the road to equity:

Training Women and First Nations on the Vancouver Island Highway — A Model for Large-Scale Construction Projects

by Marjorie Griffin Cohen and Kate Braid

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Summary

The equity initiatives in training and hiring on the large construction project to build the Vancouver Island Highway were unique and stunningly successful. It was the first time in Canada that a significant effort had been made to integrate women and First Nations in the work of building a commercial highway.

The Vancouver Island Highway Project (VIHP) was often featured in the news during its peak building years, primarily because of its union-only hiring policy. Contractors who opposed this policy claimed a unionized workforce would make the project too expensive and, as a result, an unnecessary burden on taxpayers. However, to date, with most of the project completed, the work has been accomplished within the budget and on time. This has occurred while at the same time meeting the social objectives of hiring local labour and mounting a significant training program specifically for women and First Nations people.

The construction industry in B.C. has been notoriously difficult to integrate and the workforce representation of women, at 0.3%, and First Nations, at less than 1%, is depressingly low. The work culture of the construction industry is partially responsible for these poor figures, an issue that is examined in this study. But particularly significant in highway building has been the unsystematic ways in which people normally receive training for their jobs. In the VIHP, by focusing on a defined training program as well as providing support and training for supervisors and co-workers, some of these barriers to an integrated labour force were removed. At peak production periods, equity hires were more than 20% of the workforce.

A great many innovative management initiatives were responsible for the successful equity component on the VIHP. An unusual feature was the centralized hiring of all construction labour on the project through a single employer, Highway Constructors Limited (HCL), a subsidiary of a provincial crown corporation. Another important feature was the actual building of a section of the highway at Hindoo Creek, by the trainees. And, most significantly, the contract with contractors and unions gave priority in hiring to equity employees.

All parties involved faced difficult challenges. For the unions these included a surrender of their traditional control of the hiring hall to HCL. Contractors had to accept that all employees become unionized and be paid a standard rate. All personnel had to accept contract language that gave priority to both local hire and employment equity in dispatch, and had to adjust to the introduction of equity workers into their work places and practices.

In spite of these challenges, the potential for lucrative work for both trade union members and independent contractors makes the VIHP an excellent model for future large-scale construction projects. The success of the project shows that governments can, in fact, create positive social and economic results when undertaking public projects.

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Training Women and First Nations on the Vancouver Island Highway — A Model for Large-Scale Construction Projects [1]

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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 opportunity for equity initiatives, particularly because virtually all governments profess to be committed to equal opportunity in employment. Highway construction jobs are skilled and 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 in the mid-1990s, women's work in highway construction in Canada was confined almost exclusively to traffic management. 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%. Workers identified as "equity" workers comprised only 4% of the entire unionized construction workforce.[2] No reliable information exists on the employment 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.[3]

Integrating the construction trades is notoriously difficult. 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%, has increased only one-tenth of a percent over the last decade.[4] 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.[5] 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. This innovative contract was negotiated through a project/labour agreement in which Highway Constructors Ltd. (HCL), a subsidiary of a provincial Crown Corporation, was set up as the exclusive employer for all construction labour used on the highway.[6] HCL provided labour to contractors, and contractors reimbursed HCL for labour costs. HCL's involvement in the hiring process facilitated the initiatives to hire labour from local communities and from targeted equity groups.

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 initially opposed to the equity measures, although many individual trade unionists supported them. Despite this start-up handicap, the equity initiatives were surprisingly successful. As seen in Table 1, the numbers employed from the equity target groups were much higher on the VIHP than is normally the case for their representation in building construction projects altogether.

As Table I shows, in each year of the project during the major building years, the proportion of hours worked by members of equity groups increased. "Hours worked" is a better indication of representation of the equity workforce than 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 were virtually zero for each of these groups, they indicate substantial gains. At various times during the project, particularly during summer months, the number of equity workers hired climbed to over 23%, with women representing over 10% of the total and First Nations representing 12%.[7] 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.

Over the course of a year, we conducted extensive interviews with the workers who participated in the equity process. We also interviewed contractors, trainers, trade union representatives, and government personnel responsible for the project at various stages. In total thirty-eight people were interviewed. Other information about the workforce came from unusually detailed bi-weekly labour statistics collected by HCL. This material provides 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.

