

Regional Development Committee Inquiry into Sustainable Transport

Comments prepared by



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Northern Ireland Environment Link (NIEL) is the networking and forum body for non-statutory organisations concerned with the environment of Northern Ireland. Its 55 Full Members represent over 90,000 individuals, 262 subsidiary groups, have an annual turnover of £70 million and manage over 314,000 acres of land. Members are involved in environmental issues of all types and at all levels from the local community to the global environment.

These comments are agreed by Members, but some members may be providing independent comments as well. If you would like to discuss these comments we would be delighted to do so.

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1. Summary Points

- 1.1 With the upcoming review of the Regional Transportation Strategy and the Regional Development Strategy and the continued implementation of the Programme for Government 2009-2012 (and the associated Budget) the decisions that are made in the coming year will have a significant influence on the transport systems we have for the next 20 years and beyond.
- 1.2 The Programme for Government and Investment Strategy, which were released in 2008, commit Northern Ireland to a continuing unsustainable transport system; highway measures have been allocated 80% of the transport spend.
- 1.3 The PricewaterhouseCoopers *Bridging the Gap* report confirms that investment in public transport on a per capita basis in England, Scotland, Wales and the Republic of Ireland is at least twice that of Northern Ireland.
- 1.4 The Committee is right to analyse the impacts of transport in the widest sense and also to investigate the context in which transport policy must now be made.
- 1.5 While domestic transport emissions in the UK increased by 9% from 1990 to 2006, in Northern Ireland they increased by a staggering 51%. The transport sector now accounts for 25% of Northern Ireland's total GHG emissions.
- 1.6 Travelwise reports that a 10% increase in the number of frequent cyclists would result in a cost saving of £200 million per year for the NHS. Moreover, a frequent cyclist is expected to be as fit as a non-cyclist who is 10 years younger.
- 1.7 A move away from hydrocarbon fuelled private cars may soon become an economic necessity. There is no other sector which is so utterly reliant on a single source of primary energy.
- 1.8 Reducing the energy used for transport has obvious economic (and environmental) benefits; this should become a central aim of new transport policy.
- 1.9 Recent Investment in public transport in Northern Ireland has produced results. There has been a 31% increase in Metro passengers since 2005 while rail passengers (excluding cross border journeys) for 2007/08 are up by 53% on 2001/02.
- 1.10 Most key Northern Ireland transport investments are based on their economic case. Other impacts such as social and environmental issues are sometimes considered but rarely used as deciding factors.
- 1.11 Climate Change must now be a key consideration when determining transport policy.
- 1.12 The emissions reductions required in Northern Ireland can only be achieved by promoting active and public transport and in the longer term through major changes to land-use policies.

- 1.13 We support a default 20mph or lower speed limit in all residential areas, as slower speeds help to improve road safety, encourage walking, cycling and public transport use, reduce fuel consumption and CO₂ emissions and reduce noise.
- 1.14 Spatial planning plays a particularly important role in shaping individuals' behaviour with regard to travel and transport. It is, therefore, imperative that a co-ordinated approach be taken when considering land-use and transport.
- 1.15 A well planned transport system can facilitate social connections which are important for mental health. Neighbourhood designs most likely to promote social networks are those that are mixed use and pedestrian orientated, enabling residents to perform daily activities without the use of a car.
- 1.16 A new rural transport policy is needed which ensures that the problems of the immobile and socially excluded are not analysed or tackled in isolation from the mobile and included within a wider canvass of growing sustainable rural communities that balances environmental, social and economic sustainability and which encourages rural dwellers to use viable alternatives to the car.
- 1.17 Government should lead on implementation of public and active transport for all public employees.
- 1.18 The indicative spend figures for transport modes should be revised to ensure that at least 50% of Government investment goes to sustainable transport measures.
- 1.19 Northern Ireland's transport policy requires revolution not evolution if we are to meet the challenges of the 21st Century. The Assembly must show **Leadership**, reconsider their **Investment** priorities, embrace new **Technology** and promote **Behaviour Change** in a serious way. See section 3.3 and Annex 1 for specific recommendations.

