



**Department of the Environment, Transport and the Regions**

**MULTI-MODAL STUDY  
A453 NOTTINGHAM TO M1 JUNCTION 24**

**WORKING PAPER NO 30**

**Summary of Land Use Planning Implications of Schemes and Options**

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## **1. INTRODUCTION**

In February 2002, following a detailed three-stage appraisal scheme, the study team short listed an initial schedule of over 150 possible schemes to around 100 for input into the Multi Modal Strategy. These schemes have been developed into potential Multi Modal options for the A453 Corridor designed to test the various effects and to subsequently inform a preferred option that meets the objectives for the study.

Since this time, analysis has been carried out into the potential effects of the schemes in the form of the defined options. As this work has evolved it has become apparent that the relationship between transportation and land-use planning so inherent within the overall study process should also be recognised at this critical final stage of the work. Therefore a strategic land use analysis of the schemes and options has been undertaken as part of the process of evolving the preferred option. At the recent public consultation events it was clear that there is considerable concern as to the possible implications of transport interventions on future development pressures.

The GOMMMS guidance provides little reference to such an approach and an evaluation of other published studies has thrown up little further in the way of precedents. The team have therefore developed an approach that enables both an assessment of the effects of schemes and also an analysis of the potentially different implications of the options in strategic terms. Critically, this piece of work is not designed to appraise the emergent strategy against existing policy as this has already been undertaken through the AST's. The focus of this report therefore, is to try to predict what the further possible land use implications of the various options may be.

## **2. APPROACH & REPORT STRUCTURE**

The remainder of this report outlines the process undertaken and the key findings. The work is structured as follows: -

- **Common Elements**  
There are a number of schemes that are common to all of the options being proposed. An overall assessment of these schemes is described relating to both individual and combined effects.
- **The Three Consultation Options**  
Whilst there are a number of common elements that exist across the three options there are also a number of marked differences that are highlighted and assessed.
- **Shortlist Options**

In addition to the above, there are three further shortlist options that comprise tests based on Option A of the Consultation Options with a core package and local variations in highway provision in relation to Clifton.

- **Further Considerations**

Having established the overall land use planning implications for both the common proposals and the individual options, there are two further route warranting analysis in the context of this report. These are as follows: -

- The Clifton Eastern Bypass to A606 scheme (the former Blue Route at the the 1996 Public Enquiry)
- The Red Route (dual carriageway standard)

- **Conclusions**

The findings of the above work are summarised together with an assessment of the significance of the likely impact/relationship.

### **Starting Points / Assumptions**

In analysing the effects of the proposed schemes and options the following starting points have been assumed: -

- The land use planning implications have been focussed on the direct effects for the A453 corridor itself. The implications on wider areas such as the city of Nottingham or Derby have not been addressed.
- In terms of the analysis, the impacts of the schemes north of the River Trent have been limited to general coverage.
- The approach for East Midlands Airport has been to follow the policy line as set out in the draft RPG. Local impacts of the A453 are reflected, however wider more strategic implications are assumed to be covered by the M1 Study.
- When addressing issues in relation to the potential bypass options it has been assumed that there are no intermediate junction proposals.
- The assessment of all schemes and options is on the basis of consultant knowledge and desk based information – Consultation has not formed part of the work, however this could be carried out at a later date if appropriate.

## **3. KEY FINDINGS**

The key findings of the strategic appraisal are outlined below and a schedule of the impacts in relation to each individual component of the defined options is shown at Appendix 1.

### **3.1 Common Schemes**

Those common schemes that form the basis for the Multi Modal Strategy cover both those that are already planned and those that have been included as a result of the Multi Modal study. Both include public and private transportation interventions as well as traffic management and behavioural actions. The key impacts of these are outlined below.

### **Common Schemes – Already Planned**

Of the schemes that have been included in the A453 Multi Modal strategy the most significant is probably the development of the East Midlands Parkway Station and the affiliated East Midlands Airport shuttle bus service. The development of the parkway station facility will require a significant site. The RPG sets out clearly the future for the airport and the airport shuttle bus service linked to the Parkway Station will be crucial in enabling the sustainable approach to growth required.

