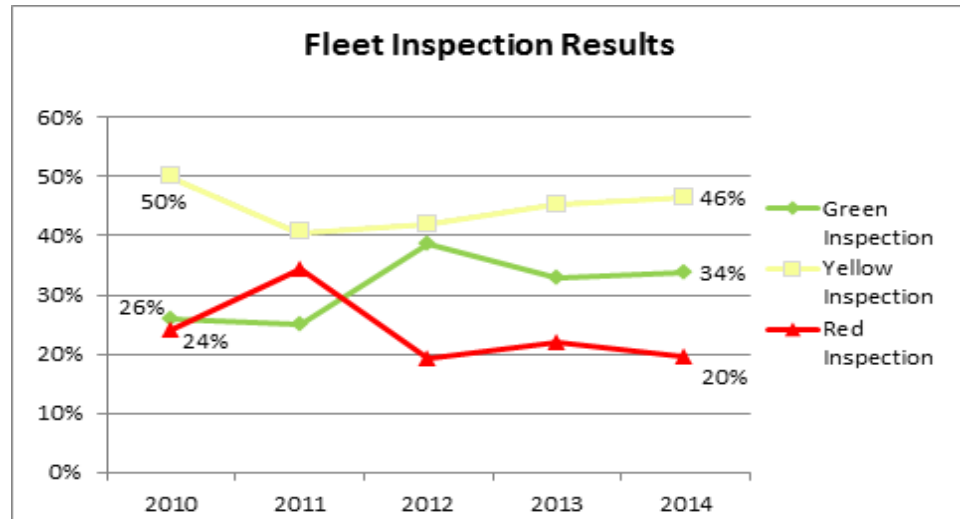
BC Transit summarizes the results of its fleet inspections in reports that are graded as green, yellow, or red as indicated in the chart below.

GRADE	INSPECTION CRITERIA
Green	No safety related issues, meets all regulatory and maintenance program requirements, and reported concerns are minor in nature.
Yellow	Minor defects per regulatory and maintenance program. Reported concerns may require correction to operating practices.
Red	Multiple or repeated safety related physical bus defects per regulatory and maintenance program. Deficiencies could contribute to serious fleet maintenance failures. Reported concerns require immediate correction to operating practices.

Source: BCT Fleet Assets Inspection Procedural Guideline

For systems that are given red inspection reports, BC Transit requires the regional transit operator to develop a plan to fix the identified issues. BC Transit then follows up on the previous inspection report to confirm the transit operating company has resolved the issues. BC Transit will increase monitoring if repeated issues are identified. However, they have no system for determining if there are overall trends by operator, location or bus so that these trends can be addressed.

The following chart summarizes the fleet inspection results for the last five years throughout the province, including Victoria.



Source: BCT Fleet Inspection Report Summary. Information is presented on a calendar basis.

In the Victoria conventional system, BC Transit advises that fleet inspection results are managed through unit meetings and performance evaluations for fleet supervisors. In its most recent operating agreements, BC Transit has included financial penalties for regional transit operators that incur two or more red inspections.

Recommendation:

- (11) BC Transit should implement a comprehensive monitoring and tracking process for fleet inspections.**

6.0 Service Delivery

As a result of government direction and the level of funding, BC Transit has been able to deliver transit services to communities as small as 1,000 people. BC Transit serves:

- 100% of communities over 10,000 people (41 communities);
- 82% of communities between 5,000 and 10,000 people (14 communities);
- 81% of communities between 2,500 and 5,000 people (21 communities); and
- 54% of communities with less than 2,500 people (31 communities).

In contrast, according to the CUTA in 2013, no other communities in Canada with a population of fewer than 10,000 people were served by public transit.¹

BC Transit directly provides conventional transit services in Victoria. For all other communities, and handyDART services in Victoria, service is provided through an operating agreement with a transit operator or, in four communities, with the municipality.

6.1 Victoria Regional Transit System

Transit buses in Victoria are operated by 520 FTE drivers, providing over 900,000 transit service hours per year. Currently, there are two types of unionized drivers:

- Conventional drivers (471 FTEs) that are full time and operate conventional buses.
- Community drivers (49 FTEs) that are part-time and operate light-duty buses.

In September 2015, BC Transit reached a new collective agreement with the union representing drivers and mechanics. This new collective agreement eliminates the distinction between conventional and community drivers effective April 2016.

Under the new collective agreement, the standard shift length moved from 7.5 to 8 hours per day before overtime is incurred.

¹ CUTA relies on self-reporting and numbers provided are not audited.

BC Transit estimates this change will result in a minimum annual savings of \$500,000 due to a decrease in planned overtime to accommodate transit route schedules.

Victoria Regional Transit System staff are paid premiums for all hours worked on Sundays. Employees earn one and a half times their standard rate of pay for their regular hours worked on a Sunday and two times their standard rate for each overtime hour. In the last five years, BC Transit paid approximately \$700,000 annually in Sunday premiums. Nanaimo and Sunshine Coast, two municipally-operated systems, have negotiated the elimination of Sunday premiums with their drivers.

Driver
Scheduling

BC Transit uses software to schedule drivers. This software produces cost-effective shifts after taking into account key data including route length, transit centre locations, the number of drivers available, and collective agreement rules.

Drivers must manually sign up for shifts that have been printed out and posted at transit depots. Drivers are assigned specific sign-up times based on seniority and, if scheduled to work during their sign-up time, must be temporarily replaced by relief drivers. From 2010 to 2014, the average annual cost of wages for relief drivers to accommodate the sign up process was \$70,000.

