Twenty-Fifth Actuarial Valuation

of the Assets and Liabilities Under the Railroad Retirement Acts as of December 31, 2010

U.S. Railroad Retirement Board
Bureau of the Actuary
Chicago, Illinois

UNITED STATES OF AMERICA
RAILROAD RETIREMENT BOARD
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STATEMENT OF THE RAILROAD RETIREMENT BOARD

Section 15(g) of the Railroad Retirement Act of 1974 requires that the Railroad Retirement Board, at intervals not longer than three years, estimate the liabilities created by the Act and include the estimate in its annual report. Section 22 of the Railroad Retirement Act of 1974 requires that the Board submit to the President and the Congress, by July 1 of each year, a report containing a five-year projection of the revenues to and payments from the Railroad Retirement Account. Section 502 of the Railroad Retirement Solvency Act of 1983, Public Law 98-76, requires that the Board submit to the Congress, by July 1 of each year, a report on the actuarial status of the railroad retirement system. The 25th valuation was prepared by the Board's Chief Actuary and meets these requirements. The Actuarial Advisory Committee reviewed the valuation as to assumptions and methods as required by Section 15(f) of the Railroad Retirement Act.

The Chief Actuary's report describes the results of three valuations, each valuation differing from the others as to the employment assumption on which it is based. Cash flow problems occur only under the most pessimistic employment assumption. Even under that assumption, the cash flow problems do not occur until the year 2035.

Section 502 of the Solvency Act requires recommendations with respect to tax rates and whether any part of the taxes on employers should be diverted to the Railroad Unemployment Insurance Account to aid in the repayment of any debt to the Railroad Retirement Account. The Chief Actuary's report does not recommend a change in the tax rate, nor does it recommend a diversion of taxes from the Railroad Retirement Account to the Railroad Unemployment Insurance Account.

The Board Members believe that the 25th valuation presents a fair picture of the financial condition of the railroad retirement system, and we support the conclusions reached in the report.

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The Railroad Retirement Board wishes to thank the members of the Actuarial Advisory Committee for their assistance in this important project.

Michael S. Schwartz

Walter A. Barrows

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STATEMENT OF THE ACTUARIAL ADVISORY COMMITTEE
May 30, 2012

This statement sets forth the Committee's review of the twenty-fifth actuarial valuation of the railroad retirement system. This valuation, performed as of December 31, 2010, was completed in the spring of 2012 by Mr. Frank J. Buzzi, Chief Actuary of the Railroad Retirement Board, and his staff. In both the planning and carrying out of the valuation, the Committee has counseled with Mr. Buzzi as to the structure, actuarial methods, actuarial assumptions, and procedures of the valuation and as to the scope and content of his report. In all, the Committee has met with the Chief Actuary on September 23, 2010, November 14, 2011, and May 30, 2012, for the purpose of reviewing and discussing the significant elements of the twenty-fifth valuation.

The Committee believes that the actuarial assumptions are reasonable and that the valuation results present a fair picture of the financial condition of the railroad retirement system.

Section 502 of the Railroad Retirement Solvency Act requires the Board to report to Congress on the actuarial status of the railroad retirement system each year. The report must include recommendations for any desirable financing changes. The Chief Actuary recommends no change in payroll tax rates under the railroad retirement system.

The Chief Actuary's report indicates that the average cost of the program over the projection period as measured by the excess of present value of tier 2 payroll taxes over the actuarial surplus ranges from 16.79% to 22.40% of payroll, depending on assumed future employment levels. This compares to a range of 16.13% to 21.57% of payroll in the twenty-fourth valuation.

The Committee acknowledges the valuable help of the Board, the Chief Actuary and his staff in the Committee's review of this valuation.

Respectfully submitted,

Albert Pike 3rd, M.A.A.A., Chair

Keith T. Sartain, M.A.A.A.

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REPORT OF THE ACTUARY

I. INTRODUCTION

Section 15 of the Railroad Retirement Act of 1974 requires that the Railroad Retirement Board, at intervals of not more than three years, prepare actuarial valuations of the railroad retirement system.

Section 22 of the Railroad Retirement Act of 1974 requires the Railroad Retirement Board to prepare an annual report containing a five-year projection of revenues to and payments from the Railroad Retirement Account and to submit the report to the President and the Congress by July 1. This report must also contain a five-year projection of the account benefits ratio and average account benefits ratio. If the five-year projection indicates that funds in the Railroad Retirement Account will be insufficient to pay full benefits, (1) representatives of railroad employees, railroad carriers and the President must submit proposals to the Congress to preserve the financial solvency of the Railroad Retirement Account, and (2) the Railroad Retirement Board must issue regulations to reduce annuity levels during any fiscal year in which there would be insufficient funds to make full payments.

Section 502 of the Railroad Retirement Solvency Act of 1983 requires the Railroad Retirement Board to prepare an annual report on the actuarial status of the railroad retirement system and to submit the report to the Congress by July 1. The report must contain recommendations for any financing changes which might be advisable, including (1) changes in the tax rates, and (2) whether any part of the taxes on employers should be diverted to the Railroad Unemployment Insurance Account to aid in the repayment of any debt to the Railroad Retirement Account.

This report, the 25th actuarial valuation, is intended to meet these three requirements for 2012.

II. SUMMARY OF RECENT DEVELOPMENTS AND RESULTS

Recent actuarial reports have discussed in detail the importance of the level of railroad employment to the railroad retirement system's financial stability. The payroll tax on railroad employment has been the major source of income to the system since its establishment in the 1930s. It is clear that with a fixed tax rate the fewer railroad workers there are, the less money the retirement account collects in payroll taxes, and the more likely the system is to require additional funds. Declines in railroad employment over a long period, coupled with inflation and subsequent benefit increases, required legislation to strengthen the system's financial condition in 1974, 1981, 1983, and 1987. With the introduction of the average account benefits ratio to automatically adjust the payroll tax rates in 2004 and later, there is less need for corrective legislation.

The 24th valuation (2009 actuarial report) projected a surplus of 0.35 percent of tier 2 payroll and an average tier 2 tax rate of 18.97 percent under the intermediate employment assumption. Since the 24th valuation employment dropped in 2009 and 2010, then rose to close to the optimistic assumption in 2011, investment return and inflation have been favorable while wage increases have been lower than projected. The average tier 2 tax rate has increased to 19.70 percent, and the surplus has increased to 0.42 percent of tier 2 payroll. Most of the increase in the average tier 2 tax

rate was expected based on tax increases projected in the 24th valuation, with the remainder attributable to changes in experience and assumptions (see Section V). The combined effect of a 0.73 percent of payroll increase in projected future tier 2 tax rates net of a 0.07 percent of payroll increase in projected surplus results in an overall increase in cost equal to 0.66 percent of tier 2 payroll.

The 25th valuation has been prepared under three assumptions as to the future behavior of railroad employment. These employment assumptions are similar to the employment assumptions used in the 24th valuation. Employment assumptions I and II assume stable passenger employment and different rates of decline in freight employment. Employment assumption III follows the structure of assumptions I and II, except that it has declines in passenger employment and steeper declines in freight employment than employment assumptions I and II. Employment assumptions I, II and III are intended to provide an optimistic, moderate and pessimistic outlook, respectively. The specific results of the projections made in this report of the railroad retirement system's financial condition are as follows:

1. Under employment assumption I, the average tier 2 tax rate is 17.25 percent, and an actuarial surplus of 0.46 percent of tier 2 payroll exists as of December 31, 2010. There are no cash flow problems during the 75-year projection period, and the tier 2 payroll tax rate ranges from 10.0% to 20.0%.

2. Under employment assumption II, the average tier 2 tax rate is 19.70 percent, and an actuarial surplus of 0.42 percent of tier 2 payroll exists as of December 31, 2010. There are no cash flow problems during the 75-year projection period, and the tier 2 payroll tax rate ranges from 12.0% to 27.0%.

3. Under employment assumption III, the average tier 2 tax rate is 21.82 percent, and an actuarial deficiency of 0.58 percent of tier 2 payroll exists as of December 31, 2010. Cash flow problems arise in 2035 and remain to the end of the 75-year projection period. The tier 2 payroll tax rate ranges from 16.0% to 27.0%.

The average tier 2 tax rate is calculated by dividing the present value of tier 2 payroll taxes by the present value of tier 2 payroll as of January 1, 2011. The surplus or deficiency figures given above represent the change in the average tier 2 tax rate which would produce a balance of zero in the combined National Railroad Retirement Investment Trust, Railroad Retirement Account and Social Security Equivalent Benefit Account at the end of the 75-year projection period.

The conclusion is that, barring a sudden, unanticipated, large drop in railroad employment or substantial investment losses, the railroad retirement system will experience no cash flow problems during the next 23 years. The long-term stability of the system, however, is not assured. Under the current financing structure, actual levels of railroad employment and investment return over the coming years will determine whether additional corrective action is necessary.

As mentioned earlier, this report is intended to meet the requirements of Section 502 of the 1983 Solvency Act. Section 502 requires recommendations with regard to (1) the tax rates and (2)

whether any part of the taxes on employers should be diverted to the Railroad Unemployment Insurance Account to aid in the repayment of its debt to the Railroad Retirement Account.

1. This report recommends no change in the rate of tax imposed on employers and employees.

   The tier 2 tax rate schedule maintains a close balance between the present value of future income and expenditures. Although future financing problems are projected to occur under employment assumption III, as discussed above, the absence of projected cash flow problems for at least 23 years under each employment assumption indicates that an immediate change in the tax rate schedule is not required.

2. No diversion of taxes from the Railroad Retirement Account to the Railroad Unemployment Insurance Account is recommended. As of May 30, 2012, there are no loans outstanding from the Railroad Retirement Account to the Railroad Unemployment Insurance Account.

Section V of this report presents details of the valuations under the three employment assumptions.

III. REGULAR AND SUPPLEMENTAL BENEFITS AND THEIR FINANCING

The Appendix contains a detailed description of the provisions of the current law. Sections III and IV provide a more general summary of the law.

Amounts available for payment of railroad retirement benefits are held in four Accounts: the National Railroad Retirement Investment Trust (NRRIT), the Railroad Retirement (RR) Account, the Social Security Equivalent Benefit (SSEB) Account, and the Dual Benefits Payments Account. Because of their intertwined nature, the NRRIT, RR Account and SSEB Account are discussed together in this section. Dual benefits and the Dual Benefits Payments Account are discussed in a separate section, Section IV.

Amounts held in the NRRIT, RR Account and SSEB Account are mainly used to pay monthly benefits to retired or disabled employees, their spouses, and survivors. The various types of benefits and their eligibility requirements are described in the Appendix. The Accounts also pay out relatively small amounts in lump sums to employees and their survivors in certain cases. The monthly benefits consist of three components, known as tier 1, tier 2 and supplemental annuity.

For all categories of recipients, the gross tier 1 benefit is generally equivalent to the benefit that the social security system would pay if all the employee's earnings (railroad and non-railroad) had been covered under the Social Security Act. Any benefit actually received from social security is subtracted to determine the net tier 1 benefit payable. Section IV explains the logic behind this determination. The cost-of-living increase paid to social security beneficiaries automatically carries over to the tier 1 component of railroad retirement annuities.

There are some differences between social security benefits and tier 1 benefits. The most significant are as follows:

1. An employee may not retire before age 62 under the social security system. Under the railroad retirement system, an employee may retire at age 60 with 30 years of service. A spouse of a 30-year employee may also retire at age 60. If the employee retired after 2001, there is no age reduction in either case.

2. Railroad retirement pays an occupational disability benefit under tier 1 and tier 2. Social security requires total and permanent disability. A five-month waiting period applies under both systems.

3. Widow(er)s who retire at age 60 or 61 under railroad retirement are deemed age 62 in the computation of the tier 1 benefit, resulting in a smaller age reduction than under social security.

4. From the start of the railroad retirement system through 1984, earnings up to a monthly maximum amount were taxed and credited for benefit computation purposes. Social security has always used an annual earnings limit. The 1983 Solvency Act changed railroad retirement to an annual earnings limit for 1985 and later years, but benefit computations for new beneficiaries continue to reflect the pre-1985 use of a monthly limit. All benefits awarded before 1985 reflect a monthly limit exclusively.

The formula used to compute the tier 2 component of railroad retirement is comparable to a private pension formula. Under the formula adopted in 1981, the employee tier 2 benefit is equal to 0.7 percent of the employee's average monthly railroad earnings for the 60 months of highest earnings, multiplied by the number of years of railroad service, less 25 percent of any vested dual benefit. Unlike private pensions, tier 2 benefits (1) provide automatic cost-of-living increases, and (2) are paid to spouses and survivors without any reduction in employee benefit for the payment of these auxiliary benefits.

The tier 2 benefit for spouses is equal to 45 percent of the employee's tier 2 benefit. The survivor's tier 2 benefit is a specified percentage of the employee's tier 2 benefit. The Appendix lists the percentages and describes an initial minimum widow(er)’s amount which became payable beginning in calendar year 2002.

The tier 2 cost-of-living increases for employees, spouses and survivors are equal to 32.5 percent of the percentage increase which is used in computing social security increases (and tier 1 increases). The increase is paid at the same time as the tier 1 cost-of-living increase.

The portion of tier 1 benefits which is considered equivalent to social security benefits is subject to Federal income tax under the rules that apply to social security benefits. Tier 2 benefits, the portion of tier 1 benefits in excess of social security benefits, supplemental annuity benefits, and vested dual benefits are subject to Federal income tax under the rules that apply to private pensions.