2. Introduction

- 2.1 NIEL welcomes the Regional Development Committee's decision to conduct an Inquiry into Sustainable Transport.
- 2.2 With the upcoming review of the Regional Transportation Strategy and the Regional Development Strategy and the continued implementation of the Programme for Government 2009-2012 (and the associated Budget) the decisions that are made in the coming year will have a significant influence on the transport systems we have for the next 20 years and beyond.
- 2.3 In 2002 the Department of Regional Development launched the RTS with a vision for:

a modern, sustainable, safe transportation system which benefits society, the economy and the environment and which actively contributes to social inclusion and everyone's quality of life.

The RTS acknowledged that Northern Ireland suffered decades of underinvestment in public transport. Despite this, it allocated two-thirds of its investment to roads infrastructure while just one-third was allocated to improving Northern Ireland's public transport. The RTS aimed for a modal shift from car-use to public transport-use, walking and cycling. Unfortunately, but unsurprisingly, this aim is unlikely to be realised. In fact, *Travel Survey* and emissions figures suggest we are heading in the opposite direction (see Section 3).

- 2.4 The Programme for Government and Investment Strategy, which were released in 2008, commit Northern Ireland to a continuing unsustainable transport system; highway measures have been allocated 80% of the transport spend. Although highway improvements can have positive effects on the other transport modes and the environmental impact of road transport in particular areas (improving local air quality at traffic bottlenecks) they also have the effect of reinforcing car-use. Northern Ireland's indicative expenditure figures for transport modes need to be revised significantly if we are to move away from a transport system which is dominated by the car. It is generally accepted that the construction of new roads generates more traffic; therefore, the emphasis for roads should be on efficiency rather than capacity. Only by increasing the share of the budget for other transport modes will significant strides be taken towards ending the reliance on private car-based transport.
- 2.5 The PricewaterhouseCoopers *Bridging the Gap* report confirms that investment in public transport on a per capita basis in England, Scotland, Wales and the Republic of Ireland is at least twice that of Northern Ireland.
- 2.6 The Northern Ireland Transport Survey (2005-2007) includes the following statistics:

- Approximately 35% of journeys travelled by the average person in Northern Ireland are short journeys of less than two miles of which 44% are taken by walking;
- The average number of journeys made by walking and cycling has fallen since 2002;
- 23% of journeys were made for leisure purposes, 21% to and from shops, 16% for commuting and 14% for personal business;
- There has been a slight increase (2%) in the percentage of journeys to work undertaken by private transport (84% in Northern Ireland compared with fewer than 70% for the UK); and,
- Belfast residents make 59% of journeys to work by private transport.

- 2.7 The continuation of recent transport policies is not sustainable. Unless tackled, our over-reliance on the private car will have a continuing and worsening impact on Northern Ireland's economic, societal and environmental wellbeing.
- 2.8 The Committee is right to analyse the impacts of transport in the widest sense and also to investigate the context in which transport policy must now be made.
- 2.9 The call for submissions allowed interested parties only a short response time. NIEL understands the urgency for action and commends the Committee in its efforts to publish its findings quickly. Therefore, NIEL believes that written submissions should be considered as initial thoughts which can be added to and developed throughout the inquiry.
- 2.10 NIEL would welcome the opportunity to make an oral presentation to the Committee Inquiry.

3. Submission of Evidence

3.1. To explore and clarify the social, environmental and economic aspects of sustainable transport.

- 3.1.1 The choices that we have made in the past have resulted in a transport network that is not fit for purpose in 2009 and beyond. The following statistics paint a picture of a transport network that is at odds with emerging regional, national and international targets and regulations.

