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# Road Safety Strategy

Údarás Um Shábháilteacht Ar Bhóithre Road Safety Authority



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# **Introduction from Minister**



Noel Dempsey, Minister for Transport

Road Safety is everyone's responsibility. We all need to take responsibility - and take pride - in how we behave on the road as pedestrians, motor cyclists, cyclists, drivers and passengers.

Awareness of road safety, and of the contribution each individual can make to saving lives, is increasing all the time, and the best modern thinking is embodied in this new Strategy. The Government is committed to ensuring the Strategy works, by providing the leadership, action and resources to make it work.

As Minister, I will do all in my power to ensure that this Road Safety Strategy is delivered in full and that Ireland becomes one of the leading nations in protecting its citizens on the road. I also expect full and timely delivery from each of the agencies responsible for action and I have every confidence that each agency will take its leadership role seriously.

As politicians and legislators, it is our job to create the context and awareness to allow Ireland to become one of the safest countries in the world. When every citizen takes responsibility, that objective will become more than an aspiration.

And we will have a real sense of pride in how we use our roads.

**Noel Dempsey T.D.** Minister for Transport October, 2007

# Introduction from Chairman, RSA



Mr. Gay Byrne, Chairperson

Road Safety is one area that makes nonsense of Mark Twain's famous observation that there are "Lies, damned lies – and statistics".

Statistics are the key measures of progress in road safety. There is no arguing the fact that Ireland's roads have become safer in recent years. In fact, 2006 saw the second lowest number of fatalities on Irish roads in forty one years, despite the increase in population and number of registered vehicles. However, this is no consolation to the families, communities and workplaces which have been shattered following a death or serious injury on our roads. That is why this strategy sets tough targets for the reduction of death and serious injury and demands trojan effort and delivery from each and every one of the agencies responsible for actions in the strategy.

Recent progress and experience from other countries worldwide prove beyond doubt that Ireland has the capacity to make significant progress and to become one of the "best practice" countries.

This strategy demands tough measures and robust action for Government and its agencies. It also needs to capture the hearts and minds of the Irish public. We must all take personal responsibility for the way in which we behave; this strategy seeks to engender a sense of public and personal pride about our behaviours on the road and our performance as a nation.

The RSA advises the Minister, who then develops policy for road safety. The RSA will report on implementation of this policy and on progress against the targets set out. In addition the strategy document is a handbook for those with responsibility for making road safety happen.

On behalf of the RSA Board I commend this strategy to you and assure you that we will do all that is humanly possible to ensure it is delivered in full so that you and those close to you do not become a tragic statistic.

This publication is a major step towards saving lives. Its proposals are backed by best national and international research.

But I hope the comprehensiveness of this strategy does not detract from one central truth – Road safety comes down to individual behaviour.

I can make a difference.

I will make a difference.

Will you?

#### Gay Byrne

Chairman

October, 2007



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Road Safety Strategy 2007-2012



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Section 1

# Introduction

Ireland's third Road Safety Strategy seeks to build on the progress and understanding provided by the first two strategies (1998-2002 and 2004-2006), with the objective of radically - and sustainably - improving safety on Irish roads. It draws on the insight and experience of countries implementing best practice in road safety, among them The Netherlands, Sweden, United Kingdom, Norway and France. New Zealand, the states of Victoria and Queensland in Australia, and a number of states in the USA also provided valuable input.

## **Public Consultation Process**

A public consultation process was conducted to inform this Road Safety Strategy. An invitation for submissions was issued through national and local media in late 2006. Approximately 500 valuable submissions were received from members of the public, the media, corporate agencies and other sources. The consultation process showed overwhelming support for continued actions to reduce the number of deaths and serious injuries from road collisions. Consultation and communication will continue throughout the implementation and evaluation of this Road Safety Strategy.

# **Road Fatalities in Ireland**

During the 1970s, the worst period for road deaths in Ireland, road fatalities averaged 50 per month, although the country had, at that time, only  $\frac{1}{3}$  of the current number of vehicles on the road (See figure 1).

#### Figure 1



#### Fatalities per annum and Fatalities per million registered vehicles, 1970 - 2006

Fatality numbers fell as a result of increased enforcement, improvement in the safety engineering of vehicles and roads, together with improvements in medical interventions. Road safety developed as a research topic with increasing focus on the avoidable social and economic costs.

1997 was the most recent peak year in road fatalities, averaging 39 deaths per month. This led to the introduction of the first Road Safety Strategy in 1998. Actions based on the Strategy brought deaths down to an average of 35 per month by December 2000. The introduction of penalty points in November 2002 helped achieve the primary target of a 20% reduction in fatalities by December 2002.

#### Figure 2



#### Monthly Fatalities, (3 month moving average), January 1997 - April 2007

Looking at the year-on-year impact of policy on road deaths (figure 2), it's evident that the most successful years were 2002 and 2003 following the introduction of penalty points in November 2002. The years 2004 to mid 2006 were disappointing as fatalities increased and the gains of the previous years were lost. This trend changed in July 2006 with the introduction of Mandatory Alcohol Testing (MAT) supported by the visible and consistent enforcement programme of the Garda Traffic Corps.

333 people died on the roads in the twelve months from the end of June 2006 to June 2007 (the lowest twelve month number in 4 years since 335 fatalities in 2003). That is an average of 28 fatalities per month or 80 fatalities per million of population. This is a reduction of 19% when compared with 412 fatalities in the twelve month period from the end of June 2005 to June 2006 – an average of 34 deaths per month or 98 fatalities per million of population.

Throughout this document calculations are based on a population in Ireland of 4.2 million.

# Ireland's Road Safety Performance in the EU

Best practice countries in the EU have achieved a reduction to 50 deaths per million and are already committed to improving this position by a further 20% (figure 3). The EU has set an overall target of a 50% reduction by 2010 from the base year of 2000. Ireland now ranks 14th out of 25 countries in the EU. To join best practice countries in the next five years, this Strategy must reduce annual road deaths to between 50 to 60 deaths per million of population. This allows for the different characteristics of our road network and kilometres per annum travelled compared with the best practice countries.

#### Figure 3



#### 2005 European Road Deaths - per million population

Source: NRA / RSA, OECD / IRTAD and ECMT

Using annual average fatalities the chart overleaf (figure 4) illustrates the challenge to road safety policy. The target is to reduce fatalities to no greater than 60 fatalities per million by the end of 2012 and 50 or fewer in the following years with demonstrable downward reductions in each year of this Strategy (see page 36).

Achieving 60 road deaths per million of the population is equal to 21 deaths per month or 252 deaths per annum. 18 deaths per month is the monthly average that would place Ireland alongside The Netherlands, Sweden, Norway and the United Kingdom. This is equivalent to 210 deaths per annum, 50 road fatalities per million of our population.

#### Figure 4



Annual Monthly Average Road Collision fatalities, 1997 - 2006

# **Primary Causes**

The primary causes of road collisions, deaths and injuries are:

- Speed inappropriate for, or inconsistent with, the prevailing circumstances or driving conditions
- Impaired driving through alcohol, drugs (prescription or non-prescription), or fatigue
- Failure to use or properly use seatbelts and child safety restraints
- Unsafe behaviour towards / by vulnerable road users (pedestrians, motorcyclists, cyclists, young children and older people).

See Appendix II (The High Risks – Who, Why, When and Where?) for research on primary causes.

9 out of 10 fatal collisions are caused primarily by the behaviour of road users. This fact, consistent over time, is illustrated overleaf in Figure 5.

Research on fatal collisions indicates:

- Excessive speed is a contributory factor in 1 in 3 fatal collisions 1
- Alcohol is a contributory factor in 1 in 3 fatal collisions<sup>2</sup>
- Driver fatigue is estimated to be a factor in 1 in 5 fatal collisions <sup>3</sup>
- 1 in 3 of those killed in cars in the last six years were not wearing a safety belt or child restraint 1
- 1 in every 3 children travel unrestrained in a car 1
- 3 out of 4 people killed on the roads are male<sup>1</sup>
- Young men aged 17 to 34 are consistently over- represented in death and serious injury statistics. 1
- Road Accident Facts, NRA 2000-2005 & Road Collision Facts, RSA 2006.
- 2 Source: North Eastern Health Board, Doctor Declan Bedford, Specialist in Public Health Medicine Blood Alcohol Levels in persons who died as a result of road traffic crashes, in Cavan, Monaghan and Louth in 2001 and 2002 November 2003.
- 3 Source: Professor Jim Horne, Head of the Sleep Research Laboratory, Loughborough University, UK http://www.lboro.ac.uk/departments/hu/groups/sleep/ http://www.rsa.ie/NEWS/News/Driver\_Fatigue.html The European Transport Safety Council (ETSC) - http://www.etsc.be/home.php

Source: NRA / RSA

## Figure 5

#### Contributory factors for Fatal Collisions 2000 - 2005



Source: Calculated from NRA / RSA Data (2063 Collisions 2000-2005)

# Vulnerable Road Users <sup>1</sup>

Vulnerable road users are pedestrians, motor cyclists, cyclists, young children and older people.

- 6 out of 10 of those who have died on our roads in the last six years are vulnerable road users
- 2 out of 10 are pedestrians
- 1 out of 10 is a motor cyclist
- 1 out of 30 is a cyclist
- Vehicle speed is the primary contributor to these fatalities.

At 60 km/h 9 out of 10 pedestrians will be killed in an impact with a vehicle.

At 50 km/h 5 out of 10 pedestrians will be killed in an impact with a vehicle.

At 30 km/h 1 out of 10 pedestrians will be killed in an impact with a vehicle.<sup>4</sup>

<sup>1</sup> Road Accident Facts, NRA 2000-2005 & Road Collision Facts, RSA 2006.

<sup>4</sup> Source: Rules of the Road RSA 2007

# Figure 6

## Road Deaths By Road User Type 2000 - 2005



Source: Calculated from NRA / RSA Data (2,307 road deaths 2000-2005)

## Figure 7

#### Fatalities Classified by Road User and Age: 2000 - 2005



Source: NRA Road Accidents Facts 1997 - 2004 / RSA Road Collision facts 2005 (1,706 road deaths 2000 - 2006)

## Days and Time of Day for Road Fatalities

The following graphs illustrate the high risk days and time of day for fatal crashes. 2,307 people were killed in road collisions from 2000 to 2005. Half of these were killed on Friday, Saturday and Sunday – the high-risk weekend period. 36% of these weekend fatalities were single-vehicle collisions.

# Figure 8

#### When do fatal crashes occur - by day 2000 - 2005



Source: Calculated from NRA / RSA Data (2,307 road deaths 2000-2005)

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Figure 9 indicates two high-risk periods during a 24 hour day. A significant increase in the number of fatalities happens between 1600hrs and 2200hrs as homeward-bound commuter traffic builds up. Another spike occurs from 0000hrs and 0300hrs – a time associated with fatalities for young men - with a combination of speed, alcohol, and fatigue as major contributory factors. Another high-risk time for high volume traffic movement is from 0700hrs to 0800hrs.

#### Figure 9



When do fatal crashes occur - by hour?

Source: Calculated from NRA / RSA Data (2,307 road deaths 2000-2005)

# The Four Es

International consensus has built around the Four Es as the pivotal elements in reducing road deaths.

- Education raising awareness of road safety by imparting knowledge and developing an understanding of the risks with a view to changing attitudes and behaviour at individual, community and organisational levels.
- Enforcement visible and appropriate enforcement acting as a deterrent and increasing compliance with road traffic laws
- Engineering making the road network safer and more forgiving of inevitable errors by road users. Vehicle engineering to improve occupant and pedestrian / cyclist safety and minimise harm
- **Evaluation** ensuring sustainable reduction in road deaths and serious injury by constant research into the efficacy of actions undertaken.

Evaluation is now included as part of the strategy for the first time. Individual actions under these measures vary between countries in response to local conditions, culture, legislation, demographics and road infrastructure. In Ireland, the RSA will collaborate with stakeholders to implement a range of actions appropriate to local culture, laws, and infrastructure.



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Section 2 Role of the Road Safety Authority

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Section 2

# **Role of the Road Safety Authority**

The Road Safety Authority (RSA) is a statutory organisation created by the Road Safety Authority Act 2006. The RSA was established on September 1st 2006. The functions it carries out were transferred from the Department of Transport (DoT), the National Roads Authority (NRA) and the National Safety Council (NSC).

The aim of the Road Safety Authority is to save lives and prevent injuries by reducing the number and severity of collisions on the road. *Working to Save Lives* is the stated goal adopted by the Board of the RSA.

The functions for which the RSA is responsible are set out in the legislation. The RSA is organised into three directorates as follows:

- Driver Testing and Training
- Road Safety, Research and Driver Education
- Standards and Enforcement.

The directorates are supported by Corporate Services.

This is the first time such an extensive and important range of road safety related functions has been vested in one statutory body. It enables the RSA to co-ordinate and implement a series of interdependent road safety initiatives in a way that has not been possible before now.

While setting road safety policy remains the function of the Minister for Transport the RSA has a key role in advising on the formation of such policy.

The RSA takes responsibility, in accordance with the Road Safety Authority Act 2006, for producing and formally reporting on the implementation of the third Road Safety Strategy 2007 – 2012, which has received Ministerial and Government approval. The targets set out in the Strategy will be met if all stakeholders commit to the delivery of the agreed actions set out in section 6.

In implementing the Road Safety Strategy, the RSA relies on a number of critical actions by other Departments and Agencies.

The RSA will continually monitor, audit and report on the effectiveness and cost of these actions against plans, outcomes and alternatives. The members of the RSA board and the executive team are outlined in Appendix V.

# The Road Safety Authority Policy Advisory Panel

In the consultation process, stakeholders stressed the need for an equivalent to the High Level Group on Road Safety, chaired by the DoT under the previous Strategy.

Therefore, a Policy Advisory Panel made up of a number of experts on road safety has been established to support the work of the RSA in the development, implementation and evaluation of integrated policy measures. This Advisory Panel will:

- Continue the analysis of recommendations in the submissions received during the consultation period
- Facilitate communication and consultation between the primary stakeholders
- Provide access to information and research
- Support the RSA in its service delivery.

Membership of the Policy Advisory Panel is outlined in Appendix VI.



