



The **BEST** example of
how a public/private
PARTNERSHIP should
work.

*Reg Alcock, A National Highway Renewal Strategy,
Report of the Standing Committee on Transport,
February 1997.*



Right this way

Cobequid Pass

Amherst



The Overview

- 45 kilometres between Masstown and Thomson Station
- Twinned, four-lane
- Wide median (22.6 metres)
- Nine kilometres shorter than existing route
- 16 minutes faster
- 20-month construction schedule
- On schedule for opening December 1997
- 110 km/hour

Financing

- Construction cost: \$112.9 million
- Provincial contribution: \$27.5 million
- Federal contribution: \$27.5 million
- \$5.5 million in subordinated notes invested from the provincial pension fund
- \$60.9 million provided by the sale of bonds to private investors underwritten by Newcourt Credit Group of Toronto
- Toll revenues over 30 years will provide the investors a return; pay for toll operations; cover the \$650,000 for annual maintenance provided by the Nova Scotia Department of Transportation and Public Works; and contribute to long-term maintenance.
- The money borrowed from the private sector by the Highway 104 Western Alignment Corporation through Newcourt Credit Group is borrowed on the security of tolls and not the financial guarantees of the province.
- \$3 per car; \$2 per axle for trucks over five tonnes; \$4 per recreational vehicle.

Oxford

Springhill

Thomson Station

204

Wentworth

CUMBERLAND
COLCHESTER



This project has been lauded nationally and internationally for its innovative financing and risk-sharing design. *Privatization International Infrastructure Yearbook*, London, England, called it *North American Deal of the Year*, and articles praising the financing ran in the publications *Infrastructure Finance*, and *Project and Trade Finance*.

Economy



Londonderry



Glenholme

Masstown

Truro

Cobequid Pass Location

- Alignment location
- Interchange locations
- ⓧ Toll Plaza location

The Highway 104 Western Alignment Corporation:

A key player in an innovative partnership.

The Highway 104 Western Alignment Corporation is an entity unique to infrastructure financing in Canada. Neither a Crown corporation, nor an agent of the Crown, the 104 Corporation's sole purpose is managing the financing, design, construction, operation and maintenance of the 104 Trans Canada Highway in north-western Nova Scotia. Formerly called the Western Alignment, now Cobequid Pass, this highway is one of Canada's first to be built through public-private partnering and will be a toll road.

The 104 Corporation has the mandate to borrow money to finance the highway and to enforce toll collection. Its only source of revenue will be the tolls of the highway, used to repay investors and fund annual and long term maintenance. With the funding for Cobequid Pass flowing through the 104 Corporation alone, the highway's debt does not belong to the province of Nova Scotia, nor does the province guarantee the debt. However, because public monies are involved in the highway financing, and because the 104 Corporation is wholly owned by the Crown, its operations are scrutinized annually by the Auditor General.

The financing for this project (outlined on the inside front cover), has been recognized internationally for its innovation. In awarding the project North American Deal of the Year honors, editors at the British magazine *Privatization International Infrastructure Yearbook* wrote, "the first-Canadian public-private partnership to meaningfully balance risks and rewards between government, the contractor/operator and the lenders."

The Safety Concern

Safety is the reason Cobequid Pass is a provincial priority when money is scarce for large capital undertakings. Its location

defines both its significance and its hazard: As the gateway to Nova Scotia, it serves tourists and local travellers, as well as transporting goods and services west to major North American markets, and east to international shipping lines.

The existing two-lane highway has the highest percentage of trucks travelling on it in the province: on any given day, one in four vehicles on this road is a truck. The mix of vehicles — high-speed transport trucks heading to market and low-speed local traffic turning on and off the road — is an ongoing danger. More than 50 fatalities in the past decade make an intolerable statistic, and one the new highway is designed to change.

The Partnership Solution

In 1993 the province had one of the highest per capita public debts and deficits in Canada, and the federal government was reining in its spending. Both circumstances eliminated traditional options for the badly needed highway: capital borrowing and federal cost-sharing.

A public-private partnership allowed the government to make a financial contribution it could afford. A further benefit of a partnership was timing. With private investors, the funding was in place at start-up, allowing the highway to be built in 20 months with economies of scale efficiencies. Because safety was the major concern, an accelerated construction schedule became important.

