# TEMPORARY FOREIGN WORKERS IN BRITISH COLUMBIA'S CONSTRUCTION INDUSTRY: FRIENDS OR RIVALS

by

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Bennett Library Simon Fraser University Burnaby, BC, Canada **Abstract** 

This study assesses the extent to which opposition to temporary foreign workers exists in British Columbia's construction industry and uses the findings to suggest policies designed to address the concerns of resident workers. Using a survey of resident workers, the study examines the economic rationale behind their opposition to the employment of temporary foreign workers and determines whether skill levels affect the degree of opposition. The survey finds that resident workers are most concerned about potential lowering of wages and that a large minority would like the number of temporary foreign workers be reduced. These findings are validated through a key informant interview with an employer. The study concludes by suggesting that a Temporary Foreign Worker Advisory Office and Hotline as well as a Construction Job Bank be created to help ensure that program's rules are being adhered to and enforced.

**Keywords:** temporary foreign worker; economic competition; skill level; construction industry; British Columbia

## **Executive Summary**

This study examines the economic rationale behind resident worker opposition to the employment of Temporary Foreign Workers (TFWs) by looking at the construction industry in British Columbia. The number of TFWs in the construction industry has increased significantly in recent years, resulting in public protests by resident workers, labour unions and first nations groups. Perceived economic competition from TFWs can promote open hostility and discriminatory behaviour towards them; it can also prevent their smooth social integration into the domestic labour force. These factors may support limiting the number of TFWs in receiving countries and may inhibit the full realization of economic benefits that temporary foreign worker programs (TFWPs) can produce.

This study assesses whether the relative skill levels of the TFWs affects the level of opposition exhibited by resident workers. The literature suggests that those with higher skill levels generally report lower levels of opposition to TFWs, but that resident workers are more likely to oppose TFWs of the same skill level as they are indirect competition for jobs. The literature also suggests that opposition is based upon the belief that TFWs i) increase competition for jobs, promotions and benefits; ii) produce downward pressure on domestic wages; iii) prevent an increase in wages; and iv) diminish the bargaining power of unions.

To identify what adverse economic consequences most concern resident workers and to determine whether the skill level of resident workers and skill level of resident workers relative to TFWs greatly impacts levels of opposition, a survey of resident

workers is administered. The survey finds that workers that most oppose TFWs are most concerned about potential depression of wages and the untapped local labour supply that could be used to address the labour shortage. The survey also finds that workers of higher skill levels are generally less likely to oppose TFWs than workers with lower skill levels. Management or very skilled workers are much less likely than other workers (i.e., trade workers, labourers) to feel that TFWs have negative effects on their financial wellbeing. The findings are validated through a key informant interview with an employer.

This study uses the results of the survey and key informant interview to suggest possible policy options for revising the TFWP. Three policy alternatives are presented: i) a temporary foreign worker advisory office; ii) an information campaign; and iii) a construction job bank. The temporary foreign worker advisory office serves to alleviate resident workers' concerns that employers are not providing the same working conditions to TFWs by providing more avenues for TFWs to report unfair treatment and more active monitoring of employers. The information campaign is designed to reduce opposition by making resident workers aware of program regulations and requirements. The construction job bank is designed to provide an online national conduit, linking resident workers and employers. This policy option provides workers with information about regional labour shortages, and information on how to become certified for all construction related occupations across Canada.

Cost, policy effectiveness, level of stakeholder opposition and commitment to opposition are used to evaluate the policies. Based on this analysis, it is recommended

that both a temporary foreign worker advisory office and a construction job bank be created.

Though the construction industry has contracted recently because of global economic uncertainty, it is expected that TFWs will continue to play a role in alleviating labour shortages due to the demographic composition of the construction workforce and the expected retirement of many workers in coming years.

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## Glossary

BCYTBTC British Columbia and Yukon Territory Building Trades Council

CIC Citizenship and Immigration Canada

COPS Canadian Occupational Classification System

CSC Construction Sector Council

ELMO Expedited Labour Market Opinions

HRSDC Human Resources and Social Development Canada

LMO Labour Market Opinion

NOC National Occupation Classification

TFW Temporary Foreign Worker

TFWP Temporary Foreign Worker Program

## 1. Introduction

International mobility of temporary workers is increasing dramatically as governments and employers look abroad to address temporary labour shortages in particular occupations. The temporary foreign worker program (TFWP) is a federal initiative designed to enable employers to employ foreign workers temporarily when a suitable resident worker cannot be recruited. The number of temporary foreign workers (TFWs) employed in the construction industry in British Columbia is very small though it is increasing rapidly. For example the number of TFWs increased from 586 to 882 from 2005 to 2006 (CSC, 2008d). Although TFWs still account for a small fraction of total workers, some resident workers and labour organizations have voiced concerns about the possibility that the employment of TFWs could create adverse economic consequences for resident workers.

Opposition to TFWs on economic grounds is often based upon the belief that they increase competition for jobs, promotions and benefits, producing a downward pressure on resident wages, diminishing the bargaining power of unions, and creating a fiscal drain on local populations by costing the government more in services than they pay in taxes. Perceived economic competition with foreign workers poses potential problems for receiving countries as it has been linked to support for economic discrimination and open hostility; it can prevent the smooth social integration, or level of acceptance, of TFWs into the resident labour force and is a major reason for limiting the number of TFWs in receiving countries. Limitations on the number of TFWs may inhibit the full realization of economic benefits that TFWPs can potentially produce through efficiency

gains. Determining what aspects of economic competition with TFWs are of greatest concern to resident workers in BC's construction industry will facilitate the formulation of policy measures that promote workplace harmony and social integration.

This study investigates whether the skill level of both resident workers and TFWs significantly impacts perceptions of competition with TFWs. Literature suggests that resident worker opposition to migrant workers generally decreases with higher levels of education because higher education provides a relatively protected labour market outlook and produces confidence in one's own future employment prospects. Evidence also suggests that resident workers feel greater levels of opposition to TFWs with similar skills levels because they are in direct competition for jobs. This study examines these hypotheses by surveying local workers in order to determine whether the skill level of both resident workers and TFWs are a major determinant in resident worker assessment of economic competition with TFWs. My survey finds that almost half of the workers surveyed desire TFWs. These respondents are most concerned with the impact of TFWs on wages and believe that local workers could adequately address any labour demand and that TFWs make it more difficult to secure jobs. Perceived economic competition with TFWs generally decreases with skill level, though highly skilled workers tend to be much less threatened by TFWs than less-skilled workers.

The work is organized in the following way. Section 2 presents an overview of the TFWP in Canada; section 3 presents a review of the literature; section 4 describes the policy problem; section 5 provides an overview of the construction industry in Britsh Columbia; section 6 describes the methodology used in this study; section 7 presents the analysis of the data; section 8 presents an evaluation of policy alternatives and

recommendations for future action; section 9 concludes with a brief summary of the major findings.

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## 2. The Temporary Foreign Worker Program in Canada

This section provides an overview of the evolution of the Temporary Foreign Worker Program in Canada. This is followed by a description of the current application process, program rules and monitoring processes that occur at the federal and provincial levels with a description of major changes to program design. The section concludes with a look at TFWs in Canada.

#### 2.1. The Temporary Foreign Worker Program

The TFWP is a federal program administered by the Human Resources and Social Development Canada (HRSDC) and Citizenship and Immigration Canada (CIC). The legislative framework for the program was first created in 1973, making it possible for employers to fill short-term needs for foreign labour (OECD, 1998).

Employers that wish to hire a TFW must first obtain a Labour Market Opinion (LMO), which is an assessment of the probable impact that the employment of a TFW will have on the Canadian labour market (CIC, 2007). Most occupations in the construction industry require an LMO irrespective of skill level, though a small number of skilled occupations such as engineers, some entrepreneurs and some employees of international companies in Canada do not require LMOs (CSC, 2008d).

As stipulated by the Immigration and Refugee Protections Regulations 203(3) (Canadian Legal Information Institute, 2002), before a LMO is approved the employer's

An LMO is generally required prior to offering a job to a foreign worker, except in cases in which the occupation is covered under a specific program such as the live-in caregivers program or a trade agreement such as the Canadian-Chilean Agreement or NAFTA (Construction Sector Council, 2008).

request is assessed by several criteria. These include whether: i) the job offer is genuine; ii) the compensation and working conditions are comparable to those offered to resident workers; iii) the employer has made adequate attempts to hire locally; iv) there is a labour shortage; v) the employment of the TFW will result in job creation or retention for Canadians; and vi) the foreign worker will transfer skills or knowledge to the Canadian population (HRSDC, 2008b). Some or all of these conditions must be met in order to obtain a positive LMO, depending on the particular occupation and the specifics of the job offer. HRSDC also assesses whether hiring the TFW will affect a labour dispute. If a labour union and employer are engaged in collective bargaining, then the LMO will be denied (HRSDC, 2008b).

Employers must also demonstrate that they have: i) attempted to hire Canadians through federal and provincial employment programs and/or have advertised on established employment publications<sup>2</sup>; ii) have consulted with local labour unions to determine if the position is covered under a collective agreement; iii) sign a contract outlining wages, duties, working conditions and benefits (employers must offer the same wages, working conditions and duties to TFWs as they do for resident workers in the same occupation); iv) pay for all recruitment costs; v) help the worker find suitable accommodation; vi) provide medical coverage until the worker is covered under

Employers that wish to hire unskilled TFWs (NOC C and D Occupations) must advertise through both government employment programs such as the Job Bank as well as established employment publications for 14 days in the three months prior to applying for an LMO. Employers that wish to hire skilled workers (NOC B) must advertise on the job bank or equivalent publication for 14 calendar days in the 3 months prior to applying for an LMO. For highly skilled workers (NOC 0 and A occupations), employers may decide to advertise in public and/or private employment publications for 14 calendar days in the three months prior to applying for an LMO (HRSDC, 2008).

provincial health insurance; viii) register the worker under the provincial workplace safety and compensation plans (HRSDC, 2008b).

In 2002 the Pilot Project for Occupations requiring Lower Levels of Formal Education commenced, allowing unskilled TFWs to participate in the program (HRSDC, 2008b). Under this program, in addition to the requirements described above, prospective employers of unskilled TFWs must also demonstrate that efforts to recruit youth, aboriginal peoples, recent immigrants and Canadians in areas of high unemployment have been undertaken and must pay for the transportation costs for TFWs from and back to their country of origin (HRSDC, 2008b). Though it is stated that employers have to attempt to recruit workers from regions and from groups that experience high unemployment rates, there is no specific regulations detailing what this effort must entail. These requirements do not apply to skilled workers.

LMOs can take months to process depending on the volume of applications, but Expedited Labour Market Opinions (ELMOs; first offered in September, 2007 for occupations under pressure in British Columbia and Alberta) are processed within five days (HRSDC, 2007b, 2008b). Occupations under pressure are those with a particularly high demand for suitable workers. A list of occupations under pressure is updated regularly, and in Spring 2008 there were 33 identified occupations under pressure of which 14 occupations are used by the construction industry. If employers wish to hire in these occupations, the application processing time is sharply reduced through the ELMO.

Occupations under pressure were last updated in Spring 2008. Occupations under pressure that are used in the construction industry include: carpenters, civil engineers, construction labourers, crane operators, electrical and electronics engineers, heavy-duty equipment mechanics, industrial electricians, ironworkers, machinists, mechanical engineers, mechanical engineering technologists, roofers, steamfitters and pipefitters, and welders (CSC, 2008d).

Employers are only required to advertise for the position for one week prior to the submission of the application on the Job Bank, the federal government's employment website, and must also advertise on private employment publications for one week if the position requires an unskilled worker.

If the LMO or ELMO is positive, the employer is permitted to hire a TFW. Work permits are granted for a maximum of 2 years<sup>4</sup>. The foreign worker must then apply for a work permit from Citizenship and Immigration Canada (HRSDC, 2008b). Depending on the country of origin, a temporary resident visa may also be required. The length of time for this process is highly variable, as it requires the production of documentation by the foreign worker's country of origin such as criminal record checks and may involve medical examination (HRSDC, 2008b). The Canadian Border Services Agency issues the work permit upon arrival in Canada.

For some occupations, including some trade workers in the construction industry, workers are required to be certified to be employed legally in the occupation. The process varies from province to province. In British Columbia it is done through local certification and licensing bodies such as the BC Safety Authority for electrical workers or the Workers Compensation Board for crane operators (CSC, 2008d). TFWs with adequate training or experience obtained in another country may become certified to work in British Columbia by taking certification examinations. Workers are responsible for taking the exam, which typically involves the verification of documents demonstrating the number of hours employed in the occupation and the types of skills

In February, 2007, the maximum length of time for a work permit was increased from 12 month to 24 months for unskilled workers (HRSDC, 2007).

utilized (ITA, 2009). The Industry Training Authority in British Columbia administers certification examinations if the TFW has sufficient academic or work experience (ITA, 2009).

Skilled workers can apply for renewal of the permit without leaving the country, and there is no maximum length of time that the skilled TFW is allowed to stay in Canada (CSC, 2008d). Unskilled workers, however, must exit the country after 2 years for a minimum of four months prior to reapplying to the program (CSC, 2008d).<sup>5</sup>

TFWs are required to pay income taxes, employment insurance premiums and must contribute to the Canada pension plan. However, they often do not stay in Canada at the end of their work period and generally do not receive basic employment insurance premiums or collect from the Canadian pension plan at retirement (Elgersma, 2007). Thus they are usually net contributors to these systems. TFWs in British Columbia are able to receive income assistance after their employment insurance benefit runs out or when they are waiting to receive employment insurance and require income in the interim. Employers in British Columbia must pay for private health coverage for TFWs until they are covered under the provincial health care systems, which may also benefit the resident population as most health care costs are financed out of general revenues opposed to medical service plan premiums. TFWs, like all new residents of British

Under the Provincial Nominee Program, skilled workers can apply for permanent residency status in Canada after having arrived in Canada through the TFWP. The program offers accelerated immigration for qualified applicants who wish to settle permanently in Canada and who have the ability to produce significant economic benefits to the province (Ministry of Advanced Education and Labour Market Development, n.d.).

<sup>&</sup>lt;sup>6</sup> If income assistance is granted to a TFW while he/she is waiting to be approved for employment insurance, the worker may be asked to repay the amount granted once the employment insurance is approved. This information was gathered through a personal communication with the Vancouver income assistance branch (April 3, 2009).

Columbia, must wait 3 months before being covered under provincial health care (B.C. Ministry of Health Services, 2008). TFWs may therefore be net contributors to the provincial health care system because during this time TFWs are paying provincial taxes, which are used for financing the health care system, but are not covered under the provincial health care plan.

#### 2.2. Regulation and Monitoring

Federally, no specific role or duty is set for HRSDC or CIC in the regulation and monitoring of TFWs. However, an interview with a representative of the British Columbia and Yukon Building Trades Council indicated that if HRSDC in BC receives a complaint about an employer, a call will be made to the employer inquiring about the complaint and applications for LMOs from that employer may be scrutinized in greater depth in the future.<sup>7</sup>

The monitoring of TFWs varies substantially across the provinces. In British Columbia, the Ministry of Labour, Citizens Services Employment Standards Branch and the Workers Compensation Board monitor the working conditions of TFWs. There is currently no regulatory body that directly oversees the temporary foreign worker program in British Columbia, but reports released in 2008 from organizations such as the Construction Sector Council (CSC), the British Columbia Federation of Labour (BCFL) and the British Columbia and Yukon Building Trades Council (BCYBTC) indicate a need for increased monitoring of employers. 8

Information gathered through a personal communication with the British Columbia and Yukon Building Trades Council (November 19, 2008).

