British Columbia Ferry Services Inc.

Performance Term Two
Submission to the
British Columbia Ferries Commissioner

September 30, 2006





Table of Contents

Table of Contents

INTRODUCTION	1
PART I	6
CORE INFORMATION	6
SECTION 1: CORE FERRY SERVICES	
DESCRIPTION OF CORE SERVICE LEVELS	
FIRST TWO YEARS OF PERFORMANCE TERM ONE	
FISCAL YEAR 2005/06	
FISCAL YEAR 2006/07	
FISCAL YEAR 2007/08	
Conclusion	17
SECTION 2: TARIFFS FOR CORE FERRY SERVICES	18
Tariff Structure	18
PRICE CAP SETTING	
TARIFFS CHARGED IN PERFORMANCE TERM ONE	
EXTRAORDINARY PRICE CAP INCREASES	
Conclusion	25
SECTION 3: SERVICE FEES FROM GOVERNMENT	30
Service Fees for Designated Ferry Routes	30
Service Fees for Unregulated Ferry Routes	33
Conclusion	33
SECTION 4: REVENUES FROM ALL SOURCES	34
Tariff Revenues	35
Ancillary Revenues	38
CANADA / BRITISH COLUMBIA COASTAL FERRY SUBSIDY AGREEMENT	
ALLOCATION OF REVENUES	
Conclusion	42
SECTION 5: EXPENSES	43
OVERVIEW OF EXPENSES	43
ALLOCATION OF EXPENSES	48
CONCLUSION	50
SECTION 6: ALTERNATIVE SERVICE PROVIDERS	51
IMPLEMENTATION OF THE ASP PLAN	51
Unsolicited Proposals	
Procurement Model Changes	
CONCLUSION	54



Table of Contents

PART II	55
OTHER INFORMATION	55
SECTION 7: CAPITAL EXPENDITURES	56
OVERVIEW OF CAPITAL PROJECTS	58 72
CONCLUSIONSECTION 8: DEMAND FORECAST	
METHODOLOGYPERFORMANCE TERM TWO ADJUSTMENTS	
SECTION 9: TOTAL FACTOR PRODUCTIVITY	
SECTION 10: RETURN ON EQUITY	83
APPENDICES	86
APPENDIX A - SERVICE LEVEL REDUCTIONS	87
APPENDIX B -ROUTE STATEMENTS	91
CORPORATE TOTAL ROUTE STATEMENT	
ROUTE GROUP STATEMENTS	
APPENDIX C - FUEL PRICE FORECAST	125
Purvin & Gertz Inc. Crude Oil and Product Forecast	126
APPENDIX D - CAPITAL PLAN	127
APPENDIX E - TRAFFIC STATISTICS	131
APPENDIX F- INTERVISTAS REPORT	134
SETTING THE PRICE CAR FOR PERFORMANCE TERM TWO	135

Forward Looking Statements of this Submission

This submission contains historical information and also contains certain forward-looking statements which relate to future events or future performance. These forward-looking statements are based upon management's current expectation and assumptions as to a number of factors, including, the risks, uncertainties and other factors as described in BC Ferries' Management's Discussion and Analysis for the fiscal year ended March 31, 2006 and certain of the other BC Ferries' documents available at www.sedar.com. These forward-looking statements are made as of the date of this submission and are based upon information currently available to management, and BC Ferries assumes no obligation to update or revise them to reflect new events or circumstances. If management's expectations and assumptions prove to be incorrect, or factors change, then actual results could differ materially from the forward-looking information contained in this submission.



Introduction

British Columbia Ferry Services Inc. ("BC Ferries" or the "Company") is pleased to submit this report in accordance with the requirements of section 40 of the *Coastal Ferry Act* (the "Act"). Its purpose is to provide information to assist the British Columbia Ferries Commissioner (the "Commissioner") in establishing price caps for each of the route groups, as identified in the Coastal Ferry Services Contract (the "CFSC" or the "Contract") between BC Ferries and the Province of British Columbia as represented by the Ministry of Transportation, for performance term two (April 1, 2008 – March 31, 2012).

This report responds to the specific information requirements identified in the Act. It contains information on the ferry services BC Ferries has provided and expects to provide in performance term one (April 1, 2003 – March 31, 2008) in relation to each designated ferry route within a route group for which a price cap is to be set by the Commissioner for performance term two.

Included in this report is information on the tariffs charged, service fees paid by the provincial government as well as revenues earned and expenses incurred by BC Ferries in performance term one. In addition, information is provided on the activities BC Ferries has undertaken and expects to undertake in the current performance term with respect to meeting the requirements under section 69 of the Act to investigate opportunities for the provision of services on the designated routes by additional or alternative service providers.

This report also provides information with respect to BC Ferries' second performance term pertaining to the period April 1, 2008 through March 31, 2012. Although BC Ferries is not providing recommendations as to an appropriate price cap for each route group in this report, it is providing information which it believes will assist the Commissioner in making such a determination.

Included in this report is forecast information with respect to BC Ferries' operating expenses, capital costs and traffic, return on equity and the productivity growth BC Ferries has achieved during performance term one and reasonably expects to achieve through performance term two.

It needs to be noted that the forecast information for performance term two assumes no change in core service levels or service fees from the Province from the levels set in the CFSC as amended at this time.

September 30, 2006 1 of 169



Section 41(2) of the Act requires that the Commissioner ensure that the price caps for performance term two are sufficient to allow the Company to earn an allowed pre-tax return on equity as defined under this section. As a result, BC Ferries submits that forecast information for performance term two is necessary information for the Commissioner to take into consideration in the setting of second performance term price caps.

Part I – Core Information

Part I of this report responds to the specific information requirements as set out in sections 40(1)(a) to (f) of the Act.

Section 1: Core Ferry Services

BC Ferries delivers coastal ferry services under terms and conditions specified in the CFSC. The CFSC establishes the core (minimum) level of service that BC Ferries is expected to provide on the designated (regulated) routes during the first performance term and sets out a process by which core service levels may be changed during the performance term.

Section 1 of this report contains information on the core services that have been provided and are expected to be provided by BC Ferries in performance term one. Included is a description of how core service levels for the designated ferry routes are defined in the CFSC and the amendments to core service levels that have and/or are expected to be made in performance term one. As well, this section reports on BC Ferries' performance to date in meeting its core service level commitments under the CFSC for each of the designated routes.

Section 2: Tariffs for Core Ferry Services

The Act establishes the price caps for each of the route groups for performance term one and sets the percentages by which the price caps increase each year during the first performance term. The Act also identifies the process by which the Commissioner may authorize a price cap increase in response to an extraordinary situation.

It is a requirement under the Act that the weighted average of the tariffs charged by BC Ferries in relation to the core ferry services applicable to each route group that it services, be within the price cap established for that route group. Compliance to this requirement is assessed by the Commissioner quarterly on the basis of a rolling four quarter average. Should a route group's average fare exceed its price cap (over four consecutive quarters) BC Ferries has one quarter to adjust its tariffs so that the average fare is at or below the price cap.

September 30, 2006 2 of 169



Section 2 of this report provides information on BC Ferries' tariff structure as well as the Company's performance, by route group, in terms of ensuring that the weighted average of the tariffs are within the established price caps. This section also describes the extraordinary price cap increases that have been approved by the Commissioner in performance term one and their effect on the tariffs charged on the route groups. Also included in this section is information on the price caps and average tariffs BC Ferries expects to charge for each of the route groups for the remainder of the performance term.

Section 3: Service Fees from Government

Under the CFSC, BC Ferries provides ferry services on 25 designated (regulated) routes as well as 8 unregulated routes in return for service fees paid by the provincial government. As well, the provincial government reimburses BC Ferries for any foregone revenue in respect of provincial social program discounts.

Section 3 of this report provides a summary of the service fees BC Ferries has and expects to receive from the provincial government in performance term one, including the reimbursements for social program discounts.

Section 4: Revenues from All Sources

BC Ferries earns revenue from various sources, including fares from ticket sales and ancillary services. Under the Contract, the Company also receives the full proceeds of the Canada/British Columbia Coastal Ferry Subsidy Agreement from the provincial government.

Section 4 of this report provides information on the revenues BC Ferries has earned and expects to earn in performance term one.

Section 5: Expenses

Section 5 of this report provides information on the expenses that BC Ferries has incurred and expects to incur in respect of the provision of service on the designated ferry routes in performance term one.

The section begins with an overview of the expenses at a Company level, including amortization and financing expense, followed by a description as to how those expenses are and have been allocated on a route basis.

September 30, 2006 3 of 169



Section 6: Alternative Service Providers

Under section 69 of the Act, BC Ferries is required to seek additional or alternative service providers to provide ferry services on the designated ferry routes. In accordance with the Act, BC Ferries has filed an Additional or Alternative Service Providers Plan with the Commissioner which sets out the manner in which the Company intends to meet this requirement in the first performance term. A summary of the proposals received and the actions the Company has taken and expects to take to implement the Additional or Alternative Service Providers Plan is provided in section 6 of this report.

Part II - Other Information

Part II of this report responds to section 40(1)(g) of the Act and provides additional information that BC Ferries considers relevant for purposes of the Commissioner's determination of the price caps for performance term two.

Section 7: Capital Expenditures

BC Ferries, as a provider of ferry service, is a capital intensive business with requirements for large and small vessels, terminals and other infrastructure.

Capital expenditures impact performance term two price caps through their impact on amortization expense and cost of capital. Therefore, the price caps that will be established in performance term two must be set at a level that permits the recovery of those costs.

Section 7 of this report provides a summary of the capital costs BC Ferries has incurred and expects to incur in performance term one, as well as the capital costs forecasted to be incurred in performance term two.

Section 8: Traffic Forecasts

BC Ferries' traffic projections include forecasts to the end of performance term one as well as the expected growth over performance term two.

Section 8 of this report provides the traffic forecast to the end of performance term two.

September 30, 2006 4 of 169



Section 9: Total Factor Productivity

Section 41(5) of the Act requires the Commissioner to determine the productivity that BC Ferries should achieve in performance term two. Pursuant to section 41(6) of the Act, the Commissioner may provide for the prices caps established for each route group to change annually during performance term two at a specified rate equal to the British Columbia Consumer Price Index (CPI) minus a productivity factor.

One method of determining an appropriate productivity factor for performance term two is to observe the level of productivity growth BC Ferries has achieved over performance term one.

BC Ferries contracted InterVISTAS Consulting, represented by Dr. Michael Tretheway, to assist BC Ferries' in quantifying the productivity BC Ferries has achieved in performance term one. For this purpose, Dr. Tretheway has undertaken a Total Factor Productivity (TFP) analysis. Section 9 of this report provides an overview of the work Dr. Tretheway undertook and attaches his report on the TFP BC Ferries has achieved, to date, in performance term one.

Section 10: Return on Equity

The Act sets out in Section 38(1)(a) that as the Commissioner undertakes his regulatory responsibilities "...priority is to be placed on the financial sustainability of the ferry operators". Return on equity (ROE) drives the setting of the price caps because the Commissioner is to set the price caps for performance term two at levels that allow BC Ferries to earn its legislated ROE during the performance term and therefore achieve sustainability.

Section 10 of this report provides information on the ROE for performance term two.

September 30, 2006 5 of 169

PART I

Core Information



September 30, 2006 6 of 169



Section 1: Core Ferry Services

Coastal Ferry Services Contract

The CFSC establishes the minimum core level of service that BC Ferries is expected to provide on designated ferry routes during performance term one. In return for providing these service levels, a service fee for every round trip is paid to BC Ferries by the Province on non-major routes. Service fees are not paid to BC Ferries for service on the major routes (routes 1, 2, and 30).

Minimum core service levels on the designated ferry routes are set out in Schedule A to the CFSC. In this schedule, each designated route is described detailing the core service levels, route and service description, the vessel and terminal description, traffic levels and a service analysis. Core service level descriptions include hours of operation, number of round trips per day and total number of trips to be provided annually. Information on core service levels is provided for peak and off-peak operation.

It should be noted that after the Contract was executed, the parties identified that certain elements of the actual 2002/03 schedule of ferry services had not been accurately reflected in the detail of the Contract. To correct this, BC Ferries and the Province agreed to an amendment to the CFSC which was executed in December 2005.

Description of Core Service Levels

As indicated above, the CFSC sets out the core service levels BC Ferries is expected to provide on the 25 designated (regulated) ferry routes in performance term one. The Contract groups these routes into seven route groups as set out in Table 1-1.

The CFSC requires BC Ferries to operate the system in a manner that complies with, or exceeds, the core service levels in relation to the designated ferry routes.

For the first two years of performance term one (April 2, 2003 to March 31, 2005), core service levels for each designated ferry route is defined as the number of trips and the number of hours during which home port departures occurred, as specified in the 2002/03 published schedule for the designated ferry route.

September 30, 2006 7 of 169



Table 1-1 Listing of Routes and Route Groups

ROUTE GROUPS	DESIGN	NATED ROUTES
Route Group 1	MAJOR ROUTES	
Route Group 1	1	Tsawwassen/Swartz Bay
	2	Horseshoe Bay/Nanaimo
	30	Tsawwassen/Nanaimo
Route Group 2	ROUTE 3	Horseshoe Bay/Langdale
Route Group 3	NORTHERN ROUTES	Tiorsestice Bay, Earigadie
Route Group 5	10	Port Hardy/Prince Rupert
	11	Prince Rupert/Skidegate
Route Group 4	ROUTE 40	Discovery Coast
Route Group 5	ROUTE 12	Brentwood Bay/Mill Bay
Route Group 6	MINOR ROUTES	, , , , , , , , , , , , , , , , , , , ,
	4	Swartz Bay/Saltspring
	5	Swartz Bay/Outer Gulf
		Islands
	6	Crofton/Saltspring
	7	Saltery Bay/Earls Cove
	8	Horseshoe Bay/Bowen Island
	9	Tsawwassen/Gulf Island
	17	Comox/Powell River
	18	Powell River/Texada
	19	Nanaimo Harbour/Gabriola
	20	Chemainus/Thetis/Kuper
	21	Buckley Bay/Denman
	22	Denman/Hornby
	23	Campbell River/Quadra
	24	Quadra/Cortes
	25	Port McNeill/Alert
		Bay/Sointula
	26	Skidegate/Alliford Bay
Route Group 7	ROUTE 13	Langdale/Gambier/Keats

For the last three years of performance term one (April 1, 2005 to March 31, 2008), core service levels for each designated ferry route are defined as:

- the total number of round trips that were required to be delivered under the 2002/03 published schedule for the designated ferry route;
- the number of hours during which home-port departures occur for the designated ferry route (such home-port departures being identified as "Hours of Operation");

September 30, 2006 8 of 169



- the number of home port departures per day that were required to be delivered under the 2002/03 published schedule for the designated ferry route (identified as "Number of Round Trips per Day"); and
- the capacity provided on the designated ferry route will be sufficient to carry the previous year's traffic.

Core service levels in relation to each designated ferry route include an allowance for short term temporary service disruptions for specific circumstances as described in the Contract. Such temporary service disruptions cannot exceed 20 consecutive days and the aggregate of such disruptions in a calendar year cannot exceed 30 days.

Core service levels include a requirement that BC Ferries carry passengers falling within the provincial social programs including seniors, students, the disabled and persons travelling for medical transport and travelling on the designated ferry routes.

As well, core service levels include certain additional adjustments which may apply for specified reasons on specific designated ferry routes.

Finally, the Contract provides for adjustments to be made to core service levels for such reasons as to improve customer service and enhance operational efficiency. Such changes in core service levels may be made with the approval of both the provincial government and BC Ferries.

First Two Years of Performance Term One

In the first two years of performance term one (April 2, 2003 to March 31, 2005), BC Ferries provided the service requirements as set out in the CFSC with the following exceptions:

M.V. "Queen of Surrey" Fire

On May 12th 2003, the engine room of the M.V. "Queen of Surrey" caught fire while operating on route 3 (Horseshoe Bay to Langdale). The vessel was removed from service for extensive repairs. A replacement vessel provided service, however, the core service levels were impacted and for the period June 24 - July 14, one round trip was missed on route 3 on each of July 7, July 10, July 11, and July 14 (although all of the traffic was carried).¹

September 30, 2006 9 of 169

¹ BC Ferries did not apply for a Temporary Service Disruption pursuant to section 43 of the Act because the Commissioner had not been appointed at the time of this incident. BC Ferries provided the Province with a notice of an event of force majeure with respect to both the M.V. "Queen of Surrey" fire and the labour disruption.



Labour Disruption

The illegal work stoppage by the BC Ferry and Marine Workers' Union during the week of December 7, 2003 caused temporary service disruptions on all designated ferry routes. However, this event did not result in service on any of the routes falling below core service levels, with the exception of route 3 where the work stoppage resulted in a further five days of service disruption.

Route 30

The Commissioner, by Order 03-01, authorized a temporary reduction in service on route 30 (between Tsawwassen and Duke Point) in late November and early December 2003 and in March 2004, needed for the mid-life upgrade of C class vessels. The service levels were reduced from the scheduled 4 round trips per day to 3 round trips.

Temporary Service Disruptions

With the exception of the foregoing, BC Ferries was in compliance in providing core service levels on the designated ferry routes in the first two years of performance term one.

The core service levels include an allowance for a short term, temporary service disruption to address issues like vessel/dock breakdowns, correction of situations that compromise safety, bad weather etc. Appendix A contains a list of temporary service disruptions by designated ferry route for both fiscal years. For the first year of operation, with the exception of route 3 noted above, no designated ferry route had service disruptions exceeding 20 consecutive days nor did the aggregate of all temporary service disruptions for the calendar year exceed 30 days in total. Overall, during each of these two years, BC Ferries delivered 99% or more of the 83,086 scheduled number of round trips as stipulated in the CFSC.

As stated previously, the Contract allows for adjustments to be made to core service levels for such reasons as to improve customer service and to enhance operational efficiency. These changes may be made with the approval of both the provincial government and BC Ferries. In 2004/05, BC Ferries and the Province agreed to one change on route 1 (Tsawwassen to Swartz Bay), where the first sailing was moved from 07:00 to 06:00 and the last sailing was moved one hour earlier. This schedule change was introduced for the summer only of 2004, and was well received by commercial carriers.

September 30, 2006 10 of 169



Fiscal Year 2005/06

In the third year of performance term one, BC Ferries' core service levels on the minor routes were impacted by the refit of the M.V. "Kwuna", the vessel operating on route 26 (Skidegate to Alliford Bay) and the northern routes (routes 10 and 11) were impacted by the sinking of the M.V. "Queen of the North".

Route 26

With respect to the M.V. "Kwuna", BC Ferries requested and received authorization from the Commissioner for two temporary service reductions. In September 2005, the Commissioner issued Order 05-04 authorizing a temporary reduction in service on route 26 (service between Skidegate and Alliford Bay on the Queen Charlotte Islands) to accommodate a life extension capital program of the M.V. "Kwuna". Due to the delayed delivery of replacement parts and equipment for the M.V. "Kwuna" refit, in November 2005, the Commissioner issued Order 05-05 authorizing a further extension to the temporary service disruption on route 26 to December 20, 2005.

Routes 10 and 11 - M.V. "Queen of the North"

On March 22, 2006 shortly after midnight, the M.V. "Queen of the North", operating on its regular route from Prince Rupert to Port Hardy, ran aground on Gil Island in Wright Sound and subsequently sank.

As a result of this incident, core ferry services on routes 10 and 11 were impacted in both fiscal years 2005/06 and 2006/07. From March 23, 2006 to the end of the fiscal year, (March 31, 2006) and from April 1, 2006 to April 19, 2006, no regular service was provided. A tug and barge service, as well as air service, was used as an interim measure to ensure that supplies reached the Queen Charlotte Islands and passengers requiring passage were accommodated. The M.V. "Queen of Prince Rupert" was undergoing refit at the time of the sinking. On April 19, 2006 the M.V. "Queen of Prince Rupert" returned to service and core service levels were resumed with the M.V. "Nimpkish" providing a hub and spoke service in the mid-coast.

In accordance with the terms of the CFSC, BC Ferries filed a notice of force majeure with the Province related to the incident.

September 30, 2006 11 of 169



Other Service Changes

During 2005/06, BC Ferries and the Province agreed to a number of amendments to core service levels as defined in the CFSC, which served to improve service delivery on various designated ferry routes. Table 1-2 summarizes the amendments.

Table 1-2 Amendments to Core Service Levels in 2005/06

Route	Change to Core Service Levels	Period for which the Service Change was Implemented
Route 1 (Tsawwassen to Swartz Bay)	For the summer, introduce a 06:00 sailing with a reduction in the corresponding last sailing of the day during Monday to Thursday.	Jun 28 – Aug 31
Route 2, 3, 8 (Horseshoe Bay (Terminal) to Departure Bay, Langdale and Bowen Island)	For the summer, change in-transit and in dock time for route 2 to ensure better on-time performance during peak periods. Change in-dock time for route 3. Amend route 8 schedule to ensure efficient access into Horseshoe Bay.	Jun 28 – Aug 31
Route 9, 9A, 5, 5A (Southern Gulf Islands)	For the summer, amend Southern Gulf Islands schedule to improve on-time performance during the summer peak period.	Jun 28 - Sept 4
Route 6 (Crofton to Saltspring Island)	For the summer, introduce an earlier sailing to reduce oversize vehicles during commuter periods.	Jun 28 - Sept 4
Route 30 (Tsawwassen to Duke Point)	While the regular vessel was in refit, a request was made to extend the number of operating hours so the replacement vessel could deliver the required 4 round trips.	Oct 24 – Nov 30

September 30, 2006 12 of 169



Temporary Service Disruptions

Core service levels include an allowance for short term, temporary service disruptions. Appendix A contains a list of temporary service disruptions by designated ferry route for 2005/06. With the exception of route 26 and routes 10 and 11, as noted above, BC Ferries met core service levels on all designated routes, as no other designated ferry route experienced service disruptions exceeding the maximums allowable under the Contract.

Fiscal Year 2006/07

Northern Routes

For fiscal 2006/07, core service levels on the northern routes have continued to be significantly impacted by the sinking of the M.V. "Queen of the North".

As stated above, BC Ferries was unable to meet core service levels on routes 10 and 11 until the M.V. "Queen of Prince Rupert" returned to service on April 19, 2006. To lessen the stress on the M.V. "Queen of Prince Rupert" in keeping to the regular schedule, BC Ferries provided additional service (above core service levels) with the M.V. "Nimpkish" providing service on the midcoast in a hub and spoke fashion. BC Ferries continued to exceed core service levels with the M.V. "Queen of Prince Rupert" and the M.V. "Nimpkish", until May 18, 2006 which is the beginning of the peak summer period.

Over the summer of 2006, BC Ferries was unable to meet core service levels, which were usually provided by the M.V. "Queen of Prince Rupert" operating full time on route 11 (Prince Rupert to the Queen Charlotte Islands) and the M.V. "Queen of the North" operating full time on route 10 (Prince Rupert to Port Hardy). Instead, route 10 and 11 service was provided by the M.V. "Queen of Prince Rupert" operating on both routes, augmented by tug and barge service, as well as scheduled air service provided by BC Ferries. Route 40 core service levels were maintained with the M.V. "Queen of Chilliwack" and the M.V. "Nimpkish" providing service.

BC Ferries submitted to the Commissioner an application under section 43 of the Act for a temporary service disruption on routes 10 and 11 (Prince Rupert to Port Hardy and Prince Rupert to the Queen Charlotte Islands) during the period of the immediate loss of the M.V. "Queen of the North" and for the peak summer 2006 season, once it was determined a replacement vessel could not be found for immediate deployment on the northern routes.

September 30, 2006 13 of 169



Core Ferry Services

- By Order 06-01, the Commissioner authorized the reduction of service from March 23 to May 18 2006 on northern routes 10 and 11 following the sinking of the M.V. "Queen of the North" with the resulting loss of ferry capacity.
- By Order 06-02, the Commissioner authorized the reduction in service from May 18, 2006 on northern routes 10 and 11 for 60 days. The Commissioner directed that this Order may be extended following a review by the Commissioner of BC Ferries' search for a suitable replacement vessel for the M.V. "Queen of the North".
- By Order 06-05, the Commissioner extended Order 06-02 for a temporary service reduction on the northern routes and authorized the continued reduction in service for the remainder of the summer, i.e. through September 30, 2006. The Commissioner determined that BC Ferries' search for a replacement vessel (which would not be in service before 2007) was thorough.

After September 30, 2006, and with the re-introduction of the winter schedule, it is expected that core service levels for routes 10 and 11 will again be met with the M.V. "Queen of Prince Rupert" assuming winter service levels, supplemented by the M.V. "Nimpkish" operating on the mid-coast in a hub and spoke manner.

Other Service Changes

In addition to the changes in service that occurred in the north, BC Ferries and the Province agreed to certain amendments to the CFSC to improve service delivery and/or to ensure a more efficient operation. Table 1-3 summarizes the amendments.

September 30, 2006 14 of 169



Table 1-3 Amendments to Core Service Levels in 2006/07 (to date of this submission)

Route	Change to Core Service Levels	Period for which the Service Change was Implemented
Route 30 (Tsawwassen to Duke Point)	While the regular vessel was in refit, the number of operating hours were extended so the replacement vessel could deliver the required 4 round trips.	Apr 18 – May 9
Route 1 (Tsawwassen to Swartz Bay)	For the summer, introduce a 06:00 sailing with a reduction in the corresponding last sailing of the day during Monday to Thursday.	Jun 28 – Aug 31
Route 2, 3, 8 (Horseshoe Bay (Terminal) to Departure Bay, Langdale and Bowen Island)	For the summer, change intransit and in dock time for route 2 to ensure better ontime performance during peak periods. Change in-dock time for route 3. Amend route 8 schedule to ensure efficient access into Horseshoe Bay.	Jun 28 – Aug 31
Route 9, 9A, 5, 5A (Southern Gulf Islands)	For the summer, amend Southern Gulf Islands schedule to improve on-time performance during the summer peak period.	Jun 28 - Sept 4
Route 6 (Crofton to Saltspring Island)	For the summer, introduce an earlier sailing to reduce oversize vehicles during commuter periods.	Jun 28 – Sept 4

September 30, 2006 15 of 169



Core Ferry Services

In addition to the above, BC Ferries has recently submitted a request to the Province regarding the following change in service on route 30.

Route	Proposed Change to Core Service Levels	Period for which the Service Change is Proposed
Route 30 (Tsawwassen to Duke Point)	Remove the last round trip of the evening, on Saturdays only.	Oct 14, 2006 – Mar 31, 2007

Temporary Service Disruptions

As noted above, core service levels include an allowance for short term, temporary service disruptions. Appendix A provides the list of temporary service disruptions by designated ferry route for the first quarter of fiscal 2006/07. To date during 2006/07, with the exception of routes 10 and 11 as described earlier, no service disruptions have exceeded the maximums as permitted under the CFSC and taking allowed temporary service reductions into account, the service requirements of the CFSC have been met.

Fiscal Year 2007/08

For fiscal 2007/08, BC Ferries expects that core service levels will remain as identified in the CFSC with one exception. As noted above and after consulting with the BC Trucking Association and the Brechin Hill Community Association, BC Ferries has requested the Province approve the deletion of the last round trip on route 30 (Tsawwassen to Duke Point) on Saturday evenings only for the period October 14 to March 31, beginning in October 2006. The CFSC envisaged the possibility of adjustments to the Saturday service on this route. This change in core service levels, if approved, would effectively cancel the 20:15 and the 22:45 sailings from both Tsawwassen and Duke Point.

With respect to the northern routes (routes 10 and 11) over spring and summer 2006, BC Ferries conducted an international search to lease or purchase a replacement vessel for the M.V. "Queen of the North". This search has resulted in a decision by BC Ferries to purchase the M.V. "Sonia". The M.V. "Sonia" is expected to arrive in Canada in October, 2006 and will require an extensive refit. It is expected that the vessel will enter service on the North coast in April 2007. For this reason, BC Ferries anticipates meeting core service levels on the northern routes next spring/summer.

September 30, 2006 16 of 169



Core Ferry Services

It should also be noted that by the December, 2007, BC Ferries expects to take delivery of the first of the Super C class vessels, M.V. "Coastal Renaissance". This vessel is scheduled to arrive in Canada in December 2007 and will be deployed on route 2 (Horseshoe Bay to Departure Bay). The remaining Super C class vessels, M.V. "Coastal Celebration" and M.V. "Coastal Inspiration" will enter service after April 1, 2008.

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(a) of the Act to provide the Commissioner with core ferry services BC Ferries has provided and reasonably expects to provide on the designated ferry routes in the current performance term.

September 30, 2006 17 of 169



Section 2: Tariffs for Core Ferry Services

Tariff Structure

BC Ferries charges tariffs or fares for the delivery of ferry transportation services on each route. These fares are specific to each route and vary between seasons (peak versus off-peak pricing) and mid-week versus weekend travel. Also, for each route, the fares are segregated into various categories for passengers (adult, student, and child), vehicles (cars, overheight vehicles, motorcycles, bicycles and commercial (e.g. semi trailer trucks)). Vehicles pay a set tariff rate, whereas trucks, buses and semi-trailers pay by length (using a per foot calculation).

On route group 2 (Horseshoe Bay to Langdale), route group 5 (Brentwood Bay to Mill Bay), route group 6 (minor routes) and route group 7 (Langdale, Gambier & Keats), BC Ferries provides discount books that, purchased in books of 5 or 10 round trip tickets, provide a discount for passenger and vehicle travel. Also, route group 3 (northern routes) and route group 4 (Discovery Coast) provide discounts.

For illustrative purposes, Table 2-4 provides the current tariff for each route for an adult passenger during the peak and off-peak period. Further detail on BC Ferries' current tariffs for each category on each route is available on the BC Ferries website at www.bcferries.com.

Price Cap Setting

The fares BC Ferries charges for core ferry services on the designated ferry routes are subject to regulation under the Act. In accordance with the Act, the Commissioner does not regulate ancillary services which are defined as any services that are not directly related to the transportation of vehicles and passengers. This includes services such as parking, reservations, catering and retail.

For purposes of setting price caps in performance term one, the Commissioner computes a maximum permitted ceiling of average ferry fares for each route group. This ceiling is called the price cap.

For performance term one, section 39 of the Act sets the initial price caps at the level of the average tariffs payable as at April 1, 2003 and provides for the price caps to rise annually each November 1st during the performance term by 2.8% for the major route group and 4.4% for all other route groups.

September 30, 2006 18 of 169



The Commissioner is required to establish new price caps for each of the route groups for performance term two.

The Commissioner regulates fares by ensuring the weighted average of the tariffs charged for each route group is within the price cap established for that route group. The weighted average tariff for each route group is comprised of the following: the fares charged on each route in a route group, all the different traffic types (passengers, autos, trucks, buses etc.), the fares applicable to different times of the week (weekend vs. midweek), the different peak/shoulder/off peak fares charged in that quarter, and other variables. On a quarterly basis, BC Ferries reports to the Commissioner on the actual weighted average fares paid by customers, by route group, and whether the average fares remained under the price cap.

Tariffs Charged in Performance Term One

The average level of ferry fares and the price cap are expressed as indices. BC Ferries must not allow the four quarter average index of actual ferry fares for a route group to rise above the index of its price cap for more than one consecutive quarter. If the four quarter average of fares do exceed the price cap in any particular quarter, BC Ferries has one quarter to reduce its average fare index so that the four quarter average is back within the price cap. If BC Ferries fails to reduce the average fare index within the following quarter such that it is at or below the price cap index, the Commissioner can order BC Ferries to reduce its fares.

Table 2-1 illustrates the indices of actual average tariffs in relation to the price cap indices set by the Commissioner for each route group. To date, during performance term one, the average fares charged by BC Ferries' have been within the established price caps on all but five occasions. In this context, however, it is important to note that for some route groups, in particular route group 6 (minor routes) the average fares charged by BC Ferries in 2005/06 have increased at a lesser rate than the price caps.

September 30, 2006 19 of 169



Table 2-1 Comparison of Actual Average Fare Indices to Price Cap Indices

Quarter		up 1 jors		up 2 ite 3		up 3 orth		up 4 te 40		up 5 Bay		oup 6 nors		up 7 te 13
	Price Cap	Actual Average Fare												
Q1 2003/04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Q2 2003/04	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Q3 2003/04	100.34	100.00	100.56	100.00	100.25	100.00			100.57	100.00	100.52	100.00	100.54	100.00
Q4 2003/04	100.83	100.51	101.39	100.28	100.60	100.16			101.53	101.00	101.36	99.79	101.42	96.22
Q1 2004/05	101.55	101.12	102.49	101.21	101.67	101.52	100.78	99.70	102.20	100.63	102.45	100.46	102.41	98.10
Q2 2004/05	102.57	102.42	104.04	102.67	104.22	103.38	104.40	99.40	103.97	106.31	104.07	101.87	104.09	90.36
Q3 2004/05	103.26	103.36	105.20	103.56	104.73	103.70			105.16	104.71	105.16	104.14	105.23	95.76
Q4 2004/05	103.75	103.45	106.05	104.26	105.08	104.05			106.01	99.60	106.00	104.63	106.03	101.36
Q1 2005/06	104.48	104.25	107.21	105.45	106.21	105.25	105.22	102.44	107.15	96.18	107.13	105.51	107.29	98.71
Q2 2005/06	105.25	105.11	108.79	106.65	108.86	107.44	108.99	111.93	108.85	107.35	108.77	107.29	108.68	102.49
Q3 2005/06	106.35	106.32	110.22	108.30	109.46	107.78			110.02	106.06	110.20	107.06	110.00	103.01
Q4 2005/06	106.60	106.99	110.63	109.04	109.69	108.12			110.49	106.61	110.56	106.78	110.66	102.72
Q1 2006/07	107.37	106.92	111.91	110.13	111.00	108.49	109.96	107.17	111.57	107.17	111.78	106.97	111.16	115.84



As noted above, BC Ferries has on five separate occasions exceeded the price cap for a single quarter. Generally, BC Ferries has undertaken pricing initiatives in the form of either promotions or tariff modifications to bring the average fares under the price cap in the subsequent quarter. In addition, BC Ferries has utilized these instances as opportunities to stimulate demand. The five instances were as follows:

- Route group 1 (major routes), Quarter 3, 2004/05. During Quarter 4, 2004/05, BC Ferries implemented a number of discount programs including:
 - a 50% discount for commercial customers from March 1 March 10 from Mondays to Thursdays, and
 - a 50% discount for passenger and vehicle fares between from March 14 to March 17, 2005.
- Route group 1 (major routes), Quarter 4, 2005/06. During Quarter 1, 2005/06, BC Ferries implemented the following programs:
 - an extension of the off-peak season fares from May 19 to June 30; and
 - a 25% promotional discount for passenger and vehicle fares on Tuesdays and Wednesdays from May 23 to June 28.
- Route group 4 (Discovery Coast), Quarter 2, 2005/06. Route 40 (Discovery Coast) only operates 3 ½ months in the year. In Quarter 1, 2006/07, BC Ferries implemented a 30% discount on all travel from June 15 to June 30, 2006.
- Route group 5 (Mill Bay), Quarter 2, 2004/05. Route 12 (Mill Bay to Brentwood Bay) exceeded the price cap in this quarter. BC Ferries implemented a 50% promotional discount on vehicle and passenger fares from November 27 to December 10, 2005.
- Route group 7 (Langdale, Gambier, Keats), Quarter 1, 2006/07. Route 13 (Langdale, Gambier, Keats) exceeded the price cap in the first quarter. Based on the revenue pattern, BC Ferries expects to manage the fares within the existing tariffs.

