

Defining a road safety vision for Northern Ireland

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Defining a Road Safety Vision for Northern Ireland

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(Susan Dolan)**

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1 Introduction

A number of countries have adopted road safety visions; these include Sweden and the Netherlands, which are often seen as leading the way in their approaches to road safety. Scotland now has a vision and targeted reductions in road traffic related deaths and serious injuries to 2020, and Great Britain has recently consulted on various road safety issues for the next decade or more, including a vision.

Much of the material in this report is taken directly from previous TRL work that has contributed to the development of Great Britain's road safety vision and strategy, though it has been supplemented following the GB work and also similar developments specifically in Scotland. It examines the motivation for, and nature of, visions from various countries and reviews and considers their implications for road safety practice, policy and strategy.

Going forward there is a need to recognise the importance of integrating any road safety strategy and vision with other policy areas, and to further recognise the challenges described by the Eddington and Stern reports, as discussed by the Northern Ireland Assembly's Committee for Regional Development (2007). Any road safety strategy, whether or not in pursuit of a vision for road safety, should reflect the need to understand and improve road safety in the context of the full end-to-end journeys of people and movements of goods, and to do so in ways that are consistent with an overall reduction in emissions and support for economic growth.

2 Why have a vision?

Prior to the global recession which began in 2008, progress in reducing fatalities was slowing in many countries. The recession has led to appreciable fatality reductions in many countries, but it is likely that progress with fatality reduction will slow again when economies return to growth. This indicates that there is limited scope for further fatality reduction from traditional policies. A new approach to reducing safety risk is needed to achieve substantial additional reductions.

A vision can act as a promotional tool as well as giving a steer to policies through focusing on how a future safety scenario should look.

If going beyond traditional safety policies means a change in expenditure level or in public behaviour, this change will need to be justified by a clear statement of what policies are aiming to achieve, in terms that both politicians and the public wish to sign up to.

Loo *et al.* (2005) explained what a 'vision' is in this context and what benefits a vision brings: 'A vision is an innovative description of the future traffic system or a desired direction of safety development. A vision ensures that road safety gains a prominent position in transport policy and decision-making processes, raises public interest and creates public support for road safety improvements. With the vision as a long-term goal, short-term objectives, targets and action plans can be set.'

Loo *et al.* (2005) identified the vision, objectives, targets and action plans of various administrations:

- for Australia, the vision was 'safe road use for the whole community';
- for Great Britain, there was no vision though the objective identified was 'making the roads safer for everyone';
- New Zealand's vision was to 'reach and keep up with the standard of "the safest countries in the world"', and the objectives were 'to achieve the current world's best road safety practices'; and
- Sweden had 'Vision Zero', with the objective being to 'manage injuries so that they do not cause deaths or even serious damage to health'.

Scotland's recently developed vision is "a steady reduction in the numbers of those killed and those seriously injured, with the ultimate vision of a future where no-one is killed on Scotland's roads, and the injury rate is much reduced." The long-term vision on which Great Britain's Department for Transport recently consulted was "to have the world's safest roads", explaining that "a vision for road safety will be an important factor in enabling a diverse range of road safety stakeholders to work effectively together" and that "any vision should be credible, challenging and engaging for all concerned."

A vision is not a substitute for safety strategy

A strategy is an essential tool to guide policy development and organisational change – visions and targets are ways to promote, justify and assess progress in achieving the strategy outcomes.

Castle and Kanya-Lukoda (2006) conducted a review of international road safety good practice and identified the major strengths of road safety strategies: 'The major factors for the success or failure of road safety initiative are political will, proper organisation, and knowledge. Good planning and a clear national framework, and support at all levels are emphasized for the successful implementation of an effective road safety programme. Through a detailed analysis of various road safety strategies in different countries, Loo *et al.* (2005) developed a framework, with nine main components, of a road safety strategy: vision, objectives, targets, action plan, evaluation and monitoring, research and development, quantitative modelling, institutional framework, and funding.'

