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LEARNING FROM OVERSEAS EXPERIENCE

THE UK APPROACH TO REGIONAL TRANSPORT PLANNING: THAMES VALLEY MULTI MODAL TRANSPORT STRATEGY

Regional land transport strategies have become a primary mechanism in New Zealand for addressing the problems of traffic growth and congestion. A similar form of integrated land-use and transport planning is also a key mechanism for resolving regional transport problems in the United Kingdom.

The British Government's 10-Year Transport Plan and planning guidance from Regional Assemblies provide the context for developing area transport strategies to deal with specific transport, economic, social or environmental problems. Called 'multi modal strategies', a number have already been completed and are in the first phase of implementation.

The United Kingdom approach differs from New Zealand's regional land transport strategies because in the UK, multi modal strategies usually cover large-scale study areas that encompass regional cities, sub-regional towns and may span several counties. Multi modal strategies do not provide detailed transport measures such as walking and cycling schemes as these are covered in Local Transport Plans implemented by local authorities. Strategies provide frameworks for delivering regional policies through schemes and measures to address an identified problem/s within a defined region.

The Thames Valley Multi Modal Strategy is regarded as one of the best examples of a regional transport study and addresses economic concerns arising from an overloaded transport network. This article provides an overview of the Thames Valley Multi Modal Strategy.

INTEGRATED TRANSPORT

The Thames Valley Multi Modal transport study covers an area to the west of London's Heathrow Airport (Map 1). Over the past twenty years, the Thames Valley has attracted investment by information and communication technology businesses and is considered one of the ten strongest 'knowledge based' European regions. Excellent air, rail and road links to London and other European cities has made the area a popular location for international business operations. The Thames Valley provides jobs for around 770,000 people in over 100,000

businesses, generating an annual output amounting to some 24bn. This means the Valley has the highest GDP per head of any UK region outside London.

There are growing fears that the transport links that attracted so many businesses to the area could now become a factor that drives them away. Road congestion alone already costs business in the region an estimated one billion a year in lost productivity. At current traffic growth rates, peak hour delays in the Thames Valley could nearly double by 2016 as traffic growth increases by 20-30%. Carbon dioxide emissions are projected to rise by 20%. Some parts of the transport network are near maximum capacity. The level of traffic is largely due to the polycentric nature of the Thames Valley that generates disparate movements between towns that are not easily or cost effectively met by current public transport provision.

The area not only has internal transport issues but acts as a strategic gateway to the UK, catering for through-traffic between the South West and Wales on one side, and London, Heathrow and Europe on the other. If the Thames Valley is to maintain its major contribution to the economy, all aspects of the transport system need be addressed.

The Government commissioned consultants to develop a strategy to cover the time period 2003-2016 with forecasting up to 2031. The consultants brief was to identify the factors influencing the nature and performance of the transport system and develop an integrated transport and land-use strategy through a co-ordinated area-wide approach. The Study was guided by a steering group comprised of key stakeholders including local authorities and delivery agencies.

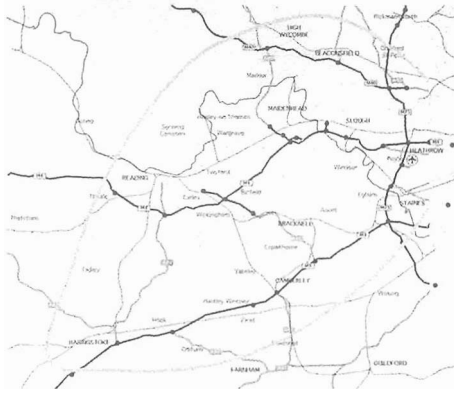
THE STRATEGY

The Strategy comprises a package of inter-related measures designed to collectively widen travel choice, slow traffic growth and reduce congestion by 2016. Thorough testing of many options was undertaken using two models - one based on population, transport and land use trends and the other applying the parameters and

Below top: Delayed for five hours on the M4 motorway as police attend an incident - better incident handling could reduce up to 20% of motorway delays.

Below bottom: Severe morning peak congestion is a common sight in many Thames Valley villages and towns.





Thames Valley Multi Modal Strategy.

forecasts contained within regional transport and planning policies. The Strategy aims to:

- improve journey reliability of all transport modes
- improve access to key destinations such as employment centres
- encourage consistency in transport and land use planning in
 - the study area
 - reduce accidents
 - improve air quality
 - support sustainable growth in the Thames Valley economic area.

