

Underground Economy in Construction - It Costs Us All

Ontario Construction Secretariat **April 2008**

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Prepared for OCS by Prism Economics & Analysis.
April 2008

Table of Contents		
Foreword		1
Key Findings		2
Introduction		3
General Indicators of Underground Activity		4
Estimates of the Underground Economy		8
Independent Operators / Estimates of Revenue Leakage		10
Appendices:		
Methodology		12
Technical Tables - Part A	(Estimates of Underground Employment and Income)	18
Technical Tables - Part B	(Estimates of Revenue Losses to Government and WSIB)	30



Our purpose is to enhance Ontario's unionized ICI construction industry by developing relationships, facilitating dialogue, providing value-added research, coordinating the dissemination of information to our client groups and promoting the value of unionized ICI construction. In business since June of 1993, the Ontario Construction Secretariat (OCS) is all about its' partners! The twenty five organized building trade unions (the Workers) and the signatory contractors (the Employers) of Industrial, Commercial and Institutional (ICI) construction are the grassroot business partners comprising the OCS. Together with representatives from the Provincial Government, we form a tripartite organization intended to enhance the well being of organized ICI construction in Ontario.

In response to a growing concern expressed by contractors and construction unions, the OCS initiated its study of underground practices in 1994 with a survey of workers. In 1997, OCS presented its concerns to the Ontario government. In our ongoing efforts to draw attention to this urgent public policy challenge, OCS commissioned a study in 1998 on the magnitude of the underground economy in Ontario's construction industry and the estimated tax losses to the federal and provincial governments and contribution losses to the Workplace Safety and Insurance Board. These estimates were updated in 2001 and again in this current report. Total average annual losses to governments and government agencies are estimated at \$2.0 billion.

The growth of the underground economy has many negative implications for both the construction industry and government, ranging from unfair competition to significant lost revenue to government and government agencies. Our research of the current enforcement environment and an analysis of the "independent operator" question was presented in a report *"Attacking the Underground Economy in the ICI Sector of Ontario's Construction Industry."* The crux of the enforcement problem, from a statutory perspective, is the "independent operator" exemption. The ability of workers in the construction industry to be classed as "independent operators" not only makes them exempt from the WSIB, but also opens the door to non-compliance in other areas – trade licensing, income tax evasion, health and safety, etc.

OCS and its labour and management partners continue to voice our concerns to the Ontario government and work towards resolving this critical issue.

Key Findings

1. It is estimated that in the period 2003-2005, total losses to governments and government agencies from underground activity in the Ontario construction industry ranged from \$1.641 billion to \$2.735 billion, with our best estimate being \$2.026 billion. Approximately 56% of this loss was attributable to income that is not declared for Income Tax purposes.
2. Losses to the WSIB, in the same period, from improperly styled 'independent operators' are estimated at \$109 million to \$160 million, with our best estimate being \$143 million.
3. In the years 2003, 2004 and 2005, the number of workers employed in the underground economy for a substantial portion of each year was between 70,300 and 108,000, with our best estimate being 84,500 workers.
4. Approximately 22% of construction employment in Ontario was underground, in the sense that the earnings derived from employment were not declared for tax purposes and/or employment status was misrepresented for WSIB exemption purposes.
5. There is reason to believe that increased audit and enforcement activities on the part of CRA and the WSIB, together with improved labour market conditions, have led to a reduction in the *rate* of underground activity, although in absolute dollar terms, the amount of underground income has increased.

Underground Economy in Construction - It Costs us All

Introduction

The purpose of this report is to update the estimates of the underground economy originally prepared for the study, *The Underground Economy in Ontario's Construction Industry* (November 1998)¹ and subsequently updated in 2001 for the period 1998-2000². The 2001 study revised some of the calculations in the original 1998 study, based on new data that was not available at the time of the original study. This study revises (and increases) earlier estimates of revenue losses to the WSIB.

Since completion of the original 1998 study and the 2001 update, there have been important administrative and economic developments which affect the vulnerability of the construction industry to underground practices. Among these have been increased audit enforcement by both the Canada Revenue Agency (CRA) and the WSIB. As well, CRA introduced the Contractor Reporting System which requires contractors to report sub-contracts to CRA.

Undoubtedly, many workers still prefer 'independent operator' status for the opportunities for tax evasion that this status permits. These workers are unlikely to have difficulty finding an employer that will accommodate them by characterizing their employment relationship as a 'sub-contract' relationship. Many undocumented workers are also likely to prefer independent operator status because they believe such arrangements will protect them from immigration authorities. Nevertheless, the improved labour market conditions of the past several years appears to have reduced that rate (though not the number) of 'independent operators'. Unscrupulous employers are less able to compel job-seekers to accept 'independent operator' status, with the implied loss of benefits under the *Employment Standards Act*, EI, CPP and the WSIB.

Improved labour market conditions and strengthened audit enforcement contributed to a modest decline in the rate of underground activity. Despite the decline in the rate of underground activity, however, the actual dollar amount of underground work has increased since our last study.

Underground activity in the construction industry comprises more than just cash transactions which are intended to avoid GST or income tax. In the construction industry, cash transactions account for a relatively small proportion of the total value of construction spending, probably less than 10%. Most of this is concentrated in residential renovations and repair and, to a much lesser degree, in low value renovation and repair expenditures in the ICI sector.

¹ *The Underground Economy in Ontario's Construction Industry: Estimates of Its Size and the Revenue Losses to Government and the WSIB*, by John O'Grady and Greg Lampert with the ARA Consulting Group, for the Ontario Construction Secretariat (November 1998). Detailed estimates are set out in Appendix A: Estimating Expenditures, Employment and Income in Ontario's Construction Industry, pp 75-88 and Appendix B, Estimating Revenue Loss, pp 89-96.

² *Estimates of Revenue Losses to Governments as a Result of Underground Practices in the Ontario Construction Industry, 1995-1997 compared to 1998-2000 (August 2001)*, Prism Economics and Analysis for the Ontario Construction Secretariat.

In the construction industry, by far the more common form of non-compliance is styling employees as independent contractors (or ‘independent operators’, to use WSIB nomenclature) for the purpose of avoiding the costs that arise from a conventional employment relationship.

These ‘avoided costs’ include:

- benefit entitlements under the *Employment Standards Act* (principally vacation and holiday pay, but also overtime entitlements),
- employer contributions to EI and CPP, WSIB premiums, and,
- in some instances, Employer Health Tax.

Some construction contractors, of course, will argue that the persons they classify as ‘independent operators’ do, in fact, meet the accepted common law tests of an independent contractor. However, there is growing anecdotal evidence that many of the individuals who are styled as ‘independent operators’ are actually employees in the substantive sense of that term.

*The savings in labour costs that arise from styling workers as ‘independent operators’ are in the range of 18-31%, and by some calculations, can be higher than this. At the same time, styling employees as ‘independent operators’ also avoids the necessity of reporting remuneration paid by issuing T-4 slips. As noted in the 1998 report, Statistics Canada found an exceedingly high rate of under-reporting of income by unincorporated construction businesses, which is a category that largely (but not entirely) corresponds to ‘independent operators’.³ Over the period 1985 to 1991, Statistics Canada estimated that more than 60% of net income earned by unincorporated construction businesses was concealed from Revenue Canada (now Canada Revenue Agency).⁴ The under-reporting of income by so called ‘independent operators’ is a major source of the revenue losses to governments. What must be stressed, however, is that *this revenue loss has its origins in the practice of construction employers styling their workers as ‘independent operators’*. That practice is a necessary, prior condition for the rampant under-reporting of income.*

General Indicators of Underground Activity

Use of Cash

The underground economy has a strong preference for eliminating audit trails by using cash.

