

6.2 SCHEMES SUSPENDED, AMALGAMATED, OR REJECTED

APPENDIX 6.2

SCHEMES SUSPENDED, AMALGAMATED, OR REJECTED

INTRODUCTION

This Appendix lists and describes the schemes on the reference list - the 'Long List' – that are not in the Final Options from which the Preferred Option is selected. Schemes were transferred out at various stages during the development of schemes and Options covered in Sections 6 and 7 of the Report.

An underlying principle in the appraisal process has been to retain schemes unless and until there are sound reasons to reject them. The stage when most of the sifting occurred is when the Options were being developed into contenders for the final Study recommendations.

The appendix gives each scheme a status. Suspended schemes are those identified during the Study as having some merit, but not necessary to form part of a Preferred Option. Rejected and amalgamated schemes are self-explanatory.

B4 New Station at Ilkeston, B12 New local Rail Stations at Sandiacre, Wollaton, Beechdale, and Faraday Road

Scheme for a two-platform stations were investigated. Whilst in each case a feasible layout is possible and could be considered for a future Transport Strategy for Nottingham, they are not necessary for a Preferred Option for the A453 corridor.

Status: Suspended

B16 Upgrade to Castle Donington Line (to allow passenger services to Birmingham)

The scheme would create a new more direct Nottingham – Birmingham route not via Derby. Derby is a popular destination from both Birmingham and Nottingham, so any diversion of the existing level of services would be counter-productive. The new route would have to be additional to services via Derby. The journey would be approx.10 mins. shorter than the existing quickest. It lends itself to a half-hour peak time express limited stop service competing with the journey by road, stopping at Beeston and a new P & R and general station at Castle Donington, possibly with Park and Ride.

To facilitate the service a flyover is needed at Trent junction on the Nottingham – Donington axis over the London-Derby tracks. The prospect for this scheme estimated to cost £10-15m is not good, given the calls on railway funds.

The limited number of trains in the service, together with the expense of the flyover and the fairly small time advantage over the existing rail route mean that the scheme would not be viable unless it could increase its potential for modal transfer, a situation likely to occur only in extreme conditions of highway saturation. This in turn would occur only if the favoured Options could not provide the desired improvements. The service via Derby would in any case be more attractive if it were improved and run with modern rolling stock.

It is accepted that a more strategic assessment could have a different view. It is not inconsistent that the scheme is regarded more favourably in the M1 corridor Study in the East Midlands(See also B25 below).

Status: Suspended.

B18 New Nottingham to Melton Mowbray Service via Test Track

The scheme creates an alternative route to the Midland Mainline, by joining the Leicester-Peterborough Line at Melton Mowbray, enabling a link to the East Coast electrified route.

The advantages of the alternative for the A453 transport corridor are limited, provided that the current capacity limitations of the MML at Trent junction and the approach to Nottingham are cured by scheme B3. The latter scheme is understood to be a high priority for the Rail Authority.

The track between Melton and Stanton on the Wolds is privately owned by Alstom, the Test facility company, which has made a substantial investment in the track over the past two years, electrifying and upgrading for the testing of high speed trains. The scheme could not realistically proceed unless Alstom wish to sell or would agree to a re-location.

Between Stanton and the former colliery line north of Cotgrave the scheme involves the construction of a new rail route across open countryside. The Wolds landscape is currently unspoilt with a rolling farmland topography with a prominent scarp onto the Trent washland south-west of Cotgrave. The new link would have a high environmental impact.

Status: Rejected

B19 New Station at Long Eaton Central, and B20 New train service via Long Eaton Central to Nottingham

A station site was investigated immediately east of the low level track on the north side of Nottingham road. The station would serve a different catchment to the existing southerly one on the Midland main line. However, as with B4 and B12 it is not necessary for a Preferred Option for the A453 corridor.

Status: Suspended

B21 Electrification of Midland Mainline

This scheme aims to improve the performance, convenience, and service level for this main rail route. Midland Main Line are well advanced in their plan to introduce a new fleet of high speed diesel powered trains which are expected to match the performance of the current East and West coast main line routes at less cost. Electrification is not necessary to achieve the improvements sought, and this aspect can be rejected.

