COST ESTIMATE FOR VARIOUS MODIFICATIONS OF THE OLD-AGE INSURANCE BENEFITS UNDER TITLE II SUGGESTED TO THE SOCIAL SECURITY BOARD

Based upon original calculations made for the Committee
on Economic Security which require reexamination
in the light of later information

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From time to time various modifications and liberalizations of the Old-Age Benefits under Title II have been suggested. It is the purpose of this report to compare the apparent costs of some of the more important of these proposals with the cost of the present Title II.

The same methods of estimation have been used as those underlying the original estimates on the cost of Title II as prepared by the Committee on Economic Security. Underlying this estimate, the following somewhat reasonable assumptions were made:

(1) That the covered group start at 25,337,000 and slowly increase due to general population growths.

(2) That, having selected gainful workers from the census, a reasonable age distribution derived from the 1930 figures could be accepted as applicable to the prospective coverage.

(3) That as time went on, the future coverage would depend upon mortality in accordance with the white lives portion of the United States population tables based on data of the period 1920-1929.

(4) That net immigration would remain fairly constant at the sum of 200,000 new lives per year with certain arbitrary assumptions as to the age distribution.

(5) That a uniform wage of $1100 could reasonably represent the effective per capita wage during the entire period under specification.

(6) That other than in this wage assumption, no special treatment of periods of unemployment would be introduced.

(7) That no attempt would be made to forecast when booms and depressions would occur, nor the extent of their effect upon the progress of funds and benefit payments.

(8) That all retirements take place at the age of 67½ rather than at varying ages roughly equivalent to the results of such a uniform retirement.

(9) That the amounts of death benefits for death prior to age 65 would follow uniformly from the above assumptions and the continuous use of the white life table.

(10) That the amounts of death benefits for deaths after age 65 would be reasonably estimated by considering that the full benefits applicable for death at age 65 would be payable for death prior to age 67½ and thereafter would be reduced by the monthly benefit based on the $1100 level wage. This assumption is in accordance with that in (8).

(11) That lump-sum benefits could be predicted with some adequacy in considering non-qualified individuals reaching the age of 65 before 1942, and that thereafter certain crude assumptions could be made without any great effect upon the aggregate results.

(12) That the relation of the proportion of employees actually covered would remain constant when applied to the total age distribution of the population at the employable ages.

(13) That having adopted a scale of taxes which triple in the next 12 years, some rough similarity in annual amounts of appropriations made to the reserve account could be anticipated and that the action of Congress could be thus foretold for 45 years in the future.

(14) That the increasing proportion of the aged would not result in a change in method of retirement or of granting benefits, but that a program initiated in 1937 would under widely changing conditions be maintained for so long a period.

(15) That the excess of appropriations over benefits would only be invested at the end of the year in Federal bonds earning 3 percent, but that no interest earnings would be credited within the year on any such excess.

(16) That no effort to estimate further changes in benefits schedules would be worthwhile since they would involve even more intricate theorizing.

(17) That uniformity in ruling as to what industries are covered and what industries are not covered was to be expected from the Treasury Department and the Social Security Board, over long periods of time.

(18) That uniformity of the present rule requiring separate returns for affiliated corporations and therefore affecting the amount of earnings credited to the individual accounts will be continued.

For some of the proposed modifications which have different benefit schedules and which allow those now over 60 to become eligible for monthly benefits, it is necessary to make some additional assumptions, namely:

(19) That the rate of retirement is not affected by a change in benefit schedules. This is, of course, not true, since a higher initial benefit would undoubtedly produce many more retirements than the present schedule would.

(20) That the initial coverage of the Act would be increased by 800,000 persons now aged 65 and over. For this group and for those now 61-65 who cannot at present qualify for monthly benefits, a somewhat arbitrary retirement scale has been set up which presents a rather good aggregate picture, although the year by year result is not entirely smooth.

(21) That the suggested modifications all begin in 1937 rather than being spliced later into the current operations under Title II.

(22) That the additional taxes resulting from crediting wages beyond age 65 under both Titles II and VIII will result in larger appropriations.

(23) That for a given benefit schedule and set of qualifications, the disbursements year by year will remain the same regardless of the amount of the appropriation to the reserve or of the scale of taxes under Title VIII.

Due to all the above assumptions, the resulting figures for the various estimates of the progress of reserve from 1937-1980 should not be taken as representing either the final truth or even the best estimates of probable results, but rather as yardsticks for comparing one benefit plan with another. Even for this latter use the estimates are not entirely satisfactory, due to the obvious latitude in some of the assumptions previously mentioned, although every effort has been taken to make these estimates consistent among themselves. In other words, these estimates are fairly reliable relative to one another, but not nearly so reliable from an absolute viewpoint.

From the above discussion it follows that there are many factors which should be much more thoroughly investigated in order to recognize the doubt which has crept into consideration of the reasonableness of these estimates.

(1) <u>A Forecast Table of Mortality</u>. There must be slowly developed analysis starting with the full review of census methods, using both the methods of population tables and private insurance mortality tables. When we now speak of life expectance, we do not mean that we <u>expect</u> continuously to find the figures we quote actually developing. We should have a table aimed at estimating future mortality rates by ages, period by period in the future and providing for a new type of prospective recognition of future mortality improvement.

(2) Immigration and Emigration. We do not have any adequate program for guessing at what future Congresses will do in the regulation of gross and net migration trends. We know that no such uniform rate of migration as has been introduced into this schedule will be persistently duplicated. We do know in what direction future tendencies now seem to lean. It is quite conceivable that a panicky Congress wishing more taxpayers at lower ages might attempt a selective migration to add to the working forces and to the taxable workmen of the country. We ought to follow actual migration.

(3) Wage Rates. We need gradually to estimate personal wage trends. We are quite unprepared to do so now, but such wage scales will be a very large influence upon eventual benefits and costs. This involves a synthesis of the results available from separate group policies, the balance of labor supply and demand, the effective results of collective bargaining, management capacities, etc. This includes the balance between employment and unemployment and employment in non-covered industries.

(4) Individual Wage Trends. In addition to future wage trends, we are greatly dependent upon actual year by year wage distributions, particularly because of the formula boundaries, $2000, $3000, $45,000, and $129,000. Low wages mean larger proportional benefits. High wages mean smaller proportional benefits. Apparently the first usable wages will be available in the calendar year 1938 covering the calendar year 1937. Only slowly will the individual effective "covered" wages come to be known. Our guesses will be crude for a long time and never does the past reproduce itself in the future.

(5) Retirement Policy. The effectiveness with which employees beyond the age of 65 are able to retain their positions will determine whether or not they are forced to accept promptly the very small old-age benefits. The normal attitude seems to postpone retirement as long as possible. Obviously when benefits are small, retirement will be postponed so far as the workman is concerned. Employment may be taken from him. He will oppose retirement. He will want to quit, when benefits are larger. This tendency is in the wrong direction since the country could better afford earlier retirements now when there are fewer aged and deferred

retirements later when there are more aged. The effectiveness of public attitude toward retirements will go in waves. In times when conditions are bad and when some retirement allowance is available, the attitude (similar to that of railroad employees of a few years back) of trying to make jobs by enforced retirement will make itself felt. Then retirement will be regarded as good public policy because it clears the decks for the more active workmen. In other times when conditions are good and it is obvious that too large a retired list is an unnecessary expense, retirements will tend to be postponed and men allowed to work indefinitely so that their production may add to the common store of wealth for all. This range of retirements is, over a long term of years, clearly unpredictable.

(6) Probability of Plan Change. This probability is virtually a certainty. There are rarely very long periods of operation without change in a social security program. Changes will probably successively increase and decrease costs, or at least decrease rate of increase in cost. Any specific amendment will have different influences in different periods of time.

(7) Booms and Depressions. The program of benefits will be radically affected by tightening up of expenditure and by the selective way in which men are laid off. At times it will be regarded as better social policy to lay off the younger people and to allow them more time for better education. Studies can be initiated using certain figures from the early part of the century to see how far from straight-line progress certain factors might have carried the accumulation of funds. A boom, them, might even send people back to work after they have retired because their services would be so well paid for. Under the present scheme this would not add to the taxable income but would reduce outgo. In depressions, income is drastically reduced. Benefits are somewhat increased, insofar as the new unemployed over the age of 65 are transferred to the pension rule more rapidly.

