

# Our Safety Our Future

Tasmanian Road Safety Strategy 2007-2016



## Progress Report

*to the  
Road Safety Advisory Council  
including progress on the Work Program*

*as at  
31 March 2012*

## Executive Summary

### Progress on meeting the Tasmania *Together* target

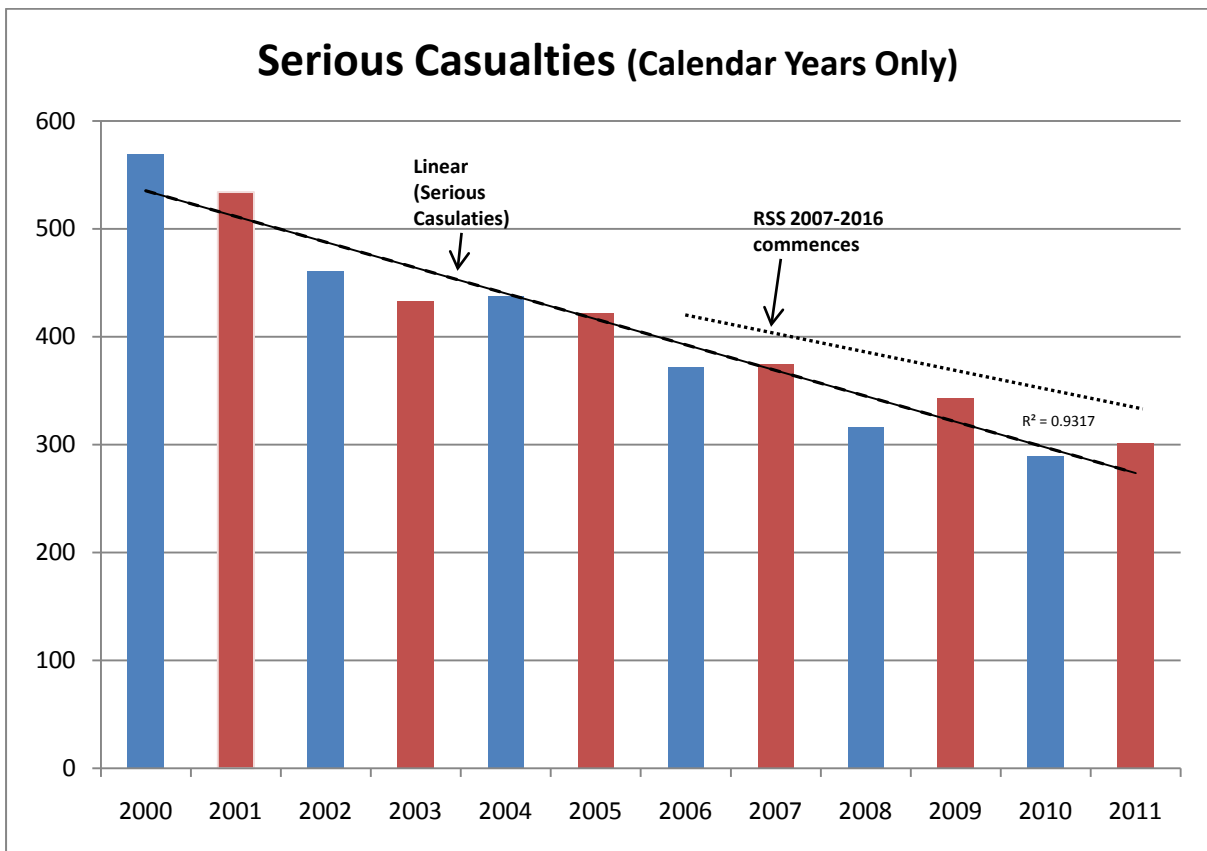
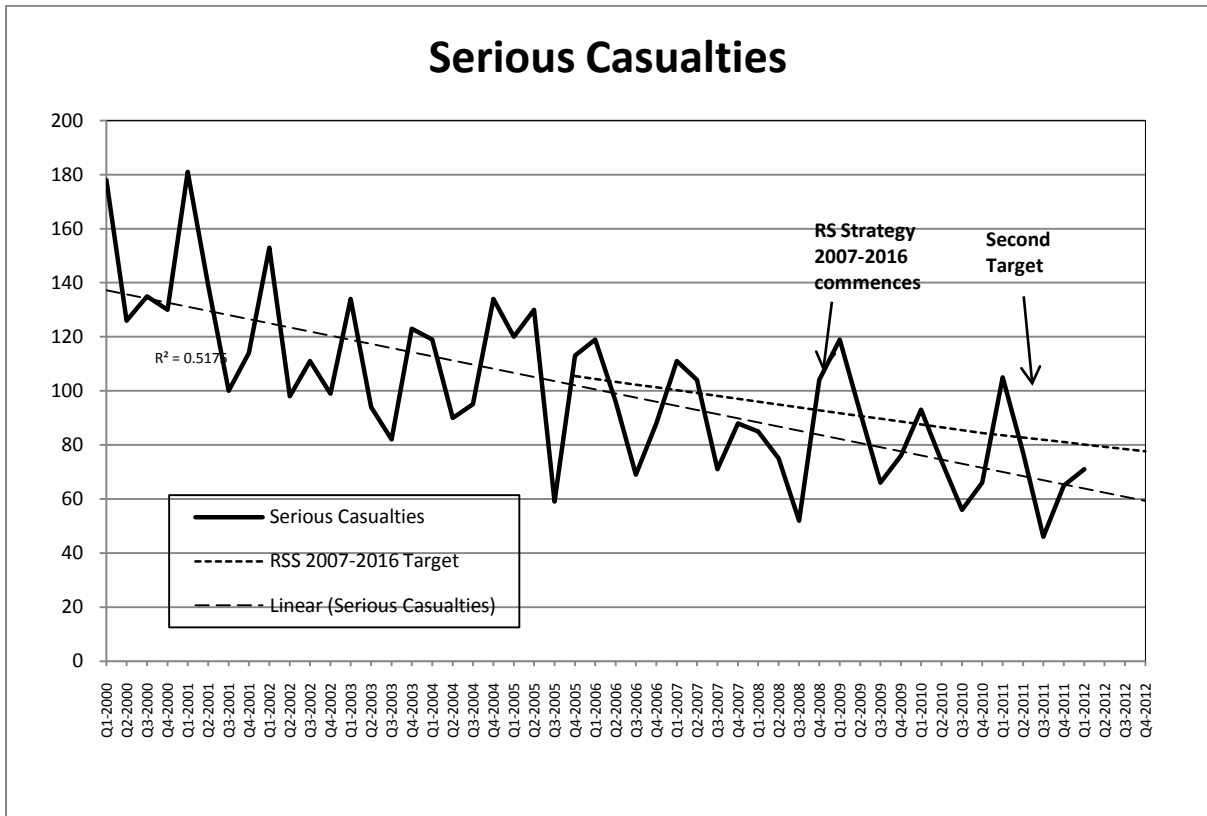
- As at 31 March 2012, the number of serious injuries is 71, compared to 105 for the same period in 2011, a 32.4% decrease.
- For the 2011 calendar year, there were 25\* fatalities on Tasmanian roads. This compares to 31 fatalities for the same period in 2010. This is a 19.3% decrease from the 2010 total. The table below outlines road crash deaths for individual states and territories for the period January to December in 2010 and 2011.

	N.S.W	Vic	Qld	S.A	W.A.	Tas	N.T.	A.C.T.	Aust
Jan-Dec 07	435	332	360	124	235	45	58	14	1603
Jan-Dec 08	374	303	328	99	205	39	75	14	1437
Jan-Dec 09	453	290	331	119	190	63	31	12	1489
Jan-Dec 10	405	288	249	118	193	31	49	19	1352
Jan-Dec 11	376	288	269	103	180	25	44	6	1291
% Difference									
Last 12 months	-7.2	0.0	8.0	-12.7	-6.7	-19.3	-10.2	-68.4	-4.5

- When considering serious injuries and fatalities together, the number of serious casualties in 2011 was 293, compared to 287 in 2010, a 2.1% increase.
- Despite the significant increase in serious casualties in 2009, Tasmania is still tracking ahead of the Tasmania *Together* long-term target for road safety. The first target of 'by 2010: a 20% reduction in serious injuries and fatalities from 2005' has been reached with a reduction of 30.6%. Progress is indicated on the charts below.

- *NB. The final road toll for 2011 has been revised from 26 fatalities to 25 fatalities, due to a determination by the Coroner that one fatality was due to natural causes.*

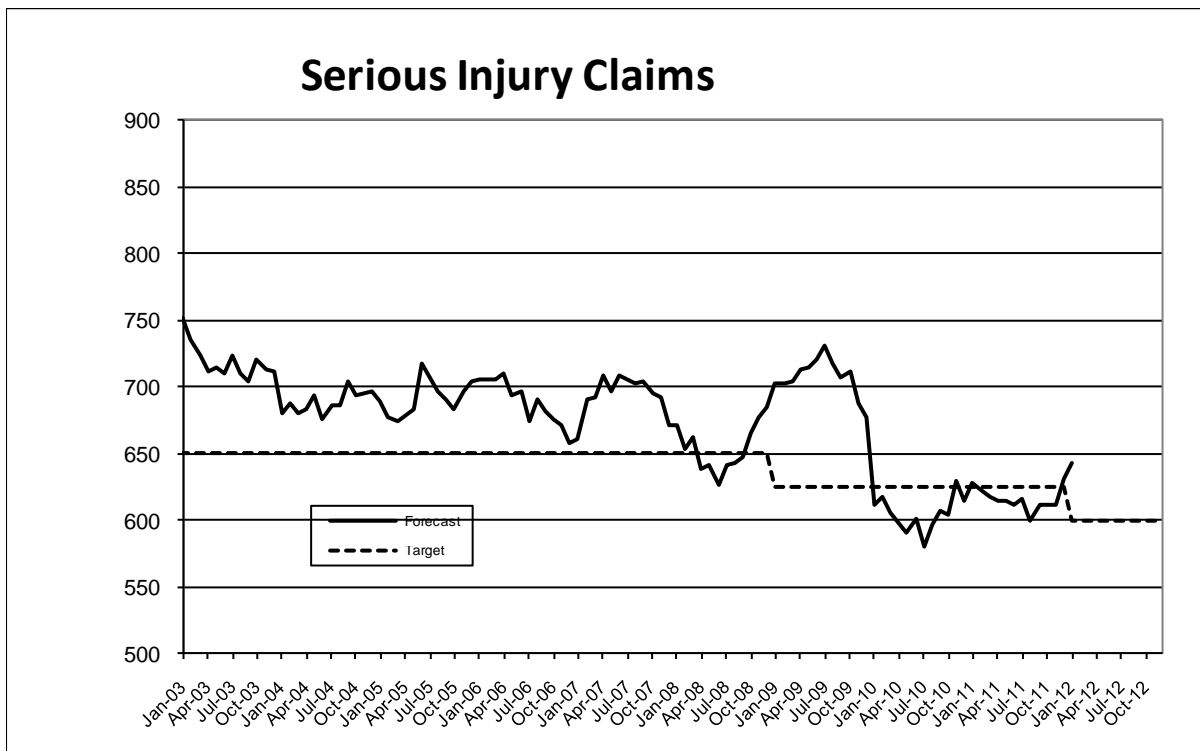
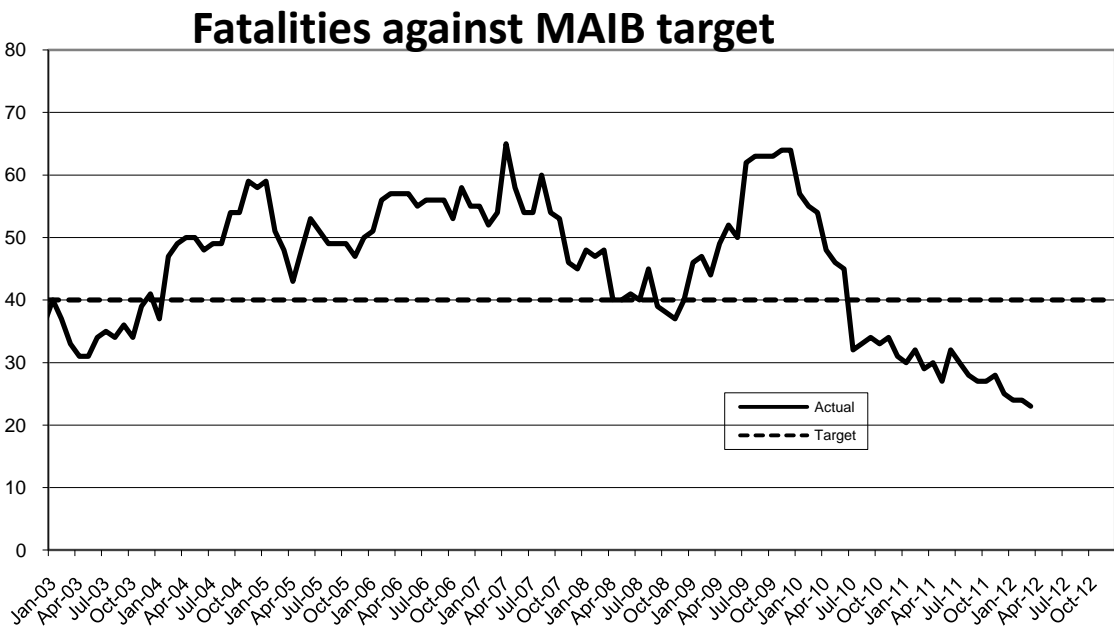
# Executive Summary



# Executive Summary

## Progress on meeting the MAIB targets

- Various claim reduction targets are specified in the Memorandum of Understanding with the Motor Accidents Insurance Board (MAIB). Progress against high level targets is shown below, with further details provided in the road safety statistics section. The fatality and casualty claims are expressed as 12-month moving totals.
- The 12-month fatality totals at the end of March 2012 are below the target levels while the forecast serious injury claims at the end of January 2012 are just above the target level (data lag due to time to assess claims).



## Executive Summary

### Crash statistics strategic issues

The data confirms the importance of progressing priority areas identified in the *Tasmanian Road Safety Strategy*: to reduce the incidence and severity of serious crashes in higher speed zones; to reduce run-off-road, and head-on crashes; and to reduce crashes involving younger road users.

#### Crash trends in 2011

##### Serious Casualties

Features associated with the 293 serious casualties for 2011 include:

- A high proportion of vehicle occupants, accounting for more than half of all serious injuries
- The predominance of serious casualties in high speed zones
- The high proportion of 17 to 29 years road users
- Excessive speed for the conditions/circumstances, inexperience and alcohol remain as the leading crash factors.

#### Crash trends in 2012

##### Serious Casualties

Features associated with the 71 serious casualties for the first quarter of 2012 include:

- A high proportion of vehicle occupants, accounting for more than half of all serious injuries
- There has been a reduction in motorcyclist serious casualties, with more than half of these being single vehicle crashes in high speed zones
- The predominance of serious casualties in high speed zones
- The high proportion of 17 to 29 years and 30 to 49 years road users
- Excessive speed for the conditions/circumstances and inexperience are the leading crash factors.

## Executive Summary

### Key achievements since last report

#### Safer Travel Speeds

- DIER completed a review of the proposed Point-to-Point sites and two new sites have been identified which best meet the site selection criteria. A dedicated project officer was appointed in March 2012 to progress and finalise the Business Case.
- Majority of work for the Variable Speed Limit, Tasman Highway has been completed, including the intelligent transport system components. Testing of the system is planned for end April and throughout May.
- Signs have been installed in the Moonah Shopping Precinct as part of the Part-time Speed Limits in Areas of High Pedestrian Activity project. Final cabling and testing to be done April-May 2012. An official launch is being considered.

