

*United Steelworkers of America, CIO Exhibit No. 7
Pensions (1949)*

PENSION PLAN
1
and
SOCIAL INSURANCE
DOCUMENTS

*By Murray Latimer,
1949 Collective Bargaining Conference
etc.*



UNITED STEELWORKERS OF AMERICA (C.I.O.)
1500 Commonwealth Building, Pittsburgh 22, Pa.

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**INSTITUTE OF
LABOR RELATIONS**

THIS booklet contains the basic argument presented by the United Steelworkers of America to the Steel Producing Subsidiaries of the United States Steel Corporation in the collective bargaining conference of June 21, 1949. It was prepared by Murray Latimer, Insurance Consultant.

This may be used in other collective bargaining conferences but it must not be released to the newspapers nor its contents revealed publicly.



President



Secretary-Treasurer



1949 Collective Bargaining Conference

between

United Steelworkers of America

and

**The Steel Producing Subsidiaries of the
United States Steel Corporation ...**



A REPORT

**Implementing Those Parts of the Requests of
United Steelworkers of America
For an Increase in Rates of Pay to Provide
Adequate Pensions**

and

**For the Inauguration of Decent Insurance
Covering
Life, Accident, Health, Medical and Hospital Benefits**

This report is intended to implement demands of the United Steelworkers of America for modification of the collective bargaining contract with the six steel-producing subsidiaries of the United States Steel Corporation: (a) that the provisions relating to rates of pay be amended so as to make provision for payment of a pension upon retirement or disability to each member of the Union; and (b) that there be inaugurated a decent system of social insurance benefits covering the risks, other than retirement and disability, to which the members of the Union are subjected.

The report is divided into two major parts: the first part has to do with the needed wage modifications to cover provision for pensions upon retirement and disability; the second deals with the insurance against other hazards to which the members of the United Steelworkers of America, employed in the steel-producing subsidiaries of United States Steel Corporation, are exposed.

Each of the two major parts of the report contains three subdivisions: the first of these describes the existing arrangements in effect in the field, with such background of development as is appropriate; the second subdivision analyzes what is needed in order to arrive at a general statement of the kinds of provisions which might approach adequacy; the third subdivision examines the cost factors involved in the provision of adequate security provisions.

The paragraphs of the report are assigned consecutive numbers for ease of reference.

I. AN INCREASE IN WAGE RATES BE DEVOTED TO PROVIDING ADEQUATE PENSIONS UPON RETIREMENT AND DISABILITY

A. Existing Provisions for Pensions in the United States Steel Corporation

1. For an understanding of the present situation with respect to the provision of pensions by the United States Steel Corporation for its employees, it is necessary to review the steps taken by the Corporation in the pension field over a long period of years. The history of pensions in U. S. Steel began in 1901, when Mr. Andrew Carnegie created the Carnegie Relief Fund and donated to it an "endowment" of \$4,000,000 of Carnegie Steel Company bonds. The relief fund provided disability benefits, death benefits and pension allowances.

2. The Carnegie Relief Fund is described in the Twenty-third Annual Report of the United States Commissioner of Labor (pages 637-639). The report states that:

"Any employee of a constituent company of the Carnegie Steel Company which has been ten years controlled by the Carnegie interests, who has reached the age of 60 years and has been at least fifteen years continuously in the service of the company or the employing constituent company, and is incapacitated for further service, may be granted a pension. Any employee of a company which has ceased to be a constituent company of the Carnegie interests is eligible to a pension allowance, provided that at the time the company by which he is employed left the Carnegie interests he had reached the age of 55 years, had been twenty years in service, and his case fulfills all the other requirements. In such cases only such time as was given by the employee to the Carnegie interests is included in computing length of service. If an employee becomes permanently totally disabled from sickness or injury while not on duty before reaching the age of 60 years, provided his case fulfills all the other requirements, he may be granted a pension. A physical examination by a company surgeon, or some other surgeon satisfactory to the manager, is made of all applicants for a pension allowance."

3. The pension allowance was computed by averaging the regular monthly pay of an employee over his entire period of service. For each year of his service the monthly pension was 1 per cent of such average pay. Pensioners were permitted to engage in any gainful occupation outside of the Company's service. The plan contained a provision that if, at any time, the total benefits, including pensions, were to exceed the annual income, there was to be a ratable reduction in all such benefits. Pensions and benefits were subject to being suspended or terminated on account of any misconduct on the part of the recipient.

4. On the basis of the data reported in the Report of the United States Commissioner of Labor referred to above, and assuming that the changes in the pension roll were distributed over the year 1908, the average monthly pension payment in the year ending December 31, 1908, was \$14.18.

5. A corporation-wide plan for all United States Steel Corporation subsidiaries was established in 1910 and began to operate on January 1, 1911. The plan differed in a number of important respects from the pension provisions of the Carnegie Relief Fund. Among the important differences were, first, a stipulation that all men who had been 20 years or longer in the service and had reached the age of 70 were to be retired on pension. A similar provision was applied to women except that the age was fixed at 60 rather than at 70. Second, there was no provision for retirement at any age or for disability except upon completion of 20 years of service, though the age for the voluntary age retirement of women was placed at 50 years; it had been 60 for both men and women under the Carnegie Relief Plan. Third, the pension was based on the average pay during the last 10 years of service rather than pay over the whole period of service.

6. In 1915 the Corporation plan was modified so that the award of the pension, except for disability, was raised from 20 to 25 years. Apparently compulsory retirement at 70 was to apply only to those having 25 rather than only 20 years of service. The age for voluntary retirement was increased by 5 years—that is, from 60 to 65 for men and from 50 to 55 for women. However, the service requirement for the award of a pension based on permanent disability was lowered from 20 to 15 years.

7. In 1927 the requirement for disability retirement under the Corporation plan was raised from 15 to 25 years. At the same time there was added to the plan a provision providing for payment of pensions to an employee permanently disemployed because of permanent shut-down of a plant, mill, shop or department, if such employee were at least 55 years old and had 25 years of service, or if he had 35 years of service though under 55.

8. As a comparison of paragraphs 5, 6 and 7 with paragraphs 2 and 3 shows, the history of the first 26 years in which pension programs were operated in the United States Steel Corporation was marked by a process of retreat. Andrew Carnegie pioneered; the Corporation moved, in the accustomed sedate order and at the times deemed appropriate in the directors' collective wisdom, in a direction away from Mr. Carnegie's foundation.

9. Although from 1911 the Corporation pension plan read, without equivocation, that male employees who reached 70 were to be retired, if they had a certain period of service, the rule appears not to have been observed at all until May 1, 1931. On that date a slight change was made in the language referring to compulsory retirement, and a previous provision which apparently permitted continuation of employment after the age of compulsory retirement was dropped. At the same time a provision making possible a deviation from strict interpretation of the service requirements for award of a pension was added to the plan. It appears that beginning on May 1, 1931, the United States Steel Corporation began to compel most employees to retire at the age of 70. An employee who had completed 25 years of service at the time of his enforced severance was entitled to a pension; those who did not have 25 years of service were not so entitled, but were frequently retired. The operative language of the plan respecting retirement after May 1, 1931, did not differ significantly from the corresponding previous language which, in practice, had not involved any arbitrary retirement.

10. When employees with less than 25 years of service were compelled to retire on or after May 1, 1931, some may have been awarded pensions. If so, this could have come about only "at the discretion of the Board of Directors in event the conditions attending their initial entrance into the service and/or continuance thereof were unusual, special or exceptional and/or required continuity of service had been broken from causes not of their own making, or in event of other conditions justifying such action, provided, however, that any such cases shall be considered by the Board of Directors only if same have the endorsement of (a) the employing com-

pany, (b) the Pension Committee of United States Steel and Carnegie Pension Fund, and (c) the Finance Committee or the Board of Directors of the United States Steel Corporation." The probability of qualification for a pension "under exceptional conditions" by any employee of the United States Steel Corporation without the rights, title, tenure and dignity of vice-presidential or superior office in the parent corporation or in a subsidiary having hierarchical rank can reasonably be approximated as .00000001.

11. The rules relating to the amount of pension were not touched between the establishment of the Corporation plan as of June 1, 1911, and March 28, 1933. On the latter date all pensions over \$35 a month were reduced; the pensions just above \$35 to that amount of or 95 per cent of the original amount, whichever was the larger; up to 10 per cent for pensions at the \$50 a month level; 12 per cent at the level between \$50 and \$83.33; and on up to a maximum of 25 per cent applied to pensions of over \$20,000 a year. This reduction was applied both prospectively and retroactively to all employees on the pension rolls.

12. On October 30, 1934, an amendment to the Corporation pension rules was adopted, effective as respects employees retiring after August 1, 1934, providing for payment, under the Corporation pension plan of only the difference by which the pension calculated by the formula of the plan exceeded the "public pension" which might thereafter become payable to an employee. The public pension was "any pension or payment of similar kind by reason of any State or Federal law." Under the amendment to the pension rules the means by which the funds for the support of a public pension was raised was irrelevant. The initial amendment was occasioned by enactment of the Railroad Retirement Act of 1934, under the terms of which contributions were levied on railroads and railroad employees to be paid into a special fund in the United States Treasury. Employers paid two-thirds of the contributions and employees one-third.

13. Credit for service under the pension plan of the United States Steel Corporation in effect, with amendments, since January 1, 1911, was discontinued as of December 31, 1939. The base on which pensions were to be calculated was made, for all employees retiring after January 1, 1945, the 10 years ending on that date. The provisions relating to public pensions were continued without substantive change from the original provision adopted in 1934. The Railroad Retirement and Tax Acts, beginning in 1935, and as subsequently amended, and the Social Security Act levied half the cost of benefits on employees. Under the Corporation pension plan, however, pensions are reduced by the entire amount of the social security or railroad retirement annuity.

14. On April 22, 1940, the "United States Steel Contributory Pension Plan" was adopted, as an amendment to the pension rules, by the Board of Directors of the United States Steel Corporation. Under the terms of this plan, employees under age 65 whose compensation is in excess of \$3000 per annum (\$3600 in the case of employees of a railroad subsidiary) are eligible to participate, upon agreement to contribute 3 per cent of such excess compensation. The pension is 1 per cent of the aggregate of such excess compensation during the period of participation. Until 1947, at least the average steelworker would not have been eligible to membership in the contributory pension plan, since his pay would have been less than \$3000. A great number are still ineligible. But on the basis of current average pay (an overstatement for the average employee) the contributory plan would produce a pension of about \$7.50 for an employee starting to participate at age 51 and about \$13.20 for an employee joining the plan at 41. This means that the average employee looking forward to retirement in the next 5 years can expect about \$5 per month under the Contributory Plan and less than \$15 a quarter of a century in the future. With trifling exceptions, members of the United Steelworkers of America who are eligible to join the U. S. Steel contributory pension plan have decided, with obvious justification, that such trifling pensions are not worth the bother of making contributions, and the consequent diminution of current take-home pay.

15. The step taken by U. S. Steel, in December, 1939, amounted, in substance, to a decision, so far as the rank and file of the Corporation's employees were concerned, to retire the pension plan rather than to retire employees. The retirement of the pension plan, to be sure, has been "orderly"; and the timing has "appropriately" coincided with a period of extraordinarily high profits.

16. The impact of the decision to retire the pension plan can be traced in part from the Annual Reports of the Corporation. These disclose that the maximum number of new pensions granted in any calendar year was in 1938; beginning with 1939, there were sharp reductions through the war years, followed by increases in 1945, 1946 and 1947. In 1947, however, the number granted pensions was less than in 1938. During the 9 years from 1938 to 1947 the number of employees of the Corporation increased substantially, and the number who were in the age group 60 to 65 rose by probably more than 80 per cent (a fact not disclosed by the Annual Reports). In relation to the size of the pensionable group, the number of pensions granted must have fallen by about 45 per cent. The number of pensions granted in 1948 was 27.5 per cent less than in 1947. Part of this drop was occasioned by the partial suspension of the compulsory retirement rule on October 1, 1948. In part, perhaps in large part, the decline was the result of a rapid increase in "zero" pensions.

17. It is the officially proclaimed policy of U. S. Steel that "member companies work closely together to serve, at one and the same time, the best interests of stockholders, employees, customers and of the nation itself . . ." The Annual Reports of the Corporation purport to be a record of the service of U. S. Steel. Among the top interests of U. S. Steel employees are the subjects of retirement and retirement income. The Annual Report of the Corporation for 1948 tells that on December 31, 1948, there were 202 insurance companies holding 402,791 shares of Corporation stock; but it does not tell how many workers were dismissed from the Corporation without a penny after serving it and its predecessors from 30 to 50 years, solely for the crime of reaching age 65. The Report tells (maybe with some exaggeration) that the cost of wear and exhaustion of facilities was \$114,045,483 in 1947 and \$145,986,681 in 1948. It states that the non-contributory part of the pension plan (the part applicable to the rank and file) was provided with \$7,174,442 in 1947, and \$5,900,698 in 1948. Human wear and tear of the rank and file was 6.3 per cent of U. S. Steel's property wear and tear in 1947, and 4.0 per cent in 1948. The Report failed to state that the human wear and tear was lower (and profits higher) because the pension plan for the great bulk of employees had almost worn out, and the process of discharging it had been virtually completed.

18. The Annual Report of the Steel Corporation for 1948 thought it important to detail additions to and subtractions from working capital, accounting for the changes to the last dollar; but the amount of payments to pensioners was omitted as was the average pension, either paid or granted, the number of persons who, having received pensions, had their pension incomes terminated, or how many of the pensions granted included awards under the Contributory Plan. An examination of the last 11 annual reports of the Corporation shows that in most of these years, pertinent pension data were conspicuous in being omitted.

19. While the published records of the Steel Corporation fail to indicate the significant facts about the operation of the Corporation pension plan, there have been certain data available which indicate in a rough way what has occurred. Under the agreement between U. S. Steel and the United Steelworkers in 1947 there was established a joint fact-finding committee to study the costs of insurance. In the course of the studies the age distributions of the members of the group life insurance plan as of certain dates and pertinent death, withdrawal and disability rates were made available. From these data, it is possible to make a close estimate as to what happened to older employees of U. S. Steel in the 12-month period, May, 1947, to May, 1948.

20. The 12-month period ending May, 1948, is chosen because of the availability of two age distributions covering membership in the Corporation group life insurance plan in May, 1947, and May, 1948.