The alterations proposed to the A46 and A52 junctions at A60 and A606 are other schemes already planned that could have a direct land use planning impact. The improvements to access into Nottingham from the East will inevitably lead to increased demand for this implication could be even more significant when taken in conjunction with the possibility of a form of Clifton bypass which would open up access to the M1 also.

The Gamston Park and Ride facility will, in our opinion have little impact in land use terms other than the development of a site of scale to make the scheme viable. The implementation of the Nottingham Net Line 1 is really to serve the areas to the north of the study area and as such will not really directly effect the A453 corridor. Similarly, it is not felt that the implementation of a city bound bus lane on Farnborough Road or the extensions of the Nottingham City centre clear zone will have direct land use effects on the A453 corridor.

### **Common Schemes - MMS Additional**

The additional common schemes can be broken down as follows:

1. Rail Schemes
2. NET Schemes
3. Bus Schemes
4. Traffic Management Schemes

#### **1. Rail Schemes**

There will clearly be benefits in terms of the potential for increased patronage and improved service as a result of rail interventions. In general, however, it is not anticipated that the alterations proposed will have a significant impact on future land use planning. The major exception to this being the provision of a park and ride facility linked to the new Parkway Station. The development of the station is anticipated to attract major patronage and an extended park and ride facility will necessarily require a site of some size.

The second possible impact from the Rail Schemes comes from the redevelopment of Nottingham Station. Depending on the scale of the proposals this could require land to be found for development. In addition, experience of improvements to stations in London and Manchester has shown that increased demand for retail and services can result.

We would also anticipate that there would be minor implications arising from the provision of the park and ride facility in Gedling, which has already been planned for the in the current local plan.

The final impact that could arise as a result of the improved rail provision is the assistance that this might provide in terms of the regeneration agenda in Nottingham. There are significant areas designated under a range of regeneration banners in the south of the city and the potential to link these to an effective public transport system could be a factor in their ongoing success.

## **2. NET Schemes**

The implementation of the various routes of the Nottingham NET in the south of the city will have a major impact on future land use planning. Experience from other similar systems such as Metrolink in Manchester has shown that the implementation of a quality public transport route and the associated stops and stations leads to increased demand for development as new areas become accessible. In our minds the development of the NET could add significantly to the high levels of development pressure already being felt in the southern part of greater Nottingham.

The implications of the park and ride facility linked to the NET system in Clifton South also has implications for land use planning. This site is currently allocated for housing development and its development for a park and ride facility could lead to the need to allocate an alternative new housing site(s) to make up for the land taken.

## **3. Bus Schemes**

The majority of the bus schemes advanced as common parts of the options will not, in our view present any significant land use planning issues.

The most obvious possible exception to this is the proposed Park and Ride site at Junction 23a of the M1. This would require a site of considerable scale. The allocated land around this location at present has been allocated for business in the form of the Pegasus Business Park. Any park and ride site would therefore require an additional site possibly in conflict with open countryside policy. However this scheme has not been included in the shortlist options.

In addition, local parking is proposed at major bus stops in Kegworth and at Ratcliffe on Soar power station. This will clearly not have the impact of a proposed park and ride scheme, however local land use issues could arise as the need to deliver sites is brought forward.

## **4. Demand Management Schemes**

There are unlikely to be direct land use planning impacts as a result of the proposed Demand Management schemes.

In terms of the work place parking levy, it seems clear that coupled with the government's approach to flexible parking standards in urban areas, this will be likely to reduce the amount of parking attendant to new development. Traffic demand management could have implications for the business market in the City and the location of future business. This will

be dependent on the strength of the market in Nottingham for offices and commercial premises and is essentially an economic development issue.

At first sight traffic demand management could be seen as a negative influence on economic development. However the overall effect of the transport strategy is to reduce congestion and improve accessibility hence potentially producing a stimulus. Overall the effect is likely to be neutral, but is being studied in greater depth elsewhere.

