# Railroad Retirement System

## Annual Report Required by Railroad Retirement Act of 1974 and Railroad Retirement Solvency Act of 1983

U.S. Railroad Retirement Board

Bureau of the Actuary

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**ANNUAL ACTUARIAL REPORT REQUIRED BY RAILROAD RETIREMENT ACT OF 1974 AND RAILROAD RETIREMENT SOLVENCY ACT OF 1983**

## I. INTRODUCTION

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. The 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 its debt to the Railroad Retirement Account.

This report is intended to meet the requirements of Section 22 and Section 502 for 2011.

## II. RAILROAD EMPLOYMENT

Over the years, the main source of income to the railroad retirement system has been a payroll tax on railroad employment. The amount of income that the tax produces is directly dependent on the number of railroad employees covered under the system.

An abbreviated history of average railroad employment from 1955 through 2005 is shown in the following table.

| Year | Average employment for year | Average annual rate of decline for the 5-year period ending with the year |
|---|---|---|
| 1955 | 1,239,000 | |
| 1960 | 909,000 | 6.0% |
| 1965 | 753,000 | 3.7 |

| | | |
|---|---|---|
| 1970 | 640,000 | 3.2 |
| 1975 | 548,000 | 3.1 |
| 1980 | 532,000 | 0.6 |
| 1985 | 372,000 | 6.9 |
| 1990 | 296,000 | 4.5 |
| 1995 | 265,000 | 2.2 |
| 2000 | 246,000 | 1.5 |
| 2005 | 232,000 | 1.2 |

Between 1955 and 2005, the average annual rate of decline was 3.3 percent. Since 2005, average employment and rates of decline have been as follows:

| Year | Average employment for year | Annual rate of decline from previous year |
|---|---|---|
| 2006 | 236,000 | (1.7%) |
| 2007 | 237,000 | (0.4) |
| 2008 | 235,000 | 0.8 |
| 2009 | 223,000 | 5.1 |
| 2010 | 221,000 | 0.9 |

Two things become clear from the figures shown -- (1) railroad employment has continued to decline over a long period of years, and (2) the rate of decline has been irregular.

Three employment assumptions were used in the 24th actuarial valuation, which served as the 2009 annual report required by Section 502. Employment assumptions I and II were based on a model developed by the Association of American Railroads, and assumed that (1) passenger employment would remain at the level of 43,000, and (2) the employment base, excluding passenger employment, would 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 differed from employment assumptions I and II by assuming that (1) passenger employment would decline by 500 per year until a level of 35,000 was reached and then remain level, and (2) the employment base, excluding passenger employment, would 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.

The 2010 annual report continued the use of the three employment assumptions, updating them as to current employment levels.

The projected average employment for 2010, based on the three employment assumptions used in the 2010 report, ranged from 213,000 to 219,000. The actual average employment for 2010 was 221,000 (subject to later adjustment), which was above the range of projected amounts. Passenger employment at the end of calendar year 2010 was estimated to be 44,000. Based on this result, it was decided to use 2010 average employment of 221,000 as a starting point in this year's report and continue the use of the rates of decline used in the 24th valuation. In this year's report, for employment assumptions I and II, passenger employment is assumed to remain level at 44,000. For employment assumption III, passenger employment is assumed to decline by 500 per year until a level of 35,000 is reached and then remain level. These assumptions are shown in Table 1.

## III. RESULTS

Projections were made for the various components of income and outgo under each employment assumption for the 25 calendar years 2011-2035. The projections of these components were combined and the investment income calculated to produce the projected balances in the accounts at the end of each projection year. The results are summarized in Table 2 and Figure 1.

Table 2 consists of three tables, one for each of employment assumptions I, II and III. The tables show, for the Social Security Equivalent Benefit Account (SSEBA) and the combined National Railroad Retirement Investment Trust (NRRIT) and Railroad Retirement Account (RRA), 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 (ABR) and average account benefits ratio (AABR). [1]

Table 2 indicates that cash flow problems arise only under employment assumption III, and not until 2034. The results shown in Table 2 will be discussed separately for the SSEBA and the combined NRRIT and RRA.

