Alaska Highway Pipeline Project Fiscal Estimates

Submitted to:
Perry Diamond
Energy, Mines and Resources
Government of Yukon
Box 2703 Whitehorse, Yukon Y1A 2C6

Prepared by:
Paul Kishchuk, MA
Vector-Research
Box 31126 Whitehorse, Yukon Y1A 5P7
paul@vectorresearch.ca
t: 867.668.3164
f: 867.668.3124
c: 867.333.2910

August 12, 2005

Alaska Highway Pipeline Project Fiscal Estimates

Contents

1. Background

Schedule 1of the *Northern Pipeline Act*, an "Agreement Between Canada and the United States of America on Principles Applicable to a Northern Natural Gas Pipeline", outlines several international considerations for construction of the Alaska Highway Pipeline Project (AHPP). A key consideration for the Government of Yukon is outlined in Section 5 – Taxation and Provincial Undertakings – which limits the amount of revenues that may be raised via direct tax measures "having incidence exclusively, or virtually exclusively, on the Pipeline."[1]

In the Agreement, the revenue so raised is termed *Yukon Property Tax* and is capped at $30 million per year indexed to price inflation from 1983. Yukon Energy, Mines and Resources has estimated the inflation-adjusted value of the Yukon Property Tax cap to be worth approximately $50 million per year in 2004 dollars. The revenue cap is intended to prevent discriminatory taxation along the Yukon portion of the pipeline[2] and to provide monies for the mitigation of "…indirect socio-economic costs in the Yukon Territory…".[3]

While the *Northern Pipeline Act* limits the annual amount of revenue which may be raised via taxes with exclusive (or near-exclusive) incidence on the pipeline, no such limit is spelled out for revenues raised via non-exclusive or, general-incidence tax bases. Thus, with its powers of direct taxation, the Government of Yukon may also experience an increase in revenues derived from general-incidence direct tax bases such as income tax as a result of construction and operation of an Alaska Highway natural gas pipeline.[4]

Interest in the construction of an Alaska Highway Pipeline Project is continuing to gather momentum. While significant work towards the estimation of the value of the Yukon Property Tax has been completed, an estimation of the revenue impacts deriving from non-exclusive tax bases associated with the Yukon portion of the Alaska Highway Pipeline Project has not yet been made. Accordingly, the primary purpose of this project is to calculate the approximate value of revenues deriving from general-incidence tax bases in the Yukon attributable to the construction and operation of the Alaska

[1] Schedule 1, subparagraph 5.(b)(i), *Northern Pipeline Act,* R.S.C. 1985, c. N-26.

[2] Notwithstanding that the Yukon Property Tax provision is to terminate on December 31, 2008, provisions of the *National Energy Board Act* with a similar intent of preventing discriminatory taxation of pipeline interests will come into play at that time.

[3] Schedule 1, subparagraph 5.(b)(ix) *Northern Pipeline Act,* R.S.C. 1985, c. N-26.

[4] Note that while the additional direct tax revenues will have material formula financing implications for the Government of Yukon, the assessment of those implications is not within the scope of the analysis which follows.

Highway Pipeline Project. A secondary purpose of the project is to attempt to assess the potential revenues from the same general-incidence tax bases using British Columbia and Alberta tax rates.

2. Yukon Tax Revenue Scope

Terminology

The terminology used to describe tax-related concepts is highly technical. To facilitate the understanding of the analysis which follows, the key terms used in the analysis are briefly described below.

In general terms, to assess the *incidence* of a tax is to identify who bears the burden of the tax, that is, who ultimately ends up paying the tax. For example, the burden of personal income taxes, which are levied against the income of individuals, is borne by individual taxpayers who are required to pay an assessment based on their taxable income. Since individual taxpayers cannot pass on the burden of the income tax to another taxpayer (they cannot "shift" the burden of the tax), they bear the entire burden of the tax.