Environmental

- 3.1.2 The Intergovernmental Panel on Climate Change (IPCC), a group containing over 2500 scientists, reported in 2007 that 'warming of the climate is unequivocal' and that 'most of the observed increase in temperature is very likely (90%) due to human activity'. The findings of the IPCC are also supported by the Academies of Science of the 11 largest countries in the world, including the Royal Society of London.
- 3.1.3 Northern Ireland's per capita greenhouse gas (GHG) emissions of 12.83 tonnes per annum compares badly with the UK average of 10.48 tonnes. While the UK as a whole has achieved a greenhouse gas emissions decrease of 15.7% since 1990, Northern Ireland's total has decreased by only 5.8% despite major expansion of the use of natural gas. Much of the difference between the UK and Northern Ireland averages is due to our transport emissions (agricultural emissions are also high in Northern Ireland).
- 3.1.4 While domestic transport emissions in the UK increased by 9% from 1990 to 2006, in Northern Ireland they increased by a staggering 51%. The transport sector now accounts for 25% of Northern Ireland's total GHG emissions.
- 3.1.5 The UK has introduced a legally binding target to reduce emissions by 80% of the 1990 level by 2050, with an interim target of 34% reduction by 2020. However, the UK Act does not set specific legally binding emission reduction targets for the devolved administrations.
- 3.1.6 The target set in the Northern Ireland Sustainable Development Strategy, to reduce GHG emissions by 25% by 2025, is no longer ambitious enough based on recent scientific evidence and evolving international targets. In the recent Environment Committee Climate Change Inquiry most sectors, including representatives of the business community, advocated for a target for Northern Ireland in line with that set for the UK.

Social

- 3.1.7 Currently, over half of all women and two-thirds of men are either overweight or obese. Obesity lowers life expectancy, results in approximately 450 deaths per year in Northern Ireland and can lead to other associated health conditions such as heart disease, cancer and

type-2 diabetes. This leads to significant costs for the health service as well as increased human suffering.

- 3.1.8 Travelwise reports that a 10% increase in the number of frequent cyclists would result in a cost saving of £200 million per year for the NHS. Moreover, a frequent cyclist is expected to be as fit as a non-cyclist who is 10 years younger.
- 3.1.9 The cost of physical inactivity and obesity to the Northern Ireland economy in 2010 is likely to exceed £500 million.
- 3.1.10 There are important social equity issues around transport. There are now 900,000 vehicles registered in Northern Ireland for a population of 1.7 million yet 50% of households in areas of Belfast and 20.5% of rural residents do not have access to a motor vehicle. 39% of women in Northern Ireland do not have a full driving licence.
- 3.1.11 Urban areas are affected by vehicle-related air pollution which can contribute to respiratory disease, especially amongst vulnerable groups such as the elderly. Disadvantaged urban areas tend to be characterised by high traffic volume, with residents at increased risk of road traffic accidents.

Economic

- 3.1.12 A move away from hydrocarbon fuelled private cars may soon become an economic necessity. In July 2008 a barrel of oil cost nearly \$150, a price that was passed on to the disgruntled consumers at the pumps. The price has reduced since, but it is only a matter of time before this price level becomes the norm. The International Energy Agency has predicted that oil will cost \$200 per barrel by 2030.
- 3.1.13 Liquid hydrocarbon fuels derived from crude oil provide 95% of the primary energy consumed in the transport sector worldwide. There is no other sector which is so utterly reliant on a single source of primary energy.
- 3.1.14 Reducing the energy used for transport, by reducing the number of private vehicle journey miles and increasing the efficiency of vehicles, has obvious economic (and environmental) benefits and should become a central aim of new transport policy.
- 3.1.15 Alternative transport fuels may also contribute to lower emissions and improve the market performance of renewable fuels such as biogas and electricity produced from wind energy. For example, electric vehicles could be charged from wind turbines at non-peak times providing advantages to the generating sector in dealing with irregular production. However, a policy based solely on encouraging new fuels will not address the wider consequences (congestion, obesity, etc) of private car use.
- 3.1.16 Sustainable transport may help secure jobs. In April 2009, Ireland's Energy Minister, Eamon Ryan, announced the Irish Government had signed a Memorandum of Understanding with the Electricity Service Board (ESB) and Renault and Nissan which will help Ireland not only

realise, but surpass, the target of having 10% of Irish cars (approximately 230,000) fully electric by 2020. The ESB subsequently announced that up to 3,700 new jobs will be created (600 of them directly as a result of the development of the infrastructure for electric cars) and 1,300 outside the company, sustained by ESB, in Ireland because of this commitment.