Table 2-2 provides a forecast of the price caps for the remaining two years of performance term one. Actual price caps may vary from forecast due to the revenue patterns that occur during the future periods. As contemplated by the Act, the forecast is based on price cap increases of 2.8% for the major route group, and 4.4% for all other route groups on November 1 in each of 2005/06 and 2006/07.

September 30, 2006 21 of 169



Table 2-2
Forecast Price Cap by Route Group
Effective November 1 of Each Year (excluding fuel surcharges)
(Index: April 1, 2003 = 100)

Year At Nov.1	Group 1 Majors	Group 2 Route 3	Group 3 North	Group 4 Route 40	Group 5 Mill Bay	Group 6 Minors	Group 7 Route 13
2006/07	109.05	114.51	114.09	113.79	114.35	114.49	114.51
2007/08	112.10	119.54	119.11	118.79	119.38	119.52	119.54

Based on the price caps, as identified in Table 2-2, and the anticipated tariff increases for the next two years, BC Ferries is projecting that weighted average fares will be at or below the price caps.

Extraordinary Price Cap Increases

The Act (section 42 (1) and (2)) provides for price caps to increase in response to extraordinary circumstances. All such increases in the price cap must be authorized by the Commissioner.

In performance term one, BC Ferries experienced unanticipated and extraordinary increases in the price of fuel that caused the Company to seek recovery of these costs.

In September 2004, BC Ferries applied to the Commissioner for the establishment of fuel deferral accounts for each of the route groups, with the exception of route group 7 (route 13). By Order 04-02 dated September 28, 2004, the Commissioner authorized the establishment of deferral accounts in which to record the variance between the actual delivered price of fuel and a set price for fuel for each route group. To the extent that fuel prices are different from the set price, the difference in price is recorded in a fuel deferral account by route group for future recovery from or refund to customers.

The deferral accounts were established to remove the uncertainty of world fuel prices and the corresponding impact to BC Ferries' annual financial plan. It was envisaged that if the delivered price of fuel declined below the set price, the deferral accounts would be credited with the difference until the deferral fuel costs were recovered.

September 30, 2006 22 of 169



At the time the fuel deferral accounts were established, market forecasts projected that fuel prices would decline over time. However, the price of fuel remained high and caused the aggregate balance in the deferral accounts to reach \$8 million by March 31, 2005. With continued high fuel costs, BC Ferries projected that the deferral accounts would accumulate much greater balances than expected. BC Ferries determined the growing account balances were a concern and, to address this, the Company made an application under section 42 of the Act for extraordinary price cap increases.

BC Ferries applied for two extraordinary price cap increases to address the continuing increases in fuel prices. The results of those applications were as follows:

By Order 05-02 (July 2005), the Commissioner approved extraordinary price cap increases of 4% on the major routes, and 6% on all other route groups effective July 25, 2005. BC Ferries did not seek an extraordinary price cap increase for route group 7, (Langdale/Gambier/Keats). In this Order, the Commissioner also determined that there would be a 5% increase in the set price for fuel.

These increases to the price cap were insufficient to address the escalating fuel price and, consequently, BC Ferries made a further application for an extraordinary price cap increase.

- By Order 05-06 (January 2006), the Commissioner approved further extraordinary price cap increases of 1.5% on the major routes, and 3% on all other route groups. Order 05-06 also provided for a second step price cap increase, if needed, that would be effective June 2006. For such an increase to take effect, the Order required that BC Ferries demonstrate market expectations of continued high fuel prices. Also as part of Order 05-06, the Commissioner required BC Ferries to develop and implement a fuel savings plan that would reduce fuel consumption by 1% per year in each of 2006/07 and 2007/08.
- On June 15, 2006, BC Ferries provided to the Commissioner a fuel savings plan to achieve the reductions in fuel consumption set by the Commissioner.
- Consistent with Order 05-06, BC Ferries presented to the Commissioner fuel forecasts that demonstrated market expectation of continued high fuel prices through performance term one. In June, 2006 the Commissioner ordered a further 3.2% increase in the price cap for the major routes and a further 9.6% increase in the price caps for the other route groups excluding route 12 (Mill Bay to Brentwood Bay) and route 13 (Langdale, Gambier & Keats).

Route 12 was excluded from the additional surcharge because it is anticipated the route will recover its deferral account balance by the end of the first performance term with the fuel surcharges already in place.

September 30, 2006 23 of 169



Table 2-3 provides a summary by route group of the extraordinary price cap increases approved by the Commissioner to date in performance term one. Even with these extraordinary price cap increases, the fuel deferral account balances at the end of performance term one are expected to be significant.

Table 2-3
Extraordinary Price Cap Increases in Performance Term One

Route Group	Fuel Surcharge 1	Fuel Surcharge 2a	Fuel Surcharge 2b
Group 1 - Majors	4.0%	1.5%	3.2%
Group 2 - Route 3	6.0%	3.0%	9.6%
Group 3 - North	6.0%	3.0%	9.6%
Group 4 - Route 40	6.0%	3.0%	9.6%
Group 5 - Mill Bay	6.0%	3.0%	0%
Group 6 - Minors	6.0%	3.0%	9.6%
Group 7 - Route 13	0.0%	0.0%	0%

For illustrative purposes, Table 2-5 provides, by route, the tariffs for an adult passenger with the price cap increases for both the annual increases provided for in the Act, as well as the extraordinary increases approved by the Commissioner.

Fuel Forecasts

When BC Ferries implemented the fuel surcharges in response to the extraordinary price cap increases authorized by the Commissioner, it was anticipated that this would result in a substantial reduction in the fuel deferral account balances at the end of performance term one. This is now uncertain.

Based on a revised fuel price forecast prepared for BC Ferries by Purvin & Gertz Inc. (PGI) for the remainder of performance term one, BC Ferries is projecting the deferral account balances in aggregate will be \$23.7 million as at March 31, 2008. The PGI fuel price forecast was received by BC Ferries September 1, 2006 and a summary is attached as Appendix C. PGI has indicated that this forecast will be revised in the near future.

Fuel Recovery Over Performance Terms One and Two

BC Ferries believes that the Company must recover the outstanding fuel deferral balances accumulated in performance term one so that, by the end of performance term two, no residual balances are left in the performance term one deferral accounts.

As stated previously, the balances in the deferral accounts at the end of performance term one are forecast to be significantly higher than the \$9.7 million anticipated in the May 2006 forecast.

September 30, 2006 24 of 169



In his Order 04-02, the Commissioner stated that "The balance in the deferral accounts, at a date prior to March 31, 2008, to be determined at the time of the price cap review required under Section 40, will be taken into account in setting the allowable price cap increase, by route group, for the performance term commencing April 1, 2008."

BC Ferries is proposing that this be accommodated by the remaining balances (either positive or negative) in the performance term one fuel deferral accounts, with associated interest, being amortized and built into the price cap to be recovered over performance term two

BC Ferries would like an opportunity to discuss with the Commissioner the issue of the uncertainty of fuel prices over performance term two. These discussions will include options available to address increases and decreases in the fuel deferral accounts.

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(b) of the Act to provide the Commissioner with the tariffs BC Ferries has charged and reasonably expects to charge on the designated ferry routes in the current performance term.

September 30, 2006 25 of 169



Table 2-4
Passenger Tariffs for All Routes

Tariffs as	Tariffs as
at Nov.	at Nov.
01/04	01/05

ROUTE GROUP 1

MAJOR ROUTES (One Way Fare)

Peak Weekend	\$10.50	\$10.80
Peak Midweek	\$10.50	\$10.80
Shoulder Weekend	\$10.00	\$10.30
Shoulder Midweek	\$10.00	\$10.30
Low Weekend	\$8.75	\$10.30
Low Midweek	\$8.75	\$10.30

ROUTE GROUP 2

Route 3 Horseshoe Bay/Langdale (Return Fare)
Peak \$8.75 \$9.15
Low \$8.50 \$8.90

Frequent User \$6.25 \$6.60

ROUTE GROUP 3

ROUTE 10 Prince Rupert/Bear Cove/Mid Coast (One Way Fare)

 Peak
 \$107.00
 \$111.00

 Shoulder
 \$75.75
 \$79.00

 Low
 \$56.75
 \$59.00

ROUTE 11 Prince Rupert/ Skidegate (One Way Fare)
Peak \$25.25 \$26.25

Peak \$25.25 \$26.25 Low \$20.50 \$21.50

ROUTE GROUP 4

ROUTE 40 Bear Cove/ Bella Coola (One Way Fare)
Peak \$111.00 \$115.00

ROUTE GROUP 5

Route 12 Mill Bay to Brentwood Bay (One Way Fare)
Peak \$5.00 \$5.25
Low \$4.50 \$4.70
Frequent User \$2.95 \$3.10

ROUTE GROUP 6

Route 4 and 6 (Saltspring to Vancouver Island) (Return Fare)

 Peak
 \$6.75
 \$7.05

 Low
 \$6.50
 \$6.80

 Frequent User
 \$4.00
 \$4.20

Route 5 (Swartz Bay - Outer Gulf Islands) (Return Fare)

 Peak
 \$7.00
 \$7.35

 Low
 \$6.75
 \$7.05

 Frequent User
 \$4.15
 \$4.35

Route 7 Saltery Bay/Earls Cove (One Way Fare)

 Peak
 \$8.75
 \$9.15

 Low
 \$8.50
 \$8.90

 Frequent User
 \$6.25
 \$6.60

September 30, 2006 26 of 169



]				
	Tariffs as	Tariffs as					
	at Nov.	at Nov.					
	01/04	01/05					
Route 8 Horseshoe Bay/Bowe	en Island (Re	turn Fare)					
Peak	\$6.50	\$6.80					
Low	\$6.25	\$6.55					
Frequent User	\$3.35	\$3.55					
Route 9 Tsawwassen to Gulf							
Peak	\$10.75	\$11.25					
Low Fraguent User	\$10.50	\$11.00					
Frequent User							
Route 17 Powell River/Little F	iver (One W	av fare)					
Peak	\$8.25	\$8.65					
Low	\$8.00	\$8.40					
Frequent User	\$6.25	\$6.60					
·		•					
Route 18 Powell River/Texada	a Island (Ret	urn Fare)					
Peak	\$6.00	\$6.30					
Low	\$5.75	\$6.05					
Frequent User	\$3.20	\$3.40					
Route 19 Nanaimo Hbr/Gabri							
Peak	\$6.00	\$6.30					
Low	\$5.75	\$6.05					
Frequent User	\$2.85	\$3.00					
D . 20.61	, , , , , , , , , , , , , , , , , , ,	. ,					
Route 20 Chemainus/Thetis/k							
Peak Low	\$6.00 \$5.75	\$6.30 \$6.05					
Frequent User	\$3.73 \$2.85	\$3.00					
rrequent oser	Ψ2.03	Ψ3.00					
Routes 21 & 22 Buckley Bay/	Denman Isla	nd/Hornby (Return Fare)				
Peak	\$5.50	\$5.75	,				
Low	\$5.25	\$5.50					
Frequent User	\$2.50	\$2.65					
Route 23 Campbell River/Qua							
Peak	\$5.50	\$5.75					
Low	\$5.25	\$5.50					
Frequent User	\$2.50	\$2.65					
Davida 24 Overder In/Carter In	(D -t	>					
Route 24 Quadra Is/Cortes Is Peak							
Low	\$6.50 \$6.25	\$6.80 \$6.55					
Frequent User	\$3.75	\$3.95					
rrequent oser	Ψ3.73	Ψ3.33					
Route 25 Port McNeill/Alert B	av/Sointula (Return Fare)				
Peak	\$6.50	\$6.80	,				
Low	\$6.25	\$6.55					
Frequent User	\$3.75	\$3.95					
·	•	•					
Route 26 Skidegate/Alliford B	Bay (Return F	are)					
Peak	\$5.50	\$5.75					
Low	\$5.25	\$5.50					
Frequent User	\$2.50	\$2.65					
DOLLTE CDOLLD 7							
ROUTE GROUP 7	mbiou 7- /C	a Way Fam S					
Route 13 Langdale/Keats/Gar							
Peak Low	\$4.50 \$4.25	\$4.70 \$4.45					
Frequent User	\$4.25 \$2.95	\$3.10					
r requerit User	φ ∠ .53	φ3.1U					

September 30, 2006 27 of 169



Table 2-5
Passenger Tariffs Including Fuel Surcharges

			Г	assenge	I Talliis	Includin	g ruer si	ar Charge	5	
				Including		Including		Including		Including
				Fuel		Fuel		Fuel		Fuel
		Tariffs as	Fuel	Surcharge	Fare	Surcharge	Fuel	Surcharge	Fuel	Surcharge
		at Nov.	Surcharge	As At Jul.	Increase	As At Jul.	Surcharge	As At Feb.	Surcharge	As At Jun.
		01/04	Jul. 25/05	25/05	Nov. 01/05	25/05	Feb. 1/06	1/06	Jun. 22/06	22/06
ROUTE O	SROUP 1					•	,	•		
MAJOR KI	OUTES (One Way Fare)									
	Peak Weekend	\$10.50	\$0.35	\$10.85	\$10.80	\$11.15	\$0.15	\$11.30	\$0.30	\$11.60
	Peak Midweek	\$10.50	\$0.35	\$10.85	\$10.80	\$11.15	\$0.15	\$11.30	\$0.30	\$11.60
	Shoulder Weekend	\$10.00	\$0.35	\$10.35	\$10.30	\$10.65	\$0.15	\$10.80	\$0.30	\$11.10
	Shoulder Midweek	\$10.00	\$0.35	\$10.35	\$10.30	\$10.65	\$0.15	\$10.80	\$0.30	\$11.10
ROUTE C	GROUP 2									
Route 3 Ho	orseshoe Bay/Langdale (Re	eturn Fare)								
	Peak	\$8.75	\$0.40	\$9.15	\$9.15	\$9.55	\$0.20	\$9.75	\$0.65	\$10.40
	Low	\$8.50	\$0.40	\$8.90	\$8.90	\$9.30	\$0.20	\$9.50	\$0.65	\$10.45
						-				
	Frequent User	\$6.25	\$0.40	\$6.65	\$6.60	\$7.00	\$0.20	\$7.20	\$0.65	\$7.85
DOUTE (SDOUD 2									
	GROUP 3									
ROUTE 10	Prince Rupert or Bear Cov									
	Peak	\$107.00	\$5.25	\$112.25	\$111.00	\$116.25	\$2.60	\$118.85	\$8.35	\$127.20
	Shoulder	\$75.75	\$5.25	\$81.00	\$79.00	\$84.25	\$2.60	\$86.85	\$8.35	\$95.20
	Low	\$56.75	\$5.25	\$62.00	\$59.00	\$64.25	\$2.60	\$66.85	\$8.35	\$75.20
ROUTE 11	Prince Rupert/ Skidegate	(One Way Fa	ıre)							
	Peak	\$25.25	\$1.25	\$26.50	\$26.25	\$27.50	\$0.65	\$28.15	\$2.05	\$30.20
	Low	\$20.50	\$1.25	\$21.75	\$21.50	\$22.75	\$0.65	\$23.40	\$2.05	\$25.45
	2011	Ψ20.30	Ψ1.23	Ψ21.73	Ψ21.50	Ψ22.73	ψ0.03	Ψ23.10	Ψ2.03	Ψ23.13
ROUTE (GROUP 4									
	Bear Cove/ Bella Coola (C	ne Way Fare	4)							
	Peak	\$111.00	\$6.50	\$117.50	\$115.00	\$121.50	\$3.25	\$124.75	\$8.55	\$133.30
	reak	\$111.00	\$0.50	\$117.50	\$115.00	\$121.50	\$5.25	\$124.75	φ0.55	\$155.50
DOLITE (SDOUD F									
	GROUP 5									
Route 12 N	Mill Bay to Brentwood Bay	(One Way Fa	are)							
	Peak	\$5.00	\$0.15	\$5.15	\$5.25	\$5.40	\$0.05	\$5.45	\$0.00	\$5.45
	Low	\$4.50	\$0.15	\$4.65	\$4.70	\$4.85	\$0.05	\$4.90	\$0.00	\$4.90
	Frequent User	\$2.95	\$0.15	\$3.10	\$3.10	\$3.25	\$0.05	\$3.30	\$0.00	\$3.30
ROUTE (GROUP 6									
Route 4 ar	nd 6 (Saltspring to Vancou	ver Island) (Return Fare)							
	Peak	\$6.75	\$0.30	\$7.05	\$7.05	\$7.35	\$0.15	\$7.50	\$0.45	\$7.95
	Low	\$6.50	\$0.30	\$6.80	\$6.80	\$7.10	\$0.15	\$7.25	\$0.45	\$7.70
						-				
	Frequent User	\$4.00	\$0.30	\$4.30	\$4.20	\$4.50	\$0.15	\$4.65	\$0.45	\$5.10
Route 5 (S	Swartz Bay - Outer Gulf Isl	, ,								40.05
	Peak	\$7.00	\$0.30	\$7.30	\$7.35	\$7.65	\$0.15	\$7.80	\$0.45	\$8.25
	Low	\$6.75	\$0.30	\$7.05	\$7.05	\$7.35	\$0.15	\$7.50	\$0.45	\$7.95
	Frequent User	\$4.15	\$0.30	\$4.45	\$4.35	\$4.65	\$0.15	\$4.80	\$0.45	\$5.25
Route 7 Sa	altery Bay/Earls Cove (Ret	urn Fare)								
	Peak	\$8.75	\$0.40	\$9.15	\$9.15	\$9.55	\$0.20	\$9.75	\$0.65	\$10.40
	Low	\$8.50	\$0.40	\$8.90	\$8.90	\$9.30	\$0.20	\$9.50	\$0.65	\$10.15
	Frequent User	\$6.25	\$0.40	\$6.65	\$6.60	\$7.00	\$0.20	\$7.20	\$0.65	\$7.85
	•									

September 30, 2006 28 of 169



	Passenger Tariffs Including Fuel Surcharges								
			Including		Including		Including		Including
	Tariffs as	Fuel	Fuel Surcharge	Fare	Fuel Surcharge	Fuel	Fuel Surcharge	Fuel	Fuel Surcharge
	at Nov.	Surcharge	As At Jul.	Increase	As At Jul.	Surcharge	As At Feb.	Surcharge	As At Jun.
	01/04	Jul. 25/05	25/05	Nov. 01/05	25/05	Feb. 1/06	1/06	Jun. 22/06	22/06
Route 8 Horseshoe Bay/Bowen Islan	•	•		=					
Peak	\$6.50	\$0.30	\$6.80	\$6.80	\$7.10	\$0.15	\$7.25	\$0.45	\$7.70
Low	\$6.25	\$0.30	\$6.55	\$6.55	\$6.85	\$0.15	\$7.00	\$0.45	\$7.45
Frequent User	\$3.35	\$0.30	\$3.65	\$3.55	\$3.85	\$0.15	\$4.00	\$0.45	\$4.45
Route 9 Tsawwassen to Gulf Islands	(One Way Fa	are)							
Peak	\$10.75	\$0.35	\$11.10	\$11.25	\$11.60	\$0.20	\$11.80	\$0.60	\$12.40
Low	\$10.50	\$0.35	\$10.85	\$11.00	\$11.35	\$0.20	\$11.55	\$0.60	\$12.15
Frequent User									
Route 17 Powell River/Little River (O	no Way faro	١							
Peak	\$8.25	\$0.40	\$8.65	\$8.65	\$9.05	\$0.20	\$9.25	\$0.65	\$9.90
Low	\$8.00	\$0.40	\$8.40	\$8.40	\$8.80	\$0.20	\$9.00	\$0.65	\$9.65
Frequent User	\$6.25	\$0.40	\$6.65	\$6.60	\$7.00	\$0.20	\$7.20	\$0.65	\$7.85
	70.20	4	70.00	4 - 1 - 2	4	7	4	70.00	4
Route 18 Powell River/Texada Island	•	•		,					
Peak	\$6.00	\$0.30	\$6.30	\$6.30	\$6.60	\$0.15	\$6.75	\$0.45	\$7.20
Low	\$5.75 ¢2.20	\$0.30	\$6.05	\$6.05	\$6.35	\$0.15	\$6.50	\$0.45	\$6.95
Frequent User	\$3.20	\$0.30	\$3.50	\$3.40	\$3.70	\$0.15	\$3.85	\$0.45	\$4.30
Route 19 Nanaimo Hbr/Gabriola Isla	nd (Return F	are)							
Peak	\$6.00	\$0.30	\$6.30	\$6.30	\$6.60	\$0.15	\$6.75	\$0.45	\$7.20
Low	\$5.75	\$0.30	\$6.05	\$6.05	\$6.35	\$0.15	\$6.50	\$0.45	\$6.95
Frequent User	\$2.85	\$0.30	\$3.15	\$3.00	\$3.30	\$0.15	\$3.45	\$0.45	\$3.90
Route 20 Chemainus/Thetis/Kuper Is	(Poturn Far	رم.							
Peak	\$6.00	\$0.30	\$6.30	\$6.30	\$6.60	\$0.15	\$6.75	\$0.45	\$7.20
Low	\$5.75	\$0.30	\$6.05	\$6.05	\$6.35	\$0.15	\$6.50	\$0.45	\$6.95
Frequent User	\$2.85	\$0.30	\$3.15	\$3.00	\$3.30	\$0.15	\$3.45	\$0.45	\$3.90
Routes 21 & 22 Buckley Bay/Denma		, ,	•	#F 7 F	¢6.05	¢0.15	¢6.20	¢0.45	#C CE
Peak Low	\$5.50 \$5.25	\$0.30 \$0.30	\$5.80 \$5.55	\$5.75 \$5.50	\$6.05 \$5.80	\$0.15 \$0.15	\$6.20 \$5.95	\$0.45 \$0.45	\$6.65 \$6.40
Frequent User	\$2.50	\$0.30	\$2.80	\$2.65	\$2.95	\$0.15	\$3.10	\$0.45	\$3.55
	7-1	7	7-1	7-100	7	70.00	7-1	701.0	40.00
Route 23 Campbell River/Quadra Is	(Return Fare)							
Peak	\$5.50	\$0.30	\$5.80	\$5.75	\$6.05	\$0.15	\$6.20	\$0.45	\$6.65
Low	\$5.25	\$0.30	\$5.55	\$5.50	\$5.80	\$0.15	\$5.95	\$0.45	\$6.40
Frequent User	\$2.50	\$0.30	\$2.80	\$2.65	\$2.95	\$0.15	\$3.10	\$0.45	\$3.55
Route 24 Quadra Is/Cortes Is (Retur	n Fare)								
Peak	\$6.50	\$0.30	\$6.80	\$6.80	\$7.10	\$0.15	\$7.25	\$0.45	\$7.70
Low	\$6.25	\$0.30	\$6.55	\$6.55	\$6.85	\$0.15	\$7.00	\$0.45	\$7.45
Frequent User	\$3.75	\$0.30	\$4.05	\$3.95	\$4.25	\$0.15	\$4.40	\$0.45	\$4.85
Double 2E Doub MoN-WAL-ut D- 70	tula (D-tu	Fama\							
Route 25 Port McNeill/Alert Bay/Soin Peak	tula (Return \$6.50	\$0.30	\$6.80	\$6.80	\$7.10	\$0.15	\$7.25	\$0.45	\$7.70
Low	\$6.25	\$0.30	\$6.55	\$6.55	\$6.85	\$0.15	\$7.23	\$0.45	\$7.75
Frequent User	\$3.75	\$0.30	\$4.05	\$3.95	\$4.25	\$0.15	\$4.40	\$0.45	\$4.85
Route 26 Skidegate/Alliford Bay (Ret	,	40 30	4E 00	4F 7F	#6.0 F	40 1 F	46.30	40 4F	46.6 5
Peak Low	\$5.50 \$5.25	\$0.30 \$0.30	\$5.80 \$5.55	\$5.75 \$5.50	\$6.05 \$5.80	\$0.15 \$0.15	\$6.20 \$5.95	\$0.45 \$0.45	\$6.65 \$6.40
Frequent User	\$3.23 \$2.50	\$0.30	\$3.33 \$2.80	\$5.50 \$2.65	\$3.80 \$2.95	\$0.15	\$3.95 \$3.10	\$0.45 \$0.45	\$6.40 \$3.55
equent obei	42.50	40.50	42.00	42.00	42.55	40.13	43.10	40.13	45.55
ROUTE GROUP 7									
Route 13 Langdale/Keats/Gambier Is			1.50	4. =-	4.==	10.00	4.=-	10.00	4. =-
Peak	\$4.50	\$0.00	\$4.50	\$4.70	\$4.70	\$0.00	\$4.70	\$0.00	\$4.70
Low Fraguent User	\$4.25 \$2.95	\$0.00	\$4.25	\$4.45	\$4.45	\$0.00	\$4.45	\$0.00	\$4.45 \$3.10
Frequent User	\$2.93	\$0.00	\$2.95	\$3.10	\$3.10	\$0.00	\$3.10	\$0.00	\$3.1U

September 30, 2006 29 of 169



Section 3: Service Fees from Government

Under the CFSC, BC Ferries provides ferry services on 25 designated (regulated) ferry routes and 8 unregulated ferry routes. In return for providing these services, BC Ferries receives a service fee from the provincial government.

Service Fees for Designated Ferry Routes

The service fee payable to BC Ferries in performance term one under the CFSC for services provided in respect of the designated ferry routes is comprised of the following two components:

- **Ferry Transportation Fee** a fee for providing ferry transportation services on the designated ferry routes; and,
- Social Program Reimbursement an amount representing reimbursement of BC Ferries for any foregone revenue in respect of the provincial social program discounts.

The service fees BC Ferries has received and expects to receive in performance term one with respect to each of these components is described below.

Ferry Transportation Fee

The CFSC prescribes the core ferry services BC Ferries is to provide on each of the designated routes. In return for providing these services, BC Ferries receives a Ferry Transportation Fee calculated on the basis of the number of core round trips the Company delivers.

The Ferry Transportation Fee to be paid by the Province on the designated ferry routes in performance term one is set out in Appendix 1 of Schedule B of the Contract. A Ferry Transportation Fee is paid by the Province for service on all designated routes with the exception of the routes comprising the major route group (service between Vancouver Island and the Lower Mainland on routes 1, 2 and 30). Without the provincial Ferry Transportation Fee, tariffs on the non-major routes would need to be correspondingly higher in order for BC Ferries to remain financially viable and maintain current service levels. Ferry Transportation Fees are service based, and are not adjusted for annual inflation in performance term one.

September 30, 2006 30 of 169



Service Fees from Government

As noted above, the Ferry Transportation Fee varies depending on the route and the actual service BC Ferries provides. For example, BC Ferries may not always be able to deliver a specific sailing due to maintenance issues, weather, emergency response, etc. "Temporary Service Disruptions" are defined in Schedule A of the Contract, of which twenty consecutive days and an aggregate of thirty days per annum are allowed.

BC Ferries provides monthly invoices to the provincial government. If actual service meets or exceeds core service, then the Company receives full payment of the Ferry Transportation Fee. If service is disrupted, then the Ferry Transportation Fee may be reduced to reflect the lower service level.

Table 3-1 summarizes the provincial service fees paid to BC Ferries for core ferry service by route group. Actual payments received are reflected for the fiscal years 2003/04 to 2005/06, and forecasts through to 2007/08 are presented. Appendix B provides further detail at a route level.

Table 3-1 Summary of Ferry Transportation Fees (\$Millions)

Fiscal Year	Group 2 Route 3	Group 3 North	Group 4 Route 40	Group 5 Mill Bay	Group 6 Minors	Group 7 Route 13	Total
2003/04	5.0	13.5	1.9	1.4	69.5	0.5	91.8
2004/05	5.0	13.5	1.9	1.4	69.5	0.5	91.8
2005/06	5.0	13.5	1.9	1.4	69.5	0.5	91.8
2006/07	5.0	13.5	1.9	1.4	69.5	0.5	91.8
2007/08	5.0	26.9	1.9	1.4	69.5	0.5	105.2

With the exception of route group 3 (northern routes), the forecast information assumes service fees from the Province remain unchanged from the levels set in the CFSC.

The forecasted increase in the Ferry Transportation Fee for route group 3 (northern routes) in fiscal year 2007/08 is attributable to the replacement vessel M.V. "Sonia" entering service in April 2007. BC Ferries expects to take delivery of the M.V. "Sonia" in October 2006, however, the vessel will require an extensive refit before entering service. No service fee increase is anticipated in fiscal year 2006/07. BC Ferries and the Province are currently working towards a final form of the amendment to the CFSC to reflect these negotiated increases to the Ferry Transportation Fee.

September 30, 2006 31 of 169



Service Fees from Government

Social Program Reimbursement

BC Ferries provides social program discounts on behalf of the provincial government for seniors, students, the disabled and for passengers requiring medical treatment. In turn, the provincial government reimburses BC Ferries for the cost of providing this service. The following discounts apply:

- Seniors traveling Monday through Thursday, excluding statutory holidays, receive free passenger travel (On routes 10, 11 and 40 seniors receive a 33% discount any day of the week);
- Students traveling for school and/or junior association related events receive free passage on the minor routes and route 13, a 50% discount on the major routes and route 3 between Langdale and Horseshoe Bay;
- Disabled individuals travel at half the passenger fare on all routes; and
- Passengers requiring travel for medical treatment receive free travel for a vehicle and passenger.

BC Ferries records the number of passengers traveling under these social programs and invoices the provincial government for the difference between the fare collected and the full tariff fare. On this basis, BC Ferries is reimbursed for the cost of the social program discounts offered by the provincial government. Table 3-2 shows the Social Program Reimbursement fees received and forecast to be received by BC Ferries by route group in performance term one. Appendix B provides further detail at a route level.

Table 3-2 Social Program Reimbursement Revenue (\$Millions)

Route Groups	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Group 1 - Majors	6.67	7.26	7.79	8.00	8.33
Group 2 - Route 3	1.34	1.46	1.62	1.66	1.76
Group 3 - North	0.49	0.48	0.52	0.54	0.56
Group 4 - Route 40	0.01	0.01	0.03	0.03	0.04
Group 5 – Mill Bay	0.00	0.01	0.07	0.07	0.07
Group 6 - Minors	3.77	4.17	4.61	4.83	5.08
Group 7 - Route 13	0.04	0.27	0.04	0.04	0.04
TOTAL	12.32	13.41	14.67	15.16	15.88

The Social Program Reimbursement fees are increasing as a result of an increase in usage as well as corresponding annual increases in the tariff.

September 30, 2006 32 of 169



Service Fees from Government

In forecasting the Social Program Reimbursement fees, increases are anticipated in senior travel due to continuing tariff increases, population increases as well as shifts in demographics of an aging population. Medical travel also is expected to increase as a result of an older population.

Fees under the student discount program are expected to remain flat because the communities we serve are showing a general decline in the student population, with the exception of certain Islands. In particular, route 8 (Horseshoe Bay to Bowen Island) has shown substantial growth. Route 6 (Saltspring Island to Crofton) is also showing growth in student travel.

Service Fees for Unregulated Ferry Routes

Under the CFSC, BC Ferries receives a service fee from the provincial government for the provision of service on 8 unregulated routes. BC Ferries has contracts with third party service providers to deliver service on these routes. The Commissioner does not regulate the tariffs or service levels on these routes.

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(c) of the Act to provide the Commissioner with the service fees BC Ferries has and reasonably expects to receive in the current performance term.

September 30, 2006 33 of 169



Section 4: Revenues from All Sources

BC Ferries receives revenues from various sources that contribute to the overall recovery of its cost of service, including a return on equity, that are then used by BC Ferries to cover expenses and to add, replace or upgrade capital assets such as ferries, terminals and other infrastructure.

Sources of revenues include fares from ticket sales, ancillary services and revenues provided to the Company pursuant to the CFSC. The CFSC revenues include funding from the Canada / British Columbia Coastal Ferry Subsidy Agreement, provincial Ferry Transportation Fees, reimbursement of costs from the provincial government to provide social discount programs, and service fees from the Province for the provision of service on the unregulated routes. Revenues from ticket sales, ancillary services and the Canada/British Columbia Coastal Ferry Subsidy Agreement are discussed below. The other revenue categories are described in the preceding section of this report.

Table 4-1 provides a comparison of revenues, year over year, in performance term one. Specific revenue summaries for each of the designated routes are included in the route statements attached as Appendix B.

Table 4-1 Annual Revenues from All Sources (\$Millions)

Revenues	2003/ 04	2004/ 05	2005/ 06	Forecast 2006/07	Forecast 2007/08
Tariff Revenue	323.0	345.9	353.6	362.2	381.8
Ancillary Revenue	57.6	61.2	65.9	68.8	68.8
Proceeds from the Canada/BC Coastal Ferry Subsidy Agreement	24.0	24.3	24.9	25.3	25.9
Ferry Transportation Fee	91.8	91.8	91.8	91.8	105.2
Social Program Reimbursement	12.3	13.4	14.7	15.2	15.9
Unregulated Route Service Fees	1.7	1.7	1.7	1.7	1.7
TOTAL	510.4	538.3	552.6	565.0	599.3

September 30, 2006 34 of 169

Tariff Revenues

BC Ferries' core business is the provision of ferry transportation service. BC Ferries transports passengers, vehicles and freight on 25 designated ferry routes between 45 terminals. Each passenger and/or vehicle is required to pay a fare for core ferry service as set out in the Company's tariff schedule that is updated from time to time.

Section 2 of this report provides more details on how BC Ferries' manages its tariffs.

Traffic Levels

BC Ferries' fares, multiplied by the number of passengers and vehicles, determine the tariff revenue that BC Ferries can expect to achieve in any given year. Traffic not only determines revenues to the Company for providing core service levels, but also influences revenues received from ancillary services.

Traffic statistics are recorded based on passenger and vehicle types. Traffic categories include passengers (adults, child, and students) and vehicles (under-height vehicles, over-height vehicles, as well as trucks, buses and semi-trailers). Table 4-2 illustrates actual BC Ferries passenger and vehicle traffic statistics by fiscal year from 2003/04 through 2005/06, with a forecast of passenger and vehicle traffic for fiscal years 2006/07 and 2007/08.

Traffic statistics by route group are included as Appendix E.

Table 4-2
Traffic Statistics for All Route Groups
(in 000's)

Traffic Type	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Passengers	21,367	22,027	21,730	21,778	22,011
Vehicles	8,292	8,557	8,543	8,515	8,638

Passenger traffic increased approximately 3.1% between 2003/04 and 2004/05 fiscal years and declined marginally by approximately 1.3% in 2005/06 from levels experienced in the previous fiscal year.

Similarly, vehicle traffic also increased from 2003/04 to 2004/05 by approximately 3.2%. As well, vehicle traffic declined by 0.2% between 2004/05 and 2005/06. The decrease in traffic between 2004/05 and 2005/06 was primarily due to fiscal year 2004/05 having two Easter weekends while fiscal year 2005/06 did not have an Easter (Easter weekends experience significant traffic). BC Ferries also witnessed a decline in the number of tour buses, which is believed to be related to a general decline in tourism. This is

September 30, 2006 35 of 169



most evident on the major routes which experience the greatest volatility from changes in tourism.

Northern route traffic levels (route group 3) are expected to decline by approximately 38% in 2006/07 as a result of the loss of the M.V. "Queen of the North". BC Ferries is forecasting that traffic levels on the northern routes will recover in 2007/08 to normal levels with the introduction of the M.V. "Sonia".

Over the period of April 1, 2006 to March 31, 2008, BC Ferries is projecting traffic growth of 1.3% for passengers and 1.1% for vehicles fleetwide.

Revenues from Fares

Individual route group tariff revenues by fiscal year are presented in Table 4-3. Actual tariff revenues are presented for the first three years of performance term one and forecasted tariff revenues are presented for the remaining two years of the performance term. Tariff revenues by route are included in the route statements attached as Appendix B.

