# STRATEGIC HIGHWAY INFRASTRUCTURE PROGRAM 

Border Crossing Component

# ANNUAL REPORT 2008/09 

(FISCAL YEAR ENDED MARCH 31, 2009)
June 2009

Ministry of Transportation and Infrastructure

## Canadàa <br> Transport Canada

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An annual progress report is required under section 5.02 .05 of the Border Crossing Component of the Strategic Highway Infrastructure Program Contribution Agreement. This report is used to provide the Management Committee with information regarding the status of projects and to formally track progress to date under the agreement. The report will also likely be translated and posted on Transport Canada's web site for public use.

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## GENERAL OVERVIEW OF RESULTS

A general overview of the results accomplished under the Agreement during the fiscal year, including, but not limited to, a description of the work completed, financial results, environmental issues, any concerns affecting the progress of the Program and any other issues that may affect completing the Program as per this Agreement.

As of the end of the fiscal year 2008/09 (ending March 31, 2009), the status of the 10 SHIP projects, environmental assessments and audits were as follows':

- 8th Avenue Improvements (Highway 15 and 99) - The approval of the environmental review (CEAA) was given by Transport Canada on February 4, 2004. A total of $\$ 14,652,834$ has been expended against eight contracts as of the end of the 2006/07 fiscal year. Since construction began on June 1, 2004, \$481,582 has been expended towards Provincial Expenditures with $\$ 996,516$ towards Design and Engineering. Since construction began on June 1,2004 , there was $\$ 13,174,736$ of construction claims. This project is now complete and in-service. A Schedule C (Affidavit of Completion) was affirmed on March 13, 2006.
- Highway 15: ITS/CVO Truck [FAST] Lane and Nexus Lane - The approval of the environmental review (CEAA) was given by Transport Canada on March, 9 2004. A total of $\$ 2,718,369$ has been expended against eight contracts, as of the end of the 2004/05 fiscal year. There has been $\$ 226,738$ expended towards Provincial Expenditures, with $\$ 136,052$ towards Design and Engineering. Since construction began on June 1, 2004, there was $\$ 2,355,580$ of construction claims. The project is now complete and in-service. Construction was completed in October 2004, with some local complaints about truck noise and vibration. A Schedule C (Affidavit of Completion) was affirmed on June 27, 2005.
- Highway 15: ITS/CVO System Enhancements - As this project entails only technical and electronic improvements, there was no requirement for an environmental review (CEAA) approval by Transport Canada. A total of $\$ 261,724$ had been expended against one contract as of the end of the 2004/05 fiscal year. This project was completed March 31, 2004, with a Schedule C (Affidavit of Completion) affirmation on August 12, 2004.
- Highway 15/88th Avenue - The approval of the environmental review (CEAA) was given by Transport Canada on July 12,2004 . A total of $\$ 4,257,398$ has been expended against nine contracts, as of the end of the 2008/09 fiscal year. Claims for the 2008/09 fiscal year were $\$ 1,002,615$, with $\$ 290,495$ in accrual (PAYE).
- Highway 13: Truck-Climbing Lane - A key deliverable, the long-term corridor plan was submitted on July 20, 2005 to Transport Canada. Although the truck-climbing lane remains a priority, for which the constituent study demonstrates its viability, the Province and Canada mutually agreed, early in 2006, not to proceed with the Highway 13 climbing lane, but rather to transfer the remaining construction-based funding against incremental eligible costs on Highway 15/88th Avenue. This fact is reflected in "Schedule B" revisions of this report (Revision 16). A total of $\$ 134,354$ has been expended against three contracts, primarily provincial expenditures and planning, as of the end of the 2005/06 fiscal year.

Highway 11: (Commercial Staging Area) - The approval of the environmental review (CEAA)

[^0]was given by Transport Canada on January 8, 2003. Construction is now complete as the staging area was in use by trucks early in the summer of 2004. A total of $\$ 1,562,184$ has been expended against three contracts, as of the end of the 2005/06 fiscal year. A total of $\$ 1,174,660$ has been expended towards Construction, $\$ 276,289$ towards Provincial Expenditures, with the remaining $\$ 111,235$ towards Design and Engineering. This project was completed July 2004, with a Schedule C (Affidavit of Completion) affirmation on June 27, 2005.

- Highway 15/99 Advanced Traveller Information System (ATIS) - As this project entails only technical and electronic improvements, there was no requirement for an environmental review (CEAA) approval by Transport Canada. A total of $\$ 600,000$ has been expended against one contract. as of the end of the 2004/05 fiscal year. This project was completed December 15, 2003 with a Schedule C (Affidavit of Completion) affirmation on March 22, 2005.
- Highway 99: NEXUS Lane Extension - The approval of the environmental review (CEAA) was given by Transport Canada on April 15, 2004. The project was tendered with the 8th Avenue Improvements Project for economies of scale and efficiency reasons. A total of $\$ 96,402$ has been expended against four contracts, as of the end of the 2005/06 fiscal year. There were no claims in the 2005/06 fiscal year. This project was completed December 15, 2004, with a Schedule C (Affidavit of Completion) affirmation on June 22, 2006.
- Environmental Assessment - A total of $\$ 35,915$ has been expended against seven contracts: (1) Environmental Assessment; (2) 2003/04 Annual Audit performed by the Office of the Auditor General of British Columbia; (3) 2004/05 Annual Audit performed by the Office of the Auditor General of British Columbia; (4) 2005/06 Annual Audit performed by the Office of the Auditor General of British Columbia; (5) 2006/07 Annual Audit performed by the Office of the Auditor General of British Columbia; (6) 2007/08 Annual Audit performed by the Office of the Auditor General of British Columbia; and (7) 2008/09 Annual Audit performed by the Office of the Auditor General of British Columbia.

