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LETTER TO THE MINISTER

The Hon Terry Mulder MP
Minister for Roads
Level 16
121 Exhibition Street
MELBOURNE VIC 3000

Dear Minister

VicRoads 2012-13 Annual Report

I have much pleasure in submitting to you, for your presentation to Parliament, the annual report of the Roads Corporation (VicRoads) for the period 1 July 2012 to 30 June 2013.

Yours sincerely

Gary Liddle
Chief Executive
As I reflect back on 2012-13, I appreciate that this has been one of the most challenging years in the history of VicRoads. We have faced a period of significant change and undertaken significant steps in implementing the plan for our future. It will assist us to become a highly agile and adaptive organisation that puts the customer at the centre of everything we do and enables us to meet the challenges ahead.

I have been immensely proud of our achievements over the past year as we continued to focus on delivering a road system that is efficient, reliable, sustainable and integrated with the rest of the transport system.

One of the highlights for me in 2012-13, was the celebration of our Centenary. Whilst we have gone through several transitions over the last century, taking a moment to pause and look back at our legacy of achievement in the development of Victoria’s prosperity and renowned liveability reminded me how far we have come as a State over that period of time.

Our Strategic Directions 2012-14 provided us with the framework to understand where we should focus our initiatives to best serve the people of Victoria. It assisted us in determining a new organisational structure and to take a more holistic approach to the overall transport system. Beyond the restructure, we continued to operate our business as usual and I am proud of the progress we have made against achieving our strategic priorities. Some of our achievements in 2012-13 include:

- Being recognised by industry for innovations related to road maintenance including leadership in consistently achieving new retro reflectivity standards aimed at making road lines more visible at night, improving road safety and providing support to national research involving a trial of more environmentally friendly materials for road sealing.
- Undertaking a post completion evaluation of the M1 Upgrade confirming a number of benefits including: a significant reduction in the number of crashes, travel time improvement of up to 10 minutes, an increase in traffic volumes, reduced delays and freight growth between 2 to 4 per cent per annum.
- Continuing to maintain and deliver significant improvement to the road network. VicRoads delivered 100 per cent of its metropolitan operations program and 93 per cent of its regional operations program. A number of key outer suburban road projects such as the Dingley Arterial (Perry Road to Springvale Road) and duplication of Plenty Road at South Morang were completed. VicRoads also delivered a number of Nation Building projects that included the Anglesea Road to Princes Highway West section of the Geelong Ring Road and the Goulburn Valley Highway, Nagambie Bypass.
Collaborating with our road safety partners (the Transport Accident Commission, Victoria Police and Department of Justice) and other stakeholders to develop future directions for road safety in Victoria. The Road Safety Strategy and supporting Action Plan which seeks to reduce fatalities and serious injuries by at least 30 per cent over the next ten years, was launched in March 2013.

Supporting the National Heavy Vehicle Regulator to commence limited operations in January 2013 providing the National Heavy Vehicle Accreditation Scheme (NHVAS) and Performance Based Standards (PBS) services. VicRoads recognises the importance of this national reform and continues to support it commencing full heavy vehicle regulatory functions later in 2013.

Undertaking trials of a number of environmentally sustainable technologies such as LED street lights and solar powered barriers that will significantly reduce electricity consumption.

Having INVEST, VicRoads’ sustainability rating tool recognised as a finalist for the 2012 Banksia Awards for leadership and innovation through integrating sustainability principles in designing and building infrastructure.

Seeing significant improvements in drive test appointment wait times, customer waiting times in Customer Service Centres, in the average speed to answer a customer call in the Contact Centre and in the back-log of medical review matters.

Transitioning to our new structure, with a strong emphasis on the collaborative approach across our internal business functions. This collaboration has also extended to our external stakeholders where our planning activities with other parts of government are focused on integrated outcomes.

Working closely with the Department of Transport, Planning and Local Infrastructure and central agencies in the preparation and coordination of 2013-14 state and federal budget submissions. VicRoads also updated the Speed Zoning Guidelines and developed ‘Moving More with Less’, the high productivity freight vehicle policy that allows longer vehicles to access our freeway network.

I want to sincerely thank our staff and stakeholders across government, industry and the community who have worked together during 2012-13 to help us deliver a more efficient and sustainable road transport system. I want to especially commend our staff who have continued to dedicate themselves to providing a world class quality road system, including the registration of vehicles and licensing of drivers, during a time where our organisation has gone through a significant transformation. Their efforts are what makes VicRoads a great place to work.

