

Training and Equity Initiatives on the British Columbia Vancouver Island Highway Project: A Model For Large-Scale Construction Projects

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The equity initiatives in training and hiring on this large project were unique and stunningly successful. At peak production periods the equity hires constituted more than 20 percent of the workforce, a figure that is ten times higher than normal. This project was the first time a significant effort had been made to integrate women and First Nations in a commercial highway project. It was accomplished through two risk-taking and innovative measures. One was a priority for equity hires in the collective agreement and the other was the establishment of a training site where women and First Nations (mostly male) built a section of the highway as part of the training process. This article examines these features and the experiences of the workers, contractors, and trade unions with the equity initiatives. It pays particular attention to the construction industry workplace culture and how this affects training for equity groups.

Index Terms: Affirmative action/Canada/Construction industry/Minorities/Training/Women workers

Introduction

There are good reasons to train and employ women and people from minority groups in highway construction. Massive amounts of public money are involved and the employment needs of the projects are large. The overwhelmingly "white, male" face of the workforce in highway building makes

this setting an ideal laboratory for equity initiatives, particularly because virtually all governments profess to be committed to equal opportunity in employment. Highway construction jobs are well paying and the exclusion of women or people from minority groups has become increasingly difficult to justify.

Until the building of the Vancouver Island Highway in British Columbia (B.C.) in the mid-1990s, women's work in highway construction in Canada was confined almost exclusively to traffic management. Sometime during the 1980s the demands for equity in employment affected even the fairly well protected environment of large-scale public construction projects. While the lack of experience or qualifications for most jobs effectively excluded certain groups of employees, the clearly so-called "unskilled" jobs could no longer be protected. To the astonishment of motorists, they began to see women directing traffic on road construction sites. These were not entry-level jobs into the industry, however. If on a very rare occasion a woman could be seen working on heavy equipment, it was most likely operating the compactor—that is, doing the most boring, repetitive machine work. But, even these jobs were scarce for women, visible minorities, those with disabilities, and those from aboriginal groups.

Breaking into the industry was made particularly difficult by the mobile nature of highway construction contracting. In an industry where work is always temporary, the continuous process of finding a job is particularly onerous for workers who face a succession of hiring barriers not typical in other discriminatory workplaces (Eisenberg, Gale). Even when highways were built in rural areas in Canada and areas with First Nations populations, construction workers tended to come from contractors' urban workforces, a practice that has reinforced the exclusion of local labour as well as those from minority groups.

A survey of unionized workers in B.C. in 1990 indicated that women accounted for less than three-tenths of one percent of the province's unionized construction workforce. Aboriginal workers fared slightly better, making up about one percent, and the total for visible minorities was 2.67 percent. Workers identified as "equity" workers comprised only 4 percent of the entire unionized construction workforce (Amalgamated Construction Association of B.C.).¹ Integrating construction trades is notoriously difficult:

1. In Canada the terms "equity workers" and "equity hires" refer to individuals from targeted groups that are under-represented in occupations and industries and are the specific focus for hiring initiatives. The Royal Commission on Equality in Employment identified five groups of people as being particularly disadvantaged in the labour market (Canada). These are women, those with disabilities, immigrants, native people, and visible minorities. Visible

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even in the U.S., where legal requirements and funding for ameliorative programs have been available, not much progress has been made and women's proportion of construction trades jobs, at 2.4 percent, has increased only one-tenth of a percent over the last decade (Byrd). In Canada there has been no legal requirement for affirmative action, as has existed in the U.S. At the federal level there is a legal requirement for companies that fall under federal jurisdiction to provide statistics each year on the numbers and pay levels of equity hires. However, there is no requirement for meeting specific targets on the numbers of individuals hired in each group.

The equity initiatives for the Vancouver Island Highway Project (VIHP) were the first time equity measures were a specific requirement in a project agreement in highway construction in Canada.² This innovative contract was negotiated through a Project/Labour agreement in which a provincial Crown Corporation, Highway Constructors Ltd. (HCL) was set up as the exclusive employer for all labour used on the highway. HCL provided labour to the mostly local contractors and contractors reimbursed HCL so that specific initiatives to hire labour from local communities and from targeted equity groups could be undertaken.

The equity component of the project agreement was difficult to negotiate primarily because the major participants to the agreement, the building trade unions and the highway building contractors, were generally opposed to the equity measures, although many individual trade unionists supported them. However, ultimately the employers and the trade unions were convinced that they could live with the project agreement's requirements and agreed to the equity provisions. The initial hostility of the building trades and the contractors cannot be underestimated, because ultimately it did affect the outcomes of the project. But despite this handicap, the equity initiatives were surprisingly successful and frequently resulted in a reversal in attitudes toward the equity participants, particularly among the union leaders on the Island. The numbers employed from the equity target groups were much higher than was normally the case for their representation in building construction projects altogether. No reliable information exists on the em-

minorities is a term used to include all people of colour. The terms First Nations, Native, Aboriginal, and Indian are all terms that are used in Canada in reference to indigenous peoples and vary in use according to the ways in which particular groups choose to be named (Canada).

2. There is some indication that women have been trained for highway construction in the U.S. under specific programs (Johnson). For example, five women were among team leaders in a phase of the Mt. Lemmon Highway north of Tucson, Arizona. This was a relatively small project of \$7 million involving safety improvements and widening the highway (Johnston).

TABLE 1
Vancouver Island Highway Equity Groups Proportion
of Total Hours Worked

	1994	1995	1996	1997
Women	2.2	4.0	5.8	6.5
Aboriginal	5.3	5.9	7.6	7.5
People with Disabilities	0.8	1.6	1.2	1.2
Visible Minorities	0.0	1.8	1.8	2.0
**Equity as % of Total	8.3	12.6	15.5	16.3

**Total equity is less than the sum of the columns because some people are included in more than one category.

Source: Calculated from the Labour Force Report of Highway Constructors Ltd.

ployment of equity groups in highway construction, but most analysts assume that the representation of these groups in highway construction is less than in building construction (Calvert).

Each year of the project the proportion of hours worked by members of equity groups increased. As Table 1 shows, the equity component of the VIHP workforce, calculated by hours worked, was over 16 percent of the total in 1997, the peak year of hiring. Women's proportion reached 6.5 percent and aboriginal workers accounted for 7.5 percent of the total hours worked. Hours worked is a better indication of representation of the equity workforce than is a calculation based on the number of individuals working because it reflects more accurately their actual participation in the project.

These figures may appear to be modest, but when compared with the normal numbers, which was virtually zero for each of these two groups, they indicate substantial gains. At various times during the project, particularly during summer months, the number of equity workers hired could climb to over 23 percent, with women representing about 9 percent of the total and aboriginal workers representing 11 percent (see Appendix I). The project was also a clear success in its attempt to provide labour for local residents, since 93 percent of the workforce was local hire.

The Study

This study analyzes the features of the initial project agreement that permitted equity initiatives to be implemented and assesses the experience of the people affected by the conditions of the project. Unusually detailed bi-

weekly labour force statistics were collected by the employer, HCL. These statistics include information about the numbers of people employed, the hours they worked, and the type of job performed, in addition to specifying the equity classification of the employee. As a result, one could tell in any two-week period, for example, how many women were working as operating engineers, or how many visible minorities were working as teamsters (see Appendix I). This aggregate data gives a good general overview of the success of the project, at least as far as the numbers were concerned. But how these numbers played out in the actual implementation of the project required knowledge of the experience of those involved with the equity initiatives in this project.

