

The Impact of Employment Insurance on New-entrants and Re-entrant Workers

Final Report

***Prepared for:
Strategic Evaluation and Monitoring
Evaluation and Data Development
Strategic Policy
Human Resources Development Canada***

***Prepared by:
Shelley Phipps
Dalhousie University
and Fiona MacPhail
University of Northern British Columbia***

November 2000

SP-AH135-11-00E

Acknowledgements

Paper prepared for the Strategic Evaluation and Monitoring Directorate, Human Resources Development Canada, as part of the ongoing evaluation of the “Impacts of the Employment Insurance Act on Individuals, Communities, and the Economy.” We would like to thank Lynn Lethbridge for excellent research assistance.

Table of Contents

Abstract	i
1. Introduction	1
2. Data and NERE Identification Issues	3
2.1 Data	3
2.2 The Identification of NERE Workers	3
3. Who Are the NERE Workers?	7
4. How Has EI Affected NERE Access to Benefits?	15
4.1 Descriptive Analysis	15
4.2 Multivariate Analysis	21
5. NEREs' Experiences with UI/EI	31
6. Conclusions	35
Biographical Notes	37
Bibliography	39

List of Tables

Table 1	New and Re-Entrants as a Percentage of All Job Separators, All Regular Claimants, and UI/EI Benefit Recipients	8
Table 2	Percentage of All Job Separators by Category Who Are New and Re-Entrants	10
Table 3	Composition of New and Re-Entrants by Category.....	12
Table 4	NEREs and Non-NEREs Who Receive Regular Benefits.....	16
Table 5A	Percentage of All Non-NEREs Receiving Benefits — by Category.....	17
Table 5B	Percentage of All NEREs Receiving Benefits — by Category	19
Table 6	Probit Regressions of the Probability of Receiving Regular Benefits NEREs and Non-NEREs (Standard Errors in Parentheses)	22
Table 7	Probit Regressions of the Probability of Receiving Regular Benefits NEREs (Standard Errors in Parentheses)	25
Table 8	Probit Regressions of the Probability of Receiving Regular Benefits NERE Males and NERE Females (Standard Errors in Parentheses)	27
Table 9	Mean and Distribution of Benefit Entitlement Weeks for Those Who Are Entitled to Some Weeks of Benefits	31
Table 10	Termination Code for Those With Benefits	32
Table 11	Mean Weekly Regular Benefits Who Collected UI/EI Recipients (Standard Errors in Parentheses).....	33

Abstract

This study investigates the impact of EI on new and re-entrant (NERE) workers. The objectives of the study are to identify and characterize NERE workers and to investigate the extent to which the change from UI to EI reduces the access of NERE workers to employment insurance benefits.

The study focuses on two components of the program change, which are particularly relevant for the NERE group. These changes are an increase in eligibility condition and a switch from a weeks-based system (UI) to an hours-based system (EI).

In 1995-1997, NEREs represented about 26 percent of all workers with a job separation. NEREs were mostly young, single, and had no children. Re-entrant mothers may have relatively higher probability of being NEREs if they separated from their jobs. However, re-entrant mothers did not constitute a large proportion of the NERE population. Job separators were more likely to be NEREs if they were relatively younger, had relatively lower hourly wages and family annual incomes.

NEREs were much less likely to receive EI benefits than non-NEREs, both under UI and EI. Benefit reciprocity rates for NEREs were generally one-half of the non-NEREs'. The increase in eligibility condition substantially reduced access to benefits for NERE workers, but the switch from a weeks-based system to an hours-based system significantly improved the situation. The net effect of the two policy changes was thus only a small reduction in the overall benefit reciprocity rate for NEREs. In general, this pattern of change in access to benefits should also be observed for various socio-economic sub-groups. The net change in benefit reciprocity rate remained stable and low for NERE youth, fell for NERE women, and increased for NERE men.

Average weeks of entitlement for NEREs was 30.3 weeks in the post January 1997 period, roughly 4 weeks less than that of non-NEREs'. NERE EI recipients also received lower average weekly benefits than non-NEREs. During the same period, the average NERE EI benefit was \$236, or about 82 percent of the average weekly non-NERE benefits. Young NERE recipients had considerably lower average weekly benefits, at \$176.

1. Introduction

The *Employment Insurance Act* (EI) replaced the *Unemployment Insurance (UI) and the National Training Act* on July 1, 1996. The new EI system is designed to provide more help to those who are unemployed to return to work, to strengthen work incentives, help workers adjust to economic change through reinvestment in re-employment benefits, and secure \$1.2 billion in savings by 2001-2002.¹ The EI system has two main components which are a redesigned income benefits program and an active re-employment benefits and support program. With respect to the income benefits program, one of the four main changes is the switch from using a weeks-based criterion to determine eligibility for unemployment benefits (under UI) to the use of an hours-based criterion of work (under EI). The hours-based criterion reflects the idea that all hours worked should count towards determining eligibility (since under UI, if an individual worked less than 15 hours per week, then the work did not count toward benefit entitlement). This is considered to be an important program design change given the increased prevalence of part-time work and a possible incentive to create jobs which are less than 15 hours per week.² The first major focus of this paper is to study the impact of the switch from the weeks-based to the hours-based criterion for determining eligibility for unemployment benefits on one group of workers, namely, the new and re-entrant workers.

New and re-entrants (NEREs) to the labour market face a tougher eligibility criterion for unemployment insurance benefits compared to regular workers, under both UI and EI. The tougher eligibility criterion for NEREs has been designed to reduce the incentive for anyone to enter the labour force primarily to establish eligibility for unemployment insurance benefits. The switch to EI further increases the difficulty of establishing eligibility for unemployment insurance benefits for NERE workers. This design feature was implemented in order to encourage individuals to establish reasonable attachment to the labour force before collecting benefits with the idea that this will reduce the probability of becoming reliant on the EI system.³ The second major focus of this paper, therefore, is to investigate the consequences of the increase in eligibility conditions for NERE workers (from 20 to 26 weeks as of July 1, 1996 with a conversion of the 26 weeks to 910 (35 x 26) hours as of January 1, 1997).

There is little information about the group of NEREs and this paper seeks to address this gap in our current understanding of UI/EI. Thus, we first ask: “Who are the NEREs?” We establish the percentage of workers with job separations who are NEREs and study their characteristics. Since neither the Canadian Out of Employment Panel (COEP) survey nor the UI/EI administrative data explicitly identify NERE workers, perhaps the major contribution of this research is simply the identification and analysis of NERE workers. Second, we investigate the consequences for NERE workers of the change from UI to EI.

¹ Human Resources Development Canada. *A Guide to Employment Insurance*. www.hrdc-drhc.gc.ca/hrdc/ei/sc1236_e.html, pp. 1-2.

² Ibid, pp. 3-5.

³ Ibid, pp. 17.

Specifically, has the switch from UI to EI reduced the access of NERE workers to (un)employment insurance benefits? Two components of the program change are particularly relevant for the NERE group and so we focus upon these: (i) the increase in eligibility conditions (from 20 to 26 weeks) and (ii) the switch from a weeks-based program to an hours-based program.

One might hypothesize that young workers seeking their first job and mothers returning to the labour market after taking time out to care for pre-school children might constitute two important groups of NEREs. We are interested in investigating whether this is so and, in particular, in assessing the effects of the policy change for these two groups.

Section 2 of the report discusses the data employed and some of the major issues involved in identifying NEREs. Section 3 focuses upon the question: Who are the NERE workers? Section 4 asks: How has the switch from UI to EI affected NERE workers' access to benefits? More specifically, what were the consequences of tightening eligibility (from 20 to 26 weeks) and of switching from a weeks-based to an hours-based system? Section 5 continues with some discussion of the NERE experience of UI/EI benefits. Section 6 concludes.

2. Data and NERE Identification Issues

2.1 Data

This paper uses Human Resources Development Canada (HRDC)'s Canadian Out of Employment Panel (COEP) survey data and several UI/EI administrative files. The target population for the COEP survey is Canadians aged 15 and over, living in the ten provinces or the territories, who had a job separation or a break/change in employment between July 1995 and December 1997 inclusive. Survey participants were selected from the HRDC Record of Employment administrative file. Selected individuals were then contacted by telephone, up to 12 months after the separation for which they were selected into the sample.