Our assessment is that the HCL model used on 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

Table 1: Vancouver Island Highway Equity Groups Proportion of Total Hours Worked

	1994	1995	1996	1997	1998	1999
Women	2. 2	4.0	5.8	6.5	10.3	8.4
Aboriginal	5.3	5.9	7.6	7.5	11.6	8.9
People with Disabilities	0.8	1.6	1.2	1.2	0.8	0.8
Visible Minorities	0.0	1.8	1.8	2.0	1.5	1.2
**Equity as a % of Total	8.3	12.6	15.5	16.3	22.1	17.8

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

Note: The figures for 1994-97 are for the full year, while those for 1998-99 are for the construction season. Only the contractors' core labour force would be working throughout the year, a factor that would depress statistics for equity hires.

Source: 1994-97 calculated from the Labour Force Report of Highway Constructors Ltd.; 1998-99 information from HCL Payroll Summary, Construction Season April 26 to November 7, 1998 and 1999.

for both trade union members and independent contractors, despite equity hiring, is a powerful incentive to achieve the compliance of these groups. In addition to the very important goal of providing work for women and First Nations, HCL's commitment to equity hiring provided considerable social benefits to both the local community and the culture of the industry. Its success also shows that these results can be obtained within the budgetary constraints of the 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.'" [8] The challenges encountered during the process of integrating women and aboriginal people into the workforce of HCL were considerable, but these three components were present, albeit in various degrees.[9] However, the most significant ingredient identified for this project contradicts conventional wisdom: 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.

The equity provisions were the 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 the minister under which it had been initiated who later became premier of the province, Glen Clark. Second, they were initiated, monitored and continually supported by women's groups and native bands on Vancouver Island.[10] Third, the equity and local hire issues were in some respects tied together so that the VIHP had strong support from the local community. Fourth, there was a model project agreement to follow that had worked in the past in other large-scale construction projects.

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 can 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 when no common collective agreement exists, very disruptive strikes can occur at any point in the process. The first attempt to change this process began with the historic St. Lawrence Seaway Project in the 1950s. The governments involved 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. When trade unions accepted these agreements it was usually 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 and continue to be used in all new building projects.[11] 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 makeup of the labour force on this project.

Traditional bidding systems encourage 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 are minimal. 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. Including the interests of the First Nations was especially crucial in the VIHP 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 HCL project agreement make it an equity model that is distinct from previous ones. First, it is the first major construction project in B.C. that has included women as a target group for hiring and

training.[12] Second, unlike other project agreements that had equity components, this one applies to a labour force specifically associated with road construction. Previous agreements were associated with large, fixed site, and relatively long-term projects with a labour force that was not as intermittent as is typical in highway construction.

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.[13] This seven-year project had a budget of $1.2 billion to cover building about 250 kilometers of highway. A new crown corporation, The B.C. Transportation Financing authority (BCTFA) was created to undertake 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. Rather, it functioned as a source of employees—a sort of 'hiring hall'—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 restricted local hire requirements of the contract.[14] The contract language gives hiring preference to local Vancouver Island residents and people from equity groups, although contractors were able to 'name-hire' some of their own workforce.

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."[15] This is a strong statement that should have made equity hiring fairly straightforward, but various other provisions in the contract lessened its impact.

For example, a provision permitted contractors to specifically identify up to "50% of employees, on a one-for-one basis (first dispatched by Union) to a maximum of five (5) "named" employees"[16] This meant that on a large contract, five of the first ten employees could be the traditional employees of the contractor. In addition, all supervisors could be named directly by the contractor. The ability of contractors to "name hire" all employees on contracts of $30,000 or less also served as an effective way for some contractors to circumvent the equity hire priority.[17] 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.

For the trade unions, a very important advantage of the agreement was the provision that all labour on the project would be union labour. During the 1980s the Social Credit government changed labour legislation in B.C. 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 project 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.[18] It was also a very controversial feature that was fiercely attacked by some contractors.

The requirement for union membership, combined with the local hire and equity provisions, was also 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 new workers *into the union*, 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%.[19] Another unpopular concession made by the unions was for wage rates at about $2.00 an hour lower than the standard rate negotiated for the industry.