Over the course of a year, we conducted extensive interviews with the workers who participated in the equity process. These interviews occurred both at the worksite and in other locations and were invaluable in order to understand not only the success of the training project itself but also the nature of the subsequent experiences of the equity personnel with racism, sexual harassment, and other barriers to the full participation of these workers in the highway workforce. We also interviewed several contractors, trainers, trade union representatives, and government personnel responsible for the project at various stages. In total thirty-eight people were interviewed. These interviews yielded information that greatly affected our ultimate assessment of why certain aspects of the project were less successful than they could have been. In particular, while our original tendency was to see contractors and traditional workers as an inherent obstacle, simply because they rejected "equity" initiatives altogether, we came to understand that some specific features of the training program itself as well as the overall economic climate contributed to their negative reaction.

Our assessment is that the VIHP is an excellent model to use as a generic approach for training and integrating people from traditionally excluded groups into the workforce of large-scale construction projects. The potential for substantial and lucrative work for both trade union members and the independent contractors, despite equity hiring, is a powerful incentive to achieve the compliance of these groups. But this does not mean that goodwill, at least initially, was bought with their compliance.

As could be expected on any new initiative of this kind, many things did go wrong. Some of them were a result of poor initial planning, some of a poor selection of people to carry out the project. But these problems were relatively minor and most can be rectified, with sufficient planning, in future projects. Some of the more important insights gained from this study relate to the very nature of the construction industry itself and the ways in which

people generally receive training and gain entry into this workforce. These are issues that will also be a focus for our policy recommendations. The first section on the project agreement, which follows, is rather technical, but it is crucial for understanding the significance of the collective agreement for the success of equity initiatives on this project.

The Project Agreement

Analysts of non-traditional employment in the construction industry identify three key ingredients as essential for establishing a successful equity program. These are 1) building collaborative relationships between contractors, trade unions, and community-based organizations, 2) establishing a critical mass of specific equity group employees, and 3) creating an atmosphere "characterized by cooperation rather than the demand for 'compliance'" (Nelson). The challenges encountered during the process of integrating women and aboriginal people into the workforce of the VIHP were considerable, but these three components were present, albeit in various degrees, during the life of the project. However, the most significant ingredient identified for this project contradicts that of conventional wisdom that eschews compliance demands: that is, a certain degree of compulsion was essential at the outset because neither the contractors nor the trade unions welcomed equity provisions in the project agreement.

It would be safe to say that both equity and local hire initiatives would not have occurred if a voluntary initial agreement from these parties had been relied upon. The equity provisions were a result of a top-down decision that was codified both in the collective agreement and the structure of the project's management. This occurred for several reasons. First, the equity provisions had support at the highest levels, including that of the Premier of the province, Glen Clark. Second, it was initiated, monitored and continually supported by women's groups and native bands on Vancouver Island. Third, the equity and local hire issues were in some respects tied together so that the VIHP had the strong support of the local community. Fourth, there was a model project agreement to follow that had worked in the past. The province had precedence in including local hire and aboriginal people in other large-scale construction projects, through direct control of the hiring process, and so had some familiarity with the incentives and compulsory measures necessary to bring trade unions and contractors on side.

Traditionally, construction projects are built through a bidding process in which the owner specifies what work is needed in a tender document. Each successful bidder then is able to sub-contract portions of the work in

a similar bidding process. At no time does the initial owner deal directly with workers or labour issues, and strikes can occur at any point in the process. Beginning with the historic St. Lawrence Seaway Project in the 1950s, governments initiated project/labour agreements in which a single agreement was negotiated for contractors and trade unions. The main point was to eliminate the right to strike for the duration of the project. Trade unions accepted these agreements mainly because the pay and other conditions were excellent for workers, and contractors agreed to pay relatively high wages because these premium labour costs were covered by the contract price. In B.C. these types of project/labour agreements were used throughout the great building phases of B.C. Hydro in the 1960s and 1970s in order to contain labour disputes, which in turn contained costs and maintained a reliable schedule. The long-standing familiarity with the idea of a project/labour agreement was a very important first step in getting contractors and trade unions to accept the further step of government intervention in the make-up of the labour force on the VIHP.

Generally the major construction projects in B.C., such as the building of B.C. Hydro dams, have taken place in remote areas. Too often these projects provided little employment for local residents even in areas where there were high levels of unemployment. Traditional bidding systems encouraged large contractors to transport their skilled urban labour forces to remote areas by including pay for workers' travel and housing expenses within the bid. As a result, the labour benefits to local communities were short-term at best. This practice became increasingly untenable politically when native groups began to have more influence on projects that affected their land base. As governments became more conscious of the political efficacy of promoting local employment, the long-standing use of a project/labour agreement was expanded to make provisions for a workforce more reflective of the populations in areas where the work occurred. The first major initiative of this sort that included equity, was B.C. Hydro's agreement negotiated in the early 1990s between Columbia Hydro Constructors (B.C. Hydro's construction entity) and the Allied Hydro Council, the bargaining group representing the trade unions. The innovative feature of this agreement was that it stipulated provisions for local hire and specifically for hiring aboriginal workers. This agreement's architect was instrumental in constructing a similar agreement for the Island Highway Project and much of the language in the two agreements is similar. Including the interests of First Nations in designing the VIHP project was crucial because the highway would cross the land of twelve First Nations, covering areas where major land claim issues were unresolved.

Two important new aspects of the VIHP project agreement make it an equity model that is distinct from previous ones. First, it is the only major construction project in B.C. that has included women as a target group for hiring and training. Second, unlike other project agreements, it applies to a labour force specifically associated with road construction. In the past when project/labour agreements were used, they were associated with large, fixed site, and relatively long-term projects with a labour force that was not as intermittent as that characteristic of highway construction. This factor, along with the equity initiatives for women, made the implementation of hiring, training and retention of equity workers more difficult.

The VIHP was announced in 1994 as a part of the B.C. government's "B.C. 21" initiative for economic development through capital spending on large public construction projects. This seven-year project had an initial budget of \$1.4 billion to cover building about 250 kilometers of highway. A new crown corporation, The Transportation Financing Authority (TFA) was created to oversee capital spending on transportation building throughout the province with a subsidiary, HCL, established as sole employer for the VIHP. While HCL was the exclusive employer and workers were hired, dispatched, and paid by HCL, HCL did not supervise actual highway building, but, rather, it functioned as a source of employees for private contractors. This was a major concession from the unions who were not enthusiastic about giving up traditional 'hiring hall' practices.

Equity in the Contract

Neither private contractors nor trade unions embraced the new hiring arrangement and they specifically resented the equity and local hire requirements of the contract. The contract language gives preference in hiring to local Vancouver Island residents and people from equity groups, although contractors were able to "name-hire" some of their own workforce, as can be seen from the Collective Agreement (HCL Contract 11). The crucial sections in the collective agreement are as follows:

- 6.203 To provide economic benefits to the local communities in the Development areas, the Parties agree that the Employer, Council, and Affiliated Unions agree to provide employment preference to qualified local community residents and for the Vancouver Island Highway Project, to residents of Vancouver Island.
- 6.204 The Parties agree to ensure that the Contractor and Affiliated Unions agree to provide equity employment opportunities for First Nations People, women in non-traditional job classifications, visible minorities, disabled, or other groups identified by mutual agreement.

6.205 The Employer, Council, and Affiliated Unions agree to give preference to certain members of the Contractor's existing Employees to assist the Contractor in start up and in effective execution of the work.

The relationship between equity issues and other preferential hiring provisions was made clear by a specific clause: "Employment Equity hiring shall operate in priority over other preferential hiring processes" (HCL Contract, Article 6.222). This is a strong statement that should have made equity hiring fairly straightforward, but various other provisions in the contract lessened its impact.