The COEP survey includes 4 cohorts of individuals who had an interruption in their employment or a job loss before July 1, 1996 (when the first aspects of the Employment Insurance (EI) system came into effect, including the increase in new and re-entrants (NERE) entrance requirements from 20 to 26 weeks). Two cohorts had job separations between July 1, 1996 and January 1, 1997 (when the switch from a weeks-based system to an hours-based system came into effect). The remaining 4 cohorts had job separations after January 1, 1997. Each cohort is a sample of all individuals with a separation/interruption occurring in a particular quarter.

The COEP provides a wide-ranging set of information about job separators and this paper uses the usual demographic variables such as age, sex, marital status and number of children, as well as household income, hourly wage at last job, and receipt of UI/EI benefits. The UI/EI administrative database contains the Record of Employment information which is used to construct individual employment histories.

2.2 The Identification of NERE Workers

Under Unemployment Insurance (UI), NEREs were defined in terms of a weeks-based criterion and, specifically, as workers with: (i) less than 14 weeks of insurable employment in the 52 weeks preceding the qualifying period; (ii) less than 14 weeks of benefit paid or payable; or (iii) any combination of (i) and (ii). Under EI, NEREs are defined using an hours-based criterion and, specifically, as workers with: (i) less than 490 hours (14 weeks at 35 hours/week) of insurable employment in the 52 weeks preceding the qualifying period; (ii) less than 490 hours for which benefits have been paid or were payable (on the basis of 35 hours per week); or (iii) any combination of (i) and (ii).

An important point to notice is that although individuals with job separations after January 1, 1997 should technically now be entirely covered by the EI legislation, in fact the period covered by the COEP is still somewhat transitional. This problem of transition is particularly acute for the identification of NERE workers since the NERE identification

period extends back two years before the actual job separation. For example, if an individual had a job separation in December 1997 (the latest possible date in the COEP sample), then his/her qualifying period is January to December 1997, and the period in which NERE status is determined is between January and December 1996. Prior to January 1, 1997 HRDC converted weeks of work to hours of employment by the simple expedient of multiplying by 35 and so the impact of the switch from weeks to hours on the definition of who is a NERE cannot be assessed with data covering job separations in the 1995 to 1997 period. Effectively, all NEREs in our sample period were identified by the 14 weeks criterion (even if it was nominally an hours criterion, multiplying weeks by 35 hours per week for everyone still basically leaves us with a weeks criterion). The impact of the change to hours on who is identified as a NERE is an interesting research question which must wait for another day.⁴

It should also be noted that the same transition problem partially applies to the calculation of benefit eligibility (for all workers — not just NEREs). For example, while the job separation may have occurred during 1997, for many people, some part of the qualifying period for EI extends back into the 1996 year and in this case, HRDC again converted weeks to hours simply by multiplying each eligible week by 35 hours. Until all of the qualifying period for every worker occurs after January 1997, we won't know the full impact of this policy change.

The first key step in identifying the sample for this analysis is to select individuals who are, by HRDC definition, NEREs to the labour market and this is a difficult process since NEREs are not explicitly flagged in any of these data sources. To identify NERE workers, we constructed work histories for all workers in the COEP survey, regardless of whether they were claimants or not, using a combination of COEP and UI/EI administrative data. Specifically, we used a combination of information from the ROE file, the benefits file,

⁴ The change from a weeks-based definition to an hours-based definition of NEREs will, in the absence of any adjustment to behaviour, change who is defined to be a NERE both in terms of the composition and the size of the NERE population. The impact of the EI change on who is classified as a NERE can be seen from the following chart:

Employment in 52 weeks preceding Qualifying Period	NERE Under UI	NERE Under EI
13 weeks at 35 hrs/week = 455 hours	Yes	Yes
13 weeks at 40 hrs/week = 520 hours	Yes	No
14 weeks at 10 hrs/week = 140 hours	No	Yes
14 weeks at 25 hrs/week = 350 hours	No	Yes
14 weeks at 35 hrs/week = 490 hours	No	No

Thus, for example, an individual who worked 13 weeks with 40 hours per week would be a new entrant under the UI regulations, but not under the EI regulations. However, an individual who worked 14 weeks with 25 hours per week would not be a new entrant under UI, but would be a new entrant under EI. In general, individuals with more weeks but fewer hours per week are less likely to be classified as NEREs under UI, compared to EI. In contrast, individuals with fewer weeks but higher weekly hours are less likely to be classified as NEREs under EI, compared to UI. Clearly, though just this change in the definition of a new or re-entrant can affect access to benefits for some individuals.

and the survey.⁵ From the survey, we know the last week of the sample job (i.e., the job separation which led the individual to be included in the COEP sample), and hence can calculate the qualifying period (i.e., the preceding 52-week period) and the NERE period (the 52 weeks preceding the qualifying period). Once we know the NERE period for any worker, we can use the Record of Employment (ROE) file to see if he/she has any ROEs which overlap the NERE period. As well, we can use the benefits file to see if he/she received any UI benefits during the NERE period. For many individuals, we can determine that the combination of weeks of benefits (from the benefit file) plus weeks of work (from the ROE file) is more than or equal to 14 weeks and hence he/she is *not* a NERE. Using the same information, we can determine that other individuals did not have at least 14 weeks of benefits plus weeks of work within the NERE period and hence they *are* NERE. Individuals who worked for the first time and had less than 14 weeks during the NERE period are labelled new workers — in contrast to re-entrant workers. Finally, survey information can be used to determine that some individuals have sample jobs with very long durations. These people might not have any ROEs during the NERE period because they were working continuously throughout that time. If, in addition, the individual reports no absences from work and normally works every week with enough hours to count as an insured week, we label him/her as a non-NERE. While we are guessing here, we feel very comfortable that the individual is almost certainly not a NERE.

After labelling all respondents to be definitely NEREs or definitely non-NEREs, we were left with 2,883 (6.7 percent) of observations which we could not comfortably identify. These observations were deleted from the sample.

In our analysis of whether or not individuals received benefits, we needed to be careful that the benefits received pertained to the sample job separation, for which we had analyzed the NERE period. Thus, we focused only upon claims made within 5 weeks of the sample job separation week (though the benefits may have been received beyond the 5-week period). In this way, we hoped to avoid using claim information where, for example, an individual is a NERE at the time of the sample job separation, but has since worked for several months and hence is no longer a NERE. Thus, we deleted any observations from the COEP survey where the respondents claimed to have received benefits, but had not made claims within 5 weeks of the sample job separation (the benefits reported in these cases are very likely to be related to another job separation). We also deleted non-regular benefits claimants — a total of 10,503 deletions, leaving us with 28,638 observations. Of these, 10,915 are from Cohorts 1 through 4 (with job separations before July 1, 1996), 6,167 are from Cohorts 5 and 6, with separations between July and December, 1996, and 11,556 are from Cohorts 7 through 10 with job separations during 1997.

⁵ Time spent on strike or on worker's compensation can be used to demonstrate non-NERE standing. These are labelled prescribed weeks/hours. Unfortunately, computerized records do not indicate "prescribed" weeks. We were told that this information is kept in personal files of claimants in regional offices. To the extent that any worker is not a NERE as a result of strike time/worker's compensation time, we will not be correctly labelling that worker.

3. *Who Are the NERE Workers?*

The new and re-entrants (NEREs) represent about 26 percent of all workers with a job separation (see Table 1, row 1) — a very significant proportion of this population which makes the study of their experiences with the Unemployment Insurance (UI)/Employment Insurance (EI) system important to consider. The percentage of job separators that are NEREs are shown for the three periods defined by the time of the job separation, namely, prior to July 1996, July-December 1996, and January-December 1997, which correspond to the timing of key changes from UI to EI.⁶ NEREs constitute 18.9 percent of all regular benefits claimants, and 16.5 percent of those receiving UI benefits (as the result of claims established in the 5 weeks following their sample job separation).

We focus on analyzing the characteristics of NERE workers. There is little information, both in terms of the incidence of NERE status for all workers with a job separation (see Table 2) and in terms of the composition of the NERE population (see Table 3). Since, as discussed in some detail above, the policy change has not yet affected who is defined as a NERE, we focus on the first columns of Tables 2 and 3 which refer to a worker with a job separation prior to July 1996 (though this choice does not affect the story to be told).