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Section 3

# **Critical Success Factors**

## **International Best Practice**

Countries described as achieving best practice have reduced road deaths to 50 per million of population per year.

In the EU, these countries are The Netherlands, Sweden, Norway and the United Kingdom.

What sets the best practice countries apart is the implementation of an integrated plan across education, engineering and enforcement with high levels of collaboration among the Departments and Agencies involved. All strategies are supported by comprehensive education programmes in schools and in the community. In these countries, the Road Safety Strategy is fully funded over its lifetime and evaluation is based on outcomes achieved.

From 1998 to 2003 the improvement in Ireland's performance was among the best in Europe, improving from 112 to 84 deaths per million. However, from 2003 - 2006, Ireland was one of the few countries to show a deteriorating trend as road fatalities increased from 84 to 87 per million of population. In 2006 Ireland returned to the 2003 level and this improving trend has continued into 2007.

This improving trend is attributed to the increase in resources of the Garda Traffic Corps, the extention of penalty points and in particular, the introduction of Mandatory Alcohol Testing (MAT) in July 2006 and the related increase in enforcement activity.

Reducing road collisions has a significant and measurable effect on healthcare services. Road collisions account for 30,000 bed days per year in the healthcare system.<sup>5</sup>

Following the introduction of penalty points for speeding in November 2002 admissions to the Spinal Injuries Unit of the Mater Hospital fell by 50 % in the first six months of 2003.<sup>6</sup> Similar improvements were reported from the Maxillofacial Units of St. James and Beaumont Hospitals. These improvements were not maintained from 2003 – 2006 as the number of collisions increased.

The internationally-recognised success factors for implementation of a road safety strategy will form the basis of future road safety policy in Ireland.<sup>7</sup> They are:

- Political commitment
- Leadership and road safety champions
- Accountable stakeholders
- Collaboration between stakeholders
- Road safety planning (goals, strategy, action plans, funding)
- Data sharing information systems
- Monitoring and evaluation
- Trained and equipped staff
- Marketing, outreach and public information.

5 Source: HSE Road Safety Presentation December 2006

<sup>6</sup> Source: The Impact of a Driving Offence Penalty Points System on Admissions to the National Spinal Injuries Unit. DG Healy, P Connolly, MM Stephens, J O'Byrne, F McManus, D McCormack. National Spinal Injuries Unit, Division of Orthopaedic Surgery, Mater Misericordiae Hospital, Eccles St, Dublin 7

Source: SWOV, the Institute for Road Safety Research in the Netherlands (Advancing Sustainable Safety 2005 – 2020)

# **Current Critical Success Factors in Ireland**

#### 1. Political Commitment

In January 2006 the Taoiseach set up a Cabinet Level Committee on Road Safety chaired by the Minister for Transport and attended by five other Ministers, their supporting officials, the Attorney General, Garda Commissioner and the CEO of the RSA. This structure mirrors political arrangements in best practice countries.

#### 2. Policy Implementation and Collaboration

The RSA is now the primary organisation responsible for advising and evaluating road safety policy. The Advisory Panel to the RSA consists of knowledgeable and experienced road safety practitioners who provide advice and support in prioritising and evaluating policy actions.

#### 3. Garda Traffic Corps

The Gardaí established the Garda Traffic Corps, with the supporting command structure, equipment and resources. The Traffic Corps, dependent on the resourcing of the Medical Bureau of Road Safety (MBRS), ensures the necessary enforcement capacity to achieve increased compliance with road traffic law.

#### 4. Legislation

A significant strengthening of the legislative framework for road safety, including measures such as increased penalties, court fines, disqualification periods and MAT are now in place.

#### 5. Funding

Dedicated funding is available for the work of the RSA, NRA and the Garda Traffic Corps. This brings together the funding for critical road safety interventions over the lifetime of the Strategy. It facilitates best practice in service delivery, transparency in resource allocation and enables quality evaluation.

#### 6. On-going Consultation Process

Building on the success of the initial consultations, the RSA has committed to an on-going consultation process with key stakeholders and other interested road safety practitioners during the implementation of the Strategy.

#### 7. Public Support

Public support for the work of the RSA is measured through attitudinal surveys which demonstrate that 9 out of 10 are in favour of having more enforcement of traffic laws. 9 out of 10 of those surveyed also agreed that penalties for drink driving should be much more severe.<sup>8</sup>

#### 8 Road Engineering

Significant investment has gone into building new roads / motorways and improving existing roads to make them measurably safer and more user-friendly.

#### 9. Media Support

The print, broadcast and electronic media play a critical role in communicating road safety issues and maintaining road safety as a priority social issue in this country.

8 Source: SARTRE Report & Millward Brown Study



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Road Safety Strategy 2007-2012



#### Section 4

# The Third Road Safety Strategy: 2007 - 2012

In addition to the Public Consultation Process, the Road Safety Strategy 2007 – 2012 is informed by experience and research from other countries. Part of the process also carefully reviewed and evaluated the effectiveness of the previous strategies, the results of which suggested this approach had to be sustained and developed in a third Road Safety Strategy.

The four elements, Education, Enforcement, Engineering and Evaluation will be the policy framework of the Strategy.

The Strategy seeks to achieve:

- A change in focus to prioritise prevention of a collision in addition to planning to contain the consequences and recovery / rehabilitation of the injured
- A change in focus where the policy accepts that road users will make mistakes. It seeks to compensate for those mistakes by designing and building a more forgiving road network. (A forgiving road side is a road side which minimises the severity of the injury to a driver or passenger when the driver loses control and the vehicle leaves the road.)
- Better management and coordination of the actions among the stakeholders particularly in managing the prioritising and sequencing of actions between Government Departments and Agencies
- Improvement of communication and consultation to ensure public support is achieved and sustained
- Provision of timely, accurate and meaningful information to all road users
- Accountability through detailed regular reporting on effectiveness, value for money and outcome measurement.

An Action Plan and the lead Department / Agency responsible for each is listed in section 6.

The RSA will submit an Annual Report to the Minister for Transport reporting on the implementation progress of the Strategy.

#### Finance

There is substantial evidence that investing in road safety has significant social and economic benefits. This is supported by the Goodbody research referred to in Appendix I. There is also a need for a detailed comprehensive cost-benefit analysis of all of the interventions outlined in this Strategy. This will clearly outline the economic benefits relative to the costs incurred. The cost-benefit analysis will be developed further under this Strategy.

## **Priority Actions**

The primary aim of this Strategy is to reduce collisions, deaths and injuries on Irish roads. In terms of fatalities this is an average of 21 per month. This equates to 252 fatalities per annum or not greater than 60 per million with a demonstrable reduction each year of the Strategy.

The RSA has identified a number of key behaviours to be changed by the actions set out in this Strategy:

- Inappropriate speeding
- Impaired driving through alcohol, drugs (prescription or non-prescription), or fatigue
- Not using seat belts and child safety restraints
- Unsafe behaviour towards / by vulnerable road users (pedestrians, motorcyclists, cyclists, young children and older people).

Under the Strategy, all of the stakeholders are collectively responsible for their respective actions set out in Section 6 – Action Plan. Education and Evaluation are the key elements where most of the work will be done by the RSA. Actions have been set out under each of the four elements of the policy framework. The actions are defined, with clear timelines and responsibilities. Implementation will be reported each year.

# 1. Education

The purpose of actions under this heading is to ensure all road users develop appropriate attitudes and safe behaviours. To do this we must impart knowledge and appropriate skills to road users as they move through life.

#### Pre-Primary, Primary and Post-Primary Education

The RSA's current policy is to deliver road user education and awareness in a cumulative approach up to third level.

Education measures will be introduced at pre-primary level including programmes for expectant parents and pre-school children.

By 2012, all primary school children will have completed a road safety programme within the generic framework provided by the Social, Personal and Health Education Programme. This will promote an understanding among children of how to cross the road safely, how to behave walking to and from school, how to behave on buses, appropriate use of seat belts, careful entering and exiting of cars and safe cycling. It will also address the importance of being seen and will develop an awareness of potential hazards and risks on the road.

The implementation of the Social, Personal and Health Education programme at post-primary level will be supported by the development of innovative and interactive learning resources which will focus explicitly on issues of road safety. This will be allied to the development of core values and attitudes essential for responsible decision-making, health / well-being, and promoting behaviour which respects personal safety and the safety of others.

The RSA will work collaboratively with the Department of Education & Science (DoE&S) and the National Council for Curriculum and Assessment (NCCA) to develop a road safety programme for schools as part of Transition Year (TY). This programme will encourage active learning and the development of awareness, knowledge, skills and values which will create a foundation for the development of safe road users now and into the future.

The RSA will review and integrate the variety of road safety educational activities across primary and post primary with all relevant stakeholders to ensure long-term sustainable impact.

The operation of the school bus fleet will become part of a comprehensive safety programme with annual training, development of all school bus drivers and research into safety issues on buses.

#### Third Level Education

The RSA has begun work on formal road safety education programmes at third level in conjunction with the Garda National Traffic Bureau. The programmes will engage with the high risk 17 to 24 year-old road user. Education of students will happen in partnership with student unions, education establishments, community groups, sporting activities and other social outlets. This approach will develop more informed road users with a heightened awareness of the risks and hazards associated with modern road use.

#### **Community Education**

The activities in schools and colleges will be complemented by community-based programmes. These will target high risk groups in the workplace and in their local communities. They will be implemented in partnership with sporting organisations and community groups.

Education programmes will be developed through formal structured road safety plans at local authority level. This will be augmented through strategic partnerships with community organisations.

#### **General Public Education**

In addition, the RSA will provide constant learning and communications opportunities to all road users through their website, information leaflets and publications.

The RSA objective to deliver driver education will be achieved through ensuring a uniform standard of tuition from Approved Driving Instructors. This will include a set curriculum in a compulsory basic tuition model at the point where learner drivers are in a position to practise and consolidate their newly acquired practical driving skills.

#### Communication

The promotion of Road Safety using marketing communications tools such as advertising and public relations has an important contribution to make to the overall Strategy of reducing death and serious injury on Ireland's roads.

In Ireland, every road user is in daily danger due to high-risk behaviour on the roads from speeding, drunk-drivers, drug-drivers, fatigue, non-wearing of seatbelts, drivers using hand-held mobile phones, and other illegal behaviour. Therefore, continuous awareness interventions are needed to remind road users of their vulnerability and to reinforce the need for culture change.

Since the year 2000, the promotion of road safety in Ireland has been based upon the Education / Enforcement Model in which advertising, supported by other activity is designed to shape the climate of public opinion and build community support for increased enforcement.

# The Road Safety Education / Enforcement Model



This is consistent with the policy of the European Commission.

"From the same scientific sources it appears that enforcement actions are only optimally effective if they are combined with actions to make the public aware of such enforcement actions and of the reasons why they are being held." <sup>9</sup>

The use of this model has led to a series of road safety campaigns which have won international awards for their effectiveness.

Promoting road safety on an all-island basis has been a key part of previous Government road safety strategies. Since 1996, twelve road safety campaigns have been produced on a joint North / South basis with the Department of the Environment in Northern Ireland (DoENI). This has had many significant benefits including the sharing of costs and the spill-over effect of common road safety messaging in both jurisdictions. It is recommended that co-operation on joint North / South road safety promotional campaigns continue over the life-time of this Strategy.

9 Source: European Commission Recommendation on enforcement in the field of road safety, 2003

A successful road safety strategy depends on the support of the community it serves and road users in particular.

"Studies and research on this subject have shown that, to achieve a significant improvement in compliance with the rules by road users, an overall approach is needed which combines police checks with education and awareness campaigns for users" <sup>10</sup>

There are always risks in maintaining the support of road users in a road safety strategy which aims to change their behaviour. The introduction of safety cameras will focus attention on speed limits in general – and in particular on an objective view of their consistency and appropriateness across the road network.

The implementation of the Safety Camera Network will require a major public awareness campaign to make all road users aware of the role of the cameras in enhancing their safety by reducing the number of collisions, deaths and serious injuries across the road network.

Similarly, the implementation of MAT and penalty point offences should be experienced as reasonable and proportionate to the lives saved and injuries avoided. The risk is in losing the support of the community and of road users. This challenge is best dealt with by providing timely, relevant and meaningful information to the road user. The purpose of communication and advertising is to gain the confidence of road users by sharing the information, listening to feedback, and taking corrective action where required.

The primary communications activities during the period of the Strategy will focus on the main factors contributing to road fatalities and injuries in Ireland, namely:

- Speed inappropriate for, or inconsistent with, the prevailing circumstances or driving conditions
- Impaired driving through alcohol, drugs (prescription or non-prescription), or fatigue
- Failure to use or properly use seatbelts and child safety restraints
- Unsafe behaviour towards / by vulnerable road users (pedestrians, motorcyclists, cyclists, young children and older people).

10 Source: European Commission; European Road Safety Action Programme 2nd June 2003

# 2. Enforcement

An Garda Síochána, supported by the Department of Justice, Equality and Law Reform (DoJELR) and the RSA, will increase compliance with all road traffic legislation. In particular, continuous high visibility enforcement will focus on speed limits, drink driving, seat belt wearing, licensing, vehicle roadworthiness and driver rest regulations. Enforcement activity is critically dependent on the resourcing of the MBRS for the provision, calibration and maintenance of alcohol detection equipment, the analysis of specimens and the development of drug detection techniques.

The Safety Camera Network is a significant addition to the existing enforcement programme. Mobile and fixed cameras will be used across the road network. The locations will be based on analysis by the Gardaí of speed-related collisions, which will allow optimal deployment of the safety cameras and hours of operation to achieve the compliance rates set out in Section 6. Implementing a successful Safety Camera Network requires an integrated technology system that links the camera output to the vehicle and licence databases and to the courts administration system. The operation of the Safety Camera Network will be supported by a high profile and continuous public awareness campaign to ensure drivers are aware of the role of safety cameras in enhancing their safety.

The road transport sector has a vital role to play in relation to road safety. Goods and passenger vehicles have the potential to cause a disproportionate impact on death and injury compared to other road users. A series of initiatives, adopted by the EU are designed to improve the overall safety of goods vehicles and passenger vehicles on the European road network. These measures include changes in rules on driving and rest periods as well as setting targets for minimum enforcement activities to be implemented by Member States in the professional road transport sector.

