

Dún Laoghaire-Rathdown County Council

Transportation and Water Services Department

Road Safety Plan 2015 – 2020



Working together to reduce casualty numbers

CONTENTS

FOREWORD	2
1. Introduction	3
2. Profile of Dún - Laoghaire Rathdown	4
2.1 Road Network	4
2.2 Travel Patterns and Licensed Vehicles	4
2.3 Collision and Casualty Trends 2008 to 2012	4
2.4 Casualty Trends Road Users 2008 to 2012	5
2.5 Collision comparison with other City and County Council areas	6
3. National Road Safety Strategy 2013-2020	7
3.1 Review of 1997 to 2012 National Road Safety Strategies	7
3.2 Collision Contributory Factors	7
3.3 National Road Safety Strategy 2013 to 2020	7
3.4 Safe Systems Approach	8
4. Role of the Working Group and key Stakeholders	9
4.1 Road Safety Working Together Group	9
4.2 Key Stakeholders	9
5. DLR Road Safety Plan 2015 - 2020	12
5.1 Aims and Objectives of the Road Safety Plan 2015-2020	12
5.2 Scope of the Plan	12
5.3 Road Safety Plan Targets	12
6. Critical Success Factors and Action Planning	14
6.1 The four E's of Road Safety	14
6.2 Education Measures	14
6.3 Engineering Measures	17
6.4 Enforcement Measures	19
6.5 Road Safety Plan Evaluation	20
7. Summary	21
APPENDIX A Acronyms:	22

FOREWORD



Dún Laoghaire – Rathdown County Council is committed to reducing the number of road collisions in the County. Although there have been improvements in the road environment and infrastructure for pedestrians, cyclists and vehicle users, an increase in the number of road safety campaigns and initiatives and improvements in traffic enforcement, there are certainly no grounds for complacency as each year, lives are still being lost in road collisions in the County with many people injured. Death and injury on our roads ruin lives and cause irreparable damage to those involved.

No one can deny the extraordinary human cost of road collisions. One collision is one too many. With increasing population numbers and increasing number of road users, the task for Dún Laoghaire-Rathdown County Council is to continue to play a part in reducing the number of road collisions in conjunction with other agencies and to focus on reducing the severity of injuries for those who survive a serious collision. This in turn will help contribute to the national road safety targets set out in the Road Safety Authority Road Safety Strategy 2013 to 2020.

This Dún Laoghaire-Rathdown County Council Road Safety Plan 2015 to 2020 will focus on the reduction in road collisions through Education, Enforcement, Engineering and ongoing Evaluation. Actions and targets are set to allow progress to be reviewed over the lifetime of the plan. Implementation of this plan will require a co-ordinated approach between Elected Members and Management in Dún Laoghaire-Rathdown County Council and external agencies such as An Garda Síochána, the Fire Service, the Road Safety Authority, the National Transport Authority and Transport Infrastructure Ireland. The Plan also seeks to encourage every member of the community to play their part in reducing road collisions by taking responsibility for their own behaviour as road users.

I welcome this second Road Safety Plan and I am confident that this County Council, with the support of the various agencies and the public can continue to make the County a safer place to live and work over the next five years.

Cllr Barry Saul
An Cathaoirleach

Cllr Gerry Horkan
Chair Transportation and County Wide Movement SPC

1. Introduction

Local Authorities have an important role in promoting road safety in addition to their statutory obligations under roads and traffic legislation. Continuing the work in the previous Dún Laoghaire-Rathdown County Council Road Safety Plan 2010-2015, this new Road Safety Plan, covering the period 2015 to 2020, offers a strategic direction for road safety in Dún Laoghaire-Rathdown County Council in terms of Engineering, Enforcement, Education and Evaluation and in line with the National Road Safety Strategy.

Ireland's fourth Road Safety Strategy 2013-2020, launched in March 2013, seeks to build on the progress and understanding provided by the first three strategies, with the objective of improving safety on Irish roads. The Strategy – 'Closing the Gap' - will run until 2020 and aims to make Ireland one of the safest countries in terms of road deaths in the EU. The new Strategy sets a specific target for 2020 to reduce the number of road deaths to 124 a year (from 162 in 2012) and serious injuries to 330 per year (from 485 in 2012). It will also focus on new measures to reduce the number and severity of serious injuries arising from road collisions. Among the key challenges to be addressed to help achieve the targets, as identified as part of the public consultation for the Strategy, are meeting design needs for vulnerable road users and reducing incidents of drug driving and use of mobile phones while driving.

In line with the National Strategy, the Dún Laoghaire-Rathdown County Council Road Safety Plan 2015 to 2020 is designed to ensure a co-ordinated, collaborative and consistent approach to improving road safety for all road users. Although the casualty rates per population resulting from road collisions in the County are lower than other main urban centres, the number of casualties must be reduced further while recognising the population is expected to grow in the coming years. Also, the economy is changing and road users are changing their travel choices with more people walking and cycling and more people driving longer distances. Delivery of safety improvements need to reflect these changing times and balance the needs of all road users.