Table 2 presents estimates of the incidence, or likelihood, of being a NERE. That is, we calculated the percentage of all workers with job separation who are NEREs, for various significant sub-populations (e.g., men versus women, younger versus older workers).

Not surprisingly, the incidence of being a NERE is much higher among younger workers, since young workers are more likely to be entering the labour market for the first time than older workers; for example, the percentage of job separators aged 15-24 years who are NEREs is 51.8 percent, compared to 22.0 percent for the age group 25-34 years. Workers with lower hourly wages in their sample Record of Employment (ROE) jobs are much more likely than others to be NEREs (e.g., 41.9 percent for those with hourly wages less than \$7.00 per hour) and individuals from families with lower annual incomes are more likely to be NEREs (e.g., 33.7 percent of separators from families with total incomes⁷ less than \$20,000 are NEREs as compared to only 19.0 percent of those from families with total incomes of \$50,000+). Since younger workers are also more likely to have lower wages and lower family incomes, these are presumably connected issues.

⁶ We report results using this division of the sample, according to the policy regime in place at the time of the job separation, throughout the paper. While not particularly relevant at the NERE identification stage, the divisions are very important later for understanding the implications of the policy changes for access to benefits.

⁷ The Canadian Out of Employment Panel (COEP) survey asks respondents their total household income in the 4-week period preceding the interview. They are also asked if this is an increase or decrease from their total household income in the 4 weeks preceding the sample job separation. If there was a change, they are asked how much. We used this information to calculate household income in the 4 weeks preceding the sample ROE and then multiplied this figure by 13 to obtain an estimate of annual income.

TABLE 1
New and Re-Entrants as a Percentage of All Job Separators,
All Regular Claimants, and UI/EI Benefit Recipients

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
Percentage of All Job Separators Who Are NEREs*	26.3	26.3	26.4
Percentage of All Regular Benefit Claimants Within Five Weeks of Job Separation Who Are NEREs**	18.9	13.2	17.8
Percentage of All Benefit Recipients Who are NEREs***	16.5	10.8	15.9
<p>* the number of NEREs divided by the total number with a job separation ** the number of NEREs divided by the total number of regular benefit claimants *** the number of NEREs divided by the total number of regular recipients</p>			

The incidence of being a NERE is slightly higher for women than for men, 28.2 and 24.7 percent, respectively. This result presumably reflects the greater tendency for women, compared to men, to periodically leave and re-enter the labour force, as a strategy of balancing family and work responsibilities. In fact, if we look at separators who are parents versus those who are not, we find the incidence of being a NERE to be higher for those with no children (less than 18 years of age⁸) at home than for those with children at home; the percentages are 29.7 and 19.3, respectively. This result is presumably due to the fact that many new entrants are younger workers who have not yet had children, something which must be sorted out through multivariate analysis. We also compared all separators who are parents with parents whose youngest child is aged 6 to 10 years. We are looking here in particular for mothers who have temporarily left the labour force to care for pre-school children and who then re-enter as the children reach school age. Unfortunately, we do not have a better way of identifying this group than by the age of their youngest child. There is no difference between all fathers and fathers with a youngest child aged 6 to 10 years in the probability of being NEREs. However, for either married or single mothers, there is a marked increase in the probability of being a NERE for those with a youngest child aged 6 to 10 years compared to all mothers (e.g., from 21.9 percent for all married mothers to 31.2 percent for married mothers with a youngest child aged 6 to 10 years). Notice, single mothers are in general much more likely to be NEREs than

⁸ Number of children is at the time of the survey, rather than at the time of the job separation. There can be up to a one-year difference, so family status could have changed (e.g., through birth of a child, divorce/separation).

either married mothers or fathers (e.g., 41.8 percent for single mothers with a youngest child aged 6 to 10 years, versus 31.2 percent for married mothers and 14.2 percent for fathers in the same category).

In terms of education, having a high school diploma or a university degree is associated with a higher incidence of being a NERE, compared to having less than high school or a non-university credential. Again, it is likely that there is a connection between the level of education completed and the age of the worker which cannot be sorted out through a simple descriptive analysis (i.e., many younger workers may still be engaged in education).

Table 3 presents estimates of the composition of the NERE population and provides another way to analyze the characteristics of the NERE population. As for Table 2, we focus only on the first column. NEREs are most likely to be young; 40 percent of NEREs are between the ages of 15 and 24 years. NEREs are roughly split between men and women, as 52 percent of NEREs are men and 48 percent are women. A greater percentage of NEREs are single compared to married, 65.1 and 34.9 percent, respectively. The vast majority of NEREs are childless (76.1 percent). Thus, returning mothers do not constitute a large part of the total NERE population, despite relative high probabilities of being NEREs if they have job separation.

Given the distribution of the population, not surprisingly most of the NEREs reside in Quebec and Ontario, 22.9 and 38.1 percent respectively. Of the NEREs with children, 42 percent had children less than 5 years of age. In terms of education, almost 70 percent of NEREs had a high school diploma or less (53.0 plus 17.8 percent). In terms of hourly wage rates, over 50 percent of NEREs earned wages less than \$10.00 (16.2 plus 39.1 percent) and over 75 percent of NEREs earned wages less than \$15.00.

TABLE 2
Percentage of All Job Separators by Category Who Are New and Re-Entrants*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
<i>Age Group</i>			
age 15-24	51.8	55.3	51.9
age 25-34	22.0	21.7	24.8
age 35-44	19.5	19.1	18.5
age 45+	17.3	12.7	15.8
<i>Gender</i>			
male	24.7	22.9	24.4
female	28.2	30.7	28.6
<i>Marital Status</i>			
married	17.7	17.0	18.9
single	35.8	36.1	34.9
<i>Province</i>			
Newfoundland	19.6	19.8	25.0
P.E.I.	17.5	12.2	18.5
Nova Scotia	22.4	19.3	20.4
New Brunswick	20.9	20.5	20.9
Quebec	22.7	21.6	25.1
Ontario	30.4	33.9	27.3
Manitoba	25.3	25.9	29.1
Saskatchewan	28.4	27.3	29.9
Alberta	25.1	24.8	27.0
British Columbia	27.8	25.7	28.1

TABLE 2 (continued)
Percentage of All Job Separators by Category Who Are New and Re-Entrants*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
Children			
has no children in household <18	29.7	29.1	28.7
has child <18	19.3	19.9	21.8
Married Mother	21.9	23.4	24.6
Single Mother	33.4	34.6	33.3
Father	13.8	13.7	16.2
Married Mother/Youngest Child 6-10	31.2	30.9	26.6
Single Mother/Youngest Child 6-10	41.8	38.6	37.6
Father/Youngest Child 6-10	14.2	7.6	13.4
Education Level			
< high school	21.5	18.3	20.7
high school	29.0	28.4	28.9
non-university credentials	23.0	22.9	24.9
university credentials	28.3	34.3	28.4
Household Income (at ROE)			
< 20,000	33.7	35.9	36.3
20,000-34,999	21.0	20.7	23.8
35,000-49,999	22.6	16.2	20.6
> 50,000	19.0	20.7	16.5
Wage (ROE job)			
< \$7.00/hr	41.9	40.3	45.7
\$7.00-9.99/hr	39.9	41.5	39.7
\$10.00-14.99/hr	22.1	23.8	25.2
\$15.00-24.99/hr	15.0	10.9	12.7
\$25.00/hr	14.7	17.1	11.8

* i.e. the number of NEREs divided by the total number of job separators in each category.