Contractors ultimately appreciated the fact that HCL was the employer for all projects. This saved them money on record keeping, payroll, finding employees and other personnel functions.[20] Another important cost-saving

aspect of the contract was the local hire provision, which eliminated the need for providing room and board for out-of-town employees.

Training for Road Construction

Contractors in the road building industry tend not to formally train employees and no traditional apprenticeship system exists for workers to learn a broad range 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." [21] Hiring is done by reputation. 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." The 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 HCL 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 from which 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 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 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 operate large road building equipment such as bulldozers, excavators, 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 and operating 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 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 HCL trainees who took these programs liked them, but they taught only the basics of how to operate equipment. 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 a training program that included actual road building, something the HCL program eventually provided.

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, one BCTFA employee reported early on to the Premier of the Province that there were virtually no women, First Nations, people of colour or people with disabilities at work on the new 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. Merely supplying an opportunity for employment is not sufficient to overcome the enormous barriers faced by those traditionally excluded from construction jobs.[22] According to one employee, one critical point for a focus on equity came from the Minister responsible for B.C. 21 when he pointedly asked, "How are we doing on the equity and training side?" The initiative also received strong support within Cabinet and was consistent with other attempts to increase the participation of under-represented groups on provincial boards and commissions.[23]

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. If they did know, they assumed that, as in the past, they would not be welcome. HCL personnel therefore changed focus. First they changed their recruiting sites. They 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, they adjusted their interview questions. When asked, "Do you have experience in building roads or operating heavy equipment?" people from equity groups generally answered "No." When asked, "Do you have any experience relevant to building roads," the answer was more likely to be something like "Yes, I've run my father's skidder." Most applicants assumed that when employers asked about 'work experience,' they meant *paid* 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 First Nations. For each month during the major intake period between December 1994 and June 1995, equity applications accounted for between 28% and 33% of all applications. Aboriginal applications constituted 60% and women's 40% of all applications from equity groups. About 5% of the equity groups' applications came from people with disabilities and about 9% from visible minorities. 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 offered entry-level positions. Without skills and "hours in the seat," contractors refused to hire them. It was clear that if the equity initiatives were to work, applicants would have to be trained.

HCL Training

The most innovative equity training initiative on the project 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 Union Bay 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 project is that a well-developed training system was neither in place, nor even planned, before actual construction on the highway began. 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. Eventually less than $2 million was committed to all the training schemes, including $900,000 from Skills, Training and Labour.

In hindsight the lack of planning for specific on-the-job training at the outset seems a serious oversight. However, 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. That this was a pioneering effort should 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 began, a variety of short introductory training programs were provided to prospective employees. The first was a two week course designed to familiarize prospective workers with the construction industry . About 200 people were chosen to attend this course in the first year, of whom 127 were from equity groups. It informed 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 experience. 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 to further training conducted in cooperation with the local community college and union training plans. Most of the trainees in these courses were from equity groups. Those in the operating engineers' course had the most difficulty being hired because of the limited nature of the training (which was due to the high cost of heavy equipment).

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, nor were they reimbursed for travel, day care, or other expenses.[24] At least one trainee was so eager to get work experience that s/he lived in a car. Two important things happened on this project: first, a First Nations company, Yiasulth Management Corporation (YMC) supplied the machinery used. YMC was set up to create a single entity to speak for the twelve First Nations involved and was designed to serve their long-term construction interests. Second, the experience of training on an actual piece of road building became the distinct and innovative feature of the VIHP. All parties who participated in the Shell Beach experiment, including contractors, 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 training site to build a section of highway would have been for contractors to take on trainees before they had specific road-building experience and teach them on-the-job. This did not occur because training was not written into contract documents and, therefore, contractors were reluctant to spend the time and money required. Training for highway building is a particularly expensive business, more onerous than in other building trades. As one contractor explained: "A trainee gets on your machinery and breaks a centre pin on a D10, that's a $12,000 bill. 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 330L hoe costs $250,000."