21. In May, 1947, the number of members of the group life plan between the ages of 52 and 58, inclusive, was 33,853. One year later the number of members of the plan between the ages of 53 and 59 was 32,584. It is possible that there may have been a few new members admitted to the plan in the year, but it is reasonable to assume that the reduction in numbers in the interval of a year must have been a rough measure of deaths, permanent and total disabilities, and termination of employment for other causes which occurred in the age group referred to. In connection with certain of the studies of the joint fact-finding committee, authoritative information was received that the average age of entry into the group life plan had been 26. For safety's sake, it is here assumed that the average entry age is 27. Since 25 years of service is required to qualify for a pension under the pension plan, the average age of qualification for a disability pension will be 52. While this is an average, it will be assumed that the number of cases of permanent and total disabilities among those having 25 years of service can be measured by the number of such cases among employees 52 and over. Using the rates furnished to the joint fact-finding committee relating to death, permanent and total disability and withdrawal, there should have been for the group during the year 513 deaths, 737 permanent and total disability cases, and 284 terminations for other causes. This exceeds the number of actual net terminations by 25. It is possible that this represents new entrants into the plan; but it is also a reasonable surmise that the rate of disability is less than when the rate of disability was measured. If the rates in the last published experience of the railroad retirement system were used, the net expected reduction in this age group would be 1275, almost exactly the same as the terminations which actually occurred. Similarly, in the age group 59-63, the actual reduction in number of employees in the group life plan between May, 1947, and May, 1948, was 1031. Under the mortality, disability and withdrawal rates based on past steel experience, the number of expected reductions would have been 1343. However, with the railroad disability rates the expected number would be 1063, within 3 per cent of the number which actually occurred. Of employees at age 64 in 1947, there were 747 fewer at 65 a year later. The number of expected reductions, using steel experience, would have been only 249, and only 171 using the disability experience on the railroads with disability. Of this number, 87 would have presumably died during the course of the year. The reduction in the number of persons 65 and 66 in 1947 was 1,679, and the number from 67 to 72, 109.

22. In all, the number of employees 53 years of age or older in 1948 was 4835 smaller than those 52 or older a year earlier. It can reasonably be supposed that 1170 of those died and that the employment of 348 was terminated before age 65 for reasons other than disability. It is, therefore, reasonable to estimate that in the year ending May, 1948, there were about 3320 employees of the United States Steel Corporation whose services were terminated after the attainment of age 65 or by reason of total and permanent disability after the completion of 25 years of service.

23. As already indicated, the Corporation Annual Reports for 1947 and 1948 showed 1894 employees were pensioned in the earlier year, and 1371 in the latter year. On the basis of a sample study to be outlined below, it is estimated that half of the 1948 pension awards were made in the first 5 months of the year. Assuming that the 1947 pensions were distributed equally month by month, the number of pensions granted in the year ending May, 1948, must have been about 1710; that is to say, there must have been about 1600 persons whose Corporation employment was terminated after reaching age 65 or because of permanent and total disability after 25 years of service who did not receive pensions. This is a minimum estimate. If, for example, there were 300 new members of the group life plan at ages 52 or over, the number of persons who would have been retired without pension would be 1900 rather than 1600.

24. The group life insurance plan does not cover all Corporation employees; only about 80 per cent are members. It was reported to the joint fact-finding committee on insurance that the age distributions of steel employees, as indicated by the group life plan, does not differ significantly from the age distribution of all employees. If this is so, the number of retirements from the Corporation without pension, in the

year ending May, 1948, was probably not less than 2450; and if there were as many as 300 new entrants into the insurance plan at ages 52 and over, the number of retirements without pension would have been about 2750. If the latter were the case, the ratio of retirements without pension to the total number of retirements would have been about 2 to 3.

25. While it is a reasonable surmise that the number of employees of the Steel Corporation who retired without pension at 65 or over or for disability after 25 years of service in the year ending May, 1948, could not have been much below 2450 and may have been higher, the information was rather intangible and failed to reveal a number of significant facts. Among other things, of course, the Corporation reports do not divide the data as between the steel-producing subsidiaries and the other subsidiaries. The data are therefore not directly applicable to proposals intended to be directed to the steel-producing subsidiaries. It was therefore thought desirable and appropriate to make a collection of data directly from the employees known to have been retired in recent months.

26. In April, 1949, Secretary-Treasurer McDonald of the United Steelworkers of America directed that inquiry be made of as many employees as possible who had been retired at 65 or over, or because of permanent and total disability with pension eligibility, in the six steel-producing subsidiaries of the United States Steel Corporation after June 30, 1947. The inquiry covered age, date of retirement, plant at which last employed, cause of retirement, occupation, length of U. S. Steel employment, social security and U. S. Steel pension status with the amount of each, work status, and source of livelihood during retirement. A total of 772 forms covering retired workers were received, of which 50 were discarded, almost wholly because of retirement before July 1, 1947. The 722 forms which form the basis of the results to be described were divided by company and plant location, as shown in Table 1 (see end of report).

27. The sample indicates that so far as rank and file employees are concerned, between July 1, 1947, and October 1, 1948, the Corporation pension plan was almost exclusively a device to produce unemployment among workers when they attained the age of 65. In the period July to December, 1947, out of 286 retirements whose causes were reported, 261 were retirements by operation of the compulsory retirement rule. In the 9-month period ending on September 30, 1948, 328 retirements out of 356 resulted from operation of the compulsory retirement rule. Although the compulsory retirement rule was allegedly suspended on October 1, 1948, 48 out of 79 retirements which have occurred since the date of presumed suspension were reported by the employees affected to have resulted from operation of the compulsory retirement rule. The breakdown of retirement by cause, as reported by respondents, is shown in Table 2.

28. The retired workers on which these data are based represent a sample which, while not selected at random, involved no intentional exclusions within the membership of the United Steelworkers of America except (a) inability to locate pensioners, and (b) the inability of some retired workers to furnish information. Both of the major factors having to do with the exclusions from the sample are of a character which probably operate to over-state the average pension in the sample. The pensioners who had been compelled to enter institutions or to move in with other families were the most difficult to locate. These persons would probably have been more proportionately representative of those receiving no pension or a very small pension. The majority of persons unable to give sufficient information for a return to be made were from the labor group. Laborers at T. C. I., the lowest paid employees in the group surveyed, were certainly under-represented. Laborers' pensions, if any, would be smaller than average.

29. The ages of the retired workers indicated the great preponderance of retirements at exactly age 65. In a handful of cases retirement had been delayed after 65 either by separations under the rules or by inaccuracies of the Corporation records relating to date of birth. Year of birth of the employees in the sample is given in Table 3.

30. Pensions had been awarded to 350 of the 722 employees in the survey. On the date of the survey, however, only 297 employees were actually receiving pensions. In 38 cases the pension was so small it had been commuted to a lump sum. Upon receipt of the lump sum, which averaged \$310, the retired employee had no further claim under the pension plan. Twelve had been awarded a pension based on disability but had attained the age of 65 by the time of the survey, and because they had, on attaining 65, become entitled to social security benefits exceeding the Corporation pension, the latter had been discontinued. In 3 cases the pension had been awarded just before the survey, and the notification of the amount had not been received by the pensioner.

31. The amount of pension in the 297 cases in current payment status was reported in all but one case. A distribution of pensions by amount group is shown in Table 4. The average pension being paid as of May, 1949, was \$22.67. The average commuted pension was, before commutation, \$2.58. The average monthly pension now being paid to all 718 retired workers, the amount of whose pensions is known, including the zeros, was \$9.35, as of the beginning of May, 1949.

32. To say that the pensions now paid to retired U. S. Steel employees now average \$9.33 per month is misleading. First, the statement lumps together the pensions now being paid to employees retired for disability who are not yet 65 and the pension, including of course the zero pensions, payable to employees who have reached 65 and whose pensions under the Corporation plan have been reduced by the amount of the social security benefit. The average monthly pension paid to the 637 employees who were compelled at age 65 to retire from the service of the Corporation was \$6.99, including the commuted pensions, or an average of \$6.83 for the amounts now actually being paid. Since the average for the 85 other pensions was only \$27.75, and since the average amount of the social security primary insurance payment will probably be about \$36, the average for the pensioners other than those compulsorily retired, will, when all reach 65, be as low or lower than the amount paid to those compelled to retire at 65.

33. The second factor which makes the average over-all pension now being paid misleading is the fact that the pension payable under the Corporation plan is continuously declining. This comes about, of course, because the longer the period between 1940 and retirement date, the less service before 1940 will employees have; employees retiring now have fewer years of creditable service (i. e. service before 1940) than those who retired in 1948, and those who retire next year will have less creditable service, on the average, than those who retire in 1949. Further the average social security benefit is rising because of the rise in the pay base and the lengthening years of service since January 1, 1937. The net Corporation pension, therefore, is being reduced by the operation of both these factors; and, as already pointed out, U. S. Steel pensions for the rank and file will, on the basis of existing participation, ultimately disappear.

34. The average monthly pension to the 261 U. S. Steel employees covered by the survey, who were forced to retire in the period July-December, 1947, was \$7.29. In the next 6 months, the corresponding average was \$6.97. (Table 5.) In the period July-December, 1948, the average was \$6.04. This average, however, conceals the effect of the partial suspension of compulsory retirement on October 1, 1948. The most important single factor now influencing the size of the average U. S. Steel pension for rank and file workers is, of course, the relative number of zero pensions. The number of such zero pensions declined with the suspension of compulsory retirement. Therefore, after October 1, 1949, the average pension awarded had a wholly spurious increase. For the period July-September, 1948, the last 3 months before the compulsory retirement rule was suspended, the average pension was \$5.41.

35. If the compulsory retirement rule had been in effect throughout the last half of 1948, the average pension payable to those compelled to retire would have been lower than \$5.41, probably about \$5.30. The average pension which will be payable to employees who have remained in service after 65, when they ultimately retire,

will be lower than \$5.30 because the pension is fixed, while the social security benefit will increase.

36. If the compulsory retirement rule were to be reinstated now, the average pension to be granted in 1949 to those who would be affected by it from among the members of the United Steelworkers of America would not exceed \$5.00. At the rate at which average pensions are declining, pensions will disappear at age 65 for rank and file U. S. Steel employees, to all intents and purposes by about 1955.

37. The number of employees in the sample who retired for other than compulsion is small; the average pension (Table 5) is more variable than was true for the employees compelled to retire. However, the downward trend in pension amounts is unmistakable. While the pre-65 pensions of employees whose retirement occurs before 65 will not disappear as rapidly as pensions at 65, the amounts paid will soon become so small as to raise serious question of whether they are worth the labor of making payment.

38. While, on the average, the employees to whom pensions have been awarded since June 30, 1947, have had longer service with United States Steel Corporation than have those to whom pensions were not granted, most of the latter spent their working lives in the service of the Corporation. Of the 422 employees out of the 722 in the sample to whom a pension is not now and will not be due in the future, only 32, or less than 8 per cent, have had less than 20 years of service; 58 of the 422 have had total service in excess of 40 years (Table 6). The average length of service for the 372 employees to whom pensions were never awarded was just short of 29 years; the average for those whose pensions were commuted, 34.4 years; and the average for those whose pensions have been terminated, 35.3 years. The average period of service of all the workers now receiving pensions was 41.5 years.

39. The average service of employees who will receive no pensions under the Corporation plan will rise with the elapse of time after 1940, unless there was a change in hiring policies which may have taken place in the Corporation 25 or 30 years ago to increase average hiring ages. It seems unlikely that the effect of any influence so far in the past could be sufficient to upset the trends indicated by these data. In the absence of any such change in policy a generation ago, it could be asserted with reasonable confidence that the average service of employees who would be retired in 1940 by operation of a compulsory retirement rule and who would receive no pensions, would be 31 or 32 years.

40. In addition to the annuities paid by the United States Steel Corporation, the retired steelworkers have two other sources of income concerning which inquiry was made in the survey. These are the benefits payable under Title II of the Social Security Act and pensions payable under legislation affecting veterans. Of the 722 retired employees included in the survey, only one was receiving a veterans' pension, which was \$60 per month. There were 636 retired employees who were receiving primary benefits under Title II of the Social Security Act, of whom almost 30 per cent had wives or children, or both, entitled to wife's or child's supplemental benefits under the Federal old age and survivors' insurance program. Most of the 86 employees who were not receiving social security benefits were under 65, the others being engaged in employment subject to the Social Security Act, except one who apparently has insufficient social security service to qualify. The average monthly primary insurance benefit actually paid was \$36.13; averaged over the entire group of retired employees, it was \$31.83. The average supplemental benefit under social security was \$3.92 for the employees qualified for social security, or \$3.45 for the entire group of employees. The distribution of employees by amount of primary social security benefit is shown in Table 7.

41. In Table 8 there is set forth a distribution of 722 retired employees by the total amount of monthly income granted under Title II of the Social Security Act under the United States Steel pension plan, and under the provisions for veterans' pensions. Of the 722 employees, 34 received no income from any of the three sources, and 9 have incomes of less than \$25 a month. Over 61 per cent have monthly incomes in the range from \$25 to \$65. The average monthly income for all 722 from the three

sources is \$44.69 (Table 7). Exclusive of the 34 who receive no income from the three sources, the average is \$46.90 per month.

42. If the compulsory retirement rule were to be reinstated, the average U. S. Steel pension for those 65 and over, as indicated above, would be not more than \$5.00 a month. This is \$4.30 less than the pension shown in Table 7. The average primary insurance under Title II of the Social Security Act would not increase by more than \$1 or \$2, and supplemental by 15 to 30 cents, so that the average income to steelworkers, if employees now over 65 were to be retired, will be less than is shown in Table 7; that is, the reduction in the Corporation pension will not be off-set by an increase in social security. Whether the employees over 65 are retired now, or in the future, the incomes of steelworkers, on retirement, will tend to be lower than is shown by Tables 7 and 8.

43. As indicated in paragraph 40, the average primary social security benefit being paid to 636 retired employees in the sample is \$36.13 per month. It is a reasonable estimate that this average is based on an average increment, as used in Title II of the Social Security Act, of 10 per cent. If such be the case, the average wage on which social security primary insurance for the 636 retired employees is based would be \$175 per month. Under the Corporation plan as it stood before the amendments of December, 1939, the average wage base on which pensions would have been calculated would have been higher than \$175, since the latter figure is the result of creditable wages divided by total elapsed time since January 1, 1937, and omits all compensation in excess of \$3000 annually. It is a reasonable guess that the Corporation wage base for those among the 636 with service of 25 years or longer (about 525) would have been not less than \$210 per month.

44. The service reported for the purposes of the survey was total service, which was not necessarily identical with continuous service as defined in the Corporation pension plan for the purpose of calculating a pension. The average total service for all the 525 employees age 65, with 25 years of service, would have been about 36 years. It would be a reasonable estimate that the continuous service would have been 33 years. On the basis of the pension plan as of December 1, 1939, the total average pension payable to the group would have been about \$61.00, and before the amendment of March 28, 1933, about \$69.00. If the Corporation plan had remained as it was on March 1, 1933, the average family income of the 525 employees, qualifying for a pension at 65, would be with Social Security, about \$112 to \$115 per month. On the basis of the Corporation plan as it stood on December 1, 1939, the average family income would have been around \$103 to \$106 per month.

45. In a statement published in the January, 1940, issue of "U. S. Steel News," it was said that:

"In 1935 the pension rules were amended to provide that payments under the plan be reduced by the amount of public pensions, when and if payments under state or federal pension plans started. It was then recognized that as state or federal plans came into operation, they would take the place of and supersede the United States Steel pension plan to the extent that they provided retirement benefits."

The implication of the quoted statement is that the U. S. Steel pensions would be reduced to the extent that social security payments are made. In view of the plan's formula, the expression, "public pensions," in relation to social security, means the primary insurance amount. Actually pensions have been reduced to a far greater degree than the amount of the primary insurance benefit.