TABLE 3
Composition of New and Re-Entrants by Category*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
<i>Age Group</i>			
age 15-24	40.1	46.2	40.3
age 25-34	25.7	25.5	26.7
age 35-44	18.7	16.4	17.2
age 45+	15.5	11.9	15.7
<i>Gender</i>			
male	52.1	49.9	49.3
female	47.9	50.1	50.7
<i>Marital Status</i>			
married	34.9	33.0	38.0
single	65.1	67.0	62.0
<i>Province</i>			
Newfoundland	1.7	1.9	2.2
P.E.I.	0.5	0.4	0.5
Nova Scotia	2.9	2.7	2.5
New Brunswick	2.8	3.2	2.8
Quebec	22.9	24.3	25.9
Ontario	38.1	39.8	33.6
Manitoba	3.5	3.2	4.0
Saskatchewan	3.3	3.0	3.5
Alberta	10.0	9.0	11.4
British Columbia	14.4	12.5	13.7

TABLE 3 (continued)
Composition of New and Re-Entrants by Category*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
Children			
has no children in household <18	76.1	76.3	72.3
has child <18	23.9	23.7	27.7
Married Mother	10.3	10.8	12.6
Single Mother	5.2	5.0	5.3
Father	8.4	7.9	9.7
Married Mother/Youngest Child 6-10	48.3	52.2**	45.4
Single Mother/Youngest Child 6-10	24.1	30.3**	26.3
Father/Youngest Child 6-10	27.6	17.5**	28.3
Education Level			
< high school	17.8	14.7	16.6
high school	53.0	50.8	49.7
non-university credentials	13.9	14.5	16.4
university credentials	15.3	20.0	17.3
Household Income (at ROE)			
< 20,000	29.7	30.0	29.3
20,000-34,999	22.6	22.3	26.6
35,000-49,999	23.2	18.0	19.3
>50,000	24.5	28.7	24.7
Wage (ROE job)			
< \$7.00/hr	16.2	10.9	12.0
\$7.00-9.99/hr	39.1	46.2	43.4
\$10.00-14.99/hr	24.6	26.8	27.7
\$15.00-24.99/hr	15.9	11.5	13.1
\$25.00/hr	4.1	4.6	3.9
* i.e. the percentage of all NEREs who are male/female, in each age group, etc. ** Note: Variation due, in part, to a small sample size.			

4. *How Has EI Affected NERE Access to Benefits?*

To address the question, “does the switch from Unemployment Insurance (UI) to Employment Insurance (EI) reduce new and re-entrants (NEREs)’ access to unemployment insurance benefits?”, we start with an analysis of the incidence of receiving benefits for all NEREs and then for various sub-populations of NERE workers. Secondly, we analyze the probability of NEREs receiving benefits using multivariate techniques.

4.1 Descriptive Analysis

Note first that NEREs are *much* less likely to receive benefits than non-NEREs (reciprocity rates are generally one half) under either UI or EI. Overall, there was a very small decline in the percentage of NEREs reporting benefits as a result of the full switch from UI to EI. For example, 26.9 percent of NEREs with job separation prior to July 1996 reported receiving unemployment insurance benefits and 23.8 percent of NEREs with job separation after January 1997 reported receiving unemployment insurance benefits (see Table 4).⁹ The change in the percentage of NEREs reporting benefits potentially can reflect (i) the increase in eligibility requirements from 20 to 26 weeks and (ii) the change from a weeks-based system to an hours-based system. To distinguish the relative impacts of these two changes we present results for the 3 time periods: (i) before July 1996, the date at which the eligibility condition was increased from 20 to 26 weeks; (ii) the interim period from July 1996 to December 1996 during which the increased eligibility condition was in place, but benefits still depended on the number of weeks of work during the qualifying period; and (iii) the period after January 1997 when the switch from weeks to hours was made.¹⁰

By distinguishing the effects of the two policy changes we can see that the increase in eligibility conditions substantially reduced the access to benefits for NERE workers (26.9 percent of NERE separators received benefits prior to July 1996 versus only 17.8 percent after July 1996), but the switch from a weeks-based system to an hours-based system significantly improved this situation (from 17.8 percent reciprocity to 23.8 percent reciprocity). Thus, the net effect of the two changes is only a small reduction in the overall rates of reciprocity for NEREs.

⁹ There is no significant difference in the proportion of claimants receiving benefits in the two periods. An interesting research question is thus the impact of the program changes on the probability of filing a claim.

¹⁰ As discussed earlier, even after January 1997, claimants with working time during 1996 were granted 35 hours per week for each insured week of employment. Thus, we do not yet have data available which fully reflect the new system. However, Table 4 adds a fourth column, not carried through the remainder of the paper, which looks only at separations from July 1997 to December 1997 which would minimize this “transition problem”. Results are very similar, which we find reassuring.

Notice that there is a similar overall decline in the access to benefits among regular workers. For example, non-NEREs with benefits as a percentage of all job separators with benefits, declined from 48.9 to 45.5 percent (see Table 4, row 1). However, there is not the same dip in benefit receipt between the pre-July 1996 and July-December 1996 periods for non-NERE separators (nor did they experience the same significant increase in eligibility conditions).

TABLE 4				
NEREs and Non-NEREs Who Receive Regular Benefits				
	Job Separation pre-July 1996	Job Separation July- December 1996	Job Separation January- December 1997	Job Separation July- December 1997
Percentage of Job Separators Receiving Benefits*				
Non-NEREs	48.9	52.6	45.5	46.9
NEREs	26.9	17.8	23.8	22.8
Percentage of Claimants Receiving Benefits**				
Non-NEREs	85.8	88.2	83.8	84.3
NEREs	72.5	70.1	72.8	76.2
* the number of EI recipients divided by the total number of job separators, for NEREs and non-NEREs				
** the number of EI recipients divided by the total number of claimants, for NEREs and non-NEREs				

This basic pattern of change in the access to benefits observed for all NEREs can also be found for various socio-economic groups considered separately, with some exceptions and these are reported here. Results on NEREs reporting benefits as a percentage of all NEREs, for various categories, are presented in Table 5B and for comparison, results for all non-NEREs are presented in Table 5A. Benefit receipt among NEREs declined in each of the age groups considered, with the exception of the youngest age group (15-24 years) in which case, the percentage of these youngest age NEREs receiving benefits remained about the same (at very low levels; only about 15 percent of young NEREs received benefits). The largest reduction in benefit receipt occurred for the 35 to 44 age groups (from 39.2 percent to 32.4 percent). For all but the oldest age group, benefit reciprocity declined as a result of the tighter eligibility condition, then recovered somewhat with the switch from a weeks-based to an hours-based system.

The results by gender show that while the percentage of NEREs receiving benefits decreased for women (from 27.6 to 20.6 percent), it actually increased very slightly for men (from 26.3 to 27.1 percent). Notice that female NEREs experienced a larger drop in eligibility than men as a result of the increase in minimum eligibility conditions from 20 to 26 weeks. If we look at NEREs with children living at home, it is clear that benefit receipt

dropped quite strikingly for NERE married mothers, fell for NERE single mothers, and increased for NERE fathers. We also looked at mothers and fathers with a youngest child aged 6 to 10 (our potentially re-entering parent case). Again, we found that reciprocity rates fell dramatically for mothers, but increased for fathers.

NEREs in some provinces experienced increases in access to benefits, namely, Newfoundland, New Brunswick, and Quebec. In terms of changes in benefit receipts for different levels of income, there was an increase in benefit receipt among NEREs in households with income levels in the \$35,000-49,999 range, whereas, for all-non NERE households, benefit receipts fell in each of the household income categories.

