

**APPENDIX 4b - APPRAISAL MATRIX: ACCESSIBILITY**

<b>SEA Analysis Table</b>		<b>Policy: Accessibility</b>	
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	P+	This policy will mean using shared mobility schemes, more active travel and use of technology to avoid some journeys; this could in time lead to less vehicles on the roads, reducing their negative impact on biodiversity.	Reducing unnecessary journeys will help reduce the amount of vehicles on the roads. This is the ideal scenario, but it may be compromised by housing growth unless demand is managed carefully
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	The ability to access key services such as work, health, education and food shopping is the key to having a healthy population, especially if active travel is involved.	An accessibility strategy is planned for 2017/8 this will be much more detailed as to which schemes can improve access to key services. This SEA matrix should be looked at when

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		Those with poor access to services are often disadvantaged groups (low income, disabled, rural, older) by improving access we want to increase fairness in society.	scoping the strategy.
To reduce crime and create safe environments	P+	If more people are visible in the public realm because they find it easier to access places, it will deter perpetrators of crime and make people feel safer.	
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	U		
To move away from waste disposal to minimisation, reuse, recycling and recovery.	O		
To ensure the efficient use of water, and safeguard water resources.	O		
To reduce contamination, and safeguard soil quality and quantity	O		

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<b>SEA Analysis Table</b>	<b>Policy: Accessibility</b>		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	✓	This policy will mean using shared mobility schemes, more active travel and use of technology to avoid some journeys; this could in time lead to fewer vehicles on the roads, reducing the negative impact of noisy transport and polluting vehicles.	Shared mobility schemes must work towards green solutions.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Accessibility is about sharing mobility, and making it easier to access places other than by driving in a vehicle alone (sole occupancy).	An accessibility strategy is planned for 2017/8 this will be much more detailed as to which schemes can improve access to key services. This SEA matrix should be looked at when scoping the strategy.
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	U		

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<b>SEA Analysis Table</b>	<b>Policy: Accessibility</b>		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	This policy will mean using shared mobility schemes, more active travel and use of technology to avoid some journeys; this could in time lead to less vehicles on the roads which will reduce greenhouse gases.	Shared mobility must work towards green solutions,
To ensure the sustainable supply and use of energy	P+	By sharing vehicles (eg total transport, buses, minibuses, voluntary schemes) energy use will be reduced.	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	This policy will mean using shared mobility schemes, more active travel and use of technology to avoid some journeys; this could in time lead to less vehicles on the roads which will protect and enhance landscape, townscape and green spaces.	

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To conserve and enhance the historic environment, heritage assets and their settings	P+	Shared mobility schemes, more active travel and use of technology to avoid some journeys will in time lead to fewer vehicles on the roads which will enhance the historic environment of Herts, impacts though could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	✓	Those with poor access to services are often disadvantaged groups (low income, disabled, rural, older); by improving access to everyone regardless of income, we can help increase fairness in society and enable people to work and access training and education.	

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To empower all sections of the community to participate in decision making and local action	<b>P+</b>	Those with poor access to services are often disadvantaged groups (low income, disabled, rural, older) by improving access we can empower those who may otherwise be unable to participate in decision making and local action.	Include this aspect of Accessibility in the new strategy.
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	<b>P+</b>	Those with poor access to services are often disadvantaged groups (low income, disabled, rural, older), by improving their access to employment there will be an increase in economic competitiveness and a more vibrant economy.	Include this aspect of Accessibility in the new strategy
To spread economic growth more evenly to benefit deprived areas	<b>P+</b>	Those with poor access to services are often disadvantaged groups (low income, disabled, rural, older), by improving their access to employment growth can be more easily spread to deprived areas.	

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To maintain the vitality and viability of existing centres.	P+	By improving access to employment, food shops and education, existing centres will remain viable in terms of retail footfall.	

### Significant Positive Effects:

This policy has many beneficial impacts on the environment and society. In time it will mean more shared mobility and less individually owned vehicles using the roads. There will be better access for transport disadvantaged groups with resulting beneficial impacts in the public realm, on the economy, less air and noise pollution. Biodiversity and historic environments will benefit from fewer but cleaner vehicles

### Significant Negative Effects:

None.

**Timescale:** medium.

### Temporary or Permanent:

Temporary. This is because human behaviour can change, as can the nature of shared mobility schemes. IT may also have profound changes on accessibility, although it is too early to predict exactly how and when.

**Likelihood of effects or impacts identified occurring:** medium as long as the accessibility strategy is effective.

### Recommendation for mitigation for adverse effects and/or enhancement or positive effects:

An accessibility strategy is planned for 2017/8 this will be much more detailed as to which schemes can improve access to key services. This SEA matrix should be looked at when scoping the strategy. The shared mobility schemes must work towards using ULEV / non fossil fuel.

**Data Issues:** use of green energy sources should be monitored.

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**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - CYCLING**

<b>SEA Analysis Table</b>		<b>Policy: Active Travel - cycling</b>	
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	Cycling has far less negative impact on the biodiversity and the natural environment than modes of transport that use fossil fuels.	Promote cycling as often as possible.
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	Cycling is proven to prolong life and improve physical and mental health, plus it is open to everyone in society at little cost.	Promote cycling as a form of exercise for everyone.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - CYCLING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - cycling</b>		
To reduce crime and create safe environments	✓	If there are more people cycling and walking in public spaces, this leads to safer environments and a feeling of personal security. Secure storage for bicycles is also vital, to encourage their use. Cyclists need also to be safe on the road, appropriate infrastructure can help.	Think about the interactions between pedestrians, vehicles and cyclists to prevent any conflicts. For example use signage so it is clear who has the priority right of way to avoid accidents. Safety also applies on the road, bikeability training can help cyclists ride safely, drivers also need tuition to be aware of cyclists. Cycle storage needs to include the ability to lock them securely.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	✓	Off road cycling surfaces are more sustainable in terms of impacting on the environment than road surfaces for vehicles. The more use of sustainable surfaces for cyclists the less will be spent on resurfacing roads.	

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<b>SEA Analysis Table</b>	<b>Policy: Active Travel - cycling</b>		
To move away from waste disposal to minimisation, reuse, recycling and recovery	✓	Cycle ways use fewer resources than road surfaces, when construction work is undertaken recycled materials should be used.	
To ensure the efficient use of water, and safeguard water resources	P+	Less roadway runoff including chemicals from tyres and road salt will reach water courses.	Consult the section in the TIAMP about SUDS when putting in new cycleways.
To reduce contamination, and safeguard soil quality and quantity	P+	Less roadway runoff including chemicals from tyres and road salt which contaminate the soil.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	✓	Cycling has no negative impact on air quality or noise pollution unlike modes of transport that use fossil fuels.	
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Cycling addresses this objective completely.	

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<b>SEA Analysis Table</b>		<b>Policy: Active Travel - cycling</b>	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	✓	Cycling has no negative impact on the causes of climate change and the resulting flooding and heatwaves, compared to modes of transport that use fossil fuels.	Promotion of cycling as beneficial for the environment needs to be the message for all.
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	Cycling does not produce the greenhouse gases that are causing climate change unlike modes of transport that use fossil fuels.	
To ensure the sustainable supply and use of energy	✓	Cycling does not use any energy other than that produced by individuals. Even electric bikes generate energy using human energy.	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	✓	Cycling in the public domain will enhance the landscape of Hertfordshire's towns, particularly if the infrastructure is designed in accordance to those suggested in Manual for Streets.	New cycling infrastructure should be designed using established standards such as Manual for Streets or Roads in Herts.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - CYCLING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - cycling</b>		
To conserve and enhance the historic environment, heritage assets and their settings	✓	Cycling in the public domain, instead of driving vehicles will protect Hertfordshire's historic towns and surroundings particularly if the infrastructure is designed according to standards such as those suggested in Manual for Streets.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	✓	Cycling is open to everyone and the cost of a bicycle is generally affordable for most people. Longer distances can be achieved by cycling and therefore access can be improved if cycling infrastructure is in place.	Build more connective cycle routes particularly to key services and community facilities. For people who cannot cycle, promote bikeability or other training to give people confidence to cycle. For those who cannot afford bikes, consider opening places where unwanted bicycles can be recycled. Electric bikes are also increasing used by people who need extra assistance.

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<b>SEA Analysis Table</b>	<b>Policy: Active Travel - cycling</b>		
To empower all sections of the community to participate in decision making and local action	P+	People on low incomes are more able to ride bicycles than afford to run cars, therefore with better access to places through improved cycling infrastructure etc, people are better able to participate in decision making and local action.	As above.
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	✓	Potential employees on low incomes are more able to ride bicycles than afford to run cars, therefore with better access to places through improved cycling infrastructure, people are better able to access work opportunities.	As above
To spread economic growth more evenly to benefit deprived areas	✓	Potential employees on low incomes are more able to ride bicycles than afford to run cars, therefore with better access to places through improved cycling infrastructure etc, people are better able to access work opportunities.	As above

## APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - CYCLING

SEA Analysis Table	Policy: Active Travel - cycling		
To maintain the vitality and viability of existing centres	✓	Following on from above, with more people employed, there will be more spending power in existing centres leading to improved vitality and viability. Retail centres experience more footfall if people can access them by walking and cycling.	Encourage new shopping areas to be accessible by active modes of transport at the negotiation stage of development.

### Significant Positive Effects:

Cycling and the construction of cycling infrastructure has far less impact on biodiversity and the historic and natural environment than the negative impacts of continued use of fossil fuelled vehicles. The more people that replace car journeys with cycling the better. There will then be the additional benefit of a healthier population from additional exercise, a more pleasant public realm with less air and noise pollution and a safer environment from the point of view of more people being around to deter anti-social behaviour. Economically, retailers can benefit from more footfall as it is proven that walkable shopping areas are more conducive to shopping trips. This in turn provides more jobs, with employees being able to access their workplaces easier if there is the cycling infrastructure to enable them to do so.

**Significant Negative Effects:** None.

**Timescale:** medium.

**Temporary or Permanent:** Although the cycling infrastructure is fairly permanent, human travel behaviour dictates that numbers of people cycling could increase or decrease depending on promotion, weather, demography as well as other indirect criteria.

**Likelihood of effects or impacts identified occurring:** medium as long as more cycling schemes are implemented throughout the county.

## **APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - CYCLING**

### **Recommendation for mitigation for enhancement of positive effects:**

Promote cycling as often as possible particularly as a form of exercise that most people can enjoy and as beneficial for the environment. Think about the interactions between pedestrians, vehicles and cyclists to prevent any conflicts. For example use signage so it is clear who has the priority right of way to avoid accidents. Safety also applies on the road, bikeability training can help cyclists ride safely, drivers also need tuition to be aware of cyclists.

Cycle storage needs to include the ability to lock bikes securely, particularly in transport interchanges and at workplaces and near shops . New cycling infrastructure should be designed using established standards such as Manual for Streets or Roads in Herts. Build more connective cycle routes particularly to key services and community facilities. For people who have not learnt to cycle or are afraid of the roads, promote bikeability to give people confidence. For those who cannot afford bikes, consider opening places where unwanted bicycles can be recycled. Electric bikes are also increasing used by people who need extra assistance. Town Planners and HCC Development Control can assist by encouraging new shopping centre developers to build in accessible routes for active modes of transport.