### A. Social Security Equivalent Benefit Account

The SSEBA 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. The SSEBA also receives or pays the financial interchange transfers between the railroad retirement and social security systems. The financial interchange transfer, subject to the qualification in the next paragraph, should be enough to offset any surplus or deficit for the year. The SSEBA can thus be regarded as automatically funded, the financial interchange being the mechanism for correcting any surplus or deficiency.

The qualification mentioned in the preceding paragraph arises because, in a relatively small number of cases, the railroad retirement system does not pay benefits when the

[1] At the end of each fiscal year (September 30), the Account Benefits Ratio (ABR) is calculated by dividing the fair market value of the assets in the RRA and the NRRIT (and for years before 2002, the SSEBA) as of the close of such fiscal year by the total benefits and administrative expenses paid from the RRA and the NRRIT during such fiscal year. The Average Account Benefits Ratio (AABR), with respect to any calendar year, is 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.

social security system would. In these cases, mainly dependent children of retired railroad employees, the SSEBA collects an amount through the financial interchange but does not pay a corresponding benefit. This imbalance between outgo and income is small in any particular year.

The SSEBA must from time to time transfer to the NRRIT or RRA amounts not needed to pay current benefits and administrative expenses in such a manner as to maximize investment return to the Railroad Retirement system.

The SSEBA is assumed to maintain a target balance of approximately 1.5 months of benefit payments in order to meet benefit obligations and contingencies, and transfer any excess to the NRRIT/RRA. However, if the NRRIT/RRA runs into cash flow problems, the SSEBA is assumed to transfer enough of its accumulated funds to the NRRIT/RRA to provide for benefit payments until the SSEBA is exhausted. Thereafter, the SSEBA is assumed to transfer to the NRRIT/RRA any excess of income over outgo, maintaining a zero balance.

## B. Railroad Retirement Account and National Railroad Retirement Investment Trust

The RRA receives tier 2 payroll taxes and income taxes on tier 2 and excess tier 1 benefits. Tier 2 benefits, excess tier 1 benefits, supplemental annuity benefits and administrative expenses are paid from the RRA. The NRRIT receives funds from the RRA and SSEBA for investment, pays investment expenses, and transfers funds to the RRA to meet benefit obligations.

The tier 2 payroll tax rate is determined from a tax rate table based on the AABR. The combined employer and employee tier 2 tax rate is 18% for values of the AABR between 4.0 and 6.0, inclusive. A maximum rate of 27% is reached when the AABR falls below 2.5, and a minimum rate of 8.2% is reached when the AABR reaches 9.0. Since the AABR is a 10-year average of the ABR's, whether the AABR in a given year increases or decreases from the prior year depends solely on whether the ABR in the prior year is greater or less than the ABR 10 years earlier.

Under employment assumption I (Table 2-I), the combined NRRIT and RRA balance declines through 2024 and then grows through the end of the projection period. The combined employer and employee tier 2 tax rate increases to 19% in 2025-2035.

Under employment assumption II (Table 2-II), the combined NRRIT and RRA balance declines through 2027 and then grows through the end of the projection period. The combined employer and employee tier 2 tax rate increases to 27% in 2033-2035.

Under employment assumption III (Table 2-III), the combined NRRIT and RRA balance declines until the balance becomes negative in 2034. 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 reaches

$2,872 million at the end of the projection period. The combined employer and employee tier 2 tax rate increases to 27% in 2028 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.

## C. Analysis of Results

Under both employment assumptions I and II, no cash flow problems occur throughout the 25-year projection period, and the ABR remains above 0.5 in each year. Under employment assumption III, cash flow problems occur in 2034. In order to maintain an ABR of at least 0.5 throughout the projection period under employment assumption III, the increase in tier 2 tax rate to 27% would need to be accelerated to calendar year 2024. Alternatively, increasing the tier 2 tax rate to 20.7% beginning in 2012 would also maintain an ABR of at least 0.5 throughout the projection period.