The RSA and An Garda Síochána are responsible for the enforcement of drivers' hours, rest periods, tachograph and licensing legislation. The current enforcement activity will be continued and increased by the RSA to achieve compliance with driver hour regulations by random roadside checking and following up with random premises checks.

The key measure of success in enforcement is achieving increased levels of compliance with road traffic law.

# 3. Engineering

#### National Roads Authority

The provision of a safe and efficient network of national roads, a key function of the NRA and local authorities, includes work on major inter-urban projects, network maintenance and management, and road safety engineering measures.

Over the lifetime of the last two strategies the NRA led the way in improving the safety of the road network. This was achieved through major developments of motorways and dual carriageways on the national primary and secondary network and the completion of over 1,050 accident remedial schemes at identified collision locations throughout the network.

The NRA will spend up to €1.5bn per annum on National Roads over the life of this Strategy. A substantial part of this expenditure will be on Major Inter-Urban Motorway Projects.

It is estimated that Major Road Building Programmes may save 50 lives a year when completed in 2010. This is supported by recent studies on the newly completed M1 from Dublin to Dundalk where the number of fatalities has fallen dramatically with the new motorway while traffic has grown two and a half times in eight years, well ahead of expectations. In the 3 years before the motorway was completed 12 fatalities occurred on the route. The 3 years after the motorway was completed have seen 2 fatalities (see figure 10).

#### Figure 10



#### Fatalities vs Traffic Volume on M1

The NRA have also prioritised the completion of Major Inter-Urban Motorway Projects based on research demonstrating that motorways are 7 to 9 times safer than unimproved single carriageways <sup>11</sup>. This safety dividend should mean a significant reduction in fatal and serious injury collisions in the years to come.

A recent international comparsion of collisions on different road types from the Euro RAP survey for Ireland shows that our different road types stand up well to international comparsions (see table 1 overleaf).

11 Source: Interurban Accident Rates By Road Type & Geometric Elements, Dr. D. O'Cinneide, UCC, 2004

# Table 1Comparsion of fatal collision rates per billion vehicle km among<br/>EuroRAP partners

	REPUBLIC OF IRELAND	NORTHERN IRELAND	GREAT BRITAIN	THE NETHERLANDS	SWEDEN	SPAIN
Motorway	2.3	1.9	1.9	1.7	1.7	11.3
Dual Carriageway	4.7	7.3	5.0	7.7	-	11.3
Single Carriageway	11.5	12.4	12.4	-	7.7	23.2

However the key difference between Ireland and the United Kingdom is the percentage of the national road network represented by motorways and dual carriageways (6% of the Irish national road network in 2002 compared to 23% of the UK trunk road network). This figure for Ireland has nearly doubled in the last 5 years (353 kms in 2001 to 622 kms in 2006), and will double again to over 1250 kms (23% of our national road network) by the end of 2010. <sup>12</sup>

#### Local authorities

Local authorities have responsibility for local and regional roads. This responsibility extends to road design, construction, and maintenance. The authorities are also responsible for road signage and speed limits. Safety dividends will be realised through a structured road programme that incorporates and integrates these particular elements.

To ensure that Ireland maximises road user safety and protection, the RSA will introduce and enforce best standards in vehicle and component engineering, mechanical standards and drivers' hours.

#### Information, Communication and Processing Technology

The third Strategy moves Ireland towards best practice that is dependent on reliable and integrated technology systems operating across different Departments and Agencies. The RSA will review the developing technology processes to ensure they support progress towards the targets set out in the Strategy.

The pace of change in technology – and, as a consequence, technology-driven change is a challenge and an opportunity.

Substantial international evidence indicates that technology-led change can significantly support road safety strategies. The technologies involved have come from the aerospace, defence and motor manufacturing industries.

#### 'In road' technology

In some countries, safety cameras are being replaced and /or complemented by roadside or 'in road' technology. This detects a vehicle at separate points and calculates average speed between these points to determine whether an offence was committed. Other technology checks and reports on the volume and frequency of traffic on the road network. Similar tracking systems using sophisticated satellite location technology are now in use in Ireland in the logistics industry.

12 Source: NRA records of road completions since 2001

#### 'In vehicle' technology

Developments in the US and UK in particular have increased awareness of the sophistication of existing 'safety box' technology in modern cars and HGVs. The use of 'in vehicle' monitoring technology is driven by trends in 'pay-as-you-drive insurance', 'pay-as-you drive tolling' and emissions monitoring. For example, increasing access to pre-recorded information is now being used in some states in the US and in Australia to determine the causes of collisions. In those states, 'event data' from in-vehicle recorders is acceptable as court evidence to determine primary cause and assess liability.

The safety boxes will become increasingly important as the technology is refined, its cost falls and resistance to its use is tempered by recognition of its potential value.

Other developing 'in vehicle' technology – such as risk detection devices - assists the driver to maintain a safe distance from other vehicles.

These technologies have the potential to significantly reduce the investment cost of road safety. Costs and benefits will be shared between the State and the owner/driver, incentivised by lower and more predictable insurance costs and other benefits.

The challenges for these kinds of technologies lie in practical application in the Irish context. Such application requires the creation of EU directives, the necessary complex legislation, the installation of technologies in vehicles and the revision of protection measures in relation to privacy and data protection.

# 4. Evaluation

The RSA has set a number of objectives under this heading and will achieve them over the lifetime of this Strategy. It will:

- Improve the availability of accurate, relevant and timely data / information to support policy decisions
- Apply cost-benefit analysis and evaluation techniques in all decisions relating to the commitment
  of public funds in the prevention of and response to collisions, deaths and injuries and in followup recovery and rehabilitation of the people injured in a collision.
- Engage in collaborative and partnership projects with the EU, international agencies and with all stakeholders.

#### Methodology for delivering these actions

The RSA will:

- Consult and communicate with road users and representative organisations to ensure the Strategy is understood and is seen to be fair and proportionate for law abiding road users.
- Develop and implement a collaborative approach across all of the Departments and Agencies involved.
- Ensure that the communication, processes and information technology required to support an integrated road safety strategy are developed and implemented.

#### Dependencies

The implementation of this Road Safety Strategy requires the cooperation and collective responsibility of all stakeholders including the RSA. The actions outlined in section 6 must happen in the time sequence set out otherwise there is a risk that the targets will not be met.

Examples of key dependencies are:

- DoT for supporting legislation and resources
- Department of Justice, Equality and Law Reform (DoJELR) for resources and support
- Gardaí and the Traffic Corps in particular, for consistent and appropriate enforcement aimed at increasing compliance
- NRA and Local Authorities for appropriate and consistent speed limits and road quality across the road network
- Local Authorities and NRA for the implementation of local road safety plans and for best road safety practice in the planning permission process and the control of development
- MBRS for approving, testing and supplying roadside analysis equipment and for analysing blood, breath and urine samples at a volume and quality to support the increased level of enforcement
- HSE and other agencies for advice and evaluation of the population health impacts of road safety initiatives.



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Section 5

# **Targets**

## **Targets**

The primary aim of the Strategy is to save lives and prevent injuries by reducing the number and severity of collisions across the road network.

### 1. Reducing Fatalities

Over the last six years, two periods stand out in which this was achieved. In the four month period November 2002 to February 2003, following the introduction of penalty points for speeding, deaths per month averaged 21. This compared to 33 per month for the previous ten months. Those four months approached best practice in road safety – an annualised rate of 60 deaths per million of population. Although this reduction was not sustained, the total number of collisions and deaths in 2003 at 335 was the lowest since 1963. The number of road fatalities increased in each of the next two years to 374 in 2004 and 396 in 2005, falling to 366 in 2006. (See figure 4 page 10).

In July 2006, MAT was introduced. Again, the impact was immediate. Deaths reduced for the following six months to an average of 28 per month compared with 33 per month for the first half of the year. The difference in this case was the continued presence of the Garda Traffic Corps and the increase in the number of interventions on the road network. The aim of enforcement, is to increase compliance with the road traffic law and is best achieved by a level of enforcement that acts as a continuous reminder.

The target set is dependent on:

- the increasing presence of the Garda Traffic Corps
- the introduction of safety cameras
- reform of the driver licensing system
- increased use of MAT and other enforcement measures
- resourcing of the MBRS and the courts to meet the increase in enforcement activity during the lifetime of the Strategy
- effective education, engineering and communication actions.

#### **SPECIFIC TARGET**

Reduce fatalities to no greater than 60 fatalities per million by the end of 2012 and 50 or fewer in the following years with demonstrable downward reductions in each year of this Strategy.

## 2. Reducing Serious Injuries

The second Road Safety Strategy noted that it was not possible to set a benchmark for a reduction in serious injuries similar to that for fatalities.

This is because the reported figures for serious injuries in road collisions over the period of the *Road to Safety* (the Government's first Road Safety Strategy) declined so sharply as to give rise to doubt about their reliability. A considerable body of international evidence indicates that road collision injury statistics are liable to suffer from under-reporting as opposed to figures for fatalities, which in general tend to be highly accurate.

The immediate task is to ensure that the statistics for serious injuries are reliable enough to form the basis for analysis and planning. Nevertheless, the same plans that reduce the number of deaths also reduce serious injuries. Therefore, until the database for serious injuries is updated and completed, the target for reduction in serious injuries can be set only relative to fatalities.

Existing information systems will be the primary sources for building the database of serious injuries. Claims data from the insurance industry will be used as a secondary source. The database will be completed by the 4th Quarter 2008. This will provide a benchmark for measuring the reduction in serious injuries.

The RSA aim to reduce serious injuries and has set out specific actions to achieve this in Section 6.

### SPECIFIC TARGET

- To complete the database for serious injuries by 4th Quarter 2008
- To reduce injuries by 25%.

## 3. Reducing the Number and Severity of Collisions

Best practice countries aim to reduce the number and severity of collisions for two reasons:

- The number of fatalities and injuries reduces as a consequence
- The data from collision analysis informs policy and actions.

In Ireland, the only source of reliable data on fatal collisions is provided by the Gardaí. Up to now it has not been possible to collect and analyse data from the healthcare system and the insurance industry. These sources are essential to provide consistent and reliable data on fatal and injury collisions. For these reasons this Strategy continues to use fatality targets as the primary measure of success.

An immediate task must be to ensure that the statistics for fatal and injury collisions are reliable enough to form the basis for analysis and planning.

#### SPECIFIC TARGET

The database for collisions will be complete by 4th Quarter 2009, following which there will be a benchmark for measuring the reduction in the number and severity of collisions.

## 4. Speeding

Excessive or inappropriate speed remains one of the key contributors to road deaths and serious injuries.

The introduction of metric speed limits was one of the successful actions of the last Strategy. It was an excellent example of what can be achieved when a variety of Departments and Agencies work together to a common plan. This collaborative activity now needs to be repeated to ensure that speed limits across the network, on national, regional and local roads, are appropriate and consistent. This is more important than ever because of the introduction of a Safety Camera Network that will deliver a much greater volume of interventions and, initially, detections, on the way to achieving greater compliance.

Much needs to be done to bring compliance with speed limits up to a level that will again reduce the number of collisions and road deaths. Research accepted by the EU indicates a causal relationship between the reduction in the average speed across the network and a reduction in the number and severity of collisions. However, the relationship between the reduction in average speed and the reduction in collisions will vary – the variance will depend on the road type and the speed at which the vehicle is travelling.<sup>13</sup>

The targets set for compliance with speed limits are derived from a review of compliance levels in best practice countries in the EU. Sweden, for example, has set targets for 100% compliance. The RSA accepts that to strive for 100% compliance is desirable but recognises that it can never be achieved. However, demanding targets are required.

The following compliance levels are based on the results of the RSA Free Speed Survey 2006 and the targets are based on international best practice.

### SPECIFIC TARGET

**Cars and Motorcycles** 

- To increase compliance with speed limits on urban national roads (at 50 km/h sign) from 18% to 60% or better by 2012.
- To increase speed limit compliance on urban arterial roads from 14% to 60% or better in 50 km/h zones and from 11% to 60% or better in 60 km/h zones by 2012.
- To increase speed limit compliance on regional roads from 84% to 90% or better by 2012.
- To increase compliance on 2-lane national primary roads from 74% to 90% or better by 2012.

#### Heavy Goods Vehicles and Buses

- To increase articulated vehicles' compliance with speed limits on urban national roads (at 50 km/h sign) from 33% to 70% or better by 2012 and to increase rigid vehicles' compliance on the same roads from 23% to 70% or better.
- To increase speed limit compliance by articulated vehicles on 2-lane national roads from 13% to 60% or better by 2012 and to increase compliance of rigid vehicles from 24% to 60% or better over the same time period.
- To increase both rigid and articulated vehicles' compliance with speed limits on regional roads to 95% or better by 2012.
- To increase the percentage of single deck buses complying with speed limits on 2-lane national roads to 85% or better by 2012.

13 Source: Research references: Fuller and Gormley School of Psychology, Trinity College Dublin, May 25th, 2007.

## 5. Impaired Driving due to Alcohol, Drugs and Fatigue

Irish and European research establishes that Ireland's excessive alcohol consumption is reflected in death and injury on the roads.

Irish research indicates that 37% of fatal road crashes in 2003 were related to alcohol.<sup>14</sup>

In an analysis of all fatal collisions occurring between 2001 and 2004 in the border counties and Meath, alcohol was the main contributory factor in single vehicle collisions (57%)<sup>15</sup> and was a factor in 37% of all collisions. This research was supported in analysis of 143 fatalities from single vehicle collisions in County Kildare over a ten year period to 2005. Alcohol was present in 54% of those killed. <sup>16</sup>

Further and more reliable statistics on the incidence of drink/drug-driving are needed, as is further examination of the toxicology reports of road traffic collision victims. <sup>17</sup>

In addition, all data available from impaired driving interventions by the Gardaí should be collated into a research database. The forensic analysis programme should expand to ascertain and deal with the incidence of driving under the influence of drugs.

A critical issue emerging from the consultation process was the need for increased enforcement and for a reduction in the alcohol limit in line with best practice countries. A significant number of stakeholder submissions called for an urgent review of the blood alcohol levels permitted while driving. Submissions recommended reducing further, the levels permitted for provisional, commercial and public transport drivers. Some submissions called for a zero tolerance level towards alcohol and for increased enforcement.