#### Best Practice Infrastructure

- The painted median with flexible safety barrier along centre of road on the Brooker Highway at Granton has been completed. Final payments to be made in April 2012.
- The final seal of the roads at the Gage Road Roundabout, East Derwent Highway was undertaken in December. All payments have been made and the project is now complete with a saving in construction costs of 16%.
- Flexible safety barrier, shoulder sealing and right-hand turn facilities at Mersey Main Road at Tarleton project is complete. Final payments to be made next financial quarter.

#### Improved Safety for Young Drivers

- A dedicated policy officer was recruited to manage the Graduated Licensing System review in March 2012. The project proposal is expected to be finalised by early May 2012.

#### Complementary Initiatives

- The design of the Tasmanian Mandatory Alcohol Interlock Program has been completed. A commencement date will be determined following the outcomes of stakeholder consultations planned for the first half of 2012.
- In May 2012 Regional Workshops will be conducted in Burnie, Hobart and Launceston targeting key local Community Road Safety Partnership (CRSP) Program contacts. The workshops will aim to achieve a common understanding and direction of the major CRSP objective of “creating a culture of road safety at the community level”.

## Executive Summary

### Projects previously completed and removed from Progress Report

- The Flexible Wire Safety Barrier Project on the Bass Highway east of Penguin and west of Travellers Rest.
- Wet and Icy Traffic System at Constitution Hill on the Midland Highway.

### Marketing Key Achievements

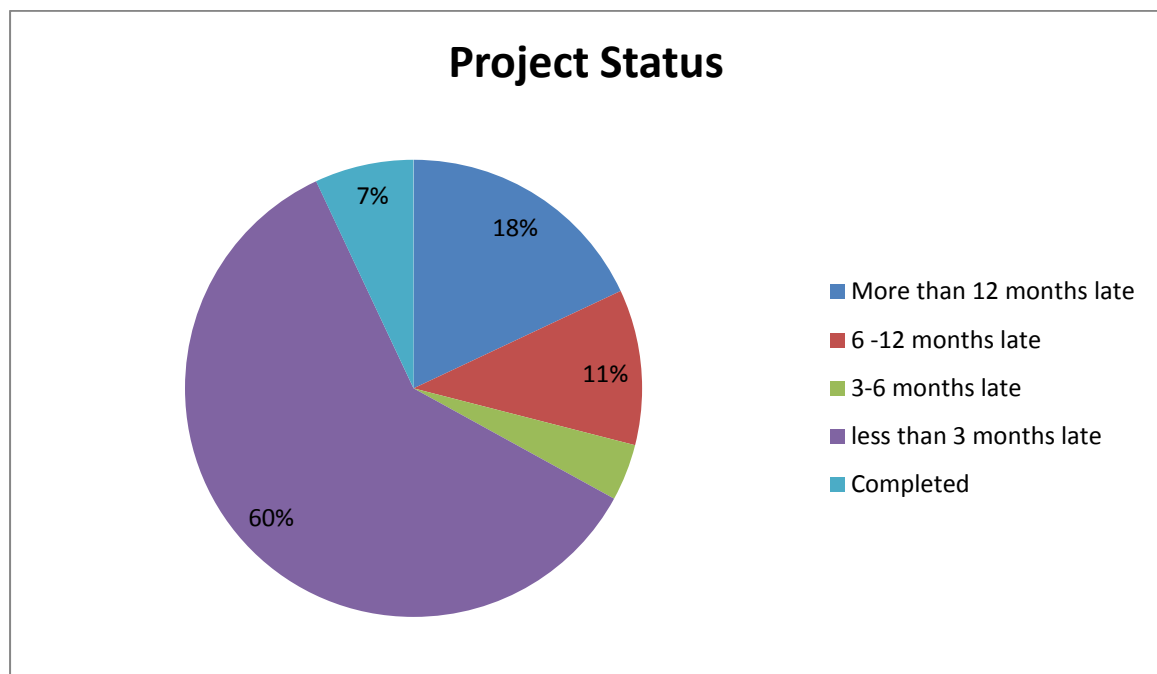
Please see separate report from the RSAC Education and Enforcement Sub Committee.

## Executive Summary

### Project progress: schedule and budget

Budget information, milestones and project status are correct as at 31 March 2012. Please note that projects previously reported as being complete have been removed from this Report.

Project progress	Number of projects
More than 12 months late	5
Between 6 and 12 months late	3
Between 3 and 6 months late	1
Less than 3 months late or on target	16
Completed	2
<b>TOTAL</b>	<b>27</b>





## Executive Summary

### Projects delayed over 12 months *(further detail provided under specific projects)*

#### **651300 - Variable Speed Limit Sign on Tasman Highway - Hobart to Tunnel Hill/Cambridge Road Interchange (including Tasman Bridge)**

Scheduled completion date: March 2010

Forecast completion date: July 2012

##### **Reason for delay**

Original concept was for the system to be installed in two stages, with the first stage consisting of a variable speed limit set by time of day. Consultation identified that the system should operate automatically using real time data from the first day of operation.

The project is more complex than originally forecast, involving significantly more design and procurement stages. This has resulted in additional costs being incurred. The system is anticipated to be installed early 2012 and will go 'live' at a suitable date after in-field testing is completed.

##### **Action taken to address delay**

During procurement and detailed design of the system DIER has encountered some technical issues. These have been worked through to ensure that once the system is obtained, it meets requirements and is a robust and fully tested system.

#### **83100100 - Flexible Safety Barrier, Shoulder Sealing and Right Hand Turn Facilities at West Tamar Highway, South of Beaconsfield**

Scheduled completion date: October 2010

Forecast completion date: Dec 2011 (final reseal summer 2012)

##### **Reason for delay**

Delays in finalising tender resulted in later commencement date. Service relocation further delayed works, pushing the works into winter.

##### **Action taken to address delay**

Work was suspended over winter 2011 but continued again in spring with all work (except for final reseal) completed by end December 2011.

#### **651510 - Safer Travel Speeds in Shared Urban Spaces Funding Program 2009/10**

Scheduled completion date: June 2010

Forecast completion date: to be advised

##### **Reason for delay**

Extensions given to councils to complete works in 2011/12 financial year.

Final audits by DIER and payments yet to be finalised.

##### **Action taken to address delay**

Councils experience difficulty designing and constructing significant projects within 12 months. 18-24 months is a more realistic timeframe. Regular liaison between DIER and relevant councils continues. Funding provided after DIER audit.

## Executive Summary

### R320004 - East Derwent Highway, Old Beach – Cassidy’s Road to Baskerville Road

Scheduled completion date: April 2011  
Forecast completion date: February 2013.

#### **Reason for delay**

Structural integrity issues.

#### **Action taken to address delay**

Work has been suspended and monitoring of settlement of reclamation material is continuing. It is expected that settlement will stop by spring 2012, then shape correction and sealing will commence summer 2012/2013.

As an interim measure the existing road has been resealed to improve skid resistance over the next 12 months.

### 651810 - Weather-based Warning System at Vince’s Saddle, Huon Highway

Scheduled completion date: October 2011  
Forecast completion date: April 2013.

#### **Reason for delay**

Complexity of site.

#### **Action taken to address delay**

A report under Phase 2 of this project, noted a number of challenges including:

- The area is geographically challenging from an installation perspective with narrow verges, steep roadsides and multiple bends.
- There is no mains power at the site; the area is not ideal for solar power.
- Wireless communication is required over a long distance with poor line-of-sight.

As a result it was recommended that a detailed design plan be completed before any on-ground works are undertaken. DIER is recommending that the project be delayed by up to 12 months to enable DIER staff to undertake the work. Because of the ITS elements, it is not considered a suitable project to outsource.

## Executive Summary

Projects delayed between 6 and 12 months *(further detail provided under specific projects)*

### 651100 - Electronic School Speed Signs

Scheduled completion date: July 2011

Forecast completion date: May-June 2012

#### **Reason for delay**

Supply of signs; problems with software and hardware components.

#### **Action taken to address delay**

Ongoing discussions with Contractor on rectifying issues, including continued faulty components issue.

### 651510 - Safer Travel Speeds in Shared Urban Spaces Funding Program 2010/11

Scheduled completion date: June 2011

Forecast completion date: April 2012

#### **Reason for delay**

Refer below.

#### **Action taken to address delay**

Councils experience difficulty designing and constructing significant projects within 12 months. 18-24 months is a more realistic timeframe. Regular liaison between DIER and relevant councils continues. Funding provided after DIER audit. Future program design under review.

### 652600 – Motorcycle Safety Measures: Sealing at Isolated Bends

Scheduled completion date: December 2011

Forecast completion date: October 2012

#### **Reason for delay**

Preparation of Project Proposal Reports (PPRs) have been delayed. Project is being delivered as a variation to the current Maintenance Contracts under the Minor Works Component. Preparation of collapsible Chevron Alignment Markers specifications (new to Tasmania) added another layer of complexity. Tender process and timing of sealing and resurfacing works in regard to weather conditions, may see a delay in full installation to October 2012.

#### **Action taken to address delay**

DIER officers are progressing project.

## Executive Summary

Projects with budget variance more than 10% (further detail provided under specific projects)

### Under Budget

#### 651510 - Electronic School Speed Signs

Allocated budget:	\$6,000,000
Forecast expenditure:	\$5,400,000
Underspend:	\$600,000 (10%)

**Reason**

Original scope of project was estimated to require 700 signs. Site plans indicate total number to be installed is 600. Reduction due to shared and amalgamated school zones.

Ongoing and increasing problems with signs plus required modifications to solar capability will see a reduction in the estimated underspend to approximately 10%.

#### R32000600 - Roundabout at East Derwent Highway – Gage Road

Allocated budget:	\$1,800,000
Forecast expenditure:	\$1,506,988
Underspend:	\$293,012 (16%)

**Reason**

Brighton Council contributed \$200,000. Cost of final reseal less than anticipated.

## Executive Summary

### Over Budget

#### R320007 - Flexible Safety Barrier, Shoulder Sealing and Right Hand Turn Facilities at Mersey Main Road, Tarleton

Allocated budget:	\$2,000,000
Forecast expenditure:	\$2,219,000
Overspend:	\$219,000 (11%)

#### Reason

Infrastructure project budget based on best estimate and therefore subject to variation.

#### 651300 - Variable Speed Limit Sign on Tasman Highway - Hobart to Cambridge Road Interchange (including Tasman Bridge)

Allocated budget:	\$1,800,000
Forecast expenditure:	\$3,035,485
Overspend:	\$1,235,485 (69%)

#### Reason

The original project plan was for a time based system. Following initial consultation the scope was changed to an adaptive system that automatically responds to change in traffic conditions. This more complex project required additional design and equipment, but provides a more intelligent system. Additional features were added such as using wind strength as a parameter and incorporating the bridge closure system.

Cost of the control system is much higher than anticipated, requires commitment to fund on-going costs to ensure design features are enhanced, but the system is the most advanced system available in Australia and is the standard platform used by other states. The control system has longevity and its modular architecture means it can be expanded to cover other highways, enabling the road network to be managed as a whole rather than a collection of separate components.

An estimate was undertaken at the time of project conception, but was significantly underestimated. This project was designed and implemented concurrently and this has proven to be an unsatisfactory model. Future major projects will be delivered through a different model, involving concept, preliminary design and final design phases and cost estimates updated at each phase.

## Strategic Direction 1 – Safer Travel Speeds

### 651100 Electronic Speed Signs at School Zones

#### Description

Highly visible signs that only operate during designated school zone times are scheduled to be fitted at all 40 km/h school zones by May-June 2012.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2008	Announce successful contractor	July 2008	Completed
Aug 2008	Commence liaison with schools prior to implementation	Sep 2008	Completed
Dec 2008	Commence implementation	Feb 2009	Commenced
Sept 2009	Signs to be installed at 70 schools	Jan 2010	Completed
Feb 2010	Approximately 290 signs are due to be installed in 118 schools by beginning of Term 1 (subject to no technical delays)	May 2010	65% complete at start of Term 1 2010. Significant upgrade of Control System software caused delay, but improved fault monitoring and communications with the signs.
July 2011	Approx 700 signs to be installed at around 240 schools	September 2011	455 signs installed for 188 schools.
July 2011	Installation completed	December 2011	501 signs installed for 206 schools.
July 2011	Scheduled Completion	March 2012	510 signs installed for 211 schools (refer 'Status').

#### Status

As at end March 2012, 510 signs are operating around the State, covering 211 schools. In addition, 12 signs (covering 4 schools) are newly installed and currently undergoing in-field testing. Fewer than anticipated signs were installed over the summer. A decision was made to resolve the problems with existing signs before installing at any new sites. Additional delays at a couple of sites were incurred when newly arrived residents objected to the location of the signs and DIER had to negotiate relocation of some signs.

A number of software issues and problems with sign casings were experienced with the last delivery of signs, received in October 2011. The extensive maintenance and adjustment work required in installing new signs as well as attending to failures on existing signs, further extended the completion date by three-four months. As reported in December 2011, completion of the project is anticipated in May-June 2012.

## Strategic Direction 1 – Safer Travel Speeds

<b>Budget (\$)</b>		
<b>Total allocated budget for project</b>		<b>6,000,000</b>
Expenditure in 2007/08	85,086	
Expenditure in 2008/09	738,258	
Expenditure in 2009/10	1,613,818	
Expenditure in 2010/11	1,083,761	
Expenditure in 2011/12 (year to date)	789,675	
<b>Total expenditure to date</b>		<b>4,310,598</b>
<b>Current Balance</b>		<b>1,689,402</b>
<b>Forecast total expenditure on completion</b>		<b>5,400,000</b>
<b>Forecast balance remaining on completion</b>		<b>600,000</b>

### Comments

The payment structure for the signs is 80% paid on delivery of signs and 20% paid after 3 years of successful operation. Current commitment is \$582,000 which will decrease progressively between 2012 and 2015 as payments are made to the contractor.

The anticipated 15% saving on this project may not be fully realised due to the increase in staff time required in addressing the various problems and the cost of additional batteries purchased for signs in areas with minimal solar radiation exposure.

It is anticipated that in 2013 Tasmanian schools will be changing from a three-term structure to a four-term school year, requiring additional work from the Contractor to make adjustments to the Network Management System.

## Strategic Direction 1 – Safer Travel Speeds

### 651300 Variable Speed Limit Sign on Tasman Highway - Hobart to Cambridge Road Interchange (including Tasman Bridge)

#### Description

The installation of electronic speed limit signs that will set a lower speed limit during peak traffic periods and assist incident management.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2008	Meet with internal stakeholders	July 2008	Completed
Sept 2008	Scoping and costing of project	Sept 2008	Completed
Mar 2009	Civil works for power and communications being scoped	Mar 2009	Completed
Apr 2009	Consult with external stakeholders on potential issues	Feb 2010	Preliminary discussions complete. DIER to consult external stakeholders as needed.
July 2009	Civil works complete (trenching for conduit)	Jan 2011	Completed
March 2010	Full installation	September 2011	Delays to delivery of signs; central control system (STREAMS) being designed. Design of fibre and power cables completed.
March 2010	Project completed	December 2011	STREAMS control system installed. All signs delivered and 22 installed.
March 2010	Project completed	March 2012	All signs and cabling installed. (Refer 'Status'.)