Now consider, in contrast, corporations who are also required to pay assessments based on their taxable incomes. By increasing the prices charged for the goods and services they produce, a corporation may pass on some portion of the corporate tax. Thus, corporations are able to shift some portion of the burden of the tax to another taxpayer. By shifting the burden of the tax, a corporation may share the incidence of the tax with others.

A *general-incidence* tax satisfies the taxation principle of horizontal equity, namely that taxpayers in similar situations pay similar amounts of taxes. For example, in the context of personal income tax, this means that taxpayers with the same taxable income are required to pay the same amount of personal income tax. In the context of corporate income tax, horizontal equity implies that corporations with similar abilities to shift the burden of a tax will pay similar amounts of taxes.

A tax which features *exclusive incidence* does not satisfy the principle of horizontal equity. Taxpayers in similar situations do not pay similar amounts of taxes. Such discriminatory taxation is achieved through the singling out of a certain class of taxpayer and applying a differential tax rate. Thus, the key feature of a tax with exclusive incidence is not whether its burden may be shifted, but instead whether it violates the principle of horizontal equity to some extent. In Canada, taxes with exclusive incidence are the exception rather than the rule.

Under section 18 of the *Yukon Act,* the Government of Yukon may levy *direct taxes* – a tax imposed on the individual expected to bear the burden of the tax (e.g., income tax). The Yukon, like Canada's provinces and other territories, is restricted from levying *indirect taxes* – a tax imposed on the producer of a good or services that is expected to be borne by the final consumer of the good or service rather than the producer (e.g., import tariffs). According to the division of powers outlined in Canada's constitution, only the federal government may levy indirect taxes in addition to direct taxes. Thus, possessing only the powers of direct taxation, tax revenues which accrue to the Yukon as a result of the construction and operation of the Alaska Highway natural gas pipeline must necessarily derive from taxes which are direct in nature.

A *tax base* is the aggregate value of income, goods, services or property on which a given tax rate is applied. For example, the tax base for personal income tax is the sum of the taxable incomes of all individual taxpayers. Alternatively, consider the property tax base which is the summed value of all land and improvements within the boundaries of a given property taxation authority. Note that the same income, good, service or property can be part of more than one tax base. For example, in the Yukon, gasoline is part of the tax base for the federal excise tax on fuel, the federal goods and services tax as well as territorial fuel oil tax.

A tax base is said to be *occupied* when a government with legitimate taxation authority delineates the tax base and specifies the applicable tax rate (or, rates, as the case may be) in a taxation statute. For example, the parameters of the personal income tax base occupied by the Government of Yukon and the applicable income tax rates are outlined in the Yukon *Income Tax Act.* A tax base is considered to be *unoccupied* when precedent, usually in the form of an example of occupation in another jurisdiction, suggests that a similar tax base could be occupied through the imposition of a similar taxation statute.

Direct Tax Base Identification

The tax bases currently occupied by the Government of Yukon which could potentially be sources of increased revenues with the go-ahead of construction and operation of an Alaska Highway natural gas pipeline are shown in Table 1 below.[5] All tax bases appearing in the table are direct in nature as the Government of Yukon may levy only direct taxes. Taxes which feature horizontal equity – general-incidence taxes – may be assessed against any one of the tax bases identified.

[5] Note that gas royalties do not appear on the list of direct taxes as they are technically a type of r*esource rent* rather than a direct tax. A resource rent is a payment, usually based on production volume, made to the owner of a natural resource (e.g., citizens of the jurisdiction from within which the resource is located) in exchange for the right to extract the resource. As the transport of natural gas through a pipeline does not constitute production, a resource royalty is not applicable.