Status: Rejected

B22 Four tracking of Midland Mainline

The aim of this proposal is taken to be to raise the capacity and flexibility of the Midland Mainline route. The route extends from St Pancras to Nottingham, Derby, and points further north, and is the foremost rail route in the study area. Creating four tracks would

- Improve reliability by providing an alternative during maintenance work
- Reduce competition for track possession with other services on the route
- Potentially reduce journey time by reserving track for express services

Its benefits are not disputed, but to realise them fully would require all the 'pinch' points from London northwards to be improved. These are not all stretches of two track, but include a variety of signalling/capacity problems like the one at Trent Junction north of Ratcliffe on Soar power station where the triangular Derby/Nottingham/London junction involves services crossing over each other's tracks and is served by obsolescent signalling.

The Rail Authorities' view is that there would be adequate capacity on MML if Trent Junction major scheme were implemented. Anything further is beyond the scope of this Study.

Status: Rejected

B23 Increase loading gauge on Midland routes

The need for this scheme would be to serve and promote railfreight. There have been plans in recent years for schemes to create a long distance railfreight facility running along or broadly parallel to the Midland Main Line. However, freight in the A453 corridor is much more influenced by issues of access, transfer of goods, security, journey time and reliability. Increasing the gauge would have little effect in the current situation, but could more appropriately be considered in its full context. It is an appropriate subject for strategic Study going well beyond the limits of the A453 corridor.

Status: Rejected

B24 Rail link between Parkway station and East Midlands Airport

The engineering feasibility of this scheme has been investigated.

Two route corridors appear to be available

- a) a northerly route using the Castle Donington line from north of Parkway, including the existing bridge under the M1
- b) a route south of the A453 carried on a new bridge over the M1. They have not been identified as separate schemes as neither is realistically feasible on engineering grounds.

A northerly route would face the steep slopes between the airport and the M1 rail bridge, leading to track gradients in the order of 5% or a rail tunnel. The route would either have to be in tunnel under the runway and taxiway, ending in an underground stop at the Air Terminal, or skirt around the west side of the runway at a safe distance, passing the south side of the freight buildings at ground level to reach the Terminal. Neither is a realistic

proposition and can be recommended for rejection without having to take into account their considerable other impacts.

A southerly route would branch off the Midland main line south of A453 and cross the A6 on a new bridge, and M1 on a new structure north of the existing Kegworth Road bridge. It would then pass through the Pegasus business park to approach the Terminal. In principle this route is feasible, but is inferior from every aspect to light rail alternatives between the Airport and Parkway, except for its theoretical possibility of a through service to the Airport. It might however have a role in the national and longer term context.

(N.B. A rail link between MML and the airport not directly from Parkway is a separate scheme B27).

Status: Rejected

B25 P&R off A50 Cavendish Roundabout

If scheme B16, the Castle Donington Rail line, were re-opened and used for passenger services this Park and Ride scheme could siphon off road some road trips in the A453 corridor. It is however wholly dependent on B16, which is suspended.

Status: Suspended

B26 Rail based Park and Ride at Trowell

A Park and Ride facility in the Trowell area would have potential to attract commuter traffic from the M1 motorway onto public transport, but would have very little effect on the A453 corridor.

Status: Suspended

B27 Rail Link from Midland Main line south of Kegworth to E M Airport

This scheme was identified in the search for alternatives to the more northerly rail links to the airport in scheme B24. A link would be fairly straightforward in engineering terms, but would require a short section of tunnel under the M1 motorway and the A453. It would also involve level crossings in the Pegasus Industrial park area, and necessitate extensive alterations in front of the terminal buildings. Within the time span of the Study, bus or possibly a light rail connection later, are more viable connections between the airport and the national rail network, but it may be prudent to protect a route for a heavy rail connection.

Status: Suspended

C2b: NET extension to Clifton: Queens Drive Route

C4b: NET extension to Beeston Queens Drive Route

Or C4c: NET extension to Beeston combined with Clifton Line

These schemes are amongst the options being investigated by the NET consortium. They are direct alternatives to the Wilford and University routes for Clifton and Beeston respectively and the choice is mainly of concern to the scheme promoters, in particular Nottingham City Council with their broader responsibilities. For this Study the competing routes are fairly similar in their overall effect. Analysing one representative route is therefore sufficient for the purpose of the A453 Multi-Modal Study.

Status: Suspended.

C5 Stand-alone Light Rail Shuttle between Parkway Station and EMA

This scheme has a valuable characteristic in that it would create a transport channel independent of the heavily loaded road network around J24 of the M1 and so offer high reliability and attraction. However, it would be a large investment highly dependent on gaining a minimum patronage to make it worthwhile. For the Study period this is unlikely, but should there be any change in the major expansion plans for East Midlands Airport, this scheme should be re assessed.