TABLE 5A			
Percentage of All Non-NEREs Receiving Benefits — by Category*			
	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
Age Group			
age 15-24	30.3	34.7	25.8
age 25-34	48.8	48.6	44.7
age 35-44	53.1	59.8	50.5
age 45+	53.6	59.1	50.4
Gender			
male	46.6	54.3	43.3
female	51.9	49.9	48.1
Marital Status			
married	51.5	55.7	49.4
single	44.9	48.1	39.9
Province			
Newfoundland	73.8	78.6	75.6
P.E.I.	81.7	85.4	76.8
Nova Scotia	62.6	68.9	63.6
New Brunswick	69.9	74.5	71.3
Quebec	60.3	59.5	55.9
Ontario	39.6	42.6	34.7
Manitoba	40.9	48.1	36.9
Saskatchewan	35.9	39.7	32.0
Alberta	35.6	33.0	28.7
British Columbia	46.5	54.8	49.9

TABLE 5A (continued)
Percentage of All Non-NEREs Receiving Benefits — by Category*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
<i>Children</i>			
has no children in household <18	46.3	49.3	43.2
has child <18	53.6	58.9	49.6
Married Mother	57.6	58.3	53.8
Single Mother	52.6	43.3	49.8
Father	50.5	62.0	46.3
Married Mother/Youngest Child 6-10	63.5	67.0	58.2
Single Mother/Youngest Child 6-10	48.8	18.8**	43.1
Father/Youngest Child 6-10	50.6	67.0	46.4
<i>Education Level</i>			
< high school	58.9	64.2	55.5
high school	45.7	53.8	44.3
non-university credentials	49.5	46.8	42.7
university credentials	42.0	35.6	37.6
<i>Household Income (at ROE)</i>			
< 20,000	53.9	54.6	47.2
20,000-34,999	54.5	56.4	53.6
35,000-49,999	52.6	53.7	48.1
> 50,000	42.3	52.6	40.2
<i>Wage (ROE job)</i>			
< \$7.00/hr	44.7	43.9	31.8
\$7.00-9.99/hr	43.6	50.1	40.3
\$10.00-14.99/hr	54.8	57.6	50.1
\$15.00-24.99/hr	52.4	56.8	51.8
\$25.00/hr	35.6	33.9	37.3
* i.e. for those who are NOT NERE, the number of recipients divided by the number of job separators in each category. ** Note: Variation due, in part, to a small sample size.			

TABLE 5B
Percentage of All NEREs Receiving Benefits — by Category*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
<i>Age Group</i>			
age 15-24	15.4	7.6	15.3
age 25-34	31.6	26.2	27.7
age 35-44	39.2	20.7	32.4
age 45+	33.8	34.9	29.6
<i>Gender</i>			
male	26.3	19.2	27.1
female	27.6	16.3	20.6
<i>Marital Status</i>			
married	37.4	27.3	30.4
single	21.3	13.0	19.7
<i>Province</i>			
Newfoundland	35.5	38.9	46.3
P.E.I.	43.3	27.3	41.4
Nova Scotia	32.3	31.5	29.1
New Brunswick	35.6	32.5	42.3
Quebec	34.9	19.8	36.4
Ontario	22.6	13.3	14.8
Manitoba	19.4	14.9	18.6
Saskatchewan	24.6	13.9	15.9
Alberta	23.7	14.5	13.8
British Columbia	25.2	21.5	25.3

TABLE 5B (continued)
Percentage of All NEREs Receiving Benefits — by Category*

	Job Separation pre-July 1996 (NERE period begins pre-July 1994)	Job Separation July- December 1996 (NERE period begins July- December 1994)	Job Separation January- December 1997 (NERE period begins January- December 1995)
<i>Children</i>			
has no children in household <18	25.0	15.6	22.7
has child <18	33.0	24.4	26.8
Married Mother	33.9	20.5	18.9
Single Mother	34.7	14.4	27.2
Father	30.8	36.1	36.2
Married Mother/Youngest Child 6-10	42.1	22.1**	16.9
Single Mother/Youngest Child 6-10	43.1	9.0**	15.8
Father/Youngest Child 6-10	24.7	31.2**	41.7
<i>Education Level</i>			
< high school	35.8	27.9	33.5
high school	22.6	15.8	19.7
non-university credentials	32.3	20.5	28.3
university credentials	26.9	13.1	22.5
<i>Household Income (at ROE)</i>			
< 20,000	31.2	13.1	26.8
20,000-34,999	40.0	20.7	32.1
35,000-49,999	28.6	20.8	40.4
> 50,000	23.0	25.4	20.1
<i>Wage (ROE job)</i>			
\$7.00/hr	21.0	15.8	17.4
\$7.00-9.99/hr	21.2	18.3	18.7
\$10.00-14.99/hr	33.6	18.5	28.2
\$15.00-24.99/hr	33.3	22.4	36.9
\$25.00/hr	41.0	9.5**	32.4
* i.e. for those who are NERE, the number of recipients divided by the number of job separators in each category.			
** Note: Variation due, in part, to a small sample size.			

4.2 Multivariate Analysis

We also examined whether the policy changes resulted in a decline in access to (un)employment insurance benefits for NERE workers, after controlling for worker characteristics and some employment characteristics. We first estimated a probit model of the probability of receiving benefits for all workers (NEREs and non-NEREs) with job separation. The key explanatory variables are: (i) a dummy variable (WEEKS26) which indicates whether the individual's job separation occurred between July 1996 and December 1997 and captures the impact of the increase in the number of weeks from 20 to 26 of required employment to qualify for benefits; (ii) a dummy variable (HRSEBASE) which indicates whether the individual's job separation occurred after January 1997 and captures the impact of the switch from a weeks-based to an hours-based criterion¹¹; and (iii) a dummy variable (NERE) which indicates whether the individual is a NERE worker. (i) and (ii) are also entered interactively with (iii) to assess whether NEREs disproportionately experience a decrease in access to unemployment insurance benefits in the two EI periods, compared to the UI period. We also include a dummy variable (NEW) which indicates that the worker is a new entrant,¹² a set of seasonal, age, education, marital status, and children dummy variables, the hourly wage at the time of the separation, household equivalent income¹³, and the regional unemployment rate.¹⁴

A second version of this model is estimated with gender and youth dummy variables interacted with both NEREs and the policy change variables since we have argued that these two groups may be particularly affected. Results are presented in Table 6.

A first main result from the probit analysis using all job separators is that the NERE variable is negative and significant indicating that the probability of a NERE worker receiving benefits is significantly lower than the probability of a regular worker receiving benefits [see Table 6, column 1]. Notice also that the NEW variable is negative and significant indicating that the probability of receiving benefits for a new entrant is even lower than that of the other NERE workers.¹⁵

¹¹ Since the increased eligibility condition for NERE workers was still in effect after January 1, 1997 (though re-expressed as 910=26X35 hours rather than as 26 weeks), all observations with job separations after January 1997 have WEEKS26=1 and HRSEBASE=1. Observations from cohorts 5 and 6 with separations between July and December of 1996 have only WEEKS26=1.

¹² We tried policy dummy interactions with this variable which were not statistically significant, so we do not include them here.

¹³ Household income is adjusted for the economies of scale available to those who live together using the Organization for Economic Cooperation and Development (OECD) equivalence scales.

¹⁴ The provincial unemployment rate varies both by province and year, partially controlling for changing economic circumstances over the period of study.

¹⁵ Since new entrants are both NERE and NEW, the two coefficients must be added to get the total effect for a new entrant.

TABLE 6
Probit Regressions of the Probability of Receiving Regular Benefits
NEREs and Non-NEREs
(Standard Errors in Parentheses)

Variable	Specification 1	Specification 2
Intercept	-1.062* (0.063)	-1.086* (0.063)
Dummy=1 if ROE in October-December	0.397* (0.025)	0.395* (0.025)
Dummy=1 if ROE in January-March	0.109* (0.031)	0.112* (0.031)
Dummy=1 if ROE in April-June	0.121* (0.028)	0.122* (0.028)
Dummy=1 post July 1996 (26 weeks required for NEREs)	0.010 (0.032)	0.013 (0.032)
Dummy=1 post January 1997 (hours system)	-0.088* (0.030)	-0.090* (0.030)
Dummy=1 if female	0.114* (0.021)	0.160* (0.023)
Dummy=1 if aged 15-24	-0.416* (0.036)	-0.383* (0.040)
Dummy=1 if aged 25-34	-0.109* (0.026)	-0.111* (0.026)
Dummy=1 if aged 45 or older	-0.046 (0.028)	-0.048*** (0.028)
Dummy=1 if single	-0.043*** (0.023)	-0.047** (0.023)
Dummy=1 if the individual has a child < 18 in household	0.005 (0.024)	0.006 (0.024)
Provincial Unemployment Rate	0.118* (0.004)	0.118* (0.004)
Dummy=1 if wage < \$7.00 per hour	-0.394* (0.044)	-0.386 (0.044)
Dummy=1 if wage \$7-10 per hour	-0.236* (0.027)	-0.235* (0.027)
Dummy=1 if wage \$15-25 per hour	0.031 (0.025)	0.035 (0.025)
Dummy=1 if wage > \$25 per hour	-0.248* (0.040)	-0.242* (0.040)
Equivalent ¹ Household Income	-5.34E-6* (8.38E-7)	-5.47E-6* (8.40E-7)