Unions and employers also play a large role in monitoring the working conditions of TFWs. Unions monitor the working conditions of all their members (some of which may be TFWs) and have an interest in ensuring that TFWs are given the same compensation as resident workers. TFWs working on the Tanslink RAV line who claimed they had received lower wages than resident workers brought their case before the BC Human Right Tribunal with the assistance of a labour union (BCYTBTC, 2008). Employers contracted by construction owners to undertake construction activities are also responsible for ensuring that program rules are adhered to. Employers are obligated to ensure that proper compensation is disbursed to TFWs by their administrative departments, that TFWs have valid visas and work permits, and must notify HRSDC if the TFW is no longer working for them (CSC, 2008d).

### 2.3. Temporary Foreign Workers

The number of TFWs throughout Canada has been increasing dramatically in recent years. From 2002 to 2007 the total number of TFWs increased by 39%. Increases in TFWs have occurred most notably in Alberta, which saw a 68.5% increase in the total number TFWs from 2006 to 2007 (see Table 1). In 2007, the largest number of TFWs in Canada resided in Ontario with 41.2% of the national total.

British Columbia had the second largest number of TFWs with 21.6% of all TFWs in 2007. Most TFWs in British Columbia work in the food and beverage, agricultural or care giving sectors, though the number of TFWs in construction is

The statistics from this section are from CIC (2008).

increasing. <sup>10</sup> The top two source countries for both British Columbia and Canada are the United States and Mexico. The number of TFWs has increased for all provinces from 2002 to 2007 with the exception of Newfoundland and Labrador. Despite the overall increase, TFWs still only account for just over 1% of the total labour force in Canada (Statistics Canada, 2007).

Table 1. Stock of Temporary Foreign Workers 2000-2007 (% in Parentheses)

	2000	2005	2006	2007	% Change 2000-2007
British Columbia	15,246 (16.8)	31,488 (22.2)	35,217 (21.7)	43,375 (21.6)	184.5%
Alberta	9,521 (10.5)	15,836 (11.2)	22,105 (13.6)	37,257 (18.5)	291.3%
Ontario	46,738 (51.8)	65,150 (46.0)	72,389 (44.7)	82,873 (41.2)	77.3%
Canada	90,230	141,743	162,046	201,057	122.8%

Note. Adapted from CIC, 2008.

The skill level of TFWs is defined using the HRSDC NOCS (National Occupation Classification System), which is a system based on skill level and occupation type (HRSDC, 2006). The skill level is represented by the letters "A" through "D" and is based on the level of education required for a particular occupation: A = university education; B = college education or apprenticeship training; C = secondary school and/or occupation-specific training; D = on-the-job training is usually provided. Most TFWS in Canada belong to skill level C, followed closely by skill level A (see Table 2). Though TFWs with skill level D constitute the smallest skill category with only 6,160 workers in Canada in 2007, this group has experienced the greatest percentage increase (2181.5%)

There are no official statistics on the number of TFWs by industry. Thus the information on the distribution of TFWs by industry was obtained through personal correspondence with HRSDC.

from 2000 to 2007. Occupation types are represented by the numbers "0" through "9." "0" represents all management positions and other numbers represent other occupational categories. Occupations that are used in construction industry worksites are predominantly grouped in category "7," which denotes occupations related to trades, transport and equipment operators. HRSDC considers TFWs in managerial occupations or with a skill level of "A" or "B" as skilled and workers with a skill level of "C" or "D" as unskilled.

Table 2. Flow of Temporary Foreign Workers by Skill Level 2000-2007

	2000	2005	2006	2007	% Change 2000-2007
Skilled					
Level 0 – Managerial	7,004 (11.3)	9,155 (11.0)	9,935 (10.5)	10,917 (9.4)	55.8%
Level A – Professional	20,880 (33.8)	23,439 (28.1)	25,582 (27.0)	27,043 (23.3)	29.5%
Level B – Skilled and Technical	8,661 (14.0)	11,899 (14.3)	14,934 (15.8)	21,345 (18.4)	146.5%
Unskilled					
Level C – Intermediate and Clerical	18,173 (29.4)	23,347 (28.0)	25,471 (26.9)	30,059 (25.9)	65.4%
Level D – Elemental and Labourers	270 (0.4)	1,002 (1.2)	2,260 (2.4)	6,160 (5.3)	2181.5%
Level Not Stated	6,736 (10.8)	14,530 (17.4)	16,564 (17.5)	20,366 17.6)	202.3%
Total	61,724	83,372	94,746	115,890	87.8%

Note. Adapted from CIC, 2007; % in Parentheses.

Given that the number of TFWs across Canada is increasing, the question of how TFWs are viewed by resident workers becomes much more relevant. Though the TFWP is designed to prevent adverse economic consequences for resident workers, whether the program design assures resident workers that this is actually the case remains to be

determined. Though many governmental and non-governmental bodies oversee and implement the TFWP, many questions remain about whether monitoring of employers and protection for TFWs are adequate. Thus it is important to examine the characteristics of opposition to TFWs, as this may indicate the need for program revision to ensure that temporary foreign labour has a neutral or positive economic impact on resident workers.

## 3. Economic Rivalry

This section provides an overview of research on resident worker perceptions regarding the effects of TFWs on their personal economic prosperity and provides economic models that explain the rationale behind some of these perceptions.

#### 3.1. The Economic Effect of Foreign Labour

Many models seek to explain the effects of migrant labour on the prevailing wage rates of resident populations. Ruhs (2002) presents a model proposed by Borjas (1995), as depicted in Figure 1. This model rationalizes the perception that foreign labour decreases wages and also lends support for the perception that the use of foreign labour benefits employers at the expense of resident workers. As the supply of workers increases from S<sub>1</sub> to S<sub>2</sub> wages decrease from w<sub>1</sub> to w<sub>2</sub>, benefiting employers due to a downward shift in the cost of labour. However, this model also shows how labour migration economically benefits receiving countries. A welfare gain arises as migrant workers increase national income, otherwise known as the efficiency effect (represented by the efficiency triangle represented by area BDE). The model also shows how the addition of foreign labour to the labour market redistributes income from resident workers to employers (shown as area ABCD), otherwise known as the redistribution effect. Thus, this model substantiates resident worker opposition to TFWs as it illustrates how the addition of TFWs into a host country's labour market can create

The efficiency effect refers to the increase in national income accruing to residents of the receiving country as a result of increased efficiency.

The redistribution effect refers to the reduction in the wage bill for employers. As wages are decreased for workers, the savings in the cost of labour are transferred to the employer.

adverse economic consequences for resident workers through a decrease in wages despite overall efficiency gains. This model assumes full employment, as TFWs are available only when there is full employment within a regional labour market.

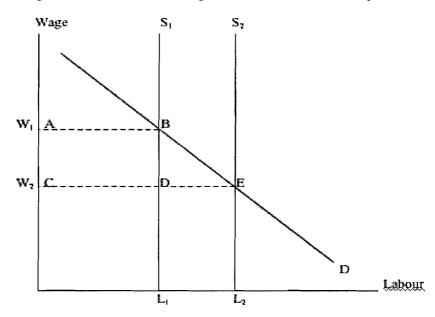
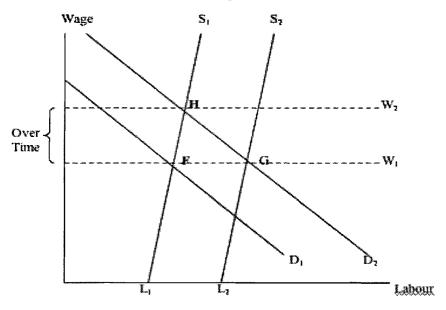


Figure 1. Foreign Workers Decrease Wages and Increase Efficiency

The potential decrease in the prevailing wage rate for resident workers may have benefits for consumers. Cortes (2008) estimates the causal effect of immigration on the prices of domestically produced goods and services and finds that increased immigration decreases the price of goods and services produced by immigrant intensive sectors. Cortes (2008) concludes that although the influx of immigrants can lower the wages in some sectors, lower wages often result in lower prices and an increase in purchasing power for resident workers. Thus, there is some evidence that TFWs may actually benefit resident workers by lowering the prices of goods and services. There is however no evidence that this effect is a major determinant of attitudes towards immigrants or TFWs.

Ruhs (2002) notes that models that depict an increase in labour supply as having a purely negative effect on wages may be oversimplifications, as they do not take into account the effect that the policies of the receiving country has upon wage levels. As in the case for the TFWP in Canada, employers are obligated to pay TFWs the prevailing wage rate. As is depicted in Figure 2, the addition of foreign labour to the labour market may in fact have no impact on domestic wage rates when demand increases from F to G, but may still have the adverse effect of preventing upward pressure on wages as a result of increased demand for labour. As demand increases from  $D_1$  to  $D_2$ , without an increase in supply created by the addition of foreign labour into the domestic market there is an increase in the wage rate from  $W_1$  to  $W_2$ , as employers increase wages in order to induce workers to substitute work for leisure (over-time). The addition of foreign workers in this model ( $S_1$  to  $S_2$ ) prevents the wage increase by increasing the supply of workers, keeping wages as  $W_1$ . Thus in this model, although wages remain constant, resident workers may still feel that foreign workers have a negative impact on their economic prosperity by preventing a wage increase.





Semyonov et al. (2002) take another theoretical approach to the effect of foreign workers on resident worker wage rates. They posit that "direct competition, prejudice and discriminatory ideologies rationalize the exclusion of subordinate minorities from equal access to societal and material goods" (Semyonov et al., 2002, p. 418). According to this model, foreign workers are often forced by the dominant in-group population to supply their labour at a lower wage rate than the local population, which drives down wage rates as well as working conditions for resident workers (Semyonov & Lewin-Epstein, 1989). In this model wages are depressed not only due to an increase in supply, but also due to the fact that the prevailing wage rate for foreign labour is lower than for resident workers placing pressure on resident workers to work for a lower wage rate in order to maintain or secure employment.

TFWs may, however, create benefits for resident workers as well as employers through the allieviation of bottlenecks. Bottlenecks are defined as temporary blockades

to increased output, which occur when the demand for a resource exceeds the supply (Lawrence, 1995). By providing construction worksites with the necessary labour for construction projects to progress at desirable speeds both resident workers and employers benefit. Construction projects are particularly vulnerable to bottlenecks as they require the timely completion of certain components of the structure prior to the addition of other components. Thus resident workers benefit from the alleviation of bottlenecks as their jobs depend upon the completion of other required tasks. Employers also benefit from the alleviation of bottlenecks as they are able to meet timelines for completion and are able to undertake projects that they may not otherwise have been able to complete.

#### 3.2. Personal Characteristics of the Resident Workers

Beyond the pure economic effect, personal characteristics and perceptions held by resident workers greatly impact the extent to which foreign workers are viewed as economic competitors. The main characteristics examined in the empirical literature are age, gender, labour union membership, education, and skill level.

Age has been found by some researchers to be positively correlated to opposition to foreign labour because of the possible link between youth and more "progressive" and tolerant attitudes towards out-group populations. O'Rourke and Sinnot (2006) provide evidence to support this connection in finding that the higher the worker's age, the more likely the worker is to oppose economic migration. Scholten and Thum (1996) confirm these findings and assert that the old oppose immigration on the grounds that immigration lowers wages and hence their pension benefits. Conversely, Semyonov and Raijman (2004) find that age is not a significant determinant of perceptions of economic threat posed by migrant populations.

The gender of resident workers has also been found to significantly impact views on foreign labour migration. Semyonov et al. (2002) find that women reported less perceived economic threat from foreign workers. This is linked to the relatively small number of female migrants in their country of study, Israel. O'Rouke and Sinnot (2006) also found that women were less likely to oppose immigration.

Union membership has been linked with heightened levels of perceived economic competition with foreign workers. Some researchers have found a tendency of labour union leaders to blame foreign workers for unemployment and downward pressure on wages resulting in an increase in anti-immigrant sentiments among workers who belong to labour unions (Olzak, 1992).

Several studies find support for the theory that resident workers' opposition to migrant workers generally decreases with level of education, because workers with higher levels of education have more job security and feel less threatened by migrant labour (Hernes & Knudsen, 1992; Citrin et al., 1997; Citrin, Reingold, & Green 1990; Hoskin 1991). The rationale is provided by Hernes and Knudsen (1992) through a study of Norway during the 1980s when there was a large influx of immigrants, refugees and asylum seekers. They find that higher education provides a relatively protected labour market outlook and produces confidence in one's own future employment prospects. Highly educated resident workers feel less relative deprivation defined as "a feeling of injustice when others receive more than they 'should', in relation to their efforts, their needs, their rank, etc." (Hernes & Knudsen, 1992, p. 124). Hernes and Knudsen (1992) report that education rather than actual labour market position affected attitudes towards recent migrants, finding that "it was the potential to reach certain positions rather than

actually being in them that seems relevant" (Herbes & Knudsen, 1992, p. 135).

Semyonov et al. (2002) find that workers with lower levels of education are more likely to endorse economic discrimination against foreign workers. These findings are confirmed by Raijman and Semyonov (2004), who find that native populations with lower levels of education are more likely to endorse economic as well as social deprivation for foreign workers in the form of denial of social benefits, educational benefits, health services, housing, and minimum wages.

Education has also been linked to the formation of 'enlightened' worldviews that may promote a more tolerant attitude towards out-group populations (Lipset, 1960; Hyman & Wright, 1979). Education ingrains values such as support for economically disadvantaged migrant workers. Evidence also exists for a general reluctance among highly educated people to say anything negative about out-group populations (Jackman & Muha, 1984). O'Rourke and Sinnot (2006) find that the highly skilled are less opposed to immigration than the low-skilled, which may be attributed to the higher levels of education and more secure labour market position of those with higher skill levels. Scheve and Slaughter (2001) confirm these results, finding that less-skilled or less educated workers are more likely to prefer limiting immigration flows.

Finally, the relative skill levels of the resident and foreign workers has been identified as an important determinant of attitudes towards migrant out-group populations because resident workers are most likely to be threatened by foreign workers with the same skill level with whom they are in direct competition for jobs (O'Rourke & Sinnot, 2006; Scheve & Slaughter, 2001). O'Rourke and Sinnot (2006) report greater resident

worker opposition for immigrants of the same skill class than immigrants of other skill classes.

#### 3.3. Perceptions of Resident Workers

The perceptions of resident workers about their own economic prospects greatly influence their receptiveness to TFWs. Expectations about their own personal economic horizons, the size of the TFW population, the effect of TFWs on domestic taxes, and the effect of TFWs on the ability of resident workers to secure jobs, promotions and benefits have been found to impact the degree to which resident workers feel economically threatened.

