



Somerset County Council

Somerset County Council  
Transport Policies Strategic  
Environmental Assessment  
Environmental Report

Appendix 2: Assessment of  
the Future Baseline

Prepared for:

**Somerset County Council  
Taunton**

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Date:

**October 2010**

Project or Issue Number:

**UK1815830**



Contract/Proposal No:	UK1815830
Issue:	2
Author	
(signature):	
Project Manager/Director	
(signature):	
Date:	October 2010

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<b>Version Control Record</b>				
<b>Issue</b>	<b>Description of Status</b>	<b>Date</b>	<b>Reviewer Initials</b>	<b>Authors Initials</b>
1	First Draft to Client	01/06/10	JC	EJ
2	FINAL Draft to Client	07/10/10	JC	EJ

<b>Assessment of the Future Baseline</b>
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SEA objective	SEA question	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect
<b>Health</b>			
<p>Improve the safety of the transport system?</p> <p>Make healthier modes of travel easier and more attractive?</p> <p>Reduce the impact of the transport system on air and noise pollution?</p>	<p>Lead to a decrease in traffic accidents /accident severity and help to meet KSI targets (link to LAA indicator NI 47 on road accidents)?</p> <p>Increase walking and cycling and help to meet the Somerset SCS target to increase the number of children and adults regularly participating in physical activity (link to LAA indicator NI 56 on obesity; NI 121 on circulatory disease; NI 137 on life expectancy)?</p> <p>Reduce traffic/congestion that affects an AQMA or would help to meet air quality objectives?</p> <p>Cause any changes to traffic levels (particularly a change of over 10%) or the nature of traffic</p>	<p>Total KSI accidents and children KSI accidents are both in decline (although there was a slight increase in children KSI accidents in 2007 and 2008). The severity of car accidents may decrease in the longer term due to improved vehicle design and increased safety awareness amongst the public. However, in the absence of the measures in the Somerset County Council Transport Policies vehicle miles will increase (potentially increasing the number of accidents). Therefore, the number of accidents might increase in the absence of the plan but their severity may decrease due to changes in vehicle design.</p> <p>The population of Somerset is ageing and this needs to be considered in the provision of services and transport. There is predicted to be a 14% rise in the total population of Somerset by 2025. The population aged 65 and over is set to grow by 55% over the same period and the over 85s by 73%.</p> <p>Obesity and childhood obesity are increasing; less than 25% of people in Somerset undertake as much physical activity as recommended and the number of people cycling is below target. However, cycling and walking in the Taunton Strategy Study Area in particular is higher than the national average. In the absence of measures in the Somerset County Council Transport Policies to</p>	<p>- accident numbers</p> <p>+ accident severity</p> <p>- physical activity</p>

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	<p>past sensitive receptors or on sensitive routes that would help to achieve WHO noise guidelines?</p> <p>Reduce traffic in tranquil areas?</p>	<p>promote walking and cycling and reduce traffic and congestion, levels of walking and cycling are likely to decline. This will have a negative (potentially long term) effect on obesity levels and general health. However, this has not been scored as significantly negative because other factors are just as (if not more) important in encouraging people to take exercise.</p> <p>Air quality across the County is considered to be largely good but traffic is contributing to poor and worsening air quality in Taunton and Yeovil (which both have declared AQMAs) along a number of sensitive routes including the stretches of the M5, A38, A358, A303, A3088, A37 and the A39. Forecast improvements in vehicle technology mean that emissions of local pollutants should decrease in the future baseline although increased traffic and congestion might offset this in Yeovil and Taunton.</p> <p>As a general rule for there to be a perceptible change in noise levels there has to be a change of 3dBA which equates to a doubling or halving of traffic flow. The Taunton Transport Strategy Review (which is looking at the area which will experience the most growth in traffic) found that changes in annoyance associated with noise are generally small in scale for the future baseline with the exception of Fore Street/East Street in Taunton. People taking short cuts is likely to increase through rural lanes etc as drivers seek alternative routes to avoid congestion hot spots and this may have a slight negative effect on noise as it is not expected that traffic will increase by 10%.</p>	<p>○ air quality rural areas</p> <p>- air quality towns</p> <p>- noise</p>
<b>Community</b>			

