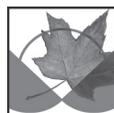


The Case for a Stronger Fair Wage Policy in Ontario

Josh Mandryk





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Executive Summary

THIS REPORT ANALYZES Ontario's fair wage policy, which has not been modernized since it was introduced by order-in-council in 1995. It draws from a broad range of examples to show how a modernized fair wage policy can be a critical link to bring construction tendering policy in line with government policy objectives pertaining to skills training and apprenticeships, improved health and safety outcomes, and tackling the underground economy in construction. It could strengthen Ontario's apprenticeship system, it could improve health and safety outcomes, it could help tackle the underground economy in Ontario's construction industry, and it could improve workers' pay and benefits.

This report also examines the cost impact of fair wage policies, the main argument of those seeking the repeal of such policies. A review of the extant research comes to a surprising finding: fair wage policies do not significantly increase overall construction costs, contrary to the claims of critics.

Based on these findings, this report recommends that Ontario update its fair wage policy, not only by re-introducing a new schedule of wage rates, but by making a number of amendments to better achieve the objectives of a modern, relevant fair wage policy. This would involve expanding the policy's coverage to:

- include independent contractors;

- define fair wages according to the total compensation package rather than straight wages;
- apply the policy broadly to all provincially-funded construction projects rather than just those of ministries and direct agencies; and
- explicitly link fair wages to skills training.

Introduction

THE FOCUS OF this report is on the impact of fair wage policies on Ontario's construction industry, for two primary reasons. First, fair wage policies are most prevalent in the construction industry, and as a result, a robust body of literature has been written on the impact of fair wage policies on the construction industry in the United States and Canada. By contrast, little has been written about the application of fair wage policies to other sectors. Second, because of the unique nature of the construction industry, the positive impact of fair wage policies on outcomes such as health and safety and the acquisition of skills is more readily apparent. This focus is by no means meant to insinuate a lack of support for fair wage policies in other sectors, or for the broader application of the principles underlying fair wage policies, but simply reflects the limitations of the extant research.

In fact, the relevance of this analysis extends to the broader discourse about living wages. By demonstrating the positive role fair wage policies play as a statutory floor for wages and benefits in the construction industry, this report seeks to contribute to better understanding of how the use of government procurement policy can support positive labour market outcomes. The proven success of fair wage policies in the construction industry in jurisdictions across Canada and the United States since the late 19th century serves as direct evidence of the positive impact of such policies.

What are Fair Wage Policies?

FAIR WAGE POLICIES mandate minimum wages and benefits that must be paid to workers on government contracts for the services to which they apply. Fair wage policies establish a floor for employee compensation in industries where government contracts are awarded on a low-bid basis in order to prevent a downward spiral in wages and benefits. Fair wage policies are most prevalent in the construction industry, but can also apply to security, cleaning, and other services for which the government contracts.

Fair wage policies are not unlike living wage policies, except that 1) they have a narrower application which focuses on government contracts for the purchase of specific services such as construction or cleaning, and, 2) while they share the goal of providing a fair and sustaining wage, they are not directly based on a cost of living calculation. Fair wage policies emerged from concerns with setting a level playing field for employers bidding for government work and preventing labour abuses by employers who ultimately secured government contracts.¹ They also emerged out of a desire for government to act as a model employer,² as well as to prevent governments from using their significant market share and purchasing power to undercut local labour conditions.³ Fair wage policies allow governments to positively impact market conditions through their role as a major consumer of construction and other services. They are an excellent example of the capacity of governments to use their tendering policy to achieve broader policy objectives, including economic fairness for workers.

A Review of Fair Wage Policies in Canada

FAIR WAGE POLICIES have been enacted in Canada at the municipal, provincial/territorial⁴ and federal levels of government. These policies had broad acceptance over a very long period of time. More recently, however, they've come under attack. For example, the federal *Fair Wages and Hours of Labour Act*,⁵ and British Columbia's *Skills Development and Fair Wage Act*⁶ have been repealed (2012 and 2001, respectively).

The following section provides a brief overview of Canada's fair wage policies.

Municipal Fair Wage Policies

Fair wage policies are enforced in many municipalities across Canada. Ontario municipalities with fair wage policies include Toronto, Hamilton, Thunder Bay, London and Sudbury. The issue continues to attract attention and debate. In the summer of 2013, a proposed fair wage policy was narrowly defeated in the city of Windsor.⁷ More recently, the City of Toronto updated its policy and delegated the authority to update its fair wage schedules to the City's Fair Wage Manager.⁸

The City of Toronto enacted Canada's first fair wage policy in 1893, before federal or provincial governments followed suit. The City of Toronto's fair wage policy is the strongest currently in force in Canada. It links fair

wages to the entire union wage package, including benefits, rather than simply to straight wages. The policy is enforced through the City's Fair Wage Office. Between 2004 and 2010, the Fair Wage Office has recovered \$1.2 million in back wages for 1,341 workers.⁹ The City of Toronto fair wage policy was enacted by council shortly after amalgamation in October 1998, to replace all of the policies of the City of Toronto's predecessor municipalities.¹⁰ The policy directed that the fair wage policy be applied to all City of Toronto departments, agencies, boards and commissions.

On December 18, 2013, The City of Toronto's construction fair wage schedules were updated for the first time in a decade.¹¹ Furthermore, pursuant to a July 16, 2013 vote of Toronto City Council, the authority to routinely update these schedules has been delegated to the City's Fair Wage Manager.¹² The delegation of this authority will help depoliticize the policy and ensure it is kept current. Prior to this, although the policy contained provisions for the rates to be reviewed every three years,¹³ the schedule of fair wage rates had not been updated since May 1, 2003.¹⁴ On July 16, 2013, however, Toronto City Council voted to update the City's fair wage schedules for general classifications, including workers performing custodial services, and also to delegate the authority to update fair wage schedules to the City of Toronto Fair Wage Manager.¹⁵ Pursuant to this vote, City Council enacted By-Law No. 1287-2013 on October 11, 2013, which enshrined the delegation of authority to the Fair Wage Manager by amending Chapter 67 of the City of Toronto Municipal Code.¹⁶ These authorities delegated to the Fair Wage Manager include:

...the authority to update the wage rates in Schedule C to Chapter 67, Fair Wage, every three years consistent with the construction industry prevailing market rates commencing in 2013 for new Tenders, Requests for Quotations, Requests for Proposals, Purchase Orders and Divisional Purchase Orders issued by the City.¹⁷

City Council must still give effect to the wage rates determined by the Fair Wage Manager under this delegated authority,¹⁸ however, and on December 18, 2013, City Council enacted By-Law No. 1717-2013, which introduced increased 2013–2016 fair wage rates for the Heavy Construction, ICI, Road Building, Sewer and Watermain and Utility classifications, as well as adding or deleting occupations included within those classifications.¹⁹ The City of Toronto's new process will help ensure the policy remains current.

Unlike the Ontario and the now-repealed federal fair wage policies, which are tied to straight wages only, the City of Toronto's fair wage policy is tied to the entire compensation package, including benefits. A 2007 fair

wage policy comparison conducted by the City of Toronto Fair Wage Office criticized the Ontario and federal practice as follows:

Both levels of government adopt an interpretation of wages that is both unrealistic and at odds with respective public policy goals. There is no reason for distinguishing between a dollar paid out in wages and a dollar paid out in a benefit fund or a pension fund. Benefits are simply indirect compensation and pensions are deferred wages. Comparing the employer who pays the money, wages and benefits to an employer who pays straight wages implies employers who provide benefits to their workers be put at a competitive disadvantage for doing so. If the goal of public policy were to discourage benefit plans, this would make sense. However, the goal of public policy has always been the opposite and that is encourages workplace benefit plans so as to relieve the burden on publicly provided plans.²⁰

As this passage highlights, tying fair wages to the entire package makes more sense than tying them to straight wages alone from a public policy perspective since the latter option disincentivizes the payment of benefits.

Federal Fair Wage Policy

The federal government's first fair wage policy was enacted in 1900. This policy had no statutory foundation until 1930, when the government enacted the *Fair Wages and Eight-Hour Day Act*. In 1935, the government repealed that Act and enacted the *Fair Wages and Hours of Labour Act*, which was in effect until its repeal in the 2012 federal budget. The Act's hours and wages regulations applied to all construction, remodeling, repair or demolition work supported by federal funds. Section 3(1) of the Act dictated that hours and wages regulations established through the Act apply to all contracts made with the Government of Canada for construction, remodeling, repair or demolition. Section 5(1) of the Act dictated that whenever federal funds are granted or paid to another party, whether a province or municipality or any other agency or individual, that the Government of Canada and the party enter into an agreement stipulating the terms and conditions in which the grant is to be made. Section 5(2) of the Act stated that the agreement referred to in subsection 1 shall include stipulations "designed to secure, in so far as may be practicable, the observance, in the execution of the work contemplated, of the conditions set out in paragraphs 3(1)(a) and (b)." This ostensibly included provincial and municipal construction projects financed with federal stimulus funds under Canada's Economic Ac-

tion Plan, although it is unclear whether these provisions were always enforced in practice.

