



Road versus rail: Facts sheet No 12: Costs of conversion and rates of return

Although Transwatch does not advocate converting rail to road, preferring to concentrate on facts leading to policy, rather than policy itself, this facts sheet nevertheless deals with the costs of conversion and touches briefly on conversion strategy.

The note shows that (a) the first year rates of return from railway conversion would be overwhelming and (b) that the cost of converting the entire rail network would be less than £12bn or about one sixth the present cost of the rail modernisation programme.

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 A contract let by the then Department of the Environment (Contact DG 466/3) culminated in the Hall Smith report Better Use of Railways. The second edition was published in 1976 (ISBN 0 7049 0349 0) - a long time ago. That report attracted vitriolic but baseless criticism. The critics never responded to the companion volume, Comments and Rejoinders, (ISBN 0 7049 0473 x) in which they appear, for the most part, and at the politest, in a very poor light.

The main report examined the potential for converting six railway lines to motor roads in and around London. The conclusion was that conversion would yield first year rates of return in the range 100 to 500% (except in one case where the return was infinite because the value of scrap and spare land exceeded the cost of the conversion). Those very high rates of return are hardly surprising in view of my analysis which shows rail 3 to 4 times as expensive as, and with one quarter the capacity of, a road.

The report may be updated by factoring the time and accidents savings valuations according to their modern equivalents and by factoring the costs by the Road Construction Prices index. That analysis showed that benefits would rise in real terms but that costs would fall, so strengthening the conclusions.

Comments and Rejoinders provides a useful cost summary which compares the all-in study costs of conversion with 5 actual schemes as follows where all prices are per sq. metre and are at the price base 1973 base.

Actual Conversions: Edinburgh £10.95, Southport: £3.73, Radnor CC 1970: £2.49, Radnor CC 1969: £2.94, Radnor CC 1968: £3.35 (Motorway Construction standards would add about £3 per sq. metre to these costs.

Study Estimates: had the range £8.21 to £19.40 per sq. metre, implying straight away that the study estimates were, if anything, too high.

The estimates may be converted to 1999 equivalents using the Road Construction Price index. The range is £43-102 per sq. metre, including all ancillary works etc. The mid range value is £72.5. Applying that to the 32,000 km of rail network and assuming a generous 5 metre lane width yields £12 billion. In comparison the a conversion of a railway to a 7.3 metre road in open country at Southport was carried out for £19 per sq. metre at 1991 prices, equivalent to £25 per sq. metre at 1999 prices, suggesting £75 is too high by perhaps a factor of 3. In any event the £12 billion is dwarfed by the £70 billion now required for rail modernisation and the £12 billion would provide a track with 4 times the capacity of the rail system.

As to conversion strategy, first remember that they can lay a mile of road surfacing in a day.

The strategy would be to stockpile materials and plant at 5 to 10 mile intervals for a particular route. Then on Death of Rail Day the tracks would off and replaced by a road surface sufficient for buses in a matter of weeks, at least to the edges of town and city. During that period special traffic orders would be in place to enable buses, previously procured etc. to operate reasonably in urban areas. On completion the passengers would all have seats at one-third the cost etc. etc.

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