Highway 15: Extension of FAST Truck Lane was added to the Program in April 2005. The approval of the environmental review (CEAA) was given by Transport Canada on March 17,2006 . A total of $\$ 3,886,695$ has been expended against seven contracts, as of the end of the 2007/08 fiscal year. There has been $\$ 320,030$ expended towards Provincial Expenditures and $\$ 355,797$ towards Design and Engineering. This project was completed in May 2007, with a Schedule C (Affidavit of Completion) affirmation on June 8, 2007.

Overall, as of the end of the fiscal year 2008/09, 50 contracts had been established on the HIGHWAY CONTRIBUTION MANAGEMENT SYSTEM (HCoMS) for a total cost of $\$ 28,207,747$ out of a total HCOMS-active sharable cost (across 10 projects and environmental assessments) of $\$ 28,207,750$ ( $100 \%$ of HCOMS-active sharable cost). A total of $\$ 28,205,849$ has been expended against these 50 contracts ( $99.99 \%$ of the existing value of the 50 contracts). This combined annual report and audit constitutes the last such reporting under the contribution agreement. The 2009/10 fiscal year will entail only an audit on outstanding PAYE (accrual).

# DATE, LOCATION AND AGENDA ITEMS OF OFFICIAL MANAGEMENT COMMITTEE MEETINGS 

1 MINUTES OF MEETING
Strategic Highway Infrastructure Program - Borders (SHIPB)
Management Committee Meeting
June 17, 2008
Teleconference

- IN ATTENDANCE

BC Ministry of Transportation David Marr (BC Provincial Co-Chair)
and Infrastructure Avi Ickovich (BC Ministry of Transportation and
Infrastructure)
Transport Canada Jim Lothrop (A/Federal Co-Chair)
Kim Aziz (Transport Canada)
James Clarkin (Transport Canada)
Matthew Cloutier (Transport Canada)
Bradley Hunt (Transport Canada)
1.0 Opening Remarks - Introductions
2.0 Administrative Details
2.1 Bradley Hunt was designated as the note-taker.
2.2 Minutes from the October 29, 2007 Management Committee were accepted and approved.

### 3.0 Program Management

### 3.1 Status of Highway 15/88th Avenue Project

This is the only project still under construction under SHIPB and is scheduled for completion by October 2008. Jim advised that all work is to be completed by March 31, 2009, the termination date for the SHIP-B Contribution Agreement.

### 3.2 Annual Report and Audit

This will be finished by the end of July 2009.

### 3.3 Retrospective Analysis

It was agreed upon that this would be done five years after the completion of the projects and in conjunction with the retrospective analyses for other programs.

## MINUTES OF MEETING

Canada-British Columbia
SHIP, SHIPB, CSIF, BIF, APGCTIF and APGCTIF:SFPR
Management Committee Meeting
December 11, 2008
Victoria, BC
IN ATTENDANCE
BC Ministry of Transportation David Marr (BC Provincial Co-Chair)
and Infrastructure

Transport Canada James Clarkin (A/Federal Co-Chair)
Mark Thompson (Transport Canada)
Kim Aziz (Transport Canada - via teleconference)
Matthew Cloutier (Transport Canada)
Randy Jenkins (Transport Canada - via teleconference)

### 1.0 Opening Remarks - Introductions

### 2.0 Administrative Details

2.1 Note-taker - It was decided that Mark Thompson (TC) would be the note-taker
2.2 Minutes of the June 17, 2008 Management Committee meeting were accepted and approved.
2.3 Affidavits of completion

Dirk Nyland (BCMOT) and Jim Lothrop (TC) have been discussing how to deal with affidavits where no engineer was responsible for the entire project. Consultants on some projects were not comfortable signing the document in its current form. The proposed solution is to have an affidavit for each part of the project that an engineer was responsible for and to have a document signed by Dirk Nyland for the overall project.

### 3.0 BIF Program Management

### 3.1 Status of projects

Program is complete including Highway 15/88th Avenue Intersection, which was completed under BIF but funded under Strategic Highway Infrastructure Program - Border Crossing Component (SHIP-B). Minor works will continue on Mt Lehman project in 2009.

### 3.2 Amendment to the BIF agreement to extend to 2009-2010 will be processed by Transport Canada

### 3.3 Final payment

The final payment is contingent on the Province providing a signed Schedule G (Affidavit of Completion). This will be completed by the Province through Dirk Nyland (Chief Highway Engineer) who will be the coordinating engineer and sign off the signatures of the constituent engineers.

This affidavit solution will also be utilized for CSIF (Park Bridge: Kicking Horse Canyon, Phase 2) and SHIP (Yoho Bridge Project: Five Mile).

On a long-term basis (for future Contribution Agreements), the Province and Transport Canada will continue to work on developing a schedule that will address the concerns of the Consulting Engineers of BC .
3.4 An annual report covering the work performed in 2008/09 and minor works on the Mt. Lehman project in early 2009/10 may be submitted, combined, as a final annual report. Separate audits will still be required for the 2008/09 and 2009/10 fiscal years.

### 4.0 CSIF Program Management

### 4.1 Final payment

The final payment for this program will not be held up pending the sign-off of an Affidavit of Completion as there was no mention of such a requirement in the Contribution Agreement. However, as an act of good faith, the Province will provide a signed schedule at its earliest convenience.

### 5.0 SHIPB Program Management

### 5.1 Status of projects

The last project completed under this program is the Highway 15/88th Avenue intersection. All projects are now complete.

### 5.2 Final payment

The requisite Schedule C will be completed as part of the sign-off for the Border Infrastructure Fund (BIF), under which the project was completed.