Table 4-3
Tariff Revenue by Route Group
(\$ million)

Route Groups	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Group 1 - Majors	242.9	259.6	264.5	273.1	282.7
Group 2 - Route 3	22.5	24.8	25.9	27.4	28.4
Group 3 - North	11.6	12.2	12.7	8.4*	14.4
Group 4 – Route 40	1.2	1.1	1.4	1.5	1.6
Group 5 – Mill Bay	0.8	1.1	1.1	1.0	1.3
Group 6 - Minors	43.9	47.0	47.9	50.6	53.3
Group 7 – Route 13	0.1	0.1	0.1	0.2	0.2
TOTAL	323.0	345.9	353.6	362.2	381.8

*Note: Route group 3 tariff revenues are forecast to decline substantially in 2006/07 due to the sinking of the M.V. "Queen of the North". The route revenues are expected to recover in 2007/08 with the M.V. "Sonia" entering service.

September 30, 2006 36 of 169



As can be seen in Table 4-3, the major routes serving Victoria, Nanaimo and Vancouver (route group 1) account for approximately 75% of tariff revenues. The minor routes, or route group 6, is the second largest generator of tariff revenue accounting for approximately 13.5% of total tariff revenues, with passengers using the Horseshoe Bay - Langdale route making up approximately 7% of total tariff revenues. All other routes make up the remaining 4.5% of tariff revenue.

Due to the relative magnitude of the major route group in relation to total revenues, changes in traffic and tariffs on the major routes will have the largest impact on the Company's revenues. To a much lesser extent, revenues are also impacted by changing conditions on route group 6 (minor routes) and route group 2 (route 3).

Overall, BC Ferries' tariff revenue increased by approximately 7.1% from \$323.0 million in 2003/04 to \$345.9 million in 2004/05 primarily due to higher tariffs and an increase in traffic as described above.

Tempered by the lower traffic in 2005/06, overall tariff revenue increased approximately 2.2% from 2004/05 to 2005/06.

In each year commencing November 1, the price caps increase over a twelve month period by 2.8% on the major routes and 4.4% on all other routes. The average fares generally increase in line with the price caps.

It should be noted that over 2005/06, the average fares on the minor routes (route group 6) did not increase at the same rate as the price cap increase of 4.4%, due to the higher number of customers using discount books. On smaller routes BC Ferries offers discount books for passengers and vehicles that range between 25% and 55%, and on average are approximately 40% of the regular tariff. With the introduction of fuel surcharges and increasing regular tariffs, more customers are purchasing the discount books rather than paying full fare in an effort to mitigate the higher fares.

For 2006/07, BC Ferries is forecasting tariff revenues to increase by \$8.6 million to \$362.2 million. This reflects projected traffic growth as well as increases in the tariff aligned with the annual price cap increases of 2.8% on the major routes and 4.4% on all other route groups provided for under the Act. It is estimated that the loss of the M.V. "Queen of the North" will result in a year-over-year reduction in tariff revenues of \$4.3 million.

For 2007/08, BC Ferries is forecasting tariff revenues of \$381.8 million. This growth in tariff revenues reflects projected traffic growth, as well as increases in the tariff aligned with the annual price cap increases provided for under the Act and anticipated revenue on the northern routes as a result of core service levels being resumed.

September 30, 2006 37 of 169



Ancillary Revenues

In addition to fares for ferry transportation services, BC Ferries also earns revenues from non-regulated, ancillary goods and services. Ancillary revenues are those revenues that are derived from non-core activities and include revenues received from such things as parking fees, retail and restaurant operations both on and off the ferries, and reservation fees for the major routes and route 3 (BC Ferries does not charge a reservation fee on the northern routes or on the Southern Gulf Island route).

Table 4-4 provides ancillary revenues (net of cost of goods sold) by route group and by fiscal year. Ancillary revenues by route are included in the route statements attached as Appendix B.

Table 4-4
Ancillary Revenues
(Net of Cost of Goods Sold)
(\$ million)

Route	2003/04	2004/05	2005/06	Forecast	Forecast
Groups				2006/07	2007/08
Group 1 -	47.0	49.9	53.9	57.8	57.2
Majors					
Group 2 -	4.0	4.6	5.1	5.7	5.7
Route 3					
Group 3 -	2.5	2.6	2.8	1.4	2.1
North					
Group 4 -	0.1	0.2	0.2	0.2	0.2
Route 40					
Group 5 -	0.0	0.0	0.0	0.0	0.0
Mill Bay					
Group 6 -	3.9	3.9	3.9	3.7	3.6
Minors					
Group 7 -	0.1	0.0	0.0	0.0	0.0
Route 13					
TOTAL	57.6	61.2	65.9	68.8	68.8

Approximately 83% of ancillary revenues are generated on the major routes (route group 1), more than ten times the next largest source of ancillary revenue from route group 2 and route group 6, the Langdale to Horseshoe Bay and minor routes, respectively. Due to this relative volume from the major routes, growth in ancillary revenues from the major routes has been the principal driver of ancillary revenue growth of approximately 7.7% in 2005/06 compared to 2004/05.

September 30, 2006 38 of 169



Ancillary revenue for the major routes has also been impacted by Assured Loading Tickets (ALTs). In 2005/06, \$2.0 million in ALT revenues was recognized, reflecting the reassessment of the deferred revenue liability related to historical sales of paper ALTs. Sales of paper ALTs ceased in May 2005 upon the introduction of the "Coast Card". For fiscal 2006/07, it is anticipated that a further \$1.5 million will be recognized in ALTs, once again reflecting a reassessment of the deferred revenue liability.

Route group 3 (Langdale to Horseshoe Bay) is forecasted to have strong ancillary revenue growth in 2006/07 due to expected growth in on-board retail services. This is the result of the mid-life upgrade to the M.V. "Queen of Surrey" and the associated improvements to passenger amenities. After the initial launch of the vessel, ancillary revenue will moderate to normal growth rates in future years.

It should be noted that although there has been strong growth in the ancillary revenues related to the northern routes from 2004/05 to 2005/06, with the sinking of the M.V. "Queen of the North", it is expected that ancillary revenues from route group 3 (northern routes) will be lower in 2006/07 but will increase again next year with the replacement vessel M.V. "Sonia" expected to be in service for the spring/summer season.

For the remainder of performance term one, BC Ferries is forecasting that ancillary revenue will grow to \$68.8 million in 2006/07 and remain stable in 2007/08. This reflects projected traffic growth as well as inflationary increases.

Canada / British Columbia Coastal Ferry Subsidy Agreement

The Canada / British Columbia Coastal Ferry Subsidy Agreement (the "Federal Contract"), signed on April 18, 1977, provides funding from the federal government to the Province in return for the Province agreeing to provide adequate ferry service in British Columbia. The CFSC provides that the Province will continue to make available to BC Ferries the full proceeds of the subsidy from the Federal Contract. The Federal Contract can only be terminated by the joint agreement of the Province and the federal government.

The annual payments under the Federal Contract are subject to inflation at a rate equal to the Vancouver Consumer Price Index. Actual subsidy payments received by BC Ferries through 2005/06 and forecast payments through 2007/08 are presented in Table 4-5.

September 30, 2006 39 of 169



Table 4-5
Summary of Federal Contract Subsidy Payments
Allocated to Route Groups
(\$ Millions)

Year	Group 2 Route 3	Group 3 North	Group 4 Route 40	Group 5 ² Mill Bay	Group 6 Minors	Group 7 Route 13	Total
2003/04	1.3	3.6	0.5	0	18.4	0.1	23.9
2004/05	1.3	3.6	0.5	0	18.7	0.1	24.3
2005/06	1.4	3.7	0.5	0	19.2	0.1	24.9
2006/07	1.4	3.8	0.5	0	19.5	0.1	25.4
2007/08	1.4	3.9	0.5	0	19.9	0.2	25.9

Note: the above table assumes Vancouver CPI of 2% for the forecast period through 2008 and allocated in the same proportion as 2006 actual results

Allocation of Revenues

Allocation Methodology

In order to account for all revenues at the route group level, BC Ferries must allocate direct and indirect revenues to each route group. Revenues incurred directly at the route level are easily assignable to that route or route group. For example, direct revenues, such as tariffs are easily applied to the route in which the revenue was received from vessel operations.

However, revenues incurred at a multi-port terminal (indirect revenues) are not necessarily readily assignable to any one specific route or route group. Examples of such indirect revenues include parking and terminal catering revenue in multi route terminals. These services enhance the customer experience when traveling on a route, but the revenues are not specific to one route. Therefore, revenues that are not specific to a particular route or route group must be allocated to a route in a systematic and rational way.

Table 4-6 provides a guide to the types of revenue that are allocated to routes, the allocation factor used and the methodology followed.

September 30, 2006 40 of 169

² When the subsidy from the Federal Contract was allocated, route group 5 (Mill Bay to Brentwood Bay) was excluded because there is a highway alternative to the service.



Table 4-6 Allocation of Revenues

Type of Revenue	Allocation Methodology	Explanation
Canada/British Columbia Coastal Ferry Subsidy Agreement		The Federal Contract Subsidy was originally allocated to routes based on the anticipated loss of each route in the 2003/04 budget. The continuing allocation for the balance of performance term one will be based on this original proportion. Routes 1, 2, 30 and 12 are excluded from this allocation.
Coastal Ferry Service Fees		
Ferry Transportation Fees	Direct	Fees are assigned directly to each route based on the Coastal Ferry Services Contract. Route 1, 2, 30 are excluded from this.
Social Discount Program Fees	Direct	Assigned to routes based on forgone revenue not charged to travellers.
Unregulated Routes Fee	Direct	Assigned to contracted routes based on the contracted cost.
Tariff Revenue	Direct	Tariff revenues are assigned directly to each route.
Catering Revenue		
Vessel	Direct	Vessel catering revenues are assigned directly to each route.
Terminal	Passenger thru put	Terminal catering revenues are allocated based on the percentage of total passengers embarking from the terminal on a route.
Parking Revenue	Foot passenger thru put	Parking revenues are allocated based on the percentage of foot passengers embarking on a route from the terminal where the parking revenues are earned.
Reservation Fees/Rent	Direct	Revenues directly related to a route are assigned directly to the routes.
Other Revenues (foreign exchange, marketing)	Total direct revenue	Revenues that are not directly attributable to a route are allocated based on each route's percentage of total direct revenue.

September 30, 2006 41 of 169



Revenue Allocated To Route Groups

Table 4-7 shows the actual route group revenue allocations for the first three years of performance term one and the forecasted revenue allocations for the remaining two years of the performance term. Revenue allocations by designated ferry route are provided in the route statements attached as Appendix B.

Table 4-7
Total Revenue Allocated to Route Groups
(\$ Millions)

Route Groups	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Group 1 Majors	296.5	316.8	326.2	338.9	348.3
Group 2 Route 3	34.1	37.2	39.0	41.2	42.3
Group 3 North	31.7	32.3	33.2	27.5	47.7
Group 4 Route 40	3.7	3.7	4.0	4.1	4.2
Group 5 Mill Bay	2.3	2.5	2.6	2.5	2.8
Group 6 Minors	139.5	143.3	145.1	148.2	151.4
Group 7 Route 13	0.9	0.9	0.9	0.9	0.9
Unregulated Routes	1.7	1.7	1.7	1.7	1.7
TOTAL	510.4	538.4	552.7	565.0	599.3

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(d) of the Act to provide the Commissioner with the revenues from all sources that BC Ferries has earned and reasonably expects to earn in the current performance term.

September 30, 2006 42 of 169



Section 5: Expenses

This section provides information on the expenses that BC Ferries has incurred and expects to incur in respect of the provision of service on the designated ferry routes in performance term one.

It begins with an overview of the expenses at a Company level, followed by a description as to how those expenses are and have been allocated on a route basis.

Overview of Expenses

Table 5-1 provides a summary of total expenses incurred by the Company in the first three years of performance term one, as well as forecasted expenses to the end of the performance term.

Table 5-1 Summary of Total Expenses (\$Millions)

	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Operating, Maintenance and Administrative Expenses	411.2	426.4	425.2	437.1	452.1
Amortization	47.3	47.5	52.9	56.5	74.2
Financing Expense	22.5	24.0	24.4	19.7	33.6
(Gain)/Loss on Disposal	1.6	0.6	0.3		
TOTAL	482.6	498.5	502.8	513.3	559.9

Operating, Maintenance and Administrative Expenses

As indicated in Table 5-1, Operating, Maintenance and Administrative (OM&A) expenses increased in 2004/05 by \$15.2 million, or 3.7%, to \$426.4 million from \$411.2 million in $2003/04^3$. The increase is mainly attributable to the following:

3 Cost of Goods Sold are net of ancillary revenues and are therefore not included in OM&A

September 30, 2006 43 of 169



Expenses

- \$5.8 million was due to the first complete calendar year of the change from paying grants in lieu of taxes to property taxes based on assessed value. Another \$1.6 million was due to increased wage and training costs.
- Maintenance expenses, which include expenditures for vessel refit and maintenance as well as terminal maintenance activities, were \$0.7 million higher mainly due to changes in scope and scheduling of vessel refits and maintenance.
- Administration expenses increased \$5.6 million due mainly to the cost of corporate information technology support of \$4.3 million. BC Ferries has had many new initiatives and upgrades in its computer systems which require increased support. These initiatives enhance customer service in areas such as reservations and retail and food services as well as provide operational efficiencies in crew scheduling.

OM&A expenses in 2005/06 were \$425.2 million, \$1.2 million or 0.3% less than in 2004/05. The decrease in OM&A expenses can be attributed to the following:

- The total decrease in operations expenses reflects a \$7.7 million net decrease in property tax expense. In January, 2006, the Property Assessment Appeal Board accepted an agreement reached with the BC Assessment Authority to settle 2003/04 and 2004/05 terminal property assessment appeals. Prior to becoming an independent company, BC Ferries paid approximately \$1.4 million per year in grants-in-lieu of property taxes. In 2003/04, BC Ferries was levied \$8.9 million in property tax and a further \$9.9 million in 2004/05. The settlement reduces terminal property assessments by approximately 40% for 2003/04 and 47% for 2004/05 resulting in a refund of \$8.2 million. This reduction in property tax expense was partially offset by an increase in wages and benefits of \$3.6 million, a \$0.7 million increase in the total fuel costs due to a 5% increase in the set price as approved by the Commissioner in Order 05-02, a \$1.3 million increase in marine insurance and a \$1.6 million increase in major advertising campaigns and travel agent fees. Costs not covered by third party insurance for the grounding of the M.V. "Queen of Oak Bay" totalled \$1.5 million, with \$1.2 million reflected in operations and \$0.3 million reflected in maintenance expenses.
- Maintenance expenses were \$5.7 million lower in fiscal year 2005/06 compared to fiscal year 2004/05. This was mainly due to the higher maintenance costs incurred in fiscal year 2004/05 for one-time costs required to meet Transport Canada requirements.
- Administration expenses increased \$6.7 million in fiscal year 2005/06 compared to the previous fiscal year. Increases include:

September 30, 2006 44 of 169



- \$3.7 million for corporate information technology support. BC Ferries
 has had many new initiatives and upgrades to computer systems,
 including safety and security programs, a new catering and retail
 system and systems to improve customer service, which require
 increased support;
- \$2.1 million resulting from the internal control certification project. BC Ferries has initiated this project to document and test the effectiveness of internal controls on which management is relying to support certifications required by the Canadian Securities Administrators. This work, which is due to be completed in time to certify by March 31, 2007, is required under Multilateral Instrument 52-109 issued by the Canadian Securities Administrators. BC Ferries is required to comply with this as we are a reporting issuer (our debt instruments are available to the public). Once certification is achieved, the costs associated with the project will decline but ongoing costs are required as the Company continues to support ongoing maintenance of the program, and,
- \$2.1 million costs for severance and restructuring.

These increases were partially offset by administrative efficiencies.

Year over year, OM&A expenses are projected to increase approximately 2.8% in 2006/07. In considering this increase, it is important to note that the OM&A expenses in 2005/06 were unusually low as they were impacted by the recovery of property taxes. Normalizing the property tax rebate would result in OM&A expenses in 2005/06 of \$431.6 million, resulting in a restated increase in 2006/07 of approximately 1.3% compared to 2005/06.

Forecasted OM&A expenses to 2007/08 are expected to increase by an additional \$15.0 million, or 3.4% over 2006/07. The projected increase reflects the following:

- Operating expenses (excluding labour) are inflated at the CPI forecast rate of 2.0%.
- Labour expenses are forecast to increase by 1.5%, consistent with the 2004 Vince Ready Interim Arbitration Award that is part of the Collective Agreement. The Ready Award expires on October 31, 2010, and as currently directed in the Award there would be a 2% general wage increase for all job classifications on 1st November 2008 and on 1st November 2009. In his Interim Award, Mr. Ready also makes for provision to modify the award and for the parties to reopen wage negotiations. The Commissioner will be kept informed of any such actions in this regard.

September 30, 2006 45 of 169



- Higher insurance costs are forecasted, escalating at 10% per year, with an additional \$1.8 million associated with the sinking of the M.V. "Queen of the North".
- Internal Control Certification (ICC) costs of \$1.6 million established in the 2006/07 base year decline to \$1.0 million in 2008, and are held at that level going forward.
- Fuel prices are increasing at the Consumer Price Index, consistent with the Commissioner's Order 04-02.

The price of fuel continues to challenge BC Ferries. When BC Ferries implemented the most recent fuel surcharge in June, 2006, BC Ferries had retained PGI to provide a forecast to the end of performance term one. Based on those forecasts, BC Ferries was projecting that the fuel deferral accounts would have a residual balance of \$9.7 million.

However, BC Ferries recently retained PGI to update their fuel forecast and, based on the revised fuel price forecasts (recieved September 1, 2006), for the remainder of performance term one, BC Ferries is projecting the deferral accounts balances in aggregate will be \$23.7 million as at March 31, 2008. A summary of PGI's recent fuel price forecast is attached as Appendix C.

Amortization of Capital Costs

BC Ferries amortizes assets on a straight line basis in accordance with Generally Accepted Accounting Principles (GAAP) and the Act (pursuant to s.41(2)(a)(iii)(B)). Amortization is based on the cost of the asset, the expected life of the asset and the expected salvage value at the end of the life of the asset. BC Ferries' amortization policy sets the average life expectancy of each asset class as well as the components in each asset. For example, a ship is made up of several different components each with a different life expectancy: the hull is amortized over 40 years, hotel and life saving appliances are amortized over 13 years, and propulsion components are amortized over 20 years. A complete schedule of BC Ferries' amortization policy is available to the Commissioner on request.

As BC Ferries makes investments in capital assets such as vessels, terminals and head office facilities and equipment, the cost of the asset base grows, resulting in higher annual amortization. During performance term one, the Company has been reinvesting in infrastructure and will continue to do so for the remainder of term one and throughout performance term two.

September 30, 2006 46 of 169



Amortization expense incurred and expected to be incurred by BC Ferries in performance term one is set out in Table 5-1. Over performance term one, amortization expense is forecasted to increase by 57% to \$74.2 million for the year ended 2007/08 compared to amortization of \$47.3 million for the 12 months ended 2003/04. This reflects the continued investment BC Ferries is making in its infrastructure. Large acquisitions such as new vessels generally result in a larger than normal increase to amortization. For example, route group 1 will receive a Super C class vessel in fiscal year 2008, which will result in a material increase to annual amortization. The loss of the M.V. "Queen of the North" will see a decline in amortization on route group 3 in 2007 compared to 2006. However, with the replacement vessel for the M.V. "Queen of the North" entering service in 2007, annual amortization is expected to increase on route group 3 in 2007/08.

BC Ferries is currently undertaking an aggressive capital rebuilding program to replace aged infrastructure. This is the result of minimal capital replacements over the ten year period prior to BC Ferries becoming an independent company. As a result, amortization costs will increase in step with this program and without revenue increases net earnings would decline.

Financing Expense

BC Ferries funds its operational requirements and capital expenditure program through cash from operations and debt. BC Ferries currently has \$500 million in capital market debt, made up of \$250 million, 5.74% Senior Secured Bonds due May 2014 and \$250 million, 6.25% Senior Secured Bonds due October 2034. In addition to the capital market debt, the Company has a \$155 million, 5-year revolving credit facility with a syndicate of Canadian Banks. As at the date of the report, the credit facility was un-drawn.

As shown in Table 5-1, financing expense has been relatively consistent from year to year up to fiscal year 2005/06. For fiscal year 2006/07, BC Ferries is forecasting a financing expense of approximately \$19.7 million, a decrease of \$4.7 million from fiscal year 2005/06. This can be attributed in part to the following events:

- An increase in the capital expenditure program for fiscal year 2006/07
 has resulted in a larger credit for interest during construction of
 approximately \$4.7 million, which is partially offset by an increase in
 interest expense related to new borrowings of \$2.1 million; and
- An increase in the amount of interest expense relief received from the Structured Financing Facility ("SFF") program. The federal government, through the SFF program will provide interest expense funding of approximately \$4.6 million for fiscal year 2006/07. This represents an increase of \$2.1 million over fiscal year 2005/06. The SFF program is associated with the Company's midlife upgrade ("MLU") program on various vessels in the fleet.

Financing costs for fiscal year 2007/08 are projected to increase to \$33.6 million, a year over year increase of \$13.9 million. This is mainly due to:

September 30, 2006 47 of 169



- A decrease in the federal government SFF funding received of approximately \$2.0 million in fiscal year 2007/08, a year over year decrease of \$2.6 million. The decrease is a result of the Company having realized a significant portion of the funding benefit for the MLU program; and
- Higher interest costs associated with increased borrowings necessary to support the planned capital expenditures.

Gain/Loss on Disposal of Assets

When BC Ferries disposes of its assets, it must recognize a gain or loss on the sale. BC Ferries recorded losses on disposal of its assets in each of 2003/04, 2004/05 and 2005/06 of \$1.6 million, \$0.6 million, and \$0.3 million, respectively.

Allocation of Expenses

Allocation Methodology

In order to account for all costs at the route and route group level, BC Ferries must allocate direct, overhead and indirect costs incurred in the operation of its business to each route. Costs incurred directly at the route level are easily assignable to a route or route group. For example, direct expenses, such as vessel labour and fuel costs are easily applied to the route in which the vessel operates.

However, costs incurred at the terminal and at the administrative level (indirect costs and overheads) are not necessarily readily assignable to any one specific route or route group. Examples of such costs include expenses incurred in multi route terminals, payroll and accounting services, terminal asset management, etc. These indirect costs all serve to ensure that the ferry on a route continues to operate, but are not specific to one route. Therefore, costs that are not specific to any particular route or route group must be allocated to a route in a systematic and rational way.

BC Ferries carries out an allocation procedure with respect to all of its costs that are not directly assignable to a specific route or route group. In most respects the allocation of expenses is based on the same principles as the allocation of revenues, with the exception of some expenses requiring a two-step process. For example, maintenance costs are directly attributable to a vessel. However, to allocate costs, including maintenance to each route, total vessel costs are allocated to the route based on the number of vessel sailing hours.

Table 5-2 provides a guide to the types of indirect costs that are allocated to routes, the allocation factor used and the methodology followed.

September 30, 2006 48 of 169



Table 5-2 Allocation of Operating Expenses

Type of Expense	Allocation Methodology	of Operating Expenses Explanation
Operational Administration and		Allocated to routes based on productive labour
Human Resources	Productive route labour hours	hours.
Catering - Direct Overhead	Net catering revenue	Allocated across catering routes based on each route's percentage of net catering revenue.
Reservations Centre - Direct Overl	nead	
Inquiry	Total tariff revenue	Historically 60% of all Reservations expenses are Inquiry related. Allocated across all routes based on each routes percentage of tariff revenue.
Booking	Quantity of reservations	Historically 40% of all Reservations expenses are Booking related: 50% of this is allocated to routes based on quantity of reservations booked to a route. 50% of this is allocated to routes based on total value of reservations redeemed on a route.
Amortization		
Vessels	Vessel sailing hours	Amortization for each vessel is allocated to individua routes based on vessel sailing hours.
Terminals	Vehicle thru put	Amortization for multi-route terminals is allocated to individual routes based on vehicle throughput.
Other	Total Revenue	Amortization for overhead assets is allocated to individual routes based on total revenue.
Corporate Human Resources	Productive route labour hours	Allocated across all routes based on productive route labour hours.
Workforce Development	Productive route labour hours	Allocated across all routes based on productive route labour hours.
Business Development	Total Revenue	Allocated across all routes based on total revenue per route.
Purchasing & Materials Administration	Total Revenue	Allocated across all routes based on total revenue per route.
Corporate Support Services	Total Revenue	Allocated across all routes based on total revenue per route.
Financing Expense	Net Book Value of Capitalized Assets	Allocated based on the NBV of Capital assets employed on each route.
		The NBV of Vessels is allocated to routes based on vessel sailing hours
		The NBV of Terminal assets is allocated to routes based on vehicle thru put.
DPMI (Gain) Loss	Refit and Maintenance Cost	The DPMI (Gain) Loss is allocated to routes based on the refit & maintenance costs.
Loss (Gain) on Disposal of Fixed	Assets	Lancar (Online) discretization of the control of th
	Vessel Sailing Hours	Losses (Gains) directly attributable to vessels are first assigned to the route group the vessel served and are then allocated to routes based on vessel sailing hours.
	Vehicle thru put	Losses (Gains) directly attributable to terminals are allocated to routes based on vehicle thru put.
	Total Revenue	Losses (Gains) on overhead assets are allocated based on total revenue.
BCF Captive (Gain) Loss	Vessel insurance premiums by route	Losses (Gains) as a result of vessel policies (premiums less claims paid) are allocated across all routes based on vessel insurance premiums by route.
	Total Revenue (tariff and ancillary)	Losses (Gains) as a result of terminal policies (premiums less claims paid) are allocated across all routes based on total revenue by route.
	Total Revenue (tariff and ancillary)	Administrative expenses and allocated to all routes based on total revenue by route.

September 30, 2006 49 of 169



Expenses Allocated to Route Groups

Table 5-3 provides an allocation, by route group, of expenses for performance term one. Expenses allocated by designated ferry route are provided in the route statements attached as Appendix B.

Table 5-3
Summary of Operating Expenses, Amortization, Financing
Expenses and Loss/Gain on Disposal of Capital Assets by Route
Group⁴
(\$Millions)

Route Groups	2003/04	2004/05	2005/06	Forecast 2006/07	Forecast 2007/08
Group 1 – Majors	267.8	283.2	282.6	288.7	308.7
Group 2 - Route 3	36.3	32.6	37.6	38.9	42.2
Group 3 - North	34.0	34.5	38.4	36.5	50.0
Group 4 - Route 40	4.4	3.3	3.5	3.6	3.8
Group 5 - Mill Bay	2.5	2.1	2.3	2.3	2.4
Group 6 - Minors	135.1	140.6	136.1	140.7	150.0
Group 7 - Route 13	0.5	0.5	0.5	0.8	0.9
Unregulated Routes	1.9	1.8	1.8	1.8	1.9
TOTAL	482.5	498.6	502.8	513.3	559.9

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(e) of the Act to provide the Commissioner with the expenses that BC Ferries has and reasonably expects to incur in respect of the provision of service on the designated ferry routes in performance term one

September 30, 2006 50 of 169

⁴ BC Ferries incurs approximately \$1.8 million annually for the provision of non-designated, unregulated routes as defined in Appendix 2 of Schedule A to the CFSC. BC Ferries receives \$1.7 million annually from the Province pursuant to Schedule C of the CFSC.



Section 6: Alternative Service Providers

Pursuant to the requirements under section 69 of the Act, BC Ferries submitted its Additional or Alternative Service Providers Plan (the "ASP Plan") for the first performance term of the CFSC to the Commissioner in March, 2004.

In June, 2005, the Commissioner sponsored a one day workshop, hosted by the Western Transportation Advisory Council (WESTAC) to explore the ASP Plan. At this workshop, information and views on the potential opportunities and challenges in coastal BC for ferry service providers as subcontractors, franchisees and competitors to BC Ferries were exchanged. Comments received from the workshop were taken into consideration by BC Ferries and, in July, 2005, the Company submitted the Supplement to the Additional or Alternative Service Providers Plan to the Commissioner. In this supplement, BC Ferries confirmed the specific route groups for which it intends to consider alternative service delivery options during the first performance term of the CFSC and set out a proposed procurement model to support the ASP process.

Implementation of the ASP Plan

To date, BC Ferries has undertaken the following activities in accordance with its ASP Plan.

Route Group 5 - Mill Bay to Brentwood Bay (Route 12)

A Request for Expressions of Interest (RFEOI) was issued in October, 2005 to identify alternative service providers who are interested in delivering ferry services on the route, including ticketing, vessel provision, on-board services, terminal operations and maintenance. The RFEOI closed in November, 2005 and resulted in two existing ferry operators coming forward with expressions of interest. A Request for Proposals (RFP) is expected to be issued in 2006. In advance of the RFP being issued, there will be consultation with the BC Ferry & Marine Workers' Union in accordance with the requirements under the Collective Agreement.

Route Group 6 - Powell River to Comox (Route 17) and Powell River to Texada Island (Route 18)

As required by the CFSC, BC Ferries developed a vessel and service strategy with respect to routes 17 and 18. This strategy was developed after extensive consultation with the community and was submitted to the Ministry of Transportation in September, 2005. BC Ferries will review the viability of pursuing alternative service delivery arrangements for these routes once a response is received from the provincial government to the strategy.

September 30, 2006 51 of 169



Alternative Service Providers

Northern Routes

Route 10 - Port Hardy to Prince Rupert Route 11 - Queen Charlotte Islands to Prince Rupert Route 40 -Discovery Coast passage (Port Hardy to Mid Coast) Route 26 - Skidegate to Alliford Bay

A Request for Expressions of Interest (RFEOI) was issued in August, 2005 to identify alternative service providers who are interested in delivering ferry services on the northern routes, including ticketing, vessel provision, onboard services, terminal operations and maintenance. The RFEOI closed in September, 2005 and resulted in two existing ferry operators and one financial institution coming forward with expressions of interest. The financial institution subsequently withdrew from the process. In March, 2006 BC Ferries provided the two remaining proponents with detailed information on the service standards and requirements the Company considers are necessary for an alternative service provider to meet with respect to the provision of service on the northern routes. At fiscal year-end, there remained one proponent in the process, the other having subsequently withdrawn.

The sinking of the M.V. "Queen of the North" has occasioned the need for BC Ferries to review its original plans for seeking long term alternative service delivery options for the northern routes. In order to restore service levels on the northern routes and meet its requirements under the CFSC, BC Ferries has expedited its procurement process for acquiring replacement vessels for the northern routes. Consistent with this process, BC Ferries approached the sole proponent for the northern routes ASP process to determine whether that proponent had a suitable vessel that could be used for service on the northern routes. BC Ferries committed to consider alternative service delivery options the proponent might bring forward to enable the restoration of core service levels in a timely manner. The proponent submitted a conceptual proposal to BC Ferries, however, it could not be evaluated because it lacked sufficient information.

BC Ferries has had discussions with the Commissioner on possible modifications to the ASP process for the northern routes and expects to file a further update to the ASP Plan with the Commissioner once the process modifications have been fully developed.

September 30, 2006 52 of 169

Alternative Service Providers

Unsolicited Proposals

To date, BC Ferries has received a number of inquiries from parties interested in providing ferry services on the regulated ferry routes, but, with the exception of the conceptual proposal received for provision of service on the northern routes (see above) has not received any formal unsolicited proposals.

Procurement Model Changes

BC Ferries' approach to exploring alternative service delivery options responds to the specific requirements of the Act and reflects the Company's commitment to a fair and open competitive procurement process.

As BC Ferries progressed through the preliminary stages of implementing its ASP Plan, it became evident that changes to the procurement model were necessary. These changes are described in BC Ferries' Update and Supplement to the Additional or Alternative Service Delivery Plan, which was submitted to the Commissioner in February 2006.

Principal among the changes was the elimination of BC Ferries' role as a formal proponent in the process. A more traditional procurement approach will now be pursued, under which BC Ferries will assess alternative service proposals against the cost and risk profile of continuing to deliver the service itself. BC Ferries' objective in making this change has been to ensure that alternative service delivery proposals can be fairly and properly assessed within a framework that is efficient, cost effective, and minimizes risk.

With BC Ferries no longer being a formal proponent in the process, the need for "chinese walls" to be put in place within the Company was eliminated. As well, the change in approach to one which is less cumbersome caused the Company to reassess the appropriateness and need for fairness auditors as part of its procurement process. The use of fairness auditors in public and private sector outsourcing transactions is extremely rare. BC Ferries' procurement activities are already conducted in an open and transparent manner with practices and procedures that are well established, tested, and based on commercial best practices. External oversight of the procurement process by a fairness auditor was viewed as redundant and unnecessary. The fairness auditors concluded their involvement in the process in mid-February, 2006.

September 30, 2006 53 of 169



Alternative Service Providers

The continued need to provide assurance to proponents, BC Ferries' Board of Directors, and the Commissioner of the fairness of the procurement process is recognized. BC Ferries' ASP Plan envisages continued oversight by the Commissioner, which is consistent with the Commissioner's obligations under the Act. The ASP Plan also contemplates that BC Ferries will seek independent, external review of its decisions at key points in the process, including its final decisions with respect to an alternative service delivery proposal.

Conclusion

BC Ferries has provided the information noted above in accordance with the requirement under Section 40(1)(f) of the Act to provide the Commissioner with the requests for proposal issued, or other actions taken, in the performance term in accordance with section 69, and the responses received to those requests, actions and proposals by BC Ferries.

September 30, 2006 54 of 169

PART II

Other Information



September 30, 2006 55 of 169



Section 7: Capital Expenditures

BC Ferries operates one of the largest ferry transportation systems in the world providing vehicle and passenger transportation and related services in the coastal waters of British Columbia. As a provider of ferry service, BC Ferries is required to incur large capital expenditures for vessels, terminals and other infrastructure, to maintain a safe, reliable and efficient service.

Pursuant to Section 41(3)(c) of the Act, the Commissioner must, in setting price caps:

- (c) determine whether it was reasonable, in the Commissioner's opinion, acting reasonably, for the ferry operator to have incurred capital expenses in relation to a designated ferry route included in the route group, and take into account only those capital expenses that:
 - (i) are determined under this paragraph to be reasonable, or
 - (ii) had been approved under section 55.

Based on the above, the Commissioner must determine whether or not the level of capital expenditures BC Ferries has incurred over performance term one, some of which will be a forecast due to the timing of this report, was reasonable and should therefore form part of the cost structure of BC Ferries for the purposes of calculating price caps for performance term two. Capital expenditures impact performance term two price caps through their influence on amortization expense and cost of capital. Therefore, the price caps established for performance term two must be set at a level that permits the recovery of those costs within the initial price cap.

Capital expenditures include the purchase or upgrade of vessels, improvements to terminals and marine structures, and investments in appropriate management systems and ancillary business facilities that ultimately enhance the customer's experience while traveling.

Overview of Capital Projects

To ensure that its capital projects are reasonable, BC Ferries undertakes a comprehensive planning and approval process for all capital expenditures. As well, BC Ferries can submit capital projects for review by the Commissioner under section 55 of the Act, prior to committing to the project. Section 55 filings enable the Company to seek an early determination by the Commissioner of whether a particular capital expenditure is reasonably required and will, therefore, be included in the setting of future price caps.

September 30, 2006 56 of 169

Capital Planning Process

BC Ferries has developed a framework to guide the capital planning process to ensure alignment with, and achievement of, the Company's strategic objectives. The framework not only addresses the long-term capital asset management strategy but also provides a flexible mechanism to respond to the needs of operational requirements and emerging business opportunities in the short term.