The package of measures proposed by the Strategy include public transport improvements, travel management measures and improved management of roads.

PUBLIC TRANSPORT

Improvements to the rail system focus on better use of the current network with higher service frequencies and changes in service patterns. The Strategy also includes new and upgraded stations and new rail links between Heathrow and key employment areas in the Thames Valley region.

Rail is the most popular public transport mode but is not a viable option for providing the complex range of trips required. For this reason, the major public transport improvement proposed is a new high frequency inter-urban express coach service between key employment towns in the Thames Valley. A feature of the network will be high quality transport interchanges with intelligent information systems. Bus priority measures on the road network will be essential to ensure travel times are efficient and reliable. Mass transit and demand responsive bus transport services are two further measures to be pursued at a local level.

TRAVEL MANAGEMENT

There continues to be significant

development pressure in the Thames Valley and land availability is constrained by greenbelts and transport network limitations. Changes to land-use planning policies will concentrate mixed development activity near public transport interchanges in town centres. The focus of high-density commercial and residential development with reduced parking in areas with high accessibility to public transport will help reduce reliance on the car for commuting and other journeys. Consideration is also given to managing increased development generated by new transport interchanges in town centres and along identified transport priority corridors.

Demand management mechanisms such as business and school travel plans (packages of demand management measures to reduce car use) will be implemented to improve travel choice and reduce car use. It is estimated that 50% of businesses are capable of successfully implementing travel plans which will reduce traffic levels by 8-10%. Recent experience shows that travel plans are most effective when implemented as part of planning obligations for a new or expanded developments.

MANAGEMENT OF ROADS

The Study identified a series of priority corridors and congestion hot spots that would need to be addressed if the express coach network is to succeed. Rather than building new roads, improvements to the road network are proposed to achieve better traffic flow and capacity at strategic locations. These include traffic management measures such as better motonvay incident detection, variable message signing on roads to advise motorists of incidents, priority motorway access for public transport, freight and high occupancy vehicles, lane discipline controls and ramp metering to limit the number of cars joining a motonvay if it is congested.

The Thames Valley is both a gateway and destination for freight so better management of the road network is crucial for improving capacity and movement. The Strategy proposes road based freight be managed through Freight Quality Plans which include lorry lanes, freight routing and urban consolidation centres at locations close to motonvay junctions near urban centres where goods can be transferred to smaller vehicles better suited to the local network.

LONG-TERM MEASURES


Two additional long-term measures are

considered but not included in the core strategy as they may have significant economic and social disadvantages. The first is road user charging which places a charge on vehicles travelling into an area. An area-wide levy (on all roads for all users at all times of the day) estimated at 6.5pence/km will be necessary to achieve adequate congestion relief. The second is motorway widening although the additional benefits in terms of highway performance are small relative to road user charging being in place or the other measures proposed in the Strategy.

IMPLEMENTATION

Implementation of the core Strategy will cost 1.1 billion in capital costs and 140 million in annual revenue costs. There is generally an expectation that the majority of funding will come from central government, although public-private partnerships are likely to play an important role. The Strategy will be submitted to Ministers for approval in the summer and a positive decision would see work begin in 2004. Full implementation of the core Strategy is expected to take up to eight years. Road user charging and motorway widening would not be considered before 2011.

WILL IT WORK?

The Strategy relies on a range of engineering, service and planning measures to limit traffic growth, reduce congestion and widen travel choice. If the Strategy is fully implemented, the growth in traffic delays will still increase 30% by 2016 from current levels (compared to an 80% increase if we do nothing). To achieve far more promising results, the introduction of road user charging should ensure traffic delays would be only marginally greater than today's levels. In making a decision on whether or not to proceed with implementing the Strategy, the Government will need to be convinced that the relatively modest gains are worth the significant level of investment required. Certainly, to do nothing is no longer an option but it is questionable whether the Strategy goes far enough to protect the Thames Valley from a transport crisis in the future. 

REFERENCES:

- Thames Valley Multi Modal Strategy and Study reports (www.thamesvalleytransport.org.uk)
- Thames Valley Economic Partnership 'Action on Transport in the Thames Valley' unpublished paper.