(8) The Changing Status of Industry, Commerce, Agriculture, etc. Up until now there have been considerable changes in the proportion of men in different portions of our economic system. There is no reason to believe that we have now stabilized the relationship of one

type of employment to the rest. In fact, some of our leading industries today were virtually non-existent at the end of the last century (automobile production, radios, aviation, rayon) -- many of the synthetic products were not in existence 35 years ago. While one tacitly assumes that there should be new industries created in the future, similar to those created in the past, it is conceivable that there may be a steady transfer taking place in a renaissance of the professional attitude and of the service occupations. There seems a definite trend towards transfer of a considerable amount of employment from private to public auspices. For any adequate projection of future coverage down to the year 1980 it is necessary to project these elements of change in industrial set-up since ignoring them assumes a static situation which we have no reason to believe will come into being for the first time.

(9) The Government Subsidy. It is conceivable that one of the financial standards in relation to this plan is the assumption that Congress will not bother to appropriate larger funds than are needed year by year, placing the financing of social security on exactly the same basis as the financing of the army, the navy, and general governmental expenditures. In this case, the particular reason for subsequent allocation of taxes to the payment of interest on Federal bonds would give way to direct appropriation of the amount needed beyond preliminary estimates of appropriation now estimated to be made as related to the amounts of pay-roll taxes. Some consideration as to change in governmental policy is a vital element of cost, but quite unpredictable.

(10) Interest Rates. A rate of interest of 3% was probably adopted because 3% is the legal rate usually used by most large mutual life insurance companies in the valuation of their liabilities. If such large changes in interest-paying securities are to take place in the future as in the past, it is possibly desirable to contemplate what effect this plan would have on current rates of interest estimated by insurance companies and trust funds for 10, 20, 30, 40, and 50 years from now. If the simulation of insurance technique by social security continues, it may be necessary to extend estimates and to change the official

interest rate. It is possible that the function of "interest" may be dropped in favor of a straight subsidy.

(11) Improving Health Standards and Their Effect Upon Both Mortality and Effective Retirement Date. Should improvement in general mortality, which in the past has been most marked up to age 40 or 45, continue in the future through the continued excellent efforts of both public and private health activities, it is to be hoped that not only may lives be extended, but that the health and working ability of the elderly people will likewise be improved. There is no particular logic in persistently retiring people at the age of 65. That age is a sort of compromise between invalidity and old age and arises through the recognizing of a given number of years of service as warranting retirement. Unless our financial capacity is strong enough to give elderly people more than a mere subsistence level of income, they will be much better off if they are privileged to work and earn larger sums and keep themselves occupied in some wholesome fashion. No very adequate pension philosophy has yet been established. The age of 65 is rather a fortuitous choice resulting from bewilderment in a changing technological scene and the delusion that old people are incompetent to work. There seems, in fact, much hope that a greater social recognition is pending as to the cooperative responsibility to the elderly person. When it is realized that too large a proportion of the population would probably be left idle with a retirement age of 65, the general feeling will undoubtedly be that a constant retirement age should be banished, or that it should be left as a balancing item. There is no particular importance in caring for over 20,000,000 people in 1980 against only 8,000,000 now. We can therefore expect a considerable shift in the retirement age. Advancing it five years would make a lot of difference. There may be times when it could be reduced.

(12) Coverage. We well know about coverage in 1938 from what was recorded in 1937. Then there must be estimates asto unrecorded coverage, lag in reports, and so on. There must be recognition of the lack of a clearly defined scope. Future trends are of course very doubtful.

(13) Unemployment. Some time an unemployment census of sufficient scope and meaning may show the possible extension in coverage, if such unemployment were eliminated. Better knowledge of trends might show the direct effect of unemployment (from all causes) on coverage. Never will the past records permit full credence in turning to the future.

(14) Mortality Actual vs. Reported. The insignificance of many of these claims may keep them from being reported. As claims become larger, a gaining recognition of the desirability of reporting is to be expected. Lags and credits may be estimated but crudely.

(15) Appropriations. These are determined by the Congress after an actuarial determination by the Treasury. There are yet to be outlined what "accepted actuarial principles" may be. Actuaries have not yet reported on this point. The Treasury, largely non-actuarial, may know. The guideposts have twice been set up by the Treasury. There is considerable doubt, even after the guideposts are admitted to be well placed, as to how far Congress will or should observe them.

(16) Insurance Precedent. Insurance bases are hedged about with safeguards and are clearly of brief duration for the average life of the policy. Thus the extreme extensions of customary insurance practice, here, make the insurance methods safely applicable only by those who fully understand the limited scope of such methods. Actuarial analysis suggests the undesirability of pretending that any safe reading of probable benefits is possible for any considerable period in the future, in view of the extremely wide range of factors and the international hazards of war, conquest, peaceful penetration, etc.

(17) All Other Factors. These are so numerous, including our whole socio-economic, technical, political interrelated civilization that we can have no valid expectation of trends over the next half century. A chart or table is only illustrative of possibilities and not prophetic as to what will be.

Tables of the progress of reserve from 1937-1980 showing the appropriations, benefit payments, interest, and balance in reserve year by year from 1937-1945, and quinquennially thereafter are presented for the present Title II and six proposed modifications thereof. On each of these tables there are also shown the cumulative appropriations and cumulative benefit payments from 1937 up to the given calendar year. These columns thus give an indication of the financial status of the reserve account, neglecting the interest factor.

For each of these plans the progress of reserve is shown on two assumptions as to the tax scale under Title VIII: (1) the present scale; (2) a "current cost" scale. It should be remembered that in all these estimates it is assumed that the appropriation to the reserve equals the tax receipts less an arbitrary expense allowance (8 1/3% for a 2% tax rate, 6 2/3% for a 3% tax rate, and 5% for all tax rates in excess of 3%). Thus, under the "current cost" tax scale, the rate of taxation is computed so that the resulting appropriations are sufficient to develop a reserve and then maintain it at a level of 4 to 6 billion dollars. It is also assumed that any increases in the tax rate occur only at quinquennial periods, namely, 1937, 1942, 1947, etc. For each of the plans discussed the table showing the reserve on the "current cost" basis is indicated by the letter "a".

The tables are arranged in the order of their liberality and thus by increasing cost. <u>Table 1</u> is the present Title II; <u>Table 2</u> is the present Title II plus credit for employment after age 65, so that individuals now aged 61 and over may qualify for monthly benefits starting in 1942; Table 3 is similar to Table 2 except that retirements begin in 1939; Table 4 is the same as Table 3 except that a $20 minimum benefit provision is introduced; Table 5 is based on the Transitional Benefits Plan (present formula plus $10 per month for those retiring in the first quarter of 1939, $9.85 per month for those retiring in the second quarter of 1939, decreasing by 15 cents per quarter for those retiring subsequently until becoming zero for those retiring in and after October, 1955); Table 6 is based on the Revised Formula (1% of the first $2000 plus 1/12% of the next $36,000 plus 1/24% of all in excess of $38,000) with retirements beginning in 1939.

From the above it can thus be seen in all these modifications there are only three different formulas used to determine the amount of the monthly benefits, namely: the present formula, the Revised Formula, and the Transitional Benefits Formula. The latter is, of course, the same as the present formula for those retiring after 1955. Table A* gives illustrative monthly benefits arising under each of these three formulas for various average monthly wages and for various years of coverage from the present time. From this table it can be seen that for those retiring in the next few years both the Transitional and Revised formulas produce appreciably larger annuities than the present formula. In almost all instances the Transitional Formula produces slightly larger annuities than does the Revised Formula. Thus, for a

*All tables referred to in this text follow the Appendix.

$100-per-month individual who is now aged 60, the monthly benefit will be $17.50 under the present formula, $23.33 under the Revised Formula, and $25.70 under the Transitional Formula. These figures indicate the probable average benefit for those retiring in 1942.

It is also interesting to note the effect of these formulas for those retiring 40 or 45 years hence. Of course, ultimately the Transitional Formula becomes the present formula so that it is only necessary to compare the present formula and the Revised Formula. For a period of coverage of 45 years it can be seen from this table that the Revised Formula produces appreciably higher monthly benefits than does the present formula. Thus, for the $100-per-month individual with 45 years of coverage, the Revised Formula produces a monthly benefit of $56.67 as compared to $53.75 under the present formula. It may be stated in general that for total wages between $30,000 and $38,000 the monthly benefit under the Revised Formula is always $5.83 greater than that under the present formula, while for total wages between $45,000 and $122,000, the monthly benefit arising under the Revised Formula is always $2.92 higher. The maximum monthly benefit of $85 is obtained from the Revised Formula with $122,000 of total wages as compared to $129,000 of total wages for the present formula.

