

## Retirement and Skill Issues in Northern Ontario Industries

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### Résumé de l'article

Au cours de la décennie 1980, les entreprises de fabrication et de transformation ont connu une rationalisation de leurs activités et une diminution de leurs effectifs notamment par l'application de régimes de retraite anticipée. Malheureusement, il y a eu des pertes inattendues d'employés compétents de sorte que certaines entreprises ont été obligées d'embaucher de nouveaux employés spécialisés.

Les prévisions d'emploi, à moyen terme, pour le secteur minier canadien préconisent un niveau d'emploi stable accompagné d'une restructuration du travail en faveur de la mécanisation et de la technologie. En revanche, la demande pour les ingénieurs et les techniciens serait en croissance et l'on pourrait même prévoir une possibilité de pénurie. Cette transformation de la structure occupationnelle a débuté au cours de la décennie 1970 et s'est accélérée par la suite. Le même processus se passe dans le secteur forestier à un rythme plus lent. Dans ces deux secteurs, les entreprises ont mis l'emphase sur le recyclage lorsque cela s'est avéré possible.

La plupart des gestionnaires croient que l'âge est une barrière au recyclage, c'est pourquoi ils tendent à préférer la retraite anticipée. Ce faisant, ils tentent d'éviter la mise à pied de jeunes travailleurs spécialisés possédant peu d'ancienneté de préférence aux travailleurs plus âgés dont les compétences sont désuètes. Afin d'assurer le départ de ces derniers, la direction doit donc proposer des régimes de retraite anticipée répondant à leurs besoins et à leurs attentes.

Le but de cette étude consistait à définir des profils de professions et métiers pour les travailleurs de 45 à 64 ans dans l'industrie de la transformation et de la fabrication du nord de l'Ontario. Ces profils étaient composés des variables suivantes: démographique, santé, revenu présent et anticipé, et l'âge prévu et idéal de retraite. Une étude de ces profils devrait faciliter la double tâche de planifier les départs des employés et de maintenir l'ensemble des compétences dans l'entreprise.

Les données utilisées pour cette étude ont été recueillies par Schell et al. (1989) au moyen d'un questionnaire distribué par courrier aux employés de sexe masculin âgés de 45 ans et plus de huit entreprises nord-ontariennes. Les 373 réponses furent ensuite distribuées suivant les douze catégories résultant des deux dimensions: «Âge»: 45-54 (travailleurs), 55-64 (travailleurs) et 55-64 (retraités); et «Occupation»: gestionnaires/professionnels, employés à l'extraction/transformation, machinistes/électriciens/mécaniciens et autres regroupant des postes semi-spécialisés.

La grande majorité des gens interrogés étaient mariés et avaient un, deux dépendants ou plus. Au-delà de 20% des membres de trois des quatre groupes de retraités avaient deux dépendants ou plus. Pour ce qui est de la scolarité et de la possession de cartes de métier ou de licences professionnelles, le niveau de formation (et par inférence de spécialisation) des employés en extraction/transformation montrait une baisse alors que celui des autres postes était à la hausse. Les données relatives à l'ancienneté ont démontré que tous les groupes étaient relativement peu mobiles. Enfin, 27% du groupe autres de 45-55 ans, et plus de 30% des ouvriers âgés de 55-64 ans, à l'exception des gestionnaires/professionnels, s'inquiétaient de leur santé.

Tous les groupes bénéficiaient de sources de revenu autres que le salaire ou la pension de l'entreprise. Le niveau d'endettement était moins élevé chez les personnes âgées de 55-64 ans que chez les 45-54 ans. Tel n'était pas le cas pour les membres du groupe autres ou le contraire s'est présenté. Si l'on excepte les machinistes/électriciens/mécaniciens, la pension de l'entreprise s'avère insuffisante pour satisfaire aux besoins présents ou futurs des gens. Cependant, tous les groupes ont indiqué une sécurité financière grâce à des sources additionnelles de revenu. La plupart des employés de 45-55 ans sont disposés à prendre leur retraite à 55 ans ou même avant, et seulement 2 à 3% sont intéressés à travailler jusqu'à l'âge de 65 ans ou plus. Entre 10 et 13% de personnes âgées de 55-64 ans ont l'intention de travailler jusqu'à la limite d'âge, à l'exception de tous les employés à l'extraction/transformation. Ces derniers recherchent majoritairement une retraite après 26-30 ans de service, alors que les autres employés sont prêts à travailler entre 30 et 35 ans.

Ces résultats démontrent que l'intérêt à l'égard de la retraite anticipée est très élevé et que les entreprises continueront à obtenir des taux de participation élevés à toute offre de retraite anticipée dans les prochains dix ans. Les employés feront pression pour le maintien de ces offres même si l'entreprise ressent le besoin d'augmenter sa main-d'œuvre à moyen terme. Advenant une pénurie de machiniste/électriciens/mécaniciens sur le marché du travail, la firme exigera des périodes prolongées d'emploi de ses employés.