As noted above, unlike the City of Toronto's fair wage policy, which is tied to the entire compensation package, the federal fair wage policy was tied to the straight wage rate only. In 1983, the Mulroney government discontinued the practice of updating the fair wage schedules, and replaced them with ad hoc surveys conducted in response to complaints as well as by reference to provincial fair wage schedules, where appropriate. This practice created significant confusion and ambiguity as to the application of fair wages, and in April 1997 the Chrétien government announced its intention to reintroduce updated fair wage schedules.²¹ In response to stakeholder concerns, the government appointed Mr. Douglas Stanley to conduct a comprehensive review of the *Fair Wages and Hours of Labour Act* in August 1998. Mr. Stanley submitted his report on his findings in October 1998. According to the Canada Gazette:

He recommended that the federal government keep the fair wage legislation; that wage schedules should be reintroduced; the hours of work ought to be the working hours standards applicable in the provinces or territories; after the wage schedules would be in place, an advisory panel should be created to advise the Minister on whether the schedules are still current. Mr. Stanley also recommended that a provision setting a reasonable time limit for claiming unpaid wages from prime contractors be put in place. The Minister of Labour accepted in principle Mr. Stanley's report and recommendations.²²

Prior to its repeal, the federal fair wage schedule for Ontario set out rates in 8 geographical zones for 36 trades and occupations.²³ O'Grady et al. conducted a comparison of the fair wage rates and the Industrial Commercial and Institutional (ICI) sector union rates as of January 17, 2005 for electricians, plumbers, sheet metal workers, carpenters and painters. According to their analysis, the fair wage rate averaged 86.5 percent of the union basic wage rate at the journeyman level, which amounted to an average of 68 percent of the total union wage package.²⁴

The *Fair Wages and Hours of Labour Act* was repealed in 2012 as part of the Harper government's 425-page federal omnibus budget Bill C-38, the *Jobs, Growth, and Long-Term Prosperity Act*. Unlike the previous government's decision to re-introduce updated schedules, the repeal of the act was done without consultation from industry stakeholders or any study into the impact of the change. Rather, the decision appears to have been brought on solely by the lobbying efforts of the anti-union contractors' organization Merit Can-

ada. Records from the Office of the Commissioner of Lobbying indicate that Merit Canada was lobbying Labour Minister Lisa Raitt on the *Fair Wages and Hours of Labour Act* as early as February 2011.²⁵ Just days after the decision to scrap the act was made public, Merit Canada Chairman Curtis Monsebroten boasted of his organization’s “remarkable success” in lobbying federal Conservative politicians since opening its national office in 2011.²⁶

British Columbia’s Skills Development and Fair Wage Act

British Columbia’s *Skills Development And Fair Wage Act, 1994* (SDFWA) was unique among fair wage policies because of its formal link between skills training and fair wages. While all fair wage policies are associated with improved apprenticeship and skills training outcomes, B.C.’s policy was unique in that it formalized this link. The SDFWA was enacted in 1994, but the policy had existed since 1992 through an earlier order-in-council of the NDP government. In September 2001, the SDFWA was repealed by the newly elected Liberal government.²⁷ Prior to its repeal, the SDFWA required all construction workers on provincially-funded construction projects over \$250,000 in pre-tender value to either have a journeypersons certificate or be registered as an apprentice. According to O’Grady et al., fair wages under the SDFWA were calculated to be approximately 90 percent of the union wage rate, plus a minimum of \$4.00 an hour to be paid as benefits.²⁸

Ontario’s Fair Wage Policy

Ontario’s first fair wage policy was enacted in 1936 by the Liberal government of Mitchell Hepburn with the adoption of the *Government Contracts Hours and Wages Act*, which mirrored the federal *Fair Wages and Hours of Labour Act*. The *Government Contracts Hours and Wages Act* was repealed by the Progressive Conservative government of Mike Harris, effective September 4, 2001. The impact of this repeal was not significant, however, as by this time Ontario’s fair wage policy was enforced through the government’s general regulatory power rather than through the Act.²⁹ Ontario’s current fair wage policy, which is separate from the *Government Contracts Hours and Wages Act*, was put into force through Order-in-Council 773/95 (OIC), effective April 1st, 1995. The policy applies to government contracts for construction, security, and cleaning services. For construction, fair wage schedules

are set out for the industrial, commercial and institutional (ICI), sewer and water main, and roads construction sectors. In the ICI sector, wage rates are set out for each trade for 27 different urban and non-urban zones across the province. The road building, sewer and water main sectors rates are set out for the Hamilton, Toronto, Windsor and Ottawa zones, with the rest of the province falling into a fifth provincial zone. For security and cleaning services, wage rates are set out for six regions: eastern, central, Peel and York counties, southwestern, northeastern and northwestern.³⁰

Prior to the 1995 OIC, there were no fixed intervals for reviewing or updating the fair wage schedule. According to analysis by O'Grady et al., the prevailing wage rates established prior to the 1995 OIC averaged approximately 65 percent of the prevailing union wage rate in non-urban zones, while fair wage rates averaged 80 to 85 percent of the prevailing union wage rate (excluding benefits) in urban zones.³¹ The 1995 fair wage policy tied the fair wage rates for urban zones to the prevailing collective agreement's basic wage rate as of April 1st. For non-urban zones, previous rates were increased by 9.6 percent.³² As noted, like the federal fair wage policy, the 1995 Ontario fair wage policy was tied to the straight wage and did not include benefits. Unlike the federal fair wage policy and the *Government Contracts Hours and Wages Act*, which mirrored it, Ontario's fair wage policy is more narrow in its application, applying only to government ministries and their direct agencies.³³ Moreover, the enforcement of the Ontario policy is lax. Inspections only take place in response to complaints, the process of filing is unclear, and there are neither reporting requirements nor audits.³⁴ important point to note is that, as with other Canadian fair wage policies, Ontario's fair wage policy presumes an employment relationship, and thus does not apply to independent operators.³⁵ These distinctions make Ontario's fair wage policy relatively weak compared to more robust policies in other jurisdictions.

Section 4 of the 1995 OIC directed the Ministry of Labour to update the schedules on April 1st of every year, however, this section was repealed by the newly elected Harris government later that year. As a result, Ontario's fair wage schedules have not been updated since 1995. Given the cumulative impact of inflation and real wage growth over the past eighteen years, the fair wage schedules in the 1995 OIC have become functionally inoperable. The building cleaning and security schedules of wage rates are below Ontario's minimum wage. The construction wage rates are not only significantly below the union rates, but are also below the market wage rates in the non-union sector. As a result, while they continue to be referenced in government contracts, they act as a non-binding floor.³⁶

FIGURE 1 Ontario Fair Wage Schedule: Building Cleaning Industry, Ontario

Area	Cleaner	Window Cleaner Low	Window Cleaner High
Eastern Region	\$7.21	\$8.34	\$9.59
Central Region	\$7.34	\$8.42	\$9.59
Peel and York Counties	\$8.49	\$9.87	\$12.59
Southwestern Region	\$6.97	\$8.03	\$9.20
Northeastern Region	\$7.06	\$7.97	\$9.10
Northwestern Region	\$7.06	\$7.90	\$9.26

Note Effective April 1, 1995 through 2013 (Never Revised)

Note Ontario's statutory minimum wage in 2013 was \$10.25, unchanged since 2010.

Source Ontario, Ministry of Labour, *Fair Wage Schedules and Labour Conditions* (Toronto: Queen's Printer for Ontario, 1995).

FIGURE 2 Ontario Fair Wage Schedule: Security Guard Industry, Ontario

Area	Rate Per Hour
Eastern Region	\$7.50
Central Region	\$7.45
Peel and York Counties	\$9.34
Southwestern Region	\$7.20
Northeastern Region	\$8.54
Northwestern Region	\$7.27

Note Effective April 1, 1995 through 2013 (Never Revised)

Note Ontario's statutory minimum wage in 2013 was \$10.25, unchanged since 2010.

Source Ontario, Ministry of Labour, *Fair Wage Schedules and Labour Conditions* (Toronto: Queen's Printer for Ontario, 1995).

In 2007, the Ontario Government announced it was commissioning Professor Morley Gunderson from the University of Toronto's Centre for Industrial Relations and Human Resources to conduct a full independent review of Ontario's fair wage policy.³⁷ This decision was received positively by both labour and management stakeholders, who generally regarded the ambiguous status of Ontario's fair wage policy as undesirable. For instance, representatives from both the Carpenters' District Council of Ontario and the anti-union Open Shop Contractors Association of Ontario were quoted as lauding the decision in an article published shortly after the review was announced.³⁸

Professor Gunderson's report was submitted to government in 2008. For reasons unknown, the report was not released to the public³⁹ and no updates have been made to Ontario's fair wage policy. Since then, the issue has fallen off the policy agenda.

FIGURE 3 Ontario Fair Wage Schedule: Roads and Highway Construction, Toronto Zone

Classification of Labour	Fair Wage Rate Per Hour Not Less Than (Effective April 1, 1995 Through 2013 (Never Revised)):
Road Building Section	
Licensed Operators	\$24.90
Licensed Mechanics and Welders, Class A	
Category 1: Mechanics	\$24.65
Category 2: Welders	\$24.65
Equipment and Maintenance Operators, Group A	
Category 1	\$24.30
Category 2	\$24.20
Category 3	\$24.05
Equipment and Maintenance Operators, Group B	
Category 1	\$23.60
Category 2	\$21.90
Category 3	\$21.90
Skilled Labourers	
Category 1	\$24.16
Category 2	\$22.66
Common Labourers	\$22.66
Truck Drivers	
Category 1	\$23.70
Category 2	\$23.70
Category 3	\$23.20
Category 4	\$20.10
Flagperson	\$14.66
Watchperson	\$14.66
Student (registered in day school)	\$11.33
Structural Section	
Carpenters (incl. form work where applicable)	\$26.47
Form Builders (Labourers where applicable)	\$24.78
Rodmen	\$24.69
Concrete Finishers	\$25.61
Painters	\$24.66
Electricians	\$27.88
Labourers (on structures)	\$24.73
Structural Steel Workers	\$25.66

Note Ontario's statutory minimum wage in 2013 was \$10.25, unchanged since 2010.

Source Ontario, Ministry of Labour, *Fair Wage Schedules and Labour Conditions* (Toronto: Queen's Printer for Ontario, 1995).