The overall conclusion is that, barring a sudden, unanticipated, large decrease 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 still questionable. Under the current financing structure, actual levels of railroad employment and investment return over the coming years will largely determine whether corrective action is necessary.

## D. Comparison of Results with 2010 Report

The projected tier 2 tax rates for each calendar year are either the same or lower than in last year's report. The projected combined account balances are higher through calendar year 2027 under each employment assumption. Under employment assumptions I and II, the account balances are lower at the end of the current projection period due to lower tax rates in some earlier years.

The favorable comparison with last year was largely due to both actual investment return of approximately 14.4% exceeding the expected investment return of 7.5% in calendar year 2010 and to higher projected employment. This was offset by a lower estimated wage increase for calendar year 2010.

# IV. RECOMMENDATIONS

As stated in the introduction, this report must contain recommendations with regard to (1) 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.

## A. Tax Rates

This report recommends no change in the rate of tax imposed on employers and employees. The tax adjustment mechanism will automatically increase or decrease tax rates in response to changes in fund balance. Even under a pessimistic employment assumption, this mechanism is expected to prevent cash flow problems for at least 23 years.

## B. Diversion of Taxes to Railroad Unemployment Insurance Account

No diversion of taxes from the Railroad Retirement Account to the Railroad Unemployment Insurance Account is recommended at this time. The loans outstanding from the Railroad Retirement Account to the Railroad Unemployment Insurance Account are expected to be repaid in calendar year 2011 without any diversion of taxes.

Table 1. Employment, inflation and investment return assumptions

| Calendar year | Average employment (thousands) I | II | III | Percentage increase over prior year: Earnings | Cost of living | Investment return |
|---|---|---|---|---|---|---|
| 2010 | 221 | 221 | 221 | 2.4% | 0.0% | 14.4% |
| 2011 | 220 | 218 | 214 | 4.0 | 0.0 | 7.5 |
| 2012 | 219 | 214 | 208 | 4.0 | 3.0 | 7.5 |
| 2013 | 218 | 211 | 202 | 4.0 | 3.0 | 7.5 |
| 2014 | 218 | 207 | 196 | 4.0 | 3.0 | 7.5 |
| 2015 | 217 | 204 | 190 | 4.0 | 3.0 | 7.5 |
| 2016 | 216 | 201 | 184 | 4.0 | 3.0 | 7.5 |
| 2017 | 215 | 198 | 179 | 4.0 | 3.0 | 7.5 |
| 2018 | 214 | 195 | 173 | 4.0 | 3.0 | 7.5 |
| 2019 | 213 | 192 | 168 | 4.0 | 3.0 | 7.5 |
| 2020 | 212 | 189 | 163 | 4.0 | 3.0 | 7.5 |
| 2021 | 212 | 186 | 158 | 4.0 | 3.0 | 7.5 |
| 2022 | 211 | 183 | 154 | 4.0 | 3.0 | 7.5 |
| 2023 | 210 | 180 | 149 | 4.0 | 3.0 | 7.5 |
| 2024 | 209 | 177 | 145 | 4.0 | 3.0 | 7.5 |
| 2025 | 208 | 175 | 140 | 4.0 | 3.0 | 7.5 |
| 2026 | 207 | 172 | 136 | 4.0 | 3.0 | 7.5 |
| 2027 | 207 | 170 | 132 | 4.0 | 3.0 | 7.5 |
| 2028 | 206 | 167 | 128 | 4.0 | 3.0 | 7.5 |
| 2029 | 205 | 165 | 125 | 4.0 | 3.0 | 7.5 |
| 2030 | 204 | 162 | 122 | 4.0 | 3.0 | 7.5 |
| 2031 | 203 | 160 | 119 | 4.0 | 3.0 | 7.5 |
| 2032 | 203 | 158 | 116 | 4.0 | 3.0 | 7.5 |
| 2033 | 202 | 155 | 113 | 4.0 | 3.0 | 7.5 |
| 2034 | 201 | 153 | 110 | 4.0 | 3.0 | 7.5 |
| 2035 | 200 | 151 | 108 | 4.0 | 3.0 | 7.5 |