A "name hire" provision permitted contractors to select up to "50% of employees, on a one-for-one basis (first dispatched by Union) to a maximum of five (5) 'named' employees" (HCL Contract, Article 211b). This meant that on a large contract, five of the first ten employees could be the traditional employees of the contractor. In addition, all the supervisors could be named directly by the contractor. Also, the ability of contractors to "name hire" all employees on contracts of \$30,000 or less served as an effective way for some contractors to circumvent the equity hire priority. The original intention of the \$30,000 specification was to cover very small, two to three day jobs, such as landscaping. But this clause could be used sometimes by contractors who wanted to break larger jobs into several smaller ones in order to keep complete control of their workforce. These concessions for "name hire," which took priority over equity considerations, were considered necessary in order to make this unusually structured agreement acceptable to contractors.

Despite trade union and contractor initial objection to the equity hiring provisions, they ultimately appreciated certain aspects of the project agreement. For the trade unions, a very important advantage was the provision that *all* labour on the VIHP would be union labour. During the 1980s the Social Credit government changed labour legislation in the province and generally promoted an anti-trade union climate that resulted in a dramatic fall-off of union membership. By the 1990s only about 20% of building trades workers were unionized. The requirement that all workers employed on the VIHP join a union within thirty days of starting work, even if the contractor was a non-union firm, was a strong feature favouring trade unions (HCL Contract, Article 6.110). It was also a very controversial feature that was fiercely attacked by some contractors-particularly those firms that had traditionally opposed the unionization of their labour forces. They undoubtedly saw this as a dangerous precedent that could influence the union's strength among their traditional workforces in the future. During the life of

the project, some non-union contractors groups continually harangued the government by claiming that the VIHP was costing too much because they were forced to pay wages higher than they would have by using non-union labour. A group representing some contractors challenged HCL's status as an employer through the B.C. Labour Relations Board, but the ultimate finding was not in their favour.

The requirement for union membership, combined with the local hire and equity provisions, was also fairly controversial with the members of trade unions. The feeling of many in the construction trades was that with high unemployment among existing union members throughout the province, the local hire and equity provisions brought in new workers, which worked to the detriment of an already underemployed labour force. In the three years immediately preceding the VIHP the unemployment rate for construction workers in B.C. averaged 16 percent (Statistics Canada). Trade unions benefited by having their enrolment increased, but their traditional membership felt disadvantaged by these provisions. Another unpopular concession made by the unions was for wage rates at about \$2.00 an hour lower than the standard rate negotiated in the industry.

Contractors ultimately appreciated the fact that HCL was the employer for all projects. This saved them money on record keeping and on finding employees. Another important cost-saving aspect of the contract was the local hire provision, which eliminated the need for providing room and board.

Training for Road Construction

Traditionally, hiring in the road building industry has been done "by reputation" and "hiring them away from other companies."³ Contractors tend not to train employees and no apprenticeship system exists for workers to learn a variety of skills in a systematic way. According to one contractor, "road building is a transient business so there is no major commitment to training in principle." Another contractor explained how workers got into the industry: "It was who you know. It helped to have a father or an uncle who'd let you try their machine. You'd go out on the machine and get run off. Then you'd go out on another machine and stay for a couple of days before you got run off again. Then you'd go out again and stay for a few days longer and eventually you became qualified. That's the tradition-hit or miss." An

3. Quotations are from IHP participants interviewed for this study.

operator said he learned "from watching other guys on the job, picking up tips here and there, from guys helping me out." Few contractors are willing to risk \$500,000 machines on novices or people they do not know, particularly knowing that once trained, workers are easily poached. As one contractor explained, "preferably, you look for people who are already trained and hire them away from other companies."

The disadvantages of such a system are obvious. The learning process, without any formal component, is haphazard and inconsistent; the quality of training depends on who happens to be around to teach and how skilled they are at both their job and at teaching; and the whole system is largely dependent on trial and error through on-the-job training. An employer has no easy and reliable way of knowing the skill level or range of ability of someone applying for a job. As one contractor explained, "It's all just what a guy tells you. How do I know he's going to be a good operator? Do I risk this guy wrecking my machine and not producing the work? I wish they had an apprenticeship for operators." This informal training system also makes for a closed system where just getting experience on a machine requires personal connections or a great deal of assertiveness, something that can disadvantage even white males. It is a particularly effective barrier to First Nations, women, and other non-traditional groups of workers.

Designers of the VIHP understood that training would be an important part of the whole project mainly because the commitment to equity and to local hire would reduce the pool of qualified workers they could hire. Initially it was assumed that this training would be done under the umbrella of the building trades unions and that the length of the project would allow time for the traditional four or five year apprenticeships. Oddly, it appears that no one at the planning stages had fully realized that eighty percent of highway building is done by three unions, none of which commonly use the formal apprenticeship system practiced by other building trades, such as carpenters and plumbers. The three major highway building unions are the Teamsters, who drive the heavy trucks, the Construction and Specialized Workers Union (commonly known as Labourers), who do general labour as well as the stake work that estimates how much earth is to be removed to reach engineers' specifications, and the International Union of Operating Engineers, who drive large road building equipment such as bulldozers, caterpillars, cranes and compactors. Of these, only the Operating Engineers have formal apprenticeships and then only for crane operators and heavy-duty mechanics. All other positions covered by Operating Engineers and Teamsters measure a person's skill readiness by "hours in the seat," that is, how many hours members have spent driving rather than by any specific Trades

Qualification certificate. The building trades that do rely on apprenticeships and Trades Qualification programs, such as the Ironworkers and Cement Masons, have relatively little to do with highway building.

The only formal training program then available for road builders was a seven week program in Haney, B.C. for Operating Engineers and a training school at Sardis, B.C. for Teamsters. The VIHP trainees who took these programs liked them, but, since they taught only the basics of how to operate equipment rather than give students actual road building experience, they were not sufficient for moving directly to the job site. As one woman Teamster reported, "It was a good training course in terms of what the equipment could do, but it wasn't practical. I mean, after the first day on the job for HCL I was wondering what I'd gotten myself into! All of a sudden I had six trucks flying at me, two packers running behind me, foremen running around pointing, asking me to do things and excavators swinging behind me—all in a small congested area. I was so unaccustomed to anything like that." Clearly what was needed was some training program which included actual road building, something that the HCL program eventually was able to provide.

Recruitment

The equity provisions of the collective agreement opened the door for people from the targeted groups and gave them a chance to access jobs on the highway. However, it became clear early on, as was noted by one of the TFA employees reporting to the Premier of the Province, that there were no women, First Nations, people of colour or people with disabilities at work on construction jobs. This would not have been a surprising result to the small group of people who deal with integrating women and minorities into non-traditional workforces. All studies indicate that merely supplying an opportunity for employment will not be sufficient to overcome the enormous barriers to employment from those traditionally excluded from construction jobs (Braid, Braundy, Goldberg). According to one employee, the turning point for a focus on equity on the VIHP emanated from the Premier when he pointedly asked, "How are we doing on the equity and training side?"

When construction jobs were initially posted very few people from the targeted equity groups applied. Women did apply for clerical work, but few seemed aware of the construction postings and if they did know, assumed that, as in the past, they would not be welcome. All the traditional recruiting practices for construction now had to be questioned. First, recruitment sites needed to change. HCL personnel began to actively recruit on First Nations'

reserves and in women's centres and to seek the help of organizations for Women in Trades, people of colour and those with disabilities. Second, interview questions had to be adjusted. When asked, "Do you have experience in building roads or operating heavy equipment?" those from targeted equity groups generally answered "No." But sometimes when asked for this information in a different way, the answer was positive. By asking, "Do you have any experience *relevant* to building roads or operating heavy equipment," the answer was more likely to elicit information like "Yes, I've run my father's skidder," or "I helped my dad frame houses." When the recruiter asked one person why this type of information hadn't been mentioned earlier, the response was "I didn't get paid for it, it was just my dad." Most applicants assume that when employers ask about 'experience,' they want to know about *paid* work experience.