But before moving toward a business arrangement for the new highway, the government laid out two critical and

fundamental objectives:

- 1) the title of the highway must be held by the province; and
- 2) financing would be repaid only through toll revenue and *without* guarantees of the debt by the province.

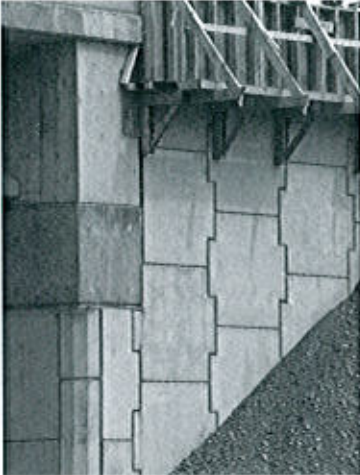
These criteria resulted in the creation of the Highway 104 Western Alignment Corporation by an Act of the Provincial Legislature in 1995. The 104 Corporation, operating independent of government, permits non-recourse financing, meaning private investors have no claim on government assets or money should toll revenue fail to provide a return on investment. The risk for low traffic volume and resulting revenue flow falls to the private investors. The private partner has also assumed risk for cost overruns on construction because of such factors as design flaws or interruptions due to weather.

These were all the result of intense negotiations that determined in detail how the costs, risks, and rewards of a project are shared — the essential nature of a public-private partnership. The public-private partnership now constructing the new highway was borne out of extensive and often tough negotiations between the provincial government and the selected contractor, Atlantic Highways Corporation.

With the pressing need for a safer highway, and at the same time, pressing provincial budget concerns, the answer was public-private partnering. The Highway 104 Western Alignment Corporation is integral to the success of this project, and a key player in this innovative public-private partnership.

"Highway 104 is the first Canadian toll-road to be part-financed in the capital markets, and is the first to be financed without any guarantees from Government." *Project & Trade Finance Magazine*, November 1996.

Administration and Accountability



An abutment under construction on one of the highway's overpasses.

Mid-page, opposite, subcontracts in engineering, design and construction worth a total of \$96 million were awarded as of March 31, 1997, most to regional firms.

Administration

The administration of the Highway 104 Western Alignment Corporation is conducted on several fronts.

The construction is monitored and reviewed daily by the 104 Corporation's Project Manager on site. An Administrative Manager oversees business affairs and financial transactions, and other professional services are contracted. The province, as owner, provides advice, experience and support through the Department of Transportation and Public Works.

One of the 104 Corporation's primary responsibilities is the overall administration of the agreement between the Corporation, the partners, the trustee - Montreal Trust, and the bondholders representative - Newcourt Credit Group. This includes ensuring payment directives are issued, and that parties to the agreements are paid in a timely fashion after due diligence.

Accountability

The financial activities of the Corporation are carefully scrutinized. Invoices for construction are paid only after the Administrative Manager receives confirmation from the Independent Engineer on site that the work is completed according to the contracted specifications for design and quality. The Independent Engineer is required to certify payments.

Because Newcourt Credit Group must ensure its bondholders investments are handled responsibly, they also review each transaction before payment. Montreal Trust again examines payments before releasing funds according to the strict procedures required of all trust companies and as detailed in the Construction Trustee agreement.

The Deputy Minister of the Department of Transportation and Public Works receives detailed reports of the project's progress from the Corporation's Administrative Manager, and he informs the Minister of Transportation and Public Works as the owner. The Minister is well

equipped to respond to questions from the public, Cabinet, the Priorities and Planning Committee, Members of the Legislature and the media. The Public Affairs Division of the Department of Transportation and Public Works, and the Communications Co-ordinator contracted by the 104 Corporation are also available to answer questions.

The 104 Corporation's activities are reviewed annually by the province's Auditor General.

There have been two requests for contract details under the Freedom of Information and Protection of Privacy Act in the past year. The Highway 104 Western Alignment Corporation did not object to the release of either document. The Construction Specifications were released on April 23, 1997 and the Omnibus Agreement was released June 11, 1997.

