# Table of Contents

Introduction ..............................................................................................1  
Your Privacy ..............................................................................................3  
The Plan Administrator ............................................................................4  
Commonly Asked Questions ...................................................................5  
Glossary ...................................................................................................6  
Joining the Plan .......................................................................................8  
Contributions ............................................................................................9  
Credited Service ......................................................................................9  
Excess Hours and the 'Hour Bank' ...................................................... 11  
Retirement Dates ................................................................................... 12  
Pension at Retirement Date .................................................................. 15  
Plan Minimum ....................................................................................... 17  
Sample Pension Calculations .............................................................. 18  
Forms of Pension .................................................................................. 21  
Termination of Participation and Entitlement to Benefits .................... 23  
If You Become Disabled ........................................................................ 27  
If You Take a Maternity or Parental Leave ............................................ 29  
If You Die Before Your Retirement Date ................................................ 30  
If You Die After Your Retirement Date ................................................... 32  
Designation of Beneficiary - Before Your Retirement Date .................. 33  
If You Return to Work After Your Retirement Date ................................ 34  
Division of Pension on Marriage Breakdown ...................................... 35  

Appendix 1 - Earnings .................................................................A1-1

Appendix 2 - Percentage of Normal Form of Pension 
Payable at Various Ages by Options for Participants 
with Retirement Dates on or After July 1, 1989 ..................A2-1

Appendix 3 - Pension Calculation Worksheet ..................A3-1
Introduction

The primary objective of the Pulp and Paper Industry Pension Plan (the Plan) is to provide retirement income to employees in the pulp and paper industry covered by a collective agreement between their employer and the Pulp Paper and Woodworkers of Canada (PPWC) or the Communication Energy and Paperworkers Union (CEP). The Plan also provides benefits in the event of death or termination of Plan participation.

This booklet is a summary of the Plan provisions as of January 1, 2005. Your pension benefit under the Plan for all service after December 31, 1996 is based on your earnings, as defined in the Plan text, and a benefit rate of 1.4% (or such benefit rate that is in effect at the calculation date).

The Plan rules set out in this booklet apply to all active participants on January 1, 2005.

There is a list of “Commonly Asked Questions” on page 4. Answers to these questions may be found by referencing the page numbers indicated at the end of each question.

There is a glossary beginning on page 5 that defines some of the specialized terms used in this booklet. The terms that are defined in the glossary are italicized when they are used in this booklet.

Your entitlement to benefits and their amount depends entirely on the correct application of the Trust Agreement and Plan.

Because this booklet is a summary, it does not include every detail of the Plan. It is intended only as a guide to assist you in understanding the main features of the Plan applicable to most of the participants. You may obtain complete copies of the Trust Agreement and Plan from the human resources department of your employer, from your local union office or directly from the Plan Administrator.
Although this summary is intended to assist you in understanding your rights, and the Administrator will assist by answering your questions, your entitlements to benefits and the amount of benefits depend entirely on the correct application of the Trust Agreement and Plan. You will receive only the benefits resulting from the correct application of the Trust and Plan even if that amount is different from what this Plan summary provides, or from information provided to you by the Administrator, an employer or union.

**Amount of pension**

The amounts of pensions depend on many factors, particularly on your time in employment covered by the Plan and your eligible earnings while employed in and after 1997. No final determination of your service, earnings and the benefits payable will be made until you are entitled to and request commencement of payment of a benefit from the Plan.

The Trustees may amend the Trust and Plan from time to time. This could affect the benefits you will receive.
Your Privacy

Your privacy is important to us. We will respect your privacy through the protection of your personal information.

Your Personal Information

Your personal information is received or collected by the Trustees, by way of data supplied to the Plan Administrator by either your employer or yourself. Personal information is required for the purpose of administering your pension benefits. This information may be shared with the Plan actuary, Plan custodian, and other pension professionals for the purpose of calculating and processing your pension benefits. Personal information will not be collected, used or disclosed for any other purpose than for the administration of the Plan.

Purpose of Collecting Personal Information

Personal information is used for and limited to administering your pension benefits and including the following:

• determining eligibility for benefits
• calculation and payment of benefits
• providing information to you (the member)

Security

We protect your information with the appropriate security safeguards. Your personal information is kept confidential and secure and is not disclosed to anyone other than the parties mentioned above without your consent and authorization, unless required or authorized by law. If you have questions concerning the privacy of your personal information, please contact the Plan Administrator at 1-888-384-7555.

Access

You have the right to access your personal information and to correct any inaccuracies.
The Plan Administrator

The Trustees have appointed Mercer Human Resource Consulting Limited to be the Plan Administrator. The Plan Administrator maintains all of the Plan records, maintains and tracks the Plan data and is responsible for the day to day operation of the Plan. They do all of the retirement, termination, and death benefit calculations.

Telephone: 604 609 3720 (Lower Mainland)
888 384 7555 (Toll Free)

Email: pulp@mercer.com

Address: Mercer Human Resource Consulting Limited
Suite 900, Bentall 5, 550 Burrard Street
Vancouver BC V6C 3S8
Commonly Asked Questions

1. I would like to receive a retirement estimate for my retirement 4 years from now. Can you project my pension for me? (Answer on page 12)

2. How does integration with Old Age Security impact my monthly pension? (Answer on page 22)

3. What is the commuted value of my pension and how is it calculated? I am still working but I would like to know what it is. (Answer on page 24)

4. My spouse and I are separating. Can I find out the value of my pension? What do I need to do? (Answer on pages 35-36)

5. My spouse is 6 years younger than I am. How much will my pension be reduced by if I choose a joint and survivor 60%? (Answer in Appendix 2)
Glossary

active employment  You are considered to be in active employment if you are:
• at work; or
• on a layoff with recall rights; or
• on an approved leave of absence; or
• in receipt of weekly indemnity, workers’ compensation wage loss, or long term disability benefits which are paid as a result of a disability that commenced during your active employment.

annualized earnings  Your earnings in a Plan year divided by the credited service you earned during that Plan year.

average annualized earnings  As of each January 1, commencing January 1, 2003, the average of your annualized earnings in the 5 Plan years ended on the December 31 immediately preceding such January 1.