These special outreach initiatives were very effective, prompting a large number of applications for road building work from targeted equity groups, with particularly high numbers coming from women and aboriginal people. While initially there was an attempt to elicit applications from visible minority and disabled groups, the program did not ultimately focus on these people. For each month during the major intake period between December 1994 and June 1995, equity applications accounted for between 28 percent and 33 percent of all applications. Aboriginal applications constituted 60 percent and women's 40 percent of all applications from equity groups. About 5 percent of the equity groups' applications came from people with disabilities and about 9 percent from visible minorities (see Appendix II). The major problem, once people applied, was that the vast majority did not have even basic road building skills and the jobs they were applying for did not have apprenticeships that would offer them entry-level positions. Without skills and the "hours in the seat," contractors refused to hire them. It was clear that if the equity initiative were to work at any significant level, applicants would have to be trained.

HCL Training

The most innovative equity training initiative on the VIHP involved on-the-job experience at several locations, the most significant being at Hindoo Creek. This involved the actual construction of a 5.2 kilometer section of the highway in the forest near Parksville by women and First Nations trainees. Since the training program was not part of the original design of the VIHP, it did not begin until well after a large portion of the labour force was in place. A serious flaw in the whole training process on the VIHP is that

a well-developed system was neither in place, nor even planned, before actual construction on the highway began.

Ideally, any training program on a project of this size should begin well before construction begins. Because the need to establish training programs was not recognized at the outset, important time was lost at the initial stages—a delay that affected the ability of workers from targeted equity groups to be hired at the outset. By the time many students had completed the training there were not enough jobs for all those trained to be placed (Calvert). Also, the cost of training was not built into the budget, resulting in considerable scrambling to pull together the necessary resources and, ultimately, a drastically under-funded program. Contractors did not consider training as their responsibility and HCL did not have its own training budget, so it needed to get funding from other government ministries and organizations. The result of having to be dependent on the criteria of other organizations, rather than pursuing the equity criteria of highway building, meant that the focus for training was often geared more toward the requirements of the funding agencies than toward the real needs of participants. Ultimately less than \$2 million was committed to all the training schemes, including \$900,000 from Skills, Training and Labour requiring that 50 percent of the trainees be on B.C.'s social assistance program. One problem with this grant was that First Nations trainees would not qualify for provincial assistance because their incomes are under federal jurisdiction.

While in hindsight the lack of planning for specific on-the-job training at the outset seems a serious oversight, it needs to be kept in mind that the innovative feature of integrating women and aboriginal people in highway construction meant that many mistakes would be made. This was a pioneering effort and that factor needs to be kept in mind as assessments are made about what worked and what did not in the training process. The remarkable results of the project, given this late understanding of the importance of creating a training site, indicate that a great deal occurred that worked extremely well.

Before the training site at Hindoo Creek was begun, a variety of introductory training programs were provided to prospective employees. The most general training was a two week introductory course designed to familiarize prospective workers with the construction industry and to determine which of these people would benefit from further training and which stream of work (and therefore which union). Slightly over 200 people were chosen to attend this course in the first year, of which 127 were from equity groups. It focused on informing applicants about issues of health and safety and the conditions of this work, particularly its seasonal nature, the demand for

physical fitness, and the lack of job seniority. It also included some hands-on practical experience, such as how to handle a compressor, and some grading and concrete work. Only fifteen people left the program after this course. A small proportion (2%) of those with sufficient experience went directly to worksites, but most went on for further training that was conducted in cooperation with the local community college and union training plans. Most of the trainees in the courses were from equity groups. The eight-week course for labourers was taken by 64 students and was completed by 58 of them, a 90 percent completion rate. Of these who completed, 42 (72%) were from equity groups, as were 29 of the 31 who were hired (Calvert). The teamster's course trained 31 people out of the 36 initially enrolled and 90 percent of those who completed were from the designated equity groups. The course for operating engineers enrolled 69 originally and of these 59 completed the course, with 70 percent of being from equity groups. Of this group of 59, only 20 found jobs by the end of 1995, although 16 of these were from the equity designations. Those from the operating engineers' course had the most difficulty being hired because of the limited nature of the training. The cost of training on heavy equipment is very high and the total training budget was small, so the trainees were not given a range of experience on different types of equipment, a limitation that affected their employability.

The first on-the-job training site occurred early in the project when trainees who had completed their courses were given hands-on experience by building a section of road on the Chemanius First Nations Reserve at Shell Beach. Trainees were not paid for this work, which lasted for one summer, nor were they reimbursed for travel, day care, or other expenses, but at least one trainee was so eager to get work experience that he or she lived in a car. Two important things happened on this project: first, a First Nations company, Yiasulth Management Corporation (YMC) supplied machinery used on this project. This company was set up to create a single entity to speak for the twelve First Nations involved, and it was also designed to serve their long-term construction interests. It owned ten pieces of road building equipment worth approximately \$2.5 million and established the right to supply equipment on training projects to HCL. In addition to supplying equipment, YMC was a contractor and bid on contracts as joint ventures with other contractors because of issues having to do with bonding and indemnity. Second, the experience of training on an actual piece of road building would become the distinct and innovative feature of the VIHP. All parties who had participated in the Shell Beach experiment, including con-

tractors, unions, and especially the trainees, agreed that this was an excellent way to introduce people with no road building experience to actual job conditions. It was the success of this venture that led to the development of the training site at Hindoo Creek.

The alternative to establishing a specific training site to actually build a road would have been for contractors to take on trainees before they had specific road-building experience and to teach them on-the-job. This did not occur because training was not written into contract documents and, therefore, contractors did not include the cost of training in their bids. Highway contractors find training a particularly expensive business—one that is more onerous than it is in other building trades. One contractor explained: "A trainee gets on your machinery and breaks a centre pin on a DC10, that's a \$12,000 bill. Trainees here have done that, and blown tracks and put a log through a window and so on. Every time, we pay." He compared this cost to an apprentice carpenter who "cuts the cord, nails the air house to the floor, drops the saw. The difference is that the saw costs \$200 but a 33L hoe costs \$250,000."

The problems and costs for training on roads are intensified simply because of the expensive nature of the machinery. With trainees making only \$2 less an hour than the wages of regular workers in the VIHP, the contractors felt there was no incentive for them to hire trainees. In other building trades the wage differentials between apprentices and journey workers are much larger. For example, a first year carpenter makes 55 percent of a journey rate, a wage that increases every six months. One advocate speculated that it is possible the higher wage rate for trainees was established specifically *because* it would lessen the chances of trainees (especially equity trainees) to be hired. This approach would have been consistent with the positions of both unions and contractors—at least at the beginning when these issues were being negotiated. It is also possible that no one involved in negotiating wage rates imagined the extent of training that would be required.

Hindoo Creek

Hindoo Creek was an extraordinary training site, and its existence was the primary reason the equity hiring results for the VIHP were so impressive. The equity trainees, specifically women and those from First Nations, in about equal proportions, were not only being trained, but were the primary employees on the road site. The high proportion of women in training at this

project was remarkable and the contrast with other large-scale projects in Canada, such as the Hibernia Construction Project, where women were only 4 percent of all trainees, is dramatic (Grzetic, Shrimpton, Skipton).

Since the objectives at Hindoo Creek were twofold, to build a road and to train employees for work on other VIHP sites, some tensions were created that centred on the difficulties of doing both simultaneously. Sometimes training was sacrificed just to get the job done because, as a genuine project, it had the same budget constraints and need for efficiency as other highway projects. Trainees began with a raw site in the forest, and while it had been logged before trainees arrived, the trainees performed virtually all other work. The Ministry of Transportation and Highways (MOTH) acted as the contractor on this section of the highway and hired seventeen trainees at the outset. During the peak summer seasons, as many as fifty-two trainees on two shifts were building.