TABLE 6 (continued)
Probit Regressions of the Probability of Receiving Regular Benefits
NEREs and Non-NEREs
(Standard Errors in Parentheses)

Variable	Specification 1	Specification 2
Dummy=1 if less than high school education	0.168* (0.026)	0.171* (0.026)
Dummy=1 if non-university accreditation	-0.030 (0.027)	-0.028 (0.027)
Dummy=1 if university accreditation	-0.090* (0.030)	-0.092* (0.030)
Dummy=1 if NERE	-0.353* (0.041)	—
Interaction Dummy NERE*26 weeks required	-0.373* (0.066)	—
Interaction Dummy NERE*hours system	0.406* (0.065)	—
Dummy=1 if a new entrant	-0.100*** (0.054)	-0.100*** (0.055)
Interaction Dummy NERE*female	—	-0.454* (0.055)
Interaction Dummy NERE*male	—	-0.266* (0.054)
Interaction Dummy NERE*female*26 weeks required	—	-0.262* (0.095)
Interaction Dummy NERE*male*26 weeks required	—	-0.190** (0.096)
Interaction Dummy NERE*female*hours system	—	0.258* (0.095)
Interaction Dummy NERE*male*hours system	—	0.237** (0.095)
Interaction Dummy NERE*age 15-24*26 weeks required	—	-0.585* (0.125)
Interaction Dummy NERE*age 15-24*hours system	—	0.623* (0.140)
¹ Using Organization for Economic Cooperation and Development (OECD) equivalence scales. * significant with 99% confidence ** significant with 95% confidence *** significant with 90% confidence		

In terms of policy effects, we find that the WEEKS26 variable is insignificant overall, which is reasonable since non-NERE workers are unaffected by this change aimed specifically at NEREs. However, the HRSBATCH variable is negative and significant, indicating that for all workers, the switch from the weeks to the hours-based criterion reduced benefit eligibility. The interaction of the NERE variable with the WEEKS26 variable is negative and significant indicating that the tighter eligibility criterion reduces the probability of a NERE worker receiving benefits. However, the interaction of the NERE and the HRSBATCH variable is positive and significant indicating that the switch from the weeks to hours-based criterion increases the probability of a NERE worker receiving benefits. Thus, the 2 policy changes had off-setting impacts on NEREs overall, confirming the story apparent in the descriptive tables discussed earlier.

The second version of this model (Table 6, column 2) shows that female NERE workers are less likely than male NERE workers to receive benefits (though the opposite is true for non-NEREs). Notice that while both the female and male NERE variables (NEREFEM and NEREMAL) are negative, the coefficient on the female NERE worker variable is larger. Both the male and female NERE workers have lower probabilities of receiving benefits after the increase in the number of weeks-worked criterion (compared to the original criterion) since the interactions of NEREFEM and WEEKS26 and NEREMAL and WEEKS26 variables are negative and significant, though the reduction is larger for female NEREs. Finally, for both the male and female NERE workers, the switch to the hours-based criterion was beneficial, bringing the probability of receiving benefits back up almost to the pre-July 1996 level. The magnitude of this softening effect is roughly the same for men and women. Thus, it was the larger effect on women of the increase to a 26-week entrance requirement which results in female NEREs being worse off overall.

Younger NERE workers (15 to 24 years) are also more affected by the policy changes than others, especially by the increase in the minimum required weeks. In fact, the policy impact on NERE youth is the largest observed.

Having examined the probability of all workers (regular and NERE workers combined) receiving (un)employment insurance benefits, we turn next to focus upon a more detailed analysis of the determinants of the probability of NERE workers alone receiving benefits (see Table 7). We estimate a probit model of NERE workers receiving (un)employment insurance benefits where the two key explanatory variables included to capture the policy changes are again, (i) a dummy variable WEEKS26 indicating whether the individual's job separation occurred when the criterion increased from 20 to 26 weeks of employment (the period July to December 1996) and (ii) a dummy variable HRSBATCH indicating whether the individual's job separation occurred when the criterion switched from weeks to hours (post-January 1997). As for the previous estimates, a set of seasonal, age and education dummies are also included, along with the hourly wage at the time of separation, household equivalent income (at the time of the ROE), and regional unemployment rate.

TABLE 7
Probit Regressions of the Probability of Receiving Regular Benefits
NEREs
(Standard Errors in Parentheses)

Variable	Specification 1	Specification 2
Intercept	-1.300* (0.138)	-1.417* (0.140)
Dummy=1 if ROE in October-December	0.412* (0.055)	0.394* (0.056)
Dummy=1 if ROE in January-March	0.306* (0.067)	0.308* (0.067)
Dummy=1 if ROE in April-June	0.097 (0.063)	0.090 (0.063)
Dummy=1 post July 1996 (26 weeks required for NEREs)	-0.349* (0.065)	-0.034 (0.080)
Dummy=1 post January 1997 (hours system)	0.296* (0.062)	0.130*** (0.075)
Dummy=1 if female	-0.021 (0.045)	-0.011 (0.047)
Dummy=1 if aged 15-24	-0.250* (0.069)	0.066 (0.093)
Dummy=1 if aged 25-34	0.040 (0.060)	0.036 (0.061)
Dummy=1 if aged 45 or older	-0.008 (0.071)	-0.035 (0.071)
Dummy=1 if single	-0.223* (0.049)	-0.220* (0.050)
Dummy=1 if the individual has a child < 18 in household	-0.153* (0.055)	-0.142** (0.057)
Provincial Unemployment Rate	0.103* (0.010)	0.103* (0.010)
Dummy=1 if wage < \$7.00 per hour	-0.337* (0.080)	-0.344* (0.081)
Dummy=1 if wage \$7-10 per hour	-0.161* (0.055)	-0.145* (0.055)
Dummy=1 if wage \$15-25 per hour	0.061 (0.064)	0.061 (0.064)
Dummy=1 if wage > \$25 per hour	0.008 (0.101)	0.015 (0.101)
Equivalent ¹ Household Income	-2.33E-6 (1.77E-6)	-2.75E-6 (1.77E-6)

TABLE 7 (continued)
Probit Regressions of the Probability of Receiving Regular Benefits
NEREs
(Standard Errors in Parentheses)

Variable	Specification 1	Specification 2
Dummy=1 if less than high school education	0.219* (0.058)	0.246* (0.059)
Dummy=1 if non-university accreditation	-0.001 (0.060)	0.003 (0.061)
Dummy=1 if university accreditation	-0.100 (0.064)	-0.110*** (0.065)
Dummy=1 if a new entrant	-0.108*** (0.056)	-0.105*** (0.057)
Interaction Dummy female*youngest child 6-10	—	0.333** (0.140)
Interaction Dummy female*youngest child 6-10*26 weeks required	—	-0.746* (0.242)
Interaction Dummy female*youngest child 6-10*hours system	—	-0.073 (0.251)
Interaction Dummy age 15-24*26 weeks required	—	-0.969* (0.144)
Interaction Dummy age 15-24*hours based system	—	0.607* (0.142)
¹ Using Organization for Economic Cooperation and Development (OECD) equivalence scales. * significant with 99% confidence ** significant with 95% confidence *** significant with 90% confidence		

A second version of the model is estimated with additional variables added to take into account of youth and re-entrant parents. That is, we include dummy variables for separators who were less than 25 years old and whose youngest child was aged 6 to 10. These variables are interacted with the policy dummies to test whether or not youth and/or re-entrant parents have been differentially affected by the policy changes, compared to other NEREs (see Table 7). Finally, the model is estimated separately for men and women. The probit results are presented in Table 8.

With regard to the effect of the policy changes on the access to unemployment insurance benefits among NERE workers, the results indicate that the change in the eligibility criterion from 20 to 26 weeks decreased the probability of NEREs receiving benefits, after controlling for other worker characteristics. The results indicate that the WEEKS26 variable is negative and statistically significant (see Table 7, column 1). However, the change in the eligibility criterion from weeks to hours of employment is associated with an increase in the access to benefits; this is indicated by the positive and statistically

significant HRSBSE variable (see Table 7, column 1). These two results for the entire population of NERE workers also hold for women and men separately. Notice that when the model is estimated for male and female workers separately, the WEEKS26 and HRSBASE variables are negative and positive, respectively, and statistically significant for both the male and female equations (see Table 8, columns 1 and 3).

