# Your Road Safety Levy at Work

First Year Progress Report



## **Executive Summary**

The Tasmanian Government is strongly committed to reducing the number of deaths and serious injuries on our roads. Although we have achieved significant reductions in casualty crashes in recent years, every life is precious and far too many people continue to be killed and injured on our roads. A key message is that most crashes are preventable. The Government has a plan for action contained in the Tasmanian Road Safety Strategy. It will continue to do more, but it can't do it alone - we all have a role to play in road safety.

The *Tasmanian Road Safety Strategy 2007-2016* provides the strategic direction for road safety initiatives in Tasmania for the next 10 years. The Strategy contains four key Strategic Directions. These have been identified through research and expert advice as most likely to reduce the level of serious casualty crashes:

- Strategic Direction 1: Safer Travel Speeds
- Strategic Direction 2: Best Practice Infrastructure
- Strategic Direction 3: Increased Safety for Young Road Users
- Strategic Direction 4: Enhanced Vehicle Safety

There are many actions we could take to improve road safety. However Tasmania is a small State with limited resources. We need to select initiatives that are evidence-based, achievable and which are targeted to achieve the biggest reduction in fatalities and serious injuries. Our focus is on implementing a select number of initiatives - and doing these well.

The **road safety levy** was introduced on 1 December 2007, for five years, to provide additional funding for road safety initiatives under the Strategy. It provides the ability to implement road safety initiatives in addition to those already funded by Government through the Consolidated Fund. The levy is \$20 (\$12 concession) per annum for each registered vehicle in Tasmania. Restricted access vehicles (such as farm vehicles) are exempt from the levy.

The levy is paid into a dedicated trust fund that can only be spent on road safety. The levy is only expended on costs associated with initiatives under the Strategy, and all expenditure is approved by the Minister for Infrastructure, on the advice of the Tasmanian Road Safety Council.

Around three quarters of the levy is allocated to Best Practice Infrastructure projects. This report lists the key road safety initiatives funded during the first year of the levy. These include:

- Installation of 21.5 km of Flexible Safety Barrier on Tasmania's major highways and arterial roads. Locations include the Tasman Highway, Southern Outlet, Brooker Highway and Bass Highway.
- Dollar-for-dollar funding for Councils to undertake traffic calming treatments in shared urban spaces. Projects undertaken by Clarence Council, Derwent Valley Council, Glenorchy City Council, Hobart City Council, Kentish Council and Latrobe Council.
- Trial of electronic speed limit signs at Perth Primary School, Spreyton Primary School and Margate Primary School.
- Installation of motorcycle safety infrastructure, including 'stack cushions' at the Mornington Interchange, and 5kms of 'rub rail' at the following locations: Channel Highway, Tasman Highway, Grass Tree Hill Road, Lyell Highway, Frankford Road and Lake Leake Main Road.
- Demonstration and trial of safer default rural travel speeds in Kingborough and Tasman Municipalities.
- Reforms to the Novice Licensing System (Stage 1):
  - o a minimum two year provisional period for all drivers and motorcycle riders;
  - the requirement to complete separate provisional periods in relation to cars and motorcycles;
  - o a driving reward, in the form of a refund of provisional licence fees, for drivers and riders who complete the provisional stages without committing a driving-related offence; and
  - o tougher penalties for drivers and riders who break the law.
- New safety standards for the Government vehicle fleet and a public education campaign on choosing safer vehicles: 'How Safe Is Your Car'?
- Trial of **innovative technologies**: wet weather warning system (Constitution Hill); vehicle activated signs (Mt Pleasant Interchange); and alcohol interlocks.

Further detail on these initiatives is given below.