### 6.0 SHIP Program Management

6.1 Discussion on Schedule G

This affidavit will be completed by the Province through Dirk Nyland (Chief Highway Engineer), who will be the coordinating engineer, and sign off the signatures of the constituent engineers for the Yoho (Five Mile) Bridge project.

### 6.2 Final payment

This will be processed by Transport Canada once the Schedule $G$ is signed off by the Province.

### 7.0 APGCTIF Program Management

### 7.1 Status of projects

Pitt River Bridge/Mary Hill Bypass

- $100 \%$ design completed
- Deck section is being raised
- Project 66\% completed as of September 30th

Mountain Pine Beetle - Silver Road-McBride Timber Road Passing Lane

- Schedule G - Affidavit of Completion sent to Transport Canada on November 6, 2008

Highway 97: Simon Fraser Bridge

- Sub-deck is done
- Only the deck is still left to be done and some work on approaches
- Project 70\% complete
- Project to be completed May or June of 2009 (ahead of schedule)

Highway 1: Hilltop to Balmoral - Four-Laning and Frontage Roads

- Tendering to commence in March 2009
- $\$ 1.509$ million was transferred from the Simon Fraser Bridge project to this project

Highway 97 - Wright Station Curves (Realignment)

- This project is shut down for the winter and will proceed in May/June 2009


### 7.2 Transfer of funds between Mountain Pine Beetle projects

- $\$ 1.509$ million was transferred from the Simon Fraser Bridge project to Highway 1: Hilltop to Balmoral project


### 8.0 APGCTIF:SFPR Program Management

8.1 Status of project - Provided by Province

- Preloading has started along some sections
- RFQ for SFPR construction has closed. RFP expected to be released in January 2009
9.0 Other Items
9.1 BCF projects
- KHC - Brake Check to Yoho: construction underway
- KHC - Golden Hill to West Portal: moving forward slowly to show continuous progress in the Kicking Horse Canyon
- Winfield to Oyama: expect to tender in 2010


### 9.2 Accelerating Infrastructure

- Announced projects are moving ahead well and cannot be accelerated.
- BCMOT in discussions with INFC for new projects


### 9.3 Communications events

Brief discussion on possible upcoming communications events. No events are foreseen for the near future.

### 9.4 Program Signs

Some program signs may be changing. TC will work with BCMOT to ensure the appropriate signs are installed at all project sites.

## SCHEDULE B REVISIONS

Please refer to Table 1 outlining the evolution of Schedule B during the 2008/09 fiscal year. Table 2 (Statement of Changes) calculates the cash flow and budget changes across revisions.

Revision 23 March 28, 2008 - This revision entailed final changes at the end of the 2007/08 fiscal year.

Revision 24 November 25, 2008 - This revision is the first after March 28, 2008 (Revision 23), the end of the 2007/08 fiscal year. This exercise has traditionally been conducted at the request of Transport Canada for HCOMS (Transport Canada on-line administration system) to open the next year after the Annual Report has been approved by Transport Canada. The Province and Transport Canada therefore took this opportunity to reflect the following changes:

- Moving $\$ 895$ in the Environmental Assessment Costs from the 2007/08 fiscal year to the 2008/09 fiscal year. The Province uses this line item to all pay for auditing costs as required by the Contribution Agreement.
- There were no changes to "Unallocated Funds" as all Programs funds were fully allocated.

Table 1


Table 2


## PROJECT UPDATES

- A map of all current SHIP projects, as of March 31, 2008, is included for reference purposes. The map includes projects under both the Highway Construction Component and under the Border Crossing Component of SHIP.
- Information on contracts started/completed and estimated completion of contracts is addressed more extensively in a subsequent section of the report "A YEAR END SUMMARY TABLE OF EXPENDITURES UNDER THE AGREEMENT." However, it is important to mention that there are no major anomalies from forecasts earlier in the fiscal year 2008/09.
- The following pages of the report entail a series of photographs for the current SHIP projects and are meant to provide not only a portrayal of the actual project but also a broader geographic topographical and geologic context and, as such, some pictures are overviews.
- As of the end of the 2008/09 fiscal year nine of nine (originally eight), SHIP projects have been successfully delivered by the Province. As of the end of the 2008/09 fiscal year, eight of nine requisite Schedule Cs (Affidavit of Completion) have been submitted to Transport Canada. Since the Highway 15/88th Avenue Intersection Project was funded under SHIP but delivered under the much larger Border Infrastructure Program (BIP), the requisite Schedule C for the Highway 15/88th Avenue Intersection Project will be submitted along with the requisite BIP affidavits by the summer of 2009.

Major milestones (e.g. opening of a section of a project): The most significant milestone for the 2008/09 fiscal year is the successful completion of the Highway 15/88th Avenue Intersection which was opened in November 2008.

## 2008/2009 STRATEGIC HIGHWAY INFRASTRUCTURE PROGRAM (SHIP)

Border Crossing Transportation Component (\$28.207 M) Highway Construction Component (\$122.4 M)
(1A Huy $99:$ 8th Avenue Interchange Upgrade (Detail A)
(Completed)
(1B 8th Avenu: Widening (Four Lanes) Upgrade (Detail A)
(Completed)
(1c) Hwy 15:8 th Avenue Intersection Upgrade (Detail A)
(Completed)
2. Hwy 15: ITs/CVO (Fast) Truck Land and Nexus Lane (Detail A) (Completed)
33 Huy 15: Intelligent Transportation System Commercial Vehicle
Operation Enhancements (Detail A) (Completed)
4 Hwy 99: Nexus Lane Extension (Detail A) (Completed) 5 Hwy 15: 88th Avenue Intersection Upgrade (Completed) 6 Hwy 13: Truck Climbing Lane (Planning Study Completed) 7 Hwy 11: Commercial Vehicle Staging Area (Completed)
8 Hwy 15/99: Advanced Traveller Information System (ATIS) 8 Hwy 15/99: Ad
(Completed)
9 Highway 15: 4th to 8th Avenue FASTNEEXUS Lanes Extension (Completed)