#### Status

This project had a significant change in design and scope following stakeholder consultation. The original concept was for the system to be installed in two stages, with the first stage consisting of a variable speed limit set by time-of-day. However, consultation identified that the system should operate automatically using real time data from the first day of operation.

The project is more complex than originally forecast, involving significantly more design and procurement stages. This will result in additional costs being incurred.

Progress in this quarter:

- All signs installed.



## Strategic Direction 1 – Safer Travel Speeds

- All in-road sensors installed.
- Fibre and cable connecting taking place.
- Testing of STREAMS Control System continuing.

Connection of cables and fibres to signs and STREAMS will be completed in April. Full system testing scheduled to start end April and throughout May. After testing satisfactorily completed the system will be commissioned. Completion date for the project to 'go live' is no later than July 2012, if no significant issues are identified during testing.

<b>Budget (\$)</b>	
<b>Total allocated budget for project</b>	<b>3,091,901</b>
Expenditure in 2008/09	37,363
Expenditure in 2009/10	846,627
Expenditure in 2010/11	384,723
Expenditure in 2011/12 (year to date)	1,242,913
<b>Total expenditure to date</b>	<b>2,511,626</b>
<b>Current Balance</b>	<b>523,859</b>
<b>Forecast total expenditure on completion</b>	<b>3,091,901</b>
<b>Forecast balance remaining on completion</b>	<b>0</b>

### Comments

In February 2012 approval was given to extend the contract for a SKM technician; additional funds of \$56,416 were secured to cover the period 27 February to 6 May 2012, bringing the total project budget to \$3,091,901. SKM technician was required to continue electrical engineering/ITS work on the project, including detailed testing, integration and other associated project engineering work.

The increase in costs is mainly around the Variable Speed Limit Control System, power cable and the amount of in-field processing equipment. The purchase of the STREAMS Control System includes ongoing yearly fees as well as development costs.

The completed power cable design has identified the need for a larger power cable due to higher than expected power consumption of the electronic speed limit signs. This has a flow-on effect to increase the cost associated with cable installation and termination of the cables.

The number of in-road sensors has also significantly increased from 16 to 100; this is to enable the system to recognise crashes and to respond with an appropriate response plan to prevent secondary crashes.

The amount and complexity of field processing equipment was significantly underestimated.

## Strategic Direction 1 – Safer Travel Speeds

### 651510 Safer Travel Speeds in Shared Urban Spaces Funding Program 2009/10

#### Description

The State Government will deliver dollar-for-dollar funding with Local Government for speed management and traffic calming measures to provide protection for vulnerable road users including children, pedestrians and cyclists.

Milestone Schedule		Milestone Progress	
Date		Date	
Feb 2009	Submissions for funding sought for 09/10 projects	Feb 2009	Completed
April / June 2009	Submissions assessed for 09/10	June 2009	Completed
May 2009	Submissions for 09/10 projects closed	May 2009	Completed
June 2009	Announcement of successful 09/10 projects	June 2009	Completed
July 2009 / June 2010	Monitoring progress of implementation of 09/10 projects	May 2010	Ongoing
Feb 2010	Submissions for funding sought for 10/11 projects	March 2010	Completed
April / June 2010	Submissions assessed for 10/11	Aug 2010	Completed
June 2010	09/10 projects completed by end of financial year. Funding awarded following a completion audit by DIER	September 2011	BO'D Community meeting held in August some debate about format of project. GTC work almost complete.
June 2012	Projects complete under 2009/10 program	Dec 2011	BO'D Water main installed.
June 2012	Projects complete under 2009/10 program	March 2012	BO'D project stalled, (refer 'status'). GTC work completed.

#### Status

Extensions given to Councils to complete works in 2010/11 financial year.

**Break O'Day Council** the water main was installed by Ben Lomond Water in December 2011. All other work is on hold until a decision is made at a final community meeting. The meeting scheduled for February 2012 did not go ahead and is now scheduled for June 2012. The Council is going through a period of restructure and this project is on hold until a new officer responsible for its completion is appointed.

**George Town Council** majority of works completed and audited. Rubber humps were installed March 2012; DIER to undertake inspection April 2012. Lack of stock of rubber hump components in Australia, requiring sourcing from overseas, delayed the installation. Specialised removable rubber

## Strategic Direction 1 – Safer Travel Speeds

humps required as road forms part of TARGA Tasmania route. Final payment will be processed in 2011/2012 financial year.

<b>Budget (\$)</b>		
<b>Total allocated budget for project</b>		<b>500,000</b>
Expenditure in 2009/10	132,750	
Expenditure in 2010/11	253,250	
Expenditure in 2011/12 (year to date)	0	
<b>Total expenditure to date</b>		<b>386,000</b>
<b>Current Balance</b>		<b>114,000</b>
<b>Forecast total expenditure on completion</b>		<b>473,000</b>
<b>Forecast balance remaining on completion</b>		<b>27,000</b>

### Comments

Once practical completion certificate issued, George Town Council payment will be made in next financial quarter.

Payment for outstanding project items with Break O'Day Council may not be finalised in 2011/12 financial year.

## Strategic Direction 1 – Safer Travel Speeds

### 651510 Safer Travel Speeds in Shared Urban Spaces Funding Program 2010/11

#### Description

The State Government will deliver dollar-for-dollar funding with Local Government for speed management and traffic calming measures to provide protection for vulnerable road users including children, pedestrians and cyclists.

Milestone Schedule		Milestone Progress	
Date		Date	
June 2010	10/11 projects announced	Jan 2011	Completed
June 2011	10/11 projects completed by end of financial year. Funding awarded following a completion audit by DIER	September 2011	HCC preliminary work started. DCC work completed.
June 2011	Projects completed	Dec 2011	Projects in final stages.
June 2011	Projects completed	March 2012	DCC work completed. Majority of HCC work completed (refer 'Status').

#### Status

**Hobart City Council** project is for a new roundabout at southern junction of Churchill Avenue and Nelson Road (adjacent to Hutchins School). Bus lay-by, kerbing and footpath work completed. Construction of roundabout was completed March 2012. Finishing work to be done April-May 2012.

**Devonport City Council** Berrigan Road in Miandetta – works completed end September. Awaiting invoice from Council.

Budget (\$)	
<b>Total allocated budget for project</b>	<b>251,000</b>
Expenditure in 2010/11	0
Expenditure in 2011/12 (year to date)	26,000
<b>Total expenditure to date</b>	<b>26,000</b>
<b>Current Balance</b>	<b>225,000</b>
<b>Forecast total expenditure on completion</b>	<b>251,000</b>
<b>Forecast balance remaining on completion</b>	<b>0</b>

#### Comments

Devonport City Council project at Berrigan Road in Miandetta is complete with final payment and certificate of works completed.

Hobart City Council major work is completed with some minor finishing works to be done April-May 2012. Payment for project to be made by June 2012.

Total budget of \$251,000 is less than previous years because DIER received only two projects eligible for funding under the Shared Urban Spaces criteria.

## Strategic Direction 1 – Safer Travel Speeds

### 651510 Safer Travel Speeds in Shared Urban Spaces Funding Program 2011/12

#### Description

The State Government will deliver dollar-for-dollar funding with Local Government for speed management and traffic calming measures to provide protection for vulnerable road users including children, pedestrians and cyclists.

Milestone Schedule		Milestone Progress	
Date		Date	
April 2011	Submissions for funding sought for 11/12 projects	September 2011	Completed
April / June 2011	Submissions assessed for 11/12	September 2011	Ongoing
June 2011	11/12 projects announced	December 2011	No projects met criteria
Dec 2012	11/12 projects completed by end of financial year. Funding awarded following a completion audit by DIER		

#### Status

A total of 12 project submissions were received from eight different councils. The total amount of funding requested through the program for 2011-12 was \$594,638.

Project submissions were reviewed by DIER to assess their suitability against the program criteria. None of the applicants met the criteria and therefore it was decided not to fund any of the submissions.

The continuation of the program is being considered, with a recommendation being prepared for the design of any future programs.

Budget (\$)	
<b>Total allocated budget for project</b>	<b>500,000</b>
Expenditure in 2011/12	0
<b>Total expenditure to date</b>	<b>0</b>
<b>Current Balance</b>	<b>0</b>
<b>Forecast total expenditure on completion</b>	<b>0</b>
<b>Forecast balance remaining on completion</b>	<b>500,000</b>

#### Comments

This project did not go ahead, however, the program is to be reviewed in 2012 to determine if changes to the program or criteria are needed.

## Strategic Direction 1 – Safer Travel Speeds

### 651810 Weather-based Warning System at Vince’s Saddle, Huon Highway

#### Description

There have been 44 casualty crashes at this site in the last five years (including one fatality and six serious casualty crashes). The majority of crashes have occurred in wet or icy conditions.

The project is for the installation of a weather station to detect when the road is wet and icy and electronic speed limit and icy/wet signage. The application of a speed limit more appropriate to the conditions should lead to a reduction in serious casualty crashes due to adverse weather conditions.

Milestone Schedule		Milestone Progress	
Date		Date	
Nov 2009	Design System	Feb 2010	Completed
Feb 2010	Procure equipment	April 2010	Completed
May 2010	Installation Road Weather Information System (RWIS)	Jul 2010	Completed
June 2010	Commissioning RWIS	Aug 2010	Completed
June 2011	Design Warning System	Dec 2011	Report recommended detailed design work.
Oct 2011	Install and Commission Warning System	Dec 2011	Awaiting detailed design work. 12 month delay

#### Status

The project is to be delivered in two phases. Phase 1 Thermal mapping and Installation of Road Weather Information Station (RWIS). Phase 2 Weather Based Variable Speed with Electronic Speed Warning Signage. Phase 1 works are now complete.

The scoping report under Phase 2 to design the electronic weather-based warning system was completed in December 2011. The report noted a number of challenges, including:

- The area is geographically challenging from an installation perspective with narrow verges, steep roadsides and multiple bends.
- There is no mains power at the site; the area is not ideal for solar power.
- Wireless communication is required over a long distance with poor-line-of-sight.
- Integrating with the STREAMS network system may be complex but experience with the VSL Tasman Highway project will increase knowledge of DIER staff working with ITS.

It is recommended that a detailed design plan be completed before any on-ground works are undertaken.

A combination of consultants and DIER staff will deliver the project and DIER will manage and maintain the system.

DIER is recommending that the project be delayed by up to 12 months to enable DIER staff to undertake the work. Because of the ITS elements, it is not considered a suitable project to outsource.

## Strategic Direction 1 – Safer Travel Speeds

<b>Budget (\$)</b>		
<b>Total allocated budget for project</b>		<b>400,000</b>
Expenditure in 2009/10	28,170	
Expenditure in 2010/11	79,767	
Expenditure in 2011/12 (year to date)	16,463	
<b>Total expenditure to date</b>		<b>124,400</b>
<b>Current Balance</b>		<b>275,600</b>
<b>Forecast total expenditure on completion</b>		<b>400,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

### Comments

Payment has been made to SKM for consultant who undertook the scoping report.

## Strategic Direction 1 – Safer Travel Speeds

### 651830 Part Time Speed Limits in areas of High Pedestrian Activity

#### Description

Pedestrians are vulnerable road users - crashes involving pedestrians are more likely to result in serious injury or death. A detailed analysis of pedestrian crashes in Tasmania identified the locations with the highest number of pedestrian crashes:

- Macquarie Street (between Harrington and Argyle Streets).
- Davey Street (between Argyle and Harrington Streets).
- Main Road through the existing Moonah shopping zone.
- Sandy Bay Road through the existing Sandy Bay shopping zone.

Pedestrian safety would be improved by installing electronic signs (similar to those being used at schools) that would apply a lower speed limit of 40 km/h during periods of high pedestrian activity. Reducing vehicle speeds is expected to reduce pedestrian crashes by 20%.

Milestone Schedule		Milestone Progress	
Date		Date	
June 2011	Delivery of Signs for Moonah Shopping Precinct.	September 2011	90% poles installed. Awaiting signs.
Sept 2011	Moonah Shopping Precinct work completed	Dec 2011	Signs delivered. To be completed March 2012
Sept 2011	Moonah Shopping Precinct work completed	March 2012	All signs and major cabling completed (refer 'Status').

#### Status

Since the four project sites were selected, the Hobart City Council has implemented a reduced 50 km/h speed limit in the CBD. The Davey Street, Macquarie Street and Sandy Bay projects are on hold pending a decision on possible installation of 40 km/h shopping precinct signs. A change at this time is not considered appropriate as it may complicate the message.

Update from last quarter for Moonah site:

- All signs installed.
- Final connections of signs, fibres and cabling with network management system to be completed April-May 2012.
- Anticipated completion date is May 2012.
- Awaiting advice from Minister's office whether official launch to be conducted.

Review of the other three sites will be undertaken in 2012.



## Strategic Direction 1 – Safer Travel Speeds

<b>Budget (\$)</b>		
<b>Total allocated budget for project</b>		<b>*200,000</b>
Expenditure in 2010/11	0	
Expenditure in 2011/12 (year to date)	54,000	
<b>Total expenditure to date</b>		<b>54,000</b>
<b>Current Balance</b>		<b>146,000</b>
<b>Forecast total expenditure on completion</b>		<b>200,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

### Comments

\*Estimated cost for Moonah Shopping Precinct is \$90,000. If Hobart City and Sandy Bay locations do not proceed, project will be underspent by approximately 55%.

## Strategic Direction 1 – Safer Travel Speeds

### 141100.32 Point to Point – Stage 1 (Feasibility)

#### Description

In September 2009, the Premier announced a range of new road safety initiatives, including 'investigation of the feasibility of implementing point-to-point average speed enforcement on Tasmanian highways'.

Point to point systems use Automatic Number Plate Recognition (ANPR) technology to measure the average speed of a vehicle between two points along a route. If the average speed of the vehicle exceeds the speed limit, an infringement notice is issued. Point to point systems are particularly suited to extended lengths of road with a history of serious crashes and speeding. They encourage 99.5% (or more) of drivers to comply with the speed limit and achieve significant reductions in serious casualty crashes within the enforcement zone.

Milestone Schedule		Milestone Progress	
Date		Date	
Sept 2010	Feasibility Study (Business Case)	April 2012	85% complete

#### Status

- The project was previously placed on hold to allow for the upgrade of required business systems (TIPS) and reassessment of site locations following the decision to implement flexible safety barrier on part of the original sites.
- DIER completed a review of the proposed Point-to-Point sites and two new sites have been identified which best meet the site selection criteria.
- A dedicated project officer was appointed in March 2012 to progress and finalise the Business Case.
- The Point-to-Point Steering Committee met on 30 March 2012 and endorsed full investigation of the two new sites.
- Updating and finalisation of inputs to the Point-to-Point (P2P) Business Case is presently being undertaken which requires updating of the financial model due to revised sites including estimated development costs, recurrent costs, crash savings, infringement revenue and benefit cost ratios.
- A significant amount of the draft Business Case requires updating due to the time which has elapsed since it was first drafted.
- Re-engagement with stakeholders regarding the revised site selection is expected to occur in May 2012. It is anticipated the Business Case will be completed in June 2012 and presented to Government in mid 2012.
- Importantly in 2011 Tasmania contributed to the national Austroads research project on 'Best Practice Point-to-Point Speed Enforcement'. This research project was completed in December 2011 which was prior to specifications for Tasmania's project being finalised (subject to Government approval). This will enable the Tasmanian project design to draw upon world's best practice, and learnings from implementation in other jurisdictions.

