Estimates of Revenue Losses to Governments as a result of Underground Practices in the Ontario Construction Industry

1995-1997 compared to 1998-2000 Updated Estimates – August 2001

Prepared by:
Prism Economics and Analysis

Author:
John O'Grady

Prepared for:

Ontario Construction Secretariat

Table of Contents

Key Findings 1

Introduction 2

General Indicators 3

Estimates of the Underground Economy 5

Comparisons of the Underground Economy: 1995-1997 versus 1998-2000 7

Estimates of Revenue Losses 8

Appendices

- **Appendix A: Technical Notes** 9
- **Appendix B: Estimates of Underground Economy, 1995-1997** 10
- **Appendix C: Estimates of Underground Economy, 1998-2000** 20
- **Appendix D: Estimates of Revenue Losses to Governments and WSIB, 1995-1997** 28
- **Appendix E: Estimates of Revenue Losses to Governments and WSIB, 1998-2000** 33

Key Findings

1. The two co-incident indicators of underground activity are the rate of self-employment in construction and the share of cash in total transactions. For the period 1998-2000, both of these indicators show a moderate increase in comparison with the period 1995-1997.

2. Average annual underground income in Ontario's construction industry, in the period 1998-2000, was $2.395 billion. This compares with $1.971 billion in the period 1995-1997. The estimated increase is 21.5%.

3. The rate of underground income, i.e., the share of underground income in total construction income, is estimated to have declined from 22% to 19%. This decline in the rate of underground income is attributable to changes in the composition of construction, increased enforcement activities and an increase in the share of housing starts accounted for by large developers.

4. Over the period 1998-2000, the average annual revenue loss to governments and government agencies, such as WSIB, is estimated at $1.259 billion. This is an increase of 16% over the estimated average annual loss of $1.089 billion for the period 1995-1997. Over 60% of the total loss is accounted for by income tax evasion.

5. Average annual losses to the Workplace Safety & Insurance Board (WSIB) are estimated at $28 million. This is an increase from $23 million over the period 1995-1997.

6. Underground practices and underground income remain a serious problem in Ontario's construction industry. The problem has not diminished in the past three years. While the rate of underground activity has declined, this is chiefly attributable to changes in the composition of construction activity. The absolute amount of underground income has increased.

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]

Since completion of the 1998 study, there have been administrative and economic developments which require the estimates proposed in the study be amended. Also important are new input/output data which alter the estimate of the income share of the construction industry's output. Finally, Statistics Canada has now adopted the NAICS definition of industries, which replaces the former SIC system. This has affected the construction industry.

When administrative and economic developments are taken into account, the estimated rate of underground employment income declines marginally from 22% (in the 1998 report) to 20%. The estimated economic losses to governments, however, are reduced much more significantly. This reduction from $1,072 - $1,734 million (in the 1998 report) to $1,089 is chiefly attributable to changes in estimation procedures arising from the use of more recent input/output data. In the 1998 report, the income share of contract construction work was estimated at 44%. Revised data have led us to use an income ratio of only 35%.

To permit comparisons, the results presented in this report use the same data sources and estimation procedures for 1995-1997 and 1998-2000.

[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.

General Indicators

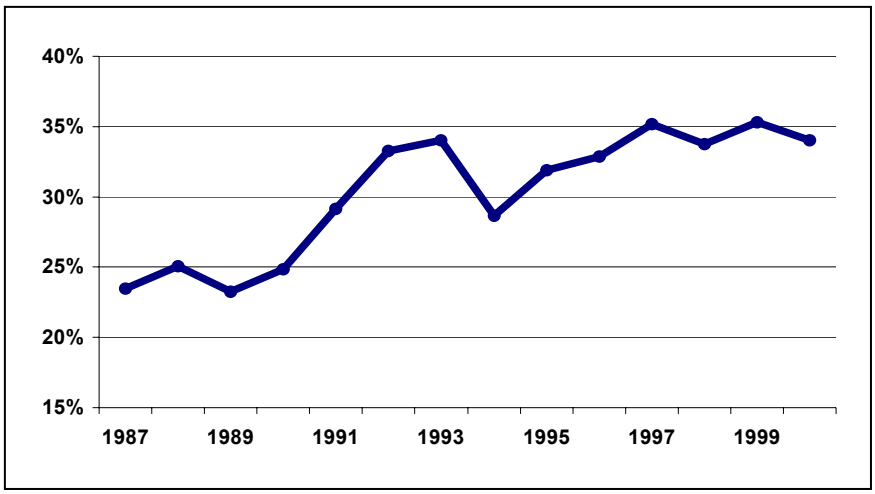
The 1998 report cited a number of indicators of underground activity. A number of these cannot be updated. For example, the 1998 report cited a study by Statistics Canada comparing national accounts estimates of the income earned by the self-employed with income reported for tax purposes. This study showed a concealment rate ranging from 57% to 65% over the period 1985-1991.[2] This analysis has not been updated.

However, two important indicators can be updated. Neither of these suggests a decline in the overall rate of underground activity.

Self-Employment

As the Statistics Canada study showed, self-employment strongly correlates with income concealment and tax evasion. While Canada Customers and Revenue Agency (CCRA), formerly Revenue Canada, have augmented their enforcement activities, it is still reasonable to regard the rate of self-employment as an indicator of the likelihood of underground activity. Figure 1 shows the proportion of persons in construction occupations, working in the construction industry, who are self-employed

Figure 1 – Percent of Employed Persons in Construction Occupations Employed in the Construction Industry who are Self-Employed Statistics Canada, Labour Force Survey – Special Tabulation for OCS



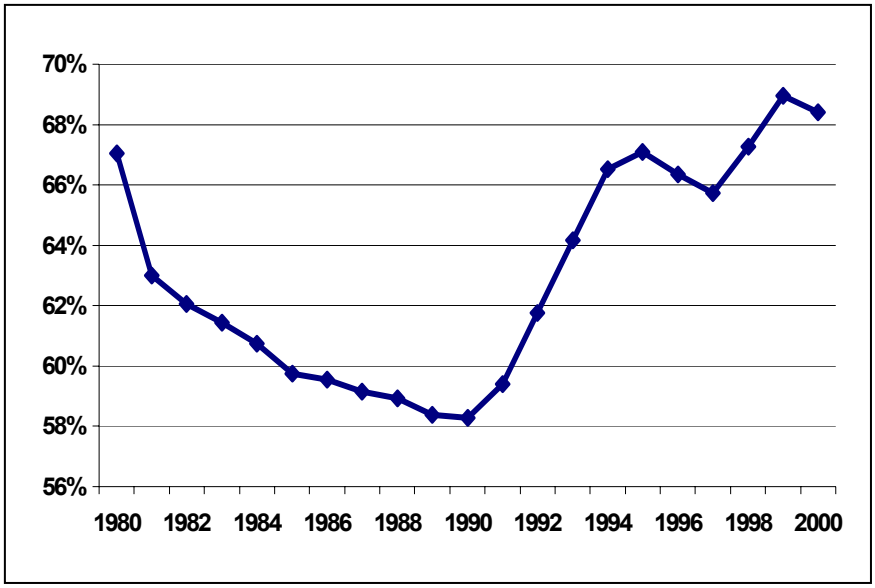
The 1998 report was based on annual averages for the period 1995-1997. Figure 1 shows that in 2000, the rate of self-employment declined marginally from the year prior. However, for the period 1998-2000, there was an increase in the rate of self-employment compared to the previous period. In 1995-1997 the average rate of self-employment was 17.6%. Over the period 1998-2000, the average rate increased to 18.6%

[2] See *The Underground Economy in Ontario's Construction Industry* (November 1998), pp18-19.