46. To say that pensions paid under the Corporation plan have failed to maintain the level implied in 1939 is not meant to indicate that all that is necessary to remedy the situation is a return to that level. The level was itself unsatisfactory; and the plan as of 1939 would have failed to provide pensions for one in five of those retired at 65.

47. The Corporation pension plan, as amended on December 18, 1939, contained no reference to compulsory retirement. The most that can be said is that an em-

ployee "may be retired and pensioned at the request of his employing officer." (Emphasis supplied.) By no stretching of language is there here any implication of compulsion, and no hint of retirement without pension. It is apparent that, in the Steel Corporation, retirement and pension policies have come to be determined as if they were unrelated. The pension policies, even though obsolete, have at least been reduced to writing; the retirement policies can only be inferred from actions taken.

48. The history of pensions in the United States Steel Corporation is a history of steady retrogression from the brave beginnings of Andrew Carnegie. The Corporation plan of 1911 represented a retrenchment from the Carnegie plan of 1901. The next two amendments cut away from the 1911 plan; and in 1931 came a new policy of arbitrary dismissal for employees solely by reason of attainment of age 70. Pension reductions came in 1933 and 1934 and again in 1939. There remains of the 1911 plan only a shadow; and that shadow will, in the not far distant future, become wholly invisible. The sole reward to which employees of the United States Steel Corporation can now look forward, in return for a lifetime of service to the Corporation, is a letter expressing a hope for "the best of health" and that the "retirement years will be many and enjoyable"—only that and nothing more.

49. A healthy, enjoyable and long retirement is hardly possible on the incomes available to the retired employees of United States Steel Corporation through the combination of social security, the Corporation pension plan or a veterans' pension. The survey already referred to attempted to ascertain in general what the sources of livelihood of these retired U. S. Steel employees is. The survey showed that not quite 7 per cent of these retired employees had taken the cash surrender value of a loan on insurance; about 5 per cent had sold or mortgaged some property; 4 per cent had given up a car (58.8 per cent had no car to give up); 11.4 per cent had taken in boarders or rented rooms; over 72 per cent had used up some savings. The survey did not attempt the difficult task of ascertaining the amount of savings of the retired employees. Only about 7 per cent reported themselves as having no savings, a fact which perhaps indicates the sample may not adequately represent employees in the lowest income groups. It cannot very well be expected, however, that the savings of the group would provide support for any extended period. The detail of the extent to which the retired pensioners have used their own resources is shown in Table 9 and in the last section of Table 10.

50. The retired workers have made substantial use of sources of income other than their own savings or property. Twenty per cent have had aid from children; 11 per cent aid from other relatives; about 4.6 per cent have moved in to live with relatives; 10 per cent have incurred indebtedness; and about one in four has drawn unemployment insurance. This last fact, of course, indicates that a substantial portion of the retired workers are in the active labor market, a fact brought out by direct questions as shown in the next paragraph. Charity, old age assistance and relief and the income of an employed wife, seem to constitute very minor sources of support for the retired workers (Table 10).

51. Of the 722 retired workers in the sample, 90 were employed at the time of the survey (Table 11); 323 were not employed but wanted to be employed and thought themselves able to work. Over 57 per cent of the group was in the labor market. Two hundred and sixteen felt themselves not able to work. Only 76 definitely indicated that they were voluntarily out of the labor market. It is clear that the retirement policies of the United States Steel Corporation resulted, in large measure, in additions to the group of involuntarily unemployed in the United States and will inevitably, unless a change in policy occurs, add substantially to the burdens of relatives of the workers, or to the relief rolls, or both.

B. Monetary Requirements for "A Healthy, Enjoyable and Long Retirement"

52. In the February, 1948, issue of the Social Security Bulletin there was published in detail "A Budget for an Elderly Couple." It is said that "The level of living represented by this budget . . . is intended to represent a modest but adequate mode of living which allows normal participation in the life of the community in accordance with current American standards."

53. That the budget is "modest" will not be denied. Serious question can be raised as to its adequacy. In Table 12 some of the more important aspects of the level of consumption implied by the budget are set out. Doubtless the food budget would be sufficient from a nutritional standpoint; but it is hardly up to the customary level of food consumption in steelworkers' families. The budget for furnishings and equipment will suffice to cover depreciation, as represented by replacement of the normal household's stock of these items. The clothing would not suffice to permit decent participation in a public meeting unless the period of retirement began with a large supply of clothing. There is no allowance for a private automobile; no insurance; no specific allowance for hospitalization (although there may be an implied allowance in the surgical items); and the standards of medical care are based on records of almost 20 years ago. While it is unquestionably true that the level of living indicated by the elderly couple budget is far above the level of living of retired employees of United States Steel at the present time, it is substantially below the level of living for steelworkers during the period of active employment, particularly in the period preceding retirement for age when normally the family would consist of only two persons.

54. The elderly couple budget referred to in the preceding paragraph has been priced in March, 1946; June, 1947; and early in 1949. In terms of monthly amounts the requirements for maintenance of the budget in (unless otherwise indicated) March, 1949, ranged from a low of \$120 in Houston, Texas, to \$152.50 in Washington, D. C. (for February). The requirement in Boston, Chicago and Detroit is \$143.33; in New York, \$148.33; in San Francisco, \$142.50; and in Indianapolis (for January), \$136.67. It is reasonable to estimate that the current cost of this "elderly couple budget" for the average elderly couple represented in retired United States Steel families would be between \$140 and \$145 per month. The annual figures (from the Social Security Administration release of May 16, 1949) for 1949, June, 1947, and March, 1946, are shown in Table 13.

55. The survey, from which the data relating to retired workers were derived, covered 315 employees over 65 still in United States Steel service. Questions were asked of these employees as to the amount of Corporation pension to which they would become entitled, the amount of social security benefit they expected, in both cases if they retired now, and what income would be required for their support after retirement. The answers to these questions showed first that the amount of Corporation pension expected by the 151 respondents was \$6.15 a month. Of the 151, 111 expected no pension at all; two thought they would get more than \$100 per month. There can be no doubt that most of the 40 who expect a pension will not get one. An estimate of the amount of monthly primary insurance benefit under Social Security was made by 131. The average expectation was \$38.69 per month; 6 of the replies indicating an expectation of \$47 per month or more (none expected \$46). Since, under existing law, a primary insurance benefit in 1949 cannot exceed \$45.20, amounts of \$46 or more are open to question. However, these have little influence on the average, and the expectation appears not unreasonable.

56. Only 6 of the 315 respondents failed to set down a figure for the amount of monthly income required for support during their retirement. The data are less serviceable than the returns would be if they had been based on a more detailed inquiry as to family status and other factors which have a bearing on budgetary necessities. Seventy-one of the respondents indicated the need for a monthly income of less than \$125. In addition, 40 estimated from \$125 to \$149. The average estimate for the 309 making one was \$150.72 a month. If it be assumed that 75 per cent of the respondents were married and that those without wives required 60 per cent of the amount required for the support of an elderly couple, the \$150.72 average would translate into \$167.50 as the monetary requirement for a couple. The instructions to the respondents emphasized the desirability of taking into account all the factors by which budget requirements would be reduced after retirement. It is possible that respondents may have, because of the emphasis on this factor, over-stated the extent to which retirement would reduce their living costs. On the basis of evidence relating to budgetary costs and the appropriate interpretation of the questionnaire re-

turns, it seems reasonable to suppose that "modest but adequate" budgetary requirements for the retirement period of an elderly couple would run from \$180 to \$185 a month.

C. Magnitude of Wage Increase Required to Support a Reasonable Pension

57. The first problem to be considered in connection with pension costs is, "By what amount should rates of pay be increased, assuming that (a) the distribution of such increase to employees is to be deferred; (b) the increase will be transferred to a pension fund as wage payments are due; (c) that wages will emerge from the pension fund as pensions in amounts and under conditions specified in a pension plan along the lines hereinafter set forth; and (d) that any excess of wages deposited in the pension fund over immediate cash need for wages paid as pensions may be appropriately invested?" In answering the question the first stage will consist of a determination of the net amount to be paid into a pension fund, which net amount is the gross cost of the wage increase to the Corporation. It seems desirable to use this rather paradoxical form of expression because, under methods of financing pensions frequently adopted when the holder of pension funds is an insurance company, the amounts paid into the pension fund (that is, the insurance company) are not net amounts, because after longer or shorter periods of time there are returns from withdrawal forfeitures, and dividends, reflecting lower costs than the gross payments into the pension fund. The first step is, therefore, to estimate the net payments required to be paid into a fund.

58. The net payments of wages into the pension fund are gross costs to the Corporation because the contributions to the fund constitute (except under circumstances which would make a pension arrangement out of conformity with section 165(a) of the Internal Revenue Code, a condition which need not be considered here) a cost of doing business for the Corporation just as any other wage increase. Therefore, the increase would reduce the income taxes paid by the Corporation by 40 per cent of the contribution, leaving 60 per cent of the contribution as the maximum net cost. As will be indicated later, there are other deductions from gross cost.

59. While it was desirable to point out, for the sake of clarity, that under certain forms of pension financing there is a difference between the gross and net contributions to a pension fund, the discussion here proceeds on the assumption that the contributions will be estimated in advance and paid and accounted for on a net basis. The calculation as to the required increase in wages must be appropriately related to the precise terms of the pension plan. There are a substantial number of factors in a pension plan which will have a bearing on the amount of wage increase required for its support. The influence on costs of many of the factors is rather small. In this report only the major factors of a plan are dealt with. These are: (a) the age at which retirement for age can begin; (b) the retirement conditions; (c) whether or not a disability retirement provision is included in the plan; (d) the service requirement for disability retirement; (e) the definition of "disability"; (f) the amount of pension; and (g) the age, service and formula by which vested rights, if any, to a pension, are conferred on an employee.

60. The "retirement conditions" referred to in paragraph 59 will indicate whether retirement is compulsory at some single age, such as 65, or whether, even though there is no compulsory retirement rule, the employer is to have the unilateral right of retiring any employee at the minimum age or at any time thereafter, or whether retirement is to be at the option of the employee so long as he is able to perform his duties. Omitted from the list of important factors is a provision for length-of-service qualification for retirement for age. This does not mean that the existence or absence of such a requirement and its length will not affect costs. Unless the requirement is a very long one, however, its main (though not exclusive) import is negative; that is, the service requirement prevents the possibility of persons seeking a job for a short period of time in order to qualify for a substantial pension. It will be assumed in the calculations reported here that the pension plan will not result in the adoption of new hiring policies which will add substantially to costs by increasing the proportion of elderly workers hired. As a practical matter, there is more

danger that the tendency will be in the other direction; that is, fewer older workers will be hired. This would be an undesirable consequence of the adoption of a pension plan, and it is assumed here that such will not occur.

61. The basic plan for which cost figures will be presented will have the following major characteristics: (a) retirement for age beginning at age 65; (b) retirement to be voluntary at the option of the employee without direct or indirect compulsion from the Corporation, with employees over 65 having the right to remain in service so long as they are able to perform their jobs satisfactorily; (c) provision for disability retirement after the completion of 10 years of service with the Corporation; (d) disability for the purposes of the pension plan to be defined as permanent and total inability to perform the duties of any and all jobs in existence at the employing company; and (e) a pension amount of \$100 a month.

62. While no vested rights are specifically included in the plan, the cost factors are such as to involve an implicit assumption that in case of shutdown or mass lay-off after age 55, rights to receive a pension at 65 would be maintained. The plan on which costs were predicated, however, does not contemplate creation of vested rights for every employee covered by the plan, no matter how brief the period. In order to give the plan an appropriate setting, cost figures for several variants will be given, involving compulsory retirement at 65, voluntary retirement beginning at age 60, compulsory retirement at age 60, with pensions of varying amounts.

63. Apart from the terms of the plan itself, there are, of course, numerous other factors, the magnitude of which are influenced to a greater or smaller degree by such terms, which will undoubtedly play a large part in determining the net hourly wage to be contributed to a pension fund. The most important of these factors are (a) the rate at which the employment of employees within the scope of the pension plan is terminated by death before a pension begins; (b) the rate at which employees' services are terminated for reasons other than death before they become eligible for a pension; (c) the rate of disability retirement; (d) the rate of age retirement; (e) the mortality rate among persons retired for disability; (f) the recovery rate among persons retired for disability; (g) the mortality rate among employees retired for age; (h) the age and service distribution of the covered group; (i) the distribution of new employees by age at entry; (j) the rate of interest earned on reserves created by deposits of wages in the pension fund; (k) the number of hours per employee over appropriate periods of time, with a measure, if applicable, of differentials as between employees of different ages and periods of employment; (l) the expenses of operation of the pension plan and the pension fund. In other types of plans other factors are required; if, for example, pension costs were to be expressed not in terms of rates of pay per hour but as a level percentage of payroll, a salary scale would be necessary. If the pension amount were to be related to pay and service a very detailed breakdown of pay by age and service would be needed.

64. As already indicated, there was made available to the joint fact-finding committee on insurance the set of rates relating to wage earners used by the Corporation in determining certain of its pension costs. Since these rates were based on the experience of the Steel Corporation, a substantial part must have grown out of that experience before the decision to retire the pension plan was made; therefore, such rates are more appropriate to the operation of a pension plan than would be rates developed on the experience under the Corporation pension plan in recent years. The latter, of course, could have no remote relevance to experience under a genuine pension plan; any coincidence would be purely fortuitous. As indicated above, the returns under the old pension experience, when applied to the changes in the membership in the group life insurance plan in the 12 months ending May, 1948, indicated a larger number of terminations of employment than actually occurred, unless it be assumed that as many as 300 to 400 employees over the age of 52 joined the group life plan in the year in question. It seems more probable that the disability and death rates in the Corporation are lower than in the period when the disability rate was measured.

65. It is to be remembered that the only recent check on the rates of employment terminations is one applicable only to the group life insurance plan membership. It would be reasonable to suppose that the group life membership may be somewhat more stable than employment among non-members. Further, the group life membership includes a heavy representation of executives, office supervisors, technicians, professional persons and others whose ages are on the whole higher, whose mortality is lower, whose tenure of employment is more stable and therefore whose pension costs are very much higher than are costs for rank and file workers.

66. It has been possible to test the rates of mortality, disability and withdrawal developed from Corporation experience against the actual deaths, disabilities and withdrawals from membership in a large relief association of another steel company. The man years of exposure of steel plant employees in this case, covering parts of the year 1946, 1947 and 1948, totaled more than 180,000. The members were eligible for a pension which was substantially superior to that for which Corporation employees have recently been eligible. A comparison of these basic cost factors by age at intervals of 5 years is shown in Table 14. The rate of withdrawal from active service for reasons other than death or permanent and total disability was from 3 to 4 times as great in the other steel company as would be indicated by the U. S. Steel withdrawal rate. A decent pension ought to reduce substantially the rate of withdrawal. Assuming that the other steel company represents the rate of withdrawal not substantially influenced by a pension (even though the company does have a pension plan), the Steel withdrawal rate might represent a situation where the pension plan was a good one. It seems likely that the Steel withdrawal rate is a reflection of conditions during the period of depression, plus the influence of a pension plan substantially superior to that which now exists.