Afin de concilier ces différentes pressions, il est suggéré de créer une culture organisationnelle où l'accès à la formation serait fonction des aptitudes et non de l'âge, et où l'évaluation du rendement serait reliée étroitement à la performance. Un niveau de performance inadéquat serait suivi de recyclage dans le cas de compétences désuètes, et de retraite anticipée si l'employé refusait tout recyclage. Une telle retraite serait bien vue par tous si les conditions financières étaient raisonnables et si l'importance de la formation représentait une valeur de base dans l'entreprise. Cependant, l'émergence de cette culture est freinée par l'attitude négative de beaucoup de gestionnaires à l'égard des travailleurs âgés. Il n'en demeure pas moins qu'une telle culture axée sur la formation et la compétence faciliterait l'utilisation de la nouvelle technologie. Complétée par un système de retraite flexible relié à la performance et aux préférences des employés, elle permettrait la planification systématique de l'ensemble des compétences de l'entreprise.

# ***Retirement and Skill Issues in Northern Ontario Industries***

**Rolland LeBrasseur**

*This study is a follow-up to Schell et al. (1989), and explores the occupational and age profiles of employees 45-64 years old in relation to retirement issues. Three profiles are presented: socio-demographic including health, present and future finances, and retirement age intentions and opinions. Effective retirement packages are discussed as a matching of company and employee interests, and as a tool for managing human resource flows.*

Retirement options for some Canadian employees continue to expand because of changing company practices and positive retirement values in society. On the one hand, firms in the resource extracting and processing sectors continue the trend started in 1981 of reducing their labor forces. Downsizing was achieved, in part, by offering early retirement packages and enhanced pension benefits (Schell et al., 1989; COPS, 1986), thus driving down the retirement age. On the other hand, the *Canadian Charter of Rights and Freedoms* and the growing value of «respect for the individual» may make mandatory retirement inoperable (Special Report, 1986), giving workers the option to work to an unspecified mature age. Thus employees in the resource sector may shortly have the option to retire at any age from 50 to 65 and up.

Resource companies aiming for productivity gains have the task of gradually downsizing the workforce while retaining skilled employees. Offering early retirement packages to selected age or seniority groups of exempt and nonexempt employees has worked reasonably well, though acceptance levels have been unpredictable, varying from 30 to 100%. Flexible time limits with additional sweeteners have raised low acceptance levels,

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whereas high acceptance levels have given rise to higher than expected costs and some loss of skill. Companies occasionally are forced to recruit new employees in key occupations to make up the loss.

A recent Employment and Immigration Canada study examined the future occupational requirements in the Canadian metal mining industry (COPS, 1986). They reported that with the declining intensity of mineral use and the world-wide excess capacity, Canadian companies would emphasize productivity gains in addition to cost competitiveness. Consequently, they projected a flat employment level for the remainder of the 1980's. They also indicated a restructuring of the industry in favor of technology:

The general trend toward more mechanization in both mining and milling has resulted in the requirements for more engineering technologists and technicians. The increasing use of new computerized process control results in the need for upgrading skill levels for both electricians and instrument technicians. Electronic technicians will likely gain in importance as more electronics are utilized [...] The new technologies create a growing demand for new training to handle and repair the new machinery and equipment. The ratio of skilled to unskilled workers is growing and will continue to grow. The general trend is toward reduced requirements for direct labour and more for indirect.

The study indicated that the major portion of skills enhancement was taking place through retraining versus new hires (likely due to contract negotiations), and that the industry had not experienced shortages of new skilled workers, but that the future supply was uncertain.

Statistics indicated that the shift in occupations was taking place throughout the 1970's (COPS, 1986, Tables 2.2, 2.3). The trend continued in the 1980's with a simultaneous reduction of the workforce from 69,000 in 1981 to 51,000 in 1985. The combined effect accounted for the 17% reduction in Management and Professional positions and an 11% reduction in Machining/Electrical/Mechanical, compared to a 42% reduction in Mining/Milling positions and 39% for semi-skilled «Other» positions. Thus the loss in jobs was 2 to 3 times greater in the latter occupations.

A parallel development has taken place in the forestry industry. It also has entered a phase of stable employment levels with increasing mechanization of processing mills and occupational restructuring, though the rate of change appears to be slower than in the mining sector.

In keeping with these national trends, the resource sector in Northern Ontario continues to experience downsizing for the medium term (next 5 years), but at a much slower rate than in previous years. In this context, human resource planning is concerned with ensuring sufficient outflows of employees (by turnover, retirements and layoffs) to gradually decrease

overall employment levels while permitting some inflows of younger skilled employees. The coordination of inflows and outflows needs to be accomplished on two fronts: (1) by age so as to achieve a balance workforce age profile for continuity, orderly transitions and promotion opportunities (Pfeffer, 1985); and (2) by occupational group to ensure that pools of key skills are maintained for sustained productivity. The latter point requires careful management given the occupational restructuring taking place.

Retirement of older employees ensures that adequate human resource (HR) outflow takes place while minimizing layoffs. Involuntary turnover usually is avoided because young employees with desirable skills, but few years of seniority, are first to go. Retirement also helps to exit older workers with obsolete skills. Many managers believe that older employees make poor candidates for retraining, and are reluctant to offer them the opportunity to do so (Rosen and Jerdee, 1985). This widespread belief exists despite the evidence that age is no barrier to effective learning (Rhodes, 1983). Similarly, managers worry about the prospect of some employees choosing to remain beyond 65 years of age or beyond their 30 or 35 years of service.