This Road Safety Plan strategy will focus on the implementation of actions under the four E's of Road Safety: Education, Engineering, Enforcement and Evaluation. Its implementation will be dependent on the co-operation of the principal agencies charged with responsibility for road safety with each road user helping to play a part in reducing casualty numbers. As part of the plan, a Road Safety Working Together Group will be set up to oversee and steer the implementation of the Road Safety Plan 2015 to 2020.

2. Profile of Dún - Laoghaire Rathdown

Dún Laoghaire-Rathdown County is located on the east coast of Ireland between the outer suburbs of Dublin City and the Dublin / Wicklow Mountains and covers the suburban areas of Dundrum, Glencullen, Stillorgan, Blackrock Dún Laoghaire and Ballybrack. The population of the County according to the 2011 census is 206,261 (48% male, 52% female), a 6% increase over the 2006 census.

2.1 Road Network

The road network in the County has been significantly upgraded in the past 10 years with improved facilities for pedestrians, cyclists and those with reduced mobility. The approximate road length of 700km in the County broken down as follows:

- Local and Residential Estate Roads – 550km
- National & Regional Roads – 125km
- Motorway – 25km

2.2 Travel Patterns and Licensed Vehicles

Analysis of Census 2011 travel mode share data for trips to work, school and college show that 54% of trips are by car (including passengers), 5% by bike, 15% by walking and 23% by bus, Luas or Dart. In terms of commuting patterns, Census 2011 data shows that the majority of 39,000 workers commuting into the County originated from the surrounding Greater Dublin Area Local Authorities of Dublin City (19%), South Dublin (12%), Wicklow (11%) and Fingal (5%). About 30,000 of the workers are resident in the County.

The number of licensed vehicles registered in Dublin has reduced slightly in recent years. In 2013, data in the Irish Bulletin of Vehicle and Driver statistics showed there were 596,418 licensed vehicles registered in Dublin City and County with 622,300 registered in 2008, a 4% reduction. Nationally, the corresponding reduction was 1%.

2.3 Collision and Casualty Trends 2008 to 2012

Tables 2.1 and 2.2 provide an overview of reported collision and casualty number trends in the County over the period 2008 to 2012. This data was obtained from the annual Road Safety Authority publication Road Collision Facts and compiled by An Garda Síochána at the scene of a collision. In a collision, there may be more than one casualty. For example, in a pedestrian collision, there may be an injury to both the car driver and the pedestrian (i.e. two casualties in one road collision).

Table 2.1 Collision Trends in DLR County Council Area 2008 to 2012

Year	2008	2009	2010	2011	2012	average
Fatal	1	1	4	1	1	2
Serious	10	13	8	6	9	9
Minor	212	225	166	165	186	191
Total	223	239	178	172	196	202

Table 2.2 Casualty Trends in DLR County Council Area 2008 to 2012

Year	2008	2009	2010	2011	2012	average
Fatal	1	1	4	1	1	2
Serious	11	14	8	7	12	10
Minor	263	294	219	211	243	246
Total	275	309	228	219	256	258

From Table 2.1 and 2.2, we see that the number of injury collisions and casualties reduced between 2009 and 2011. However there was a 14% increase in collisions between 2011 and 2012. Given that the level of under reporting of collisions is unknown year on year, it is difficult to compare annual collision trends. This may indicate that the actual level of collisions may even be higher in the County resulting in very significant human suffering at many levels to many families and also at a high cost to society.

2.4 Casualty Trends Road Users 2008 to 2012

Tables 2.3 and Table 2.4 show the overall fatal and injury casualty trends for various road users categories over the period 2008 to 2012.

Table 2.3 Fatal Casualties in DLR County Council Area 2008 to 2012

Casualties	2008	2009	2010	2011	2012	average
Pedestrians	1	1	2	1	1	1
Pedal Cycle Users	0	0	0	0	0	0
Motor Cycle Users	0	0	1	0	0	0
Car Users	0	0	1	0	0	0
PSV Users	0	0	0	0	0	0
Goods Veh. Users	0	0	0	0	0	0
Other/Unknown	0	0	0	0	0	0
Total	1	1	4	1	1	2

Table 2.4 Injury Casualties in DLR County Council Area 2008 to 2012

Casualties	2008	2009	2010	2011	2012	average
Pedestrians	51	50	24	33	40	40
Pedal Cycle Users	25	31	37	28	54	35
Motor Cycle Users	26	35	17	18	10	21
Car Users	154	181	140	129	144	150
PSV Users	4	5	1	0	1	2
Goods Veh. Users	7	4	4	5	1	4
Other/Unknown	7	2	5	5	5	5
Total	274	308	228	218	255	256

From Tables 2.3 and 2.4, we see that 59% of those killed and injured were in a car and 38% of collisions involve vulnerable road users (pedestrians, pedal cyclists and motor cyclists).

