Carlow Local Authorities

Road Safety Plan

2007 – 2012

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>Revision</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>20/02/2007</td>
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<td>Working Draft</td>
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<td>Road Safety Plan</td>
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1 Introduction

1.1 General

In 2006 368 people lost their lives nationally in fatal traffic collisions, more than one person for each day in the year. For the period 2004 to 2006, the period of the last National Road Safety Strategy, an average of 379 people died each year as a result of collisions on Irish roads. Within County Carlow, 19 people have died as a result of road collisions in the period 2004 to 2006 inclusive, an average of over 6 per year. In addition, over 623 people were injured in the same period, compared with 47,600 nationally.

The Road Safety Authority is currently preparing The National Road Safety Strategy for the period 2007 to 2011. This Road Safety Plan is intended to be the document that outlines how The National Road Safety Strategy will be implemented within County Carlow.

The Local Authorities within County Carlow - Carlow County Council, Carlow Town Council and Muinebheag Town Council - in association with An Garda Síochána, the Road Safety Authority, the Department of Transport, the National Roads Authority and other relevant agencies, have prepared this Road Safety Plan as part of a coordinated strategy to address the issue of road fatalities and serious injuries within the county.

Through working together, pooling our knowledge, expertise and ideas, it is intended that much more can be achieved than working as individual agencies. Carlow Local Authorities, and the other agencies involved in preparing this document, are committed to implementing the plan, and look forward to the support of the wider community.

1.2 Profile and Population of County Carlow

Carlow County is 943 sq.km. in area, with principal towns of Carlow, Tullow, Muinebheag, Hacketstown and Borris. County Carlow forms part of the South East Region consisting of counties Carlow, Kilkenny, Tipperary South Riding, Waterford and Wexford.

The population of County Carlow according to the 1996 census was 41,616. This was a 1.6% increase on the 1991 figures. In the six year period between 1996 and 2002 the population increased by 10.2%.

In the 2006 Census the population of Carlow is given as 50,349, an increase of 4,335 on the population recorded in the 2002 Census - a 9.4% increase. This corresponds with an overall population increase in Leinster of 9%, and a national population increase of 8.2%.

1.3 Road Network within County Carlow

A safe and efficient road network is an important part of any county. Carlow County Council is responsible for maintaining and improving the road network within the County. The council's annual roadworks programme sets out priorities each year for improvements to national and non-national roads in the county. The Council in association with the National Roads Authority, and The Department of Transport and An Garda Síochána continues to endeavour to implement engineering measures with a particular focus on road safety.
Map of County Carlow Highlighting National Primary, National secondary and Regional routes.
Within Carlow there is the N9 national primary, the M9 motorway bypass of Carlow route and two national secondary routes, the N80 and the N81. The total length of road in County Carlow, by category, is given in Table 1.1.

Table 1.1 - Length of Road by Category in County Carlow

<table>
<thead>
<tr>
<th>Road Category</th>
<th>Length [km]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorway</td>
<td>24</td>
</tr>
<tr>
<td>National Primary</td>
<td>0</td>
</tr>
<tr>
<td>National Secondary</td>
<td>54</td>
</tr>
<tr>
<td>Total National</td>
<td>78</td>
</tr>
<tr>
<td>Regional</td>
<td>187</td>
</tr>
<tr>
<td>Local Primary</td>
<td>328</td>
</tr>
<tr>
<td>Local Secondary</td>
<td>337</td>
</tr>
<tr>
<td>Local Tertiary</td>
<td>284</td>
</tr>
<tr>
<td>Total Non-National</td>
<td>1,136</td>
</tr>
</tbody>
</table>
2 Current Road Safety Status

2.1 National Road Safety Strategy

The first national road safety strategy, "The Road to Safety 1998 -- 2002" set a main target of a reduction of a minimum of 20% in road deaths and serious injuries. Other targets included in the strategy related to speeding, driving under the influence of alcohol, seatbelt wearing and engineering measures to reduce collision rates at high collision locations. The introduction of the penalty points system in late 2002 had a significant impact on rising road safety awareness.

This was followed by the "Road Safety Strategy 2004 -- 2006" which had as a primary target a reduction of 25% in the average level of fatalities. Secondary target areas include speeding (speed limit review), seatbelt use, driving while intoxicated, engineering measures and vulnerable road users (motorcyclists, children, pedestrians, elderly, cyclists).

In January 2007 the Road Safety Authority assumed responsibility for the preparation of the successor to the Road Safety Strategy 2004 - 2006. The new strategy was presented in mid year 2007 and deals with the period to end of 2012. This strategy again sets targets for reducing fatalities and serious injuries, and also outlines the necessity for all the agencies involved in reducing road accidents to work together.

2.2 National and International Data on Road Accidents/Crashes

The Road Safety Authority (RSA) is responsible for maintaining the national records of road collisions as reported by An Garda Síochána, a function previously undertaken by the National Roads Authority (NRA). The latest report, "Road Collision Facts 2005" is a comprehensive analysis of the available information. Tables 2.1 to 2.4 highlight some of the statistics contained within the publication.