FIGURE 4 Ontario Fair Wage Schedule: Roads and Structures Construction, Ontario Provincial Zone

Classification of Labour	Fair Wage Rate Per Hour Not Less Than (Effective April 1, 1995 Through 2013 (Never Revised)):
Road Building Section	
Licensed Operators	\$13.83
Licensed Mechanics and Welders, Class A	\$12.99
Equipment and Maintenance Operators, Group A	\$12.85
Equipment and Maintenance Operators, Group B	\$12.20
Skilled Labourers	\$11.69
Truck Drivers — Tow Tractor Operators — Rollermen (Grade)	\$11.48
Labourers	\$11.19
Flagperson	\$9.40
Watchperson	\$9.40
Students (registered in day school)	\$9.04
Structural Section	
Carpenters, Form Builders	\$13.83
Rodmen, Concrete Finishers, Painters	\$12.69
Structure Labour Operations	\$11.34
Structural Trainees	\$11.48

Note Ontario's statutory minimum wage in 2013 was \$10.25, unchanged since 2010.

Source Ontario, Ministry of Labour, *Fair Wage Schedules and Labour Conditions* (Toronto: Queen's Printer for Ontario, 1995).

Why a Modern Fair Wage Policy is Harmonious With Broader Policy Objectives

ALTHOUGH ONTARIO'S FAIR wage policy has fallen off the policy agenda, there are several important reasons why fair wage policy deserves renewed attention. In addition to promoting positive competition by setting a floor for wages and benefits, a properly implemented modern fair wage policy would support a number of the Ontario government's policy objectives, such as improving apprenticeship uptakes and completions, tackling the underground economy in construction, and improving health and safety outcomes. Currently, the Ontario government's procurement policy is at odds with these objectives. In combination with the positive impact of fair wage policies on workers' wages and benefits, these reasons provide a strong rationale for updating Ontario's fair wage policy.

Tackling the Underground Economy

The Ontario government first committed to tackling the underground economy in construction in 2004.⁴⁰ The Ministry of Labour has long recognized the challenges posed by the underground economy, noting in a 2010 press release:

[The underground economy in the construction industry] is a major source of revenue loss to both government and the workers' compensation system, it threatens the competitiveness of legitimate businesses, it compromises the health and safety of workers and the public, and it undermines employment standards and apprenticeship programs.⁴¹

Concerns about the underground economy were also expressed more recently in the Report of the Commission for Reform of Ontario's Public Services, commonly known as the Drummond Report, which stated that:

The underground economy creates an unfair tax burden for taxpayers and makes it difficult for legitimate businesses to remain competitive with those participating in the underground economy. Addressing the underground economy creates a level playing field for taxpayers and businesses. It also helps provide greater protection to consumers who may not realize the risks of participating in the cash economy.⁴²

According to a study commissioned by the Ontario Construction Secretariat (OCS), the annual estimated revenue losses to the Workplace Safety and Insurance Board (WSIB), the Canada Pension Plan (CPP), the tax system and the Employment Insurance (EI) system over the 2007 to 2009 period was in the order of \$1.4 billion to \$2.4 billion.⁴³ Contrary to popular misconception, the most important enabler of underground practices is not cash transactions in the home renovation sector, but, rather, the improper designation of employees as independent contractors, which accounts for more than 80 percent of the underground economic activity in Ontario's construction industry.⁴⁴ Construction employers who improperly designate their employees as independent contractors are able to evade their obligations to pay CPP and EI contributions, the employer health tax, and, until recently, WSIB premiums. Just as importantly, employees who are mischaracterized as independent contractors are not issued tax receipts, and are thus able to underreport their income for tax purposes.

On November 27, 2008, Bill 119, the *Workplace Safety and Insurance Amendment Act*,⁴⁵ received royal assent. In an attempt to curb underground economic activity in construction and the evasion of WSIB premiums, which contribute to the WSIB's unfunded liability, Bill 119 requires previously exempted independent contractors and some construction business owners to pay WSIB premiums as of January 1, 2013. As of January 1, 2014, contractors who perform construction work who have not registered with the WSIB and received a clearance number may face compliance charges and fines of up to \$100,000 upon conviction, as may their clients. These provisions have only come into

force recently and their effectiveness cannot yet be accurately measured, but, if properly implemented, they could be a strong step towards recovering WSIB premiums and reducing the competitive advantage of employers who mischaracterize their employees as independent contractors. It is important to note, however, that even if Bill 119 effectively mandates independent contractors to pay WSIB premiums, the avoidance of EI premiums, CPP premiums and the employer health tax — as well as the underreporting of income for taxation purposes — still provide incentives for misclassification. As will be made clear in the subsequent analysis, a modern fair wage policy applying to all workers on construction projects, including independent contractors, would further the Ontario government's aim to tackle the underground economy in construction. In the absence of such a policy, the government is enabling underground economic activity by giving employers who mischaracterize their employees as independent contractors an unfair cost advantage. Thus, procurement policy as it stands is currently at odds with these policy aims.

Strengthening Ontario's Apprenticeship System

The Ontario government has identified the apprenticeship system as “a key part of building the well-educated and highly skilled workforce the Province needs to compete in the current and future economy.”⁴⁶ The number of apprentices learning a trade in Ontario has nearly doubled from over 60,000 in 2003 to over 120,000 by 2009 and has since stayed at this level.⁴⁷ At the same time, annual apprenticeship enrolment has jumped from 17,100 per year in 2002–03 to more than 30,000 in 2011–12.⁴⁸ In 2012–13, Ontario exceeded its target of 29,000 by engaged a further 32,488 Ontarians in skills training,⁴⁹ but apprenticeship completion rates remain a key challenge, as studies indicate apprenticeship completion rates average around 50 percent in Ontario.⁵⁰

Recognizing these ongoing challenges, the Ontario government has taken a number of steps to strengthen Ontario's apprenticeship system. The most significant of these initiatives has been the establishment of the Ontario College of Trades (OCOT). The OCOT is North America's first regulatory college for skilled tradespeople, which aims to modernize Ontario's apprenticeship and skilled trades system. The establishment of the OCOT was aimed at building on the success of Ontario's apprenticeship system by empowering the trades to take a more prominent role in the recruitment, governance, certification and training of tradespeople.⁵¹ As of April 8, 2013, the OCOT began accepting members and is responsible for governing the trades in the public interest.⁵²

A modern fair wage policy which follows British Columbia's *Skills Development and Fair Wage Act*'s requirement that all workers on government construction sites have either a journeyperson certificate or be a registered apprentice would further the government's objective of strengthening Ontario's apprenticeship system. Current tendering policy puts employers who do not invest in skills training at a competitive advantage over those who make responsible investments in apprenticeships and skills training. A modern fair wage policy would put tendering policy in line with the Ontario government's goals for the apprenticeship system.

The underinvestment in skills training in the non-union construction industry has been exacerbated by the increased use of the temporary foreign worker program. Access to the temporary foreign worker program creates a perverse incentive against investing in skills training, as employers who rely on the program may find themselves at a competitive advantage over employers who hire apprentices. Most construction apprenticeship programs require between 5,700 and 9,000 hours of training, of which up to 90 percent is comprised of mandatory on-the-job training.⁵³ On-the-job training is paid as a percentage of a journeyperson's wage, and that percentage generally increases incrementally on a yearly or hourly basis as the apprentice progresses towards completion. The temporary foreign worker program allows employers to side-step these investments in training Canadian workers, but does not address long-term skills training needs in Canada since the program offers no path to permanent immigration. This has troubling long-term consequences for skills training in Canada.

The dramatic rise in temporary foreign workers in construction is also happening elsewhere in Canada, most notably Alberta and British Columbia. In a recent interview, Alberta Federation of Labour (AFL) President Gil McGowan singled out Alberta's non-union construction industry as a particularly egregious abuser of the program. McGowan contends that employers are opting for the program over training new apprentices, and that these contractors are able to secure contracts by undercutting those who invest in the apprenticeship system.⁵⁴

The temporary foreign worker program also raises concerns about discrimination and abuse of foreign workers. In British Columbia, a group of 40 Latin American temporary foreign workers recently obtained compensation through a settlement with SELI Canada and SNC Lavalin respecting discrimination in their employment regarding their salaries, accommodations, meals and expenses in the construction of the Canada Line, a public transit construction project in British Columbia carried out through a pub-

lic-private partnership (P3).⁵⁵ SELI Canada is a wholly owned subsidiary of the Italian SELI SPA, which specializes in tunnel boring projects around the world. In construction of the Canada Line, SELI Canada brought in workers from Central and South America on temporary foreign worker visas who had previously worked for SELI SPA on the La Joya hydroelectric project in Costa Rica. SELI Canada also brought in members of its SELI SPA's European workforce on temporary foreign worker visas and treated them substantially better than their Latin American colleagues with respect to their wages, accommodations, meals and expenses. In *C.S.W.U. Local 1611 v. SELI Canada and others (No. 8)*,⁵⁶ the British Columbia Human Rights Tribunal found that the Latin American workers were discriminated against when they were given lower wages, adverse housing, adverse meal arrangements and adverse expense arrangements compared to their European colleagues. The Tribunal ordered SNC Lavalin and SELI Canada to pay the Latin American workers the difference between the salaries paid to them and paid to their European coworkers, the difference between the expenses paid to them and the expenses paid to their European coworkers, and \$10,000 each as compensation for injury to dignity.⁵⁷ The Tribunal calculated these damages at \$2.4 million – the largest human rights award in Canadian history – that had increased to \$2.5 million with interest by late 2012.⁵⁸ In December 2012, the workers unanimously voted in favour of a negotiated settlement with the employer for an undisclosed sum, avoiding the years of delays that would have arisen from the lengthy appeal process.⁵⁹ This settlement finally brought an end to their five-year struggle for back pay.