Table 1: Government of Yukon Direct Tax Bases – Occupied and Unoccupied

Tax Base	Occupied	Unoccupied	Taxation Statute
Fuel oil – diesel	X		*Fuel Oil Tax Act*
Fuel oil – gasoline	X		*Fuel Oil Tax Act*
Fuel oil – aviation	X		*Fuel Oil Tax Act*
Fuel oil – liquefied petroleum[1]	X		*Fuel Oil Tax Act*
Income – personal	X		*Income Tax Act*
Income – corporate	X		*Income Tax Act*
Insurance premium	X		*Insurance Premium Tax Act*
Liquor	X		*Liquor Tax Act*
Payroll – workers' compensation	X		*Workers' Compensation Act*
Real property	X		*Assessment and Taxation*
Tobacco	X		*Tobacco Tax Act*
Corporate capital[2]		X	n/a
General sales[3]		X	n/a
Natural gas[4]		X	n/a
Payroll – other[5]		X	n/a

[1] Liquefied petroleum gas (LPG) is comprised of propane (C_3H_8) and in some areas, butane (C_4H_{10}). Under current provisions of the *Fuel Oil Tax Act,* LPG is exempt from fuel oil tax.
[2] In 2004, capital taxes were levied against the "paid-up" capital of corporations by the governments of Canada, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and Saskatchewan.
[3] General sales taxes are levied by the federal government and in all provincial jurisdictions except Alberta. None of the three northern territories (Yukon, Northwest Territories, Nunavut) levy a general sales tax.
[4] The Yukon *Fuel Oil Tax Act* defines fuel oil to mean the liquid derived from petroleum or natural gas (Section 1, *Fuel Oil Tax Act,* R.S.Y. 2002, c. 97). As such, the *Fuel Oil Tax Act* would not appear to be applicable to natural gas in a gaseous state.
[5] Examples of payroll taxes other than workers' compensation premiums levied on employers include federal Canada Pension Plan premiums, the Health and Post-secondary Education payroll tax in Newfoundland and Labrador, the Health Services Fund tax in Quebec and the employer health tax in Ontario and Manitoba. Employees in the Northwest Territories and Nunavut are charged a payroll tax that is refundable to individuals resident in either territory but is not refundable to individuals indicating residence in other jurisdictions.

A Note on the Taxpayer Protection Act

The primary purpose of the Yukon's *Taxpayer Protection Act,* in force since 1993, is to prevent the creation of accumulated deficits (i.e., debt) by the Government of Yukon. Under provisions of the *Taxpayer Protection Act,* for a sitting government to create a financial debt is to trigger a general election. The *Taxpayer Protection Act* also speaks to changes in tax law, specifically that:

> *A bill to impose a new tax, or to increase the rate of tax imposed by the Income Tax Act or the Fuel Oil Tax Act, must not be presented to the Legislative Assembly unless the government first puts the question of proceeding with such a bill to the electors of*

> *the Yukon in a referendum and the electors approve the imposition of the new tax or the increase in the rate of tax.*[6]

With regard to tax bases currently unoccupied by the Government of Yukon (e.g., corporate capital, general sales and natural gas) the future occupation of those tax bases would appear to require the conduct of a referendum to approve occupation of the tax base. The same provision would presumably also apply to the future raising of revenues via the taxation of liquefied petroleum gas (propane/butane) which is exempt from tax under the *Fuel Oil Tax Act.*

