

## Chapter 8 Mitigation and dealing with uncertainty

### 8.1 Introduction

- 8.1.1 Where a strategy is likely to have significant adverse effects, measures should be considered to prevent, reduce or offset these effects. The evaluation of the draft LTP3 strategy has identified that no significant adverse environmental effects are expected from the Plan. Therefore, we do not need to develop mitigation measures as such.
- 8.1.2 We have made it clear that this assessment is made at a strategic level. Of course this brings with it an element of uncertainty of assessment. An element of this uncertainty is due to lack of knowledge about resources and also that the Plan also has to be flexible in its delivery to deal with many pressures for delivering transport services. Therefore, the location and magnitude of measures will change to deal with differing pressures through the 15 year period and of course it would not be a sensible approach to appraise a set plan for 15 years where there would be a high probability of change.
- 8.1.3 We have previously mentioned that the role of the SEA is to inform the development of the plan making process. This SEA will only serve that purpose if we develop a framework to ensure that delivery of the plan relates to the assessment made within this SEA. This is a common issue for strategic level planning and risk management frameworks have been used for LTP2s and other plans to ensure that their delivery follows a predicted path and where not, measures introduced to mitigate against any unforeseen negative effects. Therefore our mitigation measure for this SEA is to deal with the uncertainty by developing a risk management framework for the delivery of the Derbyshire LTP3 strategy.

### 8.2 A Framework for achieving environmental positive effects, managing risks and taking environmental opportunities

- 8.2.1 Therefore, within this chapter we set out a simple framework that identifies where we expect positive effects against one or more SEA objectives or sub objectives for each measure that forms our preferred LTP3 strategy. This framework also identifies where we expect there to be conflicts and where these risks need consideration when undertaking each measure. This risk management framework will help minimise any negative and maximise positive secondary or cumulative effects. This framework, as set out in Table 8.1, is intended to act as a 'live' list that will be considered and updated during the lifetime of the plan. Chapter 9 will deal with monitoring the risk management process.

#### Key to Risk Management Framework Tables

- Measure expected to contribute to a positive effect against SEA objective or sub-objective
- Potential risk of negative effect that requires consideration when delivering measure

**Grey shading** Relates to emphasis of measures in the preferred option. We expect to do more of these measures than we would than if we followed the 'without the plan' scenario

- 8.2.2 These risk management tables, set out the basic framework for what each measure needs to consider through its implementation. In practice, this will be managed through the development of an 'Investment Protocol' as described within the draft Derbyshire LTP3.

Table 8.1 Risk Management Framework for Measures used for the preferred Derbyshire LTP3 strategy

Measure	SEA Objectives and Sub Objectives																									
	SEA 1: Protect and enhance the landscape character including the setting of heritage assets	SEA1a: Maintain the transport asset for local travel	SEA1b: Reduce light pollution and preserve dark sky areas	SEA1c: Avoid damage to the World Heritage Site	SEA1d: Help preserve remoteness and tranquillity	SEA1e: Prevent damage due to increased recreation	SEA1f: Reduce the visual impact of transport infrastructure	SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity	SEA 3: Support a resilient economy	SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)	SEA4a: Promote behavioural change	SEA4b: Support sustainable tourism	SEA4c: Improve access to key services	SEA4d: Improve health and reduce health inequalities	SEA4e: Influence development to reduce need to travel	SEA 5: Minimise noise and vibration impacts	SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas	SEA 7: Improve road safety through targeted interventions and make travel feel safer, particularly by non-car modes	SEA 8: Improve community safety, reduce crime and the fear of crime	SEA 9: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment	SEA 10: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change	SEA 11: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas e.g. reduce the risk of flooding	SEA 12: Enhance the networks resilience to climate change	SEA 13: Minimise the use of environmental resources	SEA13a: Minimise energy usage and reduce dependency	SEA13b: Increase proportion of re-use and recycled materials
**Improving the streetscape through high quality design, use of local materials and multi-disciplinary approach	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
**Removing unnecessary infrastructure	<input checked="" type="checkbox"/>																									
** Minimising damage to the environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
** Reducing street lighting CO <sub>2</sub> emissions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
** Management of the transport asset to support local journeys		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																							
* Routine maintenance of roads		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																							
* Routine maintenance of pavements		<input checked="" type="checkbox"/>																								