BC Ferries continues to refine its capital management process to validate the timing of projects and ensure that they are completed in the most cost effective manner. The capital management process includes:

- Master Plans;
- Condition Surveys;
- Project Management Framework and Guidelines; and
- Project Classification.

Master Planning Process

The goal of the master planning process is to develop long-term strategies that will allow BC Ferries to provide safe, reliable and cost effective ferry services and replace capital assets in a financially responsible manner. One of BC Ferries' biggest challenges is the age of its infrastructure. Consequently, capital expenditures are focused on upgrading terminals and replacing or renewing the fleet. To assist BC Ferries in prioritizing and scheduling terminal upgrades, a terminal master planning process has been developed. Under this process, Master Plans are created for each terminal. BC Ferries initiated a similar master planning process for its vessels in 2005. Each Master Plan includes a long term deployment, maintenance, and capital upgrade strategy in addition to retirement or replacement options over a 20-year period.

Condition Surveys

BC Ferries conducts condition surveys for terminals and vessels under the Condition Assessment Program. Under this program, all terminals and vessels are required to undergo Level I and Level II Condition Surveys at specified times during their useful lives. The Company uses these surveys to identify capital projects that are necessary, and to ensure that assets reach their expected useful lives while meeting regulated standards.

The Level I Condition Survey is a visual inspection that assesses the condition of the asset. Level II Condition Surveys, which are completed by independent assessors, are more comprehensive and technical. Level II Condition Surveys examine both the asset and its major components to assess the remaining useful life, deficiencies and cost to address these deficiencies. A Level II Condition Survey also serves to audit the effectiveness of the maintenance

September 30, 2006 57 of 169

strategy undertaken over the life of the asset, and assist in defining the maintenance strategy required to ensure the asset reaches its expected economic life.

Project Management Framework and Guidelines

The Project Management Framework and Guidelines (Framework) has been implemented for BC Ferries' capital and major operating projects. The Framework is intended to promote a disciplined approach to the management and delivery of projects and provides key principles, techniques and tools for managing projects over the life cycle of the expenditure. A document detailing the Framework is available to the Commissioner on request.

Project Classification

To ensure an appropriate reporting and monitoring process of projects, the Company uses a project classification system to determine the review schedule of active projects. The system is based on a combination of both cost and risk assessments. Risk is defined by five categories (general, management, design/construction, economic, and other). Each project is assessed against a number of criteria within each category to determine the overall level of risk. Once a project risk profile is determined, a review schedule appropriate to the level of risk is developed and followed.

Capital Spending in Performance Term One

Over performance term one, BC Ferries expects to incur a total of \$1.15 billion in capital expenditures. Table 7-1 identifies the capital expenditures made or expected to be made in performance term one as either vessel related, terminal related, or other (all projects not captured in vessels and terminals).

Table 7-1
Capital Expenditures
Performance Term One
(Inclusive of Section 55 Supported Capital)
(\$Millions)

	2003 /04	2004 /05	2005 /06	Forecast 2006 /07	Forecast 2007 /08	Total	% of Total
Vessels	37.4	78.6	81.7	219.2	438.1	855.0	74.6%
Terminals	11.3	33.7	43.0	61.1	63.5	212.6	18.6%
Other	11.0	14.8	9.8	13.6	28.4	77.6	6.8%
TOTAL	59.7	127.1	134.5	293.9	530.0	1,145.2	100.0%

September 30, 2006 58 of 169



Included in the \$1.15 billion of capital expenditures represented in Table 7-1, are projects ranging in value from \$175 million for a Super C class ferry, to approximately \$26 thousand for a shipwright's replacement van. A listing of all project expenditures placed in service by year, up to and including 2005/06 fiscal year end, is included in Appendix D.

BC Ferries has not provided in this report the forecast costs of those projects beginning in fiscal years 2006/07 and beyond, due to competitive considerations. Details on any capital project, including costs, are available to the Commissioner upon request.

All projects undertaken or expected to be undertaken in performance term one have gone or will go through the capital planning and approval process as described above, and are considered by BC Ferries to be reasonable and required for the continued safe, reliable and efficient operation of the BC Ferry system. BC Ferries submits, therefore, that these projects should be included by the Commissioner in the setting of performance term two price caps.

Of the forecast \$1.15 billion capital expenditures in performance term one, the Commissioner, through section 55 Orders, has determined that approximately \$548 million in capital expenditures related to the three Super C class vessels, a new intermediate class vessel, the replacement vessel for the M.V. "Queen of the Prince Rupert" and the replacement vessel for the M.V. "Queen of the North" (the M.V. "Sonia") is reasonably required. The first Super C class vessel and the M.V. "Sonia" are expected to enter service in the 2007/08 timeframe. As part of the above noted section 55 Orders, the Commissioner has also determined that a further \$391 million in capital expenditures are reasonably required in performance term two.

The remaining capital expenditures for performance term one are approximately \$597 million. To assist the Commissioner in making his determination of whether or not these were, or are, reasonably required, BC Ferries has provided in this report, justifications and summaries of those projects that have total capital costs valued at \$5.0 million or greater. If the Commissioner requires further justification or details on any remaining capital expenditures, BC Ferries has that information available for review.

Table 7-2 provides an overview of performance term one, capital expenditures further detailed in this report.

September 30, 2006 59 of 169



Table 7-2 Capital Expenditures and Project Costs – Performance Term One

	Listing of Capital Projects	Total Project Capital Costs (\$Millions)	Capital Expenditure In Performance Term One (\$Millions)
	Section 55 Supported Capital		
	A. Super C Class Vessels	\$542.0	\$375.7
	B. Intermediate Class Ferry	\$58.0	\$29.7
	C. Purchase of M.V. "Sonia"	\$106.3	\$106.3
	D. Replacement Vessel for the M.V. "Queen of Prince Rupert"	\$233.0	\$36.6
	Total Projects Supported by Section 55 Orders	\$939.3	\$548.3
	Projects with Total Costs of \$5 Million or Gr		
Completed	1. "C" Class MLU's	\$94.2	\$77.6
April 2003	2. Spirit Class – Interior Betterment/Evacuation	\$25.7	\$25.7
through March 2006	3. M.V. "Queen of Nanaimo" Life Extension	\$16.3	\$16.3
March 2006	4. M.V. "Queen of Prince Rupert" – Renovations	\$7.0	\$6.8
	5. Tsawwassen Berth 2	\$16.9	\$16.9
	6. Tsawwassen Terminal Retail Redevelopment	\$7.3	\$7.3
Ongoing April	Sub-Total	\$167.4	\$150.6
Ongoing April 2006 through	7. M.V. "Queen of New Westminster" Life Extension 8. "C" Class MLU's		
March 2008			
March 2000	9. M.V. "Quinsam" Life Extension 10. M.V. "Quinitsa" Mid Life Extension		
	11. M.V. "John Atlantic Burr"		
	12. Tsawwassen Berth 4		
	13. Horseshoe Bay Upgrade Berths 1 and 2	\$486.9	\$282.2
	14. Swartz Bay Master Plan	Ψ.00.5	4-0-11
	15. Departure Bay Master Plan		
	16. M.V. "Queen of Capilano" RADs		
	17. Corporate Information Systems - Charts		
	18. Corporate Information Systems - CMMS		
	Implementation and Oracle Upgrade		
	Sub-Total	\$486.9	\$282.2
	Total Projects \$5 Million or Greater	\$654.3	\$432.8
	Total Projects \$5 Million or Greater and/or Supported by Section 55 Orders	\$1593.6	\$981.1
	Projects with Capital Costs Less Than \$5 Million		\$164.1
TOTAL CA	PITAL EXPENDITURES – PERFORMANCE TERM ONE		\$1,145.2

September 30, 2006 60 of 169

Section 55 Supported Capital

As noted above, filings pursuant to Section 55 of the Act enable the Company to seek an early determination by the Commissioner of whether a particular capital expenditure is reasonably required and will, therefore, be included in the setting of future price caps.

To date in performance term one, BC Ferries has made four section 55 filings. The following describes briefly each of those applications and the determinations made by the Commissioner with respect to them.

Super C Class Vessels (3) \$542 million

This project involves the construction of three Super C class vessels which will be double ended in design and each have the capacity to carry 370 cars and 1650 passengers. The three vessels are expected to enter service in 2007/08 and 2008/09. The first two vessels are planned for deployment on route 2 (Horseshoe Bay to Departure Bay) with the third vessel being deployed on route 1 (Tsawwassen to Swartz Bay).

The arrival of the three Super C class vessels will allow for the retirement, or significant redeployment, of three V class vessels, (the M.V. "Queen of Vancouver, M.V. "Queen of Saanich", and M.V. "Queen of Esquimalt") as they are nearing the end of their service lives and are each more than 40 years old. The V class vessel face a number of regulatory issues and would require substantial upgrades and refit to remain in their current deployments. Upgrades to address regulatory issues may also reduce the vehicle carrying capacity of the V class vessels which are already smaller than the C class and Spirit class ships operating on the major routes. As a result of their size, BC Ferries experiences overload situations when relying on the V class vessels, especially during busy summer peak periods.

The Commissioner declared the acquisition of the three Super C class vessels to be reasonably required in Order 04-01.

Intermediate Ferry \$58 million⁵

The M.V. "Queen of Tsawwassen" is nearing the end of its service life and is currently 47 years old. As with the V class vessels, upgrades and refit to the M.V. "Queen of Tsawwassen" may not materially extend its useful life. Therefore, it was determined that the most economic course of action was to replace the vessel with a new intermediate sized vessel. The acquisition of an intermediate ferry was declared to be reasonably required by the Commissioner in Order 05-03.

September 30, 2006 61 of 169

⁵ The Commissioner determined in his Order 05-02 that \$51.0 million was reasonably required for the intermediate ferry. An addendum to increase this amount is currently before the Commissioner.

Purchase of the M.V. "Sonia" and Associated Terminal Modification Costs \$106 million

After the loss of the M.V. "Queen of the North", BC Ferries undertook an international search for a replacement vessel. After an extensive search, BC Ferries determined that the M.V. "Sonia" was a suitable vessel and would meet the service requirements for route 10 and Transport Canada's (TC) operational regulations. The M.V. "Sonia" will enter service in April 2007. The acquisition of the M.V. "Sonia" and the associated terminal modifications were declared to be reasonably required by the Commissioner in Order 06-04.

Replacement for the M. V. "Queen of Prince Rupert" and Associated Terminal Modification Costs \$233 million

BC Ferries filed a section 55 submission for the construction of a new ship to replace the M. V. "Queen of Prince Rupert". The replacement vessel for the M.V. "Queen of Prince Rupert" is expected to be in service in 2009/10. The Commissioner declared the acquisition of this new vessel and the associated terminal modifications to be reasonably required in Order 06-06.

Other Projects with Total Capital Costs of \$5.0 Million or Greater

BC Ferries has provided below justifications and summaries of other projects undertaken or expected to be undertaken in performance term one that have total capital costs valued at \$5.0 million or greater. The projects can generally be categorized into vessel mid-life upgrades and betterments, terminal upgrades and marine structure replacements, a new minor vessel, and computer system upgrades/replacements. As indicated above, BC Ferries believes that each of the projects are reasonable and required for the continued safe, reliable and efficient operation of the BC Ferry system. Accordingly, the Company submits that these projects should be included by the Commissioner in the setting of performance term two price caps.

Projects Undertaken from April 2003 through March 2006

1. C-Class (MLU's) \$94.2 million

The C class ferries were built between 1976 and 1981 making the C class ferries between 25 and 30 years of age. Although the ferries have been well maintained, new and revised TC regulations are due to come into effect in late 2006/07. To ensure the vessels meet these new requirements and are able to provide a further 20 years of service, each of the C class vessels requires a mid life upgrade (MLU).

Beginning in 2003, BC Ferries has (or will) undertake a MLU for five C class vessels. Table 7-3 provides information on the MLU's that have been, or are expected to be incurred in performance term one.

September 30, 2006 62 of 169

Table 7-3 C-Class Mid Life Upgrades

Vessel Name	Date Built	Date of MLU	MLU Costs (\$Millions)
M.V. "Queen of Alberni"	1976	2007/08	
M.V. "Queen of Surrey"	1981	2006/07	
M.V. "Queen of Oak Bay"	1981	2005/06	
M.V. "Queen of Cowichan"	1976	2004/05	\$94.2
M.V. "Queen of Coquitlam"	1976	2003/04	

As noted above, the M.V. "Queen of Surrey" and the M.V. "Queen of Alberni" are scheduled to undergo MLU's in 2006/07 and 2007/08, respectively.

A MLU is a major betterment of the asset required to extend the service life so the asset can fulfil its initial projected service life requirement. Without the MLU, the vessel would start to exhibit accelerated deterioration, may no longer comply with regulations, and may not likely be able to maintain its operating licence and therefore not be able to remain in service. The MLU's for the C class vessels all share similar upgrade drivers. The requirements for the MLU's generally fall into 3 broad categories: regulatory compliance, passenger accommodation upgrades, and extraordinary maintenance.

Regulatory Compliance

Each of the ships must adhere to and meet or exceed stringent regulations in order to maintain its operating licence. As stated previously, new and revised TC regulations are scheduled to come into effect in late 2006/07. TC variances that must be corrected so that the vessels can remain in compliance over the second half of their useful lives include upgrades to life saving appliances and marine evacuation systems, structural fire protection requirements on deck and stairwell heads, compartmentalization of hulls to meet stability requirements. In addition, the C class ships are also required to meet Workers Compensation Board NOx emission standards including upgrades to ventilation systems on the car deck. Not attending to the reported regulatory variances would mean that the vessels are no longer in compliance and therefore not able to be licensed.

September 30, 2006 63 of 169

Passenger Accommodation Upgrades

Due to the general age of the ships, most of the accommodation areas for passengers were in need of complete replacement. As part of the MLU's BC Ferries replaces retail and food services fitting and fixtures and reconfigures food service stations to improve efficiency, reduce labour, improve product offerings and aesthetics to improve profitability. Passenger area updates require the replacement of obsolete outfitting, replacing worn flooring, furniture, fixtures, light fixtures and wall coverings to meet fire ratings. Washrooms on all the ships have been or will be improved.

Extraordinary Maintenance

Extraordinary maintenance requirements are identified in the Level II Condition Surveys, and are specific to each ship. However, several projects were common to each of the C class ferries, including steel renewal, electrical cabling, replacing the HVAC systems, fire line piping renewal, sandblasting the hull and repainting, corrosion protection, upgrading of elevators and replacing sanitary piping. Differences that led to the variability in the capital expenditures included the size and capacity of the ships, the extent of passenger area upgrades and price escalation at ship yards and for materials between the 2002/03 and 2007/8 timeframe.

2. Spirit Class - Interior Betterment/Evacuation \$25.7 million

The M.V. "Spirit of British Columbia" (SOBC) and the M.V. "Spirit of Vancouver Island" (SOVI) entered service in 1993 and 1994 respectively on route 1 between Swartz Bay and Tsawwassen. The SOVI and the SOBC are currently the two most visible vessels in the BC Ferries fleet as they each carry approximately 2.3 million passengers annually on route 1. Regulatory improvements included the installation of new marine evacuation equipment to allow for more efficient evacuation of severely disabled passengers. The passenger areas and passenger facilities (washrooms, cafeteria and buffet) onboard both vessels were showing the combined signs of wear and age. The costs of the evacuation plan enhancements and the interior betterment were \$14.2 million⁶ for the SOVI and \$11.5 million for the SOBC and occurred in 2006 and 2005, respectively.

The following is a brief description of the work undertaken:

Evacuation Plan Modifications Approved by TC

The Spirits are equipped with marine evacuation chutes (MEC) for the purposes of passenger evacuation in the event of an emergency. Subsequent to installation, TC determined that marine evacuation chutes are not suitable for the evacuation of severely disabled passengers. BC Ferries has installed new combination rescue boat/life raft davits and davit launched life rafts as a suitable alternative means of evacuation. The evacuation plan modifications do not impact existing crewing requirements.

6 This project has a forecast total capital cost of \$14.2 million; \$13 million was capitalized in 2005/06 and a further \$1.2 million is forecast to be capitalized in 2006/07

September 30, 2006 64 of 169



Passenger Areas on Decks 5 and 6 and Deck 6 Aft Lounge

Replaced carpeting under the lounge seats, in the staterooms, and in the conference room. Remaining areas, including stair towers and walkways throughout the vessel, were covered with new vinyl deck covering. Recover/replaced bulkheads, reupholstered and repainted all lounge seating, upgraded snack bar seating with tables and chairs, repainted handrails, fire stations and trims and upgraded signage program. Windows showing excessive corrosion or blown seals were replaced. Relocation of the Chief Steward's office and addition of a customer service window, new wind protection for Deck 4, pet area, a new tourist councillor's desk and relocation of the bus desk, and conversion of the Lantern Coffee Bar on Deck 6 to premium business seating. Approximately 9% of passengers on the Spirit Class vessels indicated preference for a premium seating lounge, isolated from the rest of the ship and this was added. In addition, the gift shop on the SOBC was increased to 1,460 ft² and to the C class MLU design standard.

• Cafeteria and Buffet Improvements

Replaced the damaged floating floor and re-covered with vinyl deck covering in the cafeteria and buffet dining area. Replaced tables and chairs, recovered bulkheads, and installed new refrigerated display cases and servery deck coverings. A new oven and the associated display cases were added.

Washroom Improvements

Washroom improvements were made to all passenger area washrooms including the installation of new vanity, sinks, fixtures, new deck coverings, new bulkheads, new deckhead panels, new toilet partitions, and all new urinals and toilets.

Sewage Vacuum Collection System and Piping Improvements

Shortly after the commissioning of the Spirit class vessels, ongoing problems (odours and frequent maintenance) associated with the vacuum type waste collection systems in the washrooms arose. Kvaerner Masa Marine a consultant w hired to perform a design check, a system performance study and create a problem statement as part of the pre-implementation work. The findings and recommendations were incorporated into the scope of the washrooms betterments.

3. M.V. "Queen of Nanaimo" Life Extension \$16.3 million

The purpose of the M.V. "Queen of Nanaimo" Life Extension was to prepare the vessel for approximately nine more years of service on route 9 (Tsawwassen to the Southern Gulf Islands) while meeting regulatory requirements, maximizing vessel profitability and providing an acceptable and consistent standard of customer service. The scope of the M.V. "Queen of Nanaimo" Life Extension included regulatory safety compliance, passenger accommodation upgrades, and extraordinary maintenance items.

September 30, 2006 65 of 169



Regulatory Safety Compliance

Improvements required in order to meet TC regulatory requirements were undertaken. These included structural fire protection upgrades. As well, as part of its fleet renewal program, BC Ferries modernized its life saving appliances (LSA) to meet the upcoming regulations associated with the Canada Shipping Act (CSA).

Passenger Accommodations Upgrade

There have been no major capital upgrades to the passenger areas since the vessel was constructed in 1964. Passenger accommodation upgrades as part of the life extension were similar to, but not as extensive as, the C-Class MLUs due to the comparatively shorter life-expectancy of the vessel and lower passenger volumes.

Extraordinary Maintenance

The scope of the extraordinary maintenance required on the M.V. "Queen of Nanaimo" was based on the Level II Condition survey. Priority items in the Level II Condition survey undertaken included replacement of sections of steel decking, upgrades to the fire main deluge piping, boiler upgrades, bilge piping, sanitary water piping upgrades, and car deck lighting.

4. M.V. "Queen of Prince Rupert" - Renovations \$7.0 million

A Level II Condition Survey of the M.V. "Queen of Prince Rupert" (QPR) was completed in July 2001 indicating that extensive work was required to maintain year-round service with the QPR until the vessel is retired in 2009/10. This project was completed in fiscal year 2004/05.

Extraordinary Maintenance Component:

The extraordinary maintenance for the QPR included replacing steelwork, replacing the emergency generator, upgrading of electrical cabling and circuit breakers, replacing the seawater lines and sanitary system, and upgrading the elevator.

5. Tsawwassen Berth 2 - Replace Marine Structures \$16.9 million

Berth 2 at Tsawwassen is the primary operational berth for route 9 to the Gulf Islands. Berth 2 is also used intermittently as an extra tie-up berth for vessel layovers due to re-positioning/re-scheduling as well as emergency repair refit needs. The marine structures including the abutment, ramp, ramp towers, wingwalls and dolphin structures, the foot passenger holding room and walkways, and the attendants' catwalk (port side) were all constructed in the 1960's and required complete replacement. This project, completed in 2005/06 involved a complete reconstruction of the berth including realigning the dolphins and repositioning all structures (including abutments, ramp, towers and wingwalls) to accommodate route 9 operations and the tie up of existing and future vessels operating out of Tsawwassen.

September 30, 2006 66 of 169



6. Tsawwassen Terminal – Retail Redevelopment \$7.3 million

In 2005, BC Ferries completed the construction of a new retail building $(1,500 \, \mathrm{m}^2)$ and associated upgrades (landscaping, new children's play area, new eastern washrooms/storage building) on the north median at Tsawwassen terminal. The previous facilities shared a mix of functional and economic obsolescence problems. The retail redevelopment is a part of a larger strategy to improve the passenger experience on the BC Ferries' major routes. This strategy of improvements (including new/upgraded vessels and new/upgraded terminal facilities) is expected to contribute to growth in vehicle and passenger volumes - BC Ferries' core business.

The new retail building concept was developed as part of the Tsawwassen Terminal Master Plan and is operated and maintained by a Master Tenant who rents out commercial space to individual retail/food service sub-tenants.

Projects to be Undertaken from April 2006 through March 2008

Projects that BC Ferries is undertaking or about to undertake over 2006/07 and 2007/08 are identified below. As noted above, for competitive reasons, BC Ferries has not included the cost estimate for each individual project in this report. This information is available to the Commissioner upon request.

In total, the projects to be undertaken during this period have an estimated capital cost of \$282.2 million. It should be noted that experience in both vessel and terminal construction costs suggests that pricing today is subject to escalation. BC Ferries is currently updating its capital plan for 2007/08; projects and associated capital costs are subject to change.

7. M.V. "Queen of New Westminster" Life Extension

The M.V. "Queen on New Westminster" entered service in 1964, making it 44 years old at the time of its planned life extension in 2007/2008. Although the M.V. "Queen of New Westminster" has been well maintained, to ensure it is able to provide a further 13 years of safe and reliable service, it requires a life extension. The life extension is required to support the M.V. "Queen of New Westminster" operating as the number four vessel on route 1 (Swartz Bay to Tsawwassen).

The scope of work on the vessel includes regulatory upgrades, comprised mostly of replacing lifesaving equipment, expanding the stairwells and upgrading the passenger accommodation areas. Also the vessel requires some extraordinary maintenance including asbestos abatement, steel renewal, electrical renewals and blasting and painting of the entire vessel.

8. C Class MLU's

See description of C class MLU's in 1, above.

September 30, 2006 67 of 169

9. M.V. "Quinsam" Upgrade

The M.V. "Quinsam" was built in Vancouver in 1982 and is scheduled for retirement in 2022. BC Ferries will be upgrading this vessel to ensure it will provide a further 16 years of service. The major components of the project include the replacement of the right angle drives (RADs), electrical upgrades, upgrades to LSA's, and extraordinary maintenance.

Replacement of Right Angle Drive Units (RADs)

Due to their age, the M.V. "Quinsam" RADs have become obsolete and expensive to maintain. This project will see the RADs on the M.V. "Quinsam" replaced.

Electrical Upgrades

The electrical power plant requires upgrading. In 2002, a Hydroxyl sewage treatment plant was installed onboard, which increased the electrical load on the vessel's systems generators and associated wiring and panels have improved the power requirements of the ship.

<u>Life Saving Appliances (LSA)</u>

The lifesaving plan requires updating to meet future TC requirements. As part of this project, the LSA system will be upgraded.

Extraordinary Maintenance

Some extraordinary maintenance will also take place. This includes replacing sections of steelwork, sandblasting and painting of the hull and superstructure that will greatly enhance the structural integrity of the vessel, enabling it to be in service for twenty more years.

10. M.V. "Quinitsa" Mid Life Extension

The M.V. "Quinitsa" was built in 1977 and is scheduled for retirement in 2021. In order to ensure the vessel is able to provide a further 15 years of service, it requires a mid-life extension. The mid-life extension is planned to commence November 2006, with a scheduled in-service date of March 2007. The project scope includes the following components:

- Replace the Four Main Engines.
- Replace the RADs with four new units and associated controls.
- Regulatory Upgrades including:
 - Lifesaving system; and
 - Structural fire protection.
- Passenger/Crew Area Improvements:
 - Complete refurbishment of passenger lounges to low fire risk interior consistent with BC Ferries' standard;
 - Upgrade crew accommodation, not including crew mess area;
 - Upgrade fire detection panel and sensors;
 - Install new fire door indication panel in wheelhouse; and
 - Install localised HVAC in passenger and crew areas.

September 30, 2006 68 of 169



- Extraordinary maintenance:
 - Steel renewals, sand blasting and painting of exterior hull and superstructure;
 - Sand blast and paint car and exterior decks;
 - Sand blast and paint voids and machine spaces;
 - Install new lighting and ventilation for voids; and
 - Renew salt water pipe work fire main, sanitary main and keel coolers.

11. M.V. "John Atlantic Burr"

Acquiring an additional smaller vessel to operate on the minor routes was necessary to expand the number of minor vessels in the fleet thus increasing the flexibility of deployment options surrounding refit relief periods. The M.V. "Pender Queen", M.V. "Vesuvius Queen", and M.V. "Saltspring Queen" were minor vessels retired in the 1990's without replacement. The M.V. "John Atlantic Burr" (JAB), was offered for sale by the State of Utah – Department of Transportation. The ship is a K class vessel of similar design to BC Ferries' vessel M.V. "Klitsa". The JAB was constructed in 1985 and lengthened in 1996. A survey identified that the JAB was in excellent condition as it served its entire 20 years on a fresh water lake in a very hot and dry climate, resulting in excellent preservation of the vessel's structure and its associated machinery and electrical equipment.

The reassembly of the vessel presents an opportunity to significantly improve the operational flexibility of the vessel by installing a hull insert. The insert will increase the capacity of the vessel to approximately 34 vehicles.

12. Tsawwassen Berth 4 Rebuild

The rebuild of the marine structures in Berth 4 at the Tsawwassen terminal involves the replacement of obsolete structures, and an upgrade of Berth 4 to improve operations for the route 9 vessels and to provide back-up/relief service for Spirit class vessels and future Super C class vessels. In addition, to improve route 9 operations, the lower vehicle ramp and apron will be replaced with a new structure to add transition aprons. During the replacement of the dolphins, an opportunity exists to strengthen approximately 200 meters of sheet pile wall between Berth 3 and Berth 5 with fill and rip-rap armour.

A Level II Condition Survey of the Tsawwassen terminal completed in 2003 reported deterioration and corrosion of the Berth 4 marine structures. Replacement of five dolphins (numbers 25, 26, 30, 34, 49) was recommended immediately, and three dolphins (numbers 24, 31, 33) within 3 years. As the dolphins are replaced, the associated timber catwalk will be replaced as well.

September 30, 2006 69 of 169



Horseshoe Bay Upgrade Berths 1 and 2

A rebuild of Horseshoe Bay Berths 1 and 2 is required to replace deteriorated marine structures and accommodate the Super C class vessels scheduled to be introduced to route 2 in 2008. A Level II Condition Survey of Horseshoe Bay was completed and recommended immediate replacement of Dolphins 13 and 14. The flow deflector was also recommended for replacement within 3 years. Given the work identified in Berth 1, the flow deflector work has been brought forward to be completed as part of the Berth 1 and 2 upgrade. Berth 1 will serve as the primary operational berth and Berth 2 will be upgraded to serve as a back-up/relief berth.

13. Swartz Bay Master Plan

The Swartz Bay Master Plan is a 5-year redevelopment plan commencing in 2006/07. Costs will be incurred over performance terms one and two. The overall master plan includes upgrading Berths 2, 4 and 5 marine structures, replacing concrete decking, replacing a waste water treatment plant, reconfiguring the south Gulf Island component of the terminal, relocating a warehouse, and improving highway 17 and west exit roads. The major work for the Swartz Bay Master Plan has been divided into a series of Construction Packages (CP) based on the type of work, contractor experience and the logical sequencing of construction activities.

14. Departure Bay Master Plan

The Departure Bay Master Plan involves a number of CPs that are expected to be completed over a 4 year timeframe commencing in 2006/07. The Departure Bay Master Plan includes marine structure upgrades to Berth 2 and Berth 3, the addition of a retail building and new ticketing building, improved washroom areas and passenger walkways, intersection realignments, shoreline infill, waiting room modifications, and reconfiguration of the holding compound.

15. M.V. "Queen of Capilano" RAD Replacement

Despite being well maintained, the right angle drive (RAD) units on the vessel have experienced mechanical failures since first installed at the time of the vessel's construction. BCF is replacing these RAD units with modern ones of greater strength and proven design.

16. Corporate Information Systems - CHaRTS Crewing Project

The purpose of the CHaRTS program is to create efficiency in the functions of crew scheduling and time collection through an information system. The project has two main purposes: 1) to automate manually-intensive business processes in the areas of crew scheduling, leave management, and time collection through the selection, acquisition and implementation of an integrated software package(s); and 2) to enable effective long-range crew

September 30, 2006 70 of 169



scheduling and planning and more accurate time collection for better resource management.

The CHaRTS program was designed to achieve quantifiable business benefits. The scope includes the re-engineering of business practices and organization structure to introduce best practices.

17. Corporate Information Systems – CMMS Implementation and Oracle Upgrade

Both the Corporate Asset and Maintenance Management System (CMMS) and Enterprise-wide Resource Planning (ERP) systems are enterprise-wide applications critical to the ongoing operations of BC Ferries. This project involves the upgrade of Oracle ERP applications from version 11.5.8 to version 11.5.10 and the upgrade of BC Ferries' CMMS application from Maximo 4.1 to Maximo 6.0. Currently, Maximo 4.2 is no longer supported and Oracle 11.5.8 will no longer be supported by Oracle in the near future. These upgrades are predominantly technical upgrades to re-establish BC Ferries' systems on a stable and supported platform and to accommodate regulatory and business requirements.

Performance Term One Capital Summary

BC Ferries has provided above, an overview at a summary level, of the projects that have been completed or planned in performance term one that have total projects costs of \$5 million or more. Expenditures on these projects represent almost 86% of total actual or planned capital spending in performance term one. As indicated previously, if additional information is required on any of these projects, or if the Commissioner requires information on any project not described above, BC Ferries will provide that information.

As stated above, each of these projects has undergone or will undergo extensive review and approval processes. BC Ferries has provided this information on capital expenditures for the purposes of it being appropriately included in the calculation of performance term two price caps. It should be noted that the capital expenditure forecasts prepared for the remaining two years of performance term one have been carefully developed, however, due to high cost escalations being experienced on terminal and vessel works currently underway, the expenditure estimates are subject to change.

September 30, 2006 71 of 169



Performance Term Two Capital Expenditures

BC Ferries' capital plan extends through the second performance term, with projects for new vessels, vessel upgrades, terminal improvements, and information systems and other general plant. Table 7-4 provides a summary of the planned capital expenditures and the timing of those expenditures over performance term two. BC Ferries' capital plan is updated on an annual basis and these forecast expenditures are subject to change in performance term two.

Table 7-4
Forecast Capital Expenditures
Performance Term Two
(Inclusive of Section 55 Supported Capital)
(\$Millions)

	Forecast	Forecast	Forecast	Forecast	Total	% of
	2008/09	2009/10	2010/11	2011/12		Total
Vessels	365.6	16.8	46.5	27.7	456.5	69.6%
Terminals	22.4	21.2	33.5	48.9	126.0	19.2%
Other	17.2	12.8	17.4	25.7	73.2	11.2%
TOTAL	405.2	50.8	97.4	102.3	655.7	100.0%

From Table 7-4, it can be seen that BC Ferries is planning capital expenditures, inclusive of those projects already determined to be reasonably required through section 55 Orders, of approximately \$656 million over performance term two. Expenditures on vessels account for 69.6% of total planned spending, and include new vessels and replacement vessels. Within performance term two BC Ferries expects to place five new vessels into service including two Super C class vessels, the Intermediate class ferry, the replacement for the M.V. "Queen of Prince Rupert" and the replacement for the M.V. "Queen of Chilliwack".

Terminal improvements account for approximately \$126 million over performance term two, or 19.2% of planned capital expenditures. Other capital expenditures on information systems and other projects, including allowances for asset replacements and upgrades, total approximately \$73 million or 11% of planned expenditures. All expenditure estimates included in the above forecasts have been developed as carefully as is possible at this time. However, due to the escalation of prices being experienced in terminal and vessel construction, these estimates may be considerably different compared to actual costs when the projects are completed. Price estimates for the Super C class ships, the replacement for the M.V "Queen of Prince Rupert", and the Intermediate class ferry are based on fixed price contracts, and are not expected to change from costs included in this submission.

September 30, 2006 72 of 169

Deployment of Capital Assets

BC Ferries anticipates that operating expenses will change with the deployment of these new capital assets. Table 7-5 provides information on anticipated changes in vessel deployment and the year the assets will enter service.

Table 7-5 Deployment of Vessels

Route Deployment	Replacement Vessel	In Service Fiscal Year	Vessel to be Replaced
TBD	M.V. "John Atlantic Burr"	2006/07	New Addition
7	Intermediate class vessel	2008/09	M.V. "Queen of Tsawwassen"
2	Super C class vessel #1	2007/08	M.V. "Queen of Esquimalt"
2	Super C class vessel#2	2008/09	M.V. "Queen of Saanich"
1	Super C class vessel #3	2008/09	M.V. "Queen of Vancouver"
10, 11	M.V. "Sonia"	2006/07	M.V. "Queen of the North"
10, 11	Northern replacement vessel #2	2009/10	M.V. "Queen of Prince Rupert"
40	Northern replacement vessel #3	2011/12	M.V. "Queen of Chilliwack"
12	M.V. "Klitsa"	2010/11	M.V. "Mill Bay"

Replacement dates are coordinated with the planned deliver of (new/used) replacement vessels. e.g. year of replacement = last year of cash flow for new vessel

September 30, 2006 73 of 169



It is assumed for purposes of operating expenses that the vessels being replaced have no residual value. However, BC Ferries is still considering options related to the retirement of the V class vessels. Once relieved from current service, consideration is being given to opportunities of using the V class vessel in supplemental or ancillary service with a focus on commercial services.

New Regulatory Requirements

BC Ferries operates under many different regulations and must keep pace with new and changing regulatory requirements. Once scope, budget and schedule are defined associated projects will be included within the capital plan. BC Ferries is currently developing programs in support of the following specific changes to regulatory requirements.

Environmental

The new CSA, regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals will affect BC Ferries operations. Some of the changes to the CSA include:

- Sewage discharges from the vessels: Sewage discharge from vessels will be allowed if first treated onboard by an approved sewage treatment plant (STP). Alternatively the sewage may be held onboard and discharged to approved shore based reception facilities (i.e. piped to an approved STP or to a pumper truck). All existing BC Ferries vessels must comply with this requirement not later than 5 years after the legislation comes into effect. All new vessels delivered after the legislation comes into effect must comply immediately. BC Ferries may use onboard STPs to meet the requirement, or may pump ashore, or may use both. BC Ferries has initiated a fleet wide sewage compliance program which contains elements of all three approaches.
- Oil and Oily Mixture Discharges: All new vessels will have to be fitted in with new type of oily water separator (OWS) system that has build-in recording capacity.
- Air Emissions: All engines that will be undergoing major upgrades will have to be compliant with the new NOx emissions standard (add-on technologies may be required i.e.: scrubbers)

In addition to changes to the CSA, other regulations coming into force include changes to the BC Drinking Water Act, Health Canada has prepared a new "On Board Passenger Ferry Potable Water Inspection Guidelines", and Environment Canada anticipates limiting the sulphur content in marine diesel starting October 1, 2007.