The Use of Cash

The underground economy has a strong preference for eliminating audit trails by using cash. Figure 2 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.

Figure 2 – Ratio of Currency outside Chartered Banks (Monthly Average) to Personal Expenditure on Goods and Services (at monthly rate) Statistics Canada, CANSIM II, Tables 176-0020 and 380-0024



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. In 2000 there was a modest decline in the use of cash. However, the period 1998-2000 shows an overall increase in the use of cash compared to 1995-1997.

The increased rate of self-employment in the construction industry and the overall increase in the use of cash lead us to conclude that a significant reduction in the rate of underground activity in the construction industry is highly unlikely. The 1998 report concluded the magnitude of underground activity was such that underground practices had become embedded in the construction industry. While there is some reason to believe overall underground activity in the industry may have been reduced marginally, there is no evidence to suggest the picture presented in 1998 has changed in any fundamental way.

Estimates of the Underground Economy

Figure 3 sets out updated estimates of the distribution of underground employment across sectors and the rate of underground activity by sector.

Over the period 1998-2000, we estimate the rate of underground activity at 23% to 32% of total construction work, with a best estimate of 25%. This compares with the 1998 report where estimates ranged from 26% to 36%, with a best estimate of 28%.

Figure 3 – Estimates of Underground Employment in the Construction Industry – Ontario (1,000's)

	Avg Employment	Low Estimate		High Estimate		Best Estimate	
	1998-2000	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	106.9	16.0	15%	21.4	20%	16.0	15%
Renovations	59.1	29.6	50%	41.4	70%	33.1	56%
Total New Residential	166.0	45.6	27%	62.8	38%	49.1	30%
Repair - Residential	21.5	12.9	60%	17.2	80%	14.4	67%
Total Residential Construction	**187.5**	**58.5**	**31%**	**79.9**	**43%**	**63.5**	**34%**
New Non-Residential Construction							
Buildings	51.3	7.7	15%	10.3	20%	7.7	15%
Engineering	40.9	1.6	4%	2.5	6%	1.6	4%
Total Non-Residential New Construction	92.1	9.3	10%	12.7	14%	9.3	10%
Repair - Non-Residential	25.3	3.3	13%	6.1	24%	3.5	14%
Total Non-Residential Construction	**117.5**	**12.6**	**11%**	**18.8**	**16%**	**12.9**	**11%**
Total Construction	**304.9**	**71.1**	**23%**	**98.7**	**32%**	**76.4**	**25%**

The decline is attributable to marginal changes in the composition of construction activity. It is estimated, for example, that engineering construction – a low incidence sector – increased its share of construction work in Ontario from an average of 19% in the period 1995-1997 to 23% in the period 1998-2000. In the residential sector, it is also believed large builders undertook an increased proportion of new starts. These and other marginal changes account for the moderate reduction in the overall estimate of the incidence of underground activity.

Figure 4 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., 100 hours of underground labour costs less than 100 hours of legitimate labour. The estimated rate of underground income ranges from 17% to 25%, with a best estimate of 19%. This compares with estimates of 20% to 30%, with a best estimate of 22%, in the 1998 report.

Figure 4 – Estimates of Underground Income in the Construction Industry, Ontario – Current $ (millions)

	Avg Income	Low Estimate		High Estimate		Best Estimate	
	1998-2000	Underground	Rate	Underground	Rate	Underground	Rate
New Residential							
New Housing	$4,062	$449	11%	$621	15%	$518	13%
Renovations	$2,010	$803	40%	$1,196	60%	$957	48%
Total New Residential	$6,072	$1,252	21%	$1,817	30%	$1,475	24%
Repair - Residential	$730	$354	48%	$496	68%	$416	57%
Total Residential Construction	**$6,801**	**$1,605**	**24%**	**$2,314**	**34%**	**$1,890**	**28%**
New Non-Residential Construction							
Buildings	$2,411	$307	13%	$410	17%	$307	13%
Engineering	$2,002	$68	3%	$102	5%	$68	3%
Total Non-Residential New Construction	$4,413	$375	9%	$512	12%	$375	9%
Repair - Non-Residential	$1,088	$120	11%	$222	20%	$129	12%
Total Non-Residential Construction	**$5,501**	**$496**	**9%**	**$734**	**13%**	**$505**	**9%**
Total Construction	**$12,302**	**$2,101**	**17%**	**$3,047**	**25%**	**$2,395**	**19%**

On a best estimate basis and using the same estimation procedures for both periods, the amount of underground income in construction in 1998-2000 was $2,395 million compared to $1,971 million in 1995-1997. This is an increase of 21.5%.

Comparisons of the Underground Economy: 1995-1997 versus 1998-2000

Figure 5 compares the key estimates for the periods 1995-1997 and 1998-2000. Detailed estimates are set out in the appendices. The estimation procedures for the two periods are comparable.

Figure 5 – Comparisons of Estimates for 1995-1997 and 1998-2000

	1995-1997	1998-2000	Change	% Change
Expenditures on Contract Construction - $millions (A-4)				
Total Residential Construction	$13,450	$18,131	$4,681	34.8%
Total Non-Residential Construction	$14,457	$17,070	$2,613	18.1%
Total Construction	$27,907	$35,201	$7,294	26.1%
Employment in Contract Construction - 1,000's (A-6)				
Total Residential Construction	158.6	187.5	28.9	18.2%
Total Non-Residential Construction	112.0	117.5	5.5	4.9%
Total Construction	270.6	304.9	34.3	12.7%
Underground Employment - 1,000's (A-7)				
Total Residential Construction	58.6	63.5	4.9	8.3%
Total Non-Residential Construction	12.3	12.9	0.6	5.1%
Total Construction	70.9	76.4	5.5	7.8%
Underground Employment Income - $millions (A-8)				
Total Residential Construction	1,544	1,890	346.3	22.4%
Total Non-Residential Construction	427	505	77.6	18.2%
Total Construction	1,971	2,395	423.9	21.5%

Estimates of Revenue Losses

Figure 6 summarizes the estimated revenue losses to governments and government agencies related to the amount of underground employment in Ontario's construction industry. It estimated total losses to governments and government agencies range from $1.085 billion to $1.716 billion, with our best estimate being $1.259 billion. Approximately 64% of this loss is attributable to income that is not declared for Income Tax purposes. Losses to the WSIB are estimated at $28 million. Other losses to the provincial government are estimated at $14 million. The province also loses approximately 28% of the Income Tax revenue that would otherwise have been collected. This amounts to $226 million.