Castle and Kamyra-Lukoda also surmised that: 'Gaining acceptance for controversial road safety initiatives is one area that has not been given emphasis by any administration. Loo *et al.* (2005) suggested that this area was to be part of the Vision component of a road safety strategy. A vision ensures that road safety gains a prominent position in transport policy and decision-making processes, raises public interest and **creates public support** for road safety improvements (Loo *et al.*, 2005).'

At a political level, the existence of a vision can make it easier to explain and justify shorter-term policies, in the context of their contribution towards a longer-term goal, particularly if the latter is expressed in terms that appear to follow ethical or environmental principles that are difficult to refute. Such principles can be elaborated both in terms of desired physical environments and health and safety principles that organisations, at all levels, should support.

Although France has not developed a formal vision, strategy and target for fatality reduction, substantial reductions have been achieved in fatality numbers in France. The policies resulting in these changes were promoted by a major initiative by the French president to improve France's safety record compared with other countries (FIA Foundation, 2006).

3 Visions from other countries

3.1 What does Vision Zero imply?

The 'foundation stones' of Sweden's road safety vision are 'safer roads, safer vehicles and better compliance with road traffic regulations', but 'Central to the "vision zero" approach ... is the concept that a driver should be able to make a mistake on the road without suffering serious injury as a result' (Ministry of Industry, Employment and Communications, 1999).

Castle and Kamy-Lukoda (2006) explained that 'Vision Zero alters the view of responsibility in that those who design the road transport system i.e. road managers, vehicle manufacturers, road transport carriers, politicians, public employees, legislative authorities and the police bear the ultimate responsibility for safety and it is the responsibility of the individual person to abide by laws and regulations. Prior to this, practically all the responsibility had been put on the individual road user.'

The elements of Vision Zero are identified in *Vision Zero on the Move* (Swedish Road Administration, 2006):

- based on ethics – no one should be killed or seriously injured for life in road traffic;
- mistakes should not be punishable by death – there is no perfect human being;
- adaptation to the human body – taking into account biological tolerance against external violence;
- a system where everything is interrelated – the importance of harmonising the development and design of vehicles and road environments on the basis of human limitations;
- the system designers have the major responsibility – shifting a major share of the safety responsibility from road users to those who design the road transport system; and
- driving forces for change – good consumer information on safety systems.

When considering the results of Vision Zero, the authors concluded that:

'In the years since Vision Zero was first introduced in 1995, Sweden has seen major changes both as regards views on road safety as well as in the working approach adopted. An important milestone was the parliamentary resolution adopted in 1997 when Vision Zero became the foundation for road safety operations in Sweden.

3.2 What does Sustainable Safety imply?

In the Netherlands, the approach adopted is known as 'Sustainable Safety'. Some background to this is given in the publication *Sustainable Safety – A New Approach for Road Safety in the Netherlands*, (Vliet and Schermers, 2000):

'The second Structure Plan for Traffic and Transport ... of 1990 laid down the road safety goals for 2010, namely a 50 per cent reduction in fatalities and a 40 per cent reduction in injury accidents over the period 1986–2010. However, in the early 1990s doubts arose whether these goals would be met. The spearhead policies were effective but did not adequately address problems at the source. While overall reductions in road accidents were still evident, analysis of accidents on certain parts of the road network reflected that remedial actions were necessary to reduce the large discrepancies in fatality and serious injury accident rates on the

different road classes. This resulted in the issuing of the “twin-pronged” policy of the [third long-term road safety policy], the first aiming at the renewal and intensified application of the focus areas and the second at a preventative strategy now known as Sustainable Safety.

In contrast to the spearhead policy the sustainable safety strategy is characterised by a proactive and preventive approach. Whereas the spearhead-policy was [a] reactive (and curative) approach aimed at addressing problems when they occurred, sustainable safety has “prevention is better than aim” as its motto.

Sustainable safety recognises that 90 per cent of road accidents are attributable (to a greater and lesser extent) to human error. Consequently sustainable safety realises that the human is the weakest link in the traffic and transport chain.

In summary a sustainable safe traffic system comprises:

- A road environment with an infrastructure adapted to the limitations of the road user;
- Vehicles equipped with technology to simplify the driving task and provided with features that protect vulnerable and other road users; and
- Road users that are well informed and adequately educated.