All of these regulations may affect (increase) costs incurred by BC Ferries.

September 30, 2006 74 of 169



Security

In 2001, the federal government enacted the *Marine Security Act*. Initially, the legislation and the associated regulations were limited to international ports and vessels. However, in November 2005, the federal government announced that the regulations would be extended to include domestic marine services, including domestic ferries. The regulations are expected to come into force in the spring of 2007.

To comply with the regulations, all ferry operators will be required to make considerable security investments in the areas of fencing, cameras, better access controls and screening. BC Ferries is in the process of defining the capital requirements and operating costs to comply with the upcoming regulations. This process is not expected to be completed until March 2007.

Conclusion

The information above is intended to provide the Commissioner with a review of capital expenditures BC Ferries has and expects to incur in performance term one and performance term two. Further detail is provided in Appendix D of this report.

September 30, 2006 75 of 169



Section 8: Demand Forecast

In 2003, BC Ferries developed a long-term demand forecast. Actual results since that time have compared well to the forecast, confirming the reasonability of the methodology and the stability inherent in the demand characteristics overall. For preparation of this report, the long-term demand forecast was revisited using the latest available data by an external transportation consultant, Mr. John Robertson⁷. Based on the most recent actual traffic statistics, growth rates have declined marginally compared to the 2003 forecast, which is primarily due to the latest population growth forecasts for coastal British Columbia.

Table 8-1 shows actual traffic for vehicles and passengers for 2004 through 2006 with forecasts for 2007 through 2012. In establishing an initial price cap for April 1, 2008, it is expected that the Commissioner will use the 2007/08 forecast by route group to establish the revenue yield index (revenue required from fares divided by traffic) for each route group. As can be seen from Table 8-1, BC Ferries expects average annual growth in vehicle traffic over the forecast period (2008/09 to 2011/12) of 1.2%, and 1.0% for passenger traffic.

Table 8-1
Passenger and Vehicle Traffic Forecasts*

Fiscal Year All Route Groups	Total VEHICLES	Growth	Total PASSENGERS	Growth
2003/04	8,292,229	-0.4%	21,367,430	-1.2%
2004/05	8,557,389	3.2%	22,026,552	3.1%
2005/06	8,543,269	-0.2%	21,729,603	-1.3%
2006/07	8,515,328	-0.3%	21,778,063	0.2%
2007/08	8,637,970	1.4%	22,011,403	1.1%
2008/09	8,778,712	1.6%	22,365,827	1.6%
2009/10	8,870,605	1.0%	22,552,902	0.8%
2010/11	8,970,043	1.1%	22,744,712	0.9%
2011/12	9,072,816	1.1%	22,937,033	0.8%
Avg. Growth 2009 -2012		1.2%		1.0%

^{*} details by route group are included in Appendix E

September 30, 2006 76 of 169

⁷ John Robertson, MBA has over 15 years of experience in financial analysis and financial modelling including a variety of international contracts. His experience with BC Ferries includes business analysis and financial modelling as well as preparation of the 2003 long-term demand forecast.



Methodology

BC Ferries used a multiple regression analysis based on four explanatory variables to establish its demand forecast. The four explanatory variables analyzed against demand are Real Disposable Income (RDI), Gross Domestic Product (GDP), tariffs and population statistics. Where positive correlations were observed in the data history, those explanatory variables were used to create a time series forecast for the customer type and route. Population statistics exhibit the strongest correlation to demand growth of all the variables observed. The correlation between major routes traffic growth and BC population growth over last 30 years is 93%.

In aggregate the demand forecast demonstrates little variability, which is consistent with the demand characteristics of a mature business such as BC Ferries.

Data Sources

RDI and GDP were obtained from Statistics Canada for British Columbia and population came from the British Columbia Ministry of Finance. Tariffs are part of the records at BC Ferries.

Population

Growth in population is highly correlated to growth in demand at BC Ferries. Therefore, the population base that supports each route is the primary driver of the demand forecast on the route. While overall the population growth forecasts for British Columbia have declined since 2003 from 1.9% to 1.8% per annum, it is the individual population forecasts supporting each route that are most important.

The Sunshine Coast exhibited the largest change in population forecasts, declining from 2.8% growth to 1.7% growth, which is now reflected in the route 3 forecasts. One other interesting change is that the Capital Regional District is benefiting from faster growth in the over 44 age group that also has a higher RDI than the rest of BC, leading to stronger route 1 forecasts.

Major Routes

The Major routes account for generally half of the demand and 75% of revenue, so a forecast for each traffic type by route is developed. Multiple regression analysis is performed using the explanatory variables and then the results are recompiled into an aggregated forecast for the major routes.

September 30, 2006 77 of 169



Other Routes

Due to the smaller data sets available for both explanatory variables and the customer types on some of the smaller routes, simple regression was performed in many cases as correlations are not as identifiable due to the lack of data. These routes are also more sensitive to single events such as a mill closure or development projects.

Performance Term Two Adjustments

In the setting of the demand forecast for performance term two, adjustments were made for known variables. Consideration was given to tourism trends and major events as well as enhanced service in the form of new or replacement vessels entering service. These adjustments were all positive adjustments. There remains risk within the demand forecast for the second performance term that there is no rebound in tourism, that the Olympics do not generate the demand expected and that there is limited response to better service delivery from new vessels.

Tourism

Canada has received the designation of "Approved Designation Status" from China, with terms yet to be negotiated. In the absence of empirical data, estimations of 190,000 visitors to Canada are being used by organizations such as Tourism BC, who also estimates that 133,000 of them will travel to BC since it is an entry point to Canada from Asia. Conventional ratios of BC tourists indicate that a portion of these tourists will travel to Vancouver Island and via route 1. Some further assumptions were made and BC Ferries is forecasting a growth of this market segment. The effect on the demand forecast in performance term two of this variable is to increase the route 1 forecast from 0.7% to 1.3% each year.

US Travel

As an off-set to the increase in the overseas tourism market, the high Canadian dollar and concerns with the proposed new United States passport regulations is anticipated to dampen US travel.

September 30, 2006 78 of 169



2010 Olympics

The 2010 Olympics are a two and a half week event and are expected to generate incremental demand. Based upon Tourism BC target growth rates for tourism BC Ferries anticipates incremental demand between 2008/09 and 2011/12.

Replacement Ferries

A demand response in 2008/09 is expected as a result of the new Super C class vessels and the M.V. "Sonia" are introduced in 2007/08 and 2008/09. These vessels will have a larger capacity, reducing peak capacity restrictions, enhancing service as well as providing improved onboard services. Overall, this is expected to marginally increase the annual demand.

Appendix E provides further detail of forecast demand for performance term two.

September 30, 2006 79 of 169



Section 9: Total Factor Productivity

In determining the price caps for performance term two, the Commissioner is required to consider a productivity factor. Section 41 (5) of the Act states:

"(5) For the purposes of this section, the Commissioner must determine the productivity gain that, in the Commissioner's opinion, acting reasonably, the ferry operator should achieve in the following performance term."

Further, the Act suggests the Commissioner may consider the productivity gain applied against the CPI. In this way, once the initial price cap is established, the quarterly or annual price cap is automatically set by the formula (CPI - X), where X is a measure of productivity that the Commissioner reasonably believes BC Ferries should be able to meet. The Act states that the X factor may be either positive or negative.

One method of determining an appropriate productivity factor for performance term two is to observe the level of productivity growth BC Ferries has achieved over performance term one. BC Ferries contracted InterVISTAS Consulting, represented by Dr. Michael Tretheway, to determine BC Ferries' historic productivity gains over performance term one. It can be inferred that the future productivity of BC Ferries will likely be similar to the observed or historic productivity achieved in performance term one.

In measuring historic productivity for BC Ferries, specific aspects of the Company's inputs can be observed. For example, labour is a typical input that can be measured to determine changes in productivity, measured as labour hours per customer or per vehicle carried. Total Factor Productivity (TFP) measures four main components (or inputs) of productivity to produce an aggregate measure of productivity. The four component measures are energy (fuel), labour, materials maintenance and outside services (remaining operating costs once fuel and labour are measured), and capital (capital service).

To reach a TFP, outputs must also be measured. Therefore fuel productivity is measured as passengers carried per litre used, and labour is measured as passengers carried per labour hour. TFP then considers all outputs compared to all inputs, which is expressed mathematically as TFP = Output Index / Input Index.

A more detailed discussion on the methodology used to measure both the outputs and the four inputs is included in the report submitted to BC Ferries by InterVISTAS Consulting, a copy of which is included in Appendix F of this report. Also included in that report are the results of the measurement of TFP for BC Ferries over the period April 1, 2003 through June 30, 2006.

September 30, 2006 80 of 169

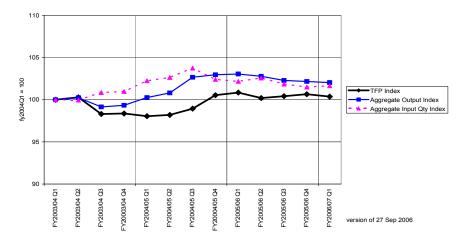


Total Factor Productivity

Generally, the findings show that TFP has improved by approximately 0.4% over the first three years of performance term one. Graph 9-1 shows the results of the study and how TFP, output and inputs have changed over time.

Graph 9-1
Graph of Total Factor Productivity, Output and Input

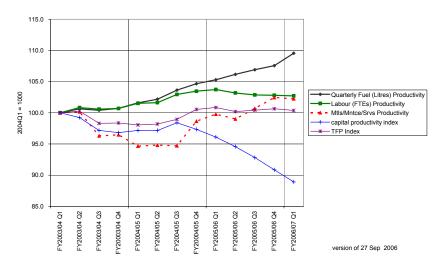
TFP, Output and Input via Physical Input Approach



Graph 9-2 illustrates each input for labour, fuel, capital expenditures, and materials maintenance and outside services.

Graph 9-2
Graph of Single Factor Productivity Indices

Single Factor Input Productivity Indices



September 30, 2006 81 of 169

Total Factor Productivity

Graph 9-2 illustrates that when only non-capital inputs (fuel, labour and materials maintenance and outside services) are considered, BC Ferries has achieved a productivity improvement of 3.3% since the inception of the Company to June 30, 2006.

Fuel productivity has improved dramatically over the period as the Company has implemented programs to reduce fuel consumption as a result of the high price of fuel. Labour inputs are also showing growth in productivity and materials maintenance and outside services have also improved substantially over the period. The gains in productivity for fuel, labour and materials and maintenance however, have been mostly offset by declines in capital productivity.

Due to a general lack of investment in the decade preceding the conversion of BC Ferries to a private company, BC Ferries has initiated a significant capital program. This program has significantly impacted capital productivity in performance term one. In addition, the capital investments will not generally see offsets in other inputs.

BC Ferries has embarked on a capital program that will see it invest in the order of \$1.8 billion from 2003/04 through 2011/12. This significant investment in ships, terminals and infrastructure negatively impacts capital productivity in the near term. However, capital productivity will improve as capital spending slows, and as overall aggregate output increases as a result of infrastructure investment.

September 30, 2006 82 of 169



Section 10: Return on Equity

A key cornerstone of the regulatory framework as set out in the Act is the concept of Return on Equity (ROE). The Act sets out in section 38(1)(a) that as the Commissioner undertakes his regulatory responsibilities "...priority is to be placed on the financial sustainability of the ferry operators". ROE is a widely used metric when measuring earnings in the context of financial sustainability.

Section 41(2)(b) of the Act states as follows:

"the price cap, when combined with all other price caps applicable to all route groups serviced by the ferry operator, must enable the ferry operator to receive a pre-tax return on equity, which return is to be calculated by adding

- (i) an equity risk premium, provided that the equity risk premium is equivalent to that of other regulated businesses with reasonably similar risk characteristics, and
- (ii) a bond yield that is consistent with Government of Canada 30 year bonds or with Government of Canada bonds that in aggregate have a similar duration;"

It is submitted that this is an important direction to the Commissioner as it relates back to the first principle of regulation as described in Section 38(1)(a) of the Act. The Commissioner has established a preliminary ROE for BC Ferries of 14% on a pre-tax basis for performance term two.

To establish the appropriate price caps for performance term two, the Commissioner will need to set the initial price caps based on revenue adequacy for the Company as at April 1, 2008. For demonstration purposes, BC Ferries has used its long-term planning model to forecast the revenue required during performance term two to achieve a corporate pre-tax ROE of approximately 14% as specified by the Commissioner in Memorandum 20. In other words, BC Ferries has determined the approximate revenue from fares, after consideration of all non-tariff sources of revenue, that is required to allow the Company recovery of its forecast operating expenditures and to allow the Company to earn the specified return on equity. This analysis assumes that the service fees from the Province remain at the levels set in the CFSC as amended at this time.

September 30, 2006 83 of 169

Return on Equity

For illustrative purposes, Table 10-1 provides the Commissioner with a forecast at the corporate level of the revenue requirement such that BC Ferries earns an average pre-tax ROE of approximately 14% over performance term two. Further, more detailed modeling can be provided through the review period, from October 1, 2006 through March 31, 2007 when the Commissioner is required to provide his preliminary price caps. The amounts in the table are based on the most recent forecasts of BC Ferries and are subject to change over the review period due to updating of information. The tariff revenue amounts in the table are the amounts that BC Ferries forecasts will be required to allow the Company to achieve an average corporate return of approximately 14% on equity; those tariff revenue amounts will not be earned under the price caps that will be in effect at the end of performance term one.

Table 10-1 Financial Forecasts

(\$ millions)	2008/09	2009/10	2010/11	2011/12
Tariff Revenue	479.8	484.3	489.2	494.1
Net Ancillary Revenue	71.0	73.0	75.2	78.3
Coastal Ferry Service				
Contract*	123.4	146.5	146.8	152.9
Canada / BC Coastal				
Ferry Subsidy	26.4	26.0	27.4	20.0
Agreement	26.4	26.9	27.4	28.0
Total Revenue	700.5	730.7	738.7	753.2
	4045	400.4		-440
Operating Expenses	494.3	498.6	507.6	514.9
EBITDA	206.2	232.1	231.0	238.4
Amortization	98.0	105.5	106.3	109.5
Net Financing				
Expense	58.6	69.8	66.3	65.8
Net Earnings	49.6	56.8	58.5	63.1
ROE **	14.6%	14.7%	13.3%	12.8%
Capital Structure	2009	2010	2011	2012
(\$ millions)				
Capital Expenditures	(405.1)	(50.8)	(97.4)	(102.3)
Total Debt	1,337.2	1,228.0	1,166.7	1,102.5
Equity	361.5	412.3	464.8	521.8

^{*} Assumes no change in provincial service fees from the levels set in the CFSC as amended at this time

September 30, 2006 84 of 169

^{**}Average over 4-year period is approximately 14%



Return on Equity

Section 41(2)(b) provides that price caps for route groups are to be established in a manner that allows the ferry operator to achieve an adequate return on equity over all route groups serviced by the ferry operator. The table above provides corporate tariff revenue amounts. It is recognized that the Commissioner may determine that variability in price cap adjustments at a route group level will be needed to allow BC Ferries to earn the appropriate return on equity on a corporate basis.

September 30, 2006 85 of 169

APPENDICES



September 30, 2006 86 of 169

Appendix A - Service Level Reductions



September 30, 2006 87 of 169



CANCELLED ROUND TRIPS (by ***Days***) FOR ROUTE AND ROUTE GROUP

(for cancels on days for allowed reasons only)

2003 Calendar Year (Cumulative/YTD)			Force Majeure DAYS when Round Trips Missed	Non Force Majeure DAYS when Round Trips Missed	Cumulative # Days when Round Trips Missed / CALENDAR YEAR: Jan-Dec 2005 Allowed 30 Cumulative Days per Contract	
MJR	Route 01	Swartz Bay	Tsawwassen	17.0	4.0	21.0
	Route 02	Horseshoe Bay	Departure Bay	11.0	6.0	17.0
	Route 30	Duke Point	Tsawwassen	10.0	17.0	27.0
MNR	Route 04	Fulford Harbour	Swartz Bay	4.0	0.0	4.0
	Route 05	Swartz Bay	Four SGIs	8.0	0.0	8.0
	Route 06	Crofton	Vesuvius Bay	4.0	0.0	4.0
	Route 07	Earls Cove	Saltery Bay	8.0	0.0	8.0
	Route 08	Horseshoe Bay	Bowen Island	5.0	3.0	8.0
	Route 09	Tsawwassen	Long Harbour	5.0	0.0	5.0
	Route 17	Little River	Powell River	11.0	3.0	14.0
	Route 18	Texada	Powell River	10.0	1.0	11.0
	Route 19	Nanaimo Harbour	Gabriola Island	6.0	3.0	9.0
	Route 20	Chemainus	Thetis Island	4.0	4.0	8.0
	Route 21	Buckley Bay	Denman West	4.0	1.0	5.0
	Route 22	Denman East	Hornby Island	5.0	1.0	6.0
	Route 23	Campbell River	Quadra Island	6.0	3.0	9.0
	Route 24	Quadra Island	Cortes Island	11.0	1.0	12.0
	Route 25	Port McNeill	Alert Bay	6.0	0.0	6.0
	Route 26	Skidegate	Alliford Bay	10.0	2.0	12.0
NR	Route 10	Port Hardy	Prince Rupert	0.0	1.0	1.0
	Route 11	Skidegate	Prince Rupert	2.0	1.0	3.0
R03	Route 03	Langdale	Horseshoe Bay	39.0	7.0	46.0
R12	Route 12	Mill Bay	Brentwood Bay	3.0	1.0	4.0
R13	Route 13	Langdale	Gambier/Keats	0.0	0.0	0.0
R40	Route 40	Port Hardy	Mid-coast	0.0	0.0	0.0

Highest Consecutive # of Days when Round Trips Missed / FISCAL YEAR: Apr/03 - Mar/04 Allowed 20 Consecutive Days per Contract
5
5
16
3
3
3
5
3
3
3 3 2 1
5
5
3
3
3
3
3
2
1
5
3
0
0

Note:

(2) The Coastal Ferry Services Contract requires reporting to Calendar Year for Cumulative Days and to Fiscal Year for Consecutive Days

September 30, 2006 88 of 169

⁽¹⁾ Cancellations noted under 'Other' reasons are not included in Days calculations as fees are deducted on an individual occurrence basis for these cancellations



Appendix A

CANCELLED ROUND TRIPS (by ***Days***) FOR ROUTE AND ROUTE GROUP

(for cancels on days for allowed reasons only)

Pou	2004 Calendar Year (Cumulative/YTD)			Force Majeure DAYS when Round Trips Missed	Non Force Majeure DAYS when Round Trips Missed	Cumulative # Days when Round Trips Missed / CALENDAR YEAR: Jan-Dec 2005 Allowed 30 Cumulative Days per Contract
MJR	Route 01	Swartz Bay	Tsawwassen	1.0	4.0	5.0
	Route 02	Horseshoe Bay	Departure Bay	1.0	1.0	2.0
	Route 30	Duke Point	Tsawwassen	1.0	28.0	29.0
MNR	Route 04	Fulford Harbour	Swartz Bay	0.0	1.0	1.0
	Route 05	Swartz Bay	Four SGIs	1.0	0.0	1.0
	Route 06	Crofton	Vesuvius Bay	2.0	0.0	2.0
	Route 07	Earls Cove	Saltery Bay	0.0	2.0	2.0
	Route 08	Horseshoe Bay	Bowen Island	0.0	2.0	2.0
	Route 09	Tsawwassen	Long Harbour	0.0	1.0	1.0
	Route 17	Little River	Powell River	4.0	1.0	5.0
	Route 18	Texada	Powell River	4.0	0.0	4.0
	Route 19	Nanaimo Harbour	Gabriola Island	0.0	10.0	10.0
	Route 20	Chemainus	Thetis Island	1.0	4.0	5.0
	Route 21	Buckley Bay	Denman West	0.0	2.0	2.0
	Route 22	Denman East	Hornby Island	1.0	3.0	4.0
	Route 23	Campbell River	Quadra Island	2.0	3.0	5.0
	Route 24	Quadra Island	Cortes Island	4.0	1.0	5.0
	Route 25	Port McNeill	Alert Bay	1.0	1.0	2.0
	Route 26	Skidegate	Alliford Bay	10.0	1.0	11.0
NR	Route 10	Port Hardy	Prince Rupert	0.0	2.0	2.0
	Route 11	Skidegate	Prince Rupert	0.0	4.0	4.0
R03	Route 03	Langdale	Horseshoe Bay	0.0	3.0	3.0
R12	Route 12	Mill Bay	Brentwood Bay	3.0	1.0	4.0
R13	Route 13	Langdale	Gambier/Keats	0.0	0.0	0.0
R40	Route 40	Port Hardy	Mid-coast	0.0	0.0	0.0

Highest Consecutive # of Days when Round Trips Missed / FISCAL YEAR: Apr/04 - Mar/05				
Allowed 20 Consecutive Days per Contract				
1				
1				
5				
1				
2				
1				
1				
2				
1				
1				
1				
2				
1				
1				
1				
1				
1				
1				
2				
1				
2				
2				
3				
0				
0				

Note:

September 30, 2006 89 of 169

⁽¹⁾ Cancellations noted under 'Other' reasons are not included in Days calculations as fees are deducted on an individual occurrence basis for these cancellations

⁽²⁾ The Coastal Ferry Services Contract requires reporting to Calendar Year for Cumulative Days and to Fiscal Year for Consecutive Days



CANCELLED ROUND TRIPS (by ***Days***) FOR ROUTE AND ROUTE GROUP

(for cancels on days for allowed reasons only)

	Route Group Terminal 1 Terminal 2		(Cumulative/YTD) Route Group Terminal 1 Terminal 2		Force Majeure DAYS when Round Trips Missed	Non Force Majeure DAYS when Round Trips Missed	Cumulative # Days when Round Trips Missed / CALENDAR YEAR: Jan-Dec 2006 Allowed 30 Cumulative Days per Contract	Highest Consecutive # of Days when Round Trips Missed / FISCAL YEAR: Apr/05 - Mar/06 Allowed 20 Consecutive Days per Contract
MJR	-	Swartz Bay	Tsawwassen	4.0		4.0	2	
	Route 02	Horseshoe Bay	Departure Bay		1.0	1.0	4	
	Route 30	Duke Point	Tsawwassen	3.0	1.0	4.0	3	
MNR	Route 04	Fulford Harbour	Swartz Bay		2.0	2.0	1	
	Route 05	Swartz Bay	Four SGIs	1.0		1.0	1	
	Route 06	Crofton	Vesuvius Bay	1.0		1.0	2	
		Earls Cove	Saltery Bay		1.0	1.0	1	
	Route 08	Horseshoe Bay	Bowen Island		1.0	1.0	1	
	Route 09	Tsawwassen	Long Harbour	3.0	1.0	4.0	1	
	Route 17	Little River	Powell River	6.0		6.0	1	
	Route 18	Texada	Powell River	4.0	2.0	6.0	1	
	Route 19	Nanaimo Harbour	Gabriola Island			0.0	1	
	Route 20	Chemainus	Thetis Island	3.0	2.0	5.0	2	
	Route 21	Buckley Bay	Denman West			0.0	1	
	Route 22	Denman East	Hornby Island	3.0	3.0	6.0	2	
	Route 23	Campbell River	Quadra Island	4.0		4.0	1	
	Route 24	Quadra Island	Cortes Island	5.0		5.0	1	
	Route 25	Port McNeill	Alert Bay	3.0	1.0	4.0	1	
	Route 26	Skidegate	Alliford Bay	3.0	1.0	4.0	3	
NR	Route 10	Port Hardy	Prince Rupert	3.0		3.0	1	
	Route 11	Skidegate	Prince Rupert	6.0	,	6.0	2	
R03	Route 03	Langdale	Horseshoe Bay		4.0	4.0	3	
R12	Route 12	Mill Bay	Brentwood Bay	1.0	1.0	2.0	13	
R13	Route 13	Langdale	Gambier/Keats			0.0	0	
R40	Route 40	Port Hardy	Mid-coast			0.0	0	

Note:

September 30, 2006 90 of 169

⁽¹⁾ Cancellations noted under 'Other' reasons are not included in Days calculations as fees are deducted on an individual occurrence basis for these cancellations

⁽²⁾ The Coastal Ferry Services Contract requires reporting to Calendar Year for Cumulative Days and to Fiscal Year for Consecutive Days

Appendix B -Route Statements



September 30, 2006 91 of 169

Corporate Total Route Statement



September 30, 2006 92 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Corporate Total

	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	323,023	345,852	353,624	362,172	381,790
Ancillary Revenue	57,601	61,224	65,925	68,797	68,842
Social Program Reimbursements	12,317	13,412	14,674	15,156	15,875
Contracted Routes Fee	1,747	1,724	1,700	1,700	1,734
Total Operating Revenue	394,688	422,212	435,923	447,826	468,241
Total Operating Expenses	411,214	426,427	425,162	437,122	452,142
Earnings from Operations	(16,526)	(4,215)	10,761	10,704	16,098
Amortization	(47,260)	(47,490)	(52,926)	(56,500)	(74,161)
Financing Expense	(22,455)	(24,030)	(32,926)	(19,693)	(33,598)
Cost of Capital	(69,715)	_ , , ,	. , ,	. , ,	
cost of Capital	(69,715)	(71,520)	(77,333)	(76,193)	(107,759)
(Loss) Gain on Disposal of Capital Assets	(1,565)	(628)	(302)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(87,806)	(76,363)	(66,874)	(65,489)	(91,660)
Ferry Service Fees	91.818	91,834	91.849	91.851	105,245
Federal Contract	23,973	24,343	24,890	25,309	25,862
rederal contract	23,373	24,545	24,030	23,303	23,002
Net Route Earnings (Loss)	27,985	39,814	49,865	51,671	39,447
Extraordinary Gain (Loss)	0	0	0	61,290	0
Extraoramary dam (2005)	3	3	J	01,290	J
Net Route Earnings after Extraordinary Gain (Loss)	27,985	39,814	49,865	112,961	39,447

September 30, 2006 93 of 169

Route Group Statements



September 30, 2006 94 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(111 000 5)			Group 1		
			Majors		
	2004	2005	2006	2007	2008
Tariff Revenue Ancillary Revenue Social Program Reimbursements	242,826 46,988 6,674	Actuals 259,600 49,935 7,258	264,479 53,933 7,789	Fore 273,133 57,788 8,001	282,660 57,249 8,326
Contracted Routes Fee	296,488	0	0	0	0
Total Operating Revenue	290,488	316,793	326,201	338,921	348,234
Total Operating Expenses	223,256	234,990	232,160	241,799	245,240
Earnings from Operations	73,232	81,803	94,041	97,122	102,994
Amortization Financing Expense Cost of Capital	(29,460) (14,100) (43,560)	(32,247) (15,429) (47,676)	(35,387) (14,962) (50,349)	(35,964) (10,917) (46,881)	(42,145) (21,303) (63,448)
(Loss) Gain on Disposal of Capital Assets	(977)	(517)	(166)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	28,695	33,610	43,526	50,242	39,546
Ferry Service Fees Federal Contract	- -	0 0	0 0	0 0	0 0
Net Route Earnings (Loss)	28,695	33,610	43,526	50,242	39,546
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	28,695	33,610	43,526	50,242	39,546

September 30, 2006 95 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 2 03-Horseshoe Bay - Langdale

	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	22,549	24,794	25,943	27,407	28,419
Ancillary Revenue	3,950	4,634	5,098	5,704	5,665
Social Program Reimbursements	1,336	1,455	1,622	1,659	1,759
Contracted Routes Fee	, <u>-</u>	0	0	0	0
Total Operating Revenue	27,835	30,883	32,663	34,770	35,843
Total Operating Expenses	31,573	27,748	30,996	32,443	32,961
Earnings from Operations	(3,738)	3,135	1,667	2,327	2,882
	(5):55)	5/255	_,	_,	_,
Amortization	(2,908)	(2,834)	(4,032)	(4,448)	(6,692)
Financing Expense	(1,905)	(1,938)	(2,528)	(2,003)	(2,534)
Cost of Capital	(4,813)	(4,772)	(6,560)	(6,451)	(9,227)
(Loss) Gain on Disposal of Capital Assets	65	(47)	(37)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(8,486)	(1,684)	(4,930)	(4,123)	(6,344)
Ferry Service Fees	4.971	5,000	5,005	5,005	5,005
Federal Contract	1,327	1,347	1,378	1,401	1,431
Net Route Earnings (Loss)	(2,188)	4,663	1,453	2,283	92
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(2,188)	4,663	1,453	2,283	92

September 30, 2006 96 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 3

Northern Routes

	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	11,645	12,182	12,684	8,377	14,383
Ancillary Revenue	2,537	2,544	2,804	1,409	2,067
Social Program Reimbursements	493	482	520	536	564
Contracted Routes Fee	-	0	0	0	0
Total Operating Revenue	14,675	15,208	16,008	10,322	17,014
Total Operating Expenses	31,992	31,081	34,427	31,198	38,031
		,	,	,	
Earnings from Operations	(17,317)	(15,873)	(18,419)	(20,876)	(21,017)
Amortization	(1,478)	(2,891)	(3,214)	(2,701)	(8,324)
Financing Expense	(513)	(519)	(712)	(2,583)	(3,659)
Cost of Capital	(1,991)	(3,410)	(3,926)	(5,285)	(11,983)
(Loss) Gain on Disposal of Capital Assets	11	(11)	(9)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(19,297)	(19,294)	(22,354)	(26,160)	(33,000)
Ferry Service Fees	13,457	13,457	13,457	13,456	26,851
Federal Contract	3,568	3,623	3,704	3,766	3,849
rederal contract	3,300	3,023	3,704	3,700	3,043
Net Route Earnings (Loss)	(2,272)	(2,214)	(5,193)	(8,938)	(2,301)
Extraordinary Gain (Loss)	0	0	0	61,290	0
Net Route Earnings after Extraordinary Gain (Loss)	(2,272)	(2,214)	(5,193)	52,352	(2,301)

September 30, 2006 97 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 4 40-Bear Cove - Mid-Coast

	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	1,184	1,131	1,375	1,451	1,558
Ancillary Revenue	146	147	157	183	191
Social Program Reimbursements	12	12	28	34	36
Contracted Routes Fee		0	0	0	0
Total Operating Revenue	1,342	1,290	1,560	1,668	1,784
Total Operating Expenses	2,944	3,223	3,386	3,562	3,694
Earnings from Operations	(1,602)	(1,933)	(1,826)	(1,894)	(1,910)
Amortization	(1,419)	(65)	(78)	(39)	(54)
Financing Expense	(46)	(15)	(18)	(11)	(12)
Cost of Capital	(1,465)	(80)	(96)	(51)	(66)
(Loss) Gain on Disposal of Capital Assets	3	0	0	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(3,064)	(2,013)	(1,922)	(1,944)	(1,976)
Ferry Service Fees	1,893	1,893	1,893	1,893	1,893
Federal Contract	502	510	521	530	541
Net Route Earnings (Loss)	(669)	390	492	479	459
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(669)	390	492	479	459
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September 30, 2006 98 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 5 12-Mill Bay - Brentwood

	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	846	1,045	1,110	976	1,317
Ancillary Revenue	16	16	13	15	16
Social Program Reimbursements	-	13	72	67	70
Contracted Routes Fee		0	0	0	0
Total Operating Revenue	862	1,074	1,195	1,059	1,403
Total Operating Expenses	1,865	1,485	1,670	1,772	1,924
Earnings from Operations	(1,003)	(411)	(475)	(714)	(521)
Amortization	(485)	(491)	(497)	(492)	(491)
Financing Expense	(143)	(128)	(107)	(34)	(27)
Cost of Capital	(628)	(619)	(604)	(526)	(518)
·		` '	` '	` ′	` '
(Loss) Gain on Disposal of Capital Assets	2	(1)	(1)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(1,629)	(1,031)	(1,080)	(1,240)	(1,039)
Ferry Service Fees	1,425	1,425	1,425	1,425	1,425
Federal Contract	-	0	0	0	0
N. D T	(204)		245	105	
Net Route Earnings (Loss)	(204)	394	345	185	386
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(204)	394	345	185	386
	·		·	·	

September 30, 2006 99 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 6

Minor Routes

	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	43,851	46,956	47,903	50,640	53,261
Ancillary Revenue	3,862	3,909	3,880	3,695	3,652
Social Program Reimbursements	3,767	4,165	4,606	4,825	5,084
Contracted Routes Fee	· -	0	0	0	0
Total Operating Revenue	51,480	55,030	56,389	59,160	61,997
Total Operating Expenses	117,237	125,570	120,216	123,709	127,532
rotal operating expenses		120/070	120/210	125/705	127,002
Earnings from Operations	(65,757)	(70,540)	(63,827)	(64,549)	(65,534)
Amortization	(11,506)	(8,959)	(9,714)	(12,856)	(16,453)
Financing Expense	(5,748)	(6,000)	(6,080)	(4,143)	(6,062)
Cost of Capital	(17,254)	(14,959)	(15,794)	(16,998)	(22,515)
(Loss) Gain on Disposal of Capital Assets	(637)	(52)	(89)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(83,648)	(85,551)	(79,710)	(81,547)	(88,050)
Ferry Service Fees	69,543	69,530	69,540	69,542	69,542
Federal Contract	18,436	18,721	19,141	19,464	19,889
Net Route Earnings (Loss)	4,331	2,700	8,971	7,460	1,382
		•	•	<u>.</u>	
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	4,331	2,700	8,971	7,460	1,382

September 30, 2006 100 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 7

13-Langdale - Gambier Island - Keats Island

	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	122	144	130	187	192
Ancillary Revenue	102	39	40	3	3
Social Program Reimbursements	35	27	37	35	37
Contracted Routes Fee	-	0	0	0	0
Total Operating Revenue	259	210	207	225	232
Total Operating Expenses	497	511	518	821	907
Earnings from Operations	(238)	(301)	(311)	(596)	(675)
Amortization	(4)	(3)	(4)	0	(0)
Financing Expense	-	(1)	O´	(2)	(2)
Cost of Capital	(4)	(4)	(4)	(2)	(2)
(Loss) Gain on Disposal of Capital Assets	(32)	0	0	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(274)	(305)	(315)	(598)	(677)
Ferry Service Fees	529	529	529	529	529
Federal Contract	140	142	146	148	151
Net Route Earnings (Loss)	395	366	360	80	4
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	395	366	360	80	4

September 30, 2006 101 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Unregulated Routes

	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	0	0	0	0	0
Ancillary Revenue	0	0	0	0	0
Social Program Reimbursements	0	0	0	0	0
Contracted Routes Fee	1,747	1,724	1,700	1,700	1,734
Total Operating Revenue	1,747	1,724	1,700	1,700	1,734
Total Operating Expenses	1,850	1,819	1,789	1,818	1,855
Earnings from Operations	(103)	(95)	(89)	(118)	(121)
Amortization	0	0	0	0	0
Financing Expense	0	0	0	0	0
Cost of Capital	0	0	0	0	0
cost of Capital				- 0	
(Loss) Gain on Disposal of Capital Assets	0	0	0	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(103)	(95)	(89)	(118)	(121)
Ferry Service Fees	0	0	0	0	0
Federal Contract	0	0	0	0	0
Net Route Earnings (Loss)	(103)	(95)	(89)	(118)	(121)
Extraordinary Gain (Loss)					
Net Route Earnings after Extraordinary Gain (Loss)	(103)	(95)	(89)	(118)	(121)
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September 30, 2006 102 of 169