The contractors and traditional union members had some objections to actual road building being done by trainees. As the Hindoo Creek section was being completed, another training site was proposed, but neither the unions nor the contractors wanted to forgo the work from another training site. But initially, when the need for trained workers was high, many endorsed the idea. As one contractor said, "I'm not a fan of anything that takes work away from us, but if it's part of the program, well then, that's the way it is. I think it's good. If you want to build a road, you don't start by building a house." In some ways also, a separate training site eased concerns about integrating equity employees into a traditional workforce by giving them work "elsewhere" and only with each other.

A trainee was considered to have completed training when s/he had 2,000 hours "in the seat." The 2,000 hour limit appears to have been somewhat arbitrarily chosen, and trainees were often dispatched to other jobs before these hours were reached and, when laid-off by a contractor, would resume training in order to accumulate more "seat time." Interviews with both contractors and trainees indicate that the 2000 measure was not a good indication of a mastery of skills. Contractors would have preferred some detailed "report card" to indicate exactly what skills the trainees had mastered and to what degree, a report similar to that provided by an apprenticeship training test. One contractor put it this way: "If a person has training on an excavator, they should list all the items that person is proficient in and give a grade. This person has put in so many culverts and can dig this much trench in half an hour. Can they pull a four meter slope, twenty meters long in thirty or sixty minutes? Then I know. Not just a sheet that says they were 'Good.' Good compared to what? It's not like someone coming in with a

checklist of ten things you can do on an excavator and some degree of certified proficiency in each one. Nobody has that."

Trainees, who were often stuck on one piece of equipment for the entire time, wanted more variation in training, depending on the skill level necessary for a particular piece of equipment. As one noted, "You don't need 2,000 hours to learn a compactor. You're fully qualified after a week." Some equity trainees saw the 2,000 hour figure as a further delay to getting on the job, and only about thirty equity trainees ultimately achieved the 2,000 hour goal. The 2,000 hour figure was particularly limiting given the late start for the training program, and as work on the Hindoo Creek site was nearing completion, even fewer trainees worked, which further affected their 'seat' time.

Time spent on the job was strictly on actual production. At students' requests, informal theory and lectures were sometimes arranged on the training site during lunch breaks. These would take the form of talks on MOTH specifications on lift thickness, rolling techniques, lab tests about how much should be packed, and ways to provide preventive maintenance on some machines. The trainees generally were eager to learn as much as they could, since they were well aware of the problems they might encounter when away from the training site. In particular, they sought cross-training, that is, the ability to move from one type of machine to another, or from one type of work to another. Because all trainees were associated with a specific union, and the jobs were union-specific, this was difficult. From the outset each trainee was treated as part of the workforce and needed to join a union after thirty-days. But the main limitation to training was created by funding problems. Training costs were very high, including \$60,000 a month for equipment rental and \$300 per day for gas in addition to the costs for instructors, supplies, and insurance.

There were several instructors at the site over the course of the project. The instructors were skilled drivers and equipment operators, but none of them had had previous training or experience in teaching. Nor did any of them have instruction in issues specifically dealing with training people from targeted equity groups. When questioned, they felt their experience qualified them to train others, but the results were hit and miss, with some instructors performing well, while others needed to be removed. One instructor was felt by some contractors to be not very skilled as an operator, so they had little confidence in the people he trained. In the worst case, one trainer was said to have sexually harassed some female trainees, and was removed. For a trainee, the particular problems of not being able to trust a trainer are difficult to combat and any complaints invite retaliation that can

take on a very threatening character (Arriola). Clearly, a more careful selection of instructors with specific focuses on both their skill level and sensitivity to equity issues is important. Also, a strong orientation course for trainers would also be helpful, in addition to specific training in teaching skills.

One trainer learned the hard way that different techniques were necessary to teach women who were unfamiliar with the construction culture: "You've got to give them a little credit. In the old days you did a good job and it was, 'so what?' With these folks, it motivates them to give them some strokes once in a while. In the old days it was yelling, screaming and fist fights with the foreman. That doesn't cut it any more." Trainers gradually learned there was a fine balance to be maintained between praise and criticism. As one noted, "You have to be firm. This is a construction site, not a playground. This equipment costs money." One important innovation at Hindoo Creek, highly praised by participants, was to employ a First Nations "shadow trainer" who received on-the-job training as an instructor. The job of this individual, who was from a local band, was to oversee the work of the trainees and to assist them when the instructor was otherwise unavailable.

One instructor described the pattern of training on new machines: "I tell them go play, get the feel of the hoe. Then I come back in a couple of hours and ask how they're doing. They ask a few questions and go back at it." None of the machines was designed as a training machine, so under Workers' Compensation Board (WCB) regulations, the trainer could not be in the cab while the trainee worked. At times this created dangerous situations that would have been avoided, for example, if there had been phones or other communication in the cabs. Unfortunately, budget problems precluded the use of even this simple teaching aid. In the first year of training, instruction was fairly intensive and required close work with the instructor, but by the second year, as one instructor explained, "trainees become more independent. We found we could give instructions in the morning and just periodically check on them. They were okay to be left alone." The instructors suggested an instructor/trainee ratio of one to five in the first year, a ratio that could be reduced to one to eight as the trainees gained skills and confidence. At Hindoo Creek the ratio was roughly one to ten, but at times it went as high as one to twenty-five.

A fascinating feature of the Hindoo Creek site was that women and people from First Nations groups (who were mostly men) were trained together. In general, there was agreement that the men were more successful in getting access to a wider variety of machines than were the women, which

may have been partially due to differences in prior experience with machines. But it was also clear that women were the most enthusiastic about taking any training available. One union official noted: "When I'd go down the dispatch list looking for who had a certain training, the women had everything: they had first aid tickets and you name it, everything available." This was something of an exaggeration, but women soon learned that if they acquired some additional skill-particularly first aid, which was needed on all job sites-they were more likely to be dispatched. The women, however, felt they were more likely than the men to be trained on smaller trucks, as Teamsters, or on the least challenging piece of heavy equipment, the compacting machine, as packer operators. One woman who repeatedly asked to be trained on other machines described the problem: "No offence to packer operators, but I found it extremely boring. Most of the men don't want it either-it's like pushing a rolling pin back and forth all day." Work on the packer was sometimes assigned as a disciplinary measure.

For the most part, according to the trainees, the women and men worked well together on the job. The instructors reported that the First Nations trainees were "quiet," and "a little bit timid," an issue that seems to have been resolved once the First Nations shadow trainer had been employed. One woman reported that she had experienced hostility from First Nations men, although this was not raised by other women. But over-all HCL felt that their success in both training and retaining equity personnel was due to the fact that trainees were not isolated but worked together.

The trainees were extraordinarily enthusiastic about their training. The over-ridingly positive aspect of the training program at Hindoo Creek, repeatedly stated by trainees, contractors and HCL, was the actual work experience of a construction site. "I wasn't just pushing barrels around from one side of a training yard to another," one trainee explained. "I was doing real work. My kids will drive on that section of highway and know their mom built it." Their main complaints about the training were about its limited resources. As one trainee explained, "every piece of equipment out there has a person for it so if you break down, you're in trouble. You may as well go sit in a bar because you're not going to work 'til it's fixed." This is the kind of issue that can be solved with more resources. Another suggestion was that in addition to the training on equipment, there needed to be training to develop job search skills. As one trainee noted, they were given skills, but they "don't know how to follow it up. Maybe in the winter time HCL could say okay you have this time, come on in, sit down, do a four week seminar on job search skills. Because the skills don't do any good unless you know where to put them."

Dispatch

The method of dispatching workers to a job is the critical point in placing the equity trainees on the job, and no training program can be effective unless there is a clear relationship between training and employment. At the initial training intake, the projected labour needs indicated that all the trainees would be employed on the project. However, the combination of the late start of training in addition to significant scaling back in the size of the project after training had already begun meant that competition for jobs was greater than anticipated and increased as the major phases of building were completed.