## Strategic Direction 1 – Safer Travel Speeds

<b>Budget</b>		
<b>Total allocated budget for project</b>		
Expenditure in 2007/08	0	
Expenditure in 2008/09	0	
Expenditure in 2009/10	\$38,203	
Expenditure in 2010/11	\$11,042	
Expenditure in 2011/12 (year to date)	NIL	
<b>Total expenditure to date</b>		<b>\$49,245</b>
<b>Current Balance</b>		<b>755</b>
<b>Forecast total expenditure on completion</b>		<b>50,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

Funding for this work will now be provided from Stage 2.

## Strategic Direction 1 – Safer Travel Speeds

### 141100.32 Point to Point – Stage 2 (Implementation) – *Project is subject to Government approval*

#### Description

*Implementation of Point to Point (Average Speed) Enforcement System (subject to business case).*

In September 2009, the Premier announced a range of new road safety initiatives, including 'investigation of the feasibility of implementing point-to-point average speed enforcement on Tasmanian highways'.

Point to point systems use Automatic Number Plate Recognition (ANPR) technology to measure the average speed of a vehicle between two points along a route. If the average speed of the vehicle exceeds the speed limit, an infringement notice is issued. Point to point systems are particularly suited to extended lengths of road with a history of serious crashes and speeding. They encourage 99.5% (or more) of drivers to comply with the speed limit and achieve significant reductions in serious casualty crashes within the enforcement zone.

Milestone Schedule		Milestone Progress	
Date		Date	
TBC	Milestones for project development will be set upon completion of the Business Case. Subject to Government Approval.		

Budget			
<b>Total allocated budget for project* (Road Safety Initiatives Funded Project)</b>			<b>1,470,000</b>
Expenditure in 2010/11		20,000	
Expenditure in 2011/12 (year to date)		0	
<b>Total expenditure to date</b>			<b>\$20,000</b>
<b>Current Balance</b>			<b>\$1,450,000</b>
<b>Forecast total expenditure on completion</b>			<b>\$1,470,000</b>
<b>Forecast balance remaining on completion</b>			<b>0</b>

#### Comments

Total budget for Stage 2 (Development) and funding sources TBC, on completion of Business Case.

## Strategic Direction 2 – Best Practice Infrastructure

### R320006 Roundabout at East Derwent Highway, Gage Road

#### Description

Installation of a roundabout at the intersection of East Derwent Highway and Gage Road, including a new connection to Lamprill Circle. This is supported by local community and Brighton Council.

Roundabouts reduce angle collisions at intersections by 80%. There have been seven casualty crashes in the last five years (including two serious casualty crashes). It is one of only 16 intersections in Tasmania that had two or more serious casualty crashes.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2009	Request for tender	Nov 2009	Completed
Sept 2009	Award tender	Dec 2009	Completed
Oct 2009	Commence work	Jan 2010	Completed
Mar 2010	Work complete	June 2010	Work completed in June 2010 – final reseal to occur summer 2011
Summer 2011	Final reseal	Dec 2011	Final reseal completed.
Summer 2011	Project completed	March 2012	All work and payments completed.

#### Status

Construction of the East Derwent Highway and Gage Road Roundabout has been completed (June 2010). Final reseal was undertaken in December 2011.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>1,800,000</b>
Expenditure in 2008/09	16,873	
Expenditure in 2009/10	1,209,749	
Expenditure in 2010/11	261,460*	
Expenditure in 2011/12 (to date)	18,906	
<b>Total expenditure to date</b>		<b>1,506,988</b>
<b>Current Balance</b>		<b>293,012</b>
<b>Forecast total expenditure on completion</b>		<b>1,506,988</b>
<b>Forecast balance remaining on completion</b>		<b>293,012</b>

#### Comments

This project is now completed. Brighton Council's contribution of \$200,000 in the 2010-11 financial year contributed to a project underspend of 16%.

## Strategic Direction 2 – Best Practice Infrastructure

### R310010 Flexible Safety Barrier, Shoulder Sealing and Right Hand Turn Facilities at West Tamar Highway, South of Beaconsfield

#### Description

The 'safe system' approach is aimed at creating safer roadsides to compensate for driver error, using infrastructure improvements. This project will consist of approximately 1.5km of shoulder sealing, 700m of flexible safety barrier, addition of a right turn lane to reduce intersection crashes and roadside hazard removal.

At this site there have been nine loss-of-control casualty crashes in the last five years (including one fatal and three serious casualty crashes). Shoulder sealing reduces run-off-road crashes by 30% and head on crashes by 15%. Providing right turn lanes at junctions reduces rear-end collisions by 60%.

Milestone Schedule		Milestone Progress	
Date		Date	
Oct 2009	Request for tender	June/July 2010	Completed
Mar 2010	Award tender	Sept 2010	Tender closed late Sept 2010 and Award expected Oct 2010
June 2010	Commence work	Oct 2010	Works commenced Nov 2010
Oct 2010	Work complete	Dec 2011	Work complete.
March 2012	Final seal	March 2012	All work completed.

#### Status

Work started in November 2010 and was completed March 2012.

Progress has been delayed due to difficulties in service relocation which pushed the program back into winter. Road works were suspended over winter due to wet weather but began again in spring 2011; however work continued to the Salisbury Creek Culvert over winter. All major work was completed by end December 2011. A final seal was done March 2012. Final payments still to be submitted.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>3,500,000</b>
Expenditure in 2009/10	251,065	
Expenditure in 2010/11	2,065,369	
Expenditure in 2011/12 (year to date)	1,342,009	
<b>Total expenditure to date</b>		<b>3,658,443</b>
<b>Current Balance</b>		<b>(158,443)</b>
<b>Forecast total expenditure on completion</b>		<b>3,760,000</b>
<b>Forecast balance remaining on completion</b>		<b>(260,000)</b>

The unexpected overspend was due to underestimates during design phase on quantities and type of materials required for base works. There was also a requirement for some modifications to design during the building phase. The issue of costings disparity between design and build phases is being addressed by DIER, including a new budget approach of P50 and P90 estimates provided at the Project Proposal Phase. It is anticipated that the final seal will cost around \$100,000.

## Strategic Direction 2 – Best Practice Infrastructure

### R320007 Flexible Safety Barrier, Shoulder Sealing and Right Hand Turn Facilities at Mersey Main Road (Tarleton)

#### Description

The 'safe system' approach is aimed at creating safer roadsides to compensate for driver error, using infrastructure improvements. This project will consist of approximately 1km of shoulder sealing, 600m of flexible safety barrier, addition of three right turn lanes at junctions to reduce intersection crashes and reduction of the severity of the S-curve near Arnold Street junction.

At this site there have been eight loss-of-control crashes in the last five years (including four casualty crashes). There have been five intersection crashes in the last five years (including two casualty crashes). Shoulder sealing reduces run-off-road crashes by 30% and head on crashes by 15%. Dedicated right turn lanes at junctions reduce rear-end collisions by 60%.

Milestone Schedule		Milestone Progress	
Date		Date	
Dec 2009	Award Tender	3 Jan 2010	Award completed
Jan 2010	Commence Works	11 Jan 2010	Works commenced
June 2010	Complete Works	Dec 2011	Complete
Jan 2012	Final Reseal and Line Marking	March 2012	All work completed.

#### Status

Construction works now complete. Final seal and line marking was completed early 2012.

Budget (\$)	
<b>Total allocated budget for project</b>	<b>2,000,000</b>
Expenditure in 2009/10	1,431,326
Expenditure in 2010/11	641,345
Expenditure in 2011/12 (year to date)	37,020
<b>Total expenditure to date</b>	<b>2,109,691</b>
<b>Current Balance</b>	<b>(109,691)</b>
<b>Forecast total expenditure on completion</b>	<b>2,219,000</b>
<b>Forecast balance remaining on completion</b>	<b>(219,000)</b>

#### Comments

Contractor payments are still to be finalised. Project expected to be overspent by 11%. Infrastructure project budgets are based on best estimate and are subject to variation; as actual cost and risks not known until works have been undertaken.

It is estimated final seal will cost \$100,000.

## Strategic Direction 2 – Best Practice Infrastructure

### R320004 East Derwent Highway, Old Beach – Cassidy’s Road to Baskerville Road

#### Description

The ‘safe system’ approach aims to create safer roadsides to compensate for driver error, using infrastructure improvements. This project will consist of approximately 1.3km of shoulder sealing, addition of three dedicated right turn lanes at junctions to reduce intersection crashes and reduction of the severity of the S-curve near Cassidy’s Road junction.

At this site there have been 29 crashes in the last five years (15 casualty crashes; 14 property damage crashes). These have occurred in three clusters:

- Nine loss-of-control crashes (three casualty) on the S-curve near Cassidy’s Road.
- Seven loss-of-control crashes (three casualty) on the bend at Melane Road.
- Three casualty crashes resulting from loss-of-control and five crashes (three casualty) at the Baskerville Road junction.

Shoulder sealing reduces run-off-road crashes by 30% and head on crashes by 15 %. Dedicated right turn lanes at junctions reduces rear-end collisions by 60%. Reducing the severity of curves and hence reducing run-off-road crashes by 60%.

Milestone Schedule		Milestone Progress	
Date		Date	
Oct/early Nov 2010	Tender Award	Jan 2011	Awarded February 2011
Dec 2010	Commence Works	Jan 2011	Commenced March 2011
April 2011	Complete Works	Sept 2011	Work suspended due to weather and settlement.
Summer 2011/12	Final Seal	Dec 2011	Monitoring land settlement. Interim works planned.
Summer 2011/12	Final Seal	March 2012	Interim reseal of existing road completed.

#### Status

Initial project development and scoping was undertaken in 2008/09. This was a contingency project to commence if funds became available from other road safety levy infrastructure projects.

Parks & Wildlife gave approval to reclaim a modest section of the Derwent foreshore to enable the full scope of the project to proceed in 2010/11. Final seal was to occur in summer 2011/2012.

Work has been suspended and monitoring of settlement of reclamation material is continuing. When settlement has stopped, anticipated to be by spring 2012, then shape correction and sealing will commence summer 2012/2013.

As an interim measure the existing road has been resealed to improve skid resistance over next 12 months. Line marking along resealed road section is to be undertaken during April.



## Strategic Direction 2 – Best Practice Infrastructure

<b>Budget (\$)</b>		
<b>Total allocated budget for project</b>		<b>2,000,000</b>
Expenditure in 2008/09	151,543	
Expenditure in 2009/10	91,162	
Expenditure in 2010/11	1,002,227	
Expenditure in 2011/12 (year to date)	34,044	
<b>Total expenditure to date</b>		<b>1,278,976</b>
<b>Current Balance</b>		<b>721,024</b>
<b>Forecast total expenditure on completion</b>		<b>2,000,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

### Comments:

Tenders came in considerably lower than expected. However, the project has become significantly more complex than anticipated, reducing the likelihood of any savings. A far greater amount of rock was required for reclamation than originally planned; monitoring and evaluation of settling has been extended; and the requirement to reseal the existing road as an interim measure, will all increase costs which will either reduce, or eliminate, the previously estimated underspend.

## Strategic Direction 2 – Best Practice Infrastructure

### R310013 Brooker Highway, Granton: Install painted median with flexible safety barrier along centre of the road

#### Description

During the last five years there have been three severe head-on collisions: two serious casualty crashes on 2 November 2004 and 5 April 2006; and a fatal crash on 5 April 2009. This is the equal highest concentration of serious head-on crashes in Tasmania.

The 'safe system' approach provides flexible wire rope safety barrier in the central median to prevent head-on crashes and reduce the severity of loss-of-control crashes. This solution is appropriate on high volume, high speed roads to separate opposing streams of traffic. This will also require some widening of the shoulders on the Brooker Highway.

Milestone Schedule		Milestone Progress	
Date		Date	
Sept 2011	Award Tender	September 2011	Tender prepared
Oct 2011	Commence Works	Dec 2011	Tender awarded
Feb 2012	Complete Works	March 2012	Works completed.

#### Status

This project was postponed as it was too late to go through the tender process and then complete road sealing works prior to the onset of winter 2011.

Work commenced in January 2012 and was completed in March 2012. Final invoices are still to be presented.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>1,000,000</b>
Expenditure in 2011/12 (year to date)	818,452	
<b>Total expenditure to date</b>		<b>818,452</b>
<b>Current Balance</b>		<b>181,548</b>
<b>Forecast total expenditure on completion</b>		<b>1,000,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

#### Comments

This project is jointly funded by the Tasmanian Road Safety Strategy and DIER. Safety improvements will be paid for from the Road Safety Levy; the resealing of the road pavement, costing approximately \$950,000, will be funded by DIER. (Note: the \$58,702 expenditure reported to end September 2011 was for the Preliminary Design stage of this project and does not form part of the allocated \$1m for this stage of the project.)

## Strategic Direction 2 – Best Practice Infrastructure

### R310024 East Tamar Highway, North of Dilston: Flexible wire rope safety barrier along existing painted median

#### Description

This is a preventative safety measure using the 'safe system' approach. Installing flexible safety barrier in an existing painted median prevents serious casualty crashes on undivided, high volume, high speed roads. The painted median was provided as part of recent upgrading of the East Tamar Highway.

Wire rope safety fencing in median barriers prevents head-on crashes and reduces the severity of loss-of-control crashes.

Milestone Schedule		Milestone Progress	
Date		Date	
May 2011	Commence works	July 2011	Works commenced
Nov 2011	Complete barrier installation works	Sept 2011	Wire Rope Safety Barrier installed
Nov 2011	Complete all works	Dec 2011	Work almost complete.
Nov 2011	Complete works	March 2012	Work completed.

#### Status

Project undertaken as a variation under the current contract for the East Tamar Highway Dilston works.

Wire Rope Flexible Safety Barrier has been installed.

All major work, including sight benching to improve sight distance to a G-turn facility and relocation of Aurora poles was completed by December 2011. Finishing work finalised early 2012.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>200,000</b>
Expenditure in 2011/12 (year to date)	170,566	
<b>Total expenditure to date</b>		<b>170,566</b>
<b>Current Balance</b>		<b>29,434</b>
<b>Forecast total expenditure on completion</b>		<b>200,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

#### Comments

The projected 25% saving on this project will not be realised due to improvement to G-turns at two locations including installation of a traffic island was additional work. Relocation of Aurora poles came in at a slightly higher cost than estimated. Final payments to be made next financial quarter.

## Strategic Direction 2 – Best Practice Infrastructure

### R310023 Bass Highway, Launceston to Burnie: Audible centreline and edge line markings

#### Description

Provide audible centreline and edge line markings on the Bass Highway between Launceston and Burnie where the posted speed limit is greater than 80 km/h.

There have been 31 serious casualty crashes on this section of the Bass Highway in the last five years – 13 involving head-on collisions and 18 involving loss-of-control.

Many head-on and loss-of-control crashes are attributed by Police to the driver being asleep, fatigued or inattentive. Audible markings help to address these factors by warning drivers when they are leaving their lane. Audible markings are expected to reduce head-on and loss-of-control crashes by 15%.

Milestone Schedule		Milestone Progress	
Date		Date	
Nov 2011	Award Tender	Sept 2011	Tenders to be advertised October
Mid Dec 2011	Commence Works	Dec 2011	Contract awarded
May 2012	Complete Works	March 2012	Work commenced January 2012 and is on track to be completed by May 2012.

#### Status

Tenders were invited on 15 October and the contracts were awarded on 13 December 2011. Work will commence early January 2012. Expected completion date for all works is May 2012.