Route Statements



September 30, 2006 103 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

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	2004	2005 Actuals	2006	2007 Fore	2008
Tariff Revenue Ancillary Revenue	123,546 27,097	132,622 28,617	134,666 30,525	138,829 32,381	143,582 31,997
Social Program Reimbursements Contracted Routes Fee	2,849 -	3,177 -	3,309 0	3,479 0	3,616 0
Total Operating Revenue	153,492	164,416	168,500	174,689	179,196
Total Operating Expenses	102,110	111,819	109,147	112,827	114,342
Earnings from Operations	51,382	52,597	59,353	61,862	64,855
Amortization Financing Expense Cost of Capital	(17,242) (8,019) (25,261)	(17,604) (7,971) (25,575)	(18,489) (8,371) (26,860)	(17,852) (5,179) (23,031)	(17,073) (6,925) (23,998)
(Loss) Gain on Disposal of Capital Assets	(245)	(271)	(80)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	25,876	26,751	32,413	38,831	40,856
Ferry Service Fees Federal Contract	-	-	0 0	0 0	0 0
Net Route Earnings (Loss)	25,876	26,751	32,413	38,831	40,856
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	25,876	26,751	32,413	38,831	40,856

September 30, 2006 104 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

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	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	74,027	79,485	81,373	84,022	87,028
Ancillary Revenue	13,747	14,885	16,850	18,334	18,163
Social Program Reimbursements	2,849	3,034	3,314	3,349	3,489
Contracted Routes Fee	-,	-	0	0	0
Total Operating Revenue	90,623	97,404	101,537	105,705	108,681
			•	,	
Total Operating Expenses	67,373	67,951	69,629	74,038	75,178
Farmings from Operations	22.250	20.452	21 000	21.667	22 502
Earnings from Operations	23,250	29,453	31,908	31,667	33,503
Amortization	(6,461)	(8,492)	(10,600)	(11,391)	(14,529)
Financing Expense	(3,017)	(4,296)	(3,529)	(3,884)	(10,841)
Cost of Capital	(9,478)	(12,788)	(14,129)	(15,275)	(25,371)
cost of Capital	(3,476)	(12,766)	(17,129)	(13,273)	(23,371)
(Loss) Gain on Disposal of Capital Assets	(295)	(156)	(58)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	13,477	16,509	17,721	16,393	8,132
Ferry Service Fees	_	_	0	0	0
Federal Contract	_	_	0	0	0
rederal Contract			O	Ü	O
Net Route Earnings (Loss)	13,477	16,509	17,721	16,393	8,132
" " >				٠	
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	13,477	16,509	17,721	16,393	8,132
-	-	-			

September 30, 2006 105 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group	1

Rte 3	U
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	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	45,253	47,493	48,440	50,282	52,049
Ancillary Revenue	6,144	6,433	6,558	7,072	7,088
Social Program Reimbursements	976	1,047	1,166	1,173	1,220
Contracted Routes Fee	-	-	0	0	0
Total Operating Revenue	52,373	54,973	56,164	58,528	60,357
Total Operating Expenses	53,773	55,220	53,384	54,935	55,720
Earnings from Operations	(1,400)	(247)	2,780	3,593	4,637
Amortization	(5,757)	(6,151)	(6,298)	(6,721)	(10,543)
Financing Expense	(3,064)	(3,162)	(3,062)	(1,854)	(3,537)
Cost of Capital	(8,821)	(9,313)	(9,360)	(8,576)	(14,079)
(Loss) Gain on Disposal of Capital Assets	(437)	(90)	(28)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(10,658)	(9,650)	(6,608)	(4,982)	(9,442)
Ferry Service Fees	_	-	0	0	0
Federal Contract	-	-	0	0	0
Net Route Earnings (Loss)	(10,658)	(9,650)	(6,608)	(4,982)	(9,442)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(10,658)	(9,650)	(6,608)	(4,982)	(9,442)

September 30, 2006 106 of 169



Group 3

≈BCFerries

British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

	Group 3				
			Rte 10		
	2004	2005 Actuals	2006	2007	2008
Tariff Revenue	8,490	8,825	9,233	Fore 6,088	10,547
Ancillary Revenue	1,805	1,809	2,023	1,140	1,644
Social Program Reimbursements	292	285	306	316	334
Contracted Routes Fee	-	-	0	0	0
Total Operating Revenue	10,587	10,919	11,562	7,545	12,524
Total Operating Expenses	19,238	19,956	22,691	20,961	24,262
Familian from Onesettana	(0.654)	(0.027)	(44.420)	(42.447)	(44 707)
Earnings from Operations	(8,651)	(9,037)	(11,129)	(13,417)	(11,737)
Amortization	(1,090)	(1,826)	(2,027)	(1,430)	(6,578)
Financing Expense	(374)	(386)	(448)	(2,267)	(3,274)
Cost of Capital	(1,464)	(2,212)	(2,475)	(3,696)	(9,852)
(Loss) Gain on Disposal of Capital Assets	13	(6)	(6)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(10,102)	(11,255)	(13,610)	(17,113)	(21,589)
Ferry Service Fees	5,307	5,307	5,307	5,307	12,717
Federal Contract	1,407	1,429	1,461	1,485	1,518
Net Route Earnings (Loss)	(3,388)	(4,519)	(6,842)	(10,321)	(7,354)
Extraordinary Gain (Loss)	0	0	0	61,290	0
Net Route Earnings after Extraordinary Gain (Loss)	(3,388)	(4,519)	(6,842)	50,969	(7,354)

September 30, 2006 107 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(111 000 5)			Group 3		
			Rte 11		
	2004	2005 Actuals	2006	2007 Fore	2008
Tariff Revenue Ancillary Revenue Social Program Reimbursements	3,155 732 201	3,357 735 197	3,451 781 214	2,289 268 220	3,836 423 230
Contracted Routes Fee Total Operating Revenue	4,088	4,289	0 4,446	0 2,777	<u>0</u> 4,489
Total Operating Expenses	12,754	11,125	11,736	10,236	13,770
Earnings from Operations	(8,666)	(6,836)	(7,290)	(7,459)	(9,280)
Amortization Financing Expense	(388) (139)	(1,065) (133)	(1,187) (264)	(1,272) (317)	(1,747) (385)
Cost of Capital	(527)	(1,198)	(1,451)	(1,588)	(2,131)
(Loss) Gain on Disposal of Capital Assets	(2)	(5)	(3)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(9,195)	(8,039)	(8,744)	(9,048)	(11,412)
Ferry Service Fees Federal Contract	8,150 2,161	8,150 2,194	8,150 2,243	8,150 2,281	14,134 2,331
Net Route Earnings (Loss)	1,116	2,305	1,649	1,383	5,053
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	1,116	2,305	1,649	1,383	5,053

September 30, 2006 108 of 169



Group 6

*≈*BCFerries

British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

			Group 6		
			Rte 4		
	2004	2005	2006	2007	2008
T : ((D	2.550	Actuals	2.756	Fore	
Tariff Revenue	3,559	3,756	3,756	3,970	4,288
Ancillary Revenue	302	292	310	84	84
Social Program Reimbursements	254	287	311	322	340
Contracted Routes Fee	4 1 1 5	4 225	0	0	0
Total Operating Revenue	4,115	4,335	4,377	4,375	4,713
Total Operating Expenses	7,265	7,269	7,960	7,206	7,400
Earnings from Operations	(3,150)	(2,934)	(3,583)	(2,831)	(2,688)
Amortization	(1,298)	(1,334)	(1,378)	(1,530)	(1,562)
Financing Expense	(1,147)	(1,155)	(1,135)	(566)	(778)
Cost of Capital	(2,445)	(2,489)	(2,513)	(2,096)	(2,340)
(Loss) Gain on Disposal of Capital Assets	(30)	(5)	(3)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(5,625)	(5,428)	(6,099)	(4,927)	(5,028)
Ferry Service Fees	5,049	5,046	5,048	5,049	5,049
Federal Contract	1,339	1,359	1,390	1,413	1,444
Net Route Earnings (Loss)	763	977	339	1,535	1,465
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	763	977	339	1,535	1,465

September 30, 2006 109 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III ood s)			Group 6		
			Rte 5		
	2004	2005 Actuals	2006	2007 Fore	2008
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	3,118 390 347	3,263 377 410	3,389 421 461 0	3,591 244 474 0	3,861 234 503 0
Total Operating Revenue	3,855	4,050	4,271	4,308	4,598
Total Operating Expenses	15,384	14,443	19,202	15,605	15,910
Earnings from Operations	(11,529)	(10,393)	(14,931)	(11,297)	(11,312)
Amortization Financing Expense Cost of Capital	(1,236) (992) (2,228)	(1,276) (1,024) (2,300)	(1,426) (1,105) (2,531)	(1,610) (612) (2,222)	(1,751) (854) (2,605)
(Loss) Gain on Disposal of Capital Assets	(95)	(1)	(5)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(13,852)	(12,694)	(17,467)	(13,519)	(13,917)
Ferry Service Fees Federal Contract	10,932 2,898	10,930 2,943	10,932 3,008	10,932 3,060	10,932 3,126
Net Route Earnings (Loss)	(22)	1,179	(3,527)	472	141
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(22)	1,179	(3,527)	472	141

September 30, 2006 110 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III 000 S)			Group 6		
			Rte 6		
	2004	2005 Actuals	2006	2007	2008 cast
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	2,915 80 233	3,109 84 258	3,129 91 292 0	3,281 115 299 0	3,647 116 320 0
Total Operating Revenue	3,228	3,451	3,512	3,694	4,083
Total Operating Expenses	4,515	5,537	3,815	4,676	4,859
Earnings from Operations	(1,287)	(2,086)	(303)	(981)	(776)
Amortization Financing Expense Cost of Capital	(163) (86) (249)	(252) (97) (349)	(267) (104) (371)	(226) (50) (275)	(411) (128) (539)
(Loss) Gain on Disposal of Capital Assets	(35)	(3)	(22)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(1,571)	(2,438)	(696)	(1,256)	(1,315)
Ferry Service Fees Federal Contract	1,444 383	1,443 389	1,444 397	1,444 404	1,444 413
Net Route Earnings (Loss)	256	(606)	1,145	591	541
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	256	(606)	1,145	591	541

September 30, 2006 111 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(111 000 5)			Group 6		
			Rte 7		
	2004	2005 Actuals	2006	2007	2008 cast
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	3,712 379 212	4,092 405 217	4,345 457 255 0	4,628 523 252 0	4,787 479 263 0
Total Operating Revenue	4,303	4,714	5,057	5,404	5,529
Total Operating Expenses	12,470	12,607	12,384	12,773	13,012
Earnings from Operations	(8,167)	(7,893)	(7,327)	(7,369)	(7,483)
Amortization Financing Expense Cost of Capital	(3,068) (333) (3,401)	(375) (280) (655)	(405) (282) (687)	(380) (201) (581)	(340) (253) (594)
(Loss) Gain on Disposal of Capital Assets	(47)	(4)	(4)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(11,615)	(8,552)	(8,018)	(7,950)	(8,077)
Ferry Service Fees Federal Contract	9,381 2,487	9,381 2,525	9,381 2,582	9,381 2,626	9,381 2,683
Net Route Earnings (Loss)	253	3,354	3,945	4,056	3,987
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	253	3,354	3,945	4,056	3,987

September 30, 2006 112 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III 000 S)			Group 6		
			Rte 8		
	2004	2005	2006	2007	2008
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	5,007 363 498 -	Actuals 5,484 375 566	5,491 397 578 0	5,862 290 626 0	6,306 277 661 0
Total Operating Revenue	5,868	6,425	6,466	6,778	7,244
Total Operating Expenses	9,832	10,814	9,740	10,628	10,886
Earnings from Operations	(3,964)	(4,389)	(3,274)	(3,850)	(3,642)
Amortization Financing Expense Cost of Capital	(1,182) (1,083) (2,265)	(1,207) (1,137) (2,344)	(1,215) (1,087) (2,302)	(1,475) (637) (2,112)	(1,597) (827) (2,425)
(Loss) Gain on Disposal of Capital Assets	(29)	(8)	(11)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(6,258)	(6,741)	(5,587)	(5,962)	(6,066)
Ferry Service Fees Federal Contract	5,175 1,372	5,173 1,393	5,175 1,424	5,175 1,448	5,175 1,480
Net Route Earnings (Loss)	289	(175)	1,012	661	589
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	289	(175)	1,012	661	589

September 30, 2006 113 of 169



Group 6

*≈*BCFerries

British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

			Group 6		
			Rte 9		
	2004	2005	2006	2007	2008
		Actuals			ecast
Tariff Revenue	7,480	7,808	7,875	8,333	8,754
Ancillary Revenue	1,446	1,457	1,302	1,372	1,359
Social Program Reimbursements	263	325	357	377	395
Contracted Routes Fee	-	-	0	0	0
Total Operating Revenue	9,189	9,590	9,534	10,082	10,507
Total Operating Expenses	18,312	15,997	16,655	16,768	17,076
Earnings from Operations	(9,123)	(6,407)	(7,121)	(6,686)	(6,568)
Amortization	(890)	(587)	(1,227)	(2,459)	(3,252)
Financing Expense	(295)	(304)	(417)	(595)	(743)
Cost of Capital	(1,185)	(891)	(1,644)	(3,054)	(3,995)
(Loss) Gain on Disposal of Capital Assets	(26)	(13)	(6)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(10,334)	(7,311)	(8,771)	(9,740)	(10,563)
Ferry Service Fees	6,880	6,880	6.880	6 <i>.</i> 880	6,880
Federal Contract	1,824	1,852	1,894	1,926	1,968
Net Route Earnings (Loss)	(1,630)	1,421	3	(934)	(1,716)
HEL ROULE LAITHINGS (LUSS)	(1,030)	1,721	<u> </u>	(934)	(1,710)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(1,630)	1,421	3	(934)	(1,716)

September 30, 2006 114 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III 000 S)			Group 6		
			Rte 17		
	2004	2005 Actuals	2006	2007	2008 cast
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	5,741 629 560 -	6,320 678 623	6,886 676 739 0	7,297 800 728 0	7,355 840 768 0
Total Operating Revenue	6,930	7,621	8,301	8,825	8,962
Total Operating Expenses	12,735	16,646	11,231	15,019	15,223
Earnings from Operations	(5,805)	(9,025)	(2,930)	(6,194)	(6,260)
Amortization Financing Expense Cost of Capital	(1,250) (568) (1,818)	(1,308) (553) (1,861)	(1,314) (521) (1,835)	(1,390) (221) (1,611)	(1,410) (254) (1,663)
(Loss) Gain on Disposal of Capital Assets	(28)	(10)	(5)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(7,651)	(10,896)	(4,770)	(7,805)	(7,924)
Ferry Service Fees Federal Contract	6,289 1,667	6,289 1,693	6,289 1,731	6,289 1,760	6,289 1,799
Net Route Earnings (Loss)	305	(2,914)	3,250	244	164
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	305	(2,914)	3,250	244	164

September 30, 2006 115 of 169



Group 6

≈BCFerries

British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Net Route Earnings after Extraordinary Gain (Loss)

			Rte 18		
	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	782	831	851	922	967
Ancillary Revenue	20	27	24	19	19
Social Program Reimbursements	116	115	136	133	138
Contracted Routes Fee		-	0	0	0
Total Operating Revenue	918	973	1,011	1,074	1,125
Total Operating Expenses	5,066	4,831	4,956	4,627	4,673
Earnings from Operations	(4,148)	(3,858)	(3,945)	(3,553)	(3,548)
Amortization Financing Expense	(314) (146)	(403) (267)	(403) (252)	(479) (129)	(610) (167)
Cost of Capital	(460)	(670)	(655)	(608)	(778)
(Loss) Gain on Disposal of Capital Assets	(41)	-	(2)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(4,649)	(4,528)	(4,602)	(4,161)	(4,326)
Ferry Service Fees Federal Contract	3,245 860	3,245 874	3,245 893	3,245 908	3,245 928
Net Route Earnings (Loss)	(544)	(409)	(464)	(7)	(152)
Extraordinary Gain (Loss)	0	0	0	0	0

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September 30, 2006 116 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III 000 S)			Group 6		
			Rte 19		
	2004	2005 Actuals	2006	2007	2008 ecast
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	3,078 59 405 -	3,347 61 393	3,309 57 428 0	76 76 451 0	3,650 75 475 0
Total Operating Revenue	3,542	3,801	3,794	4,044	4,200
Total Operating Expenses	4,773	5,054	6,899	6,410	6,564
Earnings from Operations	(1,231)	(1,253)	(3,105)	(2,367)	(2,364)
Amortization Financing Expense Cost of Capital	(447) (274) (721)	(465) (272) (737)	(491) (266) (757)	(567) (190) (757)	(1,223) (488) (1,711)
(Loss) Gain on Disposal of Capital Assets	(41)	(4)	(3)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(1,993)	(1,994)	(3,865)	(3,124)	(4,075)
Ferry Service Fees Federal Contract	2,549 676	2,549 686	2,549 702	2,549 713	2,549 729
Net Route Earnings (Loss)	1,232	1,241	(614)	138	(797)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	1,232	1,241	(614)	138	(797)

September 30, 2006 117 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	742	773	749	815	851
Ancillary Revenue	65	29	16	14	13
Social Program Reimbursements	101	107	135	132	139
Contracted Routes Fee	-	-	0	0	0
Total Operating Revenue	908	909	900	960	1,004
Total Operating Expenses	3,801	4,218	3,322	3,811	4,034
Earnings from Operations	(2,893)	(3,309)	(2,422)	(2,851)	(3,030)
Amortization	(279)	(255)	(278)	(372)	(703)
Financing Expense	(161)	(157)	(182)	(140)	(281)
Cost of Capital	(440)	(412)	(460)	(512)	(984)
(Loss) Gain on Disposal of Capital Assets	(54)	1	(20)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(3,387)	(3,720)	(2,902)	(3,363)	(4,014)
Ferry Service Fees	2,484	2,484	2,483	2,484	2,484
Federal Contract	658	668	684	695	710
Net Route Earnings (Loss)	(245)	(568)	265	(184)	(820)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	(245)	(568)	265	(184)	(820)

September 30, 2006 118 of 169

Extraordinary Gain (Loss)

Net Route Earnings after Extraordinary Gain (Loss)



Group 6

≈BCFerries

British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

			Rte 21		
	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	1,426	1,617	1,831	1,940	1,758
Ancillary Revenue	26	26	23	31	30
Social Program Reimbursements	210	208	165	187	196
Contracted Routes Fee		-	0	0	0
Total Operating Revenue	1,662	1,851	2,019	2,158	1,984
Total Outputing Foresters	2.014	4 2 4 4	2 507	4 404	
Total Operating Expenses	3,914	4,341	3,587	4,494	5,042
Earnings from Operations	(2,252)	(2,490)	(1,568)	(2,336)	(3,058)
Amortization	(425)	(419)	(270)	(600)	(1,083)
Financing Expense	(172)	(168)	(153)	(318)	(404)
Cost of Capital	(597)	(587)	(423)	(919)	(1,487)
(Loss) Gain on Disposal of Capital Assets	(38)	(2)	(1)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(2,887)	(3,079)	(1,992)	(3,254)	(4,545)
Ferry Service Fees	2,694	2,694	2,694	2,694	2,694
Federal Contract	714	725	741	754	770
Net Route Earnings (Loss)	521	340	1,443	193	(1,081)

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September 30, 2006 119 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

Group 6

	Rte	22
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	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	1,173	1,176	913	966	1,290
Ancillary Revenue	16	15	13	15	16
Social Program Reimbursements	28	109	134	186	195
Contracted Routes Fee		-	0	0	0
Total Operating Revenue	1,217	1,300	1,060	1,168	1,500
Total Operating Expenses	2,337	4,090	2,483	3,278	3,891
Earnings from Operations	(1,120)	(2,790)	(1,423)	(2,110)	(2,391)
Amortization	(151)	(162)	(149)	(157)	(518)
Financing Expense	(90)	(96)	(105)	(47)	(349)
Cost of Capital	(241)	(258)	(254)	(205)	(866)
(Loss) Gain on Disposal of Capital Assets	(27)	(1)	(1)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(1,388)	(3,049)	(1,678)	(2,315)	(3,258)
Ferry Service Fees	2,064	2,064	2,064	2,064	2,064
Federal Contract	547	556	568	578	590
Net Route Earnings (Loss)	1,223	(429)	954	327	(603)
Extraordinary Gain (Loss)	0	0	0	0	0
	Ŭ	Ŭ	Ü	ŭ	.
Net Route Earnings after Extraordinary Gain (Loss)	1,223	(429)	954	327	(603)

September 30, 2006 120 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(III dodd S)			Group 6		
			Rte 23		
	2004	2005 Actuals	2006	2007	2008
Tariff Revenue	3,025	3,226	3,267	3,455	cast 3,595
Ancillary Revenue	43	38	37	68	67
Social Program Reimbursements Contracted Routes Fee	285	271	300 0	319 0	336 0
Total Operating Revenue	3,353	3,535	3,604	3,842	3,998
Total Operating Expenses	6,061	7,007	7,322	6,375	6,540
Earnings from Operations	(2,708)	(3,472)	(3,718)	(2,534)	(2,542)
Amortization	(299)	(340)	(356)	(349)	(468)
Financing Expense	(133)	(149)	(143)	(109)	(128)
Cost of Capital	(432)	(489)	(499)	(458)	(596)
(Loss) Gain on Disposal of Capital Assets	(22)	(4)	(3)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(3,162)	(3,965)	(4,220)	(2,992)	(3,138)
Ferry Service Fees	2,894	2,894	2,894	2,894	2,894
Federal Contract	767	779	797	810	828
Net Route Earnings (Loss)	499	(292)	(529)	713	585
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	499	(292)	(529)	713	585

September 30, 2006 121 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

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	2004	2005	2006	2007	2008
		Actuals		Fore	ecast
Tariff Revenue	569	587	578	618	667
Ancillary Revenue	16	15	30	13	13
Social Program Reimbursements	30	59	72	86	92
Contracted Routes Fee		-	0	0	0
Total Operating Revenue	615	661	680	717	772
Total Operating Expenses	3,434	2,997	2,418	3,271	3,391
Earnings from Operations	(2,819)	(2,336)	(1,738)	(2,554)	(2,619)
Amortization	(217)	(229)	(188)	(279)	(543)
Financing Expense	(136)	(142)	(119)	(83)	(97)
Cost of Capital	(353)	(371)	(307)	(361)	(640)
(Loss) Gain on Disposal of Capital Assets	(34)	1	(1)	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(3,206)	(2,706)	(2,046)	(2,915)	(3,259)
Ferry Service Fees	2,647	2,643	2,646	2,647	2,647
Federal Contract	702	713	729	741	757
Net Route Earnings (Loss)	143	650	1,329	473	145
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	143	650	1,329	473	145

September 30, 2006 122 of 169



British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

(111 000 5)			Group 6		
			Rte 25		
	2004	2005	2006	2007	2008
Tariff Revenue Ancillary Revenue Social Program Reimbursements Contracted Routes Fee	1,044 20 196	Actuals 1,053 22 192	1,072 21 219 0	959 22 226 0	973 22 235 0
Total Operating Revenue	1,260	1,267	1,312	1,207	1,230
Total Operating Expenses	4,547	6,933	4,071	5,378	5,522
Earnings from Operations	(3,287)	(5,666)	(2,759)	(4,171)	(4,292)
Amortization Financing Expense Cost of Capital	(193) (93) (286)	(246) (161) (407)	(198) (158) (356)	(229) (109) (338)	(390) (141) (531)
(Loss) Gain on Disposal of Capital Assets	(53)	1	(2)	0	0
Route Earnings (Loss) Before Ferry Service Fees & Federal Contract	(3,626)	(6,072)	(3,117)	(4,508)	(4,823)
Ferry Service Fees Federal Contract	3,168 840	3,167 853	3,168 872	3,168 887	3,168 906
Net Route Earnings (Loss)	382	(2,052)	923	(454)	(749)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	382	(2,052)	923	(454)	(749)

September 30, 2006 123 of 169



Group 6

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British Columbia Ferry Services Inc. Route Statement For the period April 1 2003 - Mar.31 - 2008 (in 000's)

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			Rte 26		
	2004	2005	2006	2007	2008
		Actuals		Fore	cast
Tariff Revenue	480	514	462	486	511
Ancillary Revenue	8	8	5	8	8
Social Program Reimbursements	29	25	24	28	29
Contracted Routes Fee	-	-	0	0	0
Total Operating Revenue	517	547	491	521	547
Total Operating Expenses	2,791	2,786	4,171	3,388	3,509
Earnings from Operations	(2,274)	(2,239)	(3,680)	(2,867)	(2,961)
Amortization	(94)	(101)	(149)	(753)	(592)
Financing Expense	(39)	(38)	(51)	(135)	(170)
Cost of Capital	(133)	(139)	(200)	(889)	(762)
cost of capital	(133)	(133)	(200)	(003)	(702)
(Loss) Gain on Disposal of Capital Assets	(37)	-	0	0	0
Route Earnings (Loss) Before Ferry					
Service Fees & Federal Contract	(2,444)	(2,378)	(3,880)	(3,756)	(3,723)
Ferry Service Fees	2,648	2,648	2,648	2,648	2,648
Federal Contract	702	713	729	741	757
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Net Route Earnings (Loss)	906	983	(503)	(366)	(317)
Extraordinary Gain (Loss)	0	0	0	0	0
Net Route Earnings after Extraordinary Gain (Loss)	906	983	(503)	(366)	(317)
			_	_	

September 30, 2006 124 of 169

Appendix C - Fuel Price Forecast



September 30, 2006 125 of 169

TABLE 1 CRUDE OIL AND PRODUCT FORECAST AUGUST 2006 UPDATE US DOLLARS PER BARREL

			-								FORECAST	ST				
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
WTI, Cushing	49.88	53.08	63.18	60.01	63.29	70.45	74.14	74.06	72.72	70.72	68.71	67.19	66.16	63.89	61.43	59.48
Par, Edmonton	50.58	53.39	64.01	61.00	60.22	70.33	74.62	73.52	72.22	70.21	68.11	66.75	65.16	62.88	60.24	58.59
No. 2 Distillate, USGC (Spot)	57.32	62.71	76.64	75.84	72.30	82.13	84.11	83.69	81.32	77.11	75.12	74.96	73.41	69.35	98.99	66.21
No. 2 Distillate, New York Harbour (Spot)	58.97	63.38	75.32	73.73	72.17	81.77	83.12	84.83	82.86	78.15	76.06	76.09	74.97	70.41	67.81	67.35
No. 2 Distillate, Vancouver (Rack)	71.76	72.36	86.30	90.53	81.40	97.46	98.51	94.07	92.01	88.33	83.88	84.20	84.09	80.55	75.59	75.42
Exchange Rate (US\$ per CDN \$)	0.815	0.804	0.832	0.852	0.866	0.891	0.885	0.877	0.871	0.864	0.858	0.852	0.845	0.845	0.845	0.845
							5	FORECAST								
	2000	2001	2002	2003	2004	2005	2006	2007	2008							
WTI, Cushing	30.37	25.93	26.16	31.06	41.49	56.59	70.50	69.83	62.73							
Par, Edmonton	29.96	25.50	25.73	31.06	40.80	57.29	69.72	69.30	61.71							
No. 2 Distillate, USGC (Spot)	33.95	28.92	27.64	33.78	45.44	68.20	80.58	77.10	68.94							
No. 2 Distillate, New York Harbour (Spot)	35.72	29.53	28.35	35.22	46.58	67.91	80.49	78.26	70.11							
No. 2 Distillate, Vancouver (Rack)	39.05	34.57	32.12	41.21	55.27	80.17	92.86	87.11	78.88							
Exchange Rate (US\$ per CDN \$)	0.674	0.646	0.637	0.716	0.770	0.826	0.880	0.861	0.845							

Appendix D - Capital Plan



September 30, 2006 127 of 169



Appendix D

Project Value by In-Service Year 2003/04 - 2005/06

	• •		In-Service Yea	ır	
Project Type	Project Description	2003/04	2004/05	2005/06	Total In Service
Vessel	Queen of Coquitlam - Mid-Life Upgrade	26,145,296	4,358	2005/06	26,149,654
Vessel	Queen of Burnaby - Replace 3 Generators	15,029	4,556	0	15,029
Vessel	Quinitsa - Sewage Handling	32,997	0	0	32,997
Vessel	Quintsa - Sewage Handling (originally Powell River Queen)	1.050	0	0	1,050
Vessel	Klitsa - Sewage Handling System	55,222	0	0	55,222
Vessel	Tenaka - Sewage Handling	53,277	0	0	53,277
Vessel	Skeena Queen - Engine Replacement	(22,176)	0	0	(22,176)
Vessel	Various Vessels - Vessel Electronics Program - Phase 1 - Year 2 of 5	90,793	0	0	90,793
Vessel	Corporate - Catering Equipment Replacement Program - Phase 1 - Year 2 of 5	66	0	0	66
Vessel	Queen of Surrey - Ship Service Generator Replacement	1,006,550	0	0	1,006,550
Vessel	Powell River Queen - Sewage Treatment System	450,388	54,620	0	505,008
Vessel	Mayne Queen - Sewage Treatment System	526,129	16,498	0	542,627
Vessel	Queen of Alberni - Sewage Treatment System	1,267,590	83,226	0	1,350,816
Vessel	Queen of Cowichan - Mid-Life Upgrade	1,207,330	33.010.376	(204)	33,010,172
Vessel	Oueen of Prince Rupert - Renovation	309,022	6,717,946		7,026,107
Vessel	North Island Princess - Life Extension	1,772,505	69,064		1,841,569
Vessel	Queen of Coguitlam - Lube Oil Purifier	226,147		0	221,297
Vessel	Various Vessels - Vessel Electronics Program - Phase 1 - Year 3 of 5	198,711	151,807	0	350,518
Vessel	Howe Sound Queen - Propulsion System	0	634,631	0	634,631
Vessel	Kahloke - Propulsion System Upgrade	0		0	554,583
Vessel	Corporate - Catering Equipment Replacement Program - Phase 1 - Year 3 of 5	166,571	54,009	0	220,580
Vessel	Queen of Oak Bay - Mid-Life Upgrade	0	0 .,003	35,130,576	35,130,576
Vessel	Queen of Alberni - Lube Oil Purifier	217,187	0		217,187
Vessel	Tachek - Ship Service Generators and Switchboard Upgrade	0	263,179	0	263,179
Vessel	Oueen of Coguitlam - Evacuation Plan Modifications	0	1,118,041	0	1,118,041
Vessel	Queen of Cowichan - Lube Oil Purifier	ō	224,611	Ō	224,611
Vessel	Spirit of Vancouver Island - Expand Retail Gift Shop	0	922,276	(6,516)	915,760
Vessel	Spirit of British Columbia - Interior Passenger Area Betterments	0	10,971,530		11,481,189
Vessel	Kwuna - Thrusters & Engines	0	0		4,079,557
Vessel	Various Vessels - SCBA Expansion & Replacement	0	824,931	. 0	824,931
Vessel	Various Vessels - Vessel Electronics Program - Phase 1 - Year 4 of 5	0	428,277	951	429,228
Vessel	Queen of New Westminster - Car Deck Ventilation Improvements	0	797,615	(375)	797,240
Vessel	Queen of Coquitlam - Car Deck Ventilation Improvements	0	1,111,016	` ó	1,111,016
Vessel	Queen of Nanaimo - Life Extension	0	0	16,315,782	16,315,782
Vessel	Corporate - Catering Equipment Replacement Program - Phase 1 - Year 4 of 5	0	176,350	42,028	218,378
Vessel	Oueen of Prince Rupert - Gearbox	0	582,888	0	582,888
Vessel	Various Vessels - Vessel Electronics Program - Phase 1 - Year 5 of 5	0	. 0	385,702	385,702
Vessel	Spirit of Vancouver Island - Interior Passenger Area Betterments and Evacuation Plan Modific	0	0	13,029,519	13,029,519
Vessel	Corporate - Catering Equipment Replacement Program - Phase 1 - Year 5 of 5	0	0	186,768	186,768
Vessel	Spirit-Class Vessels - Engine Betterments	0	0	358,304	358,304
Vessel	Queen of New Westminster - Engine Betterments	0	0		710,505
	Total for Vessel Projects	32,512,354	58,766,982	70,741,395	162,020,731