### **3.2 Consultation Options**

Outlined above are the issues arising from the common schemes that are constant to all the options for the A453 Corridor. In addition to these common schemes, the study team are assessing three Options that will include the above schemes but in the context of different approaches. These three Options can be summarised as follows:

- Option A - Public transport improvements with moderate level of highway construction and demand management;
- Option B - Public transport improvements with major highway construction and demand management; and
- Option C - Public transport improvements with minimum highway construction and demand management.

It is from the analysis of the above three Options taken with that for the short-listed options outlined later in this report, that a preferred Option will be developed. Outlined below is an assessment of the potential impacts from the additional schemes included each of the three Options. This analysis is also summarised in the table at Appendix 1.

#### **Option A**

In terms of highway improvements, Option A includes both the dualling of the A453 M1 – Clifton link and a single carriageway Clifton bypass. In addition, major improvements are included for Junction 24 of the M1 with an A453 flyover.

In a land use context, the dualling of the A453 with the improvements to the M1 at Junction 24 and the increased accessibility that will necessarily result from the implementation of such schemes would be likely to increase the demand for development off the A453. This would be particularly true in relation to the housing market, which is already exerting considerable pressure on this part of south Nottinghamshire.

In terms of the single carriageway bypass, even if one assumes that there will be no intermediate junctions from this road, there will be significant land – use effect. There will be an increased pressure for development as a result of the implementation of the road. It is likely that, over a 20-year time frame the bypass could be seen as a natural boundary for development and Clifton could well grow southwards to meet it. Experience elsewhere has shown this to be the case. Whilst the land is currently a protected green belt, the implementation of a new road creates pockets of land where developers can potentially argue

that the “openness “ of the green belt has been compromised. This in turn leads to pressure for development.

To a minor degree, improvement of the A606 junctions at Plumtree and Tollerton could also have an impact in land use terms, particularly when taken in conjunction with the bypass. This could create a potential link to the M1 from the east of Nottingham and the surrounding settlements and could lead to increased pressure for development as a result of this improved accessibility. However, given the single carriageway nature of the A453 bypass the effects of this might be limited.

### **Option B**

The schemes included in Option B are similar to those highway schemes described above under Option A. The dualling of the M1-Clifton route, a dual carriageway Clifton bypass, improvements to the M1 at Junction 24 and the minor improvement of the A606 at Tollerton and Plumtree.

The implications of those elements common to both options have been addressed under Option A. The main difference between Options A and B therefore lies in the implementation of the Clifton Bypass. Under Option A this road is proposed as a single carriageway scheme and as such the impacts in land use terms have been described as moderate/major. Under Option B, this road is a dual carriageway and could therefore have a more significant impact.

As with the single carriageway bypass, the dual carriageway scheme would result in the same pressure for the development of Clifton southwards for the same reasons. The real difference in land use planning terms is the impact of such a road on the wider area. Taken with the improvements to the A606 junction at Tollerton and Plumtree junction improvements and the A52, this road could effectively act as a direct link to the M1 from the East of Nottingham. This significant improvement in current accessibility would inevitably lead to increased levels of development pressure in locations such as Tollerton, Keyworth, Ruddington and Radcliffe on Trent as well as East Nottingham.

### **Option C**

Effectively, Option C contains the minimum highway improvement rather to influence the A453 corridor through the implementation of public transport improvements and demand management.

Whilst there will be some short-term relief of congestion as a result of the proposals, in land use terms, the minor improvements to the A453 and the M1 at Junction 24 will be unlikely to result in significant impacts. It is likely that the improved capacity of the road could add to the existing demand for development, but this would not be significant when compared to implications of both Options A and B, especially as capacity would be reached between 2011 and 2021.

The planning controls to encourage public transport / walking and cycling will require further definition, but if these were effective, it could lead to more sustainable patterns of

development such as the concept of clustering and mixed use developments outlined in latest government guidance.

The implications of parking levy charges and public transport fares have been outlined in Option A above.