A recent Freedom of Information (FOI) request by the AFL revealed an extensive list of employers and workplaces that have recently qualified for Advanced Labour Market Opinions (ALMOS) under the temporary foreign worker program. Included in this list are dozens of construction companies operating in Ontario, as well as many more in British Columbia, Alberta and Saskatchewan.⁶⁰ Many of these companies are currently engaged in or have previously secured contracts for public construction work, including with Ontario government ministries and the broader public sector. Companies identified in the AFL's FOI request have secured construction contracts with the Ontario government ranging from new hospital construction to culvert upgrades to roofing projects.⁶¹ This is problematic, as employers relying on the temporary foreign worker program as a response to skilled labour shortages in the skilled trades instead of training apprentices may exacerbate labour shortages over the long run, leading to even greater reliance on the program.

In the absence of a fair wage policy setting a floor for wages and benefits, employers have a strong financial incentive against making investments in skills training and apprenticeships. While these investments contribute to a more productive and highly skilled workforce over the long-run, they do impose short-run financial costs on the contractors who make such investments, reducing their competitive edge when operating against contractors who use “cheap imports” to meet short-term contractual needs. This creates a perverse incentive for employers against investing in apprenticeships and skills training which is contrary to the government’s stated objective of strengthening Ontario’s apprenticeship system. Thus, tendering policy is at odds with the government’s goals for Ontario’s apprenticeship system.

Improving Ontario’s Health and Safety Outcomes

The Ontario government has placed significant emphasis on health and safety in the construction industry. In the wake of the 2009 Christmas Eve swing stage accident that killed four construction workers,⁶² the Ontario government struck the Expert Advisory Panel on Occupation Health and Safety Chaired by Tony Dean.⁶³ The Dean panel conducted a thorough review of Ontario’s Occupation Health and Safety system, which led to the passage of Bill 160, *Occupational Health and Safety Statute Law Amendment Act*,⁶⁴ and the establishment of Ontario’s first Chief Prevention Officer. On December 6, 2012, the Ontario government proposed regulations that would require mandatory, basic health and safety programs for workers and supervisors in all Ontario workplaces.⁶⁵ After public consultation and feedback on its proposed regulations, the Ontario government filed *O. Reg. 297/13, Occupational Health and Safety Awareness and Training*, a regulation under the *Occupational Health and Safety Act*⁶⁶ (OHSA) on November 14, 2013.⁶⁷ *O. Reg. 297/13*, which comes into effect on July 1, 2014, makes good on the government’s earlier proposal for mandatory basic health and safety training for workers and supervisors in all Ontario workplaces. In addition to these measures, the Ministry of Labour also conducts many construction sector-specific safety blitzes for compliance with the OHSA through its Safe at Work Ontario Strategy.⁶⁸ In short, the Ontario government has placed significant emphasis on health and safety for all Ontarians, but with a particular emphasis on the construction industry. As will be demonstrated in subsequent analysis, given the strong positive correlation between fair wage policies and improved health and safety outcomes, a modern fair wage policy would en-

hance the Ontario government's aims of improving health and safety and reducing injuries in Ontario's construction industry.

Promoting Positive Competition in a High-Skills, High-Wage Construction Workforce

Over a century ago, fair wage policies were implemented with the intention of countering the destructive impact of unrestrained competition for public construction work. The low-bid system of awarding contracts, the short-lived attachment of employers and employees, combined with the long chain of contracting and subcontracting in the construction industry resulted in extremely low wages and poor working conditions. This system favoured contractors who abandoned their long-run obligations to train workers and pay them decently in order to minimize their short-run labour costs and secure contracts. In Canada, the adoption of the first federal fair wage policy in 1900 was a time in which Parliamentarians saw Canada's economic development at a fork in the road. Canada could opt for a high-wage and high-skill growth path, or a low-skill and low-wage growth path. According to Azari-Rad et al., "[t]he high-wage path was seen as preferable because it promoted solid skills and good workmanship on public works, it created middle class citizens and it stimulated demand for local manufactured goods."⁶⁹

While much has changed since the time when fair wage policies were first implemented, the choice between a high-wage, high-skill path to growth and a low-wage low-skill path rings a familiar chord. The construction industry is at a pivotal junction. The Construction Sector Council recently estimated that Canada will need 250,000 new construction workers by 2021,⁷⁰ primarily in B.C., Alberta and Ontario. Between now and then, public policy can try and reach this goal through either a high-wage path or a low-wage path; it can either seek to meet labour needs by attracting and retaining a new generations of Canadians to high-skilled and well-paying careers in the trades, or it can respond to labour shortages through a deepened dependence on the temporary foreign worker program. Rather than seeking to promote competition on cheap wages and minimizing labour costs, public policy ought to encourage the development of a highly skilled and highly productive domestic labour force. The former accentuates income inequality; the latter grows the middle class.

The role of robust labour standards and minimum floors in promoting positive competition was identified in Sengenberger's 2005 study on Inter-

national Labour Standards (ILS).⁷¹ In an extensive analysis of the role of ILS in development and social progress, Sengenberger found that adopting strong labour standards “can not only – in accordance with the classic economic rationale – prevent destructive competition in the labour market, but that they also promote constructive competition.”⁷² Speaking specifically on the role of minimum wages and other floors, Sengenberger observed that:

If the option to compete through sub-standard wages and poor working conditions is closed, efforts have to be made to compete in other, more constructive ways. Firms have to attain a level of productivity sufficient to meet the prescribed floor to pay and other conditions of work. In effect, minimum terms of employment and work provide a spur to employers to improve management, technology, products, processes, work organization, and worker skills and competence. Firms that are unable to reach the standard will be squeezed out of the market, and more efficient firms will take over their market share.⁷³

While Sengenberger is speaking to minimum floors and standards broadly, these sentiments are directly applicable to the issue of fair wage policies in Ontario. When wages and benefits are not the key competitive factor in public tendering for construction, security, and similar services, other factors that promote efficiency, innovation, efficiency and higher productivity prevail. In other words, strong fair wage policies promote a race-to-the-top type competition, instead of a race-to-the-bottom, won on the backs of workers’ wages and benefits. Strong labour protections in the form of fair wage policies should not be seen as a hindrance to productivity or competition, but, rather, as a mechanism for channeling competition in a more innovative and productive direction.

Evaluating the Cost Impact of Fair Wage Policies

THE MOST COMMON criticism put forward by opponents of fair wage policies is that they dramatically inflate construction costs.⁷⁴ In the United States, critics often claim that repealing fair wage policies would reduce total public construction costs by double digit figures.⁷⁵ As this analysis demonstrates, however, these claims are not supported by the vast majority of empirical research on the cost impact of fair wage policies, especially the more recent literature relying on more sophisticated econometric analysis.

Claims that prevailing wage laws significantly increase construction costs rely mostly on the first generation of studies on the cost impact of fair wage policies. Essentially, these studies operated on a hypothetical model that works as follows: First, the wage premium attributed to a prevailing wage law is calculated. Then, assuming that the entire wage increase is passed on to the public construction consumer in higher contract costs, this cost is calculated by multiplying the percentage wage increase by the percentage share of total construction costs made up by labour costs.⁷⁶

The greatest methodological flaw of these first wave studies on fair wage policies is their unquestioned assumption that higher wages automatically lead to higher total contract costs.⁷⁷ These critics presume these wage differentials arise in a static environment and do account for the extent to

which wage cost increases will be offset by productivity increases or even by compression of profit margins as a result of higher labour costs.⁷⁸ O’Grady et al. highlight several relevant potential productivity-inducing impacts of higher labour costs. These include the substitution of skilled labour for unskilled or semi-skilled labour; the substitution of equipment and machinery for labour; the substitution of pre-fabricated components for on-site construction; and the shift towards more efficient project management practices.⁷⁹ These productivity factors counter the relatively higher wage costs of fair wage policies.

Most studies relying on econometric methods do not find fair wage policies to be associated with significant cost increases.⁸⁰ For instance, a 2000 study by Bilginsoy and Philips compared public school construction costs in British Columbia before and after the implementation of the SDFWA. When controlling for factors such as the construction business cycle, type of school, number of competitors and the time trend, the study found that construction prices rose by 9.4 percent with the introduction of the SDFWA, but that they declined steadily afterwards and offset the policy’s immediate cost impact.⁸¹ A 2003 study by Azari-Rad et al. compared the impact of state prevailing wage laws on new public school construction costs in the United States. This study found that with the inclusion of appropriate controls, there was no statistically significant cost difference for new school construction between states with and without fair wage policies.⁸² Similarly, a 2005 study by Duncan and Prus found no statistically significant change in the cost differential between public and private construction work in British Columbia before and after the implementation of the SDFWA.⁸³

Recent studies lend further support to the conclusion that fair wage policies are not associated with significantly higher construction costs. For instance, a study by Duncan compared highway construction costs in Colorado on federal projects, to which the Davis-Bacon Act applied, and state projects, to which no fair wage policy applied. Using data from 122 highway resurfacing projects between 2000 and 2010, the study found that projects funded by the federal government were significantly more expensive, but that they were also larger and often involved more complex tasks than those funded by the state government. When controlling for the size and complexity differences between projects, the study found no statistically significant difference between projects to which fair wage policies apply and those to which they do not.⁸⁴ The study also found that the average number of bidders on federal projects was 4.2, while it was only 3.7 for state-level projects. This runs counter to the common argument that fair wage policies reduce

the number of bidders, which is believed to increase costs.⁸⁵ Another study by Kim et al. published in 2012 based on 140 construction projects built between 2006 and 2007 in five Northern California municipalities — four with prevailing wage laws and one without — also found no evidence to support the claim that prevailing wage laws reduced the number of total or non-union bidders on municipal construction projects.⁸⁶

A recent study of British Columbia’s experience with the SDFWA lends support for the proposition that offsetting productivity increases gradually reduce the cost impact of fair wage policies. Duncan et al. use stochastic frontier regression to provide an estimate of technical efficiency of school construction projects in British Columbia at two different points during the implementation of its fair wage policy, which was introduced in two phases. Technical efficiency is defined as “the ability of builders to obtain maximum output from available resources.”⁸⁷ The study uses the number of project square feet as the measure of output, and project bid price as the measure of input. The study found that the average technical efficiency for all projects in the study was 94.6 percent. Average technical efficiency for projects covered by the introductory stage of B.C.’s SDFWA was 86.8 percent. By the time the policy was expanded 17 months later, however, average efficiency of covered projects had increased to 99.8 percent.⁸⁸ Thus, as hypothesized, this study suggests that productivity factors ultimately make up for the increased wage impact of fair wage policies.