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

| | | | | Combined NRRIT and RRA | | | | SSEBA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 2011 | 5.40 | 6.70 | 16.0% | $4,797 | $2,691 | $2,166 | $25,468 | $6,379 | $2,617 | $3,696 | $794 | $26,262 |
| 2012 | 5.13 | 6.50 | 16.0% | 4,992 | 2,771 | 1,868 | 25,114 | 6,621 | 2,705 | 3,946 | 824 | 25,938 |
| 2013 | 4.89 | 6.40 | 17.0% | 5,177 | 3,012 | 1,887 | 24,837 | 6,877 | 2,802 | 4,107 | 856 | 25,693 |
| 2014 | 4.65 | 6.30 | 17.0% | 5,358 | 3,107 | 1,867 | 24,452 | 7,145 | 2,907 | 4,271 | 889 | 25,341 |
| 2015 | 4.44 | 6.00 | 18.0% | 5,533 | 3,372 | 1,846 | 24,138 | 7,420 | 3,019 | 4,435 | 923 | 25,061 |
| 2016 | 4.24 | 5.70 | 18.0% | 5,689 | 3,483 | 1,722 | 23,653 | 7,701 | 3,139 | 4,558 | 919 | 24,572 |
| 2017 | 4.06 | 5.40 | 18.0% | 5,822 | 3,597 | 1,751 | 23,178 | 7,984 | 3,267 | 4,791 | 993 | 24,171 |
| 2018 | 3.90 | 5.00 | 18.0% | 5,935 | 3,717 | 1,763 | 22,724 | 8,262 | 3,402 | 4,895 | 1,028 | 23,752 |
| 2019 | 3.76 | 4.80 | 18.0% | 6,027 | 3,840 | 1,737 | 22,274 | 8,527 | 3,543 | 5,017 | 1,061 | 23,335 |
| 2020 | 3.64 | 4.60 | 18.0% | 6,104 | 3,968 | 1,712 | 21,850 | 8,777 | 3,691 | 5,117 | 1,092 | 22,942 |
| 2021 | 3.52 | 4.50 | 18.0% | 6,164 | 4,100 | 1,566 | 21,353 | 9,010 | 3,844 | 5,194 | 1,121 | 22,474 |
| 2022 | 3.45 | 4.30 | 18.0% | 6,208 | 4,238 | 1,663 | 21,046 | 9,225 | 3,983 | 5,269 | 1,148 | 22,194 |
| 2023 | 3.39 | 4.10 | 18.0% | 6,248 | 4,380 | 1,650 | 20,828 | 9,422 | 4,125 | 5,321 | 1,172 | 22,000 |
| 2024 | 3.34 | 4.00 | 18.0% | 6,292 | 4,525 | 1,643 | 20,704 | 9,606 | 4,270 | 5,359 | 1,195 | 21,899 |
| 2025 | 3.34 | 3.80 | 19.0% | 6,339 | 4,909 | 1,651 | 20,926 | 9,788 | 4,417 | 5,394 | 1,217 | 22,143 |
| 2026 | 3.35 | 3.70 | 19.0% | 6,385 | 5,070 | 1,583 | 21,194 | 9,974 | 4,567 | 5,430 | 1,240 | 22,434 |
| 2027 | 3.40 | 3.60 | 19.0% | 6,434 | 5,236 | 1,703 | 21,698 | 10,162 | 4,722 | 5,463 | 1,264 | 22,962 |
| 2028 | 3.47 | 3.60 | 19.0% | 6,498 | 5,406 | 1,748 | 22,355 | 10,352 | 4,881 | 5,495 | 1,287 | 23,642 |
| 2029 | 3.55 | 3.50 | 19.0% | 6,576 | 5,582 | 1,805 | 23,165 | 10,547 | 5,043 | 5,529 | 1,311 | 24,476 |
| 2030 | 3.64 | 3.50 | 19.0% | 6,662 | 5,764 | 1,872 | 24,139 | 10,754 | 5,210 | 5,569 | 1,337 | 25,476 |
| 2031 | 3.75 | 3.50 | 19.0% | 6,754 | 5,951 | 1,893 | 25,228 | 10,975 | 5,383 | 5,619 | 1,364 | 26,592 |
| 2032 | 3.89 | 3.50 | 19.0% | 6,841 | 6,147 | 2,039 | 26,573 | 11,212 | 5,564 | 5,677 | 1,393 | 27,966 |
| 2033 | 4.07 | 3.60 | 19.0% | 6,919 | 6,351 | 2,147 | 28,152 | 11,468 | 5,754 | 5,745 | 1,425 | 29,577 |
| 2034 | 4.27 | 3.60 | 19.0% | 7,015 | 6,562 | 2,274 | 29,973 | 11,735 | 5,950 | 5,818 | 1,458 | 31,431 |
| 2035 | 4.48 | 3.70 | 19.0% | 7,141 | 6,781 | 2,418 | 32,030 | 12,012 | 6,151 | 5,896 | 1,492 | 33,522 |