A railroad retiree may receive a supplemental annuity in addition to his regular annuity if (1) the retiree has a "current connection" with the railroad industry at the time of retirement, and (2) the retiree has attained age 65 with 25 years of railroad service, or attained age 60 with 30 years of

railroad service. A current connection is generally defined as at least 12 months of railroad service in the 30 months preceding retirement.

The 1981 amendments added the requirement that an employee must have worked in the railroad industry before October 1, 1981, to receive a supplemental annuity. This provision results in phasing out the supplemental annuity over a long period. The last supplemental annuity check will probably not be paid until after 2060.

The monthly supplemental annuity benefit is $23, plus $4 for each year of service in excess of 25, with a maximum benefit of $43. No cost-of-living increases are applied. Spouses and survivors do not receive a supplemental annuity.

If the recipient of a supplemental annuity receives a private pension from his railroad employer, the supplemental annuity is reduced by the portion of the private pension that is attributable to the employer's contributions. This reduction is not made if the private pension is reduced for receipt of the supplemental annuity.

Benefits paid from the NRRIT, RR Account and SSEB Account are financed by the following sources of income:

1. Payroll tax. Employees and employers pay a tax at the social security rate on earnings in a year up to the social security, or tier 1, earnings limit. (The Medicare hospital insurance portion of this rate is not subject to an earnings limit.) This tax is called the tier 1 tax. In addition, employers and employees pay a tier 2 tax equal to a percentage of the employee's earnings up to the tier 2 earnings limit. The tier 2 earnings limit is what the social security limit would be if the 1977 social security amendments had not been enacted. The 2012 earnings limits are $110,100 and $81,900 for tier 1 and tier 2, respectively.

   Tier 2 taxes on both employers and employees are based on a 10-year average of the ratio of certain asset balances to the sum of benefits and administrative expenses (the average account benefits ratio). Depending on the average account benefits ratio, the tier 2 tax rate for employers will range between 8.2 percent and 22.1 percent, while the tier 2 tax rate for employees will be between 0 percent and 4.9 percent. This calculation is described in the Appendix.

2. Income tax. The tax on tier 1 benefits up to the social security level is credited to the SSEB Account and then to social security through the financial interchange. Revenue derived from taxing certain RR Account benefits (tier 2 and the excess of tier 1 over the social security level) is transferred to the RR Account.

3. Investment income.

4. The financial interchange with the social security system. This extremely important arrangement, which will be discussed in detail in Section IV, has resulted in the large annual lump sum transfers of money from social security to railroad retirement shown in Table 11.

5. Advances from general revenues related to certain features of the financial interchange. Financial interchange transfers are made in a lump sum for a whole fiscal year in the June following the end of that fiscal year. For example, the transfer reflecting transactions which occurred from October 2009 through September 2010 (fiscal year 2010) took place in June 2011. At any time, therefore, there are between 9 and 21 months' worth of financial interchange transfers that are, in a sense, owed to the railroad retirement system. Railroad retirement receives interest on this money, so this practice does no long-term harm to the financial condition of the railroad retirement system. The lag in the transfers, however, could cause short-term cash flow problems.

   In order to avoid the cash flow problems caused by this lag, the 1983 Solvency Act provided for monthly loans to railroad retirement from U.S. Treasury general funds. Each loan is equal to the transfer the Railroad Retirement Board estimates railroad retirement would have received in the preceding month, with interest, if the financial interchange with social security were on an up-to-date basis. Railroad retirement must repay these loans when it receives the transfer from social security against which the money was advanced.

The 1983 Solvency Act created the SSEB Account, effective October 1, 1984. Before that date, all tier 1 benefits, tier 2 benefits, lump sums and administrative expenses had been paid from the RR Account, and all the income described above had been credited to the RR Account. Since then, the SSEB Account has paid the social security level of benefits and the administrative expenses allocable to that level of benefits. The tier 1 portion of the payroll tax, the income taxes on the social security level of benefits, the income from the financial interchange, and the advances from general revenues are credited to the SSEB Account. Repayment of the advances is made from the SSEB Account.

In order to maximize investment returns to the Railroad Retirement system, the Railroad Retirement and Survivors' Improvement Act of 2001 created the National Railroad Retirement Investment Trust (NRRIT) to manage and invest amounts collected in the RR Account and SSEB Account. Since the initial transfer of assets to the NRRIT during calendar years 2002-2004, the NRRIT has been transferring funds back to the RR Account as needed for the payment of benefits. The balance of the SSEB Account not needed to pay current benefits and administrative expenses has been transferred annually to the RR Account, reducing the amount needed from the NRRIT.

IV. THE FINANCIAL INTERCHANGE AND DUAL BENEFITS

In the early 1950s, an arrangement known as the financial interchange was established between the railroad retirement and social security systems. The purpose of the financial interchange is to place the social security trust funds in the same financial position they would have been if railroad employment had always been covered under social security. If railroad employment had been covered under social security, social security would have collected taxes on railroad employment, and it would have paid benefits based on railroad employment. Under the financial interchange, the railroad retirement system gives the social security system the taxes social security would have collected, and the social security system gives the railroad retirement system the additional benefits

social security would have paid to railroad workers and their families over what it actually pays them.

The word "additional" in the preceding sentence is important, because it is possible for a railroad employee to be covered under both railroad retirement and social security. The social security coverage may be based on earnings from moonlighting while in a railroad job or from coverage under the two systems at different times. Fulfilling the purpose of the financial interchange requires deducting from social security's fund only the difference between what social security would have paid had it covered railroad employment and what it actually pays the person based on his non-railroad employment. Under the financial interchange, therefore, social security subtracts an employee's social security benefit from the amount it would otherwise give to the railroad retirement system.

This arrangement gave rise to problems that became acute in the early 1970s. The problems arose from the weighting in the social security formula in favor of low-earning, short-service workers. A railroad employee's non-railroad earnings usually added little to the benefit social security would have paid on combined railroad and non-railroad earnings (called gross tier 1 today). However, the employee might qualify for the minimum social security benefit, receiving much more from social security than his non-railroad earnings added to his gross tier 1 benefit.

In order to improve the system's financial condition, the Railroad Retirement Act of 1974 provided that the tier 1 component of the railroad retirement annuity be reduced by any social security benefit. This essentially integrated the two systems and eliminated the advantage of qualifying for benefits under both systems.

It was generally considered unfair to eliminate this advantage entirely for those already retired or close to retirement when the 1974 Act became effective. The 1974 Act, therefore, provided for a restoration of social security benefits that were considered vested at the end of 1974. The restored amount is known as the "vested dual benefit." This benefit was available to qualifying spouses and survivors as well as to qualifying employees.

For employees retiring in 1975 or later, the vested dual benefit is equal to

(1) a social security benefit based on social security earnings, plus

(2) a social security benefit based on railroad earnings, minus

(3) a social security benefit based on combined railroad and social security earnings.

Social security or railroad earnings after 1974 are not included in this calculation. The "social security benefit" referred to in (1), (2) and (3) is the one which would have been calculated at the end of 1974. The resulting amount is increased by all the automatic social security cost-of-living adjustments between 1974 and the earlier of the year the employee retired and 1981.

Spouses and survivors are not awarded vested dual benefits after August 13, 1981, though they continue to receive these benefits if they were awarded before that date.

Since October 1981, vested dual benefits have been paid from a segregated Dual Benefits Payments Account, and appropriations have been made to that account. This means that, starting in fiscal year 1982, each annual appropriation is to be sufficient to pay the benefits for that year. If the appropriation for a fiscal year is less than required for full funding, the Railroad Retirement Board must reduce benefits to a level that the amount appropriated will cover.

The appropriation for vested dual benefits in fiscal year 1982 was less than required for full funding, resulting in a cutback in benefits during that year. Full funding was restored for the last two months of fiscal year 1982. The appropriation was less than required in fiscal year 1986, resulting in a cutback during April-September of that year. The appropriation was again less than required in fiscal year 1988, which resulted in a cutback during April-September. Benefits were cut back in January 1996 due to a lapse in government funding and then restored later that same month. For years other than those mentioned, full benefits have been paid.

V. ASSUMPTIONS, METHODOLOGY, AND VALUATION RESULTS

A. Assumptions and Methodology

Average railroad employment is assumed to be 230,000 in 2011 under each of the three employment assumptions. This is the estimated average for the year (subject to later adjustment) and exceeded the range projected for 2011 under the employment assumptions contained in the 2011 Section 502 report.

Employment assumptions I and II, based on a model developed by the Association of American Railroads, assume that (1) passenger employment will remain at the level of 45,000, and (2) the employment base, excluding passenger employment, will decline at a constant annual rate (0.5 percent for assumption I and 2.0 percent for assumption II) for 25 years, at a reducing rate over the next 25 years, and remain level thereafter.

Employment assumption III differs from employment assumptions I and II by assuming that (1) passenger employment will decline by 500 per year until a level of 35,000 is reached and then remain level, and (2) the employment base, excluding passenger employment, will decline at a constant annual rate of 3.5 percent for 25 years, at a reducing rate over the next 25 years, and remain level thereafter.

Because inflation has been fairly stable at relatively low levels in recent years, only one set of earnings and price inflation assumptions was used in this valuation. The ultimate earnings increase, cost-of-living increase and investment return assumptions have been lowered from 4.0%, 3.0% and 7.5% in the 24th valuation to 3.8%, 2.8% and 7.0%, respectively, in the 25th valuation. Table 1 shows the employment, inflation and investment return assumptions used in the 25th valuation. A comparison of historical and projected employment is illustrated in Figure 1.

Only one combination of non-economic assumptions (for example, rates of mortality, disability, retirement, and withdrawal) was used in this valuation. These assumptions, some of which were

changed from the 24th valuation to reflect recent experience, are discussed in the Technical Supplement to this report.

Projections were made for the various components of income and outgo under each employment assumption for the 75 calendar years 2011-2085. The projections of these components were combined and the investment income calculated to produce the projected balances in the combined NRRIT and RR Account and in the SSEB Account separately for each year. The results are summarized in Table 2. Present values of the various components of NRRIT and RR Account income and outgo were calculated by discounting amounts in each projection year to December 31, 2010, using a constant 7.0% interest rate. The present values were combined to calculate the NRRIT and RR Account actuarial surplus or deficiency. The derivation of the surplus or deficiency appears in Table 6.

B. Valuation Results

This section sets forth the results of the valuation in the form of a discussion of the tables in which the results appear. Because it is desirable for the discussion of a table to be reasonably self-contained, there is some repetition between tables and between this section and preceding sections of this report.

Table 2. Progress of the Combined National Railroad Retirement Investment Trust (NRRIT) and Railroad Retirement (RR) Account, and the Social Security Equivalent Benefit (SSEB) Account. Projections were made for the various components of income and outgo under each employment assumption for the 75 calendar years 2011-2085. The projections of these components were combined and the investment income calculated to produce the projected balances in the combined NRRIT and RR Account, and the SSEB Account at the end of each projection year. The results are summarized in Table 2.

Table 2 consists of three tables, one for each of employment assumptions I, II, and III. The tables show, for the SSEB Account and the combined NRRIT and RR Account for each projection year, (1) the various elements of income and outgo, (2) the account balance on December 31, and (3) the account benefits ratio, average account benefits ratio and combined employer and employee tier 2 tax rate.

The balances of the RR Account and NRRIT are combined because amounts not needed to pay current benefit and administrative costs are invested by the NRRIT. The SSEB Account is assumed to maintain a target balance of approximately 1.5 months of benefit payments in order to meet benefit obligations and contingencies, and to transfer any excess to the RR Account or NRRIT.

Table 2 indicates that no cash-flow problems arise under employment assumptions I and II (Tables 2-I and 2-II).

Under employment assumption I, the combined account balance declines through 2023 and then grows through the end of the projection period. The combined employer and employee tier 2 tax rate increases to 20% in 2026-2034, decreases to 14.0% in 2058 and remains between 10.0% and 14.0% thereafter.

Under employment assumption II, the combined account balance declines through 2026, and grows thereafter through the end of the projection period. The combined employer and employee tier 2 tax rate increases to 27% in 2030-2036, and then generally decreases until reaching the minimum rate of 12.0% in 2084-2085.

Under employment assumption III, the combined account balance declines until the balance becomes negative in 2035. Negative after-transfer balances indicate the amount that would be owed, including interest, if unreduced benefits were paid by borrowing from some unknown source. The combined account deficit grows through the end of the projection period, when the balance reaches -$254,757 million. The combined employer and employee tier 2 tax rate increases to 27% in 2027 and remains at that level through the end of the projection period. Under this assumption, the tax rate mechanism does not respond quickly enough to avoid cash flow problems.

Table 3. Present value of benefits in millions of dollars. This table shows, for each employment assumption, the present value of tier 2 benefits, supplemental annuity benefits and the portion of tier 1 benefits which exceeds the social security level of benefits. The portion of tier 1 benefits in excess of the social security level is referred to as "tier 1 liability." The most important components of this liability were described in Section III. Supplemental annuity benefits are included with tier 2 benefits in this table. The present values are shown separately by type of beneficiary (employee, spouse, survivor) and by employee status on the valuation date (retired, retired and deceased, active, inactive, future entrants).