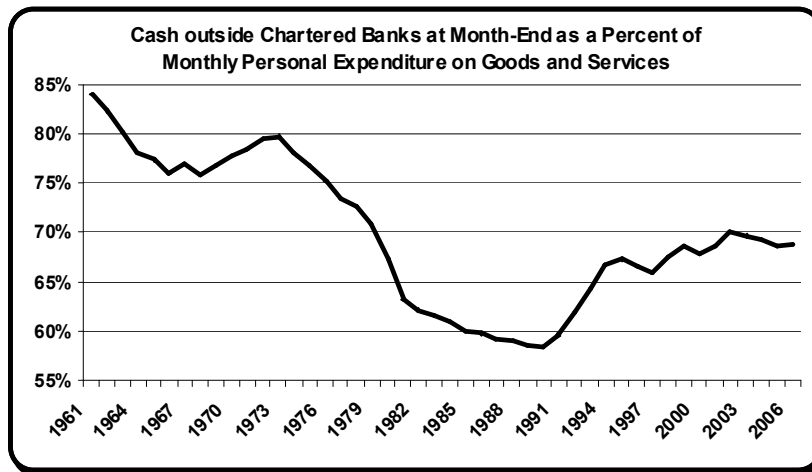
Figure No. 1 shows the ratio of currency outside banks – *i.e.*, currency in the hands of persons and companies – in relation to expenditures by households on goods and services.

In the 1998 Report, it was pointed out that the long-term decline in the use of cash was abruptly reversed in 1990, when the GST was introduced. Thereafter, the use of cash steadily increased until 2002, after which it declined marginally.

³ Technically, an ‘independent operator’ is a self-employed individual who employs no other persons to work alongside him or her. As such, this individual could be either incorporated or unincorporated. The term ‘independent operator’ is used in worker’s compensation legislation. The term is not used in employment standards legislation or in labour relations legislation.

⁴ *The Size of the Underground Economy in Canada*, Statistics Canada, Cat. No. 13-603E, No. 2, (June 1994). See Table 2, page 13.

Figure No. 1
Ratio of Currency Outside Chartered Banks at Month-End (Annual Average)
to Annual Personal Expenditure on Goods and Services (at monthly rate)
Statistics Canada, CANSIM, Tables 176-0020 and 380-0024



'Independent Operators'

Statistics Canada's Labour Force Survey classes individuals as either employees, self-employed or unpaid family help. Among the self-employed, four categories are estimated: incorporated persons, with or without paid help, and unincorporated persons, with or without paid help. Persons who are incorporated and who have paid help are likely to be genuinely engaged as independent contractors, although some may fall into the *Labour Relations Act* category of 'dependent contractors', *i.e.*, persons whose legal arrangements are those of an independent contractor but whose substantive relationship with their engager is much closer to that of an employer-employee relationship.

Persons who are self-employed *and* who do not have paid help are termed 'independent operators' by workers compensation statutes across Canada. The various Canadian jurisdictions differ as to how they treat 'independent operators' for purposes of workers compensation coverage.⁵ Some require coverage while others do not. It is important to stress that independent operator status does *not* turn on whether an individual is incorporated or has a registered business name, though some observers may infer from incorporation or registration an intent to function as an independent contractor. The common law tests of employee status, it should also be noted, do not turn on whether an individual is incorporated. Rather, the common law tests go to the heart of the relationship between the individual and his or her engager. Various factors are taken into account. These are most recently set out in *671122 Ontario Ltd. v. Sagaz Industries Canada Inc. [2001] 2 S.C.R. 983, 2001 SCC 59*.⁶

In 2006, the Labour Force Survey estimated that 32.7% of construction workers in Ontario were self-employed, or at least reported that they were self-employed. (For the economy as a whole, the proportion was 14.4%.)

⁵ For a discussion of differing coverage policies, see Tim Armstrong and John O'Grady, *Attacking the Underground Economy in the ICI Sector of Ontario's Construction Industry* (March 2004), prepared for the Ontario Construction Secretariat. The discussion of coverage policies, as they then were, is found at pages 54-59.

⁶ The *Sagaz* decision is reproduced at: scc.lexum.umontreal.ca/en/2001/2001scc59/2001scc59.html

As can be seen from Figure No. 2, in 2006, 62% of these self-employed construction workers had no paid help, i.e., they were 'independent operators'. Three-quarters of these 'independent operators' were not incorporated.

In 1987, when Statistics Canada commenced tracking workers by their employment class, only 10.8% of Ontario construction workers were 'independent operators'.

Figure No. 2
Distribution of Self-Employed Construction Workers by Incorporation
Status and by Whether or Not They Employ other Paid Persons, Ontario, 2006
Statistics Canada, CANSIM, Table 282-0012

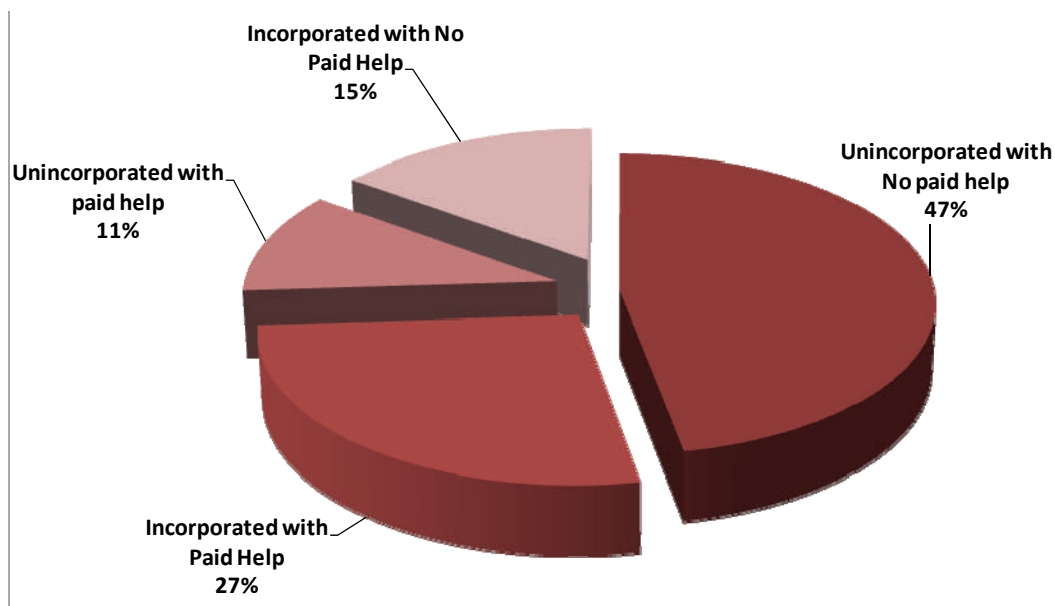
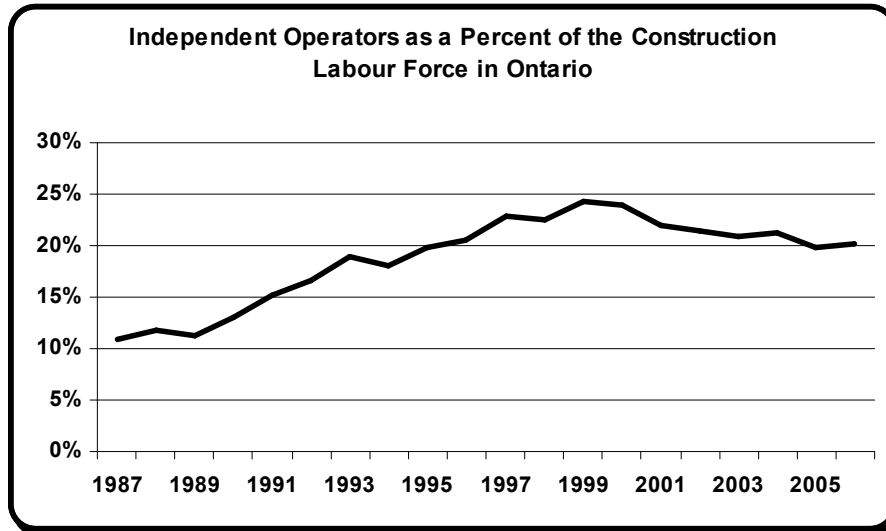


Figure No. 3 shows that the proportion of so-called 'independent operators' in Ontario's construction work force ballooned in the 1990s, peaking at 24% in 2000. It is naïve to believe that this explosion in the number and share of 'independent operators' in the construction labour force reflected a blossoming of entrepreneurship among construction workers. The change in worker status was almost wholly attributable to a change in employer practice with respect to how construction workers were styled for purposes of their employment relationship. *This practice of styling workers as 'independent operators' was supported and encouraged by the decision to continue the statutory exemption of 'independent operators' from WSIB coverage at a time when the WSIB increased its premiums to cover unfunded liabilities.*

There are no survey-based studies that estimate the distribution of independent operators across construction sectors. However, based on the overall sectoral distribution of construction employment and industry advice on employment practices, we believe that upwards of 70% of 'independent operators' are employed in residential construction. In the ICI sector, we believe that independent operators are likely to account for 10-15% of the construction work force. This proportion is higher in the finishing trades (e.g., drywalling, painting), lower in the mechanical trades, and negligible in the excavation and structural trades.