To reduce service disruption due to driver absenteeism, each transit centre in Victoria has a pool of spare drivers known as the spare board. As required by the collective agreement, the spare board drivers are paid to wait at the bus depot until they are needed to fill in for scheduled drivers on planned and unplanned leave.

BC Transit is limited in its ability to adjust the number of drivers on spare board as the collective agreement sets the minimum number of drivers on spare board at 12% of scheduled drivers.

Prior to April 2013, BC Transit did not formally track spare board data (e.g., the number of planned and unplanned absences and the number of drivers scheduled on the spare board) to understand the spare board driver utilization.

Data from April 2013 onwards shows that a driver spare board percentage of 10% would have been sufficient to meet planned and unplanned absences. The savings from reducing the spare board from 12% to 10% is estimated at approximately \$475,000 annually.

Recommendation:

(12) BC Transit should work with the union to identify and implement efficiencies in future collective agreement negotiations.

6.2 Regional Transit Systems

Outside of Victoria, regional transit systems deliver over 1.3 million annual transit service hours through operating agreements with transit operators.

BC Transit divides all of its regional transit systems into four categories based on the size of the communities served and the type of system:

- Tier 1 systems serve larger communities and generally have annual transit service hours of greater than 60,000. (11 systems).
- Tier 2 systems serve medium and large communities with annual transit service hours of 20,000 to 60,000. (12 systems).
- Tier 3 systems serve smaller communities with annual service hours typically less than 20,000. (52 systems).
- Tier 4 systems are unique stand-alone services (intercity commuting and Whistler). (Three systems).

BC Transit is responsible for monitoring the performance of regional transit operators and working with them and the local governments to resolve any transit issues. BC Transit monitors transit system service delivery through:

- requiring semi-monthly reports on route timeliness submitted by operators;
- reviewing customer complaints, and
- conducting on-site service reviews.

Regional transit operators have numerous reporting obligations under their contracts with BC Transit including reports related to insurance, transit system performance, fleet maintenance, and incidents. Separate business units within BC Transit are responsible for monitoring these reports and notifying BC Transit's regional managers of issues. Aside from its two most recent operating agreements, BC Transit does not proactively track and report on operators adherence to key contract reporting requirements.

With respect to driver safety, regional transit operators are required to periodically check the driving records of all of its transit drivers. Prior to its two most recent contracts, BC Transit did not require verification from regional transit operators that they were fulfilling this responsibility. Moving forward, BC Transit plans to require this verification in all contracts.

Previously, BC Transit did not formally track or follow-up on issues identified in the on-site service reviews. In February 2015, BC Transit implemented a program to review the performance of each regional transit system in areas such as schedule reliability, customer service, transit information, fare box management, vehicle condition, and safe driving. BC Transit now tracks recommendations made in these reviews and follows-up on them.

As of August 2015, six transit systems had passed an on-site service review by BC Transit.

Recommendation:

(13) BC Transit should enhance monitoring processes to ensure regional transit operator contract obligations are met.

6.3 handyDART

Custom transit, more commonly known as handyDART, is a door-to-door service meant for those with difficulty accessing conventional services due to disability. handyDART has a much lower cost-recovery than conventional services because it tends to serve only a few passengers at a time.

Most of BC Transit's handyDART systems experience significant capacity constraints, including a rising number of unmet trips, significant wait times, and increasingly advanced booking times. BC Transit has developed criteria for passenger access to handyDART, but it relies on transit operating companies to apply the criteria when screening applicants.

In February 2014, BC Transit piloted a new process using an impartial third party to assess applicants' eligibility for handyDART to help ensure that only those passengers requiring it are granted access. In summer 2015, the Board elected to expand this process across custom transit systems throughout the province. BC Transit estimates this will result in a \$1.2 million reduction in annual operating costs and a \$10.8 million reduction in capital costs over ten years.

7.0 Transit Planning

BC Transit plans new routes and makes recommendations for optimizing existing routes and fare structures for the majority of its systems throughout BC. While BC Transit recommends route and fare changes (new routes, changes, or cancellations to routes), local governments retain responsibility for deciding on specific routes, service levels, and fares.

BC Transit conducts various types of reviews on transit systems across the province, from envisioning what each community's transit system should look like 25 years into the future, to assessing and planning new routes and service areas, to optimizing existing routes. Fare reviews are also conducted to look at existing fare structures and the implications of potential changes.

As part of its planning reviews, BC Transit conducts research on population trends, transportation patterns and use, and community plans. BC Transit also holds open houses and conducts surveys to understand what residents would like from their transit systems. 93% of the transit systems have had some form of review conducted within the past five years aimed at increasing ridership and changing fare structures.

BC Transit includes ridership and revenue estimates in its new route recommendations. BC Transit does not perform post-implementation analysis on recommendations to determine whether anticipated benefits have been achieved.

There is no policy outlining the frequency at which the various types of reviews should be conducted for any of the transit systems.

Recommendation:

(14) BC Transit should perform post-implementation reviews of transit system changes to ensure that desired outcomes are achieved.

8.0 Ridership

To collect ridership numbers, BC Transit uses automated passenger count units, data from fare boxes and manual counts.

BC Transit estimates system-level ridership information for all of its transit systems. However, it only collects and reports on route-level information for Victoria and Tier 1 and 2 systems. BC Transit does not regularly track the number of passengers on specific routes for Tier 3 systems (less than 20,000 annual transit service hours).

