

# **Draft Regional Road Safety Strategy**

May 2004

# **Executive Summary**

The vision of the Draft Regional Road Safety Strategy is "to continuously improve the level of regional road safety based on a firmly established safety culture".

#### **Process**

This strategy has been developed as a facilitating document from the policies of the RLTS and in conjunction with a technical group comprised of representatives from Greater Wellington Regional Council, the region's territorial authorities, the New Zealand Police (Wellington region), Transit New Zealand (Wellington region), the Land Transport Safety Authority (Wellington region), the Regional Public Health Service and the Accident Compensation Corporation (Wellington region).

# Framing the issues

Figure 1 on the right indicates that despite the greater Wellington region making extensive improvements in road safety during the 1990s, casualties over the last four years have plateaued and renewed efforts are needed to help contribute to achieving the national 2010 road safety outcomes.

At the regional level four significant road safety issues were identified as being of particular concern:

- Intersections
- Loss of control
- Vulnerable road users (pedestrians, cyclists and motorcyclists)
- Road user behaviour (alcohol, speed, inattention)



Figure 1: I otal road casualties, Wellington region, 1990-2003 (LTSA, 2003a, 2004)

The results of people's perception of regional road safety are as expected with people feeling safer when driving a car, walking or using public transport than they do whilst using a bicycle.

# The Strategy

The objectives of the Regional Road Safety Strategy are:

- 1. To achieve or better the regional road crash reduction and road user behaviour targets as set by the national *Road Safety to 2010* strategy
- 2. To promote an improved road safety culture (which creates safer attitudes, skills and behaviour amongst road users)
- 3. To develop a safer roading environment (which will improve safety, personal security and public health)

Regional road safety is influenced by a number of agencies and the strategy seeks to continue enhancing the proactive and interactive best practice culture which exists among agencies in the greater Wellington region. It does so by clarifying the roles of these agencies in the action programme in working toward the vision and objectives.

Five critical integrated interventions based on the three "Es" of road safety are outlined:

#### **Engineering**

- Road Controlling Authorities to implement Safety Management Systems by 2007/08
- Road Controlling Authorities to seek adequate funding for safety works on an annual basis

#### **Enforcement**

- The Land Transport Safety Authority to implement and review quarterly Road Safety Action Plans with active participation and contribution from Road Controlling Authorities and The New Zealand Police leading to the achievement of agreed safety outcomes
- The New Zealand Police to implement Risk Targeted Patrol Plans to ensure more efficient and effective use of enforcement resources according to risk

#### Education

 Continued support of the role that Territorial Authority Road Safety Coordinators, New Zealand Police Education Officers, Accident Compensation Corporation Injury Prevention Consultants and Land Transport Safety Authority Education Advisors have in regional road safety education and promotion

The strategy action plan extends to 2007/08 and will be monitored against performance measures linked to specific interventions. An annual monitoring programme is also in place to measure system wide indicators for road safety. The strategy will be reviewed by September 2008.

#### **PART ONE**

### Introduction

The Regional Land Transport Committee (RLTC) wants to provide a safer community for everyone through a transport system that achieves or improves on targets of the national *Road Safety to 2010* (RS2010) strategy. We intend to re-establish the significant road safety gains made in the 1990s through a renewal of nationally and regionally proven best practice road safety interventions. This strategy sets out a vision shared by the region's key agencies involved in road safety and sets objectives for the improvement and promotion of road safety.

#### Vision

To continuously improve the level of regional road safety based on a firmly established safety culture.

# Strategy purpose

The purpose of this strategy is to signal key regional intentions for road safety; setting out a blueprint for making progress in the development of a road safety culture.

This strategy seeks to continue enhancing a proactive and interactive culture among agencies for the development and advancement of road safety in the greater Wellington region. It intends to clarify the roles of Road Controlling Authorities (RCAs), the Land Transport Safety Authority (LTSA), the New Zealand Police (Police), Transit New Zealand (Transit), the Accident Compensation Corporation (ACC), health authorities and Greater Wellington Regional Council (GWRC) in working toward the vision and objectives.

This strategy frames road safety issues from a regional perspective and identifies key objectives and actions that are:

- directly aimed at resolving regional road safety issues
- achievable at regional and local levels; and
- measurable, to enable an adaptive and ongoing strategy for road safety.

When adopted, this strategy will form a chapter of the Regional Land Transport Strategy (RLTS).

# Strategy development

This strategy has been developed from the policies of the RLTS and in conjunction with a technical group comprised of representatives from GWRC Access Planning, the region's TAs, Police (Wellington region), Transit (Wellington region), LTSA (Wellington region), the Regional Public Health Service (RPH), and ACC (Wellington region). This strategy has been designed to enable the key road safety partners with the ability to continue following work programmes relevant to the road safety issues of the day.