Figure No. 3
'Independent Operators' as a Percentage of the Construction Labour Force, Ontario, 2006
Statistics Canada, CANSIM, Table 282-0012



Change in the 'Independent Operator' Share of the Construction Labour Force

As can be seen in Figure No. 3, *since approximately 2000, there has been noticeable decline in the 'independent operator' share of the construction labour force.* Significantly, this is *not* attributable to a change in the composition of construction work.

The 1998 study focused on the period 1995-1997. In that period, we estimated that the residential sector accounted for approximately 48% of construction spending in Ontario. In the most recent period examined, 2003-2005, we estimate that the residential sector accounted for 55% of construction spending. Since the residential sector accounts for the preponderance of 'independent operators', the relative increase in the share of the residential sector should have been associated with an increase in the rate of employment of 'independent operators'. In actual fact, as Figure No. 3 shows, *the share of 'independent operators' as a percent of the construction labour force declined from 2000 onwards.* If the sectoral distribution of the construction labour force were the dominant factor, one would have expected the share of 'independent operators' to increase from 24% in 2000 to around 28-29% in 2006. In fact, the 'independent operator' share fell to 20.2%.

The decline in the 'independent operator' share could reflect a reduction in the willingness of construction workers to accept 'independent operator' status. Equally, the decline in the 'independent operator' share could also indicate a diminished propensity on the part of construction employers to bear the risk of improperly styling their workers as 'independent operators'.

The reduced propensity on the part of construction employers to style their workers as 'independent operators' may be attributable to increased audit and enforcement efforts. As well, it should also be noted that WSIB premium rates have fallen significantly almost 30% since the early 1990s.

Whatever its cause, the decline in the 'independent operator' share of the construction labour force has led us to lower our estimates of the rate of underground activity in Ontario's construction industry.

Estimates of the Underground Economy

Figure No. 4 on the following page sets out updated estimates of the distribution of underground employment across sectors and the rate of underground activity by sector.

Over the period 2003-2005, we estimate the rate of underground employment at 19% to 29% of total construction employment, with a best estimate of 22%. This compares with the 2001 study in which we estimated underground employment for the period 1998-2000 at 23% to 32%, with a best estimate of 25%.

Figure No. 4
Estimates of Underground Employment in the Ontario Construction Industry (1,000s)

	Avg Employment	Low Estimate		High Estimate		Best Estimate	
	2003-2005	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	126.9	15.2	12%	21.6	17%	16.5	13%
Renovations	83.7	29.3	35%	46.1	55%	37.7	45%
Total	210.6	44.5	21%	67.6	32%	54.2	26%
Repair - Residential	33.7	13.5	40%	20.2	60%	16.9	50%
Total Residential Construction	244.4	58.0	24%	87.9	36%	71.1	29%
New Non-Residential Construction							
Buildings	64.6	8.4	13%	12.9	20%	9.0	14%
Engineering	40.2	1.2	3%	2.4	6%	1.2	3%
Total	104.8	9.6	10%	15.3	14%	10.3	10%
Repair - Non-Residential	26.3	2.6	10%	4.7	18%	3.2	12%
Total Non-Residential Construction	131.2	12.2	9%	20.1	15%	13.4	10%
Total Construction	375.6	70.3	19%	108.0	29%	84.5	22%

Figure No. 5
Estimates of Underground Income in the Construction Industry
Ontario – Current \$ (millions)

	Avg Employment	Low Estimate		High Estimate		Best Estimate	
	2003-2005	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	\$5,545	\$532	10%	\$754	14%	\$577	10%
Renovations	\$3,274	\$917	28%	\$1,441	44%	\$1,179	36%
Total	\$8,820	\$1,449	16%	\$2,195	25%	\$1,756	20%
Repair - Residential	\$1,320	\$422	32%	\$633	48%	\$528	40%
Total Residential Construction	\$10,139	\$1,871	18%	\$2,828	28%	\$2,283	23%
New Non-Residential Construction							
Buildings	\$3,492	\$363	10%	\$559	16%	\$391	11%
Engineering	\$2,268	\$54	2%	\$109	5%	\$54	2%
Total	\$5,759	\$418	7%	\$667	12%	\$445	8%
Repair - Non-Residential	\$1,302	\$104	8%	\$188	14%	\$125	10%
Total Non-Residential Construction	\$7,061	\$522	7%	\$855	12%	\$571	8%
Total Construction	\$17,201	\$2,393	14%	\$3,683	21%	\$2,854	17%

Figure No. 5 translates underground employment into underground income. There is a drop-off between the employment rate and the income rate. The reason for this is the discount that underground workers offer their employer or customer, *i.e.*, a hundred hours of underground labour costs less than a 100 hours of legitimate labour. The estimated rate of underground income ranges from 14% to 21%, with a best estimate of 17%. This compares with earlier estimates for the period 1998-2000 of 17% to 25%, with a best estimate of 19%.

The reductions in the *rate* of underground activity do not imply lower overall numbers. *There are more underground workers today than earlier and the amount of underground income continues to increase.*

In the period 1998-2000, we estimated that there were approximately 76,400 underground workers who generated around \$2.4 billion in earnings.

For the period 2003-2005, we estimate 84,500 underground workers who, in turn, generate incomes totaling over \$2.8 billion.

'Independent Operators'

There are no definitive estimates of the proportion of 'independent operators' who should be classed as employees, rather than as sub-contractors. Of course, it would be impractical to survey the construction work force to formulate estimates, since there could be no confidence in either the representative nature of the sample or the truthfulness of the responses. The only procedure is to formulate estimates based on experience. Informed individuals may differ on how they understand or interpret labour market conditions.

For purposes of this study, we suggest the following working assumptions. These assumptions are intended to be conservative. First, most workers who assume the added costs of maintaining a corporate entity and filing corporate income tax returns are probably genuinely intent upon being sub-contractors. It is likely that only a small percentage of these workers are improperly styled as 'independent operators'. We estimate that 90% of incorporated 'independent operators' are likely to be legitimately so classed. Second, the growth in unincorporated 'independent operators' since the late 1980s (i.e., before the introduction of the GST) is almost entirely illegitimate and is labour market behaviour that was induced initially by the introduction of the GST and reinforced by weak labour market conditions and lax enforcement in the 1990s. In round terms, the proportion of unincorporated 'independent operators' increased from around 9.5% of the construction labour force in the late 1980s to 16.5% in the period 2003-2005. This implies that at least 47% of these workers are likely to be improperly styled as 'independent operators'. As well, some proportion of those who were unincorporated 'independent operators' in the pre-1990 period were also likely to have been improperly styled as sub-contractors. Taking these into account we estimate that in the period 2003-2005, around 50-60% of unincorporated 'independent operators' should have been classed as employees and therefore should have been covered by the WSIB and also should have had employer EI and CPP contributions made on their behalf. As well, these workers also should have had their earnings reported by T-4 slips.

Overall, these working assumptions imply that in the period 2003-2005, the number of improperly styled 'independent operators' in Ontario's construction industry was somewhere between 32,000 and 47,000 or between 26% and 38% of all self-employed construction workers.

Estimates of Revenue Leakage

Figure No. 6 summarizes the estimated revenue losses to governments and government agencies related to the amount of underground employment in Ontario's construction industry.

It is estimated that total losses to governments and government agencies range from \$1.641 billion to \$2.735 billion, with our best estimate being \$2.026 billion. Approximately 56% of this loss is attributable to income that is not declared for Income Tax purposes.

Losses to the WSIB are estimated at \$143 million.