Traditionally, unionized building trades and road builders are paid hourly for hours worked. When a job is finished, the worker returns to the union hall and "signs in" at the bottom of the dispatch list. The next time an employer calls, the qualified person nearest the top of the list is sent, or "dispatched." It is impossible to overestimate how important this traditional system is to the workers affected, and how closely they monitor it. The fairness of the dispatch system and the scrupulousness of the dispatcher are the difference between working or not working, between a one-week job or a one-year one, between working for an employer who is respected or one who is not. But dispatch is rarely a simple issue of "who is next on this list." It involves constant judgment to figure out who has the skills for specific jobs. If an employer calls for an equipment operator skilled in handling a bulldozer under hazardous conditions, the dispatcher has to determine if it really is the next person on the list, or the one after, because if it does not work out the irate call from the employer will inevitably come. The pressure on the other side is from the employee who demands to work. The dispatcher's position is a pivotal and highly sensitive one complicated by the fact that employers are not eager to hire any unskilled labour. As one contractor noted, "nobody would ever ask for a trainee."

The VIHP dispatch was carried out in a distinct way and involved collaboration between HCL and the unions. A contractor would make a single call to the dispatcher at HCL requesting a specific type of worker, say, for example, a carpenter experienced at concrete formwork. HCL would in turn contact the Carpenter's Union and make the request, preferably for an equity hire. The decision about who to dispatch then depended on some discussion between the union and the HCL dispatcher. Eventually, as the system became more familiar employers would also phone the union dispatchers directly and discuss their needs before making a name request.

The fact that the equity provisions in dispatch were part of the collec-

tive agreement was extremely important because it meant that since the normal way of dispatching was being by-passed, the union officials who needed to enforce this were, in some respects, not blamed. This evidence of compulsion was important to union officials who needed to be sensitive to membership demands. The fact that equity provisions in the contract had been negotiated meant that they had been discussed and voted on by members, even if equity was a feature they specifically disliked.

Ultimately this system worked after what one union official described as a period of "some arguing and jockeying and posturing while we all figured out exactly what each position was. If a member came in saying 'I have a problem with this,' I could say, 'it's in the collective agreement.'" Still, hostility to the dispatch of equity personnel could be strong. One union official directly involved with equity hiring is reported to have said, on leaving work, "I hope there isn't a bomb stuck underneath my car when I go home today."

Equity dispatch did not always happen when it should have. At least one HCL dispatcher found it harder to dispatch a woman than a man, in part responding to the incredulity of contractors at the suggestion of being sent a woman, but also out of his own prejudice against giving a woman a physically demanding job. Having a dispatcher at HCL who did not support the goals of employment equity was tantamount to having a union dispatcher who did not support the goals of the union. When the dispatcher clearly did not support the equity initiatives, it was critical that changes occur and that this be done in a visible manner so that equity participants could be confident of equity in dispatch. Fortunately, management understood this, and the necessary change was made. Over time the difficulty of dispatching most equity trainees through HCL and the unions dissipated somewhat, as trainees became more qualified, as both unions and contractors were more willing to "take a chance" on trainees, and as dispatchers were more sensitive to equity. The increased hours of work for equity hires over the years (Table 1) reflect this.

The success or failure of trainees was closely tied to access to dispatch, but the significance of job-fit was crucial to their success once on the job. It made no sense to send someone under-trained to a demanding job. The challenge for both dispatcher and for contractors was to be as clear as possible in their requirements. For example, one contractor called for someone to do "final grading," a highly skilled position. He was sent a woman whom he later described as someone who worked very hard and was keen, but "on the third day I had to call her in and tell her it wasn't working. She said she was glad I'd done that because if I hadn't she was going to quit because she

knew it wasn't working either. She told me she'd only had two days on grading equipment when she was in training. This woman was a very good employee but she wasn't the right person for the job, and the effect was to discourage her." Dispatching the wrong person was potentially dangerous. One contractor's first experience with an equity trainee was disconcerting: he had requested a driver who he specified would be working under dangerous conditions in a one-lane narrow and steep ravine. The woman who was sent had been in the training program only five days and had been on the truck only one and a half days. "We made it through the day, but she almost went over the side and at the end of the day I had to tell her that we just couldn't work with her." As is obvious, dispatching equity trainees can be effectively undermined by this type of action.

Despite some problems with dispatch the contractors grew to appreciate the time and effort it saved in the on-going hiring process. The fact that HCL was the sole employer took the emotions associated with hiring off the employer. As one contractor explained, "guys used to knock at my door saying 'my wife and kids are starving. You have to hire me.' Now I say 'you have to talk to HCL. It takes the weight off my conscience.'"

Construction Work Culture and Trainees' Experiences

Moving from the training site to a job with a contractor was rarely simple for the equity trainees. According to one First Nations male, "anybody in the HCL training programs that went out into the union jobs had a hard time." When asked if he was picked on because he was a native or because he was new he said, "because I was an HCL trainee. They hated it. All the unions that I've worked with think 'those fucking HCL guys, they don't know what the hell they're doing there. They're a bunch of idiots out there.'" The normal culture of the construction workforce dictates that bad situations be resolved individually. This trainee told of one incident where a hoe operator referred to him as "'some fucking Indian,' and stuff like that, so I got out and I choked him. He leaves me alone now and it's been worked out."

Women, First Nations, people with disabilities, and people of colour enter a very different culture when they enter a traditional road building or construction workforce. The specific experiences they encounter of sexism, racism, and discrimination on the job are embedded in a harsh and violent work culture that can brutalize even those who are part of its traditional workforce. Although it is usually not recognized as such by the men who work within it, it is a culture characterized by aggression, intense competition, and specific types of language and behaviour. The language, for ex-

ample, is generally competitive, brief, aimed at humour and, if possible, undermining another worker. The preferred attitude is one of aggression, demanding a brash confidence, no matter how little you know. The unspoken work expectation of the construction worker is to tinker until the problem is solved, and, when in doubt, use brute strength to get out of trouble. "When in doubt," trades people say, "hit harder." Ignorance is not to be admitted and above all, workers must not take things personally. In contrast, there are factors that mitigate this culture, factors like the common use of humour, camaraderie, and the satisfaction inherent in building.

This brutal type of workplace culture is not confined to the construction industry, but is also characteristic of other primary industries. Its destructive aspects are beginning to be understood and recently attempts have been made to bring about changes. For example, a recent management initiative to reduce conflict is under way in the logging industry where disagreements have "traditionally been settled with a piece of 2-by-4," and techniques to encourage productivity "had been based on screaming," (Globe and Mail).

When the workforce was still entirely white and male, the small jokes and challenges that went on with every new employee to see how they "fit" was called "testing." Women who experienced this identified it as "harassment." Men on the job called it "tradition." One experienced male operator explained: "everybody gets harassed. Period. When you walk onto the construction site, you're the new kid on the block and it's your turn. That's the one thing that has been passed on from job to job and crew to crew over the years. Take it. Get through it." He made a distinction, however, between this traditional type of harassment and that which comes from the real "bad apples," the bullies on the job. Workers should be protected from these bullies by their unions, but few ever complain. If it becomes too difficult, they quit. Not wanting to be perceived as "whiners," they go quietly, and without explanation. They are seen, by those who remain, as someone who "couldn't take it," and had made the ultimate mistake in the traditional construction culture—"taking it personally." One male contractor explained it is not just women who take harassment personally, but men have learned to hide it: "When you're a kid and you're a guy, your dad teaches you that you don't show emotions. We're trained from a very young age to be tough, to show you can take it. So you go onto a job site, the new guy, and someone says or does something to you and you're totally destroyed, but there's Dad saying, 'you can take it.' That's a big edge on these jobs—you may be going through hell inside but you say nothing on the outside."

