

12 CONCLUSIONS

12.1 INTRODUCTION

12.1.1 The Government Office for the East Midlands commissioned Pell Frischmann Consultants to undertake the A453 Multi Modal Study following publication of the Governments White Paper on Integrated Transport. The Study has investigated travel conditions along the A453 Corridor with a view to developing a transport strategy and recommended transport plan for the corridor to the year 2021.

12.2 THE A453 IN CONTEXT

12.2.1 The A453 is a Trunk Road that provides the major highway link between Nottingham and the national motorway network, the M1 at Junction 24. For a large proportion of its length it is a rural single carriageway. However at its northern end where the route passes between Clifton village and the Clifton Estate it is essentially urban in character. Along this length it is a single carriageway with at grade junctions (a mixture of priority junctions, traffic signals and roundabouts). There is also substantial pedestrian activity in this area with a number of signal controlled pedestrian crossings. Further north still, the section immediately adjacent to Clifton Bridge and the A50 Ring Road is to dual carriageway standard.

12.2.2 The A453 route itself has a wide range of roles within the overall highway network catering for an equally wide range of movement types including:

Strategic	J24 confluence of M1, M42, A50 and A6 Alternative access routes to Nottingham and Derby e.g. via J23a, J24, J25 and J26
Intermediate	Nottingham to Derby Alternative routes include A453/A50, A52 and A6005 Hinterland to Nottingham
Local Movements in Clifton-	Short journeys by car and bus Pedestrian and cycle movements
Access	Major traffic generators e.g. Nottingham Trent University, East Midlands Airport Frontage premises.

12.2.3 From the examination of the information gathered by the extensive programme of surveys carried out as part of the Study, as well as that provided by other agencies, the Study has established a baseline of current travel conditions that exist within the corridor. This has shown that currently traffic flows vary between 1800 veh.per hour in the AM peak on the rural section of the A453 and 4100 veh. per hour on the urban section. Furthermore the route currently suffers from substantial levels of peak period traffic congestion and unreliability with journey times. There are also high levels of personal injury accidents along rural sections of the route.

- 12.2.4 The Study has used the information from these surveys of travel patterns and conditions together with data on land use characteristics to establish a multi-mode Transport Model of the Study Area. This has been validated to ensure that it accurately represents current travel patterns and has been used to provide forecast of travel demand for 2011 and 2021. These forecasts take account of anticipated changes in land use and demographic patterns, travel cost as well as those future interventions that are considered to be “committed” to form, the “Do Minimum” case. This analysis has shown that the number of vehicle kilometres travelled by private vehicles is likely to increase by 16.3% by 2011 and 24.1% by 2021. (Compared to a base year of 2000). The number of public transport passenger kilometres are estimated to rise by 4.9% by 2011 and 6.2% by 2021. The impact of these changes is that travel conditions in the corridor are anticipated to continue to deteriorate, irrespective of the investment currently committed for transport improvements within the Nottingham area.

12.3 TRANSPORT OBJECTIVES

- 12.3.1 It was important that the Study not only addressed transport problems and issues within the corridor, but also did so in a way that was consistent with both national and local transport objectives. The national objectives for transport are set out in the Government’s White Paper on integrated transport are:

Environment:	to protect and enhance the built and natural environment;
Safety:	to improve safety for all travellers;
Economy:	to contribute to an efficient economy, and to support sustainable economic growth in appropriate locations;
Accessibility:	to promote accessibility to everyday facilities for all, especially those without a car; and
Integration:	to promote the integration of all forms of transport and land use planning leading to a better, more efficient transport system.

- 12.3.2 A wide range of local objectives has been identified from the Interim Regional Transport Strategy Local Transport Plans produced by the constituent local authorities and wide ranging consultation. These are set out in detail in the report, and are all generally consistent with national objectives, providing a local emphasis and flavour.

12.4 THE PREFERRED TRANSPORT STRATEGY

- 12.4.1 The Study has identified and appraised a range of alternative transport strategies that were considered to be appropriate to the solution of the existing and future problems. They were developed in consultation with the Project Management Group and Wider Reference Group as single focus strategies that were aimed at “pushing the boundaries” of alternative policy approaches.

- 12.4.2 The Preferred Transport Strategy has been defined to address both sides of the transportation planning equation; the demand for movement, and the network supply to provide for that movement. Historically there has been a tendency to “predict and provide” which has resulted in over-dependence upon the private car, substantial road building programmes and under-investment in public transport and the non-motorised modes. This has led to the progressive erosion of both the urban and rural environments without the resolution of road traffic congestion in the longer term.