TABLE 8
Probit Regressions of the Probability of Receiving Regular Benefits
NERE Males and NERE Females
(Standard Errors in Parentheses)

Variable	Males		Females	
Intercept	-1.397*	-1.444*	-1.228*	1.405*
	(0.200)	(0.203)	(0.188)	-(0.195)
Dummy=1 if ROE in October-December	0.447*	0.420*	0.397*	0.406*
	(0.076)	(0.077)	(0.081)	(0.083)
Dummy=1 if ROE in January-March	0.437*	0.461*	0.220**	0.215**
	(0.094)	(0.095)	(0.097)	(0.097)
Dummy=1 if ROE in April-June	0.212**	0.219**	0.028	0.010
	(0.092)	(0.093)	(0.087)	(0.088)
Dummy=1 post July 1996 (26 weeks required for NEREs)	-0.274*	-0.054	-0.373*	0.036
	(0.091)	(0.110)	(0.095)	(0.117)
Dummy=1 post January 1997 (hours system)	0.284*	0.092	0.300*	0.159
	(0.086)	(0.105)	(0.091)	(0.114)
Dummy=1 if aged 15-24	-0.402*	-0.197	-0.121	0.313**
	(0.100)	(0.134)	(0.098)	(0.133)
Dummy=1 if aged 25-34	-0.075	-0.097	0.170**	0.163***
	(0.089)	(0.090)	(0.084)	(0.085)
Dummy=1 if aged 45 or older	-0.039	-0.084	0.003	-0.037
	(0.104)	(0.105)	(0.100)	(0.101)
Dummy=1 if single	-0.386*	-0.400*	-0.072	-0.049
	(0.077)	(0.077)	(0.068)	(0.069)
Dummy=1 if the individual has a child < 18 in household	-0.151***	-0.094	-0.163**	-0.130
	(0.088)	(0.092)	(0.074)	(0.079)
Provincial Unemployment Rate	0.107*	0.109*	0.096*	0.097*
	(0.014)	(0.014)	(0.013)	(0.014)
Dummy=1 if wage < \$7.00 per hour	-0.254***	-0.239***	-0.456*	-0.477*
	(0.135)	(0.135)	(0.103)	(0.104)
Dummy=1 if wage \$7-10 per hour	0.088	0.111	-0.370*	-0.370*
	(0.079)	(0.079)	(0.078)	(0.079)
Dummy=1 if wage \$15-25 per hour	0.075	0.082	0.055	0.054
	(0.087)	(0.087)	(0.099)	(0.101)
Dummy=1 if wage > \$25 per hour	-0.0002	-0.017	-0.004	0.009
	(0.132)	(0.133)	(0.165)	(0.165)

TABLE 8 (continued)
Probit Regressions of the Probability of Receiving Regular Benefits
NERE Males and NERE Females
(Standard Errors in Parentheses)

Variable	Males		Females	
Equivalent ¹ Household Income	-1.68E-6 (2.34)	-2.E-6 (2.32E-6)	-1.01E-6 (2.765E-6)	-1.3E-6 (2.83E-6)
Dummy=1 if less than high school education	0.233* (0.076)	0.278* (0.078)	0.175*** (0.093)	0.163*** (0.095)
Dummy=1 if non-university accreditation	0.026 (0.093)	0.022 (0.093)	-0.021 (0.082)	-0.009 (0.083)
Dummy=1 if university accreditation	0.014 (0.093)	0.012 (0.093)	-0.243* (0.091)	-0.259* (0.093)
Dummy=1 if a new entrant	-0.071 (0.079)	-0.050 (0.080)	-0.116 (0.081)	-0.135 (0.083)
Dummy=1 if youngest child 6-10	—	-0.824* (0.256)	—	0.404* (0.150)
Interaction Dummy youngest child 6-10*26 weeks required	—	0.456 (0.442)	—	-0.818* (0.258)
Interaction Dummy youngest child 6-10*hours system	—	0.241 (0.419)	—	-0.113 (0.267)
Interaction Dummy age 15-24*26 weeks required	—	-0.790* (0.196)	—	-1.225* (0.223)
Interaction Dummy age 15-24*hours based system	—	0.588* (0.191)	—	0.637* (0.221)
¹ Using Organization for Economic Cooperation and Development (OECD) equivalence scales. * significant with 99% confidence ** significant with 95% confidence *** significant with 90% confidence				

Apart from the policy changes, we also consider some of the other determinants of the probability of receiving benefits. For NERE workers, there is a lower probability of receiving unemployment insurance benefits associated with workers aged 15-24 years (compared to workers 35-44 years), single workers (compared to married workers), workers with children less than 18 years of age (compared to workers with no children less than 18 years), having an hourly wage rate of less than \$10.00 (compared to \$10.00-14.99), and having a university degree (compared to a high school diploma). These results are suggested since the coefficients on each of these dummy variables (AGE15-24, SINGLE, YCHILT18, WAGELT7, WAGE710, and UNIV) are negative and statistically significant. Notice that the results for young workers, single marital status, presence of children less than 18 years of age, hourly wage rate, and education, confirm the results indicated by the descriptive analysis of incidence presented in Table 5b. With respect to education, notice that having less than a high school diploma is associated with a higher probability of receiving unemployment insurance benefits, as the LTHIGH variable is

positive and statistically significant. Finally, being a new entrant (as opposed to a re-entrant worker) is associated with a lower access to unemployment insurance benefits; this result is indicated by a negative and statistically significant coefficient on the NEW variable.

But, are there any differential effects on our special interest groups (ie., youth and re-entrant mothers)? Results shown in Table 7 (column 2) indicate that both groups were particularly disadvantaged by the increase in the minimum weeks required for NEREs to qualify for benefits, with the impact not softened at all for re-entrant mothers by the switch from weeks to hours and the impact only partially softened for youth. Notice that the impact of the policy change was presumably primarily experienced by these two special interest groups because once we allow for differential effects for them, the WEEKS26 variable is no longer statistically significant for the NEREs overall.

The final set of regression provides estimates for NERE men and NERE women separately (Table 8). There are some differences between the results for the population of all NEREs and for men and women separately when we consider the various determinants of the probability of receiving benefits. For example, for men, the presence of children less than 18 years old is not associated with a lower probability of access to benefits (compared to men with no children); notice that the YCHLT18 variable is not significant. However, for NERE men, the presence of children 6-10 years old is associated with a lower probability of access to benefits since the YCH610 variable is negative and significant. For women, the presence of children less than 18 years old is associated with a lower probability of receiving benefits, as is the presence of children aged 6-10 years; notice that the variables YCHLT18 and YCH610 are negative and significant (Table 8).

In terms of the policy effects, women with children aged 6 to 10 experience a major reduction in access to benefits as a result of the increase in the minimum weeks, with no off-setting increase in access resulting from the change to an hours-based system. This large reduction in access to benefits is not evident for men with children aged 6 to 10.

5. *NEREs' Experiences with UI/EI*

This section presents some evidence about the new and re-entrants (NERE) experience of the Unemployment Insurance (UI) versus Employment Insurance (EI) system, compared to regular benefits recipients. First, for those receiving benefits based on claims filed within 5 weeks of the sample separation job, how do weeks of entitlement compare for NERE versus non-NERE recipients (keeping in mind that NEREs are much less likely to be entitled to any benefits)? For those NEREs who qualify for benefits (and recall that for a NERE to qualify for benefits, they must satisfy a more rigorous condition than other claimants), average weeks of entitlement are about 3 weeks less than those of non-NEREs (32.5 versus 35.6 weeks in the post January 1997 period — see Table 9). It is clear from the distribution figures presented that NEREs are more likely than non-NEREs to have entitlements of 14 to 25 weeks, or 26 to 35 weeks. NEREs are less likely to have entitlements of 36 to 45 weeks. Notice also that for both NEREs and non-NEREs, entitlements are necessarily less than 45 weeks in the EI period, given that the maximum duration of benefits has been reduced.