### **3.3 Short-listed Options**

In addition to the implications of the consultation options as outlined above, this report considers the implications arising from the three short-listed options based on variants of Option A. As these options are based on the common schemes and specific elements outlined for Option A the impacts in land use planning terms are assumed to remain unchanged apart from the key variations. These are outlined below in terms of the core package and the three options, Options A (i), D and E.

#### **Core Package**

##### **Public Transport**

In terms of public transport the main differences from the schemes under Option A are the removal of the proposed park and ride scheme at Junction 23A and the limitation of the car parking provision at local stations to Beeston only. It is not felt that either of these changes will result in significantly altered land use planning effects. The reduction in the number of stations with car parking will necessarily reduce the amount of potential site requirements, however, the effects would be unlikely to carry much further than these direct implications.

In terms of the Park and Ride scheme at J23 of the M1, the removal of this site would help to potentially avoid conflict with open countryside policy and would remove the requirement for a major site designation on land that is already under significant pressure for development.

##### **Demand Management**

No Change from Option A

##### **Highway Provision**

The removal of the highway junction improvements at the A606 will not have a significant impact in land use terms. This element as identified under Option A was described as having only a minor impact in itself. In terms of increasing demand for development the key is the effect of the Clifton Bypass.

Similarly, the alterations to the M1 J24 flyover to take in the A50 west to the M1 south, is not likely to be significant in land use terms other than the land take. Like the proposal under Option A this would have the main impact in terms of increasing accessibility and demand when taken with the M1-Clifton dualling scheme.

### **Option A (i)**

Apart from the above core package changes Option A (i) reflects the schemes contained in Consultation Option A with only very minor changes that would not effect the land use implications of the overall Option.

### **Option D**

The ramifications from Option D are that with a lower grade road with 30/40mph speed limit the level of development pressure should be reduced and the nature of the development pressure that does occur will be more likely to be residential. This is due to the fact that the 30/40mph speed limit would reduce the attractiveness of the route for strategic commercial traffic seeking a quick route to the M1.

### **Option E**

The On-line dual carriageway through Clifton included under Option E differs significantly from that under Options A, A (i) and D above. The key here is the sinking of the road in to a dual carriageway cutting throughout, with grade separated junctions. This could have the effect of creating a more strategic link between Nottingham and the motorway but for the imposition of a 40mph speed limit inherent in the scheme. As a result, it would be unlikely to result in significantly greater pressures for development than those outlined under Option D.

## **4 FURTHER CONSIDERATIONS**

As outlined in the introduction to this report, the public consultation that has formed such a key part of the overall A453 MMS study process has highlighted an additional area of concern. In terms of land use planning, these relate to the possible permutations of the Clifton bypass in terms of the eastern bypass (Blue Route) based on a single carriageway option and the Red Route rural standard Online (dual carriageway).

### **The Blue Route**

The Blue Route was promoted as an objector's alternative at the 1996 public inquiry into the Clifton Bypass options, and has subsequently been promoted by other parties.

The potential land use impacts from the development of the Blue Route option for a Clifton Bypass would be considerable. The provision of a southern link road, albeit in single carriageway form, would link up directly with the A606 and the A52, providing improved access from the east of the city and beyond to the M1. This would inevitably result in the subsequent pressure for development, both along the corridor of the road but also in those settlements to the east that benefit most directly from the improved accessibility due to the link.

In addition, there is the potential for the road to act as a future boundary for development as outlined for the Clifton bypass options under Options A and B. However, the implications of

this for the Blue Route would be far more significant. In relation to the two options the road alignment is such that the effects would largely relate to the growth of Clifton southwards. The alignment of the Blue Route is such that the pressures for development of this kind would spread more widely to encompass Ruddington.

The Blue Route is not supported in any current planning policy due not only to the direct environmental impacts but also taking account of the above arguments.