The Transitional Formula has one peculiarity which is not present in either of the other two formulas, namely, that for the same average monthly wage, an individual might get a smaller benefit than another individual who has a shorter period of coverage. This is due to the fact that the additional credits earned might not be enough to offset the decreasing transitional benefit. Table B presents illustrative benefits under the Transitional Formula for a small range of average monthly wages. From this table it can be seen that the monthly benefit increases with the number of years of coverage for individuals who average more than \$60 per month. For individuals averaging \$60 per month, the monthly benefit remains level at \$23.70 for those having from 5 to 18 years of service. For those averaging between \$20 and \$60 per month the monthly benefit increases with length of coverage up to a certain point and then decreases steadily until the time when the transitional benefit has disappeared entirely. The initial increase occurs until the individual has accumulated \$3000 of total wages. After that time the effect of the decreasing transitional benefit outweighs that of the increasing total wages.

Table 1 shows the progress of reserve under the present Title II, ending up at the well-known 47 billion dollars in 1980. The cumulative appropriations up to 1980 are 14 billion dollars greater than the cumulative benefit payments. The remainder of the 47 billion dollars, or 33 billion dollars, is made up from interest on the reserve. In Table 1a is shown the progress of reserve under the present Title II if the tax rate were reduced in the early years so that the appropriations would not greatly exceed the benefit payments. This might be called the "current cost" method since the reserve is kept at a figure of about 5 billion dollars. Under this method of financing the 2% tax rate is kept for 20 years with gradual increases thereafter until the ultimate rate of 9¼% is reached in 1977. The reserve grows steadily until 1955, when it is slightly over 6 billion dollars and thereafter it remains between 5 and 6 billion dollars because of the arbitrary balancing of the appropriations and benefit payments. It is interesting to note that under this method of financing the cumulative benefit payments up to 1980 exceed the cumulative appropriations by only 600 million dollars. In other words, with the "current cost" method, the appropriations just about balance the benefit payments, with a slight contingency reserve being built up mainly from interest on the excess of appropriations over benefit payments in the early years. Table 1b presents a more detailed statement of the progress of reserve under the present Title II, giving the year by year estimates for the various types of benefit payments.

Table 2 shows the progress of reserve under a modification of Title II which allows credit for wages earned after age 65. By so doing it enables those now aged 61 and over to become eligible for monthly benefits since it would no longer be necessary to have covered employment in each of five different calendar years after 1936 and prior to age 65. The present provision would presumably be changed to require only covered employment in each of five different calendar years after 1936. The effect of this modification is threefold. First, the appropriations are slightly larger throughout due to the taxes on those employed after age 65. Second, in the decade following 1942 the benefit payments are materially larger due to the granting of monthly benefits to those who are now over 61. Third, the benefit payments are slightly greater throughout because the annuities are larger due to crediting of wages received after age 65.

Thus, in 1941 the reserve under this modification is about 150 million dollars higher than that under the present Title II. However, by 1945 it is 600 million dollars lower because of the great weight of the increased number of annuitants. This can be seen more clearly by reference to Table 9, which shows that in 1942 Table 1 allows for only 175,000 annuitants, whereas Table 2 allows for 1,282,000 or more than seven times as many. By 1950 Table 1 allows for 1,680,000 annuitants, while Table 2 allows for 2,205,000. Of course, as time goes by the difference in the number of annuitants under Tables 1 and 2 decreases until by 1980 it is negligible because the additional annuitants under Table 2 are those who are now over 61 and in 30 years most of them will have died off.

The estimated balance in reserve in 1980 for this modification is about 40 billion dollars, or 7 billion dollars less than under the present Title II. Cumulative appropriations up to 1980 exceed the cumulative benefit payments by about 10 billion dollars, the remaining 30 billion dollars of the reserve being made up from interest.

In Table 2a there is shown the reserve under this first modification with a "current cost" scale of taxes. The tax rate is kept at 2% for 15 years and gradually increased up to $9\frac{1}{4}\%$ by 1977. The balance in reserve builds up gradually to about 5 billion dollars in 1955 and remains around that level thereafter. As in the case of Table 1a, the cumulative benefit payments up to 1980 are about equal to the cumulative appropriations, with the reserve being built up from interest.

Table 3 presents the progress of reserve under a second modification of the present Title II which not only allows credit for wages earned after age 65, but which also begins annuity payments in January, 1939. In order to start payments earlier it is necessary to change the eligibility requirements from a 5-year requirement to a 2-year requirement. However, with such a short eligibility period, it is necessary to set up certain safeguards. Thus, it is required that not only must service be rendered in each of two different calendar years for those retiring in 1939, but also that at least $100 must be earned in each of these calendar years. In addition, the service requirement is increased to 3 years for those retiring in 1940, 4 years for those retiring in 1941, and 5 years for those retiring in 1942 and thereafter. From 1939 to 1941 the benefit payments under this modification greatly exceed those under the first modification. Thereafter, the two sets of benefit payments closely approximate one another. As can be seen from Table 9, the estimated number of annuitants in 1942 and thereafter is the same for both modifications and also for all subsequent modifications.

In 1980 the balance in reserve is estimated to be about $38\frac{1}{2}$ billion dollars or about $1\frac{1}{2}$ billion dollars less than that under the first modification. Thus, as compared to the present Title II the cost of including those now over age 61 for monthly benefits is indicated by the 7 billion dollar decrease in the estimated 1980 reserve, while there is a further decrease of $1\frac{1}{2}$ billion dollars if benefit payments are started three years earlier.

In Table 3a is shown the progress of reserve under the second modification of Title II with a "current cost" tax scale. The tax rate remains at 2% for 15 years, increasing gradually to $9\frac{1}{4}$% in 1977 and thereafter. The reserve increases to $4\frac{1}{4}$ billion dollars in 1955 and remains at about that figure from then on. As in all the "current cost" estimates the cumulative appropriations and cumulative benefit payments up to 1980 just about balance each other with the contingency reserve being made up from interest.

Table 4 shows the progress of reserve under the third modification of the present Title II. This modification is a further liberalization since it not only allows credit for employment after age 65 and begins benefit payments in 1939, but it also contains a $20 minimum annuity provision. This has the effect of increasing the benefit payments materially in the early years with only a slight effect ultimately. Thus, the benefit payments in 1939 are 250 million dollars for this table as compared to 181 million dollars for Table 3. The balance in reserve in 1980 for this third modification is about

33 billion dollars, or a decrease of $5\frac{1}{3}$ billion dollars from Table 3, this being due solely to the introduction of the $20 minimum provision.

Table 4a shows the progress of reserve under this third modification for a "current cost" tax scale. The tax rate is held at 2% for 10 years and then increased gradually to $9\frac{1}{4}$% by 1977. The balance in reserve builds up to about 4 billion dollars by 1955 and is held at around this level from then on. The cumulative appropriations and the cumulative benefit payments up to 1980 are approximately equal.

Table 5 shows the progress of reserve under the Transitional Benefits Plan. This modification is a further liberalization, since it not only allows credit for employment after age 65 and begins benefit payments in 1939, but it also provides larger benefits for those retiring in the early years. As compared to the third modification as shown in Table 4, the monthly benefits are larger in the early years, since every individual gets the advantage of the transitional benefit, while only the lower-paid individuals get the advantage of the $20 minimum. However, ultimately the benefit payments under the Transitional Benefits Plan will be less than those under Table 4 because the effect of the transitional benefit will have disappeared, while the effect of the $20 minimum will still be present, although applicable to only a few individuals, unless there were wide use of the system by individuals normally in non-covered occupations.

The total benefit payments in 1939 under this modification are 277 million dollars as compared with 250 million under the $20 minimum plan. Until 1965 the total benefit payments under this plan are larger than under the $20 minimum plan, but from then on the opposite is true, until in 1980 the benefit payments are practically the same for both plans. The balance in reserve in 1980 for the Transitional Benefits Plan is about 31 billion dollars, or a decrease of 2 billion dollars from Table 4, this being due to the larger benefits in the early years.

Table 5a shows the progress of reserve under the Transitional Benefits Plan for a "current cost" tax scale. The tax rate is held at 2% for 10 years and then increased gradually to 9½% by 1977. The balance in reserve builds up to about 4 billion dollars by 1955 and is held at around this level from then on. The cumulative appropriations and the cumulative benefit payments up to 1980 are approximately equal.