The RLTC has approved the draft to be released for public consultation. The final date for submissions is 5 July 2004. Submissions will be considered by the technical group and

appropriate recommendations for revisions made to the RLTC. If you would like the opportunity to be heard please indicate this in your submission. The final strategy is expected to be released in August 2004.

Please forward all submissions by 5 July 2004 to:

Günther Wild Greater Wellington Regional Council PO Box 11646 Wellington gunther.wild@gw.govt.nz

Please include full reply contact details in your submission.

# Roles and responsibilities

### **Regional Land Transport Committee (RLTC)**

The Land Transport Act 1998<sup>1</sup> requires every regional council to establish an RLTC comprised of representatives as stated in s178(2) of the Act. The RLTC is to prepare an RLTS for approval by the regional council.

### **Greater Wellington Regional Council (GWRC)**

GWRC participates in planning and monitoring the regional transport network via the RLTC and subsequent RLTS. GWRC monitors progress toward implementation of the RLTS, as required by the Land Transport Act 1998. GWRC relies heavily on transport agencies to progress RLTS policies and provisions. This Regional Road Safety Strategy stems from the policies contained in the current RLTS (WRC, 2000) which establishes a direction for improving road safety in the region. GWRC also has a minor role in coordinating regional road safety. GWRC's major role is planning and funding non-commercial passenger transport services.

### Land Transport Safety Authority (LTSA)

The main purpose of the LTSA is to reduce death and injury on our road systems through activities which promote safety at reasonable cost. The LTSA manages the safety framework for users of the roading network, in part by promoting improvements in the roading environment, ensuring compliance with safety standards, providing safety information and advice, and fostering education programmes. The LTSA is responsible for administering the New Zealand Road Safety (Administration) Programme (SAP) which has a particular focus on Police traffic enforcement and road safety education, as well as the national Road Safety Trust which makes funding available for road safety education, information, promotion and research projects. The LTSA Wellington regional office also has a key role facilitating the development of Safety Management Systems (SMSs) and Road Safety Action Plans (RSAPs) in conjunction with Road Controlling Authorities and the New Zealand Police within the

 $<sup>^{\</sup>mbox{\tiny 1}}$  As amended by the Land Transport Management Act 2003

region, as well as collating and analysing crash data throughout the region and disseminating best practice road safety advice.

### **New Zealand Police (Police)**

The Police are dedicated to reducing traffic offending, particularly the types of offences that promote crashes and injuries. Enforcement is the main intervention available to Police to achieve reductions in offending as they work in partnership with engineers and educators to make the greater Wellington region's roads safer. Along with enforcement, Police also have a key role investigating crashes and attending emergencies on the roads and are responsible for developing RSAPs and Risk Targeted Patrol Plans (RTPPs) to ensure more effective and efficient use of enforcement resources.

### **Road Controlling Authorities (RCAs)**

RCAs are responsible for identifying transport needs and implementing remedial measures as necessary on their respective networks. RCAs are responsible for contributing to the RSAP process with the implementation of agreed actions. Some RCAs in the region are also developing and implementing voluntary SMSs. SMSs ensure RCA decisions about construction, maintenance and management of road networks lead to the achievement of clear safety targets. RCAs include Transit New Zealand and Territorial Authorities.

#### Territorial Authorities (TAs)

TAs have a number of regulatory, road safety and planning roles, and ownership interests in transport, largely set out in the Local Government Act 1974. The Local Government Act 2002 also sets out their role in promoting social wellbeing in local communities; of which, road safety provisions are a key component. District and city councils own and operate the local road network. However, their land transport decisions are required to take into account the RLTS relevant to their area. Road safety needs represent an integral part of the current RLTS. TAs in the greater Wellington region are also responsible for employing road safety coordinators, who play a key role in educating, promoting and co-ordinating community awareness of road safety. Road safety coordinators and their activities are jointly funded by the LTSA and respective TAs.

#### Transit New Zealand (Transit)

Transit is responsible for managing the state highway network, through the state highway programme and in a similar manner to TAs, must take into account the current RLTS.

### Transfund New Zealand (Transfund)

Transfund is a Crown entity established in July 1996 under the Transit New Zealand Act 1989. Under the Land Transport Management Act 2003, Transfund's principal objective is to allocate resources in a way that contributes to an integrated, safe, responsive, and sustainable land transport system.

#### Regional Public Health (RPH)

RPH promotes positive health outcomes by supporting healthy public policy, community action, healthy environments and the development of individual skills for wellbeing. The Injury Prevention Team has a strong interest in this strategy.

### **Accident Compensation Corporation (ACC)**

ACC aims to reduce road crashes and their resultant injuries by working with key road safety partners. ACC has a lead role in the implementation of the New Zealand Injury Prevention Strategy's implementation plan, of which road safety forms a significant part. ACC also aims to provide effective and timely treatment and rehabilitation when injury occurs.