Figure 6 – Estimated Revenue Losses to Governments and Government Agencies arising from Underground Employment in the Construction Industry Ontario – Current $ (millions)

	1998-2000: Average Annual		
	Low Estimate	High Estimate	Best Estimate
Provincial Sales Tax Loss to Out-of-Province Contractors	$7	$14	$9
GST Loss on New Housing	$7	$19	$11
GST Loss on Residential Repair	$43	$61	$47
GST Loss on Residential Renovation	$119	$167	$129
Sub-Total: GST Loss	$169	$247	$187
Income Tax Loss	$685	$1,131	$808
CPP Loss	$156	$226	$178
EI Loss	$38	$56	$44
EHT Loss	$5	$7	$5
WSIB Loss	$24	$36	$28
Total Revenue Losses:	**$1,085**	**$1,716**	**$1,259**

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.

Appendices

Appendix A: Technical Notes

Table	Section	Notes
B-1	Appendix B	CANSIM Table 02909995 is the source for (i) total new residential construction; (ii) residential repair; (iii) total new non-residential construction; (iv) non-residential repair. The Residential Renovation share is per CANSIM Table 026-0013 The share of Engineering and ICI construction in Non-Residential Construction is based on CanaData estimates
B-2	Appendix B	The basis for the unmeasured construction estimates are discussed in the original 1998 report. The same factors are applied for both the 1995-1997 period and the 1998-2000 period.
B-3	Appendix B	Do-It-Yourself and Own-Account construction estimates are as per the original 1998 report.
B-4	Appendix B	B-4 is constructed from B-1 as modified by B-2 and B-3
B-5	Appendix B	Estimates of labour income for the construction industry as a whole are based on input-output data from CANSIM Table 381-0003
B-6	Appendix B	B-6 is derived from B-5. The employment across sectors is based on estimated wage in each sector. The estimates were calibrated to balance the total employment estimated with the reported employment in the Labour Force Survey.
B-7	Appendix B	The procedures for estimating of the rate of underground employment are discussed in the original report.
B-8	Appendix B	The procedures for deriving the estimated underground economy income are discussed in the 1998 report.

Table	Section	Notes
C-1	Appendix C	CANSIM Table 02909995 is the source for (i) total new residential construction; (ii) residential repair; (iii) total new non-residential construction; (iv) non-residential repair. The Residential Renovation share is per CANSIM Table 026-0013 The share of Engineering and ICI construction in Non-Residential Construction is based on CanaData estimates
C-2	Appendix C	The basis for the unmeasured construction estimates are discussed in the original 1998 report. The same factors are applied for both the 1995-1997 period and the 1998-2000 period.
C-3	Appendix C	Do-It-Yourself and Own-Account construction estimates are as per the original 1998 report.
C-4	Appendix C	A-4 is constructed from A-1 as modified by A-2 and A-3
C-5	Appendix C	Estimates of labour income for the construction industry as a whole are based on input-output data from CANSIM Table 381-0003
C-6	Appendix C	A-6 is derived from A-5. The employment across sectors is based on estimated wage in each sector. The estimates were calibrated to balance the total employment estimated with the reported employment in the Labour Force Survey.
C-7	Appendix C	The procedures for estimating of the rate of underground employment are discussed in the original report.
C-8	Appendix C	The procedures for deriving the estimated underground economy income are discussed in the 1998 report.

Appendix B: Estimates of Underground Economy, 1995-1997

B-1 – Estimates of Construction Expenditures excluding Unmeasured Construction Expenditures: Ontario - Current $ (millions) - CANSIM 029-0005

	Annual Estimates			Average	Percent
	1995	1996	1997	1995-1997	
New Residential					
New Housing	$5,942	$6,601	$8,618	$7,054	23%
Renovations	$5,062	$5,401	$5,745	$5,403	17%
Total New Residential	$11,004	$12,003	$14,364	$12,457	40%
Repair - Residential	**$ 1,748**	**$ 1,827**	**$ 2,139**	**$1,905**	**6%**
Total Residential Construction	**$12,752**	**$13,830**	**$16,503**	**$14,361**	**46%**
New Non-Residential Construction					
Buildings	$6,458	$7,291	$7,701	$7,150	23%
Engineering	$6,438	$6,130	$6,890	$6,486	21%
Total Non-Residential New Construction	$12,896	$13,421	$14,591	$13,636	44%
Repair - Non-Residential	$3,192	$3,112	$3,166	$3,157	10%
Total Non-Residential Construction	**$16,088**	**$16,533**	**$17,757**	**$16,793**	**54%**
Total Construction	**$28,840**	**$30,363**	**$34,260**	**$31,154**	**100%**

B-2 – Estimates of Construction Expenditures including Unmeasured Construction Expenditures: Ontario - Current $ (millions)

	Annual Estimates			Average 1995-1997	Percent
	1995	**1996**	**1997**		
New Residential					
New Housing	$6,477	$7,196	$9,394	$7,689	23%
Renovations	$5,765	$6,152	$6,544	$6,154	19%
Total New Residential	$12,242	$13,347	$15,938	$13,843	42%
Repair - Residential	$2,098	$2,192	$2,567	$2,286	7%
Total Residential Construction	**$14,340**	**$15,540**	**$18,505**	**$16,128**	**49%**
New Non-Residential Construction					
Buildings	$6,458	$7,291	$7,701	$7,150	22%
Engineering	$6,438	$6,130	$6,890	$6,486	20%
Total Non-Residential New Construction	$12,896	$13,421	$14,591	$13,636	41%
Repair - Non-Residential	$3,192	$3,112	$3,166	$3,157	10%
Total Non-Residential Construction	**$16,088**	**$16,533**	**$17,757**	**$16,793**	**51%**
Total Construction	**$30,428**	**$32,073**	**$36,262**	**$32,921**	**100%**

B-3 – Estimates of "Do-It-Yourself" Residential Construction Expenditures and "Own Account" Non-Residential Construction Expenditures

	1995-1997 Estimates	1998-2000 Estimates
New Residential		
New Housing	3.0%	3.0%
Renovations	29.0%	29.0%
Total New Residential		
Repair - Residential	29.0%	29.0%
Total Residential Construction		
New Non-Residential Construction		
Buildings		
Engineering		
Total Non-Residential New Construction	15.0%	12.5%
Repair - Non-Residential	25.0%	20.0%
Total Non-Residential Construction		
Total Construction		