Status: Suspended.

C6 NET extension from Clifton to Parkway

This involves 7Km of route through open countryside with negligible potential for extra patronage. It therefore would operate as an express service between Clifton or Nottingham and Parkway (or in conjunction with C6, East Midlands Airport). It is uncommon for a light rail service to be introduced for these conditions. LRT needs to pass through dense urban development to achieve the short-trip service that is suited to it, in order to stand a chance of economic viability. The journey times for the longer trips would be uncompetitive.

The cars are designed for short trips with a large ratio of standing room to seating. This line would need specially designed cars with extra seats not suitable for the rest of the NET system.

There are alternatives for the same trips, by express bus with route priority, or by rail with shuttle bus from Parkway to EMA also with priority at M1 junction 24, at much lower cost. The cost for the whole route would be in the order of £0.5m to £5m instead of £120m to £140m for NET.

It has one advantage over the alternatives for trips between Nottingham and Parkway or EMA in that it uses a separate transport channel free from congestion between the main centres (i.e. no transfers required). However, unless there is significant development along the route, which can at present be regarded as only a very slight possibility, this would not outweigh the disadvantages. The prospect could change with any greater expansion of East Midlands Airport, and in that case it would be appropriate to the review the scheme.

Status: Suspended.

C7 P&R at Parkway for NET users

Depends on C6 above

Status: Suspended

C8 NET extension from Parkway to EMA

By itself this fulfils the same role as C5 above, but depends on having the NET extension from Clifton to Parkway in place. Again, it should be included in any review of major expansion of East Midlands Airport.

Status: Rejected

C9 NET extension to Gamston, C10 NET extension to Edwalton, and C15 NET based Park and Ride at Edwalton

These schemes have been identified outside the Study, as part of the wider considerations of the future of Light Rapid Transit schemes in Greater Nottingham. Although they impinge on the transport movements more closely aligned with the A453 corridor, the Transport Model indicates that they would not be a significant influence.

Status: Suspended

C11 NET extension to Trowell Motorway Service Area, and C12 NET based Park and Ride at Trowell MSA

The scope for routes for light rail north of the A52 at Bardill's roundabout is extremely limited. The line should go through Stapleford on the existing B6003 but there does not appear to be sufficient width for an LRT line to be accommodated without removal of general traffic. Between the A52 and the southern end of the High Street the road is mainly residential suburban, and traffic restrictions of the level needed would not be practical.

For the High Street itself, an alternative diversion route for general traffic would have to be found, and no such route is apparent. Stapleford therefore effectively presents a major obstacle.

Routes avoiding Stapleford would have to go either west at least as far as Toton sidings or east to Bramcote. Neither seems likely to make a viable scheme.

The motorway service area at Trowell could be a key public transport commuter connection. The service area is quite close to the Trowell rail loop and to the A609 Nottingham- Ilkeston road. Bus or rail based systems appear more practical alternatives. As this is marginal to the A453 and has a larger strategic element, it is not proposed to investigate further.

Status: Rejected.

C14 Park & Ride at M1 junction 23a

As a LRT based facility this scheme is dependent on the NET extension to E. Midlands Airport, which is rejected, but could also be bus-based. It would however be the least competitive of several Park and Ride Options for the A453.

Status: Rejected.

C16 Conversion of Robin Hood Line to NET

The Robin Hood line between Mansfield and Nottingham serves a north-south travel movement with negligible bearing on the A453. The short section of NET route thus created west of Nottingham Midland station could be used by scheme C4 the NET extension to Beeston, but there is no value in assessing the scheme in this Study.

Status: Rejected.

D6 Changes to bus fare structure and level

Changes to the fare structure have been made recently by the main operators and they continue to monitor and make adjustments. There does not appear to be any advantage in suggesting any different structures. Change in the overall level of bus fares is in scheme K8.

Status: Amalgamated with scheme K8

D7 Hubs and interchanges on Nottingham ring Road

Status: Amalgamated with C3

D9 Guided bus technology at

- a) **Clifton Lane east bound approach to Crusader Roundabout and Clifton Lane east bound approach to Farnborough Road signals**
- b) **Ring Road Locations**

These schemes do not offer any significant advantages over conventional bus priority measures in their particular locations, but do sterilise potential and existing highway space and result in complications at bus stops. Bus lanes would provide additional carriageway useful in emergency or during road maintenance. Guided bus tracks need relatively long distance between stops. Stops need to avoid passengers crossing dense or high-speed traffic, and some contingency is required to cater for breakdowns. Junction priority can be provided on the existing highway without the need for and considerable expense of guided bus technology, which make it relatively a very expensive Option.