Table 6 shows the progress of reserve under the Revised Formula Plan. This modification is a further liberalization, since it not only allows credit for employment after age 65 and begins benefit payments in 1939, but it also provides larger ultimate annuities. As previously mentioned, in the first few years, the annuities arising under the Transitional Benefits Plan are larger than those arising under the Revised Formula. In turn, the Revised Formula Plan seems to have about the same effect in the first few years as does the $20 minimum provision, although ultimately there is a considerable difference. Thus the benefit payments in 1939 are 248 million dollars as compared with 250 million dollars for the $20 minimum plan and 277 million dollars for the Transitional Benefits Plan. By 1955 the total benefit payments under the Revised Formula Plan are greater than those under the Transitional Benefits Plan, and in 1980 disbursements under the Revised Formula Plan are about 250 million dollars greater than under any of the other plans due to the larger ultimate annuities arising from this formula. The balance in reserve in 1980 for the Revised Formula Plan is about $23\frac{1}{3}$ billion dollars, or a decrease of $7\frac{1}{3}$ billion dollars from Table 5, this being due solely to the larger annuities in the later years.

Table 6a shows the progress of reserve under the Revised Formula Plan for a "current cost" tax scale. The tax rate is held at 2% for 10 years and then increased gradually to 10% by 1977; the balance in reserve builds up to about 4 billion dollars by 1955 and is held at around this level from then on. The cumulative appropriations and the cumulative benefit payments up to 1980 are approximately equal.

Table 7 shows the progress of reserve under a radical modification of Title II. All individuals qualifying for monthly benefits are given a level monthly benefit of $25, so that there is no longer any dependence on the wage record. As compared with the previous plans which provide annuities increasing with wage record, and thus with the <u>duration</u> after 1936, the total benefit payments are larger in the early years and appreciably smaller later on; thus in 1939 the total benefit payments under this plan are 293 million dollars as compared with about 250 million dollars for some of the other plans. In 1980 the total benefit payments under this plan are only $2\frac{1}{4}$ billion dollars as compared to about $3\frac{1}{2}$ billion dollars for most of the other plans. The effect of the larger initial benefits and smaller ultimate benefits is to reduce the reserve in the early years as compared with the other plans and to make it much larger in the later years, so that by 1980 the reserve has increased to $53\frac{1}{4}$ billion dollars.

Table 7a shows the progress of reserve under this level $25 benefit plan for a "current cost" tax scale. The tax rate is held at 2% for 10 years and then increased gradually to $5\frac{1}{2}$% by 1977. The balance in reserve builds up to about 4 billion dollars by 1955, and it is held at about this level from then on. The cumulative appropriations and the cumulative benefit payments up to 1980 are approximately equal.

Table 8 presents a summary of the tax scales for the "current cost" financing of the various modifications. From this there can very clearly be seen the difference in cost between the various modifications. Thus by a glance at the table the increase in cost from Table 1 to Table 6 can clearly be seen. The effect of a plan which pays level monthly benefits can be seen from the figures for Table 7; thus the range in cost is less than three-fold (from 2% to $5\frac{1}{2}$%), whereas for the Revised Formula the range is five-fold (2% to 10%).

In Table 9, additional facts can be obtained for the comparison of the various plans. As mentioned previously, the modifications which have retirements beginning in 1939 instead of 1942 have an appreciably larger number of annuitants in the early years, with little ultimate difference. For 1940 the average monthly benefit in effect ranges from $25 for the level $25 plan to $16 for the present formula. The Transitional Benefits Plan has an average benefit of $24 in 1940, or almost the same as the level $25 plan. In 1980 all the plans based on the present formula and the Transitional Benefits Plan have average monthly benefits of about $45 with the Revised Formula Plan having an average benefit of $49, while the level $25 plan obviously has an average benefit of $25.

It is not the purpose of this report to discuss the advantages of one plan over another, but merely to present the estimates of cost.

APPENDIX

On pages 4-9 there were mentioned seventeen factors which affect the reasonableness of these estimates. Up to the present time some of these factors have been studied, and it is the purpose of this appendix to present the results of these preliminary investigations.

The effect of a change in the level interest rate for the Old-Age Reserve Account (Item 10) is shown in Table I. The balance in reserve is shown for various years with rates of interest of 0%, 2%, 2½%, 3% and 6%, under the assumption that the benefit payments will remain the same as in the present estimate of the progress of reserve, (see Table 1). The great effect of this one single factor can be seen from the estimated balance in reserve in 1980. Under the present estimate, using 3% interest, the balance is about 47 billion dollars, If, however, it were possible to obtain 6% interest, the reserve would be 132 billion dollars, or almost three times as great. On the other hand, if no interest at all were available, the reserve would only be about 14 billion dollars, or about one-third the size of the reserve under a 3% interest assumption. A decrease of 1/2% in the rate of interest (that is from 3% to 2½%) would lower the reserve in 1980 by about 8 billion dollars.

The effect of a wide "use" of the system by the present uncovered group (Item 12) also has an appreciable effect on the Reserve

Account. In the original estimates some allowance was made for individuals coming into the system for only a short period, such as married women who work for a few years prior to their marriage. However, in any future year there will be a large number of persons aged 65 and over who are neither working in covered employment nor receiving monthly benefits. It would have been possible for many of these persons to qualify for the relatively large monthly benefit of $15 by earning merely a total of $3000 of wages in covered employment prior to attaining age 65.

Table II presents cost estimates assuming that a certain proportion of these excluded aged persons qualify for monthly benefits by having earned $3000 of credited wages before attaining age 65. Plan A assumes that 25% of these non-covered individuals qualify, while Plans B and C assume that 50% and 100% respectively will qualify. The number of annuitants in 1945 under Plan A is 80% greater than under the present estimate; this excess decreases to 36% by 1980. Under Plan C there would be four times as many annuitants in 1945 as in the present estimate, while by 1980 the number under Plan C would be about two and one-half times the present estimate. It might be noted that under Plan C the number of annuitants in 1980 is estimated to be about 14 million. This is less than the total aged population in 1980 because about 3 million of the covered group are assumed to remain in gainful employment after age 65 and thus are not eligible for benefits. On the other hand, the additional appropriations would only be from 1% to 5% greater than under the present estimate, since the additional individuals would only be covered for a short period. The increase in the benefit payments for Plans A, B, and C as compared to the benefit payments for the present estimate is not quite as great as the increase in the number of annuitants because the death benefits are of negligible importance for the additional coverage. As compared with the present reserve of 47 billion dollars in 1980, the reserve under these three Plans is materially smaller; thus under Plan C there would be a negative reserve of about 22 billion dollars at this time, or a decrease of almost 70 billion dollars. This vividly illustrates the wide variance possible in these cost estimates.

In all of the estimates in the main part of this report, it was assumed that all qualified individuals would retire at age $67\frac{1}{2}$. A study has been made as to the effect of changes in the retirement rates (Item 5) on the progress of reserve. In Table III is shown the progress of reserve under present Title II with the assumption that all retire at age 65. The reserve builds up to a maximum of about 33 billion dollars in 1970, and then decreases to about $27\frac{1}{2}$ billion dollars by 1980. Thus considering the reserve in 1980 there is a decrease of almost 20 billion dollars due to the assumption that all retire at age 65 instead of age $67\frac{1}{2}$. Conversely, if the average retirement age were greater than $67\frac{1}{2}$, the reserve in 1980 would be much greater than the 47 billion dollar figure.

These preliminary studies of the various factors affecting the cost estimates indicate that there can be a wide range in the progress of reserve, depending upon what assumptions are made. Thus in Tables I, II, and III the range of the balance in the Reserve Account for the year 1980 is from 132 billion dollars down to -22 billion dollars. Thus it can be seen that the estimates for the various modifications of Title II as shown in the main part of this report, are by no means indicative of what may happen in terms of absolute figures, but are rather only suitable for relative purposes, since they are all based on the same general factors and assumptions.