2.5 Collision comparison with other City and County Council areas

Comparing the rate of collisions per population between Local Authorities provides a useful indicator on how Dún Laoghaire-Rathdown County are performing at a national level. Using population data from the 2011 Census and collision data from 2011, a casualty rate comparison is made with the main City and County Councils in Table 2.5.

The casualty rate per 1000 population of 1.1 is lower than most of the City and County Councils in Table 2.5 and lower than the casualty rate in the Dublin Region and nationally. The rate for 2011 is the same as 2006 due to a slight increase in collisions numbers in 2011. However, the casualty numbers are still high in the County with an increase in casualty numbers in 2012 due mainly to an increase in collisions involving pedestrians and cyclists.

Table 2.5 Casualty Rates in City and County Councils 2006 & 2011

2011	Local Authority	Population	Total Casualties 2011	Casualty Rate per 1000 Population 2011	Casualty Rate per 1000 Population 2006
1	Fingal County	273,991	155	0.6	0.9
2	Dún Laoghaire-Rathdown County	206,261	219	1.1	1.1
3	South Dublin County	265,205	295	1.1	1.3
4	Galway City	75,529	110	1.5	1.4
5	Waterford City	46,732	79	1.7	0.5
6	Dublin City	527,612	921	1.8	1.9
7	Cork City	119,230	244	2.1	1.9
8	Limerick City	57,106	172	2.0	2.8
	Dublin Region	1,273,069	1590	1.3	1.9
	National	4,588,252	7417	1.6	2.0

Source: Road Collision Facts 2006 & 2011, Central Statistics Office 2006 & 2011 (www.cso.ie)

3. National Road Safety Strategy 2013-2020

3.1 Review of 1997 to 2012 National Road Safety Strategies

Significant progress has already been achieved since Ireland first began to pursue a strategic approach to road safety in 1998 with road death numbers reduced by about two thirds over the period 1997 to 2012. This is partly due to significant improvement in compliance by road users in respect of the main collision causation factors such as seatbelt wearing, speeding and alcohol related offences. The reduction in fatalities has also been achieved through a number of robust actions under the headings of education, engineering, and enforcement, as well as significant legislative changes relating to alcohol and drug testing, penalty points, increased fines and vehicle testing.

3.2 Collision Contributory Factors

The contributory factors to road collisions are many and varied. When combined, as they do in nearly every collision, they create a very complex picture of what actually happened. An assessment of contributory factors listed by An Garda Síochána on collision report forms between 2007 and 2011 showed the following:

- Driver error accounted for 87% of all contributory factors identified in fatal collisions; pedestrian error accounted for 8%, road factors accounted for 2%, environment factors accounted for 1% and vehicle factors accounted for 1%.
- The highest number of fatalities occurred in early evening rush hours, i.e. between 6:00pm and 7:00pm.
- 333 people were killed in 301 fatal collisions between 9:00pm and 3:00am, the hours most strongly associated with drinking and driving; this period accounted for 26% of fatal collisions and 27% of fatalities.

Road collision statistics also show the following:

- Single vehicle collisions accounted for 38% of all fatal collisions and 25% of all injury collisions.
- Head on collisions accounted for 19% of fatal collisions and 12% of injury collisions.
- Collisions involving pedestrians accounted for 22% of all fatal collisions and 17% of all injury collisions.

This analysis of road collision statistics shows that despite the gains made, there is a need for a continuing focus on vulnerable road users and on the traditional causal factors of alcohol consumption and speeding.

3.3 National Road Safety Strategy 2013 to 2020

Ireland's fourth Road Safety Strategy 2013 to 2020, called 'Closing the Gap', builds on the progress and understanding provided by the first three strategies (1998–2002), (2004–2006) and (2007–2012) with the objective of sustainably improving safety on Irish roads and adopts a longer term view than previous strategies. This will bring Ireland into line

with the timing of the European Union's own Road Safety Strategy. This longer term view makes it all the more essential to engage in a continuing process of review and adaptation of measures through the lifetime of the Strategy. In this context, provision is made for a mid-term review of the Strategy in 2016.

The new Road Safety Strategy 2013 – 2020 builds on existing road safety interventions, but reframes the way in which road safety is viewed and managed in the community. It addresses all elements of the road transport system in an integrated way with the aim of ensuring collision energy levels are below what would cause fatal or serious injury. It requires acceptance of shared overall responsibilities and accountability between system designers and road users and it stimulates the development of innovative interventions and new partnerships necessary to achieve ambitious long term road safety targets. All of the 144 actions contained in the new Strategy are intended to make the roads safer. The basic assumption in this Strategy is that the objectives can be achieved, without fundamentally changing our mobility system, and within the budgets set aside for the purpose.

3.4 Safe Systems Approach

A key element of the new Strategy is that Ireland is now looking to move towards a 'Safe Systems' approach to road safety. The Safe System philosophy takes a wider perspective of road accidents, recognising that human beings are fallible, that their errors must be anticipated and the risk of serious consequences from these errors minimised. The responsibility for reducing fatalities and serious injuries is therefore not solely placed on the road users but shared with all those involved in road safety e.g. vehicle producers and infrastructure managers. The basic ethical assumption is that it is not acceptable to pay a price in deaths for the mobility the society needs.