12.4.3 The Preferred Transport Strategy outlines a new transport philosophy in which substantial investment in public transport and policies to influence travel demand and mode choice behaviour are combined to reduce the overall demand for movement and bring about much greater use of public transport, walking and cycling modes. This will result in lower traffic forecasts and the opportunity to consider lesser highway schemes than those previously envisaged for the corridor whilst still providing improvements in traffic and environmental conditions. This is especially the case when compared against the situation that would otherwise occur towards 2021.

12.4.4 The Preferred Transport Strategy comprises five main elements:

- Major Public Transport Investment
e.g. Heavy Rail, Light Rapid Transit (NET) and bus
- Demand Management and Mode Change Policies e.g. Public transport fares and workplace parking levy.
- Highway Improvements and Traffic Management
to deal with residual demand, accessibility, safety and environment.
- Complementary Packages
e.g. Freight, pedestrian and cycle networks and local travel behaviour.
- Strategic and National Measures
e.g. initiatives to influence travel behaviour and M1 MMS proposals.

This strategy is complementary to, and builds upon, many policies under consideration by Local Authorities and transport providers, especially Nottingham City Council.

12.5 THE RECOMMENDED TRANSPORT PLAN

12.5.1 Having developed the Preferred Transport Strategy and its underlying philosophy, a range of options has been developed that provide integrated packages of measures covering all modes of transport, with different mixes of schemes and interventions. In particular these options have examined the impacts of differing levels of highway provision within an established package of public transport improvements and demand management.

12.5.2 The performance of these Options has been appraised in terms the achievement of local and national objectives and also against the performance of the former on line improvement scheme, “the Red Route”. As part of this appraisal process a public consultation exercise was undertaken, which provided useful feedback on local concerns surrounding the implementation of major infrastructure schemes in the corridor. Following a process of appraisal and refinement, including establishing the sensitivity of the benefits to changes in the assumed levels of various parameters; the final Transport Plan has been developed. This contains an integrated package of 47 schemes covering a wide range of costs and impacts, and to be delivered by a range of different agencies.

12.5.3 The main schemes and policies in terms of cost and the contribution to the transport solution are:

Public Transport:

- Integration of public transport networks and fare structures.
- Improvement of the rail junction at Trent Lock
- Renewal of signalling and track changes between Trent junction and Nottingham
- Modernisation of Nottingham Midland Station with extra platform
- Improved rail services between Derby and Nottingham
- Park and Ride to Nottingham via the Proposed Parkway Station
- NET extension to Clifton
- Improvement of Bus services in Clifton and between Kegworth, and Nottingham
- Modernisation of buses and services

Highways:

- Dual carriageway A453 between Clifton and Nottingham
- M1 junction 24 improvement with A50 flyover to M1 (south)
- A453 widening to 4 lanes through Clifton with junction improvements traffic control and pedestrian facilities

Complementary measures:

- Comprehensive strategies for walk and cycle modes

Demand Management and Travel behaviour:

- Workplace Parking Levy or equivalent commuter charging in Nottingham
- Education and policies to influence future travel behaviour
- Reduced public transport fares
- Parking Controls and Charges

12.6 IMPLEMENTATION

12.6.1 It is clear from the detailed appraisal that has been carried out that the Recommended Transport Plan represents the best way of addressing the transport problems of the corridor. However the wide-ranging nature of the Transport Plan means that a large number of agencies and bodies will need to be responsible for its delivery. Each of these organisations has their own regulations that govern investment decisions and in a number of cases there will be the need to complete statutory procedures before schemes can be implemented. The Study has addressed the issue of implementation and indicated a phased programme up to and beyond the study horizon. It is clear, however that there are certain key aspects that need to be borne in mind when implementing the plan, if its underlying philosophy is not to be undermined.

- 12.6.2 From the outset the Study has sought to be as inclusive as possible and has taken every opportunity to encourage widespread contribution by local organisations and people. In particular the establishment of a Wider Reference Group (WRG) with representatives from local groups with interests in local transport, environmental and development issues has been particularly beneficial. Apart from the WRG consultations and formal consultation with all relevant Local Authorities an extensive public consultation exercise was staged on the “consultation options”.
- 12.6.3 The Study Team believes that through the integrated approach to transportation planning, the Preferred Transport Strategy and Transport Plan have gained considerable public acceptance.