The collection of passenger data has limitations and BC Transit advises that it has prepared a business case to improve the technology it uses to collect ridership information. The business case has yet to be approved.

Ridership on BC Transit's conventional systems is comparable to Canada-wide averages from CUTA, as seen below.

Conventional Transit Service Effectiveness (Ridership per Hour)		
	Pop. 50,000 – 150,000	Pop. <50,000
<10 riders per hour	0	2
10-20 riders per hour	1	9
>20 riders per hour	5	7
BC Transit system-average ridership per hour	25.7	19.6
CUTA average ridership per hour	23.5	20.5

Source: Derived from BCT internal reporting and Canadian Urban Transit Association, Canadian Transit Fact Book 2013 Operating Data, Regional transit systems-14-02E November 2014

Route-Level Ridership

The following chart displays route-level information for Victoria and BC Transit's Tier 1 and Tier 2 systems. As shown, 17% of the routes average less than ten passengers an hour. Two routes did not carry any passengers during the sampling period.

	Number of Routes (Riders per hour)*											
	<10 Riders		10 – 20 Riders		20 - 40 Riders		40 – 60 Riders		60+ Riders		Total Routes	
Victoria	3		6		11		13		12		45	23%
Tier 1	10		33		44		6		0		93	47%
Tier 2	21		27		11		1		0		60	30%
Sub	34	17%	66	33%	66	33%	20	11%	12	6%	198	100%
Tier 3**	-		-		-		-		-		180	
Total	-		-		-		-		-		378	

* Total number of routes represents only routes for which BC Transit provided data and may differ from actual total routes due to system changes.

** BC Transit does not regularly track route-level ridership for Tier 3 systems; it examines this information only during periodic reviews.

Source: BCT 2014 and 2015 route-level reports

The minimum number of passengers to be expected on individual routes depends on the size of the community and the purpose of the route. In 2012 BC Transit began developing minimum standards to help identify routes in Victoria and its Tier 1 and 2 systems that are not meeting expectations, based on:

- the average number of passengers per hour; and
- the average number of passengers per trip.

BC Transit is developing these standards in conjunction with the local government and has completed five of the twelve systems, with four under development.

Data from 2014 and 2015 shows that ridership for at least 22%² of routes, falls below both of the standards³. BC Transit has used this information to identify low-performing routes and recommend options for improvement. The authority to cancel or change routes remains the responsibility of local governments.

² The 22% includes systems with completed and draft standards

³ Route-level data was not available for certain routes in Victoria, Tier 1, and Tier 2 systems

By requiring minimum ridership at the route or system level, public transit funding could be more effectively allocated to increase ridership and fare revenue where higher demand exists.

Recommendations:

- (15) BC Transit should ensure they have sufficient and accurate ridership data to enable effective decision making.**
- (16) BC Transit should work with its funding partners to establish and enforce ridership standards.**

9.0 Transit Funding

Funding Formula

In 2014/15, BC Transit reported total revenues of \$281 million. Provincial grants, local government grants, and revenues from operations account for the three largest sources of funding.

Revenues from operations (fares and advertising revenues) are considered part of local government funding. The *Act* permits local governments to fund amounts not covered by operating revenues through property taxes. Historically, the funding formula was defined in the *Act*. An October, 2015 Order in Council removed the details of the funding formula from the *Act*. The funding formula is now contained in the operating agreements with the municipalities and is unchanged from the formula previously contained in the *Act* as shown in the following table.

System Type	Operating Funding		Capital Funding	
	Provincial	LG*	Provincial	LG
Victoria Regional Transit System				
Conventional transit	31.70%	68.30%	31.70%	68.30%
Custom transit	63.00%	37.00%	63.00%	37.00%
Regional Transit Systems				
Conventional transit	46.69%	53.31%	46.69%	53.31%
Custom transit	66.69%	33.31%	66.69%	33.31%

* Local governments.

Source: Derived from *The British Columbia Transit Act* prior to the October, 2015 Order in Council.

Victoria is responsible for contributing a greater amount of funding than other local government partners as it collects a 3.5 cents per litre fuel tax.

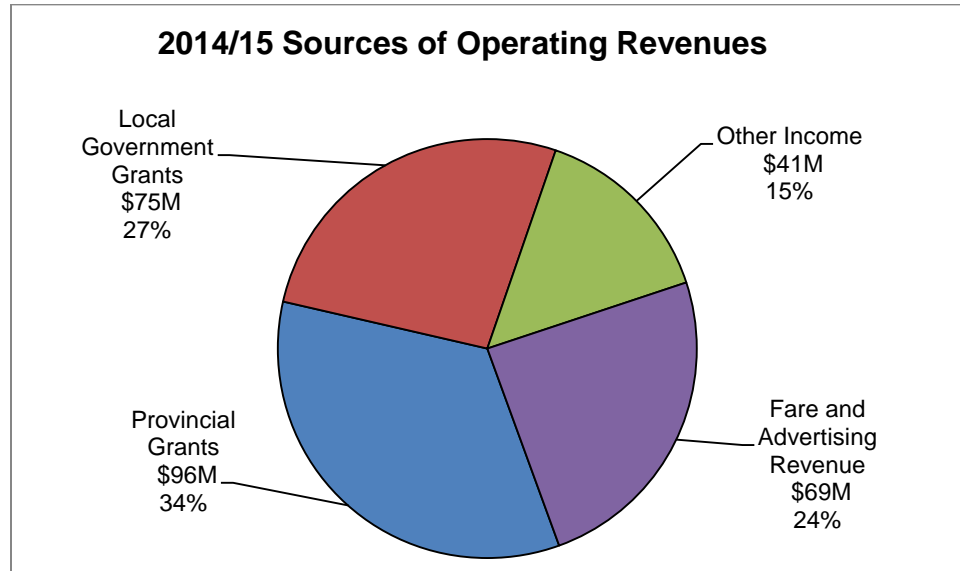
While all local governments have the option of using fuel taxes to fund public transit, they must receive approval from the Minister of Transportation and Infrastructure to do so. For systems under BC Transit (i.e., excluding Metro Vancouver), the Victoria Regional Transit System is the only transit system currently permitted to charge a transit fuel tax.