The Safe Systems approach to road safety is built on several key principles:

- **Human Behaviour** – no matter how well we are trained and educated about responsible road use, people make mistakes and the road transport system needs to accommodate this;
- **Human Frailty** – the finite capacity of the human body to withstand physical force before a serious injury or fatality can be expected is a core system design consideration.
- **Forgiving Systems** – roads that we travel on, vehicles we travel in, speeds we travel at and the attitudes of road users to each other, needs to be more forgiving of human error.

In addition, the Safe Systems approach has three core components:

- Safe roads and roadsides - a transport system designed to make a collision survivable through a combination of design and maintenance of roads and roadsides.
- Safe vehicles - the design of vehicles and their safety equipment to include protective systems including electronic stability control, air cushions, etc.
- Safe speeds – the speed limit should reflect the road safety risk to the road users.

Through a combination of the core components, the Safe Systems approach aims to design and build a transport system that will protect road users and reduce the number of deaths and serious injuries.

4. Role of the Working Group and key Stakeholders

4.1 Road Safety Working Together Group

Good road safety involves many different partners and stakeholders working together to reduce casualties. In the National Road Safety Strategy, the Road Safety Authority recognises that the ambitious road safety targets will only be met through the cooperation of all agencies involved in road safety and the shared responsibilities by all road users. To achieve this, a Road Safety Working Together Group is to be established in each Local Authority area to co-ordinate multi-agency road safety policy and to implement at a local level.

Dún Laoghaire-Rathdown County Council currently works closely with members of An Garda Síochána on traffic and road safety issues. As part of the Road Safety Plan 2015 to 2020, it is proposed to expand this Working Group to include Elected Members, the Dublin Fire Service, the Health Services Executive, Transport Infrastructure Ireland (formerly the National Roads Authority), the Road Safety Authority and other representative organisations such as the Dublin Cycling Campaign.

The main aims of the Road Safety Working Together Group are as follows:

1. To oversee the implementation of the Road Safety Plan.
2. To discuss road safety priorities and communicate good practice.
3. To enhance the knowledge of all those on the Working Group.
4. To endeavour to seek funding for road safety initiatives.
5. To recommend and provide input into Council transportation and road safety policies.
6. To foster links with other organisations that may have a role to play in Road Safety.
7. To review and report on progress in the Road Safety Plan over the 5 -years.

Terms of reference will be developed by the Working Group during Year 1 of the plan with the key individuals identified from each stakeholder. Sub-groups may also be set up over the period of the plan, as determined by the main Working Group, to cover specific road safety issues, e.g. Cycle Safety forum.

4.2 Key Stakeholders

The following sections provide a description of the key stakeholders on the Road Safety Working Together Group that will be responsible for overseeing the implementation of the 5-year plan.

Dún Laoghaire-Rathdown County Council

Dún Laoghaire-Rathdown County Council is responsible for the construction and maintenance of public roads in the County. This involves ensuring safety is a key consideration in the planning, design, construction and maintenance of

roads to provide a safe and efficient road network. The Council also has an important role in road safety education in schools and among the general population in terms of creating awareness and addressing road safety issues.

As part of the Dún Laoghaire-Rathdown Corporate Plan 2015 to 2019, under Theme 2, 'Driving quality of life for all', a goal is set as follows;

'To improve the road network (including pedestrian and cycle networks) in the County for the safe and efficient movement of all road users in a sustainable manner'.

This is to be achieved by implementing the following objectives that all impact on road safety.

- **CG.10.1** - To deliver the Transportation projects identified in the Council's Capital programme
- **CG.10.2** - To deliver a five year Road Safety Plan.
- **CG.10.3** - To provide and maintain a quality road, footpath and cycle network in the County
- **CG.10.4** - To identify opportunities to improve pedestrian and cycle facilities

Transport Infrastructure Ireland

Transport Infrastructure Ireland (TII), formerly the National Roads Authority, was established in September 2015 through a merger of the National Roads Authority and the Railway Procurement Agency under the Roads Act 2015. The TII's primary function is to provide an integrated approach to the future development and operation of the national roads network and light rail infrastructure throughout Ireland. TII brings together two organisations to provide high quality transport infrastructure and services, delivering a better quality of life and supporting economic growth. TII endeavours to provide a safer network of national roads by focusing on the development of new road schemes and carting out Engineering works to mitigate safety problems on existing national roads.

Road Safety Authority

The aim of the Road Safety Authority (RSA) 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 Licensing.
- Road Safety, Research and Driver Education.
- Vehicle Standards and Enforcement.

Health Service Executive

The Health Service Executive (HSE) is responsible for providing health and personal social services for everyone living in the Republic of Ireland. The HSE recognises that it has a key role to play in Road Safety as Road Traffic Collisions are a significant social problem resulting in death, injury and long term disability which impacts the health system as well as society as a whole. The Irish Health Service deals with the many health related outcomes of road crashes and collisions from the Ambulance Service, A&E Services, hospital services, rehabilitation, longer term and community care. The health service deals with the trauma, tragedy and results of crashes and collisions on our roads on a daily basis.