In order to ensure the timely departure of older workers, management must put forward retirement packages which match the expectations and desires of the targeted employees. These packages will be offered against the background of previous early retirement offers and «rights» to continued employment. In the resource sector of Northern Ontario, Schell et al. (1989) investigated the predictors of acceptance or rejection of early retirement offers. They found that the three best predictors were Other Income (family income minus pension), Pension Income, and Health Concerns. Oddly enough, employees who accepted the offer had somewhat less Other Income and less Pension Income than those who rejected the offer. Though occupational differences were not investigated, the database created offers the opportunity to do so. Furthermore, the retirement event can be studied for the entire age range of 40 and above through intended retirement age (e.g., Morrow, 1982; Hall and Johnson, 1980). Prothero and Beach (1984) found that retirement intentions successfully predicted 76% of retirement decisions. Armed with information on the retirement predictors and retirement intentions, management can address both medium (5 years) and long term (10 years) HR planning needs.

Few occupational studies of this nature have been reported at this time. Using an American national sample, Hayward and Hardy (1985) found that poor health influenced early retirement in occupations with low substantive complexity and in occupations with high social skills more so than in occupations with low social skills, despite the higher propensity of health

problems in the blue collar occupations. However, these findings based on job characteristics are difficult to generalize to situations where common job categories are used. Beveridge (1983) examined three groups of American male workers 51-65 years of age in five organizations who had attended a retirement preparation course: management and professionals, skilled employees and technicians, and unskilled workers. He found that all three groups looked forward to retirement, though the unskilled group had difficulty imagining a personal retirement lifestyle.

In Canada, Research and Special Studies Unit of Employment and Immigration Canada have undertaken a comprehensive study of the labor market situation, experience and outlook for workers 45 years of age and over. Based on the Census data of 1971, 1981 and 1986, industry and occupational trends are examined. The report will be available shortly. Unfortunately the findings will not be reported with an occupational breakdown for each industry. According to the 1986 Census data for Ontario, the male labor force of 45-64 year olds numbered 755,000 or 27% of working males (Statistics Canada, 1987, Table 4-14).

The purpose of this article was to explore occupational and age profiles related to retirement for employees in the resource sector of Northern Ontario. These profiles should assist management in the preparation of effective retirement packages in the medium and the long term. The following topics were targeted:

- (1) demographics including health concerns;
- (2) present and future finances; and
- (3) retirement age intentions and opinions.

Armed with these occupational profiles and with industry employment trends, companies in this industrial sector and region will be in a better position to integrate their employee retirement programs with skill requirements.

## **METHODOLOGY**

The data collected by Schell et al. (1989) was accessed: a mail-survey with eight participating firms which generated 465 completed questionnaires of male employees of age 45 years or over (response rate of 34%). Note that over 80% of respondents were employed in the mining sector with the remainder in forestry. Readers are directed to this article for details on the firms, subjects and instruments used. Results on questionnaire items pertaining to the variables of interest were retained. The original data was collected in November-December 1987 and January 1988.

## Subjects

Employees between the ages of 45 and 64 were included, as well as retirees between 55 and 64 who had retired since 1983. Other respondents were excluded because of the small cell N's obtained in the age by occupation matrix. The occupation «Clerical» was omitted for the same reason. Of the original 465 participants, 373 were included in this study. The mean cell N was 31 respondents, with a range of 21 to 49. Twelve age-occupation cells were created within a 3 by 4 matrix:

Age: 45-54 (Workers), 55-64 (Workers), 55-64 (Retirees);

Occupation: Managerial/Professional, Extrating/Processing,  
Machining/Electrical/Mechanical, Other.

## Occupational Groups

The four occupational groups were obtained through adapting and collapsing the COPS (1986, Table 2.1) categories developed for the metal mining industry; the adaptation ensured that they apply to forestry and metal transformation industries as well. Note that «Other» includes a variety of skilled and semi-skilled occupations such as Carpenter, Pipefitter, Truck Driver, and Material Handler. The low-skilled occupations such as Janitor and Security Guard are excluded.

Two local union officials were interviewed together and asked to (1) review the 116 occupational titles given by respondents, and (2) place each title in one of the four categories listed above. Through discussion, most titles were categorized successfully. For the remaining titles, personnel managers within the participating companies were consulted.

## Variables Investigated

Under the socio-demographic heading, «civil status» and «number of dependents» revealed the home situation and obligations. Skills-related variables included «years of formal education» and the «possession of a trade or licence or certification». Workforce mobility was captured by «years of seniority». Health was measured by the mean of two attitudinal items using a 0-through-100, disagree-to-agree scale: «Because of my health, I feel that I can't do my job the way I would like to», and «I am considering retirement because of my poor health.»