In short, as the analysis above demonstrates, the preponderance of econometric research suggests that fair wage policies do not significantly increase overall construction costs.

The Potential Benefits of a Modern Fair Wage Policy in Ontario

WITH CLAIMS ABOUT the cost impact of fair wage policies called into doubt, it is also important to highlight the evidence of the positive impact of fair wage policies. Unsurprisingly, fair wage policies improve workers' wages and benefits, but this is not the full extent of their positive impact. Fair wage policies are also associated with higher apprenticeship uptakes and completions, improved health and safety outcomes, and, if properly implemented, they can help root out the underground economic practices. All of this could help contribute to a more efficient and productive construction industry in Ontario. Drawing on empirical research from the United States and British Columbia, this section proceeds to demonstrate how fair wage policies further these objectives.

Impact on Wages and Benefits

It should come as no surprise that fair wage policies have a positive impact on wages and benefits, as this was the original rationale for such policies. While it seems intuitive, a number of studies have confirmed the positive impact fair wage policies have on compensation, particularly compensa-

tion in the form of benefits. A 2000 study by Petersen found that prevailing wage laws have helped to prevent a downward cycle of compensation for workers in states with fair wage policies relative to those that repealed their policies between 1982–83 and 1991–92. The study found that fair wage policies “enhance both wages and benefits, with the largest percentage increase going to employer pension contributions.”⁸⁹ Petersen concludes that “[t]he primary reason why pensions are significantly influenced is market failure in the delivery of benefits to construction workers” which arises due to “[h]igh worker turnover and lack of economies of scale”.⁹⁰ While real average total compensation remained constant for states with prevailing wage laws from 1982–83 to 1991–92, workers in states that repealed their prevailing wage laws during this period experienced a 16.6 percent decline.⁹¹

The impact on benefits was even more significant: real average total benefits per construction worker increased 3.2 percent in prevailing wage states from 1982–82 to 1991–92, but decreased 53.4 percent for workers in states that repealed their laws over the same period. Pension benefits increased 5 percent for workers in states with prevailing wage laws over the same period, while they decreased 66.7 percent for workers in states that had repealed their laws.⁹² Petersen also conducted regression estimates on the impact of fair wage policies on compensation, which found fair wage policies increased total compensation, wages, benefits and pension benefits by 12, 11, 61, and 105 percent, respectively, compared to states that had repealed their fair wage policies.⁹³ A subsequent study by Petersen and Godtland, which conducted the same comparison over the longer period of 1982–1999, confirmed these findings and also found that total compensation levels in states that repealed their prevailing wage laws fell nearly to the level of states that never had fair wage policies in the first place.⁹⁴ It found that total compensation in states with fair wage policies in 1999 was 33 percent higher and that benefits packages were 6.6 times higher than for workers in states without prevailing wage laws. It also found that workers in states with prevailing wage laws received a larger share of their compensation in the form of benefits, 7.6 percent compared to 1.4 percent for workers in states without fair wage policies.⁹⁵ As the above analysis demonstrates, fair wage policies have a positive impact on wages and benefits. An updated fair wage policy for Ontario would help ensure that the workers who build Ontario are fairly compensated for their contributions.

Apprenticeships and Skills Training

The Need for a Highly Skilled Construction Labour Force

Construction is dangerous and often complex work that requires a highly skilled workforce, yet the unique characteristics of the construction labour market, absent adequate union and government policy intervention, create market failures that result in an underinvestment in skills training and apprenticeships. The short-term nature of construction workers' attachment to any particular contractor creates disincentives for firms to invest in skills training. A so-called "human capital free-rider problem" is created by the fact that the skills a worker acquires while working for one firm could benefit competitors once a project is completed and workers are hired on new projects by other firms.⁹⁶ For larger non-union firms with the capacity to maintain a steady workforce, there remains the risk of a competitor "poaching" their workers once they have invested in skills training. Thus, the short-term nature of construction employment incentivizes employers to focus on the short-run and underinvest in skills training.⁹⁷ This market failure is accounted for in the unionized sector of the industry by the fact that the benefits and burdens of training are spread evenly across signatory contractors, and because contractors have equal access to highly trained workers through union hiring halls. As the unionized sector's market share continues to decline in Ontario and elsewhere, however, the market failure in the delivery of training becomes a greater concern. The next section proceeds to demonstrate how fair wage policies are a method through which governments can provide both indirect and direct support for the apprenticeship system.

The Link Between Fair Wage Policies and Apprenticeships

Empirical evidence demonstrates that fair wage policies are strongly associated with improved apprenticeship and skills training outcomes. In a comparative study of apprenticeship outcomes in 35 states for the period between 1989 and 1995, Bilginsoy found fair wage policies to be associated with higher registration rates and higher completion rates. Specifically, Bilginsoy found that completion rates in non-fair wage policy states over the period were only 28 percent, while in fair wage policy states they were 52 percent, and they increased with the strength of the fair wage policy.⁹⁸ At the end of the period, Bilginsoy found that 32 percent of apprentices in

non-fair wage policy states were still training, whereas only 7 percent of apprentices in fair wage policy states were still training. These figures, taken together, indicate a greater efficiency of apprenticeships in fair wage policy states than non-fair wage policy states.⁹⁹

In his study on the impact of fair wage policy repeal, Phillips et al. found that when controlling for the economic cycle, unemployment rates and regional differences in the availability of training, construction training fell by 40 percent in the nine states that repealed their fair wage policies.¹⁰⁰ In a comparison of Missouri with four other states in the Great Plains Region between 1973–1979 and 1987–1990, Kelsay et al. found that apprenticeships in the four non-fair wage policy states declined by 51 percent over the two periods, whereas apprenticeship programs increased 26.9 percent in Missouri during the two periods.¹⁰¹ These studies provide strong evidence of the correlation between fair wage policies, apprenticeships and skills training.

Explaining the Link Between Fair Wage Policies and Apprenticeships

While a strong correlation has been identified between fair wage policies and improved apprenticeship outcomes, this link is mostly indirect. It is generally hypothesized that fair wage policies support apprenticeships and skills training indirectly through their impact on construction unions. It is theorized that fair wage policies increase union density by narrowing the competitive margin between unionized and non-unionized contractors, and thus indirectly support apprenticeships and skills training.¹⁰² Evidence from the United States demonstrates that the union sector has higher apprenticeship completion rates and that the unionized sector produces a disproportionately high share of apprentices relative to its share of the construction industry.

Relying on Bureau of Labor Statistics data, Kelsey et al. found that, of apprentices registered in 1989–1991 who had graduated by 1995, 41 percent of joint-sponsored (union) and only 25 percent of non-joint sponsored (non-union) apprentices had completed their apprenticeship. Furthermore, the study found that of those who graduated from apprenticeship classes in 1989–1991, 82 percent completed joint programs and only 18 percent completed non-joint programs.¹⁰³ This data suggests that the union sector supports the bulk of the apprenticeship system.

The general findings of the American literature were affirmed by a 2013 study of apprenticeship completions in Ontario which found superior completion outcomes for union apprentices relative to non-union apprentices

in Ontario in the four largest compulsory construction trades, namely sheet metal workers, plumbers, pipe fitters and electricians.¹⁰⁴ The study, which was commissioned by the OCS and conducted by Professor Morley Gundersen, found that the notional completion rate¹⁰⁵ for apprentices indentured to Jointly-Administered Training Trusts (JATTs), a proxy for union apprentices, was 30 percent higher than the rate for apprentices indentured to individual employers (a proxy for non-union apprentices).¹⁰⁶ Based on an assumed average apprenticeship duration of seven years, apprentices indentured to JATTs had a notional completion rate of 75 percent, whereas those indentured to individual employers only had a notional completion rate of 58 percent. These findings highlight the crucial role construction unions play in the apprenticeship system.

Construction unions and their signatory contractors have made enormous investments in skills training in Ontario's construction industry in recent years. As of 2012, Ontario's unionized construction sector operates 95 joint union/employer training facilities across the province, a significant increase from the 65 facilities that were in operation in 2008.¹⁰⁷ The capital investment in these 95 facilities totals \$260 million, an average of \$2.74 million per facility.¹⁰⁸ This is a significant increase from the \$190 million total estimated in 2008, indicating an estimated collective investment in facilities and equipment of \$114.6 million during the interim period. This significant investment was made possible in part through \$40 million made available to union/employer training centres by the Ontario government's Skills Training Investment Program (STIP) and the Ontario Skills Training Enhancement program (OSTEP).¹⁰⁹ These figures highlight the significant role Ontario's construction unions and their signatory contractors play in the apprenticeship system, thanks to their substantial investments in training. To the extent that fair wage policies narrow the competitive margin for the unionized contractors, and thus support the unionized construction sector, fair wage policies indirectly provide support for apprenticeships and skills training.