Table 4. Present value of benefits as a percentage of the present value of tier 2 payroll. The format for this table is the same as for Table 3. Each number in Table 4 was obtained by dividing the corresponding number in Table 3 by the appropriate present value of one percent of tier 2 payroll. The payroll figures are shown in Table 6.

Table 5. Balance of the Combined National Railroad Retirement Investment Trust and Railroad Retirement Account, and the Social Security Equivalent Benefit Account as of December 31, 2010. This table derives the balance in the accounts as of December 31, 2010. No accrual adjustments are made either for financial interchange amounts due and unpaid on that date or for benefits due on January 3, 2011, because these amounts are included in the projected future cash flows. For the purpose of the present value calculations, an adjustment is made for the difference between the actual return earned in calendar year 2011 and the 7.0% used in the present value calculations as discussed in Table 6 below.

Table 6. Actuarial surplus or (deficiency) for National Railroad Retirement Investment Trust and Railroad Retirement Account. The top half of Table 6 expresses the asset and liability components of the actuarial balance as present values in dollars. The bottom half expresses these components as a percentage of tier 2 payroll. The actuarial surplus or deficiency was calculated for the NRRIT and RR Account, but not for the SSEB Account, for the following reason.

The SSEB Account pays the social security level of benefits and administrative expenses allocable to those benefits, and it receives as income the social security level of taxes. If there were no other source of income or outgo during the course of a year, a surplus or deficiency would build up,

depending on whether taxes exceeded or were less than benefits. However, the SSEB Account also receives or pays any financial interchange transfers. The financial interchange transfer, subject to qualifications described in the next paragraph, should be enough to offset any surplus or deficit for the year. Furthermore, this would be the case even if the social security level of benefits or taxes are raised or lowered. The SSEB Account can thus be regarded as automatically funded, the financial interchange being the mechanism for correcting any surplus or deficiency. Therefore, the concept of actuarial balance is not meaningful when applied to the SSEB Account.

The qualification mentioned above arises because, in a relatively small number of cases, the railroad retirement system does not pay benefits when social security would pay benefits. In these cases, mainly dependent children of retired railroad employees, the SSEB Account collects an amount through the financial interchange but does not pay a corresponding benefit. This imbalance between outgo and income is transferred from time to time to the RR Account or NRRIT. The value of these transfers, or amounts available for transfer, is included as an asset in Table 6 as "Available from SSEB Account."

Revenue derived from taxing NRRIT and RR Account benefits (tier 2 and the excess of tier 1 over the social security level) is transferred to the RR Account. The present value of these transfers is shown as an asset in Table 6 as "Income taxes on benefits."

Although the actual return of the trust funds during calendar year 2011 was approximately -1.6%, this rate is not used in the present value calculations because using a negative rate of return would distort the present values of income and expenditure. Instead, the present value calculations use 7.0% as the rate for 2011, as well as for the remaining 74 years of the projection. In order to account for the 2011 loss and not overstate the surplus, the beginning asset value is adjusted for the anticipated loss. The adjusted balance as of December 31, 2010, is calculated so that, assuming a 7.0% rate of return for 2011, the combined RRA, NRRIT, and SSEBA balance projected on December 31, 2011, is equal to the actual balance on that date.

The cost of the system to the railroad industry may be considered as the excess of "Retirement taxes" over "Actuarial surplus or (deficiency)." Table 6 shows that the cost of the system is much more stable when expressed in dollars than when expressed as a percentage of payroll. For example, the cost of the system under employment assumption III is $61,116 million, or 22.40 percent of payroll, whereas the cost under employment assumption I is $68,979 million, or 16.79 percent of payroll. Using employment assumption III as the base, the percentage cost variation in dollars between the two valuations is 12.87 percent. As a percentage of payroll, the percentage cost variation is 25.04 percent.

Table 7. Unfunded accrued liability. The railroad retirement program is a social insurance program rather than a private pension plan. A private pension plan should build up funds in an orderly way over the working lifetimes of the participants. With a fully funded program, the value of the accumulated assets will be sufficient to discharge all liabilities for the accrued benefits. Pay-as-you-go funding, where the pension costs are charged to the retirement years as the benefits are paid, is not acceptable for a private pension plan because of a lack of participant security. Because private pension plans can terminate, they should, ideally, be fully funded to protect the rights of active and retired participants.

For a social insurance plan, however, the situation is different, and full funding is not necessary. The program is expected to operate indefinitely. Because the program is compulsory, new entrants will constantly be entering the program, and they and their employers will be paying taxes to support the program.

Unlike some other social insurance programs, the railroad retirement program relies on payroll taxes from the employers and employees of a single industry. Although the railroad retirement program is not subject to the funding standards of a private pension plan, it is still of interest to calculate the normal cost and the accrued liability for the plan.

Table 7 illustrates what the funding requirements would be for the railroad retirement system as of December 31, 2010, using the entry age normal actuarial funding method. The present value of future benefits and the present value of future administrative expenses for former and present employees are shown on lines 1 and 2, respectively. The portion of the actuarial present value of benefits assigned to a particular year is called the normal cost. For the entry age normal actuarial funding method, the normal cost rate is the average cost expressed as a level percentage of payroll (line 4) that would fund the average employee's benefits, including dependent benefits, and expenses over the employee's working lifetime. The accrued liability for the program, shown on line 6, is equal to the difference between the present value of benefits and administrative expenses for former and present employees and the present value of future normal costs. Then the unfunded accrued liability (line 8) is the difference between the accrued liability and the funds on hand as of December 31, 2010 (line 6 minus line 7). This is the amount needed, in excess of funds on hand and future normal costs, to fund combined NRRIT and RR Account benefits and expenses for former and present employees. Line 10 shows the level tax rate that would be required to fund the unfunded accrued liability and meet the normal costs for the next 30 years. The level tax rate after 30 years if all assumptions were realized is shown on line 11.

Table 8. Vested dual benefit amounts and average number of beneficiaries. This table shows a projection of vested dual benefit payments for every fiscal year from 2013 through 2030. After 2030, the amounts become insignificant. The amounts shown assume that the benefits are fully funded. Fiscal years are shown because vested dual benefit appropriations are made on a fiscal year basis. The table also indicates the average number of vested dual beneficiaries in each fiscal year. The table applies to all the employment assumptions discussed in this report.

The revenue derived from taxing pre-October 1988 vested dual benefits was transferred to the RR Account. The revenue derived from taxing vested dual benefits in fiscal years 1989 and later is transferred to the Dual Benefits Payments Account, and it reduces the amount of the appropriation by the same amount. Therefore, the amount available for the payment of vested dual benefits is unaffected by income tax revenues derived from these benefits.

The 1981 amendments removed much of the uncertainty from projections of future vested dual benefit payments. The volatility caused by inflation is gone, since future awards take into account cost-of-living increases from 1975 through 1981, rather than through the date of retirement. Also, awards of these benefits to spouses and widow(er)s ceased after August 13, 1981. The primary

uncertainty which remains in projecting future vested dual benefit payments is estimating the relatively high rates of future mortality for the very old.

The projections of vested dual benefit payments by the Railroad Retirement Board are the basis for the agency's requests for appropriated amounts. Generally, a margin of about 2 percent is added to projected amounts to determine the appropriated amounts requested. This margin is needed because of the uncertainties in making projections and to ensure that adequate funds are available for the full payment of vested dual benefits. Appropriated amounts remaining in a fiscal year after all benefit payments have been made are returned to the Treasury.

Table 9. Supplemental annuity benefit amounts and average number of beneficiaries. This table shows a projection of supplemental annuity benefits for every calendar year from 2012 through 2050. Since service before October 1, 1981, is required for a supplemental annuity, benefit amounts after 2050 will continue to decline.

Table 10. Average number of railroad retirement annuitants and number of annuitants per full time employee. The left half of Table 10 shows the average number of annuitants under each employment assumption, and the right half shows the average number per full time employee. Under employment assumption I, the average number of annuitants per full time employee generally declines throughout the projection period. Under employment assumption II, the average number of annuitants per full time employee increases until reaching a maximum of 2.58 in 2020-2022 and then declines. Under employment assumption III, the average number of annuitants per full time employee increases steadily to 3.44 in 2038-2041 and declines thereafter.

VI. STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein to evaluate the financial and actuarial status of the Railroad Retirement System are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting actuarial estimates are, in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the experience and expectations of the program.

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Enrolled Actuary #11-4940

Table 1. Employment, inflation and investment return assumptions

Calendar year	Average employment (thousands)			Percentage increase over prior year		Investment return
	I	II	III	Earnings	Cost of living	
2011	230	230	230	3.5%	0.0%	-1.6%
2012	229	226	223	3.8	3.6	7.0
2013	228	223	216	3.8	2.0	7.0
2014	227	219	210	3.8	2.4	7.0
2015	226	216	203	3.8	2.8	7.0
2016	225	212	197	3.8	2.8	7.0
2017	224	209	191	3.8	2.8	7.0
2018	224	206	186	3.8	2.8	7.0
2019	223	202	180	3.8	2.8	7.0
2020	222	199	175	3.8	2.8	7.0
2021	221	196	170	3.8	2.8	7.0
2022	220	193	164	3.8	2.8	7.0
2023	219	190	160	3.8	2.8	7.0
2024	218	187	155	3.8	2.8	7.0
2025	217	184	150	3.8	2.8	7.0
2026	217	182	146	3.8	2.8	7.0
2027	216	179	142	3.8	2.8	7.0
2028	215	176	137	3.8	2.8	7.0
2029	214	174	133	3.8	2.8	7.0
2030	213	171	129	3.8	2.8	7.0
2031	212	168	126	3.8	2.8	7.0
2032	211	166	123	3.8	2.8	7.0
2033	211	164	119	3.8	2.8	7.0
2034	210	161	117	3.8	2.8	7.0
2035	209	159	114	3.8	2.8	7.0
2036	208	157	111	3.8	2.8	7.0
2037	207	154	108	3.8	2.8	7.0
2038	207	152	106	3.8	2.8	7.0
2039	206	151	104	3.8	2.8	7.0
2040	205	149	102	3.8	2.8	7.0
2041	205	147	100	3.8	2.8	7.0
2042	204	146	98	3.8	2.8	7.0
2043	203	144	97	3.8	2.8	7.0
2044	203	143	95	3.8	2.8	7.0
2045	202	142	94	3.8	2.8	7.0
2046	202	140	93	3.8	2.8	7.0
2047	201	139	91	3.8	2.8	7.0
2048	201	138	90	3.8	2.8	7.0
2049	201	137	89	3.8	2.8	7.0
2050	200	137	89	3.8	2.8	7.0
2051	200	136	88	3.8	2.8	7.0
2052	200	135	87	3.8	2.8	7.0
2053	200	135	87	3.8	2.8	7.0
2054	199	134	86	3.8	2.8	7.0
2055	199	134	86	3.8	2.8	7.0
2056	199	133	85	3.8	2.8	7.0
2057	199	133	85	3.8	2.8	7.0
2058	199	133	85	3.8	2.8	7.0
2059	199	133	85	3.8	2.8	7.0
2060	199	133	85	3.8	2.8	7.0
2061-2085	199	133	85	3.8	2.8	7.0

Figure 1. Average Railroad Employment 1937-2085, Historical and Projected

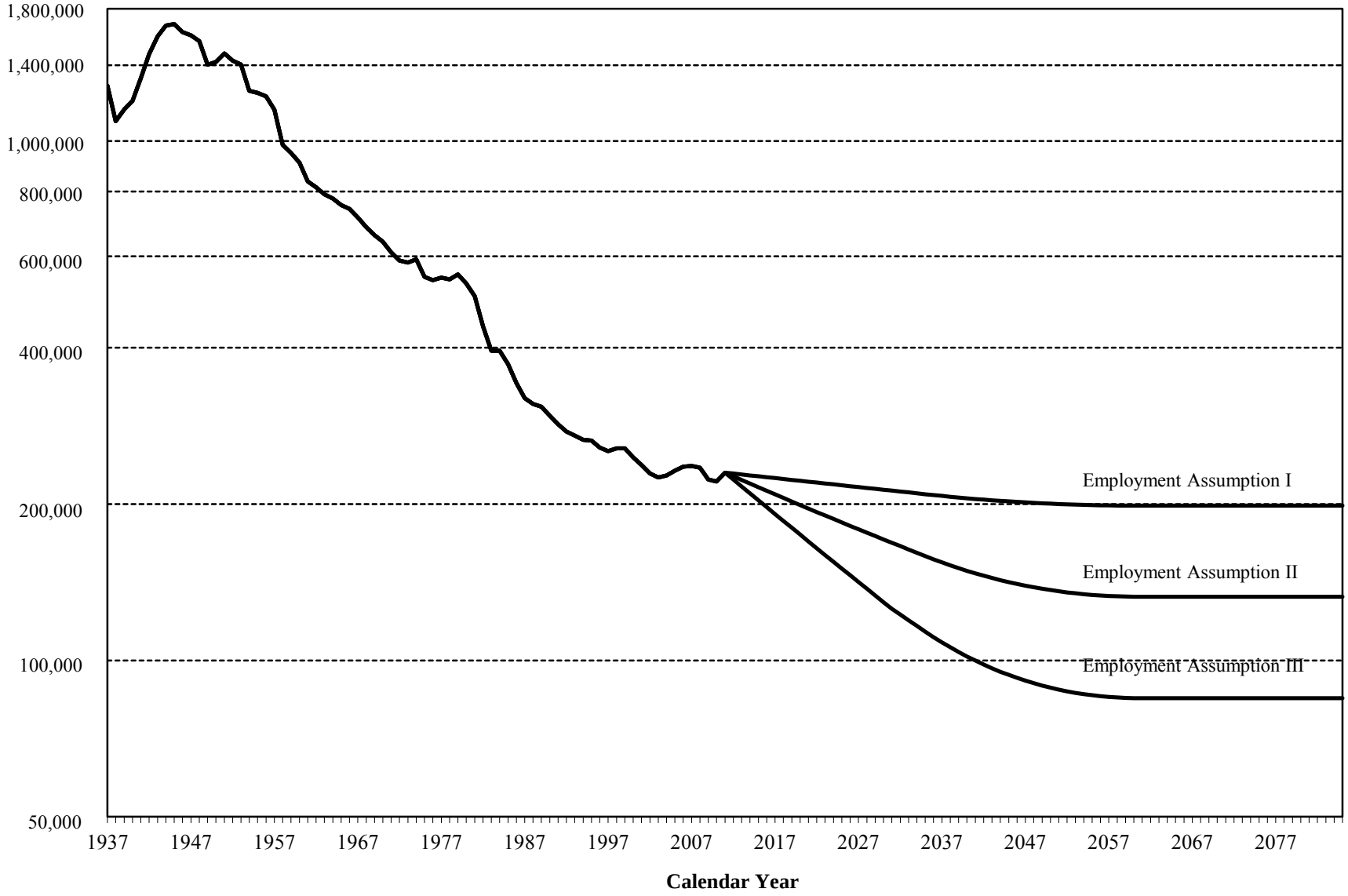

Table 2-I. Progress of the Combined National Railroad Retirement Investment Trust (NRRIT) and Railroad Retirement (RR) Account, and the Social Security Equivalent Benefit (SSEB) Account under Employment Assumption I
(Dollar amounts in millions)