The financial variables and statistics thereon portrayed both present and future finances. They were defined as follows:

- (1) Salary: monthly employment wages or salary.
- (2) Other Income: income obtained from a source other than the principal employment; includes earnings of spouse.
- (3) Debt: money owned to banks, credit unions, credit card companies, etc.
- (4) Debt Load: Debt divided by the sum of Salary (1) and Other Income (2). This ratio indicates number of months of family income required to reimburse the debt.
- (5) Needed Pension: monthly pension which the respondent believes he needs to maintain a desired lifestyle.
- (6) Expected/Actual Pension: monthly pension which the respondent expects to receive. In the case of retirees, the actual pension is cited.
- (7) Expected Pension Surplus (Shortfall): Expected/Actual Pension (6) minus Needed Pension (5). If the figure is positive, the expected pension more than satisfies the respondent (Surplus). If negative, the expected pension is viewed as inadequate (Shortfall).
- (8) Expected Financial Security: Other Income (2) plus Pension Surplus (Shortfall) (7). A positive figure indicates security and a negative one insecurity. Where a person considers that his expected pension is inadequate, Other Income may cover the shortfall partially or completely.
- (9) Expected/Actual Retirement Debt: level of indebtedness likely on retirement, or actual in the case of retirees.
- (10) Expected/Actual Retirement Debt Load: Expected/Actual Retirement Debt (9) divided by the sum of Other Income (2) and Expected/Actual Pension (6). This ratio indicates the number of months of family retirement income required to reimburse the retirement debt.

Retirement Age was covered by three items. Intended retirement age was covered by «I would like to retire by \_\_\_\_\_», and indicated a realistic assessment. Ideal Retirement Age referred to retirement age «if desired health and finances were available». Respondents also indicated their opinion of «required years of service» to qualify for retirement, independent of age.

## RESULTS

The group socio-demographic profiles are shown in Table 1. Marriage (or common law) appears to be the norm for all groups, with one, two, or more dependents. Divorce/Separation is highest (14%) in the Machining/Electrical/Mechanical group of 45-54 year olds. In the 55-64 age groups,

46% of Management/Professionals and 45% of Others reported having two or more dependents. A surprisingly high percentage of retirees (over 20% for 3 of the 4 groups) reported having two or more dependents.

**Table 1**  
**Socio-Demographic Profile of Occupational and Age Groups**

<i>Occupation Status Age Group</i>	<i>Management/Professional Workers</i>			<i>Machining/Elec/Mech. Workers</i>		
	<i>Retirees</i>		<i>Retirees</i>		<i>Retirees</i>	
	<i>45-54</i>	<i>55-64</i>	<i>45-54</i>	<i>55-64</i>		
• N	29	24	24	49	24	29
• % of sample	7,8%	6,4%	6,4%	13,1%	6,4%	7,8%
• Civil Status (%)						
– Married/Common-Law	93%	96%	92%	80%	88%	93%
– Divorced/Separated	3%	4%	---	14%	---	3%
– Never Married/Widowed	3%	---	8%	6%	13%	3%
• No. of Dependents (%)						
– 0	7%	13%	17%	16%	13%	10%
– 1	31%	42%	63%	20%	61%	62%
– 2 or more	62%	46%	21%	63%	26%	28%
• Yrs. of Schooling (M)	11,4	11,6	11,6	10,4	10,5	10,2
• Trade/Licence (%)	38%	42%	38%	71%	75%	90%
• Yrs. of Seniority (M)	23,4	30,0	35,7	23,9	25,0	32,9
• Health Concerns (%)	17%	17%	25%	22%	33%	35%
<i>Occupation Status Age Group</i>	<i>Extracting/Processing Workers</i>			<i>Other Workers</i>		
	<i>Retirees</i>		<i>Retirees</i>		<i>Retirees</i>	
	<i>45-54</i>	<i>55-64</i>	<i>45-54</i>	<i>55-64</i>		
• N	44	25	36	37	21	31
• % of sample	11,8%	6,7%	9,7%	9,9%	5,6%	8,3%
• Civil Status (%)						
– Married/Common-Law	86%	96%	83%	92%	86%	94%
– Divorced/Separated	9%	---	6%	5%	10%	7%
– Never Married/Widowed	5%	4%	11%	3%	5%	---
• No. of Dependents (%)						
– 0	23%	---	20%	11%	15%	23%
– 1	25%	48%	66%	24%	40%	47%
– 2 or more	52%	52%	14%	65%	45%	30%
• Yrs. of Schooling (M)	10,0	8,7	8,7	9,4	8,1	9,0
• Trade/Licence (%)	23%	40%	20%	41%	24%	42%
• Yrs. of Seniority (M)	25,1	27,7	31,0	23,0	25,8	32,7
• Health Concerns (%)	18%	32%	56%	27%	33%	48%

N.B.: N varied from 367 to 373 across variables.



The Extracting/Processing and Other groups of 45-54 year olds had higher formal education (10,0, 9,4) than their respective groups of 55-64 year olds (8,7, 8,1). This difference may be viewed as a reflection of the increase in formal education in the general population. An important drop in percentage of respondents holding a trade or licence was reported by the Extracting/Processing group (23% for those 45-54 years of age and 40% for those 55-64). The reverse was reported for the Other group with 41% for 45-54 year olds and 24% for 55-64 year olds. This finding suggests that the Extracting/Processing occupations are being de-skilled whereas occupations represented by Other are being up-skilled.