The Case for Forging a Direct Link Between Fair Wage Policies and Apprenticeships

While all fair wage policies provide indirect support for the apprenticeship system, they may also provide direct support if crafted properly. British Columbia's now-repealed SDFWA provided a direct link between apprenticeships and fair wage policies by requiring all workers employed on provincially funded construction projects to either hold a trade qualification or be

registered as an apprentice.¹¹⁰ By replicating such a policy, the Ontario government could use its public tendering to directly support its goals with respect to apprenticeships and skills training. Given the importance the Ontario government has placed on skills training in Ontario's construction industry, such a policy would help put tendering policy in sync with these broader policy objectives.

As noted, the Construction Sector Council estimates that Canada will need 250,000 new construction workers by 2021, primarily in Ontario, Alberta and British Columbia. The massive investment in public infrastructure that will be required to address Canada's infrastructure deficit offers an incredible opportunity to use public infrastructure investment to support the training of the next generation of skilled tradespeople. Canada faces a multi-billion dollar public infrastructure deficit as a result of decades of underinvestment. According a 2007 study commissioned by the Federation of Canadian Municipalities (FCM), Canada's municipal infrastructure deficit steadily climbed from \$12 billion in 1985, to \$60 billion in 2003, to \$123 billion in 2007.¹¹¹ In 2012, the FCM released its first national infrastructure report card, which surveyed Canadian municipalities on the state of four asset categories: roads, wastewater, drinking water and storm water infrastructure. The survey results found that nearly 30 percent of municipal infrastructure was ranked between "fair" and "very poor", and that the replacement costs of these assets alone would be \$171.8 billion in total.¹¹² These figures do not include provincial and federal infrastructure.

The importance of stable, long-term infrastructure funding is increasingly recognized by federal and provincial governments,¹¹³ but serious further investments will need to be made in years to come. This impending "big build" offers an opportunity for governments at all levels to use public infrastructure investment to further their policy objectives in supporting the apprenticeship system. Enacting a modern fair wage policy that requires all workers employed on provincially funded construction projects to either hold a trade qualification or to be registered as an apprentice would allow the Ontario government to leverage its investments in public infrastructure to help train the next generation of skilled tradespeople in Ontario, and improve the quality of life of all its residents.

Impact on Health and Safety Outcomes

The construction industry has the highest rate of workplace injuries of any industry in Canada. At 24.5 injuries per 1,000 workers, the construction in-

dustry is significantly above the Canadian average workplace injury rate of 15.2 for all industries.¹¹⁴ In light of the prevalence of workplace injuries in the construction industry, another important impact of fair wage policies is their correlation with improved health and safety outcomes. Numerous studies in the United States have demonstrated a strong link between fair wage policies and improved health and safety outcomes. In a study of injury rates for plumbers and pipe fitters over the 1978 to 1991 period, Phillips et al. found that occupational injuries rose by 15 percent where state fair wage policies had been repealed.¹¹⁵ A subsequent study by Azari-Rad expanded the analysis by examining injury rates for the entire construction workforce over a longer duration (1975–1999). It found the existence of a fair wage policy to be associated with an 8.25 percent decline in total injury rates.¹¹⁶ The study found that fair wage policies had an even more significant impact on the most serious injuries, with a 10.19 percent decline in such injuries associated with the existence of a fair wage policy.¹¹⁷ Azari-Rad contends that the causal process linking fair wage policies with increased workplace safety include:

- the role fair wage policies play in supporting training;
- the retention of more experienced workers less prone to injuries; and
- creating an environment in which other regulations are adhered to.

As with their impact on apprenticeships, O’Grady et al. theorize that the impact of fair wage policies on health and safety is a result of their impact on unionization rates. They suggest fair wage policies may support the ‘union effect’ on health and safety outcomes.¹¹⁸ Unions are believed to have a positive impact on health and safety because there is more rigorous enforcement of safety policies on union sites and because unions provide health and safety training to their members. Union hiring halls also regularize employment in an otherwise transient industry, leading to lower turnover and higher worker retention.¹¹⁹ Finally, unionization precludes the use of independent operators, who, prior to Bill 119 were not required to pay WSIB premiums. WSIB premiums are paid by employers and reflect actual injury experience, which creates a direct financial incentive to improve workplace safety.¹²⁰ Empirical Canadian data on the impact of unions on safety is somewhat limited, but O’Grady et al. report that WSIB data for electrical and mechanical trades between 1993 and 1998 show that non-unionized contractors had lost-time injury rates more than double that of unionized contractors.¹²¹

As this analysis demonstrates, fair wage policies are strongly correlated with improved health and safety outcomes. Construction is a particularly

dangerous industry and has been specifically targeted by the government, especially since the 2009 Christmas Eve swing stage tragedy and the Dean Report. Updating Ontario's fair wage policy would help support the government's efforts to improve health and safety in the construction industry.

Impact on the Underground Economy

A properly implemented fair wage policy could have a significant impact on tackling the underground economy in Ontario's construction industry. The Ontario government has made significant strides in this regard by extending the application of WSIB premiums to independent operators. Ontario should build on this progress by making its fair wage policy explicitly apply to independent operators, as is the case with the U.S. Davis-Bacon Act.¹²² While the extension of WSIB premiums to independent operators reduces the incentive for employers to misclassify their employees as independent operators, employers who do so will still avoid CPP and EI premiums, the employer health tax, and vacation and holiday pay. Thus, further action is required to curb the independent operator phenomenon.

According to O'Grady et al., the use of independent operators may generate a 2.3 percent construction cost reduction to public sector construction purchasers at face value. These "savings" are misleading, however, as they are largely financed by losses to the federal and provincial governments through CPP, EI, the Employer Health Tax and decreased federal and provincial income tax revenue, as well as losses to the workers themselves. O'Grady et al. peg net savings to public sector construction purchasers at barely over 1 percent of total costs, which, as they put it, "hardly seems commensurate with weakening occupational health and safety, eviscerating minimum employment standards, undermining apprenticeship training, and encouraging other forms of noncompliance."¹²³ Clearly, the benefits of permitting such practices are outweighed by their deleterious effects.

Implementing an updated fair wage policy that explicitly covers all workers on publicly supported construction projects, including independent operators, could go a long way to address the underground economy in Ontario's construction industry. Given the social and financial costs of the underground economy in terms of both reduced workplace safety and losses to government coffers, the savings generated at face value to public sector construction purchasers can hardly justify permitting the misclassification of employees as independent operators on public construction projects.

Conclusion

GIVEN THE BENEFITS of fair wage policies identified in this report, Ontario would be well-advised to update and strengthen its fair wage policy. Such a policy would promote positive competition based on raising the skills and productivity of the workforce rather than destructive competition based on reducing labour costs by cutting workers' pay. Fair wage policies improve workers' wages and benefits and are associated with improved apprenticeship outcomes and fewer injuries. Furthermore, if implemented correctly, fair wage policies can help tackle the underground economy. Through these impacts, a modern fair wage policy could help contribute to a more productive, efficient and skilled construction workforce in Ontario, to the benefit of skilled tradespeople, contractors, and construction purchasers in both the public and the private sector.

Many of the benefits of fair wage policies would be experienced if Ontario simply updated the wage schedules in its current fair wage policy. However, design and implementation of the policy are important to maximize its positive impact and minimize its deleterious effects. With that in mind, Ontario ought not to simply update its current wage rates for its existing fair wage policy but, rather, implement a modern fair wage policy with a number of changes from its current approach:

- First, fair wages ought to be measured with reference to the entire compensation package rather than straight wages alone. Such measurement incentivizes the payment of benefits, whereas tying fair

wages to straight wages alone puts employers who pay benefits at a competitive disadvantage;

- Second, the policy ought to forge a direct link between skills training and fair wages by introducing some element of a requirement that workers on public construction projects either be certified journeypersons or registered apprentices;
- Third, the scope of coverage must follow the U.S. practice and explicitly extend beyond the common law employment relationship so as to include independent operators. This will help make great strides towards addressing the underground economy in Ontario's construction sector; and
- Fourth, the policy ought to apply to all construction projects supported by provincial funds, rather than just those of ministries and their direct agencies. This would be more in line with modern procurement practices which increasingly use alternative delivery methods such as P3s.

A modern fair wage policy based on these principles would not only help ensure that workers on government construction projects enjoy their fair share of the benefits of economic development, but would also help ensure that tendering policy is in line with broader government policy objectives pertaining to skills training, health and safety and tackling the underground economy. A modern fair wage policy based on these principles would help support a high-skilled, high-quality construction industry to the benefit of skilled tradespeople, contractors, and construction purchasers in both the public and private sector.

Notes

1 Richard P Chaykowski, Research Review Relating to Fair Wage Policies: Canadian and American Evidence and Current Policies 113 at 119, Appendix C to John O’Grady with the collaboration of Tim Armstrong & Richard P Chaykowski, *Impact of Fair Wage Policies on the Construction Industry* (Etobicoke: Ontario Construction Secretariat, 2006).

2 *Ibid* at 119.

3 Peter Philips et al, “Losing Ground: Lessons from the Repeal of Nine ‘Little Davis-Bacon’ Acts.” (1995) Working Paper, Department of Economics, University of Utah at 5.

4 Fair wage policies have been enacted at the provincial/territorial level in British Columbia, Saskatchewan, Manitoba, Ontario, New Brunswick and the Yukon. In Quebec, union membership is compulsory in the construction industry. This report focuses on the provincial FWPs in Ontario and British Columbia. The British Columbia policy is examined in some detail because, unlike other policies, it forged a direct link between fair wages and apprenticeships by mandating the use of apprentices on public construction projects.