### **Data Issues:**

Monitor how many developers are including cycling infrastructure in their development plans.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - walking</b>		
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	Walking has far less negative impact on the natural environment than modes of transport that use fossil fuels.	Promote walking for short journeys as often as possible.
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	Walking is proven to prolong life and improve physical and mental health, plus it is open to everyone in society.	Promote walking as a form of exercise for everyone.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - walking</b>		
To reduce crime and create safe environments	✓	If there are more people walking in public spaces, this leads to safer environments and a feeling of personal security.	Any improvements to the public realm to reduce the fear of crime – such as removing hiding places will help to encourage people to walk more. This needs to be acknowledged in Growth and Transport Plans.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	✓	Walking surfaces are more sustainable in terms of impacting on the environment than road surfaces. The more use of walking surfaces the less will be spent on resurfacing roads.	
To move away from waste disposal to minimisation, reuse, recycling and recovery	✓	Pavements and rights of way use less resources than road surfaces, however when construction work is undertaken if possible recycled materials should be used.	
To ensure the efficient use of water, and safeguard water resources	P+	Less roadway runoff including chemicals from tyres will reach water courses	

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - walking</b>		
To reduce contamination, and safeguard soil quality and quantity	P+	Less roadway runoff including chemicals from tyres and road salt will contaminate the soil.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	✓	Walking has no negative impact on air quality or noise pollution unlike modes of transport that use fossil fuels.	Continue to promote walking as is currently being done by the Clean Air Day campaign and general school travel planning activities.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Walking addresses this objective completely.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	P+		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	Walking does not produce the greenhouse gases that are causing climate change unlike modes of transport that use fossil fuels.	
To ensure the sustainable supply and use of energy	✓	Walking does not use any energy other than that produced by individual people.	

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

SEA Analysis Table	Policy: Active Travel - walking		
SEA Topic - Historic Environment and Landscape			
To protect and enhance the character of landscape, townscape and green spaces	✓	More walking in the public domain will enhance the landscape of Hertfordshire's towns, particularly if the infrastructure is designed according to standards such as those suggested in Manual for Streets. Less need to build roads, will mean less fragmentation of the landscape.	New walking infrastructure should be designed using established standards such as within Manual for Streets or Roads in Herts.
To conserve and enhance the historic environment, heritage assets and their settings	✓	More walking in the public domain will reduce the negative impact of vehicles on Hertfordshire's historic towns and surroundings from vibration and pollution, although impacts could be site specific.	Consult with Hertfordshire's expert in-house archaeologists before building large schemes which may impact on heritage assets.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

<b>SEA Analysis Table</b>	<b>Policy: Active Travel - walking</b>		
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	✓	Enabling people to walk short distances, perhaps as part of a longer journey, will help towards improving access to essential services.	Prioritise schemes in the ranking system `which improve walking connectivity in urban towns. For example schemes which overcome severance by busy roads.
To empower all sections of the community to participate in decision making and local action	P+	Enabling people to walk shorter distances perhaps as part of a longer journey, will help socially isolated groups to participate in decision making and local action.	Prioritise schemes which improve walking connectivity in urban towns. For example schemes which address severance by busy roads.
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P+	Enabling people to walk shorter distances perhaps as part of a longer journey, will help socially isolated groups to access employment.	Prioritise schemes which improve walking connectivity in urban towns. For example schemes which address severance by busy roads.
To spread economic growth more evenly to benefit deprived areas	P+	Enabling people to walk shorter distances perhaps as part of a longer journey, will help socially isolated groups to access employment.	Prioritise schemes which improve walking connectivity in urban towns. For example schemes which address severance by busy roads.

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<b>SEA Analysis Table</b>	<b>Policy: Active Travel - walking</b>		
To maintain the vitality and viability of existing centres	<b>P+</b>	Following on from above, with more people employed, there will be more spending power in existing centres leading to improved vitality and viability. There is also strong evidence that retailers benefit from a walkable environment.	Prioritise schemes which improve walking connectivity in urban towns.

## **APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

### **Significant Positive Effects:**

A policy which promotes walking has many positive impacts on all aspects of the environment and social well-being, from protection/conservation of biodiversity to improving human health.

**Significant Negative Effects:** None.

**Timescale:** medium.

### **Temporary or Permanent:**

Although the walking infrastructure is fairly permanent, human travel behaviour dictates that numbers of people walking could increase or decrease depending on promotion, weather, demography as well as other indirect criteria.

### **Likelihood of effects or impacts identified occurring:**

medium as long as more walking schemes are implemented throughout the county.

### **Recommendation for mitigation for enhancement of positive effects:**

Promote walking for short journeys as often as possible, it is form of exercise for everyone that has benefits for the environment. Continue to promote walking as is currently being done by the Clean Air Day campaign and general school travel planning activities. Any improvements to the public realm to reduce the fear of crime – such as removing hiding places will help to encourage people to walk more. This needs to be acknowledged in Growth and Transport Plans. New walking infrastructure should be designed using established standards such as within Manual for Streets or Roads in Herts. Ensure we consult with Hertfordshire's expert inhouse archaeologists before building large schemes which may impact on heritage assets. Prioritise schemes which improve walking connectivity in urban towns, for example schemes which address severance by busy roads.

### **Data Issues:**

None.

**APPENDIX 4b - APPRAISAL MATRIX: ACTIVE TRAVEL - WALKING**

APPENDIX 4b - APPRAISAL MATRIX: AIR QUALITY

SEA Analysis Table		Policy: Air quality	
SEA Objective	Assessment of Effect	Justification:	Recommendations (including mitigating negative effects and improving positive effects)
	✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/Depends on implementation P- Potentially negative impact X Negative impact	<ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	Emissions – particularly NO2 have known detrimental effects on biodiversity – this policy seeks to reduce harmful emissions.	Be aware of cumulative effects of multiple transport plans impacting on biodiversity – see court case <b>Number: [2017] EWHC 351 (Admin)</b>
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	Nationally 29,000 people die early because of road transport emissions, this policy seeks to reduce the amount of emissions and maximise the physical health of the residents of Herts.	Continue and promote Clean Air Day Activities, update the air quality strategic plan, investigate whether this could involve the development of Clean Air Zones.
To reduce crime and create safe environments.	O		

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<b>SEA Analysis Table</b>	<b>Policy: Air quality</b>		
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources.	U		
To move away from waste disposal to minimisation, reuse, recycling and recovery.	O		
To ensure the efficient use of water, and safeguard water resources.	O		
To reduce contamination, and safeguard soil quality and quantity	O		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution.	✓		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car.	P+	This policy encourages more walking, cycling and shared mobility which are sustainable modes, however use of EV isn't directly a sustainable mode.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding.	U		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	More ULEV will have a positive effect on reduction of road emissions –CO2 is not an air pollutant but the increase in anthropologic carbon emissions is a cause of climate change.	

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<b>SEA Analysis Table</b>	<b>Policy: Air quality</b>		
To ensure the sustainable supply and use of energy	P+	This policy seeks to reduce the amount of fossil fuels used in transport which will have a positive impact on the sustainable supply of energy as long as green energy is used to fuel ULEV. Note that a constant speed of 60mph is the optimum speed for fuel efficiency (fossil fuel engines)	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	Sustainable modes and ULEVs will have a beneficial impact on the landscape, townscape and green spaces in Herts. Less noise pollution will also result from this policy.	

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<b>SEA Analysis Table</b>	<b>Policy: Air quality</b>		
To conserve and enhance the historic environment, heritage assets and their settings	<b>P+</b>	Sustainable modes and ULEVs will have a beneficial impact on the landscape, townscape and green spaces in Herts. Less noise and less damage to historic assets will result. Impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all.	<b>P+</b>	Encouraging more active travel through infrastructure and promotional activities will help people on low incomes access more services and help remove discrimination towards the 'carless' minority.	
To empower all sections of the community to participate in decision making and local action.	<b>U</b>		

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<b>SEA Analysis Table</b>	<b>Policy: Air quality</b>		
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	U		
To spread economic growth more evenly to benefit deprived areas	U		
To maintain the vitality and viability of existing centres.	U		

**Significant Positive Effects:**

Reducing emissions that are harmful to humans, flora and fauna will have a beneficial effect on everyone and our surroundings and quality of life.

**Significant Negative Effects:**

None.

**Timescale:**

medium.

**Temporary or Permanent:**

Temporary

**Likelihood of effects or impacts identified occurring:**

Likely, especially as technology towards the development of non-fossil-fuelled vehicles moves closer. However, this is dependent on central government pushing ULEV take-up higher up the agenda, which will occur when the *Automated and Electric Vehicles Bill* is enacted and when measures in the Air Quality Plan take place.

## **APPENDIX 4b - APPRAISAL MATRIX: AIR QUALITY**

### **Recommendation for mitigation for enhancement of positive effects:**

Be aware of cumulative effects of multiple transport plans impacting on biodiversity – see court case **[2017] EWHC 351 (Admin)**. Continue and promote Clean Air Day Activities which started in 2017.

**Data Issues:** None.

**APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS**

<b>SEA Analysis Table</b>		<b>Policy: Airports</b>	
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	Promoting sustainable modes, passenger transport, the use of land use planning, tackling local congestion, and minimising noise pollution are all positive for local biodiversity.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	Promoting sustainable modes, and tackling congestion and noise pollution will all have health benefits to those visiting the airports or living nearby.	

**APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS**

<b>SEA Analysis Table</b>	<b>Policy: Airports</b>		
To reduce crime and create safe environments	<b>P-</b>	The policy does not mention personal security and fear of crime when using sustainable modes to access the airports.	The policy needs to consider personal security and fear of crime i.e. Hate Crime when using sustainable modes, especially for protected equalities groups.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources.	<b>O</b>		
To move away from waste disposal to minimisation, reuse, recycling and recovery.	<b>O</b>		
To ensure the efficient use of water, and safeguard water resources.	<b>O</b>		
To reduce contamination, and safeguard soil quality and quantity	<b>P+</b>	The Council does not support new runways and so this would reduce soil capping from any new runway.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution.	<b>P+</b>	This policy aims to reduce air pollution from promoting sustainable modes to access the airports and reduce congestion on access roads around the airports. It also aims to minimise noise impacts, however by increasing the passenger numbers	

**APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS**

SEA Analysis Table	Policy: Airports		
		this will increase air pollution from aircraft but this is not something the Council has control over. The Council does not support runway growth.	
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	This is the aim of the policy to improve access to sustainable modes to the airports.	
SEA Topic - Climatic factors			
To adapt to the impacts of climate change such as flooding	P-	Extreme weather events can close airports, and cause localised congestion with people trying to access the airports. The policy does not mention impacts of climate change.	Look into adaptation to climate change in surface access strategies.
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	P+	The policy aims to promote sustainable modes to the airports but does not mention the use of ULEVs both for cars and buses/coaches.	Do the surface access strategies include ULEVs?

**APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS**

<b>SEA Analysis Table</b>	<b>Policy: Airports</b>		
To ensure the sustainable supply and use of energy	P-	The policy does not mention the use of ULEVs to access the airports, such vehicles would reduce the use of fossil fuels from cars and buses.	Promoting the use of ULEVs to access the airports.
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	Reduced congestion and car use around airports will benefit local towns and villages.	
To conserve and enhance the historic environment, heritage assets and their settings	P+	Reducing congestion and air pollution around the airport through the promotion of sustainable modes will benefit any historic assets near the airports, although impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	U	Fares for passenger transport, and car parking fares need to be affordable, especially for employees that need to access the airports.	

## APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS

SEA Analysis Table	Policy: Airports		
To empower all sections of the community to participate in decision making and local action	U	Consultation on airport expansion needs to ensure that it reaches all sectors of the population. There is much local concern over aircraft noise around Stansted and Luton airports, especially with proposed airport expansion.	
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P-	Proposed airport expansion will create jobs, however the Council does not support any new runways.	
To spread economic growth more evenly to benefit deprived areas	O		
To maintain the vitality and viability of existing centres	O		

### Significant Positive Effects:

- There are a number of benefits from promoting the use of sustainable modes to and from airports for both passengers and employees, reduced congestion and better air pollution will have a positive impact on local biodiversity. There will be health benefits for people using and working at the airports.
- Job creation from airport expansion will boost the local economy.

### Significant Negative Effects:

- With the promotion of sustainable modes to access the airports, no mention is made to personal security and fear of crime, this may deter some people when needing to access the airport by such modes, especially in off peak hours.

## APPENDIX 4b - APPRAISAL MATRIX: AIRPORTS

- The policy does not mention any adaptation to climate change, with extreme weather events happening more and more (snow, flooding, extreme heat) this will impact visitors and staff being able to access the airports, and the impacts of flights being cancelled.
- Walking, cycling and passenger transport are mentioned as sustainable modes, but no mention is made of the use of Ultra Low Emission vehicles for both cars and buses/coaches, these vehicles will not improve local congestion but will have a significant positive impact on local emissions and air quality.

### **Timescale:**

Short to medium term for both positive and negative impacts.

**Temporary and Permanent:** Temporary positive impacts, because we are relying mainly on travel behaviour change, and behaviour can change over time.

### **Likelihood of effects or impacts identified occurring:**

Benefits to biodiversity, air quality and health benefits will only occur if sufficient modal shift can be achieved.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- The policy needs to consider/mention personal security and fear of crime, as there will be protected equalities groups that will not want to travel by sustainable modes, particular out of peak hours, and flights are often very early morning or late at night.
- Check the surface access strategies for any climate change adaptation measures, if there are not, then HCC needs to liaise with the airport operators to see why not.
- Check that the surface access strategies include provision for ULEVs, if not then then HCC will need to work with the airport operators to promote this.

### **Data Issues:**

- Crime statistics for the airport and bus and trains services that service the airport
- Numbers of ULEVs using the airports
- Number of charging points at the airports
- Congestion hotspots around the airports.

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Asset Management</b>		
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	P+	TIAMP aims to improve the efficiency of the existing transport network, negating the need to provide new major road developments and therefore protecting existing biodiversity and habitats.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	P+	TIAMP aims to improve the existing transport network for all modes of transport. This includes walking and cycling which can play a large part in improving	

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

SEA Analysis Table	Policy: Asset Management		
		people's health and improving access to leisure opportunities.	
To reduce crime and create safe environments	P+	Policy acknowledges that there are positive returns from maintenance investment with regards to speeds and road safety, and supports the delivery of the LTP objectives especially with regard to safety.	
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	P+	The policy states that it will fully consider how it can deliver LTP objectives including environmental impacts (including the use of raw materials)	Check that the new HIAMP includes monitoring data for use of recyclable materials.
To move away from waste disposal to minimisation, reuse, recycling and recovery	P+	The policy states that it will fully consider how it can deliver LTP objectives including environmental impacts (including waste disposal). However, it does depend on how the schemes are implemented as to how	Check that the new HIAMP includes monitoring data for disposal of waste materials.

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

SEA Analysis Table	Policy: Asset Management		
		much waste is created.	
To ensure the efficient use of water, and safeguard water resources	P+	HCC assets include drainage gullies, and the maintenance of these gullies. SUDs should protect local water resources, particularly for new infrastructure.	The Local Flood Risk Management Strategy - LFRMS should give priority to actions and mitigations that have environmental benefits (such as reducing pollution)
To reduce contamination, and safeguard soil quality and quantity	P+	HCC assets include drainage gullies, and the maintenance of these gullies. SUDs should protect against soil contamination from road runoff.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	P+	HIAMP aims to improve the efficiency of the existing transport network which includes improving traffic flows and improving the network for more sustainable modes. This will have a positive impact this objective.	Does the new HIAMP recognise the part asset management can play in air quality and noise pollution?

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Asset Management</b>		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	P+	Asset management is aimed at all modes of transport. However, improvements to facilities for these modes will encourage their use and ensure their viability as an alternative to the private vehicle.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	P+	The policy recognises that asset management is a factor in poor network resilience (i.e. flooding).	Does the new HIAMP include/consider adaptation to climate change?
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	P+	Asset management schemes which improve traffic flows, reduce congestion and encourage the use of more sustainable modes of transport will contribute to reducing carbon emissions and other greenhouse gases.	Does the new HIAMP include how it will contribute to reducing greenhouse gas emissions or other environmental objectives.

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Asset Management</b>		
To ensure the sustainable supply and use of energy	U	The policy does recognise that asset management does contribute to energy consumption, but it depends on the type of works being undertaken.	Does the new HIAMP mention the reduction of energy supply and use?
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	U	The policy does acknowledge that inappropriate materials used in asset management can be to the detriment of quality of place.	
To conserve and enhance the historic environment, heritage assets and their settings	P+	Asset management environmental benefits such as reduced emissions and better air quality, and less congestion should provide positive benefits to local heritage, impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	Asset management aims to keep the county moving which can only benefit sustainable modes which then leads to improved access.	

**APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Asset Management</b>		
To empower all sections of the community to participate in decision making and local action	P+	Asset management covers small schemes, as well as larger infrastructure schemes (both of which can be subject to public consultation).	
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	✓	Asset management will improve access to employment via all modes of transport and will look to improve traffic flows and congestion to speed up journey times for all journey purposes. This will reduce the amount of lost productive time through congestion, which will improve economic competitiveness and create a vibrant community.	
To spread economic growth more evenly to benefit deprived areas	O		

## APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT

SEA Analysis Table	Policy: Asset Management		
To maintain the vitality and viability of existing centres	P+	Improved asset management will help to maintain and improve routes to and from centres, including from rural areas.	

### Significant Positive Effects:

This policy aims to ensure that highway infrastructure is maintained efficiently with the available investment, and positively contributes to a wide range of LTP objectives including environmental. A large number of SEA objectives should see positive impacts and in particular employment and the economy.

### Significant Negative Effects:

No significant negative impacts were identified.

### Timescale:

Most asset management schemes are delivered in the short term.

### Temporary and Permanent:

Permanent.

### Likelihood of effects or impacts identified occurring:

Likely If sufficient levels of funding are achieved each year.

### Recommendation for mitigation for adverse effects and/or enhancement or positive effects:

- Check that the new HIAMP includes monitoring data for use of recyclable materials and disposal of waste materials?
- Does the new HIAMP recognise the part asset management can play in air quality and noise pollution?
- Does the new HIAMP include/consider adaptation to climate change?
- Does the new HIAMP include how it will contribute to reducing greenhouse gas emissions or other environmental objectives.
- Does the new HIAMP mention the reduction of energy supply and use?

## APPENDIX 4b - APPRAISAL MATRIX: ASSET MANAGEMENT

### Data Issues:

- Does the HIAMP monitoring data include information on resource use and waste disposal.

**APPENDIX 4b - APPRAISAL MATRIX: BUSES**

SEA Analysis Table	Policy: Bus		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	If sufficient modal shift can be achieved this will reduce the numbers of cars on the road and therefore reduce emissions and improve air quality which will be of benefit to local flora and fauna. Cleaner bus fleets through the Intalink partnership will also add to improving air quality.	

**APPENDIX 4b - APPRAISAL MATRIX: BUSES**

<b>SEA Analysis Table</b>	<b>Policy: Bus</b>		
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	Promotion of buses for work and school journeys should encourage active travel, as a bus journey will also involve walking as part of the journey. The policy will also improve access to services including access to leisure opportunities.	Promote/focus marketing bus services that particularly service journeys for work and school, and leisure/cultural activities.
To reduce crime and create safe environments	<b>X</b>	The strategy does not mention personal security or Hate Crime. If more people are expected to use buses, this could increase conflicts, and incidents of Hate Crime.	Policy needs to consider personal security (i.e. provision of lighting, CCTV) and Hate Crime.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	<b>P+</b>	Overall this policy should decrease the need for resources to maintain the roads, as fewer cars should be on the roads, but any new significant bus priority infrastructure would require some construction material.	

**APPENDIX 4b - APPRAISAL MATRIX: BUSES**

<b>SEA Analysis Table</b>	<b>Policy: Bus</b>		
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	P+	Any new bus priority infrastructure will need to adhere to SUDs.	
To reduce contamination, and safeguard soil quality and quantity	U	As above – by adhering to SUDS, soil contamination from road runoff will be mitigated.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	P+	Modal shift to buses should reduce traffic growth and so improve air quality, but the bus network needs to be using fully clean and quiet technology, this will not happen immediately and will take time for operators to renew their fleets.	Assist bus operators in seeking funding opportunities to purchase cleaner buses or electric buses.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Bus use is a sustainable mode, this policy aims to increase the usage of buses and reduce traffic growth and the need to travel by car.	

## APPENDIX 4b - APPRAISAL MATRIX: BUSES

SEA Analysis Table	Policy: Bus		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	P+	Any new infrastructure for bus priority measures will need to adhere to SUDs to ensure that there is minimal additional surface runoff.	
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	U	This will depend on the speed that bus fleets are renewed to cleaner technology.	Assist bus operators in seeking funding opportunities to purchase cleaner buses or electric buses.
To ensure the sustainable supply and use of energy	U	This will depend on the speed that bus fleets are renewed to cleaner technology.	Assist bus operators in seeking funding opportunities to purchase cleaner buses or electric buses.
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	This policy aims to minimise disruption from road congestion and roadworks, which will ultimately improve air quality and tranquillity.	Ensure that any bus infrastructure delivered contributes and protects the local character of the landscape and townscape.
To conserve and enhance the historic environment, heritage assets and their settings	U	Any bus priority infrastructure delivered should be mindful of any local historic assets.	Scheme designers should consult the HCC map of historic assets.

**APPENDIX 4b - APPRAISAL MATRIX: BUSES**

<b>SEA Analysis Table</b>	<b>Policy: Bus</b>		
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	✓	This policy highlights the need to improve journeys to work and school, developing the Intalink Partnership for improved ticketing schemes, fares, access to information. The policy also highlights Stevenage and Watford as areas of focus.	
To empower all sections of the community to participate in decision making and local action	P+	By facilitating certain groups of society in having access to travel opportunities, this will empower them to make better travel choices.	The protected equalities groups should always be considered when providing bus services.

**APPENDIX 4b - APPRAISAL MATRIX: BUSES**

SEA Analysis Table	Policy: Bus		
SEA Topic - Economic development			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P+	The policy states that infrastructure will be focused on a core network, that will connect key urban areas and regional centres which will improve access to key employment areas. The policy also includes a policy statement for promoting buses for work journeys.	
To spread economic growth more evenly to benefit deprived areas	P+	Through Intalink improvements(i.e. more attractive ticketing and fares) and improving accessibility to services, especially for those without access to a car.	
To maintain the vitality and viability of existing centres	P+	Buses help people access existing centres when they may not have access to a vehicle, and if sufficient modal shift will reduce congestion in town centres.	