The contract will deliver audible centre markings on all undivided carriageway between Launceston and Burnie. Any remaining budget will be used to provide audible edge lines on this section of highway.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>1,600,000</b>
Expenditure in 2011/12 (year to date)	226,909	
<b>Total expenditure to date</b>		<b>226,909</b>
<b>Current Balance</b>		<b>1,373,091</b>
<b>Forecast total expenditure on completion</b>		<b>1,600,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

## Strategic Direction 2 – Best Practice Infrastructure

### 652600 Motorcycle Safety Measures: Sealing at Isolated Bends

#### Description

The project is to treat locations where loose gravel on the road increases the risk of motorcyclists losing control. The sites were selected by using the Crash Data Manager computer system to identify locations where motorcycle run-off-road crashes have been reported and there are issues with gravel on the road.

There are four locations where it is proposed to seal the shoulder or side road to reduce the likelihood of gravel ending up on the road. There are three sections of road where warning signs are proposed.

Sealing works to reduce the risk of gravel on the road are expected to reduce motorcycle loss-of-control crashes by 30%. Warning signs are expected to achieve a 10% reduction.

Milestone Schedule		Milestone Progress	
Date		Date	
Sept 2011	Award Tender for Warning Signage	Sept 2011	Tenders advertised.
Oct 2011	Commence Works to Install Warning Signs	Oct 2011	Tender closed
Dec 2011	Warning Signs Installed	Nov 2011	All signs installed.
Sept 2011	Award Tender for Collapsible CAMs	Dec 2011	Using DIER maintenance contract
Oct 2011	Commence Works to Install Collapsible CAMS and re-seal shoulders	Dec 2011	Commenced
Dec 2011	Collapsible CAMs installed and shoulders re-sealed.	Dec 2011	Expected early 2012
Dec 2011	Collapsible CAMs installed and shoulders re-sealed.	March 2012	Refer 'Status'.

#### Status

Project scoping identified seven sites for treatment under this project. Tender period for installation of 14 warning signs at three sites closed 14 October and was awarded late October. All warning signs were installed by end November 2011.

Preparation of Project Proposal Reports (PPRs) delayed due to competing tasks and lack of resources within DIER. Project is being delivered as a variation to the current Maintenance Contracts under the Minor Works Component. Preparation of collapsible Chevron Alignment Markers specifications (new to Tasmania) added another layer of complexity. Tender process and timing of sealing and resurfacing works in regard to weather conditions, may see a delay in full installation to October 2012.

## Strategic Direction 2 – Best Practice Infrastructure

Budget (\$)		
<b>Total allocated budget for project</b>		<b>296,340*</b>
Expenditure in 2011/12 (year to date)	0	
<b>Total expenditure to date</b>		<b>0</b>
<b>Current Balance</b>		<b>296,340</b>
<b>Forecast total expenditure on completion</b>		<b>296,340</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

### Comments

\*Budget remaining from earlier Motorcycle Safety Works programs was carried over to the 2010/11 and then the 2011/2012 Motorcycle Safety Program of Works.

## Strategic Direction 2 – Best Practice Infrastructure

### R310015 Midland Highway at Symmons Plains - 2 Plus 1

#### Description

Detailed design and construction to widen the carriageway and provide two lanes in one direction and one lane in the other direction, separated by a painted median with wire rope safety fencing.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2012	Detailed design report to be received from engineering consultants	December 2011	Consultant engaged
July 2012	Detailed design report to be received from engineering consultants	March 2012	DA lodged with Northern Midlands Council.
August 2012	Tender process for construction phase		
October 2012	Award tender		
November 2012	Commence works		
December 2014	Complete works		

#### Status

The engineering consultants engaged to investigate and provide concept report for site will continue working on the project to complete detailed design reports. Consultancy Agreement for detailed design phase signed December 2011. Development Application lodged with the council March 2012. On-site public information session is scheduled for 12 April and display will be left in-situ until 16 April 2012. Plans will then be displayed at council offices until 26 April 2012.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>7,750,000</b>
Expenditure in 2011/12 (year to date)	71,223	
<b>Total expenditure to date</b>		<b>71,223</b>
<b>Current Balance</b>		<b>7,678,777</b>
<b>Forecast total expenditure on completion</b>		<b>7,750,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

#### Comments

Monthly meetings to be held between project manager, sponsor and consultants to ensure design work remains on target to meet 2012-2013 construction period. At the end of the detailed design phase cost estimates will be revised, giving a better understanding of expected project costs.

## Strategic Direction 2 – Best Practice Infrastructure

### R310016 Bass Highway, North of Gannons Hill Road - 2 Plus 1

#### Description

Detailed design and construction to widen the carriageway and provide two lanes in one direction and one lane in the other direction, separated by a painted median with wire rope safety fencing.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2012	Detailed design report to be received from engineering consultants	December 2011	Consultant engaged
July 2012	Detailed design report to be received from engineering consultants	March 2012	DA lodged with Meander Valley Council.
August 2012	Tender process for construction phase		
October 2012	Award tender		
November 2012	Commence works		
December 2013	Complete works		

#### Status

The engineering consultants engaged to investigate and provide concept report for site will continue working on the project to complete detailed design reports. Consultancy Agreement for detailed design phase signed December 2011. Development Application lodged with the council March 2012. On-site public information session is scheduled for 12 April and display will be left in-situ until 16 April 2012. Plans will then be displayed at council offices until 26 April 2012.

Budget (\$)		
<b>Total allocated budget for project</b>		<b>7,365,000</b>
Expenditure in 2011/12 (year to date)	60,763	
<b>Total expenditure to date</b>		<b>60,763</b>
<b>Current Balance</b>		<b>7,304,237</b>
<b>Forecast total expenditure on completion</b>		<b>7,365,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

#### Comments

Monthly meetings to be held between project manager, sponsor and consultants to ensure design work remains on target to meet 2012-2013 construction period. At the end of the detailed design phase cost estimates will be revised, giving a better understanding of expected project costs.



## Strategic Direction 2 – Best Practice Infrastructure

### Road Safety Initiatives Funded Projects

#### 151030 /151040 Local Road Line Marking 2011/12

##### Description

DIER has historically assumed responsibility for maintenance of line marking on local roads. Recurrent DIER funding of about \$310,000 pa has been allocated for the task. This has been used to maintain existing lines as far as possible but has been insufficient to enhance traffic safety outcomes.

To achieve enhanced traffic safety outcomes ongoing improved line marking is a cost effective and ongoing strategy. DIER will use the additional \$500,000 pa of road safety initiatives funding to improve line marking by:

- Increasing use of long life materials in urban areas.
- Repainting waterborne painted lines on a more frequent basis in rural areas.
- Approximately one third of the total budget will be directed toward work involving water borne paint in rural areas.
- The balance will be directed toward work involving thermoplastic materials.
- In urban areas the majority of work will involve replacement of painted pavement markings with thermoplastic pavement markings.
- Thermoplastic pavement marking in urban areas will typically be packaged by geographic area eg. by suburb, town or portion of a city.

##### Status

Contract was awarded in December 2010 and at the end of June 2011 the project was underspent by \$151,310 due to wet weather constraints during the prime part of the season. This amount is being carried over. The Contractor is meeting quarterly with DIER to report progress and cash flow.

Budget (\$)		
<b>Total allocated budget for year</b>		<b>962,507*</b>
Expenditure 2011/12 (year to date)	799,867	
<b>Total expenditure to date</b>		<b>799,867</b>
<b>Current Balance</b>		<b>162,640</b>
<b>Forecast total expenditure on completion</b>		<b>962,507</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

##### Comments

\*\$500,000 provided through road safety initiatives funding plus \$151,310 carried forward from 2010/2011 financial year to be spent in 2011/12 financial year. The remaining \$311,197 funds will be provided by DIER.

## Strategic Direction 3 – Increased Safety for younger Road Users

### 653100 Novice Driver Reforms

#### Description

Stage 1 – Introduction of tougher penalties, regression and ‘restart’ provisions; a driving reward; minimum 12-month P1 stage followed by a minimum 12-month P2 stage, regardless of age.

Stage 2 – Extension of the minimum learner period from 6 to 12 months. Introduction of a two-stage learner period: a minimum three-month L1 stage, followed by a practical driving assessment, and then a minimum nine-month L2 stage (requiring 50 supervised driving hours) followed by a second practical driving assessment.

Milestone Schedule		Milestone Progress	
Date		Date	
July 2008	Recruitment of additional driver testing officers	July 2008	Completed
Aug 2008	Stage 1 reforms commence	Aug 2008	Completed
Oct / Dec 2008	Consult with relevant stakeholders	Oct / Dec 2008	Completed
June 2008 / Feb 2009	Preparation of documentation for the new L2 driving assessment and the revised P1 driving assessment	July 2009	Completed
Feb 2009	External evaluation and peer assessment	July 2009	Completed
Apr 2009	prepare legislative changes (at regulation level)	Apr 2009	Completed
Apr 2009	Stage 2 reforms commence	Apr 2009	Completed
July 2009	Introduce new L2 and P1 driver assessments	July 2009	Completed
April 2011	Review of L2 and P1 assessments by external contractor	Dec 2011	Evaluation completed and report delivered December 2011
June 2011	Achieve full cost recovery (estimated date)	Dec 2011	Significant gap between expected demand and actual demand means full cost recovery will not be achieved this financial year and is unlikely for 2012/13 financial year.

## Strategic Direction 3 – Increased Safety for younger Road Users

<b>Budget</b>		
<b>Total allocated budget for project</b>		<b>2,115,239</b>
Expenditure in 2007/08	426,091	
Expenditure in 2008/09	773,380	
Expenditure in 2009/10	355,626	
Expenditure in 2010/11	473,000	
Expenditure in 2011/12 (year to date)	44,957	
<b>Total expenditure to date</b>		<b>2,073,054</b>
<b>Current Balance</b>		<b>42,185</b>
<b>Forecast total expenditure on completion</b>		<b>2,115,239</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

### Comments

Novice Driver Reforms: New L2 and P1 driver assessments were introduced in July 2009. To date, approximately 24,817 candidates have undertaken the P1 test and 15,968 have taken the L2 assessment.

ARRB Group provided the final contract report relating to the review of L2 and P1 assessments, in early December 2011. DIER has commenced development of project proposals arising from the outcomes of the report.

Learners are taking longer to book for the L2 assessment than predicted. There are around 9,270 L1 licence holders that are eligible to undertake the L2 assessment not yet having made a booking.

The upcoming 2012 Graduated Licensing Policy project will include evaluation of these reforms.

## Strategic Direction 3 – Increased Safety for younger Road Users

### TBA Review of the Graduated Licensing System (GLS)

#### Description

To evaluate the 2008/2009 reforms to the Tasmanian Graduated Licensing System.

The reforms aimed to increase the experience and skills of car learner drivers in a safe, supervised environment and to better prepare them for the challenge and risks of solo driving.

Reforms included:

- Increasing the minimum learner period from 6 to 12 months;
- Introduction of a two stage learner period, including a minimum 3 month L1 stage, followed by a practical driving assessment and then a minimum 9 month L2 stage (requiring a minimum of 50 supervised hours) followed by a second practical driving assessment;

The review will also investigate current ‘best practice’ by examining initiatives in other jurisdictions’ graduated licensing systems such as curfews (night driving restrictions), vehicle power restrictions, passenger restrictions, increased minimum driving hours and mobile and other technology restrictions.

Milestone Schedule		Milestone Progress	
Date		Date	
Mar 2012	Policy Officer to conduct research and develop project proposal in line with best practice	April 2012	In progress
May 2012	Project proposal drafted		
May 2012	Establish working group		
May 2012	Establish Steering Committee		
June 2012	Finalise policy papers		
Aug 2012	Project proposal finalised and recommendations approved.		
Aug 2012	Consultation process commences with defined policies (extent of consultation required not determined at this stage)		
Dec 2012	Cabinet process commenced, i.e. drafting of cabinet minute		

#### Status

- A dedicated policy officer was recruited in March 2012 to work on the project full-time. The project proposal is expected to be finalised by early May 2012.
- A national Austroads research project on “Development of a Best Practice Model Graduated Licensing Scheme for Car Drivers” is presently being undertaken and is expected to be completed by mid 2012.
- This project will provide recommendations on ‘best practice’ in graduated licensing for car drivers based on the review of national and international literature. The project will be finalised prior to completion of the Tasmanian review and will allow Tasmania to draw upon world’s best practice and learnings from other jurisdictions.

## Strategic Direction 3 – Increased Safety for younger Road Users

Budget	
<b>Total allocated budget for project per annum</b>	<b>TBA</b>
Expenditure in 2011/12 (year to date)	
<b>Total expenditure to date</b>	
<b>Current Balance</b>	
<b>Forecast total expenditure on completion</b>	
<b>Forecast balance remaining on completion</b>	

### Comments

## Strategic Direction 4 – Enhanced vehicle Safety

### 654400 Australasian New Car Assessment Program

#### Description

ANCAP aims to increase consumer awareness of the importance of purchasing a safer vehicle. Levy funds will be allocated annually to ANCAP for this purpose (approximately \$11,000 per annum).

Milestone Schedule		Milestone Progress	
Date		Date	
	Ongoing, for the life of the Road Safety Levy		

#### Status

Payments are up to date.

Budget		
<b>Total allocated budget for project per annum</b>		<b>12,000</b>
Expenditure in 2009/10	0	
Expenditure in 2010/11	9,981	
Expenditure in 2011/12 (year to date)	10,310	
<b>Total expenditure to date</b>		<b>20,291</b>

#### Comments

Alternative funding was available for previous ANCAP contributions. From 2010/11 the Road Safety Levy will be used to support ANCAP.

## Strategic Direction 4 – Enhanced vehicle Safety

### 654100 Review of Minimum Safety Standards for the Government Vehicle Fleet

#### Description

To undertake a review of the existing minimum safety standards for the Government vehicle fleet and to assess whether any amendments should be made to this policy to improve the overall safety of the Government fleet. This includes reviewing the minimum ANCAP star rating and, mandatory safety features and optional safety features included in the current policy. This review will include a quantification of the financial impacts on the Government from amending the existing policy.

Improving the safety standard of the Government Vehicle Fleet will have offer significant benefits to the broader Tasmanian community as many vehicles originally sold as Government Fleet Vehicles are later passed on to other road users through the second hand car market.

Milestone Schedule		Milestone Progress	
Date		Date	
October 2011	Scoping and development of project business plan.	Dec 2011	Commenced

#### Status

Scoping and project planning for the review of the minimum safety standard of the Government Vehicle Fleet is currently underway. Milestones and budget requirements will be updated once this initial planning stage is completed.

Budget		
<b>Total allocated budget for project</b>		<b>TBA</b>
Expenditure in 2011/12 (year to date)		
<b>Total expenditure to date</b>		
<b>Current Balance</b>		
<b>Forecast total expenditure on completion</b>		<b>TBA</b>
<b>Forecast balance remaining on completion</b>		<b>TBA</b>

#### Comments

## Complementary Initiatives

### 655300 RSAC and TRSS Support

#### Description

Road Safety Levy funding was approved for two positions to assist with the co-ordination and implementation of projects delivered under the Tasmanian Road Safety Strategy, for the life of the levy (five years). One position is within Land Transport Safety Policy and one within Traffic Engineering Branch. An amount of \$200,000 has also been approved to provide funding support for the project management of Levy projects.

Milestone Schedule		Milestone Progress	
Date		Date	
	Ongoing		

#### Status

Ongoing.