The list of actions in Section 6 includes a proposed reduction in the blood alcohol limit and the expansion of the forensic analysis programme for drug driving.

The RSA proposes that the Blood Alcohol Concentration (BAC) should be reduced from the current level of 80mg.

### SPECIFIC TARGET

- To determine the incidence of drink driving in Ireland using data collected at the point of enforcement of MAT.
- Establish drug impairment training programmes for Gardaí, Doctors and Nurses by 2009.
- To publish an annual review of blood alcohol levels from coroners' data.
- To introduce a reduced BAC.

- 14 Source: Health Service Executive, Population Health Directorate, Bedford, N McKeown, A Vellinga, F Howell Alcohol in fatal road crashes in Ireland in 2003 2006. Naas.
- 15 Source: Co-operation and Working Together Group (CAWT), 'Steering to Safety Project', June 2006
- 16 Source: Single Vehicle Collisions in County Kildare and Road Safety in Ireland. McGovern and Cusack.
- 17 Source: Drinking, Drugs and Driving in Ireland; More Evidence for Action., Fitzpatrick, Daly, Leavy and Cusack.

# 6. Seatbelt Wearing

Increasing seatbelt wearing rates reduces fatalities and the severity of injuries.

The 2006 seatbelt survey carried out by the RSA indicates that for adults, front seat belt compliance rates are at 86% and rear seats are at 63%. The survey also shows that for primary school students the wearing rate for front seatbelts is at 76% and rear seatbelts at 64%, and that the front seat wearing rate for secondary school goers is at 88% with rear seats at 76%. The target for this Strategy will be achieved through continued educational and high visibility enforcement campaigns.

The RSA accepts that to strive for anything less than 100% compliance is not acceptable. It will be a number of years before this level of compliance can be achieved in Ireland.

### SPECIFIC TARGET

- Increase adult front seatbelt wearing rates from 86% to 95% or better and increase the adult rate in rear seats from 63% to 85% or better by 2012.
- Increase primary school front seatbelt wearing rates from 76% to 95% or better and rear seat wearing rates from 64% to 95% or better by 2012.
- Increase wearing rates for secondary school-goers in front seats from 88% to 95% or better and in rear seats from 76% to 95% or better by 2012.

# 7. Engineering Measures

Building new roads and improving the existing network measurably reduces collisions, deaths and serious injuries.

This work is carried out by the NRA and 34 city, town and county councils.

The NRA has a specific capital budget allowing it to allocate capital expenditure to meet the targets over the life of the Strategy.

The targets are set out by the NRA under the following headings

- Major interurban projects
- Network maintenance and management
- Road safety engineering measures
- Research and evaluation.

### Major Interurban Projects

The NRA will invest €1.25bn each year of the Strategy, a significant proportion of which is for the delivery of Motorways, Dual Carriageways and Bypasses.

### SPECIFIC TARGET

To develop a new Interurban network of Motorways and Dual Carriageways from Dublin to Galway (N6), Limerick (N7), Cork (N8) and Waterford (N9) by 2010.

### Network Management and Maintenance

The NRA is implementing a €200m programme on the management and maintenance of the road network. The changing character of the National Roads Network associated primarily with the construction of new sections of motorway and dual carriageway has placed increased demands on the maintenance of the network. Dual carriageway routes will require a significantly higher level of maintenance than single carriageway roads to maintain the safety benefits of this road type. The NRA is currently undertaking a review of maintenance policy to ensure best practice standards in this area. The specific targets are set out below.

The local authorities will continue to improve and maintain non-national roads on an annual and multiannual programme basis.

#### Network Management

### SPECIFIC TARGET

Develop an operational Strategy for the management of the National Roads network following the completion of the Major Inter Urban network.

#### Structural Maintenance and Minor Works – National Roads

### **SPECIFIC TARGET**

An annual expenditure of  $\leq 125m$  (2007 figures) for the structural maintenance, strengthening and overlaying of existing road surfaces, based on the priorities established by NRA annual maintenance surveys.

#### Bridge Rehabilitation and Strengthening

### SPECIFIC TARGET

An annual expenditure of  $\in 12m$  (2007 figures) for the inspection, rehabilitation and strengthening of bridges on the network, based on the priorities established by inspections and structural assessments.

### Signing and Lining Maintenance

#### **SPECIFIC TARGET**

The expenditure of  $\notin$ 60m over the period 2007-2010 as part of the National Road Network Re-signing programme.

### Future Maintenance Needs

### SPECIFIC TARGET

Develop pilot schemes to include the maintenance of safety barriers and other maintenance elements on new dual carriageway sections of the network.

### Network Routine Maintenance – Regional and Local Roads

### **SPECIFIC TARGET**

Local Authorities will continue maintenance of the network with annual expenditure of €54m. (2007 figures)

#### Service Areas

### SPECIFIC TARGET

Develop a network of Service Areas / Rest Areas on major inter urban and dual carriageway routes over the life of the Strategy.

#### Winter Maintenance

#### SPECIFIC TARGET

Continue to provide local authorities with an allocation of  $\epsilon$ 6m (2006 figures) for winter maintenance and the development of the Real Time Road Weather Information System.

### Road Safety Engineering Measures

The NRA road safety section manage road safety-related schemes, together with the Local Authorities, with an annual budget of €20m. The NRA will continue to monitor and refine Road Design Standards to reflect best road safety practice worldwide. The specific targets are set out below.

### Road Safety Remedial Measures



Pilot Studies and National Secondary Routes

### SPECIFIC TARGET

The NRA will continue to carry out six national secondary route treatment Pilot Studies each year and based on the results will implement Remedial Measures on these National Secondary routes.

#### Working with Gardaí and Local Authorities

### **SPECIFIC TARGET**

The NRA will continue its work with other stakeholders in developing a GIS interface for the Local Authorities in identifying collision prone zones. The NRA, in conjunction with An Garda Síochána and the Local Authorities, will pursue the 'Implementation of Reporting Mechanisms for Collisions' report, with the aim of further increasing the accuracy of collision information.

### **Research and Evaluation**

The NRA will contribute to research and evaluation of the Road Safety Strategy by participating in primary research through access to international research institutions and projects.

#### EuroRAP

#### SPECIFIC TARGET

The NRA will continue participation in EuroRAP - the European comparative Road Safety Performance project.

## 8. Driver Testing

An important feature of teaching drivers is to have a driver testing service that delivers driving tests to the appropriate standard to meet demand. In January 2007, the number of people awaiting a test was 140,500 and the average waiting time was 30 weeks.

Additional resources are being assigned to the driver testing service. Recruitment of additional staff is underway; additional out of hours testing is being incentivised to increase productivity and a contract has been signed with an outsourced provider to deliver up to 100,000 tests with the possibility of additional increments of 10,000 tests over an 18 month period. These current measures taken together will ensure that the RSA meets its stated target.

A broader aim of the RSA is to encourage the 425,225 drivers currently holding provisional licences to become full licence holders by the lifetime of this Strategy and to have in place testing resources to meet this demand as it arises.

### **SPECIFIC TARGET**

To bring waiting times to under a 10 week average across the country by end March 2008 and to maintain it at this level.

### Approved Driving Instructor Register (ADI)

The method by which a novice driver learns to drive will impact on his / her ability to drive safely. An important building block in this process is to have driving instructors with a proven ability to deliver tuition to a high standard. The RSA has begun the work of regulating the driving instruction industry. This involves setting an entry standard for all those in the industry that will ensure they have suitable knowledge, driving and teaching competencies to train new drivers.

#### **SPECIFIC TARGET**

The RSA will have all driving instructors registered by 4th Quarter 2008 with suitable ongoing monitoring mechanisms in place to maintain a high standard among driving instructors.

### **Compulsory Basic Training for Motorcyclists**

Motorcyclists are over-represented in collision statistics in Ireland. The RSA have now completed the consultation phase leading to the development of a scheme of compulsory training for novice motorcyclists. This will involve Approved Driving Instructors giving specialist training in line with an agreed syllabus to novice motorcyclists.

#### SPECIFIC TARGET

100% of all new provisional licence holders in the motorcycle category should undertake the compulsory basic training by the end of 2008 and that this is maintained thereafter.

### **Driver Theory Test**

The driver theory test is a knowledge-based test taken by novice drivers prior to applying for a provisional licence. The test, which is computer-based, assesses the knowledge of the Rules of the Road and of road safety. A review of the test was undertaken in 2006 and it was reformatted to provide a separate test for motorcyclists and to significantly increase the number of questions for all categories within the test to achieve an acceptable assessment of knowledge. Over the course of this Strategy the question bank for the test will be continually reviewed.

A particular issue to be decided is the manner in which hazard perception is to be assessed. It is recognised that this is a vital skill set. At present this is tested by way of specific questions within the computerised test.

#### SPECIFIC TARGET

By the end of 2007 the RSA will have undertaken research to evaluate the best approach to apply hazard perception learning for novice drivers and will implement the necessary change by the end of 2008.

## 9. Driver Licensing and Graduated Driver Licensing

The RSA has two key objectives in the area of driver licensing. The first is to significantly reduce the number of drivers on provisional licences and the second is to introduce a scheme of graduated driver licensing. (see Appendix III)

The figure below shows the number of people holding provisional licences in various licence categories. The first and second provisional licence generally lasts for a period of two years.

### Figure 11



### Number of persons holding driving licences, August 2007

Source: NRA / RSA / DoEHLG

### Graduated Driver Licensing (GDL)

In the context of a Graduated Licensing System specific measures will be introduced to reduce the long term reliance on provisional licences.

Graduated Licensing systems are in place in a number of countries, most notably Australia, New Zealand, the US and Canada, while a number of European countries have partial GDL in place. There is no clear definition as to what constitutes a complete GDL. For example, individual states in Australia and the US have a variety of different restrictions applying at different stages of the learning phase.

The aim of the GDL system is to reduce the number of collisions, deaths and injuries among novice drivers, particularly the high risk 17 to 24 year olds, during the learning period. GDL is based on driving experience being developed in low risk driving practice, keeping the learner out of high risk situations, developing good practice, and having a delayed progressive entry to full licence entitlement without any restrictions.

Research shows that the safest and most effective way for a learner driver to become competent is to take formal lessons combined with a long period of driving accompanied by a competent qualified driver. For maximum impact, restrictions should apply to driving licences held by novice drivers during the preand post- driving test stages. This should form part of a graduated driving licence system, since it is the relative inexperience of the learner driver that is most likely to lead to a collision rather than their status as a full or provisional licence holder.

The following diagram shows an illustrative model of the graduated driving licence system.



### SPECIFIC TARGET

The RSA will implement a learner permit and a graduated driver licence system for all driver categories within three months of final agreement on the Irish GDL system.

### Plastic Card Driving Licence

The EU requires that member states introduce a system of plastic card licences by 2013 at the latest. Member states may introduce the plastic card licence in advance of this date and it is the intention of the RSA to do so. Work on this will be complete or substantially complete by the end of the life of this Strategy.



Introduce plastic card licence within 24 months of an agreed standard being determined by the EU.

### **Penalty Points**

It is generally regarded that the system of penalty points has contributed significantly to the reduction of deaths and injuries on our roads. However, it is essential that the effectiveness of individual components of the penalty points system be evaluated to determine the impact they have on driver behaviour. This will be undertaken over the life of the Strategy and recommendations will be made based on the evaluation process.

The RSA and the Department of Transport are working with the UK authorities to implement on a bilateral basis the European Convention on Driver Disqualification. The effect of this will be mutual recognition of disqualifications.

#### **SPECIFIC TARGET**

The target for implementing the Convention on driving disqualifications is the 2nd Quarter 2008. A joint feasibility study is being conducted on the mutual recognition of penalty points.



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Section 6

# **Action Plan**

The RSA is responsible for leading, monitoring, reporting and evaluating the implementation of this Road Safety Strategy. The range of actions to ensure outcomes are achieved are set out in the following section. This will require a collaborative approach across a range of Departments and Agencies.

The challenge for the RSA is to ensure the actions are timely and coordinated. As the co-ordinator of this plan, the RSA will drive action, maintain public support, challenge and change individual behaviour, identify delays and failures with implementation and intervene where necessary.

The RSA acknowledges the research, development and implementation work of the previous road safety strategies. The third strategy is built on that foundation. This collaborative effect will enable us to be numbered among the best in the world at saving lives and preventing injuries on our roads.