3. Scale of Yukon Tax Revenues

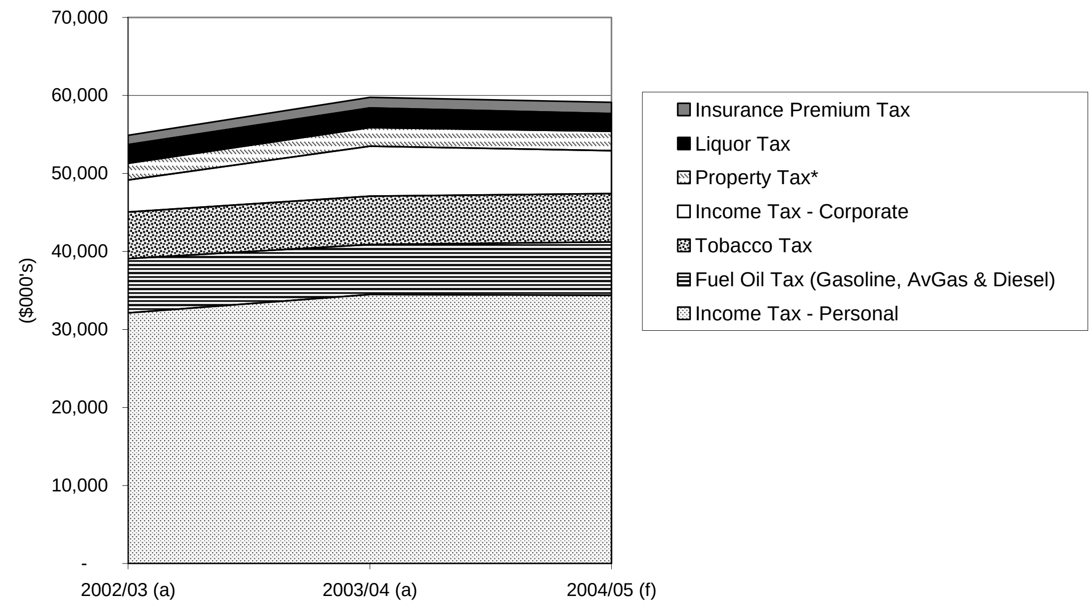
The scope, or range, of tax bases currently occupied in the Yukon were identified in section 2. Before proceeding to estimate the value of potential tax revenue increases attributable to the Alaska Highway Pipeline Project, this section of the paper illustrates the overall scale and composition of direct tax revenues currently being derived by the Government of Yukon from the tax bases identified.

Chart 1 below shows the composition of the Government of Yukon's tax revenues during the fiscal years 2002/03, 2003/04 and 2004/05. Personal income taxes were the most important source of tax revenue for the Government of Yukon and accounted for $34.4 million (or, 58%) of total tax revenues in 2004/05. Fuel oil tax revenues were the next-most productive form of taxation in 2004/05 bringing in $6.8 million or 12% of total tax revenues, followed by tobacco tax revenues which accounted for $6.2 million (or, 10%) of total tax revenues.

Corporate income tax revenues totaled $5.5 million in 2004/05, making them good for 9% of total direct tax revenues raised. In the same year, property taxes (including grants-in-lieu of taxes) and liquor taxes each accounted for approximately 4% of total tax revenues, bringing in $2.5 million and $2.3 million in revenues, respectively. Insurance premium taxes accounted for $1.5 million (or, 2%) of total tax revenues in 2004/05.

[6] Subsection 8(1), *Taxpayer Protection Act,* R.S.Y. 2002, c. 214. Note that bills related to consequential *Income Tax Act* amendments, bills required to maintain consistency in federal-territorial income tax collection arrangements and bills which impose an income tax on mining reclamation trusts are excluded from the subsection 8(1) provisions.

Chart 1: Scale and Composition of Yukon Tax Revenues



Source: Yukon Finance, *Financial Information 2004-05* and *2005-06*
Notes: a=actual, f=forecast; *=includes grants-in-lieu of property tax

Total revenues derived from all Yukon direct tax bases were equal to $54.9 million in 2002/03, $59.8 million in 2003/04 and $59.1 million in 2004/05. By way of comparison, the value of the annual Yukon Property Tax revenue cap has been estimated by Yukon Energy, Mines and Resources to be approximately $50 million (in 2004 dollars). Thus, if the maximum allowable amount of Yukon Property Tax revenues were assessed, total tax revenues collected by the Government of Yukon would close to double, increasing by 85%.

4. Estimates of Potential Yukon Tax Revenues

Section 3 of this paper illustrated the overall scale and composition of direct tax revenues currently being collected by the Government of Yukon. This section of the paper attempts to estimate the potential increase in Government of Yukon tax revenues directly attributable to the Alaska Highway Pipeline Project. The tax revenue estimates are based on previously completed impact analyses. As noted earlier, while the additional tax revenues will have material formula financing implications, the assessment of those implications is not within the scope of the analysis presented below.[7]

[7] Territorial formula financing is the Government of Yukon's major revenue source, comprising two thirds of total Government of Yukon revenues in recent years.