Local governments have the authority to set transit fare prices in their own communities. As a result, transit fare prices vary throughout the province.

In 2015, MOTI announced that the current level of provincial funding would be frozen for three years and, as a result, any service expansions would have to come from efficiencies in the current operations.

Funding Sources

In fiscal 2014/15, the provincial grants accounted for 34% of BC Transit's revenues with a further 24% coming from fare and advertising revenues. Local government grants made up 27% of revenues for the year.



Source: Data per BC Transit's 2014/15 Annual Report

While the *Act* specifies funding of greater than 50% by local governments for conventional transit which is the majority of transit costs, in 2014/15, local government grants amounted to only 27% of the total funding due to the impacts of fare and advertising revenues (which reduce the required local government contribution).

Local governments have the final word in route selection and fare structure which are key factors in determining ridership. Each local government makes these decisions based on the level of funding they are willing to provide.

There are opportunities to increase ridership and cost recoveries throughout the province without increasing the overall level of funding by optimizing routes. To take advantage of these opportunities, the Province would need to review its transit policy and consider community based ridership standards.

Cost Recovery

Cost recovery is the percentage of transit system costs that are recovered through transit operating revenues. Cost recoveries for BC Transit's larger systems are reasonable compared with CUTA averages. BC Transit's recoveries for smaller systems are lower than CUTA averages which results from BC Transit serving smaller communities than other systems in Canada. The distribution of cost recovery percentages for BC Transit's conventional systems is shown in the following table:

Cost Recovery*	Transit Systems with Population 50,000 – 150,000	Transit Systems with Population <50,000
	<10%	0
10-20%	0	5
20-30%	1	8
>30%	5	3
BC Transit average cost recovery	33%	25%
CUTA average cost recovery	36%	33%

*Note that cost recovery also includes advertising revenues

Source: Derived from BCT internal reporting and Canadian Urban Transit Association, Canadian Transit Fact Book 2013 Operating Data, RTS-14-02E November 2014

There are no minimum population, transit ridership, or cost recovery requirements to receive provincial funding for public transit; the only condition has been that the local government must be able to fund its portion of costs.

Commercial Ventures

Subject to the Minister's approval, the *Act* allows BC Transit to enter into commercial ventures to raise revenue. Because the *Act* does not define commercial ventures, MOTI and BC Transit developed the Commercial Venture Guidelines with a key provision that BC Transit ventures would not compete with the private sector. The revenue from commercial ventures is shared between the Province and the regional transit system based on the funding formula in the *Act*.

As of 2015, there are two approved commercial ventures: the Whistler facility bus wash station and the Greater Victoria Harbour Authority transportation services. Together these generate approximately \$296,000 in annual revenue. BC Transit does not monitor or report on whether the benefits projected in the business cases for these projects are being met.

Apart from these ventures, BC Transit does not have a process in place for proactively identifying, initiating, and proposing commercial ventures. Opportunities are identified and pursued on an ad hoc basis.

Advertising

BC Transit licenses the right to sell advertising space on buses. The resulting revenues are split between the licensee and the transit systems according to the percentages specified in the contract. BC Transit has put restrictions on bus advertising which limits the total advertising revenue available.

For each of the last five years, the advertising licensee has paid BC Transit the guaranteed minimum amount payable under the contract for Victoria, as actual revenues have been less than the minimum. Other regional transit systems have received the guaranteed minimum in three of the last five years.

Under BC Transit Commercial Venture Guidelines, advertising could meet the definition of a commercial venture but is currently included with fare revenues which reduces the local government grant required. If advertising revenue were to be treated as a commercial venture, approximately \$960,000 would be shared between the funding partners.

Recommendations:

- (17) The Province should review and confirm its transit policy including the operating and capital funding structure.**
- (18) BC Transit should work with its partners to maximize non-fare revenue.**

10.0 Procurement

Procurement in BC Transit is divided into two areas: general procurement and supply services. General procurement covers purchases and contracts for all areas of the business including capital assets, regional transit operators, and information technology (IT). Supply services covers fuel, parts, and materials.

The procurement team has 29 FTEs, with three FTEs assisting business areas with general procurement, and 26 FTEs dedicated to supply services. Over the last five years, total payments made to vendors have increased by 19%, from \$190 million to \$225 million.

General Procurement

The procurement team assists business units in preparing solicitation documents, negotiating contracts and drafting agreements, with business units typically responsible for all other contract management processes.

BC Transit is reviewing its procedures with the assistance of the Province's Procurement Services Branch to ensure they align with the spirit and intent of government policy and trade agreements. Currently, BC Transit's procurement policies and procedures are not comprehensive and do not include areas such as pre-award planning, contract management, or vendor performance measurement.