As we continue to implement change through VicRoads’ Plan for Our Future into 2013-14 I have no doubt that we will be better equipped to address the key challenges that we will face, our efforts will be more integrated, efficient and proactive in responding to the transport needs of the community and our people will be at the forefront of delivering a great service to our customers.

Gary Liddle
Chief Executive
ABOUT VICROADS

VicRoads is a Victorian statutory authority that was established under the Transport Act 1983 and continued under the Transport Integration Act 2010. With an annual expenditure of more than $1.8 billion, it is subject to the general direction and control of the Minister for Roads.

Purpose
VicRoads’ purpose is to support economic prosperity and liveability by shaping the development and use of Victoria’s road system as an integral part of the overall transport system.

Objectives
VicRoads’ primary objectives are outlined in section 86 of the Transport Integration Act 2010, which includes:

- working with others to ensure that the road system operates as part of an integrated transport system that seeks to meet the needs of all transport system users
- managing the road system in a way that supports a sustainable Victoria, by encouraging sustainable transport modes, and seeking to improve the environmental performance while minimising adverse environmental impacts from the road system
- contributing to social wellbeing by providing access to opportunities and supporting liveable communities
- promoting economic prosperity through efficient and reliable movement of persons and goods
- working with others to reduce deaths and injuries arising from road crashes.

Functions
VicRoads’ functions are outlined in section 87 of the Transport Integration Act 2010, which includes:

- planning for the road system as part of an integrated transport system
- constructing and maintaining roads and roadsides
- operating the road system by managing access and controlling use
- leading the development and implementation of strategic and operational policies as well as plans to improve the safety of the road system for all users
- providing registration, licensing and accreditation services for the transport system
- developing and implementing effective environmental policies, strategies and management systems
- providing technical, project management, consultancy and information services relating to the transport system
- providing and disseminating information to Victorians about the road system.

Powers
VicRoads’ powers are outlined in sections 88 and 89 of the Transport Integration Act 2010. In general, VicRoads has the power to act as necessary or convenient to achieve its object and functions. VicRoads also has powers under a number of other acts and their associated regulations including:

- Accident Towing Services Act 2007
- EastLink Project Act 2004
- Melbourne CityLink Act 1995
- Road Management Act 2004
Government priorities

Government strategies and priorities that have particular impact on VicRoads include:

- The Victorian Government has a strong economic and fiscal strategy based on strengthening the State’s finances, improving productivity growth, targeting spending to improve service delivery and investing in high quality infrastructure.

- Road Safety Strategy 2013-2022: Developed by the road safety partners of VicRoads, the Transport Accident Commission, Victoria Police and the Department of Justice. The strategy sets a target to reduce fatalities and serious injuries by more than 30 per cent.

- Cycling into the Future 2013-2023: Victoria’s Cycling Challenge: Six directions have been developed to build Victoria’s understanding of cycling and the kind of trips Victorian cyclists take, with the aim of increasing these trips and encouraging more people to considering bike riding as an option.

- Metropolitan Planning Strategy and regional growth plans: To manage growth and associated transport needs in Melbourne and regional centres.

- National transport reforms: At a national level, VicRoads is contributing to reform initiatives for heavy vehicles that have been agreed by the Council of Australian Governments. The reforms aim to improve national road freight productivity and safety, reduce costs for freight operators and find better ways to fund and price infrastructure that supports efficient freight movement.

- National transport investment: The Nation Building Program provides funding to Victoria for a number of infrastructure improvement projects across the Victorian transport system on a funding share basis. VicRoads delivers major road projects in Victoria under this program.

- Victorian Government policy: The Sustainable Government Initiative and the Better Services Implementation Taskforce are reforming the public sector and aim to provide services that work best for all Victorians.

Reducing red-tape for business and making regulations that are efficient, effective and transparent are also government priorities. VicRoads administers a wide-range of these regulations and contributes to regulatory reviews and reforms.

In delivering the Government’s transport priorities, VicRoads’ staff work in partnership with federal, state and local government agencies, businesses, their associations and communities. By working together we enhance Victoria’s liveability and enhance opportunities for growth and prosperity.

VicRoads’ strategic directions

VicRoads develops three-year strategic directions that describe the vision, purpose and objectives of our organisation and identifies what we need to focus on over a three-year period to achieve them. Initiatives to support the strategic directions are considered during VicRoads’ annual business planning process, which is reflected in our annual corporate plan.