Income Tax

Income tax impacts (both personal and corporate) were found in the Informetrica's *Alaska Highway Pipeline Project: Economic Effects on the Yukon and Canada* (April 2002). The Informetrica analysis includes estimates of potential impacts on Government of Yukon budgetary revenues and expenditures over a ten year period beginning in the 2000/01 fiscal year and ending in 2009/10. The construction phase of the project was specified to run from 2002 to 2007 with commencement of gas flow in early 2008. The analysis was based on a pipeline specification of 42" pipe running from Prudhoe Bay, Alaska to Gordondale, Alberta.

The Informetrica analysis was performed under two scenarios and the results of each scenario was compared to a base case in order to calculate the impact of the AHPP. Under *Scenario 1*, the fiscal policy of all levels of government was assumed to be held constant over the time horizon of the analysis. Thus, any improvements in a government's net fiscal position were assumed to be used for debt reduction or to build up reserves for future expenditures. In contrast, under *Scenario 2,* any improvements in a government's net fiscal position were assumed to be used to reduce taxes or increase spending. The personal and corporate income tax impacts of the Alaska Highway Pipeline Project on Government of Yukon revenues are presented in Table 2.

Table 2: AHPP Government of Yukon Income Tax Impacts

	Scenario 1			**Scenario 2**	
	Personal Income Tax	Corporate Income Tax		Personal Income Tax	Corporate Income Tax
	($ millions)			($ millions)	
2000/01	0.0	0.0		0.0	0.0
2001/02	0.0	0.0		0.0	0.0
2002/03	0.4	0.0		0.5	0.0
2003/04	0.7	0.0		1.1	0.0
2004/05	2.7	0.0		3.3	0.0
2005/06	7.9	0.0		9.8	0.0
2006/07	13.7	0.0		17.7	0.0
2007/08	10.4	0.0		14.9	0.0
2008/09	15.9	0.0		19.6	0.0
2009/10	17.5	0.0		21.3	0.0

Source: *Government Revenue and Expenditure Model: Yukon* (Working Paper No. 7.2.5), Informetrica Ltd., March 2002, pp. 5 and 6.

As shown in Table 2, under Scenario 1, personal income tax revenues attributable to the AHPP will peak during the construction period at $13.7 million in 2006/07 before rising to $17.5 million in 2009/10. Under Scenario 2, personal income tax revenues attributable to the AHPP will peak during the construction period at $17.7 million in

2006/07 before rising to $21.3 million in 2009/10.[8] Corporate income tax impacts are estimated to be nil in all years under both scenarios.

Fuel Oil Tax

As part of the work to identify impacts of pipeline construction on northern transportation infrastructure, Prolog Canada Inc. and the Van Horne Institute have calculated the potential volume of fuel required to construct the Yukon portion of the pipeline.[9] Fuel volume estimates were prepared for two alternative pipeline specifications – a 42" pipe and a 52" pipe – and were estimated by totaling the amount of fuel consumed by each piece of equipment specified for use on equipment schedules prepared by project proponents.

The Prolog Canada Inc. analysis notes that "diesel-grade fuel will be used for pipeline and compressor station construction equipment, camp heating and electrical power generation" and that "small volumes of gasoline and propane will also be required." [10] However, the figures presented in the analysis do not specify the shares of different fuel types (e.g., diesel, gasoline, propane) in the total. It has been assumed for the purposes of this analysis that the total fuel movement volumes consist entirely of diesel fuel. It is hoped that this assumption is reasonably offset by the additional notation by Prolog Canada Inc. that fuel for motor trucks used to transport project material is not included in the total fuel movement volumes.