B-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			Average 1995-1997	Percent
	1995	1996	1997		
New Residential					
New Housing	$6,283	$6,980	$9,112	$7,458	27%
Renovations	$4,093	$4,368	$4,646	$4,369	16%
Total New Residential	$10,376	$11,348	$13,758	$11,827	42%
Repair - Residential	$1,489	$1,557	$1,822	$1,623	6%
Total Residential Construction	**$11,865**	**$12,904**	**$15,581**	**$13,450**	**48%**
New Non-Residential Construction					
Buildings	$5,651	$6,379	$6,738	$6,256	22%
Engineering	$5,633	$5,364	$6,029	$5,675	20%
Total Non-Residential New Construction	$11,284	$11,743	$12,767	$11,932	43%
Repair - Non-Residential	$2,554	$2,490	$2,533	$2,525	9%
Total Non-Residential Construction	**$13,838**	**$14,233**	**$15,300**	**$14,457**	**52%**
Total Construction	**$25,703**	**$27,137**	**$30,881**	**$27,907**	**100%**

B-5 – Estimates of Employment Income in the Contract Construction Industry including Unmeasured Construction Expenditures: Ontario - Current $ (millions)

	Annual Estimates			Average	Percent
	1995	1996	1997	1995-1997	
New Residential					
New Housing	$2,262	$2,513	$3,280	$2,685	28%
Renovations	$1,637	$1,747	$1,858	$1,748	18%
Total New Residential	$3,899	$4,260	$5,139	$4,433	45%
Repair - Residential	$596	$623	$729	$649	7%
Total Residential Construction	**$4,495**	**$4,882**	**$5,868**	**$5,082**	**52%**
New Non-Residential Construction					
Buildings	$1,808	$2,041	$2,156	$2,002	21%
Engineering	$1,690	$1,609	$1,809	$1,703	17%
Total Non-Residential New Construction	$3,498	$3,651	$3,965	$3,705	38%
Repair - Non-Residential	$970	$946	$962	$960	10%
Total Non-Residential Construction	**$4,469**	**$4,597**	**$4,927**	**$4,664**	**48%**
Total Construction	**$8,963**	**$9,479**	**$10,795**	**$9,746**	**100%**

B-6 – Estimates of Employment (Persons) in the Contract Construction Industry including Unmeasured Construction Activity: Ontario (1,000's)

	Annual Estimates			Average	Percent
	1995	1996	1997	1995-1997	
New Residential					
New Housing	66.9	74.3	97.0	79.4	29%
Renovations	54.1	57.7	61.4	57.8	21%
Total New Residential	121.0	132.0	158.4	137.1	51%
Repair - Residential	19.7	20.6	24.1	21.5	8%
Total Residential Construction	**140.7**	**152.6**	**182.5**	**158.6**	**59%**
New Non-Residential Construction					
Buildings	43.2	48.8	51.5	47.9	18%
Engineering	38.8	36.9	41.5	39.0	14%
Total Non-Residential New Construction	82.0	85.7	93.0	86.9	32%
Repair – Non-Residential	25.4	24.7	25.1	25.1	9%
Total Non-Residential Construction	**107.3**	**110.4**	**118.2**	**112.0**	**41%**
Total Construction	**248.0**	**263.0**	**300.7**	**270.6**	**100%**
LFS Estimate of Employment	268.5	261.4	282.3	270.7	
Variance from LFS Estimate	-20.5	1.6	18.4	-0.2	
Percent Variance from LFS Estimate	-8%	1%	7%	0%	

B-7 – Estimates of Underground Employment in the Construction Industry: Ontario (1,000's)

	Average Employment	Low Estimate		High Estimate		Best Estimate	
	1995-1997	**Underground**	**Rate**	**Underground**	**Rate**	**Underground**	**Rate**
New Residential							
New Housing	79.4	11.9	15%	15.9	20%	11.9	15%
Renovations	57.8	28.9	50%	40.4	70%	32.3	56%
Total New Residential	137.1	40.8	30%	56.3	41%	44.3	32%
Repair - Residential	21.5	12.9	60%	17.2	80%	14.4	67%
Total Residential Construction	**158.6**	**53.7**	**34%**	**73.5**	**46%**	**58.6**	**37%**
New Non-Residential Construction							
Buildings	47.9	7.2	15%	9.6	20%	7.2	15%
Engineering	39.0	1.6	4%	2.3	6%	1.6	4%
Total Non-Residential New Construction	86.9	8.7	10%	11.9	14%	8.7	10%
Repair – Non Residential	25.1	3.3	13%	6.0	24%	3.5	14%
Total Non-Residential Construction	**112.0**	**12.0**	**11%**	**17.9**	**16%**	**12.3**	**11%**
Total Construction	**270.6**	**65.7**	**24%**	**91.4**	**34%**	**70.9**	**26%**

B-8 – Estimates of Underground Income in the Construction Industry: Ontario $ Current (millions)

	Average Income 1995-1997	Low Estimate Underground	Rate	High Estimate Underground	Rate	Best Estimate Underground	Rate
New Residential							
New Housing	$2,685	$297	11%	$411	15%	$342	13%
Renovations	$1,748	$698	40%	$1,040	60%	$832	48%
Total New Residential	$4,433	$995	22%	$1,451	33%	$1,174	26%
Repair - Residential	$649	$314	48%	$441	68%	$370	57%
Total Residential Construction	**$5,082**	**$1,309**	**26%**	**$1,892**	**37%**	**$1,544**	**30 %**
New Non-Residential Construction							
Buildings	$2,002	$255	13%	$340	17%	$255	13%
Engineering	$1,703	$58	3%	$87	5%	$58	3%
Total Non-Residential New Construction	$3,705	$313	8%	$427	12%	$313	8%
Repair - Non-Residential	$960	$106	11%	$196	20%	$114	12%
Total Non-Residential Construction	**$4,664**	**$419**	**9%**	**$623**	**13%**	**$427**	**9%**
Total Construction	**$9,746**	**$1,729**	**18%**	**$2,515**	**26%**	**$1,971**	**20 %**

B-9 – Comparisons: Original versus Revised Estimates

	1995- 1997 Average			
Table B-1 Measured Construction	**Original**	**Revised**	**Variance**	**Variance %**
Total Residential Construction	$14,699	$14,361	-$338	-2.3%
Total Non-Residential Construction	$16,891	$16,793	-$98	-0.6%
Total Construction	$31,590	$31,154	-$436	-1.4%
Table B-2 Measured + Unmeasured				
Total Residential Construction	$16,499	$16,128	-$371	-2.2%
Total Non-Residential Construction	$16,891	$16,793	-$98	-0.6%
Total Construction	$33,390	$32,921	-$469	-1.4%
Table B-4 Measured + Unmeasured with Residential DIY and Non-Residential Own Account Removed				
Total Residential Construction	$13,784	$13,450	-$334	-2.4%
Total Non-Residential Construction	$14,026	$14,457	$431	3.1%
Total Construction	$27,810	$27,907	$97	0.3%
Table B-5 Employment Income of Contract Construction Industry				
Total Residential Construction	$7,198	$5,082	-$2,116	-29.4%
Total Non-Residential Construction	$5,771	$4,664	-$1,107	-19.2%
Total Construction	$12,969	$9,746	-$3,223	-24.9%
Implied Wage Share:				
Total Residential Construction	52%	38%	-14%	
Total Non-Residential Construction	41%	32%	-9%	
Total Construction	47%	35%	-12%	
Table B-6 Employment of Contract Construction Industry				
Total Residential Construction	163.7	158.6	-5.1	-3.1%
Total Non-Residential Construction	111.3	112.0	0.7	0.6%
Total Construction	275.0	270.6	-4.4	-1.6%