# **Primary Action**

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
1.	This Strategy will save lives and prevent serious injuries by reducing the number and severity of collisions on the road. It will bring Ireland in line with best practice countries on road safety. It will reduce the number of fatalities to not greater than 60 fatalities per million (252 fatalities per annum or 21 fatalities per month) with a demonstrable reduction each year of the Strategy. It will require a collaborative approach across a range of Departments and Agencies.	RSA	All Stakeholders	CEO RSA	4th Qtr 2012

# Education

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
2.	Implement mass media campaigns which target the main causal factors for collisions, deaths and serious injuries for all road users but in particular the high risk groups.	RSA	DoE&S	RSA Director - Road Safety, Research and Driver Education	Annually
3.	Integrate mass media campaigns with the policing plans of An Garda Síochána and other enforcement agencies.	RSA	Garda Síochána / HSA	RSA Director - Road Safety, Research and Driver Education	Annually
4.	Apply new media techniques/ initiatives to road safety awareness / education which are interactive and age-appropriate.	RSA	DoE&S	RSA Directors	2nd Qtr 2008
5.	Continue to promote joint North/South cooperation on road safety awareness campaigns.	RSA / DoE NI	DoT/ North / South Ministerial Council	RSA CEO	Annually
6.	Lead the implementation of a comprehensive integrated road safety education programme in Pre-school, Primary, Post-Primary, Third Level and in the Community.	RSA	DoE&S / Higher Education Authority / Garda Síochána / HSA	RSA Director - Road Safety, Research and Driver Education	Pre-Primary (2nd Qtr 2008) Primary (2nd Qtr 2007) Transition Year (1st Qtr 2008) Third Level (3rd Qtr 2008) Community (2nd Qtr 2008)

## Education continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
7.	Develop and implement education interventions aimed at the high risk 17 to 24 year age group.	RSA	Youth Reach / National Youth Council of Ireland / Union of Students in Ireland / and other representative groups	RSA Director - Road Safety, Research and Driver Education	Annually
8.	Produce a suite of publications on the collision-causing factors (speed, impaired driving, seat belt wearing, and vulnerable road users) aimed at all road-user categories, to complement the Rules of the Road and the Driver Theory Test.	RSA	DoT /Garda Síochána /MBRS	RSA Director - Road Safety, Research and Driver Education	2nd Qtr 2008
9.	Adopt a population health approach to road safety throughout the HSE in the planning and delivery of services.	HSE	RSA/DoH&C/ HSA	HSE CEO	2nd Qtr 2009
10.	Develop a template for employers on employee road safety education which can be rolled out nationally.	RSA	HSA/ Employers/ IBEC/ Chamber of Commerce/ HSE	RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2008
11.	Develop education policies and actions aimed at ethnic minority groups.	RSA	Employers/ Trade Unions/ Embassies/ Representative Organisations	RSA Director - Road Safety, Research and Driver Education	1st Qtr 2009
12.	DoE&S, through Bus Éireann, will review and update the training programme for all school bus drivers operating under the DoE&S school transport scheme taking into account best practice standards.	DoE&S /Bus Éireann	RSA	DoE&S - Principal Officer	2nd Qtr 2008
13.	Include a road safety protocol in the Health and Safety section of each school plan.	DoE&S	Garda Síochána/HSE/ School Boards/ National Parents Councils/Local Authorities/ RSTWG/DTO	DoE&S – Principal Officer	3rd Qtr 2008
14.	Integrate international road safety awareness events such as UN Global Road Safety Awareness Week, EU Road Safety Day and World Day of Remembrance for Road Traffic Victims into road safety plans.	RSA	DoT / DoH&C / HSE / HSA / Garda Síochána / LAs	RSA Director - Road Safety, Research and Driver Education	2007 / Annually

## Education continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
15.	Every school that undertakes the RSA transition year unit programme will ensure that each pupil will have the opportunity to undertake the driver theory test before completion of the Leaving Certificate.	DoE&S	RSA	DoE&S – Principal Officer	1st Qtr 2009
16.	Each Local Authority will appoint a full time Road Safety Officer to promote road safety.	LAs	RSA / DoT	County Manager	2nd Qtr 2009
17.	The Road Safety Authority will provide a template from which each Local Authority will draft and implement its own road safety plan.	LAs	RSA / DoT	County Manager	1st Qtr 2009
18.	Host an annual international conference on road safety to update and review best practice developments.	RSA	All Stakeholders	RSA Director - Road Safety, Research and Driver Education	2008 and Annually thereafter
19.	<ul> <li>Implement specific educational measures aimed at vulnerable road users. In particular:</li> <li>Use of high visibility material for pedestrians, cyclists and motor cyclists</li> <li>Awareness of intoxicated pedestrians</li> <li>Use of Personal Protection Equipment for cyclists and motorcyclists</li> <li>Awareness of blind spots on HGVs</li> <li>Care for young and older people</li> </ul>	RSA	Garda Síochána / LAs / Representatives from Industry Bodies	RSA Director - Road Safety, Research and Driver Education	Annually
20.	Produce guidelines to assist advertisers depict positive images and behaviour and to help them to avoid showing unsafe road behaviour in advertising.	RSA	Advertising Standards Authority of Ireland	RSA Director - Road Safety, Research and Driver Education	1st Qtr 2007
21.	Implement measures to educate retailers, parents and guardians on the legal and safety requirements of using mini motorbikes, go-peds, quad bikes and similar off-road vehicles.	RSA	Garda Síochána / Consumer Groups	RSA Director - Road Safety, Research and Driver Education	4th Qtr 2007

# Enforcement

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
22.	Publish an Annual Garda Road Safety Policing Plan.	Garda Síochána	RSA / DoJELR	Garda Commissioner	Annually
23.	Rollout of Garda Traffic Corps across all Divisions to planned manning level and with all necessary equipment, technology and administrative support. 1,200 Traffic Corps personnel by 2008.	Garda Síochána	MBRS /DoJELR /DoT	Garda Commissioner	4th Qtr 2008 / annually
24.	<ul> <li>The RSA accepts that to strive for 100% compliance is desirable but recognises that it can never be achieved. However demanding targets are required.</li> <li>Achieve a target level of compliance with speed limits for cars and motor cycles by 2012:</li> <li>Increase the number of compliant drivers from 18% to 60% or better with the urban speed limit on urban national roads.</li> <li>Increase compliance on urban arterials from 14% to 60% or better in a 50km/h zone and from 11% to 60% or better in a 60km/h zone.</li> <li>Increase the compliance level on regional roads from 84% to 90% or better.</li> <li>Increase compliance on 2-lane national primary roads from 74% to 90% or better.</li> </ul>	Garda Síochána	DoJELR / DoT / Courts Services / RSA	Garda Commissioner	Annually
25.	<ul> <li>Achieve a target level of compliance with speed limits for goods vehicles and single deck buses by 2012:</li> <li>Increase articulated vehicles' compliance with speed limits on urban national roads (at 50 km/h sign) from 33% to 70% or better and to increase rigid vehicles' compliance on the same roads from 23% to 70% or better.</li> <li>Increase speed limit compliance by articulated vehicles on 2-lane national roads from 13% to 60% or better and to increase compliance of rigid vehicles from 24% to 60% or better.</li> <li>Increase rigid and articulated vehicles' compliance with speed limits on regional roads to 95% or better.</li> <li>Increase the percentage of single deck buses complying with speed limits on 2-lane national roads to 85% or better.</li> </ul>	Garda Síochána	DoJELR / DoT Courts Service / RSA	Garda Commissioner	Annually

## Enforcement continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
26.	Implement a Safety Camera Network in the region of 6,000 hours enforcement per month.	Garda Síochána	DoJELR / LAs / NRA / RSA	Garda Commissioner	2nd Qtr 2008
27.	Continue the operation of MAT, determine the incidence of drink driving in Ireland and achieve a target level of compliance with drink driving law. (See action number 122, 123)	Garda Síochána	DoJELR / MBRS	Garda Commissioner	Annually
28.	<ul> <li>Achieve a target level of compliance by 2012, through covert and high visibility enforcement, on seat belt wearing and child safety restraint use as follows:</li> <li>Increase adult front seatbelt wearing rates from 86% to 95% or better and increase the adult wearing rate in rear seats from 63% to 95% or better</li> <li>Increase primary school front seatbelt wearing rates from 76% to 95% or better and rear seat wearing rates from 64% to 95% or better</li> <li>Increase wearing rates for secondary school-goers in front seats from 88% to 95% or better and in rear seats from 76% to 95% or better.</li> </ul>	Garda Síochána	DoJELR / HSE / RSA / Courts Service / DoT	Garda Commissioner	Annually
29.	Promote An Garda Síochána Traffic Watch scheme to enable community support for road traffic law enforcement.	Garda Síochána	RSA / RSTWG / LAs	Garda Commissioner	Annually
30.	Expand the range of road safety- related offences covered by way of penalty points and administrative fines.	DoT	DoJELR / Garda Síochána / Courts Service/ RSA	DoT – Principal Officer	1st Qtr 2009

## Enforcement continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
31.	Draw up protocols to provide for the sharing of information between the Coroners Service, An Garda Síochána, RSA and any other statutory body in accordance with the Coroners Bill when enacted.	Coroners Service / Garda Síochána	Coroners Society of Ireland / RSA	Coroners Service, CEO	1st Qtr 2009
32.	Expand forensic analysis programme for driving under the influence of drugs.	MBRS	Garda Síochána / DoT	Director of MBRS	1st Qtr 2009
33.	Establish drug impairment education programmes for An Garda Síochána, Doctors and Nurses.	MBRS	Garda Síochána / ICGP	Director of MBRS	4th Qtr 2008
34.	Prepare and publish technical/engineering guidance for the setting of speed limits.	DoT	Garda Síochána / LAs / NRA / RSA / DTO	DoT - Principal Officer	3rd Qtr 2008
35.	Audit and report on the appropriateness and consistency of speed limits, in accordance with the guidelines, across the road network every two years.	DoT	RSA / NRA /Garda Síochána / LAs / HSE	DoT – Principal Officer	1st Qtr 2009
36.	Establish a risk-rating register to facilitate a more effective enforcement effort for heavy goods vehicles, drivers and operators.	RSA	Garda Síochána / HSA	RSA Director – Standards and Enforcement	2nd Qtr 2009
37.	Develop and ensure effective sanctions for all vehicles and drivers on Irish roads including out-of-state operators who breach relevant transport legislation while operating within the state.	DoT / RSA	Garda Síochána / DoJELR / LAs	DoT - Principal Officer /RSA Director – Standards and Enforcement	2nd Qtr 2009
38.	Increase enforcement of driver hours and checking of operators' licences. Check at least 1% of days worked by drivers of Goods Vehicles and Buses and increase this threshold to 3% from 2010, to comply with EU Directive EC 2000 / 30.	RSA	Garda Síochána / HSA	RSA Director – Standards and Enforcement	3rd Qtr 2007 4th Qtr 2010
39.	Participate with other EU member states in a campaign of coordinated Checkpoints.	RSA	Garda Síochana	RSA Director – Standards and Enforcement / Garda Commissioner / UK and French authorities	Annually

## Enforcement continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
40.	Establish a system to ensure current insurance details for all drivers can be accessed in real time by the Gardaí to facilitate enforcement.	DoT	Garda Síochána / IIF / RSA	DoT - Principal Officer	4th Qtr 2009
41.	Implement a random roadside mechanical checking programme for goods vehicles and buses.	RSA	NRA / Garda Síochána	Garda Commissioner /RSA Director – Standards and Enforcement / NRA Head of Network Operations	2nd Qtr 2008
42.	Conduct a review of commercial vehicle roadworthiness testing and prepare a plan for reform.	RSA	DoT	RSA Director – Standards and Enforcement	3rd Qtr 2007
43.	Produce comprehensive information guides for the road transport sector concerning drivers' hours and other legislation.	RSA	DoT	RSA Director – Standards and Enforcement	4th Qtr 2007
44.	Integrate RSA enforcement activity with An Garda Síochána, Customs and the HSA.	RSA	Garda Síochána / HSA / LAs / Revenue Commissioner	RSA Director – Standards and Enforcement / Garda Commissioner	3rd Qtr 2007
45.	Review procedures for medical certification of fitness to drive in consultation with the MBRS and medical experts.	RSA / MBRS	ICGP / DoH&C	CEO RSA	2nd Qtr 2008

# Engineering

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
46.	Ensure all school buses operating under the DoE&S school transport scheme are fitted with appropriate safety belts.	DoE&S	DoT / RSA /Bus Éireann	DoE&S - Principal Officer	1st Qtr 2007
47.	Complete the development of major inter-urban routes from Dublin to Galway (N6), Limerick (N7), Cork (N8), Waterford (N9).	NRA / LAs	DoT	NRA CEO	4th Qtr 2010
48.	Continue network maintenance and improvement works on National Primary and National Secondary roads.	NRA / LAs	DoT	NRA CEO	4th Qtr 2010
49.	Develop and implement an annual Safety Barrier Maintenance contract on the Major Inter-Urban network.	NRA / LAs	DoT	NRA Head of Programme Management	4th Qtr 2012
50.	Implement a bridge management programme for the inspection and strengthening of national road bridges.	NRA / LAs	DoT	NRA Head of Programme Management	4th Qtr 2012
51.	Continue development and funding of the IceCast Road Weather Information System.	NRA / LAs	DoT	NRA Head of Programme Management	4th Qtr 2012
52.	Implement 80 road safety remedial schemes per annum and eliminate backlogs by 2012.	NRA / LAs	DoT	NRA Senior Project Manager, Road Safety	4th Qtr 2012
53.	Put in place remedial schemes at identified collision locations on non- national roads- 180 schemes per annum.	DoT	NRA / LAs	DoT Engineering Inspector	4th Qtr 2012
54.	Implement traffic calming measures at designated locations on national roads and continue the annual traffic calming maintenance programme.	NRA / LAs	DoT	NRA Senior Project Manager, Road Safety	4th Qtr 2012

# Engineering continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
55.	Continue to monitor and develop road types, for example divided roads, ensuring best safety standards are incorporated into road design.	NRA / LAs	DoT	NRA Senior Project Manager, Engineering Standards	Annually
56.	Analyse six National Secondary routes per annum and apply a remedial measures programme based on the findings.	NRA	LAs	NRA Senior Project Manager, Road Safety / NRA Head of Network Operations	4th Qtr 2012
57.	Review and develop new design standards for National Secondary roads.	NRA	LAs	NRA, Head of Programme Management	4th Qtr 2012
58.	Examine and make available grant schemes for road safety audits and road user audits on non-national roads.	DoT	LAs	DoT - Principal Officer	Annually
59.	Provide resources for low-cost safety schemes and expand the medium- cost schemes on non-national roads.	DoT	LAs	DoT - Principal Officer / County Managers	Annually
60.	Develop design guidelines for forgiving road sides. (A forgiving road side is a road side which minimises the severity of the injury to a driver or passenger when the driver loses control and the vehicle leaves the road.)	NRA	DoT / DTO	NRA Senior Project Manager, Road Safety	2nd Qtr 2012
61.	Increase the number of minor realignment schemes over the lifetime of the Strategy.	NRA / LAs	DoT	NRA Head of Programme Management	Annually
62.	Continue the Signing and Lining programmes on National roads.	NRA / LAs	DoT	NRA Head of Programme Management	Annually
63.	Continue to develop a network of rest / service / vehicle inspection and enforcement areas on dual carriageways and major inter-urban routes.	NRA / LAs	DoT	NRA Head of Programme Management	4th Qtr 2011
64.	Develop stronger rules on planning, maximising the road safety dividend and ensuring that road safety is a consideration in the granting of planning permission.	DoEHLG	DoT / DTO / LAs	DoEHLG Principal Officer	4th Qtr 2012