Hindoo Creek:[25]

Hindoo Creek was an extraordinary training site, and its existence was the primary reason that equity hiring results for HCL 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 contrast with other large-scale projects in Canada, such as the Hibernia Construction Project in Newfoundland, where women were only 4% of all trainees, is dramatic.[26]

Trainees began at Hindoo Creek with a raw site in the forest, and—with the exception of logging—performed virtually all work. The Ministry of Transportation and Highways (MOTH) managed this section of highway with seventeen trainees at the outset. During the peak summer seasons, as many as fifty-two trainees were working on two shifts. A trainee was considered to have completed training when s/he had 2000 hours "in the seat." The 2000 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.

Trainees wanted more variation in training, depending on the piece of equipment. As one noted, "You don't need 2000 hours to learn a compactor. You're fully qualified after a week." Some equity trainees saw the 2000 hour figure as a further delay to getting on the job, and only about thirty equity trainees ultimately achieved the 2000-hour goal. The 2000 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' request, informal lectures were arranged on the training site during lunch breaks on subjects such as MOTH specifications on lift thickness, rolling techniques, and ways to provide preventive maintenance on machines. Trainees generally were eager to learn as much as they could. But the main limitation to training was created by funding problems.

There were several instructors at the site over the course of the project. The instructors were skilled drivers and equipment operators, but none had previous training or experience in teaching. Nor did any of them have instruction in issues related to training people from equity groups. 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, early in the project, was said to have sexually harassed some female trainees, and was removed. Clearly, a more careful selection of instructors with a specific focus on both their skill level and sensitivity to equity issues is important. 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 people who were unfamiliar with the construction culture: "With these folks, it motivates them to give them some strokes once in a while." He said, "in the old days it was yelling, screaming and fist fights with the foreman. That doesn't cut it any more." 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 unavailable.

In the first year of training, instruction was intensive and required close work with the instructor, but by the second year, as one instructor explained, "We found we could give instructions in the morning and just periodically check on them." 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 (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, 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, or 'packer.' 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."

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 centred on 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 eased with more resources.

Dispatch

The method of dispatching workers to a job is the critical point in placing equity trainees on a job, and no training program can be effective unless there is a clear relationship between training and employment. At the initial training intake, projected labour needs indicated that all the trainees would be employed on the project. However, the combination of the late start of training and significant scaling back in the size of the project after training had 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. 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 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. But dispatch is rarely a simple issue of "who is next on this list." It involves constant judgment. If an employer calls for an equipment operator skilled in handling a bulldozer under hazardous conditions, the dispatcher has to determine if that is really is the next person on the list, or the one after—if it does not work out, an irate call from the contractor or an on-site accident may follow. 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 unskilled labour. As one contractor noted, "nobody would ever ask for a trainee."

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.

The fact that the equity provisions in dispatch were part of the collective agreement was extremely important. 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 had 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 trade union 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 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, especially at the beginning of the project when, as one official confided, "We felt we had to cater to the contractors." The position of dispatcher proved to be crucial. At least one HCL dispatcher was sometimes reluctant to dispatch women, in part responding to the incredulity of contractors at being sent a woman, but also out of his own prejudice against giving women physically demanding jobs. Over time and with some changes in personnel,

the difficulty of dispatching equity trainees through HCL lessened somewhat. This tension eased 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 (see Table I) reflect this.

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 emotion 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 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." 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. 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.[27] The language, for example, is competitive, brief, aimed at humour and, if possible, undermining other workers. The preferred attitude is one of aggression, demanding a brash confidence, no matter how little you know. The unspoken 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.

The destructive effects of this brutal type of workplace culture on all employees no matter what their gender or ethnicity, are beginning to be understood and 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." [28]

When the workforce was still entirely white and male, the small jokes and challenges that greeted every new employee were called "testing." Often, equity hires identify it as "harassment." Men on the job call it "tradition" and often can't imagine it any differently. 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. 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 leave without explanation. One male contractor explained it is not just women who take harassment personally, but men have learned to hide it: "You may be going through hell inside but you say nothing on the outside."

All construction workers go through some form of initial testing. So when anyone, including equity hires, has experiences that go beyond teasing, it's often difficult for other construction workers to sympathize. Hostility from co-workers can erupt in many ways that undermine 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 had considerable experience driving heavy vehicles, but she was 'tested,' both by the project supervisor and the project manager "to the nth degree. 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." According to the project manager (one of her original tormentors), she became a highly sought after driver because of her skill. Even off the job equity trainees encountered hostility. In one case, 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!"