Sustainable safety distinguishes three categories of road:

- Roads with a **through** function (for the rapid movement of through traffic);
- Roads with a **distributor** function (for the distribution and collection of traffic to and from different districts and residential areas);
- Roads with an **access** function (providing access to homes and shops while ensuring the safety of the street as a meeting place).

All road categories should comply with the following three safety principles:

- **Functionality** (preventing unintended use of the infrastructure); a road functions properly if function, layout and use are geared to one another.
- **Homogeneity** (preventing major variations in the speed, direction, and mass of vehicles at moderate and high driving speeds);
- **Predictability** (preventing uncertainty among road users); design should make roads so recognizable and their alignment make them so predictable that the correct expectations of both own and other road users’ driving behaviour are evoked.’

In addition to the engineering approach, Schagen and Janssen (2000) also explain that ‘The road user, the key player in every road traffic system, has to be informed and educated to understand the aims and the product of sustainable safety as well as its consequences for his or her mobility, travel pattern and behaviour. Sustainable safety automatically means a rather severe restriction in the individual freedom of road users. It will take time and effective “marketing” to convince them and to achieve overall acceptance. In short, creating sustainable safety in road traffic requires an integrated approach.’

SWOV’s publication *Advancing Sustainable Safety* (SWOV, 2006), an update of the original Sustainable Safety plan, identified that ‘There are five principles that lead to sustainably safe road traffic: functionality, homogeneity, predictability, forgivingness (of the road layout and of road users) and state awareness (by the road user). The last two principles are new in this advanced Sustainable Safety vision. All five principles have their origins in scientific theories.’ The two new principles are described as:

- forgivingness of the environment and of road users – ‘injury limitation through a forgiving road environment and anticipation of road user behaviour’; and

- state awareness by the road user – ‘ability to assess one’s own task capability’.

The publication also explains that: ‘People not only make traffic unsafe by unintentional errors but also by **deliberate violations**. The original Sustainable Safety vision did not emphasize deliberate violations explicitly as causes of crashes as much as this advanced version. When the traffic environment does not more or less automatically invite correct and safe behaviour, road users should comply with the rules from an inner motive. In this case, behaviour is the most consistent and thus sustainable. To improve rule acceptance, rules should be appropriate to the traffic environment and credible to road users, and people should be educated to accept the usefulness of rules. For those who still fail to obey the rules, the Sustainable Safety vision includes enforcement with a fairly good chance of being caught when violating rules.’

3.3 Implications for expenditure

While broad statements of desired outcomes can generate support for safety policies, achievement of these desired outcomes can have substantial expenditure implications.

Of the countries setting out new visions in 2000, New Zealand was perhaps the one giving most consideration to cost implications. Loo *et al.* (2005) suggested that, among the administrations they considered, ‘New Zealand has one of the most sophisticated evaluation mechanisms. The major approach is cost-benefit analysis, based on the calculation of the social cost.’

When the New Zealand government announced their *Road Safety to 2010* strategy in 2003 (Land Transport New Zealand, 2003) their Minister of Transport stated that ‘there are cost-effective ways to implement the strategy’. The strategy is ‘part of a broader set of government goals’ – ‘The government’s transport vision is that “by 2010, New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system”.’

Developers of the strategy had identified two major policy streams, each with very different cost implications – a dominant focus on infrastructure measures that would be effective but at high cost, or a dominant focus on enforcement to modify road-user behaviour whose initial cost was much lower, but where the outcome in terms of fatality reduction was much less certain. Not surprisingly, the strategy comprises a mixture of both approaches.

Increasing investment in reducing fatalities through focusing on forgiving environments (i.e. infrastructure where crashes resulting from driver error will not result in fatality) is inevitably accompanied by reducing marginal returns. Cost effectiveness has been and is likely to remain a key determinant in Northern Irish policy, but the marginal returns on further infrastructure improvements within current budgets appear to remain substantial.