Status: Suspended.

D10 Bus route modifications

- a) **more cross city routes**
- b) **city centre circuit for Park and Ride buses**

Nottingham City Transport reorganised bus routes in the city centre in September 2001. Radial services effectively terminate at the edge of a central core, with certain services from the north and east continuing in a loop around the core before commencing the return journey. This is not compatible with 10a. The choice of which of the services should run round the loop and which should terminate is a matter for detailed separate consideration by the bus operators and Local authorities outside the Study.

The performance of the new system cannot be judged in 2002 because of operational problems, in particular a shortage of drivers. Whilst 10b has some appeal, P&R buses could become entangled in City Centre congestion, causing unreliability in the service schedules.

The performance of the new arrangement needs to be monitored before any additions to services can be suggested, although the potential is created by the effects of demand management schemes, and it will be important for achievement of mode transfer and the success in general of local public transport to respond to any opportunities that appear.

Status: Suspended.

D13 Bus based Park and Ride adjacent to M1 junction 24

A P&R site at this location would be able to transfer some A453 trips onto public transport and provide relief for the A453. The sites at Parkway Station and Clifton south would be more viable, making this scheme unnecessary for the core of schemes in a Preferred Option.

Status: Suspended.

E1 M1 to Clifton dual carriageway with at grade junctions

The standards for the A453 in the Study area are influenced by junction 24 of the M1 at one end and the urban constraints of greater Nottingham, either through Clifton, or at the A52 Ring Road at the other. Grade separation already exists at one junction. Where junctions involve left-off or left-on turning movements only, grade separation need not be involved. Overall, scheme E1 need not be considered. The choice of at-grade or grade separation should be assessed taking account of these considerations as part of the similar dualling scheme E2.

Status: Rejected.

E3 M1 to Clifton Single Carriageway with grade separated junctions

The objective of this scheme is to improve safety and enable traffic to flow smoothly by removing delays caused by turning traffic. Significant contributions to these problems are made by the steep inclines at Wright's hill and Brands hill, exacerbated by slow moving traffic joining and starting uphill from the left. Grade separation alone would not fully solve this problem. Scheme E4 would deal with the safety issue whilst the larger single c'way scheme E25 tackles the flow problems with climbing lanes.

Status: Amalgamated with E4 and E25

E5.5 Clifton dualling on-line in cutting with extended bridges and simpler junctions

Scheme E5, the on line dualling that was the Highways Agency's proposed scheme in 1993, is to be modified in the light of current Government Policy and the resulting updating of guidance and standards and identified as E5a. The merits of simpler junctions and extended bridges at crossings have been taken into account in E5a.

Status: Amalgamated with E5a, the modified Red Route

E6 Clifton dual carriageway in cut and cover tunnel

A cut and cover tunnel on the line of the existing A453 would not achieve degree of improvement in the environment hoped for compared with scheme E5a. Construction could be expected to take up to a year longer than E5 or E5a and cause severe disruption. The scheme would not avoid impact even when completed because of the open cut around the junctions and the continued existence of the local road at surface level. There would be no overall reduction in the vehicle emissions by enclosing the road in a tunnel.

The advantage of a tunnel is in enabling easier cross movements and removing noise and visual impact. The disadvantages, apart from those already noted, are the high construction and maintenance costs. If a tunnel scheme were adopted in principle, each metre of the length of tunnel would have to be justified and would probably result in a design with gaps where the route was in open cutting.

During the formative stages a tunnel scheme would be interchangeable with a scheme in cutting. There is therefore no need to separately pursue a tunnel scheme as long as E5 or E5a is designed retaining the possibility of roofing over any parts of the main section in Clifton. Detailing of any on line dualling scheme would be subject to further study by the promoting agency.

Status: Suspended.

E4 A453 M1 Clifton single carriageway improvement with at-grade junctions.

E7 A453 Clifton single carriageway scheme with minor junction improvements and restrictions.

E8, E10 and E11 A453 Clifton Green route, Purple route and Grey route.

E9 Clifton Eastern Bypass.

E12 Clifton Eastern Bypass (former Blue Route).