As noted in the 1998 Report, the growth of the underground economy has many other negative implications for the construction industry. These include higher tax and contribution burdens on legitimate contractors and workers. The growth of underground practices in construction also

results in unfair competition for legitimate contractors and workers. As well, underground practices potentially weaken health and safety policies, undermine labour standards and erode construction standards. Finally, underground practices reduce the contribution base for benefits plans and weaken apprenticeship training and skills development

Figure No. 6
Estimated Revenue Losses to Governments and Government Agencies
arising from Underground Employment in the Construction Industry
Ontario – Current \$ (millions)

	2003-2005 Average Annual		
	Low Estimate	High Estimate	Best Estimate
Provincial Sales Tax Loss to Out-of-Province Contractors	\$8	\$16	\$9
GST Loss on New Housing	\$9	\$27	\$16
GST Loss on Residential Repair	\$65	\$97	\$73
GST Loss on Residential Renovation	\$160	\$201	\$162
Sub-Total: GST Loss	\$234	\$324	\$251
Income Tax Loss	\$871	\$1,628	\$1,143
CPP Loss	\$359	\$520	\$411
EI Loss	\$52	\$76	\$60
EHT Loss	\$7	\$11	\$8
WSIB Loss	\$109	\$160	\$143
Total Revenue Losses:	\$1,641	\$2,735	\$2,026

Methodology

Underground Activity

There are three perspectives on the meaning of ‘underground activity’ in the construction industry.

The measurement perspective is concerned with estimating the value of activity that is not included in Statistics Canada’s national accounts estimates, irrespective of whether the activity is legal or illegal, compliant or non-compliant with the tax system, and undertaken in accordance with statutory labour standards. This ‘measurement perspective’ is the focus of a 1994 study by Statistics Canada.¹ That study estimated that the amount of construction that escaped measurement in the systems of national accounts was 9.0% in new residential construction and 13.9% in residential renovation construction. Statistics Canada believed that unmeasured construction work in other sectors (*e.g.*, ICI, civil, power, pipeline, etc.) was trivial or non-existent.

The tax compliance perspective is concerned with estimating the amount of income generated in the construction industry which is not reported to the authorities and which therefore escapes corporate and income tax, payroll contributions to CPP and EI, WSIB premiums, other payroll taxes, and GST. In Ontario, there is, the avoidance of retail sales tax on building materials brought in from outside Ontario.

The labour standards perspective is concerned with both tax compliance (income tax, EI, CPP) and with compliance with *Employment Standards Act* obligations. In particular, the labour standards perspective is concerned with the practice of styling workers as ‘sub-contractors’ even though those workers are employees, in the substantive sense of the term. By styling employees as ‘sub-contractors’, a construction contractor can avoid EI and CPP obligations, WSIB premiums, and *Employment Standards Act* requirements (chiefly holiday and vacation pay). As ‘sub-contractors’, these workers do not receive T-4 statements and are therefore in a position to under-report their earnings.

This study uses a broad meaning of underground activity. Adjustments are made to official estimates of construction spending to account for unmeasured construction activity. Estimates are also developed of the likely range of incidence of improper styling of workers as ‘sub-contractors’ (or ‘independent operators’ to use workers compensation terminology).

¹ Statistics Canada, *The Size of the Underground Economy in Canada*, by Gylliane Gervais, 1994 Catalogue No. 13-603E, No. 2

Definitions and Terminology

Construction sectors:

Construction activity is typically disaggregated into two broad sectors (residential and non-residential):

Residential construction comprises work on residential buildings (including houses and multiple unit buildings).

Non-residential construction comprises construction projects which do not involve residential buildings. There are two broad types of non-residential construction: buildings and engineering work.

Non-residential building consists of work on buildings. This is commonly referred to as ICI (industrial, commercial and institutional) construction.

Engineering construction consists of work on projects which do not involve buildings. Often called *heavy construction*, the engineering sector includes work on a diverse range of activities such as roads, bridges, airstrips, railways, dams, and irrigation projects.

Type of Construction: Within each construction sector, there are two broad types of construction activities. *New construction* comprises work on a new structure or building. Statistics Canada's definition of new construction includes both the construction of new structures and other work which is commonly regarded as *renovations*. For residential construction, renovations include additions and major alterations or improvements to a dwelling and conversions of existing buildings to create additional residential units. The distinction between new housing and residential renovation work is important for the analysis in this report. For non-residential construction, statistics are not available to distinguish between new work and renovation work.

Repair construction consists of work on an existing building or structure which does not add expected life to the building or structure and which reasonably would have been expected as necessary when the building or structure was erected.

Construction Industry and Own-Account Construction: Construction work is undertaken in a variety of ways: owners may either utilize contractors to undertake the work or they may utilize their own work force. What is referred to as 'the construction industry' includes only workers or businesses involved in contract construction work. Own-account work is *not* considered to be work undertaken by the construction industry. This distinction is important because data on construction expenditures refers to the amalgam of work done by the construction industry and work done on own-account. Adjustments must be made to construction spending to estimate the construction industry's share of that spending.

Contractors are engaged to undertake construction work on behalf of the owner. They may be either general contractors or specialists in a particular trade. *General contractors* are responsible for completion of an entire construction job. Some general contractors undertake portions of a construction project using workers that they directly employ. However, the preponderance of work is sub-contracted to *trade contractors*.

Own-account construction work consists of construction activities undertaken by owners, utilizing their own work force. This includes do-it-yourself (DIY) homeowners who undertake repairs or renovations to their homes as well as organizations in industries other than construction which have construction work forces to undertake construction work on their facilities.

Within the construction industry, the *Labour Force Survey* distinguishes between workers that are paid (i.e., employees) and workers that are self-employed (i.e., sub-contractors). Self-employed workers may be either incorporated or unincorporated. As well, self-employed workers may either work independently or may employ other workers as helpers. Independent Operator is a term used in workers compensation legislation and refers to workers who are self-employed and do not employ other workers as helpers. Independent Operators may be either incorporated or unincorporated.

The distinction between an 'employee' and a 'sub-contractor' is founded in common law. The key factors are summarized in an Ontario Ministry of Revenue publication. The factors include: control, ownership of tools, chance of profit/risk of loss, and integration with the engaging/employing organization.² The most current jurisprudential statement of the common law is set out in a Supreme Court of Canada decision: *671122 Ontario Ltd v. Sagaz Industries Canada Inc.*³

Data Sources

National Accounts data include estimates of expenditures by sector and type of construction in Ontario.

Input-Output data indicate the inputs (e.g. materials, services, labour, etc.) required for a given volume of expenditures in particular types of construction. This information can be used to estimate the income and employment generated in the construction industry from the volumes of expenditures in different sectors and types of construction provided in the National Accounts data.

Labour Force Survey data provide information on the number of workers employed in construction over time, including details on the number of paid versus self-employed workers. The Labour Force Survey data are aggregated to *the construction industry as a whole*; they are not available for sectors or types of construction.

Census data provide information on income and a check on the Labour Force Survey.

Price indexes are available to measure changes in the prices of various types of construction. Price indices are essential to this type of analysis because they allow the conversion of the *current dollar* estimates of construction expenditures into *real (constant dollar)* estimates of expenditures. Since price changes affect the volume of construction which can be purchased with a given expenditure, it is important to be able to convert (*deflate*, in statistical terminology) expenditure estimates to a constant dollar series for some parts of this analysis, in particular, estimates of employment by sector and type of construction.

² Ontario Ministry of Revenue, *How to Identify and Employer-Employee Relationship*, <http://www.rev.gov.on.ca/english/bulletins/eh/0196.html>

³ *671122 Ontario Ltd v. Sagaz Industries Canada Inc.*, [2001] 2 S.C.R. 983, 2001 SCC.

These are the main data sources for this analysis. However, information from a variety of other sources were also utilized in preparing the estimates presented here. For example, data from Canada Mortgage and Housing Corporation (CMHC) and the Ontario New Home Warranty Program were utilized to assist in the analysis of owner-built new housing. Data from Statistics Canada's *Homeowner Repair and Renovation Survey* were used to disaggregate the estimates of overall expenditures on repairs and renovations into estimates of expenditures by size of job.

1998 Study

The methodology employed in the update is derived from the methodology used in the 1998 study which was the first set of estimates of revenue losses to governments and the WSIB from underground activity in Ontario's construction industry. The methodology used in the 1998 study is described in Appendices A and B of that study. Reference should be made to those appendices for a more complete description.

Estimates of Underground Employment and Underground Income

A-1 Estimates of Construction Expenditure

Estimates of total construction spending are derived from national accounts.

A-2 Adjusted Estimates including Factor for 'Unmeasured'

Adjustments are made to the national accounts estimate of construction spending to reflect unmeasured activity in the residential sector, per the the 1994 Statistics Canada study.