4 Safe System approach

The approaches adopted, for example, in Vision Zero and Sustainable Safety have coalesced into a Safe System approach which is now being generally promoted among safety professionals as the basis for future safety philosophies. The Organization for Economic Co-operation and Development (OECD, 2008) provides a good overview of the principles underlying this approach, stating 'a fundamental policy shift, characterised as the Safe System approach, is required both to consolidate the significant improvements in road safety in recent decades and to generate further gains in the future'. In addition to recognising the need for systems to accommodate human error and provide better management of crash forces, it emphasises the need for 'shared responsibility' and for 'aligning safety management decision making with broader societal decision making'.

This approach is described in part in Great Britain's recent consultation as follows:

"[We propose] a shift towards a road safety 'system' in which we try to anticipate people's errors and provide protection through safer road and vehicle design, and through everyone of us improving our skills, so that the mistake of the child who steps off the kerb whilst distracted, or the mistake of the driver who misjudges the speed of the approaching vehicle at the junction, does not result in death or serious injury. ... And, acknowledging that not all collisions are due to mistakes, we propose ways to tackle those who indulge in irresponsible road use, going beyond errors and displaying unquestionably dangerous behaviour."

Physical interventions focus on the interaction between infrastructure (vehicle and road), speed and physical vulnerability, with safe speed thresholds suggested for different road types. In the Safe System approach, it remains the case that traditional designers of transport systems have a primary responsibility for ensuring safe conditions by addressing all these factors, but the approach stresses that there are many other 'system designers' who affect the design and functionality of the road transport system. This represents a shift from placing sole responsibility on the road user to requiring all 'designers' to provide an intrinsically safe environment. The OECD (2008) concludes that 'given the level of change implied by a Safe System approach, a vision-led approach is required'.

Implementing a Safe System approach 'builds on existing knowledge', but 'pushes the analysis ... to a greater level of systemic thinking'. It requires a response that 'extends basic co-ordination to more widespread engagement', and involves 'a greater acceptance of community views'. The OECD also suggests that the approach 'requires considerable attention to be paid to the development and management of performance indicators, and the re-orientation of these indicators to the systems and interventions that are going to create the greatest safety value'.

5 A vision for Northern Ireland

5.1 Numbers or outcomes?

Many previous road safety strategies have been supported by numerical targets, enabling assessment of progress in terms of casualty reduction. But these numerical targets, even if based on a summation of casualty reductions in individual accident types, are poor at clarifying the policy changes that are needed to achieve them. Clearer statements of the outcomes desired in terms both of behaviour and environment are necessary. A strategy involving further incremental improvement and an associated numerical target alone are unlikely to result in substantive change either in public attitude, organisational change or expenditure.

At the highest level, a short-term numerical target might simply be accompanied by a long-term aim of achieving an outcome such as 'that the risk of death or serious injury while using the roads should be no greater than the average risk while engaging in other everyday activities' (e.g. Allsop, 2005) or some multiple of this risk (e.g. Crawford, 2007). However, such statements on their own are unlikely to affect policy or gain public or political acceptance of alternative programmes unless the desired outcomes are defined in more detail in relation to individual policy areas.

5.2 Infrastructure

Ways of improving injury protection (and thus the likelihood of preventing a fatality) are well established for vehicle design and road infrastructure (and developed through the EuroNCAP and EuroRAP programmes). Benefit/cost ratios can still be used as a determinant of how far to go towards minimising the likelihood of fatalities occurring, but the desired outcomes can be debated more transparently. However, it is quite possible that proposals justified by benefit/cost ratios based on the current valuation of fatality saving may not be consistent with publicly desired infrastructure standards. If so, this inconsistency between values expressed in willingness to pay surveys and public expectation of desired levels of safety should form part of public debate about potential safety visions to target, and may indicate a need to re-assess the value to be given to fatality saving.

5.3 Behaviour

It is less clear how to define a vision in terms of desired behavioural outcomes. Clearly an outcome could be set, for example, of 100% seat-belt wearing, and this might potentially be achieved through technology. But such a behavioural change would require public acceptance. While few people would object to an improved roadside environment to prevent deaths through run-off incidents, a substantial number are likely to continue to object, for example, to speed-limit policies.