The review noted BC Transit's direct award process was not in alignment with the spirit and intent of the Province's procurement policy. In addition, many procurement files had inadequate documentation supporting the decision to direct award.

Fuel Procurement

Over the last five years, BC Transit has spent approximately \$28 million per year on fuel, representing 13% of its total operating costs.

BC Transit has used a combination of bulk and forward-buy fixed price contracts to procure the majority of its diesel fuel. Forward-buy fixed price contracts are used to mitigate its exposure to price fluctuations in purchasing fuel. Under the *Financial Administration Act*, BC Transit cannot use commodity derivatives such as swaps or options to further offset the price volatility.

These fuel procurement strategies have resulted in significant savings compared to the pump price over the past five years.

In 2015, BC Transit and TransLink requested proposals from fuel suppliers using their combined fuel volumes. The new contract was entered into in late 2015 and BC Transit estimates its additional savings from this new contract to be \$275,000 per year.

This contract also allows other government entities, including school districts, to be added to it and receive the same discounts as BC Transit with potential additional savings for the Province in excess of \$300,000.

Parts
Procurement

Over the last five years, BC Transit has spent approximately \$13 million per year on parts. BC Transit does not have policies and procedures for the procurement of parts and its current practices do not fully demonstrate value for money, as the majority of the procurements sampled were not well supported or documented.

BC Transit operates a centralized parts procurement and inventory system to serve the whole province. Regional transit operators can order parts from BC Transit or directly from a supplier, with the invoice being sent to BC Transit.

BC Transit's inventory management system only covers parts stored in its centralized warehouses. Once BC Transit ships parts to the regional transit operator, they are removed from inventory, regardless of whether the part is used immediately or held by the regional transit operator to address their ongoing maintenance needs. Improved inventory management would allow BC Transit to better manage parts and ensure adequate physical and cost controls.

BC Transit advised that savings might be possible by consolidating the purchase of parts on behalf of regional transit operators but have yet to explore this further.

As an example of the potential savings, in 2011, eight small transit operations in Ontario combined their purchasing of parts (\$23 million) and reduced the number of suppliers used. This resulted in savings of 12% for parts along with reduced administration costs. It is difficult to assess the potential savings for BC Transit given its data limitations.

Recommendations:

- (19) BC Transit should develop comprehensive procurement policies and procedures that align with government direction.**
- (20) The Province should work with BC Transit and provincial public sector organizations to look for opportunities to maximize fuel procurement savings.**
- (21) BC Transit should enhance its parts procurement and inventory management process to maximize value for money.**

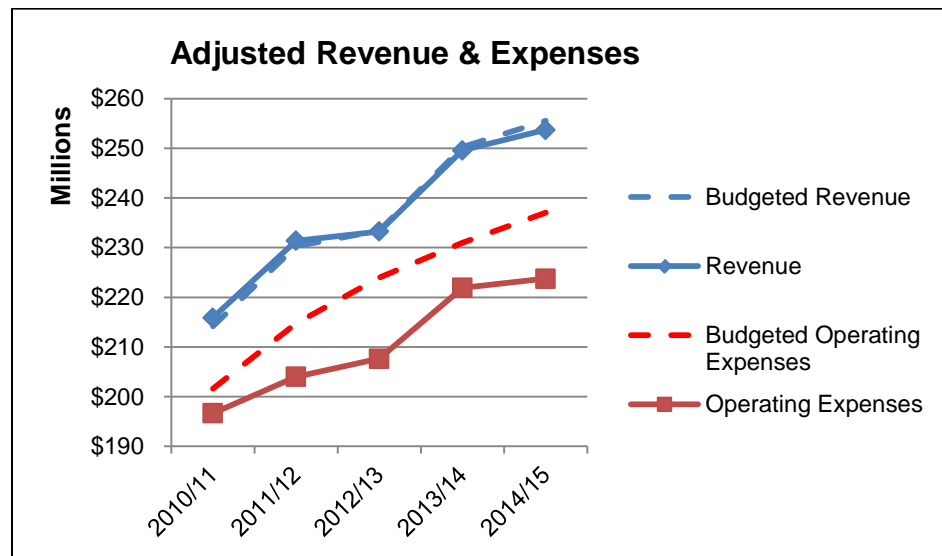
11.0 Financial Management

Budgeting

Total revenues and expenses for BC Transit have been consistently below budget in the last five years. Fluctuations in actual revenues and expenses in the past two years were primarily attributed to the actual timing of capital projects being different from the budgeted timing and their related revenues and expenses.

BC Transit's operating expenses are consistently below budget as budgets are set to reduce the risk of cost overruns. This is because expenses over budget would be proportionately charged to local governments.

The following chart eliminates the effects of capital-related income and expense items from operational results.



Source: Data per BC Transit's 2010/11 to 2014/15 Annual Report

BC Transit Management Services

Victoria and other regional transit systems are responsible for paying the costs of BC Transit's shared corporate functions. These shared service costs are capped at 8% of total direct operating costs for each regional transit system (other than Victoria) though, historically, the fee charged has been less.

Direct operating costs are not defined in the *Act*. Currently, these costs exclude items that could be considered direct operating costs such as: property, vehicle, and land lease costs; equipment and materials; marketing; property maintenance; property taxes; and education and training. Including these costs would increase the total amount BC Transit could charge to local governments for shared service costs.