A-3 Estimates of Do-It-Yourself and Own Account

Estimates of Own Account and Do-It-Yourself construction are estimated based on discontinued Statistics Canada's studies of the contract construction industry and Statistics Canada's Homeowner Repair and Renovation Survey.

A-4 Revised Estimates of Contract Construction Industry Reflecting DIY, Own Account and Unmeasured Construction

A-4 adjusts A-1 in light of A-2 and A-3

A-5 Estimates of Employment Income in Contract Construction Industry

Employment income estimates are based on Statistics Canada's input-output estimates for construction.

A-6 Estimates of Employment in Contract Construction Industry

Employment income is translated into employment estimates using wage estimates based on Statistics Canada's survey of construction wages and the consultant's information on wage trends in the unionized sector. These estimates are reconciled to the *Labour Force Survey*.

A-7 Estimates of Underground Employment in Contract Construction Industry

Estimates of underground activity are based on comparisons of the *Labour Force Survey* to the *Survey of Employment Payroll and Hours* and trends in the independent operator share of the

construction labour force. The consultant also adjusted the estimate underground activity downwards as a reflection of recent increases in audit activity in construction by CRA and the WSIB.

A-8 Estimates of Underground Employment Income in Contract Construction Industry
Underground employment estimates are translated into underground income estimates based on assumptions of *lower* gross remuneration for underground workers. This is a judgement based assumption, informed by industry consultations. A consequence of this assumption is that the rate of underground income is *lower* than the rate of underground employment. It is likely that these incomes would increase if the work were forced out of the underground sector.

A-9 Comparisons
This table compares the most recent estimates to earlier estimates.

A-10 Estimates of Independent Operators
Independent operator estimates are derived from the *Labour Force Survey*.

Estimates of Revenue Losses to Governments and WSIB

B-1 Estimated PST Loss on Out-of-Province Contractors in Border Areas
The border-area share of non-residential construction spending is estimated at 15%, based on ICI permit data. PST applies only to materials where are estimated at 30%, based on input-output data.

B-2 Estimated GST Loss on ‘Owner-Builder’ New Housing
Over the relevant period, the GST rate on new housing was 4.5%. The GST rate on existing housing is zero.

There is no significant GST leakage in apartment construction. Nor is there any significant GST leakage in large scale developments undertaken by professional homebuilders. In both cases, the developer pays GST on the full cost of constructing the house or apartment, including the cost of land. The developer charges GST to the end customer at the 4.5% rate and remits this GST to CRA, subtracting the GST that was paid to sub-contractors.

The principal source of GST leakage in residential construction is owner-builders. Owner-builders have a preferred position in the GST system. An owner-builder pays only 4.5% GST on purchased inputs. If the owner-builder occupies the house on a permanent basis, he or she clearly has an incentive to purchase as many inputs underground as possible. If the owner-builder occupies and then sells the house, no GST is charged to the customer because the unit is considered existing housing. Again the owner-builder has an incentive to have as much sub-contract work as possible done underground. Given these incentives, it is not surprising that there are bogus owner-builders who effectively build houses for sale.

Roughly 12% of newly built units in Ontario are not registered with the Tarion Home Warranty program.

We assume that 30-35% of the non-warrantied units are built by bogus owner-builders. This type of housing therefore represents around 3-5% of spending on new housing. Both legitimate

owner-builders and bogus owner-builders also have a strong incentive to do “cash deals” with specialist trades on which GST would not be charged.

We estimate the parameters of this GST evasion based on assumptions of a 3% and 5% share of total residential construction respectively and a 60% and 90% share of purchased inputs respectively. This generates upper and lower boundary estimates.

B-3 Estimated GST Loss on Residential Repairs

We postulate a 70% non-materials share for repair work and an underground (predominantly cash) share of 40-60%.

B-4 Estimated GST Loss on Residential Renovations

We postulate a 70% non-materials share for renovation work and a 40-50% underground (predominantly cash) share of this work.

B-5 Income Tax Loss

We gross-up underground income by 12.5% to take account of discounts that are typically given (or required) when work is paid in cash or not reported to CRA (because the worker is styled as a sub-contractor). Upper and lower boundaries are estimated based on 24% and 31% tax rates.

B-6 Payroll Contributions and Premia

These estimates are based on the estimated underground income described in Tables A-8. Roughly half of persons styled as independent operators are estimated to be so styled for purposes of evasion.

Technical Tables

The Technical Tables are in two sections.

Part A sets out estimates of expenditures, income and employment in construction. Estimates of the rate and amount of underground activity are contained in these tables.

Part B sets out estimates of revenue losses to governments and government agencies, based on the estimates in the Part A tables.

The detailed methodology behind the estimates is described in the 1998 Report.

A-1	Estimates of Construction Expenditures, Excluding Unmeasured Construction Expenditures, Ontario - Current \$ (millions)	Estimates construction expenditures, excluding unmeasured construction. Based on Statistics Canada CANSIM 029-0005
A-2	Estimates of Construction Expenditures. Including Unmeasured Construction Expenditures. Ontario - Current \$ (millions)	Estimates in A-1 are adjusted to account for construction expenditures that are not captured in National Accounts. For rationale and methodology, see. 1998 Report.
A-3	Estimates of "Do-It-Yourself" Residential Construction Expenditures and "Own Account" Non-Residential Construction Expenditures	DIY estimates are judgement, based on 1998 Report. Own-account are judgement, based on Statistics Canada, <i>Construction in Canada</i> 64-201 (discontinued).
A-4	Estimates of Construction Expenditures including Unmeasured Construction Expenditures, but Removing Residential "Do-It-Yourself" Expenditures and Non-Residential "Own Account" Expenditures - Ontario - Current \$ (millions)	Estimates in A-2 adjusted to produce an estimate of construction work undertaken by the 'contract construction industry', i.e., netting out DIY and 'own account' construction activity.
A-5	Estimates of Employment Income in the Contract Construction Industry including Unmeasured Construction Expenditures - Ontario Current \$ (millions)	Judgement-based estimates of wage share of total expenditure estimates in A-4. Based on estimates of wage input estimates in Statistics Canada CANSIM 361-0009 and 381-0013
A-6	Estimates of Employment (Persons) in the Contract Construction Industry including Unmeasured Construction Activity - Ontario (1,000's)	Income estimates in A-5 translated into employment estimates using judgement informed estimates of average annual earnings and reconciled to Statistics Canada <i>Labour Force Survey</i> .
A-7	Estimates of Underground Employment in the Construction Industry - Ontario (1,000's)	Judgement-based estimates of rate of underground activity. Rationale for change in estimates from 1998-2001 discussed in 2008 Report.

A-8	Estimates of Underground Income in the Construction Industry - Ontario \$ Current (millions)	Based on A-5 and A-7. The share of underground income is lower than the share of underground employment for reasons discussed in the 1998 Report
A-9	Comparisons of 1998-2000 Estimates and 2003-2005 Estimates	
A-10	Estimates of Independent Operators - Ontario (1,000's)	Judgement-based estimates of independent operators, reconciled to Statistics Canada <i>Labour Force Survey</i> . See discussion in 2008 Report.