Negative outlooks about the economy have been linked to support for restriction of immigration. When individuals view their labour market positions as tenuous because of national economic uncertainty, they are also more likely to be view TFWs negatively as they increase competition for a shrinking number of jobs. Espenshade and Belanger (1998), Fetzer (2000) and Kessler (2001) all find that individuals who view the national economy as troubled are more likely to be more opposed to foreign labour migration. Citrin et al. (1997) confirm that negative evaluations about the state of the economy are linked to negative sentiments towards out-group populations.

Perceptions about the size of the foreign migrant population have also been shown to be relevant. Resident workers who believe that the foreign worker population is large are more likely to feel that foreign workers have a widespread negative impact in the local labour market. Semyonov et al. (2004) finds that the higher the perceived size of the foreign population, the greater the support for exclusionary practices such as expelling

foreigners from the country with rising unemployment, exclusion of foreigners from all political activities, and denial of equal rights to foreigners.

Finally, when resident workers perceive that foreign workers increase competition for such opportunities as jobs, promotions and benefits, they are paradoxically more likely to support economic discrimination against those workers in the form of lower wages because of feelings of animosity towards the out-group population. This support is paradoxical because discrimination against TFWs may have the unintended consequence of lowering wages for resident workers. Semyonov et al. (2002) find that workers who report a high level of perceived economic competition with foreign workers for jobs, promotions and benefits (such as extended medical coverage) were more likely to endorse economic discrimination against the foreign workers.

#### 3.4. Non-economic Factors

Though the effects of such non-economic factors as nationality, race, ethnicity and culture on how resident worker perceive TFWs is beyond the scope of this study, no discussion of resident worker perceptions can be complete without recognizing that sociological categorizations can have a large impact on how migrant populations are viewed. National, cultural, economic and historical commonalities or differences can create adversarial relationships among different populations (Anderson, 1991; Jackson & Penrose, 1993). A common feature among resident populations is the fear that foreign workers will compromise the cultural and national homogeneity of society, creating discriminatory attitudes and anti-immigrant sentiments (Raijman & Semyonov, 2004; Shnapper, 1994; Fetzer, 2000; O'Rourke & Sinnott, 2006). These factors undeniably affect individual valuations of the effect of TFWs on the economic prosperity of resident

workers and must be recognized as the lens through which many of the personal deliberations are undertaken by resident workers.

In conclusion, though economic models illustrate that TFWs can have a negative effect on local wages, personal characteristics of workers affect the degree to which workers actually perceive foreign workers as competitors. These characteristics and perceptions about the economy and TFWs have a profound impact on the degree to which resident workers oppose the employment of foreign workers. The problem that this opposition can create is examined in the context of the construction industry in British Columbia in the following section.

# 4. Policy Problem

This study seeks to assess the level of opposition to TFWs in the construction industry in British Columbia and to identify resident workers' specific concerns about the TFWP. Resident worker opposition to TFWs on economic grounds typically accompanies all TFWPs irrespective of country (Ruhs, 2003). The degree to which resident workers view TFWs as having a negative economic impact on their economic prosperity and the specific negative effects that TFWs are perceived to create, however, varies from country to country. Perceived economic competition with foreign workers poses problems for receiving countries as it prevents the smooth social integration of TFWs into the labour force. Social integration refers to the degree to which a worker is accepted, welcomed and free to interact with resident workers as equals (United Nations, 2007). Opposition to TFWs has also been linked to support for economic discrimination and open hostility towards guest worker populations, and is a major reason for limiting the number of TFWs in receiving countries as it places pressure on governments to constrain entry of TFWs despite skills shortages. This limitation on the number of TFWs may inhibit realization of the full economic benefits that TFWPs can produce through efficiency gains. For these reasons it is important to determine what aspects of economic competition with TFWs are of greatest concern to resident workers, as this will allow for policy reforms to promote greater workplace social cohesion and less antagonism among major stakeholders.

Most accounts of the interaction between TFWs and the local population have focused on cases of maltreatment of TFWs by employers. The high profile case in which

over 50 TFWs were paid less than \$3.50 per hour (BCYTBTC, 2007) has garnered much attention in the media and on construction worksites throughout British Columbia, which may have led many resident workers to wonder about the potential economic consequences of the employment of TFWs for their own economic well-being. This concern has manifested as a public protest against the unfair treatment of TFWs by the BC Federation of Labour (CBC, 2006). The CBC (2006) reported that construction workers at the September 20, 2006 rally against the use of TFWs in the construction industry believed that employment of TFWs drives down wages and working conditions for resident workers.

This sentiment has been echoed by the executive director of the British Columbia and Yukon Territory Building Trades Council, who stated that "The government has chosen to abandon Canadians in regions and sectors of the country that are struggling in favour of cheap guest workers" (BCYTBTC, 2007). These types of public proteFsts and statements stand in stark contrast to other accounts such as were made by the Boilermakers Contractors Association of Canada, which purports that interaction between TFWs and Canadian workers is very positive, with friendly rivalries about the quality of work being developed on worksites (Versace, 2008). Accounts of the relationship between TFWs and resident workers vary and are undoubtedly the result of the heterogeneous and complex working relationships in the construction labour force. The frequency of the claim that TFWs create disadvantageous economic consequences for resident workers is, however, worthy of investigation. It may indicate that endemic structural problems with the TFWP have caused resident workers to feel economically

threatened, despite program parameters that are designed to prevent the depression of wages, benefits and working conditions by TFWs.

Opposition to TFWs has also been voiced by some first nations groups who believe that given the high unemployment rate in aboriginal communities there should be more effort on the part of government to train and recruit first nations people (Fontaine, 2008). This argument can be extended to include other groups that experience high unemployment such as people with disabilities, recent immigrants, and people with low levels of education. The emphasis of the government on the recruiting from other countries to fill labour shortages instead of focusing on providing opportunities for residents of Canada to enter the construction industry may fuel opposition to TFWs. The TFWP may be construed by some groups as providing a disincentive for government to provide more training for resident populations.

The primary stakeholders in this policy question are resident workers, as they are most concerned about the possibility that TFWs are negatively impacting their economic prosperity. TFWs are also primary stakeholders as they may be met with hostility or face discrimination on the basis of perceived economic competition with resident workers. Construction companies that employ TFWs are secondary stakeholders as tension on the worksite arising from opposition to the use of TFWs may result in a decline in productivity and conflict with resident workers and labour unions. Labour unions are also secondary stakeholders, as many TFWs do not belong to labour unions, leading some unions to believe that employers are using TFWs to bypass the strict wage and benefit agreements enforced by unions. Finally, the provincial and federal governments are also secondary stakeholders, as they are interested in ensuring that negative

consequences arising out of perceived economic competition with TFWs does not limit the program's capacity to reduce labour market shortages. The following section further contextualizes the policy problem by providing more information about the construction industry in B.C. and the role that TFWs currently play in alleviating labour shortages.

# 5. The Construction Industry in British Columbia

This section provides an overview of the construction industry in Canada, British Columbia and Vancouver, the labour market conditions within the industry and the employment of temporary foreign workers in the construction industry in British Columbia and Vancouver.

### 5.1. Recent Developments

The construction industry in British Columbia has flourished in recent years, fuelled by a growth in residential construction. British Columbia's housing starts almost doubled in the last decade. In greater Vancouver alone, housing starts increased from 11,878 in 1998 to 20,736 in 2007 (Metro Vancouver, n.d). However, this strong growth has significantly weakened in recent months due to the global economic downturn created by the sub-prime mortgage crisis in the United States. Housing starts have declined 75% from 2007 to 2008. The number of housing starts has continued to decline in the first quarter of 2009 (CMHC, 2008).

Non-residential construction in British Columbia has also exhibited strong growth in recent years. Investment in non-residential construction in British Columbia increased steadily from 2003 to 2006 but began to decline in the last quarter of 2007 (Statistics Canada, 2008). The building of infrastructure for the 2010 Olympics is estimated to have boosted non-residential investment by 9% in 2008 (Conference Board of Canada, 2008). Much of the major infrastructure projects in British Columbia are nearing completion,

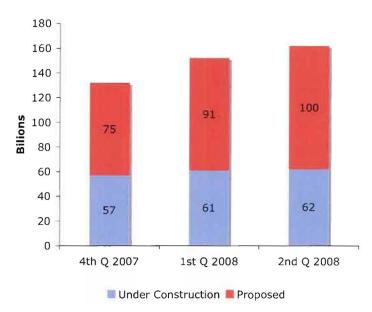
which is expected to create a decline in non-residential construction in 2009 (CSC, 2008b).

Large-scale construction projects have contributed to the labour shortage experienced in the construction industry in recent years. The British Columbia Major Projects Inventory is an inventory of all projects with over \$15 million in capital costs or over \$20 million in capital costs in the lower mainland. These construction projects include both residential and non-residential construction. The September 2008 issue reported that 31 major projects commenced in the second quarter of 2008 with an estimated capital cost of \$62 billion, an increase of \$1 billion over the previous quarter (see Figure 3). Though the September 2008 major projects inventory reports increases in projects under construction as well as proposed projects for construction for the second quarter of 2008, this upward trend has most likely come to an end due to liquidity problems in the global credit markets, which has made funding large projects more difficult. It is expected that the last quarter of 2008 will show a decrease in proposed major projects.

Most major projects in British Columbia are occurring in the Southwest Coastal region of British Columbia (see Figure 4). This concentration of projects has increased labour shortages in this area in recent years, making the region useful for study when examining the employment of TFWs. In 2005, 61% of TFWs resided in Vancouver alone (BCSTATS, 2007). No data is available on the number of TFWs currently working in the Southwest region, though TFWs likely continue to be concentrated in this region.

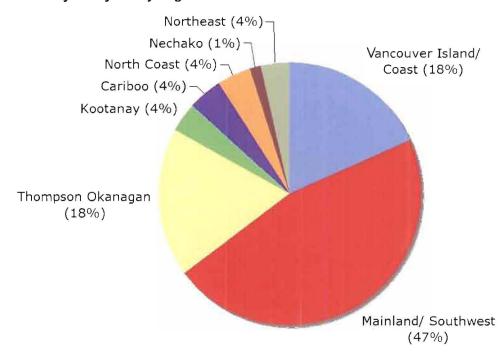
The information in this section is obtained from the B.C. Ministry of Technology and Economic Development (2008).

Figure 3. Major Projects Proposed and Under Construction: B.C. 2008



Note. Data source: Ministry of Technology Trade and Economic Development (2008).

Figure 4. Major Projects by Region: B.C. 2008



Note. Data source: Ministry of Technology Trade and Economic Development (2008).

The construction industry in British Columbia gained 17,600 construction jobs in 2007, a growth of 9.8% over the preceding year (CSC, 2008b). The labour market for workers at all skill levels, but especially skilled trades people, is expected to continue to experience shortages though the volatility of the current global economy makes predictions difficult. Labour market shortages are expected to ease in 2009, but employers may still experience difficulties in recruiting workers for some occupations due to an aging workforce. More jobs vacancies are expected to result from retiring baby boomers than will be created by rising demand (162,000 vs. 94,000; Canadian Occupational Projection, 2008; CSC, 2008b). While attrition due to retirement can be offset by youth entering the work force and increased inter-provincial migration, demographic trends for British Columbia suggest that the number of new resident workers available to fill the retirement gap will not compensate for labour force retirement in the long term (CSC, 2008b). Thus, although construction industry growth is slowing, labour shortages may still persist and TFWs will likely be used.

### 5.2. Temporary Foreign Workers in the Construction Industry

Though TFWs account for a small percentage of the total construction workforce in British Columbia, the number is increasing rapidly. The number of LMOs requested for the construction industry in British Columbia increased by more that 200% from 2004 to 2005. <sup>14</sup> Most TFWs in 2005 worked in new housing development and renovation or in institutional, commercial and industrial operations. A smaller number of TFWs worked in cross-sectoral operations and construction management operations. Occupations that

<sup>14</sup> The information in this section is obtained from the Construction Sector Council (2008d).

required the highest number of TFWs in British Columbia included carpenters, construction managers, refrigeration mechanics, labourers, millwrights, residential/commercial installers, painters and industrial electricians.

There were 196,900 people working in the construction industry in 2007, and of these, 983 were TFWs (BCSTATS, 2009; CSC, 2008d). Thus TFWs accounted for just half of 1% of all workers employed in the construction industry in B.C. in 2007. All TFWs were employed in positions requiring skill levels "0", "B", "C" or "D" (see Table 3). The lack of TFWs with skill level "A" can be attributed to the paucity of occupations used on construction worksites requiring university training. Most TFWs in 2007 were employed in occupations requiring a skill level of "B," which may be explained by the significant skills shortage for skilled trades people (all of which have a skill level of "B") in British Columbia in 2007 (CSC, 2008). Workers with a skill level of "B" working in the category of "trades, transport and equipment operators and related occupations" accounted for 82% of employees in the construction industry in 2007 (Statistics Canada, 2008), further explaining the large number of TFWs in 2007 that fell into this skill category (Statistics Canada, 2008).

Table 3. 2007: Temporary Foreign Workers in B.C.'s Construction Industry

	Occupation	Number
Skill Level "0"	Construction Manager	83
Skill Level "B"	Carpenters	107
	Crane Operators	6
	Electrical Trades	10
	Glazers	8
	Floor Installers	40
	Heavy Construction Equipment	22
	Industrial Electricians	62
	Industrial Instrument Technicians	6
	Iron Workers	26
	Mechanic Trades	39
	Millwrights	54
	Painters/Decorators	51
W. V. L.	Plaster/Drywallers	67
	Plumbers	12
	Refrigeration Mechanics	65
	Roofers/Shinglers	41
	Skilled Welders	31
	Steamfitters/Pipefitters	40
	Tile Setter	44
	Other Construction Trades	21
	Total	752
Skill Level "C"	Residential/Commercial Installer	51
	Heavy Equipment Operators	31
	Total	82
Skill Level "D"	Helpers/Labourers	66
Total		983

Note. Adapted from Construction Sector Council (2008).

The top source country for TFWs was the United States in 2007, followed by Germany, Italy, and Poland (see Figure 5). <sup>15</sup> Most workers in managerial or supervisory positions came from the United States. The top source countries for occupations requiring lower levels of formal training were the United States and China. Many TFWs

<sup>15</sup> The information presented in this section was obtained from Construction Sector Council (2008d).

in particular occupations tend to come from particular source countries. This may be attributed to the tendency of employers that require a large number of workers for a particular occupation to focus their recruitment efforts on a particular country.

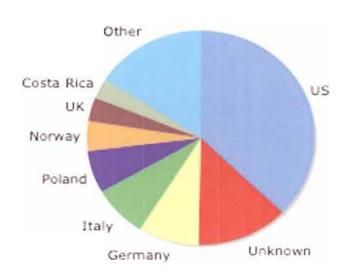


Figure 5. Temporary Foreign Workers in B.C.'s Construction Industry: Sending Countries, 2007

Note. Data source: Construction Sector Council (2008).

For example, recruiting a team of welders from Poland would be logistically simpler than recruiting a team of welders from a multitude of source countries. Recruiting from one source country may also be advantageous in the event that the TFWs recruited did not have a strong command of the English language as it would only require supervisory staff to communicate with the TFWs in one other language, instead of numerous other languages. Thus many TFWs from the same source country worked in the same occupation in 2007 in British Columbia.