### **The Red Route**

The On-line Clifton dual carriageway proposed as the Red Route differs significantly from that under the various Options above. The key here is the sinking of the road in to a cutting throughout, with grade separated junctions, but with a 70mph speed limit. This would have the effect of creating a more strategic link between Nottingham and the motorway and to our minds would be likely to result in different pressures for development. Whilst, residential demand would continue due to improved access, there would be significant demand for more strategic commercial development off the A453 and in south Nottingham including the regeneration areas of Riverside and Eastside adjacent to the City Centre.

## **5. CONCLUSIONS**

Having analysed A453 Multi Modal Study transport options terms of the common elements and in relation to the defined Options the key conclusions are outlined below and are summarised in terms of each of the proposed schemes in the table at Appendix 1.

### **Common Schemes**

Taken as a whole, the schemes that form part of each of the Options and ultimately the preferred strategy have a significant impact on the land use in and surrounding the study area. The schemes have direct implications in terms of the requirements for sites, often of significant scale. Moreover, they also result in indirect effects through their impact on other initiatives such as the regeneration areas in South Nottingham and the wider development demand that is created as a result of increased accessibility.

### **Consultation Options**

The three consultation Options create different implications in terms of land use planning. Whilst Options A and B would seem to be very similar in nature, the inclusion in Option B of the dualled Clifton Bypass means that the effects of this Option would potentially be more wide reaching than those for Option A. Further differences between these two Options will depend upon the success of the demand management schemes that are contained in Option A, but omitted from Option B. At this stage, it is not envisaged that the impact in land use terms will be that significant, but nevertheless, this does create a potential difference between the two.

Option C is the only one of the three Options on the table at this stage that does not include major highway improvements from M1 through Clifton. As a result, we would envisage that the potential impacts in land use terms would therefore be likely to be more limited to the A453 corridor itself and the immediate vicinity as increased accessibility and demand in other areas will be affected.

### **Short-Listed Options**

The core package of the short-listed Options differs little from that for Option A as outlined in terms of the impacts on land use planning. There are, however, potential differences in the impacts of the three Options.

The minor changes to Option A (i) from the consultation Option A mean that this would not alter significantly the overall effects in land use terms.

The key changes would appear to relate to options D and E. However, whilst the impacts of both will be significant in terms of the land use implications, the variants of Online Clifton dual carriageway link between the two options will be unlikely to result in significantly differing development pressures.

### **Further Considerations**

Through the consideration of the Blue Route, there is no doubt that the impacts in land use terms would be significant. The creation of a new road on the alignment suggested would not only have significant environmental implications, but would also create major land use issues in terms of demand for development and creating pressure on green land in south Nottingham/Rushcliffe.

The impacts of the Red Route are significant in that this would create a very attractive strategic route into Nottingham and would therefore be likely to result in significant pressure for development along the corridor and in south Nottingham.

### **Overall Comments**

In order to place the findings of this report in context, it is essential to remember that land use is both informed by and informs transport strategy. Therefore, having highlighted the possible land use implications of the various options it should be noted that land use planning work has also informed the modelling process and subsequent development of schemes and options.



**APPENDIX 1 - SCHEDULE OF POTENTIAL  
LAND USE IMPACTS**

<b>MMS SHORTLIST SCHEMES</b>	<b>LAND USE PLANNING IMPACT</b>	<b>DEGREE Major/Moderate/Minor</b>
<b>Common Schemes Already Planned</b>		
B1/ D3 East Midlands Parkway Station and E.M. Airport shuttle bus service.	The development future of EM Airport is set out in the draft Regional Planning Guidance and improvements in public transport will enable a sustainable future land use scenario. The Parkway Station itself will require a significant site and could potentially help to reduce the severance effect of the A453 by reducing traffic.	Moderate
B2a Replacement rolling stock Midland Mainline  A46 Widmerpool-Newark-Lincoln dualling and A52 Ring Road junction improvements at A60 and A606.	No direct land use planning impact  Improved access to Nottingham from the east could have a direct knock on effect on the development pressures in settlements to the east of the city. This could be exacerbated by a possible highway scheme in the A453 Corridor (especially a dual carriageway eastern bypass.)	None  Moderate
B10/ C1/C 3 NET Line one with bus/rail interchanges and footbridge to Nottingham Midland Station.	Unlikely to impact significantly on the A453 corridor	Minor
D1 Citybound bus lane Farnborough Road.	No direct land use planning impact	None
D19 Gamston park and ride.	Site requirements for a Park & ride development	Minor
I8 Extension of Nottingham City Centre clearzone.	No direct land use planning impact	None