1 Hwy 97: South Peace Hill (Highway Realignmen
(Completed)
2 Hwy 16: Blackwater/Shanley (Passing Lanes) (Completed)
$3 \mathrm{Hwy} \mathrm{97:} \mathrm{Cottonwood} \mathrm{Bridge} \mathrm{(Realignment/Replacement)}$
(Completed) (Completed)

| $4 \begin{array}{c}\text { Hwy 5: Preacher Hill Curves (Highway Realignment) } \\ \text { (Completec) }\end{array}$ |
| :--- |

5 Hwy 1: Broderick to Ford (Four Laning/Frontage Roads)
5 Huy 1: Broderid
(Completed)
6 Hwy 1: Woods Overhead (Realignment/Replacement) (Completed)
7 Hwy 1: Victoria Road (Intersection Upgrade/Down Hill Lane) (Completed) 8 Hwy 1: Five Mile Bridge (Four Laning/Replacement) (Completed) 9 Hwy 3: Moyie Bufffs (Realignment/Climbing Lane) (Completed)
10 Hwy 1: Vedder Interchange (Recontiguration) (Completed)
11 Hwy 1: Annis to Highway 9 (Highway Realignment) (Completed) 12 Hwy 1: 30th Street to Hwy 978 (Realignmentllntersection Improvement) (Completed) 13 Hwy 3/95: Yahk Weigh Scale (Access/Intersection Improvement (Completed)
14 Hwy 1: At 192nd West Facing Ramps (Completed)
15 Hwy 1: Cobble till Road to Kimalu Rood (Completed)


Totals reflect only cost-shared amounts between the province and Transport Canada

## 8TH AVENUE IMPROVEMENTS

## Project Overview

This project includes four-laning 8th Avenue (a connector road) and interchange improvements at Highway 99 and intersection improvements at Highway 15 (including roundabouts).

This project is now complete and in-service. A Schedule C (Affidavit of Completion) was affirmed on March 13, 2006.

The following are photographs of construction activities:



Photographs of 8th Avenue Improvements including four-laning, roundabout and interchange improvements on both Highway 99 and 15 :

8th Avenue Facing West at 176th Street

8th Avenue 250m West at 176th Street Facing East

176th Street Facing North

176th Street South End of Project Facing North

East Roundabout - Bridge in Background

East Roundabout - Bridge in Background


Highway 99 Facing South - New Bridge


Highway 99 Facing South - New Bridge


Highway 99 Northbound On-Ramp


West Roundabout Facing South (In operation)


## HIGHWAY 15: ITS/CVO TRUCK [FAST] LANE AND NEXUS LANE

This project entailed the construction of a combined and dedicated FAST/NEXUS/Bus lane from 4th Avenue to 1st Avenue on Highway 15, diverging to three lanes at the Pacific Highway, BC/ Blaine, Washington border crossing. An adjacent project will shortly commence construction, Highway 15: 4th to 8th Avenue.

Construction was completed in October 2004, with in-service status by March 31, 2005. The Schedule C (Affidavit of Completion) was affirmed June 27, 2005.


The photograph on the left is of Highway 15 looking south towards the US Border.


The photograph on the left is of the parking lot for trucks close to the border, designed to mitigate congestion and increase throughput at the border.


These south-facing pictures are of the Nexus Lane which are currently not in use due to construction south of border, under US jurisdiction.

## HIGHWAY 15: ITS/CVO TRUCK LANE SYSTEM ENHANCEMENTS

This project entailed ITS/CVO System Enhancements. This project was completed March 31, 2004, with a Schedule C (Affidavit of Completion) affirmation on August 12, 2004.

## HIGHWAY 15/88TH AVENUE INTERSECTION IMPROVEMENTS

To accommodate historic and future traffic growth at this congested facility, the scope of the project includes:

- This project was originally assigned to BCMoT South Coast Region to deliver; however, as it was immediately adjacent to the Highway 15 portion of the Border Infrastructure Program, (BIP) it was reassigned to be delivered by the BIP Team. The principal project deliverable was the design and construction of a four-lane facility on Highway 15 between the 8700 block (approximately 140 metres south of 88th Avenue) and 92nd Avenue, with the capacity and operational efficiency that can best satisfy the travel demands and economic viability of the corridor. Intersection improvements at 88th Avenue included signalization, a second throughlane, left-turn bays on all approaches, widened shoulders and increased corner radii. Project delivery also included all the appropriate approvals and property acquisition required for design and construction. A staged approach was developed to work simultaneously with the Border Infrastructure Program and the later-announced Gateway Project (Highway 15 from 92nd to 96th Avenue) which would reduce "throw-away" portions at the interface to the two Programs.
- A full-movement intersection at 88th Avenue that ties into the City of Surrey's 88th Avenue improvements.
- Two lanes of northbound traffic from the 8700 Block to approximately 92 Ave. These two northbound lanes will tie into the existing northbound lane and the existing truck climbing lane at 92nd Avenue.
- One additional southbound lane from approximately 92nd Avenue to the 88th Avenue intersection.
- Work will also involve widening of shoulders, increased corner radii on all approaches and the elevation of the road surface to control flooding.
- This intersection (Highway 15/88th Avenue), funded under SHIP, is part of a larger Border Infrastructure Program contract P-71101-2011. Contract and construction completion date was October 31, 2008. The Contract extended from 32nd Avenue north to 88th Avenue along Highway 15. The SHIP component is the section through 88th Avenue, tying into the new infrastructure just prior to 92nd Street, which is funded under the Gateway Program.