## **APPENDIX 4b - APPRAISAL MATRIX: BUSES**

### **Significant Positive Effects:**

This bus policy could provide a significant opportunity to achieve modal shift, and change people's journeys to work and school, by reducing the need to travel by car. This in turn would have additional benefits to local biodiversity, emissions, air quality, health, landscape & townscape, by encouraging active travel and by using cleaner technology. By improving the bus network, this can significantly improve accessibility and so work towards tackling social exclusion, and spread economic growth to the more deprived areas of the county. Independence and empowerment can be facilitated by the provision of a good bus network.

### **Significant Negative Effects:**

This bus policy does much to reduce the causes of poverty and social exclusion but the more vulnerable groups in society could be deterred from using buses because of personal security issues and the fear of crime, both in the street and on the buses.

### **Timescale:**

Short to medium term for delivery of Intalink improvements and new Bus Act powers, longer term for significant bus priority measures i.e. new bus lanes.

### **Temporary or Permanent:**

Temporary as economics plays a large part in making the scheme successful, currently buses vary as to whether they are heavily subsidised or are commercially viable.

### **Likelihood of effects or impacts identified occurring:**

Medium – depends on investment, and whether IT solutions can solve some of the issues.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- Focus any bus promotion/marketing on travel to work/school, as this is more likely to achieve substantial modal shift.
- The policy needs to address/recognise personal security issues and fear of crime (i.e. Hate Crime), as these are at the moment a barrier for some people for using buses.
- The Council recognises that funding is limited for buses, but there is a need to help operators in seeking funding opportunities to turn their fleets green, cleaner, and more fuel efficient.
- Any schemes/infrastructure delivered should consider the local character of an area and any potential impacts on local heritage.
- Always consider protected equality groups in any scheme.

## **APPENDIX 4b - APPRAISAL MATRIX: BUSES**

### **Data Issues:**

- Numbers of alternative fuel (ULEV) buses in Hertfordshire
- Crime data on buses or at bus stops.
- What is people's perceptions of buses (need to ask non-bus users).
- Hits on the Intalink website.

**APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION**

SEA Analysis Table	Policy: Emissions Reduction		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	Emissions – particularly NO2 have known detrimental effects on biodiversity – this policy seeks to reduce harmful emissions.	Be aware of cumulative effects of multiple transport plans impacting on biodiversity – see court case <b>Number: [2017] EWHC 351 (Admin)</b>
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	Nationally 29,000 people die early because of road transport emissions, this policy seeks to reduce the amount of emissions and maximise the physical health of the residents of Herts.	Continue to promote Clean Air Day Activities which started in 2017 and all associated travel behaviour campaigns.
To reduce crime and create safe environments.	O		

**APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION**

<b>SEA Analysis Table</b>	<b>Policy: Emissions Reduction</b>		
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources.	U		
To move away from waste disposal to minimisation, reuse, recycling and recovery.	O		
To ensure the efficient use of water, and safeguard water resources.	O		
To reduce contamination, and safeguard soil quality and quantity	P+	Certain polluting road emissions, contaminate the soil, this policy seeks to introduce ULEV that are cleaner for the environment.	To further investigate whether road transport emissions are a soil pollutant issue in Hertfordshire.
<b>SEA Topic – Air</b>			
To protect and enhance air quality and minimise noise pollution.	✓		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	P+	This policy encourages more walking and cycling and use of EV which isn't truly a sustainable mode but does not emit NOx or particulates. (cannot specify at source until UK energy production is totally sustainable)	

**APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION**

<b>SEA Analysis Table</b>	<b>Policy: Emissions Reduction</b>		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding.	U		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport.	✓	This policy will have a positive effect on reduction of greenhouse gases particularly carbon dioxide.	
To ensure the sustainable supply and use of energy	P+	This policy seeks to reduce the amount of fossil fuels used in transport which will have a positive impact on the sustainable supply of energy as long as green energy is used to fuel ULEV.	Find a monitoring figure for the use of green energy in the county.
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	More sustainable modes and vehicles that do not use fossil fuels will have a beneficial impact on the landscape, townscape and green spaces. Less noise pollution will enhance tranquillity.	

**APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION**

<b>SEA Analysis Table</b>	<b>Policy: Emissions Reduction</b>		
To conserve and enhance the historic environment, heritage assets and their settings	P+	More sustainable modes and vehicles that do not use fossil fuels will have a beneficial impact on the landscape, townscape and green spaces in Herts. Less noise and less damage to historic assets will result, however impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	Encouraging more active travel through infrastructure and promotional activities will help people on low incomes access more services and help remove discrimination towards the 'carless' minority.	
To empower all sections of the community to participate in decision making and local action	U		
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy.	U		

## APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION

SEA Analysis Table	Policy: Emissions Reduction		
To spread economic growth more evenly to benefit deprived areas.	U		
To maintain the vitality and viability of existing centres.	U		

### Significant Positive Effects:

There are many positive or potentially positive impacts on the objectives from the emission reductions policy

Currently many road emissions have a negative impact on biodiversity and humans. It is estimated by COMEAP that nationally 29,000 people die early due to road transport emissions; this policy seeks to reduce the amount of emissions and also maximise the physical health of the residents of Herts through encouraging more walking and cycling and use of EV. The emissions reduction policy will also have a positive effect on reduction of greenhouse gases particularly carbon dioxide which cause climate change.

The policy will lead to a reduction in fossil fuels used in transport which will have a positive impact on the sustainable supply of energy as long as sustainable 'green' energy is used to fuel the ULEV. The growing number of sustainable modes and vehicles that do not use fossil fuels will have a beneficial impact on the landscape, townscape and green spaces in Herts. Greater tranquillity and less damage to historic assets will also result in the long term. From a social point of view encouraging more active travel through providing appropriate infrastructure and promotional activities will help people on low incomes access more services and help remove discrimination towards the 'carless' minority.

### Significant Negative Effects:

none.

### Timescale:

medium.

### Temporary or Permanent:

Permanent hopefully, although it will take time for the new technology to embed into everyday life.

## **APPENDIX 4b- APPRAISAL MATRIX: EMISSIONS REDUCTION**

### **Likelihood of effects or impacts identified occurring:**

Likely, especially as the development and use of non-fossil-fuelled vehicles grows. However the growth is dependent on central government driving ULEV take-up through financial incentives.

### **Recommendation for mitigation for enhancement of positive effects:**

Be aware of cumulative effects of multiple transport plans impacting on biodiversity – see court case **[2017] EWHC 351 (Admin)**. Continue to promote Clean Air Day Activities which started in 2017.

### **Data Issues:**

- Have a monitoring measure for the use of green energy in the county
- Investigate whether road transport emissions are a soil pollutant issue in Hertfordshire.

**APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

<b>SEA Analysis Table</b>	<b>Policy: Environment</b>		
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	Minimising noise/light pollution, and air pollution, and mitigating adverse impacts from new highways infrastructure schemes will provide benefits to the local flora and fauna, habitats and important sites.	Investigate the internal processes to assess the impact of schemes if they do not qualify for an Environmental Impact assessment.
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	P+	Although this policy is about the natural, built and historic environment, minimising impacts from noise/light pollution, and improving public space, will have	

**APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

SEA Analysis Table	Policy: Environment		
		positive impacts on public health.	
To reduce crime and create safe environments	O		
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	O		
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	✓	This policy acknowledges the need to reduce diffuse pollution (run-off), and to seek opportunities to reduce any impact from new infrastructure.	
To reduce contamination, and safeguard soil quality and quantity	P+		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	✓		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	P+	This policy does not directly increase use of sustainable modes, but by achieving modal shift through the delivery of other LTP policies this will contribute towards minimising environmental impacts.	

**APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

SEA Analysis Table	Policy: Environment		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	O	Adaptation to climate change is considered by the Network Management policy.	
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	P+	The policy aims to minimise impacts from transport and highway improvements which would include reducing greenhouse gases.	
To ensure the sustainable supply and use of energy	✓	This policy aims to conserve energy from street lights/signage.	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	✓	This policy aims to minimise adverse impacts on the landscape and environment, and protect and enhance public spaces.	
To conserve and enhance the historic environment, heritage assets and their settings	✓	This policy acknowledges that transport impacts on and causes damage to the historic environment, and aims to minimise the impact.	

**APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

<b>SEA Analysis Table</b>	<b>Policy: Environment</b>		
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	Potential to improve access to rural areas and improvements to public spaces.	
To empower all sections of the community to participate in decision making and local action	P+	Any major projects that require an EIA will involve detailed public consultation on the scheme and its impacts on the environment.	
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P+	By maintaining the quality or improving local landscape and townscapes this will provide benefits to those working within them, with physical and mental health benefits for staff.	
To spread economic growth more evenly to benefit deprived areas	O		
To maintain the vitality and viability of existing centres	P+	Through improvements to public spaces, minimal street clutter, less noise and light pollution.	

## **APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

### **Significant Positive Effects:**

This policy will provide significant benefits to local biodiversity, local rivers and streams (through reduced runoff), air quality and noise, landscape and townscape and the historic environment. It would also see a reduction in energy usage through the replacement programme for energy efficient streetlights.

### **Significant Negative Effects:**

There were no significant negative effects identified.

### **Timescale:**

Short to medium term for minimising impacts of smaller scale interventions, longer term for any major projects.

**Temporary and Permanent:** Permanent.

### **Likelihood of effects or impacts identified occurring:**

This will depend on how each scheme is implemented and the location (i.e. the vicinity to sensitive locations).

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- Investigate the internal processes to assess the environmental impact of smaller scale schemes, as they will not qualify for an Environmental Impact assessment.

### **Data Issues:**

None.

**APPENDIX 4b - APPRAISAL MATRIX: ENVIRONMENT**

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

<b>SEA Analysis Table</b>		<b>Policy: Growth &amp; Transport Plans</b>	
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	The localised GTPs plan to deliver LTP objectives which include reducing carbon emissions and reducing congestion, which will benefit the biodiversity of Hertfordshire.	Ensure emissions agreements are made in Quality Partnerships.  Lobby local operators to use Euro 6 buses with reduced emissions or electric buses.
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	To help improve access to opportunities, the GTPs are prioritised for local area needs. Reduced congestion and decreasing vehicle emissions alongside enhanced town centres with open spaces and active travel, will both	

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

SEA Analysis Table	Policy: Growth & Transport Plans		
		improve the health of the population.	
To reduce crime and create safe environments	P+	Each G&TP will need to show that it is delivering the LTP objectives (for which safety is an objective), and with a substantial evidence base this should ensure that personal and road safety are considered in any intervention.	
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	U	The construction materials required for any GTP scheme should aim to be recycled or sustainably sourced.	Use sustainable and recycled construction materials. Check what the current guidelines are in the HIAMP.
To move away from waste disposal to minimisation, reuse, recycling and recovery	U	Any waste produced from construction of interventions.	What is the guidance in the HIAMP for waste disposal from construction waste?.
To ensure the efficient use of water, and safeguard water resources	P+	Infrastructure construction as part of a GTP (e.g. new lane or cycle path,) may increase run of and prevent rainwater infiltration. However HCC must use SUDs for any new infrastructure.	