- 3.1.17 The UK government has also committed to promoting 'green' cars, as part of a £250 million plan to promote low carbon transport over the next five years. Though Ministers do not expect eligible cars to hit the showrooms until 2011, the strategy includes plans to provide £20 million for charging points and other necessary infrastructure.
- 3.1.18 Recent Investment in public transport in Northern Ireland has produced results. Public funding has allowed Translink to convert Citybus to Metro; to carry out a Strategic Review to introduce additional Ulsterbus services; and to purchase over 194 new buses and 23 new trains. All this has resulted in a 31% increase in Metro passengers since 2005 while rail passengers (excluding cross border journeys) for 2007/08 are up by 53% on 2001/02.
- 3.1.19 Most key Northern Ireland transport investments are based on their economic case. Other impacts such as social and environmental issues are sometimes considered but rarely used as deciding factors. The economic case is usually based mainly on enhanced productivity through 'time savings.' Other direct economic factors, such as increased productivity from improved health, are rarely given the same prominence despite their very real impacts. While the economic benefits are likely to be significant, when these other factors are considered the arguments supporting enhanced investment in public transport become overwhelming

3.2. To identify the policies, attitudes and technologies likely to underpin a move to more sustainable transport in Northern Ireland.

- 3.2.1 Climate Change must now be a key consideration when determining transport policy.
- 3.2.2 The Stern Review calculated that the dangers of unabated climate change would be equivalent to at least 5% of GDP each year. However, when more recent scientific evidence is included in the models, the Review estimates that the dangers could be equivalent to 20% of GDP or more. In contrast, the costs of action to reduce greenhouse gas emissions to avoid the worst impacts of climate change can be limited to around 1% of global GDP each year. The central message is that reducing emissions today will make us better off in the future: one model predicts benefits of up to \$2.5 trillion each year if the world shifts to a low carbon path.
- 3.2.3 The people of Northern Ireland are asking for leadership from the Assembly. A survey conducted in 2008 by Sustainable Northern Ireland for the Northern Ireland Climate Change Impacts Programme revealed that, "92% of respondents were willing to make changes to their lifestyles, especially if encouraged to do so by strong government leadership."
- 3.2.4 The Committee on Climate Change, the UK and devolved Governments' advisor on climate change, predicted that more efficient vehicles and new transport fuels could deliver reductions of up to one million tonnes of CO₂ in 2020. This would represent an 18% reduction in transport emissions, but greater reductions are required by 2020 and even more by 2050.
- 3.2.5 The emissions reductions required from transport in Northern Ireland can only be achieved by reducing our dependence on the private car by promoting active and public transport and in the longer term through major changes to land-use policies.
- 3.2.6 The significant emissions reductions proposed for the UK in the Committee on Climate Change's first report can be achieved without harming the economy and at a cost of less than 1% of GDP in 2020. In other words, an economy that might grow by 30% in the period to 2020 would instead grow by 29%. The Committee on Climate Change advises that this is a price worth paying, given the long-term significant costs of inaction on climate change.
- 3.2.7 The SNIFFER report on the impacts of climate change on Northern Ireland identified a number of direct effects, mostly negative, on human health, the economy, natural habitats and water resources. For example, the extent of flood risk to existing infrastructure (including transport infrastructure) remains unquantified compared with the situation in Great Britain.