Measure	SEA Objectives and Sub Objectives																	
	SEA Objectives and Sub Objectives																	
* Parking controls	★	SEA 1: Protect and enhance the landscape character including the setting of heritage assets																
* Better direction and tourist signing	★		SEA1a: Maintain the transport asset for local travel															
* Providing travel information		★	SEA1b: Reduce light pollution and preserve dark sky areas															
* Keeping local roads clear in bad weather			SEA1c: Avoid damage to the World Heritage Site															
* Keeping pavements clear in bad weather			SEA1d: Help preserve remoteness and tranquillity															
= Coordination of streetworks			SEA1e: Prevent damage due to increased recreation															
= Keeping lorries out of villages			SEA1f: Reduce the visual impact of transport infrastructure															
= Tackling bad parking in rural areas	✓		SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity															
<b>New Infrastructure</b>																		
** Walking networks	★						★		★	✓	✓	✓	✓	✓	✓	✓	✓	✓
** Major schemes congestion and safety																		
* Cycling facilities	★						★		★	✓	✓	✓	✓	✓	✓	✓	✓	✓
See section 8.3																		
SEA 1: Protect and enhance the landscape character including the setting of heritage assets																		
SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity																		
SEA 3: Support a resilient economy																		
SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)																		
SEA 5: Minimise noise and vibration impacts																		
SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas																		
SEA 7: Improve road safety through targeted interventions and make travel safer, particularly by non-car modes																		
SEA 8: Improve community safety, reduce crime and the fear of crime																		
SEA 9: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment																		
SEA 10: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change																		
SEA 11: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas																		
SEA 12: Enhance the networks resilience to climate change e.g. reduce the risk of flooding																		
SEA 13: Minimise the use of environmental resources																		
SEA13a: Minimise energy usage and reduce dependency																		
SEA13b: Increase proportion of re-use and recycled materials																		
SEA13c: Use locally sourced materials wherever possible																		



Measure	SEA Objectives and Sub Objectives												
	SEA Objectives and Sub Objectives												
* Improved street lighting e.g. waiting areas and crossings	★	SEA 1: Protect and enhance the landscape character including the setting of heritage assets											
= Speed reduction schemes	★	SEA1a: Maintain the transport asset for local travel	✓										
** More flexible ways of paying e.g. multi-operator ticketing scheme		SEA1b: Reduce light pollution and preserve dark sky areas	★	★									
* Concessionary fares scheme		SEA1c: Avoid damage to the World Heritage Site	★	★									
* Improvements to public transport services	✓	SEA1d: Help preserve remoteness and tranquillity	★	★									
* 'Smart ticketing' improved technology for paying		SEA1e: Prevent damage due to increased recreation	★	★									
*Review of supported public transport network	★	SEA1f: Reduce the visual impact of transport infrastructure											
* Discounted travel scheme – buses and trains		SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity	★	★									
= Making public transport physically accessible	★	SEA 3: Support a resilient economy											
SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)													
SEA4a: Promote behavioural change													
SEA4b: Support sustainable tourism													
SEA4c: Improve access to key services													
SEA4d: Improve health and reduce health inequalities													
SEA4e: Influence development to reduce need to travel													
SEA 5: Minimise noise and vibration impacts													
SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas													
SEA 7: Improve road safety through targeted interventions and make travel feel safer, particularly by non-car modes													
SEA 8: Improve community safety, reduce crime and the fear of crime													
SEA 9: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment													
SEA 10: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change													
SEA 11: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas													
SEA 12: Enhance the networks resilience to climate change e.g. reduce the risk of flooding													
SEA 13: Minimise the use of environmental resources													
SEA13a: Minimise energy usage and reduce dependency													
SEA13b: Increase proportion of re-use and recycled materials													
SEA13c: Use locally sourced materials wherever possible													