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

<b>SEA Analysis Table</b>	<b>Policy: Growth &amp; Transport Plans</b>		
To reduce contamination, and safeguard soil quality and quantity	<b>U</b>	Depends on the type and number of schemes identified as part of each Growth and Transport Plan.	Any new infrastructure should adhere to the Sustainable Urban Drainage System to ensure that any additional road run-off is collected and not released onto adjoining land.
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	<b>P+</b>	GTPs will encourage modal shift towards less polluting modes and support schemes that do not encourage car growth. Fewer cars on Hertfordshire's roads will improve air quality and noise pollution.	Any packages of measures need to be mindful of any local air quality management areas, and should consult the local district air quality officer.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	<b>P+</b>	GTPs will select solutions that support growth without encouraging congestion, and will need to follow the transport user hierarchy.	

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

<b>SEA Analysis Table</b>	<b>Policy: Growth &amp; Transport Plans</b>		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	<b>U</b>	Extreme weather events will become more common, so any new infrastructure delivered should not increase run off (e.g. cycle paths.) Adaptation to climate change, such as SUDS will be dependent on location and nature of the package.	Does the new HIAMP include mitigation for climate change and in particular flooding?
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	<b>P+</b>	GTPs aim to deliver LTP objectives which promote reduced carbon emissions. Packages will discourage congestion, helping to reduce vehicular emissions. GTPs will help facilitate active and sustainable travel with reduced emissions.	
To ensure the sustainable supply and use of energy	<b>U</b>	Any new street signage or lighting could be LED / solar to ensure they are more sustainable. Encouraging active travel could result in reduced fuel consumption by replacing the need to	Encourage the use of renewable energy for road infrastructure energy supply.

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

<b>SEA Analysis Table</b>		<b>Policy: Growth &amp; Transport Plans</b>	
		travel by car.	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	✓	GTPs aim to deliver LTP objectives which promote enhancing town centres and preserving the quality of the Hertfordshire environment.	
To conserve and enhance the historic environment, heritage assets and their settings	✓	GTPs aim to deliver LTP objectives which promote enhancing town centres and preserving the quality of the Hertfordshire environment.	Any new development should follow NPPF guidance on conserving and enhancing the historic environment
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	The GTPs aim to deliver LTP objectives which promote improved access through transport for all Hertfordshire's residents.	Should ensure packages implemented by a GTP consider protected groups; covered by EqIA assessments.
To empower all sections of the community to participate in decision making and local action	✓	The GTPs will be subject to public consultation whereby residents can promote and raise awareness of local transport issues.	

**APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

<b>SEA Analysis Table</b>	<b>Policy: Growth &amp; Transport Plans</b>		
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	✓	GTPs will help facilitate growth and seek to understand the relationship between towns. GTPs will support all of the LTP 'Prosperity' objectives which support economic growth.	
To spread economic growth more evenly to benefit deprived areas	P+	GTPs will help support improved access between employers and their labour markets. Improved access to employment will help spread economic growth.	
To maintain the vitality and viability of existing centres	P+	Certain GTPs will aim to investigate the relationship between towns. They will also support the LTP objective of "enhancing the quality and vitality of town centres, however package delivery is dependent on the location.	

## APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY

### **Significant Positive Effects:**

By encouraging mode shift and supporting the delivery of schemes which do not encourage traffic growth, the GTPs will help to reduce vehicular emissions and improve air quality. This will help to improve the health of Hertfordshire's residents whilst also creating safer environments with less cars and congestion. GTPs will help to enhance and protect Hertfordshire's town centres by identifying how LTP objectives can be delivered at a local level. Economic growth will be supported by the GTPs which aim to deliver the LTPs 'Prosperity' objectives, and individual consultations for each GTP will help to empower the community and involve Hertfordshire's residents in decision making.

**Significant Negative Effects:** None.

**Timescale:** Medium to long term, as the plans are on a rolling programme, the first plan is only just being produced.

**Temporary or Permanent:** Permanent and Temporary, the infrastructure would be permanent, the travel behaviour could be temporary depending on implementation.

### **Likelihood of effects or impacts identified occurring:**

GTPs cover wide areas of Hertfordshire rather than individual towns. As such, the delivery and any associated benefits will not be the same across the county, with different areas experiencing varying degrees of benefit.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- Use buses which are fitted with "green" technology to further support reduced emissions from less car traffic.
- Where possible, use sustainable and recyclable construction materials for any required infrastructure projects. Check what the current guidelines are in the HIAMP.
- Where possible, construction materials should also be locally sourced.
- What is the guidance in the HIAMP for waste disposal from construction waste.
- To help safeguard water supplies and the local soil environment, the Sustainable Urban Drainage System should be used if any projects could result in additional run off.
- Any packages of measures need to be mindful of any local air quality management areas, and should consult the local district air quality officer.
- Does the new HIAMP include mitigation for climate change and in particular flooding?
- New signs or street lighting should be powered with renewable energy to further support reduced fossil fuel consumption from less car traffic.

## **APPENDIX 4b - APPRAISAL MATRIX: GROWTH & TRANSPORT PLANS POLICY**

- Any new development should follow NPPF guidance on conserving and enhancing the historic environment.

### **Data Issues:**

There are no currently identified data issues. The GTPs will be supported by Evidence Packs covering background data such as community characteristics, the economic portrait of the area, and the transport network of the area as well.

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING**

<b>SEA Analysis Table</b>		<b>Policy: Influencing land use planning</b>	
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	This policy will increase the potential for growth in sustainable transport; all fuel based transport has a detrimental effect on biodiversity, so any reduction is welcomed.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	If planners create urban environments where there are closer links to sustainable transport, then opportunities for a healthier lifestyle will be available for all.	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING**

<b>SEA Analysis Table</b>	<b>Policy: Influencing land use planning</b>		
To reduce crime and create safe environments	P+	Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will create a safer environment, with less opportunities for crime to occur and fewer road traffic accidents.	
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	O		
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	P+	Less vehicles will mean less pollutant contamination of water.	
To reduce contamination, and safeguard soil quality and quantity	P+	Less vehicles will mean less pollutant contamination of soil.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	✓	Less vehicles on the road will mean less pollution of air from road pollutants and minimise noise pollution.	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING**

<b>SEA Analysis Table</b>	<b>Policy: Influencing land use planning</b>		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Planners need to consider the choice of active travel opportunities and availability of passenger transport when considering applications for development.	Training of planners is crucial to alert them to the sustainable transport message.
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	O		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	Less fossil fuel transport means less greenhouse gas emissions from vehicles.	
To ensure the sustainable supply and use of energy	O		
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will protect the historic environment.	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING**

<b>SEA Analysis Table</b>	<b>Policy: Influencing land use planning</b>		
To conserve and enhance the historic environment, heritage assets and their settings	<b>P+</b>	Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will protect the historic environment, although impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	<b>P+</b>	Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community could create a more inclusive environment where everyone will benefit.	
To empower all sections of the community to participate in decision making and local action	<b>P+</b>	Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will empower all sections of the community.	

## APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING

SEA Analysis Table	Policy: Influencing land use planning		
SEA Topic - Economic development			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P+	Research has showed that a walkable retail area can have good footfall, therefore if planners negotiate for walking environments, economic areas can improve in terms of competitiveness.	
To spread economic growth more evenly to benefit deprived areas	P+	Planners can influence the urban realm of deprived areas too, by considering sustainable transport options in their negotiations with developers.	More training for planners would be welcome.
To maintain the vitality and viability of existing centres	P+	Planners can influence the urban realm of deprived areas too, by considering sustainable transport options in their negotiations with developers.	

### Significant Positive Effects:

This policy will increase the potential for growth in sustainable transport; all fuel based transport has a detrimental effect on biodiversity, so any reduction is welcomed. If planners create urban environments where there are closer links to sustainable transport, then opportunities for a healthier lifestyle will be available for all. Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will create a safer environment, with less opportunities for crime to occur and fewer road traffic accidents. Less vehicles on the road will mean less pollution of air from road pollutants and

## **APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING LAND USE PLANNING**

minimise noise pollution. Planners need to consider the choice of active travel opportunities and availability of passenger transport when considering applications for development. Less fossil fuel transport means less greenhouse gas emissions from vehicles. Less people in individual cars, sharing sustainable transport, engaged in active travel and more people out in the community will protect the historic environment. Research has showed that a walkable retail area can have good footfall, therefore if planners negotiate for walking environments, economic areas can improve in terms of competitiveness. Planners can influence the urban realm of deprived areas too, by considering sustainable transport options in their negotiations with developers.

**Significant Negative Effects:** None

**Timescale:** Long-term

**Temporary or Permanent:** Permanent

**Likelihood of effects or impacts identified occurring:** Likely if the LTP4 objectives are fully endorsed.

**Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**  
More training for planners in the advantages of sustainable transport.

**Data Issues:**  
None.

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

SEA Analysis Table	Policy: Influencing Travel Behaviour		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	If sufficient modal shift is achieved.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	The delivery of travel planning aims to promote sustainable modes and more active travel, and will potentially benefit business by having healthier staff.	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

<b>SEA Analysis Table</b>	<b>Policy: Influencing Travel Behaviour</b>		
To reduce crime and create safe environments	P-/P+	By encouraging people to use more sustainable modes, and shared mobility choices, there could be the potential for more hate crime incidences and personal security issues when walking, cycling, using passenger transport alone. Or alternatively the more people there are around – the less likely for hate crime or other crimes to take place.	Scheme design will need to consider security and safety as a higher priority.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	P-	Small negative impact if any hard measures/new infrastructure is required to deliver more cycling, walking, passenger transport	Any new infrastructure should consider using local or recycled materials (particularly aggregates). HIAMP policy needs to be checked.
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	O		
To reduce contamination, and safeguard soil quality and quantity	O		

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

<b>SEA Analysis Table</b>	<b>Policy: Influencing Travel Behaviour</b>		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	<b>P+</b>	Positive impacts on air quality and noise pollution if sufficient modal shift is achieved through, delivery of travel plans, parking measures, digital connectivity measures.	Perhaps prioritise travel planning and parking measures in towns with air quality management areas.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	This is the aim of this policy to facilitate behavioural change and reduce growth, congestion and the need for excessive road building.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	<b>U</b>	Any new infrastructure implemented for walking, cycling, passenger transport needs to be mindful of future changes in weather i.e. flooding, very hot/cold temperatures.	Does the HIAMP/Roads in Herts refer to the need to adapt to future climate change issues?
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	<b>P+</b>	Again dependant on the level of modal shift achieved through the delivery of travel plans, land use planning and parking restrictions. Any	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

<b>SEA Analysis Table</b>	<b>Policy: Influencing Travel Behaviour</b>		
		new bus services delivered should ensure that the cleanest buses are used i.e.the latest Euro rating or are an Ultra Low Emission Vehicle.	
To ensure the sustainable supply and use of energy	<b>P+</b>	If local services can be delivered using virtual connectivity this would save energy with fewer buildings being required.	
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	<b>U</b>	This would depend on the design and quality of any schemes delivered to accommodate modal shift. More infrastructure would be required to get people out of their cars and into the landscape/townscape, and would add to what is already existing.	
To conserve and enhance the historic environment, heritage assets and their settings	<b>P+</b>	Any improvements to walking, cycling, passenger transport should improve access to local heritage, sites and buildings, especially in urban areas.	

**APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

<b>SEA Analysis Table</b>	<b>Policy: Influencing Travel Behaviour</b>		
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	✓	Strategic land use planning, travel planning and better digital connectivity will bring services closer to the people, therefore the need for a private car (with its financial constraints) should diminish.	
To empower all sections of the community to participate in decision making and local action	P+	With more people out in the community using the infrastructure rather than travelling alone in a car, this should empower people to make more of an effort in shaping local transport through local consultation.	County Council need to ensure that the public are informed/consulted upon with sufficient notice before any significant changes are made.
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy.	✓	Travel Planning is cost effective for businesses, and should assist business with staff retention, and result in healthier staff.	

## APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR

SEA Analysis Table	Policy: Influencing Travel Behaviour		
To spread economic growth more evenly to benefit deprived areas	✓	Services and employment should become more readily accessible, especially for those without access to a car.	Target travel planning first at key employment sites in towns with known areas of deprivation.
To maintain the vitality and viability of existing centres	P+/P-	By bringing people back into the community and out of their cars, and by encouraging more local journeys by sustainable modes this may rejuvenate the counties town centres. Improvements to digital connectivity, home shopping, and accessing services remotely will mean that people will not need to go into their local town centre.	

### Significant Positive Effects:

The aim of this policy is to reduce traffic growth, congestion and the need for excessive road building, through behavioural change (using land use planning, travel planning and demand management). With sufficient modal shift to walking, cycling, and passenger transport local biodiversity will see benefits as a result of lower emissions and better air quality. People should see improvements to their mental and physical health, and should find it easier to access local services, employment, and leisure activities, it should bring people out into the community and not just see the county from the safety of their cars. Local business should experience cost benefits, have healthier staff, and have a better access to local labour markets.

## **APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR**

### **Significant Negative Effects:**

By bringing more people into the community and using public transport this could increase the potential for more incidents of hate crime (particularly on buses), the general public will also be more aware of their personal safety and security when out walking, cycling alone. With improvements with technology and digital connectivity, this could result in people having less interaction with the community, with negative impacts on mental and physical health, and on the counties town centres as fewer people need to travel to services and facilities (particularly with younger people who tend to use technology more).

Any new sustainable mode schemes need to be mindful of the impacts of climate change, as the weather can be a large determining factor on people's travel choices.

### **Timescale:**

Short to medium term for travel planning and demand management measures, longer term for any significant bus projects (i.e. Bus Rapid Transit) or strategic land use planning.

### **Temporary or Permanent:**

Temporary.

### **Likelihood of effects or impacts identified occurring:**

This will depend on the level of modal shift to more sustainable modes, and the development of new and improved technology.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- Future scheme designs should give a higher priority to the consideration to personal safety and security, so that people feel safe enough to switch to more sustainable modes.
- Check to see if the Herts HIAMP includes the use of recycled/local materials and aggregates when delivering new infrastructure, and that it acknowledges the need for adaptation to climate change.
- When delivering travel planning/parking measures, consider implementing measures first in areas with Air Quality Management Areas, or key employment sites near areas of deprivation.
- Local people need more empowerment with regards to local improvements to their community, the county council needs to ensure that any consultation is done with sufficient notice and people are informed on how their comments have made a difference.

## APPENDIX 4b - APPRAISAL MATRIX: INFLUENCING TRAVEL BEHAVIOUR

### Data Issues:

- Hate Crime statistics (see HCC Hate Crime Strategy).
- Research any figures for use of local/recycled construction materials in Hertfordshire.
- Incidents of extreme weather (flooding, excessive hot/cold spells).
- Numbers of Euro 6/ULEV buses being used in Hertfordshire.
- Map of key employment sites and local areas of deprivation.

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

SEA Analysis Table	Policy: Managing New Development		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>X</b>	Any significant new development will impact on the local flora and fauna due to habitat loss. An EIA and TIA would be undertaken on such large developments and mitigation measures developed as appropriate.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	By ensuring the new development reflects the Transport User Hierarchy; developments in the future should incorporate more sustainable modes, and	

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

SEA Analysis Table	Policy: Managing New Development		
		encourage the use of shared mobility and travel plans. This should improve the health of those living or working in such developments, by reducing emissions and air pollution and making people more physically active.	
To reduce crime and create safe environments	P-	By promoting sustainable modes and travel plans, more people will have to share infrastructure and road space, which could result in possible conflicts.	Any new development design should give higher priority to personal security and safety is this reflected in Roads in Herts (the council's highway design manual)
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	O	Developments not delivered by the County Council.	
To move away from waste disposal to minimisation, reuse, recycling and recovery	P-	Due to construction work on any new development.	Check what guidance says on waste disposal in Roads in Herts, Manual for Streets etc.
To ensure the efficient use of water, and safeguard water resources	X	Any new development will require drainage, and will add additional pressure onto the high water demand	

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

<b>SEA Analysis Table</b>	<b>Policy: Managing New Development</b>		
		(Hertfordshire are amongst the highest water users nationally).	
To reduce contamination, and safeguard soil quality and quantity	<b>P+</b>	Any new development will need to adhere to SUDS to reduce surface water run-off into local water courses, to reduce land contamination and flooding.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	<b>P-</b>	Any new development will generate vehicle traffic which will add to local congestion and therefore create emissions and impact on local air quality.	Prioritise any developer contributions on delivering sustainable modes for accessing both residential and business developments, and /or increasing infrastructure for ULEVs and shared mobility. Lobby district/borough councils to add conditions onto planning applications to install EV charging points, not all districts do this, should be as standard.

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

<b>SEA Analysis Table</b>	<b>Policy: Managing New Development</b>		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	<b>P+</b>	The policy states that the location and design should reflect the new Transport User Hierarchy, this should mean that sustainable modes are considered above the motor vehicle when designing new developments.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	<b>U</b>	Any development will need to be assessed for flood risk during the planning application stage, and should be discouraged within a floodplain. Any new development will need to adhere to SUDS to reduce surface water run-off into local water courses.	
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	<b>P+</b>	If any new development can increase the use of sustainable modes and ULEVs by applying the transport user hierarchy.	

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

<b>SEA Analysis Table</b>	<b>Policy: Managing New Development</b>		
To ensure the sustainable supply and use of energy	<b>P+</b>	The installation of EV infrastructure in new development could be achieved through the planning process.	Lobby district/borough councils to apply conditions to planning applications, not all currently do this.
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	<b>P+</b>	This policy states that it will resist development that significantly affects the rural or residential character of a road or right of way. By supporting development that is sustainable this should also protect landscape and townscape and green spaces.	
To conserve and enhance the historic environment, heritage assets and their settings	<b>P-</b>	New development and roads could impact on local heritage it depends on where the new development is planned to be located, therefore any impacts could be site specific.	The County Council's database of historic assets is available to study for any proposed development.

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

SEA Analysis Table	Policy: Managing New Development		
SEA Topic - Social inclusiveness			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	The application of the transport user hierarchy and the delivery of travel plans should improve access to services by increasing travel choices and promoting sustainable modes that are accessible for all.	
To empower all sections of the community to participate in decision making and local action	P+	To support developments that are increasing opportunities for sustainable modes and ULEVs this should empower people to make better transport choices, and by reflecting the transport user hierarchy this should also benefit those on lower incomes and those without access to a car.	For any new residential or business development, it will be important to promote and raise awareness of travel plans or any sustainable modes so that people can change their travel behaviour at the start of using the new development.

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

SEA Analysis Table	Policy: Managing New Development		
SEA Topic - Economic development			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	✓	This policy should help new business developments be more accessible to all, therefore opening up the labour market. By increasing access to employment by sustainable modes this should benefit the local environment by reducing congestion, improving air quality and the health of employees, which in turn will provide many economic benefits to business.	Monitoring of travel plans will be important, so see how successful the delivery of the transport user hierarchy has been.
To spread economic growth more evenly to benefit deprived areas	U	This will depend on where the new development is located, but it has the potential to benefit deprived areas by increasing the provision of sustainable modes.	
To maintain the vitality and viability of existing centres	U	Depends on the location and type of the development.	

## **APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

### **Significant Positive Effects:**

By ensuring that any new development reflects the new LTP4 Transport User Hierarchy this should provide a number of benefits to both people and business, including improvements to mental and physical health by increasing sustainable transport choices. This will also empower people to make better transport choices, which could reduce emissions and improve air quality. Any new development for business use with a good provision of sustainable modes and an active travel plan should provide many benefits to business (healthier staff, access to a wider labour market, increased productivity from reduced congestion).

### **Significant Negative Effects:**

Any new development would require landtake and so would impact on the local biodiversity of the area. Any large business or residential development would require an Environmental Impact Assessment, and Transport Impact Assessment which should mitigate any negative impacts, and either move or recreate sensitive habitats. One area of significant concern is the requirement for water for any new development, the majority of Hertfordshire's water comes from underground aquifers and the county is already an area experiencing serious water stress. The County has a wide range of historic assets from historic buildings to smaller historic monuments and archaeological sites, new development will possibly impact on these sites in both a positive and negative way.

### **Timescale:**

Short, medium and long term, depending on size and timescales of each development. District/Borough Local Plans show areas planned for development up to 2031.

**Temporary or Permanent:** Permanent.

### **Likelihood of effects or impacts identified occurring:**

The negative impacts could happen if guidance and regulations are not followed when at the planning applications stage. Many organisations need to be involved from an early stage to mitigate negative impacts on biodiversity, water usage and on the local historic environment.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- To establish the success of the implementation of the transport user hierarchy and any sustainable modes it is essential that Travel Plans are developed, and just as important that these travel plans are monitored. A significant amount of promotion and awareness raising will also be required for any travel plan, especially at the start of populating a new development, to get people to consider new ways of travelling.

## **APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

- Make the planning authorities aware of the County Council's map of historic assets.
- Lobby the district/borough councils to apply air quality conditions to new planning applications for the installation of EV infrastructure.
- Ensure that developer contributions are spent on sustainable mode infrastructure.
- Check any HCC guidance, design regulations (i.e. roads in Herts) on waste disposal from construction from new developments.
- Check that Roads in Herts considers personal safety issues.

### **Data Issues:**

- Numbers of new developments delivered, and numbers of those with Travel Plans per year.
- Which districts/boroughs currently apply planning conditions for air quality reasons.
- How many new developments have EV infrastructure.
- Map of floodplains in Hertfordshire.
- Water usage figures for Hertfordshire and any projections.
- Map of water utility companies that cover Hertfordshire.
- Map of planned development from Local Plans (countywide).