The means of Years of Seniority indicated that all occupation and age groups are relatively non-mobile. This finding is consistent with those of Slocum and Cron (1985) who found that salespeople 45 to 60 years old were not willing to relocate. It contradicts the findings of the COPS (1986) which reported high mobility in the industry for the entire workforce. It appears that mobility is characteristic of the 20-44 year olds, and not the 45-64 age group.

Focussing on respondents who indicated that their health was poor (score of 50 or above), «Other» workers in the 45-54 cohort had the highest level of concern, with 27% worried about their health. In the 55-64 cohort, all occupational groups had over 30% of members with health concerns, except for Management/Professional with only 17%.

Table 2 presents the financial profile of each group. Interpretation of these results requires some caution; only about two thirds of respondents were willing to share this information. Monthly salaries appeared somewhat low (\$2,400-\$2,800), except for Management/Professional (\$3,400-\$3,800), when compared with the average monthly earnings of employees in Forestry (\$2,628) and Mines and Quarries (\$2,914) reported in the 1986 Ontario Census (Statistics Canada, 1987, Table 5-9)<sup>1</sup>. Given that older workers are approaching their maximum earning levels, we would expect their salaries to be somewhat higher than the average.

All groups reported having sources of income in addition to wages or company pension. A variety of sources were cited: rental revenues, wife's salary, compensation (for retirees) and investment revenues. On retirement, additional sources of revenue would include R.R.S.P.'s (most cited by far), rental revenues, investment revenues and interest income.

An important reduction in Debt Load was noticable with age for all occupations when comparing 45-54 year olds to 55-64 year olds. This

<sup>1</sup> Average weekly earnings were multiplied by 4,3 to arrive at a monthly figure for comparison purposes.

decrease in indebtedness may indicate both repayment of long-term debt and an unwillingness to take on more debt. The group Other was exceptional in that debt load actually increased in the 55-64 year olds (from 3,75 to 7,05).

**Table 2**  
**Financial Profile of Occupational and Age Groups**

<i>Occupation Status Age Group</i>	<i>Management/Professional Workers</i>			<i>Machining/Elec/Mech. Workers</i>		
	<i>Retirees</i>		<i>Retirees</i>	<i>Retirees</i>		<i>Retirees</i>
	<i>45-54</i>	<i>55-64</i>		<i>45-54</i>	<i>55-64</i>	
(1) Salary	\$3459	\$3809	n/a	\$2491	\$2549	n/a
(2) Other Income	\$ 741	\$ 869	\$ 740	\$ 1219	\$ 791	\$ 543
(3) Debt	\$17286	\$ 3904	\$ 1682	\$21525	\$ 3076	\$ 2256
(4) Debt Load (3/1+2)	4,43	1,03	0,55*	5,55	0,88	1,06*
(5) Needed Pension	\$ 2096	\$ 2364	\$ 2033	\$ 1702	\$ 1670	\$ 1972
(6) Expected/Actual Pension	\$ 1957	\$ 2245	\$ 2455	\$ 1794	\$ 2145	\$ 1421
(7) Pension Surplus (Shortfall) (6-5)	(\$ 191)	(\$ 118)	\$ 404	\$ 150	\$ 475	(\$ 619)
(8) Financial Security (2 + 7)	\$ 561	\$ 231	\$ 1045	\$ 945	\$ 522	\$ 449
(9) Expected/Actual Retirement Debt	\$ 463	\$ 304	\$ 1682	\$ 1000	\$ 28	\$ 2256
(10) Expected/Actual Retirement/Debt Load (9/2+6)	0,21	0,14	0,55	0,57	0,01	1,06
<i>Occupation Status Age Group</i>	<i>Extracting/Processing Workers</i>			<i>Other Workers</i>		
	<i>Retirees</i>		<i>Retirees</i>	<i>Retirees</i>		<i>Retirees</i>
	<i>45-54</i>	<i>55-64</i>		<i>45-54</i>	<i>55-64</i>	
(1) Salary	\$2686	\$2698	n/a	\$2421	\$2420	n/a
(2) Other Income	\$ 730	\$ 523	\$ 656	\$ 927	\$ 884	\$ 495
(3) Debt	\$13356	\$ 3468	\$ 2248	\$10288	\$11813	\$ 5174
(4) Debt Load (3/1+2)	4,68	1,46	1,74*	3,75	7,05	1,06*
(5) Needed Pension	\$ 1762	\$ 1763	\$ 1580	\$ 1551	\$ 1573	\$ 1532
(6) Expected/Actual Pension	\$ 1612	\$ 1519	\$ 1499	\$ 1482	\$ 1385	\$ 1569
(7) Pension Surplus (Shortfall) (6-5)	(\$ 228)	(\$ 205)	(\$ 145)	(\$ 21)	(\$ 295)	(\$ 130)
(8) Financial Security (2 + 7)	\$ 455	\$ 189	\$ 382	\$ 779	\$ 893	\$ 446
(9) Expected/Actual Retirement Debt	\$ 1086	\$ 1978	\$ 2248	\$ 1897	\$ 3200	\$ 5174
(10) Expected/Actual Retirement/Debt Load (9/2+6)	0,72	1,49	1,74	0,76	1,71	1,06

\* Debt Load = 3/(2 + 6)

N.B. Group means are used throughout the table. N varies from 266 to 311 across variables except for Fin. Security (N = 214).