Schematic diagram of final configuration

A geotechnical assessment indicated that highly compressible subsoils would require surcharge preloading for a period of up to a year. Therefore, a staged construction plan was developed to schedule work accordingly.

Stage I - Preload Placement (Day Labour \& Contract \#71101-2002)
Stage II - Grading, Paving and Electrical (Contract \#71101-2011)

### 1.1. Stage I - Preload Placement

In areas outside the existing highway footprint, preload fills were placed to stabilize underlying soils and limit post-construction settlement. Preload was placed in stages upon geotechnical approval. Generally each stage was one metre in thickness, placed in 300 mm compacted lifts. The ultimate preload height was, on average, 4.5 metres in elevation. Monitoring and the interpolation of settlement data was the responsibility of Golder \& Associates.

Preload was placed through the following activities and schedule:

| START | FINISH | DESCRIPTION |
| :--- | :--- | :--- |
| May-04 | July-05 | Preload placement at the 88th Avenue Intersection |
| Sep-05 | Nov-05 | Preload placement at the Archaeological Site |
| Sep-04 | Dec-07 | Highway 10 and 15 Preload and Drainage Construction: North Section |

### 1.2. Stage II - Grading, Paving and Electrical

The grading, paving and electrical stage was delivered through the following activities and schedule:

| START | FINISH | DESCRIPTION |
| :--- | :--- | :--- |
| Aug-06 | Dec-08 | Highway 15 Grading, Paving, Utilities and Electrical: 32nd to Roger <br> Pierlet Overhead and 68A Avenue to 88th Avenue |

The grading, paving, and electrical stage was subsequently divide into two phases in order to maintain the 88th Avenue intersection's functionality and to facilitate the adjacent Gateway project between 92nd and 96th Avenue.

Phase I
A full-movement intersection was completed at 88th Avenue and a second northbound lane constructed for 600 metres to connect into the existing truck-climbing lane. This provided the final segment of two-lane traffic, northbound from the US border to the Trans-Canada Highway.

## Phase II

The construction of the second southbound lane, approximately 1600 metres in length, from 92nd to 88th Avenue, was completed. This work was sequenced with Project 04885 and compatible with its requirements.



Line painting

The project was completed and in-service in the fall of 2008.

## HIGHWAY 13: TRUCK CLIMBING LANE AND CORRIDOR STUDY

This project involves the development of a long-term corridor plan to determine the long-term needs of Highway 13, located approximately 50 kilometres east of Vancouver, B.C. This project also includes the construction of a 1.7-kilometre, northbound, truck climbing lane leading away from the Aldergrove, B.C./Lynden, Washington border crossing. A key deliverable, the long-term corridor plan was submitted on July 20, 2005 to Transport Canada. Although the truck climbing lane remains a priority for which the constituent study demonstrates its viability, the Province and Canada mutually agreed to not proceed with the Highway 13 climbing lane, but rather to transfer the remaining construction-based funding against incremental eligible costs on Highway 15/88th Avenue. This fact is reflected in "Schedule B" revisions of this report (Revision 16). Nevertheless, the Planning Study will still provide both levels of government valuable information on the Highway 13 corridor that will be used towards future infrastructure needs.

## HIGHWAY 11: COMMERCIAL VEHICLE STAGING AREA

Located on the Canadian side of the Huntington, B.C./Sumas, Washington border-crossing, the staging area is expected to provide 15 pull-through spaces for semi-trailers, as well as public washrooms.

As of August 2004, the staging area was in use by trucks and improving upon congestion at the border. The Schedule C (Affidavit of Completion) was affirmed June 27, 2005.

Pre-Construction Photographs:



## HIGHWAY 15/99: ADVANCED TRAVELLER INFORMATION SYSTEM (ATIS)

The intent of ATIS is to monitor and report on border delays at Highway 99 and Highway 15. The current photographs below illustrate a test of this system as it nears completion. System calibration and validation was completed by May 31, 2004. The Ministry has displayed the test message during the validation. The messages reverted to the automated system by the end of June 2004. The web-site and the interactive voice-line were made available to the public at the same time. Please note that the date is not correct in the photographs below and that these are calibration photos. One view is the sign looking southward on Highway 15 and the other view is the sign looking southward on Hwy 99.


There are ongoing discussions with Transport Canada and IMTC about management and use of data on traffic delays and queues. This project was completed June 2004, with a Schedule C (Affidavit of Completion) submission on March 22, 2005.

## HIGHWAY 99: NEXUS LANE EXTENSION

The project entails the extension of the existing dedicated commuter lane on Highway 99 southbound by approximately 700 metres, to be used by pre-approved NEXUS registered drivers. The project was tendered and constructed concurrently with the 8th Avenue Improvements projects for reasons of efficiency (e.g., minimization of remobilization costs and disruption to service).

Construction is completed and the project is now in-service. This project was completed December 15, 2004 with a Schedule C (Affidavit of Completion) affirmation June 22, 2006.

The following are photographs of the project.



## HIGHWAY 15: 4TH TO 8TH AVENUE FAST TRUCK LANE

This project was added to the Program in April 2005. The approval of the environmental review (CEAA) was given by Transport Canada on March 17, 2006. The tender for the project was awarded May 2006.

The following photographs provide the rationale for why upgrading was necessary for the only remaining section of Highway 15 SHIP improvements from the US border to 8th Avenue.


The photographs below provide an indication of the extent of improvement through a series of "Before" and "After" depictions, as well as during construction.