### Strategy structure

Part One of this document frames the regional context for road safety, including agency roles, road safety issues and policy context. Part Two presents the strategy, including the vision and objectives. A detailed action plan describes more specifically how the objectives are to be achieved. Performance measures are specified to enable monitoring and review of the region's progress toward its objectives and ultimately the vision.



# **Strategy Context**

### **Policy context**

### **National Road Safety Policy**

The New Zealand Transport Strategy (NZTS) released in December 2002, guides New Zealand (NZ) transport policy at all levels to create a sustainable, affordable, integrated, safe and responsive transport system. The NZTS specifically supports road safety though the objective "assisting safety and personal security" (MOT, 2002, p18).

RS2010, the national road safety strategy released in October 2003 further develops the wider central government objectives identified in the NZTS and conveys the government's direction for road safety in NZ to the year 2010. RS2010 provides the strategic direction for significantly reducing deaths and injuries on our roads and draws together the government's overall approach to meeting the goals. The strategy has three key areas of action, called the three "E's" of road safety: education, engineering and enforcement and recognises that using one "E" will not necessarily work. Instead an integrated approach, using all of the "E's" is required to make a difference and achieve the 2010 goals (LTSA, 1998-2004). Specific 2010 greater Wellington regional goals will be set as the RS2010 strategy progresses (LTSA, 2003b).

The New Zealand Road Safety Programme, better known as the SAP is the annual programme of work detailing activities the LTSA, Police and TAs anticipate undertaking at a national, regional and local level to achieve the goals of RS2010 for the upcoming fiscal year. SAPs are the "critical delivery system" of RS2010, binding together key road safety partners into firm partnerships aimed at improving road safety (LTSA, 2003c, p3).

The New Zealand Injury Prevention Strategy (NZIPS) outlines key activities that government agencies will undertake, in partnership with local government, non-government organisations, community groups and individuals. The NZIPS establishes central government's injury prevention priorities and affirms central government's commitment to addressing the impact that injuries have on the community. A key priority area for action is motor vehicle crashes. The vision of a safe NZ becoming injury free will guide and inspire efforts now and in the future (ACC, 2003).

It is intended that the principles of this strategy and the above work are consistent.

### Regional Land Transport Strategy (RLTS)

The Land Transport Act 1998 requires regional authorities to produce regional land transport strategies that contribute to the overall aim of achieving an integrated, safe, responsive, and sustainable land transport system. The region's RLTS (WRC 2000, p47) has responded to these needs in a number of ways outlined in *Objective 4: Safety*:

#### Objective 4 Safety:

Provide a safer community for everyone through a transport system that achieves or improves on the national road safety targets by:

Theme 4.1: Improving the safe operation of the transport network

- Policy 4.1.1: Developing programmes that improve the skills and behaviour of people using the transport system
- Policy 4.1.2: Planning development and design to improve road infrastructure and safety
- Policy 4.1.3: Developing a safety culture with respect to travel assisted by more effective coordination of the planning and implementation of road safety programmes
- Policy 4.1.4: Encouraging greater use of cycling and walking for local trips
- Policy 2.2.6: Introducing traffic calming in residential areas

Specific roading projects that have been designed primarily to improve road safety are also listed in the RLTS. These projects are:

- Completing safety improvements at McKays Crossing junction
- Completing safety improvements on State Highway One north of Paremata
- Providing safety improvements to State Highway 58

The current review of the RLTS will specify new regional safety related roading projects to be achieved in the future.

This strategy is derived directly from the RLTS and intends to develop and respond to the needs, objectives and themes detailed above.

# Framing the Issues

An extensive issue framing exercise was undertaken in the preliminary stages of strategy development by GWRC and LTSA's Wellington regional office, analysing trends in regional road safety data over the last 14 years<sup>2</sup> (since 1990), with a particular focus on trends over the last five years. Appendix 1 provides a detailed report on the regionally significant road safety issues that were identified, while a background and issue summary is outlined below. Rural and urban crashes for all TAs in the region were grouped together, to develop an understanding of the regionally important issues.

#### **Total casualties**

1 details Table total road casualties<sup>3</sup> reported in the region for the last 11 years, broken into local body areas. The majority of casualties occuring are Wellington and Hutt Cities. This is consistant with the fact that they are the region's largest cities. All areas show either an increasing or static trend. Road casualty numbers the region as a significantly decreased during the 1990's but have plateaued in the last four years (figure 1).