Pension Shortfalls were reported by all groups except for Machinists/Electrical/Mechanical. However, all groups reported some level of Financial Security. Furthermore, workers in all occupations showed some lack of retirement realism by reporting lower expected levels of debt retirement than that achieved by retirees.

Table 3 covers the retirement question in terms of age and years of seniority. Most of the workforce of 45-54 year olds intend to retire by 55 years of age. Their inclination to retire early is shown even more strongly in the Ideal Retirement Ages given. Only 2 to 3% of 45-54 year olds intend to work up to age 65 and over. For the 55-64 year olds, 10 to 13% intend to work to the upper age limit, with the exception being Extractors/Processors reporting 0%. The latter group exhibited realism in the face of de-skilling and retrenchment taking place within their occupations.

Most respondents in Extracting/Processing favored retirement after 26 to 30 years of service, whereas the remainder tended to favor 30 to 35 years of service.

## DISCUSSION

All four occupational groups studied are inclined to take an early retirement in the medium term (55-64 year olds), and even more so in the long term (45-54 year olds). With repeated offers of enhanced pensions for early retirement, resource companies have created strong expectations of continued offers. Given current levels of expected financial security and concerns about health, recent acceptance rates (60%) for the existing pension packages will likely continue. The company need not improve the packages significantly, other things being equal. So long as workforce downsizing remains a competitive strategy, worker expectations will coincide with company interests. However, any increase in workforce requirements, which could happen in the long term, would oblige companies to consider diminishing their use of early retirement offers.

Firms could supplement the existing workforce inflows by increasing recruitment of skilled employees while maintaining current retirement practices. However, the costs of enhanced pensions would be difficult to justify given a cost reduction strategy. Clearly, employees will pressure companies to maintain early retirement practices, and will have the sympathy of management staff who share their concerns. Furthermore, expected pension shortfalls will give rise to employee pressures to improve existing pension benefits. Though no immediate requirement exists to discontinue current retirement practices, these companies would do well to examine the scenario

for the long term. They also should seek the reasons why 30% of their staff 55-64 years of age (Management and Professionals excluded) have health concerns, and consider remedies that would decrease health risks at work.

**Table 3**  
**Intentions and Opinions of Occupational and Age Groups**  
**Concerning Retirement Age**

<i>Occupation Status Age Group</i>	<i>Management/Professional</i>			<i>Machining/Elec/Mech.</i>		
	<i>Workers</i>		<i>Retirees</i>	<i>Workers</i>		<i>Retirees</i>
	<i>45-54</i>	<i>55-64</i>	<i>55-64</i>	<i>45-54</i>	<i>55-64</i>	<i>55-64</i>
• Intended Retirement Age (%)						
– 55 & less	62%	8%	26%	61%	4%	7%
– 56-59	17%	25%	43%	18%	29%	33%
– 60-64	17%	54%	26%	10%	54%	59%
– 65 & over	3%	13%	4%	2%	13%	---
• Ideal Retirement Age (%)						
– 55 & less	76%	46%	46%	85%	38%	50%
– 56-59	10%	8%	25%	9%	21%	21%
– 60-64	10%	38%	29%	4%	33%	25%
– 65 & over	3%	8%	---	2%	8%	4%
• Required Yrs of Service (%)						
– 25 & less	24%	8%	---	6%	23%	7%
– 26-30	31%	38%	26%	64%	36%	48%
– over 30	45%	54%	74%	30%	41%	45%
<i>Occupation Status Age Group</i>	<i>Extracting/Processing</i>			<i>Other</i>		
	<i>Workers</i>		<i>Retirees</i>	<i>Workers</i>		<i>Retirees</i>
	<i>45-54</i>	<i>55-64</i>	<i>55-64</i>	<i>45-54</i>	<i>55-64</i>	<i>55-64</i>
• Intended Retirement Age (%)						
– 55 & less	52%	13%	9%	43%	10%	11%
– 56-59	27%	29%	62%	31%	48%	54%
– 60-64	16%	58%	29%	23%	33%	36%
– 65 & over	2%	---	---	3%	10%	---
• Ideal Retirement Age (%)						
– 55 & less	84%	38%	44%	73%	33%	29%
– 56-59	9%	17%	24%	16%	29%	29%
– 60-64	5%	46%	29%	8%	38%	42%
– 65 & over	2%	---	3%	3%	---	---
• Required Yrs of Service (%)						
– 25 & less	14%	13%	9%	24%	21%	7%
– 26-30	61%	46%	50%	62%	37%	45%
– over 30	25%	42%	41%	14%	42%	48%

N.B. N varies from 367 to 373 across variables.