67. As shown in Table 14, the rate of permanent and total disability based on U. S. Steel experience is far higher than actually occurred in the other steel company in 1946-48. As compared with the rate of permanent and total disability developed from experience under the Railroad Retirement Act for the third valuation of liabilities under that Act, the Steel rate is lower at the younger ages, but higher from age 32 on. Taking the entire 1948 age distribution for the Steel producing subsidiaries of the Steel Corporation, as indicated by the membership in the group life plan, the total number of cases of permanent and total disability per 1000 employees indicated by the railroad rates would be 7.04 and by the Steel experience rates, 10.63. That is to say, if the Steel disability rates were applicable there would be under existing age distributions, 51 per cent more cases of permanent and total disability than if the railroad disability rates applied. Although it seems probable that the result is an over-statement of the number of disabilities, the Steel rates have been used in the calculation of costs in this report; that is, a level of costs as shown here is higher than would be the case if the railroad disability rates had been used.

68. The mortality rate during active employment before 65 (in the form of a probability of death in active service) which has been used in calculating pension costs in this report is almost surely higher than the rate of death which is actually applicable to the employees of the Corporation at the present time. If it were not clear that the aggregate rate of terminations of employment is on the low side, the death rate unquestionably should have been lower. Since it seems likely that the rate of withdrawal is understated and the rate of permanent and total disability overstated, the use of the Steel mortality rate is of not substantial importance in calculating pension costs. Further, in calculating the cost of paid-up life insurance, as reported in a later section, the same mortality rate as that for the pension calculations has been used. The costs of the life insurance, therefore, would be overstated; by taking the two costs together a hedge is created.

69. For mortality after retirement on disability, the rates in the 1944 Disabled Railroad Employees Select Table were used, while for mortality among those retired for age, the Combined Annuity Table was the basis. It was assumed that the only terminations of pensions granted to persons disabled would be those caused by death. Interest at the rate of 2½ per cent per annum, compounded annually, was used throughout.

70. The age distributions of new and present employees used in the cost calculations are as follows, by 5 year age groups:

Age	Present Employees (Percentages of Total)	New Employees
Under 20	1.20	14.50
21-24	8.69	37.89
25-29	11.50	20.48
30-34	14.21	12.56
35-39	13.17	7.58
40-44	12.46	4.23
45-49	10.92	1.79
50-54	10.64	.64
55-59	9.28	.25
60-64	7.21	.07
65-69 .....	.71	.01
70-74 .....	.01	....
Total	100.00	100.00

71. A factor of substantial importance is the rate of retirement after reaching the minimum age. That part of the survey relating to workers over 65 remaining in service covered several of the factors relating to the retirement rate. First, the question was asked as to whether the respondent felt any less able to work now than a year ago. Out of 314 answers to this question 71 replied "yes," an answer which ties in to the desire of 93 to retire at 65 and 24 at 66. However, there were only 15 job changes since 65, and of these only 9 involved an easier assignment. The man-years of post-65 exposure was 130; therefore the annual rate of change to an easier job was .07, hardly an indication of a need for wholesale retirement. There is no doubt that the rate of incapacity rises with age; the rate of change to easier jobs by survey respondents since the beginning of 1942 and before 65 was only .01. This was probably abnormally low because of the war. But there is certainly nothing in the record to indicate any sudden inability to work at age 65.

72. Each respondent in the survey was asked to specify the age at which he would like to retire. There were 296 answers as follows:

Age	Number	Percentage of Total	Percentage of Those Indicating an Age 65 or Over to Total of Those So Indicating
50	1	0.34	
55	1	0.34	
60	45	15.20	
62	2	.67	
63	2	.67	
64	1	0.34	
65	93	31.42	38.10
66	24	8.11	9.84
67	22	7.43	9.02
68	8	2.70	3.28
70	30	10.14	12.30
No age fixed—			
Indefinite future	67	22.64	27.46
Total	296	100.00	100.00

The question was intended to elicit information as to a future intention. The fact that over one in six indicated a wish that they had retired in the past is natural. Doubtless not a few, in view of their zero pensions after 30 to 40 and 50 years of employment now regret that "retirement" so far as the Corporation's service is concerned, did not occur about the time employment began—or even earlier.

73. The rates of retirement used for the cost calculations here were approximated from experience under the Railroad Retirement Act in 1939 when annuities, on the average, were from 40 to 45 per cent of average full-time pay. These rates with the comparative railroad rates used in this report are:

Age		Railroad—1939
65	0.25	0.246
66	.20	.201
67	.26	.257
68	.27	.271
69	.70	.703
70	1.00	.476

The retirement rates were combined with a probability of death in active service based on the Combined Annuity Table. It is believed that, under conditions existing in 1949 and likely to continue, that the retirement rates used are applicable, if there is an adequate disability provision, to voluntary retirement on a pension of 50 to 60 per cent of pay.

74. If the retirement intentions of the over-65 employees covered by the survey were translated into retirement rates, with those having no present intention assumed to retire at 70, the resulting costs, all the other factors used here remaining unchanged, would be substantially lower than those about to be quoted. The retirement rates in the 1946-8 experience of the other steel company already referred to were far lower than those used here. A cost for the age-retirement pension was calculated, using retirement rates 3 times the actuals from the other steel company, other factors remaining the same. The result was 13.4 per cent lower than the cost from the use of the rates shown in the preceding paragraph.

75. Costs were calculated on the level premium method. First, the present value of a pension of \$100 per month at 65, and for disability, was calculated for each of the mid-points of quinquennial age groups. The sum, for all employees, was the present value of future benefits. Since no service breakdown was available, it was assumed that all disability cases occurring at age 37 and after would be a pensionable case. Second, the value of a contribution of \$1.00 per employee per annum (in equal monthly installments) was computed. Third, the number of dollars per annum (payable in equal monthly installments) to provide the pension of \$100 a month at the mid-point of each quinquennial age group was found, and the "normal contribution" was established by weighting the contribution for each group by the percentage weights for new employees shown in paragraph 70. The "normal contribution," it may be repeated, was a dollars-per-annum figure. The present value of the normal contribution for all employees was calculated by multiplying that contribution by the value of the \$1 per annum contribution and by summing the products for all the age groups. The present value of the normal contribution for all employees was then subtracted from the value of the benefits for all employees. The remainder was what is commonly known as "accrued liability."

76. The cost with respect to accrued liability was assumed to be the cost of "freezing" that liability at the rate of $2\frac{1}{2}$ per cent per annum. The per capita figure was computed by dividing $2\frac{1}{2}$ per cent of the accrued liability by the total number of employees. The annual per capita amounts required to support the plan on all the assumptions set forth are:

	Normal Contribution	Accrued Liability "Freezing Charge"	Total
Age Retirements	\$ 51.29	\$39.10	\$ 90.39
Disability	56.29	24.13	80.42
Total	\$107.58	\$63.23	\$170.81

Costs of administration are not dealt with in this report. From this annual figure the translation to an hourly rate of pay figure involves the average length of the working year in terms of hours. For some years the average annual hours of em-

ployment for work in the basic steel industry has been somewhat above 2000. For this report the annual working hours are set at 2000. On that basis the hourly pay rate equivalent of \$170.81 is 8.54 cents. It was assumed that there were no significant differences in average annual hours as between the several age and service groups.

77. It is reasonable to suppose that, other things being equal, a pension of \$150 a month would result in employees deciding to retire at a somewhat more rapid rate than would be the case if the pensions were \$100 a month. If the pensions were \$200 a month, the rate of retirement would probably be still higher. If the cost calculated above had been solely with respect to a pension of \$100 a month and it had not been expected that the figures would be translated into costs for higher pensions, the rate of retirement used to calculate costs would have been lower than was actually the case. The retirement rate was intended to apply to a situation in which retirement income was 50 to 60 per cent of current average pay. It is therefore reasonable to say that, all other things being equal, the contribution required to support a pension of \$150 per month under the assumptions here used would be the equivalent of a 12.81 cent increase in the hourly rate of pay. Using the same procedure, the contributions required for the support of a pension of \$200 per month would be the equivalent of an increase in the rate of pay of 17.08 cents per hour. The retirement rate from 65 on applicable to a pension of \$200 per month might be higher than the retirement rate used for cost calculations in this report. No experience with a pension producing retirement incomes as high as would result from a \$200 pension has been available.

78. If the plan outlined in paragraph 61 were to be changed only in one respect, to provide compulsory retirement at 65, the required contribution corresponding to the equivalent of 8.54 cents per hour would be 10.01 cents per hour, an increase of 17½ per cent. The contribution needed for disability would rise very slightly because the only factor producing an increase would be the lower value of contributions resulting from the slightly curtailed working life. The contribution required for the age retirement pension, however, would be increased by approximately 31 per cent. If the disability costs are overstated the introduction of a compulsory retirement age would be relatively greater than is here indicated.

79. No experience in the steel industry has been available with respect to the effect of the offer of a pension as early as age 60. The experience in another industry having roughly comparable conditions was used as the basis of estimating the costs of retirement on the basis of \$100 beginning at age 60. The retirement rate under these conditions was as follows:

Age	
60	0.1303
61	1458
62	1605
63	1803
64	2050
65	2352
66	2805
67	3104
68	3602
69	4258
70	1.0000

The contributions required to support a plan providing \$100 a month, with the terms of the plan and assumptions outlined above, modified only with respect to the earliest age of age retirement, would be the equivalent of a pay rate increase of 10.85 cents per hour. If the same plan were to provide for compulsory retirement at age 60, the required contribution would be equivalent to a pay rate increase of 15.20 cents an hour, almost 90 per cent greater than the corresponding contribution under a plan differing only in specifying voluntary retirement beginning at 65.

80. Taking the plan providing \$150 a month benefit as being the most accurately represented in these calculations, the net contribution required to support the im-

plementing pension fund would be the equivalent of an increase in pay rates of 12.81 cents per employee per hour. This is the gross cost to the Corporation. In any year in which the Corporation makes the usual profits, and as shown elsewhere, no reason for expecting any marked diminution of profits need be anticipated, the maximum net cost to the Corporation would be only 60 per cent of 12.81 or 7.69 cents per man-hour. The net cost to the Corporation will be lower than 7.69 cents per man-hour because there will be savings arising out of non-replacement of workers who retire. This non-replacement is not the result of the retention of men in service past the point of usefulness. Rather it is a natural and inevitable consequence of the constant flux in processes, work-flow, lay-out, job assignments, content of operations, and so on, which goes on in American industry. This flux both influences and, to a substantial degree, is influenced by the available work force. Without attempting to spell out the process in detail it is asserted that when older workers retire, they are not replaced, at least immediately, and that in the process the employer reaps some savings. There is no way by which the amount of these savings can be calculated. It is not unreasonable, however, to estimate them at 20 per cent of the net cost to the employer before allowances for these savings. This would make the final net cost to the Corporation of a \$150 pension, with other terms as set out in paragraph 61, 6.15 cents per hour.

81. The contributions set out in this report are far lower than the costs which most businessmen visualize in connection with pensions. The typical businessman now thinks of pension costs as being the initial annual premium for a group annuity plan operated through an insurance company. Without attempting to account in detail for all differences, the following steps will show some of the more important factors. The contribution required for the support of the \$150 plan has been set down as the equivalent of a rate of pay increase of 12.81 cents per hour. If instead of voluntary retirement beginning at 65 compulsory retirement at 65 were provided, the 12.81 cents would become, as already stated (for a \$100 plan) 15.02 cents. Insurance company costs are calculated on the assumption that all employees will retire at the youngest age scheduled for age retirement.

82. Insurance companies calculate initial costs on the assumption that the "accrued liability" will be amortized, not merely frozen. If instead of "freezing" the accrued liability, the contributions had been computed on the assumption that the accrued liability would be amortized in 20 years, the 15.02 cents per hour figure would have been 23.74 cents per hour.

83. Insurance companies ordinarily make no advance allowance for withdrawals. They quote no premium rates for disability. On the other hand, they usually calculate contributions in terms of single rather than level premiums. Precise measurement of the net effect of these differences involves a long series of intricate calculations which have not been attempted for this report. It is estimated, however, that if an insurance company were to include a disability estimate based on railroad figures in its premium quotations, were to use interest at 2½ per cent, and Combined Annuity mortality after retirement, the net premiums, translated into cents per man-hour, would be roughly 28.

84. Insurance companies use, as the lowest basis for quotations, the 1937 Standard Annuity Table of Mortality. Some companies even apply the premium for 64 to 65, that for 65 to age 66 and so on. If the 1937 Standard Table without rate down had been used in this report as the measure of mortality after age retirement together with the changes in method outlined in the 3 preceding paragraphs the 28 cents in the preceding paragraph would have been about 29.5 cents.

85. The maximum interest used by insurance companies in current premium quotations is 2¼ per cent. If that rate were substituted for 2½ per cent, the 29.5 cents would become about 31.4 cents.

86. The premiums of the insurance companies on group annuities are almost universally 92 per cent of the gross—the premium actually quoted. Using that relation between net and gross, a net premium equal to 31.4 cents per man-hour would end up in an actual quotation at 34.13 cents. The net required contribution

for the "\$150 plan" equal to 12.81 cents increase in the hourly rate of pay could, under insurance methods of calculating initial costs, turn out at 33 to 35 cents.

87. The relative importance of these various factors are to be measured in relation to the change produced in the figure at the preceding stage. These were in order of magnitude:

	Per Cent
Amortization of accrued liability	58.05
Net result of withdrawals, provision of disability, single as against level premium	17.94
Uniform retirement at 65	17.25
Loading	8.69
Interest	6.44
Mortality after age retirement	5.36

88. It is important to bear in mind, in comparing these "costs" that they are not measuring the same thing, at least at the same time. Thus, under the insurance method, when a withdrawal occurs, before retirement, costs in the year of withdrawal will be reduced. When an employee remains in service until 66, costs are reduced in the year of deferred retirement. If he then remains in service until 67, costs are reduced in the next year, and so on. The method of calculating costs used here anticipates these savings. The fact that no anticipation is matched exactly by the facts is no reason for failure to anticipate; it would be as sensible to say that U. S. Steel should not depreciate any of its property in arriving at net profits because the exact life of any given piece of property cannot be anticipated. The differences—and they are substantial—relating to advance accounting for withdrawals and deferment of retirement, are not differences in cost, but differences in recognition of factors in cost.

89. Under the ordinary insurance method of financing pensions, contributions for the initial years of a pension plan are made abnormally high in order to meet the costs of the "accrued liability" and get back to a normal contribution rate within 15 or 20 years. Using the methods of this report, and taking the plan described in paragraph 61, except for the pension amount of \$150 per month, a contribution equivalent to an increase in the rate of pay of 20.09 cents per hour would amortize the accrued liability in 20 years, and in addition pay normal costs in that period. At the end of 20 years the pension fund would be sufficiently large to enable the contributions from that time on to be met by the equivalent, in the rate of pay, of 8.07 cents per hour.