September 30, 2006 128 of 169



Appendix D

Project Value by In-Service Year 2003/04 - 2005/06

Project Type Project Description 2003/04 2004/05 2005/06 Total Ir	
Terminal Cathodic Protection, Starboard Wingwall 6,623 0 0	6,623
Terminal Departure Bay - Terminal Lighting Upgrade 471 0 0	471
Terminal Major Terminals - Cathodic Protection 39,741 0 0 Terminal Minor Terminals - Cathodic Protection 32,783 305 (305)	39,741 32.783
Terminal Minor Terminats - Catronic Protection 32,763 303 (303) Terminal Horseshoe Bay - Administration/Foot Passenger Building 25,797 0 0 0	25,797
Terminal Horseshoe Bay - Expand Holding Area 417,048 39,974 0	457,022
Terminal Departure Bay - Administration Building and Tower 10,540 0 0	10,540
Terminal Horseshoe Bay - Terminal Maintenance Building 2,152,963 0 0 Terminal Horseshoe Bay - Parkade 45,639 4,031 0	2,152,963 49,670
Terminal Horseshoe Bay - Electrical System Upgrade 1,000 0 0	1,000
Terminal Various Terminals - 600 Volt Shore Power Standard 462,258 81 0	462,339
Terminal Bear Cove - Replace Ramp & Upgrade Ramp Hydraulics 82,088 0 0 Terminal Tsawwassen - Brinks Cash System Replacement 50,210 0 0	82,088
Terminal Tsawwassen - Brinks Cash System Replacement 50,210 0 0 Terminal Village Bay - Electrical Upgrade 139,878 0 0	50,210 139,878
Terminal Otter Bay - Replace Port & Starboard Wingwalls 1,715 0 0	1,715
Terminal Swartz Bay - Replace Dolphins 7 and 8 and Catwalk 2,270 (4,000) 0	(1,730)
Terminal Various Terminals - Wayfinding Signage (DEP, TSA, SWB) 0 452,142 0 Terminal Departure Bay - Berth 2 - Replacement of Upper Ramp Support Frame 10,079 0 0	452,142 10,079
Terminal Departure Bay - Berth 2 - Replacement of Upper Ramp Support Frame 10,079 0 0 Terminal Langdale - Admin Building Shoreline Stabilization 235,472 2,609 0	238,081
Terminal Blubber Bay - Ramp, Pontoon and Dolphin Upgrade 941,083 0 0	941,083
Terminal Sturdies Bay - Electrical Systems Upgrade 145,922 0 0	145,922
Terminal Tsawwassen - Berth 4 - Replace Starboard Wingwall (4,962) 0 0 Terminal Horseshoe Bay - Slope Stabilization 3,304 0 0	(4,962)
Terminal Horseshoe Bay - Slope Stabilization 3,304 0 0 Terminal Swartz Bay - Freezer and Warehouse Expansion Project (387) 0 0	3,304 (387)
Terminal Tsawwassen - Berth 3 - Replace Dolphins 13, 14, 15, 22, 23, 48 0 3,807,027 0	3,807,027
Terminal Sturdies Bay - Replace Ramp Towers 0 2,415,525 228,557	2,644,082
Terminal Port McNeill - Electrical Relocation 0 240,147 0	240,147
Terminal Alert Bay - Replace Dolphins 1,2,3,4,5 1,306,679 9,210 0 Terminal Horseshoe Bay - Berth 1 - Tower Pile Strengthening 163,345 2,744 0	1,315,889 166,089
Terminal Horseshoe Bay - Berth 1/3 - Replace Floating Leads 16 (aka 22) and 18 717,939 18,623 0	736,562
Terminal Swartz Bay - Bedrock Foundation Stabilization at Foot Passenger Drop-Off Area 0 0 518,363	518,363
Terminal Saltery Bay - Berth 1 & 2 - Marine Structure Replacements 0 263,105 0	263,105
Terminal Langdale - Washrooms Replacement 0 481,716 (3,574) Terminal Westview - Staff and Administration Building 0 458,695 0	478,142 458,695
Terminal Westewn - Standay Power Upgrade 103,256 6,373 0	109,629
Terminal Departure Bay - Berth 1 - Dolphin 8 Replacement 289,665 0 0	289,665
Terminal Tsawwassen - Terminal Retail Redevelopment 0 0 7,274,959	7,274,959
Terminal Various Mainland Terminals - Acquire and Install Parking Equipment 0 911,955 7 Terminal Tsawwassen - Berth 2 - Replacement of Marine Structures 0 0 16,850,819	911,962 6,850,819
Terminal Tsawwassen - Berth 3 - Lower Ramp Apron Replacement 0 380,845 0	380,845
Terminal Saturna Island - Waiting Room - Washroom Rebuild 0 474,140 0	474,140
Terminal Swartz Bay - Passenger Area Betterments 0 3,177,461 (2)	3,177,459
Terminal Tsawwassen - Foot Passenger Facilities Betterments 0 3,063,038 (39) Terminal Horseshoe Bay - Replace Floating Leads 17, 20, 21 0 0 1,398,450	3,062,999 1,398,450
Terminal Horseshoe Bay - Replace Floating Leads 17, 20, 21 0 0 1,398,450 Terminal Horseshoe Bay - Pre-ticket Traffic Flow Reconfiguration 0 424,557 11,329	435.886
Terminal Horseshoe Bay - Passenger Facilities Betterments 0 0 2,302,313	2,302,313
Terminal Langdale - Berth 1 - Upper and Lower Apron Modifications 0 398,334 158,780	557,114
Terminal Langdale - Replace Trash Compactor and Carts 0 57,088 0 Terminal Swartz Bay Information Systems - MAXIMO Office Space 0 104,435 0	57,088 104,435
Terminal Swartz Bay Information Systems - MAXIMO Office Space 0 104,435 0 Terminal Duke Point - Food Services Facility 0 73,446	73,446
Terminal Swartz Bay - Berth 1 - Re-Armor Existing Riprap 0 125,757 0	125,757
Terminal Swartz Bay - Berth 3 - S-Class Stand Alone Power 0 89,959 3,549	93,508
Terminal Sturdies Bay - Install Salt Water Fire Protection 0 35,111 0 Terminal Kuper - Replace Marine Structures 0 0 2,397,705	35,111 2,397,705
Terminal Kuper - Replace Marine Structures 0 0 2,397,705 Terminal Tsawwassen - Berth 5 - Fender Panels 0 0 3,421,942	3,421,942
Terminal Tsawwassen - Berth 5 - Lower Ramp Apron Replacement 0 420,883 (182,805)	238,078
Terminal Langdale - Emergency Generator (Master Plan) 0 0 180,005	180,005
Terminal Tsawwassen - Parking Site Modification 0 0 331,359	331,359
Terminal Port McNeill - Dolphin #1 Replacement 0 0 472,180 Terminal Alliford Bay - Upgrade Concrete Ramp 0 0 248,844	472,180 248,844
Terminal Skidegate - Concrete Ramp Upgrade 0 0 0 235,866	235,866
Terminal Tsawwassen - Berth 2 - Foot Passenger Walkway Betterments 0 0 373,868	373,868
Terminal Otter Bay - Pedestrian Access 0 0 147,533	147,533
Terminal Sointula - Trestle Upgrade with Passenger Waiting Room & Washrooms 0 0 467,244 Terminal Swartz Bay - Replacement of Work Trailer 0 0 37,764	467,244 37,764
Terminal Tsawwassen - Changeable Message Sign (CMS) 0 0 377,991 143,990	143,990
Terminal Horseshoe Bay - Toll Booth Relocation 0 0 126,678	126,678
Total for Terminal Projects 7,382,419 17,861,870 37,218,825	2,463,114

September 30, 2006 129 of 169



Appendix D

Project Value by In-Service Year 2003/04 - 2005/06

	Project Value by In-Service Year 2003/0	4 - 2005/06			
			In-Service Yea	r	
Project					
Type	Project Description	2003/04	2004/05	2005/06	Total In Service
Other	Corporate Information Systems - @CCESS - Release 1	0	0	311,197	311,197
Other	Corporate Information Systems - Financial System Replacement (FINS)	(11,488)	0	0	(11,488)
Other	Corporate Information Systems - Windows 2000 Upgrade	1,078,478	0	0	
Other	Corporate - Reservations - System Enhancements	58,259	0	0	
Other	Corporate Information Systems - NT Server Evergreening Program - Phase 1 - Year 1 of 3	857,288	0	0	857,288
Other	Corporate Information Systems - CRISP (Catering & Retail Systems)	0	0	4,620,275	
Other	Corporate Information Systems - Network Switches	291,585	0	0	
Other	Automotive - SWB - Purchase LWB Van 6400 (Shipwright's Vehicle)	23,630	0	0	23,630
Other	Automotive - DPMI - Light Vehicle Replacement Program - Year 3 of 5	375,427	8,775	0	384,202
Other	Automotive - DPMI - Heavy Vehicle Replacement Program - Year 3 of 5	326,208	973	0	327,181
Other	Corporate Information Systems - CHaRTS (HR/Crewing project)	6,485,514	5,104,529	0	
Other	DPMI - Machinery & Equipment Program - Phase 1 - Year 3 of 5	193,626	0	0	,
Other	Corporate Information Systems - Cognos Reporting Upgrades	303,089	0	0	
Other	Automotive - SWB - Replace tow motor	46,879	0	0	
Other	Corporate Information Systems - SARI Enhancements	191,034	63,534	0	
Other	Automotive - TSA - OSH Officer Van	0	30,161	0	
Other	Automotive - DPMI - Light Vehicle Replacement Program - Year 4 of 5	0	447,506	1,819	
Other	Automotive - DPMI - Heavy Vehicle Replacement Program - Year 4 of 5	0	482,706	11,169	
Other	Corporate Information Systems - Data Warehousing	0	463,269	0	
Other	Langdale - Route 3 Reservations	13,957	76,430		
Other	DPMI - Erosion Control	0	0	1,068,559	
Other	Corporate Information Systems - @CCESS - Release 1	391,268	0	0	391,268
Other	DPMI - Berth 1 Upgrade	0	141,183	0	141,183
Other	Corporate Information Systems - MAX Renewal - Release 1	0	725,930	0	725,930
Other	DPMI - Machinery & Equipment Program - Phase 1 - Year 4 of 5	62,584	185,744	0	248,328
Other	Corporate Information Systems - NT Server Evergreening Program - Phase 1 - Year 2 of 3	0	347,961	0	347,961
Other	Automotive - Corporate - Parade Float / Trailer	0	69,373	0	,
Other	Corporate Information Systems - Ship Log Pilot	0	115,923	0	
Other	Corporate Information Systems - Smart Media	0	0	860,957	
Other	Corporate - Fleet House - Renovation & Consolidation	0	1,400,119	0	
Other	Corporate Information Systems - MAX Renewal - Release 2	0	721,070	0	
Other	Corporate Information Systems - ERP Expansion - Bundle #1	0	3,318,712	648,194	
Other	Corporate Information Systems - CPM Program - Budget System Replacement - Phase 1	0	0	1,607,429	
Other	Corporate Information Systems - MAX Renewal - Release 3	0	0	519,795	
Other	Corporate Information Systems - NT Server Evergreening Program - Phase 1 - Year 3 of 3	0	0		
Other	DPMI - Machinery & Equipment Program - Phase 1 - Year 5 of 5	0	115,085	18,664	
Other	Automotive - TSA - Bobcat Purchase (TAM)	0	51,284	0	,
Other	Corporate Information Systems - UNIX Server Replacement Program - Phase 1	0	0	363,203	
Other	Automotive - Terminal Cart Replacement Program (Phase 1 of 2)	0	0	,	
Other	Automotive - North Coast Forklifts	0	0	74,828	
Other	DPMI - Machinery & Equipment Program - Phase 2 - Year 1 of 5	0	0	9,431	9,431
Other	Fleet House HVAC Upgrade	0	0	210,999	
Other	MEC (Marine Evacuation Chute) Training Facility	0	303,595	0	
	Total Other Projects	10,687,338	14,173,862	11,323,942	
	Total In Service	50,582,111	90,802,714	119,284,162	260,668,987
	Total Capital Placed In Service	50,582,111	90,802,714	119,284,162	
	Closing Work in Progress	35,618,715	71,939,058	86,794,832	
	Opening Work in Progress	(28,600,397)	(35,618,715)		
	Write Offs	2,048,454	14,474		
	Total Capital Expenditures	59,648,883	127,137,531	134,487,714	•

September 30, 2006 130 of 169

Appendix E - Traffic Statistics



September 30, 2006 131 of 169



Table E -1

1st Performance Term							
(000's)	Fiscal Year	TOTAL	TOTAL				
	Ending	VEHICLES	PASSENGERS				
Route Grou	•		_				
Majors	2003/04	3,688	10,825				
	2004/05	3,809	11,222				
	2005/06	3,790	11,056				
	2006/07	3,798	11,177				
D 4 O	2007/08	3,835	11,244				
Route Grou Route 3	•	4.074	0.555				
Route 3	2003/04	1,071	2,555				
	2004/05	1,123	2,676				
	2005/06	1,135	2,652				
	2006/07	1,125	2,738				
Route Grou	2007/08	1,141	2,772				
Northern	2003/04	34	108				
Northern	2003/04	34	108				
	2004/03	34	107				
	2005/00	21	67				
	2007/08	34	110				
Route Grou		01	110				
Route 40	2003/04	3	9				
	2004/05	3	9				
	2005/06	3	10				
	2006/07	3	10				
	2007/08	3	10				
Route Grou	p 5						
Route 12	2003/04	60	122				
	2004/05	76	154				
	2005/06	70	153				
	2006/07	73	160				
	2007/08	74	162				
Route Grou	p 6						
Minors	2003/04	3,436	7,695				
	2004/05	3,513	7,802				
	2005/06	3,511	7,697				
	2006/07	3,496	7,570				
Davita Crav	2007/08	3,550	7,657				
Route Grou	•		E 4				
Route 13	2003/04	-	54				
	2004/05	-	55				
	2005/06 2006/07	-	54 56				
	2006/07	-	56 57				
	2007/00	-	5/				
Total	2003/04	8,292	21,367				
	2004/05	8,557	22,027				
	2005/06	8,543	21,730				
	2006/07	8,515	21,778				
	2007/08	8,638	22,011				
		-,	==,				

September 30, 2006 132 of 169



Table E-2

2	nd Performa	nce Term	Table L-2
(000's)	Fiscal Year	TOTAL	TOTAL
()	Ending	VEHICLES	PASSENGERS
Route Group	1		
Majors	2008/09	3,923	11,505
	2009/10	3,962	11,592
	2010/11	4,002	11,686
	2011/12	4,044	11,780
D 4	•		
Route Group Route 3		4.450	0.044
Route 3	2008/09	1,158	2,814
	2009/10 2010/11	1,173	2,858
	2010/11	1,189 1,204	2,894
	2011/12	1,204	2,920
Route Group	3		
Northern	2008/09	35	111
	2009/10	35	112
	2010/11	35	112
	2011/12	35	113
Davita Crave	4		
Route Group Route 40		2	10
Route 40	2008/09	3	10
	2009/10	3	10
	2010/11 2011/12	3	10 10
	2011/12	3	10
Route Group	5		
Route 12	2008/09	75	164
	2009/10	76	165
	2010/11	76	167
	2011/12	77	169
Route Group	6		
Minors	2008/09	3,585	7,705
	2009/10	3,622	7,757
	2010/11	3,665	7,816
	2011/12	3,709	7,886
		0,. 00	,,000
Route Group	7		
Route 13	2008/09	-	58
	2009/10	-	59
	2010/11	-	59
	2011/12	-	60
Total	2008/09	8,779	22,366
	2009/10	8,871	22,553
	2010/11	8,970	22,745
	2011/12	9,073	22,937

September 30, 2006 133 of 169

Appendix F- InterVistas Report



September 30, 2006 134 of 169

Setting the Price Cap for BC Ferries Services Inc. for Performance Term 2



strategic transportation & tourism solutions



Setting the Price Cap for BC Ferry Services Inc. for Performance Term 2

29 September 2006

Prepared by Michael W. Tretheway Executive Vice President InterVISTAS Consulting Inc.

Table of Contents

1.0	Introd	luction	1
2.0	Price	Caps	2
	2.1	Price Cap Concept	
	2.2	CPI versus Input Price Index	
	2.3	Defining "X" in CPI-X	3
	2.4	Cost increases and the price cap	4
3.0	Meas	urement of Total Factor Productivity for BC Ferries	5
	3.1	The Concept of Total Factor Productivity (TFP)	
	3.2	Aggregating Outputs and Inputs	
	3.3	Output Measurement	
	3.4	Aggregate Input Measurement	
	3.5	Computing TFP	
	3.6	Measuring BCFS Labour Input	
	3.7	Measuring BCFS Fuel Input	
	3.8	Measuring BCFS Materials/Maintenance/Services (MMS) Input	
	3.9	Measuring BCFS Capital Input	
	3.10	Results for BCFS TFP measurement	
4.0	Reset	ting the Price Cap	23
	4.1	Reasons for price cap recalibration	23
	4.2	Re-establishing the level of the price cap	
	4.3	The growth in the price cap has two components	
	4.4	A simple approach to resetting the price cap at the end of a performance term	
	4.5	Types of price cap adjustments	
	4.6	Projected growth in TFP	
	4.7	CPI and IPI diverge	
	4.8	Computing the X factor the 7 Routes Groups of BCFS	

Setting the Price Cap for BC Ferry Services for Performance Term 2

1.0 Introduction

This report describes the concepts behind setting a price cap for British Columbia Ferry Services Inc., (BCFS) for performance term 2. As part of that task, it is necessary to address the issue of the productivity performance of BCFS, and this report also provides a description of the methodology for measuring Total Factor Productivity (TFP) for performance term 1. TFP is one of the components in a price cap.

The report is organised as follows:

- Section 2 describes the concept of price caps and the various elements needed to establish a price cap
- Section 3 describes the concept of total factor productivity, one of the elements needed to establish a price cap, describes how to measure it for BC Ferry Services, and presents results of this measurement.
- Section 4 describes how to re-establish a price cap for BCFS.

2.0 Price Caps

2.1 Price Cap Concept

Under traditional regulation, every time a firm wishes to change any part of its tariff of charges, it must obtain regulatory approval. Regardless of the specifics of how the regulator evaluates such applications for tariff changes, this is an expensive process (for both the firm and the regulator), with significant delays.

Price cap regulation has several objectives, but perhaps the most important is the objective of granting the regulated firm the ability to change prices to keep up with inflation, without regulatory approval. This eliminates delays and saves costs for both the regulator and the firm.

The rate of inflation should be the specific inflation faced by the regulated firm – i.e., the inflation in its own unit costs of fuel, labour, capital and other costs. Economists refer to an index of the inflation in a firm's unit costs as its *input price index*. However, economists also recognise that firms generally also improve their productivity, and that this provides a partial offset to inflation in the firm's unit costs of labour, fuel, etc. A simple example would be a firm that faces a 5% per annum increase in costs per labour hour, but also achieves a 1.5% increase in labour productivity (output per labour hour). In this case, the firm only needs to increase the prices it charges its customers by 3.5%. Of course, the increased labour productivity may have been achieved by a major investment in capital (economists would say that the capital-output ratio has increased), and this must be accounted for when measuring the productivity offset to inflation in the input price index. This is why *total* factor productivity is measured in price cap regulation, rather than something simpler, such as labour productivity.

2.2 CPI versus Input Price Index

While theoretically, price cap regulation should be based on the firm's own input price index, measuring this can be an expensive undertaking in its own right. As well, using the firm's own input price index can become an unintended vehicle through which cost increases are merely passed through to consumers, with no discipline to control costs. For both reasons, regulators often use the consumer price index (CPI) in place of a firm specific price index. The CPI is measured and reported regularly by government statistical agencies. It is accurate and easy to use. Using the CPI prevents undisciplined pass through of cost increases.

However, the regulator must recognise that the correct price cap should be based on the firm's own input price index. Thus, periodically, the regulator must recalibrate the price cap for the difference between the input price index and CPI. As well, periodic assessment of actual and potential productivity growth should be made as part of the recalibration of the price cap.

The mechanics of the recalibration can be described as follows:

The correct price cap concept is:1

```
Price cap = Input Price Index - Total Factor Productivity

Or

Price Cap = IPI - TFP
```

We can both add and subtract CPI on the right hand side in the above equation:

Thus, the change in the price cap can be set relative to the changes in the CPI, with two offsets: one for productivity growth, and one for any changes in the difference between the CPI and the firm's input price index. Note that the (CPI-IPI) term could be either positive or negative, depending on the unique circumstances of the firm's inflation in input costs.

2.3 Defining "X" in CPI-X

Price caps are generally expressed as "CPI - X". The term 'X' is used when the price cap is set relative to the CPI. This is because using the CPI requires two different offsets: one for productivity growth and one for any changes in the difference between CPI and the input price index. This can be expressed mathematically as:

Price Cap = CPI - (CPI - IPI) - TFP

Or

Price Cap = CPI - X

Where
$$X = (CPI - IPI) + TFP$$
.

The periodic recalibration of the price cap requires the regulator to establish the values of TFP and the (CPI-IPI) gap.

29 September 2006

¹ To keep the mathematics more clear, the equations are expressed in these simple forms. In practice, price are generally established to limit the *change* in the level of prices by the regulated entity. A more precise mathematical expression would be to express these terms in *difference* form, that is as changes or percent changes.

2.4 Cost increases and the price cap

Often, the recalibration of the price cap focuses on the measurement of TFP. TFP is discussed more thoroughly in the next section, but it is a 'real' or quantity based measure. For example, fuel productivity is the ratio of the units of ferry services provided to customers divided by the quantity of fuel used (e.g., passengers carried per litre of fuel).² If fuel prices have increased dramatically, then one might ask how the price cap recognises increased fuel costs, since the productivity measure is based on real quantities, not costs.

The answer is that increases in fuel or other costs are dealt with via the input price index. If fuel costs increase, then the IPI will increase, and the firm will be allowed to increase its prices and stay within the price cap. If the price cap is established relative to the CPI, then the firm will not be allowed to automatically increase its prices sufficiently to compensate for higher fuel costs. This can be dealt with in two ways. The firm might be allowed by legislation to apply to regulator for an increase in the price cap if the fuel price increase is extraordinary. Alternatively, at the time of the price cap review, the firm can be allowed a one time increase in the price cap to deal with the gap between the IPI and the CPI. If the first method is used, then the recalibration must recognise that full or partial pass through has already been allowed and thus only partial 'catch up' is required.

29 September 2006

² BC Ferries provides many different types of services, such as transporting passengers and transporting vehicles (of different sizes and types), and each of these are measured in their own units. Because one cannot simply add numbers of passengers carried to numbers of vehicles, these numbers have to be aggregated using an index number procedure. This was discussed in the BC Ferry Commissioner's Order 05-01.

3.0 Measurement of Total Factor Productivity for BC Ferries

This section describes the methodology for measuring TFP, one of the components of "X" in price cap regulation.

3.1 The Concept of Total Factor Productivity (TFP)

A partial productivity measure is the ratio of total output to a single input: for example, labour productivity is the ratio of total output produced to the number of labour hours used. Total factor productivity (TFP) is the ratio of total output to *all* inputs.

TFP = Output Index Input Index

While TFP is a much better indicator of overall corporate efficiency performance than partial productivity indicators, its measurement is not without challenges. Because multiple outputs are produced and multiple inputs are employed, there must be an accurate and consistent way of aggregating the individual outputs into a measure of total output, and aggregating individual inputs (e.g., labour, fuel, capital, and other inputs) to compute a measure of total input. As well, while the quantities of labour and fuel used are relatively straightforward to measure, computing the quantities of capital and other inputs can be complicated.

This memo discusses the general issue of aggregating outputs and inputs, then provides some specific information on how computations are made using data for British Columbia Ferry Services, Inc. (BCFS).

3.2 Aggregating Outputs and Inputs

If a firm produces two or more distinct outputs, one might be tempted to add together the number of units of each produced to get a measure of total output. However, adding the number of subcompact cars produced to the number of limousines produced does not provide a good indicator of total output of a car manufacturer.

This "aggregation" problem can be solved by constructing an output "index". Such an index will give different "weights" to the number of units produced in each product line before adding them up. A limousine would thus get a larger weight than a subcompact car. The resulting index is no longer denominated in units produced, an intuitively appealing concept, but rather in "weighted units produced," a measure one generally cannot visualize. Because of this, indices are generally rescaled or "rebased" so that a particular year (or firm) is assigned a convenient value such as 100. A subsequent year's output index might be 112, indicating that a 12 percent increase in total product has occurred.

In practice, an aggregate output index (also known as an index of total output) is constructed as follows:

- Set the aggregate output index to 100 for the first year.
- Obtain data on the levels of each separate output.
 E.g., for BCFS the analysis below collects data on traffic levels for each of nine types of output.
- Compute the year over year growth rates of each individual output.³,⁴
- Obtain data on the revenues associated with each output.
- Compute each output's share of total revenue for that guarter.⁵
- Compute a weighted average growth rate of the various outputs, using revenue shares as weights.
- Use the weighted average growth rate to compute the output index for year 2 (and similar for subsequent years).6

For the year 3 output index, the year 2 to 3 growth rate is used to 'chain link' the year 2 output index, using the same formula. Most government price and output index are chain linked indexes. Other types of indexes exist, such as the multilateral index, but these are not appropriate for measuring the TFP of BCFS.

³ In economics, growth rates are generally computed as continuous compounding growth rates (which can be easily computed using natural logarithms of the ratio of current year to previous year output levels). While the difference between a simple growth rate and a continuous compounding growth rate may be small (e.g., 4.000% versus 3.922%), over a number of years the differences can accumulate into important dollar amounts for price regulated firms. Most economists would agree that economic phenomena tend to grow on a continuous compounding path.

⁴ The data used in the analysis of TFP for BCFS is quarterly data. However, because there is considerable variation in BCFS traffic and costs, it was decided to compute each quarter's traffic and costs as four quarter trailing sums of traffic and costs. The resulting price, quantity, cost and productivity measures will vary each quarter, but without the up and down patterns of seasonal differences. Thus, the growth rates computed for BCFS are the year over year growth rates of four quarter trailing sums.

⁵ There are issues in what revenue shares to use, since the revenue share for a given output may be different in different years. Many government price indices fix the weights for one year and use those fixed weights for all subsequent years. This is referred to as the Laspeyres method, which has been severely criticised as creating anomalies as consumers change their purchasing habits. For example, a consumer price index using weights for 1992 would assign a zero weight to MP3 players and a high weight on dot matrix printers. The Paasche method fixes weights for the last year in a time series and uses those weights for all previous years. This is criticised as resulting in constant recomputation of previous years output indexes. The Divisia method uses an average of current year and past year weights, and is often advocated by economists. A similar approach is to use constantly changing current year revenue shares (constantly updated Paasche weights). These do not require constant recomputation of past year's output indices and are similar to Divisia weights. This method was chosen for BCFS as in the first year of computing the output index for the price cap, revenue shares for all individual outputs were not available for the pre-regulation year. BCFS only began to assemble revenue data detailed by each type of output on each route when regulation began.

⁶ Mathematically, this can be expressed for continuous compounding growth rates as: Output Index for Year 2 = exp(In(output index for year 1) + weighted average growth rate from year 1 to 2).

Aggregation of the different inputs into an index of aggregate input follows an identical approach.

3.3 Output Measurement

An appropriate measure of the output of BCFS has already been developed. In the quarterly monitoring of BCFS compliance with its regulatory price cap, the BC Ferry Commissioner has approved measures of the aggregate output of each BCFS route group.⁷ Further, the output index for each route group has been further aggregated into an overall measure of the total output of BCFS.

The methodology of the construction of the BCFS total output index has the following characteristics:

 There are nine separate outputs, corresponding to different types of traffic, each with different prices. These include:

> Passengers Adults

> > Children Seniors

SE

Buses

Trucks (further subdivided by truck length)

Passenger Vehicles

Overheight Passenger Vehicle

Underheight Passenger Vehicle

Misc. (bicycles, etc.)

- The output index is computed quarterly.
- Due to seasonality, each quarter's output index is computed as a four quarter trailing sum of traffic levels and revenues.
- Weights for the output index are constantly updated .8
- The output index is computed as a "chain link" of quarter by quarter growth rates.

These basic characteristics of the output index also characterize the aggregate input index.

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⁷ BC Ferry Commissioner Order 05-01.

⁸ The weights are computed using constantly updated Paasche weights. This allows the weights to vary over time and does not introduce the long-term distortion of a "Laspeyres" index.

For BCFS, the total output index has increased modestly, roughly 4% in total over the period since June 2003.

3.4 Aggregate Input Measurement

The basic characteristics of constructing the BCFS overall aggregate output index are used to construct the BCFS aggregate input index, that is, a quarterly trailing sum of four quarters data, computed as chain lined Paashe indexes.

The are four types of inputs:

Labour

Fuel

Capital9

Materials/Maintenance/Services

The input indexes were computed only at a company wide level. Details on the construction of each input are provided later in this report.

3.5 Computing TFP

Total factor productivity is the ratio of the resulting aggregate output to the resulting aggregate input indices.

TFP = <u>Aggregate Output Index</u> Aggregate Input Index

All indices (total output, total input, and TFP) and are based to a value of 100 for the first quarter of fiscal year 2003/2004 (calendar 2003, 2nd guarter).

3.6 Measuring BCFS Labour Input

The measure of BCFS labour quantity is computed as an index of productive hours worked.¹⁰ Labour cost is computed as actual payments to labour. Labour price is the index of labour cost to labour quantity. As is convention, the labour quantity and labour price indices are re-based to 100 for the first time period (the first quarter of fiscal year 2003/2004 - calendar 2003, 2nd quarter).

⁹ While some studies differentiate between long-lived capital (structures) and shorter-lived capital (equipment), unlike other industries, such as rail or trucking, BCFS major equipment assets are vessel hulls, with very long lives. Ships consist of hull with additional equipment such as engines. While some of this equipment has shorter lives than hulls, and are periodically replaced, it was decided to keep a single type of capital for TFP measurement.

¹⁰ Again, four quarter trailing sums are used for computing input quantities and input costs.

During the period under review, BCFS experienced an increase in productive hours per employee, largely due to a reduction in average sick days per employee. This does not affect the total quantity of labour – the same productive labour hours are still required for each sailing — but it did result in lower increases in cost per productive labour hour.

In computing the quantity of labour for purposes of measuring BCFS labour productivity and TFP, labour hours used for capital upgrades were removed from the computation. BCFS capitalises these hours and thus they should not be part of the labour component of productivity measurement.

For BCFS, labour quantity decreased by a small amount, roughly 0.7% in total since June 2003. Its labour price index increased by roughly 7.1% in total, less than inflation (measured by the CPI), largely due to an increase in productive hours per employee, which has the effect of reducing the cost per productive hour. Labour productivity increased, by 2.7% over the period since June 2003, as output grew faster than productive labour hours.

3.7 Measuring BCFS Fuel Input

BCFS fuel quantity is an index of litres of fuel used. BCFS fuel price is the average price per litre of fuel consumed. Both indexes were re-based to 100 for the first period.

During the period under review, BCFS used a fuel cost deferral account, with approval of the BC Ferry Commissioner, to allow deferral of price increases. However, for purposes of measuring TFP, all fuel used was included in the fuel quantity index. Correspondingly, all fuel cost was included for computing the average price per litre for each quarter — including deferred fuel cost.

For BCFS, there has been a dramatic increase in fuel price, up 71% since June 2003. Fuel quantity fell, by just under 7% since June 2003. This resulted in an appreciable increase in fuel productivity for BCFS, up 9.6% since June 2003.

3.8 Measuring BCFS Materials/Maintenance/Services (MMS) Input

MMS is a residual category for all purchased inputs which are not included in the other three input categories. It is comprised of many diverse and disparate items with as many units of measurement as there are components. There exists little or no physical quantity data for the individual items. Detailed aggregation would be prohibitively time consuming and expensive, even if these data were available. Hence this category of input is measured by deflating aggregate MMS expenditures by an appropriate price index to arrive at "physical" units of MMS (that is, to arrive at the MMS quantity index).¹¹

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¹¹ Note that if one knows fuel cost and fuel price, one can compute fuel quantity as the ratio of cost to price. This is analogous to the procedure for computing MMS quantity.

Materials expenditures are calculated as a residual of total expenditures:

MMS expenditures = Operations, maintenance & administration cost

- Cost of retail goods sold
- Property taxes¹²
- Cost of fuel
- Labour costs

The price index used for deflating current dollar MMS expenditures is the producer price index.¹³

The resulting MMS quantity index is re-based to 100 in the first time period. The MMS price index is simply the Producer Price Index. For display purposes, the producer price index was also re-based to 100 in the first time period.

For BCFS, MMS quantity increased then fell back, to end at a level almost the same as in June 2003. The increase in MMS quantity was largely due to major expenditures for maintenance after June 2003, which then fell back to normal. The MMS productivity index fell during the period of increased maintenance activity, then rose and ended 2.3% higher than in June 2003.

3.9 Measuring BCFS Capital Input

Of all the inputs identified in this study, the quantity of services from capital (vessels, terminals and other assets) presents the greatest difficulty in accurate measurement. Unlike other inputs, expenditure to purchase capital assets in one period will contribute to output in subsequent periods. This 'durability' leads to complications in measuring the quantity of services from capital used in any given period. Even more problematic is the assignment of capital costs over the lifetime of the asset. Following is a discussion of how the capital quantity index is computed for use in the measure of TFP for BCFS. Unfortunately the discussion can be quite technical as the measurement of the quantity of capital is not as straightforward as for the quantities of the other inputs.

Capital Stock Concepts

Capital stock is the amount of capital owned by or available to the company.¹⁴

29 September 2006

¹² Prior to 2004, BCFS paid grants in lieu of property taxes. Subsequently it has paid property taxes.

¹³ Source: Statistics Canada v3822562 - from Table 329-0038: Industry price indexes, by NAICS, Geography = Canada, North American Industry Classification System (NAICS) = All manufacturing. Note that a five year trailing average of the PPI is used to smooth out volatility in the PPI. This approach has been used in many other TFP studies.

Most companies have a reasonable *accounting* measure of the capital stock they have available, typically net book value of capital assets. However, this number is a mix of investments made in different years, with different intervening rates of inflation. Thus net book value, when based on historical costs, is not easy to covert to an inflation adjusted *real* measure without getting into the detail of the different years when investments were made. The way economist prefer to measure real capital stock is by a 'perpetual inventory' measure. For capital assets which physically depreciate on geometric basis, ¹⁵ real capital stock is computed as follows:

$$RK_t = RK_{t-1} * (1 - \delta) + RI_t$$

Where:

RKt is real capital stock in year t,

 δ is the rate of physical depreciation of the capital asset, and

RI_t is the amount of real (inflation adjusted) investment in year t. This is computed actual investment in current dollars in year t, divided by a price index.

To illustrate the concept, the following table works through an example. The firm starts in year 1 with no existing capital, but invests \$50 million in new capital. The firm expands and invests an additional \$20.4 million in the second year, and another \$21.01 million in the third year, but there is 2% inflation between years 1 and 2, 3% inflation between years 2 and 3.17 The firm will have invested a total of \$91.41 million, not correcting for inflation. If the assets depreciate at 5% per year (20 year straight line depreciation), it will have a net book value of \$85.39 at the end of year 3.18

Year	Beginning of year capital stock	New investment	Investment price index	Real invest- ment	Depreciation	End of year real capital stock	Account- ant's net book value
1	\$0	\$50.00 million	100.00	\$50.00 million	5%	\$50 million	\$50 million
2	\$50 million	\$20.40 million	102.00	\$20 million	5%	\$67.50 million	\$67.90 million

¹⁴ Some capital may be on long term lease (or even rented) and thus not owned by a company. Leased and rented capital also counts as capital stock used by the company.

¹⁵ The concept of geometric physical depreciation of capital assets will be discussed shortly.

¹⁶ The firm cannot begin production until year 2, as the first is needed to get the capital stock in place.

¹⁷ The two investment numbers were computed to be the inflation adjusted equivalent of \$20 million in the first year.

¹⁸ E.g., in the second year the net book value will be \$67.9 million, computed as the new investment of \$20.40 plus the 1st year investment of \$50 million after 5% straight line depreciation (\$47.50).

3	\$67.50 million	\$21.01	105.06	\$20 million	5%	\$84.13 million	\$85.39
4							

In this example, the real capital stock at the end of the third year is \$84.13 million, less than the net book value which an accountant would compute. In part, this is because the *real* capital stock is expressed in constant year 1 dollars, while the accountant's net book value measure mixes in some year one dollars with year 2 and year 3 inflated dollars. The accountant's net book value is carrying the year 1 investment at its historical \$50 million value, and depreciating it by 5% of the historical value each subsequent year. If the real capital stock is updated to year 3 dollars, ¹⁹ then the year 3 nominal value of capital stock would be \$88.38 million. The \$88.38 million value reflects updating the original \$50 million year 1 investment by the 5.06% inflation (as well as depreciating the investment), and a similar updating of the year 2 investment.

There is no clear statement that can be made regarding the relationship between accounting net book value and real capital stocks. A few general comments can be made which may be useful:

- For a constant depreciation (e.g., 20 years), the geometric depreciation of the
 perpetual inventory formula will depreciate more slowly than an accountant's straight
 line deprecation, with some value remaining after the accountant's (20 year)
 depreciation period.
- If real capital stocks are expressed in constant 2006 dollars, they will be higher than net book values.²⁰
- If real capital stocks are expressed in constant old dollars (e.g., constant 1997 dollars), then the net book value number will generally be higher than the real capital stock number.²¹
- Only real capital stocks can be viewed as a 'clean' measure of the real quantity of capital available, as they properly correct each year's investment for inflation.

Asset Price Index

The formula for computing real capital stock requires a price index for the capital assets. For BCFS, this 'asset price' index was constructed from two Statistics Canada series:²²

29 September 2006

¹⁹ By multiplying it by the 105.06 price index (actually by 1.0506).

²⁰ For example, in the example \$85.39 million net book value in year 3 versus constant year 3 dollars of \$88.38 million for real capital stock.

²¹ For example, in the example \$85.39 million net book value in year 3 versus real capital stock in constant year 1 dollars of \$84.13 million.

- Machinery & Equipment water transport used to reflect vessel related costs. The specific index covers domestic and imported machinery and equipment.
- Construction
 used to reflect terminal and other capital assets. A non-residential construction index
 composite for 7 census metropolitan areas was used.²³

Measuring Real Capital Stock for BCFS

Ideally, real capital stocks would use several decades of data on investment. In some industries, such long time series of data is readily available, such as the rail industry where governments and carriers have been collecting and/or publishing since the 1880s. For BCFS, this is more problematic, if for no other reason because the government imposed investment in fast ferries, which were subsequently written off, makes this difficult.

To measure BCFS real capital stocks, the analysis began with net book value of capital assets as of the end of 1995. BCFS provided this value as well as new investment made each year.