B-1	Estimated PST Loss on Out-of-Province Contractors (Non-Residential), Ontario 2003-2005 (Million Current Dollars)	In border regions, out-of-province contractors may undertake construction work in Ontario using building materials purchased out-of-province. In the case of Quebec-based contractors especially, there is a strong incentive to purchase materials in Quebec so as to benefit from full deductibility of input tax credits under the harmonized sales tax.
B-2	Estimated GST Loss on New Residential Construction, Ontario 2003-2005 (Million Current Dollars)	GST loss pertains to undeclared labour income.
B-3	Estimated GST Loss on Residential Repairs, Ontario 2003-2005 (Million Current Dollars)	GST loss pertains to undeclared labour income.
B-4	Estimated GST Loss on Residential Renovations, Ontario 2003-2005 (Million Current Dollars)	GST loss pertains to undeclared labour income.
B-5	Estimated Income Tax Losses, Ontario 2003-2005 (Million Current Dollars)	Income tax losses (federal and provincial) arise from undeclared income.
B-6	Estimated Payroll Contribution-Based Losses, Ontario 2003-2005 (Million Current Dollars)	Payroll contribution losses arise from two sources: (1) undeclared income, and (2) employees who are improperly styled as independent operators. See discussion in 2008 Report.
Summary	Estimated Revenue Losses	Summarizes estimated revenue losses

A-1 Estimates of Construction Expenditures Excluding Unmeasured Construction Expenditures Ontario—Current \$ (millions) - CANSIM 029-0005

	Annual Estimates			Average 2003-2005	Percent
	2003	2004	2005		
New Residential					
New Housing	\$15,643	\$16,877	\$16,452	\$16,324	28%
Renovations	\$9,589	\$10,593	\$11,845	\$10,676	19%
Total	\$25,233	\$27,471	\$28,297	\$27,000	47%
Repair - Residential	\$3,456	\$3,744	\$4,416	\$3,872	7%
Total Residential Construction	\$28,689	\$31,215	\$32,713	\$30,872	54%
New Non-Residential Construction					
Buildings	\$12,277	\$12,732	\$13,608	\$12,872	22%
Engineering	\$8,806	\$8,790	\$10,170	\$9,255	16%
Total	\$21,083	\$21,522	\$23,778	\$22,127	39%
Repair - Non-Residential	\$4,142	\$4,356	\$4,355	\$4,284	7%
Total Non-Residential Construction	\$25,225	\$25,877	\$28,133	\$26,412	46%
Total Construction	\$53,913	\$57,092	\$60,846	\$57,284	100%
Of which					
New	\$46,316	\$48,992	\$52,075	\$49,127	
Repair	\$7,598	\$8,100	\$8,771	\$8,156	
Total	\$53,913	\$57,092	\$60,846	\$57,284	
Repair Share	14.1%	14.2%	14.4%	14.2%	

A-2

Estimates of Construction Expenditures Including Unmeasured Construction Expenditures Ontario—Current \$ (millions)

	Annual Estimates				
	2003	2004	2005	Average 2003-2005	Percent
New Residential					
New Housing	\$156,113	\$17,384	\$16,946	\$16,814	28%
Renovations	\$10,356	\$11,441	\$12,792	\$11,530	19%
Total	\$26,469	\$28,824	\$29,738	\$28,344	48%
Repair - Residential	\$4,147	\$4,493	\$5,299	\$4,646	8%
Total Residential Construction	\$30,616	\$33,317	\$35,037	\$32,990	56%
New Non-Residential Construction					
Buildings	\$12,277	\$12,732	\$13,608	\$12,872	22%
Engineering	\$8,806	\$8,790	\$10,170	\$9,255	16%
Total	\$21,083	\$21,522	\$23,778	\$22,127	37%
Repair - Non-Residential	\$4,142	\$4,356	\$4,355	\$12,852	22%
Total Non-Residential Construction	\$25,225	\$25,877	\$28,133	\$26,412	44%
Total Construction	\$55,841	\$59,194	\$63,170	\$59,402	100%
Of which					
New	\$47,552	\$50,346	\$53,516	\$50,471	
Repair	\$8,289	\$8,848	\$9,654	\$17,499	
Total	\$55,841	\$59,194	\$63,170	\$67,970	
Repair Share	14.8%	14.9%	15.3%	25.7%	

A

A-3

Estimates of “Do-It-Yourself” Residential Construction Expenditures And “Own Account” Non-Residential Construction Expenditures

	1998-2000 Estimates	2003-2005 Estimates
New Residential		
New Housing	3.0%	3.0%
Renovations	29.0%	29.0%
Repair - Residential	29.0%	29.0%
New Non-Residential Construction		
Total	12.5%	12.5%
Repair - Non-Residential	20.0%	20.0%

A-4

Estimates of Construction Expenditures including Unmeasured Construction Expenditures but Removing Residential “Do-It-Yourself” Expenditures and Non-Residential “Own Account” Expenditures - Ontario - Current \$ (millions)

	Annual Estimates				
	2003	2004	2005	Average 2003-2005	Percent
New Residential					
New Housing	\$15,629	\$16,862	\$16,437	\$16,310	32%
Renovations	\$7,353	\$8,123	\$9,082	\$8,186	16%
Total	\$22,982	\$24,985	\$25,520	\$24,496	38%
Repair - Residential	\$2,945	\$3,190	\$3,762	\$3,299	7%
Total Residential Construction	\$25,927	\$28,175	\$29,282	\$27,795	55%
New Non-Residential Construction					
Buildings	\$10,743	\$11,140	\$11,907	\$11,263	22%
Engineering	\$7,705	\$7,691	\$8,899	\$8,098	16%
Total	\$18,448	\$18,831	\$20,805	\$19,362	38%
Repair - Non-Residential	\$3,313	\$3,484	\$3,484	\$3,427	7%
Total Non-Residential Construction	\$21,761	\$22,316	\$24,290	\$22,789	45%
Total Construction	\$47,688	\$50,491	\$53,572	\$50,583	100%

A-5

Estimates of Employment Income in the Contract Construction Industry Including Unmeasured Construction Expenditures - Ontario Current \$ (millions)

	Annual Estimates			Average 2003-2005	Percent
	2003	2004	2005		
New Residential					
New Housing	\$5,314	\$5,733	\$5,589	\$5,545	32%
Renovations	\$2,941	\$3,249	\$3,633	\$3,274	19%
Total	\$8,255	\$8,982	\$9,222	\$8,820	51%
Repair - Residential	\$1,178	\$1,276	\$1,505	\$1,320	8%
Total Residential Construction	\$9,433	\$10,258	\$10,727	\$10,139	59%
New Non-Residential Construction					
Buildings	\$3,330	\$3,453	\$3,691	\$3,492	20%
Engineering	\$2,157	\$2,154	\$2,492	\$2,268	13%
Total	\$5,488	\$5,607	\$6,183	\$5,759	33%
Repair - Non-Residential	\$1,259	\$1,324	\$1,324	\$1,302	8%
Total Non-Residential Construction	\$6,747	\$6,931	\$7,507	\$7,061	41%
Total Construction	\$16,180	\$17,189	\$18,233	\$17,201	100%
Of which:					
New	\$13,743	\$14,589	\$15,404	\$14,579	
Repair	\$2,437	\$2,600	\$2,829	\$2,622	
Total	\$16,180	\$17,189	\$18,233	\$17,201	
Repair Share	15.1%	15.1%	15.5%	15.2%	

A-6

**Estimates of Employment (Persons) in the Contract Construction Industry
including Unmeasured Construction Activity
- Ontario - (1,000's)**

	Annual Estimates				
	2003	2004	2005	Average 2003-2005	Percent
New Residential					
New Housing	121.6	131.2	127.9	126.9	34%
Renovations	75.2	83.1	92.9	83.7	22%
Total	196.8	214.3	220.8	210.6	56%
Repair - Residential	30.1	32.6	38.5	33.7	9%
Total Residential Construction	226.9	246.9	259.3	244.4	65%
New Non-Residential Construction					
Buildings	61.6	63.9	68.3	64.6	17%
Engineering	38.3	38.2	44.2	40.2	11%
Total	99.9	102.1	112.5	104.8	28%
Repair - Non-Residential	25.5	26.8	26.8	26.3	7%
Total Non-Residential Construction	125.4	128.9	139.3	131.2	35%
Total Construction	352.3	375.8	398.6	375.6	100%
LFS Estimate of Employment	369.1	367.6	394.8	377.2	
Variance from LFS Estimate	-16.8	8.2	3.8	-1.6	
Percent Variance from LFS Estimate	5%	2%	1%	0%	

A-7

Estimates of Underground Employment in the Construction Industry - Ontario (1,000's)

	Avg Employment	Low Estimate		High Estimate		Best Estimate	
	2003-2005	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	126.9	15.2	12%	21.6	17%	16.5	13%
Renovations	83.7	29.3	35%	46.1	55%	37.7	45%
Total	210.6	44.5	21%	67.6	32%	54.2	26%
Repair - Residential	33.7	13.5	40%	20.2	60%	16.9	50%
Total Residential Construction	244.4	58.0	24%	87.9	36%	71.1	29%
New Non-Residential Construction							
Buildings	64.6	8.4	13%	12.9	20%	9.0	14%
Engineering	40.2	1.2	3%	2.4	6%	1.2	3%
Total	104.8	9.6	10%	15.3	14%	10.3	10%
Repair - Non-Residential	26.3	2.6	10%	4.7	18%	3.2	12%
Total Non-Residential Construction	131.2	12.2	9%	20.1	15%	13.4	10%
Total Construction	375.6	70.3	19%	108.0	29%	84.5	22%