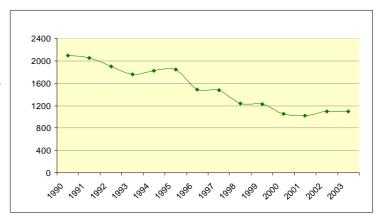


Figure 1: Total road casualties, Wellington Region, 1990-2003 (LTSA, 2003a, 2004

 $<sup>{\</sup>ensuremath{^{2}}}$  Please note that all 2003 data quoted is provisional until published by LTSA

<sup>3</sup> Casualty: reported death or injury resulting from crashes involving a motor vehicle

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wellington City	671	713	714	544	464	486	399	357	396	395	372
Porirua City	157	224	199	142	154	117	97	116	86	103	135
Upper Hutt City	127	125	117	123	133	99	103	84	77	66	89
Hutt City	435	460	421	374	380	309	331	248	229	257	241
Kapiti Coast District	203	155	203	151	163	104	141	96	97	128	97
Masterton District	88	80	100	92	103	76	84	87	77	82	95
South Wairarapa District	35	37	52	26	40	35	42	38	38	34	40
Carterton District	39	35	35	39	37	13	35	28	23	32	27
Wellington Region	1755	1829	1841	1491	1474	1239	1232	1054	1023	1097	1096

Table 1: Total casualties 1993-2003 for Wellington region, broken into local body areas (LTSA, 2003d, 2004)

# Road safety risk by age group

As expected, the 15-29 age group most at risk and over represented in the casualty data compared to their population proportion (figure 2), signifying the problems associated with inexperienced drivers. young, While casualties in the Wellington region are slightly lower (18%) than the national average (19%) in the 15-19 age group, Wellington region is slightly higher (17%) than the national average (16%) in the following 20-24 age group. This suggests there is potential for improvements in driving skill for the 15-29 age

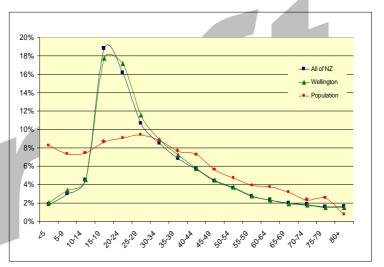


Figure 2: Wellington region road casualty age profile, 1990-2003 (LTSA, 2004)

group, but may be related to population demographics.

# Relative modal risk using exposure indicators

Determining the relative risk of each mode is done using the "exposure-to-risk" indicator injury crashes per trip<sup>4</sup> (Frith, 2000) and data sourced from the travel estimates generated by the New Zealand Travel Survey 1997/98 (LTSA, 2000). Figure 3 illustrates these risks for the Wellington region. The graph shows that vulnerable road users such as cyclists and motorcyclists are much more likely than a vehicle or bus occupant, to be involved in an injury/death crash. For example a

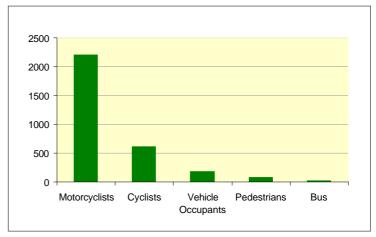


Figure 3: Reported deaths and injuries in Wellington region per 100 million trips (LTSA, 2000)

motorcyclist is twelve times more likely than a vehicle occupant on any given trip to become a casualty.

# Strategy implications

Despite excellent, proactive working relationships among the key road safety partners, greater Wellington's road safety casualty numbers have plateaued in recent years and a renewal of proven initiatives is needed to contribute to the national 2010 targets outlined in RS2010.

Four regionally significant road safety issues have been identified (see Appendix 1):

- Intersections
- Loss of control
- Vulnerable road users (pedestrians, cyclists and motorcyclists)
- Road user behaviour (alcohol, speed, inattention)

They are addressed in the action programme section of the strategy. Traditionally, improvements to road safety have been achieved through engineering, education and enforcement. In line with RS2010, it is suggested that improvements can come about via these three areas.

<sup>4</sup> Notes at the end of the strategy detail the limitations of this kind of data and should be read in conjunction with this section of the strategy

#### **PART TWO**

# The Strategy

### **Vision**

To continuously improve the level of regional road safety based on a firmly established safety culture.

## **Objectives**

The objectives for the Regional Road Safety Strategy are as follows:

- 1. Achieve or better the regional road crash reduction and road user behaviour targets as set by the national RS2010 strategy
- 2. Promote an improved road safety culture (which creates safer attitudes, skills and behaviour amongst road users)
- 3. Develop a safer roading environment (which will improve public health, safety and personal security)

The following section details the strategy action programme which is an integrated package of interventions incorporating aspects of engineering, education, and enforcement to achieve the outcomes stated below. Regional road safety is affected by a number of agencies and the Strategy seeks to continue and enhance the proactive and interactive culture which exists among agencies in the greater Wellington region as well as clarifying the roles of these agencies in working toward the vision and objectives.

#### **Outcomes**

The major outcomes sought from this strategy are:

- Improved regional road safety
- Improved perceptions of road safety
- A safer roading environment

We expect to see positive outcomes over all indicators (with the primary indicator being that of regional road crash figures and road user behaviour data) as a result of successful implementation of the interventions detailed in the action programme.