Measure	SEA Objectives and Sub Objectives																									
	SEA 1: Protect and enhance the landscape character including the setting of heritage assets																									
* Home to school transport																										
Behavioural change																										
*** Personalised travel planning																										
* Travel plans for businesses and new developments, including monitoring																										
* School travel plans, including monitoring																										
* DCC to tackle commuting mileage	★																									
* Better promotion of existing opportunities for walking and cycling	★																									
Spatial Planning																										
* Influencing spatial planning to reduce car use and enable more walking, cycling public transport																										
	SEA 1a: Maintain the transport asset for local travel	SEA 1b: Reduce light pollution and preserve dark sky areas	SEA 1c: Avoid damage to the World Heritage Site	SEA1d: Help preserve remoteness and tranquillity	SEA1e: Prevent damage due to increased recreation	SEA1f: Reduce the visual impact of transport infrastructure	SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity	SEA 3: Support a resilient economy	SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)	SEA4a: Promote behavioural change	SEA4b: Support sustainable tourism	SEA4c: Improve access to key services	SEA4d: Improve health and reduce health inequalities	SEA4e: Influence development to reduce need to travel	SEA 5: Minimise noise and vibration impacts	SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas	SEA 7: Improve road safety through targeted interventions and make travel safer, particularly by non-car modes	SEA 8: Improve community safety, reduce crime and the fear of crime	SEA 9: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment	SEA 10: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change	SEA 11: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas	SEA 12: Enhance the networks resilience to climate change e.g. reduce the risk of flooding	SEA 13: Minimise the use of environmental resources	SEA13a: Minimise energy usage and reduce dependency	SEA13b: Increase proportion of re-use and recycled materials	SEA13c: Use locally sourced materials wherever possible

Measure	SEA Objectives and Sub Objectives																							
	SEA 1: Protect and enhance the landscape character including the setting of heritage assets																							
* Influencing spatial planning to minimise the impacts of road freight	<input checked="" type="checkbox"/>	SEA 1a: Maintain the transport asset for local travel	SEA 1b: Reduce light pollution and preserve dark sky areas	SEA 1c: Avoid damage to the World Heritage Site	SEA 1d: Help preserve remoteness and tranquillity	SEA 1e: Prevent damage due to increased recreation	SEA 1f: Reduce the visual impact of transport infrastructure	SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity	SEA 3: Support a resilient economy	SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)	SEA 4a: Promote behavioural change	SEA 4b: Support sustainable tourism	SEA 4c: Improve access to key services	SEA 4d: Improve health and reduce health inequalities	SEA 4e: Influence development to reduce need to travel	SEA 5: Minimise noise and vibration impacts	SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas	SEA 7: Improve road safety through targeted interventions and make travel safer, particularly by non-car modes	SEA 8: Improve community safety, reduce crime and the fear of crime	SEA 9: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment	SEA 10: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change	SEA 11: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas	SEA 12: Enhance the networks resilience to climate change e.g. reduce the risk of flooding	SEA 13: Minimise the use of environmental resources
<b>Accounting/ decision-making</b>																								
*** Best use of resource to reduce carbon footprint																								
<b>Vehicle fleets</b>																								
*** Use of alternative fuels e.g. plug in points for electric vehicles																								
* Sustainable freight distribution networks																								
* Environmental specification in contracted services																								
= Low emission zones																								
<b>Economy</b>																								
* Encourage the use of local facilities and local businesses																								