break in service  A break in service occurs when you have less than 640 hours paid in two consecutive Plan years. The break in service occurs at the end of the two consecutive Plan years.

commuted value  The lump sum present value of the pension payable to you in the future based on the rate of interest and actuarial tables adopted by the Trustees.

credited service  The total years of service used to calculate your pension benefit (i.e. past service and current service).

current service  Your service recognized by the Plan since you became a participant.

designated beneficiary  The person you have named on a Spouse and Beneficiary Designation form to receive any benefit payable from the fund in the event of your death.

earnings  The earnings upon which contributions are payable and upon which you earn pension benefits are summarized in Appendix 1.
Pulp and Paper Industry Pension Plan Summary

- **earnings update**: defined on pages 15 and 16
- **eligible banked overtime hours**: defined in Appendix 1 - *Earnings*
- **eligible hours not worked**: defined in Appendix 1 - *Earnings*
- **hours paid**: The hours for which you receive earnings on which your employer pays contributions; refer to Appendix 1 for a detailed description of *hours paid*.
- **hours worked**: defined in Appendix 1 - *Earnings*
- **locked-in**: The pension assets cannot be withdrawn in a lump sum and must be used to buy a pension at retirement.
- **past service**: Your service recognized under the Plan before you became a participant; for most participants, this is service before July 1, 1975.
- **Pension Benefits Standards Act (PBSA)**: The provincial legislation regulating pension plans registered in B.C.; all Plan provisions must meet the minimum requirements of the *PBSA*.
- **Plan year**: Coincides with your employer’s payroll year for each year except the first *Plan year*, which started on January 1, 1997.
- **retirement date**: The date you start receipt of your pension benefit.
- **spouse**: A person to whom you are married and, if no longer living with you, who has not lived separate and apart from you for more than two years.
  
  If there is no person as described above, the person who has been living with you in a marriage-like relationship for at least two years.
- **updated credited service**: defined on page 9
Joining the Plan

All employees covered by a collective agreement between their employer and the PPWC or the CEP which requires their employer to make contributions to the Plan are automatically participants of the Plan.

Other employees may also be covered by the Plan if a special arrangement has been made with the Trustees.

Additionally, a person employed by the PPWC, the CEP, or locals of them, is covered by the Plan from the date on which the union begins to make contributions on their behalf.

You do not have to enroll in the Plan; your participation will begin when your employer starts remitting contributions on your behalf.
Contributions

Employee contributions
You contribute 6% of your earnings by payroll deduction to the Plan. Commencing on January 1, 2006, you will contribute 7% of your earnings, and commencing on January 1, 2007, you will contribute 8% of your earnings to the Plan.

Employer contributions
Your employer contributes 10% of your earnings to the Plan.

No further contributions are required or permitted from either you or your employer once you have been credited with 2080 hours paid in a Plan year.

Credited Service

Before January 1, 1997
Your credited service before January 1, 1997 is the total amount of past service and current service you have on January 1, 1997.

On and After January 1, 1997
Your credited service on and after January 1, 1997 is your current service if your group entry date is before January 1, 1997.

Total credited service
The Administrator will determine your total credited service under the Plan to calculate the amount of any benefit payable on your termination, retirement or death before retirement from the Plan. It is the sum of your credited service before January 1, 1997 and your credited service on and after January 1, 1997.

For a complete list of hours paid, please refer to Appendix 1.
Updated credited service

Your updated credited service is the number that is obtained by dividing the total of your hours paid since January 1, 1997 by 1700, to a maximum of your total years of active employment from the later of January 1, 1997 or the date you first became covered by the Plan. Updated credited service is used when calculating the Plan minimum (described on page 17) and the earnings update (described on pages 15 and 16).

Example

Updated credited service calculation

For example, if you had worked 12,000 hours between January 1, 1997 and December 31, 2004, your updated credited service would be 7.0588 years (12,000 ÷ 1,700).

If you had worked 16,640 hours over the same time period, your updated credited service would be 8 years (16,640 ÷ 1,700) to a maximum of 8 years.
Excess Hours and the ‘Hour Bank’

Your hour bank is frozen at December 31, 1996. Provided you remain an active participant in the Plan, the hours in the hour bank stay with you until you retire. At retirement, the Administrator will check to see if you have any gaps in your credited service prior to January 1, 1997. As long as the gap in your credited service did not cause a break in service, the hour bank hours will be used to fill in these gaps in service prior to January 1, 1997.

For Plan years after 1996, your annual hours paid that exceed 1700 (the number required to earn a full year of current service after 1996) are reported to and tracked by the Administrator. These excess hours are used to calculate your updated credited service.

Your excess hours paid may also be used to determine your right to receive a pension. For instance, if you have more than 3400 hours paid in a period of employment lasting less than two years, your total hours paid will satisfy the Plan’s requirements for eligibility to receive a benefit.

Please note that hours paid in excess of 1700 for Plan years beginning in 1997 will have no effect on your credited service before January 1, 1997; they cannot be applied to any periods in which you did not have hours reported before January 1, 1997.
Retirement Dates

Normal retirement

Your normal retirement date is the first day of the month following your 65th birthday.

Early retirement - between ages 55 and 65

If you have reached age 55 and have two years of credited service, 3400 hours paid, two consecutive Plan years in which you worked at least 350 total hours or you have reached age 60, you have the right to receive a reduced pension on the first day of any month between age 55 and 65. Your pension is reduced by the early retirement reduction factor in effect for your age at your retirement date.

Upon your request, the Plan Administrator will provide you with a retirement package at your expected retirement date. Because your credited service and your earnings are subject to change, retirement packages are not done more than 4 months before your retirement date. You also must request your retirement package at least 30 days prior to your expected retirement date (ie. if you want to retire on December 1 you must request your retirement package no later than November 1). These packages can be sent directly to your home address and are strictly confidential.

Reduction for early retirement

The reduction factors applicable, with Trustee consent, to participants with a retirement date on or after July 1, 1989, are as follows:

<table>
<thead>
<tr>
<th>Table A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants Age at Retirement Date</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>60 - 64</td>
</tr>
<tr>
<td>59</td>
</tr>
<tr>
<td>58</td>
</tr>
<tr>
<td>57</td>
</tr>
<tr>
<td>56</td>
</tr>
<tr>
<td>55</td>
</tr>
</tbody>
</table>
Pulp and Paper Industry Pension Plan Summary

The reduction factor is pro-rated for participants with retirement dates between these exact ages. For instance, the reduction for a participant whose retirement date is after July 1, 1989 at age 57½ years is 8%.