To summarize, the construction industry in British Columbia has experienced dramatic growth in recent years, which has resulted in increased reliance on TFWs to

address labour shortages. Though the industry in the short term is experiencing some contraction, which calls into question the need for TFWs in the short term, the demographic composition of the labour force makes the need for more TFWs likely in the longer term. The use of TFWs to ease labour shortages has, however, been met with some concern by resident workers and unions who fear adverse economic consequences for resident workers.

The TFWP and the need to identify resident workers' concerns has now been outlined. Though TFWs do not constitute a large percentage of the construction labour force, their numbers are increasing, creating some unease among resident workers. My study will now turn to the methodology used to research these problems, an analysis of the data and policy alternatives that can be used to address resident worker concerns.

# 6. Methodology

To assess the extent of B.C. construction resident workers' beliefs that TFWs have a negative impact on their economic prosperity and the variables that affect resident worker perceptions, I administered a survey to resident workers in the Metro Vancouver area in winter 2008-2009. The survey data are first analyzed and then compared to responses obtained through a semi-structured key informant interview with an employer.

## 6.1. Survey Design and Data Collection

The primary methodology is a survey of resident workers in the construction industry. This group includes managerial, skilled and unskilled occupations but does not include such occupations as engineers or clerical staff that do most of their work off-site.

The survey contains 27 questions (see Table 4). <sup>16</sup> The first set of survey questions identifies personal characteristics including residential status, age, gender, and level of education. This is followed by questions related to employment characteristics such as job title, length of employment, hours of work, and labour union membership. The questions then address their individual perceptions and valuations. Questions that measure interaction with TFWs, opinions about the state of the economy, admission levels of TFWs, and wage effects follow. The survey then asks respondents to indicate whether they "strongly agree," "agree," are "indifferent," "disagree" or "strongly disagree" with statements about the positive economic effect of TFWs on the economy and the negative effect of TFWs on employment, benefits, promotions, union bargaining

A copy of the survey can be found in Appendix 1.

power, taxes, and quality of work. Respondents are also asked to rank whether they feel economically threatened by skilled and unskilled workers and whether they feel that the labour shortages warrant the employment of TFWs. The survey concludes with two open-ended questions about specific instances in which the resident worker has personally experienced negative economic consequences as a result of TFWs and about what is of greatest concern about the use of TFWs in the construction industry in B.C.

Table 4. Survey Questions

Personal Characteristics	
Employed in the Construction Industry	Permanent Resident of Canada
• Age	<ul> <li>Education</li> </ul>
Gender	
Employment Characteristics	
Skill Level	Union Membership
Length of Employment	<ul> <li>Personal Financial Outlook</li> </ul>
Hours Worked Per Week	<ul> <li>Experience Working With a TFW</li> </ul>
Perceptions of Temporary Foreign Workers	
Desired Number of TFWs	<ul> <li>Inadequate Language Skills and Training</li> </ul>
Perceived Size of TFW Population	<ul> <li>TFWs Unnecessary</li> </ul>
Positive Effect of TFW on the Economy	
Financial Security	
Effect on Wages	<ul> <li>Skilled TFWs Threaten Financial Security</li> </ul>
• Taxes	<ul> <li>Unskilled TFWs Threaten Financial Security</li> </ul>
Employment Security	
Increased Competition for Jobs	<ul> <li>Promotions</li> </ul>
Benefits	<ul> <li>Bargaining Power of Unions</li> </ul>
Open Ended Questions	
Experience Being Negatively Effected by TFWs	
Main Concerns	

The survey was conducted from December 15, 2008, to January 14, 2009.

Resident workers were surveyed before work, during their lunch breaks or after work in

public spaces such as coffee shops located in areas adjacent to various construction work sites throughout the downtown Vancouver area. Workers were identified visually and asked to participate in a short-survey about TFWs. Such visual cues that were used to identify resident construction workers include apparel such as cover-all work suits, steel-toed boots and hard-hats.

The survey was also administered through the assistance of a property development company. This company asked a construction company contracted to construct a large commercial and residential property in South Surrey to help administer the survey to its workers. On January 9, 2009, the survey was administered to some of the resident workers working on the construction site using an on-site facility provided by the construction company. The development company also asked another construction company contracted to renovate a hotel in Richmond to help administer the survey. On January 9, 2009, the survey was administered to resident workers working on the hotel renovation project using an on-site facility provided by the construction company.

Finally, a company that specializes in providing temporary unskilled labour to construction companies was contacted and asked to help in administering the survey. The survey was administered to workers waiting to be dispatched to worksites in the organization's main office on January 14, 2009.

The results of the survey are used to determine resident workers' greatest perceived negative economic consequences arising from the use of TFWs. The demographic variables and variables that describe characteristics of the respondent's labour market participation are cross-tabulated against variables that measure the level of concern. The resulting cross-tabulations help to explain what variables are important

when considering opposition to TFWs. The demographic variables and variables that describe labour market participation and position are also cross-tabulated against the variable that measures the general attitude towards TFWs.

### 6.2. Key Informant Interview

An interview was undertaken on March 8, 2009, with an employer of TFWs. This interview was a semi-structured telephone interview consisting of nine open-ended questions that were created based on the results of the survey. The individual was first contacted using information on the construction company's website. The interview was recorded using a computer application, which contains an audio recorder.

The research design is somewhat weakened because the survey does not take a stratified random sample to ensure the participation of different ethnic groups, age groups and skill levels. There is also has a possibility of self-selection bias. Resident construction workers with strong views about TFWs may choose to take the survey, while workers with more moderate views may choose to abstain, thus over-representing extreme views. Also, the sample under-represents unskilled permanent workers who are employed directly by construction companies, as many of the unskilled workers sampled work for a staffing agency which dispatches workers to worksites. Most of these workers indicated that they work 40 hours per week or more, indicating that most people in this group are not in fact under-employed. The analysis of the data follows.

## 7. Analysis

The key concerns of resident workers in the construction industry in British Columbia as expressed by respondents of the survey are identified, with a particular emphasis on skill level. The section concludes with a description of data gathered from an interview with a TFW employer and a summary of major findings.

### 7.1. Survey

In total 145 surveys were completed by respondents (see Appendix A). All respondents indicated that they were currently employed in the construction industry in British Columbia and were permanent residents of Canada or Canadian citizens. Because of the very small number of respondents from skills categories "A" and "C" (3 respondents in total), the responses were removed from the data set. Thus there are 142 valid surveys from respondents with skill level "0," "B" and "D," representing the managers (i.e., highly skilled), skilled and unskilled respectively. The survey results have been recoded in some cases as will be explained later in this section. All responses that indicate agreement with a statement include those that "strongly agree" or "agree." Similarly, all responses that indicate disagreement with a statement include those that "strongly disagree" or "disagree." Responses that indicate indifference will not be presented, as the study does not focus on ambivalence towards TFWs. Next, I present the results on personal characteristics, employment characteristics, perceptions about TFWs, and perceived financial and economic impact of TFWs.

#### 7.1.1. Personal Characteristics

The frequencies for variables relating to personal characteristics are presented in Table 4. Survey respondents aged 18-34 constitute the age group "young," and survey respondents aged 35 and older constitute the age group "mature." Ages of the respondents are quite evenly distributed between the two categories with 52% of the sample falling into the "Young" category and 48% of the sample falling into the "Mature" category (see Table 5). The average age of workers surveyed is 35 years. In the Canadian labour force, men aged 35 and older constitute over 63% of the labour force, thus this group is underrepresented in the sample. The average age of workers employed in construction trades in Canada was 39.5 in 2007, almost two years younger than the average age of non-trades in the same year (Pyper, 2008). 17

Table 5. Personal Characteristics

	Total	Skill Level "0"	Skill Level "B"	Skill Level "D"
Age				
Young	52%	33.3%	59.7%	47.3%
Mature	48%	66.7%	40.3%	52.7%
Gender				
Male	95.8%	100.0%	97.2%	92.7%
Female	4.2%	0.0%	2.8%	7.3%
Education	- NIA			
Lower Level of Education	40.8%	33.3%	41.7%	41.8%
Higher Level of Education	59.2%	66.7%	58.3%	58.2%

Thus the average age of resident workers sampled is lower than the national average for construction workers. Most workers with a skill level of "0" belonged to the "mature" age category, which is consistent with expectations as resident workers that are more

No information is available of on the average age of unskilled workers in construction or construction management in Canada.

advanced in age are more likely than younger workers to possess the experience necessary to work in management positions. The percentages of workers that are "young" or "mature" are more evenly distributed for skill levels "B" and "D."

In my sample, women account for 4.2% of the total sample, a very small percentage as is the case in the construction industry as a whole. The construction industry historically has had very few women employed on worksites. Though in recent years there has been a dramatic increase in the number of women workers, they still account for merely 3% of all construction trades positions in Canada (Statistics Canada, 2008). Most of the women surveyed were in skill category "D," and no women belonged to skill category "0."

In the sample 59.2% of respondents indicated that they have some post secondary or above (i.e., "higher levels of education" in Table 4). People with a high school diploma or less (i.e., "lower level of education") constitute 40.8% of the sample. More than half of the unskilled workers indicated that they had a high level of education suggesting they may have more education than required. Though there is currently no accurate data on the educational attainment level of construction workers in Canada, all skilled trades people require formal training (Industry Training Authority, 2009). Skilled trades people are the largest occupational category in the construction industry in British Columbia (Statistics Canada, 2006). The relatively high number of workers with lower levels of education that belong to skill level "B" may be attributed to the fact that the survey question asked workers to indicate their highest level of educational attainment. Workers who are currently completing an apprenticeship program for a skilled trade are included in skill level "B," though these respondents may have indicated that their

highest level of educational attainment was high school or less because they have not completed their apprenticeship. Higher levels of education were most prevalent with those with skill level "0". The percentages of workers with higher levels of education are very similar between skill levels "B" and "D".

### 7.1.2. Employment Characteristics

Employment characteristics of the surveyed workers are summarized in Table 6.

Table 6. Employment Characteristics

	Total	Skill Level "0"	Skill Level "B"	Skill Level "D"
Skill Level	100%	10.6%	50.7%	38.7%
Length of Employment 5 Years and Less Over 5 Years	45.8% 54.2%	26.7% 73.3%	45.8% 54.2%	50.9% 49.1%
Hour Worked Per Week Part-time Full-time	23.9% 76.1%	13.3% 86.7%	15.3% 84.7%	38.2% 61.8%
Union Membership Union Member Non-Union Member	28.9% 71.1%	26.7% 73.3%	34.7% 65.3%	21.8% 78.2%
Financial Outlook Better Off Stay The Same Worse Off	57.0% 33.1% 9.9%	53.3% 40.0% 6.7%	54.2% 36.1% 9.7%	61.8% 27.3% 10.9%
Worked With TFW Yes No Don't Know	59.2% 31.0% 9.2%	66.7% 26.7 6.7%	51.4% 40.3% 8.3%	67.3% 20.0% 12.7%

The job title of the participant was cross-referenced with the HRSDC NOC codes. NOC codes are four digits numbers, and the second digit always indicates the skill level of the occupation. Using the second digit of the NOC code the skill level of all respondents was determined. There is no data on the number of skilled vs. unskilled workers in the construction industry. Different projects require different ratios of skilled and unskilled

workers, and the ratio of skilled to unskilled workers varies widely depending on the phase of construction (CSC, personal communication). In the sample the highly skilled respondents with a skill level of "0" account for 10.5% of the sample, skilled respondents with skill level "B" account for 51% and respondents with skill level "D" account for 38.5%.

In terms of length of employment, 45.8% of the sample had been employed in the construction industry for 5 years or less at the time of the survey (see Table 6).

Respondents employed for over 5 years in the construction industry accounted for 54.2%. No available data are available on the average length of employment in the construction industry in British Columbia. A large majority of workers with a skill levels of "0" indicated that they have been employed in the construction industry for over 5 years (73.3%), which can be explained by the fact that workers in management positions must usually possess experience working in the construction industry prior to being promoted to management positions. For skill levels "B" and "D" the percentage of workers that indicted that they have been employed for less or more that 5 years is relatively equal.

The survey then asks respondents to record their average workweek. According to section 35 of the Employment Standards Act of British Columbia, 40 hours per week or 8 hours per day is the threshold above which employers must pay overtime wages (Government of British Columbia, 2009). Thus, the respondents of the survey that indicated they worked less than 40 hours per week are categorized as part-time workers, and those that worked 40 hours or more are categorized as full-time workers. A majority of people sampled indicated that that they were employed full-time (see Table 6). Full-time workers outnumber part-time workers in all skill categories, though this was most

pronounced with skill level "0" and skill level "B". Average weekly hours of employment for workers in enterprises employing 300 employees or more in British Columbia for the last quarter of 2008 was 40.5 (Statistics Canada, 2009). Most workers surveyed worked on large projects employing 300 or more workers, as they were surveyed in areas adjacent to or on very large construction projects.

Union members account for 29% of the sample. Union membership is most prevalent among respondents with a skill level of "B" (see Table 6). Most unskilled respondents indicated that they did not belong to a labour union. This is consistent with expectations in that most labour unions in the construction industry are trade unions, which require members have completed or be undertaking apprenticeship training. Union membership has increased in recent years with the rapid growth of the construction industry, though the percentage of unionized workers in the total construction workforce has been declining, decreasing by almost 4 percentage points between 2007 and 2008 (Statistics Canada, 2009). Of all workers in the BC construction industry in 2008, 20.5% belonged to a union (Statistics Canada, 2009). Hence, unionized workers are somewhat overrepresented in the sample.

A majority of respondents report their financial outlook as optimistic. Most respondents answered that they expected to be "Better Off" (57%), while those choosing "Worse Off" accounted for merely 10% of the sample. Surprisingly, people with a skill level of "D" were the most optimistic about their economic horizons, with 61.8% of respondents in this category indicating that they expect to be better off in one year. This result is contrary to expectations as it was expected that those with the lowest skill level would be least optimistic due to their more vulnerable labour market position.

Finally, a majority of respondents indicated that they had previously worked or were currently working with a TFW. While 31% indicated that they had never had direct labour market contact with a TFW, 59.2% of respondents indicated that they currently or previously worked with a TFW. Workers with skill level "B" were most likely to state that they had never worked with a TFW despite the fact that most TFWs work in occupations requiring a skill level of "B". Next, I turn to the analysis of workers' perception toward TFWs.

#### 7.1.3. Perceptions about The Temporary Foreign Worker Population

Perceptions about the TFW population are discussed in this section with a particular emphasis on the skill level of respondents. The frequencies are presented in Table 7. Most workers (65.6%) indicated that they believe the TFW population constitutes less than 1/3 of the total construction labour force. About 34% indicated that they believe that TFWs accounted for over 1/3 of the population. Given that TFWs account for less than 0.5% of the labour force in Canada (CSC, 2008), estimates of over 1/3 are considered greatly exaggerated. Those with a skill level of B are least likely to over-estimate the population even though, as discussed in section 7.1.2 they are also most likely to state they have never worked with a TFW.