In practice, shared service costs are allocated to the regional transit system according to estimated utilization rates for each shared service. As part of its monthly billing to local governments, BC Transit charges a fee to recover the costs of the shared services it provides. Collectively, these charges are known as BC Transit Management Services (BCTMS) and include:

- Planning and Operations
- Scheduling
- Finance
- Human Resources, Safety, Training, and Security
- Marketing and Media Relations
- Governance
- Information Technology
- Fleet and Facility Services
- Environment
- Procurement
- Capital Program Management

Between 2007/08 and 2011/12, shared services fees charged to local governments grew by 87%. For the 2011/12 fiscal year, BC Transit voluntarily committed to limit the annual growth of these fees at or below inflation for the upcoming fiscal year providing local governments with cost certainty and predictability. BC Transit's current practice is to limit shared service cost growth to 3% annually. By honouring the 3% limit in 2014/15, BC Transit did not charge \$400,000 in BCTMS fees that were incurred. This unnecessarily limits the ability of BC Transit to improve its shared corporate functions.

As a result of this allocation of BCTMS costs and the inflation cap, in 2014/15 the aggregate amount charged to local governments was 7.1% of direct operating costs. Local governments were not charged an additional \$1 million they could have been had the allowed 8% been charged.

BCTMS costs were the subject of a 2011 review conducted by KPMG. That review included recommendations to:

- *formally document the process as a BC Transit policy or procedure;*
- *document the underlying values guiding the process; and*
- *document a process for the ongoing maintenance of the policy or procedure.*

To date, none of these recommendations have been completed.

Debt and
Investment
Management

BC Transit's borrowing, investing, banking, and cash management activities are governed by BC Transit's internal Treasury Management Committee.

BC Transit participates in provincial issues rather than issuing debt in its own name with a debenture between BC Transit and the Province being issued for each borrowing. Because the debt is issued by the Province, BC Transit is able to borrow at a more favourable rate than would otherwise be available.

Total debt outstanding for BC Transit at the end of 2014/15 was \$212 million offset by sinking fund balances of \$101 million. Sinking funds are investments used to retire debt at maturity.

BC Transit bears the risk and/or reward of any sinking fund shortfalls or surpluses realized on the maturity of the related long-term debt. Recently, the Treasury Management Committee has not convened to review the returns on sinking funds. While returns have historically been sufficient to retire outstanding debt, the new Chief Financial Officer (CFO) advises he will be reinstating Treasury Management Committee reviews.

Internal Audit

In May 2014, BC Transit hired a Director of Corporate Audit and Risk Management to establish the Internal Audit function. Within six months, this position also assumed responsibility for the Procurement and Supply Services functions.

The Board has acknowledged these added responsibilities threaten not only the independence and objectivity of the Internal Audit function but also the ability to conduct audits and is taking steps to address this area.

Recommendations:

- (22) BC Transit should ensure that the basis for allocating British Columbia Transit Management Service continues to be equitable and document the process as recommended in the 2011 KPMG report.**
- (23) BC Transit should ensure the Treasury Management Committee fulfills its obligations for debt and sinking fund management.**
- (24) BC Transit should ensure the internal audit function has the independence, objectivity and capacity needed to appropriately fulfill its role.**

12.0 Staffing and Compensation

Staffing

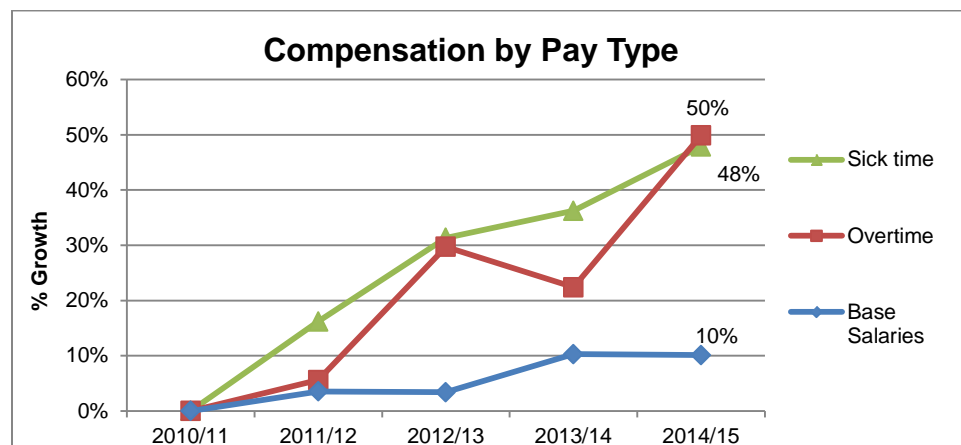
BC Transit has 743 union employees and 115 exempt employees. There are three unions at BC Transit: COPE Local 378, UNIFOR Local 333, and CUPE Local 4500.

- a) COPE employees at BC Transit perform various office-related functions. COPE job titles include (but are not limited to): Operations Services Clerk, Occupational Safety and Training Officer, Business Analyst, and Customer Relations Agent.
- b) UNIFOR employees at BC Transit work as transit drivers and mechanics in Victoria.
- c) CUPE employees at BC Transit are employed as Transit Supervisors and Communication Coordinators.

Compensation

Total compensation paid by BC Transit has grown from \$60 million to \$69 million (14.5%) over the past five fiscal years. The majority of the growth in salaries has been a result of two factors: an increase in service hours and an increase in wages under union contracts.

During the period from 2010/11 to 2014/15, overtime grew from \$2.2 million to \$3.3 million (50% growth) and total sick time grew from \$1.37 million to \$2.03 million (an increase of 48%) as can be seen in the graph below.