An Garda Síochána

The mission of An Garda Síochána in its Corporate Strategy 2013-2015 is "to achieve the highest attainable level of personal protection, community commitment and state security". This includes a number of strategic goals in the area of Road Safety in an attempt to significantly reduce the incidence of fatal and serious injuries and improve road safety. Dún Laoghaire-Rathdown and An Garda Síochána work closely together on many road safety campaigns and initiatives in the County.

Dublin Fire Service

The purpose of the Fire Service is to respond quickly and efficiently to fires and other emergencies, including road traffic incidents, throughout the County. This response consists of a pre-determined turnout of appliances and equipment based on the nature, magnitude and severity of the incident. Dún Laoghaire-Rathdown works closely with the stations in the Kill 'o' the Grange and Rathfarnham on fire safety Awareness, Community Events, National Schools Project and Community Awareness Programmes which are held in conjunction with other agencies.

5. DLR Road Safety Plan 2015 - 2020

5.1 Aims and Objectives of the Road Safety Plan 2015-2020

The **Dún Laoghaire-Rathdown County Council Road Safety Plan** covers the period 2015 to 2020 and in line with the previous Road Safety Plan 2010 to 2015 and offers a strategic direction for road safety in Dún Laoghaire-Rathdown County Council at a local level in terms of Engineering, Enforcement, Education and ongoing Evaluation. The principal aims of the Road Safety Plan are as follows:

- To develop an action plan to improve safety for all road users in the County and to set up a Road Safety Working Together Working Group to steer the implementation of the Plan,
- To highlight the scale of the deaths and injuries that are occurring at present on the County Council's road network,
- To provide a focus on road safety and to ensure that road safety underpins all transportation policy measures in the County Council,
- To develop new initiatives to focus on specific vulnerable road user groups,
- To play a role in meeting national road safety targets set out in the National Road Safety Strategy 2013 to 2020.

The main objective in the Road Safety Plan is to reduce the number of collisions and casualties on the roads of Dún Laoghaire-Rathdown County Council in line with National targets and to provide focus on making roads in the County a safer place for all road users.

5.2 Scope of the Plan

The strategy to be adopted in the Road Safety Plan focuses on Engineering, Education Enforcement measures and ongoing Evaluation. Actions are set to be achieved over the period of the Plan. Specific targets are also outlined relating to the Plan objective of casualty reduction.

5.3 Road Safety Plan Targets

Setting a quantified road safety target can contribute to an improved road safety performance provided a realistic safety programme is developed to help achieve the target (*European Transport Safety Council, 2003*). The Government has set ambitious targets that reflect the principles of the new Safe Systems approach and contribute to the overall aim of reducing deaths and serious injuries on Irish roads. This in turn will help close the gap between Ireland and the best performing countries in the area of road safety.

Ireland had approximately **41 fatalities per million population in 2011**. The Strategy requires a reduction of the number of fatalities on Irish roads to **25 per million population or less by 2020**. This means reducing deaths from 186 in 2011 to 124 or fewer by 2020.

In addition to continuing to reduce fatalities, a number of actions will be taken within the Strategy to reduce the number of serious injuries. With a target of 124 fatalities by 2020, a realistic target for serious injuries should be in the region

of **330 by 2020 or 61 per million population**. Reduced fatalities and serious injuries will realise benefits for public health policy objectives, as well as reduced demands on the emergency services.

The population of Dún Laoghaire-Rathdown County Council area was 206,261 in 2011. The CSO Population and Migration Estimates suggests growth rate of 0.9% per annum for Dublin, which would give an estimate of approximately 223,000 persons in the County by 2020.

Applying the population of Dún Laoghaire-Rathdown County Council to this target would equate to a target of not greater than **6 fatalities by 2020** and **14 serious injuries by 2020**.

Table 5.1 Road Safety Plan 2015 – 2020 Targets

Targets	2012	Target 2020
Fatalities	1 or less	6 or less
Serious Injury	12 or less	14 or less

6. Critical Success Factors and Action Planning

6.1 The four E's of Road Safety

The key challenges facing road safety in Ireland were outlined in the National Road Safety Strategy following extensive public consultation. Arising from these challenges, the new Road Safety Strategy is based on four key areas of intervention:

- **Education** – measures relating to awareness raising, formal education and training to ensure that all road users have the appropriate attitudes, knowledge and skills to ensure safe road behaviour and to reduce the chance of committing errors,
- **Engineering** – measures relating to the design of roads and vehicles, the operation of the road system and the integration of land use and road planning to promote safe and forgiving spaces to ensure that Irish roads and the vehicles that use them maximise road user safety,
- **Enforcement** – measures for the prevention, policing and mitigation of the effect of collisions to ensure that road users behave in a safe manner and where collisions occur, that the impact on casualties is minimised.
- **Evaluation** – monitoring of progress in conjunction with key stakeholders incorporating a review of Strategy targets and actions.

