adopt an automatic basis that will provide a gradually increasing subsidy and reflect salary fluctuations, and accordingly I recommend for consideration an annual subsidy of 15 per cent. of the salary roll, which with the full restoration of salaries would give a commencing subsidy of about £450,000 per annum.

35. It may be asked whether, judged by ordinary commercial standards, this is too high a price for the State as employer to pay for the advantages it derives from the existence of a Staff Superannuation Fund. In order to enable comparisons to be made, I cannot do better than to quote the following extract from the report of a Commission on the Pension Funds of the City of New York:—

> " The Commission has made a broad review of existing pension systems in operation, both in the United States and abroad, on which it was able to secure information. This inquiry has brought out the fact that the development of pension measures as a result of an experience of over a hundred years is in the direction of equal division of cost between the employer and the employed, and that this tendency applies equally to systems for public employees and for industrial workers."

My recommendation for the future State subsidy to be 15 per cent. of the salary roll does not differ very much from apportioning the cost equally between the employer and the employee when account is taken of the initial deficiency created in the Fund by the gift of back service in calculating the pensions payable to employees in the Service when the Fund was established, the considerable amount by which past subsidies have fallen short of the contributions paid by employees, and the additional financial strain thrown on the Fund by the Railway Department's policy of compulsorily retiring, irrespective of age, officers with over thirty-five years' service. It may also be of interest to call attention to the increase in the requisite automatic subsidy from 7½ per cent. recommended in the 1919 actuarial report to the present figure of 15 per cent.

36. I have previously stated that, on account of the large deficiency in the Fund, the subsidy is in the nature of a perpetuity, and consequently my recommendation of an automatic subsidy equal to 15 per cent. of the pay-roll will require modification if at any time the present constitution of the Fund is altered, as, for example, by refusing or even making voluntary the enrolment in the Fund of new employees.

37. In recommending that the amount of the automatic subsidy be fixed at 15 per cent. of the pay-roll I have endeavoured not only to place the Fund on a firmer footing, but also to keep the cost to the State as low as is reasonably possible.

In view of the opinions expressed from time to time by certain Service organizations that the actuarial valuations of the Fund have no touch with realities, and are unnecessarily stringent, it may not be out of place to state that such valuation differs considerably from the actuarial valuation of a profit-distributing institution like a life-assurance office. In the latter case, the need to provide for the maintenance of the same rate or even for an increasing rate of bonus calls for the use of caution in distributing profits and the actuary takes the same view as those engaged in dealing with the profits of any other commercial institution, whereas in a superannuation fund, and particularly in a Government Superannuation Fund, the question of profit does not arise, and there is no need in the actuarial valuation to adopt bases any more stringent than the actual experience of the Fund requires. That the bases adopted for the Government Railways Superannuation Fund cannot be regarded as stringent will be obvious by considering them seriatim. In the first place, the future rate of interest has been taken at 4½ per cent. per annum, which can hardly be regarded as conservative, and it is unnecessary to point out that the liabilities are underestimated if the average rate of interest earned by the Fund during the lifetime of contributors falls below this figure. Again, the rates of withdrawal used were considerably heavier than those actually experienced during the septennium under review, and if this latter experience can be taken as a guide that in future officers will be more reluctant to leave the employ of the Railway Department than they were prior to 1927, it is clear that the estimated liabilities for future pensions will need to be increased. Further, the rates of retirement adopted in the valuation fall far short of those operating during the last valuation period, and if this latter trend continues, the estimated liabilities will naturally need to be increased. There is very little valuation profit or loss from mortality as the actual number of deaths in Service corresponds very closely with the expected. The above remarks should make it clear that if the present valuation errs at all, it is not on the side of stringency, but rather of underestimating the liabilities.

If Government considers the annual subsidy too big a price to pay for the benefits of a Railways Superannuation Fund, it would be better to face up to the position and reconstruct the Fund in accordance with the State's ability to pay. Such a procedure would at least have the merit of letting officers know where they stand, and of enabling them, if desired, to make alternative provision for their old age.

38. It may be as well at this stage to point out that there is no statutory obligation on the State, through the Working Railways Account to pay into the Fund the present annual subsidy of £170,000. It is in the power of the Railway Department at any time to discontinue the payment of any subsidy whatever, and although such a contingency may appear remote, it is interesting and instructive to examine the resulting position of the Fund. For this purpose, it is only necessary to submit the following figures as at 31st March, 1934:—

	£
Amount of accumulated funds	1,240,831
Amount of contributions paid by contributors still in the Service	1,802,393
Capital value of pensions and allowances actually entered upon	4,394,747