VicRoads’ programs and projects have been developed and delivered against the VicRoads Strategic Directions 2012-2014. Our main objectives are to:

- operate and maintain the road system to help our customers travel easily and reliably
- develop the road system to improve connections between places that are important to our customers
- improve road safety
- make the road system more environmentally sustainable.
PART ONE: REPORT ON OPERATIONS

This section provides information about VicRoads’ performance against VicRoads Strategic Directions
Objective: Operate and maintain the road system to help our customers travel easily and reliably

VicRoads is committed to providing a road system that allows our customers to travel easily and reliably. We have placed emphasis on understanding our customers’ needs and their expectations, to better allocate road space and encourage travel behaviour that supports an efficient transport system. Our priorities in 2012-13 have been to:

**Better allocate road space and manage it efficiently and reliably**

Victoria’s roads are vital to our social and economic prosperity as well as the liveability of our state. Allocating adequate space on roads to transport people, move goods efficiently, deliver services, support utilities, host shopping precincts and interact with community activities requires trade-offs and balancing of objectives.

Our cities have grown beyond the point where the simple provision of roads with coordinated traffic signals can serve all of the many users adequately.

In response to this, SmartRoads assigns clear operational priority to different road users at different times of the day, in consultation with communities. This award-winning approach has been acknowledged by the Victorian Auditor - General’s report *Managing Traffic Congestion*.

More than 350 project and site proposals have been evaluated using the SmartRoads approach including rail grade separations, freeway upgrades, major developments, road duplication, tram and bus route upgrades and pedestrian and bicycle improvement projects.

The continued implementation of the SmartRoads approach will mean changes in the nature of travel for road users – with walking, cycling and public transport being considered as increasingly important transport modes.

New technologies are making this task easier, adjusting speed limits at different times of the day, adjusting parking times and managing lane use on freeways. It also provides earlier and improved advice to travellers on the road and via the web.
Encourage changes to travel behaviour that support an efficient transport system

An integrated transport system supports practical choices in travel modes to suit the travel needs of individuals and companies. VicRoads has an important role to support road based transport including trams, buses, cycling and walking.

Our planning policies are geared to encourage non-motorised methods of travelling as they are the most environmentally sustainable, support liveability, and are the least expensive to use and maintain.

In December 2012, the Government released the new Cycling Strategy 2012-2013. Objectives of the Strategy include, reducing safety risks, encouraging more people to take up cycling and better targeted investments in the bicycle network. A number of cycling infrastructure projects commenced in 2012-13 as part of major road projects. These include the Dingley Bypass and upgrades to Stud Road, Bayswater, High Street Road in Wantirna South and the Narre Warren - Cranbourne Road in Narre Warren.

The Traffic Monitor publication provides information on the performance of the network each year. Passenger vehicle occupancy is a particular challenge to manage, as car occupancy has been decreasing. For more information visit vicroads.vic.gov.au

Since 2001 Victoria’s road network has enabled a 15 per cent increase in the vehicle kilometres travelled (VKT) in support of a 17 per cent increase in population and a 32 per cent increase in the Gross State Product (GSP).

Maintain assets to service levels that meet customer needs

VicRoads’ maintenance activities aim to minimise transport costs, improve road safety and ensure that we can secure maximum benefit for our community from road system investments.

Weather conditions in the last two years have caused increases in potholes and degradation of pavements, beyond the levels experienced during the prolonged drought. The response has been to prioritise resources to address critical safety maintenance, ensuring safe and reliable travel.

Improve emergency response and recovery

VicRoads plays a vital role in the response to, and recovery from, large scale emergencies. A key aspect of this is the provision of information on road closures and conditions via the web and out on the road system.

Roadside management includes bushfire prevention measures, with VicRoads working alongside other agencies and emergency services to support effective responses for protecting life and property.
Key Performance Indicators

The following four performance indicators reflect some aspects of the operational performance of the arterial road network and VicRoad’s role in supporting this.

**Fig 1. Travel time variability**

The last year saw increases in average traffic delay and travel time variability across the state. This correlates with an increasing number of people using our network. We have been holding travel times relatively constant, however we recognise that there is more work to be done to achieve our objective of improving the road system.

**Fig 2. Person throughput in Melbourne inner area**

Person throughput measure reflects how efficiently the road system supports movement of people through the inner Melbourne metropolitan area.

The travel time variability in the morning peak has shown a slight overall decrease in variability. Variability during the afternoon/evening peak is increasing slightly, while off peak is relatively unchanged.

The number of registered vehicles in Victoria and the total vehicle kilometres travelled in Melbourne have increased during this same period.