The Dutch, in their Sustainable Safety strategy, initially focused on the behavioural implications of the infrastructure aspects of the strategy, such as self-explaining, easily recognisable, road types, minimising incorrect routeing, and ensuring that all road users are well informed and well trained. At the same time they implemented direct actions to improve seat-belt wearing rates and increase enforcement. In their 'advanced' definition of Sustainable Safety, however, they explicitly include the 'ability to assess one's own task capability' and recognise that 'people ... make traffic unsafe ... by deliberate violations' (SWOV, 2006). They go on to state that 'rules should be appropriate to the traffic environment and credible to road users' and that 'people should be educated to accept the usefulness of rules'.

It is implicit in the Swedish Vision Zero policy that this would only be achieved if road users' behaviour was consistent with the infrastructure design principles – for example, deaths will still occur in impacts if seat belts are not worn by car occupants. The New Zealand strategy considers intermediate targets for compliance with various behaviours.

Lynam (2007) suggests that substantial fatality reductions could be achieved through the greater control of behaviour using technologies which are currently available or being developed. However, he emphasises the need for these behaviours to be accepted by the large majority of road users who would be subject to them. This might mean that any vision needs to include a consideration of how agreement should be reached on achieving more public consensus on such issues. It might also usefully address actions needed to remove or reduce the obstacles to changes in safety policy, both institutionally and in the public mind.

5.4 Role of public view

In recent years, at least in the GB context if not elsewhere, public opinion appears to have played an increasing role in resisting some safety policies. There are several reasons for this, ranging from an increasing distrust of politicians and of scientific evidence to resistance to the reduction in driving freedoms and a greater willingness to contest traffic law in court.

Lynam (2007) has argued the need for greater public involvement in decision making and greater transparency in policies, but has also raised the question: 'How much should policies be led by public view and how much do public views need to be changed?'

Scotland's Public Consultation Exercise, for example, identified that young drivers were a significant cause of concern, yet no young drivers contributed to the exercise. Subsequently, focus groups of young people were commissioned so that the strategy could take into account young drivers' road safety perceptions.

It is clear that dialogue with the public, through whatever means, is desirable in achieving the implementation of effective safety policies, and a 'vision statement' of desirable outcomes to be achieved might help in this discussion.

5.5 Institutionally

Consideration of a possible vision should include the implications of any long-term goal for the changes in public and private policy required, and the extent of institutional initiatives that would be required to achieve these. The Scottish Road Safety Strategy, for example, recognises that:

"Different arms of government have critical roles to play. Some road safety responsibilities lie at European level. A substantial part also takes place at UK level – key amongst these are responsibilities in areas such as driver testing and drink drive legislation. The Scottish Government and local government also have considerable responsibilities in areas such as education, publicity, roads and related infrastructure." The Scottish strategy also considers the various non-government organisations, the academic sector and, of course, the public in identifying those who have a role in road safety.

More effective co-operation between government departments in relation to road safety policies has been sought over many years, and may only result from more independent oversight of road safety activities. Quality assurance processes are beginning to emerge in both Dutch and Swedish thinking.

6 Discussion

6.1 Reasons for adopting a vision for road safety in Northern Ireland

A vision for road safety has potential value as a promotional tool, in guiding policy by providing a focus upon a desirable future road safety scenario, and in gaining acceptance for controversial initiatives. Adopting a vision is not a substitute for developing and implementing a safety strategy.

Experience in Sweden, the Netherlands and New Zealand is seen as indicating the importance of securing parliamentary commitment on grounds that are hard to refute, demonstrating that there are cost-effective measures through which the vision can be pursued, and securing the engagement of stakeholders and the public through careful development of readily comprehensible concepts, principles and lines of action. The value of overt high-level political commitment is highlighted by experience in recent years in France.