**APPENDIX 4b - APPRAISAL MATRIX: MANAGING NEW DEVELOPMENT**

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Network Management</b>		
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	Better management of traffic and the reduction of congestion should keep traffic moving and therefore improve air quality, this would benefit flora and fauna and local designated sites and habitats.	
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	<b>P+</b>	Rural areas could benefit with slight improvements to air quality, this could have positive impacts on the health of those living in the vicinity of inter-urban routes. Less congestion and	

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

SEA Analysis Table	Policy: Network Management		
		freer flowing traffic would should result in less road rage. Diesel delivery vehicles significantly contribute to poor air quality so by managing freight movements this could improve air quality to certain areas and so have health improvements for those with respiratory issues.	
To reduce crime and create safe environments	P-	By managing congestion this can increase traffic speeds. Any parking solutions for HGVs also need to be secure to deter theft.	Any traffic management schemes also need to consider road safety alongside.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	O	Minimal resources will be used as the policy is to make best use of the existing network.	
To move away from waste disposal to minimisation, reuse, recycling and recovery	O	Minimal waste will be produced.	

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Network Management</b>		
To ensure the efficient use of water, and safeguard water resources	<b>U</b>	The policy encourages the transfer of freight to water i.e. Herts 2 navigable waterways. At this stage it is unclear what impacts there would be to these waterways if there were more movements of freight.	What are the impacts of freight movement on local waterways.
To reduce contamination, and safeguard soil quality and quantity	<b>P+</b>	The policy aims to where feasible reduce congestion and reduce levels of single occupancy car use which would result in less surface runoff. The policy also includes policy to operate all infrastructure in light of climate change risk.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	<b>P+</b>	Better management of traffic and freight, and the reduction of congestion should keep traffic moving and therefore improve air quality with benefits to both biodiversity and human health.	

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

<b>SEA Analysis Table</b>	<b>Policy: Network Management</b>		
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	P+	This policy does not directly improve the choice of sustainable transport modes, but by making the network more resilient and reliable this would allow sustainable modes especially buses to be more reliable, which may result in people choosing more sustainable travel choices.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	✓	This policy has been developed to deal with unplanned events such as flooding. To ensure that the network continues to run and diversion routes are put in place.	
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	P+	This policy is about keeping the network moving not about reducing traffic, but the policy does aim to reduce single occupancy car use, encourage sustainable modes and deliver the road	

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

SEA Analysis Table	Policy: Network Management		
		hierarchy. Transfer of freight to rail or water would also reduce greenhouse gases.	
To ensure the sustainable supply and use of energy	P-	Most Intelligent Transport Systems (ITS) will require electricity from the national grid, it will be difficult to ensure that this electricity is wholly or partly sustainable.	
SEA Topic - Historic Environment and Landscape			
To protect and enhance the character of landscape, townscape and green spaces	P+	This policy will allow some highway upgrades to mitigate new development in congested areas and so could have a positive impact on landscape and townscape, with regards to improving congestion and reducing air pollution. People are more likely to visit attractions and town centres is traffic is well managed.	

## APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT

SEA Analysis Table	Policy: Network Management		
To conserve and enhance the historic environment, heritage assets and their settings	P+	Less congestion and air pollution as a result of this policy should benefit the historic assets and settings, although impacts could be site specific.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	Dealing with localised congestion will improve accessibility to services, and allow sustainable modes to become a more realistic choice.	
To empower all sections of the community to participate in decision making and local action	U	Unclear as to how communities will be involved.	
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	✓	By being able to deal with unplanned events i.e. weather events, accidents. This should result in less congestion which will benefit local businesses.	
To spread economic growth more evenly to benefit deprived areas	P+	If sustainable modes are able to use the network then this will facilitate modal shift and will benefit those without access to a car.	

**APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

SEA Analysis Table	Policy: Network Management		
To maintain the vitality and viability of existing centres	✓	Existing centres and the local economy will thrive with reduced congestion and more reliable journeys especially from buses.	

**Significant Positive Effects:**

By reducing congestion and keeping the traffic moving this policy should achieve an improvement in air quality (which would have a positive impact on local biodiversity and habitats). Delivery of this policy should also improve the health of the population from both an air quality aspect and mental health (i.e. road rage), and provide benefits to the historic environment. By improving the reliability of journeys this will have specific benefits for passenger transport users and local businesses. This policy has been developed to deal with unplanned events on the road network, such as increased flooding incidents as a result of climate change. Less congestion should allow local centres to thrive, making it easier to access town centres and local services.

**Significant Negative Effects:**

By reducing congestion this can have a knock-on effect and result in vehicles travelling at higher speeds on some routes, if road safety measures are not also considered. Any Intelligent Transport Systems delivered would require energy from the already stretched national grid.

**Timescale:**

Short to medium term, long term for management of autonomous vehicles.

**Temporary or Permanent:** Temporary depending on implementation.

**Likelihood of effects or impacts identified occurring:**

The positive and negative impacts are all reliant on congestion being reduced and journey times being improved, but this will also require behavioural change from road users.

## **APPENDIX 4b - APPRAISAL MATRIX: NETWORK MANAGEMENT**

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- Ensure that road safety is considered at the same time as any schemes implemented to look at traffic management, to consider traffic speed changes.
- Look into the impacts of freight movement on waterways, as the policy is promoting movement of freight from road to waterway.

### **Data Issues:**

- Where are the congestion hotspots in Hertfordshire (Maps of congestion hotspots, congestion reference flow maps)
- Where are known areas of poor air quality (Map of AQMA sites)
- What are the appropriate routes for freight movement (map of Strategic Route Network)
- Performance indicators for speed of traffic
- Where is current provision for lorry parking (Map)
- Where are the navigable waterways in Hertfordshire (Map) and what are the current freight movements on these waterways
- What areas of the county currently experience flooding (Map)
- What is the percentage of energy that is produced by green sources that is available in Hertfordshire.

**APPENDIX 4b - APPRAISAL MATRIX: RAIL**

SEA Analysis Table	Policy: Rail		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	O		
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	P+	This policy aims to improve stations as interchanges and improve access through car parking, and access by non car modes, this should encourage more active travel by people finding it easier to walk and cycle to railway stations.	

**APPENDIX 4b - APPRAISAL MATRIX: RAIL**

<b>SEA Analysis Table</b>	<b>Policy: Rail</b>		
To reduce crime and create safe environments	X	This policy does not mention personal security at stations and at interchanges, or mention fear of crime (i.e. hate crime)	That this policy includes personal security and fear of crime at stations and interchanges.
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	P-	Small amount of resources required for station and interchanges improvements and infrastructure.	
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	O		
To reduce contamination, and safeguard soil quality and quantity	O		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	P+	Passenger rail travel does not contribute to poor air quality, but an increase in the frequency of rail services could impact on people that live alongside railway tracks with an increase in rail noise.	
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	Rail travel is a sustainable mode.	

**APPENDIX 4b - APPRAISAL MATRIX: RAIL**

<b>SEA Analysis Table</b>	<b>Policy: Rail</b>		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	O		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	✓	Electrified rail travel is a sustainable mode which does not emit greenhouse gases. Any modal shift to rail travel will also have a positive impact as there will be fewer road vehicles emitting pollution.	
To ensure the sustainable supply and use of energy	P-	Passenger trains require electricity, how much is provided by green electricity?	
<b>SEA Topic - Historic Environment and landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	If there is modal shift to rail the result is fewer vehicles on the roads which will have a positive impact on local landscape, townscape and green spaces.	
To conserve and enhance the historic environment, heritage assets and their settings	P+	Improvements to integrated ticketing could improve access to local historic assets.	

**APPENDIX 4b - APPRAISAL MATRIX: RAIL**

<b>SEA Analysis Table</b>	<b>Policy: Rail</b>		
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	<b>P-</b>	At the moment rail journeys are not affordable for those on lower incomes, but this policy will look at fares through the Intalink Partnership.	
To empower all sections of the community to participate in decision making and local action	<b>P+</b>	The County Council supports the development of Community Rail Partnerships which are developed in partnership with local organisations and local people.	
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	<b>✓</b>	Better rail service with improved frequencies, affordable fares, and shorter journey times will encourage people to access work via rail. Improvements to stations and interchanges will allow those in rural areas to access railway stations.	

## APPENDIX 4b - APPRAISAL MATRIX: RAIL

SEA Analysis Table	Policy: Rail		
To spread economic growth more evenly to benefit deprived areas	P+	Improvements to the railway stations will support regeneration in towns i.e. Stevenage.	
To maintain the vitality and viability of existing centres	P-	Rail services currently only appear to cater for commuter journeys into London, and it is fairly difficult to travel to towns within Hertfordshire during the day and it is virtually impossible to travel east west.	

### Significant Positive Effects:

Rail travel has the potential to facilitate active travel, especially at the start and end of a journey, improvements to interchanges and stations should assist in achieving this. Rail is a sustainable mode and so does not contribute to air pollution or greenhouse gases. The council supports Community Rail Partnerships which allow local people to have a say in the rail service in their area. Rail travel can play a large part in access to employment and by prioritising improvements to stations in towns with a greater number of deprived areas this will provide benefits to those on lower incomes and without access to a car.

### Significant Negative Effects:

The County Council has no decision making powers on the rail network, it can only lobby and influence rail operators. A significant negative impact is that the policy does not consider personal safety or fear of crime at stations. Police statistics show that crime at stations ranges from cycle thefts to anti-social behaviour, and more vulnerable sectors of the community may be put off travelling on public transport. Another negative for rail travel are high rail fares especially for those on lower incomes, if we want people to use rail instead of the car to access work and other services rail fares need to be affordable for all sectors of society. Currently it is difficult to get between towns by rail, especially during the daytime, rail seems concentrated around commuting into London and daytime trips are reasonably difficult, as parking is full up, and rail is limited east to west.

## **APPENDIX 4b - APPRAISAL MATRIX: RAIL**

### **Timescale:**

Short to medium term for service improvements, medium to longer term for station and interchange improvements.

**Temporary or Permanent:** Permanent.

**Likelihood of effects or impacts identified occurring:** likely.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- The policy needs to consider personal security and fear of crime at stations.

### **Data Issues:**

- Amount of cycle parking at stations
- Station crime statistics (types of crimes)
- Rail noise complaints

**APPENDIX 4b - APPRAISAL MATRIX: ROAD SAFETY**

<b>SEA Analysis Table</b>	<b>Policy: Road Safety</b>		
<b>SEA Objective</b>	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	<b>P+</b>	Slower traffic will result in less road-kill.	Review signage for deer on roads safety warnings in areas where there is a risk. This could be something for the forthcoming road safety strategy.
<b>SEA Topic - Population and human health</b>			
To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities	✓	Effective road safety measures will reduce physical injuries to all the stakeholders in the county.	
To reduce crime and create safe environments	✓	Effective road safety measures will create safer environments.	