Highway 15
(After)



4th Avenue
(Before)


4th Avenue
(After)


West Retaining Wall (During Construction)

West Retaining Wall (Completed)


Turnaround Facility behind Northbound Weigh Scale Exit



Southbound Weigh Scale Facility


Highway 15 after Southbound Weigh Scale


Separating of Trucks and General Purpose Traffic at 4th Avenue

This project was completed in May 2007, with a Schedule C (Affidavit of Completion) affirmation on June 8, 2007.

There were no communications activities for the last project completed, the Highway 15/88th Avenue (completed in the Fall of 2008).

## A YEAR END SUMMARY TABLE OF EXPENDITURES UNDER THE AGREEMENT

Please refer to Table 3 for complete details on year-end expenditures against existing contracts, as of March 31,2008 , for each of the respective projects:

- 8th Avenue Improvements - Eight contracts have been established for a total cost of $\$ 14,776,706$ out of a sharable project cost of $\$ 14,812,000$ ( $99.76 \%$ of sharable cost). A total of $\$ 14,652,808$ has been expended against these eight contracts $(99.16 \%$ of existing eight contracts).
- Highway 15: ITS/CVO Truck (FAST) Lane and NEXUS Lane - Seven contracts have been established for a total cost of $\$ 2,718,369$ out of a sharable project cost of $\$ 2,718,369$ ( $100 \%$ of sharable cost). A total of $\$ 2,718,369$ has been expended against these eight contracts ( $100 \%$ of existing eight contracts). Provincial expenditures (e.g., BC Ministry of Transportation and Infrastructure internal costs such as salaries) claims amounted to $\$ 206,627$.
- Highway 15: ITS/CVO Systems Enhancements - One contract has been established for a total cost of $\$ 261,724$ out of a sharable project cost of $\$ 261,724$ ( $100 \%$ of sharable cost). A total of $\$ 261,724$ has been expended against this one contract ( $100 \%$ of sole contract).
- Highway 15/88th Avenue Intersection Improvements - Nine contracts have been established for a total cost of $\$ 4,257,398$ out of a sharable project cost of $\$ 4,257,398$ ( $100 \%$ of sharable cost). A total of $\$ 4,257,398$ has been expended against these nine contracts ( $100 \%$ of existing nine contracts).
- Highway 13: Truck Climbing Lane - Three contracts have been established for a total cost of $\$ 143,390$ out of a sharable project cost of $\$ 143,390$ ( $100 \%$ of sharable cost $)^{2}$. A total of $\$ 134,354$ has been expended against these three contracts ( $93.70 \%$ of existing three contracts). The three contracts established are for Provincial expenditures (e.g., BC Ministry of Transportation and Infrastructure internal costs such as salaries), design fees and a Corridor Planning Study, respectively.
- Highway 11: Commercial Staging Area - Three contracts have been established for a total cost of $\$ 1,562,185$ out of a sharable project cost of $\$ 1,562,185$ ( $100 \%$ of sharable cost). A total of $\$ 1,562,184$ has been expended against these three contracts ( $100 \%$ of existing three contracts). The three contracts established are for construction activities, Provincial expenditures (e.g., BC Ministry of Transportation and Infrastructure internal costs, such as salaries) and design fees respectively. Provincial expenditures accounted for $\$ 276,289$ of claims.
- Highway 15/99: Advanced Traveler Information System - One contract has been established for a total cost of $\$ 600,000$ out of a sharable project cost of $\$ 600,000$ ( $100 \%$ of sharable cost). A total of $\$ 600,000$ has been expended against the one contract ( $100 \%$ of sole contract).
- Highway 99: Nexus Lane - Four contracts have been established for a total cost of \$96,402 out of a sharable cost of $\$ 96,402$ ( $100 \%$ of sharable cost). A total of $\$ 96,402$ has been expended against these four contracts ( $100 \%$ of existing four contracts).

[^1]- Environmental Assessment Costs - Seven contracts have been established for a total cost of $\$ 37,813$ out of a sharable project cost of $\$ 37,813$ ( $100 \%$ of sharable cost). A total of $\$ 35,915$ has been expended against these seven contracts ( $94.98 \%$ of existing contracts).
- Highway 15: Extension of FAST Truck Lane was added to the Program in April 2005. Seven contracts have been established for a total cost of \$3,886,695 out of a sharable cost of $\$ 3,886,695$ ( $100 \%$ of sharable cost). A total of $\$ 3,866,695$ has been expended against these seven contracts ( $100 \%$ of existing seven contracts).

Overall, 50 contracts have been established for a total cost of $\$ 28,207,747$ out of a total sharable projects costs of $\$ 28,207,750$ ( $100 \%$ of sharable cost). A total of $\$ 28,205,849$ has been expended against these 50 contracts ( $99.99 \%$ of existing 50 contracts). This annual report and audit constitutes the formal end to such reporting under the contribution agreement. The 2009/10 fiscal year will entail only an audit on an outstanding PAYE (accrual).