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

[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 Account (RRA), and Social Security Equivalent Benefit Account (SSEBA) under Employment Assumption II
(Dollar amounts in millions)

| | | | | Combined NRRIT and RRA | | | | SSEBA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 2011 | 5.39 | 6.70 | 16.0% | $4,797 | $2,676 | $2,165 | $25,452 | $6,379 | $2,601 | $3,711 | $794 | $26,246 |
| 2012 | 5.12 | 6.50 | 16.0% | 4,992 | 2,728 | 1,865 | 25,053 | 6,621 | 2,663 | 3,988 | 824 | 25,877 |
| 2013 | 4.86 | 6.40 | 17.0% | 5,177 | 2,937 | 1,880 | 24,693 | 6,877 | 2,732 | 4,177 | 856 | 25,549 |
| 2014 | 4.61 | 6.30 | 17.0% | 5,357 | 3,000 | 1,852 | 24,188 | 7,145 | 2,806 | 4,373 | 889 | 25,077 |
| 2015 | 4.37 | 6.00 | 18.0% | 5,532 | 3,224 | 1,820 | 23,699 | 7,420 | 2,885 | 4,569 | 923 | 24,622 |
| 2016 | 4.13 | 5.70 | 18.0% | 5,688 | 3,296 | 1,681 | 22,988 | 7,701 | 2,970 | 4,727 | 919 | 23,907 |
| 2017 | 3.90 | 5.40 | 18.0% | 5,820 | 3,370 | 1,692 | 22,229 | 7,983 | 3,060 | 4,997 | 993 | 23,222 |
| 2018 | 3.69 | 5.00 | 18.0% | 5,932 | 3,446 | 1,681 | 21,424 | 8,261 | 3,156 | 5,140 | 1,028 | 22,452 |
| 2019 | 3.49 | 4.70 | 18.0% | 6,023 | 3,524 | 1,627 | 20,552 | 8,525 | 3,255 | 5,303 | 1,061 | 21,613 |
| 2020 | 3.30 | 4.50 | 18.0% | 6,098 | 3,604 | 1,569 | 19,627 | 8,774 | 3,359 | 5,446 | 1,092 | 20,719 |
| 2021 | 3.09 | 4.30 | 18.0% | 6,157 | 3,686 | 1,383 | 18,540 | 9,005 | 3,466 | 5,568 | 1,120 | 19,660 |
| 2022 | 2.91 | 4.10 | 18.0% | 6,198 | 3,771 | 1,434 | 17,547 | 9,218 | 3,555 | 5,689 | 1,147 | 18,694 |