Table 3: AHPP Construction Phase Fuel Tax Estimates

	42" Pipe	**52" Pipe**
Fuel Movement Volume (tonnes)[1]	100,500	121,200
Fuel Movement Volume (litres)[2]	119,184,578	143,733,043
Yukon diesel fuel tax rate ($/litre)[3]	0.072	0.072
Estimated Yukon fuel tax revenue ($ millions)[4]	8.6	10.3

[1] *Arctic Gas Pipeline Construction Impacts on Northern Transportation,* pp. 47 and 55.
[2] Fuel movement volumes were converted from tonnes to litres using a factor of 1,186.92 litres per tonne.
[3] Under provisions of the Yukon's *Fuel Oil Tax Act,* fuel oil is taxed according to where it is consumed. Thus, notwithstanding that all fuel in all forms will be imported into the Yukon for the AHPP, it will be subject to Yukon fuel oil tax.
[4] Estimated revenues assume that off-road pipeline construction activities are not considered to be fuel tax exempt.

[8] The Yukon is the only jurisdiction in Canada where personal income tax revenues are shared between three levels of government – federal, territorial and self-governing Yukon First Nations. To the extent that individuals employed in pipeline construction and operation activities are resident on Settlement Land, a portion of the personal income tax revenues estimated by Informetrica will flow of Yukon First Nation governments.

[9] Prolog Canada Inc. and the Van Horne Institute, *Arctic Gas Pipeline Construction Impacts on Northern Transportation,* January 2003, pp. 47 and 55.

[10] Ibid, p. 47.

As shown in Table 3, Government of Yukon fuel tax revenues attributable to construction of an Alaska Highway natural gas pipeline are estimated to total $8.6 million under the 42" pipe scenario and $10.3 million under the 52" pipe scenario. These tax revenue figures assume that off-road pipeline construction activities are not considered to be fuel tax exempt. The Yukon's *Fuel Oil Tax Act* currently exempts diesel fuel and gasoline from fuel oil tax when used otherwise than on roads maintained entirely with public money for the following commercial purposes: fishing, logging, hunting or outfitting, trapping, mining (including mining exploration and development), farming, tourism, operating/maintaining a sawmill and operating/maintaining a golf course.[11]

With regard to fuel tax revenues attributable to pipeline operations, it is possible that natural gas passing through the pipeline will be used as fuel for gas compressors located along the pipeline route. Officials at the Department of Energy, Mines and Resources have indicated that when natural gas is used as compressor fuel, consumption of approximately 5% of total pipeline throughput would be consistent with current industry practice.[12] With initial daily throughput expected to be in the order of 4.5 billion cubic feet per day, natural gas consumption would be approximately 0.2 billion cubic feet per day.

As described in section 2 of this paper, however, natural gas in a gaseous state does not appear to be assessable under existing Yukon taxation statues. In other words, natural gas used as compressor fuel does not appear be part of an existing occupied Yukon tax base. Furthermore, it should be noted that under provisions of the *Northern Pipeline Act,* "taxes on gas used as compressor fuel"[13] are included within the definition of the Yukon Property Tax for purposes of the revenue cap.

It is also possible that the natural gas compressor stations located along the pipeline could be powered by electricity. As the sale of electricity is not taxable at the territorial level, the use of electricity to power the natural gas compressors holds no tax revenue implications for the Government of Yukon.

Property Tax

As noted at the outset of this paper, property taxes with exclusive incidence on an Alaska Highway natural gas pipeline are deemed form part the Yukon Property Tax for which aggregate revenues are subject to an annual cap. Yukon Energy, Mines and Resources has estimated that a pipeline built of 42" pipe with seven compressor stations

[11] Subsection 6(2), *Fuel Oil Tax Act,* R.S.Y. 2002, c. 97.
[12] Pers. comm. with Don Dempster, Yukon Energy, Mines and Resources, May 16, 2005.
[13] Schedule 1, subparagraph 5.(a), *Northern Pipeline Act,* R.S.C. 1985, c. N-26.

would have an assessed value of $780 million which would generate annual property tax revenues of approximately $5.2 million.