As concerns extended employment up to and beyond age 65, the problem is of moderate size for the cohort of 55-64 year olds, where 10 to 13% of them have this intention. Persuading these employees to retire early by offering improved pension benefits may be an ineffective tactic, given that they already expect to attain financial security with existing packages. A different approach may be called for: training assessment followed by retraining where appropriate. Where worker resistance or obsolescence takes place, reliance on systematic performance appraisals and forced departure for poor performance would follow. This latter option will likely be acceptable to the workforce if use of performance appraisals is integrated in the ongoing personnel management, if training is considered important by all levels of staff, and if the terms of departure are financially reasonable.

The likelihood of skill shortages seems highest for the Machinery/Electrical/Mechanical group in light of the growing emphasis on new technology and accompanying maintenance requirements. Given this group's interest in early retirement, how can companies maintain their skills pool? Given the relative isolation of northern plants, most of the Ontario workforce likely would decline employment offers if competing offers were available. These companies may have limited options, and may have to encourage longer employment periods for its skilled workforce. Presently 13% of the 55-64 year olds in this occupational group are prepared to maintain their employment status as long as possible. Whether these employees have the desired skills or are prepared to retrain remains an unknown. Given the maintenance-oriented stage of their career and their low interest in promotions (Slocum and Cron, 1985), increasing their motivation for retraining would have to be part of a larger effort to create a company culture favorable to training. (See Pettigrew et al. (1988) for a discussion of culture change in relation to training.)

A training culture would facilitate greater use of technology by employees of all ages. An existing barrier to creating this culture lies in management attitudes and practices towards younger and older workers. Not only is there some measure of interaction and solidarity among non-management staff of all ages, but today's younger workers are aware that they will become tomorrow's older workers. A more progressive approach to training would be based on training assessment rather than age biases. Complementing this competency based framework for training, there would be flexible retirement over a wide age range, linked to work performance as well as to employee preferences. Managing human resource inflows and outflows would become complex, but the payoffs in terms of reconciling skill requirements and retirement scheduling would justify the added effort.

## REFERENCES

- BEVERIDGE, W.E., «The Approach to Retirement: A Study of the Perceptions and Expectations of a Sample of Men from Three Occupational Levels», *Journal of European Industrial Training*, Vol. 7, 1983, pp. 4-9.
- COPS, *Future Occupational Requirements and Workforce Adjustment in the Canadian Metal Mining Industry*, Canadian Occupational Projection System, Employment and Immigration Canada, 1986.
- HALL, A. and T.R. JOHNSON, «The Determinants of Planned Retirement Age», *Industrial and Labor Relations Review*, Vol. 33, 1980, pp. 241-254.
- HAYWARD, M.D. and M.A. HARDY, «Early Retirement Processes Among Older Men», *Research on Aging*, Vol. 7, 1985, pp. 491-515.
- MORROW, P.C., «Human Resource Planning and the Older Worker: Developing a Retirement Intentions Model», *Journal of Occupational Behavior*, Vol. 3, 1982, pp. 253-261.
- PETTIGREW, A., P. SPARROW and C. HENDRY, «The Forces that Trigger Training», *Personnel Management*, December 1988, pp. 28-32.
- PFEFFER, J., «Organizational Demography: Implications for Management», *California Management Review*, Vol. 28, 1985, pp. 67-81.
- PROTHERO, J. and L.R. BEACH, «Retirement Decisions: Expectation, Intention, and Action», *Journal of Applied Social Psychology*, Vol. 14, 1984, pp. 162-174.
- RHODES, S.R., «Age Related Differences in Work Attitudes and Behavior: A Review and Conceptual Analysis», *Psychological Bulletin*, Vol. 93, 1983, pp. 328-367.
- ROSEN, B. and T.H. JERDEE, *Older Employees: New Roles for Valued Resources*, Homewood, Ill., Down Jones-Irwin, 1985.
- SHELL, B., R. LEBRASSEUR and R. RENAUD, «Predictors of Acceptance of Early Retirement Offers for Workers», *Relations industrielles*, Vol. 44, 1989, pp. 376-390.
- SLOCUM, J.W. and W. CRON, «Job Attitudes and Performance during Three Career Stages», *Journal of Vocational Behavior*, Vol. 26, 1985, pp. 126-145.
- SPECIAL REPORT, *Human Resource Planning for the 90's*, Don Mills, Ontario, Canada, CCH Canadian Limited, 1986, pp. 1-8.
- STATISTICS CANADA, *Market Research Handbook*, Catalogue 63-224 Annual, 1987.

### ***Problématique de la retraite et des compétences dans les industries du nord de l'Ontario***

Au cours de la décennie 1980, les entreprises de fabrication et de transformation ont connu une rationalisation de leurs activités et une diminution de leurs effectifs notamment par l'application de régimes de retraite anticipée. Malheureusement, il y a eu des pertes inattendues d'employés compétents de sorte que certaines entreprises ont été obligées d'embaucher de nouveaux employés spécialisés.

Les prévisions d'emploi, à moyen terme, pour le secteur minier canadien préconisent un niveau d'emploi stable accompagné d'une restructuration du travail en faveur de la mécanisation et de la technologie. En revanche, la demande pour les ingénieurs et les techniciens serait en croissance et l'on pourrait même prévoir une possibilité de pénurie. Cette transformation de la structure occupationnelle a débuté au cours de la décennie 1970 et s'est accélérée par la suite. Le même processus se passe dans le secteur forestier à un rythme plus lent. Dans ces deux secteurs, les entreprises ont mis l'emphase sur le recyclage lorsque cela s'est avéré possible.