## **Strategic Direction 1: Safer Travel Speeds**

#### Fast facts:

- Faster vehicle speeds increase the likelihood of a crash occurring and the severity of any injuries sustained in a crash.
- Speed is the most critical factor in determining the forces the human body is exposed to in the event of a collision.
- Speeds just 5 km/h above the speed limit in 60 km/h zones and above are sufficient to double
  the risk of a crash occurring where an injury is likely.
- Reducing travel speeds is highly cost-effective. Small reductions in average vehicle speeds
  have consistently been shown to reduce death and injuries.
- Ensuring vehicle speeds match the safety of the road environment is an essential element of a safe road system.

## Your Road Safety Levy at work

## **Electronic Speed Limit Signs at Schools**

The aim of this project is to boost the visibility of school zone speed limit signage and to lessen confusion for motorists as to exactly when the 40km/h speed limit operates.

The 40km/h limit electronic speed signs use high intensity Light Emitting Diodes (LEDs) to boost visibility and feature wireless connections so that signs can be remotely monitored and controlled from a central location.

In 2007/08 your road safety levy funded the trialling of electronic speed limit signs at Perth Primary School, Spreyton Primary School and Margate Primary School. The contract for the manufacturing of the electronic speed signs and its supporting network management system was also awarded in 2008.

#### Kingborough Safer Speeds (KiSS) Demonstration

A demonstration of safer default rural travel speeds has been underway in the Kingborough Municipality since September 2007. This ground-breaking initiative was developed in a partnership between the Department of Infrastructure, Energy and Resources (DIER), the Kingborough Council, and the Kingborough community through the Kingborough Road Safety Committee.

#### The KiSS Demonstration involves:

- A reduction in the default speed limit from 100km/h to 90km/h on sealed rural roads and from 100km/h to 80km/h on gravel rural roads; and
- Higher standard arterial roads, Southern Outlet, Huon Highway and Algona Road to retain 100km/h speed limit.

The Kiss Demonstration began prior to the commencement of the road safety levy. In 2007/2008 the levy has funded a 12 month evaluation of the project. This included a community knowledge and attitude survey, and a review of crash trends.

## **Tasman Safer Travel Speeds Trial**

In September 2008, the Tasman Community Road Safety Working Group was established under the Community Road Safety Partnership (CRSP) Program. The Working Group resolved to launch a trial of safer speeds, similar to those being employed in Kingborough. As well as reducing the number and severity of crashes in the Tasman Municipality, the project aims to improve safety for wildlife on Tasman roads, including the endangered Tasmanian devil.

The trial commenced on 19 December 2008. As with Kingborough, the rural default speed limits in the Tasman municipality were reduced from 100 km/h to:

- 90 km/h on sealed roads: and
- 80 km/h on unsealed roads.

In 2007/08 your road safety levy funded the installation of gateway signs to advise of the demonstration, along with supplementary communication and public education strategies to support the introduction of the new speed limits.

#### Safer Travel Speeds in Shared Urban Spaces Funding Program

This program provides dollar-for-dollar funding for Councils to undertake traffic calming treatments in shared urban spaces, to protect vulnerable road users such as pedestrians and cyclists. Where vulnerable road users cannot be separated from fast moving traffic, speed reductions can be achieved through lower speed limits, use of smaller roundabouts, narrow traffic lanes, cobble pavements and landscaping.

Where possible, vulnerable road users should not be exposed to vehicles travelling at speeds greater than 30 or 40 km/h, as this is the maximum speed that an unprotected human body can tolerate without receiving a serious injury.

In the first year, levy funds have been committed to the following traffic calming projects:

- Clarence Council Between South Arm Highway and Shoreline Drive
- Derwent Valley Council Intersection of High Street and Stephen Street, New Norfolk
- Glenorchy City Council Main Road Moonah, from Hopkins Street to Amy Street
- Hobart City Council Churchill Avenue, between Alexander Street and Nelson Road
- Kentish Council Main Street Sheffield, from Henry Street to Duff Drive
- Latrobe Council Shearwater Esplanade

## Strategic Direction 2: Best Practice Infrastructure

#### Fast facts:

- The design and installation of best practice infrastructure on the road network plays a key role in creating a safer road environment.
- Human error in the road environment is inevitable, and infrastructure should accommodate this error and minimise the consequences.
- Research indicates that flexible barriers are the best performer in targeting run-off-road and head-on crashes. Flexible barriers can reduce serious casualty crashes of these types by up to 90%.
- Other cost-effective infrastructure treatments include roundabouts, creating safer roadside areas, improving road delineation and sealing road shoulders in rural areas.

