

THE RAILROAD DISABILITY RETIREMENT PROGRAM

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The disability retirement program administered by the United States Railroad Retirement Board has been in existence for 28 years. It is the oldest and most comprehensive program of its kind in the United States. For this reason, experience under this program is of interest not only to the Board and to the railroad industry, but also to pension experts and students of social insurance problems, generally.

This paper discusses the historical development of the program, the current provisions of law, and the relationship of the railroad program to the Board's sickness insurance program and to the disability benefit program of the social security system. The last section consists of a statistical summary of current and historical data on the program, including information on medical and other characteristics of beneficiaries. The actuarial data included were supplied by the Board's Actuary.

Development of the Disability Program

Background

The roots of the railroad disability program lie in the nineteenth century. Company pension plans began in this country in the railroad industry, which led all others in providing old-age and disability retirement benefits for employees. The first formal pension system in the industry providing old-age and disability benefits was established in 1874. By 1927, about 80 percent of all railroad employees worked for companies with pension plans but relatively few employees ever received benefits under such plans.

The financial base of the railroad pension structure was not strong enough to support it. With few exceptions, the plans were financed entirely by employers on a pay-as-you-go basis; that is, pension payments were treated as current operating expenses. As the benefit rolls grew, pension payments became more burdensome and generally could not be maintained during periods of adverse economic conditions. Widespread reductions in pension payments during the depression of the early 1930's brought about a movement which led to the development of a nationwide railroad retirement system on a contributory basis.

The Railroad Retirement Act of 1934 established the first contributory retirement system for nongovernmental employees in this country to be administered by the Federal government. It was declared unconstitutional by the Supreme Court and new legislation was enacted in 1935 designed to meet the constitutional objections to the 1934 act. These laws--the Railroad Retirement Act and the

Carriers' Taxing Act of 1935--also became the subject of litigation, but the dispute never reached the Supreme Court. Instead, at the request of President Roosevelt, railroad management and labor formed a joint committee to negotiate their differences. The result was the system of retirement and survivor benefits embodied in the Railroad Retirement Act of 1937 and its companion taxing act.

The Railroad Retirement Act of 1937 is the foundation of the present system. Although that act provided for disability retirement, the conditions under which disabled employees could get benefits were severely limited. Unless the employee had reached age 60, he needed 30 years of service to qualify for a disability annuity.

The law was liberalized by amendments in later years in several important ways: (1) the service requirement for annuities based on total disability was reduced, (2) provision was made for annuities based on occupational disability, and (3) the Board received the authority to determine a "period of disability" within the meaning of the Social Security Act.

Current Disability Benefit Provisions

A railroad employee under age 65 who is permanently disabled, either for all employment or for his regular railroad occupation only, may receive a retirement annuity for life. The annuity terminates if he recovers from disability before age 65. Also, it is subject to deductions if his earnings exceed certain limits.

The amount of the annuity is computed according to the same formula used in calculating annuities to persons retiring at age 65 or over. No benefits to wives are payable until the employee reaches age 65. However, a special provision in the Railroad Retirement Act, called the "social security guaranty," may enable an employee to receive additional benefits if he had dependents who would have qualified for them under the Social Security Act. Under the railroad formula, the maximum annuity currently payable is \$211. Under the special guaranty, the maximum is \$279--10 percent more than the maximum family benefit of \$254 payable under the Social Security Act.

An employee is eligible for an annuity based on total disability if his physical or mental condition disables him permanently for all regular employment and if he has at least 10 years of railroad service.

An employee is eligible for an annuity based on occupational disability if he has a "current connection with the railroad industry" and is permanently disabled for work in his regular occupation. If he has reached

age 60, he needs 10 years of railroad service; if he is under age 60, he needs 20 years.

An employee has a current connection with the railroad industry if he worked for a railroad in at least 12 out of the last 30 months before his annuity begins. Any other 30-month period may be used if the employee had no regular nonrailroad employment after the 30-month period. Self-employment is not considered "employment" for this purpose.

Determinations of disability are made by Board medical and other personnel specially trained in the field of disability evaluation. Usually, the Board's physicians do not conduct examinations themselves, but base their determinations on medical evidence supplied by physicians of the employer and employee. If this evidence is not sufficient, a supplementary examination is made. In addition to medical evidence, the Board also considers nonmedical factors such as the employee's age, training, education, and work experience.