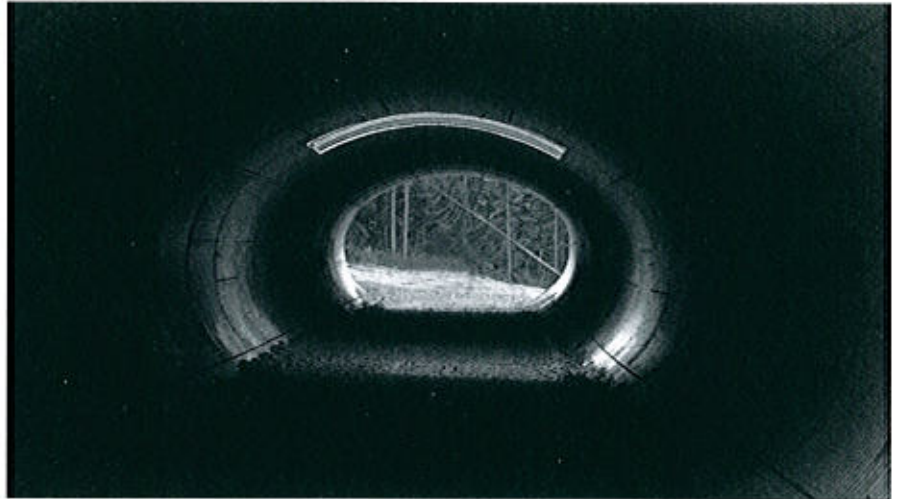


The Committees

The Highway 104 Western Alignment Corporation is represented on three committees reviewing the highway's progress: the Project Advisory Committee, the Department of Transportation and Public Works Steering Committee, and the Communications Advisory Team.

Project Advisory Committee

The PAC maintains good working relations among all parties, and ensures the project is executed according to the specifications of the contract. The contractor, sub-contractors, the Department of Transportation and Public Works and representatives from the Corporation meet monthly to review all aspects of the project and discuss solutions to problems. A sub-committee is responsible for dispute resolution.



Since construction started on April 1, 1996, the Corporation has agreed to two minor changes in construction specifications. Additional funds of under \$1,000 were released for an archeological dig that subsequently uncovered nothing of significance, and Right of Way modifications were allowed to accommodate a minor change in the design of bridge approaches.

A culvert, complete with skylight, was constructed under the highway for wildlife passage at a natural crossing.

Steering Committee

The Departmental Steering Committee ensures the interests of the province are represented in the partnership. Many people who sit on this committee were part of the government's original negotiation team.

Communications Advisory Team

Communications and media issues are discussed monthly by this committee, made up of representatives from all partners. (The province is represented on a fourth committee monitoring the project, the Community Liaison Committee.)

The contractor, sub-contractors, the Department of Transportation and Public Works and representatives from the Corporation meet monthly to review all aspects of the project and discuss solutions to problems.



Construction



Top photo: This project is one of the first in Nova Scotia to use steel arches in bridge construction. Equally as strong as conventional bridges, the steel arch provides significant cost savings.

Bottom photo: The toll plaza under construction.

Mid-page, opposite, workers erect concrete barrier walls on a bridge deck. The highway has six major bridges.

The Highway 104 Western Alignment Corporation contracted with the successful bidder, Atlantic Highways Corporation (AHC) for the highway design and construction. AHC is a subsidiary of Canadian Highways International Corporation (CHIC).

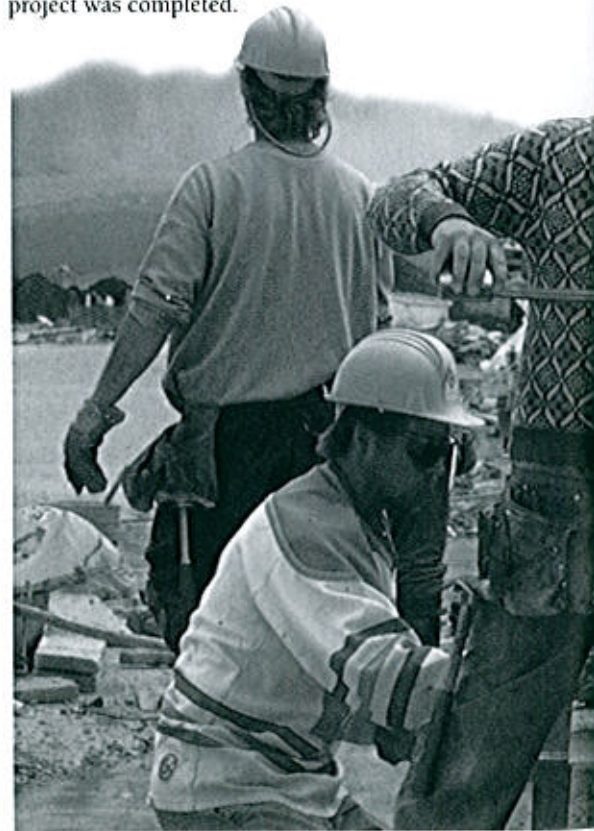
The major subcontractors employed by AHC are:

- Nova Construction and Tidewater Construction for highway construction;
- The BFC Civil Company of Canada for structures;
- and SIRIT Corporation for tolling.

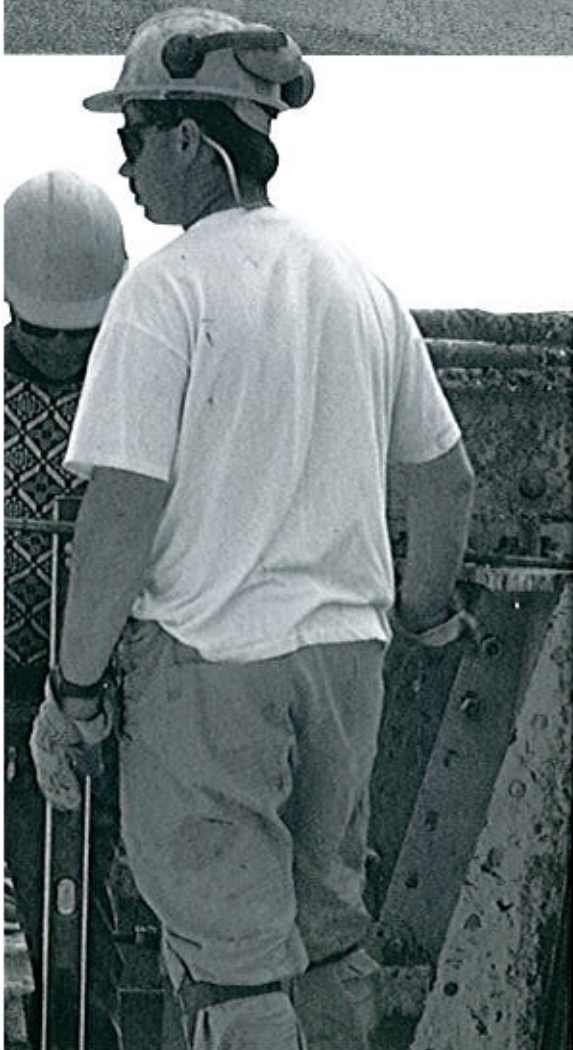
The operation of the tolling facility has been contracted with Atlantic Highways Management Corporation, a subsidiary of AHC, and annual maintenance will be provided through a contract with the Department of Transportation and Public Works.

In a national industry publication, the Highway 104 project was called the fastest ever to be designed and constructed in this country. Given the highway's profile, that comment is significant:

- Five full interchanges with grade separations
 - Six major bridges
 - 22.6 metre wide median with 16 kilometres of guardrails
 - Five large tunnels under the road for access to land parcels, snowmobile trails and wildlife passages
 - Seven stream crossings with large concrete box culverts
 - The construction of 18 kilometres of access road
 - A toll plaza with an automated transponder toll system for frequent users
 - 4.7 million cubic metres of fill were moved within the site
 - An additional 0.52 million cubic metres of earth were borrowed for the project
 - 0.90 million cubic metres of rock were blasted
 - 347,000 tonnes of asphalt will be laid.
- As of March 31, 1997, 75 per cent of the project was completed.



Industrial Benefits



Construction on Cobequid Pass is pumping millions of dollars into Nova Scotia's economy, most significantly for local communities in Colchester and Cumberland Counties.

During peak construction, more than 400 people are employed on the project in manufacturing, construction and technical sectors. Most are from Colchester and Cumberland Counties while most others from outside the two counties are also Nova Scotian.