- 3.2.8 A Strategic Energy Framework sets a target of sourcing 15% of all our energy (electricity, transport and heat) from renewable sources by 2020. This is the target set for the UK in the EU Climate and Energy Package and will act as the driving force towards a low carbon society.
- 3.2.9 The European Union has set a binding target for the average emissions across a producer's range of 130g CO₂/km for new cars sold in the EU to be achieved by 2015. We believe fleet-average energy efficiency of new cars sold within the European Union should smoothly increase year-on-year, so as to achieve continuous improvements corresponding to 120g CO₂/km by 2012, 80g CO₂/km by 2020 and 60g CO₂/km by 2025.
- 3.2.10 The use of zero or low carbon fuels, including electricity and hydrogen, could help reduce transport emissions, especially if generated from a renewable source, such as wind power, thereby offering a completely green cycle for the fuel. As electric vehicles make use of up to 75% of electricity taken from the grid, they are up to four times more efficient than conventional mechanical vehicles where only 18-23% of the energy contained in the fuel is converted into motion. Spain (1 million by 2014), Japan (50% by 2020) and the Republic of Ireland (10% by 2020) have already set targets for more electric vehicles.
- 3.2.11 In the light of widespread concern about the sustainability of biofuels, both in terms of their greenhouse gas savings and their impact on the environment and global food supply and prices, we welcome the UK Government's leading role in calling for the review of the 10% target and the need for robust sustainability criteria for biofuel use. We believe it is unacceptable to continue to promote biofuels which cannot be reasonably shown to offer genuine carbon savings (based on complete life cycle costings) and which do not meet sustainability criteria.
- 3.2.12 Broadly speaking, we feel that second generation biofuels are the most likely to satisfy sustainability criteria. If possible, biofuels should be produced from the 'waste' of food crops; thus causing less disruption to existing land use, food supply, natural habitats and water availability. Great care must be taken to ensure that increasing demand in the developed world does not cause unacceptable impacts on biodiversity and people in developing countries.
- 3.2.13 Research by the Consumer Council suggests that only three in ten people here use bus services regularly, and fewer than one in ten uses train services. The Survey suggested that cost, frequency, choice, safety and reliability should be the priorities for public transport here.
- 3.2.14 There is significant potential for change in travel behaviour. Research by the Department for Transport showed that:
- Over 90% of adults consider that everyone should be encouraged to walk to help their health, help the environment and to ease congestion;

- Four in ten car users say they would walk more if congestion charging was introduced, if it was more expensive to park and if it was more difficult to park; and,
- Three in ten car users say they would reduce their car use if there was better provision for cyclists; such as more cycle tracks, cycle lanes, and parking facilities.

3.2.15 In Northern Ireland 20% of cars in peak time are taking children to school. We know around 40% of young people would prefer to cycle to school but only 3% do so.

3.2.16 A major concern, which leads to people not cycling, is a perception that roads, particularly arterial roads, are unsafe. We support a default 20mph or lower speed limit in all residential areas, as slower speeds help to improve road safety, encourage walking, cycling and public transport use, reduce fuel consumption and CO₂ emissions and reduce noise.

3.2.17 The introduction of 20mph limits could reduce all casualties by 60% and child casualties by 70%.

3.2.18 *Footpaths to Sustainability* estimated that if the number of short journeys made by walking was increased by 20% (on 2002 levels) by 2012 (the target for the Northern Ireland Walking Action Plan), a 5% reduction in the carbon footprint of transport would be delivered. If every short journey was made on foot or bike the ecological and carbon footprints of transport would reduce by 16% by 2024.

3.2.19 Spatial planning plays a particularly important role in shaping individuals' behaviour with regard to travel and transport. It is, therefore, imperative that a co-ordinated approach be taken when considering land-use and transport. Planners should only make decisions after they have considered how the development will contribute to mitigation efforts and whether the site and design is appropriate given the predicted impacts of climate change in Northern Ireland.

3.2.20 A review of the planning system in Northern Ireland is currently being conducted while a revised policy for development in rural areas was recently released. We must increase the density of housing in major settlements and concentrate future rural development in established settlements to reduce individuals' need to travel by car and to provide a larger customer base for public transport operators. Public transport links should be incorporated into new developments, with new bus stops and services provided in growing villages and towns in a proactive and innovative manner.

3.2.21 There are now numerous examples of policies aimed at improving travel choice and reducing car use. Invariably these include a mixture of 'carrots' (public transport improvements, park and ride, and improvements to pedestrian and cycling networks), and 'sticks' (parking policy, re-allocation of road space and controls on vehicle access).

Nottingham (-1.8%), Perth (Australia) (-4%) and Rome (-7%) are examples of cities where car use has been reduced.