Because a beneficiary may receive his annuity only if he remains disabled, the Board systematically checks on his continuing eligibility for benefits. A variety of means are employed, including annual questionnaires covering his medical and employment status and exchanges of wage information with the Social Security Administration. As mentioned previously, the receipt of earnings in excess of specified amounts may result in deductions from annuity payments or in an investigation to determine whether the work record is consistent with his disability.

An employee under age 65 may not receive a disability annuity for any month in which he earns more than \$100 either in employment-for-hire or in self-employment. If his total earnings for the year are less than \$1,250, however, any amounts withheld are restored at the end of the year. If an annuitant earns \$1,250 or more in the year, he loses one month's annuity for each \$100 of earnings in excess of \$1,200. (In calculating the excess, a remainder of \$50 or more is counted as \$100, while a remainder of less than \$50 is not counted.) No deductions are made for any month in which the annuitant earns \$100 or less. Penalty deductions may be made if a disability annuitant fails to report earnings promptly.

The railroad disability program is limited to cash benefits and does not include provision for vocational rehabilitation or training of disabled employees. However, in selected cases, disabled employees are referred to the appropriate State agency for possible vocational rehabilitation services.

Coordination with Sickness Benefits

Disability benefits under the Railroad Retirement Act are coordinated with

sickness benefits which first became payable in 1947 under another law administered by the Board, the Railroad Unemployment Insurance Act. Many employees awarded disability annuities receive sickness benefits before their annuities begin. If an employee meets the eligibility conditions of both programs, he may still receive sickness benefits, but only to the extent that they exceed the amount of the annuity for the same period.

In the typical case, a disabled employee first applies for sickness benefits and later for a disability annuity. There are three important reasons for this procedure: (1) at the beginning of his disability, it may not be apparent that the employee will be permanently disabled, (2) sickness benefit payments can be started more quickly so that the employee has some income while he is waiting for the retirement annuity to be awarded, and (3) the sickness benefits are usually larger than the annuity.

Coordination with Social Security

In connection with its own disability program, the Board also makes determinations of "periods of disability" (disability freeze), within the meaning of the Social Security Act, for railroad employees with 10 or more years of service. To be eligible for a freeze, an employee must satisfy three requirements of the Social Security Act. He must be (1) totally disabled for at least 6 months, (2) fully insured on the basis of combined railroad and social security employment, and (3) have worked in at least one-half of the 10-year period before he became disabled. The criteria of disability used in establishing a freeze are approximately the same as those for permanent disability for all regular employment as used in adjudicating disability annuities under the Railroad Retirement Act.

An employee for whom a disability freeze period has been established may qualify for a higher annuity under the special guaranty than under the railroad formula. Under the guaranty, monthly benefits to an employee and his family equal 110 percent of the amount, or the additional amount, that the social security system would pay if railroad employment had been covered under that system. To illustrate the application of the provision, assume a disabled railroad employee could receive \$150 a month, calculated under the regular railroad retirement formula. Assume, further, that the employee has dependents and that the Social Security Administration would have paid a total of \$200 a month to this family if the employee had been in social security coverage. Therefore, the amount of annuity under the guaranty would be \$220 a month. This entire payment would be made to the employee, since the Railroad Retirement Act does not provide for direct payments to the wife of an employee under age 65 or to children while the employee is alive. Even if the disability freeze does not provide higher retirement benefits, it may result in higher survivor benefits after the employee dies,

since such benefits may also be computed under the guaranty provision.

Statistical Summary

The importance of the disability program may be illustrated by a number of summary figures. In calendar year 1962, about 10,300 annuities, averaging \$125, were awarded to employees on the basis of disability. They accounted for one out of four retirement annuities awarded by the Board. The average annuity awarded does not reflect the effect of subsequent increases under the guaranty provision. The average increase for annuities recertified is about \$50. Since about one out of five disability annuities is recertified under the guaranty, the completion of recertification actions will increase the average for all disability annuities awarded in the year by about \$10, that is, from \$125 to \$135.