If Trustee consent is not granted for any reason, you may still choose an early retirement date. However, your pension will be calculated using reduction factors that are substantially greater than those shown in Table A.

A different reduction factor may be used if your employer offers and you accept a severance package or incentive that is more generous than the ongoing standard early retirement benefits.

If an incentive is offered, your employer has the option of paying a supplemental contribution to the Plan to offset your early retirement. If they pay the supplemental contribution, the early retirement reduction factors in Table A apply. If they do not pay the supplemental contribution, the early retirement reduction factors in the following table (Table B) will be applied to your pension. **Before accepting an incentive or severance package, you should check with your employer to see if your pension will be affected.**

<table>
<thead>
<tr>
<th>Participants Age at Retirement Date</th>
<th>Reduction Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 - 64</td>
<td>0%</td>
</tr>
<tr>
<td>59</td>
<td>7%</td>
</tr>
<tr>
<td>58</td>
<td>14%</td>
</tr>
<tr>
<td>57</td>
<td>21%</td>
</tr>
<tr>
<td>56</td>
<td>27%</td>
</tr>
<tr>
<td>55</td>
<td>33%</td>
</tr>
</tbody>
</table>
If you continue working after age 65, you will continue earning *current service* until you choose a *retirement date* or reach age 69. At age 69 you must start receipt of your pension from the Plan even if you continue working in the industry. Neither employee nor employer contributions are made on your earnings after you reach age 69 and you cease to earn *current service*.

Please note that employment after you have reached age 65 is subject to the terms of your employer’s retirement policy.
Pulp and Paper Industry Pension Plan Summary

Pension at Retirement Date

Sum of pre-1997 and post-1996 benefits

The monthly pension paid to you on your normal retirement date is the sum of:

- the benefit you earned for credited service under the Plan before January 1, 1997; and
- the benefit you earned for credited service under the Plan on and after January 1, 1997.

Pension earned for service before January 1, 1997

Your monthly pension for service before 1997 is calculated by multiplying your total years of credited service before January 1, 1997 by the benefit rate in effect on the date of your retirement. As of January 1, 2005, the benefit rate in effect for this service is $48.24.

If there is a benefit rate increase, you are eligible for it if, at the time the increase is granted, you are either a participant or became a terminated vested participant after reaching age 55.

Earnings update

For the years ending December 31, 2002, 2003, and 2004, the Trustees implemented a procedure that, in most cases, increased the benefit that each active participant has earned to date. This procedure is referred to as the earnings update.

At the end of 2002, 2003, and 2004, the Plan Administrator did a test to determine which of the following calculations would give you the highest benefit:

- Benefit you earned to end of the prior Plan year plus the accrual rate in the prior Plan year (1.35% in 2003) times your earnings in the current Plan year divided by 12
- The current benefit accrual rate (1.4% in 2004) times your total earnings for all of the years after 1996 divided by 12
- The current benefit accrual rate (1.4% for 2004) times your average annualized earnings for the last 5 Plan years times your updated credited service divided by 12
The benefit of the earnings update process is that if your earnings increase during your years of Plan membership, your earned pension benefit will be higher if it is based on an average of your most recent earnings, rather than your total earnings. Any gaps in service you may have had after 1996 may also be filled in through the updated credited service calculation.

In 2004, the earnings update will use earnings based on the annualized average of the five years ending December 31, 2004 (2000-2004), rather than the total of all your earnings since 1996, in calculating your benefit.

As described above, your monthly pension for current service from January 1, 1997 to December 31, 2004 is equal to the greater of:

- Your benefit earned to December 31, 2003 plus 1.35% of your 2004 earnings divided by 12
- 1.4% of your total earnings for all the years after 1996 divided by 12
- 1.4% of your average annualized earnings for the five Plan years ending December 31, 2004 (2000-2004) times your updated credited service to the end of December 31, 2004 divided by 12

Provided that the funded status of the Plan is such that there is enough money to pay for the earnings update, the Trustees are planning to provide this update at the end of each year.

In any event, your monthly pension for current service beginning with 2005 is calculated by multiplying your earnings for each year of current service by the Plan’s benefit accrual rate of 1.4%.
Plan Minimum

If on December 31, 1996, you were in active employment with a participating employer, the Plan Minimum provision applies to you. This provision states that the pension payable from the Plan on your death or retirement date for service after 1996 is the greater of the pension provided under the Plan formula as explained above, or the Plan Minimum. This provision does not apply on your termination of participation under the Plan for any reason other than death or retirement.

Amount of Plan Minimum

As of January 1, 2005, the Plan Minimum is $48.24 per month per year of updated credited service after 1996.
Sample Pension Calculations

Based on the following information, you will find pension calculations for two participants with different earnings histories.

The following applies to the participant in the following examples:

• retirement date of January 1, 2005 (assumed to be after age 60);

• has 22 years of credited service before January 1, 1997;

• has 8 years of updated credited service on and after January 1, 1997; and

• assumes hourly rate increases of 2% per year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours</th>
<th>Earnings</th>
<th>Annualized Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>2080</td>
<td>$48,713.60</td>
<td>$48,713.60</td>
</tr>
<tr>
<td>1998</td>
<td>2080</td>
<td>$49,687.87</td>
<td>$49,687.87</td>
</tr>
<tr>
<td>1999</td>
<td>2080</td>
<td>$50,681.63</td>
<td>$50,681.63</td>
</tr>
<tr>
<td>2000</td>
<td>2080</td>
<td>$51,695.26</td>
<td>$51,695.26</td>
</tr>
<tr>
<td>2001</td>
<td>2080</td>
<td>$52,729.17</td>
<td>$52,729.17</td>
</tr>
<tr>
<td>2002</td>
<td>2080</td>
<td>$53,783.75</td>
<td>$53,783.75</td>
</tr>
<tr>
<td>2003</td>
<td>2080</td>
<td>$54,859.43</td>
<td>$54,859.46</td>
</tr>
<tr>
<td>2004</td>
<td>2080</td>
<td>$55,956.61</td>
<td>$55,956.61</td>
</tr>
</tbody>
</table>