<table>
<thead>
<tr>
<th>Severity</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>411</td>
<td>376</td>
<td>335</td>
<td>374</td>
<td>396</td>
<td>368</td>
<td>339</td>
</tr>
<tr>
<td>Serious Injury</td>
<td>10,222</td>
<td>9,206</td>
<td>8,262</td>
<td>7,867</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Provisional Figures


CARE (Community database on Accidents on the Roads in Europe) is an EU database of road accidents that result in injuries or fatalities. The purpose of CARE is to assist in the identification and quantification of road safety problems throughout European roads, to evaluate the efficiency of road safety measures and to facilitate the exchange of road safety experience.

National accident data for each member state is included within the CARE database, with access to confidential data not permitted. The Commission provides a framework of transformation rules allowing CARE to provide compatible data. The currency of the information within CARE is variable, and is dependent on what national accident statistics are available. The current data availability is given in Table 2.2.
Table 2.2 - Injuries Arising from Road Accident Collisions Nationally (2001 to 2006)

<table>
<thead>
<tr>
<th>Country</th>
<th>Years</th>
<th>Country</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1991-2005</td>
<td>Lithuania</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Not yet Available</td>
<td>Malta</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Not yet Available</td>
<td>Netherlands</td>
<td>1991-2003</td>
</tr>
<tr>
<td>Denmark</td>
<td>1991-2005</td>
<td>Norway</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Estonia</td>
<td>2004 (Test data Only)</td>
<td>Poland</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>France</td>
<td>1991-2004</td>
<td>Slovakia</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Germany</td>
<td>no data</td>
<td>Slovenia</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Hungary</td>
<td>Not yet Available</td>
<td>Sweden</td>
<td>1991-2004</td>
</tr>
<tr>
<td>Ireland</td>
<td>1991-2003</td>
<td>Switzerland</td>
<td>Not yet Available</td>
</tr>
<tr>
<td>Latvia</td>
<td>Not yet Available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The accident data within the CARE database is referred to on a proportion of population basis, i.e. Number of fatalities per 1,000,000 population, to enable comparisons with national figures to be made. Table 2.3 represents information extracted from the CARE database for the total number of fatalities in the Eur25 countries (Malta, Netherlands, Sweden, United Kingdom, Denmark, Germany, Finland, France, Ireland, Italy, Austria, Luxembourg, Slovakia, Spain, Belgium, Portugal, Estonia, Hungary, Czech Republic, Slovenia, Greece, Poland, Cyprus, Lithuania and Latvia). The information for all countries for 2004 & 2005 is given graphically in Figure 2.1 along with the 2005 Eur25 Average.

Table 2.3 - Fatalities by Population (2000 to 2005)

<table>
<thead>
<tr>
<th>Year</th>
<th>Ireland</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>111</td>
<td>117</td>
</tr>
<tr>
<td>2001</td>
<td>107</td>
<td>112</td>
</tr>
<tr>
<td>2002</td>
<td>96</td>
<td>110</td>
</tr>
<tr>
<td>2003</td>
<td>85</td>
<td>103</td>
</tr>
<tr>
<td>2004</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>2005</td>
<td>99</td>
<td>91</td>
</tr>
</tbody>
</table>

2.3 Data on Road Crashes in Carlow

Table 2.4 highlights that Co Carlow experienced a reduction in road fatalities between 2002 and 2003. This reduction can in part be accredited to the introduction of the penalty points system, but road engineering measures and education programmes undertaken by Carlow County Council also played a role in achieving this reduction.

The decrease in the number of persons injured on roads in Carlow from 114 in 2002 to 73 in 2004 was statistically significant. An analysis for the four years prior to this reduction indicates that the reduction is statistically significant and unlikely to arise as a result of random chance.

Table 2.4 - Injuries Arising from Road Accident Collisions in Co Carlow (2000 to 2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Serious Injury</td>
<td>131</td>
<td>114</td>
<td>102</td>
<td>73</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Provisional Figures
Figure 2.1 - Fatalities by Population (2004 & 2005)
Figure 2.2 - Injuries 1994 to 2004
Figure 2.3 - Fatalities 1994 to 2006
Figure 2.4 - Number of Vehicles & Injuries 1994 to 2004

- Injury (National)
- Total Number of Vehicles
Figure 2.5 - Number of Vehicles & Fatalities 1994 to 2006

- Fatal (National)
- Total Number of Vehicles

Figure 2.6 - Fatal/Serious Accident Locations in County Carlow (2000 to 2004)
2.4 Achievements in Carlow (2001 to 2008)

2.4.1 Road Improvements

Within County Carlow there are ongoing improvements to the road network to improve safety & efficiency. In addition Carlow County Council have, over the past number of years, been involved in the systematic identification of accident cluster sites using the NRA's GIS database. Accident cluster sites have then been included on the roadworks programme in order to address any perceived deficiencies in the road layout at these locations. This process has been applied in a hierarchical format to the busiest sections of road within the county, with national primary/secondary roads and junctions between national/regional roads now considered to be completed. It is intended in the coming years to progressively address junctions between regional/regional roads and regional/local primary roads.

Table 2.5 contains a list of some of the locations where works of the number taken by Carlow County Council over the past number of years.