Construction workers often recall the shock of their own entry into the

workplace, and assume it is the same for everyone. Its brutality in general tends to make them deny the specific harassment of women and other equity hires. However, women and First Nations did have experiences that were distinct from the traditional "testing," although it was clear in the hierarchy of discrimination that any man was considered preferable to a woman. Hostility from co-workers could erupt in many ways that undermined the confidence and performance of the equity hire. One contractor reported a First Nations man who had been dispatched as a driver: "If anyone came near him, he was absolutely terrified and he'd start making mistakes. Eventually I found out the man had been terrorized on another site where his co-workers had been trying to get rid of him." As could be expected, the harassment women experienced was specific and sexist. One woman, the first equity trainee dispatched to a job, was immediately asked, "What are you doing here? Why don't you go find some rich sugar daddy?" This woman was well trained and had considerable past experience in driving heavy vehicles, but she was "tested," both by the project supervisor and the project manager "to the nth degree. There was a lot of arm waving, but I was lucky I had the support of one teamster who just took me under his wing, and of a cat operator who was totally supportive." She endured two weeks of this 'testing' before deciding that she was not going to quit, no matter how much yelling occurred. According to the project manager (one of her original tormentors), she became a highly sought after driver because of her skill—she was the only driver who never rolled the truck on the job. Even off the job equity trainees encountered hostility. In one example, a woman explained: "I walk into my gym and one of the trainers there says, 'Yeah, you've gotta be a goddamn Indian or a woman to work on this highway,' which is not true at all!"

The opposition to the equity hires was often attributed to introducing this new group into a field in which unemployment was high. As one worker put it, "If you were working with a system that had ninety percent employment, the idea of introducing equity would probably work pretty smooth. But when you have a system like the one on Vancouver Island that averages fifty percent unemployment and you introduce twenty percent new people, there are going to be some unhappy campers. The guy who's been around for twenty years is wondering why he isn't working when someone who's been a member for two months is."⁴ Without doubt, it certainly would have been easier to integrate equity hires into a full-employment workforce, but

4. These figures in quotations are literally figures of speech and are more illustrative of the attitude than the actual situation.

in a province that had experienced unemployment rates of more than 9.7 percent in the three years immediately preceding the VIHP, this could not happen (Statistics Canada). The fact that the trainees came from targeted equity groups created, as one union business agent acknowledged, "Animosity. Big Time." According to one contractor, "the immediate reaction of sixty percent of the guys on the job when an equity trainee arrived was pure hatred."

Some older workers were particularly resentful when asked to work with or train the new employee. One contractor gave as an example a woman trainee who was "an excellent employee—good to have around, a lot of fun, and very good at driving the D400 and other trucks. But she'd never done belly dumps." [This is a difficult dumping process that involves opening the bottom of an 18-wheel vehicle.] "One day her regular truck was being repaired and I asked an older guy to take her out on his truck and show her how to do belly dumps. At the end of the day I thought the guy was going to kill me. He said 'I ain't training no goddamn woman to take my job when she should be home anyway!'"

A co-worker who wants a trainee to fail could make sure that s/he did. In road building, if everyone does not work together, then the whole job goes badly. When anything starts to go wrong, the tendency is to blame the trainee, but sabotaging a trainee's efforts was not difficult. A contractor explained how it could work: "A hoe operator might set up a truck driver by putting his bucket in a certain place, then just as the truck is set up to back up to it, the operator moves the bucket slightly. When the supervisor drives up and sees the truck three feet off where it should be, now pulling out to take yet another run at situating itself, you can think it's the truck driver's fault—that damn trainee again—unless you're very conscious of what's going on and who's driving what. Or if the skilled driver is in the truck, he can dump it in such a way that it will be hard for the trainee to get it. Then all of a sudden the dozers are backed up and the whole job is behind schedule and who do you blame? If you're laying off, who do you get rid of?"

This type of harassment was noticed frequently by employers, but even employers sympathetic to the situation of the equity hires, were often unprepared to provide the necessary leadership to prevent this sabotage. And, ultimately knowing how to control this type of behaviour requires specific skills. Several factors were in place on the VIHP, however, to help motivate the employers to integrate equity hires into the workplace. The one-day Diversity Seminars which HCL provided for employers and front-line supervisors, while resented by some, seem to have given important skills to those who were not adamantly opposed to equity hires. One contractor explained how after attending the seminar, he learned of a crew leader who had been

harassing a woman under his supervision and knew exactly what to do. He called the supervisor into his office, gave him a copy of the HCL Harassment Policy and made him attend a diversity seminar. He said this woman experienced no further problems.

The presence of the equity hires on the worksite began, in small ways, to change the workplace culture. Some employers particularly liked having women drive their equipment, mainly because they tended to be less aggressive. According to one contractor, "they're easier on it, they don't drive it into the ground." Another noted that women have a better attitude toward their work than men and that they work harder: "If you're a woman, you really want to be there." Others who worked with trainees noted that it was often easier for the women to admit that they did not know something, so it was easier to teach them and to work with them. Some men learned that skill was not dependent on sex or race. One employer admitted: "The best hoe operator I ever had was a woman. Anything she did with a backhoe wasn't just good, it was beautiful. It looked as if someone had been over the ground with a rake. Most people could spend the rest of their lives training on this one piece of equipment and they'd never be half as good as she was. She had the most talent I've ever seen; a real finesse operator."

Many involved in the VIHP felt the job culture was changing. According to one contractor: "People are getting to be more aware of each other's feelings. As the equity groups get involved, become real people, attitudes are changing. That's a fact." A union business agent concurred and noticed in particular how behaviour at union meetings changed with a woman present. "You'll get a guy swearing and yelling at a meeting, totally out to lunch, when a sister walks in and all of a sudden the same person is very polite. They don't swear. They deal with the issues. And I say, 'Sisters, keep on coming!' This is how the old school changes."

Significance of Equity Officer and Outside Groups

The Employment Equity Coordinator facilitated outreach, recruitment, training, and delivery of services to trainees and was generally a vital advocate for employment equity to all parties. The trainees, unions, and employers all repeatedly mentioned her importance as an invaluable resource for informally resolving difficulties. Most seemed to find traditional union grievance procedures unnecessarily cumbersome and felt that harassment complaints were most effectively dealt with through her on an informal level.

The constant monitoring of the equity initiatives on the VIHP was a critical feature of its successes in integrating the labour force. Shortly after

hiring began, local equity groups and First Nations pressed for the formation of an Equity Integration Committee (EIC), which included members of the designated equity groups, HCL, contractors, unions and government representatives. Of particular importance was the representative from the Ministry of Women's Equity. This group met once a month during the busy seasons and once every other month in winter to examine progress and to make suggestions for changes. These meetings were crucial for educating both contractors and trade union representatives in equity initiatives, as well as for alerting community groups to the problems the unions and employers were encountering in implementing equity initiatives.

An initial demand from this committee was for very detailed record keeping so that the monitoring of equity hires could be tracked. The experience of Affirmative Action in the U.S. and equity reporting at the federal level in Canada is that double counting (e.g., a woman who was from a visible minority group could be counted twice) or including very short-term hires inflates statistics of employers who resisted equity hires. In other equity programs in B.C. and in Canada, the lack of reliable, long-term statistics has made it difficult to determine the true effectiveness of any equity initiatives. The EIC insisted on records not only of who was hired, but when, from which equity group, for which job, and, most crucially, how many hours they worked. The reliable numbers generated indicated that the equity trainees listed were not token, short term hires, but had significant hours in employment and training. This information was also extremely useful to union business agents who used it to quell frequent rumours of huge numbers of trainees working while traditional union members were unemployed. The statistics showed that although the numbers of equity hires were large by traditional standards, they were still very modest in terms of actual numbers. Knowing the numbers made it easier for traditional members to accept trainees and for union business agents to defend them.