# **Targets**

The short and long term Wellington regional targets for deaths<sup>5</sup> and hospitalisations<sup>6</sup> of this strategy are as follows:

	2004 <sup>7</sup>	2010 <sup>8</sup>
Deaths plus hospitalisations not exceeding	300	245
Deaths plus hospitalisations of more than 1 day not exceeding	200	158
Deaths plus hospitalisations of more than 3 days not exceeding	120	95



<sup>5 &</sup>quot;Deaths are injuries that result in death within 30 days of the crash" (LTSA, 2003b, p12)
6 "Hospitalisations are the number of hospital admissions reported by the New Zealand Health Information Service. Along with deaths, the number of people hospitalised for more than one day and more than three days have been included as measures of more serious injuries (LTSA, 2003b, p12) <sup>7</sup> LTSA, 2003b, p12

<sup>8</sup> Specific 2010 targets have yet to be determined by LTSA for the Wellington region, and the targets have been determined using the regional proportions applied in RS2010

# **Action Programme**

Actions	Responsibility & Role	Timing	Target	Individual Action Performance Measure	System Objective Performance Indicators	
Safety Management Systems Ensure that RCA's decisions about construction, maintenance and management of road networks lead to the achievement of clear safety targets using LTSA best practice guidelines	RCAs (Development and implementation)	Ongoing All RCAs to have a SMSs in place by the start of the 07/08 financial year		Number of RCAs that have SMSs in place	<ul> <li>New Zealand Health Information Service death and hospitalisation data</li> <li>LTSA annual regional crash data</li> <li>LTSA annual regional</li> </ul>	
Road Safety Action Plans Key partners agree on the road safety risks, identify objectives, direct tasks (including policing), set targets, develop plans, and adequately fund, monitor and review progress for each TA (LTSA, 2003c)	LTSA with TAs, Police and Transit (Development and implementation)	Quarterly, ongoing	All TAs to have a RSAP and quarterly review programme in place by the start of the 05/06 financial year	Number of TAs that have RSAPs in place	<ul> <li>attitude survey</li> <li>GWRC biannual perception survey</li> <li>Significant regional road safety education campaign evaluation results</li> <li>LTSA Safety (Administration) Programme</li> </ul>	
Road Safety Co-ordinators, Police Education Advisors, ACC Injury Prevention Consultants and LTSA Regional Education Advisors Ensure that appropriate local education campaigns are undertaken as well as ensuring national strategic road safety campaigns are devolved to a regional and local level to help promote an improved safety culture	TAs, Police, ACC and LTSA (Development and implementation) GWRC (Facilitation)	Ongoing	Road safety education is promoted at every feasible opportunity at a TA level and a regionally focussed campaign is carried out at least annually	To be determined for each project		
Risk Targeted Patrol Plans The Police implement Risk Targeted Patrol Plans to ensure more efficient and effective use of enforcement resources according to risk	Police (Development and implementation)	Ongoing	All areas of the Wellington Policing District to have a RTPP and annual review programme in place by 04/05 financial year	Number of policing areas that have RTPPs in place		
Adequate RCA Road Safety Funding RCA's to seek adequate funding for road safety works	RCAs (Development and implementation)	Annually, ongoing	Sufficient funding is included in annual budgets to ensure safety programmes can be fully implemented	Road safety funding included in annual budgets		

# Monitoring and Review

GWRC and the Wellington regional office of LTSA will have primary responsibility for all monitoring at the regional level. Progress with strategy actions will be monitored against respective performance measures on an ongoing basis. Reporting will be in the RLTS AMR and back to an annual meeting of the Regional Road Safety technical group. The strategy will undergo a full review by September 2008.



## References

- Accident Compensation Corporation (ACC) (2003) New Zealand Injury Prevention Strategy. Wellington: Accident Compensation Corporation
- Frith, W.J. (2000). What Travel Survey Information Tells Us About Cycling and Cycle Safety in New Zealand? Wellington: Land Transport Safety Authority. Unpublished report. Retrieved December 11, 2003 from: http://www.eeca.govt.nz/content/sustainable\_transport/cycle/frith.pdf
- Land Transport Safety Authority (LTSA) (1998-2004). *Road Safety to 2010. Questions and answers.* Retrieved January 22, 2004 from: http://www.ltsa.govt.nz/strategy-2010/q-and-a.html
- Land Transport Safety Authority (LTSA) (2000). *The New Zealand Travel Survey 1997-1998*. Wellington: Land Transport Safety Authority.
- Land Transport Safety Authority (LTSA) (2003a). *Greater Wellington Region 1998-2002: Road Safety Report*. Wellington: Land Transport Safety Authority
- Land Transport Safety Authority (LTSA) (2003b). *Road Safety to 2010*. Wellington: Land Transport Safety Authority
- Land Transport Safety Authority (LTSA) (2003c). New Zealand Road Safety Programme: Safety (Administration) Programme 2003-2004. Wellington: Land Transport Safety Authority and New Zealand Police
- Land Transport Safety Authority (LTSA) (2003d). 1998 2002: Road Safety Reports. Wellington: Land Transport Safety Authority (Wellington region and comprising city/district reports).
- Land Transport Safety Authority (LTSA) (2004). Road Safety Report data. Unpublished.
- Ministry of Transport (MOT) (2002). New Zealand Transport Strategy. Wellington: Ministry of Transport
- Wellington Regional Council (WRC) (2000). *The Wellington Regional Land Transport Strategy* 1999 2004. Wellington: WRC