90. If the "accrued liability" were funded over a 20 years' period, the net cost, to the Corporation, of the required contribution, making allowance for income tax and retirement savings, is estimated at 10.31 cents per hour. In terms of aggregates, the annual extra contributions for amortization, as compared with "freezing" for the approximately 170,000 persons in the bargaining unit would be approximately \$24,730,000. This is extra contribution, not extra costs; the latter being about \$14,840,000.

91. It may be said that the failure to provide funds equal to the full accrued liability is unsafe. "Freezing" accrued liability means only that (a) the pension costs of the Corporation will not be reduced unless the assumptions used are proved to be conservative; and (2) if the plan is terminated, the reserves will be smaller than if the accrued liability had been fully funded or a full funding program begun. Taking the second point first, if the plan were to be discontinued, it is not now possible to know whether the reserves would be needed or not. If, for example, the plan were to be discontinued because of a decision of a future Federal Government that all pensions should be paid by that Government, the accumulation of large reserves might prove to have been wholly in vain. The accumulation of extremely large reserves under existing circumstances may well be avoided. Ultimate reduction in pension costs may be desirable, but it is also desirable not to burden the costs too heavily at the start. Further, whatever might have been the case in 1946, in general large reserve accumulations in 1949 are economically not

to be desired. Therefore, a rational basis on which to begin the kind of pension plan suggested here would seem to be the measurement of the required rate of pay increase in terms of "freezing" the accrued liability.

II. INSURANCE FOR DEATH, SICKNESS AND ACCIDENTS, MEDICAL CARE AND HOSPITALIZATION

A. Existing Arrangements for Insurance

92. Other than the now-retired pension plan, there is only one corporation-wide plan of employee insurance. This plan provides for insurance payable in the event of the death of an employee before retirement. The amounts payable under this group life insurance plan are roughly equivalent to a year's pay. The average amount of insurance in force for members of the plan employed in the six steel-producing subsidiaries during the last half of 1948 was \$3829. In the last quarter of 1948 the earnings of employees in the six steel-producing subsidiaries averaged, on an annual basis, \$3669. The difference between \$3669 and \$3829 was probably the result of two factors: (a) the failure of approximately 20 per cent of the employees to join the plan, those who are not members having probably lower than average wages; and (b) the use for certain groups of employees, of 300 days as the measure of a year's work for the purpose of determining the insurance classification. The fact that the insurance is not reduced with a reduction in compensation may have also been a factor in the difference, though probably not an important one.

93. In order to participate in the plan an employee must agree to authorize his employer to deduct from his pay 55 cents each month for each \$1000 of insurance. The average participation in the last half of 1948, related to employment in December, 1948, gave 69 per cent participation in American Steel and Wire; 85 per cent in Carnegie-Illinois; 60 per cent in Columbia; in Geneva, 61 per cent; 82 per cent for National Tube; and 81 per cent for Tennessee Coal & Iron with an over-all average for the six companies of 80 per cent. The number of deaths in the six steel-producing subsidiaries in recent years has been averaging approximately 1000. What deaths may have occurred among the employees who are not members of the plan has not been recorded.

94. The net cost of this Corporation term insurance was 64.2 cents per month per \$1000 in the 1948 insurance year, and 64.7 cents in 1947. With employees paying 55 cents, the Corporation's cost was 9.2 cents per month per \$1000 in 1948 and 9.7 cents in 1947. The aggregate cost to the Corporation for the whole insurance plan (no breakdown for the steel-producing subsidiaries is available) was \$904,000 in the insurance year 1948. This is the equivalent of approximately \$0.001506 per hour—and the corresponding figure for insurance year 1949 will be less.

95. The third and final aspect of the survey made of families of elderly active and retired steelworkers included an inquiry as to the insurance of steelworkers of all ages who had died. This inquiry was more difficult to execute than the others because the families of many deceased steelworkers seem to fall apart quickly; the records of only 187 deceased steelworkers could be secured. Each of the widows was asked a question as to the amount of group life insurance in the Corporation plan carried by the husband at his death. In 17 out of 187 cases, not quite 10 per cent, the husband had not been a member of the Corporation plan. The schedule of amounts of such insurance is shown in Table 15. The average amount of insurance for those having it was \$3526. The average insurance in the steel-producing subsidiaries in the 2-year period ending in June, 1949, will probably be about \$3700. The average amount for the widows from whom records were received is probably roughly 5 per cent less than the average in force, and probably represents the difference between the wages of United Steelworkers membership and the salaries of the other groups heavily represented in the group life insurance plan. Apportioned over the entire 187 deceased employees, the Corporation insurance amounts to a little over \$3200.

96. In addition to the data relating to the group life insurance, the widows also gave information as to the amount of mutual benefit and other insurance carried by

their husbands at the time of death. Of the 187 husbands 73 (39 per cent) had been members of mutual benefit associations, with average insurance of \$497 (Table 16). In 99 cases there was insurance other than group or mutual benefit, averaging \$1112. In Table 17, the total amounts of insurance are shown. Six wives reported that their husbands carried no insurance of any kind at death, and in 4 other cases the insurance had been less than \$1000. The average insurance, including of course the Corporation group life insurance, was \$4114. The average insurance of all kinds, for all widows, including those without any, was \$3982. Thus, it is clear that the Corporation life insurance supplied 80 to 85 per cent of the entire insurance available to U. S. Steel widows upon the death of their husbands.

97. No survey has been made of the proportion of active employees who carry insurance or the amounts of such insurance. It would be a reasonable surmise that a great proportion of active employees would carry insurance other than the Corporation group life and mutual benefit insurance and in amounts substantially greater than those indicated by the survey. This would not mean that such insurance would be available at death. In the great majority of cases death is preceded by a longer or shorter period of illness. Support during that period of illness, as shown in the cases of retired workers, frequently necessitates the use and possible exhaustion of all available liquid sources. Therefore, the fact that insurance is now carried would not indicate that it will be available to the widow at the death of her husband.

98. Of the 187 widows reporting, 75 were receiving survivor benefits under Title II of the Social Security Act (Table 18). The average monthly amount of social security benefit payable to the 75 families (the survey did not ask for a separation between the amounts payable to widows and children) was \$44.43. The total social security benefit apportioned over the entire group of 187 indicated that the average monthly income to the survivors of deceased steel employees was \$17.82. Twelve of the widows of steelworkers receive veterans' pensions, averaging \$48.50 per month. For the 75 who were receiving social security, the average veteran's pension amounted to \$6.09 per month, so that the average monthly family income from the two sources for the 75 families benefitting under social security was \$50.52. The average family income under both social security and veterans for all 187 families was \$20.94. The average for the families receiving either veterans or social security benefits or both was \$48.93 per month. Only one family was receiving the maximum social security benefit of \$85, and in only 5 cases did the social security benefit exceed \$75 a month. The combination of veterans and social security benefits yielded amounts in excess of \$100 a month per family in 3 cases.

99. The widows in the sample were, in great part, not receiving social security benefits because they had no minor children and were under 65. They were distributed by age as follows

Under 25	2	55-59	37
25-29	6	60-64	24
30-34	9	65-69	10
35-39	14	70 and over	3
40-44	23	Not reported	4
45-49	26		
50-54	29	Total	187

Of 181 reporting on children, 112 had none, and the other had:

1 child	34
2 children	14
3 children	13
4 children	4
6 children	3
7 children	1

100. It is obvious from the figures given as to the amount of insurance that in a maximum of one or two cases would the combination of veterans and social security and insurance be sufficient to provide a livelihood for a widow for more than a brief period of time. Widows, therefore, must look for means of support other than insurance from the Corporation group life plan or social security or the Veterans Administration. Forty widows were employed on the date of the survey (Table 19); another 38 were not at work but were in the labor market; 86 were unable to work, primarily because of the necessity of caring for small children. Only 22 were voluntarily out of the labor market (Table 19). In addition, there were 27 families where one person other than the widow was employed, 15 where there were 2 others than the widow employed, 3 families with 3 other than the widow employed, and one family where there were 4. Reports on this point came from 165 widows.

101. Twenty-three of the widows had taken the cash surrender value or a loan on insurance (Table 19); 138 had used up some savings; 13 had sold or mortgaged property; 23 had taken in boarders or rented rooms; and 25 had given up a car out of 82 who had one at the husband's death. In 26 cases the widows had regular income from investments or property. There were two other major sources of livelihood: aid from children and increases in indebtedness.

102. In addition to the Corporation group life plans, as already indicated, there exist a number of mutual benefit associations among Corporation employees, some of which provide life insurance. The Joint Fact-Finding Committee reported a year ago that there were 32 such associations providing life insurance, 7 of which also covered dependents, with approximately \$36,000,000 of insurance in force for 68,600 members, 35,000 of whom could have insured dependents. As shown by the survey, as well as these figures, the life insurance protection through these associations is very small.

103. Almost 60 per cent of the Corporation employees in the steel-producing subsidiaries are members of mutual benefit associations providing weekly payments in cases of non-occupational sickness and accidents. The average weekly benefit is about \$15. Benefits usually may be paid for 13 weeks, with a 17-weeks limit in a few cases. Typically there is a waiting period of a week for sicknesses and no waiting period for non-occupational accidents.

104. The percentage of employees in the steel-producing subsidiaries who have some protection against cost of hospitalization is slightly larger than the percentage covered for sick and accident benefits. Almost 80 per cent of the employees who have insurance for hospitalization costs can secure coverage for their dependents through the same association. With insignificant exception mutual benefit hospital insurance takes the form of cash indemnities. The average daily indemnity for both employees and dependents is \$4.30 or \$4.35 with an average limit of \$20 to \$30 for hospital costs other than room and board. The duration of the indemnity for any single hospital confinement is usually 30 days.

105. A little under 40 per cent of the employees in the steel-producing subsidiaries have insurance providing indemnities against the cost of surgical operations, and almost two-thirds may secure, through the same association, similar insurance with respect to dependents. The average maximum payment available under these indemnity insurances, all of which are operated through mutual benefit associations, is about \$150 for employees and \$115 for dependents.

106. Except for 8 mutual benefit plans providing medical indemnities, there is no insurance against the costs of medical care, and no direct provision for medical care anywhere in the steel-producing subsidiaries except in a very limited way for a few employees of Columbia Steel in California, and in the Tennessee Coal, Iron & Railroad Company, the latter being the only important exception. T.C.I. maintains a medical care and hospital plan for employees and dependents. As of August, 1946, there were about 29,000 employees and 100,000 employee dependent members. It is understood that the membership since 1946 has been maintained at about the same level.

107. The record of the operation of the hospital and medical care plan at T.C.I. seems to indicate great benefits both to employees and the Company. Before the establishment of the hospital about 35 years ago, the absenteeism from sickness and injuries was very high. In 1932 the head of the hospital reported in the Journal of the American Medical Association that:

"It is felt, therefore, that the problem faced in 1913 has been largely solved. A steady, efficient and satisfied working force has been created by this and other agencies. The labor turn-over has been reduced to a fraction of what it formerly was. Malaria, typhoid, smallpox and similar diseases have become negligible factors, and the average days worked monthly per man has been doubled."

It is a reasonable surmise that the dividends on the health plan have continued in recent years. In 1938 the over-all mortality rate among the employees of T.C.I. who were members of the Corporation group life plan was higher than the average for the members of the group life plan in the other companies by approximately 44.4 per cent. The same comparison for the insurance year ending June, 1948, showed a change from 44.4 per cent against to 2.4 per cent in T.C.I. employees' favor. In 1938 the average employee in T.C.I. group life participation was about 4½ years younger than the average member in the other steel-producing subsidiaries. In 1938, 42.9 per cent of the T.C.I. members were Negroes. In 1947 (age distributions by Company for 1948 have not been available) the average employee at T.C.I. was younger than the employees in the other steel-producing subsidiaries by less than 6 months, and the proportion of Negroes in the membership had risen to almost 48 per cent. It does not seem possible that any other demographic change could have accounted for the shift in the relative mortality rates. The most acceptable inference is that the accumulative effect of the health care provisions at T.C.I. has become manifest through a lowered rate of mortality.

B. Monetary and Other Requirements for a Decent Program of Insurance

Life Insurance

108. If the life insurance available through the Corporation facilities is to be substantially the sole insurance available to United States Steel employees, adequacy demands an increase in the amounts. Moreover, to a greater and greater degree the method of insurance is coming to be the major form of estate creation. The major need to be filled by such insurance is, of course, the support of survivors. The cost of providing a life annuity—that is, an annuity without survivorship—of \$50 per month for a wife aged 60 is about \$10,700; the cost at 65 is \$9300. To provide for a wife at the age of 50, an annuity, without survivorship, to begin at 65 would cost not less than \$5500. For a child of 10, \$50 a month payable at 18 has a present value of \$4360. For a mother and two children at 8 years would involve around \$10,000. All of these are typical cases of what is required for support of survivors at a low standard of livelihood for a relatively brief period of time. On any basis approaching adequacy, life insurance in an amount of the order of \$10,000 is almost a bare necessity.

109. In insurance, monetary requirements are important; but other factors must be taken into account. In the case of group life insurance the most important factor has to do with the coverage of retired workers. Under the existing Corporation group life plan the insurance ceases, with minor exceptions, upon retirement or termination of employment. Thus the widow of a retired employee may be left completely without insurance protection; while employees may convert term insurance upon retirement, the costs in most cases are prohibitive. Adequacy for group life insurance, therefore, means not only adequacy in terms of amounts of insurance but adequacy in terms of coverage provisions. Insurance which terminates at retirement has come to cover a minor part of the deaths and, if mortality continues to improve, may come to be of extremely small consequence.

Sick and Accident Insurance

110. When an employee of one of the six steel-producing subsidiaries becomes sick or disabled through a non-occupational accident, he will suffer a loss in wages averaging \$70 to \$72 a week. In terms of need, a sick leave at full pay is to be preferred to sick insurance. On the basis of a budget at a level corresponding, for 4-person families, to the budget for 2-person families already described, the annual cost of maintenance in Pittsburgh in December, 1948, would have been about \$61 per week; in Birmingham, \$59; in Chicago, \$61; in New York City, \$62; and in Minneapolis, about \$62. (The figures are based on data taken from a statement of Federal Social Security Commissioner Arthur J. Altmeyer sent to the Committee on Ways and Means, U. S. House of Representatives, in connection with an appearance before the Committee on March 2, 1949.) There is no reason to suppose that the budgetary requirements for a family in which the wage earner is sick are smaller than the budget requirements for a family in which the wage earner is able to work, even if there are no extra costs of the illness. For a 4-person family, it seems apparent that an income of about \$60 a week is essential for a bare maintenance budget for steelworkers. For a 3-person family, \$52 to \$53 might buy the maintenance budget. A \$41 weekly benefit would barely provide the bare maintenance budget for a 2-person family in which the head is normally gainfully employed, and \$35 would cover only temporary subsistence for that small-size family.