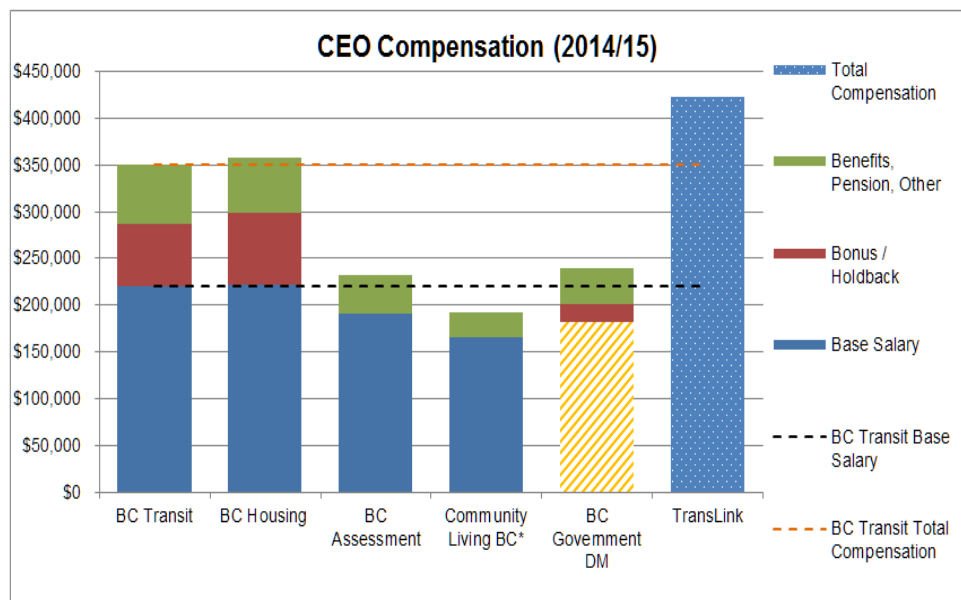


Source: Data from BC Transit

BC Transit has stated that the increase in overtime is a conscious decision to reduce FTEs in Operations and result in an overall savings without impacting service levels.

The increase in sick pay is primarily attributable to increased sick time by members of UNIFOR (who represent BC Transit's largest group of employees). Under their collective agreement, UNIFOR members are entitled to six days of sick leave per year and then 96% of pay for absences longer than three consecutive days up to 17 weeks. In 2014/15, UNIFOR members averaged 15.4 sick days taken, up from 11.4 in 2010/11. BC Transit advises it has plans to reduce absenteeism including proactively managing individuals with the highest levels of absenteeism.

Total Chief Executive Officer (CEO) compensation at BC Transit is generally comparable with compensation for chief executives in similar sized Crown corporations in BC.

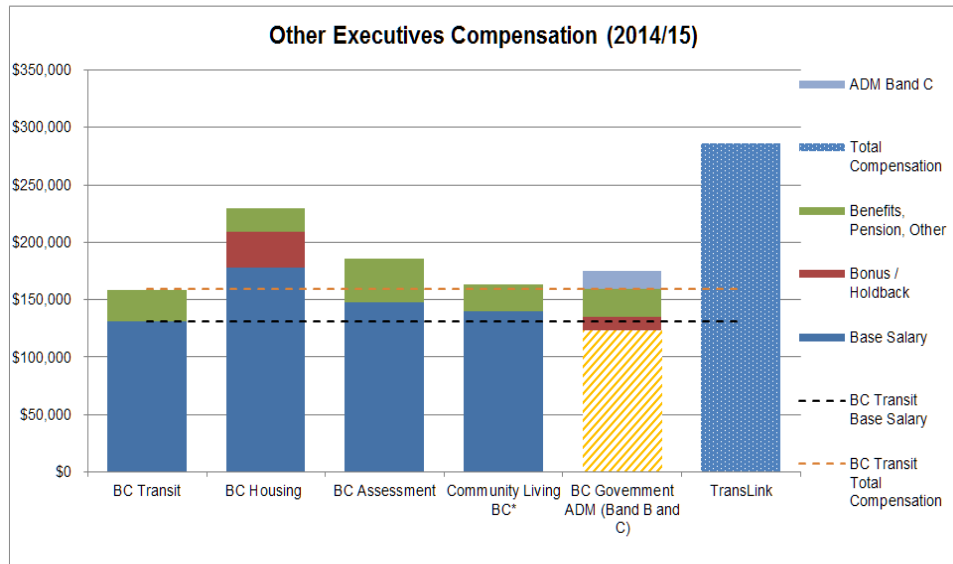


* CLBC's CEO compensation is for 2013/14. A new CEO was hired in 2014/15 and only received partial salary.

Source: Data from BC Transit and PSEC

BC Transit complies with Public Sector Employer's Council's (PSEC) guidelines with the exception of the CEO's compensation plan which includes a bonus rather than a holdback, as required by PSEC's Crown Corporation Executive Compensation Policy. BC Transit and PSEC are working to bring the contract into compliance.

Compensation for other executives (excluding the CFO) at BC Transit is generally comparable with compensation for similar executives in comparably sized Crown corporations in BC.



* These figures do not include the CFO for BC Transit as this position was vacant in 2014/15.