# Engineering continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
65.	Establish best practice and roll out a system of motorway-variable messaging systems to alert motorists of hazards and diversions.	NRA	DoT / DoEHLG / DTO	NRA Head of Network Operations	2nd Qtr 2011
66.	Publish a code of practice for the management of roadwork sites from a road worker / road user protection perspective.	DoT	NRA / LAs / HSA/ LGMSB	DoT - Principal Officer	4th Qtr 2008
67.	Engage with the motor industry to maximise the provision of approved vehicle safety devices.	RSA	SIMI /Revenue	RSA CEO	2nd Qtr 2008
68.	Implement a joint reporting collision procedure between the Gardaí, local authorities and the NRA.	Garda Síochána	NRA / LAs	Garda Commissioner	3rd Qtr 2008
69.	Each local authority to publish a prioritised plan on road building, design, construction and maintenance.	LAs	DoT / DTO	County Manager	Annually
70.	Establish a protocol with the County and City Enterprise Boards to assist and advise individuals who wish to bring new innovative road safety products to the market.	RSA	County and City Enterprise Boards	RSA Director Standards and Enforcement	2nd Qtr 2008

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Road Safety Strategy 2007-2012

# Legislation

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
71.	Review all Road Traffic legislation with a view to consolidation into a new Road Traffic Act.	DoT	DoJELR / MBRS / RSA / Garda Síochána / Courts Service	DoT - Principal Officer	3rd Qtr 2012
72.	Legislate for graduated driver licensing.	DoT	RSA	DoT - Principal Officer	3rd Qtr 2008
73.	Implement a driver permit and related measures for a graduated driver licence scheme.	RSA	DoT / Garda Síochána	RSA Director - Driver Testing	4th Qtr 2008
74.	Roll out the post driver test measures of the graduated driver licence scheme.	RSA	DoT / Garda Síochána	RSA Director - Driver Testing	1st Qtr 2009
75.	Review current legislation for impaired driving, identify best practice internationally and ensure appropriate legislation and protocols to address the testing of road users involved in collisions.	DoT	HSE / Garda Síochána / MBRS	DoT - Principal Officer	2nd Qtr 2008
76.	Legislate for and introduce a reduction in the legal Blood Alcohol Concentration (BAC) for drivers.	DoT	RSA / MBRS / Garda Síochána	DoT - Principal Officer	2nd Qtr 2009
77.	Introduce the administrative disqualification system for appropriate drink driving cases.	DoT	Garda Síochána / RSA	DoT - Principal Officer	2nd Qtr 2008
78.	Review legislation on the issue of driving under the influence of drugs and consider appropriate enforcement options.	DoT	MBRS / Garda Síochána	DoT - Principal Officer	1st Qtr 2009
79.	Explore the potential for giving RSA Transport Officers and Vehicle Inspectors the power to stop and examine vehicles for compliance with road safety standards as outlined in traffic regulations.	DoT	RSA / Garda Síochána	DoT - Principal Officer	4th Qtr 2008

# **Other Road Safety Measures**

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
80.	Research, develop and publish a national pedestrian safety strategy incorporating best practice engineering, education and enforcement issues.	RSA	Stakeholders / DoT	RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2008
81.	Research, develop and publish a national motorcycling safety strategy incorporating best practice engineering, education and enforcement issues.	RSA	Stakeholders / DoT	RSA Director - Road Safety, Research and Driver Education	1st Qtr 2009
82.	Research, develop and publish a national cycling safety strategy incorporating best practice engineering, education and enforcement issues.	RSA	Stakeholders / DoT	RSA Director - Road Safety, Research and Driver Education	2nd Qtr 2008
83.	Review / monitor implementation of the Road Safety strategy and produce an annual report to the Minister for Transport by the end of the second quarter of the following year. This will emphasise road safety outcomes achieved, cost-benefit analysis and value-for-money.	RSA	All relevant Departments and Agencies	RSA CEO	Annually
84.	Update the cost-benefit analysis research to take into account current costs and benefits associated with road safety measures in this Strategy.	RSA	DoT / HSE	RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2009
85.	Establish a specialist Policy Advisory Panel to advise the RSA Board on policy implementation and evaluation.	RSA	DoT	RSA CEO	2nd Qtr 2007
86.	Maintain the Cabinet Level Committee on Road Safety to monitor progress, assess priorities and identify difficulties in the implementation of the Road Safety Strategy.	DoT	Department of an Taoiseach / DoH&C / DoEHLG / DoJELR / DoE&S / Office of the Attorney General	DoT - Principal Officer	Annually
87.	Implement all relevant EU Directives and participate actively in the development of future policy at EU level.	RSA / DoT		RSA CEO / DoT - Principal Officer	Annually
88.	Enter a bilateral arrangement with the UK to implement the Convention on Driving Disqualifications.	RSA	DoT / DoE NI	RSA Director - Driver Testing	2nd Qtr 2008
89.	Participate in a joint feasibility study with the UK on the mutual recognition of penalty points.	RSA	DoT /DoE NI / DfT (UK)	RSA Director - Driver Testing	4th Qtr 2008

## Other Road Safety Measures continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
90.	Produce revised and updated Rules of the Road, with relevant regular updates on the website.	RSA	Stakeholders	RSA Director - Road Safety, Research and Driver Education	2nd Qtr 2007
91.	Publish a consultation document on Compulsory Training for motorcyclists.	RSA	DoT	RSA Director - Driver Testing	2nd Qtr 2007
92.	Ensure that 100% of all new provisional licence holders in the motorcycle licence category undertake compulsory basic training by the end of 2008.	RSA	DoT	RSA Director - Driver Testing	4th Qtr 2008
93.	Publish a consultation document on driver vocational training and introduce regulations / procedures for the implementation of this EU Directive (EC / 2003 / 59).	RSA	DoT / DoE NI	RSA Director - Road Safety, Research, Driver Education	3rd Qtr 2007
94.	Maintain and update the Driver Theory Test in line with international best practice and re-tender the service.	RSA	DoT	RSA Director - Driver Testing	3rd Qtr 2007
95.	Register all existing driving instructors on the ADI Register and put in place a suitable monitoring mechanism to maintain a high standard.	RSA	Representatives of driver instructors / Garda Síochána	RSA Director - Standards and Enforcement	4th Qtr 2008

## Other Road Safety Measures continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
96.	Introduce a plastic card licence once agreed by the EU.	RSA	DoT / Garda Síochána / LA	RSA Director - Driver Testing	1st Qtr 2012
97.	Reduce the waiting time for a driving test to a 10 week national average and maintain this service level.	RSA		RSA Director - Driver Testing	2nd Qtr 2008
98.	Commence a programme of review and modernisation of existing driver test centres and develop new test centres to meet the driving testing requirements of all vehicles.	RSA	OPW / DoT	RSA Director - Corporate Services	Annually and complete 4th Qtr 2012
99.	Undertake a study to identify the potential of using driving simulator technology and related hazard perception technology in the training and assessment of inexperienced drivers.	RSA	Research Institutions	RSA Director - Driver Testing / RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2009
100.	Research the potential for use of bus lanes by motorcyclists and complete a comprehensive safety analysis to determine future policy.	RSA	DoT / Garda Síochána / NRA / DTO / Dublin Bus / Dublin City Council	RSA Director - Road Safety, Research and Driver Education	2nd Qtr 2008

# Evaluation, Road Safety Data and Research Programmes

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
101.	Develop a research capability for the RSA.	RSA	Stakeholders /Academic Institutions / Coroners Society of Ireland / HSE / HSA	RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2008
102.	Review and update the annual publication of road collision facts and the collection of data to support this analysis.	RSA	Garda Síochána / Coroners Society of Ireland /HSE / IIF	RSA Director - Road Safety, Research and Driver Education	Annually
103.	Use existing data sources on injuries from road collisions and improve the content, quality and access where appropriate.	HSE	RSA / NRA / Garda Síochána / LAs	HSE CEO	4th Qtr 2008
104.	Review and expand the national speed and seat belt wearing survey on Irish roads and publish nationally on an annual basis.	RSA	NRA/ LAs	RSA Director - Road Safety, Research and Driver Education	3rd Qtr 2008 / annually
105.	<ul> <li>Participate in European and International road safety research programmes:</li> <li>FERSI (Forum of European Road Safety Research Institutes)</li> <li>SARTRE (Societal Attitudes to Road Traffic Risk in Europe)</li> <li>SAFETYNET( An EU project designed as a precursor to an EU road safety observatory)</li> <li>IRTAD(International Road Traffic and Accident Database)</li> <li>CARE (An EU Road Accident Traffic Database)</li> <li>ETSC (European Transport Safety Council)</li> <li>CORDIS (Community Research and Development Information Service 2007 - 2013)</li> </ul>	RSA	International Stakeholders / NRA	RSA Director - Road Safety, Research and Driver Education	Annually

# Evaluation, Road Safety Data and Research Programmes continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
106.	Research emerging 'in road' and 'in vehicle' road safety technologies and make recommendations on their use/introduction.	RSA	Advisory Panel / DTO	RSA CEO	Annually
107.	Enhance the collection and availability of data from enforcement activity to support the analysis and review of the Road Safety Strategy by the advisory panel.	RSA	Advisory Panel / Garda Síochána / MBRS	RSA CEO	1st Qtr 2008
108.	Exploit the potential of the (HSE) Health Atlas Ireland to develop a specialist module allowing restricted web access to health related road collision data and geo-spatial analysis; develop a dedicated module allowing access by the general public to useful and practical health-related road collision information.	HSE	RSA / NRA / An Garda Síochána / LAs	HSE CEO	4th Qtr 2008
109.	Review (HSE) emergency response to road collisions in light of available evidence on best practice and value- for-money. Commence implementation on the recommendations to improve the survival, treatment and recovery of those involved in road collisions.	HSE		HSE CEO	2nd Qtr 2009
110.	Review and research the outputs from collision analysis, including pre- crash behaviour of those involved in fatal and serious injury collisions.	RSA / An Garda Síochána	HSE / NRA	Garda Commissioner / RSA Director - Road Safety, Research, Driver Education	2nd Qtr 2010
111.	Review and research the outputs from collision analysis to ensure road related factors receive remedial attention as soon as possible.	Garda Síochána / NRA	LAs	Garda Commissioner / NRA Senior Project Manager Road Safety	1st Qtr 2008

# Evaluation, Road Safety Data and Research Programmes continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
112.	Research and update training and development programmes for the Garda Traffic Corps based on experience in Ireland and best practice from other comparable jurisdictions.	Garda Síochána / RSA	NRA	Garda Commissioner / RSA, Director - Road Safety, Research and Driver Education	Annually
113.	Research and update the mapping of collision- prone zones and include analysis by volume and type of vehicles on the road network with special emphasis on regional and local roads.	RSA	NRA / LAs / An Garda Síochána / DTO	RSA CEO	Annually
114.	<ul> <li>NRA Road Safety Research Programme:</li> <li>Evaluate the Collision Remedial Measures Programmes</li> <li>Evaluate the Traffic Calming Programmes</li> <li>Continue participation in (Conference of European Directors of Roads) Road Safety Sub-Committee</li> <li>Continue research into safety issues at junctions on rural roads</li> <li>Continue participation in EuroRAP. Publish new Risk Map in 2007/08 and 2010/11.</li> </ul>	NRA	RSA	NRA Senior Project Manager, Road Safety	Annually
115.	Conduct Road Safety Audit of all new national road schemes and review the standards on an annual basis.	NRA	DoT	NRA Senior Project Manager, Road Safety	Annually
116.	Prepare a comprehensive freight transport strategy that maximises road safety.	DoT	RSA / NRA / LAs / DoEHLG / DTO	DoT - Principal Officer	4th Qtr 2008
117.	Conduct a public consultation process in relation to the use of Agricultural Vehicles on Public Roads and introduce policy proposals to regulate the use of these vehicles.	RSA	NRA / An Garda Síochána / LAs / Road Haulage Association / IFA	RSA Director - Standards and Enforcement	2nd Qtr 2008

# Evaluation, Road Safety Data and Research Programmes continued

ACTION NUMBER	MEASURE OR ACTION	LEAD DEPARTMENT OR AGENCY	SUPPORT DEPARTMENT OR AGENCY	RESPONSIBILITY	COMPLETION DATE
118.	Work with the insurance sector, SIMI, An Garda Síochána and DoEHLG to ensure that all vehicles which have been written off and cannot be safely repaired are permanently removed from the vehicle fleet.	RSA	Garda Síochána/ IIF/ NCT / SIMI/ DoEHLG	RSA Director - Standards and Enforcement	2nd Qtr 2009
119.	Research and evaluate the effectiveness of alternative correction/rehabilitation programmes for a range of road traffic offences with a particular emphasis on high risk re-offenders.	DoJELR	RSA	DoJELR - Principal Officer	2nd Qtr 2009
120.	Implement the recommendations of the Coroners Review Group, December 2000, on the setting up of a National Coroners' database.	DoJELR	Coroners Society of Ireland	DoJELR - Principal Officer	4th Qtr 2008
121.	Prepare the legal framework for the enactment of the Coroners Bill 2006.	DoJELR	Coroners Society of Ireland / Garda Síochána / RSA	DoJELR - Principal Officer	4th Qtr 2008
122.	Develop and implement an integrated research methodology to provide data on the incidence of drink-driving in Ireland.	RSA / Garda Síochána	MBRS	RSA CEO / Garda Commissioner	1st Qtr 2008
123.	Develop the testing of impaired drivers based on the incidence of drink/drug driving, record data and plan future interventions to achieve deterrence and better compliance.	Garda Síochána	RSA / MBRS	Garda Commissioner	4th Qtr 2008
124.	Research existing sources of collision data and put in place a reliable and consistent database for collisions.	RSA	Garda Síochána / IIF/ HSE / LAs / NRA	RSA Director - Road Safety, Research and Driver Education	4th Qtr 2009
125.	Introduce a centralised permit system for the movement of wide and long loads on the National Road Network.	RSA	NRA / DoEHLG / Garda Síochána	RSA Director - Standards and Enforcement	1st Qtr 2008
126.	Undertake a review of the current NCT contract reflecting best international practice and re-tender the service.	RSA		RSA - Director of Standards and Enforcement	4th Qtr 2007


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# **Appendix I**

# **Cost of Collisions**

Goodbody Economic Consultants in a Department of Transport-commissioned study <sup>17</sup> set the following values for costs per collision:

Table 2:	
Fatal	€2,280,000
Serious injury	€304,600
Slight injury	€30,000
Material Damage	€2,400

Between the years 2000 and 2005 the total cost to the state of traffic collisions was €10.6 billion.