Average Annualized Earnings at December 31, 2004 (average of 2000-2004 earnings) $53,804.84

Updated credited service at December 31, 2004 8 years

Benefit earned from January 1/97 to December 31, 2003 $415.41
Pulp and Paper Industry Pension Plan Summary

Pension for credited service after December 31, 1996 is equal to the greatest of:

- Your benefit earned to December 31, 2003 plus 1.35% of your 2004 earnings divided by 12
  
  \[ \frac{415.41 + 1.35\% \times 55,956.61}{12} \]
  
  \[ \approx 478.36 \]

- 1.4% of your total earnings for all the years after 1996 divided by 12
  
  \[ 1.4\% \times \frac{418,107.32}{12} \]
  
  \[ \approx 487.79 \]

- 1.4% of your average annualized earnings for the last five Plan years ending times your updated credited service divided by 12
  
  \[ 1.4\% \times \frac{53,804.84 \times 8 \text{ yrs}}{12} \]
  
  \[ \approx 502.18 \]

The greatest of the above numbers is $502.18 and therefore the pension earned after December 31, 1996 is equal to $502.18. The total monthly pension payable at retirement date:

- for credited service before January 1, 1997: $1,061.28
- for credited service after December 31, 1996: $502.18
  
  **TOTAL = $1,563.46**

---

**Example 2**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours</th>
<th>Earnings</th>
<th>Annualized Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1040</td>
<td>$24,356.80</td>
<td>$39,814.00</td>
</tr>
<tr>
<td>1998</td>
<td>1040</td>
<td>$24,843.94</td>
<td>$40,610.28</td>
</tr>
<tr>
<td>1999</td>
<td>1560</td>
<td>$38,011.22</td>
<td>$41,422.49</td>
</tr>
<tr>
<td>2000</td>
<td>2080</td>
<td>$51,695.26</td>
<td>$51,695.26</td>
</tr>
<tr>
<td>2001</td>
<td>2080</td>
<td>$52,729.17</td>
<td>$52,729.17</td>
</tr>
<tr>
<td>2002</td>
<td>2080</td>
<td>$53,783.75</td>
<td>$53,783.75</td>
</tr>
<tr>
<td>2003</td>
<td>2080</td>
<td>$54,859.43</td>
<td>$54,859.46</td>
</tr>
<tr>
<td>2004</td>
<td>2080</td>
<td>$55,956.61</td>
<td>$55,956.61</td>
</tr>
</tbody>
</table>

**Average Annualized Earnings at December 31, 2004** $53,804.84

**Updated credited service at December 31, 2004** 8 years

**Benefit earned from January 1/97 to December 31, 2003** $400.82

Employee was laid off for 6 months in each of 1997 and 1998 and 3 months in 1999
Pension for credited service after December 31, 1996 is equal to the greatest of:

- Your benefit earned to December 31, 2003 plus 1.35% of your 2004 earnings divided by 12
  
  \[ 400.82 + \frac{1.35\% \times 55,956.61}{12} = 463.77 \]

- 1.4% of your total earnings for all the years after 1996 divided by 12
  
  \[ \frac{1.4\% \times 356,236.18}{12} = 415.61 \]

- 1.4% of your average annualized earnings for the last five Plan years ending times your updated credited service divided by 12
  
  \[ \frac{1.4\% \times 53,804.84 \times 8}{12} = 502.18 \]

The total monthly pension payable at retirement date:

- for credited service before January 1, 1997: \$1,061.28
- for credited service after December 31, 1996: \$502.18

TOTAL = \$1,563.46
Forms of Pension

**Lifetime pension**

All forms of pension are paid for your lifetime. The forms of pension, as described below, determine if any benefits are paid to your spouse or beneficiary after your death. You must elect a form of pension before your retirement date and you cannot change your form of pension once it commences.

**Mandatory Joint and Survivor pension**

If you have a spouse at your retirement date, you must elect a joint and survivor form of pension which provides at least 60% of your pension continuing to your spouse in the event of your death. This means that if you die before your spouse, then your spouse will receive a lifetime pension from the Plan equal to at least 60% of your pension. If your spouse chooses to sign a written waiver of rights to a survivor pension before your retirement date, you may elect a different form of pension. You may elect to provide your spouse with 75% or 100% of your pension after your death without a written waiver.

**Normal form of pension**

The normal form of pension is a monthly benefit paid for your lifetime and guaranteed for 120 months. This means that in the event of your death at any time within the first 120 months after your retirement date, pension payments continue to your designated beneficiary or estate for the balance of this 120 month period.

**Optional forms**

The optional forms of pension that are available are the following:

**Life Only form of pension**

Your pension under this optional form is higher than under the normal form explained above, but is paid only for as long as you live, even if you die shortly after your retirement date.
The five year guarantee provides you with a pension that is greater than the normal form because the guarantee period is shorter, while the fifteen year guarantee provides you with a pension that is less than the normal form because the guarantee period is longer. The pension is paid to you for your lifetime, with the provision that if you die before the end of the guarantee period, pension payments will continue to your designated beneficiary for the balance of the five year or fifteen year guaranteed period (depending on which option you elect).

These forms also provide pensions that are less than the normal form. After your death, a lifetime pension of 60%, 75% or 100% of your pension (depending on which option you elect) is paid to your joint annuitant. Only your spouse on your retirement date or, if there is none, a former spouse may be designated as your joint annuitant.

If you elect a joint and survivor form of pension and your joint annuitant dies before you but after your pension starts, no payments from the Plan are made after your death.

You may elect to have your pension integrated with your Old Age Security benefit if your retirement date is before age 65. Under this option, you receive a higher monthly pension from the Plan until age 65, when your Old Age Security benefit normally commences. Your pension from the Plan then reduces to a lower amount for your lifetime. Any of the optional forms or the normal form of pension are available in the integrated form as long as your retirement date is before age 65.