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 per cent 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." [29] The fact that 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."

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, the whole job goes badly. When anything starts to go wrong, the tendency is to blame the trainee. Sabotaging a trainee's efforts was also 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?"

Knowing how to control this type of behaviour requires specific skills on the part of supervisors. Several factors were in place on the project to help motivate contractors to integrate equity hires into the workplace. One-day (optional) Diversity Seminars which HCL provided for contractors and front-line supervisors 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 equity hires on the worksite began, in small ways, to change this particular workplace culture. Some contractors 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. 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. Some men learned that skill was not dependent on sex or race. One contractor 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. She had the most talent I've ever seen; a real finesse operator."

Many involved in the VIHP felt that the job culture there changed. 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

Early in the project, personnel at HCL recognized the need for an Employment Equity Coordinator. This person 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. Her constant monitoring of the equity initiatives on the project was a critical feature of its success 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 Equality. 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. An initial request from this committee was for very detailed record keeping so that the monitoring of equity hires could be tracked.[30] In other equity programs in Canada, the lack of reliable, long-term statistics has made it difficult to determine the true effectiveness of equity initiatives. 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 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 number of equity hires was large by traditional standards, it was 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. All who participated recognized the value of the committee and credit its success to the fact that all members were from local communities and had a stake in the project functioning well.

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 numeric target established 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. [31] 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, the existence of an active, community-based advisory committee, and a permanent equity coordinator also made a significant contribution to the success of this project and are features that should be retained in future large highway-building projects.

While this study was not designed to present detailed recommendations for future building initiatives, two ma-

jor recommendations flow from the experiences uncovered. The first 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. 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 as well as for white males without contacts in the industry.

The second and related recommendation is that the tender documents with individual contractors be more specific about the equity and training provisions required of them. The compulsory equity provision in the HCL collective agreement should extend to all contractors and subcontractors in detailed and specific ways.

This project presented an unusual and effective model for integrating people from targeted equity groups into highway construction. But, throughout the life of the project the government that spearheaded it suffered from repeated criticism—especially from non-union contractors. Criticism focused on the assumption that high wage rates would increase the cost of the project. In fact, the Vancouver Island Highway has come in under budget projections at virtually every stage of construction. This was at least partly 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 room and board costs were eliminated. For each job there were, on average, six bids, as opposed to a provincial average of 3.7 bids.[32]

Despite the general approval of the project from the people closest to it, 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 the media. To many supporters of employment equity, who aim for high proportions, the figures did not seem dramatic. However, to those who understand the complexities of integrating construction workforces the results were extraordinary. Another damper on attempts to replicate the successes of this project relate to the politics of the province. The problems associated with the government's large-scale construction projects, specifically those related to the Pacificat Fast Ferry, has made these more innovative types of initiatives harder to carry out, although current transit projects under the HCL model appear to be successful in hiring, if not training, equity employees.

To date, with most of the project completed, the work on the VIHP has been accomplished within the budget and on time, granting bids to local contractors and using Island people for its labour needs. It trained people from targeted equity groups and it brought the proportion of "equity hires" to over 22% 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.

Notes

1. A more detailed version of the training program is available in Cohen and Braid, "Training and Equity Initiatives on the British Columbia Vancouver Island Highway Project: A Model for Large-Scale Construction Projects, *Labor Studies Journal*, vol. 25, no. 3 (Fall 2000) 70-103.

2. The Amalgamated Construction Association of BC and Employment and Immigration Canada, *Women, Native Indians, Visible Minorities, and People with Disabilities Working for Employers* (Vancouver: Employment and Immigration Canada, 1990).

3. John Calvert, "Maxamizing Social, Training and Economic Development Spin-Offs from Public Capital Spending: The Experience of the Vancouver Island Highway Project," unpublished paper, 1997

4. Barbara Byrd, "Women in Carpentry Apprenticeship: A Case Study," *Labor Studies Journal* 24, 3 (Fall 1999) 3-22

5. For a discussion of this issue see Andrea W. Gale, "Women in Non-traditional Occupations: The Construction Industry," *Women in Management Review,* Vol. 9, No. 2 (1994), pp. 3-14; Susan Eisenberg, *We'll Call You If We Need You: Experiences of Women Working Construction* (Ithaca and London: ILR Press, 1998)

6. HCL is a wholly owned subsidiary of the B.C. Transportation Financing Authority (BCTFA). This Crown Corporation was established through the Build B.C. Act in 1993.