There is a need for something going beyond a target-focused strategy – an extra something that might embrace, but has to be more than, a quantification of a low aggregate level of risk in the desired scenario as advocated by the Motorists' Forum of the Commission for Integrated Transport (CfIT) (2003), Allsop (2005) and PACTS (Crawford, 2007). It has to address public acceptance of required changes in behaviour, how far policy can move ahead of public opinion, and obstacles to progress that exist either within institutions and agencies or in the mind of the public. This is seen as pointing to the need for dialogue with the public and strengthening of institutional commitment in the process of adopting a vision, and then the setting of targets and identification of performance indicators within the context of the adopted vision, followed by independent auditing of delivery.

6.2 What kind of vision?

What then are the attributes of a vision for road safety that is right for Northern Ireland?

It should speak convincingly to a public that may be sceptical of anything that smacks of pie in the sky or pre-election promises, but is responsive to down-to-earth commonsense.

It should reflect and be backed by a renewal of already recognised stakeholder commitment to a transparent programme of action, matched by credible and verifiable commitment to that programme by new and previously less committed stakeholders in government and business.

Its pursuit should be manifestly cost-effective and involving of the public.

Its essence should be expressed in a credible, challenging, appealing and memorable headline and strapline, which make it irrefutably clear that road safety is life-enhancing.

6.3 Preconditions for such a vision

Three preconditions for the effective adoption of such a vision need to be satisfied sequentially:

1. Breadth of institutional and stakeholder commitment to the concept of a vision.
2. Fresh public understanding of existing risk on the roads and the possibility of change.
3. Public and stakeholder engagement in the formulated vision.

Some key facts that should help to underpin the realisation of these preconditions are as follows:

- The risk of death per hour spent using the roads is several times higher than in the rest of everyday life (for all except elderly people who are at an increased risk of fatal falls in the home).
- Serious traffic offences like drink-driving, red light running, overtaking across double white lines and speeding kill like murder, maim like grievous bodily harm and cause damage like arson and breaking and entering.
- Basically law-abiding motorists have nothing to fear from the enforcement of traffic law to detect and deter these serious offences.

6.3.1 Breadth of institutional and stakeholder commitment

The context for road safety policy has hitherto been seen largely as the achievement by the road transport system and its users of access and mobility for the users – who are the whole population, both while engaged in economic activity and in their social and personal lives. Broad though that context is, it is only one of five current and likely continuing areas of policy in which there are substantial synergies and trade-offs with the reduction of risk on the roads. These are:

- access and mobility for all purposes;
- public health – in the workplace and other organised activity and in private life;
- liveability of urban and rural surroundings;
- social inclusion or equality of opportunity; and
- sustainability in terms of carbon and other contributors to global warning.

The formulation of a vision for road safety needs to involve and thereby engage stakeholders, including politicians, central and local government, in all these areas, such as, respectively:

- highway authorities, transport authorities, transport operators, educators and trainers in road use, and the police and the courts;
- health authorities, health and safety organisations, and health professionals;
- transport and development planners, developers, architects of buildings and landscapes, and designers;
- professionals in social work, community development, education and other related professions; and
- those concerned with energy policy, fuel supply systems, and the fuel efficiency of road vehicles, of other transport systems and of their use.

The commitment of the most relevant stakeholders from each of these sectors, and amongst leading politicians, should be accompanied by widespread awareness of the synergies and trade-offs between their work and road safety.

If a vision were to be adopted without the prerequisite commitment from public and stakeholders, and were then to come into contempt, the potential benefits to society of adopting a vision effectively would be postponed for many years.

6.3.2 Public understanding

Having secured stakeholder commitment, the prerequisite for effective consultation with the public in formulating and adopting a vision for road safety is widespread public understanding of:

- the disproportionate level of risk that is tolerated in road-use compared with risk tolerated in any other large-scale everyday activity that is necessary for participation in economic and social life;
- the fact that this level of risk can be reduced substantially by measures that are cost effective and offer the prospect of widespread public acceptance after appropriate consultation and sensitive implementation;
- the fact that road safety measures can contribute to other desirable objectives for society and that pursuit of other objectives can contribute to road safety; and
- the readiness of relevant stakeholders to work together to achieve such synergies and to address and find good resolutions of inherent trade-offs between road safety and other objectives.

