

(3) That the percentage of graduates in the totals will have increased in all branches in five years' time, if graduates are available—

				Percentage of Graduates in Group Total.	
				1948.	1953.
Civil	..	..	..	40	42
Electrical	..	..	..	51	60
Mechanical	..	..	..	35	41
Other branches	..	..	..	23	34
Total	..	..	..	42	48

(4) WASTAGE IN PROFESSIONAL ENGINEERING PERSONNEL

73. Employers were asked to give the number of replacements of professional engineers in 1947 in order that some indication might be obtained of the annual percentage of wastage. The returns showed 57 replacements in a total of 1,080 professional engineers, or approximately 5.3 per cent. One would have expected this figure to be higher, as it must include a large proportion of transfers to other professional engineering positions. It would seem that the low figure reflects the present shortage of engineers. It is impossible to estimate the number of transfers, but wastage must be taken to include retirements, transfers to other occupations and losses by emigration or death before retirement.

74. The Committee decided after very careful study of the problem to allow for a wastage of 4 per cent. per annum for this investigation. This was lower than the figures suggested by some witnesses, and it would not be sufficient under different conditions. The Committee was influenced, however, by the following considerations. The annual rate to replace wastage through retirements which, with a stable number in the profession, would be about 3 to 3.3 per cent., is as yet very much smaller because of the rapid development in the profession. The plans which the Committee has for increasing the supply of professional engineers during the next decade or so will, if implemented, result in there being an even greater proportion of young engineers. Moreover, calculations indicated that, even though a number of our graduates go overseas, either many of them ultimately return or this country receives a substantial number of graduates trained elsewhere. Finally, the present known shortage and the unsettled world conditions may well result in fewer of our graduates leaving our shores and more graduates trained elsewhere coming to this country during the next few years.

(5) PROFESSIONAL ENGINEERS PER MILLION OF POPULATION

75. The figures below are extracted from information contained in the census reports of 1911, 1916, 1926, and 1936. It should be stated that it is only recently that the returns of occupations presented in the census reports listed professional engineers separately. Even now the householder filling in the census form is his own judge of what constitutes a professional engineer, and there is considerable room for difference of opinion. The figures are, however, useful in providing an estimate of the number of