				Combined NRRIT and RR Account				SSEB Account				
Calendar year	Account benefits ratio[a]	Average account benefits ratio[b]	Tier 2 tax rate	Benefits and administration	Tax income[c]	Other income[d]	Balance, end year	Benefits and administration	Tax income[c]	Other income and expense[e]	Balance, end year	Combined balance, end year
2012	4.75	6.50	16.0%	$4,969	$2,885	$1,928	$23,148	$6,664	$2,840	$3,777	$829	$23,977
2013	4.52	6.30	17.0%	5,130	3,125	1,604	22,747	6,849	2,935	3,938	852	23,599
2014	4.29	6.10	17.0%	5,296	3,220	1,616	22,287	7,066	3,038	4,054	879	23,166
2015	4.08	5.90	18.0%	5,469	3,497	1,588	21,902	7,317	3,153	4,196	910	22,812
2016	3.87	5.50	18.0%	5,623	3,610	1,456	21,345	7,583	3,275	4,306	908	22,253
2017	3.69	5.10	18.0%	5,755	3,729	1,491	20,809	7,852	3,406	4,515	977	21,786
2018	3.53	4.70	18.0%	5,868	3,852	1,497	20,290	8,114	3,543	4,603	1,009	21,299
2019	3.38	4.50	18.0%	5,963	3,979	1,468	19,774	8,368	3,687	4,713	1,041	20,815
2020	3.25	4.30	18.0%	6,042	4,112	1,440	19,285	8,606	3,838	4,797	1,071	20,356
2021	3.13	4.10	18.0%	6,105	4,248	1,292	18,720	8,829	3,994	4,862	1,098	19,818
2022	3.06	3.90	19.0%	6,155	4,610	1,393	18,568	9,037	4,156	4,907	1,124	19,692
2023	3.03	3.70	19.0%	6,201	4,763	1,393	18,523	9,228	4,301	4,951	1,148	19,671
2024	3.01	3.60	19.0%	6,253	4,920	1,398	18,589	9,406	4,447	4,980	1,170	19,759
2025	3.01	3.50	19.0%	6,310	5,079	1,410	18,768	9,582	4,596	5,008	1,191	19,959
2026	3.05	3.30	20.0%	6,369	5,495	1,346	19,240	9,763	4,747	5,039	1,214	20,454
2027	3.12	3.30	20.0%	6,435	5,670	1,479	19,953	9,948	4,902	5,070	1,237	21,190
2028	3.21	3.20	20.0%	6,516	5,849	1,536	20,822	10,135	5,059	5,099	1,260	22,082
2029	3.32	3.20	20.0%	6,614	6,033	1,603	21,843	10,325	5,219	5,129	1,283	23,126
2030	3.44	3.20	20.0%	6,722	6,223	1,680	23,025	10,524	5,386	5,163	1,308	24,333
2031	3.56	3.20	20.0%	6,839	6,419	1,710	24,315	10,741	5,556	5,211	1,335	25,650
2032	3.72	3.20	20.0%	6,954	6,620	1,863	25,843	10,975	5,734	5,271	1,364	27,207
2033	3.91	3.30	20.0%	7,056	6,831	1,977	27,595	11,222	5,921	5,332	1,394	28,989
2034	4.11	3.40	20.0%	7,178	7,050	2,107	29,574	11,476	6,116	5,392	1,426	31,000
2035	4.28	3.50	19.0%	7,338	6,935	2,239	31,410	11,736	6,313	5,456	1,458	32,868
2036	4.45	3.60	19.0%	7,509	7,154	2,344	33,400	12,019	6,516	5,538	1,493	34,893
2037	4.63	3.80	19.0%	7,684	7,387	2,516	35,619	12,320	6,733	5,625	1,530	37,149
2038	4.83	3.90	19.0%	7,874	7,628	2,679	38,052	12,622	6,956	5,703	1,568	39,620
2039	5.00	4.10	18.0%	8,066	7,493	2,842	40,321	12,938	7,191	5,786	1,607	41,928
2040	5.19	4.20	18.0%	8,244	7,747	3,007	42,830	13,272	7,442	5,871	1,648	44,478
2041	5.39	4.40	18.0%	8,447	8,007	3,177	45,568	13,644	7,700	5,990	1,694	47,262
2042	5.59	4.60	18.0%	8,675	8,273	3,383	48,548	14,051	7,965	6,137	1,745	50,293
2043	5.81	4.80	18.0%	8,890	8,562	3,601	51,822	14,460	8,253	6,257	1,795	53,617
2044	6.00	5.00	18.0%	9,226	8,859	3,838	55,292	14,861	8,540	6,371	1,845	57,137
2045	6.12	5.20	18.0%	9,650	9,162	4,083	58,888	15,263	8,827	6,486	1,895	60,783
2046	6.30	5.40	18.0%	9,946	9,481	4,328	62,751	15,780	9,146	6,698	1,959	64,710
2047	6.55	5.50	18.0%	10,188	9,814	4,606	66,983	16,360	9,486	6,946	2,031	69,014
2048	6.82	5.70	18.0%	10,468	10,171	4,921	71,608	16,895	9,846	7,116	2,097	73,705
2049	7.04	5.90	18.0%	10,866	10,539	5,255	76,536	17,425	10,207	7,284	2,163	78,699
2050	7.16	6.10	17.0%	11,357	10,352	5,585	81,115	17,953	10,573	7,445	2,228	83,343
2051	7.33	6.30	17.0%	11,732	10,727	5,902	86,012	18,593	10,969	7,703	2,308	88,320
2052	7.50	6.50	16.0%	12,075	10,508	6,230	90,675	19,292	11,386	7,993	2,395	93,070
2053	7.67	6.70	16.0%	12,473	10,895	6,573	95,669	19,955	11,819	8,218	2,477	98,146
2054	7.83	6.90	16.0%	12,896	11,296	6,931	101,001	20,645	12,267	8,464	2,563	103,564
2055	7.95	7.10	15.0%	13,342	11,035	7,288	105,981	21,361	12,733	8,717	2,652	108,633
2060	8.57	7.90	14.0%	15,635	12,432	9,194	133,873	25,354	15,374	10,085	3,147	137,020
2065	8.64	8.50	10.0%	18,337	11,018	10,928	157,469	29,995	18,572	11,547	3,723	161,192
2070	8.21	8.60	10.0%	21,631	13,244	12,273	176,419	35,528	22,413	13,263	4,410	180,829
2075	7.90	8.30	12.0%	25,700	18,785	13,994	202,129	42,241	27,042	15,379	5,243	207,372
2080	7.90	8.00	12.0%	30,769	22,619	16,741	241,961	50,455	32,628	18,048	6,263	248,224
2085	8.00	8.00	12.0%	36,986	27,249	20,349	294,442	60,498	39,374	21,394	7,510	301,952

[a] The fair market value of the assets in the RR Account and NRRIT as of the close of the fiscal year (September 30) divided by the total benefits and administrative expenses paid from the RR Account and NRRIT during the fiscal year.

[b] The average of the account benefits ratios for the 10 most recent fiscal years ending before the calendar year.

[c] Includes payroll taxes and income taxes on benefits.

[d] Includes investment income and transfers from SSEB Account.

[e] Other income includes financial interchange income, advances from general revenues, and interest income. Other expense includes repayment of advances from general revenues and transfers to the NRRIT or RRA.

Table 2-II. Progress of the Combined National Railroad Retirement Investment Trust (NRRIT) and Railroad Retirement (RR) Account, and the Social Security Equivalent Benefit (SSEB) Account under Employment Assumption II
(Dollar amounts in millions)

				Combined NRRIT and RR Account				SSEB Account				
Calendar year	Account benefits ratio[a]	Average account benefits ratio[b]	Tier 2 tax rate	Benefits and administration	Tax income[c]	Other income[d]	Balance, end year	Benefits and administration	Tax income[c]	Other income and expense[e]	Balance, end year	Combined balance, end year
2012	4.75	6.50	16.0%	$4,969	$2,868	$1,928	$23,131	$6,664	$2,824	$3,793	$829	$23,960
2013	4.51	6.30	17.0%	5,130	3,076	1,601	22,678	6,849	2,889	3,983	852	23,530
2014	4.27	6.10	17.0%	5,296	3,138	1,608	22,128	7,066	2,963	4,130	879	23,007
2015	4.04	5.90	18.0%	5,469	3,374	1,572	21,606	7,317	3,044	4,304	910	22,516
2016	3.79	5.50	18.0%	5,622	3,449	1,430	20,862	7,583	3,132	4,449	908	21,770
2017	3.57	5.10	18.0%	5,754	3,526	1,449	20,083	7,852	3,225	4,696	977	21,060
2018	3.36	4.70	18.0%	5,866	3,605	1,437	19,258	8,113	3,322	4,823	1,009	20,267
2019	3.16	4.40	18.0%	5,960	3,685	1,385	18,369	8,367	3,424	4,975	1,041	19,410
2020	2.97	4.20	18.0%	6,037	3,770	1,329	17,431	8,604	3,530	5,103	1,070	18,501
2021	2.76	4.00	18.0%	6,099	3,854	1,147	16,333	8,826	3,639	5,215	1,098	17,431
2022	2.60	3.80	19.0%	6,147	4,136	1,209	15,531	9,032	3,751	5,307	1,123	16,654
2023	2.45	3.60	19.0%	6,191	4,229	1,161	14,730	9,219	3,843	5,400	1,147	15,877
2024	2.33	3.30	20.0%	6,239	4,529	1,119	14,139	9,392	3,934	5,480	1,168	15,307
2025	2.22	3.20	20.0%	6,294	4,626	1,083	13,554	9,563	4,025	5,559	1,189	14,743
2026	2.09	3.00	20.0%	6,349	4,724	954	12,883	9,736	4,115	5,643	1,211	14,094
2027	2.07	2.80	23.0%	6,409	5,483	1,028	12,985	9,912	4,206	5,728	1,232	14,217
2028	2.07	2.60	23.0%	6,485	5,597	1,040	13,137	10,087	4,296	5,812	1,254	14,391
2029	2.07	2.50	23.0%	6,577	5,711	1,055	13,325	10,263	4,386	5,898	1,276	14,601
2030	2.18	2.40	27.0%	6,678	6,767	1,105	14,519	10,446	4,479	5,989	1,298	15,817
2031	2.33	2.30	27.0%	6,791	6,905	1,134	15,767	10,643	4,572	6,095	1,322	17,089
2032	2.50	2.30	27.0%	6,898	7,045	1,282	17,197	10,853	4,668	6,211	1,349	18,546
2033	2.68	2.30	27.0%	6,990	7,194	1,388	18,790	11,072	4,771	6,327	1,376	20,166
2034	2.89	2.30	27.0%	7,099	7,349	1,505	20,544	11,292	4,877	6,442	1,403	21,947
2035	3.09	2.40	27.0%	7,244	7,502	1,632	22,434	11,514	4,981	6,560	1,430	23,864
2036	3.30	2.40	27.0%	7,395	7,659	1,739	24,436	11,752	5,088	6,694	1,460	25,896
2037	3.40	2.60	23.0%	7,549	6,743	1,870	25,501	12,002	5,205	6,828	1,490	26,991
2038	3.48	2.70	23.0%	7,710	6,895	1,950	26,636	12,245	5,325	6,951	1,520	28,156
2039	3.56	2.80	23.0%	7,869	7,057	2,033	27,857	12,496	5,452	7,075	1,551	29,408
2040	3.57	3.00	20.0%	8,011	6,358	2,091	28,294	12,758	5,592	7,198	1,584	29,878
2041	3.56	3.10	20.0%	8,172	6,515	2,114	28,751	13,050	5,736	7,350	1,620	30,371
2042	3.54	3.30	20.0%	8,348	6,675	2,157	29,235	13,363	5,882	7,519	1,659	30,894
2043	3.54	3.40	20.0%	8,502	6,859	2,199	29,792	13,664	6,049	7,652	1,696	31,488
2044	3.51	3.40	20.0%	8,768	7,045	2,243	30,311	13,947	6,211	7,771	1,731	32,042
2045	3.40	3.50	19.0%	9,102	6,902	2,268	30,379	14,221	6,370	7,885	1,765	32,144
2046	3.33	3.50	19.0%	9,278	7,098	2,264	30,463	14,605	6,560	8,092	1,813	32,276
2047	3.30	3.50	19.0%	9,398	7,303	2,277	30,646	15,027	6,765	8,315	1,865	32,511
2048	3.28	3.50	19.0%	9,557	7,530	2,308	30,927	15,382	6,985	8,441	1,909	32,836
2049	3.23	3.50	19.0%	9,825	7,762	2,335	31,200	15,720	7,201	8,561	1,951	33,151
2050	3.15	3.50	19.0%	10,163	8,000	2,358	31,395	16,045	7,417	8,668	1,992	33,387
2051	3.13	3.40	20.0%	10,355	8,652	2,383	32,074	16,472	7,663	8,862	2,045	34,119
2052	3.16	3.40	20.0%	10,515	8,929	2,439	32,928	16,933	7,922	9,067	2,102	35,030
2053	3.19	3.40	20.0%	10,730	9,224	2,518	33,940	17,330	8,192	9,187	2,151	36,091
2054	3.23	3.30	20.0%	10,961	9,532	2,598	35,109	17,740	8,472	9,319	2,202	37,311
2055	3.28	3.30	20.0%	11,203	9,854	2,689	36,449	18,161	8,764	9,449	2,254	38,703
2060	3.82	3.40	20.0%	12,350	11,713	3,397	47,101	20,434	10,461	10,033	2,537	49,638
2065	4.69	3.90	19.0%	13,731	13,370	4,563	64,492	22,972	12,558	10,482	2,852	67,344
2070	5.72	4.70	18.0%	15,539	15,245	6,206	89,059	26,027	15,086	11,024	3,231	92,290
2075	7.10	5.70	18.0%	17,946	18,308	8,772	127,908	29,879	18,141	11,843	3,709	131,617
2080	8.35	7.00	15.0%	21,105	18,578	12,087	176,350	34,817	21,842	13,110	4,322	180,672
2085	8.92	8.20	12.0%	25,066	18,216	15,348	223,029	41,096	26,329	14,939	5,101	228,130