<b>Common Schemes – Additional</b>			
B2b	Replacement rolling stock Central Trains.	No direct land use planning impact	None
B3a	Trent PBS (Parkway-Nottingham) signalling and track improvements.	No direct land use planning impact depending on possible land take.	None
B5	Car parking at local stations.	The provision of car parking at local stations would require additional sites / land take. ( In reality as only one such car park is proposed the impact would be minimal)	Minor
B6	Nottingham-Parkway train service.	No direct land use planning impact	None
B7	Local park and ride facility at E.M. Parkway Station.	The development of the parkway station is expected to attract major usage and an associated park & ride facility will have to be of sufficient scale to provide an effective option for those using the station. This will require a significant development site. There could also be a knock on effect on the local housing market in surrounding villages as public transport access into the city of Nottingham is significantly improved.	Moderate
B8	Nottingham Derby improved train service.	No direct land use planning impact	None
B9/1 1	Station upgrades to modern standards inc. real time information systems.	No direct land use planning impact	None
B14	Multi mode smartcard ticketing.	No direct land use planning impact	None
B13, 15	Nottingham Station masterplan redevelopment with extra platform.	Depending on the scale of change, space / land will have to found to accommodate the additional provision. There could be pressure for associated retail and service development based on experience of other station redevelopment in London and Manchester.	Moderate

B17	Park and ride service to Gedling.	Park and ride schemes obviously require major sites to accommodate the level of parking necessary to enable to patronage to make the scheme viable. The potential site as located is in line with local plan policy which designates a park & ride facility	Minor
C2	NET extension to Clifton.	Experience from similar public transport schemes such as Metrolink in Manchester have shown that the implementation of a quality public transport route often leads to additional demand for development and higher land prices, usually relation to residential development. This is particularly the case in close proximity to stops /stations and would add to the already high levels of development pressure in this part of south Nottinghamshire.	Moderate /Major
C4	NET extension to Beeston.	see comments on C2	Moderate /Major
C13	Clifton South park and ride.	Proposed site is allocated in the Nottingham Local Plan for housing and protected open space. There is also a proposed housing development for the site. The land use implications of utilising the site for a park & ride would result in the need to allocate an alternative housing site(s)	Moderate
C17	NET extension Beeston to A52 Bramcote.	See comments on C2	Moderate /Major
D2	Bus lanes A453 Farnborough Road to Silverdale flyover.	No direct land use planning impact	None
D4	M1 Junction 24 bus priority.	No direct land use planning impact	None
D5	Clifton local bus service improvements.	No direct land use planning impact	None
D8	Bus real time information.	No direct land use planning impact	None
D10	Bus service to Clifton Village.	No direct land use planning impact	None
D12	Bus marketing.	No direct land use planning impact	None

D15, 16,1 7	A453 express bus services E.M. Airport and Kegworth-Nottingham.	No direct land use planning impact	None
D11, 18	Bus/NET/rail integration of services.	No direct land use planning impact	None
D20 a	City bound bus lane Clifton Lane (Gotham Road) to Crusader Roundabout.	No direct land use planning impact	None
D21	Local parking at major bus stops.	Will require the identification of sites to accommodate the necessary provision.	Minor
D23	New generation bus stops.	No direct land use planning impact	None
D24	Park & ride at M1 Junction 23A.	Land at J23A is allocated in the NW Leicestershire Local Plan for Pegasus Business Park and development has taken place. The introduction of a park & ride in this location would require another site of significant size to be provided possibly in conflict with open countryside policy.	Moderate
E7/F 13	Clifton minor improvements and traffic management.	No direct land use planning effect	None
F5	Extension of urban traffic control system to A453 Crusader Roundabout.	No direct land use planning effect	None
G	Cycling schemes; separate network of tracks, signing, safety schemes, cycle parks, re-surfacing of tracks.	No direct land use planning effect	None
H	Pedestrian schemes: segregation, security with CCTV, priority, traffic calming, more crossings, safer school routes.	No direct land use planning effect	None