Hospitalization

111. In considering what constitutes adequacy in the field of hospitalization there are three major points to be borne in mind. First, the employee has hospitalization risks not only with respect to himself but also for his dependents. A wage earner who is sick has an income loss not shared by others. But with respect to hospitalization and other health risks his liability for his dependents is the same as in the case of his own illness. In this field, therefore, adequacy first of all involves provision for both the employees and their dependents. The second fact relevant to adequacy is the need for service, not cash. It has been said that, under a hospital service plan, an employee who is fortunate enough to be situated in a community where hospital costs are relatively low is at a disadvantage in relation to an employee in a high-cost hospital area. The reasoning is that if both employees suffer from identical sicknesses requiring identical hospital care, the value received by the employee in the low-cost area is less than the value received by the other employee. But it would be more appropriate to say that the employee in the high-cost area is at a very serious disadvantage, particularly if the size of his cash indemnity is fixed on the basis of hospital costs in low-cost areas.

112. Wherever any large group of employees is spread over a wide geographical area, as is true of the employees of the steel-producing subsidiaries of United States Steel, a uniform monetary formula to reimburse employees for hospital costs will have a widely varying real value. If a choice had to be made as between a large number of individual hospital service plans and a single uniform nation-wide indemnity plan, the latter might be preferable. It would have at least a monetary uniformity. A series of different service plans would have neither monetary nor service uniformity; and, in the absence of the most compelling reasons to the contrary, monetary uniformity is preferable to the absence of any uniformity. If, however, there is a choice between uniformity of service and uniformity of money, uniformity of service is preferable.

113. The case for preferring uniformity of service to uniformity of monetary indemnities would be less clear if the differentials in the hospital-service-value of money were constant. This is not the case. The hospital-service-value of any amount of money will vary generally over time, and the relative value as between the various communities in which steelworkers live will probably exhibit an even greater lack of consistency. It would be too much to claim, of course, that hospital service is completely uniform. It is not. But it is less variable and more useful than a money indemnity if available on reasonable terms.

114. The third criterion for adequacy of hospitalization is that the arrangement cover all the costs of hospitalization. The ordinary type of hospitalization insurance has a fixed maximum for payments for necessary hospital costs in addition to room and board—that is, operation and delivery room, medications, medicines, dressings, therapeutic x-rays, and so on. While this type of monetary arrangement, if as much as 10 times an adequate daily benefit rate, will cover the cost in the great majority of cases, it would leave the patient to pay increasing amounts as total costs increase.

115. An analysis of 1726 non-maternity claims in Pittsburgh in February, 1949, indicated that while 50 per cent of the cases involved extra service charges of less than \$40, these cases accounted for only 26 per cent of the total bills. In 66 per cent of the cases all the extra charges could have been paid from a maximum allowance of \$70, but 12 per cent of the total charges consisted of the part of the 30 per cent of the bills over \$70 which exceeded \$70. Almost 75 per cent of the Pittsburgh bills were less than \$80, but that part of the other 25 per cent which exceeded \$80 ran to a little over 9 per cent. In Chicago in March, 1949, in a sample of 13,695 cases an allowance of \$100 would have paid in full 83.3 per cent of all the bills. But that part of the one-sixth of the cases not paid in full which exceeded \$100 accounted for 19.9 per cent of the total bills for the extra charges. If the limit had been \$80 in Chicago, 26.2 per cent of the aggregate charges would not have been covered. These examples are typical of hospitalization insurance in the cash indemnity form; catastrophic risks are not avoided. Such insurance is therefore less useful to a participant than an arrangement which guarantees the necessary service.

Medical Care Insurance

116. Basically the need for medical care is governed by the same criteria as apply to hospitalization. In practice, however, the application is far more difficult than for hospitalization, a difficulty resulting from the fact that while a service arrangement for hospitalization is immediately available, a similar basis for medical care would necessitate a major organizational job on the part of both the United Steelworkers of America and U. S. Steel. It would be impossible to include in a collective bargaining contract to be entered into in June, 1949, definite provisions for a uniform system of medical care to be applicable to all the employees in the bargaining units in the six steel-producing subsidiaries. It is technically possible to arrange for an agreement with respect to how the parties would go about ascertaining how and when such a uniform system might be developed. So far as this report is concerned, however, the subject matter dealt with is related to insurance forms which are now available and do not have to be created.

117. Within the general field of medical care the following arrangements are available: First, reimbursement to an employee with respect to a surgical operation, with a maximum related to the character of the operation specified in the insuring contract. Second, in most of the areas in which steelworkers live, medical service organizations sponsored by medical societies will undertake to provide the necessary surgical services without extra charge (in addition to the regularly scheduled contributions) to participating employees whose annual incomes are below a certain amount, but with the surgeon free to charge an additional amount to those whose incomes exceed the specified limit. Third, there are available cash reimbursements to defray payments on the basis of doctors' visits to a home or hospital or visits to a doctor's office, with limitations as to the frequency or number of visits for which reimbursements are to be made or as to the total amount of reimbursement.

118. None of these available forms of medical and hospital insurance is remotely comparable to an arrangement by which immediate medical services would be given in return for the payment of a fixed monetary contribution. Of the three forms now available, the first—that is, reimbursement for surgical operations with a fixed minimum—is probably the most substantial. The second form, in which a guarantee is given that for employees with below-average incomes the operation will be performed without additional charge, is of little consequence to steelworkers because in the great majority of cases their incomes will exceed the amount which

would enable them to be protected by the guarantee. A recent study in the Detroit area, for example, indicated that under the Michigan Medical Service Plan the average surgical fees were \$103, whereas the amount allowed by the plan was \$64, or 62 per cent of the total. In 80 per cent of the cases the participating employee had to pay an additional amount for surgical service.

119. A study made by a committee of the Actuarial Society of America and published in the Transactions of the Society for May, 1948, found that the surgical reimbursements paid about 55 per cent of the total bills. The fee schedules in the actuarial study were substantially lower than the fee schedules in Michigan. Indications are that, on the basis of identical schedules, insurance costs of medical service arrangements will be greater than indemnities available through insurance companies. It seems unreasonable to expect that this higher cost would be off-set by any immunity to additional charges. On the contrary, it would seem sensible that to make arrangements for indemnities, if indemnities were all which could be secured, from an agency which is in the indemnity business rather than from an agency composed of physicians who would probably have no experience, or very little, in the operation of an insurance arrangement.

120. The third form of protection against medical costs is that of pure insurance indemnities for the non-surgical cases. The unit of insurance is, basically, a visit from or to a doctor, and reimbursement is measured by the number of visits. A claim under this type of insurance may be for a very small sum—\$3.00, \$4.00 and \$5.00; the average claim may well not exceed \$10 or \$15. It seems wholly unreasonable to suppose that the institution of a system of insurance for making payments of such small sums could possibly be economical. In the field of general medical practice it is doubtful whether there is any reasonable compromise between no insurance at all and a service arrangement. Because the costs of surgical service are substantially greater than the costs of ordinary practitioner service, and because of the catastrophic elements involved, surgical indemnities, even though an imperfect substitute for service, may nevertheless be worth while.

C. Costs of Insurance in the Field of Life, Accident and Sickness, Hospitalization and Medical Care.

121. As a preliminary to the collective bargaining conferences in 1948, the Joint Fact-Finding Committee on Insurance made a report covering the several forms of insurance discussed in the preceding section of this report. For the more important life insurance provisions, the cost figures set out in the report were as follows, in terms of cents for \$1000 of insurance per month:

One-year term life during active service.....	64.7
Level premium life during active service.....	78.3
Paid up insurance at retirement at 65 or over, or on pension before 65....	97.4

The unit costs for sick and accident insurance, and hospital and surgical indemnities were based on an assumption that net costs would be 5 per cent below the standard premiums in these fields.

122. In the 15 months which have elapsed since the Joint Fact-Finding Committee on Insurance made its report, substantial additional information has become available which makes it reasonably clear that the estimates of the Joint Committee were in all probability too high. In addition, a proposal for a nation-wide service contract for hospitalization has been made which was not available when the Committee made its report. The earlier estimates of the cost of insurance need to be reviewed in the light of the latest available information.

123. The estimates of the costs of life insurance were based primarily on the extensive experience of the Corporation plan. For the term insurance under the plan, the cost per month per \$1000 in the year ending June 30, 1948, was less than 0.5 cents under the estimate of 64.7 cents made in the Committee's report. Costs for the insurance year ending June 30, 1949, will probably be slightly lower than 64 cents. The suspension of the compulsory retirement rule may, after a period of years, increase term insurance costs somewhat because there may be a greater rise in age distributions than in past years because the number of employees at ages

over 65 could, over a period of years, run to several thousand. On the other hand, this could be off-set by a reduction in mortality.

124. While the term rate for group life insurance might rise slightly if the number of employees in service at ages over 65 increases (a development likely to be accompanied by somewhat higher age distribution of employees under 65), the costs of paid-up insurance will fall substantially. As indicated above, the term insurance fails by itself to meet the major needs for insurance. Insurance which is paid up at retirement is needed as a supplement. If, as seems probable, the disability rate has been lowered, the cost of paid-up insurance will be substantially lower than was estimated last year. This will be true even if the service requirement for disability retirement were substantially reduced. It is estimated that if the ratio between paid-up insurance at retirement to term insurance is kept at a level as high as 20 per cent, a combination of the term and paid-up insurance premiums as calculated last year will produce a reasonably accurate statement of level premium insurance costs. Taken separately, the term cost will be under-stated and the cost of paid-up insurance will be over-stated.

125. The basis for the estimates as to costs of accident and sickness insurance in the Joint Committee report was primarily the experience under railroad mutual benefit associations as published by the Public Health Service. The current experience under the railroad sickness plan has been running substantially lower than the railroad mutual benefit experience. In the fiscal year ending June 30, 1948, for example, the number of sickness cases per thousand was 38 per cent smaller than the railroad experience used by the Committee last year would have indicated. These figures were for the first year in which the new nation-wide sick benefit plan on railroads operated, and unfamiliarity with the system may have accounted for some of the low rate. Even currently, however, the sickness frequency rate would be about 25 per cent less than the old railroad experience would indicate. Duration of sickness has not been quite as low, per sick case, as the old experience indicated, but the total amount of compensation to be paid in the fiscal year 1948 was about 30 per cent less than the estimates; the total payments in fiscal 1949 will be almost 20 per cent under the estimates based on the old experience.

126. The experience of a large mutual benefit association operating in the steel industry has become available since last year. While the detailed data necessary for an exact comparison with the railroad experience have not been available, it has been possible to make certain adjustments which permit a rough comparison. The indications are that in the period 1946-1947 the number of days of sickness would be a little less than 85 per cent of the estimates used by the Committee last year.

127. In the October, 1948, Transactions of the Actuarial Society of America there was published the first comprehensive report of insurance company experience claims in the several health fields. The report showed, for a number of different plans of insurance, the annual claim cost per 1000 years of equivalent male exposure. If 10 per cent of the gross premium be added to this claim cost and the result compared with the estimate of costs in the Joint Committee report, it will appear that the costs of sick and accident insurance will run from 16 to 30 per cent lower than the estimates in the Joint Fact-Finding Committee report.

128. It would not be unreasonable to suppose that the experience represented in this Actuarial Society report is in some part an under-statement of probable sicknesses. A substantial part of the experience was developed during the war period when there were great pressures on employees to remain at work even if they were ill. The ratio between sick benefits and wages was rapidly falling in several of the years covered by the experience and the losses upon employees for remaining away from work were substantial. In order to be conservative the estimates for the current year were reduced below those of last year by only 12.5 per cent.

129. A calculation similarly made with respect to the hospitalization claim costs, as reported in the October, 1948, Transactions referred to above, indicated that the estimates of a year ago may have been from 21 to 26 per cent too high. For the

purpose of current estimates, those of a year ago were reduced by 20 per cent for employees and about one-sixth for dependents.

130. Since a year ago the Hospital Service Association of Pittsburgh, acting for and in conjunction with the hospital service organizations operating in the area where employees of the steel-producing subsidiaries live, offered to the United Steelworkers and United States Steel a proposal for complete hospital care up to 70 days, as follows:

Hospital Service

Uniform benefits will be provided, in member hospitals of the Blue Cross plans involved, for the employee and spouse and for dependent, unmarried children from birth until they attain 19 years of age, as follows:

1. Bed, board, and general nursing service in semiprivate accommodations
2. Use of the Operating Room and Delivery Room
3. Anesthesia, when administered by a salaried employee of the hospital
4. Dressings, plaster casts, and splints as provided by the hospital
5. Drugs listed in the United States Pharmacopoeia, the National Formulary, and the New and Non-Official Remedies
6. Laboratory examinations, consistent with the condition for which patient is being treated in the hospital
7. Basal metabolism tests consistent with the condition for which the patient is being treated in the hospital
8. X-ray examinations consistent with the condition for which the patient is being treated in the hospital
9. Electrocardiograms consistent with the condition for which the patient is being treated in the hospital
10. Physiotherapy and Hydrotherapy consistent with the condition for which the patient is being treated in the hospital
11. Oxygen as provided by the hospital

A subscriber occupying a private room is to be entitled to the benefits above specified but will pay to the hospital the difference, if any, between the hospital's regular charge for the private room occupied and an allowance of \$6.00 per day.

Maternity care will be limited to 10 days' care for the mother and nursery care for the newborn while the mother is in the hospital. Maternity coverage is available to the wife of the employee and to the married female employee. For members of the initial group there will be no waiting period for maternity benefit. For subsequent additions to the group through new hires or new marriages, there will be a nine-month waiting period for this benefit.

Emergency outpatient care shall be available in the event of accidental injury for care rendered within 24 hours after such accidental injury.

If hospitalization occurs in a member hospital of an approved Blue Cross hospital care plan other than the above named plans and provided that such Blue Cross plan is a member of this Inter-Plan benefit arrangement, the employees will be entitled to the benefits offered by the other hospital service plan.

If hospitalization occurs in any nonmember hospital or in any hospital where reciprocity does not apply as stated above, the following allowances will apply toward the services specified above.

One-day Stay	\$18.00
Two-day Stay	21.00
Three-day Stay	22.50
Four-day to Seventy-day Stay	\$7.50 per day

Exclusions: Hospital service is not to be provided for:

Any conditions, ailments, or accidental injury covered by a Workmen's Compensation Act or any similar legislation or for hospitalization which is furnished to the subscriber under the laws of the United States of America or any state or political subdivision thereof.

Hospital Admissions primarily for diagnostic X-ray or laboratory examinations or other diagnostic studies or primarily for basal metabolism tests, electrocardiograms, Physiotherapy, or Hydrotherapy.

Convalescent or Rest Cures

Mental and Nervous Disorders after diagnosis as such

Extraction of Teeth or other Dental processes

Services of attending Physician, Surgeon, or Private Duty Nurses

Blood, blood plasma, radium, or X-ray therapy

Pulmonary tuberculosis after diagnosis as such.

Duration of Hospital Service: Except as otherwise specified hospital services will be provided up to 70 days for each period of hospital confinement; "period of hospital confinement" means a continuous period of hospital confinement or successive periods of hospital confinement when the last date of discharge and the date of re-admission are separated by less than three months.