| 2023 | 2.76 | 3.90 | 19.0% | 6,235 | 4,048 | 1,375 | 16,734 | 9,410 | 3,646 | 5,789 | 1,171 | 17,905 |
| 2024 | 2.61 | 3.70 | 19.0% | 6,277 | 4,140 | 1,321 | 15,918 | 9,589 | 3,736 | 5,875 | 1,193 | 17,111 |
| 2025 | 2.46 | 3.50 | 19.0% | 6,320 | 4,232 | 1,265 | 15,095 | 9,765 | 3,825 | 5,961 | 1,214 | 16,309 |
| 2026 | 2.33 | 3.30 | 20.0% | 6,361 | 4,529 | 1,125 | 14,389 | 9,942 | 3,916 | 6,048 | 1,236 | 15,625 |
| 2027 | 2.22 | 3.10 | 20.0% | 6,404 | 4,629 | 1,170 | 13,782 | 10,118 | 4,007 | 6,133 | 1,258 | 15,040 |
| 2028 | 2.19 | 2.90 | 23.0% | 6,462 | 5,372 | 1,155 | 13,848 | 10,295 | 4,099 | 6,218 | 1,280 | 15,128 |
| 2029 | 2.18 | 2.80 | 23.0% | 6,534 | 5,488 | 1,164 | 13,966 | 10,474 | 4,191 | 6,306 | 1,302 | 15,268 |
| 2030 | 2.18 | 2.70 | 23.0% | 6,613 | 5,608 | 1,177 | 14,138 | 10,662 | 4,285 | 6,400 | 1,325 | 15,463 |
| 2031 | 2.18 | 2.50 | 23.0% | 6,696 | 5,730 | 1,136 | 14,309 | 10,859 | 4,380 | 6,504 | 1,350 | 15,659 |
| 2032 | 2.20 | 2.50 | 23.0% | 6,770 | 5,856 | 1,211 | 14,606 | 11,067 | 4,480 | 6,613 | 1,375 | 15,981 |
| 2033 | 2.35 | 2.40 | 27.0% | 6,832 | 6,948 | 1,277 | 15,999 | 11,290 | 4,586 | 6,732 | 1,403 | 17,402 |
| 2034 | 2.54 | 2.30 | 27.0% | 6,912 | 7,106 | 1,388 | 17,581 | 11,518 | 4,693 | 6,854 | 1,431 | 19,012 |
| 2035 | 2.75 | 2.30 | 27.0% | 7,019 | 7,267 | 1,512 | 19,342 | 11,751 | 4,801 | 6,978 | 1,460 | 20,802 |

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

[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 Account (RRA), and Social Security Equivalent Benefit Account (SSEBA) under Employment Assumption III
(Dollar amounts in millions)