J5	Railheads and sidings for road/rail transfer.	No direct land use planning effect other than possible land take for new/extended sites.	Minor
I3	HGV bans on unsuitable roads.	No direct land use planning impact	None
K2	Travel education.	No direct land use planning impact	None
K4	Green commuter plans.	No direct land use planning impact	None
K6	Information.	No direct land use planning impact	None
<b>Option A Schemes</b>			
E2	M1-Clifton dual carriageway scheme.	Improved accessibility to both Nottingham city and the MI would increase the pressures for Development off the A453. This would relate particularly to the already buoyant housing market in the area but also to the southern areas of Nottingham where the potentially strategic nature of such a route would attract more commercial forms of development possibly linked to regeneration initiatives.	Moderate/Major
E13	M1 Junction 24 major improvement with A453 flyover.	Little direct land use planning effect alone, beyond land take. Could be significant when considered with the M1-Clifton dualling scheme in terms of increasing accessibility and therefore demand.	Minor/Moderate
E27	Clifton single carriageway eastern bypass.	Even assuming that there will be no junctions from this road, it will be likely to increase pressure for development. The implementation of a road in this locality could in the future provide a natural boundary for development and Clifton could well grow southward to meet it leading to more housing development.	Moderate/Major
F11	A606 minor widening at Plumtree and Tollerton traffic signals.	Unlikely to have a significant land use planning effect in itself but could have an effect when taken in conjunction with the Clifton bypass scheme in increasing accessibility and therefore development demand to the East and	Minor / Moderate

		south-east of Nottingham	
I2I4/ I5	Nottingham City Centre work place parking levy, parking charges and controls.	This would be unlikely to have a significant effect in land use planning terms on the centre of Nottingham. It is possible that if the scheme succeeded and there were reduced requirements for car parking spaces as people switched travel modes former car park sites may become available for development.	Minor
K8	Lower public transport fares.	No direct land use planning impact	None
<b>Option B Schemes</b>			
E2	M1-Clifton dual carriageway scheme.	Improved accessibility to both Nottingham city and the MI would increase the pressures for development off the A453. This would relate particularly to the already buoyant housing market in the area but also to the southern areas of Nottingham where the potentially strategic nature of such a route would attract more commercial forms of development possibly linked to regeneration initiatives.	Moderate/Major
E9	Clifton dual carriageway eastern bypass.	Even assuming that there will be no junctions from this road, it will be likely to increase pressure for development. The implementation of a road in this locality could in the future provide a natural boundary for development and Clifton could well grow southward to meet it leading to more housing development. The improved access from the east to the M1 as a result of this road (particularly when taken in conjunction with improvements to the A606 junctions) could mean that the impacts would be more widely felt with additional development pressure being put on locations to the south east such as Tollerton, Kegworth, Ruddington and Radcliffe on Trent and even beyond.	Major
E13	M1 Junction 24 major improvement with A453 flyover.	Little direct land use planning effect alone, beyond land take. Could be significant when considered with the M1-Clifton dualling scheme in terms of increasing accessibility and therefore demand.	Minor/Moderate

