

OPPORTUNITIES FOR OPTIMISING THE COSTS OF THE FREIGHT VEHICLE-TRACK SYSTEM: A CASE STUDY BASED UPON THE 25.5 TONNE AXLELOAD AGGREGATES TRAFFIC ON THE WESTBURY TO ACTON ROUTE

This report presents analysis of the opportunities for reducing the overall costs of the freight vehicle-track system. The main emphasis of this study is an examination of the expected variation in track maintenance and renewal costs for the operation of freight vehicles with different suspension types and at different speeds. Other system aspects such as the vehicle capital and maintenance costs associated with changes in vehicle type are also considered, in an attempt to evaluate the overall financial implications.

This study suggests there are considerable opportunities for reducing current track expenditure, either by reducing freight traffic operating speeds, using vehicle types with 'track-friendly' suspensions, or modifying existing suspensions. A tentative track damage rating is given, together with estimates of the potential annual track cost savings on the above route.

The report concludes that reducing operating speeds is unlikely to be cost effective, whilst modifying existing pedestal suspensions is likely to be particularly cost effective. It also provides an opinion on the best alternative suspension types.