E15 A453 dualling with bus only lane between the Power Station and the M1, E17 Strategic Route A50 – A52 at Gamston or further east.

E19 Strategic Route from A50 to A46 north of Widmerpool.

E25 A453 M1 – Clifton single carriageway scheme with hard strips and lighting.

E26 4th Trent Crossing at Colwick.

E27 A453 Clifton single carriageway eastern bypass.

The options for the A453 major highway schemes are considered in depth elsewhere in this Report.

E18 Construct a flyover at M1 to relieve congestion problems

The aim of this scheme is to enable the junction to cope with forecast levels of traffic. Scheme E13 for the M1 J24 major improvement, fulfils this requirement for the forecasts produced within this Study.

Status: Amalgamated with E13.

E20 Provide access from M1 southbound to A46 at M1 J21a

This is located a considerable distance, some 20 miles from the Study area, and cannot be properly assessed within the limits of the Study information. It is a matter for the concurrent M1 Study.

Status: Rejected

E21 Provide access from A50 to M1 southbound at J24a

Design work on the major scheme for improvement of M1 Junction 24 has incorporated this suggestion.

Status: Amalgamated with E13

E22 New link from A453 to M1 northbound at Donington Park J23a

The examination of traffic flows and demand indicate that this scheme is not needed if junction 24 is improved.

Status: Rejected

E23 Kegworth Southern Bypass

An A6 bypass of Kegworth has a strong local focus. The village suffers from the trunk road traffic through its centre and would greatly benefit a bypass. From the strategic transport viewpoint the A6 at this point caters for predominantly south east-north or north west movements, and the A453 is relatively independent of the influence of A6 traffic. The main interaction is at M1 junction 24, and the effect of a Kegworth bypass would be to alter the pattern of A6 traffic, encouraging transfer to the A453 west. The bypass would run between the A6 south of Kegworth and the A453 west of the M1, most likely directly into the roundabout at junction 23a. The effect on Junction 24 has been taken into account in scheme E13.

The scheme therefore need not form part of the core of schemes in a Preferred Option for the A453.

Status: Suspended.

F1 Electronic vehicle guidance systems

This scheme is the use of detectors buried in the road surface to control the movement of vehicles and promote a smoother flow of traffic and higher capacity.

It is a 'high tech' innovation that has to be regarded as part of a long term vision for transport. However, implementation would require certainly national and probably international intervention, with considerable obstacles to overcome. It cannot therefore be relied upon to happen by the latest Study forecast date of 2021.

Status: Rejected

F2 Reallocate capacity, car sharing (high occupancy lanes)

This scheme can be amalgamated with F12 (prioritisation of road space) and K4 (encouragement of car sharing in travel behaviour).

Status: Amalgamated with F12 and K4

F3 Dedicated lanes

Dedicated lanes is taken to mean traffic lanes on the highway reserved for use by particular classes of traffic, without specifying which.

The principle is already widely used as a means managing the highway network, mainly applied as bus lanes, but it could be extended for HGVs, high occupancy cars, cycles, even shared use taxis, and therefore should be included in the Study.

To be evaluated it has to be identified as specific applications. Such applications derive from other listed schemes D1,D2,D4,D9,F2,F12,J9, and these cover all the possibilities under dedicated lanes.

Status: Amalgamated with above listed schemes

F4 Variable speed limits

The technique of variable speed limits is most commonly used on motorways as part of a variable message signing system (see F6 below). Future extension to lesser roads for this purpose is conceivable. It could be incorporated in an extension of an Urban Traffic Control system, where the remote control and monitoring of traffic conditions would be essential enabling elements of such a scheme.

There are potential benefits in variable speed limits both for road safety in the case of incidents or adverse highway conditions, and for smoothing traffic flow and improving the roadside environment, but they have not yet been found worthwhile for smaller scale application on traditional all-purpose roads, in effect the situation for the A453.

Status: Suspended

F6 Real Time Information (VMS, in-vehicle guidance)

There are two distinct parts to this scheme:

Variable message signing is used mainly on motorways to control traffic speeds and warn of incidents, lane closures or complete road closures. It can have a variety of further uses on lesser roads and in urban areas, for example to indicate parking availability. The system requires a communications network to a control office to enable remote operation. Whilst predominantly gantry signs are used for motorways, verge mounted signs could be appropriate for A453. A remote office controlling traffic management is an essential part of Urban Traffic Control. VMS for the A453 would be more appropriate as part of a UTC than a full motorway style system.