SEA objective	SEA question	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect
<p>Help to improve the quality of urban and rural centres?</p> <p>Improve the security of the transport system?</p> <p>Reduce the community severance effects of transport?</p>	<p>Reduce traffic levels, congestion or the nature of traffic in residential areas / town and village centres?</p> <p>Cause changes that reduce the impact of the transport system on townscape (this could include changes to highway signage, lighting and highway furniture) or introduce features that enhance the character of towns?</p> <p>Support the spatial strategy for the area including providing improvements to transport in rural areas?</p> <p>Make transport systems / interchanges more secure and contribute to the targets in the Somerset Crime Reduction and Drugs Strategy to reduce the fear of crime and reduce anti social behaviour?</p> <p>Result in a reduction in community severance (i.e. improved crossing facilities, reduced traffic speed, reduced traffic levels)?</p>	<p>The spatial strategy for Somerset will mean that most development occurs in SSCTs (Taunton, Bridgwater and Yeovil) and category B towns (most of the larger towns in the county). In the absence of measures promoted through the Somerset County Council Transport Policies the necessary infrastructure will not be put in place and journey times, congestion and impact on communities and townscape will increase. This is especially the case in the main towns as growth continues but without supporting transport infrastructure. This is likely to be a long term effect (but reversible if infrastructure is provided in the future) and will be significantly negative.</p> <p>There is no data on the security of the transport system. However, in the absence of the plan and measures to improve security, it is likely to deteriorate. This is likely to be a long term effect (but reversible if successful schemes are implemented in the future). It has not been scored as significantly negative as other factors (such as actual crime levels, people's fear of crime, and design of new development and bus and train stations etc) are also likely to play their part and these are not influenced by the Somerset County Council Transport Policies.</p> <p>Community severance is caused by large volumes of traffic in many areas of the county. In the absence of the Somerset County Council Transport Policies traffic is likely to increase (especially in larger towns) and severance in these communities is likely to increase. Without the measures put forward in the Somerset County Council Transport Policies traffic levels and severance are likely to increase. This is likely to be a long term effect (but reversible if successful schemes are implemented in the future) and will be significantly negative.</p>	<p>- quality of centres</p> <p>- security</p> <p>- severance</p>
<b>Economy</b>			

SEA objective	SEA question	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect
<p>Help to manage and maintain the existing transport system efficiently?</p> <p>Invest in transport improvements that help the economy of Somerset?</p> <p>Provide more sustainable transport access to rural areas, the countryside and visitor attractions?</p> <p>Reduce the impact of road freight on communities?</p>	<p>Help to manage routes effectively in order to maintain journey times?</p> <p>Include schemes that decrease journey times, congestion, improve journey time reliability and help to meet congestion targets in the Somerset County Council Transport Policies?</p> <p>Increase access to tourist attractions, rural areas and the countryside by public transport and help to meet the objective of the Somerset Economic Strategy to revitalise the economy of Somerset's market towns and rural communities?</p> <p>Provide / encourage the use of alternatives to road freight and provide routes for freight traffic that reduces impacts on communities and the</p>	<p>Network management duties under the Traffic Management Act 2004 including civil parking enforcement will continue. However, despite network management duties remaining it would be increasingly difficult to manage routes effectively in the face of increased traffic growth and congestion. Only maintaining transport assets to a statutory minimum level would increase the maintenance backlog. This is likely to be a long term effect (but reversible if enhanced maintenance is provided in the future) and will be significantly negative.</p> <p>In the absence of measures promoted through the Somerset County Council Transport Policies necessary supporting infrastructure for growth will not be put in place and journey times and congestion will increase. This is especially the case in the main towns as growth continues but without supporting transport infrastructure. This is likely to be a long term effect (but reversible if infrastructure is provided in the future) and will be significantly negative</p> <p>The majority of people who access tourist attractions and the countryside do so by car. In the absence of the Somerset County Council Transport Policies the proportion of people who access the countryside by car is likely to remain the same or even increase. This is likely to be a long term effect (but reversible if action is taken in the future).</p>	<p>- highway maintenance</p> <p>- infrastructure</p> <p>- access to countryside</p>