F11	A606 minor widening at Plumtree and Tollerton traffic signals.	No direct land use planning impact, could have effects when taken in conjunction with the proposed bypass, see above.	Minor/Moderate
<b>Option C Schemes</b>			
E4	M1-Clifton single lane scheme with grade separated junctions and climbing lanes.	Minor levels of improved accessibility on the A453 could lead to development pressures in the short term until capacity is once again reached and congestion results.	Minor
E14	M1 Junction 24 traffic signals scheme.	Little direct land use planning effect alone, but could be significant when considered with the M1-Clifton single lane scheme in terms of increasing accessibility and therefore demand. No direct land use planning impact	Minor
I1/I4 /I5	Nottingham City work place parking levy, parking charges and controls.	This would be unlikely to have a significant effect on the centre of Nottingham in land use planning terms. Current demand for offices and commercial premises will be unlikely to be effected. It is possible that if the scheme succeeded and there were reduced requirements for car parking spaces as people switched travel modes former car park sites may become available for development.	Minor
I9	Planning controls to encourage public transport and walk/cycling.	If controls were effective this could lead to new patterns of sustainable development including greater preponderance of clustering and mixed use developments to reduce the need to travel.	Minor/Moderate
K8	Lower public transport fares.	No direct land use planning impact	None
<b>Shortlist Options - Core Package</b>			
	The core package put together for the Shortlist Options is the same as that for Option A above apart from the following local variations. As such, this table only highlights elements where they differ from the common and Option A schemes outlined above.	The land use implications for the core package relate to those for the common schemes and Option A apart from the key differences as highlighted below.	

<b>Public Transport</b>			
B5	Car parking at Beeston Station only.	No direct land use implications other than site requirement.	Minor
D24	Park and Ride at J23a of M1 deleted	The removal of the Park and Ride proposal negates the need to allocate a major site in a sensitive location possibly in conflict with current open countryside policy.	Moderate
<b>Demand Management</b>			
	As Option A	As Option A	Minor
<b>Highway Provision</b>			
F11	A606 Junction improvements removed	The junction improvements as identified under Option A were felt to be of minor significance, possibly becoming moderate when taken in conjunction with the proposed Clifton Bypass in demand terms. Their removal will have a negligible effect in land use terms.	Minor
E13	J24 flyover now A50 (W) to M1 (S)	Other than the land take, unlikely to have significant land use planning impacts in itself. Could increase accessibility and demand when taken in conjunction with the M1-Clifton dualling scheme.	Minor / Moderate
<b>Option A (i)</b>			
E27	Single carriageway eastern bypass (yellow route alignment) with east/west movement only at A52 ring road.	The minor changes made to Option A in Option A (i) would not materially affect the land use implications of the overall scheme. The effects would therefore be as for the scheme outlined under Option A	Moderate /Major
<b>Option D</b>			
E24	Clifton on-line at grade 4 lane road with at grade junctions (30/40mph limit)	The major improvements to the A453 would potentially create new demand for development, particularly in the short term. The 30/40 mph speed limit would perhaps suggest a more suitable environment for residential rather than development that relies upon the A453 as a strategic route.	Moderate

<b>Option E</b>			
E5a	Clifton on line dual carriageway with at grade separated junctions, 6m retained cutting throughout. (40 mph limit)	The dualling of the A453 under Option E differs from that for Option D in that the entire road is sunk into a 6m cutting. This might mean that the road retains a more strategic role linking the M1 with Nottingham. However, the 40mph speed limit would be likely to reduce this role of the road and as such the impacts would be likely to be only slightly more significant than those for E24 above.	Moderate
<b>Further Considerations</b>			
	Blue Route – Clifton Eastern Bypass (Single Carriageway)	The implementation of the Blue Route Clifton Bypass would have a significant effect in land use terms. the provision of a southern link road, albeit in single carriageway form, would link up with the A606 junction and the A52 providing a vastly improved access to the M1 from the east and increasing pressure for development as a result. In addition, the arguments put forward previously in relation to the potential of the new road to form a natural boundary to development are also applicable, but the impact would be greater due to the impact on Ruddington as well as Clifton and the potentially greater land take.  This route is not supported in any planning policy.	Major
E5	Red Route - Clifton on line dual carriageway with at grade separated junctions, 6m retained cutting throughout.	The dualling of the A453 under Option E differs from that for Option D in that the entire road is sunk into a 6m cutting. This effectively means that the road retains a more strategic role linking the M1 with Nottingham. This would therefore be likely to result in development pressures for both commercial and residential development, including south Nottingham itself and at the grade separated junctions.	Moderate/Major