Status: Amalgamated with F5

In-vehicle guidance technology is dictated by vehicle design. Radios are virtually universal and many can be set up to automatically receive traffic messages. The potential benefits for the future lie in refining the information collection and broadcast side of the system – a subject outside the scope of the Study. Screen-based navigation systems are likely to remain a fairly uncommon item of equipment for years yet. They are also independent of official traffic control. They cannot be relied upon as a basis for inclusion in a Study Option.

Status: Rejected

F7 Traffic Orders

This is taken as being Statutory Orders for on-street parking restrictions, speed limits, restriction of turning movements, or restriction of use by classes of road user. All of these are ingredients of other schemes in this Study, and there is no need to treat this separately.

Status: Amalgamated with various other schemes.

F8 Improvements to bottlenecks such as Crusader roundabout

The number of bottleneck sites i.e. particular locations limiting highway capacity, is small. All of them are either Do-Minimum schemes (A46 and A52 junction improvements), are other schemes in the Study, or are dealt with as part of other larger highway schemes. Crusader Roundabout improvement and other junctions on the A453 are included in all the listed highway schemes.

Status: Amalgamated with other schemes

F9 Tidal flow scheme on section of A453 through Clifton (with construction of third lane)

For a tidal flow lane on a single carriageway road to be worthwhile the flow of traffic in one direction has to be much greater than the other in one peak period, with the flows reversed in the other. They also are most suited to substantial lengths of road with no junctions or crossings. The section of A453 where it could be applied is between Green Lane and Farnborough Road junctions. On the A453 there is currently a difference of approximately 15% am. and 5% pm. between these peak flows. Tidal flow lanes require extensive signing and remote control, including overhead gantry signs and secondary traffic signal heads at the existing pedestrian crossings. In these circumstances a tidal flow lane would not significantly improve traffic flow and would have relatively large local impacts.

Status: Rejected

F10 HGV bans (either forced to use A52 or A46, or banned during day time)

Although this scheme would remove heavy traffic from the A453 at least during the daytime, it would cause increases elsewhere on the highway network. The only justification would be if alternative routes available were of a better standard or more able to accommodate HGVs. Of the alternative routes, the A60 and A606 are of similar or lower standard. Although there is some scope for improvement of some sections of the A606 it has sections of frontage development and access on both sides and is heavily trafficked already. The A52 west of Nottingham cannot realistically be improved within the conurbation sufficiently to meet this demand.

For the HGVs affected, the diversions would involve extra mileage and time or scheduling. The imposition of a ban would be significant penalty for the freight sector alone, which would require considerable justification.

Status: Rejected

F11 Minor works to improve the alternative A52, A46, or A606 routes

The possibilities for improvement are on A606 which is currently an alternative route to A453 for longer distance trips from the south. Minor widening of the carriageways at the traffic signal junctions at Plumtree and Tollerton would increase the capacity of the route in conjunction with the A52 Ring junction improvements at A606 and A60 (Do Minimum schemes). They would not however, materially affect the Preferred Option, and are not needed for the A453 Study.

Status: Suspended.

F12 Prioritise users of additional highway capacity with emergency services, public transport and freight operators highest and commuters, journeys to school, college by car lowest

This scheme expresses a principle rather than a scheme capable of direct implementation. The principle is incorporated in the Preferred Strategy.

Status: Amalgamated.

I1 Road User charges

This is one of the key measures being considered for management of demand for road transport. The Study has assessed the effects of workplace parking levy, but because of the wider implications the development of the precise means of achieving the desired management of demand is being pursued elsewhere.

Status: Amalgamated with scheme I2

I6 Ban certain movements

This scheme is incorporated as a matter of course in the highway or traffic management schemes in the Study as far as necessary to deal with the problems it is intended for. There is no need for it to be pursued separately.

Status: Amalgamated

I7 Legislative enforcement for people to leave their cars

This is a generalised description covering a range of possibilities. There is a body of existing legislation restricting car use directly or indirectly, e.g. Bus only lanes, pedestrian areas, parking restrictions. New legislation might be for example, direct restrictions like road fund licence permitting less than every day use, or extensions of detailed indirect restrictions such as new lower speed limits.

Interventions involving further application of existing legislation are elsewhere on the long list of schemes.

New legislation is a national issue. The range of possibilities, and forecasting of the effects, would require a different sort of study looking at peoples perceptions and attitudes at a national level. It cannot be relied upon to significantly contribute to a solution for the A453 corridor transport problems without national application.