At the end of 1962, 41,900 disability annuitants under age 65 were receiving monthly benefits averaging \$126. They made up 10 percent of the retired employees on the rolls and 5 percent of all individuals on the monthly benefit rolls. (There were also 57,600 annuitants age 65 or over who had been awarded annuities before age 65 on the basis of disability.) About \$72 million--7 percent of benefits of all types paid by the Board in calendar year 1962--went to disabled employees under age 65.

The relative importance of the disability program may also be shown in terms of actuarial cost figures. According to the last actuarial valuation made as of December 31, 1959, disability annuities to individuals under age 65 accounted for 8.3 percent of the cost of all retirement benefits, and 6.2 percent of all benefits under the railroad retirement and survivor benefit programs.

Medical and Age Characteristics of Employees Awarded Disability Annuities

During the fiscal year ended June 30, 1962, a total of 11,500 applications were evaluated by the Board. In 9,500 cases--83 percent--the employee was found to be permanently disabled either for his regular occupation or for all regular employment, and an annuity was awarded. The distribution by primary disability group and by age of employee is shown in table 1. Classification by disability group is in accordance with the Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, World Health Organization.

Diseases of the circulatory system were the most common disabling conditions. They accounted for 37 percent of the disability annuities awarded in the year. Other common disabilities were diseases of the bones and organs of movement, and diseases of the nervous system and sense organs. Altogether, these three groups accounted for two out of three

annuities awarded in the year.

Employees aged 60-64 formed the largest age group in each major disability group. There was considerable variation, however, in the representation of particular disabilities in the different age groups. Diseases of the circulatory system were the primary cause for 16 percent of the employees under age 45, compared with 41 percent of those aged 60-64. In contrast, mental, psychoneurotic, and personality disorders occurred most frequently at the younger ages. These conditions accounted for 21 percent of the disability claims allowed for the employees under age 45, but for only 4 percent for those aged 60-64.

Table 2 shows the percentage distribution, by primary disability group, of individuals awarded disability annuities over the 10-year period 1952-53 to 1961-62. In evaluating these data, it should be kept in mind that some differences in the figures may be due to lack of consistency in classification by primary disability group. This is particularly noticeable in the group of "symptoms, senility, and ill-defined conditions," a "catch-all" group of cases in which the primary disability could not easily be determined. This group accounted for over 10 percent of the awards in 1956-57 but only 3 percent in 1959-60. The sharp drop in the size of this group after 1958-59 may reflect increased emphasis on classification by specific disability groups.

Notwithstanding these qualifications, there were certain notable changes in the relative frequencies of the various disability groups. The proportion of claims allowed based on diseases of the circulatory system generally declined over the period, falling from almost 42 percent in 1952-53 to less than 38 percent in 1961-62. On the other hand, the proportion of disabilities due to diseases of the bones and organs of movement rose from 12 to 15 percent.

There were also significant changes in the percentage of employees with some of the less common disabilities. The proportion with diseases of the respiratory system rose fairly steadily over the years, from only 2 percent in 1952-53 to 6 percent in 1961-62. The proportion with mental, psychoneurotic and personality disorders rose from 4 to 6 percent while the percentage with infective and parasitic diseases declined.

Awards of Disability Annuities, 1936-62

Table 3 shows selected information on awards of disability annuities since the beginning of the program. The table also includes data on disability annuities being paid at the end of each year to individuals under age 65.

Analysis of the characteristics and trend of awards of disability annuities calls for separate consideration of the periods 1936-46, and 1947 and later, because of the different eligibility requirements in the two periods. Except for a small number of annuities awarded

under the superseded 1935 Act, a disability annuity could not be awarded before 1947 unless the employee was totally disabled for all regular employment. Also, as previously noted, if the employee was under age 60, he needed 30 years of service to qualify, the maximum service that could be credited towards annuities before 1967.

A large number of disabled employees filed applications for annuities after passage of the Railroad Retirement Act in June 1937, and 10,500 disability annuities were awarded in 1938. The number of awards declined sharply in the following years and leveled off at about 4,000 a year during the war years 1942-45. Disability annuities awarded during the years 1937-46 accounted for 21 percent of all retirement annuities awarded in the period.