A-8

Estimates of Underground Income in the Construction Industry - Ontario \$ Current (millions)

	Avg Employment	Low Estimate		High Estimate		Best Estimate	
	2003-2005	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	\$5,545	\$532	10%	\$754	14%	\$577	10%
Renovations	\$3,274	\$917	28%	\$1,441	44%	\$1,179	36%
Total	\$8,820	\$1,449	16%	\$2,195	25%	\$1,756	20%
Repair - Residential	\$1,320	\$422	32%	\$633	48%	\$528	40%
Total Residential Construction	\$10,139	\$1,871	18%	\$2,828	28%	\$2,283	23%
New Non-Residential Construction							
Buildings	\$3,492	\$363	10%	\$559	16%	\$391	11%
Engineering	\$2,268	\$54	2%	\$109	5%	\$54	2%
Total	\$5,759	\$418	7%	\$667	12%	\$445	8%
Repair - Non-Residential	\$1,302	\$104	8%	\$188	14%	\$125	10%
Total Non-Residential Construction	\$7,061	\$522	7%	\$855	12%	\$571	8%
Total Construction	\$17,201	\$2,393	14%	\$3,683	21%	\$2,854	17%

A-9

Comparisons of 1998-2000 Estimates and 2003-2005 Estimates Residential and Non-Residential Shares

	Share Estimates			
	Residential		Non-Residential	
	1998-2000 Average	2003-2005 Average	1998-2000 Average	2003-2005 Average
Construction Expenditure - Excluding Unmeasured	48%	54%	52%	46%
Construction Expenditure - Including Unmeasured	51%	56%	49%	44%
Contract Construction Expenditure*	51%	55%	49%	45%
Contract Construction Wage and Other Income	55%	59%	45%	41%
Contract Construction Employment	61%	65%	39%	35%
Underground Employment Rate - Best Estimate	35%	29%	11%	10%
Underground Income Rate - Best Estimate	29%	23%	9%	8%

	Total Industry	
	1998-2000	2003-2005
Wage Share of Construction	35%	34%
Underground Employment Rate - Best Estimate	26%	22%
Underground Income Rate - Best Estimate	20%	17%

*Excluding Residential "Do-It-Yourself" and Non-Residential "Own Account"

A-10
Estimates of Independent Operators
- Ontario (1,000's)

	Avg Employment	Estimate	
	2003-2005	Estimate	Rate
New Residential			
New Housing	126.9	31.7	25%
Renovations	83.7	26.8	32%
Total New Residential	210.6	58.5	28%
Repair - Residential	33.7	10.8	32%
Total Residential Construction	244.4	69.3	28%
New Non-Residential Construction			
Buildings	64.6	6.5	10%
Engineering	40.2	0.4	1%
Total Non-Residential New Construction	104.8	6.9	10%
Repair - Non-Residential	26.3	0.8	3%
Total Non-Residential Construction	131.2	7.7	6%
Total Construction	375.6	77.0	20%

B

B-1

Estimated PST Loss on Out-of-Province Contractors (Non-Residential) Ontario 2003-2005 (Million Current Dollars)

		New Residential			Repair Residential
		New Housing	Renovations	Total New Residential	
Expenditure for Construction Industry Work*					
	2003	\$15,629	\$7,353	\$22,982	\$2,945
	2004	\$16,862	\$8,123	\$24,985	\$3,190
	2005	\$16,437	\$9,082	\$25,520	\$3,762
Border Areas 15% of Non-Residential					
	2003	-	-	-	-
	2004	-	-	-	-
	2005	-	-	-	-
Materials Share (30%)					
	2003	-	-	-	-
	2004	-	-	-	-
	2005	-	-	-	-
Maximum PST (8%)					
	2003	-	-	-	-
	2004	-	-	-	-
	2005	-	-	-	-
Estimated Tax Loss					
Low (10%)	2003	-	-	-	-
	2004	-	-	-	-
	2005	-	-	-	-
High (20%)	2003	-	-	-	-
	2004	-	-	-	-
	2005	-	-	-	-
Estimated Tax Loss 2003-2005 (Annual Average)					
Low High Best Estimate		-	-	-	-
		-	-	-	-
		-	-	-	-

Total Residential Construc- tion	New Non-Residential			Repair Non- Residential	Total Non-Residential Construction	Total Construction
	Building	Engineering	Total New Non- Residential			
\$25,927 \$28,175 \$29,282	\$10,743 \$11,140 \$11,907	\$7,705 \$7,691 \$8,899	\$18,448 \$18,831 \$20,805	\$3,313 \$3,484 \$3,484	\$21,761 \$22,316 \$24,290	\$47,688 \$50,491 \$53,572
- - -	\$1,611 \$1,671 \$1,786	\$1,156 \$1,154 \$1,335	\$2,767 \$2,825 \$3,121	\$497 \$523 \$523	\$3,264 \$3,347 \$3,643	- - -
- - -	\$483 \$501 \$536	\$347 \$346 \$400	\$830 \$847 \$936	\$149 \$157 \$157	\$979 \$1,004 \$1,093	- - -
- - -	\$39 \$40 \$43	\$28 \$28 \$32	\$66 \$68 \$75	\$12 \$13 \$13	\$78 \$80 \$87	- - -
- - -	\$4 \$4 \$4	\$3 \$3 \$3	\$7 \$7 \$7	\$1 \$1 \$1	\$8 \$8 \$8	- - -
- - -	\$8 \$8 \$8	\$6 \$6 \$6	\$13 \$14 \$15	\$2 \$3 \$3	\$16 \$16 \$17	- - -
- - -	- - -	- - -	- - -	- - -	\$8 \$16 \$9	- - -

B

B-2

Estimated GST Loss on New Residential Construction Ontario 2003-2005 (Million Current Dollars)

	Annual Estimates			Average
	2003	2004	2005	2003-2005
New Residential Construction	\$15,629	\$16,862	\$16,437	\$16,310
Scenario No.1 - 3% Share / 60% Input				
Estimated Non-GST Share—Construction only	3.0%	3.0%	3.0%	3.0%
Estimated Non-GST Amount	\$469	\$506	\$493	\$489
Estimated Construction + Land	\$624	\$673	\$656	\$651
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs - Value	\$281	\$304	\$296	\$294
GST Gross at 4.5% Rate	\$13	\$14	\$13	\$13
GST applicable on developer built housing	\$28	\$30	\$30	\$29
GST Loss	\$15	\$17	\$16	\$16

	Annual Estimates			Average
	2003	2004	2005	2003-2005
Scenario No.2 - 5% Share / 60% Input				
Estimated Non-GST Share—Construction only	5.0%	5.0%	5.0%	5.0%
Estimated Non-GST Amount	\$781	\$843	\$822	\$815
Estimated Construction + Land	\$1,039	\$1,121	\$1,093	\$1,085
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs - Value	\$469	\$506	\$493	\$489
GST Gross at 4.5% Rate	\$21	\$23	\$22	\$22
GST applicable on developer built housing	\$47	\$50	\$49	\$49
GST Loss	\$26	\$28	\$27	\$27

	Annual Estimates			Average
	2003	2004	2005	2003-2005
Scenario No.3 - 3% Share / 90% Input				
Estimated Non-GST Share—Construction only	3.0%	3.0%	3.0%	3.0%
Estimated Non-GST Amount	\$469	\$506	\$493	\$489
Estimated Construction + Land	\$624	\$673	\$656	\$651
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	\$422	\$455	\$444	\$440
GST Gross at 4.5% Rate	\$19	\$20	\$20	\$20
GST applicable on developer built housing	\$28	\$30	\$30	\$29
GST Loss	\$9	\$10	\$10	\$9

	Annual Estimates			Average
	2003	2004	2005	2003-2005
Scenario No.4 - 5% Share / 90% Input				
Estimated Non-GST Share—Construction only	5.0%	5.0%	5.0%	5.0%
Estimated Non-GST Amount	\$781	\$843	\$822	\$815
Estimated Construction + Land	\$1,039	\$1,121	\$1,093	\$1,085
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	\$703	\$759	\$740	\$734
GST Gross at 4.5% Rate	\$32	\$34	\$33	\$33
GST applicable on developer built housing	\$47	\$50	\$49	\$49
GST Loss	\$15	\$16	\$16	\$16