[a] The fair market value of the assets in the RR Account and NRRIT as of the close of the fiscal year (September 30) divided by the total benefits and administrative expenses paid from the RR Account and NRRIT during the fiscal year.

[b] The average of the account benefits ratios for the 10 most recent fiscal years ending before the calendar year.

[c] Includes payroll taxes and income taxes on benefits.

[d] Includes investment income and transfers from SSEB Account.

[e] Other income includes financial interchange income, advances from general revenues, and interest income. Other expense includes repayment of advances from general revenues and transfers to the NRRIT or RRA.

Table 2-III. Progress of the Combined National Railroad Retirement Investment Trust (NRRIT) and Railroad Retirement (RR) Account, and the Social Security Equivalent Benefit (SSEB) Account under Employment Assumption III
(Dollar amounts in millions)

				Combined NRRIT and RR Account				SSEB Account				
Calendar year	Account benefits ratio[a]	Average account benefits ratio[b]	Tier 2 tax rate	Benefits and administration	Tax income[c]	Other income[d]	Balance, end year	Benefits and administration	Tax income[c]	Other income and expense[e]	Balance, end year	Combined balance, end year
2012	4.75	6.50	16.0%	$4,969	$2,849	$1,927	$23,111	$6,664	$2,806	$3,812	$829	$23,940
2013	4.49	6.30	17.0%	5,130	3,019	1,597	22,598	6,849	2,836	4,036	852	23,450
2014	4.24	6.10	17.0%	5,296	3,044	1,599	21,945	7,066	2,875	4,218	879	22,824
2015	3.98	5.90	18.0%	5,468	3,234	1,554	21,265	7,317	2,921	4,428	910	22,175
2016	3.70	5.50	18.0%	5,621	3,266	1,399	20,309	7,583	2,970	4,611	908	21,217
2017	3.44	5.10	18.0%	5,752	3,299	1,402	19,257	7,852	3,023	4,898	977	20,234
2018	3.18	4.70	18.0%	5,863	3,331	1,369	18,094	8,113	3,077	5,068	1,009	19,103
2019	2.91	4.40	18.0%	5,956	3,363	1,291	16,792	8,366	3,135	5,263	1,041	17,833
2020	2.64	4.10	18.0%	6,032	3,397	1,205	15,362	8,602	3,195	5,436	1,070	16,432
2021	2.37	3.90	19.0%	6,093	3,597	993	13,860	8,822	3,256	5,594	1,097	14,957
2022	2.11	3.60	19.0%	6,139	3,631	1,017	12,369	9,026	3,318	5,733	1,123	13,492
2023	1.86	3.40	20.0%	6,180	3,836	925	10,951	9,209	3,358	5,874	1,145	12,096
2024	1.61	3.10	20.0%	6,226	3,871	831	9,427	9,377	3,396	6,002	1,166	10,593
2025	1.41	2.80	23.0%	6,276	4,426	746	8,324	9,541	3,431	6,130	1,186	9,510
2026	1.20	2.60	23.0%	6,328	4,459	579	7,034	9,707	3,464	6,263	1,207	8,241
2027	1.07	2.30	27.0%	6,384	5,199	609	6,459	9,872	3,496	6,396	1,227	7,686
2028	0.97	2.10	27.0%	6,454	5,234	571	5,810	10,033	3,525	6,528	1,247	7,057
2029	0.84	1.90	27.0%	6,540	5,266	527	5,063	10,194	3,552	6,662	1,267	6,330
2030	0.71	1.70	27.0%	6,634	5,299	475	4,203	10,359	3,578	6,801	1,287	5,490
2031	0.54	1.50	27.0%	6,734	5,334	357	3,160	10,535	3,606	6,951	1,309	4,469
2032	0.38	1.30	27.0%	6,826	5,376	341	2,050	10,720	3,638	7,105	1,332	3,382
2033	0.20	1.10	27.0%	6,900	5,427	266	843	10,908	3,677	7,254	1,355	2,198
2034	0.08	0.90	27.0%	6,987	5,482	663	-	11,093	3,719	6,918	898	898
2035	0.01	0.80	27.0%	7,107	5,534	1,013	(560)	11,274	3,757	6,619	-	(560)
2036	-0.22	0.70	27.0%	7,233	5,589	(15)	(2,220)	11,466	3,797	7,669	-	(2,220)
2037	-0.45	0.50	27.0%	7,357	5,656	(104)	(4,025)	11,662	3,845	7,817	-	(4,025)
2038	-0.71	0.40	27.0%	7,488	5,728	(231)	(6,016)	11,845	3,895	7,949	-	(6,016)
2039	-0.97	0.20	27.0%	7,613	5,808	(370)	(8,191)	12,027	3,951	8,076	-	(8,191)
2040	-1.26	-0.10	27.0%	7,718	5,904	(521)	(10,526)	12,214	4,018	8,197	-	(10,526)
2041	-1.56	-0.30	27.0%	7,839	6,000	(693)	(13,058)	12,424	4,086	8,338	-	(13,058)
2042	-1.87	-0.50	27.0%	7,968	6,098	(860)	(15,787)	12,643	4,155	8,489	-	(15,787)
2043	-2.20	-0.70	27.0%	8,064	6,227	(1,048)	(18,672)	12,838	4,244	8,594	-	(18,672)
2044	-2.53	-1.00	27.0%	8,265	6,352	(1,251)	(21,836)	13,005	4,324	8,681	-	(21,836)
2045	-2.86	-1.20	27.0%	8,510	6,477	(1,475)	(25,344)	13,156	4,401	8,755	-	(25,344)
2046	-3.25	-1.50	27.0%	8,570	6,627	(1,717)	(29,005)	13,411	4,509	8,902	-	(29,005)
2047	-3.68	-1.80	27.0%	8,576	6,787	(1,963)	(32,756)	13,682	4,628	9,054	-	(32,756)
2048	-4.10	-2.10	27.0%	8,625	6,973	(2,218)	(36,626)	13,862	4,757	9,105	-	(36,626)
2049	-4.51	-2.50	27.0%	8,777	7,157	(2,487)	(40,733)	14,017	4,878	9,139	-	(40,733)
2050	-4.90	-2.80	27.0%	8,974	7,342	(2,773)	(45,137)	14,152	4,998	9,154	-	(45,137)
2051	-5.36	-3.20	27.0%	8,996	7,551	(3,073)	(49,656)	14,382	5,145	9,237	-	(49,656)
2052	-5.87	-3.60	27.0%	8,986	7,769	(3,378)	(54,250)	14,623	5,302	9,321	-	(54,250)
2053	-6.37	-4.00	27.0%	9,037	8,005	(3,691)	(58,973)	14,776	5,463	9,312	-	(58,973)
2054	-6.86	-4.40	27.0%	9,096	8,251	(4,013)	(63,831)	14,934	5,631	9,303	-	(63,831)
2055	-7.35	-4.80	27.0%	9,158	8,508	(4,344)	(68,826)	15,092	5,806	9,286	-	(68,826)
2060	-10.02	-7.20	27.0%	9,327	10,030	(6,095)	(95,075)	15,903	6,841	9,063	-	(95,075)
2065	-12.54	-9.80	27.0%	9,664	11,961	(7,950)	(122,813)	16,796	8,137	8,658	-	(122,813)
2070	-14.49	-12.30	27.0%	10,398	14,306	(9,900)	(152,039)	18,076	9,705	8,371	-	(152,039)
2075	-15.64	-14.20	27.0%	11,656	17,160	(11,981)	(183,373)	20,022	11,614	8,408	-	(183,373)
2080	-16.08	-15.50	27.0%	13,472	20,636	(14,242)	(217,554)	22,842	13,952	8,890	-	(217,554)
2085	-16.05	-16.00	27.0%	15,818	24,857	(16,698)	(254,757)	26,649	16,810	9,838	-	(254,757)

[a] The fair market value of the assets in the RR Account and NRRIT as of the close of the fiscal year (September 30) divided by the total benefits and administrative expenses paid from the RR Account and NRRIT during the fiscal year.

[b] The average of the account benefits ratios for the 10 most recent fiscal years ending before the calendar year.

[c] Includes payroll taxes and income taxes on benefits.

[d] Includes investment income and transfers from SSEB Account.

[e] Other income includes financial interchange income, advances from general revenues, and interest income. Other expense includes repayment of advances from general revenues and transfers to the NRRIT or RRA.

Table 3. Present value[a] of benefits in millions of dollars

	Employment assumption I			Employment assumption II			Employment assumption III		
	Tier 2[b]	Tier 1 liability[c]	Total	Tier 2[b]	Tier 1 liability[c]	Total	Tier 2[b]	Tier 1 liability[c]	Total
Employee annuities									
Retired	$19,701	$ 7,197	$26,899	$19,701	$ 7,197	$26,899	$19,701	$ 7,197	$26,899
Active	20,621	9,211	29,831	20,621	9,211	29,831	20,621	9,211	29,831
Inactive	1,163	291	1,454	1,163	291	1,454	1,163	291	1,454
Future entrants	8,120	3,248	11,368	5,952	2,386	8,338	4,001	1,606	5,607
Total	49,605	19,948	69,552	47,437	19,086	66,523	45,486	18,306	63,792
Spouse annuities									
Retired	5,323	2,101	7,423	5,323	2,101	7,423	5,323	2,101	7,423
Active	5,193	2,808	8,001	5,193	2,808	8,001	5,193	2,808	8,001
Inactive	252	55	306	252	55	306	252	55	306
Future entrants	1,755	714	2,469	1,290	528	1,818	868	356	1,224
Total	12,522	5,677	18,200	12,058	5,491	17,549	11,636	5,319	16,955
Survivor annuities									
Retired & deceased	5,850	900	6,750	5,850	900	6,750	5,850	900	6,750
Active	2,388	286	2,674	2,388	286	2,674	2,388	286	2,674
Inactive	45	18	62	45	18	62	45	18	62
Future entrants	956	177	1,133	707	130	838	478	88	566
Total	9,239	1,380	10,619	8,990	1,334	10,324	8,761	1,291	10,052
All annuities combined									
Retired & deceased	30,874	10,198	41,072	30,874	10,198	41,072	30,874	10,198	41,072
Active	28,202	12,304	40,506	28,202	12,304	40,506	28,202	12,304	40,506
Inactive	1,459	363	1,823	1,459	363	1,823	1,459	363	1,823
Future entrants	10,830	4,140	14,970	7,950	3,045	10,994	5,347	2,050	7,398
Total annuities	$71,366	$27,005	$98,371	$68,485	$25,910	$94,395	$65,883	$24,916	$90,799
Lump sum payments			59			59			59
Total benefits			$98,430			$94,454			$90,858

Note: Detail may not add to totals due to rounding.