The averages of years of service, ages at retirement, and amounts of annuities were generally very stable during the years before 1947, especially during the latter part of the period. In each of the years 1941-46, an average of 27.8 years of service was credited, the average age when the annuity began was 60.1 or 60.2 years, and the average annuity awarded ranged from \$68 to \$71.

The liberalization of the disability provisions under the 1946 amendments resulted in a sharp increase in the number of disability annuities awarded, from 5,000 in 1946 to almost 22,000 in 1947. The number dropped to 11,000 in 1948 and then gradually declined to under 10,000 a year by 1951 and has remained at about that level ever since.

The award of annuities based on occupational disability and the elimination of the 30-year service requirement for annuities beginning before age 60, had pronounced effects on the characteristics of annuities awarded after 1946. From 1946 to 1947, the average age at retirement fell from 60.1 years to 57.1, and the average years of service credited from 27.8 to 24.5. Reflecting the decline in average service, the average annuity awarded dropped from \$70 to \$64.

After the elimination of the initial backlog of employees who could first qualify for annuities under the liberalized conditions of the 1946 amendments, the average age at retirement rose slowly and stabilized at about 58 years. The average years of service remained just under 25 years through 1951. In 1952, this average increased sharply to 26.1 years as a result of the new 10-year service requirement established by amendments in 1951. Average service credited declined slowly in later years and by 1962 had fallen to 23.1 years.

Changes in the average annuity awarded after 1947 reflected mainly several increases in the annuity formula through amendments to the law. Annuities were increased by 20 percent in 1948, 15 percent in 1951, and 10 percent in 1956 and 1959. Largely as a result of these increases, average disability annuities awarded rose from about \$70 in most of the years

before 1948 to \$120 in 1959. Increasing pay rates throughout the period caused a gradual rise in the average monthly compensation on which annuities were based. However, this effect on average annuities was minor compared with the effect of legislative increases in the scale of benefits.

The social security disability insurance benefit program established in 1957 had pronounced effects on the amounts of annuities awarded to disabled railroad employees through application of the social security guaranty. This was especially true after August 1958 when social security benefits could be paid to certain dependents of disability insurance beneficiaries. At the end of 1961, 20 percent of the disability annuitants under age 65 on the rolls were being paid under the guaranty provision. They were receiving on the average, \$142, about \$55 more than would have been paid to them under a railroad formula.

Rates of Disability Retirement by Occupational Group

Until recently, the disability retirement rates used in the periodic actuarial valuations of the railroad retirement system were perhaps the only published modern disability rates for a large industrial plan. These rates, which are based on experience under the railroad retirement system, have been used frequently for other industrial pension plans containing disability retirement features.

Table 4 shows the rates of "immediate" disability retirement under the Railroad Retirement Act in the years 1957-59, by occupational group. These rates are for employees who were in active railroad service at the time, or shortly before, they became disabled. They do not reflect retirements among employees who left the railroad industry some time before they became disabled, because of the difficulties of determining the number of such employees who may be still alive and not retired. A retirement is defined as immediate if the employee's annuity began in the same calendar year as the year in which he last worked, or in the following year. Immediate retirements account for the majority of all disability retirements (77 percent in 1958-59).

As may be seen in table 4, disability retirement rates were generally highest among maintenance employees. Among employees of all ages, the highest rates were for extra-gang, section and other maintenance of way employees, and the lowest for executives, supervisors and professionals. The adjusted rates shown in the table for all ages combined were standardized to permit more meaningful comparisons of rates by occupation. Based on the adjusted figures, for example, the disability rates for brakemen, switchmen, and hostlers are higher than for engineers and conductors while the reverse is true for the unadjusted rates.

The occupational differences in disability rates reflect the combined effects of

socio-economic differences among employees working in the great variety of railroad occupations. These include rates of pay, stability of employment, working conditions, living standards, industrial hazards and level of medical care. The group with the highest disability rates--the

extra-gang and section men--is characterized by lower pay rates, higher unemployment and sickness rates, and generally less favorable working and living conditions than occupational groups with lower rates of disability retirement.