Table A

ILLUSTRATIVE MONTHLY BENEFITS UNDER VARIOUS FORMULAS

Years of Service[a]	Present	Transitional[b]	Revised[c]	Present	Transitional[b]	Revised[c]
	Average Monthly Wage of $25			Average Monthly Wage of $50		
45	$23.75	$23.75	$29.58	$35.00	$35.00	$40.83
40	22.50	22.50	28.33	32.50	32.50	38.33
35	21.25	21.25	27.08	30.00	30.00	35.83
30	20.00	20.00	25.83	27.50	27.50	33.33
25	18.75	18.75	24.58	25.00	25.00	30.83
20	17.50	17.50	23.33	22.50	22.50	28.33
15	16.25	18.45	22.08	20.00	22.20	25.83
10	15.00	20.20	20.83	17.50	23.70	23.33
5	*	*	*	15.00	23.20	20.83
4	*	*	*	12.00	20.80	20.33
3	*	*	*	*	*	*
	Average Monthly Wage of $75			Average Monthly Wage of $100		
45	$46.25	$46.25	$51.04	$53.75	$53.75	$56.67
40	42.50	42.50	48.33	51.25	51.25	54.17
35	38.75	38.75	44.58	47.50	47.50	51.67
30	35.00	35.00	40.83	42.50	42.50	48.33
25	31.25	31.25	37.08	37.50	37.50	43.33
20	27.50	27.50	33.33	32.50	32.50	38.33
15	23.75	25.95	29.58	27.50	29.70	33.33
10	20.00	25.20	25.83	22.50	27.70	28.33
5	16.25	24.45	22.08	17.50	25.70	23.33
4	15.50	26.80	21.33	16.50	25.30	22.33
3	13.50	22.90	20.58	15.50	24.90	21.33
	Average Monthly Wage of $125			Average Monthly Wage of $150		
45	$59.38	$59.38	$62.29	$65.00	$65.00	$67.92
40	56.25	56.25	59.17	61.25	61.25	64.17
35	53.13	53.13	56.04	57.50	57.50	60.42
30	50.00	50.00	52.92	53.75	53.75	56.67
25	43.75	43.75	49.58	50.00	50.00	52.92
20	37.50	37.50	43.33	42.50	42.50	48.33
15	31.25	33.45	37.08	35.00	37.20	40.83
10	25.00	30.20	30.83	27.50	32.70	33.33
5	18.75	26.95	24.58	20.00	28.20	25.83
4	17.50	26.30	23.33	18.50	27.30	24.33
3	16.25	25.65	22.08	17.00	26.40	22.83
	Average Monthly Wage of $200			Average Monthly Wage of $250		
45	$76.25	$76.25	$79.17	$85.00	$85.00	$85.00
40	71.25	71.25	74.17	81.25	81.25	84.17
35	66.25	66.25	69.17	75.00	75.00	77.92
30	61.25	61.25	64.17	68.75	68.75	71.67
25	56.25	56.25	59.17	62.50	62.50	65.42
20	51.25	51.25	54.17	56.25	56.25	59.17
15	42.50	44.70	48.33	50.00	52.20	52.92
10	32.50	37.70	38.33	37.50	42.70	43.33
5	22.50	30.70	28.33	25.00	33.20	30.83
4	20.50	29.30	26.33	22.50	31.30	28.33
3	18.50	27.90	24.33	20.00	29.40	25.83

a/ For the transitional plan in determining the transitional benefit the years of service are those from January 1937 to the date of retirement.

b/ Benefits are those arising from the present formula plus a transitional benefit of $10 for those retiring in the first quarter of 1940, $9.85 for those retiring in the second quarter of 1940, decreasing by $.15 per quarter for those retiring in subsequent quarters until becoming zero for those retiring in and after October 1956.

c/ New formula (1% of first $2000 of total credited wages, plus 1/12% of next $36,000 plus 1/24% of all in excess of $38,000).

* Not eligible for monthly benefit.

Table B

ILLUSTRATIVE MONTHLY BENEFITS UNDER TRANSITIONAL BENEFITS PLAN

For Average Monthly Wage of:

Years of Service[a/]	$10	$20	$30	$40	$50	$60	$70	$80	$90	$100
20	$12.00	$16.50	$18.50	$20.50	$22.50	$24.50	$26.50	$28.50	$30.50	$32.50
19	11.40	16.30	18.20	20.10	22.00	23.90	25.80	27.70	29.60	31.50
18	11.20	16.50	18.30	20.10	21.90	23.70	25.50	27.30	29.10	30.90
17	11.20	16.90	18.60	20.30	22.00	23.70	25.40	27.10	28.80	30.50
16	*	17.30	18.90	20.50	22.10	23.70	25.30	26.90	28.50	30.10
15	*	17.70	19.20	20.70	22.20	23.70	25.20	26.70	28.20	29.70
14	*	18.10	19.50	20.90	22.30	23.70	25.10	26.50	27.90	29.30
13	*	18.50	19.80	21.10	22.40	23.70	25.00	26.30	27.60	28.90
12	*	18.40	20.10	21.30	22.50	23.70	24.90	26.10	27.30	28.50
11	*	17.80	20.40	21.50	22.60	23.70	24.80	25.90	27.00	28.10
10	*	17.20	20.70	21.70	22.70	23.70	24.70	25.70	26.70	27.70
9	*	16.60	21.00	21.90	22.80	23.70	24.60	25.50	26.40	27.30
8	*	*	20.80	22.10	22.90	23.70	24.50	25.30	26.10	26.90
7	*	*	19.60	22.30	23.00	23.70	24.40	25.10	25.80	26.50
6	*	*	18.40	22.00	23.10	23.70	24.30	24.90	25.50	26.10
5	*	*	*	20.20	23.20	23.70	24.20	24.70	25.20	25.70
4	*	*	*	*	20.80	23.20	24.10	24.50	24.90	25.30
3	*	*	*	*	*	20.20	22.00	23.80	24.60	24.90
2	*	*	*	*	*	*	*	*	20.80	22.00

a/ Years of service are those from January 1937 to the date of retirement.

* Not eligible for monthly benefit because total wages are less than $2000.

Table 1

PROGRESS OF RESERVE UNDER PRESENT TITLE II

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	511	6	0	505	511	6
1938	516	18	15	1,018	1,027	24
1939	521	33	30	1,536	1,548	57
1940	803	48	46	2,337	2,351	105
1941	811	45	70	3,173	3,162	150
1942	819	82	95	4,005	3,981	232
1943	1,121	124	120	5,122	5,102	356
1944	1,132	175	153	6,232	6,234	531
1945	1,142	218	187	7,343	7,376	749
1950	1,791	538	393	14,732	15,304	2,810
1955	1,869	921	635	22,765	24,493	6,661
1960	1,947	1,430	861	30,066	34,071	12,803
1965	2,025	1,875	1,053	36,307	44,039	21,423
1970	2,103	2,355	1,220	41,625	54,396	32,240
1975	2,180	2,934	1,344	45,402	65,143	45,704
1980	2,180	3,576	1,399	46,641	76,045	62,288

Table 1a

PROGRESS OF RESERVE UNDER PRESENT TITLE II AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	511	6	0	505	511	6
1938	516	18	15	1,018	1,027	24
1939	521	33	30	1,536	1,548	57
1940	526	48	46	2,060	2,074	105
1941	531	45	62	2,608	2,605	150
1942	536	82	78	3,140	3,141	232
1943	541	124	94	3,651	3,682	356
1944	546	175	110	4,132	4,228	531
1945	551	218	124	4,589	4,779	749
1950	576	538	178	6,155	7,609	2,810
1955	601	921	190	6,207	10,564	6,661
1960	956	1,430	169	5,338	14,949	12,803
1965	1,687	1,875	155	5,120	22,583	21,423
1970	2,103	2,355	156	5,090	32,600	32,240
1975	2,726	2,934	161	5,304	45,504	45,704
1980	3,362	3,576	173	5,714	61,678	62,288

Description of Plan:

1. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-56	2%	8 1/3%
1957-61	3	6 2/3
1962-66	5	5
1967-71	6	5
1972-76	7½	5
1977-	9¼	5

Table 1b

APPROPRIATIONS, BENEFIT PAYMENTS, AND RESERVES

UNDER TITLE II, SOCIAL SECURITY ACT a/

(All figures in millions of dollars)