Please note the amount of your Old Age Security benefit depends on the provisions of the Old Age Security Act. Depending on your net income level, part or all of your Old Age Security benefit may be subject to clawback.
Termination of Participation and Entitlement to Benefits

Dates when participation terminates

Your participation in the Plan terminates on the earliest of the following dates:

• your date of death; or
• your retirement date; or
• the date you have a break in service; or
• if you cease active employment, the date you transfer the commuted value of your pension out of the Plan to your locked-in RRSP/LIF or to your new employer’s registered pension plan.

Entitlement to a pension

You are entitled on termination of participation to receive a pension under the Plan once you have:

• reached age 60; or
• two years of credited service; or
• 3400 hours paid; or
• two continuous years of active employment; or
• at least 350 hours paid at the end of any 2 consecutive Plan years.

If you are not entitled to a pension

If you are not entitled to a pension, you are entitled to receive a lump sum refund of your own contributions plus interest.

These refunds are processed on an annual basis in the first quarter of each year. An Application of Refund of Employee Contributions form must be completed and returned to the Plan Administrator by the end of the prior calendar year before your refund can be processed. This form can be obtained from your employer, your local union office or from the Plan Administrator.
If you are entitled to a pension but have not reached age 55, you are entitled to choose from the following two options:

- to receive a pension anytime after reaching age 55 (your pension may be reduced - see Table A, page 12); or
- to transfer the *commuted value* of your pension out of the Plan into either your own locked-in RRSP/LIF or to your current employer’s registered pension plan.

**How is the commuted value calculated**

In simple terms, the *commuted value* is the value today of your pension at age 65. For example, if you are age 40 and have earned a monthly pension of $500, the *commuted value* is the amount of money that you would need to invest for 25 years (between age 40 and age 65) to be able to provide you with a lifetime pension at age 65 of $500 per month. The calculation also factors in mortality (i.e. the odds of you dying). The *commuted value* is highly sensitive to your age and interest rates. The older you are, the larger the amount of money you would need to invest, and the higher the interest rate, the lower the amount of money you would need to invest. The interest rates that are used to calculate the *commuted value* are set by the Canadian Institute of Actuaries and are subject to change monthly.

**Factors to consider in choosing your option at termination**

If you have terminated your participation in the Plan and wish to obtain the highest value possible from the Plan, it is very important to understand that an early retirement pension paid from the Plan has a much higher value than the *commuted value* of your pension at age 65. If you are in good health and are not concerned about dying prior to retirement, you may wish to leave your pension in the Plan and retire at the earliest possible age, at age 55, with an 18% reduction. By doing so you do not lose the value of the early retirement factors which the Plan provides – the *commuted value* of your pension at age 55 is much higher than the *commuted value* of your pension at age 65. As mentioned above, the *commuted value* of your pension is calculated at age 65 and therefore does not include any provision for the Plan’s early retirement rules. For example, for a 40 year old, the *commuted value* of a $500 pension calculated using an interest rate of 6% for the first 10 years and 7% thereafter is $12,585 calculated at age 65 (and would be $23,390 if calculated at age 55).
The Trustees recommend that, before making your choice of whether or not to transfer the commuted value of your pension from the Plan, you consider obtaining independent legal and financial advice concerning your rights and the effect of your choice from an advisor familiar with all of your personal circumstances that may affect your decision.

The Administrator will not provide you with an estimate of your commuted value until you have actually terminated your participation in the Plan.

* To estimate the commuted value of your pension that you could transfer out, multiply your monthly pension amount by the value of $1 at your age and the applicable interest rate. For example, if you are 40 years old, entitled to a $500 per month pension and interest rates are 6% for the first 10 years and 7% thereafter, the estimated commuted value of your pension is $500 x 25.17 = $12,585.

Examples of the commuted value, at age 65, of a $1* per month pension at different interest rates and ages

<table>
<thead>
<tr>
<th>Interest Rate First 10 yrs</th>
<th>Age 30</th>
<th>Age 35</th>
<th>Age 40</th>
<th>Age 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0%</td>
<td>5.0%</td>
<td>28.80</td>
<td>36.87</td>
<td>47.10</td>
</tr>
<tr>
<td>4.5%</td>
<td>5.5%</td>
<td>23.41</td>
<td>30.69</td>
<td>40.18</td>
</tr>
<tr>
<td>5.0%</td>
<td>6.0%</td>
<td>19.10</td>
<td>25.59</td>
<td>34.35</td>
</tr>
<tr>
<td>5.5%</td>
<td>6.5%</td>
<td>15.60</td>
<td>21.39</td>
<td>29.39</td>
</tr>
<tr>
<td>6.0%</td>
<td>7.0%</td>
<td>12.79</td>
<td>17.93</td>
<td>25.17</td>
</tr>
<tr>
<td>7.0%</td>
<td>8.0%</td>
<td>8.56</td>
<td>12.64</td>
<td>18.58</td>
</tr>
<tr>
<td>8.0%</td>
<td>9.0%</td>
<td>5.78</td>
<td>8.97</td>
<td>13.82</td>
</tr>
</tbody>
</table>

* To estimate the commuted value of your pension that you could transfer out, multiply your monthly pension amount by the value of $1 at your age and the applicable interest rate. For example, if you are 40 years old, entitled to a $500 per month pension and interest rates are 6% for the first 10 years and 7% thereafter, the estimated commuted value of your pension is $500 x 25.17 = $12,585.

If you are entitled to a pension and have reached age 55, you may elect a retirement date. Your pension will be reduced if you retire before age 60. (See Table A, page 12 for details.) You cannot start receiving your pension if you are still employed by a participating employer unless you have reached age 69.

If you have reached age 55, you **do not** have the option of transferring the commuted value of your pension out of the Plan.

If you transfer the value out.

If you elect to transfer the commuted value of your pension out of the Plan and you subsequently become a participant, you will be treated as a new participant (i.e. one with no prior period of participation).
If you do not transfer the commuted value of your pension out of the Plan and you subsequently become a participant, the pension you are entitled to as a terminated vested participant is maintained separately until you accumulate two years of credited service without a break in service. When this occurs, your credited service as a participant is increased by your credited service as a terminated vested participant and your records are merged.
If You Become Disabled

If you are disabled and, as a result, you are in receipt of weekly indemnity, long term disability or workers’ compensation wage loss benefits, you continue to earn both credited service and to be credited with earnings. You do not contribute to the Plan, but your employer continues to make contributions. Your earnings for purposes of the Plan are calculated as described in Appendix 1. Your employer makes contributions to the Plan based on these earnings.