When asked to indicate whether they believed that TFWs were not needed because of the existence of a sufficient number of local workers that could be trained, more workers agreed with the statement than disagreed. About 44% of workers agreed that local workers could be used to address the labour shortage, while 32.4% disagreed. A majority of workers in skill category "D" agreed that local workers could be used to deal with labour shortages. This indicates that unskilled workers are more apt to support

local recruitment strategies or may be more likely to believe that local workers could be easily trained given that their own occupations do not require extensive training.

Table 7. Perceptions of Temporary Foreign Workers

	Total	Skill Level "0"	Skill Level "B"	Skill Level "D"
Perceived Size of Population				
0 - 1/3 of Workforce	65.6%	53.8%	73.0%	59.2%
1/3 and Above	34.4%	46.2%	27.0%	40.8%
TFW Not Necessary				***************************************
Agree	43.0%	33.3%	31.9%	60.0%
Disagree	32.4%	33.3%	36.1%	27.3%
Desired Number of TFWs a				****
More	13.5%	14.3%	5.6%	23.6%
Less	40.4%	28.6%	38.9%	45.5%
Positive Effect on the Economy		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		
Agree	40.8%	53.3%	33.3%	47.3%
Disagree	30.3%	26.7%	26.4%	36.4%
Language Skills and Training Deficit	30000000000000000000000000000000000000			
Agree	51.1%	46.7%	57.7%	43.6%
Disagree	25.5%	26.7%	19.7%	32.7%

<sup>&</sup>lt;sup>a</sup> Three respondents left this question blank.

The question "Do you think we should allow more, less or the same number of Temporary Foreign Workers into Canada?" is designed as a general measure of sentiments towards the employment of TFWs in the construction industry. As is shown in Table 7, most workers (44%) indicated that they think the actual number of TFWs is adequate, followed closely by respondents that think there are too many TFWs (40.4%). A surprisingly large number of unskilled workers indicated that they desired more TFWs (45.5%). This unexpected result is worthy of further comment and is explored further through a key informant interview interview later in this study. The results of this question indicate that those who feel there should be fewer TFWs admitted into Canada constitute a minority. However, it does not necessarily indicate that the workplace integration of TFWs is at acceptable levels. The number of respondents that believe the

number of TFWs admitted into Canada should be decreased is sufficiently large (40.4%) to signal that the economic threat that TFWs are perceived to pose is significant for many resident workers.

When asked about whether TFWs ease labour shortages and have a positive impact on the Canadian work force, 40.8% of those surveyed indicated that they agreed. A smaller share, 30.3%, disagreed with the statement. This indicates many respondents believe that TFWs are beneficial to the economy. It must be noted, however, that resident workers can understand the efficiency gains that can be achieved through easing labour shortages while simultaneously harbouring the belief that they are individually disadvantaged by the entry of TFWs. Workers with a skill level of "B" were least likely to agree that TFW had a positive effect on the economy, which could be explained by the fact that most TFWs are employed in positions requiring a skill level of "B".

Finally, a small majority (51%) indicated that they do not believe that TFWs possess adequate language and training to perform the tasks of the occupation. The responses to this survey question do not vary significantly between skill levels.

Thus, according to the results of the survey, resident workers are divided on how they view the TFW population. A large number of resident workers believe that TFWs are not necessary, desire less TFWs and believe that they do not have adequate language or training skills. Conversely, many also see that TFWs have a positive impact of the economy. Though those that feel threatened by TFWs do not generally constitute a majority, their numbers are high enough to indicate inadequate labour market integration of TFWs. Those of lower skill levels, particularly those with a skill level of "D" are most concerned about TFWs.

#### 7.1.4. Financial Security

Results for questions related to financial security are summarized in Table 8. While 54% of survey respondents indicated that they believed that TFWs lower the wages of resident workers, only 4.2% indicated that they raised local wages. A majority feel that their wages are negatively impacted by TFWs despite the structural components of the TFWP that are designed to ensure that wages are not depressed. This finding is confirmed by the large number of respondents (48.6%) who indicated they agreed that TFWs depress local wages. Respondents with the skill level of "B" and "D" were much more likely to indicate that that they believed that TFWs lower wages.

Table 8. Financial Security

	Total	Skill Level "0"	Skill Level "B"	Skill Level "D"
Wage Effect <sup>a</sup>				
Lower Wages	54.2%	26.7%	59.7%	54.5%
Raise Wages	4.2%	13.3%	0%	7.3%
Higher Taxes				
Agree	20.7%	6.7%	21.4%	23.6%
Disagree	45%	46.7%	38.6%	52.7%
Skilled (B) TFWs Financial Threat				
Agree	34.5%	13.3%	31.9%	43.6%
Disagree	46.5%	60.0%	45.8%	43.6%
Unskilled (D) TFWs Financial Threat	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		NI TEECHNOOLIU OO	
Agree	31.7%	6.7%	31.9%	38.2%
Disagree	50%	60.0%	54.2%	41.8%

<sup>&</sup>lt;sup>a</sup> The confirmation of this result (survey question 16) is not presented in this table.

Conversely, a large proportion of respondents do not believe that TFWs have an inflationary effect on taxes, suggesting resident workers may be aware of TFWP rules requiring TFWs pay taxes just like resident workers. Though the number of workers who believe that TFW raise taxes is low (20%), this may indicate the need for greater dissemination of information about the TFWP.

Finally, more respondents indicated they did not feel that TFWs were a threat to their financial security than indicated otherwise irrespective of the skill level of the TFW. This suggests that the level of threat is not dependent on skill in the sample as a whole, but within each category the percent that feel threatened is higher at low level of skill. Again the responses differ between the highly skilled and the unskilled in regard to economic threat posed by both skilled (skill level "B") and unskilled TFWs (skill level "D"). While a relatively small percentage of workers with skill level "0" indicated that they were threatened by skilled and unskilled TFWs, many more respondents with a skill level of "B" and "D" indicated that they felt threatened. The perceived threat posed by both skilled and unskilled TFW increases as the skill level of the resident worker decreases, though only marginally when looking at the difference between skilled and unskilled workers.

Thus, the threat that TFWs pose to resident worker financial security is highest in respect to the effect that TFWs have upon wages, and less so when looking at the effect that TFWs have upon taxes. The skill level of the TFW does not appear to greatly influence resident worker responses, but the skill level of the resident worker does seem to be relevant as the level of threat generally increases as skill level decreases.

## 7.1.5. Employment Security

More resident workers believe that TFWs make it more difficult to secure employment than otherwise (see Table 9). While 42.1% of workers indicated that they believe TFWs make it harder to get jobs, 33.6% indicated that they disagreed with the statement. Notably, the percentage of people who agree increases as skill level decreases. Similarly, a majority of respondents indicated they did not feel that TFWs posed a

significant threat to their ability to secure promotions. And again the percentage increases as skill level decreases. So people with lower skill levels are more likely to believe that TFWs increase competition for jobs and promotion.

Table 9. Employment Security

	Total	Skill Level "0"	Skill Level "B"	Skill Level "D"
Harder to Get Jobs				
Agree	42.1%	20.0%	35.2%	57.4%
Disagree	33.6%	53.3%	32.4%	29.6%
Harder to Get Promotions				
Agree	28.2%	6.7%	18.1%	47.3%
Disagree	55.6%	66.7%	65.3%	40.0%
Decrease Power of Unions				
Agree	34.8%	40.0%	36.1%	31.5%
Disagree	35.5%	26.7%	33.3%	40.7%
Harder to Obtain Benefits	THE COLUMN THE PROPERTY OF THE			
Agree	31%	20.0%	27.8%	38.2%
Disagree	43.7%	40.0%	48.6%	38.2%

Almost the same percentage of workers agreed that TFWs decrease the bargaining power of unions than otherwise, and workers with lower skill levels were more likely to disagree with the statement (40.7%). Finally, most respondents indicated they do not believe that TFWs make it harder to obtain benefits such as extended medical and dental from their employers. The percentage of workers who agree that TFWs make it more difficult to get benefits from employers increases as skill level decreases, providing further evidence that resident workers with lower skill levels are more likely to feel economically threatened by TFWs.

#### 7.1.6. Personal Experiences and Primary Concerns

Two open-ended questions were asked at the end of the survey. The first question asked whether respondents had ever personally been negatively affected by the

employment of TFWs. Of the respondents that replied, most (53.8%) indicated that they had not been negatively affected by TFWs. Workers who indicated they have been negatively impacted by employment of TFWs said it was mostly through job loss. The second open-ended question asked respondents to indicate what was of greatest concern regarding the employment of TFWs in the construction industry in British Columbia. Again, most respondents (83.1%) chose not to respond to this question. Of the workers that responded, most indicated that they were concerned about increased risks to personal safely, job loss and communication difficulties with TFWs.

To summarize, skill level in all cases has an impact on the perceived threat from TFWs with the exception of very similar responses between respondents with respect to the effect that TFWs have upon taxation and ability to obtain benefits from employers. Perceived economic competition generally increases as skill level decreases though in some cases it is highest with skill level "B". For example more workers with skill level "B" desire less TFWs than workers with skill level "D". The level of perceived threat is often comparable for skill levels "B" and "D," though it is always much lower with skill level "0".

## 7.2. Role of Personal and Employment Characteristics

The previous sub-section has shown that skill levels often play a role in workers' perception. In this sub-section I examine some personal characteristics and employment characteristics in relation to perceptions about TFWs. The impacts of TFWs on financial and employment security are also presented.

#### 7.2.1. Personal Characteristics

Next I examine survey results on the role of age and education in attitudes (Table 10). Mature respondents (aged 35 and older) are much more likely to disagree that TFWs have a positive impact on the economy by easing labour shortages. Thus, mature respondents are less likely to perceive TFWs as positive additions to the Canadian economy.

Table 10. Role of Age and Education

	Young	Mature
TFWs Have A Positive Economic Effect Agree Disagree	41.9% 20.3%	39.7% 41.2%
	Lower Level of Education	Higher Level of Education
Inadequate Language Skills or Training Agree Disagree	63.8% 20.7%	42.2% 28.9%

Respondents with lower levels of education were more likely to indicate that TFWs have inadequate language skills and training. Level of education is different from skill level because skill level is based on the level of education required to perform a particular occupation. Level of education refers to the highest level of education achieved independent of whether it is a requirement of employment. Those respondents with a high school education or less were over 20% more likely to deem TFWs language abilities and training inadequate. Thus it appears that lower levels of education are linked to higher levels of discontent in relation to language ability and occupational training of TFWs.

Though cross-tabulations indicate that gender may be an important determinant in how economic competition with TFWs is perceived, only 6 respondents were female. Given this small sample, no further analysis of gender is presented.

### 7.2.2. Employment Characteristics

The effects of employment characteristics on perceptions of economic competition with TFWs is now assessed. The results of the survey indicate that union members are more likely than non-union members to believe that TFWs lower the wages of resident workers (see Table 11). Union members are also more likely to believe that TFWs make it more difficult to secure employment. However, they are more likely to disagree that TFWs increase the difficulty of securing promotions. This is consistent with the often strict hierarchal structure of unions, which often grants promotions based predominantly on seniority and union membership.

Table 11. Role of Union Membership

	Union Member	Non-union Member
TFW Effect on Wages		
Lower Wages	65.9%	49.5%
Raise Wages	2.4%	5.0%
TFWs Make it Harder to Get Jobs	The state of the s	
Agree	53.7%	37.4%
Disagree	24.4%	37.4%
Increased Difficulty Securing Promotions		
Agree	31.7%	26.7%
Disagree	43.9%	60.4%

The personal financial outlook of survey respondents influenced many aspects of how TFWs were viewed. Workers who expected their financial situation to worsen over the next year were more than 30% more likely to desire fewer TFWs than were workers who indicated that they expected their financial situation to improve (see Table 12).

Table 12. Personal Financial Outlook

	Better Off	Worse Off
Desired Number of TFWs		
More	21.3%	7.1%
Less	31.3%	64.3%
TFWs Have A Positive Economic Effect		
Agree	48.1%	28.6%
Disagree	19.8%	64.3%
TFW Effect on Wages		
Lower Wages	45.7%	78.6%
Raise Wages	4.9%	0.0%
TFWs Have a Negative Effect on Wages		
Agree	45.6%	78.6%
Disagree	30.4%	7.1%
Inadequate Language Skills or Training		
Agree	40.7%	57.1%
Disagree	32.1%	35.7%
TFWs Not Needed- Adequate Local Supply		
Agree	32.1%	64.3%
Disagree	40.7%	35.7%
Skilled TFWs Threaten Financial Security		
Agree	28.4%	57.1%
Disagree	55.6%	42.9%
TFWs Make it Harder to Get Jobs		
Agree	38.0%	64.3%
Disagree	36.7%	21.4%
TFWs Make it Harder to Get Benefits		
Agree	21.0%	57.1%
Disagree	51.9%	35.7%
Increased Difficulty Securing Promotions		
Agree	19.8%	57.1%
Disagree	63.0%	35.7%
TFWs Decrease the Power of Unions		
Agree	28.4%	53.8%
Disagree	42.0%	46.2%

These respondents were also more likely to disagree that TFWs have a positive effect on the economy. Those with a negative personal financial outlook were much more likely to believe that TFWs reduce resident wages, have a negative effect on resident wages, have inadequate language and skills, are unnecessary due to the existence of an adequate

domestic labour supply and make it harder to get jobs, benefits and promotions. More respondents who believed they would be worse off financially in one year indicated that skilled TFWs are more of a threat to their financial prosperity than those reporting an optimistic personal financial outlook. Finally, those who expected to be worse off also were likely to agree that TFWs diminish the bargaining power of unions. Thus, workers who expect to face worsening financial circumstances are much more likely to feel economically threatened by TFWs.

Finally, those who have worked with a TFW are more likely (60.7%) to indicate they believe that TFWs lower wages than those who have never worked with TFWs (43.2%; see Table 13). Thus the survey results suggest that increased labour market contact between TFWs and resident workers can increase negative perceptions of TFWs.

Table 13. Role of Experience Working With a TFW

	Worked with TFW	Have Not Worked with TFW
TFW Effect on Wages		
Lower Wages	60.7%	43.2%
Raise Wages	2.4%	4.5%

## 7.3. Resident Workers Who Desire Less Temporary Foreign Workers

This section examines the concerns of workers who indicated that they believe there should be fewer TFWs employed in B.C.'s construction industry. Though workers may be concerned about potential aspects of the employment of TFWs, this does not indicate that they are opposed to their employment. Thus it is necessary to look at the responses of respondents who indicated that they desire less TFWs because this group is the group that

Based on the survey responses, the potential effect of TFWs on the wages of local workers is of paramount concern for workers who desire fewer TFWs (see Table 14). Of the workers who desire fewer TFWs, 71.9% indicated they believe that TFWs have a negative effect on the wages of local workers. Many respondents also indicated they believe that there are enough local workers to fill labour shortages and that TFWs make it more difficult for resident workers to get jobs. The effect of TFWs on the potential for promotion appears to be of the least concern for resident workers.