# Your Road Safety Levy at work

Approximately three quarters of the levy funds are used to implement important infrastructure improvements. These improvements will work for many years to reduce the risk of crashes occurring, or minimise injuries in the event of a crash, whatever the cause.

#### Flexible Safety Barrier

In 2007/08 your road safety levy funded the installation of **21.5 km** of Flexible Safety Barrier on Tasmania's major highways and arterial roads. Locations include:

- Tasman Highway (west of Kennedy Drive)
- Southern Outlet (Hobart to Kingston)
- Brooker Highway (Derwent Entertainment Centre to Hilton Road)
- Bass Highway (Round Hill to River Road travelling towards Burnie)
- Bass Highway (Westbury Road to Meander Valley Overpass)

#### Wet Weather Warning System - Constitution Hill (south of Kempton)

A weather station and vehicle detection equipment have been installed at Constitution Hill. Once operational, wet and icy road conditions will trigger signs displaying a warning message and lowered speed limit. The warning system will become operational once the Auslink-funded road upgrade at Constitutional Hill is completed and the electronic signage system is installed (expected April 2009).

#### **Enhanced Road Delineation**

This type of delineation mainly improves the visibility of edge and centre lines at night time.

In 2007/08 your road safety levy provided enhanced delineation on the Southern Outlet; between Davey Street (Hobart) and Kingston.

## **Trialling of Motorcycle Safety Measures**

Heavy duty Styrofoam cushions, known as 'stack cushions', are being trialled to mitigate the risk of injury to motorcyclists in the event of a crash. Stack cushions are designed to attach to flexible safety barrier posts with the aim of protecting motorcyclists from impacting with sharp edges of the posts and to absorb some of the impact. Stack cushions are being installed on sections of road where a combination of speed and road alignment create a potentially high crash risk for motorcyclists.

'Rub rail' is being installed to cover the posts on w-beam guard rails. This treatment consists of a metal strip that fits on the bottom section of the w-beam and prevents motorcyclists from hitting the posts in the event of a crash.

Both products being trialled are designed to provide additional protection to motorcyclists in the event of a crash, without altering the operational performance of the safety barrier system.

In 2007/08 your road safety levy funded the installation of stack cushions at the Mornington Interchange and the installation of 5kms of rub rail. Locations where rub rail has been installed include:

- Channel Highway
- Tasman Highway
- Grass Tree Hill Road
- Lyell Highway
- Frankford Road
- Lake Leake Main Road

#### **Other Safety Improvements**

Roadside hazard reduction aims to provide an adequate clear zone by the removal of trees, or protection of steep drops with flexible safety barrier. It involves the clearance of trees and shrubs on the side of embankment cuttings, removal of redundant or unnecessary road signs from the road verge, or the relocation of signs behind a protective barrier. Where trees are not removed, they may be protected behind safety barriers.

In 2007/08 your road safety levy has funded such safety improvements along the Southern Outlet.

## Strategic Direction 3: Increased Safety for Young Road Users

#### Fast facts:

- Young road users aged 16-25 years are heavily over-represented in Tasmanian crash statistics, and are the largest group of road user casualties in Tasmania.
- Young drivers are among the most vulnerable road users, particularly during the first month and also during the first 6-12 months of unsupervised driving.
- Young drivers' over-representation in crashes is usually attributed to three factors:
  - o Inexperience: it takes time for driving skills to be mastered and integrated;
  - o Immaturity: characterised particularly by risk-taking and impulsiveness;
  - o Increased risk exposure: including speeding, night driving and drink-driving.