Measure	SEA Objectives and Sub Objectives												
	SEA 1: Protect and enhance the landscape character including the setting of heritage assets		SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity		SEA 3: Support a resilient economy		SEA 4: To reduce motorised traffic growth through a combination of demand management measures, land-use planning and encouragement of more sustainable transport modes (also climatic)		SEA 5: Minimise noise and vibration impacts		SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas		SEA 7: Improve road safety through targeted interventions and make travel safer, particularly by non-car modes
* Support tourism growth for specific road users and locations	<input checked="" type="checkbox"/>		SEA 1a: Maintain the transport asset for local travel				SEA 4a: Promote behavioural change		SEA 7a: Improve access to key services		SEA 10a: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change		SEA 13a: Minimise the use of environmental resources
*Support moving freight from road to rail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SEA 1b: Reduce light pollution and preserve dark sky areas		SEA 1c: Avoid damage to the World Heritage Site		SEA 4b: Support sustainable tourism		SEA 7b: Influence development to reduce need to travel		SEA 10b: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas		SEA 13b: Enhance the networks resilience to climate change e.g. reduce the risk of flooding
			SEA 1d: Help preserve remoteness and tranquillity		SEA 1e: Prevent damage due to increased recreation		SEA 4c: Improve access to key services		SEA 7c: Consider the needs of elderly people, particularly in rural areas		SEA 10c: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas		SEA 13c: Use locally sourced materials wherever possible
			SEA 1f: Reduce the visual impact of transport infrastructure				SEA 4d: Improve health and reduce health inequalities		SEA 7d: Make travel safer, particularly by non-car modes		SEA 10d: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment		
			SEA 2: Protect and enhance nature and take measures to reduce habitat fragmentation and enhance connectivity				SEA 4e: Influence development to reduce need to travel		SEA 7e: Improve community safety, reduce crime and the fear of crime		SEA 10e: Reduce transport's emissions of CO <sub>2</sub> and other greenhouse gases, with the desired outcome of tackling climate change		
			SEA 3: Support a resilient economy				SEA 5: Minimise noise and vibration impacts		SEA 6: Ensure provision of transport and services considers the needs of elderly people, particularly in rural areas		SEA 7f: Improve road safety through targeted interventions and make travel safer, particularly by non-car modes		
							SEA 6a: Ensure the provision of transport and services considers the needs of elderly people, particularly in rural areas		SEA 7g: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment		SEA 10g: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas		
							SEA 6b: Improve health and reduce health inequalities		SEA 7h: Enhance the networks resilience to climate change e.g. reduce the risk of flooding		SEA 10h: Enhance the use of environmental resources		
							SEA 6c: Improve access to key services						
							SEA 6d: Influence development to reduce need to travel						
							SEA 6e: Consider the needs of elderly people, particularly in rural areas						
							SEA 6f: Make travel safer, particularly by non-car modes						
							SEA 6g: Enhance well-being and sense of community by reducing traffic impacts, creating more opportunities for social contact and better access to leisure activities and the natural environment						
							SEA 6h: Reduce the emission of air pollutants from transport in declared Air Quality Management Areas						
							SEA 6i: Enhance the networks resilience to climate change e.g. reduce the risk of flooding						

## 8.3 Considered approach to new infrastructure: major schemes

- 8.3.1 At present it is not known whether the Department for Transport (DfT) will make available a funding stream for major new infrastructure which would continue a system that has been in place for a number of years. Without this additional DfT funding it is extremely unlikely that any major new infrastructure would be constructed during the Plan period. Therefore at this stage of Plan development and implementation there are no firm plans included within the draft LTP3 strategy or delivery plans. Based upon the last 15 years when funding levels were likely to be higher we undertook two major schemes. The following text is reproduced from the Derbyshire LTP3 strategy to set out our current position relating to new infrastructure:-

### Refinement of Major Projects

- 8.3.2 We have begun the process of streamlining the list of potential major transport projects. During the autumn of 2010 protected alignments for a Market Street diversion in Clay Cross and for a Heanor Inner Relief Road have been 'rescinded', meaning that the County Council no longer intends to promote them and will not seek the protection of any land against other forms of development. It may be that other schemes from the list below will also be rescinded once priorities have been reconsidered over the next few months.

### What we will consider

- 8.3.3 The major projects currently identified as possibilities are presented in Table 8.2 below:

**Table 8.2 Potential Major Projects**

Potential Scheme	Status
A515 Ashbourne Bypass	One of 'priority' schemes identified in preparation of second LTP
A61-A617 'Avenue' Link Road	Identified through liaison over North-East Derbyshire Local Development Framework (LDF)
A61 Chesterfield Inner Relief Road Junctions	One of 'priority' schemes identified in preparation of second LTP
Gamesley Rail Station	Under consideration as part of Longdendale Integrated Transport Strategy (led by Tameside MBC)
A617 Glapwell Bypass	One of 'priority' schemes identified in preparation of second LTP
Ilkeston Rail Station	Development work approved by Cabinet February 2010
A610 Ripley-Codnor-Woodlinkin Improvements	One of 'priority' schemes identified in preparation of second LTP
A619 Staveley-Brimington Bypass	Protected scheme 'on hold' pending review of impacts of Markham Vale and subject to consideration as part of Staveley Area Action Plan
A514 Swarkestone Bypass	Identified through liaison over South Derbyshire LDF
A511-A514 Woodville-Swadlincote Regeneration Route	Identified through liaison over South Derbyshire LDF

- 8.3.4 In finalising the LTP, we will be considering any alterations to this list and also be carrying out an appraisal of each potential scheme.