Focusing on these four areas has worked well over the period of previous national road safety strategies and facilitates the identification of intervention measures and the agencies responsible for carrying them out. The measures under these headings are informed by the challenges identified in the Strategy and are underpinned by a programme of research, monitoring and evaluation.

The following section outlines the strategy being adopted by Dún Laoghaire-Rathdown County Council to help achieve the targets set in Chapter 5, and the actions to be carried out as part of the Council Road Safety Plan 2015 to 2020 under the 4 E's. These are in line with actions outlined in the National Road Safety Strategy that are partly or fully in the remit of with the Local Authorities.

6.2 Education Measures

The aim of education and training in Road Safety is to educate road users in the proper and safe use of roads in order to change user attitudes and behaviour and to stimulate an awareness of the need for improvement in road safety. International and Irish research has consistently identified human behaviour and human error as the main contributory factor in all collisions with environmental and road factors accounting for about 3%.

Dún Laoghaire-Rathdown County Council has been active in developing and promoting road safety in schools and to the wider community for many years through Road Safety education awareness and training. The education of young road users is considered to be important in establishing positive road safety attitudes and behaviour. Exposure to road traffic education and training skills at this early age can increase awareness in the safe use of the road environment. Parents and teachers have a role to play in ensuring that young people stay safe while on the journey to and from school. The Council also works with Active Retirement groups in promoting road safety awareness.

Table 6.1 outlines the actions and timelines as abstracted from Chapter 9 of the National Road Strategy (by number) relating to Education that are in the remit of Local Authorities.

Table 6.1 National Road Safety Strategy – Local Authority Education Actions

No.	Action	Lead Agency/ Department	Completion Date	Support Dept/ Agency*
1	Integrate public education /awareness campaigns with the policing plans of An Garda Síochána (AGS).	RSA	Annually	AGS
5	Conduct an education/ awareness campaign on the use of seatbelts on school bus transport.	RSA	Q3 2013	LA/DES/Bus Eireann
18	Organise an annual Irish Road Safety Week with a series of local and national coordinated events aimed at raising awareness of road safety.	RSA	Annually	AGS/LA
22	Implement a regional structure led by a Road Safety Officer to lead the delivery of road safety education awareness programmes at a local level in each LA area.	RSA	Q1 2014	LA/CCMA
26	Develop a standardised guide to reducing road safety school gate risks and implement nationally	RSA	Q4 2014	AGS/LA/ DES
31	Develop a standardised road safety cycling training proficiency programme for children and seek to make this programme available to as many schools as possible.	RSA	Q3 2014	LA/DES
43	Establish a Road Safety Working Together Group in each Local Authority area to co-ordinate multi-agency road safety policy and implementation at a local level.	CCMA	Q4 2013	RSA/AGS/ HSE/TII
* See Appendix A for Acronyms				

Table 6.2 outlines a list of actions under Education that the Council intends carrying out as part of its 5-year Road Safety Plan while working closely with key stakeholders:

Table 6.2 DLR Road Safety Plan – Educations Actions 2015 to 2020

No.	Action	Completion Date	Support Agency*
i	Road Safety Awareness Work closely with the Road Safety Authority, An Garda Síochána and Emergency Services on all Road Safety Awareness campaigns. E.g. Halloween Safety Campaign.	4no. Annually	AGS
ii	Road Safety in Schools Work closely with parents and teachers in schools to deliver effective road safety education awareness and training; <ul style="list-style-type: none"> Assist schools with developing a Travel Plan and setting up a School Walking Buse as per Council Guidelines to encourage safe walking and cycling to school. Deliver cycle skills training to primary schools The continued provision of the school warden service (currently 70no). 	1 per year 1500 pupils per year ongoing	RSA DTTaS DES
iii	Vulnerable Road Users In conjunction with the RSA, work closely with high risk vulnerable road user groups such as children and the elderly on road safety awareness and education campaigns and good road safety practices i.e. Active Retirement talks, school talks.	5no annually	RSA
iv	Sustainable Travel Encourage schools and parents to develop and promote road safety and active travel modes (walking and cycling) through sustainable travel plans while working with the Green Schools Programme and other strategies that encourage responsible safe travel.	Ongoing	An Taisce Green Schools NTA
v	AXA Road Show Hold the AXA road show annually for Secondary School students. This aim of the road show is to highlight the dangers of irresponsible and reckless driving to Senior Cycle Students, many of whom may already be driving. The hard hitting road safety message was delivered through drama and aimed to change attitudes and the mindset of those attending.	Annually	AXA AGS
vi	National Bike Week Hold an annual series of events during Bike Week including a schools art competition and a cycling event along a Council Cycle Route to help promote safe cycling.	Annually	DTTaS
vii	Inappropriate Parking Elimination of illegal/inappropriate parking near schools or other locations though enforcement and education campaigns.	Ongoing	
viii	Cycle Standard Training Assist the DTTaS with developing the national road safety cycling training standard – attend regular meetings.	Ongoing	DTTaS

* See Appendix A for Acronyms

6.3 Engineering Measures

Research has shown that the vast majority of road collisions can be directly or indirectly attributed to inappropriate road user behaviour/performance. In the National Road Safety Strategy it is noted that on average, driver error accounted for 87% of all contributory factors identified in fatal collisions; pedestrian error accounted for 8%, road factors accounted for 2%, environment factors accounted for 1% and vehicle factors accounted for 1%. From this we can see that in a small proportion of fatal collisions, the road environment is a contributing factor. Engineering measures offer the most effective way of reducing collisions in the short to medium term by creating an environment that encourage safe behaviour by all users and by identifying and treating high collision locations with appropriate engineering measures.