Notes on the *New Zealand Travel Survey* Data (LTSA, 2000)

- 1. Injury data: reported motor vehicle injury crashes from the Police Traffic Crash Reports database maintained by the LTSA.
- 2. Regions: the travel survey regions refer to residents of the selected regions. In the crash data, the given region is the region in which the crash occurred. These are not identical. For cyclists, pedestrians and bus passengers one would expect a high correlation. For the risk estimates to be valid for vehicle occupants, it is necessary to assume that travel by regional residents outside the region is matched by travel by non-residents inside the region.
- 3. The injury statistics only include injuries in crashes reported to the Police and which involve a motor vehicle. Cyclist-only, pedestrian-only and cycle-pedestrian crashes are not included in these figures. The risk estimates will therefore underestimate the total injury risk to cyclists and pedestrian's. Information on cyclists and pedestrians hospitalised from on-road non-motor vehicle crashes may be obtained from New Zealand Health Information Services, but the two data sets deal with different populations and should not be combined.

# **Appendix 1**

# Wellington Region's Road Safety Profile

An extensive issue framing exercise was undertaken in the preliminary stages of strategy development by Greater Wellington Regional Council (GWRC) and the Land Transport Safety Authority's (LTSA) Wellington regional office, analysing trends in regional road safety data over the last 14 years (since 1990), with a particular focus on trends over the last five years. Data was collected, primarily using the *Road Safety Issues Report* documents (LTSA, 2003a) and preliminary 2003 LTSA crash data (LTSA, 2004), providing important LTSA crash data that allows regional road safety issues to be evaluated.

Other data sources for this section include the 2002/03 Annual Report on the Regional Land Transport Strategy (AMR) (GWRC, 2003) which supplies indicators of transport accessibility within the greater Wellington region, enabling us to build a picture of road safety perceptions and activity for the region. Information obtained from Census Journey to Work data (Statistics New Zealand, 2001) was also used for this section. Issues identified as being of most concern in the greater Wellington region are outlined below. Rural and urban crashes for all Territorial Authorities (TA) in the region were grouped together, to develop an understanding of the regionally important issues.

#### Intersections

Crashes occurring at intersections is an area of concern at both a regional and national level, hence LTSA's recent nation-wide "take look at intersections" another media campaign. While Wellington intersection crashes remained relatively static over the last 14 years, they have begun to track higher than the New Zealand (NZ) average since 2000, and the current rate of 39% of all crashes in 2003 (figure 4) is a concern. Added to this is that almost one third of all crashes involve the vulnerable road users cyclists and pedestrians.

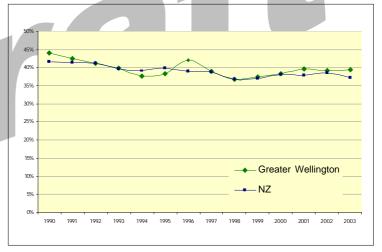


Figure 4: Wellington region intersection crashes, 1990-2003 (LTSA 2003a, 2004)

Also, almost a half of all crashes involved a driver failing to give way or stop. Intersection interventions can include strategic, systematic enforcement through the Road Safety Action plan (RSAP) process and Risk Targeted Patrol Plans (RTPP), education campaigns (local and national) and Road Controlling Authority (RCA) reviews of intersection design control and signal phasing.

#### Loss of control

Loss of control crashes as a percentage of all crashes on the region's roads increased between 2002 and 2003 to 33% (figure 5). While this is lower than the national average of 40%, it is still a high proportion of crashes and therefore of concern, especially given 22% of all loss of control crashes involved alcohol as a factor (compared with 12% of all crashes regionally) and 35% involved speed/too fast for conditions as a factor (compared with 16% of all regional crashes). The speed and alcohol components of loss of

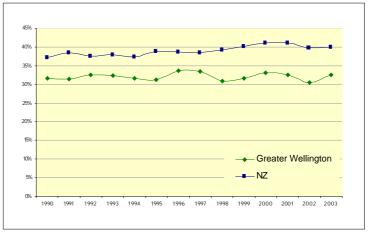


Figure 5: Wellington region loss of control crashes, 1990-2003 (LTSA, 2003a, 2004)

control crashes can often be best addressed by enforcement through RSAPs, as well as RCA Crash Reduction Studies of known black spots.