Table 1.--Disability annuities awarded in fiscal year 1961-62, by age of employee and by disability group

Disability group	Total		Age in year disability began									
			Under 45		45-49		50-54		55-59		60-64	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total-----	9,497	100	404	100	511	100	1,278	100	2,600	100	4,704	100
Infective and parasitic diseases---	183	2	25	6	16	3	36	3	52	2	54	1
Neoplasms-----	542	6	30	7	38	7	77	6	173	7	224	5
Allergic, endocrine system, meta- bolic, and nutritional diseases---	291	3	12	3	21	4	37	3	77	3	144	3
Diseases of the blood and blood- forming organs-----	22	*	3	1	2	*	3	*	7	*	7	*
Mental, psychoneurotic, and person- ality disorders-----	592	6	86	21	58	11	93	7	169	6	186	4
Diseases of the nervous system and sense organs-----	1,377	14	79	20	99	19	213	17	351	14	635	13
Diseases of the circulatory system-	3,559	37	64	16	142	28	409	32	1,004	39	1,940	41
Diseases of the respiratory system-	599	6	14	3	17	3	76	6	188	7	304	6
Diseases of the digestive system---	158	2	8	2	14	3	36	3	41	2	59	1
Diseases of the genito-urinary sys- tem-----	51	1	5	1	4	1	9	1	16	1	17	*
Diseases of the skin and cellular tissue-----	19	*	2	*	0	*	3	*	5	*	9	*
Diseases of the bones and organs of movement-----	1,440	15	58	14	80	16	198	15	370	14	734	16
Congenital malformations-----	1	0	0	0	0	0	0	0	0	0	1	0
Symptoms, senility, and ill-defined conditions-----	564	6	10	2	8	2	66	5	129	5	351	7
Amputations-----	99	1	8	2	12	2	22	2	18	1	39	1

* Less than 0.5 percent.

NOTE.--Claims involving more than one type of disability are classified by primary disability. Classification by disability group is in accordance with Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, World Health Organization. Detail may not add to totals shown because of rounding.

Table 2.--Percentage of disability annuities awarded, by disability group, fiscal years 1953-62

Disease group	Fiscal year									
	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
Number	8,535	9,524	8,875	9,642	8,330	9,459	9,982	8,896	9,218	9,497
Percent, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Infective and parasitic diseases.	3.9	3.9	3.3	3.5	3.1	3.3	3.1	2.5	2.3	1.9
Neoplasms	4.9	5.1	4.7	5.1	5.4	5.2	5.1	5.7	5.9	5.7
Allergic, endocrine system metabolic, and nutritional diseases.	3.2	2.8	2.8	2.7	2.7	1.7	2.4	2.9	3.0	3.1
Diseases of the blood and blood-forming organs . . . . .	.6	.3	.4	.2	.2	.3	.3	.3	.2	.2
Mental, psychoneurotic, and personality disorders.	4.1	4.2	3.9	3.8	4.1	5.7	5.4	5.4	4.8	6.2
Diseases of the nervous system and sense organs	15.6	16.1	16.8	17.5	17.0	16.0	16.1	17.0	15.4	14.5
Diseases of the circulatory system.	41.6	40.7	40.6	39.7	37.1	36.4	36.9	39.3	38.3	37.5
Diseases of the respiratory system.	2.2	2.6	2.8	3.0	3.2	5.2	5.2	5.9	6.2	6.3
Diseases of the digestive system.	1.5	1.5	1.5	1.8	1.7	1.6	1.2	1.5	1.6	1.7
Diseases of the genito-urinary system. . . . .	.4	.3	.4	.4	.4	.5	.5	.5	.5	.5
Diseases of the skin and cellular tissue . . . . .	.3	.4	.3	.5	.3	.4	.3	.3	.3	.2
Diseases of the bones and organs of movement	11.8	11.4	12.9	13.9	13.1	12.7	12.3	14.2	15.8	15.2
Symptoms, senility, and ill-defined conditions.	8.2	9.4	7.9	6.7	10.4	9.6	9.9	3.2	4.6	5.9
Amputations	1.6	1.4	1.4	1.1	1.2	1.5	1.4	1.2	1.1	1.0

NOTE.--Detail may not add to totals shown because of rounding.