5 RSC 1985, c L-4

6 RSBC 1996, C 427 [Repealed by the *Skills Development and Fair Wage Repeal Act*, SBC 2001, c 48 s 1, effective September 26, 2001.

7 City of Windsor, City Council, *Council Minutes*, (July 8 2013) online: <<http://www.citywindsor.ca/cityhall/city-council-meetings/council%20minutes/documents/july%208,%202013%20wcm.pdf>> at 3.

8 City of Toronto, By-Law No 1717-2013, To amend the Fair Wage Schedule of City of Toronto Municipal Code Chapter 67, Fair Wage, Schedule C, to increase the wage rates with respect to the Heavy Construction Work, Industrial, Commercial and Institutional Work, Road Building Work, Sewer and Water Main Construction and Utility Work classifications and to add or delete certain occupations included in those classifications (18 December 2013) [By-Law No 1717-2013].

9 City of Toronto, Fair Wage Office, “2010 Annual Report” online: (2010) <<http://www.toronto.ca/legdocs/mmis/2011/gm/bgrd/backgroundfile-42095.pdf>> at 3.

- 10** Toronto Public Library, City Librarian, Fair Wage Policy” online: (2008) <<http://www.torontopubliclibrary.ca/content/about-the-library/pdfs/board/meetings/2008/jun11/12.pdf>>
- 11** *By-Law No 1717-2013*, *supra* note 8.
- 12** City of Toronto, EX 33.2, *Quality Jobs, Living Wages and Fair Wages in Toronto* (16 May 2013) [*Quality Jobs*].
- 13** City of Toronto, City Manager’s Office, “Fair Wage Policy” online: (2007) <<http://www.toronto.ca/fairwage/pdf/fair-wage-policy0208.pdf>>
- 14** City of Toronto, Corporate Services, “Fair Wage Schedule” online: (2003) <http://www.toronto.ca/fairwage/pdf/03_04_schedule_general.pdf>
- 15** *Quality Jobs*, *supra* note 12.
- 16** City of Toronto, By-Law No 1287-2013, *To amend City of Toronto Municipal Code Chapter 67, Fair Wage, to increase the wage rates in Schedule C with respect to General Classifications and to delegate certain authority to the Manager, Fair Wage Office, to update the wage rates in Schedule C from time to time* (11 October 2013).
- 17** *Ibid* at s 1.
- 18** *Ibid* at s 1.
- 19** *By-Law No 1717-2013*, *supra* note 16.
- 20** City of Toronto, Fair Wage Office, “Fair Wage Policy Comparison in GTA Municipalities and Other Levels of Government” online (2007) <<http://www.toronto.ca/legdocs/mmis/2007/gg/bgrd/backgroundfile-1483.pdf>> at 4–5.
- 21** Regulations Amending the Fair Wages and Hours of Labour Regulations, Regulatory Impact Analysis Statement (1999) C Gaz I, Vol 133 No 24 (*Fair Wages and Hours of Labour Act*).
- 22** *Ibid* at 1.
- 23** John O’Grady with the collaboration of Tim Armstrong & Richard P Chaykowski, Impact of Fair Wage Policies on the Construction Industry (Etobicoke: Ontario Construction Secretariat, 2006) at 14.
- 24** *Ibid* at 22.
- 25** Josh Mandryk, “Repealing the Fair Wages Act goes against evidence and workers’ interests”, *Toronto Star* (3 July 2012) online: Toronto Star <http://www.thestar.com/opinion/editorialopinion/2012/07/03/repealing_the_fair_wages_act_goes_against_evidence_and_workers_interests.html>.
- 26** JOC Digital Media, “Lobbying pays off for open shop construction contractors in Ottawa: Merit Canada chairman Monsebroten”, *Journal of Commerce* (4 June 2012) online: Journal of Commerce <<http://www.joconl.com/article/id50452>>.
- 27** *O’Grady et al*, *supra* note 23 at 26.
- 28** *Ibid* at 26.
- 29** *Ibid* at 24.
- 30** Ontario, Ministry of Labour, *Fair Wage Schedules and Labour Conditions* (Toronto: Queen’s Printer for Ontario, 1995).
- 31** *O’Grady et al*, *supra* note 23 at 24.
- 32** *Ibid* at 24.

- 33** *Ibid* at 24–25.
- 34** *Ibid* at 25.
- 35** *Ibid* at 25.
- 36** *Ibid* at 24–25.
- 37** Ministry of Labour, Media Release “Backgrounder: Ontario Fair Wage Policy Review”, (12 April 2007) online: MOL <<http://www.labour.gov.on.ca/english/news/pdf/2007/07-38b.pdf>>.
- 38** Brian Baker, “Fair Wage Policy now under review” *Daily Commercial News* (17 April 2007) online: Daily Commercial News: <<http://dcnonl.com/article/20070417300>>
- 39** A copy of Professor Gunderson’s report was obtained through a freedom of information request to the Ontario Ministry of Labour.
- 40** Expert Advisory Panel on Occupational Health and Safety, *Report and Recommendations to the Minister of Labour* (Toronto: Queen’s Printer for Ontario, 2010) at 36 [The Dean Panel].
- 41** *Ibid*.
- 42** Ontario, Commission on the Reform of Ontario’s Public Services, *Public Services for Ontarians: A Path to Sustainability and Excellence*, (Toronto: Queen’s Printer for Ontario, 2012) at 58. [Drummond Report]
- 43** Prism Economics & Analysis, *Underground Economy in Construction — It Costs Us All* (Etobicoke: Ontario Construction Secretariat, 2010) at 3.
- 44** *Ibid*.
- 45** SO 2008, C 20.
- 46** Ontario Ministry of Finance, “2012 Ontario Budget: Chapter I: Transforming Public Services: Highlights” online: (2012) <<http://www.fin.gov.on.ca/en/budget/ontariobudgets/2012/ch1.html>>.
- 47** *Ibid*.
- 48** Ontario Ministry of Training Colleges and Universities, News Release, “McGuinty Government Salutes Employers for Training Apprentices” (19 June 2012) online: MTCU <http://www.tcu.gov.on.ca/eng/document/nr/12.06/nro619.html?utm_source=shortlinks&utm_medium=web&utm_campaign=pv83>.
- 49** Ontario Ministry of Training Colleges and Universities, “Results-based Plan Briefing Book 2013–14” online: (2013) <http://www.tcu.gov.on.ca/eng/about/annualreport/2014RbP_En.pdf>.
- 50** *Ontario Ministry of Finance, supra note 46*.
- 51** Ontario Ministry of Training Colleges and Universities, News Release, “Modernizing Ontario’s Skilled Trades System” (13 May 2009) online: MTCU <<http://news.ontario.ca/tcu/en/2009/05/modernizing-ontarios-skilled-trades-system.html>>.
- 52** Kelly Lapointe, “OCOT now officially accepting members” *Daily Commercial News* (8 April 2013) online: Daily Commercial News <<http://www.dcnonl.com/article/id54802>>.
- 53** Morley Gunderson, *Completion Counts: Raising Apprenticeship Completion Rates in Ontario’s Construction Industry* (Etobicoke: Ontario Construction Secretariat, 2013) at 21.
- 54** Vince McDermott, “Foreign Workers Easier Route than Canadian Apprentices: AFL” *Fort McMurray Today* (25 March, 2013) online: <http://www.fortmurraytoday.com/2013/03/25/foreign-workers-easier-route-than-canadian-apprentices-afl>

- 55** The Canadian Press, “Canada Line foreign workers win wage settlement” (3 April 2013) online: *CBC News* <<http://www.cbc.ca/news/canada/british-columbia/story/2013/04/03/bc-canada-line-workers.html>>.
- 56** 2008 BCHRT 436 [SELI].
- 57** *Ibid* at 14.
- 58** Kevin Drews, “Foreign workers who helped build Vancouver’s Canada Line win wage fight” (2 April 2013) online: *The Globe and Mail* <<http://www.theglobeandmail.com/news/british-columbia/foreign-workers...helped-build-vancouvers-canada-line-win-wage-fight/article10701631/>>.
- 59** *Ibid*.
- 60** Human Resources and Skills Development Canada, Access to Information and Privacy. *Request # 1033000001* (Ottawa: Office of the Information Commissioner, 2013) at 67–84 online: <<http://www.afl.org/index.php/Press-Release/list-of-accelerated-tfw-approvals-reveals-widespread-abuse-of-program.html>>.
- 61** For instance, EllisDon, one of the employers on the ALMO list for Ontario, is one of Canada’s largest construction companies which does a broad range of construction work for clients in both the private and broader public sector including a \$2.7 billion P3 hospital project in Oakville, Ontario. Other examples include ASEAL Roofing and Sheet Metal Ltd., which was awarded a roofing contract with the Ministry of Government Services under Contract Number OSS_00240195, and Thomas Cavanagh Construction Ltd., which was awarded a contract for culvert upgrades with the Ministry of Government Services under contract number OSS-079248.
- 62** Raveena Aulakh, ““You never have 4 dead in one go””, *Toronto Star* (26 December 2009) online: *Toronto Star* <http://www.thestar.com/news/gta/2009/12/26/you_never_have_4_dead_in_one_go.html>; Susan Krashinsky, “Four killed after scaffolding collapses in Toronto”, *The Globe and Mail* (24 December 2009) online: *The Globe and Mail* <<http://www.theglobeandmail.com/news/toronto/four-killed-after-scaffolding-collapses-in-toronto/article4296811/>>.
- 63** DCL Digital Media, “Construction Sector Council’s George Gritziotis appointed Ontario Chief Prevention Officer” *Daily Commercial News* (9 September 2011) online: *Daily Commercial News* <<http://www.dcnonl.com/article/id46518>>.
- 64** 2011 SO, c 11.
- 65** Ontario Ministry of Labour, News Release, “Proposal to Introduce Regulation Regarding Mandatory Health and Safety Training for All Workers and Supervisors” (6 December 2012) online: *MTCU* <<http://www.labour.gov.on.ca/english/hs/prevention/consultations/training.php>>.
- 66** RSO 1990, c 0.1
- 67** *Occupational Health and Safety Awareness and Training*, O Reg 297/13.
- 68** Ontario Ministry of Labour, “About Safe at Work Ontario” (October 2009) online: *MOL* <<http://www.labour.gov.on.ca/english/hs/sawo/about.php>>.
- 69** Hamid Azari-Rad, Peter Philips & Mark J Prus, “Introduction: Prevailing Wage Regulation and Public Policy in the Construction Industry” in Hamid Azari-Rad, Peter Philips & Mark J Prus, eds, *The Economics of Prevailing Wage Laws* (Hampshire: Ashgate, 2005) 3 at 10.
- 70** DCN Digital Media, “Construction Needs 250,000 Workers” *Daily Commercial News* (1 April 2013) online: *Daily Commercial News* <<http://www.dailycommercialnews.com/article/id54709/-construction-needs-250000-workers>>
- 71** Werner Sengenberger, *Globalization and Social Progress: The Role and Impact of International Labour Standards*, 2d ed (Bonn: Friedrich-Ebert-Stiftung).