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Year Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>N9 Ballyvergal Cross</td>
<td>provision of a ghost island and improved markings</td>
<td>2000</td>
</tr>
<tr>
<td>N80 Kilbride Cross</td>
<td>junction sightlines improved</td>
<td>2000</td>
</tr>
<tr>
<td>N80 on Boggan Hill</td>
<td>widened</td>
<td>2001</td>
</tr>
<tr>
<td>Ballon Traffic Calming</td>
<td>Provision of traffic calming measures through village</td>
<td>2002</td>
</tr>
<tr>
<td>N81 at Ardristan</td>
<td>widened</td>
<td>2003</td>
</tr>
<tr>
<td>N80 at Graignamespidogou</td>
<td>improved definition of a series of sharp bends</td>
<td>2003</td>
</tr>
<tr>
<td>N9 at Wells</td>
<td>signage improvement and revised road markings</td>
<td>2004</td>
</tr>
<tr>
<td>N9/R724 Junction</td>
<td>junction improvement at Royal Oak</td>
<td>2004</td>
</tr>
<tr>
<td>Walls Forge junction, Carlow</td>
<td>junction improvement, including provision of a right turning reservation from the National Road to the R725 Regional Road and the Local Road. Junction sight lines also improved.</td>
<td>2004</td>
</tr>
<tr>
<td>Cuckoo Corner Junction at Rathvilly</td>
<td>realigned road with altered priority between N81 and R726. This re-alignment also resulted in a reduction in vehicle speeds through the junction</td>
<td>2005</td>
</tr>
<tr>
<td>Road markings on N80 at Kildavin</td>
<td>The N80 was re marked to provide a dedicated right turning lane for right turning movement from the road and a separate overtaking lane</td>
<td>2008</td>
</tr>
</tbody>
</table>

Carlow County Council as part of their role as client and/or designer for road improvement schemes require that all road improvements be subject to an independent Road Safety Audit in accordance with the requirements of the NRA's DMRB.

2.4.2 Traffic Calming

Carlow County Council undertook a traffic calming scheme through Ballon in 2001 and 2002. The traffic
calming scheme was considered necessary for road safety reasons because of the long straight approaches to the village on both sides and the tendency for many drivers unfamiliar with the road to drive into the village core at dangerously high speeds.

Traffic calming gateways were introduced at either end to provide essential advance warning for drivers of the village. Traffic route lighting was extended out as far as the gateways. Centre refuges were provided for pedestrians and these also contributed to a slowing down of vehicle speeds.

The work was undertaken in conjunction with an urban renewal scheme which contributed to the improvement of the streetscape of the village.

**N80 APPROACH TO BALLON.**
Photographs/drawings of improvements undertaken

CUCKOO CORNER, RATHVILLY.

WALLS FORGE, CARLOW
BALLYVERGAL

BOGGAN HILL
2.4.3 Road Signage and Road Markings

The Council undertakes a continuous programme of road markings renewal which is complemented by the contract work of the NRA. Road signs are renewed on an ongoing basis.

2.4.4 Planning Control

The roads department review all proposals that have an access to National Roads and regional roads where an issue of road safety or capacity applies.

2.5 Road Safety Campaigns

2.5.1 Education and Awareness

2.5.1.1 Transition Year Programme

Subsidised Transition Year One-Day programme is provided in all Post-Primary Schools in the county. The Part-time Road Safety Officer regularly visits students in the junior cycle in all post-primary schools.

2.5.2 Training

2.5.2.1 Cycling Training

Cycle Training has been subsidised in a number of primary schools in the county each year.

2.5.2.2 Advanced Driving Training

Public Advanced Driver Training was advertised and conducted regularly in the period.

2.5.3 Media

2.5.3.1 Public Seminar Oct 2001 - 4

Annual Road Safety seminars were held in the 2001 to 2005 period. Falling attendance prompted the Council to change the direction of promotion to evening radio programmes which have been very successful.

2.5.3.2 Cinema Adverts for young drivers

A cinema advert aimed at 15 - 30 year olds is showing in all local cinema screens - featuring local gardaí and Local Authority staff who volunteered.

2.5.3.3 Press, Radio, Cinema, Literature for Pedestrians, Cyclists, Drivers, Passengers etc.

The Local Authority regularly buys local press and radio adverts for specific promotions in line with our road safety promotion strategy.
2.5.4 District Court Projects

The Part-time Road Safety officer is involved with the Courts service in two pilot projects: -

Information leaflet on Endorsements and Disqualifications and Road Safety Awareness Courses for Disqualified Drivers to assist in Licence Restoration.

Photographs/copies of education activities/flyers/posters
3 Road Safety Plan for 2007 to 2012

3.1 Objective

The primary objective of the Road Safety Plan is to achieve a reduction in the numbers of fatal and serious road accidents in County Carlow over the period of the plan (2007 to 2012). The overall road accident reduction sought within County Carlow for the period of the Road Safety Plan is:

- a reduction of 25% in the average number of road accident fatalities per population as measured over a three year period.

- a reduction of 33% in the average number of serious road accident injuries per population as measured over a three year period.

- the setting of an annual budget to address accident cluster sites, and an ongoing review of accident data for the county to identify accident cluster sites, to rank them for remedial action

It is also intended that the reductions achieved should be significant and permanent. In order to monitor progress towards achieving the primary objective a series of annual objectives will be set. The annual objectives will be selected on the basis of the progress achieved in the period prior to that. It is intended that the objectives will reflect current best practice, and the most up-to-date information in relation to accidents on the roads within County Carlow.