Table 14. Concerns of Resident Workers Who Want Fewer Temporary Foreign Workers

	Agree	Disagree
Lower Wages	71.9%	12.3%
Enough Local Workers	70.2%	14.0%
Harder to Get Jobs	63.2%	22.8%
Harder to Get Benefits	54.4%	24.6%
Reduce Power of Unions	48.2%	19.6%
Harder to Get Promotions	45.6%	35.1%

## 7.4. Key Informant Interview

An interview with an employer of TFWs was conducted as a secondary methodology. The findings of the interview with an employer will now be presented and compared with the results of the survey. A telephone interview of the vice-president of human resources for a large construction company operating in Western Canada was conducted on March 8, 2009. The interviewee was asked 9 questions (see Appendix B).

The employer was first asked whether he believed that workers in general desire less, more or the same number of TFWs. He responded that he thought workers would generally desire fewer TFWs because the labour shortage is no longer as big a problem

and jobs may again be in short supply for many occupations. This does not confirm the results of the survey, which indicate that workers who desire fewer TFWs constitute a large minority. A short explanation of "highly skilled" or skill level 0, "skilled" or skill level B, and "unskilled" or skill level "D" was then provided. When asked whether resident workers that are highly skilled, skilled or unskilled are more opposed to the employment of TFWs, he answered that he suspected that the people with the lowest skill level would most desire fewer TFWs because these workers are least likely to have job security, confirming the results of the survey.

When asked whether he thought that resident workers generally believe that TFWs have a positive effect on the economy, the interviewee replied that this was probably the case when the construction industry was growing, but now that it is contracting resident workers probably believe that the labour shortage does not exist. When asked which skill level is most likely to think that employing TFWs is positive the employer replied that those in management (skill level "0") probably would see TFWs as the most positive as they would be most aware of the difficulty in recruiting suitable workers for some positions. This response confirms the survey results.

The interviewee was then asked whether he believed that resident workers think TFWs have adequate training or language skills. He replied that resident workers most likely think that TFWs from non-English speaking countries do not have adequate language skills. As far as adequate training, he replied that workers who are employed by his construction company probably believe that there is adequate training because of the extensive training provided to TFWs prior to being allowed on the worksite and that

whether this was the case for workers employed by other construction companies is unclear. Thus his response neither validates nor confirms the results of the survey.

When asked whether he thought most local workers think that TFWs are not necessary due to an adequate local supply, the interviewee answered that this was probably not the case up until the fall of 2008 when the construction industry began to contract in B.C. When asked whether he thought that the highly skilled, skilled or unskilled are most likely to believe that TFWs are not necessary, he replied that he would think that the unskilled would be the most likely to agree because of the fact that they would believe that they could do the job of skilled workers even though in actuality they are most likely unqualified to do so. This response also validates the results of the survey.

The employer was then asked whether he believes that resident workers think that TFWs lower wages or make it harder to get promotions. He replied that he believed that most workers likely do believe that TFWs lower resident worker wages and make it more difficult to get promotions, even though this is not the case in reality. When asked which skill level is most likely to feel this way, the employer responded that he believed that the unskilled are most likely to feel this way because they make the lowest wages in most cases and are most likely to blame foreigners for their lower position on the employment hierarchy. Again, the interviewee's response was consistent with the survey's findings.

The employer was asked whether he believed that union members are more likely than non-union members to feel that TFWs negatively effect wages or make it harder to get jobs. The employer replied that union members are probably more likely to believe that TFWs have a generally negative impact on wages and the ability of local workers to

get jobs because unions produce communications to their memberships that support those views even though in most cases it is false. This confirms the results of the survey.

The employer was then asked whether he believed that resident workers who have worked with TFWs are more likely to agree or disagree that TFWs lower wages. He replied that he believed that resident workers that have worked with TFWs are more likely to believe that they lower wages because they are the most threatened by their employment due to increased competition for jobs. Again this is consistent with the findings of the survey.

Finally, when asked what he thought was of greatest concern for workers who want to have fewer TFWs, he replied that jobs were probably paramount in the current labour market. This does not confirm the results of the survey, as most workers indicated that they were most concerned with lower wages. Thus, the interview confirmed most of the findings of the survey.

## 7.5. Summary of Findings

Though many workers indicated that they are not economically threatened by the employment of TFWs in the B.C. construction industry, a significant percentage of respondents indicated that they are concerned about some potential economic consequences. Among the chief concerns for all workers surveyed are a decrease in wages, increased competition for jobs and the ability of local workers to fill vacant positions. Though a majority of workers indicated that they desired the same or more TFWs permitted in Canada, 44% of workers surveyed indicated that they wished to have fewer TFWs admitted. With close to half of a workforce desiring less of an out-group

population, this may pose barriers for the ability of foreign workers to be integrated fully into the workforce.

When looking at the responses of workers from different skill categories, workers with skills categories "B" and "D" often do not display stark differences. however, there does appear to be a large divergence in the types of responses from managers in skill category "0". Many more tend to disagree with statements about the potential negative economic consequences of employing TFWs than is seen in other skill categories.

Nevertheless, the percentage of people who agree that TFWs cause some negative consequences tends to increase as the skill level of the worker decreases irrespective of the skill level of the TFW. However, the percentage of workers from skill level "B" who agree that TFW depress wages is larger than those of skill level "D". The number of workers who indicated that TFWs make it more difficult to get promotions is also greater for people of skill level "0" than in skill level "B".

Of the 44% of workers surveyed who indicated that they wished to have fewer TFWs admitted into Canada, more than 2/3 responded that they believe that TFWs reduce the wages of resident workers. The effect of TFWs on local wages, the perceived abundance of unused local labour and the potential for TFWs to make finding employment for resident workers more difficult are of paramount concern to the workers who desire fewer TFWs in Canada.

The interview with an employer of TFWs confirmed most of the results of the survey, though not all. The respondent indicated he believed that most workers desire fewer TFWs, which the survey did not find. The employer did, however, confirm that the low skilled are most likely to be more opposed to the employment of TFWs, while the

highly skilled managers are more likely to think that TFWs have a positive impact on the economy. He confirmed that the unskilled would be most likely to believe that the local supply of workers is adequate and would be most likely to believe that TFWs lower wages. The interviewee stated he thinks that workers who have worked with TFWs would be most likely to think that TFWs reduce wages and that the greatest concern for workers would be competition for job, which was contrary to the results of the survey that indicated that workers were most concerned about wages.

In conclusion, though the number of workers who feel economically threatened by TFWs in many cases do not constitute a majority, a large minority of workers feel that TFWs have a negative impact on their economic security despite many of the TFWP structural components that are designed to ensure that this does not occur. The chief concerns of workers who desire fewer TFWs will be addressed in the following section, as this group is most opposed to the employment of TFWs. This group's primary concerns are the effect of TFWs on wages, the abundance of a local labour supply and increased competition for jobs. Thus changes to policies that address these concerns will now be presented.

## 8. Policy Analysis

This section formulates policy alternatives that could be utilized to promote better labour market integration of TFWs into the Canadian workplace. The section includes policy objectives, policy options, criteria for analysis, assessment of policy options and final recommendations.

### 8.1. Policy Objectives

The issues raised in the previous section exhibit many resident workers' concerns about some of the possible economic impacts of TFWs. Policies to decrease resident worker apprehension about the employment of TFWs have the following objectives:

1. Improve resident worker confidence that the TFWP does not negatively impact their financial well-being.

The TFW program is designed to ensure that the hiring of TFWs has a positive or neutral impact on the Canadian economy by ensuring they are paid the prevailing wage rate and are hired only when suitable resident workers cannot be found (HRSDC, 2008). The fact that many workers believe that TFWs drive down wages, make it harder to get promotions and make it harder to get jobs indicates that many resident workers do not believe that the TFWP adequately ensures that resident workers are not negatively affected. Therefore policies that promote confidence in the existing program rules and regulations should be encouraged.

2. Decrease workplace discord between resident workers and TFWs.

When resident workers believe that TFWs threaten their financial well-being, this tends to heighten discord between resident workers and TFWs, often in the form of open hostility and discriminatory practices (Semyanov et al., 2004). Policies should be pursued to reduce the tension that exists between some TFWs and resident workers.

3. Reduce discord between employers and resident workers arising from the employment of TFWs.

Much of the publicized opposition on the part of resident workers revolves around accusations of unscrupulous practices by employers in respect to the hiring and treatment of TFWs (CBC, 2008; BCFL, 2008). This can lead to workplace discord between employers and resident workers. Policies should seek to reduce this tension.

In general these objective attempt to increase labour market integration of TFWs and decrease resident worker opposition to TFWs. Policy options that could be implemented to achieve these objectives are now presented.

## 8.2. Policy Options

I next present four policy options: i) the status quo; ii) a TFW advisory office and hotline; iii) an information campaign; and iv) a national construction job bank.

### 8.2.1. Option 1: Status Quo

The first option is to maintain the TFWP in its current form. As this program was described in detail in preceding sections, only a brief description will follow. The main features of the current TFWP are as follows:

Employers must offer workers the prevailing wage rate as determined by HRSDC and comply with all labour and employment standards afforded to resident workers.

Employers must advertise for 14 calendar days in the three months prior to applying for an LMO in a public or private employment publication for highly skilled workers, in a public publication for skilled workers and in both a public and private publication for unskilled workers. For an ELMO the employer must advertise for five days on a public employment publication.

Employers must pay the transportation costs for unskilled workers to and from their country of origin.

Permits are issued for a maximum of 2 years, after which only unskilled workers must return home prior to reapplying.

### 8.2.2. Option 2: Temporary Foreign Worker Advisory Office and Toll-Free Hotline

If the program functions as intended, many of the negative consequences that arise from the employment of TFWs such as the depression of wages and the loss of jobs to foreign workers could be avoided or at least diminished. Making it easier to report violations of TFWP rules could effectively decrease the belief that TFWs cause negative economic consequences. Option 2 entails setting up offices similar to the TFW Advising Office in Alberta, launched in February of 2008 (Government of Alberta, 2007). These offices in Calgary and Edmonton:

- Provide information about employment standards and requirements;
- Arrange for translation services;
- Facilitate communication with a number of complaint services;
- Provide an outlet for TFWs seeking advice on a broad range of topics;
- Help find solutions to situations involving unsafe, unfair or unhealthy working conditions;

- Help TFWs seek new employment in the event of unfair, unsafe or unhealthy working conditions;
- Perform on-site LMO inspections, which entails looking at the payroll records
  of employers with TFWs to ensure that TFWs are being paid in accordance
  with their contracts and labour standards. They also review the payroll
  records of resident workers to ensure that workers working with TFWs are
  being treated in accordance with labour standards and being paid the
  prevailing wage rate.

These offices can be reached by drop-in during regular business hours and are for TFWs only. For TFWs working in other areas, a toll-free hotline for TFWs to seek advice is also available. Unlike the hotline in Alberta, which is staffed by specially trained employees of the employment standards branch, British Columbia's hotline would be staffed by employees from the TFW Advisory Office. Administration of the hotline by advisory office staff would link TFWs who cannot physically go to the advisory offices with the same advice and services as workers able to visit the offices. Unlike the Alberta hotline, this hotline would also be mandated to field complaints from resident workers. Resident workers who suspect that employment standards are being breached would be encouraged to call and report such abuses. These resident workers would be linked to the appropriate governmental complaint services or, if deemed appropriate, an on-site LMO inspection would be performed on the worker's worksite.

This option would increase resident worker confidence that TFWP rules are being adhered to by employers by linking TFWs and resident workers to complaint and regulatory services. According to the TFW Advisory Office, <sup>19</sup> the number of inquiries from TFWs has steadily increased since its inception with the growth in the number of

The following information was gathered during a telephone interview with the administration of the Temporary Foreign Worker Advisory Office on March 10, 2009.

TFWs in Alberta. In 2008, there were 6,000 client contacts. Approximately 50% of these contacts related to non-payment of wages, non-payment of overtime wages, overdeduction by payroll, non-payment of transportation costs and non-payment of housing subsidy. The remaining 50% related to occupational health and safety and recruitment costs from agencies. Thus, such offices have been shown to be used by TFWs to address a wide variety of problems, including situations that could have a negative economic impact on resident workers such as wage issues. The proactive investigations of worksites would provide resident workers with assurance that their worksite was being monitored and that TFWP rules were being enforced, while having the added benefit of providing protection for the rights of TFWs.

Like in Alberta, two Advisory Offices would be set up with Option 1. One office would be in downtown Vancouver, as 61% of TFWs in British Columbia in 2005 resided in the municipalty of Vancouver alone (BCSTATS, 2007). The second office would be located in Kamloops in order to serve regions in the north and the interior. Kamloops had the fifth largest TFW population in B.C. in 2005, only marginally smaller than other cities with larger TFW populations, with the exception of Vancouver (BCSTATS, 2007). All TFWs would be made aware of these services by CIC upon arrival.

### 8.2.3. Option 3: Information Campaign

As indicated by the survey results, resident workers who desire fewer TFWs are concerned with their effect on wages, competition for jobs, benefits, unions and the ability of local workers to get promoted. The survey also indicated that local workers believe that there are enough local workers to fill positions, and a small percentage (20%) believe that TFWs increase taxes. 100% of workers over-estimated the size of the TFW

population.<sup>20</sup> Many of these beliefs may arise out of a lack of understanding about the scope of the TFWP or how it is designed and administered. An informational campaign could be used to inform the construction workforce about some aspect of the current TFWP such as:

- the requirement of employers to attempt to hire workers locally;
- to advertise for the position prior to applying for am LMO;
- the added cost in the recruitment and transportation of some TFWs;
- the requirement of employers to pay TFWs the prevailing wages rate;
- the fact that TFWs pay taxes;
- the small number of TFWs employed in the construction industry.

By learning more about the TFW program structure, resident workers may become more receptive to TFWs. Such details as the costs, administrative hurdles and recruitment efforts involved in hiring a TFW may convince resident workers that TFWs may not be more desirable than resident workers to honest employers. It has been shown in other implementations of public awareness campaigns that of those people who were exposed to the campaign materials, 15.8% changed their perceptions of foreign workers (Donovan & Leivers, 1993). Given that less than 50% of resident workers desire fewer TFWs according to the survey, a decrease of this percentage would constitute a significant decrease in opposition to the employment of TFWs.

The campaign would include paid advertisements in trades magazines and websites, and educational materials would be provided to all employers in the form of posters and brochures. All employers would be required to provide compulsory information sessions with all existing employees on an annual basis and with all new

<sup>&</sup>lt;sup>20</sup> TFWs account for 0.5% of the construction labour force (BCSTATS, 2009a; CSC, 2008d)

employees thereafter. The information session would consist of watching a short video about TFWs, which will be permanently available on the HRSDC website followed by a brief verbal synopsis of the main points outlined in the video. Materials provided to the employers for their information sessions would be revised annually.

### 8.2.4. Option 4: Construction Job Bank

Resident workers who desire fewer TFWs indicated they believed that there were enough resident workers who could be trained to fill vacant positions. By creating a national employment website specifically for the construction industry, workers would become more confident that employers are making resident workers aware of vacant positions and that resident workers know about vacant positions in their industry. This option would increase resident worker mobility across Canada by creating a more streamlined and industry specific job search process. By seeing the volume of vacant positions workers will also be able to see evidence of skill shortages for some occupations. Advertising on the website would be a requirement for LMO approval.