## TABLE 3 - CANADA-BRITISH COLUMBIA IMPROVEMENTS AT BORDER CROSSINGS SCHEDULE OF DETAILED EXPENDITURE CLAIMS FOR THE YEAR ENDED MARCH 31, 2009

| Project Number | Project/Claim Description | Contract Number | Eligible Costs <br> Claimed in <br> 2008/09 (\$) | Accruals (PAYE) |
| :---: | :---: | :---: | :---: | :---: |
| 1.0 | 8th Avenue Improvements (Proj. 1.1 Agreement) (\$14,652,808) |  |  |  |
|  | 1.1 Widening of 8th Avenue to four lanes from east side of Highway 99 to Highway 15, including intersection improvements. Construct a new three-lane bridge over Highway 99, remove existing bridge. Construct two roundabouts and new ramps. Extend NEXUS lane on Highway 99 from 8th Avenue to Beach Road. | 153MJ0430 | - |  |
|  | 1.1 Project Supervision for 8th Avenue | C_S_11257_11647 | - |  |
|  | 1.1 Utilities relocation and signage | 11257_11647_Util_Signage | - |  |
|  | 1.1 Pavement marking | 11257_Paving | - |  |
|  | 1.1 Videotaping of roundabout operation to be used as an inspection and monitoring tool | 11257_Vid_Mon | - |  |
|  | 1.2 Provincial expenditures | 11257-PE | - |  |
|  | 1.2 Provincial expenditures - use of variety of material types from Ministry of Transportation and Infrastructure's Strong Pit and Nursery Pit | 11257-Gravel | - |  |
|  | 1.3 Design fees - preliminary and detailed design | 11257-DF | - |  |
|  | Subtotal |  | - |  |

2.0 Highway 15 (Proj. 1.2 \& 1.5 Agreement) (\$2,718,369)
2.1 ITS/CVO Truck Lane and NEXUS Lane: construction of a combined and dedicated FAST/NEXUS/bus lane from 4th Avenue to 1st Avenue on Highway 15 diverging to three separate lanes at the Pacific Hwy, BC/Blaine, Washington border crossing.

| 2.1 | Paving | 11651_Paving | - | - |
| :--- | :--- | :--- | :--- | :--- |
| 2.1 | Project supervision | $11651 \_C M S \_F o c u s$ | - | - |
| 2.1 | Pipes reconstruction | Surrey_Pipes | - | - |
| 2.1 | Utilities and signage | $11651 \_$Util_Signage | $11651-P E$ | - |
| 2.2 | Provincial expenditures | $11651 \_$Gravel | - | - |
| 2.2 | Gravel | $11651-$ DF | - | - |
| 2.3 | Design fees | Subtotal | - | - |
|  |  |  | - | - |

3.0 Highway 15 (Proj. 1.3 Agreement) (\$261,724)
3.3 Design fees for Highway 15 ITS/CVO system enhancements. 11522-DF - -
$\square$ Subtotal - -
5.0 Highway 15/88th Avenue (Proj. 1.6 Agreement) (\$4,257,398)

| 5.1 | Highway 15/88th Avenue Intersection Improvement: | 71101MJ5000 |  | - |
| :---: | :---: | :---: | :---: | :---: |
|  | to accommodate historic and future traffic growth at this | 71101MJ5001 | - | - |
|  | congested intersection, a second through-traffic lane | 71101MJ2006 | - | - |
|  | as well as left-turn bays will be added to all approaches. | 71101MJ2011 | 648,701 | 290,495 |
| 5.1 | Project management and design | $092 C S 10988$ | - | - |
|  |  | $092 C S 13623$ | 63,418 | - |
| 5.1 | Gravel | 11648_Gravel | - | - |
| 5.1 | Day labour | 11648_Day_Labour | - | - |
| 5.1 | Utilities and materials | Util_Materials_11648 | - | - |
|  |  |  | 712,120 | 290,495 |

Table 3 cont'd

7.0 Highway 11 (Proj. 1.8 Agreement) ( $\$ 1,562,184$ )
7.1 Commercial Vehicle Staging Area: located on the Canadian side of the Huntington, BC/Sumas, WA border crossing, the staging area is expected to provide 15 pull-through spaces for semi-trailers, as well as public washrooms 11650-0001 -

| 7.2 | Provincial expenditures | $11650-\mathrm{PE}$ | - | - |
| :--- | :--- | :--- | :--- | :--- |
| 7.3 | Design fees | $11651-\mathrm{DF}$ | - | - |
|  |  | Subtotal | - | - |

8.0 Highway 15/99 (Proj. 1.9 Agreement) ( $\$ 600,000$ )
8.1 ATIS: deploy an Advanced Traveller Information System to monitor and report on border delays at Highway 99 and Highway 15.

11560-0001
-
Subtotal - -
9.0 Highway 99 (Proj. 1.4 Agreement) ( $\$ 96,402$ )

| 9.1 | NEXUS Lane Extension: extension of the existing dedicated <br> commuter lane on Highway 99 southbound by approximately |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 700 meters. | $11647 \_$Paving | - |  |
| 9.1 | Utilities and signage | $11647 \_$Util_Signage | - | - |
| 9.2 | Provincial expenditures | $11647-P E$ | - | - |
| 9.2 | Gravel | 11647_Gravel | - | - |
|  |  | Subtotal | - | - |

10.0 Environmental Assessment Costs $(\$ 37,813)$

| 10.1 Environmental Assessment costs. | Env_SHIP_BCC | - | - |
| :--- | :--- | :---: | :---: |
| 10.2 Audit | OAG_03/04 | - | - |
| 10.2 Audit | OAG_04/05 | - | - |
| 10.2 Audit | OAG_05/06 | - | - |
| 10.2 Audit | OAG_06/07 | - | - |
| 10.2 Audit | OAG_07/08 | 5,000 | - |
|  | Subtotal | 5,000 | - |

12.0 Extension of Highway 15 FAST Truck Lane ( $\$ 3,854,735$ )
12.1 Extension of Highway 15 (176th Street) FAST lane from just 11807 MJ 0000 short of 4th Avenue to 8th Avenue at the Pacific Border Crossing

|  | 11807_Gravel | - | - |
| :---: | :---: | :---: | :---: |
|  | 11807_Pave_Mark | - | - |
|  | 11807_Qual_Con | - | - |
|  | 11807_Util_Mats | - | - |
| 12.2 Provincial expenditures | 11807_PE | - | - |
| 12.3 Design and engineering services, including environmental engineering | 11807_DE | - | - |
| Subtotal |  | - | - |
|  |  | 717,120 | 290,495 |

Annual Audit of Program - The audit evaluated the claims submitted for payment under the agreement to ensure that they are free of material misstatement and that they are consistent with the eligible costs requirements of the agreement. The audit was undertaken in accordance with accepted auditing standards such as the rules of the Canadian Institute of Chartered Accountants by an independent, certified chartered accountant (CA). The audit was conducted by the Office of the Auditor General of BC.