#### Vulnerable road users

Vulnerable road users are those road users such as pedestrians, cyclists and motorcyclists who are more exposed than drivers of enclosed vehicles when using the region's roads. They are often more severely injured when involved in crashes with cars, vans and trucks. It must be noted that only pedestrian and cyclist crashes involving motor vehicles are represented in the following statistics, and so an element of under-reporting is present.

figure As 6 shows, cyclist casualties as a percentage of total casualties have fallen over the last two years, to 7% of all casualties in 2003. Although a relatively low percentage, when mode usage is taken into account, the casualty level is of considerable concern (see figure 2, above). Greater Wellington's cycling casualty figures were also over 1% higher than the national average in 2003 and intersections are the most likely place for a cycling crash to

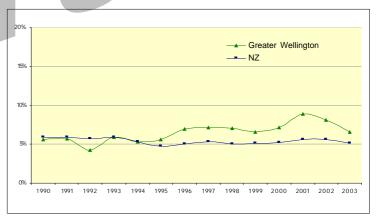


Figure 6: Wellington region cyclist casualties, 1990-2003 (LTSA, 2003a,2004)

occur. These factors make cycling safety a high concern for the region, and a separate Regional Cycling Strategy has been developed to address cycling issues.

On census day 2001, 12,240 people in Wellington City said that they walked to work (Statistics New Zealand, 2001). With such high walking rates in the central business district, it is no surprise that the greater Wellington region has one of the highest pedestrian casualty rates in NZ (13% in 2003) (figure 7). This casualty rate is over 5% higher than the NZ average of 8% in 2003 and makes pedestrian safety a high concern. Again, a separate Regional Pedestrian Strategy has been developed to address pedestrian issues.

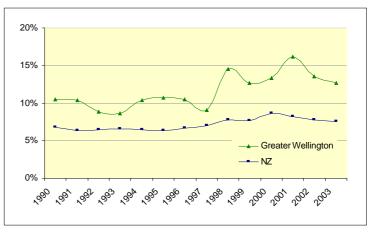


Figure 7: Wellington region pedestrian casualties, 1990-2003 (LTSA, 2003a, 2004)

As figure 8 shows, motorcyclist casualties as a percentage of total casualties have fallen over the last 14 years to 5% of all casualties in 2003. Although a relatively low percentage and continuing to fall, when mode usage is taken into account, the motorcycle casualty level is of considerable concern (see figure 2). Further, 43% of casualties involving motorcyclists in the region over the last five years were either fatal or serious, compared with 24% of all crashes in the region. Speed (of both motorcyclists and other road users)



Figure 8: Wellington region motorcyclist casualties, 1990-2003 (LTSA, 2003a, 2004)

is often a factor in motorcyclist crashes. This can be dealt with by enforcement, in addition to competency based training programmes for learner motorcyclists.

#### Road user behaviour

Road user behaviour is a factor in most crashes on the region's roads. This is why LTSA targets nationwide behaviour issues such as speed and alcohol through its education campaigns. These are backed up by the Police enforcing safety standards and holding irresponsible road users to account with effective enforcement and appropriate penalties (LTSA, 2003b, p25). The greater Wellington region's roads are no exception, and road user behaviour in an issue that needs addressing.

Significant reductions in alcohol related crashes have occurred on the region's roads during the 1990's (figure 9). This can be attributed to LTSA and the Police's national and local education and enforcement campaigns, causing a culture shift within NZ from a time when drink driving was acceptable, to now, when it is shunned by NZ's communities. During 2003. specialist Tactical Alcohol Group (TAG) unit of the Wellington Police was launched, dedicated to apprehending offending drink

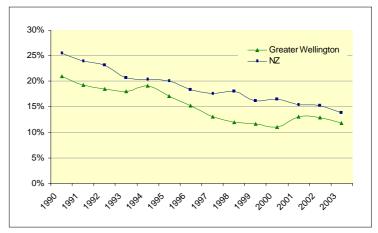


Figure 9: Wellington region alcohol crashes, 1990-2003 (LTSA, 2003a, 2004)

drivers on the region's roads. The effect of the unit is already evident in figure 9, with alcohol as a crash factor dropping by over 1% in 2002-03 to 12%. While this is still lower than the NZ average (14% in 2003), it remains a significant proportion which warrants ongoing attention. This is especially so considering 34% of alcohol related crashes over the last five years were either fatal or serious, compared with 24% of all crashes in the region. Also a recent emerging trend of recidivist<sup>9</sup> drink drivers is of concern, as is the emergence of peak drink driving crash times on both these issues that can be addressed through Police RTPPs.