La plupart des gestionnaires croient que l'âge est une barrière au recyclage, c'est pourquoi ils tendent à préférer la retraite anticipée. Ce faisant, ils tentent d'éviter la mise à pied de jeunes travailleurs spécialisés possédant peu d'ancienneté de préférence aux travailleurs plus âgés dont les compétences sont désuètes. Afin d'assurer le départ de ces derniers, la direction doit donc proposer des régimes de retraite anticipée répondant à leurs besoins et à leurs attentes.

Le but de cette étude consistait à définir des profils de professions et métiers pour les travailleurs de 45 à 64 ans dans l'industrie de la transformation et de la fabrication du nord de l'Ontario. Ces profils étaient composés des variables suivantes: démographique, santé, revenu présent et anticipé, et l'âge prévu et idéal de retraite. Une étude de ces profils devrait faciliter la double tâche de planifier les départs des employés et de maintenir l'ensemble des compétences dans l'entreprise.

Les données utilisées pour cette étude ont été recueillies par Schell et al. (1989) au moyen d'un questionnaire distribué par courrier aux employés de sexe masculin âgés de 45 ans et plus de huit entreprises nord-ontariennes. Les 373 réponses furent ensuite distribuées suivant les douze catégories résultant des deux dimensions: «Âge»: 45-54 (travailleurs), 55-64 (travailleurs) et 55-64 (retraités); et «Occupation»: gestionnaires/professionnels, employés à l'extraction/transformation, machinistes/électriciens/mécaniciens et autres regroupant des postes semi-spécialisés.

La grande majorité des gens interrogés étaient mariés et avaient un, deux dépendants ou plus. Au-delà de 20% des membres de trois des quatre groupes de retraités avaient deux dépendants ou plus. Pour ce qui est de la scolarité et de la possession de cartes de métier ou de licences professionnelles, le niveau de formation (et par inférence de spécialisation) des employés en extraction/transformation montrait une baisse alors que celui des autres postes était à la hausse. Les données relatives à l'ancienneté ont démontré que tous les groupes étaient relativement peu mobiles. Enfin,

27% du groupe autres de 45-55 ans, et plus de 30% des ouvriers âgés de 55-64 ans, à l'exception des gestionnaires/professionnels, s'inquiétaient de leur santé.

Tous les groupes bénéficiaient de sources de revenu autres que le salaire ou la pension de l'entreprise. Le niveau d'endettement était moins élevé chez les personnes âgées de 55-64 ans que chez les 45-54 ans. Tel n'était pas le cas pour les membres du groupe autres ou le contraire s'est présenté. Si l'on excepte les machinistes/électriciens/mécaniciens, la pension de l'entreprise s'avère insuffisante pour satisfaire aux besoins présents ou futurs des gens. Cependant, tous les groupes ont indiqué une sécurité financière grâce à des sources additionnelles de revenu. La plupart des employés de 45-55 ans sont disposés à prendre leur retraite à 55 ans ou même avant, et seulement 2 à 3% sont intéressés à travailler jusqu'à l'âge de 65 ans ou plus. Entre 10 et 13% de personnes âgées de 55-64 ans ont l'intention de travailler jusqu'à la limite d'âge, à l'exception de tous les employés à l'extraction/transformation. Ces derniers recherchent majoritairement une retraite après 26-30 ans de service, alors que les autres employés sont prêts à travailler entre 30 et 35 ans.

Ces résultats démontrent que l'intérêt à l'égard de la retraite anticipée est très élevé et que les entreprises continueront à obtenir des taux de participation élevés à toute offre de retraite anticipée dans les prochains dix ans. Les employés feront pression pour le maintien de ces offres même si l'entreprise ressent le besoin d'augmenter sa main-d'oeuvre à moyen terme. Advenant une pénurie de machiniste/électriciens/mécaniciens sur le marché du travail, la firme exigerait des périodes prolongées d'emploi de ses employés.

Afin de concilier ces différentes pressions, il est suggéré de créer une culture organisationnelle où l'accès à la formation serait fonction des aptitudes et non de l'âge, et où l'évaluation du rendement serait reliée étroitement à la performance. Un niveau de performance inadéquat serait suivi de recyclage dans le cas de compétences désuètes, et de retraite anticipée si l'employé refusait tout recyclage. Une telle retraite serait bien vue par tous si les conditions financières étaient raisonnables et si l'importance de la formation représentait une valeur de base dans l'entreprise. Cependant, l'émergence de cette culture est freinée par l'attitude négative de beaucoup de gestionnaires à l'égard des travailleurs âgés. Il n'en demeure pas moins qu'une telle culture axée sur la formation et la compétence faciliterait l'utilisation de la nouvelle technologie. Complétée par un système de retraite flexible relié à la performance et aux préférences des employés, elle permettrait la planification systématique de l'ensemble des compétences de l'entreprise.