GST Tax Loss				
High				\$27
Low				\$9
Best Estimate				\$16

B

B-3

Estimated GST Loss on Residential Repairs Ontario 2003-2005 (Million Current Dollars)

	Annual Estimates			Average
	2003	2004	2005	2003-2005
Residential Repair	\$2,945	\$3,190	\$3,762	\$3,299
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	\$2,061	\$2,233	\$2,634	\$2,309
Underground Share - Low	40%	40%	40%	40%
Underground Share - High	60%	60%	60%	60%
GST Loss - Low	\$58	\$63	\$74	\$65
GST Loss - High	\$87	\$94	\$111	\$97
GST Loss - Best Estimate	\$65	\$70	\$83	\$73

B-4
Estimated GST Loss on Residential Renovations
Ontario 2003-2005 (Million Current Dollars)

	Annual Estimates			Average
	2003	2004	2005	2003-2005
Residential Renovation	\$7,353	\$8,123	\$9,082	\$8,186
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	\$5,147	\$5,686	\$6,358	\$5,730
Underground Share - Low	40%	40%	40%	40%
Underground Share - High	50%	50%	50%	50%
GST Loss - Low	\$144	\$159	\$178	\$160
GST Loss - High	\$180	\$199	\$223	\$201
GST Loss - Best Estimate	\$146	\$161	\$180	\$162

B-5
Income Tax Loss
Ontario 2003-2005 (Million Current Dollars)

	Average: 2003-2005		
	Low	High	Best Estimate
Underground Income	\$3,226	\$4,669	\$3,694
Adjusted to eliminate prevailing 12.5% discount on U/G work	\$3,630	\$5,253	\$4,156
Average Income tax rate	24%	31%	28%
Estimated Income Tax Loss	\$871	\$1,628	\$1,143

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B-6

Payroll Contribution-Based Losses Ontario 2003-2005 (Million Current Dollars)

CPP	Average: 2003-2005		
	Low	High	Best Estimate
Underground Income	\$3,226	\$4,669	\$3,694
Adjusted to eliminate prevailing 12.5% discount on U/G work	\$3,630	\$5,253	\$4,156
Average Contribution Rate on Total Underground Earnings	9.9%	9.9%	9.9%
Estimated Contribution Loss	\$359	\$520	\$411

EI	Average: 2003-2005		
	Low	High	Best Estimate
Underground Income	\$3,226	\$4,669	\$3,694
Adjusted to eliminate prevailing 12.5% discount on U/G work	\$3,630	\$5,253	\$4,156
Dependent Contractor Share of Underground Employment	30%	30%	30%
Dependent Contractor Share of Underground Income	\$1,089	\$1,576	\$1,247
Average Contribution Rate (Employer + Employee)	4.8%	4.8%	4.8%
Estimated Contribution Loss	\$52	\$76	\$60

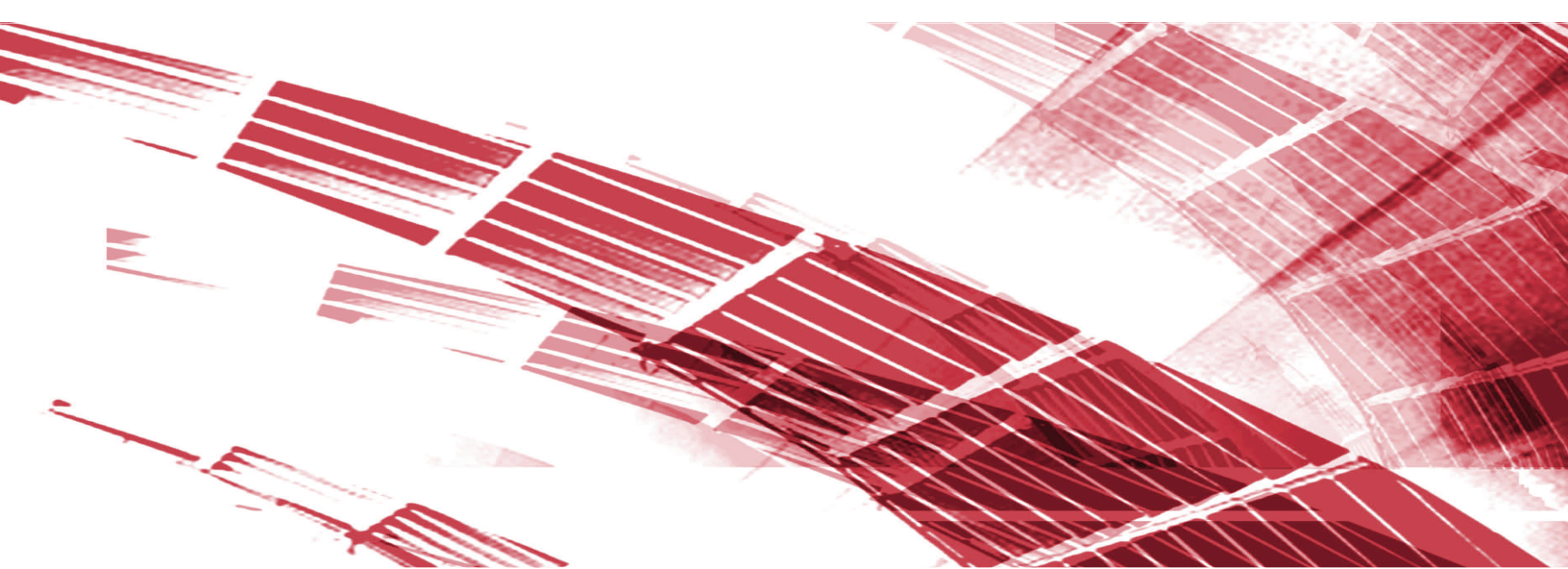
WSIB	Average: 2003-2005		
	Low	High	Best Estimate
Estimated number of improperly styled independent operators	32,000	47,000	42,000
Estimated average earnings per worker		\$34,000	
Estimated notional payroll that should have been covered	\$1,088	\$1,598	\$1,428
Estimated WSIB Premium		10%	
Estimate WSIB Premium Loss	\$108.8	\$159.8	\$142.8

EHT	Average: 2003-2005		
	Low	High	Best Estimate
Underground Income	\$3,226	\$4,669	\$3,694
Adjusted to eliminate prevailing 12.5% discount on U/G work	\$3,630	\$5,253	\$4,156
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	\$726	\$1,051	\$831
Average Contribution Rate	1.0%	1.0%	1.0%
Estimated Contribution Loss	\$7	\$11	\$8

WSIB (prior method)	Average: 2003-2005		
	Low	High	Best Estimate
Underground Income	\$3,226	\$4,669	\$3,694
Adjusted to eliminate prevailing 12.5% discount on U/G work	\$3,630	\$5,253	\$4,156
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	\$726	\$1,051	\$831
Average Contribution Rate	6.0%	6.0%	6.0%
Estimated Contribution Loss	\$44	\$63	\$50

Summary: Revenue Losses

	2003-2005 Average Annual			
	Low Estimate	High Estimate	Best Estimate	Share
Provincial Sales Tax Loss to Out-of-Province Contractors	\$8	\$16	\$9	0%
GST Loss on New Housing	\$9	\$27	\$16	1%
GST Loss on Residential Repair	\$65	\$97	\$73	4%
GST Loss on Residential Renovation	\$160	\$201	\$162	8%
Sub-Total: GST Loss	\$234	\$324	\$251	12%
Income Tax Loss	\$871	\$1,628	\$1,143	56%
CPP Loss	\$359	\$520	\$411	20%
EI Loss	\$52	\$76	\$60	3%
EHT Loss	\$7	\$11	\$8	0%
WSIB Loss	\$109	\$160	\$143	7%
Total Revenue Losses:	\$1,641	\$2,735	\$2,026	100%



Ontario Construction Secretariat
940 The East Mall, Suite 120 Etobicoke, ON (CANADA) M9B 6J7
Phone: 416.620.5210 Fax: 416.620.5310 Email: info@iciconstruction.com
Official website: www.iciconstruction.com