Table 3.--Selected characteristics of disability annuities awarded and in current-payment status^{1/}
1937-62

Calendar year	Awarded during year					In current-payment status at end of year ^{1/}			
	Number	Percent of all employee annuities	Average years of service	Average monthly amount	Average age at retirement	Number	Percent of all employee annuities	Average monthly amount	Amount paid in year (millions)
1937 ^{2/}	2,500	6	29.6	\$85	60.3	1,300	3	\$85	\$1.5
1938	10,500	22	29.2	72	60.4	10,400	13	75	12.4
1939	7,300	28	28.4	66	60.3	11,600	12	72	13.6
1940	6,000	27	28.4	71	60.3	13,000	12	72	14.0
1941	5,000	26	27.8	68	60.2	13,800	11	71	14.3
1942	4,000	27	27.8	68	60.2	13,300	10	70	18.5
1943	4,300	24	27.8	70	60.1	12,900	10	70	13.4
1944	4,200	23	27.8	70	60.1	13,500	9	70	13.5
1945	4,300	18	27.8	71	60.1	13,600	9	70	13.8
1946	5,000	19	27.8	70	60.1	14,100	8	70	14.4
1947	21,800	50	24.5	64	57.1	30,000	15	66	29.1
1948	14,100	43	24.6	78	57.3	36,000	17	71	35.8
1949	13,300	37	24.9	79	57.7	40,000	17	74	41.2
1950	12,300	34	24.6	79	58.0	42,800	17	75	44.6
1951	9,700	30	24.7	82	58.0	43,000	17	88	48.6
1952	8,800	28	26.1	98	58.0	42,500	16	91	53.1
1953	9,500	27	25.5	96	57.9	42,300	15	92	54.1
1954	9,400	26	25.3	97	58.0	42,200	14	92	53.9
1955	10,000	26	24.8	96	58.1	43,000	14	92	54.7
1956	9,200	25	24.4	106	58.1	43,100	13	101	57.4
1957	9,100	23	24.2	107	58.3	42,300	13	101	59.6
1958	10,000	23	23.7	108	58.2	42,400	12	102	60.5
1959	10,200	23	23.8	120	58.4	42,300	11	116	65.2
1960	10,700	22	23.8	130	58.0	42,200	11	122	72.0
1961	9,000	23	23.4	134	58.1	41,100	10	125	70.2
1962	10,300	23	23.1	3/135	57.9	41,900	10	126	72.2

^{1/} Annuitants under age 65 only.

^{2/} Includes data for 100 annuities awarded in 1936 under the provisions of the 1935 Railroad Retirement Act.

^{3/} Includes estimated effect of recertifications made after initial award.

Table 4.--Rates of immediate disability retirement under the Railroad Retirement Act,
by occupational group, 1957-59

(Crude rates of disability retirement per 1,000 exposed)

Occupational group	Age					
	All Ages		Under 50	50-54	55-59	60-64
	Adjusted	Unadjusted				
All employees-----	9.63	9.63	1.55	7.30	12.51	29.69
Office employees:						
Executives, supervisors, and profes- sionals-----	4.90	5.37	*	*	5.32	19.18
Station agents, telegraphers, clerks and other office employees-----	7.51	7.42	1.12	7.01	9.92	21.95
Train-and-engine-service employees:						
Engineers and conductors-----	6.61	8.88	*	5.45	9.31	20.10
Firemen, brakemen, switchmen and hostlers-----	8.75	6.77	1.59	3.45	9.51	31.42
Maintenance employees:						
Way, structure and shop craftsmen, helpers and apprentices-----	10.62	10.85	1.34	8.54	13.67	33.33
Extra-gang, section and other maintenance-of-way employees-----	17.78	17.75	4.24	12.78	23.40	51.59
Shop and stores employees-----	13.16	12.61	*	10.53	15.70	43.58
Station and platform employees-----	11.30	10.15	*	6.69	19.16	33.14
All other employees-----	8.89	9.35	1.99	8.20	9.73	26.47

* Rate not calculated because of small number of retirements in sample.

NOTE.--Retirement is classified as immediate if the employee retired in the same calendar year as the year he last worked, or in the following year. Adjusted rates are calculated on assumption that age distribution for each occupational group is the same as for all groups combined. Data are based on 4-percent sample.