There is a disability pension available under the Plan if you are not in receipt of any other disability benefits provided under the collective agreement. In order to qualify for the disability pension you must:

• be under the age of 60;
• be in receipt of a disability pension under the Canada Pension Plan;
• have received some sick pay or other disability benefit under your collective agreement but are no longer receiving any; and
• neither be engaged in or intending to engage in litigation to obtain reimbursement (that is any benefit payment or damages from a third party including an insurer).

If you have met all of the qualifications noted above or expect that you will meet them in the future, you should contact the Plan Administrator promptly in order to apply for this benefit.

If you are in the process of seeking reimbursement, you should notify the Trustees (through the Plan Administrator) prior to the date you will have a break in service that you may be applying for a disability pension from the Plan. If, at a later date, you qualify for a disability pension from the Plan, the pension will be paid retroactive to the date you would have started the disability pension had you been not seeking reimbursement. If you do not notify the Trustees...
prior to your break in service, your disability pension will only be paid retroactive to the date of your notification. If you receive any reimbursement, your disability pension payable from the Plan may be reduced.
If You Take a Maternity or Parental Leave

Contributions are optional

If you take a maternity or parental leave, you may choose to pay contributions into the Plan for the duration of your leave. If you choose to continue paying contributions, you will be considered to have *earnings* and be granted *credited service* during your leave calculated in accordance with Appendix 1. Your employer will also make contributions based on these *earnings*.

If you choose not to pay contributions to the Plan while on maternity or parental leave, you and your employer do not contribute to the Plan during your leave and you will not be granted any *credited service* nor have any *earnings* during your leave. Regardless of whether or not you choose to pay contributions to the Plan during your maternity or parental leave, the period during which you are on such leave will not count towards a *break in service*. 
If You Die Before Your Retirement Date

If you die before your retirement date and before you are entitled to a pension, a lump sum refund of your own contributions plus interest will be paid to your spouse, designated beneficiary or estate.

If you die before your retirement date and you are entitled to a pension, a pre-retirement death benefit will be paid to your spouse, designated beneficiary or estate.

Death Benefits Before Age 55

If you die before age 55 and are entitled to a pension, the Plan provides a death benefit equal to 60% of the commuted value of your pension, calculated at age 55. If you have a spouse, the death benefit is paid as a monthly pension to your spouse for life. Before the pension starts, your spouse may transfer, on a locked-in basis, the commuted value of the pension to another registered pension plan, a locked-in RRSP/LIF, or to purchase a deferred or immediate annuity. If you do not have a spouse, or if your spouse signs a Pre-Retirement Survivor Benefit Waiver form, the death benefit is paid in a lump sum to your designated beneficiary or estate.

The commuted value of the death benefit is calculated in the same way as the commuted value of your benefit on termination except that the death benefit is calculated based on pension commencement at age 55 instead of age 65. For example, if you are age 40 and have earned a monthly pension of $500, the death benefit is 60% of the amount of money that you would need to invest for 15 years (between age 40 and age 55) to be able to provide you with a lifetime monthly pension at age 55 of $410 ($500 reduced by 18% for early retirement).
Examples of the death benefit of a $1* per month pension earned to the date of death, at different interest rates and ages at death

<table>
<thead>
<tr>
<th>Interest Rate</th>
<th>Age 30 First 10 yrs Thereafter</th>
<th>Age 35</th>
<th>Age 40</th>
<th>Age 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0%</td>
<td>5.0%</td>
<td>27.81</td>
<td>35.49</td>
<td>45.39</td>
</tr>
<tr>
<td>4.5%</td>
<td>5.5%</td>
<td>23.39</td>
<td>30.65</td>
<td>40.12</td>
</tr>
<tr>
<td>5.0%</td>
<td>6.0%</td>
<td>19.76</td>
<td>26.51</td>
<td>35.55</td>
</tr>
<tr>
<td>5.5%</td>
<td>6.5%</td>
<td>16.74</td>
<td>22.98</td>
<td>31.55</td>
</tr>
<tr>
<td>6.0%</td>
<td>7.0%</td>
<td>14.23</td>
<td>19.98</td>
<td>28.07</td>
</tr>
<tr>
<td>7.0%</td>
<td>8.0%</td>
<td>10.35</td>
<td>15.17</td>
<td>22.35</td>
</tr>
<tr>
<td>8.0%</td>
<td>9.0%</td>
<td>7.53</td>
<td>11.62</td>
<td>17.91</td>
</tr>
</tbody>
</table>

* To calculate an estimate of the value of the death benefit, multiply your monthly pension amount by the value of $1 at your age and the applicable interest rate, i.e. the value of $500 a month pension for a 40 year old when interest rates are 6% for the first 10 years and 7% thereafter, is calculated as $500 x 28.07 = $14,035 (compared to an estimated commuted value on termination of $12,585).

**Death Benefits After Age 55**

If you die after age 55 but before age 65 and are entitled to a pension, the Plan provides a more generous death benefit than described above. The amount of death benefit you are entitled to depends on who you have designated as your beneficiary.

**Death benefit if you have a spouse**

If you have a spouse, the death benefit is a pension payable for life in the amount that would have been payable to you, reduced to two-thirds, if you had a retirement date on the first day of the month of your death, having elected a joint and survivor pension reduced to two-thirds (see below for example).

**Death benefit if you have a beneficiary or beneficiaries**

If you have a valid Beneficiary form on file and have designated someone other than a spouse or former spouse, the death benefit is a pension payable for 15 years in the amount that would have been payable to you if you had a retirement date on the first of the month of your death, having elected a pension guaranteed for 15 years. Please note that you can designate more than one beneficiary.
Death benefit if you do not have a spouse or a designated beneficiary

If you do not have a spouse or a designated beneficiary, a death benefit equal to 60% of the commuted value of your pension will be paid to your estate.

In calculating the pension that would have been payable to you, the reduction factors in Table A on page 12 shall apply.