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	environment?	The number of HGVs using Somerset's strategic routes is declining but decisions made by other authorities and the use of satellite navigation equipment can cause problems in Somerset. Little expansion of rail freight infrastructure is expected in Somerset in the do nothing scenario. In the absence of the plan there will be no measures to encourage alternatives to road freight and no encouragement to freight users to use advisory routes and the impact of this freight traffic will worsen. This is likely to be a long term effect (but reversible if action is taken in the future) and will be significantly negative.	- freight
<b>Accessibility</b>			
Improve sustainable access to basic services for all groups in society	<p>Improve provision of public and community transport that makes key services more accessible</p> <p>Improve access for certain equality groups (race, gender, disability, age, religion and sexual orientation) and contribute to the DfT goal of promoting greater equality of opportunity for all citizens. This includes changes to physical infrastructure and services.</p>	<p>Access to services in Somerset is poor in many areas for people without a car. Without the measures taken forward as part of the Somerset County Council Transport Policies, accessibility levels will decline as services are withdrawn. This is likely to be a long term effect (but reversible if conditions change with regards to accessibility) and will be significantly negative.</p> <p>Travel by different age groups and social groups can be very different and provision needs to be tailored more effectively. The information available on travel by different groups is not complete for Somerset. However, in the absence of measures taken forward as part of the Somerset County Council Transport Policies accessibility levels will decline for all groups. This is likely to be a long term effect (but reversible if successful schemes are implemented in the future) and will be significantly negative.</p>	- accessibility
<b>Environment</b>			



SEA objective	SEA question	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect
<p>Protect and enhance biodiversity at all levels?</p> <p>Protect and enhance buildings, sites, areas and features of historic, archaeological and architectural interest?</p> <p>Protect and enhance landscape quality and character?</p>	<p>Cause direct habitat fragmentation / loss especially that would risk achievement of Somerset BAP priority targets?</p> <p>Cause a change in traffic flows or nature of traffic that will affect sensitive habitats or focal species?</p> <p>Cause direct impacts on sites or monuments through the provision of new infrastructure?</p> <p>Cause a change in traffic flows or the nature of traffic that affects townscape, sites and monuments valued for their cultural heritage or changes the number of sites at risk?</p> <p>Cause changes in traffic flows in areas that are valued for their landscape character?</p> <p>Introduction of new infrastructure</p>	<p>Somerset is a county rich in biodiversity from international, national and local sites. Many of these sites and habitats occur next to highways, cycle routes, green lanes or other transport corridors. There have been significant declines in certain habitats and species in past years and much of the South West wildlife is still under threat. Without active management it can be assumed that some habitats and species at least will continue to decline. Climate change is likely to result in changes to biodiversity such as in the distribution of species, in species composition of habitats, effects of drier/hotter summers and wetter/warmer winters land use changes and seasonal/phenological changes and some of these changes will promote biodiversity and some will be negative (therefore, the effect is uncertain).</p> <p>There is a substantial cultural heritage resource within Somerset, with a large number of Listed Buildings and Conservation Areas. Transport can have negative effects on the townscape and heritage of the settlements it passes through. Most roads in Taunton and Bridgwater and Yeovil will experience increases in traffic thus increasing impact on townscape and without intervention the heritage assets will remain at risk from inappropriate development affecting their settings. However, this may be partly offset by a reduced impact from new infrastructure that would have been implemented through the Somerset County Council Transport Policies. Also, in the absence of</p>	<p>? biodiversity</p> <p>- heritage</p>