| | | | | Combined NRRIT and RRA | | | | SSEBA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 2011 | 5.39 | 6.70 | 16.0% | $4,797 | $2,658 | $2,164 | $25,433 | $6,379 | $2,584 | $3,729 | $794 | $26,227 |
| 2012 | 5.10 | 6.50 | 16.0% | 4,992 | 2,679 | 1,861 | 24,981 | 6,621 | 2,614 | 4,037 | 824 | 25,805 |
| 2013 | 4.83 | 6.40 | 17.0% | 5,176 | 2,851 | 1,871 | 24,527 | 6,877 | 2,650 | 4,259 | 856 | 25,383 |
| 2014 | 4.56 | 6.30 | 17.0% | 5,357 | 2,878 | 1,834 | 23,882 | 7,145 | 2,690 | 4,489 | 889 | 24,771 |
| 2015 | 4.29 | 6.00 | 18.0% | 5,531 | 3,054 | 1,790 | 23,195 | 7,420 | 2,732 | 4,722 | 923 | 24,118 |
| 2016 | 4.00 | 5.70 | 18.0% | 5,687 | 3,085 | 1,635 | 22,228 | 7,701 | 2,779 | 4,917 | 919 | 23,147 |
| 2017 | 3.73 | 5.30 | 18.0% | 5,818 | 3,115 | 1,624 | 21,149 | 7,983 | 2,830 | 5,227 | 993 | 22,142 |
| 2018 | 3.46 | 4.90 | 18.0% | 5,928 | 3,146 | 1,588 | 19,955 | 8,260 | 2,883 | 5,411 | 1,028 | 20,983 |
| 2019 | 3.19 | 4.60 | 18.0% | 6,018 | 3,178 | 1,503 | 18,618 | 8,523 | 2,940 | 5,616 | 1,061 | 19,679 |
| 2020 | 2.91 | 4.40 | 18.0% | 6,092 | 3,209 | 1,408 | 17,143 | 8,771 | 2,998 | 5,803 | 1,091 | 18,234 |
| 2021 | 2.61 | 4.20 | 18.0% | 6,148 | 3,242 | 1,179 | 15,415 | 9,000 | 3,059 | 5,970 | 1,120 | 16,535 |
| 2022 | 2.34 | 3.90 | 19.0% | 6,188 | 3,432 | 1,186 | 13,846 | 9,209 | 3,099 | 6,136 | 1,146 | 14,992 |
| 2023 | 2.06 | 3.60 | 19.0% | 6,222 | 3,467 | 1,075 | 12,165 | 9,397 | 3,139 | 6,281 | 1,169 | 13,334 |
| 2024 | 1.78 | 3.40 | 20.0% | 6,260 | 3,661 | 960 | 10,526 | 9,570 | 3,177 | 6,414 | 1,190 | 11,716 |
| 2025 | 1.50 | 3.10 | 20.0% | 6,299 | 3,693 | 840 | 8,760 | 9,738 | 3,212 | 6,547 | 1,211 | 9,971 |
| 2026 | 1.24 | 2.80 | 23.0% | 6,334 | 4,217 | 638 | 7,281 | 9,905 | 3,246 | 6,680 | 1,232 | 8,513 |
| 2027 | 1.00 | 2.50 | 23.0% | 6,373 | 4,251 | 623 | 5,782 | 10,069 | 3,278 | 6,811 | 1,252 | 7,034 |
| 2028 | 0.83 | 2.30 | 27.0% | 6,424 | 4,957 | 540 | 4,855 | 10,231 | 3,312 | 6,939 | 1,272 | 6,127 |
| 2029 | 0.67 | 2.00 | 27.0% | 6,489 | 5,003 | 472 | 3,841 | 10,393 | 3,346 | 7,067 | 1,292 | 5,133 |
| 2030 | 0.50 | 1.70 | 27.0% | 6,558 | 5,053 | 398 | 2,734 | 10,560 | 3,383 | 7,198 | 1,312 | 4,046 |
| 2031 | 0.31 | 1.50 | 27.0% | 6,630 | 5,105 | 259 | 1,468 | 10,732 | 3,420 | 7,333 | 1,334 | 2,802 |
| 2032 | 0.11 | 1.30 | 27.0% | 6,689 | 5,161 | 224 | 164 | 10,909 | 3,462 | 7,469 | 1,355 | 1,519 |
| 2033 | 0.09 | 1.10 | 27.0% | 6,732 | 5,223 | 1,346 | - | 11,096 | 3,507 | 6,395 | 161 | 161 |
| 2034 | -0.10 | 0.90 | 27.0% | 6,791 | 5,285 | 213 | (1,293) | 11,283 | 3,552 | 7,569 | - | (1,293) |
| 2035 | -0.32 | 0.70 | 27.0% | 6,872 | 5,350 | (56) | (2,872) | 11,467 | 3,598 | 7,869 | - | (2,872) |

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

[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.

**Figure 1. Combined NRRIT, RRA and SSEBA Balance**
**(In millions)**