Speed has been targeted by the LTSA (education) and the Police (enforcement) throughout the last decade. Speed as a factor in crashes has slowly declined in that period (figure 10). Speed contributed to 14% of crashes in the region in 2003. While this was lower than the 2002 figure, it is still the third highest contributor to total crashes in the region over the last five years. Further, over the last five years crashes that had speed as a factor were more likely to result in a fatal or serious injury (32%),

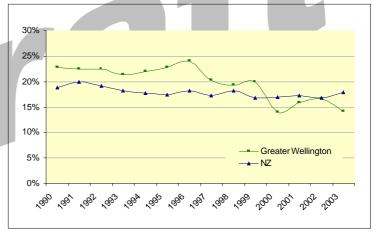


Figure 10: Wellington region speed crashes, 1990-2003 (LTSA, 2003a, 2004)

compared with 24% of all crashes in the region. The LTSA's driving attitude surveys also indicate people perceive they can drive faster than the legal speed limit on open roads. This is demonstrated in that speed is a more significant contributing factor in rural road crashes, than their urban road counterparts. Alcohol is another road user behaviour issue and was involved in 23% of speed related crashes. Intervention measures include recent targeting of Police enforcement campaigns for alcohol and excessive speed, area traffic calming such as Wellington City Council's "safer roads" project and national and local education publicity campaigns.

<sup>9</sup> Recidivist: someone who is repeatedly arrested for criminal behaviour (especially for the same criminal behaviour)

Poor observation is the key behaviour issue in the region, being involved in 46% of all crashes in 2003 (figure 11), and is therefore the single largest crash factor on the region's roads over the last five years. Poor observation has also gone against the static or declining trends seen in most other issues, and significantly increased over the last 14 years at a higher rate than the NZ average.

Failing to give way or stop is the region's second largest single crash factor, being a factor in 23% of all crashes in 2003 (figure 12). While this was slightly down on 2002, failure to give way or stop has not shown any significant improvement over 14 years and maintains its position as one of the region's most significant road safety issues.

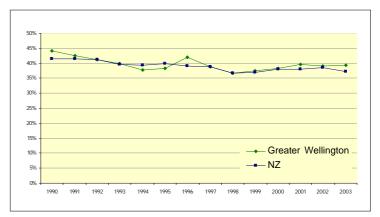


Figure 11: Wellington region poor observation crashes, 1990-2003 (LTSA, 2003a, 2004)

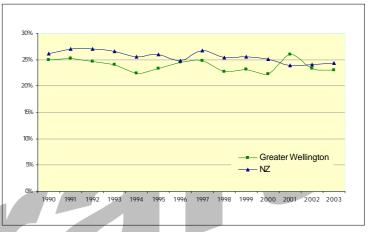


Figure 12: Wellington region failure to give way/stop crashes, 1990-2003 (LTSA 2003a, 2004)

# Safety perceptions

Figure 13 shows the results of a perception survey (NRB, 2003) conducted in July 2003 and published in the 2003 AMR showing that people perceive they are safest while driving a car (85%), followed by walking and using public transport (70% and 68% respectively), with cycling perceived as the least safe transport choice (with only 29% respondents perceiving cycling as "safe"). User perceptions important indicators, as they can give an indication as to why

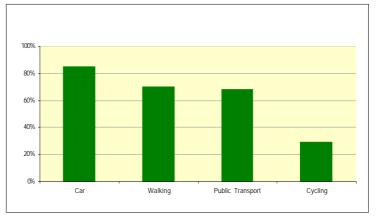


Figure 13: Wellington region transport safety perception, 2003 (NBR, 2003)

transport modes are not being used to their full potential.

# **Strategy Implications**

Despite excellent, proactive working relationships among the key road safety partners, greater Wellington's road safety casualty numbers have plateaued in recent years Four regionally significant road safety issues have been identified as being of regional concern:

- Intersections
- Loss of control
- Vulnerable road users (pedestrians, cyclists and motorcyclists)

Road user behaviour (alcohol, speed, inattention)

To address these issues and contribute to the national 2010 targets outlined in the national *Road Safety to 2010* strategy a renewal of proven initiatives such as Safety Management Systems, RSAPs and RTPPs are required.



### References

Greater Wellington Regional Council (GWRC) (2003). 2002/2003 Annual Report on the Regional Land Transport Strategy. Wellington: Greater Wellington Regional Council

Land Transport Safety Authority (LTSA) (2003a). *Greater Wellington Region 1998-2002: Road Safety Report*. Wellington: Land Transport Safety Authority

Land Transport Safety Authority (LTSA) (2003b). *Road Safety to 2010*. Wellington: Land Transport Safety Authority

Land Transport Safety Authority (LTSA) (2004). Road Safety Report data. Unpublished.

National Research Bureau (NRB) (2003). *Greater Wellington Regional Council Transport Perceptions Survey*. Report to GWRC July 2003.