General Conditions

1. "Pre-existing" conditions are not to be excluded.
2. No enrollment fee shall be charged.
3. Children covered under a family contract shall be entitled to coverage under their respective plan's direct payment contract when they are no longer eligible under their parent's contract.
4. While no attempt is made to list all of the benefits or contract provisions, it is taken for granted that all contracts would be written—
 - (a) Without race restrictions.
 - (b) Without an age limit for the worker or spouse.
 - (c) With equal benefits for the worker and members of the worker's family listed on the application or otherwise included in the contract.
 - (d) With provision for prompt addition of new spouses, etc.
 - (e) With provision for enrollment of new employees promptly.
5. Each plan is to accept transfers of United States Steel Corporation subscribers from other plans, and give credit toward the maternity waiting period for membership in such other plan.
6. Any plan may provide additional benefits or liberalizations of any of the conditions of this contract at its own option.

The contribution attached to this offer was \$3.25 per employee per month, or a total annual cost of hospital service for employees, wives and unmarried dependent children under 19 of \$39.

131. In the October, 1948, Transactions of the Actuarial Society the experience under surgical insurance expense for employees and dependents was reported on. By following the procedure of adding 10 per cent of the gross premium to claims, it was found that the estimate of cost for employees was an over-statement of about 50 per cent, while for dependents, even taking the full costs of obstetrical benefits, the costs were over-stated by 27.7 per cent. For the purposes of this report the reduction in the cost of the surgical benefits is set down as about 37 per cent for employees and 25 per cent for dependents.

132. In the collective bargaining conference of 1948 the United Steelworkers of America proposed an insurance plan providing for (a) life insurance during active employment equal to 18 months' pay, which was taken as 150 per cent of the average insurance in force at the end of 1947; (b) life insurance paid up upon retirement of \$1500; (c) \$35 a week payable to employees temporarily disabled by non-occupational sickness or accidents, the benefit to begin on the first day of an accidental injury and on the fourth day of an illness, the payments to run not more than 52 weeks with respect to any single illness; (d) a hospitalization indemnity of \$8 a day with \$80 for extra expenses, with a duration not to exceed 70 days for any single illness, for both employees and wives and children under 18; and (e) a cash indemnity for

surgical operations on the standard insurance scale with \$225 maximum. Using the 2000-hour year as the basis of the hourly wage equivalent, it was estimated for the 1948 convenence that the contribution required to support this would amount to 8.70 cents per hour. On the basis of the revised cost estimates, the contribution required to support the plan would be 7.87. The costs as estimated in 1948 and now are shown in Table 20.

133. In the past year hospital charges have increased. The \$8.00 indemnity proposed in 1948 was intended to cover the average hospital cost in a semi-private room in the hospitals which are used by the members of the United Steelworkers in the steel-producing subsidiaries of United States Steel. It seems probable that the cost of such accommodations now will average not less than \$9.50 and maybe \$10 a day. If the plan proposed last year were changed to provide for an increase in the hospitalization indemnity of 25 per cent, i. e., to \$10 per day, with a total of \$100 for other charges, the contribution required on the basis of last year's estimates would be 9.27 cents per hour, and on the basis of the current estimates 8.37 cents per hour. If for the hospitalization indemnities there were to be substituted the service contract offered by the Hospital Service Association of Pittsburgh, as described in paragraph 130, the contribution required to support the plan, otherwise unchanged, would be 8.07 cents per hour.

134. The net cost to the Corporation, after allowing for the reduction in income taxes with respect to a contribution to an insurance fund of 8.07 cents per hour, would be 4.84 cents per hour. While there may be economies to the employer in addition to savings in income taxes, they are less tangible than in the case of pensions, and no effort is made here to guess at the magnitude.

135. It is a reasonable estimate that a pension plan providing payments of \$150 a month beginning at age 65, with other conditions as set forth in paragraph 61 of this report, and the insurance plan described in paragraph 132, except that a uniform Blue Cross contract described in paragraph 130 be substituted in place of the hospital indemnity arrangements in the plan set out in paragraph 132, can be supported adequately by United States Steel at a net cost of 10.99 cents per man-hour.

TABLE 1

**NUMBER OF RETIRED U. S. STEEL EMPLOYEE SCHEDULES
RECEIVED CLASSIFIED BY COMPANY AND PLANT LOCATION**

<i>Company</i>	<i>Location</i>	<i>Number of Returns</i>
American Steel & Wire	Cleveland (American)	17
	Cleveland (Cuyahoga)	41
	Donora	38
	Duluth	21
	Worcester	38
Carnegie-Illinois	Braddock (Edgar Thomson)	14
	Clairton	22
	Duquesne	41
	Gary	113
	Munhall and Rankin	82
Columbia	Chicago (South)	72
	Pittsburg	2
National Tube	Ellwood City	37
	Lorain	91
	McKeesport	65
T. C. I.	Ensley	17
	Fairfield	11
		722

TABLE 2
NUMBER OF U. S. STEEL EMPLOYEES CLASSIFIED
BY CAUSE AND DATE OF RETIREMENT

	<i>Date of Retirement</i>				<i>Total</i>
	<i>1947</i>	<i>Jan.-Sept.</i>	<i>Oct.-Dec.</i>	<i>1949</i>	
		<i>1948</i>	<i>1948</i>		
Cause unknown	1	..	..	..	1
Compulsory retirement	261	328	22	26	637
Disability	22	28	17	6	73
Employee felt unable to work .	2	..	2	3	7
Moved from locality .....	..	..	..	1	1
Employee wanted to retire ...	1	..	1	1	3
Total	287	356	42	37	722

TABLE 3
NUMBER OF RETIRED U. S. STEEL EMPLOYEES
CLASSIFIED BY YEAR OF BIRTH

<i>Year</i>	<i>Number of Employees</i>	<i>Year</i>	<i>Number of Employees</i>
1869	1	1885	4
1872	1	1886	4
1875	2	1887	8
1876	2	1888	10
1878	3	1889	4
1879	2	1890	5
1880	6	1891	1
1881	14	1892	3
1882	267	1893	1
1883	337	Unknown	4
1884	43		
			722

TABLE 4

NUMBER OF U. S. STEEL PENSIONERS CLASSIFIED BY AMOUNT OF
MONTHLY PENSION WITH AVERAGE PERIOD OF SERVICE

<i>Amount of Monthly Pension</i>	<i>Number of Pensioners</i>	<i>Average Length of Service</i>
Under \$5.00	5	34.4
\$ 5.00-\$ 7.49	29	38.3
7.50- 9.99	48	40.4
10.00- 14.99	40	41.9
15.00- 19.99	41	42.4
20.00- 24.99	32	44.3
25.00- 34.99	43	42.0
35.00- 49.99	39	39.9
50.00 and over	19	45.1
Unknown	1	33.0
<hr/>		
Total pensions in current payment status	297	41.5
<hr/>		
Pension awarded, no notice of amount	3	34.3
No pension		
Commuted	38	34.4
Cut off	12	35.3
Ineligible	302	27.7
Status unknown to employee	70	35.2
<hr/>		
Total, pension not awarded	372	28.9
<hr/>		
	722	34.5
<hr/>		
Average monthly pension for 296 current pensioners—\$22.67		
Average monthly pension for 38 commuted pensioners—\$2.58		
Average monthly pension now paid to 718 retired workers—\$9.35		

TABLE 5

AVERAGE MONTHLY PENSIONS AWARDED TO EMPLOYEES RETIRED
IN SPECIFIED PERIODS CLASSIFIED BY MAJOR
CAUSE OF RETIREMENT

<i>Period</i>	<i>Employees Retired by Compulsion</i>	<i>All Other Causes of Retirement</i>
July-December, 1947	\$7.29	\$29.55
January-June, 1948	6.97	23.25
July-December, 1948	6.04	40.02
July-September, 1948	5.41	
October-December, 1948	7.76	
January-May, 1949	7.09	15.69
Total	\$6.99	\$27.75

TABLE 6**U. S. STEEL RETIREMENTS CLASSIFIED BY LENGTH OF SERVICE**

<i>Length of U. S. Steel Service (Years)</i>	<i>Pension Is Now Paid</i>	<i>Number of Employees to Whom Pension Was</i>		<i>Total Retirement</i>
		<i>Paid in Past</i>	<i>Never Paid</i>	
Unknown	3	—	1	4
Under 10	—	—	18	18
10-14	—	—	4	4
15-19	—	—	9	9
20-24	1	—	73	74
25-29	7	3	88	98
30-34	22	22	86	130
35-39	70	17	43	130
40-44	99	6	37	142
45-49	78	2	12	92
50-54	20	—	1	21
Total	300	50	372	722

TABLE 7

**RETIRED U. S. STEEL EMPLOYEES DISTRIBUTED BY AMOUNT OF
MONTHLY PRIMARY INSURANCE BENEFIT, TOGETHER WITH
AVERAGE MONTHLY SOCIAL SECURITY SUPPLEMENT,
AVERAGE U. S. STEEL AND VETERANS PENSIONS
FOR THE GROUP**

<i>Soc. Sec. Primary Insurance</i>	<i>No. of Retired Employees</i>	<i>Average Soc. Sec. Primary Insurance</i>	<i>Average Soc. Sec. Supplement</i>	<i>Average U. S. Steel Pension</i>	<i>Average Veterans Pension</i>	<i>Average Family Income from Stated Sources</i>
\$10 - 14	1	\$12.00		\$10.00 ¹		\$22.00
15 - 19	1	16.00		.....		16.00
20 - 24	7	22.29	\$.43 ¹	1.43 ¹		24.15
25 - 29	27	26.89	2.48 ¹	1.23 ¹		30.60
30 - 34	176	32.66	3.48 ¹	3.46 ¹		39.60
35 - 39	275	37.03	3.27 ¹	6.08 ¹		46.38
40 - 44	148	41.16	5.66 ¹	14.52 ¹		61.34
45 - 49	1	45.00	22.00	.....		67.00
None	86	.....	.....	26.26 ¹	.70 ¹	26.96
Total	722	\$31.83¹	\$ 3.45¹	\$ 9.33¹	\$0.08¹	\$44.69

¹ This is not the average payment, but total payments divided by the number of employees in the group. All but 34 of the 722 retired employees received some income from one of the three sources covered by the table.

TABLE 8

RETIRED U. S. STEEL EMPLOYEES CLASSIFIED BY AMOUNT OF
TOTAL MONTHLY INCOME FROM U. S. STEEL PENSION
PLAN, TITLE II OF SOCIAL SECURITY ACT AND
VETERANS PENSIONS

<i>Amount of Monthly Income</i>	
None	34
Under \$5.00	1
\$ 5.00 - \$ 9.99	2
10.00 - 14.99	1
15.00 - 19.99	1
20.00 - 24.99	4
25.00 - 34.99	133
35.00 - 49.99	311
50.00 - 64.99	149
65.00 - 74.99	36
75.00 - 99.99	41
100.00 - 124.99	8
130.00 - 134.99	1
Total	722

TABLE 9

USE OF OWN RESOURCES SINCE RETIREMENT
RETIRED U. S. STEEL EMPLOYEES AS OF SPRING, 1949

<i>Question relating to:</i>	<i>Total</i>	<i>Number of Cases Answering question</i>	<i>All Answers</i>	<i>Per- centage of Answers which were Yes of All answers indicating possession of specified resource</i>	<i>Per- centage of Answers indicating non- possession of resource</i>
Loan on Insurance—All	722	720	6.7	7.7	13.3
No income from stated sources	34	34	0	0	20.6
Income from stated sources					
less than \$25 per month	9	9	0	0	22.2
Income from stated sources					
\$25 to \$49.99 per month	444	444	6.5	7.6	14.4
Income from stated sources					
\$50 to \$74.99 per month	185	183	6.6	7.5	12.6
Income from stated sources					
\$75 per month or more	50	50	14.0	14.0	0
Used up any Savings—All	722	719	72.2	77.5	6.8
No income from stated sources	34	34	52.9	58.1	8.8
Income from stated sources					
less than \$25 per month	9	9	44.5	57.1	22.2
Income from stated sources					
\$25 to \$49.99 per month	444	442	71.9	77.9	7.7
Income from stated sources					
\$50 to \$74.99 per month	185	184	78.8	82.9	4.9
Income from stated sources					
\$75 per month or more	50	50	68.0	69.4	2.0

<i>Question relating to:</i>	<i>Total</i>	<i>Number of Cases Answering question</i>	<i>All Answers</i>	<i>Per-centage of Answers which were Yes of All answers indicating possession of specified resource</i>	<i>Per-centage of Answers indicating non-possession of resource</i>
Sold or Mortgaged any					
Property—All	722	720	5.1	6.0	14.0
No income from stated sources	34	34	0.0	0.0	8.8
Income from stated sources					
less than \$25 per month	9	9	0.0	0.0	11.1
Income from stated sources					
\$25 to \$49.99 per month	444	444	7.2	8.6	16.0
Income from stated sources					
\$50 to \$74.99 per month	185	183	2.2	2.5	11.5
Income from stated sources					
\$75 per month or more	50	50	2.0	2.1	6.0
Given up car—All	722	720	4.3	11.8	63.6
No income from stated sources	34	34	2.9	7.1	58.8
Income from stated sources					
less than \$25 per month	9	9	0.0	0.0	55.8
Income from stated sources					
\$25 to \$49.99 per month	444	443	3.4	10.5	67.7
Income from stated sources					
\$50 to \$74.99 per month	185	184	7.1	16.3	56.5
Income from stated sources					
\$75 per month or more	50	50	4.0	9.5	58.0
Taken in Boarders and					
Rented Rooms—All	722	720	11.4	12.6	9.7
No income from stated sources	34	34	8.8	9.4	5.9
Income from stated sources					
less than \$25 per month	9	9	11.1	11.1	0.0
Income from stated sources					
\$25 to \$49.99 per month	444	444	11.3	12.7	11.5
Income from stated sources					
\$50 to \$74.99 per month	185	183	12.6	13.8	8.7
Income from stated sources					
\$75 per month or more	50	50	10.0	10.2	2.0

TABLE 10
USE OF AID FROM OTHERS SINCE RETIREMENT
RETIRED U. S. STEEL EMPLOYEES, SPRING, 1949

<i>Type and Source of Aid</i>	<i>Number of Cases Answering Question</i>	<i>Percentage Using Indicated Resource</i>
Aid from children—All	721	20.2
No income from stated sources	34	11.8
Income from stated sources less than \$25 per month	9	11.1
Income from stated sources \$25 to \$49.99 per month	444	18.7
Income from stated sources \$50 to \$74.99 per month	184	27.2
Income from stated sources \$75 per month or more	50	16.0
 Aid from other relatives—All	 720	 11.1
No income from stated sources	34	0.0
Income from stated sources less than \$25 per month	9	0.0
Income from stated sources \$25 to \$49.99 per month	443	1.1
Income from stated sources \$50 to \$74.99 per month	184	1.6
Income from stated sources \$75 per month or more	50	0.0
 Moved in to live with relatives—All	 717	 4.6
No income from stated sources	34	0.0
Income from stated sources less than \$25 per month	9	11.1
Income from stated sources \$25 to \$49.99 per month	441	5.4
Income from stated sources \$50 to \$74.99 per month	183	3.3
Income from stated sources \$75 per month or more	50	4.0
 Aid from charitable organization—All	 718	 1.1
No income from stated sources	34	0.0
Income from stated sources less than \$25 per month	9	0.0
Income from stated sources \$25 to \$49.99 per month	442	0.9
Income from stated sources \$50 to \$74.99 per month	183	1.6
Income from stated sources \$75 per month or more	50	2.0
 Pension or relief from city, county or state— All	 717	 2.4
No income from stated sources	34	5.9
Income from stated sources less than \$25 per month	9	0.0
Income from stated sources \$25 to \$49.99 per month	441	2.5