The number of locally owned and operated trucks in the coming construction season employed on the site from Colchester and Cumberland Counties is expected to reach 65. Subcontracts in engineering, design and construction worth a total of \$96 million have been awarded as of March 31, 1997, the majority going to regional firms. \$46 million has been committed to third party suppliers. Ninety-five per cent of these suppliers are Maritime owned and operated.

A list of suppliers and sub-contractors is available from the 104 Corporation.



Top photo: A series of silt ponds near Cumberland Brook is just one of the environmental measures taken on this project.

Environmental concerns were at the forefront of discussions from the project's inception.

Bottom photo: Truck wetting down the road surface during road construction.

Top left photo: Loaders take fill from a stock pile. 0.52 million cubic metres of earth were borrowed from places such as the Westchester Mountain to lay the highway's roadbed. 4.7 million metres of fill were moved.

Auditor's Report

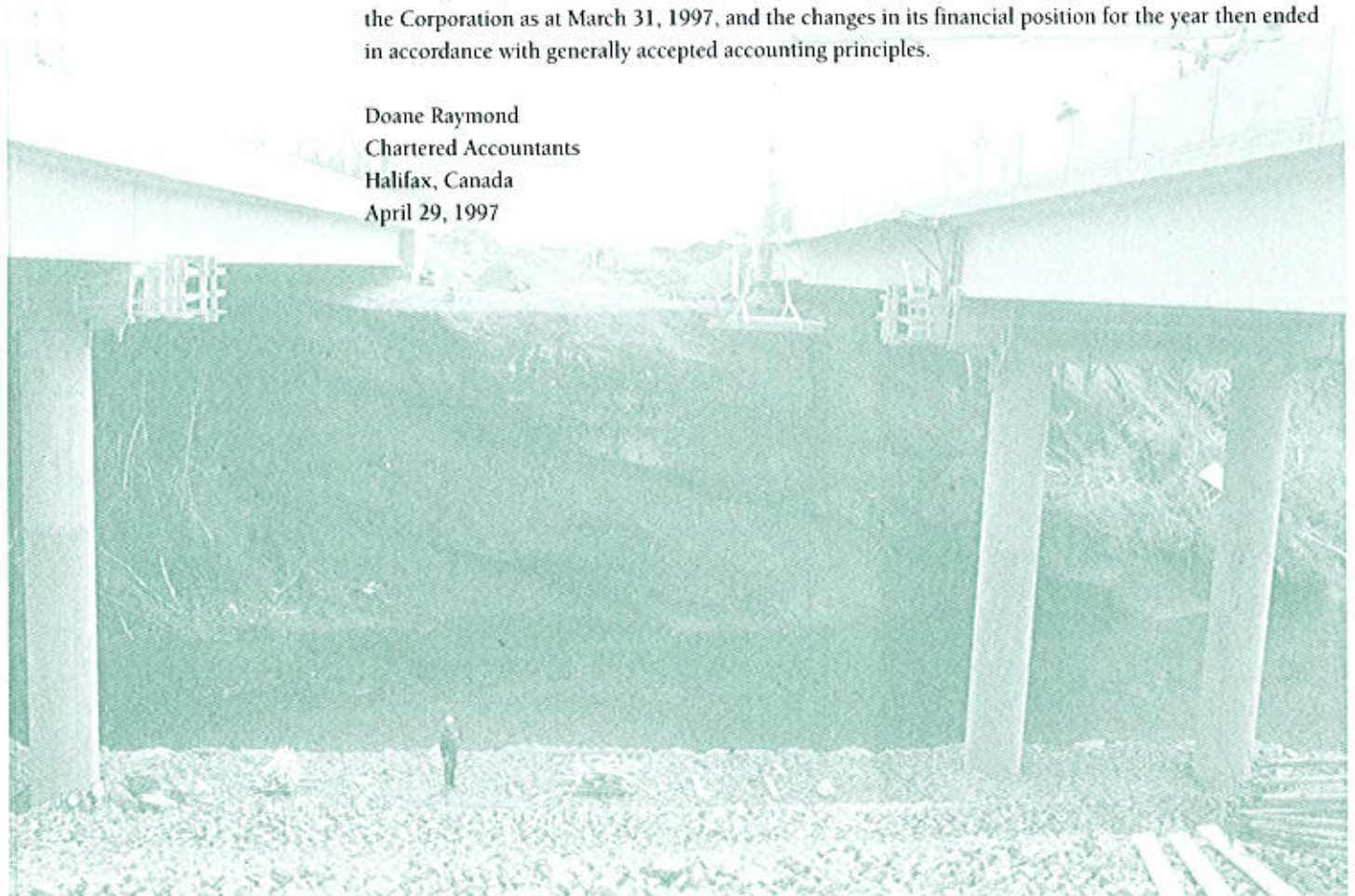
To the Shareholder of Highway 104
Western Alignment Corporation