[a] Present values are determined using a 7% interest rate for all years.

[b] Includes supplemental annuity benefits.

[c] Tier 1 benefits in excess of social security level.

Table 4. Present value[a] of benefits as a percentage of the present value[a] of tier 2 payroll

	Employment assumption I			Employment assumption II			Employment assumption III		
	Tier 2[b]	Tier 1 liability[c]	Total	Tier 2[b]	Tier 1 liability[c]	Total	Tier 2[b]	Tier 1 liability[c]	Total
Employee annuities									
Retired	4.79%	1.75%	6.55%	5.85%	2.14%	7.99%	7.22%	2.64%	9.86%
Active	5.02	2.24	7.26	6.13	2.74	8.86	7.56	3.38	10.94
Inactive	0.28	0.07	0.35	0.35	0.09	0.43	0.43	0.11	0.53
Future entrants	1.98	0.79	2.77	1.77	0.71	2.48	1.47	0.59	2.06
Total	12.07	4.85	16.93	14.09	5.67	19.76	16.68	6.71	23.39
Spouse annuities									
Retired	1.30	0.51	1.81	1.58	0.62	2.21	1.95	0.77	2.72
Active	1.26	0.68	1.95	1.54	0.83	2.38	1.90	1.03	2.93
Inactive	0.06	0.01	0.07	0.07	0.02	0.09	0.09	0.02	0.11
Future entrants	0.43	0.17	0.60	0.38	0.16	0.54	0.32	0.13	0.45
Total	3.05	1.38	4.43	3.58	1.63	5.21	4.27	1.95	6.22
Survivor annuities									
Retired & deceased	1.42	0.22	1.64	1.74	0.27	2.01	2.14	0.33	2.47
Active	0.58	0.07	0.65	0.71	0.08	0.79	0.88	0.10	0.98
Inactive	0.01	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02
Future entrants	0.23	0.04	0.28	0.21	0.04	0.25	0.18	0.03	0.21
Total	2.25	0.34	2.58	2.67	0.40	3.07	3.21	0.47	3.69
All annuities combined									
Retired & deceased	7.51	2.48	9.99	9.17	3.03	12.20	11.32	3.74	15.06
Active	6.86	2.99	9.86	8.38	3.66	12.03	10.34	4.51	14.85
Inactive	0.36	0.09	0.44	0.43	0.11	0.54	0.54	0.13	0.67
Future entrants	2.64	1.01	3.64	2.36	0.90	3.27	1.96	0.75	2.71
Total annuities	17.37%	6.57%	23.94%	20.35%	7.70%	28.05%	24.15%	9.14%	33.29%
Lump sum payments			0.01			0.02			0.02
Total benefits			23.95%			28.06%			33.31%

Note: Detail may not add to totals due to rounding.

[a] Present values are determined using a 7% interest rate for all years.

[b] Includes supplemental annuity benefits.

[c] Tier 1 benefits in excess of social security level.

Table 5. Balance of the Combined National Railroad Retirement Investment Trust and Railroad Retirement Account, and the Social Security Equivalent Benefit Account as of December 31, 2010
(Dollar amounts in millions)

	Combined NRRIT and RR Account	SSEB Account
Securities:		
Market value of NRRIT investments	$ 24,978	$ -
Par value specials[a] (including accrued interest)	379	857
Loan to Railroad Unemployment Insurance Account	48	
Cash accounts	3	3
Balance	25,408	860
Adjustment to reflect actual return[b]	1,918	-
Adjusted balance for use in present value calculation	$ 23,490	$ 860

[a] Par value specials are securities issued by the Treasury directly to the RR and SSEB Accounts, maturing on the first business day of the month following the month of issue. Their yield rate each month is the average yield rate, computed as of the last day of the previous month, of marketable Treasury notes with maturity dates not less than three years away.

[b] This adjustment, which accounts for the difference between the actual -1.6% return earned in calendar year 2011 and the 7% rate used in the present value calculations, provides for consistency with the present value calculations.

Table 6. Actuarial surplus or (deficiency) for National Railroad Retirement Investment Trust and Railroad Retirement Account

	Employment assumption		
	I	II	III
	Present values in millions of dollars		
Adjusted funds on hand, 12/31/2010	$ 23,490	$ 23,490	$ 23,490
Retirement taxes	70,868	66,314	59,522
Income taxes on benefits	6,668	6,396	6,150
Available from SSEB Account	2,443	2,368	2,300
Total, present and prospective assets	103,469	98,568	91,462
Benefit payments	98,430	94,454	90,858
Administrative expenses	3,150	2,687	2,198
Total liabilities	101,580	97,141	93,056
Actuarial surplus or (deficiency)	1,889	1,427	(1,594)
One percent of tier 2 payroll	$ 4,109	$ 3,366	$ 2,728
	Present values as a percentage of tier 2 payroll		
Adjusted funds on hand, 12/31/2010	5.72%	6.98%	8.61%
Retirement taxes	17.25	19.70	21.82
Income taxes on benefits	1.62	1.90	2.25
Available from SSEB Account	0.59	0.70	0.84
Total, present and prospective assets	25.18	29.28	33.53
Benefit payments	23.95	28.06	33.31
Administrative expenses	0.77	0.80	0.81
Total liabilities	24.72	28.86	34.12
Actuarial surplus or (deficiency)	0.46	0.42	(0.58)

Table 7. Unfunded accrued liability
(Dollar amounts in millions)

		Amount or rate		
1.	Present value of benefits for former and present employees	$ 83,460		
2.	Present value of administrative expenses for former and present employees	2,374		
3.	Present value of tier 2 payroll for present employees	145,539		
4.	Normal cost as a level percentage of tier 2 payroll	7.46%		
5.	Present value of future service costs for present employees = (3) x (4)	10,857		
6.	Accrued liability = (1) + (2) - (5)	74,977		
7.	Funds on hand, 12/31/2010[a]	24,350		
8.	Unfunded accrued liability = (6) - (7)	50,627		
9.	Level amount to fund unfunded accrued liability in 30 years	3,935		
		Employment Assumption		
		I	II	III
10.	Level tax rate to fund unfunded accrued liability and meet normal costs for next 30 years	25.36%	27.77%	30.88%
11.	Tax rate after 30 years (normal cost rate)	7.46%	7.46%	7.46%

[a] The amount shown is the sum of the NRRIT, RR Account and SSEB Account balances shown in Table 5.

Table 8. Vested dual benefit amounts and average number of beneficiaries

Fiscal year	Vested dual benefit amounts[a] (Millions)	Average number of beneficiaries
2013	$44	22,000
2014	39	20,000
2015	34	17,000
2016	29	15,000
2017	25	13,000
2018	22	11,000
2019	18	9,000
2020	15	8,000
2021	13	6,000
2022	11	5,000
2023	9	4,000
2024	7	4,000
2025	6	3,000
2026	5	2,000
2027	4	2,000
2028	3	1,000
2029	2	1,000
2030	2	1,000

[a] When projected amounts are used to determine the appropriation needed for benefit payments, a margin must be added to ensure payment of full benefits.

Table 9. Supplemental annuity benefit amounts and average number of beneficiaries

Calendar year	Supplemental benefit amounts (Millions)	Average number of beneficiaries[a]
2012	$62	123,000
2013	62	123,000
2014	62	124,000
2015	62	124,000
2016	62	123,000
2017	61	122,000
2018	60	120,000
2019	59	117,000
2020	58	114,000
2021	56	110,000
2022	53	106,000
2023	51	101,000
2024	49	96,000
2025	46	91,000
2026	44	86,000
2027	41	81,000
2028	39	76,000
2029	36	71,000
2030	34	67,000
2031	31	62,000
2032	29	57,000
2033	27	53,000
2034	24	48,000
2035	22	44,000
2036	20	40,000
2037	18	36,000
2038	16	32,000
2039	14	28,000
2040	13	25,000
2041	11	22,000
2042	10	19,000
2043	8	16,000
2044	7	14,000
2045	6	12,000
2046	5	10,000
2047	4	8,000
2048	3	6,000
2049	3	5,000
2050	2	4,000

[a] Average number in a year. Excludes cases where the supplemental annuity is totally eliminated because of a private pension. On January 1, 2011, there were about 33,000 of these cases.

Table 10. Average number of railroad retirement annuitants[a] and number of annuitants per full time employee

Calendar year	Average number of annuitants under each employment assumption			Average number of annuitants per full time employee		
	I	II	III	I	II	III
2012	544,900	544,900	544,900	2.38	2.41	2.44
2013	541,500	541,500	541,500	2.37	2.43	2.50
2014	538,300	538,300	538,300	2.37	2.46	2.57
2015	535,400	535,400	535,400	2.37	2.48	2.63
2016	532,300	532,300	532,300	2.36	2.51	2.70
2017	528,800	528,800	528,800	2.36	2.53	2.76
2018	524,400	524,400	524,300	2.35	2.55	2.82
2019	519,200	519,100	519,100	2.33	2.57	2.88
2020	513,100	513,000	512,800	2.31	2.58	2.93
2021	506,100	505,900	505,800	2.29	2.58	2.98
2022	498,400	498,100	497,800	2.27	2.58	3.03
2023	490,000	489,600	489,100	2.24	2.57	3.06
2024	481,200	480,700	480,000	2.20	2.57	3.10
2025	472,500	471,700	470,800	2.17	2.56	3.13
2026	463,800	462,800	461,700	2.14	2.55	3.16
2027	455,400	454,000	452,500	2.11	2.54	3.20
2028	447,100	445,400	443,500	2.08	2.53	3.23
2029	439,200	437,100	434,700	2.05	2.52	3.26
2030	431,600	429,000	426,100	2.02	2.51	3.29
2031	424,500	421,400	418,000	2.00	2.50	3.33
2032	417,800	414,000	409,900	1.98	2.49	3.35
2033	411,000	406,500	401,700	1.95	2.48	3.36
2034	404,600	399,300	393,600	1.93	2.48	3.38
2035	398,900	392,700	386,000	1.91	2.47	3.40
2036	393,700	386,500	378,800	1.89	2.47	3.42
2037	388,900	380,600	371,700	1.88	2.46	3.43
2038	384,100	374,600	364,500	1.86	2.46	3.44
2039	379,500	368,700	357,300	1.84	2.45	3.44
2040	374,900	362,800	350,000	1.83	2.44	3.44
2041	371,200	357,600	343,400	1.81	2.43	3.44
2042	368,100	352,900	337,100	1.80	2.42	3.43
2043	364,700	347,800	330,100	1.79	2.41	3.42
2044	362,300	343,400	323,900	1.79	2.40	3.40
2045	360,700	339,600	318,100	1.78	2.40	3.39
2046	359,000	335,600	311,800	1.78	2.39	3.37
2047	357,300	331,500	305,300	1.77	2.38	3.34
2048	355,400	327,000	298,300	1.77	2.36	3.30
2049	354,100	323,200	292,000	1.76	2.35	3.26
2050	353,300	319,700	285,900	1.76	2.34	3.23
2055	348,900	300,300	253,100	1.75	2.25	2.95
2060	343,600	280,300	221,100	1.73	2.11	2.61
2065	337,100	260,900	192,800	1.70	1.97	2.28
2070	330,800	244,200	170,800	1.67	1.84	2.02
2075	325,700	231,600	155,800	1.64	1.75	1.84
2080	322,400	223,200	146,700	1.62	1.68	1.73
2085	320,600	218,200	141,700	1.61	1.64	1.67

[a] Excludes partition payments to spouses and divorced spouses where the employee is deceased or not otherwise entitled to an annuity. On December 31, 2010, there were 745 of these cases.

Table 11. Transfers to railroad retirement system under financial interchange with social security system, 1937-2012[a]
(Millions of dollars)

Determination number	Fiscal years covered	Benefit credits to railroad retirement[b]	Tax credits to social security	Cash transfers to[c] railroad retirement	
				Amount	Year of transfer
1-25	1937-76 d	20,912.4 e	9,743.9	11,826.7 d	1953-77 d
26	1977 f	2,556.6 e	1,060.8	1,618.5	1978
27	1978	2,230.3	902.6	1,477.4	1979
28	1979	2,389.5	1,089.9	1,429.9	1980
29	1980	2,683.4	1,204.8	1,614.4	1981
30	1981	2,973.7	1,322.5	1,819.6	1982
31	1982	3,321.9	1,296.0	2,278.6	1983
32	1983	3,471.8	1,287.9	2,425.6	1984
33	1984	3,524.1	1,472.8	2,352.9	1985
34	1985	3,658.5	1,443.1	2,652.8	1986
35	1986	3,744.8	1,398.7	2,614.2	1987
36	1987	3,864.4	1,305.0	2,851.3	1988
37	1988	4,028.8	1,427.3	2,933.5	1989
38	1989	4,149.5	1,418.9	3,049.1	1990
39	1990	4,415.3	1,451.1	3,456.7	1991
40	1991	4,434.7	1,476.5	3,206.4	1992
41	1992	4,720.1	1,523.1	3,435.4	1993
42	1993	4,796.5	1,583.3	3,525.5	1994
43	1994	5,199.6	1,515.5	4,120.1	1995
44	1995	4,836.2 e	1,545.1	3,556.3	1996
45	1996	5,008.0	1,566.8	3,747.2	1997
46	1997	5,114.1	1,615.4	3,819.1	1998
47	1998	5,173.5	1,641.9	3,816.0	1999
48	1999	5,195.6	1,767.5	3,697.6	2000
49	2000	4,767.8 e	1,750.9	3,282.8	2001
50	2001	5,180.5	1,756.9	3,646.8	2002
51	2002	5,217.5	1,748.2	3,747.3	2003
52	2003	5,350.6	1,731.1	3,843.5	2004
53	2004	5,480.8	1,820.0	3,917.3	2005
54	2005	5,527.6	1,906.1	3,846.3	2006
55	2006	5,746.8	1,976.5	4,019.8	2007
56	2007	5,853.6	2,076.6	4,049.9	2008
57	2008	6,005.5	2,095.6	4,137.3	2009
58	2009	6,212.0	2,035.4	4,391.6	2010
59	2010	6,431.5	2,074.1	4,574.3	2011
60	2011	6,524.1	2,143.3	4,651.0	2012
Total	1937-2011	180,701.6	65,175.1	125,432.5	

[a] Financial interchange transactions with the Hospital Insurance Trust Fund are not included. These involve mainly a transfer of collected taxes to the Centers for Medicare & Medicaid Services, with some adjustments for difference in earnings bases under the two systems.