Responsibility for the selection of the annual objectives will rest with the Road Safety Together Committee following consultation with all relevant bodies. The agreement of all organisations that are responsible for delivery of an objective will be required for each objective to be included.

The Government Strategy for Road Safety 2004 to 2006 established a number of primary and secondary targets for achievement. Based on these targets, the Road Safety Together Committee led by Carlow Local Authorities has adopted objectives based around the themes of Education, Engineering, Enforcement and Evaluation.

These themes encompass the areas of community involvement, safer road users, safer roads and co-ordination and communication, and seek to:

- develop community support, awareness, ownership and participation in the process of improving road safety;

- improve road user behaviour and attitudes giving priority to speeding, seatbelt wearing rates, older persons, cyclists, pedestrians, children & vulnerable road users;

- continue to develop the design, construction and maintenance of the road network and ensure that safety, mobility and access issues are addressed;

- ensure the continuation of effective communication and increased co-operation and coordination between all stakeholders in road safety planning and activity; and

- improve the road environment for all classes of road user.
3.2 Road Safety Together Committee

Carlow Local Authorities have, as part of the development of this Road Safety Plan, established a Road Safety Together Committee. The committee consists of representatives from Carlow Local Authorities, An Garda Síochána, the Health Services Executive, the National Roads Authority, the Department of the Environment, Heritage and Local Government, the fire service, etc.

The committee meet on a regular basis, approximately every three months, to review progress in relation to implementing the Road Safety Plan. The committee will be briefed/receive information in relation to fatal and serious road accidents within County Carlow for the period between meetings, and for the period since the commencement of the current Road Safety Plan and current Action Plan.

The committee will provide top-level guidance to all agencies and bodies who are co-operating in the implementation of the Plan. In addition the members of the committee will operate as the primary liaison personnel for the agencies that they represent in dealing with all other agencies/bodies in relation to road accidents and the implementation of the Road Safety Plan.

The committee will report to the Local Authorities, and to the participating bodies/agencies, annually on progress in the implementation of the current Road Safety Plan, and on current progress in relation to achieving the targets set out in the plan in relation to accident/injury reduction.

Each of the participating bodies on the committee have contributed to the preparation of this Plan, and their involvement is gratefully appreciated by Carlow Local Authorities.

3.3 Primary Causes of Road Accidents/Crashes

Individual road collision incidents are caused by a combination of factors, each combination different and unique to each incident. However some commonality between groups of incidence can be seen by inspection of the historical road accident information. Some of these common factors have been the focus of successful publicity campaigns, enforcement measures and media comment, for example: -

- Excessive and inappropriate speed;
- Driving while under the influence of alcohol/drugs;

Other factors that are involved in an increased accident severity includes the non-wearing of safety belts, the non-wearing of reflective/high visibility clothing by cyclists & pedestrians, etc.

3.4 Measures for Improving Road Safety

Carlow Local Authorities, the Department of Transport, the National Roads Authority, An Garda Síochána, the Road Safety Authority, the Emergency Services, the Health Services and all road users play a role in road safety. The measures outlined in the following paragraphs have been selected as the measures to be implemented as part of this Road Safety Plan in order to achieve the objectives set out in Section 3.1. It is considered that the implementation of these measures will lead to an increase in road safety, and all the organisations contributing to this plan hereby commit to the implementation of these measures.
Road Safety Measure No. 1 - The primary objective of the Road Safety Plan is to achieve a reduction in the numbers of fatal and serious road accidents in County Carlow over the period of the plan (2007 to 2011). The overall road accident reduction sought within County Carlow for the period of the Road Safety Plan is:

3.5 Engineering

3.5.1 Road Safety Audit

Road safety audit procedures are incorporated into the National Road Authority's Design Manual for Roads and Bridges (DMRB) which is the design standard national roads, and is also used in the design of non-national roads subject to some modifications as approved by the Department of Transport (modifications formerly approved by the Department of the Environment, Heritage & Local Government). Road safety auditing involves evaluating road schemes during all design stages, and after construction, to identify potential hazards to any/all road users, with a particular emphasis on vulnerable road users (pedestrians, children, cyclists, mobility impaired & visually impaired). In addition the road safety audit report includes recommendations to eliminate or mitigate any hazards identified.

3.5.2 Passive Safety Measures

Carlow Local Authorities intend to explore the potential for accident severity reduction by the adoption of passive roadside safety measures. These measures may include the provision of frangible supports to road signage/lighting columns or the inclusion of roadside protective measures.

‘Frangible supports’, often referred to as ‘Passively Safe Supports” are supports that that reduce the risk of injury when a vehicle collides with them.

3.5.3 Traffic Calming Schemes

Traffic calming schemes are intended to improve road safety through urban areas (such as towns and villages) by the provision of measures to reduce average traffic speeds. It has been found that the posting of speed limit alone, without any physical speed reducing measures does not sufficiently induced drivers to reduce their speed to any significant degree. Traffic calming aims to reduce vehicle speeds by self-regulating traffic engineering methods. Slower speeds result in fewer crashes, and where accidents do occur the accident severity is lower.