- 3.2.22 Each of these cities has implemented traffic restraint policies, including those aimed at reducing urban sprawl, and invested in new public transport and service enhancements with transit orientated development, including the focusing of new development around suburban stations. Perth has also implemented a workplace parking levy while Nottingham and Rome have implemented travel plans. In addition, Rome has reduced city parking and re-allocated these spaces as park and ride sites in combination with access controls.
- 3.2.23 A well planned transport system can facilitate social connections which are important for mental health. Neighbourhood designs most likely to promote social networks are those that are mixed use and pedestrian orientated, enabling residents to perform daily activities without the use of a car. As traffic volumes increase, people's sense of neighbourliness decreases.
- 3.2.24 A new rural transport policy is needed which ensures that the problems of the immobile and socially excluded are not analysed or tackled in isolation from the mobile and included within a wider canvass of growing sustainable rural communities that balances environmental, social and economic sustainability and which encourages rural dwellers to use viable alternatives to the car.
- 3.2.25 Government should lead on implementation of public and active transport for all public employees. This should be integrated with Sustainable Development Strategy implementation plans and the review of government estate and jobs.
- 3.2.26 Incentive and practical schemes are needed for businesses to encourage their employees to use public and active transport Schemes such as providing company pool cars for employees who do not drive to work and ensuring that employees are financially encouraged to take public transport or walk on work related trips should be developed.

3.3. To make recommendations arising out of the above investigations, and report to the Assembly.

3.3.1 *Policy Priorities for Northern Ireland's Environment - The Way Ahead 2009* identifies the policy changes that NIEL members feel are important if Northern Ireland is not only to improve environmental performance, but also to address the economic and social challenges we currently face. Recommendations cover a wide range of strategic issues, including transport policy. Members recommend that:

- A Northern Ireland Climate Bill with a Northern Ireland specific legally binding reduction target of at least 3% per annum should be introduced;
- The EU target of sourcing 15% of all our energy (electricity, heat and transport) from renewable sources by 2020 should be adopted;
- The indicative spend figures for transport modes should be revised to ensure that at least 50% of Government investment goes to sustainable transport measures; and,
- The new Regional Development Strategy (RDS) should provide the spatial framework for planning in Northern Ireland.

3.3.2 If adopted, these strategic priorities will enable more specific actions to be delivered. Northern Ireland's transport policy requires revolution not evolution if we are to meet the challenges of the 21st Century. The Assembly must show **Leadership**, reconsider their **Investment** priorities, embrace new **Technology** and promote **Behaviour Change** in a serious way.

3.3.3 Leadership:

- Reduce Northern Ireland's reliance on fossil fuels;
- Consider carbon and health impacts in all transport decisions;
- Update the Cost Benefit Analysis process for transport investments to include all environmental and social costs and benefits;
- Target enhanced public transport provision and other non-car measures at disadvantaged areas first;
- Set targets for the percentage of trips made by each travel mode – specifically aiming to reduce car use and significantly increasing walking, cycling and public transport – and ensure they are met;
- Enforce existing and decrease (where appropriate) speed limits as a means to reduce transport emissions and accidents;
- Invest in emerging transport technologies to create jobs and wealth;

- Use aviation and car taxation revenues to improve active and public transport provision; and,
- Focus future developments in existing settlements.

3.3.4 Investment:

- Put public transport at the centre of new development planning;
- Develop an integrated, attractive, affordable, frequent and reliable public transport system across Northern Ireland;
- Create facilities for active transport in our urban centres, transport hubs and work-places;
- Increase the availability of 'park and ride' and 'park and share' facilities servicing major hubs;
- Create continuous priority lanes on all strategic corridors into major urban areas; and,
- Invest now in alternative transport systems and technologies.

3.3.5 Technology:

- Regulate for and incentivise efficient vehicles (target average vehicle emissions of 60g CO₂/km by 2025);
- Consider electric vehicles for public transport and commercial fleets;
- Use the electric vehicle network and smart technology to create a 'decentralised energy battery';
- Only use renewable energy sources to charge vehicles; and,
- Ensure biofuels meet social and environmental criteria.

3.3.6 Behaviour Change:

- Pedestrianise more of our urban areas and reduce car parking to make people, not cars, the prime consideration in urban areas;
- Provide information to show drivers how to reduce their emissions;
- Provide Safe Routes to Schools;
- Consider active and public transport as a public health enabler;
- Provide road space and 'end-of-journey' facilities for active transport; and,
- Reduce travel demand by encouraging working from home, video-conferencing, etc.

