



### Road versus rail: Facts sheet No 9: Passenger Rolling Stock costs

- 1 This note shows that the annual cost of passenger rail rolling stock is 3 to 4 times that of the equivalent motor coach.
- 2 The annual costs of capital is here defined as that sum which if paid annually will repay capital plus interest, set at the Treasury Discount rate of 6%, over the lifetime of the vehicle.
- 3 A railway carriage costs between £1 million and £2 million. It lasts perhaps 30 years. The capital recovery factor is 0.0726. Hence the annual cost of the capital has the range £72,600 to £145,200.
- 4 A bus or coach has the price range £150,000 to £250,000. The vehicle may last 15 years. The capital recovery factor is then 0.1030. Hence the annual cost of the capital for the bus/coach has the range £15,450 to £25,750. If the bus is 70% the size of a railway carriage then, for comparative purposes, these numbers become £22,100 to £36,800.
- 5 It follows that the annual capital cost of a bus/coach is 3 to 4 times less than equivalent floor space by rail.
- 6 probably the cost of rail rolling stock is an under estimate, e.g. by omitting the cost of the traction unit on intercity, but some may say I have overestimated the size of a bus. Motorway coaches have 50 somewhat cramped seats. If one row were removed leaving 46 seats the cramp would be eliminated except for the tallest or fattest since knee room would be increased by 3 inches. Some double deck buses such as the Olympian three axle bus may have 90 seats or perhaps 80 comfortable ones. A railway carriage may have 80 seats.

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