7. The terms 'equity workers' and 'equity hires' will be used to identify people from groups that had been targeted for special consideration in this project.

8. Sharon Nelson, "Women in Business," *Nation's Business,* October 1991

9. When this study was complete most of the building of the highway had occurred, but some building involving a much reduced labour force will occur on sections with completion of the whole expected in the autumn of 2001.

10. The training focus on First Nations people and women was directly related to the strength of these groups and their lobby efforts during the life of the project. While initially there was an attempt to elicit applications from visible minority and disabled groups, the program did not ultimately focus on these groups.

11. The first major initiative of this sort that included equity was B.C. Hydro's agreement negotiated in the early 1990s between Columbia Hydro Contractors (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.

12. 12 The B.C. government has decided to expand the mandate of HCL to provide labour to other new transportation projects. This will allow similar equity targets to be set for large-scale highway building in the future.

13. The Build B.C. Act created the B.C. Transportation Financing Authority and set out the policy goals that became known as "B.C.21." The purpose of the act includes: "2(b) ensuring that all regions of the Province benefit from economic expansion and diversification; 2(d) promoting training and investment in people as a significant component of public sector investment activity; 2(e) targeting activities under this Act toward traditionally disadvantaged individuals and groups.

14. Many trade union members in other parts of the Province were particularly unhappy that they would not be eligible for work on the project through the local hire provisions that gave preference to residents of Vancouver

Island.

15. HCL Contract, Article 6.222

16. HCL Contract, Article 211b

17. The original intention of the $30,000 specification was to cover very small, two to three day jobs, such as landscaping. But this clause sometimes could be used by contractors who wanted to break larger jobs into several smaller ones in order to keep complete control of their workforce.

18. HCL Contract, Article 6.110

19. 19 Statistics Canada, *Labour Force Survey*, 1999

20. HCL also has a health and safety program that has resulted in national health and safety awards for several years running.

21. 21 Quotations are from VIHP participants interviewed for this study.

22. See especially, Sharon R. Goldberg, *Women In Construction: A Report on Access, Training and Retention in the Construction Trade* (Vancouver: The Amalgamated Construction Association of B.C., 1992); Kate Braid, *Invisible Women in Non-Traditional Occupations in B.C.,* M.A. thesis, Simon Fraser University, 1979. Marcia Braundy, ed., *Surviving and Thriving: Women in Trades & Technology and Employment Equity* (Winlaw, B.C.: Kootenay Women in Trades & Technology, 1989)

23. It was the equity provisions in the collective agreement that swayed the opinion of many Cabinet Ministers who had reservations about a union only project agreement for the VIHP. Trade unions became more helpful on equity issues as they were reminded that the project/labour agreement itself only came about because of the equity provisions.

24. This road was not an VIHP project and, therefore, not covered by the collective agreement.

25. This name causes considerable discomfort to those involved in equity issues. It is a name likely from the distant past, although still prominent on maps. This site was a 5.2 kilometer section of the highway located in the forest near Union Bay. The two other projects were the Little Qualicum Underpass and Farwell Pit.

26. Brenda Grzetic, Mark Shrimpton, Sue Skipton, *Women, Employment Equity and the Hibernia Construction Project* (Newfoundland: Women in Trades and Technology, June 1996

27. See for example, the B.C. Council of Human Rights decision on Karen Burton vs. Chalifour Bros. Construction Ltd., Thomas Chalifour and Edward Tai. Vancouver, March 9, 1994, for a confirmation of the culture of harassment in construction industry.

28. "I'm a lumberjack and I'm okay," *Globe and Mail* (Nov. 17, 1999)

29. The figures in these quotations are literally figures of speech and are more illustrative of the attitude than the actual situation.

30. This initiative was strongly supported by the HCL Board of Directors who wanted accurate records for governance purposes.

31. Hewitt-Ferris and Associates, "A Review of the Equity Component of the Vancouver Island Highway Project," HCL unpublished paper, May 1997

32. HCL document, May 1998

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