Table 6.3 outlines the actions and timelines as abstracted from Chapter 9 of the National Road Strategy (by number) relating to Engineering that are in the remit of Local Authorities.

Table 6.3 National Road Safety Strategy – Local Authority Engineering Actions

No.	Action	Lead Agency/ Department	Completion Date	Support Dept / Agency*
52	Extend measures in the EU Road Infrastructure Safety Management Directive 2008/96/EC relating to road safety inspection and traffic management, which currently apply to the Ten-T routes, to the entire national road network by 2016.	TII	Q4 2016	LA
53	Carry out 150 minor realignment schemes on the national road network by 2020.	TII	Q4 2020	LA
54	Implement safety schemes at high risk locations on regional and local roads.	LAs	Annually	DTTaS
58	Each Local Authority to publish/renew their prioritised plan on road building construction and maintenance on an annual basis.	LSs/CCMA	Annually	DTTaS
65	Reduce the number of access points outside speed limit areas on national roads by 5% by 2020.	TII	Q1	CCMA/LA
* See Appendix A for Acronyms				

Table 6.4 outlines a list of actions under engineering that the Council intends carrying out as part of its 5-year Road Safety Plan under Engineering while working closely with key stakeholders.

Table 6.4 DLR Road Safety Plan – Engineering Actions 2015 to 2020

No.	Action	Completion Date	Support Agency*
i	<p>Speed Limit Reviews</p> <p>Carry out a review of speed limits in Residential Areas to facilitate the introduction of 30km/h streets and zones at appropriate locations.</p> <p>Carry out a Speed Limit Review in accordance with Department of Transport, Tourism and Sport Guidelines by April 2017.</p>	<p>End 2015</p> <p>April 2017</p>	<p>DTTaS</p> <p>TII</p>
ii	<p>Prioritisation of High Collisions Locations</p> <p>Carry out a ranking of high collision locations in the County to develop a County wide priority list. In carrying out effective engineering solutions, particular focus will be made on vulnerable road users.</p>	<p>Ranking by end 2015</p> <p>Remedial measures at 5 locations year</p>	TII
iii	<p>ITS – Traffic Signals</p> <ol style="list-style-type: none"> 1. Use of Traffic Signal optimisation on key routes to reduce speeding, maximise speed limit compliance and improve the cycle time for pedestrians and cyclists at main junctions where deemed appropriate. 2. Introduction of Variable Messaging Signage on key routes to deliver road safety messages. 3. Examine use of pedestrian countdown timers and other technologies to improve junction efficiency at key crossing points. 	<p>routes annually</p> <p>End 2016</p> <p>Ongoing</p>	<p>DTTaS</p> <p>TII</p> <p>NTA</p>
iv	<p>Cycle Network Implementation</p> <p>Development and upgrade of cycle routes on the County Cycle network in accordance with the National Cycle Design Manual and the Design Manual for Urban Road and Streets.</p>	Annual Programme	NTA
v	<p>Improve Pedestrian facilities</p> <p>Upgrading of existing and provision of new pedestrian facilities throughout the County at appropriate locations, catering for the needs of all vulnerable road users including mobility impaired and disabled persons. This shall include the implementation of school safety zones at appropriate locations.</p>	Annual Programme	<p>NTA</p> <p>TII</p>
vi	<p>Road Safety Audit/Road User Audit</p> <p>Implementation of the Road Safety Audit / Road User Audit process for major new road and traffic schemes, including QBC's, and as part of the development management process for larger development.</p>	Ongoing on major schemes	<p>DTTaS</p> <p>NTA</p>
vii	<p>Planning Process</p> <p>Incorporating road safety and sustainable travel into new developments as part of the development management process in accordance with national policy documents (e.g. Cycle Design Manual and Design Manual for Roads and Streets) and minimize access to national roads as per TII Policy.</p>	ongoing	

* See Appendix A for Acronyms

6.4 Enforcement Measures

The primary responsibility for enforcement of road traffic legislation rests with An Garda Síochána and the high visibility enforcement, in recent years, focusing on speeding, drink driving, seat belt wearing, vehicle roadworthiness and driver regulations appear to have been effective in raising awareness and changing attitudes. Dún Laoghaire-Rathdown County Council will continue to work closely with the Gardaí in dealing with road safety and traffic issues in the County.