Death benefit over 55 examples

Examples may be found below of the monthly lifetime pension your spouse would receive if you died at age 55, 58, 60 or 62 and had earned a monthly pension of $1,000 (unreduced) up to your date of death.

<table>
<thead>
<tr>
<th>Age Difference Between You and Your Spouse</th>
<th>Age 55</th>
<th>Age 58</th>
<th>Age 60</th>
<th>Age 62</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse 3 Years Older</td>
<td>$509.71</td>
<td>$581.99</td>
<td>$618.53</td>
<td>$618.93</td>
</tr>
<tr>
<td>Spouse 3 Years Younger</td>
<td>$496.32</td>
<td>$563.75</td>
<td>$596.80</td>
<td>$594.73</td>
</tr>
<tr>
<td>Spouse 9 Years Younger</td>
<td>$484.02</td>
<td>$546.95</td>
<td>$576.67</td>
<td>$572.13</td>
</tr>
</tbody>
</table>

Calculations to estimate the amount that someone other than a spouse would receive can be done by using the percentage for the life pension guaranteed for 15 years found in Appendix 2.

If you die after age 65 and before your retirement date, a death benefit is paid in accordance with your elected option if any. If you have not elected an option, a death benefit is paid as if you died after reaching age 55 and before reaching age 65.

If You Die After Your Retirement Date

Any benefits payable to your spouse or designated beneficiary on your death after your retirement date are paid in accordance with the option you elected.
Designation of Beneficiary — Before Your Retirement Date

In the event of your death before your retirement date

If you have a spouse, the PBSA requires that you designate your spouse as your beneficiary, unless she signs a Pre-retirement Survivor Benefit Waiver form. If you do not have a spouse, or if your spouse signs the waiver form, there are no restrictions on whom you name as your beneficiary.

If you have designated a beneficiary who is not your spouse, and if, on your date of death, you have a spouse who has not waived her rights to a pre-retirement death benefit, any pre-retirement death benefit payable from the Plan will be paid to your spouse.

If you have not designated a beneficiary, or if you wish to change your designated beneficiary, you should contact your employer, your local union office or the Plan Administrator for a Designation of Beneficiary form.
If You Return to Work After Your Retirement Date

**Before age 65**
If you return to employment covered by the Plan with a participating employer after your retirement date and before age 65, both you and your employer are required to pay contributions. The contributions you pay after your return to employment will be refunded with interest once you stop working.

**After age 65**
If you return to employment after your retirement date and after age 65, no contributions are payable by you or on your behalf by your employer.

Your pension will not be affected by your return to work and you will earn no further pension benefits.

Employment not covered by the Plan has no effect on the benefit you are receiving from the Plan.
Division of Pension on Marriage Breakdown

If your marriage breaks down, the Family Relations Act (FRA) entitles your spouse, unless you provide a written agreement or court order for an alternate arrangement, to 50% of the pension you earned under the Plan during the marriage. (Spouses who were not married to each other are not covered by the division of pension provisions of the FRA unless they make an agreement to be covered.) If you are not receiving a pension at the date of the division, the non-member spouse has the choice of either:

1. transferring the commuted value of their share out of the Plan when you are eligible to retire, or
2. receiving a separate pension when you actually retire.

The pension division formula under the FRA is as follows:

\[
50\% \times \frac{\text{years of credited service} \times \text{total pension earned during the marriage}}{\text{total credited service}}
\]

Please note the total pension amount used in the calculation is the total pension you have earned to the calculation date.

Designation as a Limited Member

Your former spouse can apply to the Plan to be designated as a Limited Member of the Plan. In order for your former spouse to be designated as a Limited Member they must file the following with the Plan Administrator:

- a completed Form 2: Request for Designation as Limited Member of Pension Plan;
- a copy of the Court Order or Separation Agreement stating your spouse’s benefit entitlement; and
- a cheque, payable to the Plan, in the amount of $500.
If your former spouse does not have any or all of the above documents they can file a *Form 1: Claim of Spouse to Interest in Member’s Pension*. This form puts the Administrator on notice that your former spouse may be claiming an interest in your pension. Once filed, no termination, retirement or death benefit will be paid out from the Plan prior to notifying your former spouse.

You or your former spouse may obtain the *Form 1* and *Form 2* directly from the Plan Administrator.

You may obtain more detailed information regarding additional provisions in the *FRA* from the Plan Administrator. Please note that, unless you have terminated your participation under the Plan, the Plan does not provide you with the *commuted value* of your pension.
Appendix 1 - Earnings

General Description

The Plan requires you and your employer to pay a certain percentage of your earnings as contributions. Your earnings, as that word is used in the Plan, has a special meaning. The calculation of earnings is shown in detail later in this Appendix. The calculation is based on the following general concept:

\[ \text{Earnings} = \text{the sum of all the hours you work except overtime hours which you bank} + \text{certain hours not worked which are described in this Appendix as eligible hours not worked} \]

Earnings are calculated by multiplying each type of hour paid by the appropriate rate described in this Appendix.

Lump sum payments are not included in earnings.

Detailed Description

1. Earnings are calculated only for the first 2080 hours paid for an employee in a calendar year.

2. Hours paid are the total of hours worked less eligible banked overtime hours plus eligible hours not worked.

3. Hours worked are those for which you are paid for performing work.

4. Eligible hours not worked are:
   • vacation, supplementary vacation and supplementary special (personal) floating holiday hours;
   • eligible banked overtime hours taken as time off;
   • statutory holiday hours in excess of the hours you worked on the holiday;
   • special (personal) floating holiday hours;
all paid leave hours including but not limited to those for first-aid training, steam plant, bereavement and apprenticeship leaves and jury duty;

hours (including those during a waiting period) you would have been regularly scheduled to work, but for a disability for which you become entitled to weekly indemnity benefits provided by your Collective Agreement;

hours you would have worked to a maximum of 8 hours per day and 40 hours per week, but for a disability for which you become entitled to long term disability benefits provided in your Collective Agreement;

hours you would have been regularly scheduled to work, but for a disability for which you become entitled to workers’ compensation wage loss benefits;

during a maternity or parental leave, hours you would have worked but for the leave to a maximum of 40 hours per week for which you pay employee contributions based on your card rate;

any other hours the Trustees resolve are to be included in eligible hours not worked.