To achieve this understanding calls for a brisk and powerful, yet sensitive, programme of public information ahead of consultation about the vision itself. It will call for close cooperation between different channels of information, both governmental and sympathetic non-governmental. It may well also benefit from exceptionally high-level sharing of the substance and purpose of the exercise personally with key figures in the media and other exceptionally influential opinion-formers.

6.3.3 Public and stakeholder engagement

The verifiable commitment of the wide range of stakeholders and the foregoing programme of public information should provide the foundation for extensive consultation with stakeholders and the public about a proposed vision and the specifics of an institutional framework and a strategy and programme of action in pursuit of the vision. These specifics should include:

- timetabled action by stakeholders, costed in both financial and human resource terms;
- contributions looked for from the public;
- headline targets for casualty reduction as the primary outcome;
- key performance indicators measuring other outcomes and directly relevant inputs; and
- arrangements for oversight of the programme and independent auditing of progress.

A positive outcome from this consultation, including sensitive taking on-board of the balance of the responses elicited, will pave the way for a suitably timed and orchestrated adoption of the vision and supporting strategy and launching of the targeted and monitored programme of action.

6.4 Road safety policy in the context of wider policies

Any road safety strategy, whether or not in pursuit of a vision for road safety, should reflect the need to understand and improve road safety in the context of the full end-to-end journeys of people and movements of goods, and to do so in ways that are consistent with the overall reduction in emissions and support for economic growth.

Additionally, links need to be drawn beyond the wider transport policy with, for example, health, education and urban regeneration.

In seeking and winning commitment across and beyond government to vision and strategy for road safety, it will be helpful to emphasise the contribution that radically enhanced road safety with radically reduced death and injury on the roads can make to broader goals, for example:

- **The competitiveness and productivity of the economy** will be helped by reducing not only the grievous toll of death and long-term disablement, but also the disruption resulting from the scale of shorter-term injury, material damage and delay that stem from the levels of risk currently accepted on the roads.
- **Addressing climate change** will be helped by reducing the risk associated with travel on foot or by pedal cycle (either right to the destination or to and from public transport) and by enhancing the safety of motor-vehicles and their use in ways that encourage, or are at least consistent with, increased fuel efficiency.
- **Improving people's safety, security and health** will be supported not only by tackling risk on the road as one of the largest single sources of injury and premature death, but also by encouraging the use of the streets on foot through the reduction in risk from traffic and thus helping to improve people's security in the public realm and their health through physical activity.
- **The quality of life**, as enriched by the ability to travel both locally and over longer distances, will be further enhanced by reducing one of the major negative impacts of road transport – the toll of death and injury, and the anxiety that stems from it.
- **Promotion of greater equality of opportunity** will be helped by diminishing the risk of death and injury on the roads which impinges disproportionately on disadvantaged groups, and most notably on their children.

In all of these ways, a newly invigorated determination to bring down the risk of death and injury on the roads from its still disproportionate level will contribute directly and substantially to evolving transport policy and the wider quest for sustainable prosperity and equity.

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Defining a road safety vision for Northern Ireland



A number of countries have adopted road safety visions; these include Sweden and the Netherlands, which are often seen as leading the way in their approaches to road safety. Scotland now has a vision and targeted reductions in road traffic related deaths and serious injuries to 2020, and Great Britain has recently consulted on various road safety issues for the next decade or more, including a vision.

Much of the material in this report is taken directly from previous TRL work that has contributed to the development of Great Britain's road safety vision and strategy, though it has been supplemented following the GB work and also similar developments specifically in Scotland. It examines the motivation for, and nature of, visions from various countries and reviews and considers their implications for road safety practice, policy and strategy.

Going forward there is a need to recognise the importance of integrating any road safety strategy and vision with other policy areas, and to further recognise the challenges described by the Eddington and Stern reports, as discussed by the Northern Ireland Assembly's Committee for Regional Development (2007). Any road safety strategy, whether or not in pursuit of a vision for road safety, should reflect the need to understand and improve road safety in the context of the full end-to-end journeys of people and movements of goods, and to do so in ways that are consistent with an overall reduction in emissions and support for economic growth.

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