Budget	
<b>Total allocated budget for project</b>	<b>N/A</b>
Expenditure in 2007/08	95,017
Expenditure in 2008/09	121,411
Expenditure in 2009/10	287,119
Expenditure in 2010/11	379,972
Expenditure in 2011/12	242,082
<b>Total expenditure to date</b>	<b>1,125,601</b>

#### Comments

The extension and increase of the road safety levy has provided funding for ongoing project management from January 2012.



## Complementary Initiatives

### 655100 Alcohol Interlocks - Implementation

#### Description

Implement a Mandatory Alcohol Interlock Program on re-licensing for repeat or high-level drink driving offences.

Milestone Schedule		Milestone Progress	
Date		Date	
Jan 2011	Engage Project Manager, draft project documentation and commence communications with key stakeholders	Jan 2011	Completed
Feb 2011	Establish Steering Committee	Feb 2011	Completed
Feb 2011	Preliminary design of alcohol interlock program	Feb 2011	Completed
Dec 2011	Determine system change and resourcing requirements	Dec 2011	Being finalised
Jan 2012	Draft Regulations	Dec 2011	Practical completion
March 2012	Preliminary design and costing and communications plan	Dec 2011	Completed
Jan 2012	Procurement of service providers	Jan Dec 2011	Pre-tender Engagement with suppliers completed. Tenders to be called in June 2012
May 2012	Communication with key stakeholders		In progress –May 2012

#### Status

The Project is progressing. The design of the Tasmanian Mandatory Alcohol Interlock Program has been completed. This follows extensive analysis of the Tasmanian context and the systems in place internationally and in other jurisdictions. A commencement date will be determined following the outcomes of stakeholder consultations planned for mid- 2012. System change, procurement and communications timelines will be developed based on the outcomes of stakeholder consultation.

Budget		
<b>Total allocated budget for project</b>		<b>430,000</b>
Expenditure in 2010/11	55,949	
Expenditure in 2011/12 (year to date)	28,377	
<b>Total expenditure to date</b>		<b>84,326</b>
<b>Current Balance</b>		<b>345,674</b>
<b>Forecast total expenditure on completion</b>		<b>430,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

## Complementary Initiatives

### 141104 Community Road Safety Partnerships

#### Description

Since 2003 DIER's Community Road Safety Partnerships (CRSP) program has established 29 partnerships with local government authorities and their respective community networks. All activities and project initiatives funded by the CRSP program are designed to align with the key directions of the Tasmanian Road Safety Strategy 2007-16. CRSP aims to engage local communities in road safety awareness, education and intervention projects which primarily target key focus areas such as speeding, drink/drug driving, inattention/distraction, safer vehicles and safety of young drivers.

#### Status

DIER has now established 29 partnerships across Tasmania.

The CRSP funding is broken into the following components: Salary and on costs for one FTE Road Safety consultant; local grassroots road safety projects; general community awareness / education; partnership building; community capacity building / community consultation.

In May 2012 Regional Workshops will be conducted in Burnie, Hobart and Launceston targeting key local CRSP contacts. The workshops will aim to achieve a common understanding and direction of the major CRSP objective of "creating a culture of road safety at the community level".

Budget		
<b>Annual budget for project</b>		<b>200,000</b>
Expenditure in 2011/12 (year to date)	137,186	
<b>Total expenditure to date</b>		<b>137,186</b>
<b>Current Balance</b>		<b>62,814</b>
<b>Forecast total expenditure on completion</b>		<b>200,000</b>
<b>Forecast balance remaining on completion</b>		<b>0</b>

## Funding

### Road Safety Levy 2011/12

As at 31 March 2012

2011/12 Financial Year	Proposed Budget 2011/12	Actual (ytd) 2011/12
Opening Balance (at 1 July 2011)	8,042,857	8,042,857
<b>Revenue</b>		
Road Safety Levy collected	11,000,000	8,636,586
Funds available for distribution	9,700,000	7,660,400
<b>Total Funds available for distribution</b>	<b>17,742,857</b>	<b>15,703,257</b>
<b>Expenditure</b>		
Safer Travel Speeds	5,616,128	2,202,051
Best Practice Infrastructure	12,092,148	3,394,296
Improved Safety for Young Road Users	260,000	44,957
Enhanced Vehicle Safety	166,981	10,310
Complementary Initiatives	1,075,949	1,096,381
<b>Total</b>	<b>19,211,206</b>	<b>6,794,995</b>
Closing Balance (as at June 2012)	<b>(1,468,349)</b>	

The above figures include completed projects that are not reported on in this progress report.

## Funding

### Road Safety Initiatives 2011/12

As at 31 March 2012

2011/12 Financial Year	Budget	Actual 2011/12
<b>Revenue</b>		
Carry Forward from 2010/11	471,310	
Speeding Fines allocated to DIER for 2011/12	1,240,000	
<b>Total</b>	<b>1,711,310</b>	
<b>Expenditure</b>		
Community Road Safety Partnership	200,000	137,186
Point to Point Implementation	860,000	0
Line Marking	651,310	799,867
<b>Total</b>	<b>1,711,310</b>	<b>937,053</b>

## Funding

### MAIB Funding

As at 31 March 2012

2011/12 Financial Year	Budget 2011/12	Actual 2011/12	Commitments	Balance
<b>Expenditure (DIER)</b>				
Administration & Public Relations	266,998	127,979	42,000	97,019
Public Education	966,278	670,978	155,000	140,300
Research	38,142	41,106	67,000	(69,964)
	<i>1,271,418</i>	<i>840,064</i>	<i>264,000</i>	<i>167,354</i>
<b>Expenditure (Police)</b>				
Salaries	1,839,248	1,378,166	0	461,082
Operating Expenses	194,000	122,507	0	71,493
Equipment	294,554	76,363	0	218,191
	<i>2,327,802</i>	<i>1,577,035</i>	<i>264,000</i>	<i>750,767</i>
<b>Total</b>	<b>3,599,220</b>	<b>2,417,099</b>	<b>264,000</b>	<b>918,121</b>

Please note: Budget includes carry forwards of \$592,170 to DIER and \$23,122 to Police.

## Statistics

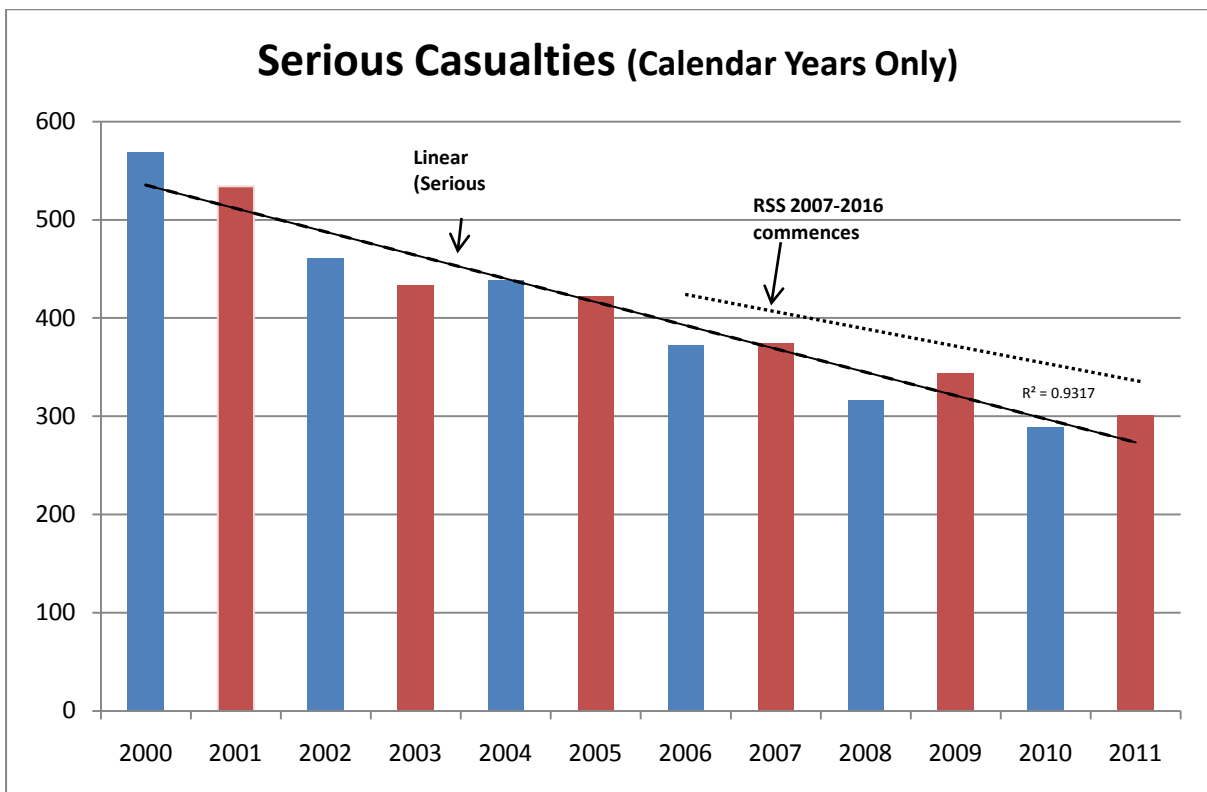
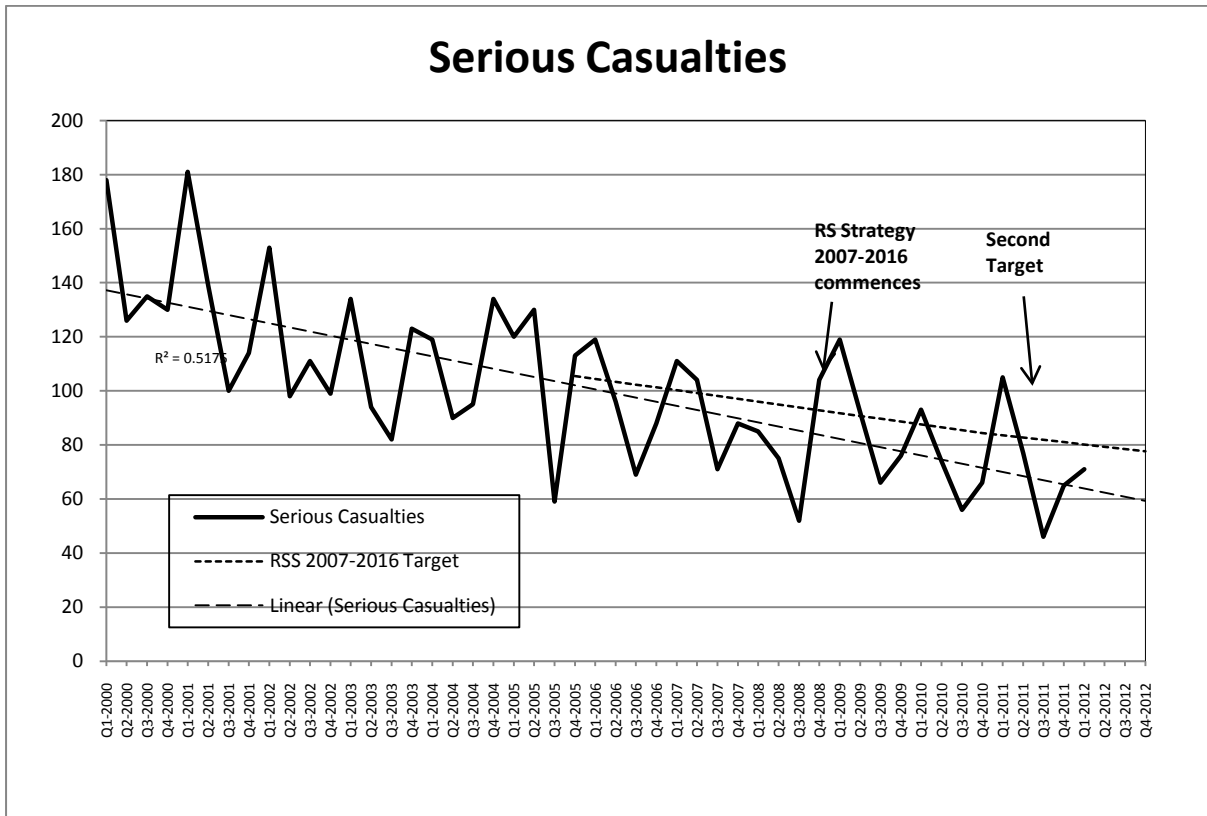
The table below provides an overview of the serious casualties from 2005 to 2011 by calendar year and for the first quarter of 2012.

		<b>Tasmania Together Baseline</b>							
		<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
	<b>TOTAL</b>	<b>422</b>	<b>372</b>	<b>374</b>	<b>316</b>	<b>353</b>	<b>287</b>	<b>293</b>	<b>71</b>
<b>By Police District</b>	North	124	94	87	28	98	70	83	18
	West	102	99	94	86	87	80	75	21
	South	78	71	65	67	56	51	56	7
	East	118	108	128	105	112	86	79	25
<b>By Speed Zone</b>	60 or less	136	124	110	120	132	96	102	16
	70-90	67	59	59	449	48	49	48	13
	100-110	219	189	205	147	173	142	143	42
	Not stated	0	0	0	0	0	0	0	0
<b>By Road User Type</b>	Driver	190	148	169	139	138	122	130	33
	Passenger	85	96	94	68	83	42	51	15
	Pedestrian	44	31	27	26	32	32	34	9
	Motorcyclist	78	80	66	68	76	76	66	12
	ATV Rider	6	4	11	7	11	4	4	1
	Bicyclist	17	12	7	8	13	10	8	1
	Other	2	1	0	0	0	1	0	0
<b>By Age Group</b>	Under 17	50	35	41	21	32	25	24	8
	17-29	136	144	131	116	130	95	97	22
	30-49	141	112	113	94	87	99	78	17
	50-64	46	43	51	43	58	38	50	13
	Over64	45	37	35	38	46	29	44	11
	Not known	3	1	3	4	0	1	0	0
<b>By Crash Type</b>	<b><u>Multi-Vehicle</u></b>								
	From adjacent directions	30	21	24	22	19	17	10	1
	From opposing direction	64	94	74	58	57	56	67	15
	From same direction	18	18	9	18	12	14	18	4
	Overtaking	27	11	23	4	20	10	10	2
	Manoeuvring	20	18	29	28	31	18	15	4
	<b><u>Pedestrian &amp; Other</u></b>								
	Pedestrian	43	32	26	26	32	33	37	8
	Passenger & Misc	13	5	3	2	3	2	4	1
	<b><u>Single Vehicle</u></b>								
	Off path on curve	118	98	107	79	107	81	83	23
	Off path on straight	80	64	70	71	65	47	47	13
On path	9	11	9	8	7	11	10	0	