The current job bank allows workers to narrow their search parameters to allow them to search for jobs within particular industries, but the construction job bank would go beyond providing a list of jobs for an industry. It would provide information about how to become certified for positions, about regional skills shortages, and provide greater connectivity between resident workers and employers. Each vacancy would have a checklist of skills required for the job, created by the employer. The checklist would allow workers to determine if they are qualified for the position prior to applying. If the worker did not possess the basic required skills as indicated by the checklist, they would be provided with information about how to become qualified for the position.

Information about apprenticeship programs and other occupational training required for all skilled occupations would be provided as well as possible funding options. This would encourage local workers who search the job bank and discover that they do not have the adequate skills or training to seek more education or training, thereby making them better equipped to secure the jobs that they perceive are being given to TFWs.

### 8.3. Evaluative Criteria

To determine which policy option(s) would best accomplish the policy objectives, four evaluative criteria have been selected. The criteria include cost, effectiveness, stakeholder response and commitment to implementation. Next I present the definitions and the ways in which these criteria will be measured and valued (see Table 15).

Table 15. Criteria Defined

Criteria	Definition	Measures	Value	
Cost	Monetary cost of implementing the policy per resident construction worker (Cost / # of Workers = CPRW)	Low Cost: CPRW ≤ \$4.00 Moderate Cost: \$4.00 < CPRW < \$6.00 High Cost: CPRW ≥ \$6.00	High (3) Moderate (2) Low (1)	
Effectiveness	Percentage of the intended targeted population reached	High success rate: 51-100% Moderate success rate: 26 - 50% Low Success rate: 0- 25%	High (3) Moderate (2) Low (1)	
Stakeholder Opposition	The degree to which policies will be met with opposition from stakeholders including: TFWs, resident workers, unions, and employers	Low Opposition: 0-1 Stakeholder Moderate Opposition: 2-3 Stakeholders High Opposition: All Stakeholders	High (3) Moderate (2) Low (1)	
Commitment to Implementation  The degree to which stakeholders charged to implement the policies are committed to policy implementation; these include government agencies, unions and employers		High Commitment: All stakeholders committed Moderate Commitment: 2 stakeholders committed Low Commitment: 0-1 stakeholders committed	High (3) Moderate (2) Low (1)	

#### 8.3.1. Cost

The cost of each policy alternative is calculated by determining the direct dollar cost of implementing and administering the policy divided by the number of resident workers. This yields the Cost Per Resident Worker (CPRW). The number of workers in the construction industry in British Columbia in 2008 totalled 220,800 (BCSTATS, 2009). The number of workers working in the construction industry in Canada in the same year totalled 1,232,200 (Stats Can, 2009). These employment estimates will be used to determine the CPRW for policies that are provincial in scope or national in scope. The measure for this criterion is based on the average cost incurred when implementing a targeted mixed media campaign that also attempted to change public perceptions. The average cost of the entire campaign per person was C\$5.08. This is the benchmark for a moderate cost. Thus a low CPRW is \$4.00 and below, a moderate CPRW is greater than \$4.00 and less than \$6.00, and a high CPRW is \$6.00 and above. Low costs are assigned a value of 3, moderate costs have a value of 2, and high costs have a value of 1.

### 8.3.2. Effectiveness

Effectiveness is defined as the extent to which the policy reaches its intended population. When 0-25% of the population is reached the policy will be considered to have a low success rate; 26-50% will be considered a moderate success rate; and 51-100% will be considered a high success rate. High success rates have a value of 3, moderate rates a value of 2 and low rates a value of 1.

The program from which the cost measure is derived was a public awareness campaign, which sought to increase physical activity in adolescent children in Delaware (Peterson et al., 2008). All cost measures have been converted to Canadian Dollars.

### 8.3.3. Stakeholder Opposition

The degree to which stakeholders oppose or support a policy impacts the viability of policies. The probable response to each policy by major stakeholders such as employers, resident workers, TFWs, and labour unions will be assessed using informal interviews. Opposition is measured through the number of stakeholder groups that are likely to oppose a policy. A policy is deemed to have low opposition when 0-1 stakeholders are likely to voice opposition; moderate opposition when 2-3 stakeholders will likely oppose the policy and high opposition when all stakeholders are likely to oppose the policy. Low opposition has a value of 3 moderate opposition has a value of 2 and high opposition has a value of 1.

### 8.3.4. Commitment to Implementation

Finally, commitment to implementation refers to the degree to which the stakeholders charged to implement a policy are committed to implementation of the policy. Stakeholders can be unwilling or hesitant to assist in implementing a policy for a number of reasons. Implementing the policy may constitute an added cost that the stakeholder is unwilling pay or the stakeholder may be ambivalent about the policy objectives. Stakeholders may include governmental and non-governmental entities such as employers. This criteria is measured by the number of stakeholders that may not be committed to policy implementation. A policy is deemed to have low commitment when only one stakeholder is committed, moderate commitment when two stakeholders are

This definition is modified from the definition developed by Patton and Sawicki (1993) and termed institutional commitment, which is defined by the commitment of institutional actors to implement policy.

committed and high commitment when all stakeholders are committed. High commitment has a value of 3, moderate a value of 2 and low a value of 1.

## 8.4. Assessment of Options

The following section provides an analysis of policy options using the evaluative criteria. The results of this analysis will form the basis for policy recommendations to follow.

# 8.4.1. Assessment of Policy 2: Temporary Foreign Worker Advisory Office and Hotline

Based on consultations with the Temporary Foreign Workers Advisory Office administration in Alberta, the cost of running two offices with 16 permanent staff members is \$1.8 million in addition to a \$700,000 budget for promoting the program.<sup>23</sup> The cost of running the hotline is low as it only requires retraining employees of an existing governmental regulatory body. The total annual cost of this program would most likely be \$1,800,700, with a cost per resident worker of \$8.15, making it a high cost policy.

The effectiveness of this option is based on its ability to target the TFW population. As all TFWs will be made aware of these services upon arrival to Canada by CIC and reminded of these services through the accompanying public awareness campaign promoting the services, this policy ranks very high in effectiveness as 100% of TFWs will be targeted.

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<sup>&</sup>lt;sup>23</sup> Information obtained from a personal communication with the administration of the TFW Advisory Office in Alberta (March 10, 2009).

The stakeholder response to this option is likely to be widely positive. All stakeholders are likely to publicly support this option. Resident workers and TFWs are likely to support increased monitoring and more avenues for TFWs to report unfair or unsafe working conditions. Support for this option by TFWs is indicated by the high volume of client contacts discussed in Section 8.2.2. Even employers are most likely to support this option because to do otherwise would cast suspicion on their professional ethics. Unions have widely supported this option in Alberta.<sup>24</sup> Thus, it ranks low on stakeholder opposition.

Finally, commitment to implementation for this policy is high. The only actor charged to implement this policy is a new governmental branch, which does not possess any apparent motives for undermining the policy.

### 8.4.2. Assessment of Policy 3: Information Campaign

The cost of the information campaign would be \$700,000. This cost would be the same as the cost of promoting the TFW Advisory Office. The cost per resident worker for this policy is \$3.17, making this a low cost policy.

This option would be very effective in targeting resident workers as all employers would be obligated to participate in this program. Thus 100% of the resident worker population would be targeted.

Stakeholder response to this policy option will most likely be moderate, as resident workers and labour unions would view public promotion of the existing TFWP

Information obtained from a personal communication with the administration of the TFW Advisory Office in Alberta (March 10, 2009).

as assisting disadvantaged resident workers. Thus it is likely that organizations such as some labour unions that are already vocal in their opposition to the TFWP would view an increase in the availability of information about the TFWP in its current form as positive.

This information campaign has a low value for commitment to implementation because of the role that employers must play. Though they do have a vested interest in promoting a workplace free of hostility and antagonism, employers are always trying to meet strict deadlines for completion and may not have a commitment to taking the time out of the workday to provide information about the TFWP. Thus, this ranks low in commitment to implementation.

### 8.4.3. Assessment of Policy 4: Construction Job Bank

The cost of implementing and maintaining the construction job bank includes the cost of web-site development which may be similar in cost to another HRSDC web-based upgrade implemented in 2003, which cost a total of \$1.9 million. In addition, the cost of running this portion of the job bank would depend on the volume of job postings and activity. The average cost of the job bank was \$3.00 per job in the 2006/2007 fiscal year (HRSDC, 2007). The number of job vacancies that will likely be posted in the new job bank is calculated using the total number of workers in the construction industry and the job vacancy rate, providing a very rough estimate. The number of workers in the construction industry was 1,232,200 in 2008, and surveys of job vacancy rates indicate that job vacancies often range between 0.43% to 0.75% (Stats Can, 2009, Stats Can,

This project developed interactive questionnaires that would yield information from clients that would normally be obtained either through interviews or through letters. Other features that HRDC included were an Automated Benefits Estimator, Bi-Weekly Declarations, and Case Specific Enquiries, which would enable EI claimants to review the details of their claim file (HRSDC, 2003).

2000). The lower job vacancy rate is used for this calculation as the current economic downturn makes lower job vacancy rates more likely. If all employers post vacant positions on the job bank, there would be an estimated 5,298 positions costing HRSDC \$381,456 annually if a posting is removed and a new posting is put in its place every two weeks. Thus the estimated total cost of this policy option is \$2,281,456, or \$1.85 per resident worker nationally, giving this option a low cost.

The effectiveness of the policy option in targeting unemployed workers in the construction industry nationally is most likely low because the usage of the current job bank website is much less than 25% of the unemployed population (HRSDC, 2008). Although industry-specific employment publications may have the potential to be more widely used than general publications, it is unlikely that the job bank would be used by the majority of the unemployed resident worker population.

Stakeholder opposition to the job bank is most likely very low, as employers, resident workers, and union members would welcome more opportunities to link vacant jobs with unemployed or under-employed workers. TFWs would be the only group that may oppose this website as this would decrease structural employment, thereby decreasing demand for TFWs. Finally, the commitment to implementation is high as it involves the expansion of a current program by HRSDC and does not require other actors for implementation to be successful.

Table 16. Evaluation Matrix

Alternative Cost		Effectiveness	Stakeholder Opposition	Commitment to Implementation	Total	
TFW Advisory Office	Low (CPRW ≥ \$6.00) (1)	High (51-100%) (3)	High (No Opposition) (3)	High (All Actors Committed) (3)	10/12	
Information Campaign	High (CPRW ≤ \$4.00) (3)	High (51-100%) (3)	Moderate (2-3 Stakeholders Oppose) (2)	Low (0-1 Actors Committed) (1)	9/12	
Construction Job Bank	High (CPRW ≤ \$4.00) (3)	Low (0-25%) (1)	High (No Opposition) (3)	High (All Actors Committed) (3)	10/12	

### 8.5. Policy Recommendations

As was exhibited in the preceding policy evaluation, each policy option has its strengths and weaknesses. The policy options that should be recommended based on the criteria are the TFW Advisory Office as well as a construction job bank as these policies had the highest total values. These policy options have many synergies that make their simultaneous implementation advantageous. The construction job bank could be used to inform resident workers about the implementation and role of the Advisory Office, thus increasing confidence the TFWP is being adequately monitored. The information campaign informing workers about the advisory office and hotline could serve the dual purpose of informing resident workers of the construction job bank. I therefore recommend that Options 2 and 4 be implemented together in order to reduce resident worker opposition to the TFWP.

## 9. Conclusion

This study has examined the economic rationale behind resident worker opposition to TFWs in the construction industry in British Columbia. This opposition has broad implications for the program and TFWs as it can lead to worksite hostility, decreased productivity, and can place pressure on governments to limit the number of TFWs admitted in times of labour shortages. Limiting the number of TFWs may also actually have negative effects on resident workers as it can prevent the alleviation of bottlenecks which impede the completion of some phases of construction that are required for the project to continue.

Through the administration of a survey and a key informant interview it can be concluded that although many resident workers are quite open to the employment of TFWs in the construction industry in British Columbia, a large minority of workers indicated that they desired fewer workers. Of primary concern to these workers were the possible decrease in wages that TFWs may create and the belief that there were enough resident workers that could be trained or recruited for vacant positions. The level of opposition tended to decrease with skill level, though there appears to be much less opposition to TFWs in the highly skilled category than in the skilled and unskilled categories.

Of the three policy alternatives to the status quo that were suggested, the creation of a TFW Advisory Office and Hotline and the creation of a Construction Job Bank were determined to be the best choices. The Advisory Office would decrease opposition to TFWs by increasing monitoring and enforcement of the TFWP regulations, reassuring

resident workers that there are institutions in place to deal with unscrupulous employers. The Construction Job Bank is designed address the concerns of resident workers who believe that there are enough resident workers to fill labour shortages. This policy option seeks to provide a link between resident job seekers and employers on the national level, promoting increased labour mobility and increasing resident worker knowledge of the labour market and regional labour shortages. This policy option seeks to promote greater recognition of the skill required for skilled occupations and seeks to encourage resident workers to upgrade their training in order to secure the positions that they desire.

Though the construction industry is currently in a contractionary period in British Columbia, the demographic composition of the workforce indicates that TFWs will continue to play a growing role in the labour market. Thus it is integral to address resident worker opposition to TFWs in order to ensure that labour market shortages can be addressed with the increasingly mobile international labour force.

# Appendix A.

# **Temporary Foreign Workers in Construction Survey**

## **Temporary Foreign Workers in Construction**



About the survey: This 5-minute survey is being administered by Ahna Kim to be used in research conducted through the Masters of Public Policy Department at Simon Fraser University. The survey looks at what construction workers think about the employment of Temporary Foreign Workers in the construction industry in B.C. Your participation is voluntary and you can withdraw at anytime. Your responses will be confidential and will not be distributed to outside parties. The survey is anonymous, please do not identify yourself. Results of the survey can be attained by contacting Ahna Kim at anytime. If you have any concerns or complaints, contact Dr. Hal Weinberg, director of research ethics, at hal\_weinberg@sfu,ca or 778-782-6593.