**APPENDIX 4b - APPRAISAL MATRIX: ROAD SAFETY**

<b>SEA Analysis Table</b>	<b>Policy: Road Safety</b>		
<b>SEA Topic - Water and soil</b>			
To improve the sustainable use of resources	O		
To move away from waste disposal to minimisation, reuse, recycling and recovery	O		
To ensure the efficient use of water, and safeguard water resources	O		
To reduce contamination, and safeguard soil quality and quantity	O		
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	U	Certain safer speeds will reduce the amount of hazardous road emissions.	Should the Road Safety Strategy mention the hazards from air pollution in conjunction with road collisions?
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	U		
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	U		
To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport	U		
To ensure the sustainable supply and use of energy	U		

**APPENDIX 4b - APPRAISAL MATRIX: ROAD SAFETY**

<b>SEA Analysis Table</b>	<b>Policy: Road Safety</b>		
<b>SEA Topic - Historic Environment and Landscape</b>			
To protect and enhance the character of landscape, townscape and green spaces	P+	Speeding vehicles have a negative impact on Hertfordshire's heritage and landscape, therefore any measures to reduce speed will help.	
To conserve and enhance the historic environment, heritage assets and their settings	P+	Speeding vehicles have a negative impact on Hertfordshire's historic environment.	
<b>SEA Topic - Social inclusiveness</b>			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	As people feel safer on the roads – pedestrians and cyclists, as well as drivers, everyone will feel less excluded.	
To empower all sections of the community to participate in decision making and local action	U		
<b>SEA Topic - Economic development</b>			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	O		
To spread economic growth more evenly to benefit deprived areas	O		
To maintain the vitality and viability of existing centres	O		

## **APPENDIX 4b - APPRAISAL MATRIX: ROAD SAFETY**

**Significant Positive Effects:** Biodiversity – slower traffic equals less road kill. Road safety measures will also reduce physical human injuries and creating safer environments. Speeding vehicles have a negative impact on the Hertfordshire's heritage and landscape and historic environment, therefore any measures to reduce speed will help. As people feel safer on the roads there should be an increase in modal shift towards walking and cycling.

**Significant Negative Effects:** None.

**Timescale:** medium.

**Temporary or Permanent:** permanent.

**Likelihood of effects or impacts identified occurring:** likely.

**Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

Review signage for deer on roads safety warnings in areas where there is a risk. This could be something for the forthcoming road safety strategy. Should the strategy also mention the hazards from air pollution in conjunction with road collisions? Monitoring using the Vision Zero and Safe System Approach will need to be worked up in the Road Safety Strategy.

**Data Issues:** Monitoring using the 'Vision Zero and Safe System Approach' will be worked up in the Road Safety Strategy.

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Objective	<b>Assessment of Effect</b> ✓ Positive impact P+ Potentially positive impact O No relationship/link U Uncertain/ Depends on implementation P- Potentially negative impact X Negative impact	<b>Justification:</b> <ul style="list-style-type: none"> <li>• Likelihood of effect occurring</li> <li>• Permanence of effect</li> <li>• Geographic scale of effect</li> <li>• Cumulative effects</li> <li>• Current env. Social &amp; economic trends of affected area</li> <li>• Likelihood of affecting particularly sensitive locations</li> </ul>	<b>Recommendations</b> (including mitigating negative effects and improving positive effects)
<b>SEA Topic – Biodiversity, fauna and flora</b>			
To protect and enhance biodiversity	✓	This policy aims to reduce the need to travel, and increase sustainable modes, both of which will reduce the numbers of vehicles on the roads and result in lower air pollution, and noise pollution which will benefit all local flora and fauna.	

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Topic - Population and human health			
<p>To maximise the opportunities for leisure and a healthy lifestyle for all, and to improve the physical and mental health of the population, and reduce health inequalities</p>	<p><b>P+</b></p>	<p>The policy aims to increase sustainable modes such as walking and cycling, but protect vulnerable road users. By considering other road users first before vehicular traffic this should increase active travel and reductions in emissions and improved air quality will improve public health.</p>	<p>Need to ensure that rural areas are also considered and not just urban areas in the county.</p>
<p>To reduce crime and create safe environments</p>	<p><b>P-</b></p>	<p>There could be more opportunities for hate crime if more people are walking/cycling/using buses.</p> <p>Personal safety issues on autonomous public vehicles with no drivers.</p>	<p>More emphasis on personal safety and road safety will be needed if sustainable modes are considered before the needs of car drivers.</p> <p>Need to follow the development of autonomous vehicles carefully nationally and the safety implications of such vehicles.</p>

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Topic - Water and soil			
To improve the sustainable use of resources	<b>P-</b>	Any new infrastructure required for sustainable modes and autonomous vehicle schemes would require construction materials, this should be recycled materials where possible.	Does the HIAMP encourage the use of recycled construction materials?  Need to research what highway policy is on construction practices.
To move away from waste disposal to minimisation, reuse, recycling and recovery	<b>P-</b>	This would apply to any construction waste as a result of any schemes delivered to improve sustainable modes or for autonomous vehicles.	Does the HIAMP mention disposal of construction materials?  Need to research what highway policy is on construction practices.
To ensure the efficient use of water, and safeguard water resources	<b>P+</b>	As the County Council is now responsible for SuDS, this would be taken into consideration for any new infrastructure scheme, and drainage requirements. Fewer vehicles on the road would also mean less pollution from road runoff going into local water resources.	

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

<b>SEA Analysis Table</b>	<b>Policy: Transport User Hierarchy</b>		
To reduce contamination, and safeguard soil quality and quantity	P+	Reduction of traffic and reducing the need to use a car through the delivery of the hierarchy should result in less road run-off that can impact on soil quality.	
<b>SEA Topic - Air</b>			
To protect and enhance air quality and minimise noise pollution	U	By considering sustainable modes first over car users, this would improve air quality and noise pollution, if there is sufficient modal shift, but it would depend on where schemes are implemented.	Consider schemes first in areas with air pollution issues i.e. Air Quality Management Areas.
To improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car	✓	This is the aim of this policy.	
<b>SEA Topic - Climatic factors</b>			
To adapt to the impacts of climate change such as flooding	U	Any new infrastructure required will need to consider impacts of extreme weather events i.e. flooding.	Does the HIAMP consider the impacts of climate change i.e. flooding, hotter summers, wetter winters, snow events?

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

<b>SEA Analysis Table</b>	<b>Policy: Transport User Hierarchy</b>		
<p>To reduce greenhouse gases including carbon dioxide, emitted by vehicular transport</p>	<p><b>U</b></p>	<p>Any modal shift to sustainable modes and reducing the need to travel will reduce carbon dioxide emissions, although buses and autonomous vehicles will need to be Euro compliant and/or use environmentally friendly fuels or be electric.</p>	<p>HCC will need to follow closely the development of autonomous vehicles.</p>
<p>To ensure the sustainable supply and use of energy</p>	<p><b>U</b></p>	<p>Modal shift to more sustainable modes as a result of a user hierarchy will only be truly sustainable if buses and autonomous vehicles are powered by more environmentally friendly energy sources i.e. electric. Buses will need to be at a minimum Euro compliant and in the future consider other fuel sources.</p>	<p>New developments when considering infrastructure for sustainable modes should also consider installing electric charging points, whether residential or for business.</p>

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Topic - Historic Environment and Landscape			
To protect and enhance the character of landscape, townscape and green spaces	P+	This policy should improve streets and places by promoting sustainable modes over car use, reducing congestion and transport emissions. Future use of autonomous vehicles would take up less road space which could be given back to green spaces or used for sustainable modes. Benefits would apply to both rural and urban areas.	
To conserve and enhance the historic environment, heritage assets and their settings	P+	By minimising impacts on the landscape and streetscape and reducing emissions this should benefit any historic assets and their settings i.e. less particulate emissions would mean less damage to the outside of historic buildings, although impacts could be site specific.	When considering the user hierarchy in any decisions, plans, strategies the County Council's map of historic assets should be consulted.

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Topic - Social inclusiveness			
To tackle the causes of poverty and social exclusion by improving access to services and community facilities for all	P+	By considering walking, cycling, passenger transport before car users this should improve access for all to services and in particular it will benefit those with no access to a car or on a low income.	Ensure that rural areas are also considered in any use of the user hierarchy.
To empower all sections of the community to participate in decision making and local action	P+	By considering the needs of other road users before car users, this will particularly benefit under represented community groups (i.e. protected equalities groups) which should allow them to make more informed decisions about their travel choices. Any schemes delivered through Growth & Transport Plans would engage with local residents through consultation.	

**APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

SEA Analysis Table	Policy: Transport User Hierarchy		
SEA Topic - Economic development			
To maintain employment, improve economic competitiveness (consistent with environmental constraints) and create a vibrant economy	P+	The adoption of a new transport user hierarchy should make it easier for people to access employment, and also allow employers to access a wider labour market. Reductions in congestion and more reliable journeys would also benefit local businesses.	
To spread economic growth more evenly to benefit deprived areas	U	This would depend on where improvements are made within towns and villages.	Could Growth and Transport Plans highlight where deprived areas are within an urban/rural area?
To maintain the vitality and viability of existing centres	P+	This new policy has the potential to improve streets and places and so would improve existing centres, and should allow more people to access town centres and local services.	

## **APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

### **Significant Positive Effects:**

The use of a Transport User Hierarchy would consider the needs of more sustainable modes of transport over the motor vehicle (walking, cycling, passenger transport), and could (if sufficient modal shift is achieved) improve public health, improve air quality, and reduce noise pollution. The main aim of this new policy is to improve the choice of sustainable transport and reduce the need to travel. By reducing congestion and emissions this could provide benefits to both the urban and rural environment, in particular on the streetscape and landscape, and the historic environment. By considering sustainable modes before motor vehicles this should improve accessibility for all (to town centres and local services), but in particular for those with no car or on a low income, and should empower these groups of people to make a more informed travel choice. This policy should result in better access to employment, and allow employers to access a wider labour market.

### **Significant Negative Effects:**

Modal shift to passenger transport modes could result in more opportunities/incidents of Hate Crime. The policy also supports the development of autonomous vehicles, and at this point in time the safety aspects of this transport mode are unknown if they are not segregated from mainstream traffic. For any new infrastructure that is required there would be negative environmental impacts around construction material used and construction waste, this will need to be investigated further with Highways on current road construction practices.

### **Timescale:**

Short to medium term for the delivery of sustainable transport schemes. Long term for the use of autonomous vehicles.

**Temporary or Permanent:** Temporary because it is dependent on travel behaviour, which is not permanent and must be constantly reinforced.

### **Likelihood of effects or impacts identified occurring:**

This is dependent on the number of schemes delivered as a result of the new hierarchy, and also the amount of modal shift that is achieved. The more people that use sustainable transport modes the better it will be for the environment, and the local economy, but there could be social impacts with regards to how people interact with each other.

### **Recommendation for mitigation for adverse effects and/or enhancement or positive effects:**

- A new user hierarchy should also ensure that it applies to rural areas (perhaps this should be considered in any review of the current Rural Strategy).
- In any scheme that is promoting the use of more sustainable modes, personal and road safety should not be forgotten.

## **APPENDIX 4b - APPRAISAL MATRIX: TRANSPORT USER HIERARCHY**

- HCC also need to follow the development of autonomous vehicles very closely and their safety implications to see if this method of transport would be suitable for travelling around Hertfordshire.
- Further research is required on what is Highway policy around construction practices i.e. the use of raw materials and recycling road aggregate, and on the mitigation and adaptation around climate change.
- It is recommended that schemes should be prioritised in areas of poor air quality i.e Air Quality Management Areas.
- To accurately gauge if any schemes would impact on the historic environment, it is suggested that the County Council's map of Historic Assets in the county is consulted.
- Do the new Growth & Transport Plans highlight where deprived areas are, schemes would most likely be delivered through these plans.

### **Data Issues:**

- Hate crime data (to be included in baseline)
- Could a performance indicator on recycling and construction material be re-instated?
- Flooding events in the last 5-10 years.
- Weather data
- How many buses currently in Hertfordshire are alternative fuel buses?
- Update the map showing deprived areas in the county.
- A map of all the main employment areas in the county.