Calendar year	Appropriation to reserve	Benefit payments: Annuity	Death under 65	Death after 65 b/	Lump sum c/	Total	Net balance d/	Interest on reserve	Balance in reserve e/
1937	511.0	0.0	3.7	0.0	2.3	6.0	505.0	0.0	505.0
1938	515.9	0.0	10.7	0.0	7.9	18.6	497.3	15.2	1017.5
1939	521.0	0.0	18.2	0.0	14.5	32.7	488.3	30.5	1536.3
1940	803.3	0.0	25.7	0.0	22.8	48.5	754.8	46.1	2337.2
1941	811.0	0.0	33.7	0.0	11.9	45.6	765.4	70.1	3172.7
1942	818.6	35.0	35.9	1.0	9.8	81.7	736.9	95.2	4004.8
1943	1121.4	70.7	43.7	2.1	7.9	124.4	997.0	120.1	5121.9
1944	1131.8	113.8	51.9	3.5	6.2	175.4	956.4	153.7	6232.0
1945	1142.2	148.5	60.1	4.6	4.7	217.9	924.3	187.0	7343.3
1946	1440.6	209.2	69.4	6.6	3.4	288.6	1152.0	220.3	8715.6
1947	1453.6	257.8	77.7	8.2	2.3	346.0	1107.6	261.5	10084.7
1948	1466.6	315.0	85.8	10.3	1.4	412.5	1054.1	302.5	11441.3
1949	1775.5	365.5	95.4	12.1	.7	473.7	1301.8	343.2	13086.3
1950	1791.1	420.0	103.8	14.1	.1	538.0	1253.1	392.6	14732.0
1951	1806.7	490.8	114.4	17.1	.1	622.4	1184.3	442.0	16358.3
1952	1822.2	548.4	122.6	19.6	.1	690.7	1131.5	490.7	17980.5
1953	1837.8	610.6	129.9	22.4	.1	763.0	1074.8	539.4	19594.7
1954	1853.4	688.3	140.5	25.9	.1	854.8	998.6	587.8	21181.1
1955	1869.0	744.5	147.7	28.6	.1	920.9	948.1	635.4	22764.6
1956	1884.5	840.2	159.3	32.9	.1	1032.5	852.0	682.9	24299.5
1957	1900.1	913.8	167.3	36.5	.1	1117.7	782.4	729.0	25810.9
1958	1915.7	1012.3	178.2	40.9	.1	1231.5	684.2	774.3	27269.4
1959	1931.3	1099.6	184.9	45.1	.1	1329.7	601.6	818.1	28689.1
1960	1946.8	1188.9	192.0	49.3	.1	1430.3	516.5	860.7	30066.3
1961	1962.5	1293.9	203.0	54.3	.1	1551.3	411.2	902.0	31379.5
1962	1978.0	1379.6	214.1	58.5	.1	1652.3	325.7	941.4	32646.6
1963	1993.5	1446.1	219.9	62.3	.1	1728.4	265.1	979.4	33891.1
1964	2009.1	1520.7	226.0	66.5	.1	1813.3	195.8	1016.7	35103.6
1965	2024.7	1565.2	239.8	69.7	.1	1874.8	149.9	1053.1	36306.6
1966	2040.3	1660.2	246.9	74.9	.1	1982.1	58.2	1089.2	37454.0
1967	2055.8	1733.1	252.8	79.4	.1	2065.4	-9.6	1123.6	38568.0
1968	2071.5	1820.8	257.3	84.2	.1	2162.4	-90.9	1157.0	39634.1
1969	2087.0	1901.5	261.8	88.7	.1	2252.1	-165.1	1189.0	40658.0
1970	2102.6	1985.5	275.9	93.6	.1	2355.1	-252.5	1219.7	41625.2
1971	2118.1	2082.2	280.9	98.9	.1	2462.1	-344.0	1248.8	42530.0
1972	2133.8	2180.4	285.7	104.5	.1	2570.7	-436.9	1275.9	43369.0
1973	2149.3	2281.2	295.0	110.3	.1	2686.6	-537.3	1301.1	44132.8
1974	2164.9	2394.2	299.3	116.5	.1	2810.1	-645.2	1324.0	44811.6
1975	2180.5	2502.6	308.7	122.8	.1	2934.2	-753.7	1344.3	45402.2
1976	2180.5	2618.0	311.3	129.0	.1	3058.4	-877.9	1362.1	45886.4
1977	2180.5	2729.4	319.4	135.5	.1	3184.4	-1003.9	1376.6	46259.1
1978	2180.5	2853.6	322.5	142.7	.1	3318.9	-1138.4	1387.8	46508.5
1979	2180.5	2971.8	325.2	149.8	.1	3446.9	-1266.4	1395.3	46637.4
1980	2180.5	3086.1	332.8	156.9	.1	3575.9	-1395.4	1399.1	46641.1
Total	76045.2	52079.0	7730.8	2379.8	98.9	62288.5	13756.7	32884.4	

a/ Estimates of the Committee on Economic Security, slightly modified to include payments to non-qualified individuals reaching age 65.

b/ For those who die after age 65 and before receiving monthly benefits equal to 3½% of total wages after 1936 and prior to age 65.

c/ For those who attain age 65 and do not qualify for monthly benefits, either because of not earning at least $2000 of total wages after 1936 and prior to age 65 or because of not having employment in each of five calendar years after 1936 and prior to age 65.

d/ Excess of appropriation over total benefit payments.

e/ At the end of the year.

Table 2

PROGRESS OF RESERVE UNDER FIRST MODIFICATION
OF PRESENT TITLE II

(All figures in millions of dollars)

Calendar Year	Appropri-ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumula-tive Appropri-ations	Cumula-tive Benefit Payments
1937	528	5	0	523	528	5
1938	535	14	16	1,060	1,063	19
1939	542	24	32	1,610	1,605	43
1940	838	35	49	2,462	2,443	78
1941	847	46	74	3,337	3,290	124
1942	820	301	100	3,956	4,110	425
1943	1,124	324	119	4,875	5,234	749
1944	1,137	363	146	5,795	6,371	1,112
1945	1,148	395	174	6,722	7,519	1,507
1950	1,813	680	354	13,278	15,526	4,333
1955	1,904	1,042	573	20,540	24,866	8,841
1960	1,994	1,545	776	27,092	34,657	15,566
1965	2,080	1,983	945	32,535	44,887	24,752
1970	2,165	2,456	1,087	37,015	55,544	36,092
1975	2,251	3,027	1,185	39,902	66,627	50,037
1980	2,259	3,657	1,212	40,206	77,906	67,053

Description of Plan:

1. Formula: Present one.

2. First annuity payments: January, 1942.

3. Eligibility for annuity: $2000 total wages and work in five different calendar years after 1936.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 2a

PROGRESS OF RESERVE UNDER FIRST MODIFICATION OF PRESENT TITLE II AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	5	0	523	528	5
1938	535	14	16	1,060	1,063	19
1939	542	24	32	1,610	1,605	43
1940	549	35	48	2,172	2,154	78
1941	555	46	65	2,746	2,709	124
1942	537	301	82	3,064	3,246	425
1943	542	324	92	3,374	3,788	749
1944	548	363	101	3,660	4,336	1,112
1945	554	395	110	3,929	4,890	1,507
1950	583	680	137	4,606	7,749	4,333
1955	935	1,042	152	5,096	12,027	8,841
1960	1,329	1,545	162	5,346	18,217	15,566
1965	1,733	1,983	157	5,137	26,406	24,752
1970	2,165	2,456	150	4,858	36,712	36,092
1975	2,814	3,027	150	4,950	50,020	50,037
1980	3,483	3,657	163	5,432	66,751	67,053

Description of Plan:

1. Formula: Present one.

2. First annuity payments: January, 1942.

3. Eligibility for annuity: $2000 total wages and work in five different calendar years after 1936.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-51	2%	8 1/3%
1952-56	3	6 2/3
1957-61	4	5
1962-66	5	5
1967-71	6	5
1971-76	7½	5
1976-	9¼	5

Table 3

PROGRESS OF RESERVE UNDER SECOND MODIFICATION
OF PRESENT TITLE II

(All figures in millions of dollars)

Calendar Year	Appropri-ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumula-tive Appropri-ations	Cumula-tive Benefit Payments
1937	528	5	0	523	528	5
1938	535	14	16	1,060	1,063	19
1939	528	181	32	1,439	1,591	200
1940	818	217	43	2,083	2,409	417
1941	829	261	62	2,713	3,238	678
1942	820	285	81	3,329	4,058	963
1943	1,124	316	100	4,237	5,182	1,279
1944	1,137	356	127	5,145	6,319	1,635
1945	1,148	389	154	6,058	7,467	2,024
1950	1,813	677	332	12,531	15,473	4,829
1955	1,904	1,041	548	19,684	24,813	9,328
1960	1,994	1,545	747	26,103	34,604	16,050
1965	2,080	1,983	911	31,389	44,834	25,236
1970	2,165	2,456	1,048	35,687	55,491	36,576
1975	2,251	3,027	1,140	38,362	66,573	50,522
1980	2,259	3,657	1,160	38,421	77,852	67,537

Description of Plan:

1. Formula: Present one.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: \$2000 total wages after 1936. \$100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 3a

PROGRESS OF RESERVE UNDER SECOND MODIFICATION
OF PRESENT TITLE II AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropri-ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumu-tive Appropri-ations	Cumula-tive Benefit Payments
1937	528	5	0	523	528	5
1938	535	14	16	1,060	1,063	19
1939	528	181	32	1,439	1,591	200
1940	535	217	43	1,800	2,126	417
1941	543	261	54	2,136	2,669	678
1942	537	285	64	2,452	3,206	963
1943	542	316	74	2,752	3,748	1,279
1944	548	356	83	3,027	4,296	1,635
1945	554	389	91	3,283	4,850	2,024
1950	583	677	116	3,878	7,709	4,829
1955	935	1,041	127	4,261	11,987	9,328
1960	1,329	1,545	134	4,380	18,177	16,050
1965	1,733	1,983	124	4,019	26,366	25,236
1970	2,346	2,456	129	4,309	37,387	36,576
1975	2,814	3,027	138	4,519	50,877	50,522
1980	3,483	3,657	149	4,934	67,608	67,537