3.5.4 Low-Cost Safety Schemes

Low cost safety schemes include the provision of additional/refreshed roadmarkings, road signage and minor junction improvements. These improvements are carried out on an annual basis in accordance with the annual roadworks programme implemented by Carlow Local Authorities.

3.5.5 Accident Remediation Schemes

Accident remedial schemes include all low cost safety measures in addition to geometry changes at junctions where necessary

3.5.6 Signage

There is currently a programme to replace all directional signage on the national road network, which is managed by the National Roads Authority. It is intended that all directional signage on the national road network will be replaced by 2010. This programme is carried out in consultation with the Local Authorities, and Carlow County Council will be directly engaging with the NRA to ensure that the revised signage is
consistent with the remainder of the road network and includes sufficient guidance to drivers in reaching their destinations.

Carlow County Council are responsible for the provision and maintenance of all road signage on the national and non-national road network. In conjunction with the NRA, and the Department of Transport, Carlow maintain the road signage within the county.

Carlow Local Authorities will also bear in mind that excessive numbers of road signs can have a negative effect on road safety by leading to information overload on behalf of drivers, or possibly resulting in driver confusion and an inability by drivers to access relevant information expeditiously.

3.5.7 Winter Maintenance Policy

Carlow County Council is responsible for implementing a winter maintenance programme throughout the county. An ice detection and prediction system, in conjunction with thermal mapping which is linked to roadside weather stations, advises of areas that are most likely to freeze. The system is used to determine whether or not to carry out salting/ gritting.

3.5.8 Special Speed Limits

As part of the speed limit review periodic special speed limits will be installed at schools on national and regional roads where necessary.

3.5.9 Pavement Renewals

The Council has over the past 5 years renewed the National Primary Road in the rural part of the county with hot rolled asphalt surface course, this has improved the texture of the road. Improvements have also been carried out to the vertical profile of the road. This has resulted in an improved road riding quality and surface texture and should assist in reducing road related accidents. A similar approach is being adopted on the National Secondary Route again the emphasis is firstly to ensure the skid resistance of the road meets the requirements of the NRA and secondly to improve the driving qualities of the road by reshaping individual local sections where considered necessary. The programme should be completed in three years.

On the non national roads a programme of pavement improvement and surface dressing has been in place for the past ten years. This is now beginning to bear fruit as the regional road network is now within six years of being treated in its entirety. Work is also ongoing on the county road network with priority being accorded the roads carrying heaviest traffic volumes.

3.5.10 Accident Investigation

Consideration may also be given to the operation of a system whereby the site of all serious and fatal collisions are investigated by a representative of the road section, in conjunction with a representative of An Garda Síochána and, where possible, a representative of the emergency services. The purpose of this review would be to discuss any possible measures that could be undertaken to reduce the possibility of a similar accident occurring at that location. This is not to say that the road at the location of these accidents was in any way deficient, but rather to see if additional, possibly unique, measures could be recommended which would assist in minimising the possibility of a recurrence.
3.6 Education and Awareness

3.6.1 Education, Training and Publicity

All three activities alter or influence the behaviour of all road users. Education seeks to foster a positive attitude, which will contribute to a safer environment for all.

3.6.2 Primary School Visits

The Road Safety Officer with the Road Safety Together Working Group will set a target number of schools to be visited in each year.

3.6.3 Primary School Activities

Fun Road Safety activities and competitions have been developed and delivered regularly to schools to encourage awareness of road safety. For many years Carlow Local Authorities have run the Road Safety Art Competitions. This is an ongoing event and will continue to run.

3.6.4 Primary School Cycle Training

Irish Cycling Skills School have regularly delivered cycling training in Carlow primary schools with support from the National Safety Council and the Local Authorities

3.6.5 Post-Primary School Visits

The Road Safety Officer with the Road Safety Together Working Group will work with the post primary school sector to increase awareness for pupils who are at the point of commencing their driving careers.

3.6.6 Transition Year Programmes

It is understood that two Transition Year Road Safety programmes are in pilot stage in 2007 – 2008 and it is anticipated that both will be rolled out from 2008 onwards.

3.6.7 Special Schools

Practical and financial support as well as visits are available for programmes in St. Lazerian’s Special School in the county at present.

3.6.8 Youth, Community and Sports Groups

Regular visits are made to beavers, cubs, scouts, brownies, ladybirds and guides as well as youth clubs, Comhairle na nÓg and Parents Groups, I.C.A. groups, Community Groups, GAA, soccer and rugby bodies in the county.
3.6.9 Third Level Colleges

Regular contact is maintained with Student Unions in both the Institute of Technology, Carlow and Carlow College. The Road Safety service of the Council has a strong presence at the annual Student Welfare Day in the Institute.

3.6.10 Motor Cycle Training

Over five years ago Carlow County Council offered one day Basic Motorcycling Skills courses with Sergeant Martin Reilly of the Head of the Garda Motor Cycling School, Phoenix Park. The course involved a fee, meals, local instructors, and volunteers as well as lunch. Demand for this course was too low to proceed.