1.		the construction in not complete this		Columbia? If no, t	hank you for yo	⊔r 1∐ Yes	2 <b>□</b> No
2.	Are you a perma	anent resident of (	Canada or a Car	nadian citizen?		1□ Yes	2 <u>□</u> No
3.	Which of the foll 1 ☐ 18-24	owing age groups 2 25-34	do you fall into 2∏ 35-44	? 7∐ 45-54	3 55-64	8 <b>□</b> 65 years	or older
4.	What is your ger	nder?				1 Male	2 Female
5.	1 Some High 2 Graduated 1 3 Some Post-	dary Certificate or		nt? des Trade Certifica	te)		
6.	What is your job	title?					
7.	How long have y	ou been employe	d in the constru	ction industry?		years _	months
8.	On an average,	how many hours o	do you work per	week?			hours
9.	Are you a memb	er of a labour unio	on?			1∐ Yes	2∏ No
10.	Do you think a y	ear from now the 1☐ Better Off	-	BETTER off finan		E, or WORSE of ☑ Worse Off	f <b>f?</b>
11.			workers from oth	ed with a Tempora ner countries that a \[ \] No	are legally perm		
12.	What percentage Foreign Workers		construction ind	ustry in B.C. do yo	u think are Tem	porary	
13.	Do you think we Canada?	should allow MOI 1☐ More		SAME number of		eign Workers in The Same	to
14.	What effect do y	ou think Tempora 1∐ Lower Wa	•	ers have upon the		workers? ] Raise Wages	

# **Temporary Foreign Workers in Construction**



Please rate on a scale of 1 to 5 the degree to which you agree with the statements below. (1= strongly agree, 5= strongly disagree)

	(1) Strongly Agree	(2) Agree	(3) Indifferent	(4) Disagree	(5) Strongly Disagree		
<ol><li>Temporary Foreign Workers have a POSITIVE impact on the Canadian economy by easing labour shortages.</li></ol>	1	2	з <u>П</u>	4	5		
6. Temporary Foreign Workers have a negative effect on local wages.	1	2	3□	4	5		
7. Temporary Foreign Workers make it harder to get jobs.	1	2	3	4	5		
8. Temporary Foreign Workers make it harder to get benefits from your employers (e.g., Extended Medical Coverage).	1	2	3	4	5		
9. Temporary Foreign Workers make it harder to get promotions.	1	2	3	4	5		
20. Temporary Foreign Workers decrease the bargaining power of unions.	1	2	3	4	5		
1. Temporary Foreign Workers cause higher taxes.	1	2	3	4	5		
<ol> <li>Temporary Foreign Workers do not have adequate language skills or training to do jobs correctly.</li> </ol>	1	2	3	4	5		
<ol> <li>SKILLED Temporary Foreign Workers are a threat to my personal financial security (e.g., Electricians and Carpenters).</li> </ol>	1	2	3	4	5		
4. UNSKILLED Temporary Foreign Workers are a threat to my personal financial security (e.g., Labourers and Trades Helpers).	1	2	з <u>П</u>	4	5		
5. Temporary Foreign Workers are not needed because employers could find or train enough local workers to fill vacant positions.	1	2	э	4	5		
6. Have you or anyone you know been negatively affected by the use (If YES, please explain)	of Temp	oorary	Foreign V	Vorkers?	•		
7. What concerns you most about the use of Temporary Foreign Workers in the construction industry in British Columbia?							
		<del></del> .					

## Appendix B. Key Informant Interview

- 1. Do you think that workers in general desire less, more or the same number of TFWs? Do you think that those with higher or lower skill levels are more opposed to the employment of TFWs? Why?
- 2. Do you think that resident workers think that TFWs have a positive effect on the economy? Which skill level do you think is most likely to think that employing TFWs is positive, Why
- 3. Do you think that resident workers think TFWs have adequate training or language skills. Which skill level do you think is most likely to believe that their training or language abilities are inadequate?
- 4. Do you think that most local workers think that think that TFWs are not necessary due to an adequate local supply? Do you think that the skilled or unskilled are most likely to believe that TFWs are not necessary.
- 5. Do you think that resident workers think that TFWs lower wages? Which skill level do you think is most likely to feel this way?
- 6. Do you think that resident workers think that TFWs make it harder to get promotions? Which skill level do you think it most likely to feel this way?
- 7. Do you think that union members are more likely than non-union members to feel that TFWs negatively affect their financial well-being?
- 8. Do you think that people that have worked with TFWs are more likely to agree or disagree that TFWs lower wages?
- 9. What do you think is of greatest concern for workers who want to have less TFWs?

## References

- Anderson, B. (1991). *Imagined Communities: Reflections on the origin and spread of nationalism*. London: Verso.
- British Columbia & Yukon Territory Building Trades Council (BCYTBTC). (2008). "Submission to citizenship and immigration Canada: Canada experience class (CEC) economic immigrant". Vancouver Consultation. Centre for Dialogue. Simon Fraser University. Burnaby.
- Citrin, J., Green, D., Muste, C., & Wong, C. (1997). Public opinion toward immigration reform: the role of economic motivations. *The Journal of Politics*, 59(3), 858-881.
- Citrin, J., Reingold, B., & Green, D. (1990). American identity and the politics of ethnic change. *The Journal of Politics*, 52, 1124-1154.
- Construction Sector Council (CSC). (2008b). "Construction looking forward: An assessment of construction labour markets from 2008 to 2016". Ottawa, Ontario: Author
- Construction Sector Council (CSC). (2008d). "Temporary foreign workers in the construction industry". Ottawa.
- Cortes, P. (2008). The effect of low-skilled immigration on U.S. Prices Evidence from CPI Data. *Journal of Political Economy*, 116(3), 381-422.
- Donovan, R., & Leivers, S. (1993). Using paid advertising to modify racial stereotype beliefs. *The Pubic Opinion Quarterly*, 57(2), 205-218.
- Elergsma, S. (2007) "Temporary Foreign Workers." PRB 07-11E. Parliamentary Information and Research Service. Library of Parliament. Ottawa
- Espenshade, T. & Belanger, M. (1998). *Immigration and public opinion*. In Marcelo M. Suarez-Oroco (Ed), *Crossings: Mexican immigration in interdisciplinary perspectives*. New York: Cambridge University Press.
- Fetzer, J.S. (2000). Public attitudes towards immigration in the United States, France and Germany. New York: Cambridge University Press.
- Government of British Columbia. (2009). "Employment Standards Act: [RSBC 1996] Chapter 113". Queen's Printer. Victoria
- Hernes, G., & Knudsen, K. (1992). Norwegian attitudes toward new immigrants. *Acta Sociologica*, 35, 123-139.
- Hoskin, M. (1991). New immigrants and democratic society (1st ed.). New York: Praeger.
- Hyman, H., & Wright, C.R. (1979). The enduring effects of education. Chicago: University of Chicago Press.

- Jackson P., & Penrose, J. (1993). *Construction of race, place and nation*. Minneapolis, MN: University Minnesota Press.
- Jackman, M. & Mua, M. (1984). Education and intergroup attitudes: Moral enlightenment, superficial democratic commitment, or ideological refinement?. *American Sociological Review*, 49, 751-769
- Kessler, A. (2001). "Immigration, economic insecurity and the "ambivalent" American public". Working Paper 41. Center for Comparative Immigration Studies. University of Texas. Texas.
- Lawrence, S. R., & Buss, A. H. (1995). Economic analysis of production bottlenecks. *Mathematical Problems in Engineering*, 1, 341-363.
- Lipset, S. (1960). Political man. Garden City. NJ: Ancor
- Ministry of Technology, Trade and Economic Development. (2008). "Major projects inventory". ISSN 1700-9537. Province of British Columbia. Vancouver.
- Olzak, S. (1992). *The dynamics of ethnic competition and conflict*. Stanford, CA: Stanford University Press
- Organisation for Economic Co-operation and Development (OECD). (1998). "Sopemi: Trends in international migration: Continuous reporting system on Migration, Annual report". OECD. Paris
- O'Rourke, K., & Sinnott, R. (2006). The determinants of individual attitudes towards immigration. *European Journal of Political Economy*, 22, 838-861.
- Peterson, M., Chandlee, M., & Abraham, A. (2008) Cost-effective analysis of a statewide media campaign to promote adolescent physical activity. *Health Promotion Pratice*, 9, 426
- Ruhs, M. (2003). "Temporary foreign worker programmes: Policies, adverse consequences and the need to make them work". Working Paper 56. Centre for Comparative Immigration Studies. Texas.
- Semyonov, M. &, Lewin-Epstein, N. (1989) Segregation and competition in occupational labour markets. *Social Forces*. 68(2), 379-39
- Semyonov, M., Raijman., & Yom-Tov, A. (2002) Labour market competition, perceived threat, and endorsement of economic discrimination against foreign workers in Isreal. *Social Problems*, 49(3), 416-431
- Semyonov, M., Raijman, R., Tom, A. & Schmidt, P. (2004). Population size, perceived threat, and exclusion: A multiple-idicators analysis of attitudes towards foreigners in Germany. *Social Science Research*, 33, 681-701.
- Scholten, U., & Thum (1996). Public pensions and immigration policy in a democracy. *Public Choices*, 87, 347-361

- Scheve, K., & Slaughter, M. (2001). Labour market competition and individual preferences over immigration policy. *The Review of Economics and Statistics*, 83(1), 133-145
- Schnapper, D. (1994) *The debate on immigration and the crisis of national identities*. Essex: Frank
- Statistics Canada. (2008). *Canada's changing labour force: 2006 census* (Catalogue No. 97-559-X). Ottawa, Ontario, Canada: Ministry of Industry.

## Websites Visited

- B.C. Ministry of Health Services. (n.d.). *B.C. residents: Medical coverage*. Retrieved April 6, 2009, from http://www.health.gov.bc.ca/insurance/msp\_register.html
- BCStats. (2007, June). *British Columbia' non-permanent resident population*. Retrieved March 29, 2009, from http://www.bcstats.gov.bc.ca/pubs/immig/imm071sf.pdf
- BCStats. (2009a, January). *British Columbia employment by detailed industry, annual averages*. Retrieved March 29, 2009, from http://www.bcstats.gov.bc.ca/data/dd/handout/naicsann.pdf
- British Columbia Federation of Labour (BCFL). (2008, September). *Unpaid workers latest victims of flawed program*. Retrieved November 8, 2008, from http://www.bcfed.ca/node/1354
- Canadian Broadcasting Corporation (CBC). (2006). *Construction protest rally draws crowd of 200*. Retrieved November 10, 2008, from http://www.cbc.ca/canada/british-columbia/story/2006/09/20/bc-fed-rally.html
- Canadian Legal Information Institute. (2002). *Immigration and refugee protection regulations*. Retrieved December 11, 2008 from http://www.canlii.org/en/ca/laws/regu/sor-2002-227/latest/sor-2002-227.html
- Canada Mortgage and Housing Corporation (CMHC). (2009). *Housing will continue to moderate in 2009*. Retrieved February 20, 2009 from http://www.cmhc-schl.gc.ca/en/corp/nero/nere/2009/2009-02-19-0815.cfm
- Citizenship and Immigration Canada. (2007, November 9). *Information for Canadian employers: labour market opinion basics*. Retrieved November 12, 2008, from http://www.cic.gc.ca/ENGLISH/work/employers/lmo-basics.asp
- Citizenship and Immigration Canada. (2008). Fact and figures 2007: Immigration overview: permanent and temporary residents. Retrieved October 10, 2008, from http://www.cic.gc.ca/english/resources/statistics/facts2007/temporary/10.asp
- Conference Board of Canada. (2008). Provincial outlook. Retrieved on November 6, 2008, from http://www.llbc.leg.bc.ca/public/PubDocs/bcdocs/358293/2008/Jun\_03.pdf
- Construction Sector Council (CSC). (2008a). A snapshot of the construction industry. Retrieved October 10, 2008, from http://www.csc-ca.org/english/industry.html
- Construction Sector Council (CSC). (2008c). Construction reaches all time high in B.C. Retrieved October 20, 2008, from http://www.csc-ca.org/english/whatsnew\_4.html#anchor32

- Fontaine, P. (2008, February 12). Assembly of First Nations Chief Phil Fontaine: Speech to the Prospectors and Developers Association of Canada. Retrieved April 6, 2009, from http://www.republicofmining.com/2008/02/12/assembly-of-first-nations-chief-phil-fontaine-speech-to-the-prospectors-and-developers-association-of-canada
- Government of Alberta. (2007). Alberta increases protection for temporary foreign workers. Retrieved March 9, 2009, from http://alberta.ca/home/NewsFrame.cfm?ReleaseID=/acn/200712/22713C4CD580 0-031F-138B-1C4E2B616DA32274.html
- Human Resources and Development Canada (HRSDC). (2006). *Tutorial*. Retrieved October 10, 2008 from http://www5.hrsdc.gc.ca/NOC/english/NOC/2006/Tutorial.aspx
- Human Resources and Development Canada (HRSDC). (2007a, March 13). Announcing changes to temporary foreign worker program to make it easier for employers to meet their labour market. Retrieved October 10, 2008 from http://www.hrsdc.gc.ca/eng/corporate/newsroom/speeches/solbergm/070223.shtm
- Human Resources and Development Canada (HRSDC). (2007b, September 24). *Temporary Foreign Worker Program improved for employers in B.C. and Alberta*. Retrieved October 10, 2008, from http://news.gc.ca/web/article-eng.do?nid=350829&
- Human Resources and Development Canada (HRSDC). (2008a, May 2). *National overview*. Retrieved March 15, 2009, from http://www.hrsdc.gc.ca/eng/employment/ei/reports/eimar\_2007/chapter3\_1.shtml
- Human Resources and Development Canada (HRSDC). (2008b, November 7). *Pilot project for occupations requiring low levels of formal training (NOC C and D)*. Retrieved November 10, 2008, from http://www.hrsdc.gc.ca/en/workplaceskills/foreign\_workers/lowskill.shtml
- Human Resources and Development Canada (HRSDC). (2009a, March 3). Temporary foreign worker program memorandum of understanding for the entry of temporary foreign workers for projects in the Alberta oil sands. Retrieved March 5, 2009, from http://www.hrsdc.gc.ca/eng/workplaceskills/foreign\_workers/contracts-forms/moualbertaoil.shtml
- Industry Training Authority (ITA). (2009). *Introduction to apprenticeship*. Retrieved on February 12, 2009, from http://www.itabc.ca/Page430.aspx
- Metro Vancouver (n.d.) *Metro Vancouver total housing starts by structural type 1961-2007*. Retrieved November 22, 2008, from http://www.metrovancouver.org/about/publications/Publications/KeyFacts-TotalHousingStartsbyStructuralType1961-200.pdf

- Ministry of Advanced Education and Labour. (n.d.). *Provincial nominee program*. Retrieved on November 9, 2008, from http://www.aved.gov.bc.ca/provincialnominee/welcome.htm
- Ministry of Health Services. (2008) *Eligibility and enrolment*. Retrieved on March 24, 2009, from http://www.health.gov.bc.ca/msp/infoben/eligible.html
- Pyper (2008). "How much of Canada's unemployment is structural?" Retrieved March 20, 2009, http://www.statcan.gc.ca/pub/11f0019m/11f0019m2000145-eng.pdf
- Statistics Canada. (2007a, January 5). *The daily*. Retrieved December 9, 2008, from http://www.statcan.gc.ca/daily-quotidien/070105/dq070105a-eng.htm
- Statistics Canada. (2007b, January 8). Employment by industry. Retrieved March 15, 2009, from http://www40.statcan.gc.ca/l01/cst01/econ40-eng.htm
- Statistics Canada. (2007c, June 12). *Industry: North American Industry Classification System 2002*. Retrieved March 1, 2009, from http://www12.statcan.gc.ca/english/census06/data/topics/RetrieveProductTable.cf m?Temporal=2006&PID=92116&METH=1&APATH=3&PTYPE=88971%2C97 154&THEME=74&AID=&FREE=0&FOCUS=&VID=0&GC=99&GK=NA&RL =0&TPL=RETR&SUB=742&d1=0&d2=6&GID=838062
- Versace, V. (2008). Temporary foreign workers 'essentail' CSC panel members say.
  Retrieved October 10, 2008, from
  http://www.dailycommercialnews.com/article/id28088