B-9 – Comparisons: Original versus Revised Estimates (cont'd)

Table B-7 – Estimate of Underground Employment: (1,000's of persons)

	Low Estimate		High Estimate		Best Estimate			
	Original	**Revised**	**Original**	**Revised**	**Original**	**Revised**	**Variance**	**Variance %**
No. of Underground Workers (1,000's)								
Total Residential Construction	57.9	53.5	79.3	73.3	64.3	58.5	-5.8	-9.0%
Total Non-Residential Construction	12.4	12.1	18.7	18.0	13.8	12.3	-1.5	-10.9%
Total Construction	70.3	65.6	98.0	91.3	78.1	70.8	-7.3	-9.3%
Rate of Underground Employment	**Original**	**Revised**	**Original**	**Revised**	**Original**	**Revised**	**Variance**	
Total Residential Construction	35%	34%	48%	46%	39%	37%	-2%	
Total Non-Residential Construction	11%	11%	17%	16%	12%	11%	-1%	
Total Construction	26%	24%	36%	34%	28%	26%	-2%	

Table B-8 Estimate of Underground Income ($millions)

	Low Estimate		High Estimate		Best Estimate			
	Original	**Revised**	**Original**	**Revised**	**Original**	**Revised**	**Variance**	**Variance %**
Underground Income ($millions)								
Total Residential Construction	$2,064	$1,306	$3,007	$187	$2,294	$1,540	-$754	-32.9%
Total Non-Residential Construction	$489	$421	$778	$625	$544	$429	-$115	-21.1%
Total Construction	$2,553	$1,727	$3,785	$812	$2,838	$1,969	-$869	-30.6%
Rate of Underground Income	**Original**	**Revised**	**Original**	**Revised**	**Original**	**Revised**	**Variance**	
Total Residential Construction	29%	26%	42%	37%	32%	30%	-2%	
Total Non-Residential Construction	8%	9%	13%	13%	10%	9%	-1%	
Total Construction	20%	18%	30%	26%	22%	20%	-2%	

Appendix C: Estimates of Underground Economy, 1998-2000

C-1 – Estimates of Construction Expenditures excluding Unmeasured Construction Expenditures: Ontario - Current $ (millions)

	Annual Estimates			Average	Percent
	1998	**1999**	**2000**	**1998-2000**	
New Residential					
New Housing	$8,801	$11,432	$11,780	$10,671	27%
Renovations	$5,867	$6,431	$6,343	$6,214	16%
Total New Residential	$14,668	$17,863	$18,123	$16,885	43%
Repair - Residential	$2,067	$2,163	$2,193	$2,141	6%
Total Residential Construction	**$16,736**	**$20,026**	**$20,315**	**$19,026**	**49%**
New Non-Residential Construction					
Buildings	$7,971	$8,587	$9,273	$8,610	22%
Engineering	$6,768	$7,695	$8,414	$7,626	20%
Total Non-Residential New Construction	$14,738	$16,282	$17,687	$16,236	42%
Repair – Non-Residential	$3,210	$3,633	$3,895	$3,579	9%
Total Non-Residential Construction	**$17,949**	**$19,915**	**$21,582**	**$19,815**	**51%**
Total Construction	**$34,684**	**$39,941**	**$41,897**	**$38,841**	**100%**

C-2 – Estimates of Construction Expenditures including Unmeasured Construction Expenditures: Ontario - Current $ (millions)

	Annual Estimates			Average	Percent
	1998	**1999**	**2000**	**1998-2000**	
New Residential					
New Housing	$9,593	$12,461	$12,840	$11,631	28%
Renovations	$6,683	$7,324	$7,225	$7,077	17%
Total New Residential	$16,276	$19,785	$20,064	$18,709	46%
Repair - Residential	$2,481	$2,596	$2,631	$2,569	6%
Total Residential Construction	**$18,757**	**$22,381**	**$22,696**	**$21,278**	**52%**
New Non-Residential Construction					
Buildings	$7,971	$8,587	$9,273	$8,610	21%
Engineering	$6,768	$7,695	$8,414	$7,626	19%
Total Non-Residential New Construction	$14,738	$16,282	$17,687	$16,236	40%
Repair - Non-Residential	$3,210	$3,633	$3,895	$3,579	9%
Total Non-Residential Construction	**$17,949**	**$19,915**	**$21,582**	**$19,815**	**48%**
Total Construction	**$36,705**	**$42,297**	**$44,278**	**$41,093**	**100%**

C-3 – Estimates of "Do-It-Yourself" Residential Construction Expenditures and "Own Account" Non-Residential Construction Expenditures

	1995-1997 Estimates	1998-2000 Estimates
New Residential		
New Housing	3.0%	3.0%
Renovations	29.0%	29.0%
Total New Residential		
Repair - Residential	29.0%	29.0%
Total Residential Construction		
New Non-Residential Construction		
Buildings		
Engineering		
Total Non-Residential New Construction	15.0%	12.5%
Repair - Non-Residential	25.0%	20.0%
Total Non-Residential Construction		
Total Construction		

C-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 1998	1999	2000	Average 1998-2000	Percent
New Residential					
New Housing	$9,305	$12,087	$12,455	$11,282	32%
Renovations	$4,745	$5,200	$5,129	$5,025	14%
Total New Residential	$14,050	$17,288	$17,584	$16,307	46%
Repair - Residential	$1,761	$1,843	$1,868	$1,824	5%
Total Residential Construction	**$15,811**	**$19,130**	**$19,452**	**$18,131**	**52%**
New Non-Residential Construction					
Buildings	$6,974	$7,514	$8,114	$7,534	21%
Engineering	$5,922	$6,734	$7,362	$6,673	19%
Total Non-Residential New Construction	$12,896	$14,247	$15,476	$14,206	40%
Repair - Non-Residential	$2,568	$2,906	$3,116	$2,863	8%
Total Non-Residential Construction	**$15,464**	**$17,154**	**$18,592**	**$17,070**	**48%**
Total Construction	**$31,276**	**$36,284**	**$38,044**	**$35,201**	**100%**

C-5 – Estimates of Employment Income in the Contract Construction Industry including Unmeasured Construction Expenditures: Ontario Current $ (millions)