3.6.11 Advanced Driver Training

Short courses leading to the Advanced Driving Test of the Institute of Advanced Motorists have been offered to the public in the county over a number of years. It is envisaged that these courses would be offered a number of times during the period of the plan subject to public demand.

3.6.12 Print Media

Adverts are bought regularly in print media circulating in the area. Press releases are submitted regularly to each print medium circulating in the area as part of awareness programmes undertaken.

3.6.13 Broadcast Media

Working with Kilkenny County Council’s Road Safety Staff, a number of innovative local radio road safety advertising campaigns have been conceived, developed and delivered in the past especially around bank holiday and Christmas periods.

Road safety topics are regularly included as part of the current affairs and features programming of the local station and Carlow’s Road Safety Officer has presented a number of one-hour magazine programmes with various guests.

3.6.14 Web Presence

It is planned to have regular updates of the road safety section of the Carlow local authorities website so that at any time it contains up-to-date information including pictures about local road safety events and activities especially ones which are planned for the near future.

3.6.15 Cinema Advertising

Since 2004/05 a local Road Safety Cinema Advert has been conceived, developed and delivered locally. Members of the Local Authority staff posed for a number of still pictures by a local photographer with a member of the Garda Síochána stationed in the area – dealing with speed, use of belts and drink driving.

The cinema advert runs 52 weeks of the year on all cinema screens in the county and is aimed at young drivers on evenings out.
3.6.16 Local and National Literature

Local literature has been developed for use at community events in the county. The literature gives advice to pedestrians, cyclists, drivers and passengers on roads in the county. The literature is distributed at health promotion, agricultural and community events in the county.

NSC and RSA literature is distributed regularly through Garda Stations, Driver Testing Centres and NCT centres as well as during visits to all groups in the county.

3.6.17 Public Seminars

A series of free public evening seminars were organised in October in each of the years 2001 – 2004. Decline in attendance prompted a re-investment of time and personnel into evening broadcasting to reach a bigger public from 2004 onwards.

3.6.18 Public Promotion Events

Other promotion events have included our “Lost Soles” campaign in December 2005 where shoes were placed on the white line on the N9 in Carlow town to represent those who lost their lives in road crashes. In April 2007 a rectangle of shoes was created in Fairgreen Shopping centre together with an information and leaflet stand during the first UN Global Road Safety Week.

Members of Comhairle na nÓg in conjunction with the Road Safety Officer visited post-primary schools in the county to deliver a hard-hitting road safety message to students during the same week.

3.6.19 Car Club

A two page layout of road safety advice was included in the 2007 programme for the Carlow Stages Rally and Ford Escort Mark II Challenge organised by Carlow Car Club.

3.6.20 The Courts Service

Two projects are currently underway with the Courts Service locally. Road Safety Awareness Training is being provided a number of times a year at a Carlow venue by a private company. This gives an extra option to judges in certain Road Traffic offence cases.

Road Safety staff and Courts service staff have jointly developed an information leaflet giving details of the effects and requirements of endorsements and disqualifications of licences.

3.6.21 Road Safety Together Working Group

Mr. Brendan Howlin, as Minister for the Environment, on 16th May, 1996, promoted the establishment of working groups in each county with a senior officer to co-ordinate and chair the group.

3.6.22 Road Safety Communications Plan

The Council has a Road Safety Communications Plan to deliver road safety messages to the public throughout the year through church, press, radio, cinema, school and community channels.
3.6.23 Calendar of Events

It is important that events, promotion and publicity in County Carlow reflect the calendar of events in Ireland and the world. Dates to remember in the current year include:-

- 16 – 24 June, 2007 Bike Week
- 4 – 6 July, 2007 IRSO Conference Bournemouth
- 12 – 13 September, 2007 Collision Reduction through research, technology and innovation: Symposium Toronto
- 19 September, 2007 Fleet Safety, Nuneaton
- 16 – 22 September, 2007 European Mobility Week
- 22 September, 2007 Car Free Day
- October, 2007 International Walk to School Month
- 5 – 11 November, 2007 Road Safety Week
- 7 November, 2007 Bright Walking Day
- 15 – 18 November, 2007 World Rally Championships, Belfast, Sligo, Leitrim, Roscommon and Donegal
- 18 November, 2007 World Day of Remembrance for Road Traffic Victims
- 21 November, 2007 Brake Annual Conference, Birmingham

3.6.24 School Wardens

The Road Safety staff have a unique role in the recruitment, selection, training, monitoring and support of School Wardens in the county. Training of new wardens and annual refresher courses are provided for School Wardens.

3.6.25 Road Works

A number of local authorities have formal arrangements where Road Safety staff are informed routinely in advance of the location and duration of all minor and major road works. This information is distributed to local media with appropriate advice for road users.

3.6.26 Planning and Development

Development control by the planning authority regulating development presents an opportunity for extra road safety measures. In other jurisdictions, comments are invited from Road Safety staff on proposed developments that involve exits to public roads near junctions, roundabouts and school warden crossings.

3.6.27 Dept of Transport and R.S.A. activities

It is important to have Carlow activities synchronised with those of the Department of Transport, National Roads Authority and the Road Safety Authority. Any advertising we undertake should tie-in with activities of the national bodies undertaking similar work.
3.6.28 Staff in RS Education and Promotion

The IMPACT union have for many years passed motions at their annual conferences (including the 2007 one) calling on various Ministers to appoint full-time Road Safety Officers and Assistants in every county and to ensure adequate support and resources to combat road carnage.