We have audited the balance sheet of Highway 104 Western Alignment Corporation as of March 31, 1997, and statement of changes in financial position for the year then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 1997, and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Doane Raymond
Chartered Accountants
Halifax, Canada
April 29, 1997



Assets

Cash and short term investments, in trust (Note 3)	\$ 8,102,788
Interest receivable	196,962
Loan receivable (Note 4)	3,507,612
Facility under construction (Note 2)	84,761,733
Deferred costs (Note 5)	<u>900,978</u>
	\$ <u>97,470,073</u>

**Highway 104 Western
Alignment Corporation
Balance Sheet***March 31, 1997***Liabilities**

Payables and accruals	\$ 1,096,616
Long term debt (Note 6)	67,373,456
Deferred contributions (Note 2)	<u>29,000,000</u>
	<u>97,470,072</u>

Shareholders' Equity

Capital stock, one no par value share issued and outstanding in favour of the Province of Nova Scotia	<u>1</u>
	\$ <u>97,470,073</u>

Commitments and contractual obligations (Note 8)

Cash derived from (applied to)

Operating

Change in non-cash operating working capital (Note 7)	\$ (2,607,958)
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Financing

Issue of common share	1
Issue of long term debt	67,373,456
Provincial contributions	<u>29,000,000</u>
	<u>96,373,457</u>

Investing

Facility under construction	(84,761,733)
Deferred costs - financing fees	(760,368)
Deferred costs - start up	<u>(140,610)</u>
	<u>(85,662,711)</u>

Net increase in cash and investments, in trust, end of year	\$ <u>8,102,788</u>
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**Highway 104 Western
Alignment Corporation
Statement of Changes in
Financial Position***Year Ended March 31, 1997*

See accompanying notes to the financial statements.

Highway 104 Western Alignment Corporation Notes to the Financial Statements

March 31, 1997

1. Nature of operations

The Corporation has been established for the purpose of financing, design, construction, operation and maintenance of the Facility consisting mainly of a 45 km stretch of highway (referred to as the Highway 104 Western Alignment) between Masstown and Thomson Station in the Counties of Colchester and Cumberland, Nova Scotia.

2. Summary of significant accounting policies

Pre-operating period

The pre-operating period is the twenty month construction period commencing April 1, 1996 to the date of acceptance estimated to be November 1997.

Facility under construction

Facility under construction includes certified progress payments for the Facility to the contractor, independent engineer fees, professional fees and interest costs incurred during the pre-operating period. To March 31, 1997, \$4,681,498 in interest costs have been capitalized to Facility under construction.

Deferred costs - start up

Administrative expenses incurred during the pre-operating period have been deferred as start-up costs and will be amortized to operations, on a pro-rata basis, over a five year period commencing in the first year of operations.

Deferred costs - financing fee

Financing, commitment and bondholder representative fees related to the establishment and placement of the senior and junior toll revenue bonds have been deferred and will be amortized to operations over the term of the related bond debt.

Deferred contribution

Government assistance provided by the Province of Nova Scotia has been recorded as a deferred contribution and will be amortized to operations over thirty years commencing in the first year of operations.

3. Cash and short term investments, in trust

(i)	Construction Trust Account	Senior Debt Reserve Account	Total
Cash	\$ 13,588	\$ 4,488	\$ 18,076
Investments, at cost	7,588,910	495,802	8,084,712
	\$7,602,498	\$500,290	\$8,102,788

(i) Investments are recorded at cost, have a weighted average term of 2.14 months to maturity and a weighted average interest rate of 4.15%.

(ii) The construction trust account includes funds held in trust, in accordance with the Construction Trust Agreement, for the benefit of the Corporation and are eligible for withdrawal based on approved payment directives and certified progress payment requests. At the date of acceptance, any residual funds will be transferred to a project account.