Description of Plan:

1. Formula: Present one.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-51	2%	8 1/3 %
1952-56	3	6 2/3
1957-61	4	5
1962-66	5	5
1967-71	6½	5
1972-76	7½	5
1977-	9¼	5

Table 4

PROGRESS OF RESERVE UNDER THIRD MODIFICATION OF PRESENT TITLE II

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	250	32	1,360	1,591	279
1940	818	300	41	1,919	2,409	579
1941	829	341	58	2,465	3,238	920
1942	820	367	74	2,992	4,058	1,287
1943	1,124	400	90	3,806	5,182	1,687
1944	1,137	444	114	4,613	6,319	2,131
1945	1,148	476	138	5,423	7,467	2,607
1950	1,813	765	299	11,308	15,474	5,871
1955	1,904	1,117	496	17,819	24,814	10,790
1960	1,994	1,581	677	23,643	34,605	17,792
1965	2,080	2,009	824	28,370	44,835	27,134
1970	2,165	2,494	942	32,010	55,492	38,641
1975	2,251	3,054	1,012	33,933	66,575	52,744
1980	2,259	3,681	1,007	33,141	77,854	69,896

Description of Plan:

1. Formula: Present one with $20 minimum.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 4a

PROGRESS OF RESERVE UNDER THIRD MODIFICATION OF PRESENT TITLE II AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	250	32	1,360	1,591	279
1940	535	300	41	1,636	2,126	579
1941	543	341	49	1,887	2,669	920
1942	537	367	57	2,114	3,206	1,287
1943	542	400	63	2,319	3,748	1,687
1944	548	444	70	2,493	4,296	2,131
1945	554	476	75	2,646	4,850	2,607
1950	891	765	110	3,918	8,920	5,871
1955	935	1,117	128	4,211	13,509	10,790
1960	1,329	1,581	124	4,022	19,699	17,792
1965	1,906	2,009	124	4,152	28,573	27,134
1970	2,346	2,494	135	4,485	39,769	38,641
1975	2,814	3,054	140	4,556	53,259	52,744
1980	3,577	3,681	155	5,225	70,366	69,896

Description of Plan:

1. Formula: Present one with $20 minimum.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-46	2%	8 1/3%
1947-56	3	6 2/3
1957-61	4	5
1962-66	5½	5
1967-71	6½	5
1972-76	7½	5
1977-	9¼	5

Table 5

PROGRESS OF RESERVE UNDER TRANSITIONAL BENEFITS PLAN

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	277	32	1,333	1,591	306
1940	818	335	40	1,856	2,409	641
1941	829	386	56	2,355	3,238	1,027
1942	820	419	71	2,827	4,058	1,446
1943	1,124	456	85	3,580	5,182	1,902
1944	1,137	504	107	4,320	6,319	2,406
1945	1,148	537	130	5,061	7,467	2,943
1950	1,813	836	278	10,526	15,474	6,548
1955	1,904	1,157	462	16,621	24,814	11,740
1960	1,994	1,587	633	22,141	34,605	18,846
1965	2,080	1,997	776	26,731	44,835	28,092
1970	2,165	2,474	888	30,187	55,492	39,526
1975	2,251	3,040	953	31,931	66,575	53,524
1980	2,259	3,682	942	30,911	77,854	70,593

Description of Plan:

1. Formula: Present one plus $10 per month for those retiring in the first quarter of 1939, decreasing by 15 cents per quarter until becoming zero for those retiring in and after October, 1955.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 5a

PROGRESS OF RESERVE UNDER TRANSITIONAL BENEFITS PLAN AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	•Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	277	32	1,333	1,591	306
1940	535	335	40	1,573	2,126	641
1941	543	386	47	1,777	2,669	1,027
1942	537	419	53	1,948	3,206	1,446
1943	542	456	58	2,092	3,748	1,902
1944	548	504	63	2,199	4,296	2,406
1945	554	537	66	2,282	4,850	2,943
1950	891	836	90	3,135	8,920	6,548
1955	1,110	1,157	110	3,731	14,199	11,740
1960	1,412	1,587	119	3,895	20,893	18,846
1965	1,906	1,997	125	4,202	29,851	28,092
1970	2,346	2,474	138	4,618	41,047	39,526
1975	2,814	3,040	147	4,820	54,537	53,524
1980	3,577	3,682	167	5,622	71,644	70,593

Description of Plan:

1. Formula: Present one + $10 per month for those retiring in the first quarter of 1939, decreasing by 15 cents per quarter until becoming zero for those retiring in and after October, 1955.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-46	2%	8 1/3%
1947-51	3	6 2/3
1952-56	3½	5
1957-61	4¼	5
1962-66	5½	5
1967-71	6½	5
1972-76	7½	5
1977-	9½	5

Table 6

PROGRESS OF RESERVE UNDER REVISED FORMULA

(All figures in millions of dollars)

Calendar Year	Appropri- ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumula- tive Appropri- ations	Cumula- tive Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	248	32	1,362	1,591	277
1940	818	299	41	1,922	2,409	576
1941	829	346	58	2,463	3,238	922
1942	820	376	74	2,981	4,058	1,298
1943	1,124	412	89	3,782	5,182	1,710
1944	1,137	460	113	4,572	6,319	2,170
1945	1,148	493	137	5,364	7,467	2,663
1950	1,813	822	292	11,031	15,474	6,125
1955	1,904	1,228	476	17,031	24,814	11,486
1960	1,994	1,746	631	21,928	34,605	19,243
1965	2,080	2,227	744	25,409	44,835	29,505
1970	2,165	2,761	810	27,221	55,492	42,290
1975	2,251	3,347	814	26,851	66,575	57,834
1980	2,259	3,949	733	23,464	77,854	76,367

Description of Plan:

1. Formula: 1% of first $2000 plus 1/12% of next $36,000 plus 1/24% of excess.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 6a

PROGRESS OF RESERVE UNDER REVISED FORMULA AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	248	32	1,362	1,591	277
1940	535	299	41	1,639	2,126	576
1941	543	346	49	1,885	2,669	922
1942	537	376	57	2,103	3,206	1,298
1943	542	412	63	2,296	3,748	1,710
1944	548	460	69	2,453	4,296	2,170
1945	554	493	74	2,588	4,850	2,663
1950	891	822	104	3,644	8,920	6,125
1955	1,110	1,228	124	4,147	14,199	11,486
1960	1,495	1,746	125	4,033	21,221	19,243
1965	2,080	2,227	124	4,099	30,948	29,505
1970	2,526	2,761	124	4,010	43,031	42,290
1975	3,189	3,347	128	4,230	58,186	57,834
1980	3,765	3,949	139	4,590	76,422	76,367

Description of Plan:

1. Formula: 1% of first \$2000 plus 1/12% of next \$36,000 plus 1/24% of excess.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: \$2000 total wages after 1936. \$100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-46	2%	8 1/3%
1947-51	3	6 2/3
1952-56	3½	5
1957-61	4⅓	5
1962-66	6	5
1967-71	7	5
1977-	10	5

Table 7

PROGRESS OF RESERVE WITH LEVEL $25 ANNUITIES

(All figures in millions of dollars)

Calendar Year	Appropriation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropriations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	293	32	1,317	1,591	322
1940	818	350	40	1,825	2,409	672
1941	829	401	55	2,308	3,238	1,073
1942	820	432	69	2,765	4,058	1,505
1943	1,124	467	83	3,505	5,182	1,972
1944	1,137	510	105	4,237	6,319	2,482
1945	1,148	537	127	4,975	7,467	3,019
1950	1,813	780	278	10,579	15,474	6,476
1955	1,904	1,029	476	17,210	24,814	11,166
1960	1,994	1,326	676	23,882	34,605	17,265
1965	2,080	1,555	879	30,705	44,835	24,659
1970	2,165	1,782	1,093	37,903	55,492	33,150
1975	2,251	2,019	1,319	45,521	66,574	42,752
1980	2,259	2,264	1,552	53,277	77,853	53,569

Description of Plan:

1. Formula: $25 per month.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

Table 7a

PROGRESS OF RESERVE WITH LEVEL $25 ANNUITIES
AND NEW SCALE OF TAXES UNDER TITLE VIII

(All figures in millions of dollars)

Calendar Year	Appropri-ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumulative Appropri-ations	Cumulative Benefit Payments
1937	528	7	0	521	528	7
1938	535	22	16	1,050	1,063	29
1939	528	293	32	1,317	1,591	322
1940	535	350	40	1,542	2,126	672
1941	543	401	46	1,730	2,669	1,073
1942	537	432	52	1,887	3,206	1,505
1943	542	467	57	2,019	3,748	1,972
1944	548	510	61	2,118	4,296	2,482
1945	554	537	64	2,199	4,850	3,019
1950	891	780	90	3,193	8,920	6,476
1955	935	1,029	108	3,607	13,509	11,166
1960	1,329	1,326	124	4,270	19,699	17,265
1965	1,386	1,555	132	4,350	26,519	24,659
1970	1,804	1,782	147	5,071	35,049	33,150
1975	1,876	2,019	164	5,500	44,285	42,752
1980	2,071	2,264	171	5,672	54,436	53,569

Description of Plan:

1. Formula: $25 per month.

2. First annuity payments: January, 1939.

3. Eligibility for annuity: $2000 total wages after 1936. $100 earned in each of two different calendar years for those retiring in 1939, in each of three for those retiring in 1940, in each of four for those retiring in 1941, and in each of five for those retiring after 1941.