Table 3: Total cost of Road Collisions 2000 to 2005					
ТҮРЕ	TOTAL NUMBER OF COLLISIONS	CPC* €000	TOTAL COST €BILLION		
Fatal	2,063	2,280	4.704		
Serious	15,295	305	4.659		
Minor	32,234	30	0.967		
Material Damage	119,631	2	0.287		
Total	169,223	N/A	10.6		

\* COST PER COLLISION

#### Investing in Road Safety

Economist Peter Bacon and Associates <sup>18</sup> stated that investing in a Road Safety Strategy will give rise to very significant net economic benefits relative to the costs incurred. In summary it was estimated that the benefit/cost ratio will be 4.5:1 rising to an annual benefit/cost ratio of 8.3:1 after implementation of the Strategy is completed.

Goodbody estimated that total expenditure on the Government's first Road Safety Strategy was €169 million.

18 Source: An Economic Assessment And Preliminary Cost-Benefit Analysis of The Government Strategy for Road Safety 1998- 2002

<sup>17</sup> Source: 'Cost-Benefit Parameters and Application Rules for Transport Project Appraisal' August 2004

The benefits attributable to the first Strategy were estimated at between €502 million and €1,032 million. This is made up of €58 million to €99 million in financial savings to the exchequer, €115 million to €255 million in wider economic benefits and €330 million to €683 million in societal gains from avoidance of pain and suffering.

Typically, investment in road safety is made through funding of education, enforcement, engineering and evaluation. This means that road safety expenditure is mostly authorised through the Department of Justice, Equality and Law Reform (enforcement), Department of Transport (engineering) and the Department of Education and Science (education). However, in budgetary terms, the benefits from the reduction in collisions, deaths and injuries flow to the Department of Finance, the Department of Health and Children, the Department of Social and Family Affairs and to society in general.

In its conclusions and recommendations the Goodbody report suggests that future strategies identify budgets, targets, performance indicators and performance monitoring and evaluation procedures and initiatives.



Road Safety Strategy 2007-2012

# **Appendix II**

## The High Risks - Who, Why, When, and Where?

The following data and charts were compiled from the primary sources of the NRA, RSA and MBRS. They reinforce the need for road safety policies to focus on the higher risk behaviours, causes, age categories and times of road collisions.

### 1. Who?

The profiles of road user fatalities as illustrated in figure 12 is consistent over time. The primary cause of 9 out of 10 collisions is human behaviour.

#### Figure 12

#### Fatalities Classified by Road User and Age: 2000 - 2005



Source: NRA Road Accidents Facts 1997 - 2004 / RSA Road Collision facts 2005 (1,706 road deaths 2000 - 2006)

#### Figure 13



Road deaths by age and gender 1996 - 2005 (indexed against population age/gender)

Young men aged 17-34 are consistently over-represented in collisions, fatality and serious injury statistics. Older men are also significantly at risk, particularly as pedestrians.

Vulnerable road users (pedestrians, motorcyclists and cyclists) accounted for 36% of fatalities and 19% of injuries in 2005.

#### Figure 14



Pedestrian deaths by age and gender 1996 - 2005

Source: Calculated from NRA / RSA / Census Data (909 Pedestrian Deaths) (814 where age and gender known)

#### Pedestrians

Since 1997 the number of pedestrians killed on Irish roads has dropped by 43%.

In 1997 pedestrians accounted for 28% (130) of all road user deaths; in 2005 they accounted for 19% (74) or one in five deaths on our roads.

The year 2003 had the lowest recorded number of pedestrian deaths (63). This corresponded with the introduction of penalty points for speeding offences. Pedestrians were the road-user group that most benefited from the initial successes around the introduction of penalty points.

Road crash data suggests that the careless action of the pedestrian was the primary cause of 13% of pedestrian fatalities.

Older people are the group most at risk when walking on Irish roads. Males 65+ are three times more likely to be killed while walking on the roads and females 65+ are twice as likely to be killed.

Older pedestrians are more vulnerable when hit by a vehicle than any other pedestrians, and are more likely to die or be disabled by severe injury. When hospitalised, their length of stay is much longer than that of younger people.

#### **Motorcyclists**

Motorcycles represent less than 2% of licensed vehicles but account for 12% of road deaths.

Between 1996 and 2003, almost 2,000 motorcyclists were killed or seriously injured. <sup>19</sup> This equates to a motorcycle fatality rate in Ireland of 1.5 per 1,000 licensed motorcycles, the highest in Europe. According to OECD figures, a motorcyclist is 2 to 3 times more likely to be killed in Ireland than in other European countries <sup>20</sup>.

In addition to the human cost, it is estimated that the economic cost of motorcycle crashes involving fatalities and injuries from 1996 to 2003 was over €1 billion.

Road collision data indicates that males in the 25 to 34 year age bracket are over-represented in motorcycle fatalities (34%) and injuries (27%).

The majority (65%) of motorcyclists are killed in single vehicle crashes outside built-up areas where it is more likely that high-speed and powerful bikes are major contributory factors.

However, the majority (75%) of bikers are injured as a result of collisions within towns and cities.

The majority of these crashes are the result of a collision involving a motorcycle and another vehicle. In the period 1996 to 2004, 81% of casualties were as a result of collisions with a car and 10% involved a collision with a goods vehicle.

#### Cyclists

Accounting for 3% of all road deaths, an average of 12 cyclists are killed and 29 seriously injured annually on Irish roads.  $^{21}$ 

The groups most at risk are the very young and older cyclists. Almost 20% of cyclist fatalities are under 17 years of age with the 10 to 14 year age group being the most at risk. However, by far the most vulnerable cyclists on Irish roads are those over 55 who account for 36% of fatalities.

Most cyclist fatalities are the result of a collision between the cyclist and another road user, typically a car (47%) or a goods vehicle (36%).

59% of fatalities occur in rural areas while 85% of cyclist injuries happen inside built-up areas.

19 Source: National Roads Authority

20 Source: Submission to Government on Motorcycling Training & Enforcement, Hibernian General Insurance, April 2003

21 Source: NRA, Road Accident Facts 2000-2004, RSA, Road Collision Facts 2005 to 2006

### 2. Why?

The primary causes of road collisions, deaths and injuries are:

- Speed inappropriate for, or inconsistent with, the prevailing circumstances or driving conditions
- Impaired driving through alcohol, drugs (prescription or non-prescription), or fatigue
- Failure to use or properly use seatbelts and child safety restraints
- Unsafe behaviour towards/by vulnerable road users (pedestrians, motorcyclists, cyclists, young children and older people).

#### 2.1 Dangerous Speed

Dangerous and inappropriate speed is the primary contributing factor to road fatalities. The graph below (Fig. 15) illustrates that 17-34 year old males are most frequently involved when excessive speed is a contributory factor. Inexperience combined with speed is a critical element in most collisions involving these age groups.

#### Figure 15

# Motor vehicle drivers responsible for fatal/serious injury collisions where excessive speed was cited as contributory factor by age/gender 1996-2005



Source: Calculated from NRA /RSA/ TGI Data (1688 Motor Vehicle Drivers Responsible 1996-2005)

Free speed is defined as the speed drivers choose to travel when unconstrained by road geometry, weather conditions or traffic conditions – for example sharp bends, rain or congestion. The 2005 free speeds rural survey showed increased free speeds compared to 2003 on rural roads. Average observed car free speeds increased on motorways, dual carriageways, national primaries and on regional roads.

The introduction of the 80 km/h speed limit applicable to cars on regional and county roads, coinciding with the introduction of metric speed limits in January 2005 has resulted in a sharp increase in breaking the speed limit on these road types. In 2005 non- compliance rates increased to 63% on regional roads and 37% on county roads from 8% and 10% respectively in 2003. Non- compliance rates for articulated and rigid vehicles remain high, varying between 45% to 94% for articulated vehicles and between 30% to 88% for rigid vehicles.

In urban areas free speeds were found to have fallen over the period 2003 - 2005 with the notable exception of car free speeds on urban arterial roads within 50 km/h zones.

The average observed free speed for single decked buses on urban national roads at the 50 km/h speed limit sign, based on a limited sample, is estimated at 56 km/h.

The average recorded free speed of an articulated vehicle entering the 50 km/h speed limit zone on urban national roads is 61 km/h, while for rigid vehicles the figure is 58 km/h. An estimated 89% of articulated vehicles and 80% of rigid vehicles exceeded the designated speed limit on entering such speed limit zones.

Speed limits set the legal maximum speed allowed, not the recommended or compulsory speed. The appropriate speed is set by the circumstances and conditions applying at the time which may demand a speed much lower than the limit.

#### 2.2 Impaired Driving due to Alcohol, Drugs and Fatigue

Irish and European research establishes that Ireland's excessive alcohol consumption is reflected in death and injury on the roads.  $^{\rm 23}$ 

*Alcohol in fatal road crashes in Ireland in 2003* is the most recent research carried out by Bedford et al and published by the Population Health Directorate, Health Service Executive, in 2006.

This report examined 301 collisions that killed 335 people in 2003 and reported on the incidence of alcohol as a factor in these events.

The Report concluded that the study provided a national picture of the role of alcohol in fatal road crashes. It can be used to measure the impact of road safety strategies. Alcohol as a factor in 37% of fatal road crashes is high compared to Australia and Finland at 25%.

A summary of the conclusions of the report:

- Alcohol was a factor in 37% of fatal crashes
- Driver/rider alcohol was a factor in 28% of fatal crashes
- In 62% of single-vehicle, single-occupant fatal crashes, driver alcohol was a factor
- In 24% of fatal crashes the driver/rider was above the legal limit
- Pedestrian alcohol was a factor in 38% of fatal pedestrian road crashes
- Driver alcohol is a male problem 90% of driver / riders, whose alcohol was a contributory factor in a fatal crash, were male and the highest risk ages were 19 to 34
- Weekends through to Monday morning are the high risk period for alcohol-related fatal crashes.

MAT was introduced on 21st July 2006 together with increased enforcement from the Garda National Traffic Bureau.

The graph overleaf (Fig. 16) confirms the increase in the activity of the Medical Bureau resulting from this increased level of enforcement.

23 Source: Drinking, drugs and driving in Ireland: more evidence for action. Fitzpatrick, Daly, Leavy and Cusack. 2006.

## Figure 16



Total Specimens Analysed by MBRS in the 10-year period 1995-2006

Road Safety Strategy 2007-2012

Table 4						
	2001	2002	2003	2004	2005	Total
Arrests (all drink driving offences)*	12841	13441	11344	12307	11646	61579
Blood and Urine						
Blood samples over legal limit	2772	2023	1977	2093	2058	10923
Urine samples over legal limit	1610	1291	1296	1379	1374	6950
Total over the limit <sup>b</sup>	4382	3314	3273	3472	3432	17873
Proceedings commenced <sup>a</sup>	4540	3638	2899	2783	2543	16403
Convictions <sup>a</sup>	3216	2231	1119	834	616	8016
Conviction rate	73%	67%	34%	30%	24%	49%
Breath						
Breath samples over legal limit ${}^{\scriptscriptstyle \mathrm{b}}$	5342	6321	5275	5570	6939	29447
Proceedings commenced <sup>a</sup>	4430	6792	5044	5428	6850	28544
Convictions <sup>a</sup>	2306	2343	1437	1929	3059	11074
Conviction rate	43%	37%	27%	36%	45%	39%

 $\oplus$ 

Table Explanatory Notes

a - Source: An Garda Síochána Annual Report 2001 - 2005

b - Source: Medical Bureau of Road Safety Annual Reports 2001 - 2005

The data in Table 4 predates the introduction of MAT in 2006.

The analysis from the MBRS included in table 4 indicates a decline in the conviction rate for drink driving offences related to blood and urine samples from 2001 to 2005. This trend reduces the effectiveness of the deterrent effect of drink driving legislation especially when viewed in the context of the alcohol content of blood, urine and breath samples in Table 5 overleaf.

The key conclusion from the table below is that the 'forming of an opinion' by the Garda Síochána is well based, given the level of intoxication confirmed by the samples sent for analysis.

Table 5									
PENALTIES ON CONVICTION	ALCOHOL CONTENT		2005		2004		5 YEAR PERIOD 1999 - 2003*		
	<b>Blood</b> mg/100ml	<b>Urine</b> mg/100ml	<b>Breath</b> mg/100ml	Number	%	Number	%	Number	%
	0-80	0-107	0-35	2,382	18.7	1,928	17.6	6,736	13.2
	Legal Lim	it							
1 year **	81-100	108-135	36-44	1,066	8.4	927	8.5	3,664	7.2
2 year **	101-150	136-200	45-66	3,804	29.8	3,237	29.5	13,885	27.5
3 year **	151-200	201-267	67-88	3,462	27.1	3,021	27.5	14,615	28.7
	201 and upwards	268 and upwards	89 and upwards	2,039	16.0	1,857	16.9	12,096	23.7

\* Blood and Urine only in 1999-2000 figures \*\* These penalities double for the second offence

The introduction of mandatory alcohol testing is increasing the demands on the capacity of the Medical Bureau.

Table 6		
	2005	2006
Blood Alcohol Samples	2,427	2,891 (19%)
Urine Alcohol Samples	1,711	2,015(18%)
Breath Alcohol Samples	8,615	11,505 (34%)

MAT introduced 21/7/2006

#### Note:

Figures contained in the Courts Service 2006 Annual Report released in August 2007 indicates that there was a significant increase in the number of serious road traffic cases being dealt with by the District Courts In 2006.

The number of drink driving cases dealt with rose by 79% in 2006 compared to 2005. The total number of drink driving cases dealt by the District Courts in 2006 was 27,836 up from 15,540 in 2005.

The number of dangerous driving cases dealt with rose by 51% in 2006 compared to 2005. The total number of dangerous driving cases before the District Courts in 2006 was 6,721 up from 4,448 in 2005.

The MBRS has commented on the increasing evidence of prescription and non prescription drugs as a cause of impaired driving. No reliable data is available beyond the work done by the MBRS in testing selected samples

from the specimens submitted to them. This will provide information on the presence of drugs only from this pre-selected sample and will not provide information on the incidence of drug-impaired driving within the driving population as a whole.

The addition of a Field Impairment Test to enforcement activity would improve the available data.