The owners of an Alaska Highway natural gas pipeline will likely also hold title to real property in the Yukon other than the pipeline proper. Such property could include for example, administrative offices in Whitehorse. To the extent that any property taxes levied are considered to be of general incidence, the relevant property taxation authority may experience an increase in property tax revenues outside the Yukon Property tax revenue cap as a result of pipeline construction and operation. The aggregate value of such property tax revenues is expected, however, to be nominal.

Other Taxes – Tobacco, Liquor and Insurance Premiums

The Government of Yukon occupies three additional tax bases not so far considered in this section – tobacco, liquor and insurance premiums. Estimates of increased revenues attributable to the construction and operation of an Alaska Highway natural gas pipeline of reasonable accuracy were not identified in the course of research for this project. As a result, estimation of tax revenues deriving from these three tax bases will require work outside the scope of this project.

With regard to tobacco and liquor taxes, as a starting point, Informetrica Ltd. has estimated the Yukon's population will increase by approximately 200 residents over the long term as a consequence of the construction and operation of an Alaska Highway natural gas pipeline.[14] When combined with a December 2004 Yukon population of 31,127, an additional 200 residents translates into a nominal population increase of 0.6%.[15] To the extent that the tobacco and liquor consumption patterns of the 200 new residents are similar to the consumption patterns of current Yukon residents, tobacco and liquor tax revenue increases attributable over the long term to the AHPP are likely to be correspondingly nominal.

In terms of insurance premium taxes, whether or not Government of Yukon insurance premium tax revenues increase as a result of construction and operation of an Alaska Highway natural gas pipeline is a function of the extent to which the pipeline owners decide to self-insure. As the Yukon's insurance premium tax is assessed on premiums received by an insurance company "…in respect of business transacted in the Yukon…"[16], no tax is payable where property owners choose to self-insure. Insurance premium tax is assessed at rate of 2% on all insurance premiums (net of dividends paid

[14] Informetrica Ltd., The Impacts of the AHPP on the Yukon Economy, March 2002, p. 22.
[15] Yukon Bureau of Statistics, *Population Report December 2004,* January 2005, p. 1.
[16] Subsection 2(1), *Insurance Premium Tax Act,* R.S.Y. 2002, c. 120.

and premiums returned) with an additional 1% assessed on net premiums which relate to fire insurance or property damage insurance.

5. Estimates of Tax Revenues with Alternate Tax Rates

A secondary purpose of this project is to attempt to assess potential general-incidence tax revenues attributable to economic impacts of the AHPP in the Yukon using British Columbia and Alberta tax rates. The intent of such an exercise is to gain a sense of whether the Yukon would be deriving a reasonable amount of revenue from the project in comparison to the two closest Canadian jurisdictions in which the AHPP will also be located. This section presents the results of attempts to re-estimate tax revenue volumes using British Columbia and Alberta tax rates for the general-incidence tax bases for which dollar-based revenue estimates were presented in section 4, namely, income tax and fuel oil tax.

Income Tax

Estimates of personal and corporate income tax revenues expected to accrue to the Government of Yukon estimated by Informetrica Ltd. in 2002 were presented in section 4 of this paper. The model-based approach used by Informetrica should, in theory, lend itself to the straightforward incorporation of alternate personal tax rates. Unfortunately, structural differences between the personal income tax regimes in the three jurisdictions introduced since the reference year for the Informetrica Ltd. work (2000) render re-estimation of personal income tax revenues problematic. Specifically, the Informetrica model is based a tax-on-tax regime which has been supplanted in all three jurisdictions by a tax-on-income approach. In addition, Alberta uses a flat tax methodology to assess tax payable while the Yukon and British Columbia have continued with a bracket-based methodology. In consequence, the re-estimation of personal income tax revenues will require significant resources and as such, is outside the scope of this project.