4. Crediting of wages beyond 65: Yes, both as to Titles II and VIII.

5. Schedule of Taxes and Expense Allowances in Arriving at Appropriations:

Period	Tax Rate	Expense as % of Taxes
1937-46	2%	8 1/3 %
1947-56	3	6 2/3
1957-66	4	5
1967-76	5	5
1977-	5½	5

Table 8

SUMMARY OF NEW SCALES OF TAXES UNDER TITLE VIII AS USED FOR CURRENT COST FINANCING OF VARIOUS MODIFICATIONS OF TITLE II

Period	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7
1937-41	2%	2%	2%	2%	2%	2%	2%
1942-46	2	2	2	2	2	2	2
1947-51	2	2	2	3	3	3	3
1952-56	2	3	3	3	$3\frac{1}{2}$	$3\frac{1}{2}$	3
1957-61	3	4	4	4	$4\frac{1}{4}$	$4\frac{1}{2}$	4
1962-66	5	5	5	$5\frac{1}{2}$	$5\frac{1}{2}$	6	4
1967-71	6	6	$6\frac{1}{2}$	$6\frac{1}{2}$	$6\frac{1}{2}$	7	5
1972-76	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{2}$	5
1977-	$9\frac{1}{4}$	$9\frac{1}{4}$	$9\frac{1}{4}$	$9\frac{1}{2}$	$9\frac{1}{2}$	10	$5\frac{1}{2}$

COMPARISON OF BALANCE IN RESERVE IN 1980 BASED ON PRESENT TAX SCALE AND ON NEW TAX SCALES (CURRENT COST METHOD)

Present Scale	46,641	40,206	38,421	33,141	30,911	23,464	53,277
New Scale	5,714	5,432	4,934	5,225	5,622	4,590	5,672

Description of Plans:

Table 1: Present Title II.

Table 2: Present Title II plus credit for employment after age 65.

Table 3: Same as Table 2 with first retirements in 1939.

Table 4: Same as Table 3 with $20 minimum.

Table 5: Transitional Benefits Plan with first retirements in 1939.

Table 6: Revised Formula with first retirements in 1939.

Table 7: Flat $25 Annuities with first retirements in 1939.

Table 9

NUMBER OF ANNUITANTS AND AVERAGE MONTHLY BENEFITS
UNDER VARIOUS MODIFICATIONS OF TITLE II

Plan	1939	1940	1942	1945	1950	1960	1970	1980
			Number of Annuitants (in thousands)					
Table 1	--	--	175	681	1680	3528	4705	5912
Table 2	--	--	1282	1561	2205	3617	4708	5912
Tables 3-7	867	1006	1282	1561	2205	3617	4708	5912
			Average Monthly Benefit in Effect					
Table 1	--	--	$17	$18	$21	$28	$35	$44
Table 2	--	--	17	18	21	30,	37	45
Table 3	$16	$16	16	17	21	30	37	45
Table 4	21	21	21	22	24	31	38	45
Table 5	23	24	24	25	27	31	37	45
Table 6	21	21	21	23	27	35	42	49
Table 7	25	25	25	25	25	25	25	25

Description of Plans:

Table 1: Present Title II.

Table 2: Present Title II plus credit for employment after age 65.

Table 3: Same as Table 2 with first retirements in 1939.

Table 4: Same as Table 3 with $20 minimum.

Table 5: Transitional Benefits Plan with first retirements in 1939.

Table 6: Revised Formula with first retirements in 1939.

Table 7: Flat $25 Annuities with first retirements in 1939.

Table I

PROGRESS OF RESERVE UNDER PRESENT TITLE II
FOR VARIOUS RATES OF INTEREST BEING CREDITED
TO THE OLD-AGE RESERVE ACCOUNT

(All figures in millions of dollars)

Calendar Year	Rate of Interest				
	0%	2%	$2\frac{1}{2}$%	3%	6%
1937	505	505	505	505	505
1938	1,003	1,013	1,016	1,018	1,033
1939	1,491	1,521	1,529	1,536	1,583
1940	2,246	2,306	2,322	2,337	2,433
1945	6,627	7,094	7,219	7,343	8,160
1950	12,494	13,931	14,325	14,732	17,509
1955	17,832	20,950	21,835	22,765	29,491
1960	21,268	26,724	28,339	30,066	43,395
1965	22,616	30,921	33,496	36,307	59,635
1970	22,156	33,675	37,434	41,625	79,336
1975	19,439	34,374	39,524	45,402	103,173
1980	13,757	32,062	38,777	46,641	131,744

Table II

ANNUITANTS, APPROPRIATIONS, BENEFIT PAYMENTS, AND BALANCE IN RESERVE UNDER THREE POSSIBILITIES AS TO INCREASED COVERAGE a/ UNDER TITLE II

(All figures in thousands of persons or millions of dollars)

Calendar Year	Present Estimate	Estimated Under			Percent of Present Estimate		
		Plan A	Plan B	Plan C	Plan A	Plan B	Plan C
			Number of Annuitants				
1945	681	1226	1771	2861	180%	260%	420%
1950	1680	2864	4048	6416	170	241	382
1960	3528	5486	7442	11355	155	210	322
1970	4705	6788	8871	13037	144	189	277
1980	5912	8017	10121	14330	136	171	242
			Appropriations				
1945	1142	1157	1171	1200	101	103	105
1950	1791	1818	1845	1900	102	103	106
1960	1947	1977	2008	2069	102	103	106
1970	2103	2131	2160	2218	101	103	105
1980	2181	2211	2241	2302	101	103	106
			Benefit Payments				
1945	213	311	409	606	146	192	284
1950	538	751	964	1390	140	179	258
1960	1430	1782	2135	2839	125	149	199
1970	2355	2730	3105	3855	116	132	164
1980	3576	3955	4333	5091	111	121	142
			Balance in Reserve				
1945	7,343	7,246	7,048	6,654	99	96	91
1950	14,732	13,852	12,848	10,840	94	87	74
1960	30,066	25,840	21,445	12,656	86	71	42
1970	41,625	32,032	22,209	2,566	77	53	6
1980	46,641	29,764	12,577	-21,792	64	27	-

a/ Each possibility assumes that a certain proportion of those not covered under Title II obtain a total of $3000 of covered employment and thus qualify for monthly benefits at age 65. These proportions are as follows: Plan A-25%; Plan B-50%; and Plan C-100%.

Table III

PROGRESS OF RESERVE UNDER PRESENT TITLE II ASSUMING THAT ALL QUALIFIED INDIVIDUALS RETIRE AT AGE 65

(All figures in millions of dollars)

Calendar Year	Appropri-ation	Benefit Payments	Interest on Reserve	Balance in Reserve	Cumula-tive Appropri-ations	Cumula-tive Benefit Payments
1937	511	6	0	505	511	6
1938	516	18	15	1,018	1,027	24
1939	521	33	30	1,536	1,548	57
1940	803	48	46	2,337	2,351	105
1941	811	45	70	3,173	3,162	150
1942	819	87	95	4,000	3,981	237
1943	1,121	141	120	5,100	5,102	378
1944	1,132	205	153	6,180	6,234	583
1945	1,142	258	185	7,249	7,376	841
1950	1,791	652	380	14,175	15,304	3,327
1955	1,869	1,116	597	21,257	24,493	7,995
1960	1,947	1,734	779	26,942	34,071	15,440
1965	2,025	2,272	903	30,749	44,039	25,888
1970	2,103	2,855	976	32,753	54,396	38,999
1975	2,180	3,556	975	32,095	65,143	55,317
1980	2,180	4,334	863	27,485	76,043	75,419