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	to existing areas. This will include new routes, changes to highways signing, lighting and highway furniture such as noise barriers?	<p>the Somerset County Council Transport Policies maintenance schemes are more likely to use standard materials which would not enhance the character of the streets. This is likely to be a long term effect (but reversible if conditions change in the future) and will be significantly negative.</p> <p>A large proportion of Somerset is protected landscape or is rural in character. Transport can affect landscape in a number of ways and transport is having a detrimental affect on a number of countryside character areas. It is assumed that traffic levels will increase in the future. Without the actions in the Somerset County Council Transport Policies it is assumed that the negative impact of transport on landscape will increase. This is likely to be a long term effect (but reversible if conditions change in the future) and will be significantly negative if traffic reduces the amount of unspoilt and tranquil countryside in the county.</p>	- landscape
<b>Natural resources</b>			
<p>Reduce the contribution of the transport system to carbon emissions?</p> <p>Ensure that the transport system can cope with the unavoidable effects of climate change?</p>	<p>Cause a change in vehicle miles or a change in the nature of traffic that would cause changes in fuel use and CO<sub>2</sub> that would assist in meeting the SCS target of reducing the amount of carbon dioxide produced per person in Somerset</p> <p>Increase the use of energy from</p>	<p>Somerset's cars emit more CO<sub>2</sub> than in other areas because of the rural nature of the county and the average age of the fleet. Road transport emits a higher amount of CO<sub>2</sub> in Sedgemoor, South Somerset and Taunton Deane. This is likely to be due to the rural nature of South Somerset and the influence of the M5 in Sedgemoor and Taunton Deane. According to the Taunton Transport Study CO<sub>2</sub> levels are forecast to increase by 42% in the study area in the future baseline scenario. CO<sub>2</sub> levels are also likely to rise in other areas of the county in the absence of measures bought forward as part of the</p>	- carbon and energy

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<p>Minimise the impact of the transport system on water resources, soil and mineral resources?</p>	<p>renewable sources in the transport system (to reach a target of 10% of the total energy consumed)</p>	<p>Somerset County Council Transport Policies as there will be little support for sustainable modes and vehicle miles and congestion will increase.</p>	<p>- adaptation</p>
	<p>Reduce the unavoidable effects of climate change (link to LAA indicator NI 188: Adapting to climate change)</p>	<p>There is no data available on the amount of renewable energy used in the transport system in Somerset. The target is 10% of the total energy use in transport systems to be derived from renewable sources. In the absence of measures bought forward as part of the Somerset County Council Transport Policies the target is unlikely to be met. Impacts on carbon emissions are likely to be a long term and irreversible effect (due to the long lag time in the climate) and will be significantly negative.</p>	
	<p>Cause an improvement in water quality that could help to meet the WFD target of achievement of good ecological status of water bodies by 2015?</p>	<p>The County is likely to experience a number of changes due to climate change such as warmer wetter winters, more stormy weather and hotter summers. This will have numerous effects on the transport system. A certain amount of unavoidable climate change is inevitable and will need to be planned for. As highway and bridge maintenance duties will continue in the absence of the plan it is assumed that some measures will be implemented to ameliorate the effects, thus reducing the effect from significant to minor negative. However, the effect is still negative, long term and irreversible.</p>	<p>- effects of mineral and waste transport</p>
<p>Cause changes to maintenance regimes that may decrease the need for water or decrease the potential for flooding?</p>	<p>Transport can also have impacts on sensitive watercourses and soil if drainage is not adequate. In the absence of measures in the Somerset County Council Transport Policies and with flooding from highway drains becoming more common under climate change scenarios this issues is likely to get worse.</p>		
<p>Reduce the demand for aggregate?</p>	<p>In terms of use of recycled aggregates, Somerset re-uses a high proportion of road planings and this should continue. The use of</p>		
<p>Help to protect loss or pollution of soils which support valued habitats or are already experiencing erosion?</p>			

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		<p>recycled road planings is likely to remain high even in the absence of the plan.</p> <p>Transport of minerals and waste by road can cause problems to local communities. Transport of minerals is likely to remain mainly by HGV and the routes currently affected are likely to remain the same. The future growth strategy will mean that more strategic waste management facilities will be focused on the SSCTs. While there can be significant advantages gained by locating new waste management facilities as close as possible to where the waste arises (the proximity principle) and in areas with good accessibility this may have impacts on already congested networks in SSTCs. In the absence of freight management measures freight traffic in unsuitable routes will increase. This is likely to be a long term effect (but reversible if action is taken in the future) and will be significantly negative.</p>	+ aggregates