New investment excludes investment in construction work in progress, as productivity measurement should only include an asset in the measure of real capital stock when its construction is completed and the asset is deployed for productive use. The new investment series provided by BCFS also excluded the investment in fast ferries and the consequent write down and sale of these assets. While these vessels were in service for a short period, that was prior to price cap regulation by the BC Ferry Commissioner, hence it was desired to have a real capital stock measure that would be devoid of any accounting influence of these assets.

New investment was deflated by the asset price index discussed above to obtain real investment. Using the perpetual inventory equation, real capital stock for BCFS was then constructed for the period 1996 to 2005. Because the data on new investment was from an annual source (the cash flow statement), quarterly values for real capital stock were constructed by interpolating the annual growth in year end real capital stock. The interpolation was done with geometric growth rates.

Quantity of Capital Services

The annual quantity of capital services for BCFS, also known as the annual flow of capital services, is assumed to be proportional to real capital stock. This is a commonly made

²² Economists refer to the price of a unit of capital stock as the *asset* price. It is differentiated from the *service* price of capital. The latter is the payment to use one unit of capital stock for one time period. The asset price might be thought of as the price of purchasing an office building. The service price is the price of using the office building for one year, the annual rent.

²³ The weights for aggregating these two price indices were based on NBV shares of BCFS capital assets, with the M&E weight derived from BCFS accounts for ships and construction in progress. A four year trailing average was used.

assumption in the measurement of TFP, and based on engineering evidence and some common sense. The common sense is that the more capital stock a firm has, the greater the quantity of services from capital it can deploy in production (4 ships can deliver more services in a given year than 3 ships). The engineering evidence is a series of studies conducted in the 1970s by and for the U.S. Dept. of Commerce and Bureau of Labour statistics, which examined the flow of services from capital stocks in different industries.²⁴

Thus, the quantity of capital services for BCFS is computed as an index of its real capital stock,²⁵ with the index set to 100 in the first time period.²⁶

For BCFS, real capital stock grew from an index of 100 in CY2003q2, to an index of 114.8, as BCFS invested in its assets.

Annual Capital Costs

The information available from GAAP accounting records has some important limitations for measuring the annual costs associated with using capital for one year (or quarter) for purposes of measuring TFP. First, the current opportunity cost of capital is likely misrepresented by only using recorded interest payments. A return on equity must also be included. Second, recorded depreciation is based upon nominal investment data and may be a weaker indicator of true engineering depreciation of capital assets. These are amongst the many reasons for use of an alternative approach to measuring annual/quarterly capital costs.

For purposes of measuring annual/quarterly capital costs for TFP measurement was developed by Christensen and Jorgenson in the 1960s. This methodology has been widely used by researchers for TFP measurement for several decades and is used here. It

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²⁴ Technically, it is being assumed that engineering depreciation of BCFS follows a geometric relationship. An accountant might amortise (depreciate) capital stock on a straight line basis, perhaps over 20 years. However, often at the end of 20 years the capital asset can still provide some level of service. It does not cease to exist as a productive asset at the end of the accounting write off period. Geometric depreciation would be equivalent to writing off a constant proportion of capital stock based on each year's balance of real capital stock. Straight line deprecation writes off a constant proportion of the first year's real capital stock. Geometric depreciation of capital stock indicates that with each year, the capital asset delivers fewer services as it ages. It can only continue to deliver a constant level of service with maintenance, overhaul and upgrade investments. BCFS capitalises upgrades, and thus this is consistent with the methodology used here to measure TFP. BCFS also overhauls and maintains its assets and these expenditures to maintain the service delivery of its assets are expensed and captured in the MMS category in this TFP measurement methodology.

²⁵ Technically, the quantity of capital services is a fixed fraction (e.g., 5% for assets with 20 year lives) of the real capital stock. However, when the index is re-based to 100 in the first time period, the resulting index is identical to an index of the real capital stock itself.

²⁶ A final comment: some researchers prefer to construct the real capital stock from a 'perpetual inventory' method rather than based on real net book values of capital assets. This is because the latter is influenced by accounting depreciation choices, which are not geometric. The challenge is that constructing a perpetual inventory method for BCFS would require assembling data on capital investments going back 50 years, a task which was problematic.

involves computation of a capital service price (that is, the nominal cost to a firm of using one unit of real capital stock for one year). The capital service price has the following components:

- The cost of financing capital stock
 This is the combined debt and equity costs of financing the purchase of a unit of real capital stock. A unit of capital might be thought of as \$1 worth or real capital.
- Depreciation
 the capital asset wears out, partially, during the year, and the depreciation of capital
 must be recognised as a cost of using capital.
- Property taxes
 Many capital assets, especially structures, are subjected to property taxes and this is a cost of using capital during the year.²⁷, ²⁸
- Offset for capital appreciation
 Offsetting the above three components is that capital assets may be worth more as
 time goes by. For example, the owner of an office building may enjoy a rising value of
 the capital asset (the building), and anticipation of such capital gains is a factor in
 decisions regarding how much to invest in capital.

The above are typically expressed as percentages, and are multiplied into the cost of the capital asset. The latter is typically referred to as the asset price.

The specifics of the construction of the BCFS capital service price are:²⁹

- The asset price index is a weighted average of the Statistics Canada Water Transport & Services machinery and equipment price index and the Statistics Canada Non-Residential Construction Price Index. 5 year trailing averages of price index are used to remove sampling variation typical of Statistic Canada index.
- The cost of financing capital is computed by summing the actual interest cost incurred by BCFS each quarter and an imputed value for return on equity (preferred shares and retained earnings), with the sum divided by BCFS net book value of capital assets.³⁰

²⁷ In the case of BCFS, it had paid grants in lieu of property taxes prior to calendar year 2004, but now pays property taxes.

²⁸ Since 2002, BCFS pays a much higher rate of property tax than it paid in grants in lieu of property tax, and thus this component of its capital service price has increased noticeably.

²⁹ Note that BCFS is a for-profit company but exempt from income taxes, and thus the adjustments to the service price for various income tax effects and incentives are not applicable for BCFS. The parent of BCFS is a not-for-profit organisation.

³⁰ It is noted that as BCFS moved from a government entity to its new governance structure, it has increased its annual debt expense, and with its new preferred stock and increasing retained earnings, it has increased its equity component of financing costs. The result is that over the time period of this study, BCFS financing

- The property tax rate is the ratio of BCFS payments in lieu of property taxes to the net book value of BCFS capital assets.³¹
- The depreciation rate is the ratio of BCFS charges for depreciation to the book value of its physical capital. As such, this is effectively a weighted average of the depreciation rates for all the different types of capital BCFS has purchased.
- The offset for capital appreciation (typically referred to by TFP economists as the
 capital gains rate) is computed as one fifth of the five-year growth in the capital asset
 price index. The use of this average five year growth rates is commonly used in TFP
 measurement made for periods longer than a single year, with "locked in" rates.

The actual formula for the capital *service* price is computed as:

$$P_t = r_t V_{t-1} + \delta V_t - (V_t - V_{t-1}) + s_t V_t$$

Where P_t is the capital *service* price (the costs of using one dollars worth of real capital stock) for year t, V_t is the cost of purchasing the capital asset (the capital asset price), r_t is the weighted average cost of financial capital rate, δ is the rate of depreciation, and s_t is the property tax rate.

Because r, δ and s are percentage rates, P_t is typically a fraction. For example, if the price of a capital asset is \$1 million (perhaps a small office building), and if the cost of capital is 10%, depreciation is 4%, property tax is 2% per annum, and the rate of appreciation is 3%, then P_t will be roughly \$130,000, or 13% (10% + 4% - 3% + 2%) of the cost of the office building asset. Another way of expressing this, is that for each dollar of real capital stock, BCFS needs to incur a 13 cent cost each year.

Summary

Thus, when computing capital input for BCFS,

- the capital input quantity index is an index of its real net book value of capital assets,
- the capital price index is an index of the annual capital service computed according to the formula above, and
- the cost of capital services (need to calculate the weight to assign to capital when computing the aggregate input quantity index) is computed by multiplying real net book value of capital assets by the capital service price. This computation is based on actual real net book value and the actual annual service price prior to indexing.

costs increased noticeably. To deal with this one time rapid run up of the WACC, it was decided to use the WACC for the four quarter trailing sum of 31 December 2003, and apply that retroactively to all previous quarters.

³¹ During the years when BCFS received a GILT rebate, this was subtracted from GILT payments before computing the property tax rate.

Results

For BCFS:

- Real capital stock grew by 14.8% over the period from CY2003q2 to CY2006q2.
- The service price of capital cycled grew by 21.2%. To a large extent, this reflects the higher costs of capital which the general economy experienced during this period as interest rates (and thus equity rates) rose.
- The share of capital costs in BCFS total costs increased from 17% in CY2003q2 to 20% by the end of the period, as debt and equity costs increased, as described above.
- Capital productivity fell considerably over the period, from an index of 100 to an index of 88.9.

This result is not surprising, as in most sectors of the economy, firms invest heavily in capital in order to achieve gains in labour, fuel and MMS productivity. In the parlance of economists, in most industries, including BCFS, the capital-output ratio increases (i.e., the output-capital ratio falls) in order generate reductions in labour hours per unit of output (i.e., the output-labour hours ratio increases), and reductions in fuel and MMS usage per unit of output.

3.10 Results for BCFS TFP measurement

Utilising the methodology and data described above, estimates of BCFS TFP were produced. The first figures on the following page summarise the key measures of TFP, aggregate output, and aggregate input. Additional figures show the trends in individual input quantities, individual input prices and the single factor productivities of individual inputs (e.g., BCFS output per labour hour).

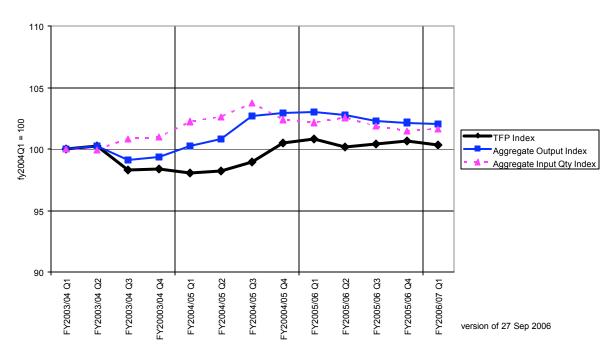
Some key observations on these results are:

- Overall, BCFS has virtually unchanged TFP.
- Systemwide BCFS output has grown modestly, and its inputs have grown at roughly the same rate. This has resulted in TFP growing by 0.4% over the period from June 2003 to June 2006.
- Fuel productivity has increased dramatically, by 9.6%. This is not surprising, given the pressure to improve fuel economy in a period with very high fuel prices.
- Labour productivity is up by 2.7%. It should be noted that BCFS is limited in its ability
 to achieve labour productivity gains, as federal safety regulations require on board
 staff in a fixed ratio to passengers carried. Thus, when traffic grows, on-board labour
 hours tends to grow proportionately.

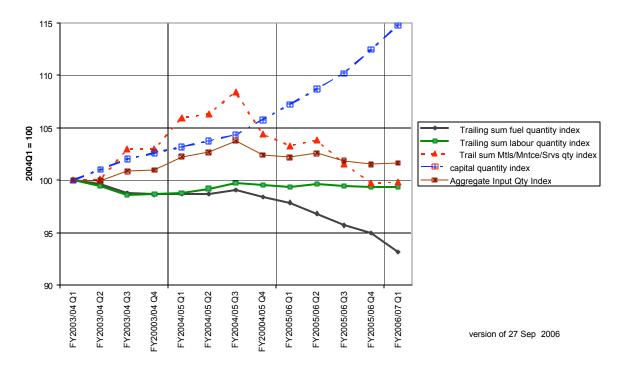
- Materials/Maintenance/Outside Services (MMS) increased in the first two years analysed, resulting in a large decrease in MMS productivity. This was due to a large and costly maintenance program to address some items whose maintenance had been deferred while BCFS was under government ownership. In the past two years MMS has returned to normal levels, and BCFS has achieved an overall growth in productivity in this area of 2.3%.
- Capital productivity has fallen quite significantly. This is not to say that BCFS has
 become inefficient in its use of capital. Rather, as BCFS makes major investments in
 its fleet and terminal, and while traffic grows only modestly, then the ratio of output to
 capital services will fall. Since BCFS was transferred from government to Authority
 operation, it has begun a major capital program. Not only is it building new
 replacement vessels, it has made major investments in overhauls of engines and other
 vessel components of existing ships, as well as major investments in terminals and
 other capital assets.
- The decline in capital productivity is not unexpected and should not be viewed negatively. In most industries, new capital investments and upgrades are a normal part of operations. As a result, measured capital productivity will fall, almost steadily. Total Factor Productivity will grow in most sectors as the investment in capital (sometimes referred to by economists as capital deepening) is offset by savings in labour and other areas. BCFS has achieved major fuel productivity improvements and some MMS and labour productivity gains.
- The price of fuel has risen dramatically, by 71% since 2003.
- The price of capital services has also risen, by 21.2%. This has been driven, in part, by rising interest rates and related costs of capital. Inflation in the construction sector is also making both vessel and marine capital investments more expensive.
- The BCFS input price index has grown faster than the CPI, as expected. While the
 CPI grew by 6.2% over the time period, the IPI grew by 13.9%, driven by the major
 increase in fuel prices, and partially by the increase in capital service costs with higher
 interest rates and higher costs of construction.
- When only non-capital inputs are considered, the BCFS variable factor productivity index (VFP) increased by 3.3% over the period, reflecting the productivity increases in fuel, labour and Materials/Maintenance/Outside Services.

There are only a limited number of observations available for statistical analysis of the record of BCFS TFP. A simple analysis reveals that output growth does improve TFP. Specifically, a 1% growth in traffic is associated roughly with a 0.5% growth in BCFS TFP. In spite of roughly 3% growth in overall traffic, the heavy (and necessary) capital investment by BCFS has more than offset the expected 1.5% gain in TFP from output growth, resulting in what is essentially a flat record of BCFS TFP since 2003. Overall TFP for BCFS grew by 0.4% over the period.

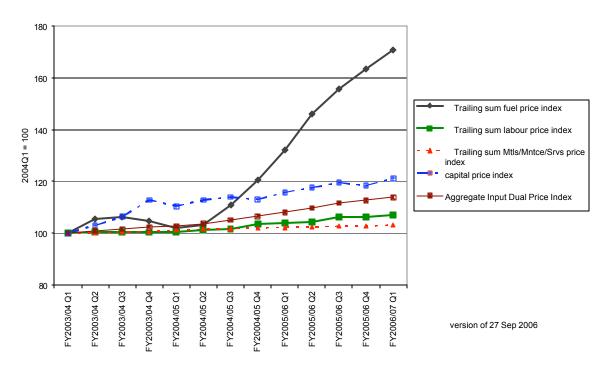
TFP, Output and Input via Physical Input Approach



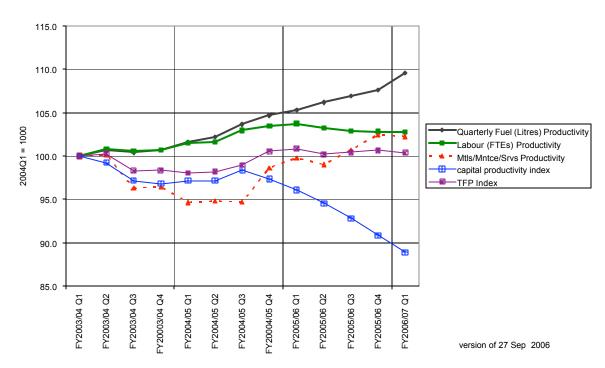
Input Quantity Indices



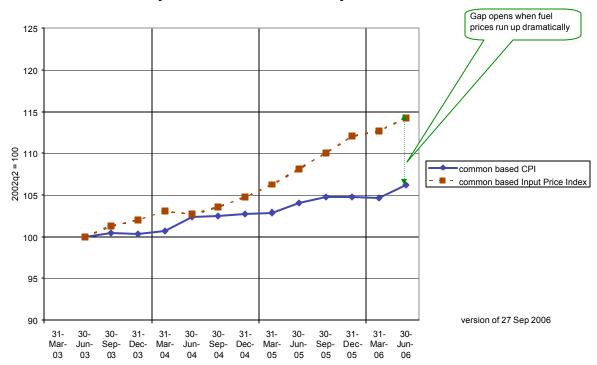
Input Price Indices



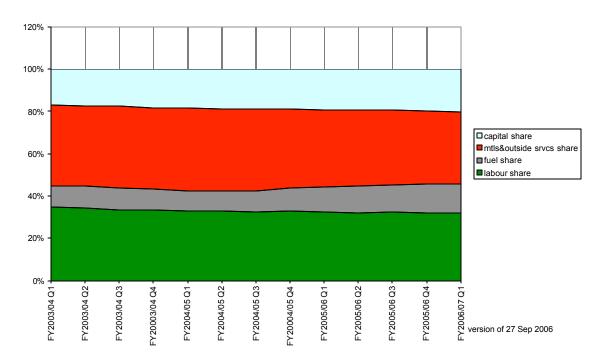
Single Factor Input Productivity Indices



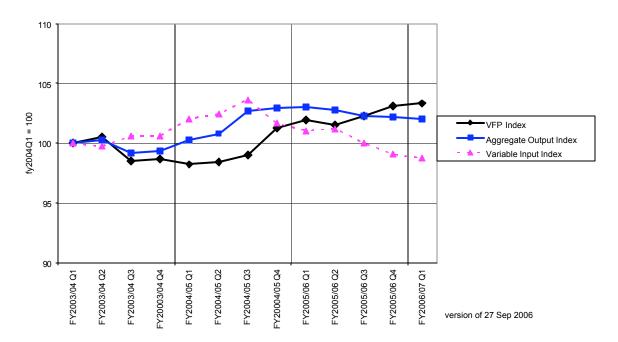
Compare CPI to BCFS Input Price Index



Cost Shares



VFP, Output and Variable Input via Physical Input Approach



4.0 Resetting the Price Cap

4.1 Reasons for price cap recalibration

Over time, a price cap can get out of calibration with the realities of the marketplace.

- For example, if the X factor is set one quarter of one percent too high, then after 4 years the firm will be experiencing a revenue shortfall of over one percent per annum. For a \$400 million revenue base, this would be more than \$4 million.
- As well, conditions change in the industry and at the service provider. Productivity
 may rise or fall, technology and regulations change, etc.
- Despite best efforts of the regulator and the service provider, the firm may be unable to earn an adequate revenue to cover its costs.

Thus, regulators will conduct investigations into the factors underlying the price cap on a period basis and reset the cap. There are two steps in reviewing and resetting a price cap

- Re-establishing the level of the price cap to ensure that the firm is revenue adequate yet not earning extraordinary returns, and
- Resetting the CPI-X for future growth in the price cap.

4.2 Re-establishing the level of the price cap

It may be discovered in a periodic review that the original price cap was in error and did not provide an adequate return to the company. Alternatively, it may be found that the firm has been able to earn returns in excess of what is deemed to be adequate. Returns above adequacy may have two sources: errors in setting the original price cap, and high returns earned on non-regulated services.

The regulator can undertake a review to determine the level of revenues from *regulated* services necessary to provide the firm with coverage of the operating costs of providing *regulated* services, plus an adequate return on its capital invested to provided regulated services. This review might be done for the last year of the current regulatory period, allowing a one time upward (or downward) adjustment in the price cap for the coming regulatory period, to return the firm to revenue adequacy.

In such a review, the regulator will consider whether the capital deployed by the firm and the valuation of that capital is acceptable. This is to prevent higher fares from the deployment of unnecessary capital. Because the firm would generally not want to run the risk the investment in major new capital assets that might not be approved, it is typical for the firm to seek approval from the regulator prior to deploying major new assets. This is provided for in the *Coastal Ferry Act*.

The issue of the proper valuation of capital can be addressed by re-valuing the capital assets at market value, and this too is provided for in the *Coast Ferry Act*. For industries with long lived assets, confining the firm to a return only on historical costs, may lead to the firm not being able to attract financial capital to allow it to renew or expand its capital in the future.

To explain this, consider the case of a 300,000 square foot office building. Suppose an investor purchased the building new in 1970 for \$10 million, and that an adequate return on capital is 15%. This would mean that in 1971, the firm would need to earn revenues to provide \$1.5 million as a return on its invested capital, or \$5 per square foot. 35 years later, a new building of similar design may cost \$70 million, and the old building may be worth \$30 million. If the owner was regulated and still allowed to only charge rents that provide for \$5 per square foot, at a time (2205) when the building could command \$15 per square foot, the firm would be making an inadequate return on the value of the building. Renters would be reaping a windfall because of the rates held down to a cost base from 35 years ago. With such low rates, the owner may be unable to obtain adequate financing for needed improvements or replacement of the building or its major systems.

If the original owner sold the building for \$30 million in 2005, the new owner would require a return of \$4.5 million per year, or 15% of the \$30 million paid for the 35 year old building. The regulator would correctly see the new cost of \$30 million for the new owner and would authorise the allowed 15% return on this. In this case, the capital portion of rents paid would suddenly jump from \$5 to \$15, even if the new owner was regulated. For the renters, their rents would triple due to the sale of the building.

To a) prevent incentives to owners to regularly 'flip' their capital assets so that adequate returns on current market values can be earned, and b) prevent renters from facing potentially dramatic increases in rents upon sale of a building, some regulators will allow a regulated firm's assets to be re-valued periodically.³² This will allow the firm to earn an adequate market return on the assets, and allow users to gradually make adjustments to market rates, rather than face sudden rate increases due to asset sales. Periodic revaluation of long lived assets is good economics, and it is provided for in the *Coastal Ferry Act*.

One additional issue in re-establishing the price cap is returns on non-regulated revenues. A firm may provide ancillary services which are not subject to price regulation. This might include things such as retail or food/beverage sales by BC Ferries. If the company earns an above average return on such sales, some regulators will require that at the time of a period price cap review, those above average returns be recognised and used to reduce the price cap.³³

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³² More precisely, some legislators will make provision in the law to allow (or require) regulators to recognise revaluation of long lived assets to market rates.

³³ It may be possible that the regulated firm is earning below average returns on ancillary services. In such a case regulators should not raise the price cap to cover the shortfall in ancillary revenues. Instead, the firm should recognise that ancillary services are earning a poor return and either find operational or market

4.3 The *growth* in the price cap has two components

As pointed out in Section 2, allowed increases in the price cap are theoretically constructed as

Price cap = Input Price Index - Total Factor Productivity

but in practice is generally set to the more measurable:

Price Cap =
$$CPI - X$$

Where $X = (CPI - IPI) - TFP$.

Over time.

- the CPI and IPI can deviate from each other and the allowed growth in the price cap needs to be re-calibrated;
- while a TFP growth target is generally established at the beginning of a performance term, actual performance may vary and the price cap may need to be re-calibrated and/or new targets set;

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- there may be new needs for increased revenues due to major, 'lumpy' capital investments: and
- there may be a regulatory requirement to adjust the price cap for returns earned in non-regulated areas of the firm's business.

Each of the above must be considered during the periodic establishment of the X factor in the price cap.

4.4 A simple approach to resetting the price cap at the end of a performance term

Resetting the price cap is intended to allow the regulated firm to earn an adequate revenue to cover its costs and provide for a reasonable rate of return on its capital at the beginning of the coming performance term. As the performance term progresses, the price cap is allowed to increase by the rate of inflation less an "X" adjustment. This eliminates the need to have the firm apply to regulator merely to keep pace with inflation, or for revenue neutral restructuring of its charges.

means to achieve an adequate return, or cease providing the service. Regulated revenues should never be used to support unregulated ancillary services.

A simple approach to recalibration of the price cap at the end of the performance term would be to estimate the firm's costs for the last year of the new performance term (including a reasonable return on capital), estimate the revenue the firm would earn if the old price cap continued, apply any required corrections (such as recognising above average returns on ancillary revenues, or recognising the need for a return on market rather than historical value of major capital assets), then determine whether there would be a shortfall of revenue relative to costs. If there is an expected shortfall, then the price cap would be increased at the beginning of the new performance term to achieve full revenue adequacy.³⁴ If the firms is found to be earning a return that is more than adequate than the price cap adjustment would be downward.

The methodology for this simple approach would be based on projections of the firm's financial statements. The methodology directly addresses the issue of ensuring the firm an adequate revenue. The drawback of this approach is that it may hide poor productivity performance by a service provider and/or lack of control of its costs.

If there is a desire to be more transparent about resetting of the price cap, then it might be desirable to break out the different adjustments that need to be made to the cap. This could be done by financial modelling which allows one factor at a time to be changed to reveal the portion of the price cap changes required to provide for:

- fold in of ancillary revenues,
- revaluation of capital assets,
- new service requirements,
- new subsidy payments if any, and
- deployment of new capital assets.

Section 4.4 deals with this more transparent, although somewhat more complicated approach. It also comments on how mid term adjustments could be made to the price cap, e.g., to allow revenue adequacy after mid-term deployment of a new vessel.

Sections 4.5 and 4.6 deal with the other part of setting a new price cap: establishing the new value of "X", which has two components: total factor productivity and divergence of the CPI from the IPI.

29 September 2006

³⁴ The recalibration would need to consider whether traffic would fall with the higher prices of the new price cap, and whether there would be corresponding cost savings. Presumably, one would repeat the recalibration of the price cap until a price is achieved which covers costs (and a return on capital) at new traffic levels.

4.5 Types of price cap adjustments

When resetting the price cap, the re-calibration should cover the following general types of adjustments:

One time adjustments to the level of the price cap:

- If the legislation requires such downward adjustment of the price cap if the firm earned above normal net revenues from its non-regulated ancillary services, then the net amount above a reasonable return on the non-regulated services must be used to compute a downward adjustment to the price cap.³⁵
- There should be an upward adjustment for any shortfall in revenue which leaves the
 firm unable to earn an adequate or allowed rate of return.³⁶ (Or conversely, a
 downward adjustment if it is determined that the firm achieved a return higher than
 allowed.) This should be done and netted against the previous adjustment for net
 commercial revenues.
- If the legislation allows or requires revaluation of capital assets, then there should be a one time upward adjustment in the price cap to provide such a return.³⁷ This one time adjustment is to be computed as the amount of the net increase in the value of the capital assets times the allowed rate of return on invested capital.
- If an adjustment is made for asset revaluation, then there is a second order adjustment that should be made to recognise that the measurement of total factor productivity will change due to the higher weight to be attached to capital (as TFP weights are cost shares, and the share of capital will be higher with revaluation of capital assets).

³⁵ Suppose the firm had exactly earned the allowed rate of return on revenues of \$100 million. Suppose it earned \$20 million on non-regulated 'commercial' services, and had costs of \$15 million on those services and was allowed a \$3 million return per year on capital invested. Thus, the firm had \$2 million in net revenues which should be used to reduce the price cap. This would translate into a one time downward adjustment of 2% in the price cap.

³⁶ Suppose it was determined that the firm had a shortfall of \$5 million on a revenue base of \$100 million. That is, the firm would require an additional \$5 million in revenue each year in order to achieve revenue adequacy. Then it would require a one time 5% increase in its price cap. If that same firm had \$2 million in net revenue from 'commercial' services which are to be recognised in performance term 2, then it would only require an increase of \$3 million, or a one time 3% price cap increase.

³⁷ Revaluation of capital assets is supported by most economists to reflect the need for firms to earn an adequate return on the actual market value of a capital asset. This is often easily understood in the context of real estate markets. Suppose an office building was purchased 25 years ago for \$10 million, but has a current market value of \$\$35 million. The owners of the building would expect to charge rents which would provide a return on the \$35 million current value. If a return were only allowed on the \$10 million historical cost paid, then the owner would have an incentive to sell the building. The new owner, having paid \$35 million, would charge rents to provide a return on that current market value. Ultimately, economic realities will prevail and allowing returns based on replacement values is good economics.

Mid Term one-time Adjustments

Sometimes it is necessary to adjust the price cap to deal with anticipated changes in the firm's costs, services or capital. These include:

- Deployment of major new capital may require an increase in price cap so that the firm will earn adequate revenue to cover the new costs of the capital. There are two parts to this adjustment. First, the price would be increased to provide the needed return on invested capital. This involves consideration of higher financing costs, increased taxes, increased depreciation, and an offset of anticipated ongoing capital appreciation. This financial calculation must also consider whether the deployment of new capital will also induce increased net revenue. For example, if a route has been capacity constrained, deployment of a vessel with increased capacity may result in increased traffic.
- The second aspect is that the newly deployed capital may increase productivity. For example, deployment of a new vessel may result in increased fuel or labour productivity, which would decrease the allowed price cap.
- Another potential mid term (or beginning of term) adjustment is for any required changes in regulated service levels. This may increase costs more than increased revenues, requiring an upward increase in the price cap. However, if the government requires the service adjustment, it may be that it will provide an offsetting subsidy. The price cap adjustment is required only if there is a revenue shortfall (or a revenue surplus).

Fuel Deferral Fund

• The Commissioner has recognised that BCFS has incurred extraordinary increases in its fuel costs. This was dealt with by allowing a partial pass through via an increase in the price cap, and partially by requiring BCFS to defer recovery of the remaining increase in fuel costs to a future date, potentially when fuel prices fall. This may require an adjustment to price cap in performance term 2 to recognise the new, higher level of fuel costs, and to allow recovery of revenues to deal with any fuel cost deferral. In doing this, the one time price cap adjustment would be accompanied by the simultaneous removal of the fuel surcharge.

Ongoing price cap changes

- The annual increase in the price cap should be adjusted to anticipate any changes in the growth of TFP. (This is discussed in more detail, below).
- The annual increase in the price cap should also be adjusted for difference between the IPI and the CPI. (This is discussed in more detail, below).

4.6 Projected growth in TFP

Most firms and industries have long term trends in productivity growth, and for this reason, historical productivity performance may be a reasonable indicator of future TFP.

However, it may be possible to fine tune the TFP forecast somewhat. For example, in industries with economies of scale, TFP will grow with traffic growth, and this relationship can be revealed statistically.³⁸ Suppose that traffic historically grew by 2% per annum, and that the traffic-TFP coefficient is .5. Then 1.0% of TFP growth can be explained by traffic growth. Further suppose that in performance term 2, traffic growth is expected to increase to 3% per annum. Then, it can be forecast that TFP growth should accelerate by 0.5% per year to a total of a 1.5% per annum increase in total productivity.³⁹

There may be other factors which have statistically significant historical relationships with TFP. For example, in air, rail and trucking, the average length of haul is known to be strongly related to TFP growth in those sectors (although for BC Ferries, the length of routes are generally fixed). Increasing average length of haul can be used to explain historical and future TFP growth. ⁴⁰ Load factors are another source of TFP growth in the transport sector.

In the case of BCFS, the investigation to date has only considered traffic growth as a source of future productivity gains. There are only 12 quarters of data on BCFS TFP, making investigation of more than one factor problematic. As well, with a fixed route system, changes in length of haul may be unlikely. Load factor data might be considered at some future date.

However, the resetting of the price cap recognises several other factors which affect productivity:

- Changes in the level of traffic are directly considered.
- Changes in the mix of traffic are also reflected, as this changes the value of the output index itself.
- Changes in productivity due to capital deepening are considered by the adjustments for new vessel deployment.

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³⁸ The economic theory of cost and production can be used to derive cost function, production function or productivity specifications which can be econometrically estimated to reveal the output TFP relationship.

³⁹ This can be computed by first subtracting the 'explainable' historical TFP growth (2% times 0.5), then adding the forecasted TFP growth (3% times 0.5).

⁴⁰ In the case of BC Ferries, there may be an exception. Route 40 (Tsawassen to Duke Point) was developed, in part, to ease traffic congestion in Nanaimo and Horseshoe Bay. The new route is a longer haul (hence more costly to serve) but relieves congestion on urban roads. Since the BCFS output measure is based on the number of vehicles rather than distance travelled, the operation of Route 40 does not increase the output measure, but does increase input quantities, resulting in a reduction in BCFS productivity (although to the great gain of the communities of Nanaimo and Horseshoe Bay).

- Changes in the efficiencies arising from new technology associated with new vessel deployment are provided for as well.
- Finally, the price cap resetting worksheet allows for recognition of other factors which
 might affect productivity. As an example, if the company had plans for an electronic
 ticket sales/verification process which would dramatically lower terminal labour costs,
 that could be added as an adjustment to the coming performance term's expected
 productivity. This would require the company to provide information to the regulator of
 any such changes.

Future TFP growth can also consider whether there are other reasons for future TFP growth which may differ from historical trends, such as expected deployment of new technologies, changes in regulations (which may increase or decrease productivity). As well, a regulator may wish to require a higher rate of TFP growth in the coming performance term. However, there would need to be a rational basis for this. As an example, the Irish aviation regulator undertook a benchmarking study of Irish airport operator Aer Rienta to establish whether performance was significantly below that of peer airports, and set productivity targets which would challenge Aer Rienta to improve its performance to industry standards in certain cost areas judged to have below average performance. It should be noted that there was much controversy on the benchmarking approach and the Irish regulator has not used this methodology other than the one time.

In the case of BCFS, the analysis of its historical TFP growth, discussed in Section 3, revealed that there is a relationship between TFP growth and output growth. Specifically, the TFP-Output coefficient is 0.48, meaning that a 1% growth in BCFS traffic is expected to result in a 0.48% increase in TFP.

4.7 CPI and IPI diverge

As discussed in Section 2, the CPI is a convenient, regularly published, reasonably accurate and publicly available inflation index. As such, it is often used as the inflator for price cap regulation.

As a general rule, the CPI and IPI will track each other in terms of growth trends, in the sense that they tend to accelerate and decelerate similarly. However, long term an IPI will generally, but not always, grow faster than the CPI. This is because factor prices (rates paid to labour, capital, outside suppliers) paid by businesses grow faster than the overall economy CPI due to productivity in the general economy.⁴¹

Over short periods of time, an IPI and the CPI may diverge dramatically if one of the firm's important factors of production has a major increase in price. For example, recently fuel prices have risen dramatically, and those firms which use fuel more than the average firm

29 September 2006

⁴¹ Note that overall economy wide productivity growth is not necessarily the same as the TFP for a specific firm.

in the economy (e.g., the transportation industries) will have IPIs that grow faster than the overall CPI, where fuel is a relatively small component.

When re-calibrating the price cap, the expected continuing difference between the CPI and the IPI must be considered. This may need to recognise that some divergences between the CPI and the IPI may have cyclical elements. For example, a recent fuel price increase might be expected to be temporary, resulting in a future drop in IPI – CPI.

It is difficult to forecast either the IPI or the CPI. That is the reason why price cap regulation typically uses a CPI-X format, rather than specifying an absolute number for the price cap. However, the CPI-X approach still requires a forecast of the IPI-CPI difference.

The approach taken here is to forecast the IPI-CPI price gap based on the historical record of the gap. This is often a good basis for the future gap, especially if the evidence is available for a number of years. The historical information might be adjusted based on judgement or other information as to what may happen in the coming performance term.

4.8 Computing the X factor the 7 Routes Groups of BCFS

Using the methodology discussed in Sections 4.6 and 4.7, the following table puts forth the resulting X factor for Performance Term 2.

	Route Group 1	Route Group 2	Route Group 3	Route Group 4	Route Group 5	Route Group 6	Route Group 7
TFP Growth due to:		,			,		
Forecasted annual output growth for route group							
Output TFP factor (from TFP regression on output)	0.497	0.497	0.497	0.497	0.497	0.497	0.497
Forecasted TFP growth due to forecasted output growth							
Other TFP target							
TFP component of X Factor for PT2							
Input Price Index - CPI difference	•						
Historical Annual CPI - IPI difference From PT1, Years 1-3							
Other Adjustment to CPI - IPI difference							
CPI - IPI component of X Factor							
Annual X-Factor for PT2	•						
Annual X-Factor for PT2							
Price cap increase if inflation is 2.5%							