TABLE 9
Mean and Distribution of Benefit Entitlement Weeks for Those
Who Are Entitled to Some Weeks of Benefits

	Job Separation pre-July 1996	Job Separation July- December 1996	Job Separation January- December 1997
Non-NEREs			
Mean	35.7	34.3	35.6
percentage with 14-25 weeks	14.8	17.2	13.4
percentage with 26-35 weeks	33.5	36.4	31.4
percentage with 36-45 weeks	37.8	46.5	55.2
percentage with > 45 weeks	13.9	0.0	0.0
NEREs			
Mean	32.6	33.3	32.5
percentage with 14-25 weeks	26.1	20.3	19.3
percentage with 26-35 weeks	37.1	42.9	46.0
percentage with 36-45 weeks	28.3	36.8	34.7
percentage with > 45 weeks	8.5	0.0	0.0

Table 10 considers how claims are likely to end for NERE versus non-NERE claimants.¹⁶ NERE claimants are more likely to exhaust their benefits than non-NEREs (38.1 percent versus 31.4 percent in the post-1997 period). Non-NEREs are more likely to have their claims terminated at 52-week duration (i.e., benefit period ends before entitlement exhausted). The probability of a claim lapsing before benefits are exhausted (in most cases presumably because the individual has found a new job) is about the same for both groups (after January 1997).

TABLE 10			
Termination Code for Those With Benefits^{1*}			
	Job Separation pre-July 1996	Job Separation July- December 1996	Job Separation January- December 1997
Non-NEREs			
has lapsed (claimant stops reporting before entitlement exhausted)	50.6	51.3	47.4
has exhausted (all entitlement weeks used)	28.1	30.0	31.4
terminated at 52-week duration (benefit period ends before entitlement exhausted)	21.3	18.7	21.3
NEREs			
has lapsed (claimant stops reporting before entitlement exhausted)	44.0	57.1	47.3
has exhausted (all entitlement weeks used)	40.8	29.0	38.1
terminated at 52-week duration (benefit period ends before entitlement exhausted)	15.1	14.0	14.6
¹ Excludes any claims not terminated and any externally terminated by Commission. * i.e. the number in each category divided by the total claims that ended.			

Finally, Table 11 reports that NERE UI/EI recipients receive lower average weekly benefits than non-NEREs, not surprisingly since NEREs have lower wages. After January 1997, the average NERE EI benefit is 82.2 percent of the average weekly non-NERE benefit (\$236 versus \$287). Young NERE recipients have even lower average weekly benefits, at \$176.

¹⁶ This obviously means we are now looking only at claims which are not still in progress, and we have not attempted to determine whether this differs between NEREs and non-NEREs.

TABLE 11
Mean Weekly Regular Benefits Who Collected UI/EI Recipients
(Standard Errors in Parentheses)

	Job Separation pre-July 1996	Job Separation July- December 1996	Job Separation January- December 1997
Non-NEREs	283 (1.748)	282 (1.875)	287 (1.583)
NEREs	225 (3.669)	218 (5.739)	236 (3.669)
NEREs aged 15-24	187 (6.19)	155 (6.81)	176 (4.68)

6. Conclusions

The principal achievement of this research project has been the identification of new and re-entrants (NEREs) experiencing job separations/interruptions. Individuals who are NEREs face more stringent conditions for gaining eligibility to Unemployment Insurance (UI)/Employment Insurance (EI) benefits and hence it is disadvantageous from a worker's perspective to be labelled as a NERE. It is also important to know more about the NERE group if we wish to understand trends in UI/EI reciprocity rates, since if the NERE population grows, reciprocity rates will fall (given that it is harder for NEREs to qualify than for other unemployed workers).

Using a combination of Canadian Out of Employment Panel (COEP) survey information and UI/EI administrative data, we find that NEREs constitute about one quarter of all separators — a sizable proportion and hence an important group to understand. Who is most likely to be a NERE? Young workers (i.e., aged less than 25 years) have the highest probability of being NEREs, followed by individuals with very low hourly wages and/or low family incomes (and these are presumably often the same people). Also, mothers with a youngest child aged 6 to 10 years, some of whom may be re-entering the labour market after a period away to care for pre-school aged children, have relatively high probabilities of being NEREs if they separate from their jobs. However, if we look at the population of workers who *are* NEREs, three-quarters have no children, 65 percent are single, and 40 percent are aged less than 25 years.

NEREs are very unlikely to receive benefits under either UI or EI. Reciprocity rates for NERE separators are roughly half of those of non-NERE separators. Only 15 percent of young NEREs experiencing a job separation report receipt of benefits. Of those who do receive benefits, weeks of entitlement are about 3 weeks shorter than non-NERE recipients and weekly benefit rates are only about 80 percent of those received by non-NERE recipients.

In addition to painting a portrait of NERE job separators, this research has attempted to assess the impact of the switch from UI to EI on NEREs' access to (un)employment insurance benefits. Two aspects of the program change are particularly important for NEREs' access to benefits: (i) eligibility requirements for NERE workers were increased from 20 to 26 weeks on July 1, 1996; (ii) the change from a weeks-based system to an hours-based system affected eligibility (though with the data we currently have available, we can only partially assess the impact of this second change).

Both descriptive statistics and multivariate analysis lead to the conclusion that the increase in the minimum number of weeks necessary for NERE workers to qualify for benefits significantly reduced access to benefits for NEREs, especially young NEREs and returning mothers. For most NEREs, on the other hand, the switch to an hours-based system cushioned the blow with the result that for many NEREs, the net reduction in access to benefits resulting from the switch to EI is very small.

One of the stated objectives of the increase in the minimum eligibility conditions for NERE workers was to reduce the access to the program for younger workers so that they would establish reasonable attachment to the labour force before collecting benefits and thus not learn to become reliant on the system. Overall, the program change does reduce access for this group (and this is particularly indicated in the multivariate analysis). However, it is important to keep the *need* to reduce access in perspective. This research indicates that *very few* young NEREs actually receive UI/EI (only 15 percent). With an unemployment rate of 16.7 percent for this group in 1997,¹⁷ the potential hardship associated with tough eligibility conditions must be kept in mind.

¹⁷ Cansim, D980405.

Biographical Notes

Shelley Phipps is a Professor in the Department of Economics at Dalhousie University. She received her Ph.D. (Economics) from the University of British Columbia in 1987, and her dissertation research focused upon an evaluation of unemployment insurance reform. Since that time she has published a variety of papers on the subject of UI/EI, including several studies conducted for HRDC: (“Potential Access to Maternity and Parental Benefits”; “Maternity and Parental Leaves and Allowances: An International Comparison”; “The Role of UI in the Income Security Framework” (with L. Osberg); and “The Income Distributional and Redistributive Consequences of Unemployment Insurance” (with L. Osberg). Her current research interests include the economic well-being of children, international comparisons of social policy, poverty and inequality and decision-making within families.

Fiona MacPhail is an Economics faculty member at the University of Northern British Columbia, where she teaches courses on Labour Economics, Poverty, Inequality, Development and Intermediate Macroeconomics. She received her Ph.D. (Economics) from Dalhousie University in 1996. Her recent publications include articles on earnings inequality in the *Cambridge Journal of Economics*, *Applied Economics* and the *International Review of Applied Economics*.

Martha MacDonald is a Professor in the Economics Department, Saint Mary’s University. She holds a Ph.D. from Boston College. Her recent research has been on labour market restructuring and social security reform. She participated in the HRDC evaluation of the Atlantic Groundfish Strategy (with GTA/ARC), for which she conducted a special study on household and gender issues. She recently published “Gender and Social Security Reform: Pitfalls and Possibilities” in *Feminist Economics*, vol. 4:1, 1998.

Bibliography

Satin, A., and Shastry, W. *Survey Sampling: A Non-Mathematical Guide Second Edition*, Statistics Canada, Cat. No.12-602E, 1993.

Phipps, Shelley, and Peter Burton. "Collective Models of Family Behavior: Implications for Economic Policy", *Canadian Public Policy*, 22:2, 129-143, 1996.

Lundberg, Shelly, Robert Pollak and Terry Wales. "Do Husbands and Wives Pool Their Resources? Evidence from the UK Child Benefit", *Journal of Human Resources*, 32(3), 463-80, Summer 1997.