(iii) The senior debt reserve fund has been established to provide a reserve of funds to be available for payments as they come due for the senior toll revenue bonds.

4. Loan receivable

Mobilization loan advanced to Atlantic Highway Corporation, non-interest bearing and repayable at a rate of 10% of certified progress payments.

5. Deferred costs

Start up	\$140,610
Financing fees	760,368
	<u>\$900,978</u>

6. Long term debt

Senior toll revenue bonds bearing interest at 10.13%, maturing March 31, 2026, repayable in partial interest payments from June 30, 1998 until March 31, 2006 and then 80 equal blended quarterly payments of interest and principal of \$44,141. Interest from the date of issue has been capitalized as part of the principal and will continue to be capitalized until June 30, 1998. As security, the Corporation has provided an assignment of all the present and future property and assets, including rights to operate the Facility, a security interest in the Debt Service Reserve Account and the Major Maintenance Reserve Fund. \$56,364,537

Junior toll revenue bonds bearing interest at 10.76%, maturing March 31, 2011, repayable in interest payments only from June 30, 1998 until March 31, 2001 and then 40 equal blended quarterly payments of principal and interest of \$50,848. Interest from the date of issue has been capitalized as part of the principal and will continue to be capitalized until June 30, 1998. As security, the Corporation has assigned a second charge security interest in all security pledged to senior toll revenue bondholders. 11,008,919
\$67,373,456

7. Change in non-cash operating working capital

Interest receivable	\$ (196,962)
Loan receivable	(3,507,612)
Payables and accruals	1,096,616
	<u>\$ (2,607,958)</u>

8. Commitments and contractual obligations

(i) Commitments

The Corporation has entered into a Design Build Agreement with Atlantic Highways Corporation in the amount of \$112,921,455 to construct the Highway 104 Alignment. As of March 31, 1997, \$78,869,288 in progress payments have been paid from the Construction Trust Account.

The Agreement also provides for a \$4,250,000 contingency fund which will be made available by the Province to the Corporation to finance change orders certified under specified events as outlined in the Omnibus Agreement. At March 31, 1997, no change orders have been approved that would result in claims on this contingency fund.

(ii) Contractual obligations

The Corporation has entered into the following agreements to finance, design, construct, operate and maintain the Highway 104 Western Alignment:

Omnibus Agreement

Agreement dated April 1, 1996, between the Corporation, the Contractor, the Operator and the Province of Nova Scotia to design, finance, construct, operate and maintain the Highway 104 Western Alignment. This agreement acknowledges that the Corporation has entered into a Design Build Agreement and an Operating Agreement to fulfill its obligations to the Province.

Under this agreement, the Province of Nova Scotia retains ownership of the Facility, however, the Corporation is granted the right to operate and collect tolls for a thirty year period, at which time this right will revert back to the Province.

The Province will contribute \$55,000,000 payable as follows: the first \$29,000,000 available April 1, 1996 was released for payment of progress payments; and, the second \$26,000,000 will be available after April 15, 1998 and will be paid to the Corporation only for purposes of repaying the Credit Facility detailed in Note 9 or for paying costs of construction.

Design Build Contract

The Corporation has entered into a fixed price contract with Atlantic Highways Corporation (the Contractor) to complete the design and construction of the Facility by November 30, 1997, the projected completion date. Pursuant to this Agreement, the Contractor is entitled to monthly progress payments provided the work has been certified by the Independent Engineer.

Operating Agreement

Agreement dated May 22, 1996 between the Corporation and Atlantic Highways Management Corporation (the Operator) whereby the Operator is required to operate the Facility which includes the toll collection system, toll plaza and the administration building.

Operator compensation is based on the annual operating budget plus a variable fee, subject to adjustment under certain conditions, equal to 10% of the total annual budget.

Major Maintenance Reserve Fund Agreement

Agreement between the Corporation, the Trustee and the Bondholders' Representative to provide for the major maintenance work required during the operating period of the Facility. The Agreement requires the Corporation, on an annual basis, to engage an independent engineer to report on all major maintenance work to be completed in the upcoming year, as well as a major maintenance budget to determine the required annual amount to be deposited in the Major Maintenance Trust Account.