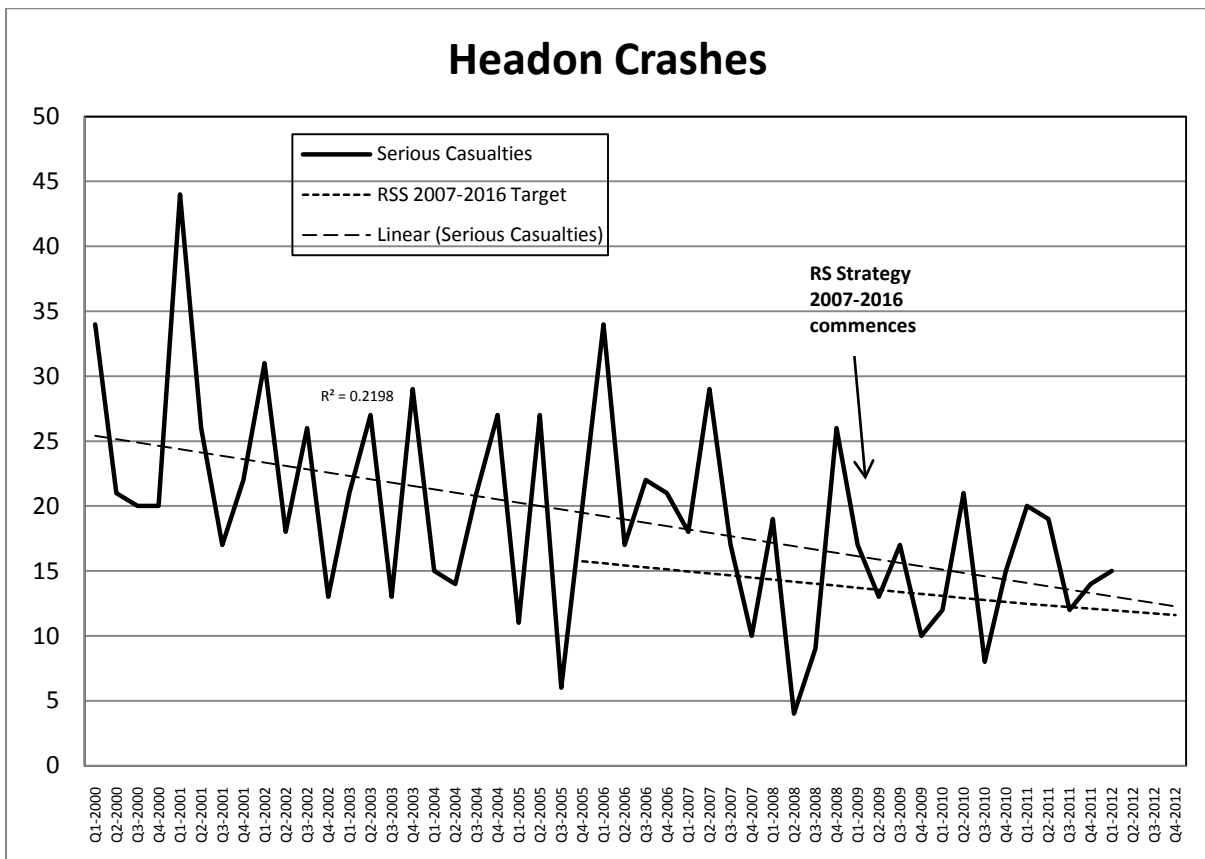
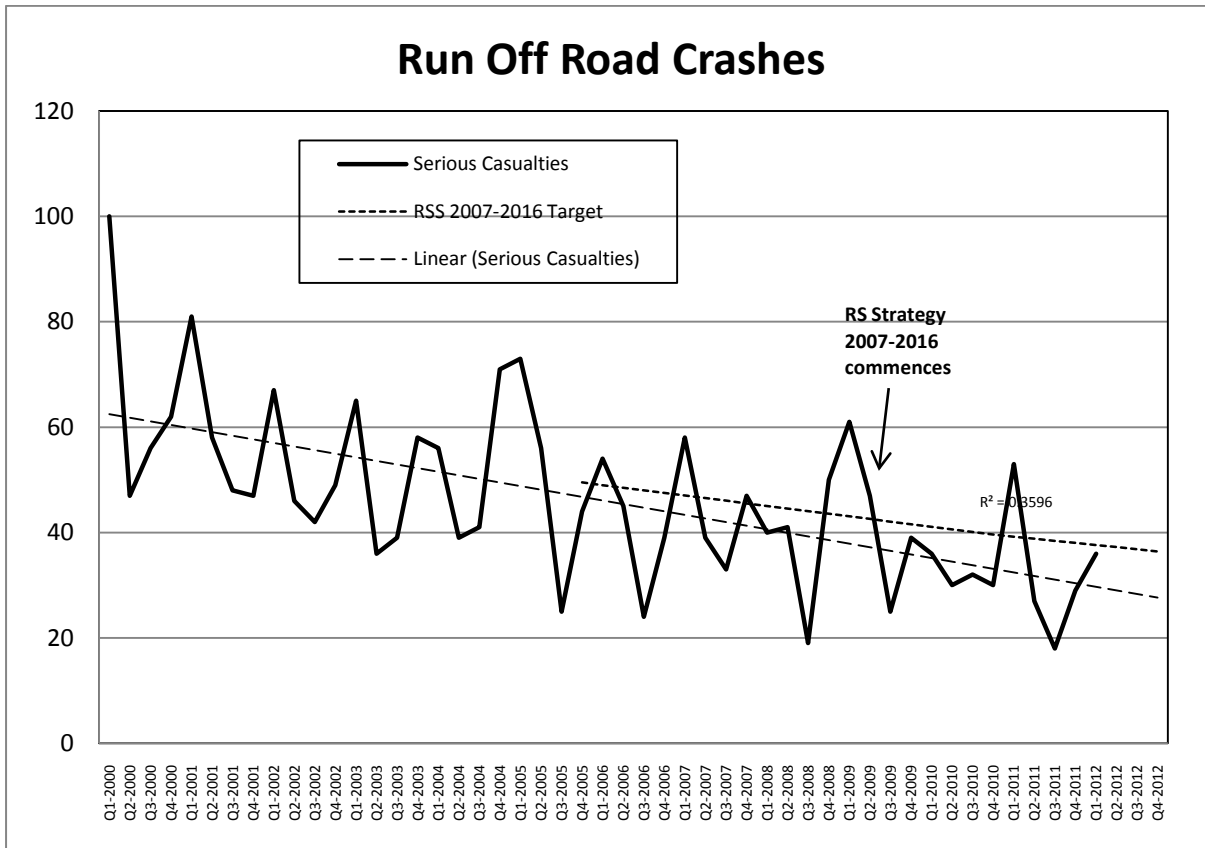
## Statistics

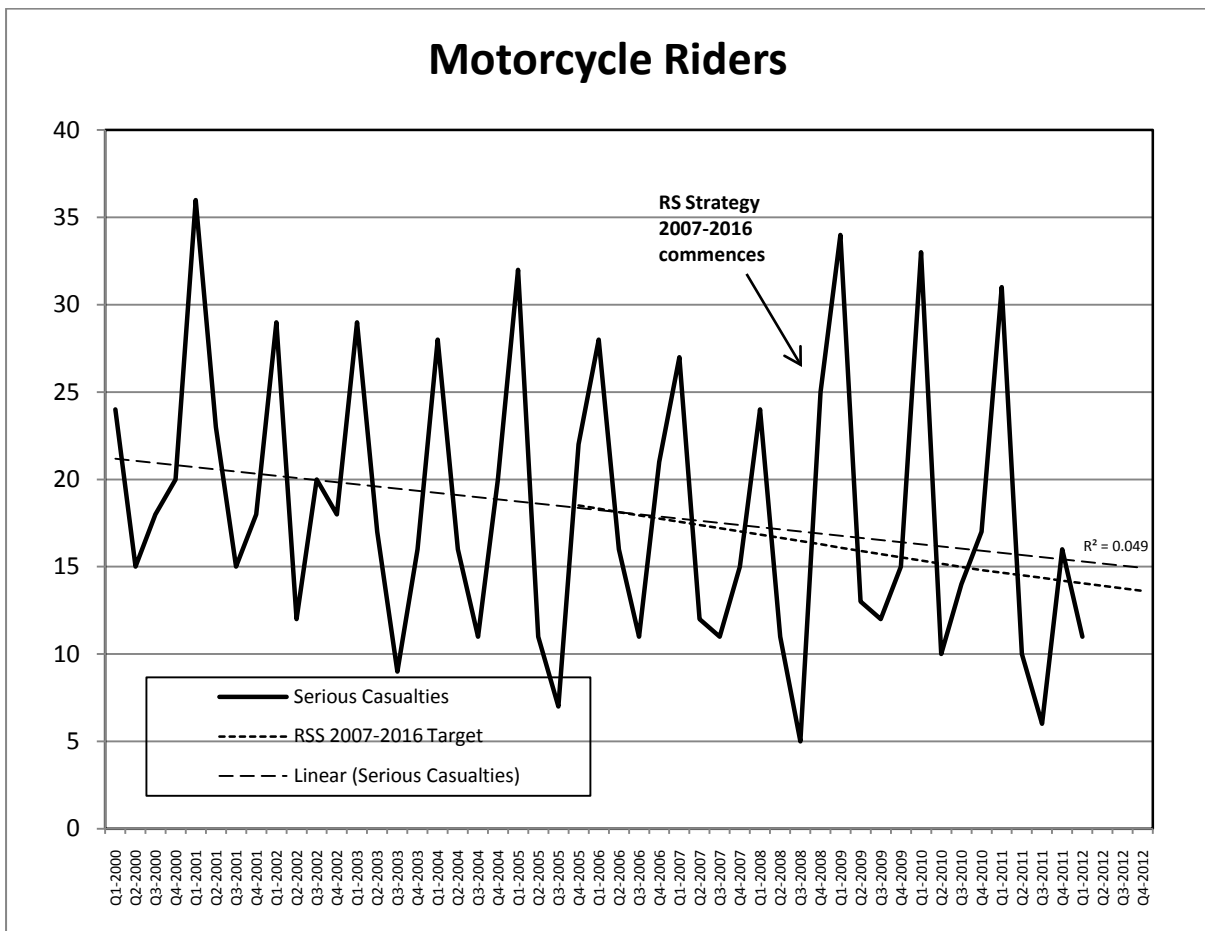
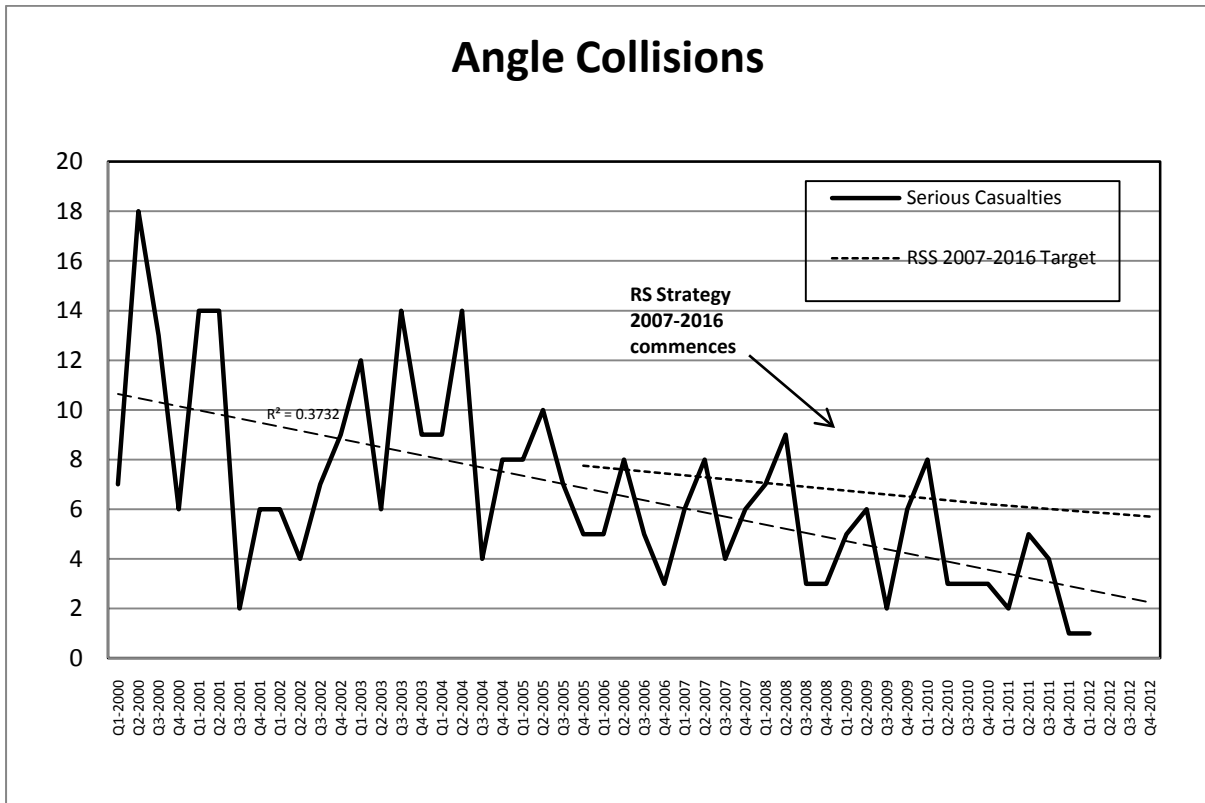
		2005	2006	2007	2008	2009	2010	2011	2012	
	<b>TOTAL</b>	<b>422</b>	<b>372</b>	<b>374</b>	<b>316</b>	<b>353</b>	<b>287</b>	<b>293</b>	<b>71</b>	
Crash Factor (as per police report at scene of crash)	Alcohol	78	77	86	93	91	70	61	9	
	Animal on road	4	4	8	8	4	15	5	2	
	Asleep-fatigue	25	30	43	15	25	10	18	3	
	Distraction – external to vehicle	19	17	32	30	40	42	37	8	
	Distraction – in vehicle	14	19	12	13	12	15	9	2	
	Drugs	32	38	62	48	53	31	24	2	
	Exceeding speed limit	49	65	45	59	57	31	29	3	
	Excessive speed for the conditions/circumstances	111	111	73	74	85	66	86	24	
	There may be more than one crash factor associated with a crash.	Fail to give way	19	29	25	36	31	27	36	12
	Fail to obey traffic signals	3	6	5	7	2	6	5	0	
	Fail to observe road signs & markings	31	12	17	21	25	18	12	6	
	Improper overtaking	17	8	21	7	27	14	13	2	
	Inattentiveness	186	145	147	160	158	74	10	3	
	Inexperience	78	98	107	93	126	101	73	18	
	Other obstruction on road	6	8	12	6	12	15	12	2	
	Pedestrian on road	35	22	22	19	28	29	35	9	
	Reversing without care	6	4	4	5	3	5	7	1	
	Road defect	22	29	18	23	20	20	9	3	
	Turning without care	7	15	12	19	22	18	20	10	
	Unwell-infirm	26	37	32	40	44	36	34	14	
Using a mobile phone	2	2	3	1	1	2	2	0		
Vehicle defect	23	18	28	18	49	15	21	2		