# Report of the Auditor General of British Columbia 

To the Management Committee of the<br>Contribution Agreement Canada - British Columbia<br>"Improvements at Border Crossings"

At the request of the British Columbia Ministry of Transportation and Infrastructure on behalf of the Management Committee, I have audited the Schedule of Detailed Expenditure Claims under the Contribution Agreement Canada - British Columbia "Improvements at Border Crossings" against the eligible costs of the agreement (as defined in Section 4.02 of the agreement dated November 19, 2002) for the year ended March 31, 2009. This financial information is the responsibility of the management of the British Columbia Ministry of Transportation and Infrastructure. My responsibility is to express an opinion on this financial information based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial information is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial information. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial information.

In my opinion, this schedule presents fairly, in all material respects, the detailed expenditure claims under the Contribution Agreement Canada - British Columbia "Improvements at Border Crossings" for the year ended March 31, 2009, in accordance with the provisions of Section 4.02 of the agreement referred to above.


John Doyle, MBA, CA Auditor General

Schedule of Detailed Expenditure Claims
For the Year Ended March 31, 2009

| Project <br> Number | Project/Claim Description | Contract Number | Eligible Costs <br> Claimed in <br> $2008 / 09(\$)$ |
| :---: | :---: | :---: | :---: |

1.0 8th Avenue Improvements
2.0 Highway 15 0
3.0 Highway 15

0
5.0 Highway 15/88th Avenue

| Hwy 15/88th Ave Intersection Improvement: to accommodate historic and | 71101MJ2011 |
| :--- | :--- |
| future traffic growth at this congested intersection, a second through traffic |  |
| lane as well as left-turn bays will be added to all approaches. | 648,702 |
| Project Management and Design | Sub-total |

6.0 Highway $13 \quad 0$
7.0 Highway 110
8.0 Highway 15/99 0
9.0 Highway 99

0
10.0 Environmental Assessment Costs/Audit Audit
12.0 Extension of Highway 15 FAST Truck Lane

0

## TOTAL

Approved by


David Marr
Executive Director
Program Development and Monitoring


Assistant Deputy Minister \& Ministry's EFO
Finance and Management Services

# CONTRIBUTION AGREEMENT CANADA-BRITISH COLUMBIA "IMPROVEMENTS AT BORDER CROSSINGS" 2002/2003-2005/2006 

Notes to the Schedule of Detailed Expenditure Claims For the Year Ended March 31, 2009

## 1. Nature of the Agreement

The Government of Canada and the Province of British Columbia entered into the "Improvements at Border Crossings" Agreement, 2002-2003/2005/06 ("the Agreement") on November 19, 2002. The Agreement was amended to extend the program to March 31, 2009.

The purpose of this Agreement is to provide support to enable the Province to undertake improvements at or in the vicinity of British Columbia border crossings situated at Douglas, Pacific Highway, Huntingdon and Aldergrove through a 50/50 cost sharing arrangement for eligible costs to a maximum of $\$ 14,103,875$.

## 2. Costs

## Eligible Costs:

The Agreement specifies "Eligible Costs" in Section 4.02, as "all those costs, fees and expenditures directly incurred by the Province and directly related to the performance by the Province of its undertakings as set out in Schedule "B" hereto annexed with the exception of ineligible costs as described in Section 4.02.02."

Ineligible Costs:
The Agreement specifies "Ineligible Costs" in Section 4.02.02 as:
a) costs incurred prior to the approval of an application and after the termination date;
b) the cost of developing a proposal;
c) the cost of purchasing land, associated real estate and other fees, financing charges and interest payments on loans;
d) leasing land, buildings, equipment and other facilities;
e) provincial sales tax and the Goods and Services Tax for which the Province or a third party is eligible for a tax rebate and all other costs eligible for rebates;
f) costs which have been shared under other federal statutes or programs;
g) legal fees; and,
h) minor repairs or general maintenance of a roadway and related structures.

## 3. Basis of Accounting and Accounting Policies

The Schedule of Detailed Expenditure Claims has been prepared in accordance with Canadian generally accepted accounting principles. Expenditures are recorded at cost on an accrual basis. Costs are net of any recoveries and GST.

The Eligible Costs Claimed in 2008/2009 represents the actual value of claims submitted to the Federal Government during the 2008/2009 fiscal year. This may include eligible expenses incurred in fiscal 2007/2008 that were submitted for reimbursement during fiscal 2008/2009.


[^0]:    ${ }^{1}$ It should be noted that the costs and expenditures referenced in this document relate to eligible and sharable costs between Transport Canada and the Province, unless otherwise noted. For instance, the total cost of the FAST/NEXUS project is $\$ 3.336$ million but only $\$ 2.718$ million is eligible for cost-sharing.

[^1]:    ${ }^{2}$ The Province and Canada mutually agreed to not proceed with the Highway 13 climbing lane, but rather to transfer the remaining construction-based funding against incremental eligible costs on Highway 15/88th Avenue and Highway 15: 4th to 8th Avenue FAST Truck lane extension. This fact is reflected in "Schedule B" revisions of this report (Revision 16).