[b] Amounts include allowances for administrative expenses and adjustments to previous determinations.

[c] Transfers include interest which is not shown in table.

[d] First determination covered period January 1937-June 1952. Initial balance of $488.2 million was never transferred to social security; only interest was paid until debt was liquidated by subsequent offsets in favor of railroad retirement.

[e] Includes adjustment for pre-1957 military service.

[f] 1977 figure covered 15 months (July 1976 - September 1977) because of change in definition of fiscal year.

A P P E N D I X

Outline of the benefit and financing provisions of the railroad retirement system as amended through December 31, 2011

EMPLOYEE BENEFITS

1. Normal age annuity

Requirement of 10 years of service or 5 years of service after 1995 for retirement at social security retirement age (see definition at end of outline). Employees with less than 10 years of service must meet Social Security Act eligibility requirements to receive a tier 1 benefit.

2. Prenormal age annuity

A. Eligible for unreduced benefit upon later of (1) attainment of age 60 and (2) completion of 30 years of service (60/30 eligibility).

B. Eligible for reduced benefit with less than 30 years of service upon later of (1) attainment of age 62 and (2) completion of 10 years of service or 5 years of service after 1995. The benefit is reduced by 1/180 for each of the first 36 months and by 1/240 for each additional month the employee is under social security retirement age. (Reduction for age in excess of 36 months applies only to tier 1 benefit if employee had any service before 8-12-1983.)

3. Total and permanent disability annuity

10-year service requirement or 5 years of service after 1995. Benefit may not begin earlier than the later of (1) the first day of the sixth month following date disability begins and (2) the first day of the twelfth month before the month in which the application is filed. Employees with less than 10 years of service and at least 5 years of service after 1995 who meet Social Security eligibility requirements may qualify for a tier 1 benefit only (an age reduced tier 2 benefit would be payable at age 62).

4. Occupational disability annuity

Requirement of 20 years of service or attainment of age 60 with 10 years of service; current connection (see definition at end of outline) required. Benefit may not begin earlier than the later of (1) the first day of the sixth month following date disability begins and (2) the first day of the twelfth month before the month in which the application is filed.

5. Supplemental annuity

Requirement of attainment of age 60 with 30 years of service if retired on or after 7-1-1974, or age 65 with 25 years of service. Must have service before 10-1-1981. Current connection required.

6. Vested dual benefit

A. Requirement of fully insured (see definition at end of outline) status under Social Security Act effective 12-31-1974 and either (1) 25 years of railroad service before 1975 or (2) 10 years of railroad service before 1975, with some railroad work in 1974 or a current connection on 12-31-1974 or at the time the annuity begins, or

B. Requirement of fully insured status under Social Security Act as of last year of railroad work before 1975 and 10 years of railroad service before 1975.

7. Work restrictions

Suspension of annuity for any month annuitant is employed by a railroad. For disabilities in 2012, loss of one month's annuity for each $790 in excess of $9,480 earned in a year with the last $395 of such excess treated as $790 (no annuity is lost for any month with earnings below $790). In addition, the tier 1 portion of a regular annuity based on railroad earnings (see definition at end of outline) after 1974 and all social security earnings (see definition at end of outline) is subject to social security work restrictions, unless a social security benefit is also being paid. If annuitant is employed by last non-railroad employer preceding retirement, the tier 2 portion and the supplemental annuity are reduced by one dollar for each two dollars of earnings, subject to a maximum reduction of 50 percent. All vested dual benefits are subject to social security work restrictions.

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8. Creditable service (continuity not required)

All service after December 31, 1936. Service before 1937 may be used if annuitant had employment relation on August 29, 1935 or 6 months of service after August 29, 1935 and before 1946. No limit on service except 30-year maximum if pre-1937 service used. Additional service months may be deemed, for years after 1984, where employee does not work in every month of year, but railroad earnings exceed monthly prorations of annual tier 2 maximum earnings creditable.

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9. Creditable and taxable railroad earnings

From 1966 through 1978, the maximum monthly earnings were one-twelfth of the annual social security maximum. The 1977 social security amendments introduced a difference between the maximum monthly earnings creditable for tier 1 and tier 2 benefits starting in 1979.

			Tier 1	Tier 2
before July 1, 1954	$ 300			
July 1, 1954 - May 31, 1959	350	1979	$1,908.33	$1,575
June 1, 1959 – Oct. 31, 1963	400	1980	2,158.33	1,700
Nov. 1, 1963 – Dec. 31, 1965	450	1981	2,475	1,850
1966-67	550	1982	2,700	2,025
1968-71	650	1983	2,975	2,225
1972	750	1984	3,150	2,350
1973	900			
1974	1,100			
1975	1,175			
1976	1,275			
1977	1,375			
1978	1,475			

Starting in 1985, earnings are credited on an annual rather than a monthly basis. The annual maximums are:

	Tier 1	Tier 2		Tier 1	Tier 2
1985	$39,600	$29,700	1999	$72,600	$53,700
1986	42,000	31,500	2000	76,200	56,700
1987	43,800	32,700	2001	80,400	59,700
1988	45,000	33,600	2002	84,900	63,000
1989	48,000	35,700	2003	87,000	64,500
1990	51,300	38,100	2004	87,900	65,100
1991	53,400	39,600	2005	90,000	66,900
1992	55,500	41,400	2006	94,200	69,900
1993	57,600	42,900	2007	97,500	72,600
1994	60,600	45,000	2008	102,000	75,900
1995	61,200	45,300	2009	106,800	79,200
1996	62,700	46,500	2010	106,800	79,200
1997	65,400	48,600	2011	106,800	79,200
1998	68,400	50,700	2012	110,100	81,900

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10. Creditable military service and earnings

Military service is creditable in war and national emergency periods, and in some cases between June 15, 1948 and December 15, 1950, if preceded by railroad service in the year of entry into military service or the preceding year.

Earnings: $160 before 1968
$260 after 1967 but before 1975
For each calendar year after 1974, earnings are the same as that credited under social security.

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11. Basic monthly annuity computation

Tier 1: Social security benefit based on combined railroad and social security earnings, less social security benefit actually payable (based on social security earnings only). See item 2 for computation of tier 1 benefit for employees with 60/30 eligibility.

Tier 2: 0.7% of the average monthly compensation (AMC) multiplied by the number of years of service. This amount is then reduced by 25% of the employee's gross vested dual benefit. The AMC is the average of an individual's highest 60 months of railroad earnings up to the tier 2 maximum. For each month of service in a year for which the Railroad Retirement Board's records do not show earnings on a monthly basis, the total earnings for the year divided by the months of service in that year will be considered the monthly earnings for each month of service in the year.

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12. Vested dual benefit computation

A. For employees satisfying requirements in item 6.A., benefit is social security benefit based on railroad earnings through 1974, plus social security benefit based on social security earnings through 1974, less social security benefit based on combined railroad and social security earnings through 1974.

B. For employees satisfying requirements of item 6.B., benefit is the same as in A., except for the exclusion of all earnings after last pre-1975 year employee had railroad employment.

In both cases, benefit might be proportionally reduced so that the total amount paid out in vested dual benefits in any fiscal year does not exceed the total amount appropriated for that year (see item 39).

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13. Supplemental annuity computation

For employees who were entitled to supplemental annuities or who would have been entitled, but for last person service, prior to 1975, the monthly benefit is a minimum of $45 increased by $5 for each year of service over 25, with a maximum benefit of $70. These employees have a reduction in their regular railroad retirement annuity because of the supplemental annuity. For employees first entitled or potentially entitled after 1974, the monthly benefit is a minimum of $23 increased by $4 for each year of service over 25, with a maximum benefit of $43. These employees have no reduction in their regular railroad retirement annuity. Supplemental annuity will be reduced if employee receives a private pension from railroad employer based on employer contributions.

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14. Tax rebate lump sum

Employee who has at least 10 years of railroad service and is not eligible for the vested dual benefit will receive a lump sum at retirement computed by summing for each year from 1951 through 1974 the product of the social security tax rate for the year times the excess of the employee's combined railroad and social security earnings for the year over (approximately) the maximum creditable for the year under the 1937 Act. Survivors of employee may receive refund if employee dies before receiving it.

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15. Separation/severance lump sum

Lump sum, equal to tier 2 payroll taxes deducted from separation or severance payments, will be paid at retirement to employees with at least 10 years of service or 5 years of service after 1995 to the extent that separation or severance payments did not yield additional tier 2 service credits.

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16. Cost-of-living increases (annually, effective with January 1 payments)

Tier 1: Same as social security increases.

Tier 2: 32.5% of social security increases.

Vested dual benefits: Frozen at the 1974 level, except that social security cost-of-living increases effective between 12-31-1974 and the earlier of January 1, 1982 and the annuity beginning date are included in the benefit computation.

Supplemental annuity: None.

SPOUSE BENEFITS

17. Eligibility

A. Unreduced annuity:

1. Spouse retiring at age 60 (or any age with a child in care), if (a) employee attained 60/30 eligibility before 7-1-1984 and retired at age 60 or later, (b) employee attained 60/30 eligibility after 6-30-1984 and retired at age 62 or later, (c) employee has 30 or more years of service and retired after 12-31-2001 at age 60 or later, or (d) spouse retired after 12-31-2001, and employee retired from disability, has 30 or more years of service and is age 60 or over.

2. Spouse retiring at social security normal retirement age (or any age with a child in care), if (a) employee retired before 1-1-1975 and is age 65 or over, (b) employee retired after 12-31-1974 and is age 62 or over, or (c) employee retired after 6-30-1974, has 30 or more years of service and is age 60 or over.

B. Reduced annuity:

1. Spouse retiring at age 60 if employee attained 60/30 eligibility after 6-30-1984 and retired with an age annuity before 1-1-2002 before attaining age 62.

2. Spouse retiring at age 62, if employee has less than 30 years of service, is retired, and has attained age 62. Age reduction is 1/144 for each of the first 36 months spouse is under social security retirement age and 1/240 for each month in excess of 36 that spouse is under retirement age. (Reduction for age in excess of 36 months applies to tier 1, but not tier 2, if employee had any service before 8-12-1983.)

18. Work restrictions

Same as employee; in addition, spouse is not paid for any month employee annuity is not payable by virtue of work restrictions, and spouse is reduced $1 for each $2 of employee's earnings for last non-railroad employer preceding employee's retirement (see item 7).

19. Annuity computation

Tier 1: One-half of social security benefit based on employee's combined railroad and social security earnings. See item 17 for computation of spouse tier 1 in cases where employee is receiving a reduced 60/30 benefit. If spouse is entitled to a social security benefit, tier 1 is reduced by the amount of the benefit, but not below 0. If spouse is entitled to employee annuity or a public service pension, certain additional restrictions apply.

Tier 2: 45% of employee's tier 2 benefit. Spouse receives additional benefit if spouse is also an employee annuitant and either the employee or spouse has railroad service prior to 1975.

20. Vested dual benefit

A spouse receiving a vested dual benefit on August 13, 1981 will continue to receive a benefit (adjusted as described in item 12). No vested dual benefits will be awarded after that date.

21. Divorced spouse, partitioned spouse and partitioned divorced spouse

A divorced spouse is entitled to a tier 1 benefit if the employee is retired, the employee and divorced spouse have been married for at least 10 consecutive years and have both attained age 62, and the divorced spouse is unmarried. If the employee is not retired, but has sufficient railroad service to otherwise be eligible for an annuity, the divorced spouse can receive a tier 1 benefit if the above conditions are met and the parties have been divorced for a period of not less than 2 years, and the employee is fully insured under the Social Security Act using combined railroad and social security earnings.

If the employee is retired, a court ordered partition of tier 2, supplemental annuity, vested dual benefit or minimum guarantee amounts (see item 42) is payable with the employee's monthly annuity reduced by the amount of the partition payment. If the employee is not retired, a court ordered partition of tier 2 or vested dual benefit payments is payable if (1) the employee has 10 years of service or 5 years of service after 1995, and (2) both the employee and spouse or former spouse have attained age 62.

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22. Cost-of-living increases for spouses

Each tier is subject to same percentage increase as corresponding tier of employee benefit.