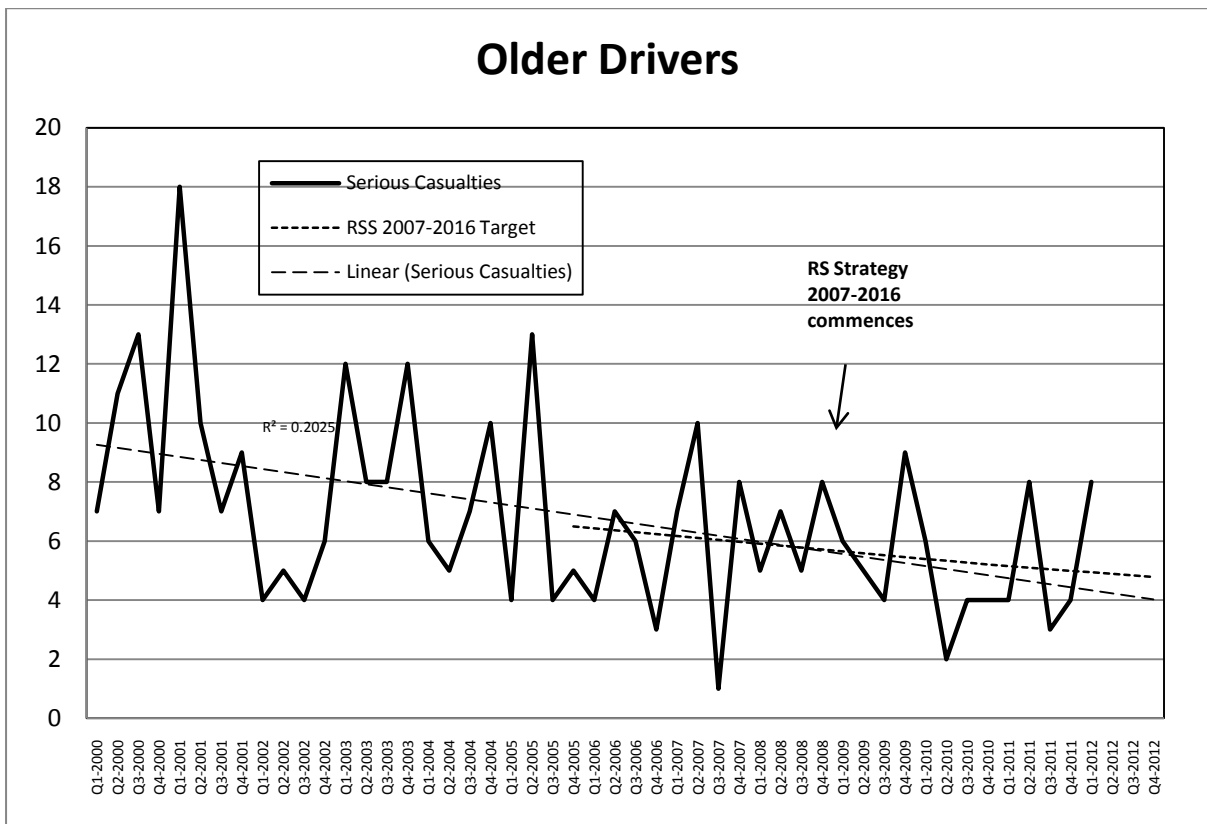
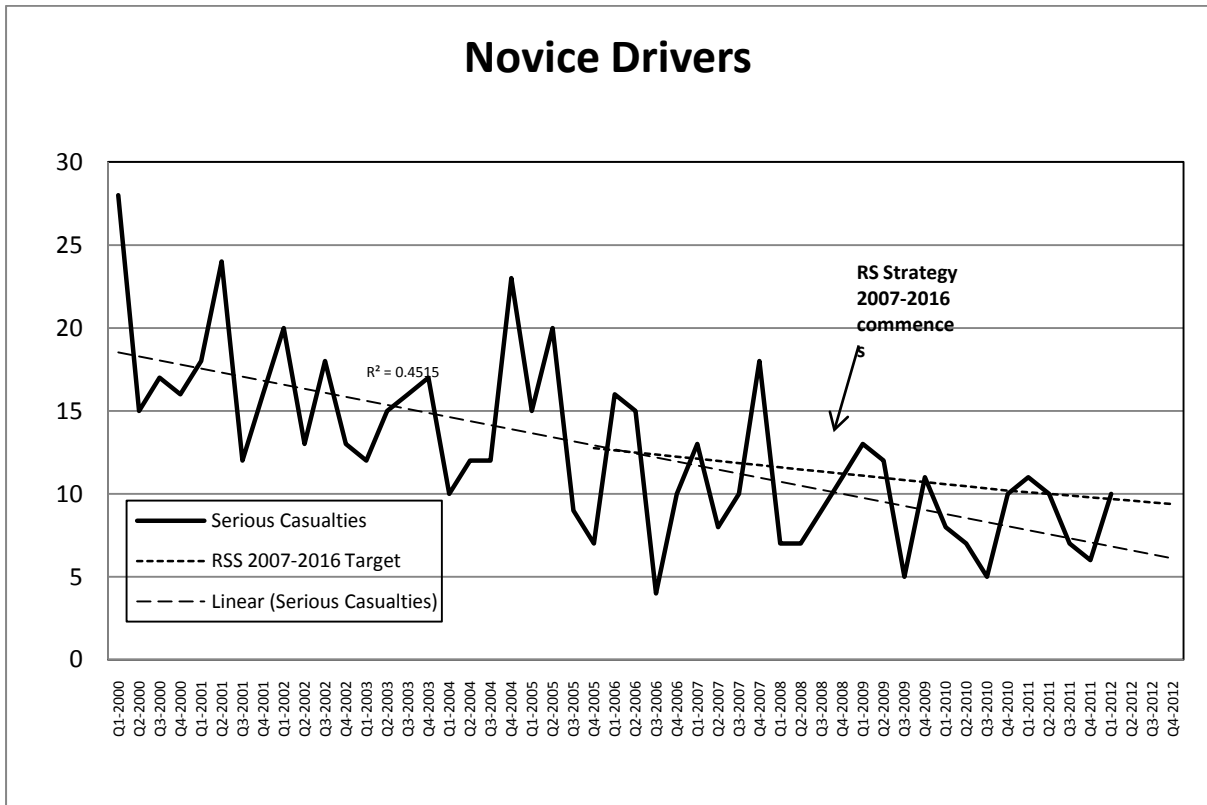
Note: From 1 January 2011 'inattentiveness' will only be reported if there is no other relevant crash factor.

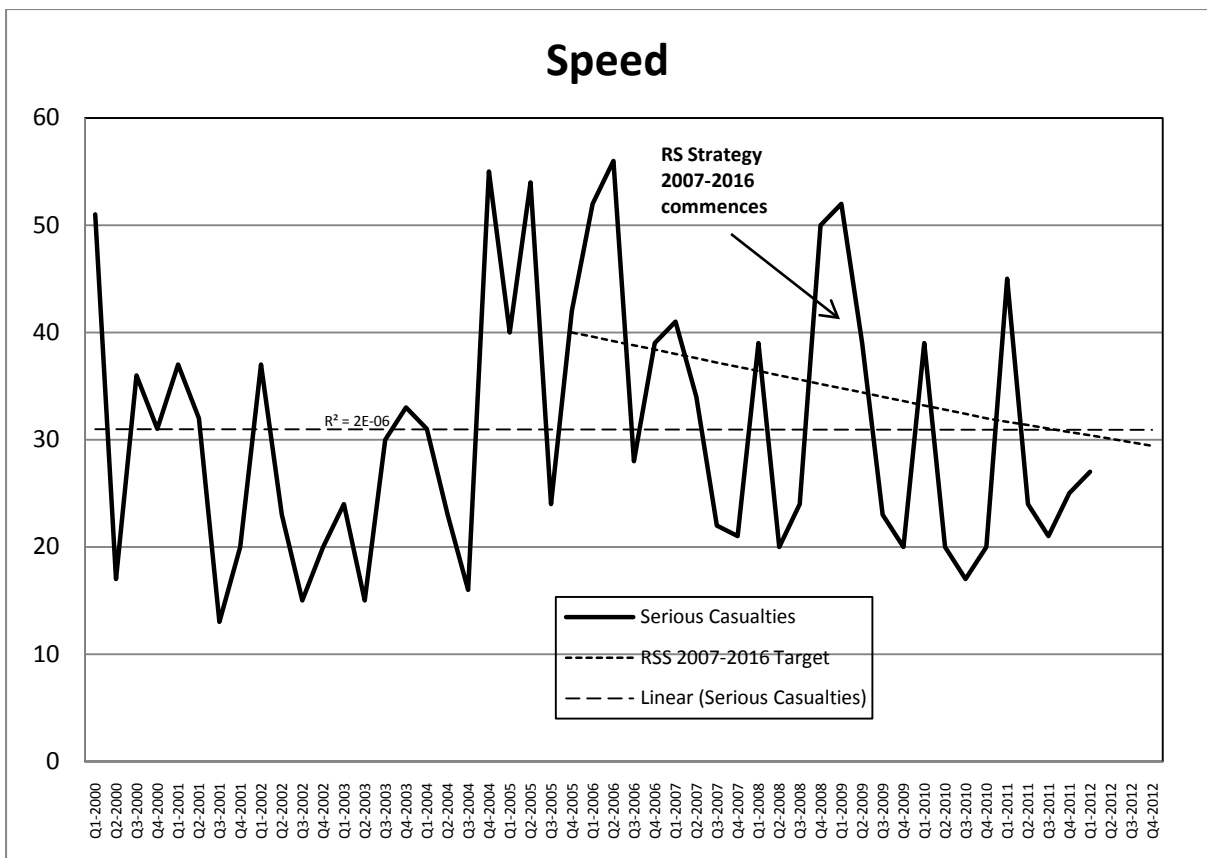
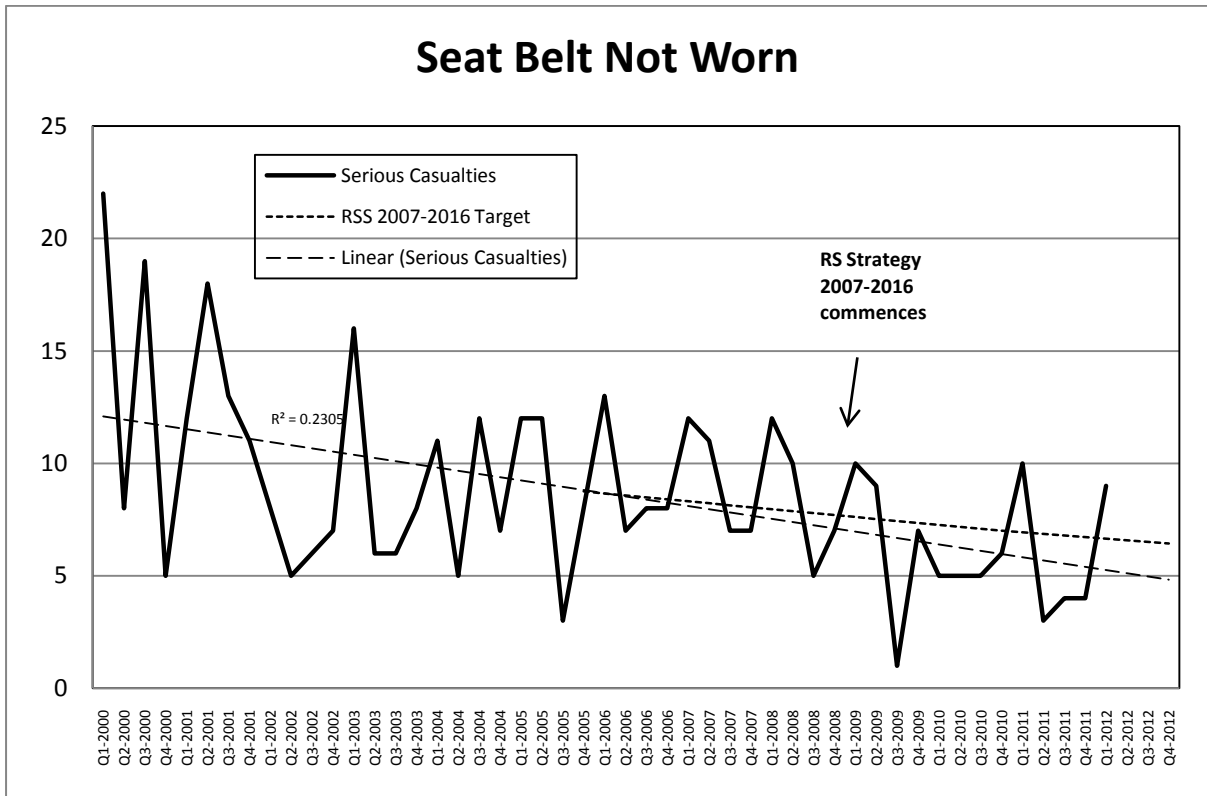




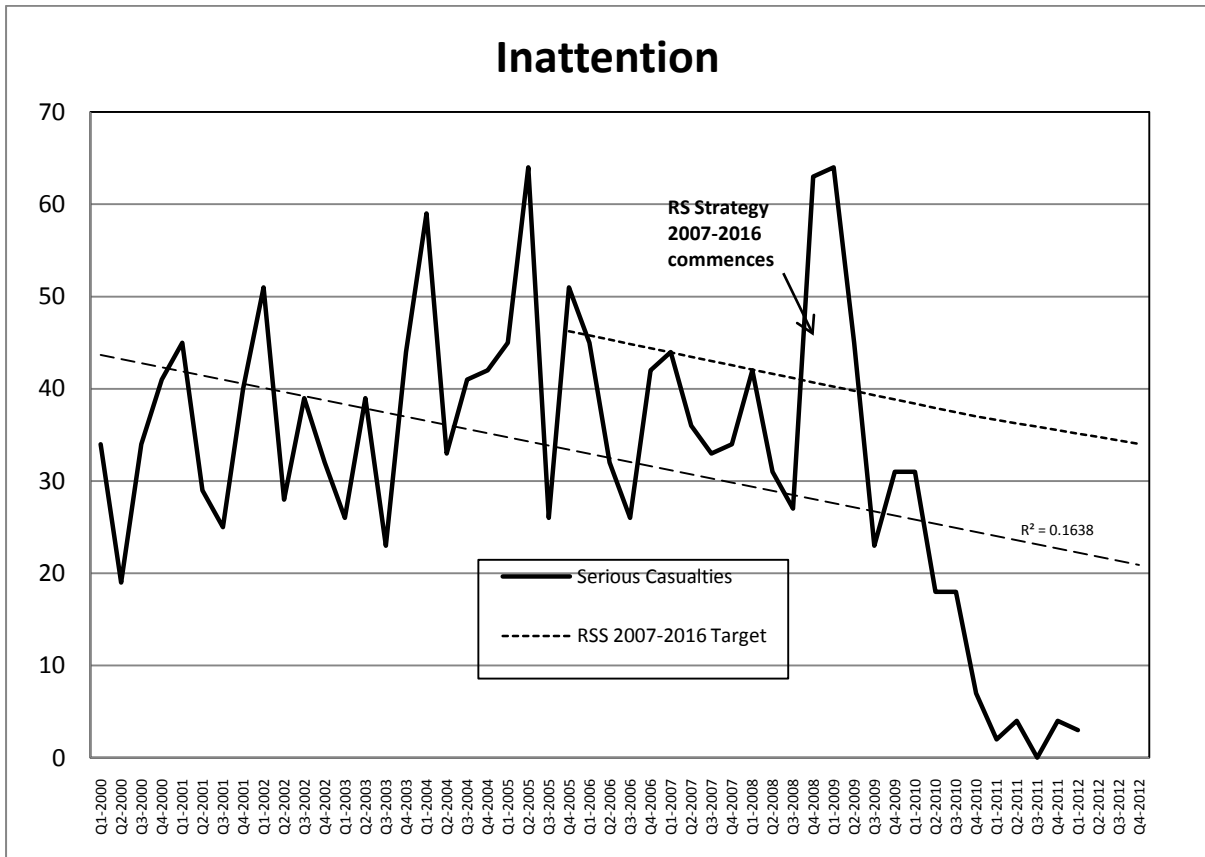








# Statistics



Note: From 1 January 2011 'inattentiveness' will only be reported if there is no other relevant crash factor.