<i>Type and Source of Aid</i>	<i>Number of Cases Answering Question</i>	<i>Percentage Using Indicated Resource</i>
Income from stated sources \$50 to \$74.99 per month	184	1.6
Income from stated sources \$75 per month or more	49	2.0
Incurring indebtedness—All	703	10.4
No income from stated sources	33	18.2
Income from stated sources less than \$25 per month	9	22.2
Income from stated sources \$25 to \$49.99 per month	432	11.1
Income from stated sources \$50 to \$74.99 per month	180	6.7
Income from stated sources \$75 per month or more	49	10.2
Unemployment insurance—All	722	26.7
No income from stated sources	34	17.6
Income from stated sources less than \$25 per month	9	11.1
Income from stated sources \$25 to \$49.99 per month	444	22.1
Income from stated sources \$50 to \$74.99 per month	185	35.1
Income from stated sources \$75 per month or more	50	44.0
Wife regularly employed—All	714	3.2
No income from stated sources	34	0.0
Income from stated sources less than \$25 per month	9	0.0
Income from stated sources \$25 to \$49.99 per month	439	3.9
Income from stated sources \$50 to \$74.99 per month	182	1.6
Income from stated sources \$75 per month or more	50	6.0
Income on investments—All	700	8.0
No income from stated sources	32	6.3
Income from stated sources less than \$25 per month	9	0.0
Income from stated sources \$25 to \$49.99 per month	430	8.1
Income from stated sources \$50. to \$74.99 per month	179	7.8
Income from stated sources \$75 per month or more	50	10.0

TABLE 11

**EMPLOYMENT STATUS OF RETIRED U. S. STEEL EMPLOYEES
SPRING, 1949**

<i>Monthly Total Income from Social Security, U. S. Steel Pension, Veterans Pension</i>	<i>Employed</i>	<i>Not Employed But Want to Be</i>	<i>Able to Work</i>	<i>Able to But Not Seeking Work</i>	<i>Not Looking for Work; No Reason Given</i>
None	18	5	6	3	2
Less than \$25 per month	4	4	1	..	..
\$25 to \$49.99 per month	43	214	140	38	9
\$50 to \$74.99 per month	21	75	58	25	6
\$75 per month and over	4	25	11	10	..
Total	90	323	216	76	17

TABLE 12

**ILLUSTRATIVE CONSUMPTION STANDARDS
IN**

**BUDGET FOR AN ELDERLY COUPLE
SOCIAL SECURITY ADMINISTRATION**

Food

Meat

- Bacon—1/3 slice per person per day
- Low cost meats—2-6/7 ounces per person per day
- Medium Cost meats—1.4 ounces per day
- High cost meats (except bacon) 0.7 ounces per day

Milk

- 0.8 pints of fresh milk per person per day
- 0.003 pints of ice cream per day
- 0.6 ounces of butter (and all other table fats) per day

Other

- 5/7 of an egg per person per day
- 3 ounces of citrus fruits per person per day
- condiments to value of 3 mills per person per day
- 1.7 ounces of sugar per person per day
- 4.1 dinners per person per year purchased away from home

Furnishings and Equipment

- Annual allowance for furniture and equipment—\$20.89 at 1941 prices
- 3/4 of a sheet per person per year
- 1 pillow case per person per year
- 1 bedspread per person each 40 years
- 1 blanket per person each 20 years
- 1 mattress per person each 40 years
- 3/4 of a bath towel per person per year
- 3/8 of a hand towel per person per year
- 1 lunch cloth and napkins *per family* each 6-2/3 years
- 1.7 dish towels per family per year
- 1 pair curtains and drapes per family per 3 years

Clothing—Elderly Woman

- 1 winter coat each 8-1/3 years
- 1 light coat each 12-1/2 years
- 1 wool suit each 33 years
- 1 cotton dress each 5 years

1 house dress each 2 years
 1 rayon dress each 17 months
 1 wool dress each 10 years
 1 cotton blouse each 20 years
 1 rayon blouse each 20 years
 1 house apron each 2-1/2 years
 1 bathing suit each 20 years
 1 cotton night gown each 5 years
 1 rayon night gown each 9 years
 1 flannel night gown each 4 years

Elderly Man

1 heavy suit each 5 years
 1 light suit each 25 years
 1 cotton suit each 50 years
 1 tropical worsted suit each 25 years
 1 pair wool trousers each 6-2/3 years
 1 pair of cotton trousers each 4 years
 1 pair of rayon trousers each 50 years
 1 pair of overalls each 2 years
 1 work shirt each year
 1 other shirt each 9 months
 1 suit of underwear each 7 months
 1 pair of pajamas each 4 years

Other

1 movie per person each 5 weeks
 1 radio purchased each 10 years
 1 round trip on local transportation system per person each 3 days
 1 railroad round trip of 25 miles per person per annum
 No allowance for private automobile
 Inadequate allowance for medical care

TABLE 13

ANNUAL COST OF BUDGET FOR ELDERLY COUPLE IN 13 SELECTED
 CITIES IN MARCH 1946 AND JUNE 1947 AND APPROXIMATE
 COST IN EARLY 1949

City	Annual Cost of Budget		
	March 1949	June 1947	March 1946
Boston, Massachusetts	\$1,720	\$1,638	\$1,455
Chicago, Illinois	1,720	1,618	1,419
Denver, Colorado	¹ 1,620	1,519	1,336
Detroit, Michigan	1,720	1,643	1,456
Houston, Texas	1,440	1,365	1,169
Indianapolis, Indiana	¹ 1,640	1,553	1,378
Minneapolis, Minnesota	1,580	1,476	1,291
Mobile, Alabama	1,520	1,444	1,265
New York, New York	1,780	1,692	1,483
Portland, Oregon	¹ 1,630	1,539	1,387
St. Louis, Missouri	1,620	1,540	1,374
San Francisco, California	1,710	1,605	1,420
Washington, D. C.	² 1,830	1,767	1,573

¹ Based on Consumers' Price Index for January 1949.

² Based on Consumers' Price Index for February 1949.

TABLE 14

**COMPARATIVE PENSION COST FACTORS
U. S. STEEL, ANOTHER STEEL COMPANY,
AND RAILROAD RETIREMENT**

Central Age	Probability of Death in Active Service		Rate of Withdrawal from Active Service		Rate of Total and Permanent Disability	
	Another Steel Company		Another Steel Company		Another Steel Company	
	1946-1948	U. S. Steel	1946-1948	U. S. Steel	1946-1948	U. S. Steel
18	.0003	.0031	.3929	.1192	.0	.0016
22	.0008	.0035	.3792	.0940	.0003	.0017
27	.0012	.0040	.2450	.0700	.0003	.0021
32	.0014	.0045	.1676	.0510	.0008	.0026
37	.0025	.0055	.1244	.0370	.0008	.0036
42	.0039	.0068	.0877	.0274	.0012	.0053
47	.0059	.0088	.0613	.0187	.0019	.0085
52	.0126	.0120	.0319	.0113	.0024	.0155
57	.0150	.0178	.0261	.0064	.0040	.0270
62	.0233	.0289	.0133	.0024	.0086	.0504
63						.0570
64						.0642

**RATE OF PERMANENT AND TOTAL DISABILITY
RAILROAD RETIREMENT SYSTEM
THIRD VALUATION, 1944**

Age	Disability Rate
18	.00182
22	.00207
27	.00234
32	.00244
37	.00266
42	.00318
47	.00498
52	.00925
57	.01859
62	.03084
63	.03196
64	.03280

TABLE 15

**U. S. STEEL WIDOWS CLASSIFIED BY AMOUNT OF CORPORATION
GROUP LIFE INSURANCE CARRIED BY
HUSBAND AT HIS DEATH**

<i>Amount of Insurance</i>	<i>Number of Widows</i>
None	17
\$ 1,000	5
1,500	2
2,000	13
2,500	7
3,000	41
3,500	35
4,000	37
4,500	15
5,000	10
6,000	2
7,000	1
8,000	1
10,000	1
Total	187
Average amount for 170 carrying insurance.....	\$3,526.47
Average amount for all	\$3,205.88

TABLE 16

**U. S. STEEL WIDOWS CLASSIFIED BY AMOUNT OF MUTUAL BENEFIT
AND OTHER INSURANCE CARRIED BY HUSBAND AT DEATH**

<i>Amount of Mutual Benefit Insurance</i>	<i>Number of Widows</i>	<i>Average Amount of Insurance</i>
None	114	.....
Under \$1,000	58	\$ 265.52
\$1,000-\$1,499	7	1,057.00
\$1,500-\$1,999	5	1,500.00
\$2,000-\$2,499	3	2,000.00
Total	187	\$ 194.12
Average for 73 carrying insurance		\$ 497.27
<i>Amount of Other Insurance</i>	<i>Number of Widows</i>	<i>Average Amount of Insurance</i>
None	88	.....
Under \$1,000	47	\$ 412.77
\$1,000-\$1,499	30	1,033.33
\$1,500-\$1,999	2	1,650.00
\$2,000-\$2,499	12	2,000.00
\$2,500-\$2,999	3	2,500.00
\$3,000-\$3,499	2	3,000.00
\$3,500-\$3,999 .....	.....	.....
\$4,000-\$4,499	1	4,000.00
\$4,500-\$4,999 .....	.....	.....
\$5,000-\$5,499	1	5,000.00
Over \$10,000	1	10,000.00
Total	187	\$ 588.77
Average for 99 carrying insurance		\$ 1,112.12

TABLE 17

U. S. STEEL WIDOWS CLASSIFIED BY TOTAL AMOUNT OF INSURANCE CARRIED BY HUSBAND AT HIS DEATH

<i>Total Amount of Insurance</i>	
None	6
Less than \$1,000	4
\$ 1,000-\$1,999	12
2,000- 2,999	13
3,000- 3,999	52
4,000- 4,999	52
5,000- 5,999	28
6,000- 6,999	10
7,000- 7,999	5
8,000- 8,999	3
10,000	1
15,000	1
	187

Average insurance for those having insurance	\$4,114.36
Average insurance for all widows	3,982.35

TABLE 18

U. S. STEEL WIDOWS CLASSIFIED BY AMOUNT OF MONTHLY FAMILY SOCIAL SECURITY BENEFITS TOGETHER WITH AVERAGE VETERANS PENSION

<i>Amount of Monthly Social Security Benefit</i>	<i>Number of Widows</i>	<i>Average Monthly Amount of Social Security Benefit</i>	<i>Average Monthly Amount of Veterans Pension</i>	<i>Average Total Family Benefit</i>
None	112	.....	\$ 1.12	\$ 1.12
\$15-\$19	5	\$16.80	.....	16.80
20- 24	7	21.57	.....	21.57
25- 29	4	27.00	.....	27.00
30- 34	9	31.22	15.00	46.22
35- 39	3	36.33	.....	36.33
40- 44	8	42.13	.....	42.13
45- 49	5	47.60	.....	47.60
50- 54	9	51.56	12.67	64.23
55- 59	3	56.67	48.67	105.34
60- 64	2	62.50	31.00	93.50
65- 69	7	66.71	.....	66.71
70- 74	7	71.86	.....	71.86
75- 79	5	78.00	.....	78.00
80- 84 .....	..	.....	.....	.....
85	1	85.00	.....	85.00 ..
Total	187	\$17.82	\$ 3.12	\$20.94
Average for those receiving		\$44.43	\$48.50	.....

TABLE 19

**U. S. STEEL WIDOWS CLASSIFIED BY EMPLOYMENT STATUS
AND BY SOURCE OF LIVELIHOOD OTHER THAN
INSURANCE AND SOCIAL SECURITY**

	<i>Number of Widows</i>
Working	40
Not working, but would like to	38
Not able to work	86
Able, but not working and not seeking work	22
Status unknown	1
Total	187

**SOURCES OF LIVELIHOOD
U. S. STEEL WIDOWS OTHER THAN INSURANCE AND
SOCIAL SECURITY**

			<i>Did Not</i>	
			<i>Have</i>	<i>Not</i>
<i>Has widow since husband's death</i>	<i>Yes</i>	<i>No</i>	<i>Any</i>	<i>Answered</i>
Cashed or taken loan on insurance	23	142	19	3
Used up any savings	138	28	20	1
Sold or mortgaged property	13	132	41	1
Taken in boarders or rented rooms	23	163	...	1
Given up car	25	57	104	1
				<i>Not</i>
<i>Has widow since husband's death</i>	<i>Yes</i>	<i>No</i>		<i>Answered</i>
Received aid from her children	71	115		1
Received aid from other relatives	10	176		1
Moved in to live with relatives	11	174		2
Placed children with relatives	1	183		3
Placed children in institution or with non relatives ..		184		3
Received aid from charitable institution	6	179		2
Received relief from city, county or state	7	174		6
Run up any unpaid bills	46	135		6
				<i>Not</i>
<i>Has widow regular income from investments or property</i>	<i>Yes</i>	<i>No</i>		<i>Answered</i>
	26	159		2

TABLE 20

**PLAN PROPOSED TO THE UNITED STATES STEEL CORPORATION,
APRIL, 1948, WITH ESTIMATED NET CONTRIBUTIONS**

	<i>Net Contribution in Cents per Hour</i>	
	<i>1948</i>	<i>1949 Estimate</i>
<i>Life Insurance:</i>		
18 months' pay for employees in active service	2.10*	2.27*
Paid-up insurance of \$1,500 at retirement for age or disability .....	.90	.90
<i>Cash Benefits for Non-occupational Sickness and Accidents:</i>		
\$35 per week, beginning with the fourth day in case of sickness and the first day in case of accident, benefit payments for any single spell of disability not to exceed 52 weeks	2.28	1.99
<i>Hospitalization for Employees and Their Wives and Dependent Children Under 18:</i>		
A cash indemnity of \$8 per day for not over 70 days for any one confinement plus not over \$80 for services and extras. For female employees, the daily indem- nity in case of maternity confinement payable for not over 14 days. For wives of employees, the total maternity benefit is not to exceed \$80, but waiting period for wives of employees in plan initially is waived	2.13	1.75
<i>Surgical Benefit for Employees and Their Wives and Dependent Children Under 18:</i>		
Reimbursement for surgeon's fees on the standard \$225 scale	1.29	.96
Total	8.70	7.87

* \$5,400 of insurance was estimated to be the equivalent of 18 months' pay in 1948, and \$5,850 in 1949—estimate based on average amounts of group life insurance.