The Informetrica analysis found the Yukon corporate income tax revenue impacts associated with construction and operation of the AHPP to be negligible. Yukon corporate income tax rates in force at the time the Informetrica Ltd. work was undertaken were higher than in both British Columbia and Alberta. As a result, it would seem safe to assume that a re-estimation of corporate income tax revenues with British Columbia and Alberta tax rates would feature a similar result.

Fuel Oil Tax

Both British Columbia and Alberta charge higher rates of tax on diesel fuel than does the Yukon with the result that higher fuel oil tax revenues are generated when diesel fuel oil tax rates from those jurisdictions are applied. As of March 2005, British Columbia levied a tax of $0.15 per litre of diesel fuel while Alberta levied a tax of $0.09 per litre of diesel fuel. Application of the British Columbia diesel fuel tax rate to the construction phase fuel movement volumes calculated in section 4 of this paper results in a fuel oil tax estimate of $17.9 million under a 42" pipe scenario and $21.6 million under a 52" pipe scenario. Application of the Alberta diesel fuel tax rate to the construction phase fuel movement volumes calculated in section 4 of this paper results in a fuel oil tax estimate of $10.7 million under a 42" pipe scenario and $12.9 million under a 52" pipe scenario.

6. Summary

The primary purpose of this paper has been to undertake a preliminary estimate – on the basis of existing economic impact analyses and transaction value estimates supplied by the Department of Energy, Mines and Resources – of the approximate value of revenues that could derive from general-incidence tax bases in the Yukon attributable to the construction and operation of the Alaska Highway Pipeline Project. By way of background to the estimation of direct tax revenues, the paper also describes some of the terminology used in the realm of tax policy and outlines the range of tax bases currently occupied and unoccupied by the Government of Yukon.

An analysis of the scale of tax revenues currently collected by the Government of Yukon was also included to provide a sense of the relative potential of tax revenues collectable within the bounds of the Yukon property tax cap specified in the *Northern Pipeline Act.* A secondary purpose of the project was to attempt to assess, where estimates of Yukon tax revenues could reasonably be made, the potential revenues from the same general-incidence tax bases using British Columbia and Alberta tax rates. A summary of the revenue estimates found to be available for occupied Yukon tax bases is presented in Table 4 below.

Table 4: Summary of Revenue Estimates Available for Occupied Yukon Tax Bases

	construction phase	operations phase	alternative tax rate estimates
Personal income tax	✓	✓	rfw
Corporate income tax	✓	✓	rfw
Fuel oil tax	✓	rfw	✓
Property tax	rfw	✓‡	rfw
Tobacco/liquor tax	rfw	rfw	rfw
Insurance premium tax	rfw	rfw	rfw

Notes: rfw = requires further work; ‡ estimate prepared by Yukon Energy, Mines and Resources

References

Boadway, R. and Kitchen, H. *Canadian Tax Policy (Third Edition)*. Canadian Tax Foundation. 1999.

Fuel Oil Tax Act, R.S.Y. 2002, c. 97.

Informetrica Limited. *Government Revenue and Expenditure Model: Yukon (Working Paper No. 7.2.5)*. March 2002.

Informetrica Limited. *The Alaska Highway Pipeline Project: Economic Effects on the Yukon and Canada (Final Report)*. April 2002.

Informetrica Limited. *The Impacts of the AHPP on the Yukon Economy (Working Paper No. 7.1.2)* March 2002.

Insurance Premium Tax Act, R.S.Y. 2002, c. 120.

Northern Pipeline Act, R.S.C. 1985, c. N-26.

Prolog Canada Inc. and the Van Horne Institute. *Arctic Gas Pipeline Construction Impacts on Northern Transportation*. January 2003.

Taxpayer Protection Act, R.S.Y. 2002, c. 214.

Treff, K. and Perry, D. *Finances of the Nation 2004*. Canadian Tax Foundation. December 2004.

Yukon Bureau of Statistics. *Population Report December 2004*. January 2005.