	Annual Estimates			Average	Percent
	1998	1999	2000	1998-2000	
New Residential					
New Housing	$3,350	$4,351	$4,484	$4,062	33%
Renovations	$1,898	$2,080	$2,052	$2,010	16%
Total New Residential	$5,248	$6,432	$6,535	$6,072	49%
Repair - Residential	$705	$737	$747	$730	6%
Total Residential Construction	**$5,952**	**$7,169**	**$7,283**	**$6,801**	**55%**
New Non-Residential Construction					
Buildings	$2,232	$2,404	$2,596	$2,411	20%
Engineering	$1,777	$2,020	$2,209	$2,002	16%
Total Non-Residential New Construction	$4,008	$4,424	$4,805	$4,413	36%
Repair - Non-Residential	$976	$1,104	$1,184	$1,088	9%
Total Non-Residential Construction	**$4,984**	**$5,529**	**$5,989**	**$5,501**	**45%**
Total Construction	**$10,937**	**$12,698**	**$13,272**	**$12,302**	**100%**

C-6 – Estimates of Employment (Persons) in the Contract Construction Industry including Unmeasured Construction Activity: Ontario (1,000's)

	Annual Estimates			Average	Percent
	1998	**1999**	**2000**	**1998-2000**	
New Residential					
New Housing	88.2	114.5	118.0	106.9	35%
Renovations	55.8	61.2	60.3	59.1	19%
Total New Residential	144.0	175.7	178.3	166.0	54%
Repair - Residential	20.7	21.7	22.0	21.5	7%
Total Residential Construction	**164.7**	**197.4**	**200.3**	**187.5**	**61%**
New Non-Residential Construction					
Buildings	47.5	51.2	55.2	51.3	17%
Engineering	36.3	41.2	45.1	40.9	13%
Total Non-Residential New Construction	83.7	92.4	100.3	92.1	30%
Repair - Non-Residential	22.7	25.7	27.5	25.3	8%
Total Non-Residential Construction	**106.4**	**118.1**	**127.9**	**117.5**	**39%**
Total Construction	**271.1**	**315.4**	**328.2**	**304.9**	**100%**
LFS Estimate of Employment	287.5	300.1	323.6	303.7	
Variance from LFS Estimate	-16.4	15.3	4.6	1.2	
Percent Variance from LFS Estimate	-6%	5%	1%	0%	

C-7 – Estimates of Underground Employment in the Construction Industry: Ontario (1,000's)

	Avg Employment 1998-2000	Low Estimate Underground Rate		High Estimate Underground Rate		Best Estimate Underground Rate	
New Residential							
New Housing	106.9	16.0	15%	21.4	20%	16.0	15%
Renovations	59.1	29.6	50%	41.4	70%	33.1	56%
Total New Residential	166.0	45.6	27%	62.8	38%	49.1	30%
Repair - Residential	21.5	12.9	60%	17.2	80%	14.4	67%
Total Residential Construction	**187.5**	**58.5**	**31%**	**79.9**	**43%**	**63.5**	**34%**
New Non-Residential Construction							
Buildings	51.3	7.7	15%	10.3	20%	7.7	15%
Engineering	40.9	1.6	4%	2.5	6%	1.6	4%
Total Non-Residential New Construction	92.1	9.3	10%	12.7	14%	9.3	10%
Repair - Non-Residential	25.3	3.3	13%	6.1	24%	3.5	14%
Total Non-Residential Construction	**117.5**	**12.6**	**11%**	**18.8**	**16%**	**12.9**	**11%**
Total Construction	**304.9**	**71.1**	**23%**	**98.7**	**32%**	**76.4**	**25%**

C-8 – Estimates of Underground Income in the Construction Industry: Ontario $ Current (millions)

	Avg Income 1998-2000	Low Estimate Underground	Rate	High Estimate Underground	Rate	Best Estimate Underground	Rate
New Residential							
New Housing	$4,062	$449	11%	$621	15%	$518	13%
Renovations	$2,010	$803	40%	$1,196	60%	$957	48%
Total New Residential	$6,072	$1,252	21%	$1,817	30%	$1,475	24%
Repair - Residential	$730	$354	48%	$496	68%	$416	57%
Total Residential Construction	**$6,801**	**$1,605**	**24%**	**$2,314**	**34%**	**$1,890**	**28%**
New Non-Residential Construction							
Buildings	$2,411	$307	13%	$410	17%	$307	13%
Engineering	$2,002	$68	3%	$102	5%	$68	3%
Total Non-Residential New Construction	$4,413	$375	9%	$512	12%	$375	9%
Repair – Non-Residential	$1,088	$120	11%	$222	20%	$129	12%
Total Non-Residential Construction	**$5,501**	**$496**	**9%**	**$734**	**13%**	**$505**	**9%**
Total Construction	**$12,302**	**$2,101**	**17%**	**$3,047**	**25%**	**$2,395**	**19%**

C-9 – Comparisons of 1995-97 Estimates and 1998-2000 Estimates Residential and Non-Residential Shares

	Share Estimates Residential 1995-1997 Average	Residential 1998-2000 Average	Non-Residential 1995-1997 Average	Non-Residential 1998-2000 Average
Construction Expenditure – Excluding Unmeasured	47%	49%	54%	51%
Construction Expenditure - Including Unmeasured	49%	52%	51%	48%
Contract Construction Expenditure*	50%	52%	50%	48%
Contract Construction Wage and Other Income	56%	55%	45%	45%
Contract Construction Employment	60%	61%	41%	39%
Underground Employment Rate - Best Estimate	39%	34%	12%	11%
Underground Income Rate - Best Estimate	32%	28%	10%	9%

	Total Industry 1995-1997	Total Industry 1998-2000
Wage Share of Construction	46%	35%
Underground Employment Rate - Best Estimate	28%	25%
Underground Income Rate - Best Estimate	22%	19%

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

Appendix D: Estimates of Revenue Losses to Governments and WSIB, 1995-1997

D-1 – Estimate PST Loss on Out-of-Province Contractors (Non-Residential): Ontario 1995-1997 (Million Current Dollars)

	Expenditure for Construction Industry Work*			Border Areas 15% of Non-Residential			Materials Share (30%)			Maximum PST (8%)			Estimated Tax Loss						Estimated Tax
	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	Low
														Low (10%)			High (20%)		
New Residential																			
New Housing	$6283	$6,980	$9,112																
Renovations	$4093	$4,368	$4,646																
Total New Residential	$10,376	$11,348	$13,758																
Repair Residential	$1,489	$1557	$1822																
Total Residential Construction	$11,865	$12,904	$15581																
New Non-Residential																			
Building	$5,651	$6,379	$6,738	$848	$957	$1,011	$280	$316	$334	$22	$25	$27	$2	$3	$3	$4	$5	$5	
Engineering	$5,633	$5,364	$6,029	$845	$805	$904	$279	$266	$298	$22	$21	$24	$2	$2	$2	$4	$4	$5	
Total New Non-Residential	$11,284	$11,743	$12,767	$1,693	$1,762	$1,915	$559	%581	$632	$45	$47	$51	$4	$5	$5	$9	$9	$10	
Repair Non-Residential	$2,554	$2,490	$2533	$383	$373	$380	$126	$123	$125	$10	$10	$10	$1	$1	$1	$2	$2	$2	
Total Non-Residential Construction	$13,838	$14,233	$15,300	$2,076	$2,135	$2,295	$685	$705	$757	$55	$56	$61	$5	$6	$6	$11	$11	$12	$6