Annex 1: Sustainable Transport – ways forward

	Short term; practical; inexpensive 2010	Medium term	Long term; ideal; visionary – 2030
Strategic Planning and Costings	<p>Develop new costing and policy programmes designed to deliver sustainable transport for long term</p> <p>Devise new cost/benefit analysis based on carbon reduction and plan to halt fossil fuel use for transport by 2030</p> <p>Prioritise measures at disadvantaged areas first</p> <p>Major campaign to enforce speed limits (reducing carbon as well as improving safety)</p> <p>Government should take a lead in promoting public and active transport for its employees</p>	<p>Reduce speed limits across road network</p> <p>Support research and development of alternative and new technologies which incorporate climate change, safety and health as key drivers</p> <p>Develop taxation schemes that encourage active and public transport and discourage (incrementally more so) use of private cars, and those less efficient proportionately more so</p>	<p>No fossil fuels used for transport</p> <p>The infrastructure should be in place so all journeys can be made by active and/or public transport</p>
Active Transport – walking & cycling	<p>Link up all cycle ways to provide connected web around Belfast</p> <p>PR campaign to promote active transport, health etc.</p> <p>Increase the safety of active transport through driver and cyclist education</p> <p>Promote Safe Routes to School</p>	<p>Expand active transport network to make it the focus and priority of all transport, not cars</p> <p>Majority of journeys to school not by private car</p>	<p>Most journeys < 5 km by active transport</p> <p>Infrastructure fully in place to allow this</p>
Public Transport	<p>Bus (and taxi) priority lanes and signalling in all major towns and cities 100% of time</p> <p>Continuing upgrading the fleet to make public transport affordable, regular and reliable</p> <p>Enforcement measures to ensure compliance and clear flow</p> <p>Expanded 'Park & Ride' and 'Park & Share' systems, improving the service to make them preferable to driving for all long journeys</p>	<p>Public transport vehicles of a variety of sizes extend accessibility beyond major cities (rural post buses, large taxis on scheduled runs, etc.)</p> <p>Public transport to be seen as the preferred method of travel.</p>	<p>Public transport available for all journeys over 5 km</p> <p>'Nodes' linked by fast, frequent, accessible and affordable public transport</p> <p>All public transport fuelled by renewable energy</p>

Vehicles	<p>PR campaign on energy efficient and safe driving</p> <p>Develop standards for vehicle efficiency</p> <p>Promotion of non-petrol based fuel for public & fleet vehicles</p> <p>Alternative systems such as pool cars for 'at work' journeys</p> <p>Promotion of 'teleconferencing' and similar to avoid journeys</p>	<p>All vehicles sized, powered as required and driven efficiently</p> <p>Provide necessary infrastructure for electric (or other) vehicles for public transport</p>	<p>Private transport rarely needed; alternatives in place for all but minority of journeys and 'socially unacceptable' to drive.</p> <p>All vehicles powered by renewables</p> <p>'Guided Intelligent' vehicles and roadways</p>
Freight	<p>Restrictions on parking/blocking public transport and cycle lanes (deliveries restricted to specific times to clear lanes for transport)</p> <p>Encourage shift to smaller, electric freight vehicles</p>	<p>Much more locally produced goods and services reducing need to drive</p> <p>'Rail' freight for major distances</p> <p>Electric distribution by smaller vehicles in town</p>	<p>System in place which minimises transport and fuel used for distribution.</p>
Planning/ Settlement pattern	<p>All new developments to include public transport, active transport facilities and their promotion</p>	<p>Plans in place to change settlement patterns and design all new developments around minimising transport needs</p>	<p>Settlements designed around sustainable transport; local services, etc.</p>
Avoiding Travel	<p>Promotion of teleconferencing, working from home, local goods and services</p>	<p>Reorganisation of public sector to allow more people to work near their homes</p> <p>Local food production, goods and services locally available</p>	<p>Technical solutions avoid need for most business travel</p>
Long Distance Travel	<p>Promotion of teleconferencing and local holidays</p>	<p>Support decrease in plane use through taxation and other costing mechanisms</p> <p>Encourage development of alternative fuels and more efficient planes</p>	<p>Northern Ireland with 'appropriate' links to GB network designed to eliminate local flights through fast trains</p>