72 *Ibid* at 9–10.

73 *Ibid* at 10.

74 In Canada, the cost argument is the only serious criticism raised against FWPs. In the United States, however, some critics contend that the Davis-Bacon Act is discriminatory (Bernstein 1994, Bloch 2003, Thieblot 1986, Vedder & Gallaway 1999). First, they contend that the Act is a vestige of Jim Crow, and that its original rationale was the exclusion of African Americans from public construction projects. Second, they contend that FWPs have a disproportionate negative impact on African Americans, who can often only compete on wages and are thus “priced out” of the market by FWPs. These claims have been debunked by a number of authors (Azari-Rad & Philips 2005, Belman & Voos 1995, Belman 2005). The first leg of this criticism relies on remarks by Rep. Upshaw, a legislator who was neither the bill’s sponsors nor a member of the party of the bill’s sponsors, in debates over a previous version of the bill. These critics almost invariably fail to mention that the bill’s namesake, Rep. Bacon, immediately took issue with Rep. Upshaw’s racist remarks. The second leg of this criticism is best addressed by former NAACP Washington Bureau Director Wade Henderson, who explained that “Many who profess concern about Davis-Bacon’s impact on black workers shed crocodile tears. This is part of a full-scale assault on many of the civil rights and worker-protection initiatives.” It is also worth noting that the Davis-Bacon Act is supported by the United States House of Representatives’ Congressional Black Congress, which has stated that: “We believe that Davis-Bacon has been instrumental in bridging the wage gap for historically disadvantaged sectors of society. In the face of decaying social and economic opportunities, this measure provides women and minorities with an important tool for achieving greater parity with their mainstream counterparts. The Davis-Bacon Act has made a valuable contribution to instituting protective equity and stability to American workers everywhere.”

75 Hamid Azari-Rad, Peter Philips & Mark J Prus, “State Prevailing Wage Laws and School Construction Costs” (2003) 40:3 *Industrial Relations* 445 at 445.

76 Mooshin Mahalia, *Prevailing Wage Laws and Government Contracting Costs: A Review of the Research* (Washington, DC: Economic Policy Institute, 2008) at 2.

77 *Ibid*.

78 Michael Kelsay, Randall Wray & Kelly Pinkham, “The Adverse Economic Impact From the Repeal of the Prevailing Wage Law in Missouri” Working Paper, Department of Economics, University of Missouri at 14; *O’Grady et al, supra* note 5 at 37.

79 *O’Grady et al, supra* note 23 at 37–38.

80 For an extensive review, see Mahalia, *supra* note 76.

81 Cihan Bilginsoy & Peter Philips, “Prevailing Wage Regulation and School Construction Costs: Evidence from British Columbia” (2000) 24 *Journal of Education Finance* 415.

82 *Azari-Rad et al, supra* note 75.

83 Kevin Duncan & Mark J Prus, “Prevailing Wage Laws and Construction Costs: Evidence from British Columbia’s Skills Development and Fair Wage Policy” in Hamid Azari-Rad, Peter Philips & Mark J Prus, eds, *The Economics of Prevailing Wage Laws* (Hampshire: Ashgate, 2005) 123.

84 Kevin Duncan, An Analysis of Davis-Bacon Prevailing Wage Requirements: Evidence from Highway Resurfacing Projects in Colorado (2011) online: <[http://www.leg.state.co.us/clics/clics2012a/commsumm.nsf/b4a3962433b52fa787256e5foo670a71/c5a8582c74cd709787257990060a36d/\\$FILE/HseLocal0125AttachB.pdf](http://www.leg.state.co.us/clics/clics2012a/commsumm.nsf/b4a3962433b52fa787256e5foo670a71/c5a8582c74cd709787257990060a36d/$FILE/HseLocal0125AttachB.pdf)>.

85 *Ibid* at 29–30.

- 86** Jaewhan Kim, Chang Kuo-Liang & Peter Philips, “The Effect of Prevailing Wage Regulations on Contractor Bid Participation and Behavior: A Comparison of Palo Alto, California with Four Nearby Prevailing Wage Municipalities” (2012) 51:4 *Industrial Relations* 874.
- 87** Kevin Duncan, Peter Philips & Mark J Prus, “The Effects of Prevailing Wage Regulations on Construction Efficiency in British Columbia” (2009) 5:2 *International Journal of Construction Education and Research* 63 at 63.
- 88** *Ibid* at 63.
- 89** Jeffrey S Petersen, “Health Care and Pension Benefits for Construction Workers: The Role of Prevailing Wage Laws.” *Industrial Relations* 39 (April 2000) 246 at 246.
- 90** *Ibid* at 248.
- 91** *Ibid* at 257.
- 92** *Ibid* at 257.
- 93** *Ibid* at 258.
- 94** Jeffrey S Petersen and Erin M Godtland, “Benefits vs. Wages: How Prevailing Wage Laws Affect the Mix and Magnitude of Compensation to Construction Workers” in Hamid Azari-Rad, Peter Philips & Mark J Prus, eds, *The Economics of Prevailing Wage Laws* (Hampshire: Ashgate, 2005) 191 at 191.
- 95** *Ibid* at 193–194.
- 96** Hamid Azari-Rad, “Prevailing Wage Laws and Injury Rates in Construction” in Hamid Azari-Rad, Peter Philips & Mark J Prus, eds, *The Economics of Prevailing Wage Laws* (Hampshire: Ashgate, 2005) 169 at 169.
- 97** *Kelsay et al, supra* note 78 at 109.
- 98** Cihan Bilginsoy, “Wage Regulation and Training: The Impact of State Prevailing Wage Laws on Apprenticeship” in in Hamid Azari-Rad, Peter Philips & Mark J Prus, eds, *The Economics of Prevailing Wage Laws* (Hampshire: Ashgate, 2005) 149 at 159.
- 99** *Ibid* at 162.
- 100** *Phillips et al, supra* note 3 at 6.
- 101** *Kelsay et al, supra* note 78 at 111.
- 102** *O’Grady et al, supra* note 23 at 50.
- 103** *Kelsay et al, supra* note 78 at 111.
- 104** *Gunderson, supra* note 53.
- 105** *Ibid* at 35. According to the study, “A ‘notional completion rate’ is calculated by taking as the denominator the number of new apprentices registered in ‘year X’ (e.g., 2000) and as the numerator the number of C of Qs issued to apprenticeship completers in ‘year X plus 4’ (e.g. 2004) or ‘year X plus 5’ (e.g. 2005), depending on the expected length of the apprenticeship program.”
- 106** *Ibid* at 8.
- 107** *Ibid* at 28.
- 108** *Ibid* at 28.
- 109** *Ibid* at 29.
- 110** *O’Grady et al, supra* note 23 at 8.

- 111** Saeed Mirza, *Danger Ahead: The Coming Collapse of Canada's Municipal Infrastructure* (Ottawa: Federation of Canadian Municipalities, 2007).
- 112** Federation of Canadian Municipalities, Canada Infrastructure Report Card, Volume 1: 2012 Municipal Roads and Water Systems, online: Federation of Canadian Municipalities, 2012 <http://www.canadainfrastructure.ca/downloads/Canadian_Infrastructure_Report_Card_EN.pdf>.
- 113** Infrastructure Canada, The New Building Canada Plan: \$53 billion, including over \$47 billion in new funding, over the next 10 years (22 August 2013) online: Infrastructure Canada <<http://www.infrastructure.gc.ca/plan/plan-eng.html>>;
- 114** LABORSTA Internet, "8B Rates of occupational injuries, by economic activity" online: International Labour Organization <<http://laborsta.ilo.org/STP/guest>>.
- 115** *Phillips et al, supra* note 3 at 6.
- 116** *Azari-Rad, supra* note 96 at 183.
- 117** *Ibid.*
- 118** *O'Grady et al, supra* note 23 at 5.
- 119** *Azari-Rad, supra* note 96 at 170.
- 120** *O'Grady et al, supra* note 23 at 54.
- 121** *Ibid* at 55. For the electrical trades, unionized and non-unionized contractors had lost-time injury rates of 8.9 per 1000 and 18.5 per 1000, respectively. For the mechanical trades, unionized and non-unionized contractors had lost-time injury rates of 11.1 per 1000 and 24.6 per 1000, respectively.
- 122** *Ibid* at 8.
- 123** *Ibid* at 5–6.



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