Table 6.5 outlines the actions and timelines as abstracted from Chapter 9 of the National Road Strategy (by number) relating to Enforcement that are in the remit of Local Authorities;

Table 6.5 National Road Safety Strategy Local Authority Enforcement Actions				
No.	Action	Lead Agency/ Department	Completion Date	Support Dept / Agency*
90	Publish the Speed Limit Review report and implement its recommendations.	DDTAS	Q4 2014	TII/LA/RSA/LGMA/ AGS
91	Legislate for, subject to legal advice, and implement the use of average speed cameras at appropriate locations including the Dublin Port Tunnel and at road works.	DTTaS	Q2 2014	AGS/TII/ LA
96	Develop guidelines for organisations and strengthen the permitting system to ensure that all aspects of road safety are considered when organising public events on Irish roads.	RSA	Q4 2013	AGS/CCMA/ LA
127	Produce estimates of road safety related expenditure to inform the Annual Road Safety Strategy Report.	RSA	Annually	AGS/LA/ TII/ DTTaS
141	Report on the implementation of a target emergency response time for the life threatening emergency calls in line with the National Policy Document 'Keeping Communities Safe-A Framework for Fire Safety in Ireland'	DECLG/ National Directorate for Fire & Emergency Management	Q1 2013	LA/AGS/ HSE NATIONAL
* See Appendix A for Acronyms				

Table 6.6 outlines a list of actions under Enforcement that the Council intends carrying out as part of its 5-year Road Safety Plan while working closely with key stakeholders:

Table 6.6 DLR Road Safety Plan – Enforcement Actions 2015 to 2020

No.	Action	Completion Date	Support Agency*
i	Fatal Collision Inspection Jointly inspect each fatal collision location with a member of An Garda Síochána as soon as practicable after a fatal collision occurrence and bring reports on major collision occurrences to the Working Group.	Annually	AGS
ii	School Education A co-ordinated approach is to be adopted between the Dún Laoghaire-Rathdown County Council Road Safety Unit and Community Policing in delivering education programmes to school children.	Annually	AGS
iii	Ongoing Co-operation Explore areas of co-operation with the Gardai in the area of road safety engineering and education through regular meetings. <ul style="list-style-type: none"> • Identify locations for speed vans • Event Planning • Road Works • Ongoing traffic and road safety issues 	Regular meetings	AGS
iv	Speed Limit Reviews (see also under Education) Carry out a review of speed limits in Residential Areas to facilitate the introduction of 30km/h streets and zones at appropriate locations. Carry out a Speed Limit Review in accordance with Department of Transport, Tourism and Sport Guidelines by April 2017.	End 2015 April 2017	DTTaS

6.5 Road Safety Plan Evaluation

The effectiveness of a particular service refers to the extent it achieves its objectives. It is vital that the progress of Road Safety Plan is reviewed annually to establish to assess if it is effective in meeting the objectives and carrying out its actions. As part of the Road Safety Plan, to help ensure a reduction in collisions and casualties in the County, a report will be carried out annually to monitor the implementation of the plan and will be presented to the elected members at the Transportation and County Wide Movement Strategic Policy Committee.

7. Summary

The various road safety interventions and targets as set out in previous National Road Safety Strategies coupled with an ever strengthening road safety culture have resulted in a successful period in road safety for Ireland with deaths and injuries decreasing at a rate that is comparable with other best performing countries in the European Union. There has been significant improvement in compliance by road users in respect of the main collision causation factors such as seatbelt wearing, inappropriate speeding and alcohol related offences. However, despite an overall reduction in road deaths, there is continuing need to focus on collisions involving vulnerable road-users and other causal factors where there are low levels of compliance and this will be a major focus of the Government Road Safety Strategy 2013—2020.

Dún Laoghaire-Rathdown County Council has adopted a strategy for road safety based on what is known as the four 'E's, Education, Enforcement, Engineering and Evaluation. This requires a co-ordinated approach between Dún Laoghaire-Rathdown County Council and other stakeholders to provide focus on collision and casualty reduction in the County and this will be achieved by setting up a Road Safety Working Together Group. In line with National Strategy, the Council will focus on the principles of the Safe Systems approach in the implementation of the plan.

An annual review of the Road Safety Plan will be presented to the Transportation and County Wide Movement Strategic Policy Committee in Dún Laoghaire-Rathdown County Council. This will assess what has been done over the period of the plan to help achieve the fatal and injury casualty targets. The continued focus on road safety in the County, as part of this road safety plan and as part of transportation policy, will contribute further to collision and casualty reduction over the next 5 years.

APPENDIX A Acronyms:

AGS	An Garda Síochána
CCMA	County & City Manager’s Association
DES	Department of Education and Skills
DTTaS	Department of Transport, Tourism & Sport
TII	Transport Infrastructure Ireland (formerly National Roads Authority)
HSE National	HSE National Ambulance Service
LA	Local Authorities
LGMA	Local Government Management Association
NTA	National Transport Authority
RSA	Road Safety Authority