Annual Roadway Maintenance Agreement

Five year agreement between the Corporation and the Department of Transportation and Public Works of the Province of Nova Scotia to provide annual roadway maintenance services for an annual fee of \$650,000 commencing April 1, 1998 and subsequently adjusted thereafter for inflation.

9. Credit facility

The Corporation has established a \$26,000,000 line of credit with the Province of Nova Scotia to be repaid on or before April 15, 1998, secured by an assignment of the Provincial contribution receivable on that date. The line of credit will be interest bearing and as of March 31, 1997, no funds were advanced on this line of credit.

10. Fair values of financial instruments

Financial assets

The fair values of cash, short term investments and receivables approximate their carrying amounts because of their short term to maturity.

Financial liabilities

The fair values of payables and accruals approximate their carrying amounts because of their short term to maturity. The fair value of long term debt has been estimated to be \$69,923,722 based on discounted future cash flows at a rate currently offered for bonds of similar credit quality and period to maturity. The carrying value of long term debt has not been adjusted as the Corporation intends to settle the debt on maturity.

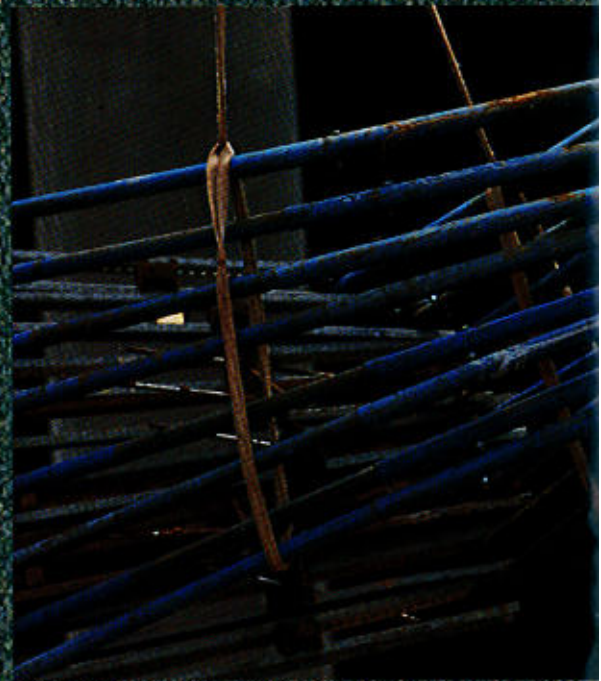
The Partners

- Atlantic Highways Corporation (AHC), a subsidiary of Canadian Highways International Corporation (CHIC) of Mississauga, Ontario, is the major contractor.
- AHC has involved three major Nova Scotia sub-contractors: Nova Construction, Tidewater Construction, and the BFC Civil Company of Canada.
- CHIC has four equity partners: Monenco-Agra Inc., Dufferin Construction, Armbro Holdings Inc., The BFC Civil Co. of Canada.
- Atlantic Highways Management Corporation (AHMC) is a subsidiary of AHC and is subcontracted by the Highway 104 Western Alignment Corporation to manage the toll operations.
- Newcourt Credit Group is a non-bank lending institution in Toronto, and is underwriting the toll revenue bonds for the private financing.
- The Highway 104 Western Alignment Corporation is a private company owned by the provincial government. It was created by the Highway 104 Western Alignment Act (and incorporated in July of 1995) to manage the financing, design, construction, operation and maintenance of the project. In this way, the financial obligations of the highway are separate from the province's debt. This is termed *non recourse* financing because the private investors have no recourse to government assets or money should toll revenue fail to provide them a return on their investment. The financial transactions of the Corporation are handled through the construction trustee, Montreal Trust, and Newcourt Credit Group has the right to review these transactions.
- McCormick Rankin is the independent engineer. Before the Highway 104 Western Alignment Corporation can authorize payment, the independent engineer ensures work has been done according to the specifications in the contract.
- The Department of Transportation and Public Works owns the highway. The operation of the highway is turned over to the province when the bondholders are repaid in 30 years. (The contracts stipulate that the highway must be in excellent condition.) Until that time the Highway 104 Western Alignment Corporation is managing the highway and sub-contracting the toll operations to AHMC.
- The federal contribution to this project is funded by the Strategic Highway Improvement Program (SHIP) through Transport Canada.



BFC Civil





HIGHWAY 104

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WESTERN ALIGNMENT
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