SURVIVOR AND DEATH BENEFITS

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23. Employee requirement for survivor benefits

All benefits except residual lump sum require deceased employee to have 10 years of railroad service or 5 years of service after 1995 and a current connection. If employee does not meet above conditions, his or her earnings record is transferred to social security, which pays any survivor benefits.

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24. Aged widow's and widower's eligibility

A widow or widower must be age 60 and unremarried. Those age 60-61 are deemed age 62 in computing the benefit. The age reduction for each month of age under social security retirement age is 28.5% divided by the number of months from age 60 to social security retirement age.

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25. Disabled widow's and widower's eligibility

A widow or widower must be at least age 50 and under age 60, unremarried, and totally and permanently disabled if disability occurs within 7 years of employee's death or within 7 years after widowed mother's or father's status terminated. Age reduction is 28.5%. Benefit may not begin earlier than the later of (1) the first day of the sixth month following the date disability begins and (2) the first day of the twelfth month before the month in which the application is filed.

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26. Widowed mother's and father's eligibility

Unremarried surviving spouse of a deceased employee who is under social security retirement age and who at the time of filing an application has in his or her care a minor or disabled child of the deceased employee.

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27. Divorced widow(er)'s, remarried widow(er)'s eligibility, partitioned surviving spouse and partitioned surviving divorced spouse

The following are eligible for a tier 1 benefit.

A. Divorced widow(er) - must (1) have been married to employee at least 10 years, be unmarried or remarried after age 60 (after age 50 and disability onset if disabled), and have attained age 60 or age 50 if disabled, or (2) be unmarried at any age with a child of the employee in care.

B. Remarried widow(er) - must have remarried after age 60 (after age 50 and disability onset if disabled), or the remarriage must have ended. Widow(er) must have attained age 60, be between 50 and 59 and disabled or be any age with a child in care.

Benefits for divorced aged widow(er)s and remarried aged widow(er)s are reduced for the full number of months under social security retirement age.

Where court ordered partition of tier 2, supplemental annuity and vested dual benefit payments are in effect at the time of the employee's death, such payments will continue after the employee's death unless the court order requires termination upon the employee's death. Where the employee dies before partition payments are initiated, and the employee acquired 120 months of railroad service, or 60 months of service after 1995, such payments may be made when both the surviving spouse/divorced spouse, and the employee if he or she had survived, would be 62.

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28. Child's eligibility

A child of a deceased employee must be under 18 or under 19 and a full-time elementary or secondary school student. Unmarried children continuously disabled since before age 22 are also eligible, regardless of age.

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29. Parent's eligibility

A parent of a deceased employee who has attained age 60 and received at least one-half of his or her support from the employee will be eligible for an annuity. If the employee died leaving a widow, widower or child who is or might become eligible in the future, the parent will be eligible for a tier 1 benefit only. In certain instances, a remarried parent of a deceased employee will be eligible for a tier 1 benefit.

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30. Work restrictions

Annuity not payable for any month in which survivor engages in railroad employment. Entire benefit subject to social security work restrictions.

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31. Annuity computation

Tier 1: Amount payable to survivor under Social Security Act, based on the deceased employee's combined railroad and social security earnings after 12-31-1936, less the amount of any social security benefit received. Additional restrictions exist for a widow or widower who also receives an annuity as a railroad employee or who receives a public service pension.

Tier 2: Widow or widower - 50% of employee tier 2 benefit
Parent - 35% of employee tier 2 benefit
Children - 15% of employee tier 2 benefit for each child
The total family tier 2 benefit has a minimum of 35% and a maximum of 80% of the employee's tier 2 benefit (a maximum of 130% is used for the purpose of calculating the widow(er) intitial minimum amount).

For a widow or widower an "initial minimum amount" based on the two-tier annuity amount that would have been payable to the railroad employee at the time the widow(er)'s annuity is awarded is computed with a widow(er)'s tier 2 amount equal to 100 percent of the employee's tier 2 amount. Widow(er)s' annuities computed on the basis of the initial minimum amount are not adjusted for annual cost-of-living increases until the total annuity amount is exceeded by the annuity amount the widow(er) would have been paid under prior law (tier 2 amount equal to 50 percent of the employee's tier 2 amount), with all interim cost-of-living increases otherwise payable.

For an aged widow or widower, the total benefit exclusive of any vested dual benefit may not be less than amount received as spouse in month before employee's death.

All percentages are before deductions for work or entitlement to social security benefit or railroad retirement employee annuity.

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32. Vested dual benefit for widow or widower

A widow or widower receiving a vested dual benefit on August 13, 1981 will continue to receive a benefit (adjusted as described in item 12). No vested dual benefits will be awarded after that date.

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33. Insurance lump sum

Payable if employee leaves no survivor eligible for monthly benefits in the month of his or her death.

A. If employee had 10 years of service before 1-1-1975, the benefit is 10 times the basic amount. The basic amount is 52.4% of the first $75 of average monthly remuneration (AMR), plus 12.8% of the remainder, increased by 1% for each year before 1975 with earnings of $200 or more. The AMR is based on combined railroad and social security earnings before 1975 and after 1936.

B. If employee had less than 10 years of service as of 12-31-1974, the amount will be the amount social security would have paid (currently $255). This amount will only be paid to a widow or widower living with the employee at the time of the employee's death.

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34. Residual lump sum death benefit

Payable when it appears no further benefits will derive from deceased employee except possibly to a widow, widower or parent at a future date. In this case, survivor must waive the right to all future benefits based on the deceased employee's railroad service. The amount payable is the sum of 4% of taxable railroad earnings from 1-1-1937 to 12-31-1946, 7% from 1-1-1947 to 12-31-1958, 7-1/2% from 1-1-1959 to 12-31-1961, 8% from 1-1-1962 to 12-31-1965, 8.1% from 1-1-1966 to 12-31-1966, 8.65% from 1-1-1967 to 12-31-1967, 8.8% from 1-1-1968 to 12-31-1968, 9.45% from 1-1-1969 to 12-31-1970, 9.85% from 1-1-1971 to 12-31-1972, 10.1% from 1-1-1973 to 9-30-1973, 5.35% from 10-1-1973 to 12-31-1973, and 5.45% from 1-1-1974 to 12-31-1974. Railroad earnings after 1974 are not taken into account. The amount actually paid is reduced by the amount of benefits paid deriving from the deceased employee.

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35. Cost-of-living increases for survivors

Each tier is subject to same percentage increase as corresponding tier of employee benefit.

FINANCING, INVESTMENTS AND TAXATION OF BENEFITS

36. Employee and employer payroll taxes

Employees and employers contribute at the prevailing social security rate up to the tier 1 earnings limit. In addition, employees and employers pay a tier 2 tax up to the tier 2 earnings limit. Tier 2 taxes on both employers and employees are based on the ratio of certain asset balances to the sum of benefits and administrative expenses (the average account benefits ratio).

At the end of each fiscal year (September 30), an Account Benefits Ratio (ABR) is calculated by dividing the fair market value of the assets in the RR Account and the NRRIT (and for years before 2002, the SSEB Account) as of the close of such fiscal year by the total benefits and administrative expenses paid from the RR Account and the NRRIT during such fiscal year. The Average Account Benefits Ratio (AABR), with respect to any calendar year, is then calculated as the average of the account benefits ratios for the 10 most recent fiscal years ending before such calendar year. If the AABR is not a multiple of 0.1, it is increased to the next highest multiple of 0.1. The tier 2 tax rate is determined from a tax rate table based on the AABR.

AABR		Tier 2 tax rate	
At least	But less than	Employer	Employee
	2.5	22.1	4.9
2.5	3.0	18.1	4.9
3.0	3.5	15.1	4.9
3.5	4.0	14.1	4.9
4.0	6.1	13.1	4.9
6.1	6.5	12.6	4.4
6.5	7.0	12.1	3.9
7.0	7.5	11.6	3.4
7.5	8.0	11.1	2.9
8.0	8.5	10.1	1.9
8.5	9.0	9.1	0.9
9.0		8.2	0.0

Contributions to 401(k) deferred compensation plans and the value of employer-paid premiums for group term life insurance coverage in excess of $50,000 are included in railroad earnings for payroll tax purposes.

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37. Financial interchange

Railroad retirement system pays to social security system the taxes social security would have collected and receives the additional amount of benefits and administrative expenses social security would have paid if railroad employment had been covered under social security. The net difference (including interest) is transferred in the June after the fiscal year for which the transfer is made.

The Railroad Retirement Board estimates the amount and direction of the financial interchange transfer that would be made for each month if transfers were on a current monthly basis. If this estimate favors the railroad retirement system, Treasury advances the amount with interest to the Railroad Retirement Account, as a loan from the general fund, by the middle of the succeeding month. Within 10 days after receipt of the annual financial interchange for a fiscal year, the RRB must repay the amount, with interest, advanced during the fiscal year.

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38. Investments

Amounts in the Railroad Retirement Account and in the Social Security Equivalent Benefit Account not needed to pay current benefits and administrative expenses are invested by the National Railroad Retirement Investment Trust, whose Board of seven trustees is empowered to invest Trust assets in non-governmental assets, such as equities and debt, as well as in governmental securities. The Trust transfers funds back to the Railroad Retirement Account as needed for the payment of benefits.

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39. Financing of vested dual benefits

General revenue appropriations finance all vested dual benefit payments since September 1981. Beginning October 1, 1981, each annual appropriation is placed in the Dual Benefits Payments Account. Total benefits paid in any fiscal year (starting with 1982) may not exceed the total available in the account. The account may borrow at the end of a fiscal year the amount that the Railroad Retirement Board estimates will be necessary to pay vested dual benefits for the first month of the next fiscal year.

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40. Taxability of benefits

The portion of tier 1 benefits equivalent to social security benefits is taxed under the same rules as are social security benefits. Tier 1 benefits in excess of social security equivalent benefits, tier 2 benefits, vested dual benefits, and supplemental annuities are taxed under the rules by which private pensions are taxed.

Revenues from taxes on social security equivalent benefits are transferred to the social security system through the financial interchange. Revenues from taxes on tier 1 benefits in excess of social security equivalent benefits and tier 2 benefits are transferred to the Railroad Retirement Account. Revenues from taxes on vested dual benefits are transferred to the Dual Benefits Payments Account.

MISCELLANEOUS PROVISIONS

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41. Benefit preservation

Each year the Railroad Retirement Board must report to the President and Congress the results of a five-year projection of anticipated revenues to and payments from the Railroad Retirement Account. If the results show that the funds in the account will be insufficient to pay full benefits at any time during the five-year period, the report must indicate (1) the first fiscal year in which benefits would have to be reduced because of insufficient funds in the absence of any changes, and (2) the amount of adjustments necessary to preserve financial solvency. Within 180 days after publication of this report, representatives of railroad labor and management are obligated to submit proposals designed to preserve the fund's solvency. The Railroad Retirement Board will publish regulations necessary to provide a constant level of benefits at the maximum level possible and to insure that no individual receives less than what he or she would have had all his earnings been covered under social security. The Railroad Retirement Board's regulations will take effect beginning with the first year in which benefit reductions will be necessary and continue until legislative action supersedes them.

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42. Minimum annuity

The overall minimum guaranty for employees and dependents is 100% of the amount, or the additional amount, the family would receive under the Social Security Act if the employee's railroad earnings after 1936 were credited as social security earnings.

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43. Automatic benefit eligibility adjustments

A liberalization of entitlement provisions enacted for title II of the Social Security Act will be applied to provide entitlement to a Tier 1 benefit under the Railroad Retirement Act.

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44. Transfer of credits

Transfer of railroad retirement credits is made to social security if an employee had less than 10 years of railroad service and less than 5 years of service after 1995 or, in the case of a survivor, if the employee lacked a current connection.

DEFINITIONS

The meanings of terms used in the outline are defined below:

Railroad earnings - earnings derived from covered railroad employment, up to the maximums specified in item 9.

Social security earnings - earnings derived from employment covered under the Social Security Act (excludes railroad earnings), up to the maximums allowed.

Current connection - generally defined as having at least 12 months of railroad service in the 30 months preceding death or retirement. An employee whose last 12 months of railroad service occurred prior to the 30 months before retirement or death may maintain a current connection if the employee did not perform any regular employment between the end of the 30 month period containing the last 12 months of railroad service and the month of retirement or death. For purposes of the supplemental annuity or survivors' benefits, an employee who was terminated involuntarily and without fault on or after October 1, 1975, after 25 years of service and did not thereafter decline an offer of employment in the same class or craft in the railroad industry is deemed to have a current connection.

Fully insured - insured for retirement at age 62 under social security; does not necessarily imply an insured status for disability benefits or for survivor benefits for death before age 62.

Social security benefit - when used in describing the computation of the vested dual benefit, the term "social security benefit" means a primary insurance amount computed by using the social security formula in effect in 1974 and the specified earnings; it does not imply an actual benefit.

Social security retirement age - the age at which an individual may receive an unreduced benefit at retirement under the Social Security Act, as follows:

Year of attainment of early retirement age (62 for employees and spouses, 60 for widows and widowers)	Retirement age (age for unreduced benefit)
1999 or earlier	65 years, 0 months
2000	65 years, 2 months
2001	65 years, 4 months
2002	65 years, 6 months
2003	65 years, 8 months
2004	65 years, 10 months
2005-2016	66 years, 0 months
2017	66 years, 2 months
2018	66 years, 4 months
2019	66 years, 6 months
2020	66 years, 8 months
2021	66 years, 10 months
2022 or later	67 years, 0 months