## Your Road Safety Levy at work

## **Novice Licensing System Reforms**

Your road safety levy is funding a number of reforms to the Novice Licensing System. In August 2008, the following reforms were introduced:

- a minimum 2 year provisional period for all drivers and motorcycle riders regardless of age;
- the requirement to complete separate provisional periods in relation to cars and motorcycles;
- a driving reward, in the form of a refund of provisional licence fees, for drivers and riders who complete the provisional stages without committing a driving-related offence; and
- tougher penalties for drivers and riders who break the law. These include:
  - o restarting the P1 stage on conviction for speeding 10 km/h or more above the legal limit, failing to wear a seatbelt, illegally using a mobile phone or failing to ride only a learner approved motorcycle;
  - a three-month disqualification and \$150 fine for learner drivers who drive without an appropriate supervising driver; and
  - the loss of two demerit points and a \$50 fine for novices who fail to display their L or P plates.

### **Learner Driver Mentor Programs**

In 2007/2008 your road safety levy has funded the development of an independent 'resource kit' that will give organisations all the background, planning, implementation and monitoring information and strategies needed to develop and deliver a Learner Driver Mentor Program (LDMP) in their local community.

# Strategic Direction 4: Enhanced Vehicle Safety

#### Fast facts:

- Improving the safety features of light vehicles has enormous potential to reduce serious road trauma. Research
  estimates that if everyone drove the safest car in each vehicle class, road trauma involving light vehicles could
  be reduced by 26%.
- The majority of new cars in Australia are sold as fleet vehicles. Improving the safety of light-vehicle fleets will improve the safety of individuals during work-related travel.
- By exercising their purchasing power as consumers, fleet owners can encourage vehicle manufacturers to incorporate safety features into their new cars.
- Including enhanced vehicle safety features in fleet vehicles also benefits the broader community. Many vehicles
  originally sold as fleet vehicles are later passed on to other road users through the second hand car market.

## Your Road Safety Levy at work

#### **Vehicle safety initiative for the Government fleet**

During 2008, your road safety levy funded development of a business case that resulted in Government approving a new safety policy for its vehicle fleet. From 1 July 2008, Tasmanian Government fleet vehicles must either have a minimum four-star Australasian New Car Assessment Program (ANCAP) safety rating, or must comply with a set of minimum mandatory safety features.

As well as improving the safety of work-related travel for government employees, these vehicle safety features are passed on to the broader community when these vehicles are sold.

## Public education campaign on choosing safer vehicles: 'How Safe Is Your Car'?

The Vehicle Safety Campaign 'How Safe is Your Car' commenced in May 2008. The aims are:

- to encourage those proposing to purchase a new car to insist on a car that has these new safety features (Electronic Stability Control (ESC) and curtain airbags), to improve the safety of the Tasmanian vehicle fleet; and
- to increase consumer demand for these safety features, and encourage manufacturers to include them as standard features on all vehicles.

The following communication tools have been used to deliver the key messages:

- Television two television commercials purchased from the Transport Accident Commission (TAC) in Victoria advertising the function and benefits of ESC and curtain airbags in vehicles, and directing viewers to visit the website, www.howsafeisyourcar.com.au for more information. These are being run at intervals over a 12 month period.
- Websites a DIER website and link to the website, <u>www.howsafeisyourcar.com.au</u> to enable access to information for people proposing to purchase a new car.

## **Complementary Actions**

#### Fast facts:

- A number of road safety initiatives complement the four key Strategic Directions under the Strategy.
- New and emerging technologies may offer considerable safety benefits in addressing some of the key contributing factors to serious casualty crashes, such as speed and alcohol.
- Trials of innovative technology enable the most promising road safety solutions to be assessed under Tasmanian conditions.
- A very small portion of levy revenue (approximately [1]%) is expended on technical management and coordination of projects delivered under the Strategy.