D-2 – Estimated GST Loss on New Residential Construction: Ontario 1995-1997 (Million Current Dollars)

	Annual Estimates			Average 1995-1997
	1995	**1996**	**1997**	
New Residential Construction	$6,283	$6,980	$9,112	$7,458
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	$188	$209	$273	$224
Est. Construction + Land	$251	$278	$364	$298
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs - Value	$113	$126	$164	$134
GST Gross at 4.5% Rate	$5	$6	$7	$6
GST applicable on developer built housing	$11	$13	$16	$13
GST Loss	$6	$7	$9	$7
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	$314	$349	$456	$373
Est. Construction + Land	$418	$464	$606	$496
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs - Value	$188	$209	$273	$224
GST Gross at 4.5% Rate	$8	$9	$12	$10
GST applicable on developer built housing	$19	$21	$27	$22
GST Loss	$10	$11	$15	$12
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	$188	$209	$273	$224
Est. Construction + Land	$251	$278	$364	$298
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	$170	$188	$246	$201
GST Gross at 4.5% Rate	$8	$8	$11	$9
GST applicable on developer built housing	$11	$13	$16	$13
GST Loss	$4	$4	$5	$4
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	$314	$349	$456	$373
Est. Construction + Land	$418	$464	$606	$496
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	$283	$314	$410	$336
GST Gross at 4.5% Rate	$13	$14	$18	$15
GST applicable on developer built housing	$19	$21	$27	$22
GST Loss	$6	$7	$9	$7
GST Tax Loss	High			$12
	Low			$4
	Best Estimate			$7

D-3 – Estimated GST Loss on Residential Repairs: Ontario 1995-1997 (Million Current Dollars)

	Annual Estimates			Average
	1995	1996	1997	1995-1997
Residential Repair	$1,489	$1,557	$1,822	$1,623
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	$1,043	$1,090	$1,276	$1,136
Underground Share - Low	48%	48%	48%	48%
Underground Share - High	68%	68%	68%	68%
GST Loss - Low	$35	$37	$43	$39
GST Loss - High	$50	$52	$61	$54
GST Loss - Best Estimate	$38	$40	$47	$42

D-4 – Estimated GST Loss on Residential Renovations: Ontario 1995-1997 (Million Current Dollars)

	Annual Estimates			Average
	1995	1996	1997	1995-1997
Residential Renovation	$4,093	$4,368	$4,646	$4,369
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	$2,865	$3,058	$3,252	$3,058
Underground Share - Low	40%	40%	40%	48%
Underground Share - High	60%	60%	60%	68%
GST Loss - Low	$80	$86	$91	$104
GST Loss - High	$119	$127	$135	$146
GST Loss - Best Estimate	$90	$96	$102	$112

D-5 – Income Tax Loss: Ontario 1995-1997 (Million Current Dollars)

	Average: 1995-1997		
	Low	High	Best Estimate
Underground Income	$1,729	$2,515	$1,971
Adjusted to eliminate prevailing 12.5% discount on U/G work	$1,945	$2,829	$2,218
Average income tax rate	30%	34%	32%
Estimated Income Tax Loss	$583	$962	$710

D-6 – Payroll Contribution-Based Losses: Ontario 1995-1997 (Million Current Dollars)

CPP

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$1,729	$2,515	$1,971
Adjusted to eliminate prevailing 12.5% discount on U/G work	$1,945	$2,829	$2,218
Average Contribution Rate on Total Underground Earnings	6.6%	6.6%	6.6%
Estimated Contribution Loss	$128	$187	$146

EI

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$1,729	$2,515	$1,971
Adjusted to eliminate prevailing 12.5% discount on U/G work	$1,945	$2,829	$2,218
Dependent Contractor Share of Underground Employment	30%	30%	30%
Dependent Contractor Share of Underground Income	$583	$849	$665
Average Contribution Rate	5.4%	5.4%	5.4%
Estimated Contribution Loss	$32	$46	$36

WSIB

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$1,729	$2,515	$1,971
Adjusted to eliminate prevailing 12.5% discount on U/G work	$1,945	$2,829	$2,218
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	$389	$566	$444
Average Contribution Rate	5.2%	5.2%	5.2%
Estimated Contribution Loss	$20	$29	$23

EHT

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$1,729	$2,515	$1,971
Adjusted to eliminate prevailing 12.5% discount on U/G work	$1,945	$2,829	$2,218
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	$389	$566	$444
Average Contribution Rate	1.0%	1.0%	1.0%
Estimated Contribution Loss	$4	$6	$4

Appendix E: Estimates of Revenue Losses to Governments and WSIB, 1998-2000

E1 – Revenue Losses

	1998-2000: Average Annual		
	Low Estimate	**High Estimate**	**Best Estimate**
Provincial Sales Tax Loss to Out-of-Province Contractors	$7	$14	$9
GST Loss on New Housing	$7	$19	$11
GST Loss on Residential Repair	$43	$61	$47
GST Loss on Residential Renovation	$119	$167	$129
Sub-Total: GST Loss	$169	$247	$187
Income Tax Loss	$685	$1,131	$808
CPP Loss	$156	$226	$178
EI Loss	$38	$56	$44
EHT Loss	$5	$7	$5
WSIB Loss	$24	$36	$28
Total Revenue Losses:	**$1,085**	**$1,716**	**$1,259**

E2 – Revenue Losses

	Best Estimates Annual Average 1995-1997	1998-2000	Change	Percent Change
Provincial Sales Tax Loss to Out-of-Province Contractors	$8	$9	$1	13%
GST Loss on New Housing	$7	$11	$4	51%
GST Loss on Residential Repair	$42	$47	$5	12%
GST Loss on Residential Renovation	$112	$129	$17	15%
Sub-Total: GST Loss	$161	$187	$26	16%
Income Tax Loss	$710	$808	$99	14%
Canada Pension Plan Loss	$146	$178	$31	22%
EI Loss	$36	$44	$8	22%
EHT	$4	$5	$1	22%
WSIB Loss	$23	$28	$5	22%
Total	**$1,089**	**$1,259**	**$171**	**16%**

	Share of Total 1995-1997	1998-2000
Provincial Sales Tax Loss to Out-of-Province Contractors	0.7%	0.7%
GST Loss on New Housing	0.7%	0.9%
GST Loss on Residential Repair	3.8%	3.7%
GST Loss on Residential Renovation	10.3%	10.2%
Sub-Total: GST Loss	14.8%	14.9%
Income Tax Loss	65.2%	64.2%
Canada Pension Plan Loss	13.4%	14.1%
EI Loss	3.3%	3.5%
EHT	0.4%	0.4%
WSIB Loss	2.1%	2.2%
Total	`	100.0%

E-3 – Estimate PST Loss on Out-of-Province Contractors (Non-Residential): Ontario 1998-2000 (Million Current Dollars)