Status: Rejected

I8 Extend the application of the Clear Zone concept, including time of day access restrictions and strict emission standards

The Nottingham City Clear Zone was developed and extended in late 2001. The concept is to create a city centre street area best suited to the function of the City centre, which had led to a high priority for pedestrians together with tight restrictions including time of day for access by general and service traffic and public transport. With that level of restriction there is very limited scope for further extension, as walking distances would tend to become unattractive, and essential servicing difficult.

There could nevertheless be some minor future extensions of the Clear Zone in Nottingham, and introduction of them in Derby and Leicester, but the influence of these changes on the A453 corridor would be insignificant.

Local applications on the A453 could only be considered if the route were to be downgraded in the road network hierarchy to an extent not currently considered feasible.

Status: Suspended

J1 Re-structure commodity supply

This scheme implies changes throughout the supply chain. The concept is far reaching. It would involve tracing the transport of food, raw materials, and manufactured goods. To be effective it should include the large amount of travel associated with the commodity oriented part of the service sector of the economy. These are fundamental transport issues requiring study at a regional or greater scale.

Status: Rejected.

J2 Transhipment depots

This is taken as being a form of the existing goods distribution system, in which bulk haulage would be from central origin points to distribution depots, where goods would be broken into smaller packages for delivery to outlets. The essential difference from existing practice, which is in any case along these lines, would be to give a high priority to planning and operating the system to minimise road journeys and HGVs on unsuitable roads.

Whilst there may potentially be benefits in such a system, the various parameters that would have to be brought to bear to make it work would be in direct conflict with the principles of commercial competition by which the haulage industry operates. Under existing transport conditions new Government rules at national level would be needed to alter current practice. If conditions deteriorate in the future distribution could conceivably move in that direction naturally, but the subject is complex and a specialised Study would be required to produce useful conclusions.

Status: Rejected

J3 Expand Subsidy

Direct encouragement of freight by road is not in accordance with the Preferred Strategy.

Status: Rejected.

J4 Dedicated routes

A highway for commercial vehicles or HGVs only. There should be no reason in principle for not having such a facility if the conditions were suitable. However, in the Study corridor the opportunity is restricted to a bypass of Clifton, most likely a western route connecting directly to the Lenton and Riverside industrial and commercial sites. Any Clifton bypass would have to relieve Clifton of through traffic. The benefits of removing cars as well as large vehicles would too great to ignore.

Status: Rejected

J6 Market forces

This scheme is understood to suggest leaving market forces to determine the decisions on transport.

The generalised description is open to interpretation.

In principle it leads to unresolvable conflict with Government policy on transport, which are parameters for the Study. However, pragmatic interpretations of market forces lead towards highway, rail, LRT, and bus schemes already identified and placed elsewhere on the long list. There is therefore no need to consider this separately.

Status: Rejected

J7 Designated Routes

These are routes designated in a road hierarchy as suitable for lorry traffic. Local Transport plans usually have policies supporting this concept. No new routes have been identified in this Study. The major highway schemes would automatically be recognised lorry routes.

Status: Amalgamated.

J8 Taxation

This is similar in principle and effect to J3.

Status: Rejected.

J9 Possible shared Use of bus lanes by HGVs.

There are serious disadvantages to allowing HGVs on bus lanes. Stationary buses would obstruct the free passage of HGVs, and the safety risks to pedestrians and to buses would be high.

Status: Rejected.

K1 Legislation

The comments for scheme I7 apply.

Status: Rejected

K3 Integration

Integration is an important principle in transport planning and part of Government policy. It covers a range of applications identified in schemes elsewhere in the long list: B1,5,7,10,17, C3,6,7,8, D3,7,10,11,18, G6. No other applications are evident. It therefore need not be considered separately.

Status: Amalgamated with various other schemes

K5 Environmentalists

This is taken to be the influence of environmental campaigns on public awareness and official policies. It is not possible to make an objective assessment of such an influence. Specific scenarios might be considered e.g. if a major component of an option package were abandoned sometime after the end of the study, what would be the effect? It could be expected that the proposals would logically turn towards other one of the study options, unless environmental campaigning resulted in all of them being rejected.

Status: Rejected

K7 Public transport subsidies

Incorporated in K8. Lower public transport fares with initial subsidy is part of the Preferred Option.

Status: Amalgamated