#### 2.3 Non-wearing of seatbelts

The data in the chart below (Fig. 17) indicates the relationship between the wearing of seat belts and the over-representation of 17 to 34 year old males in road deaths.

#### Figure 17



Road Deaths of those not wearing seatbelts by age and gender 1996 - 2005 (indexed againts population age/gender)

Source: NRA Road Accident Facts 1997 -2004 / RSA Road Collision Facts 2005 (4,103 road deaths 1997 - 2005)

### Seatbelts and Child Restraint Wearing

Increasing seatbelt wearing rates reduces fatalities and the severity of injuries.

The 2006 seatbelt survey carried out by the RSA indicates that for adults, front seat belt compliance rates are at 86% and rear seats are at 63%. The survey also shows that for primary school students the wearing rate is at 76% and rear seatbelts at 64%. In addition, it found that front seat wearing rates for secondary school goers is at 88% with rear seats at 76%.

Male car occupants account for 4 out of 5 road deaths where no seatbelt is being used. Young people aged 17 to 24 are at the greatest risk – almost 5 times more likely to be killed or seriously injured without a seatbelt, higher than any other group of car users.

Currently, more than one child in three travels unrestrained in a vehicle. This puts them in grave danger of death or serious injury in the event of a collision. Head injuries are the leading cause of death in such collisions. Because children's skulls are only one eighth as strong as adults, they are at extreme risk of brain injury if unbelted or unrestrained.

Front and rear seatbelt wearing rates are a particular problem on the school run. Research indicates that females do more school run journeys than males. The last census also revealed a 29% increase in school run trips by car for children aged 5 to 12.

Greater educational activity needs to focus on mothers of primary school children, to stress the vital importance of securing children in an appropriate restraint on every car journey, however short.

Research reveals that 80% of child car seats are fitted incorrectly and as many as half could cause serious injury to a child. Even though child seats are being installed, incorrect fitting is a significant issue. Further work is required to educate parents, guardians and retailers on the correct selection and installation of child restraint systems.

## 3. When?

The following graphs illustrate the higher risk time of day, days and month for fatal crashes and where excessive speed was a contributory factor.

The number of fatal collisions between the hours of 2100hrs and 0300hrs, the hours most strongly associated with drinking and driving was 92 in 2005 with 100 people being killed in these collisions. This period accounted for 26% of fatal collisions and 25% of fatalities in 2005.

#### Figure 18

#### Road Death hourly breakdown, 1996 - 2005



Source: NRA Road Accident Facts 1997 -2004 / RSA Road Collision Facts 2005 (4,103 road deaths 1997 - 2005)

Figure 18 indicates two high risk periods during a 24 hour day. There is a significant increase in the number of fatalities from 1600hrs to 2100hrs as homeward bound commuter traffic builds up and continues into the early evening. Another spike occurs from 0000hrs to 0300hrs – a time associated with fatalities for young men - with a combination of speed and alcohol as major contributory factors. It is worth noting that 29% of fatalities are represented by single vehicle collisions between the hours of 0000hrs and 0300hrs.

Road Death daily breakdown, 1996 - 2005

#### Figure 19



The highest risk period for fatalities and serious injuries is from 1600hrs on a Friday afternoon to 0300hrs on a Monday morning.

#### Figure 20



#### Road Death monthly breakdown, 1996 - 2005

Source: NRA Road Accident Facts 1997 - 2004 / RSA Road Collision Facts 2005 (4,103 road deaths 1997 - 2005)

The months of July, August and September are the higher risk months.

## 4. Where?

National Roads at 5,415 km represent 6% of the total road network but account for 45% of traffic volume. 38% of fatal collisions happen on these roads.

On National Roads 28% of fatal collisions are inside built- up areas, 72% outside built- up areas.

Regional and Local Roads at 91,111 km represent 94% of the total road network and account for 55% of traffic volume. 62% of fatal collisions happen on these roads.

The key point to note is the relative fatality rate and traffic volumes carried on the National Roads (6% of the road network) compared with the Regional and Local Roads (94% of the road network).

Table 7: Percentage of Fatal Collisions where Speed was a contributory Factor					
ROAD TYPES	LENGTH (KM)	NETWORK (%)	TRAFFIC VOL (%)	FATAL COLLISIONS (%)	SPEED AS A CONTRIBUTORY FACTOR (%)
Local	79, 466	82	-	-	-
Regional	11, 645	12	-	-	-
SUBTOTAL	91,111	94	55	62	31
Undivided Two Lane Carriageway	4, 860	5	-	-	-
Dual Carriageway / Two Plus One	308	-	-	-	-

TOTAL	96, 526	100	100	100	-

Source: NRA (National route lenghts as at 31/12/2005; National Road and traffic flow 2005); NRA road collision facts.

247

5, 415

1

6

38

24

45

Motorway

SUBTOTAL

# **Appendix III**

### **Graduated Driving Licensing System**

The proposed Graduated Driving Licensing System (GDLS) will involve a range of measures to be applied to drivers with learner permits. Some measures will continue to apply for the first two years after acquiring a driving licence.

The measures under consideration are outlined in bold. Beneath each measure the current situation is described:

• Drivers of cars under a Learner Permit will be accompanied by and under the supervision of a person who has a full driving licence for a minimum period of 2 years.

Provisional licenced drivers may drive under supervision from a person with a minimum level of experience. There is no set minimum period for which the accompanying driver should have a driver's licence.

• The accompanying driver must carry their driving licence. Failure to comply will be a penalty point offence for the accompanying driver

Accompanying drivers must be able to show that they hold a full licence and are entitled to act in this capacity. They are not required to provide any documentation to prove that they may drive the category of vehicle concerned.

• The person acting as accompanying driver will be subject to drink driving legislation and mandatory alcohol testing.

The accompanying driver is not subject to drink driving legislation and mandatory alcohol testing.

 Learner motorcyclists will display an L plate to give greater awareness to other road users that the motorcyclist is a learner and that additional care may be required.

A motorcyclist on a provisional licence is not currently required to display any distinguishing identification signs or markers to notify other drivers that they are a learner.

Failure to comply by a learner motorcyclist with the prohibition on carrying a passenger will be a
penal offence

It is an offence for a provisional licence holder to carry a passenger.

Mandatory tuition will be a requirement for all learner drivers. Part of the tuition will be taken with a
professional instructor. Learner drivers will have to hold and complete a logbook detailing their
tuition.

At present a provisional licenced driver is not required to take tuition or complete a log book from an approved driving instructor. In the future learner drivers will be required to undertake a programme of instruction with an approved driving instructor which would follow a set syllabus. Part of this tuition would take place with a professional instructor. Drivers under a learner permit should be able to detail in a logbook the supervised driving they receive. This will confirm that learners have experienced various defined conditions.

• A person may not apply for a driving test for six months after gaining a Learner Permit, so that they have this minimum period of supervised accompanied driving experience when applying.

At present there is no minimum tuition period between acquiring a provisional driving licence and doing the driving test. If the person is unsuccessful in the driving test they may obtain a further provisional driving licence and drive unaccompanied.

Long term learner drivers must take the driving test and may not apply for up to three months for a further learner permit where they do not take a driving test or professional instruction as required.
 At present, other than applying to do the driving test, there are no restrictions on the number of

provisional licences a person may hold.

• Consideration will be given to applying a restricted engine capacity to the cars of learner drivers. This will apply to motorcyclists with a learner permit and for the first two years of a driving licence.

Currently no such restrictions are in place on the engine capacity of a car that a learner driver can drive. There are restrictions on the engine capacity for a motorcycle that applies to a provisional licence holder.

Reduced Speed Limit for learner drivers

At present no reduced speed limit applies.

- The Courts will also be empowered to specify as part of the penalties under the Road Traffic Acts that
  an offender be required to take a course of driving instruction with a professional instructor.
  At present there is no basis for consistent approach to ensuring serious offenders take a course of driving
  instruction.
- The Courts will also be empowered to specify that a person convicted of drink or drugs offences under the Road Traffic Acts may be referred to an appropriate counselling programme

Currently there are no court diversion programmes in place.

- Apply a greater number of penalty points to offences committed by a learner driver while holding a learner permit licence and during the first two years of holding a driving licence.
   No such provision applies at present.
- Apply zero balance alcohol for learner drivers while holding a learner permit licence and during the first two years of holding a driving licence.

No such provision applies at present.

• Require drivers having passed the driving test to display R plates during the first two years of holding a driving licence.

There is no restricted licence system at present.

• The licence category for land tractor and work vehicles will be revised to reflect the varying type and size of vehicle, and size of trailer which may be used, and require a trailer component for the driving test.

There is no speed or size restriction on the tractor, or on the size of trailer which may be drawn by either a tractor or work vehicle.

• Failure to comply by a learner driver of a tractor or works vehicle with the prohibition on carrying a passenger unless the vehicle is constructed or adapted for this purpose will be a penal offence.

The learner driver is not licensed to carry a passenger unless the vehicle is constructed or adapted for this purpose. The passenger must have a driving licence in respect of the vehicle category.

# **Appendix IV**

### Strategy Workshop Group Attendees

The following primary stakeholders were invited to make submissions at a two-day workshop at Croke Park on December 12th and 13th 2006:

- The Department of Education and Science
- The Department of the Environment, Heritage and Local Government
- The Department of Health and Children
- The Department of Justice, Equality and Law Reform
- The Department of Transport
- The Garda National Traffic Bureau
- Health Services Executive
- Local Authorities
- The Medical Bureau of Road Safety
- The National Roads Authority
- The Road Safety Authority
- SWOV Institute for Road Safety Research, Netherlands.

In advance of those dates, the RSA met with the key stakeholders and discussed the preparatory work required for their presentations. On day 1 of the workshop the stakeholders presented their views and recommendations for the third Road Safety Strategy to the invited audience. Day 2 was a series of workshops on each of the 4Es. The workshops were recorded, transcribed and summarised for reference use in this document.

### **Agencies / Departments**

- Advertising Standards Authority of Ireland
- Bus Éireann
- Chamber of Commerce
- City and County Managers' Association
- Coras lompar Éireann
- Coroners Society of Ireland
- Courts Service
- Department of Education and Science
- Department of the Environment, Heritage and Local Government
- Department of the Environment, Northern Ireland
- Department of Health and Children
- Department of Justice, Equality and Law Reform
- Department of An Taoiseach
- Department of Transport
- Dublin Transportation office
- Garda National Traffic Bureau
- Garda Síochána
- Health and Safety Authority
- Health Service Executive
- Higher Education Authority
- International Stakeholders
- Irish Business and Employers Confederation
- Irish College of General Practitioners
- Irish Farmers Association
- Irish Insurance Federation
- Irish Medical Organisation
- Irish Road Haulage Association

- Local Authorities
- Medical Bureau of Road Safety
- National Car Test
- National Parents Councils
- National Roads Authority
- National Youth Council of Ireland
- North / South Ministerial Council
- Office of Public Works
- Representatives of Driver Instructors
- Revenue Commissioners
- Road Safety Working Together Groups
- School Boards
- Society of the Irish Motor Industry
- Third Level Institutions
- Youth Reach
- Union of Students in Ireland

# **Appendix V**

# **RSA Board Members**



Mr. Gay Byrne,

Chairperson



Ms. Áine Cornally



Ms. Myra Garrett



Mr. Paul Haran, Chairman of the Remuneration Committee



Mr. Thomas Kelly



Mr. Aaron MacHale

Ms. Ann McGuinness



Mr. Tony McNamara, Chairman of the Internal Audit Committee



Mr. John O'Gorman

# **The Executive Team**



Mr Noel Brett, Chief Executive Officer

Ms. Denise Barry, Director of Standards and Enforcement



Mr. Peter Dennehy, Director of Corporate Services



Mr. Declan Naughton, Director of Driver Testing



Mr. Michael Rowland, Director of Road Safety, Research and Driver Education.

# **Appendix VI**

## **Policy Advisory Panel to RSA**

- Mr. Tony Boland, Principal Officer, Department of Environment, Heritage and Local Government
- Mr. Brendan Callaghan, Principal Officer, Department of Justice, Equality and Law Reform
- Mr. Harry Cullen, Senior Projects Manager Road Safety Division, National Roads Authority
- Professor Denis A. Cusack, Director, Medical Bureau of Road Safety
- Mr. Martin Devine, Assistant National Director, Health Service Executive
- Mr. Conor Faughnan, Public Affairs Manager, AA Ireland
- Professor Ray Fuller, School of Psychology, Trinity College Dublin
- Ms. Margaret Kelly, Principal Officer, Department of Education and Science
- Mr. Michael Malone, County and City Managers Association, Kildare County Council
- Mr. Eddie Rock, Assistant Commissioner, An Garda Síochána
- Mr. Hugh O'Neill, Chief Fire Officer, Dublin Fire Brigade
- Mr. Fred Wegman, Managing Director, S.W.O.V (Institute for Road Safety Research), The Netherlands

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# **Appendix VIII**

# Acronyms

ACRONYM	FULL TITLE
ADI	Approved Driving Instructor
BAC	Blood Alcohol Concentration
CCMA	The County and City Managers' Association
CEDR	Conference of European Directors of Roads
DoE&S	Department of Education and Science
DfT	Department for Transport UK
DOE (NI)	Department of the Environment in Northern Ireland
DoEHLG	Department of Environment, Heritage and Local Government
Doete	Department of Enterprise, Trade and Employment
DoH&C	Department of Health & Children
DoJELR	Department of Justice, Equality and Law Reform
DoT	Department of Transport
DTO	Dublin Transportation Office
EuroRAP	European Road Assessment Programme
GNTB	Garda National Traffic Bureau
HSA	Health & Safety Authority
HSE	Health Service Executive
IBEC	Irish Business and Employers Confederation
ICGP	Irish College of General Practitioners
IFA	Irish Farmers Association
IIF	Irish Insurance Federation
IMO	Irish Medical Organisation
LA	Local Authority
LGMSB	Local Government Management Services Board
MAT	Mandatory Alcohol Testing
MBRS	Medical Bureau of Road Safety
NRA	National Roads Authority
OPW	Office of Public Works
RSA	Road Safety Authority
RSTWG	Road Safety Together Working Groups
SIMI	Society of the Irish Motor Industry



Working To Save Lives

### Údarás Um Shábháilteacht Ar Bhóithre Road Safety Authority

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