#### Trial of alcohol interlocks

An alcohol interlock is an electronic breath alcohol analyser with a microcomputer and an internal memory wired to the vehicles ignition system. Its purpose is to measure the driver's breath alcohol concentration (BAC) prior to each attempt to start the vehicle. If the driver's breath sample exceeds a preset limit (eg zero BAC), the ignition locks and the car is immobilised.

A trial of alcohol interlocks commenced mid August 2008 for 6 – 9 months, focusing on drivers with a previous drink driving conviction and a zero blood alcohol condition on their licence.

An independent researcher is evaluating the trial, examining other interlock schemes that have been conducted both nationally and internationally, and will deliver a final report in 2009. The evaluation will include recommendations on whether there should be a permanent alcohol interlock program for Tasmania.

## **Vehicle Activated Signs**

A Vehicle Activated Sign (VAS) is an electronic traffic management sign that advises a safety message when a motorist approaches at a speed considered too fast to safely negotiate an upcoming road feature for example, a sharp bend or t-junction.

When activated the signs will display the following sequential message:



The aim of the Mount Pleasant Interchange vehicle activated sign project is to evaluate whether the signs lead to improved safety and reductions in the number and severity of casualty crashes at the location. Speed has been identified as a contributing factor to crashes in this location and about half have resulted in an occupant receiving an injury. If the trial of vehicle activated signs at Mount Pleasant Interchange is a success, then the technology will be considered at other locations.

## <u>Summary of Levy Revenue and Expenditure: 1 December 2007 – 30 November 2008</u>

Total levy revenue (Year 1)	\$8,367,566
Levy Expenditure (Year 1):	
Strategic Direction 1: Safer Travel Speeds	\$221,139
Electronic Speed Limit Signs at Schools	
Kingborough Safer Speeds Demonstration	
Tasman Safer Speeds Trial	
Safer Travel Speeds in Shared Urban Spaces Funding Program	
Strategic Direction 2: Best Practice Infrastructure	\$2,970,285
Flexible safety barrier	
Wet Weather Warning System – Constitution Hill	
Enhanced road delineation	
Trial of motorcycle safety measures (stack cushions and rub rail)	
Other safety improvements (such as shoulder sealing, tree removal)	
Strategic Direction 3: Increased Safety for Young Road Users	\$724,290
Novice Licensing System Reforms	
Learner Driver Mentor Programs (including Resource Kit)	
Strategic Direction 4: Enhanced Vehicle Safety	\$152,921
Vehicle safety initiative for the Government fleet	
Public education campaign on choosing safer vehicles: 'How Safe Is Your Car'?	
Complementary Actions	\$274, 501
Trial of Alcohol Interlocks	
Vehicle Activated Signs – Mt Pleasant Interchange	
Coordination and implementation of projects delivered under the Strategy	
Total Expenditure (Year 1) December 2007 - November 2008	\$4,343,136
Dollar-for-dollar funding to Councils for traffic calming in shared urban spaces. Funding is provided on completion of works. Amount of levy funds committed in the first year:	\$462,950
Please note: This report details expenditure as at 30 November 2008. Significant works have range of projects however in some cases, invoices have not yet been received.	been undertaken on a

This report details expenditure as at 30 November 2008. The balance of levy funds received in the first year (approximately \$3.5M) has been committed to projects already underway and not yet invoiced (including a further \$1.2M for Electronic School Speed Signs), or to projects currently under development.

Any revenue that has been collected but not expended each year will be held in trust to be spent on road safety initiatives in following years.

## Your Road Safety Levy at Work – First Year Progress Report

For further information, please see the related links to the Tasmanian Road Safety Strategy 2007-2016: <a href="http://www.transport.tas.gov.au/">http://www.transport.tas.gov.au/</a> data/assets/pdf\_file/0013/16222/Road\_Safety\_Strategy\_Final\_28\_May.pdf) and the first three-year Action Plan supporting the Strategy: (<a href="http://www.transport.tas.gov.au/">http://www.transport.tas.gov.au/</a> data/assets/pdf\_file/0014/16223/70490\_DIER\_AP\_final\_28\_May\_2007.pdf).



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