Another benefit of EIC meetings was the regular exchange in information and recommendations for solutions among parties traditionally suspicious of each other. Diversity training for front-line supervisors came initially from an EIC recommendation, something that might not have happened and certainly not successfully if various parties had not mutually agreed to it. All who participated recognized the value of the committee and credit its success to the fact that all members were from the local communities and had some stake in the project functioning well. The EIC meetings ensured that all members were receiving the same information and that the community was both watching and being watched.

Conclusions

The most instructive result of the experience of the VIHP is that the mandatory requirement to hire workers from targeted equity groups through a specific negotiated project agreement is essential to the success of the process. While there was no specific numerical target set at the outset, the unofficial goal was to have equity hires constitute twenty percent of the workforce, a figure which was met and surpassed during peak hiring times (Hewitt-Ferris & Associates). This crucial aspect of the project agreement meant that all of the key players were aware of the commitment and agreed to equity hires. Without this element of compulsion in the initial project agreement, the overwhelming obstacles to equity training and hiring would have ensured that yet another equity project failed. As someone from HCL noted, "given that the walls that equity has to penetrate are made of concrete and reinforced with steel, I think we've done well." The introduction of training on an actual work-site also made a significant contribution to the success of this project and it is a feature that should be retained in future large highway-building projects.

While this study was not designed to present detailed recommendations for future highway building initiatives, two major recommendations flow from the experiences uncovered and will be important considerations in future equity initiatives in highway construction. The first recommendation is for the establishment of an apprenticeship system in highway construction and the second relates to equity provisions in the tendering process.

Establishing an apprenticeship system in highway construction would serve the needs of both employers and workers. The need for contractors to have a clear indication of the kinds and degree of skills achieved was one clear message from employers. Workers too expressed the need for entry-level positions and understood the value of practical experience and theoretical knowledge of a wide range of skills. These features of training could be best provided through a structured apprenticeship system. As one person from HCL noted, "the one thing that would have made life easier for everyone from day one, would have been to have entry level positions for all these trainees." An apprenticeship system is also important for establishing a more integrated workforce because it would provide a clear access point to the industry for workers from equity groups.

The second and related recommendation is that the tender documents with individual contractors be more specific about equity and training provisions required of employers. That is, the compulsion that was inherent in the equity provision in the HCL collective agreement should extend to all

contractors and subcontractors in detailed and specific ways. The tender documents should include, for example, a specified plan for the number of trainees and equity personnel to be taken on over the course of the project. It should also specify the costs for these equity initiatives and a clear plan for how equity hires will be integrated in the workforce. In order to eliminate the ability to avoid these kinds of contractual obligations through the subcontracting process, the contractual arrangements on equity and training need to be extended to each subcontractor.

The VIHP presented an unusual and effective model for integrating people from targeted equity groups into highway construction. Throughout the life of the project the government that spearheaded it suffered from repeated criticism-especially from non-union contractors. The criticism focused on the fact that high wage rates would increase the cost of the project. The NDP government of the time was particularly vulnerable to charges of this kind, even when they were not true, because other construction projects that had strong equity components, specifically the "Fast Ferry" project, greatly exceeded budgets. In fact, the Vancouver Island Highway came in under budget projections at virtually every stage of construction. This was mainly because the commitment to providing opportunities for local contractors and for local hire meant that a larger number of smaller contracts than usual were tendered and housing and board costs were eliminated. For each job there were, on average, six bids, as opposed to a provincial average of 3.7 bids. However, this larger number of small contracts could negatively affect equity provisions, primarily because of the ability of the employer to "name call" employees on small projects. The small contracts also worked against trainees because of the short nature of the work experience. Trainees sometimes required a week or even two to become comfortable and productive on a new job. As one equity spokesperson said, "If you get a crew out for just two or three days, nobody can really see what you can do. You become the person who fumbles around for two or three days at the beginning of the project and then you get laid off. You need a couple of weeks."

Despite the general approval of the project from the people closest to it-the equity participants, union business agents, and contractors, a project of this type may not occur again soon. The government's innovative action with the equity initiatives on the VIHP did not win widespread public praise and those who opposed both the fact of the union contracts and equity hires spoke loudest when the project was discussed in newspapers and on the airwaves. To the supporters of employment equity (who aim for high proportions) these figures did not seem dramatic. However, to those who under-

stand the complexities of integrating construction workforces the results were stunning.

The politics of the province and specifically the problem of the government's handling of large-scale construction projects, like the Pacificat Fast Ferry, has made these more innovative types of initiatives harder to carry out. Once the glitches of equity training and hiring had been ironed out and communication between the participants improved, it was clear that the equity and local-hire portions of the Vancouver Island Highway Project had been a success. "Considering all the factors we had to deal with, the percentages we reached were phenomenal," according to one HCL employee. A union contractor particularly liked it because "with everyone having to pay union wages, it means we can compete. Overall, I think HCL is fine."

This was a project that was completed under budget and on time, using people from the Island for its labour needs. It trained people from targeted equity groups by giving them a section of the highway to build, and it brought the proportion of "equity hires" to over 20 percent of the total workforce during peak building periods. This was an astonishing improvement on standard rates of employment of equity workers in construction. It is easy, in retrospect, to see how it could have been improved, but this cannot detract from what was accomplished—something which has not occurred previously in highway construction on this scale, anywhere in North America.

APPENDIX I
VIHP Equity Participation (Numbers)
Bi-Weekly Labour Force Report, 6/22/97-7/5/97

*Classification	Total	F	FN	DA	VM	TE
Bricklayers	5	0	0	0	0	0
Carpenters	45	1	4	0	0	5
Cement Masons	14	0	0	0	1	1
IBEW	7	0	0	0	0	0
Ironworkers	45	0	0	1	0	1
Labourers	130	20	15	1	3	37
Operating Engineers	130	10	15	3	6	33
Painters	4	0	0	0	0	0
Piledrivers	2	0	0	0	0	0
Plumbers & Pipefitters	0	0	0	0	0	0
Technical/Clerical	5	0	1	0	1	2
Teamsters	45	7	8	0	1	16
Total	433	38	48	6	13	100
%	100	8.8	11.1	1.4	3.0	23.1

* F=Female, FN=First Nations, DA=People with Disabilities, VM=Visible Minorities, TE=Total Equity.

Note: Total Equity will differ from the sum of the rows because some individuals may be placed in more than one group. The Total Equity column represents the total number of individuals. The % figures measure individuals working in that pay period and does not double-count equity groupings.

APPENDIX II
Equity Applications to HCL on the Vancouver Island Highway
Dec. 1994-June 1995*

	Dec.	Feb.	April	June
Women	444	602	742	793
Aboriginal	743	973	1103	1149
Aboriginal Women	148	190	215	228
People with Disabilities	48	67	99	112
Disabled Women	5	7	11	12
Visible Minorities	53	96	152	172
Visible Minority Women	10	13	20	20
Total Equity	1111	1512	1823	1938
Total Applications	3950	4631	5765	6909
Equity %	28%	33%	32%	28%

*Four months have been selected as samples, although figures are available for each month.

APPENDIX III
Vancouver Island Highway Project
Women and First Nations In Construction
Trade Union Members
July 1994-December 1997*

Classification	Numbers		Total
	Women [%]	First Nations [%]	
Labourers	63 [8%]	71 [9.5].	750
Operating Engineers	33 [4%]	49 [6.2]	795
Teamsters	26 [6%]	27 [6]	449

*Includes early period when very few from equity groups had been trained, so underestimates the significance of equity participation.

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