3.6.29 Continuing Professional Development

Road Safety staff will engage in continuing Professional Development. This will involve education and training in specific road safety areas and management organisation provided by recognised institutes in Ireland and abroad.

It is vitally important that the Road Safety staff should keep up to date on developments in this country, and all other relevant places.
3.7 Enforcement

An Garda Síochána continues to endeavour to reduce the incident of fatal and serious injury collisions and improve traffic flow through rigorous enforcement with regard to speeding, seatbelt use/child restraints and drink-driving offences.

Overall policy in relation to Garda Traffic Management on enforcement is co-ordinated by Assistant Commissioner Eddie Rock. Each Garda Division has a dedicated operational Garda Traffic Corps. The Carlow/Kildare Division have Traffic Corps based in Naas and Carlow and will soon be augmented by an additional unit based in Baltinglass. The present strength of the Carlow Traffic Corps is one Sergeant and sixteen Gardai with four marked cars and one motorcycle permanently attached. Road traffic management and enforcement activities carried out by the Traffic Corps Units across the divisions are augmented by all operational Garda personnel.

Presently Garda divisions do not coincide with county boundaries and, for example, the Carlow Traffic Corps have responsibility for parts of Laois, Kilkenny, Kildare and a large portion of County Wicklow including Baltinglass, Tinahely and Shillelagh. Likewise parts of County Carlow are the responsibility of other traffic units, for example, Borris and its surrounds are covered by the Thomastown Traffic Corps while Clonegal and the Whitemills to Bunclody area is policed by the Gorey Traffic Corps. The Garda Commissioner has indicated his intentions to initiate proposals to examine the alignment of Garda divisional boundaries with local authority areas during 2007.

During the course of 2006, the deployment of traffic personnel and resources increased significantly with the overall strength of personnel being increased from 563 to 805. An additional 38 vehicles (marked and unmarked) for dedicated Road traffic enforcement were purchased during the year. Additional vehicles were also purchased for allocation to Forensic Collision Investigators who are now allocated to each division to assist in the investigation of fatal and serious injury collisions. There are two such investigators in the Carlow/Kildare Division, with one being attached to the Naas Traffic Corps and the other attached to the Carlow Traffic Corps.

Traffic enforcement activities have been enhanced through the availability and use of new tools and technologies which radically reconfigure the capacity of the Garda organisation, through its members. The development of capabilities with regard to Automated Number Plate Recognition, Forensic Collision Investigator and the Fixed Charge Processing System are some of the more important initiatives which either have been developed or are at an advanced stage thereof. These initiatives coupled with legislative changes particularly with regard to drink-driving have collective implications which are far reaching in so far as the reduction in road traffic fatalities is concerned. The outsourcing of speed cameras scheduled for the end of 2007 should also assist greatly in the reduction of speeding incidents.

Extensive analysis has been carried out by An Garda Síochána in conjunction with the National Roads Authority, Ordinance Survey Ireland and the Local Government Computer Services Board with regard to collision history on our road network over the last ten years. Road sections measuring about 5-8 kilometres have been identified as having a particular propensity for collisions and have been categorised on a descending basis having regard to such propensity as Red, Amber and Green zones. Garda resources are focused particularly on these road sections referred to as “Collision Prone Zones”.

Greater emphasis is being placed on policing and management of risk. This implies a move towards increased focus on an ‘intelligence led’ approach and applying interventions to reduce such risk. Based on analysis of collision trends and drink driving incidents, targeted enforcement was carried out throughout the year with substantial resources deployed, particularly at weekends during the hours 12am to 8am. Enforcement capabilities were enhanced through the introduction of legislation permitting the operation of mandatory alcohol testing of drivers. Detected drink driving incidents recorded in 2006 increased by 34% when compared to 2005. Intelligence led targeting of high risk zones, led to increased activity in key road safety areas thus contributing to a reduction of road traffic offences and playing a significant part in the
Garda enforcement strategy to reduce deaths and injuries on our roads.

The number of fixed charge notices issued for speeding offences increased by 26% in 2006. Seat belt detections during the year increased by 48% compared to 2005. On the 3rd April 2006 an additional 30 offences became Fixed Charge Penalty offences and in September 2006 the use of the hand held mobile phones while driving became a penalty point offence. In excess of 6000 fixed charge notices were issued for this offence up to the end of the year.

An analysis of road fatalities during 2006 indicates that those in the 16 – 30 year old age group continued to be at most risk from road traffic related death with 160 in the category killed. The most dangerous times were between 6/8pm (42) and 2/4am (38) and 4/6pm(35) with the most dangerous days being Sunday (82), Monday (66) followed closely by Saturday (65). January was the worst month for fatalities with 40 deaths followed by July (39) and April (38) respectively.

An emerging trend noted during 2006, saw an increase in fatalities among the 65+ age group with 30 pedestrians killed during the year. This group will also be targeted through enforcement, education and prevention programmes, as part of the profiling process used to identify ‘vulnerable’ road users. During 2006, males accounted for 269 fatalities and females for 99. Drivers, passengers and pedestrians accounted for 170, 183 and 74 deaths respectively, representing almost 90% of all road fatalities.