	Expenditure for Construction Industry Work*			Border Areas 15% of Non-Residential			Materials Share (30%)			Maximum PST (8%)			Estimated Tax Loss						Estimated Tax
	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	Low
														Low (10%)			High (20%)		
New Residential																			
New Housing	$9,305	$12,087	$12,455																
Renovations	$4,745	$5,200	%5,129																
Total New Residential	$14,050	$17,288	$17,584																
Repair Residential	$1,761	$1,843	$1,868																
Total Residential Construction	$15,811	$19,130	$19,452																
New Non-Residential																			
Building	$6,974	$7514	$8,114	$1,046	$1,127	$1,217	$345	$372	$402	$28	$30	$32	$3	$3	$3	$6	$6	$6	
Engineering	$5,922	$6,734	$7,362	$888	$1,010	$1,104	$293	$333	$364	$23	$27	$29	$2	$3	$3	$5	$5	$6	
Total New Non-Residential	$12,896	$14,247	$15,476	$1,934	$2,137	$2,321	$638	$705	$766	$51	$56	$61	$5	$6	$6	$10	$11	$12	
Repair Non-Residential	$2,568	Z$2,906	$3,116	$385	$436	$467	$127	$144	$154	$10	$12	$12	$1	$1	$1	$2	$2	$2	
Total Non-Residential Construction	$15,464	$17,154	418,592	$2,320	$2,573	$2,789	$765	$849	$920	$61	$68	$74	$6	$7	$7	$12	$14	$15	$7

E-4 – Estimated GST Loss on New Residential Construction: Ontario 1998-2000 (Million Current Dollars)

	Annual Estimates 1998	1999	2000	Average 1998-2000
New Residential Construction	$9,305	$12,087	$12,455	$11,282
Scenario No. 1 - 3% Share / 60% Input				
Est. Non-GST Share - Construction only	3.0%	3.0%	3.0%	3.0%
Estimated Non-GST Amount	$279	$363	$374	$338
Est. Construction + Land	$371	$482	$497	$450
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs – Value	$167	$218	$224	$203
GST Gross at 4.5% Rate	$8	$10	$10	$9
GST applicable on developer built housing	$17	$22	$22	$20
GST Loss	$9	$12	$12	$11
Scenario No. 2 - 5% Share / 60% Input				
Est. Non-GST Share - Construction only	5.0%	5.0%	5.0%	5.0%
Estimated Non-GST Amount	$465	$604	$623	$564
Est. Construction + Land	$619	$804	$828	$750
GST Inputs as Percent of Construction only	60%	60%	60%	60%
GST Inputs - Value	$279	$363	$374	$338
GST Gross at 4.5% Rate	$13	$16	$17	$15
GST applicable on developer built housing	$28	$36	$37	$34
GST Loss	$15	$20	$20	$19
Scenario No. 3 - 3% Share / 90% Input				
Est. Non-GST Share - Construction only	3.0%	3.0%	3.0%	3.0%
Estimated Non-GST Amount	$279	$363	$374	$338
Est. Construction + Land	$371	$482	$497	$450
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	$251	$326	$336	$305
GST Gross at 4.5% Rate	$11	$15	$15	$14
GST applicable on developer built housing	$17	$22	$22	$20
GST Loss	$5	$7	$7	$7
Scenario No. 4 - 5% Share / 90% Input				
Est. Non-GST Share - Construction only	5.0%	5.0%	5.0%	5.0%
Estimated Non-GST Amount	$465	$604	$623	$564
Est. Construction + Land	$619	$804	$828	$750
GST Inputs as Percent of Construction only	90%	90%	90%	90%
GST Inputs - Value	$419	$544	$560	$508
GST Gross at 4.5% Rate	$19	$24	$25	$23
GST applicable on developer built housing	$28	$36	$37	$34
GST Loss	$9	$12	$12	$11
GST Tax Loss	High			$19
	Low			$7
	Best Estimate			$11

E-5 – Estimated GST Loss on Residential Repairs: Ontario 1998-2000 (Million Current Dollars)

	Annual Estimates			Average
	1998	1999	2000	1998-2000
Residential Repair	$1,761	$1,843	$1,868	$1,824
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	$1,233	$1,290	$1,308	$1,277
Underground Share - Low	48%	48%	48%	48%
Underground Share - High	68%	68%	68%	68%
GST Loss - Low	$42	$44	$44	$43
GST Loss - High	$59	$61	$62	$61
GST Loss - Best Estimate	$45	$47	$48	$47

E-6 – Estimated GST Loss on Residential Renovations: Ontario 1998-2000 (Million Current Dollars)

	Annual Estimates			Average
	1998	1999	2000	1998-2000
Residential Renovation	$4,745	$5,200	$5,129	$5,025
Non-Materials Share	70%	70%	70%	70%
Non-Materials Amount	$3,321	$3,640	$3,591	$3,517
Underground Share - Low	40%	40%	40%	48%
Underground Share - High	60%	60%	60%	68%
GST Loss - Low	$93	$102	$100	$119
GST Loss - High	$138	$152	$150	$167
GST Loss - Best Estimate	$104	$114	$112	$129

E-7 – Income Tax Loss: Ontario 1998-2000 (Million Current Dollars)

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$2,101	$3,047	$2,395
Adjusted to eliminate prevailing 12.5% discount on U/G work	$2,364	$3,428	$2,694
Average income tax rate	29%	33%	30%
Estimated Income Tax Loss	$685	$1,131	$808

E-8 – Payroll Contribution-Based Losses: Ontario 1998-2000 (Million Current Dollars)

CPP

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$2,101	$3,047	$2,395
Adjusted to eliminate prevailing 12.5% discount on U/G work	$2,364	$3,428	$2,694
Average Contribution Rate on Total Underground Earnings	6.6%	6.6%	6.6%
Estimated Contribution Loss	$156	$226	$178

EI

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$2,101	$3,047	$2,395
Adjusted to eliminate prevailing 12.5% discount on U/G work	$2,364	$3,428	$2,694
Dependent Contractor Share of Underground Employment	30%	30%	30%
Dependent Contractor Share of Underground Income	$709	$1,029	$808
Average Contribution Rate	5.4%	5.4%	5.4%
Estimated Contribution Loss	$38	$56	$44

WSIB

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$2,101	$3,047	$2,395
Adjusted to eliminate prevailing 12.5% discount on U/G work	$2,364	$3,428	$2,694
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	$473	$686	$539
Average Contribution Rate	5.2%	5.2%	5.2%
Estimated Contribution Loss	$24	$36	$28

EHT

	Average: 1998-2000		
	Low	**High**	**Best Estimate**
Underground Income	$2,101	$3,047	$2,395
Adjusted to eliminate prevailing 12.5% discount on U/G work	$2,364	$3,428	$2,694
Estimated Evasion Rate	20%	20%	20%
"Payroll" Subject to Evasion	$473	$686	$539
Average Contribution Rate	1.0%	1.0%	1.0%
Estimated Contribution Loss	$5	$7	$5