Note: “hours you would have worked” when on weekly indemnity, long term disability, workers’ compensation wage loss benefits or maternity/parental leave does not include hours you would have been laid off, or when bargaining unit work is not performed at your work location due to a strike or lawful lock out.

5. Eligible banked overtime hours means overtime hours worked and banked

• on or after January 1, 1997; and

• before the employee has 2080 hours paid in the calendar year.

6. Earnings means the result of the following calculation:

\[ \text{Earnings} = \left( \text{hours worked} \times \text{rate paid} \right) + \left( \text{eligible hours not worked} \times \text{applicable rate pursuant to this Appendix} \right) - \left( \text{eligible banked overtime hours} \times \text{straight time rate} \right) \]
7. The rate for *hours worked* is the rate paid by the employer:
   - including continuous operating premium, shift differential, ticket bonuses (including deep-sea premium) and Sunday premium, but excluding overtime premium.

8. The rate for *eligible hours not worked* is as follows:
   - vacation, supplementary vacation and supplementary special (personal) floating holiday hours: *the card rate*;
   - *eligible banked overtime hours* and overtime hours banked before January 1, 1997 taken as time off: *the rate paid for the straight time hours taken*;
   - statutory holiday hours when a paid day in lieu is taken: *the rate for the paid day in lieu*;
   - special (personal) floating holiday hours: *the rate for the hours taken*;
   - paid leave hours: *the rate for the leave*;
   - weekly indemnity hours: *the rate which determines your weekly indemnity benefit level*;
   - long term disability hours: *your card rate at the commencement of the long term disability or the rate subsequently used to recalculate your LTD benefit level*;
   - workers’ compensation wage loss benefits hours: *your card rate*;
   - Maternity or Parental Leave hours: *your card rate*;
   - other hours which the Trustees resolve are to be included in *eligible hours not worked*: *the rate established by the Trustees*. 
Appendix 2 - Percentage of Normal Form of Pension Payable at Various Ages by Options for Participants with Retirement Dates on or After July 1, 1989
(includes early retirement reduction with Trustee consent (Table A, page 12))

<table>
<thead>
<tr>
<th>Form of Pension</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Life pension</td>
<td>83%</td>
</tr>
<tr>
<td>Life pension, guaranteed 5 years</td>
<td>83%</td>
</tr>
<tr>
<td>Life pension, guaranteed 10 years (normal form)</td>
<td>82%</td>
</tr>
<tr>
<td>Life pension, guaranteed 15 years</td>
<td>80%</td>
</tr>
<tr>
<td>Joint survivor pension (spouse 3 years older)</td>
<td>77%</td>
</tr>
<tr>
<td>- 60% continues after your death</td>
<td>76%</td>
</tr>
<tr>
<td>- 75% continues after your death</td>
<td>73%</td>
</tr>
<tr>
<td>Joint survivor pension (spouse the same age)</td>
<td>76%</td>
</tr>
<tr>
<td>- 60% continues after your death</td>
<td>75%</td>
</tr>
<tr>
<td>- 75% continues after your death</td>
<td>72%</td>
</tr>
<tr>
<td>Year</td>
<td>Joint survivor pension (spouse 3 years younger)</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>- 60% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 75% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 100% continues after your death</td>
</tr>
<tr>
<td></td>
<td>Joint survivor pension (spouse 6 years younger)</td>
</tr>
<tr>
<td></td>
<td>- 60% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 75% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 100% continues after your death</td>
</tr>
<tr>
<td></td>
<td>Joint survivor pension (spouse 9 years younger)</td>
</tr>
<tr>
<td></td>
<td>- 60% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 75% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 100% continues after your death</td>
</tr>
<tr>
<td></td>
<td>Joint survivor pension (spouse 12 years younger)</td>
</tr>
<tr>
<td></td>
<td>- 60% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 75% continues after your death</td>
</tr>
<tr>
<td></td>
<td>- 100% continues after your death</td>
</tr>
</tbody>
</table>

Percentages shown above reflect reductions based on Trustee consent where applicable, and are rounded to the nearest full percent. They are based on the January 1, 2003 actuarial valuation assumptions of a 5.75% interest rate and a UP94 mortality table. These assumptions are reviewed on an annual basis and are subject to change, resulting in a change to the percentages shown. This table provides estimated amounts of pension based on the normal form as quoted on your annual statement. For example, if you are 56 years of age and have earned a monthly pension of $1,500, in normal form (i.e., life pension guaranteed 120 months) at age 65, you may use this table to determine your monthly pension if your retirement date is at age 56 on a life guaranteed fifteen years form of pension. The $1,500 monthly benefit is multiplied by 84% to determine the approximate amount payable at age 56 ($1,260).
Appendix 3 - Pension Calculation Worksheet

Using your most recent annual statement and the factors in the table in Appendix 2, you may use the following worksheet to estimate the monthly pension payable to you at any age over 55 under the Plan.

**Pension earned until December 31, 1996**

<table>
<thead>
<tr>
<th>Credited Service</th>
<th>Benefit Rate</th>
<th>Pension</th>
</tr>
</thead>
<tbody>
<tr>
<td>For past service</td>
<td>_____ years x $_____ = $_______ (A)</td>
<td></td>
</tr>
<tr>
<td>For service after</td>
<td>_____ years x $_____ = $_______ (B)</td>
<td></td>
</tr>
</tbody>
</table>

**Pension earned for service after December 31, 1996**

Monthly pension earned up to last statement date = $_______(C)

<table>
<thead>
<tr>
<th>Years to estimated retirement date</th>
<th>Earnings in Plan year**</th>
</tr>
</thead>
<tbody>
<tr>
<td>For service from last statement date to estimated retirement date</td>
<td>* <em><strong>% x ___ (yrs) x $</strong></em>____ (÷12) = $_______ (D)</td>
</tr>
</tbody>
</table>

* (benefit accrual rate - 1.4% in 2005)

Total monthly pension payable at retirement date (A+B+C+D) = $_______ (E)

Total monthly pension payable in elected option (E x factor from Appendix 2) (factor)

\[
\text{(factor)} = \frac{\$_______}{\text{_______}} = \$_______
\]

** from your most recent annual statement

A3-1