<table>
<thead>
<tr>
<th>Detections</th>
<th>2006</th>
<th>2005</th>
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<tbody>
<tr>
<td>Drink Driving</td>
<td>17,868 (+34%)</td>
<td>13,370</td>
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<tr>
<td>Speeding</td>
<td>181,335 (+26%)</td>
<td>143,651</td>
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<tr>
<td>Seat Belt Wearing (Non Compliance)</td>
<td>26,687 (+48%)</td>
<td>18,084</td>
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<tr>
<td>Mobile Phone Usage (Offence since 1/9/06)</td>
<td>6,171</td>
<td>N/a</td>
</tr>
<tr>
<td>Dangerous Driving</td>
<td>5,810</td>
<td>4,786</td>
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</tbody>
</table>
3.8 Evaluation

The means of evaluating the efficacy of the proposed measures will be dependent on the measures chosen, and may vary from year to year in accordance with the Action Plan for that year. However the overall measure of the success of the Road Safety Plan relates to the numbers of fatal/injury accidents within the county at the end of the Plan's timespan.

3.9 Funding

Carlow County Council, the National Roads Authority, the Road Safety Authority, An Garda Síochána and the Health Service Executive have committed funding to the promotion of road safety and the implementation of engineering and enforcement measures for the lifetime of the plan.

These actions are listed in the action plan. The promotion measures include the visits to primary, post primary and third level educational establishments, press, radio and cinema campaigns, presentations to community groups and schools and general promotional activity.

Engineering commitments include low cost safety improvement measures at 8 No locations in the county, road safety auditing of all proposed road improvements, improvements in signing and lightning and periodic special speed limits. These engineering measures will cost approximately €200,000 in 2008.

Enforcement will be the responsibility of An Garda Síochána and will focus on speeding, seatbelt use/child restraints, drink-driving etc.

3.10 Monitoring

It will be the responsibility of the Road Safety Together Committee to manage the implementation of the successive Action Plan.

The Road Safety Officer of Carlow County Council will be responsible for ensuring the initiation of action in the identified areas of activity. The chairperson of the group will report progress to the members of Carlow County Council Strategic Policy Committee on a quarterly basis.
4 Action Plan 2007

4.1 General

The Annual Action Plans prepared under the Road Safety Plan will set out the specific targets for each year of the plan, and the proposed means and methods to be implied in the pursuit of these targets. The targets shall conform with the SMART objectives principal, e.g. that they are Specific, Measurable, Achievable, Realistic and Timed. In relation to the Timed aspect, this is set in advance in the Road Safety Plan by choosing to set and review the objectives on an annual basis.

In relation to the specificity, measurability, achievability and realism of the annual objectives these shall be the subject of discussions by the Road Safety Together Committee, and the respective participating organisations/bodies.

4.2 Overall Targets

The overall targets for road accident reduction within County Carlow for the period of the Road Safety Plan: -

- a reduction of 25% in the average number of road accident fatalities per population as measured over a three year period.
- a reduction of 33% in the average number of serious road accident injuries per population as measured over a three year period.
- the setting of an annual budget to address accident cluster sites, and an ongoing review of accident data for the county to identify accident cluster sites, to rank them for remedial action

These targets shall be achieved under the broad Road Safety Measures outlined within the County Road Safety Plan.

4.3 Annual Targets for 2008

- The convening of the Road Safety Together Committee.
- The exploration of the possibility of the appointment of a full-time Road Safety Officer jointly with an adjacent local authority.
- The establishment of a Road Safety Together Fatal Incident Investigation Team.

While it is acknowledged that achieving a statistically significant reduction in road accidents in one year would be hard to measure or assess, it is therefore not proposed that a percentage reduction target for a fatal/serious injury road accidents be set for 2008. It is intended in the targets set out above that solid foundations will be established for achieving sustained and significant accident reductions in the coming years. It is recognised that short-term measures will only result in short-term gain, and that in the medium to long term the current unacceptable situation could re-establish. Carlow Local Authorities and the other members of the Road Safety Together Committee will endeavour to implement measures which will have a lasting effect on road user behaviour and hopefully on road accident levels.
4.4 SMART Actions

4.4.1 General

The targets set out in the previous section are the end result desired by the time of the first annual review in January 2008. This section sets out the tasks required to achieve the targets. The tasks are set out in the SMART format, with named organisations responsible for delivery/completion of the task and an agreed deadline for completion.

4.4.2 Education & Awareness

<table>
<thead>
<tr>
<th>Task Description &amp; Desired Outcome</th>
<th>Responsible Organisation</th>
<th>Completion By</th>
<th>Budget</th>
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4.4.3 Engineering

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4.4.4 Enforcement

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4.5 Reviews

Reviews of the tasks outlined in the previous section will occur at the regular meetings of the Road Safety Together Committee. The reviews will attempt to ascertain progress towards completion and each task, and
may amend the task timetable or deliverable if deemed necessary. The committee will bear in mind that the completion of each individual task is subservient to the achieving of the overall Plan Objectives.