Source: Data from BC Transit and PSEC

Recommendations:

- (25) **BC Transit should ensure that plans to manage absenteeism are implemented and effective in reducing the level of absenteeism.**
- (26) **BC Transit should align the Chief Executive Officer compensation plan practices with the Province's direction.**

13.0 Information Technology and Management Information

Information Technology

The Information Services & Technology Department provides IT services at BC Transit. Currently, the department operates with 12 full-time equivalent staff and four contractors.

BC Transit has recently undertaken a number of initiatives to improve IT services, including establishing an IT Steering Committee to support IT governance. Also, BC Transit recently centralized its IT services, created an IT service desk to establish one point of contact for delivering and monitoring all IT services, and implemented change management procedures.

The review identified areas for further improvement including enhancing IT policies and user account management practices, and developing a formal disaster recovery plan.

BC Transit acknowledges the work that still needs to be completed and currently has two key initiatives underway to enhance its IT environment:

- the IT Betterment Initiative (\$2.2 million capital only) to standardize desktop applications and enhance IT service, disaster recovery, and IT security management (to be completed in June 2017); and
- the Enterprise Investment Initiative (EII), developed in 2012 (\$6.7 million capital and \$1.8 million operating for Phase 1), that includes an upgraded Enterprise Resource Planning (ERP) system (to be completed November 2017).

BC Transit could further enhance its IT environment through:

- an annual review of the IT strategic plan, the EII, to ensure it is still current and incorporates new priorities; and
- the development of a data classification system for information managed by BC Transit.

Management Information

BC Transit's current accounting system has not been upgraded since 2003, does not currently meet the needs of the business and the version in use is no longer supported by the manufacturer.

As part of the EII, in 2014/15, BC Transit began a multi-year, multi-phase program to upgrade its accounting system to the current release and enhance its functionality. The first phase of the program is planned to be completed in November 2017 with a capital cost of \$6.7 million. It is anticipated to provide BC Transit with the foundations for an integrated ERP system to meet its reporting and analytical needs.

Phase 1 will deal with the capital asset management limitations listed above. Phases 2 through 6 will address other management information deficiencies as follows:

- Phase 2: Human Capital Management/Payroll will integrate operator scheduling with payroll (currently a manual process) and add items such as performance management, employee self-service, e-recruitment, and learning management.
- Phase 3: Content Management will centralize document storage for regional operations and procurement contracts.
- Phase 4: Operations will improve dispatch, timekeeping, and operator sign-up processes.
- Phase 5: Financial modelling will replace Excel for capital planning and other reporting, and provide what-if capability.
- Phase 6: KPIs will provide enhanced reporting and accountability.

In the business case for the new ERP system, BC Transit outlined the key risks associated with the project and associated management strategies. Given the importance of this project, BC Transit will have to appropriately manage the project risks to ensure the system delivers its expected benefits.

Recommendations:

- (27) BC Transit should perform an annual review of its IT Strategic Plan to ensure it remains current.**
- (28) BC Transit should continue to enhance its information technology environment, including the areas of strategy, security, data management, and disaster recovery, and ensure it meets government information technology standards.**

Appendix 1 – Summary of Recommendations

1	BC Transit should align the Board of Directors remuneration practices with Treasury Board Directives.
2	BC Transit should ensure its key performance indicators are the appropriate measures and are sufficiently challenging.
3	BC Transit should ensure they have the systems and information necessary to effectively manage their operations.
4	BC Transit should improve the accuracy of its project budgets.
5	BC Transit should include expected benefits in business cases and perform post-completion monitoring.
6	BC Transit should work with local governments to standardize lease fees.
7	BC Transit should ensure that the Facilities Preventative Maintenance Plan is fully implemented.
8	BC Transit should ensure that all regional transit operators are performing quarterly environmental site inspections.
9	BC Transit should develop a Fleet Standardization Plan.
10	BC Transit should monitor and optimize the size of its spare and contingency fleets.
11	BC Transit should implement a comprehensive monitoring and tracking process for fleet inspections.
12	BC Transit should work with the union to identify and implement efficiencies in future collective agreement negotiations.
13	BC Transit should enhance monitoring processes to ensure regional transit operator contract obligations are met.
14	BC Transit should perform post-implementation reviews of transit system changes to ensure that desired outcomes are achieved.
15	BC Transit should ensure they have sufficient and accurate ridership data to enable effective decision making.
16	BC Transit should work with its funding partners to establish and enforce ridership standards.

Appendix 1 – Summary of Recommendations (continued)

17	The Province should review and confirm its transit policy including the operating and capital funding structure.
18	BC Transit should work with its partners to maximize non-fare revenue.
19	BC Transit should develop comprehensive procurement policies and procedures that align with government direction.
20	The Province should work with BC Transit and provincial public sector organizations to look for opportunities to maximize fuel procurement savings.
21	BC Transit should enhance its parts procurement and inventory management process to maximize value for money.
22	BC Transit should ensure that the basis for allocating British Columbia Transit Management Service continues to be equitable and document the process as recommended in the 2011 KPMG report.
23	BC Transit should ensure the Treasury Management Committee fulfills its obligations for debt and sinking fund management.
24	BC Transit should ensure the internal audit function has the independence, objectivity and capacity needed to appropriately fulfill its role.
25	BC Transit should ensure that plans to manage absenteeism are implemented and effective in reducing the level of absenteeism.
26	BC Transit should align the Chief Executive Officer compensation plan practices with the Province's direction.
27	BC Transit should perform an annual review of its IT Strategic Plan to ensure it remains current.
28	BC Transit should continue to enhance its information technology environment, including the areas of strategy, security, data management, and disaster recovery, and ensure it meets government information technology standards.