<table>
<thead>
<tr>
<th></th>
<th>AM PEAK</th>
<th>PM PEAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>21,300</td>
<td>20,200</td>
</tr>
<tr>
<td>Tram</td>
<td>118,300</td>
<td>124,100</td>
</tr>
<tr>
<td>Vehicles</td>
<td>1,628,500</td>
<td>1,691,600</td>
</tr>
</tbody>
</table>
Table 1. Percentage of distressed pavement

<table>
<thead>
<tr>
<th></th>
<th>TARGET 2012-13</th>
<th>ACTUAL 2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>7.2%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Regional</td>
<td>8.2%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

This measure reflects the percentage of the road network exhibiting cracked and/or 'distressed' pavement (a potential for potholes).

Table 2. Freeway incident response

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL NUMBER OF INCIDENTS ATTENDED BY THE INCIDENT RESPONSE SERVICE</th>
<th>ATTENDANCE PERFORMANCE</th>
<th>CLEARANCE PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NUMBER OF INCIDENTS ATTENDED WITHIN 15 MINUTES – TARGET 80%</td>
<td>NUMBER OF INCIDENTS CLEARED WITHIN 15 MINUTES – TARGET 50%</td>
</tr>
<tr>
<td>2009</td>
<td>5846</td>
<td>73.6%</td>
<td>56.8%</td>
</tr>
<tr>
<td>2010</td>
<td>8374</td>
<td>72.6%</td>
<td>51.9%</td>
</tr>
<tr>
<td>2011</td>
<td>9072</td>
<td>71.3%</td>
<td>47.8%</td>
</tr>
<tr>
<td>2012</td>
<td>8249</td>
<td>70.9%</td>
<td>46.6%</td>
</tr>
</tbody>
</table>

Since 2009, the numbers of freeway incidents VicRoads responds to has increased significantly with related traffic growth and some delay. Over that period, incident attendance and clearance rates have dropped just below targets.
Highlights
Some highlights of the year in operating the network include:

Intelligent transport systems and managed motorways on M1 and M80
The first section of the M80 managed motorway between Sydney Road and Calder Freeway was completed in 2012-13. Planning work is now underway to extend the Monash managed motorway to Warrigal Road.

Trials and investigations into motorcycle and bike use of bus lanes
VicRoads completed a trial, allowing motorcycles and motor-scooters to use the southbound bus lane on Hoddle Street. A review of bicycles using bus lanes has also been undertaken, which is currently under review. The findings of these studies will be used to inform development of a policy on other modes of transport using bus lanes.

Broader access for High Productivity Freight Vehicles
Our ‘Moving More with Less’ policy was launched in April 2013. This new policy allows for longer High Productivity Freight Vehicles (HPFVs) to use more of the road network to transport goods to consumers, with the aim of reducing freight costs and lowering the number of trucks on Victorian roads. Under the policy, 30 metre HPFVs are allowed to operate on the Monash Freeway, CityLink, EastLink, the Ring Road and the West Gate Freeway. In regional Victoria, HPFVs up to 36.5 metres in length are able to transport goods from the Port of Melbourne via the West Gate Freeway to Princes Highway West to Geelong, the Western Freeway to Ballarat; the Calder Freeway to Bendigo; the Hume Freeway to Wodonga; and the Westernport Highway to the Port of Hastings. Accompanying safety measures have been imposed to ensure the continued safety of all road users.

Bicycle and pedestrian upgrades
VicRoads delivered 39 projects to improve pedestrian and bicycle access across the road network.

Bridge Road Easy Access tram stops
Construction works of two pairs of Easy Access Stops (EAS) on Bridge Road between Church Street and Punt Road was completed in March 2013. These works will improve accessibility for tram passengers, by providing level access from the kerb to the tram door whilst maintaining the traffic carrying capability of the road.

Tram Route 96 Corridor Development
Route 96 Corridor Development aims to improve access and reliability for the tram network. Planning is underway for a range of improvements on Nicholson Street between Victoria Parade, Carlton and Blyth Street, East Brunswick. Improvements will include tram priority at key intersections, upgrade of tram stops and relocating or removing tram stops.

Melbourne Bike Share scheme
The Melbourne Bike Share scheme is an initiative to promote alternative modes of transport in the inner city and support the use of both cost and energy efficient transport for Victorian road system users. In March 2013, the Hon. Terry Mulder MP, Minister for Roads, announced a three month free helmet trial which is expected to encourage greater uptake of the scheme.
VicRoads explores new ways to minimise whole of life asset maintenance costs

In 2012-13, VicRoads instigated and supported a number of innovations in the maintenance industry through our commercial business Sprayline Road Services (SRS) including:

- new retro reflectivity standards aimed at making road lines more visible at night to improve road safety, which received a commendation from the Road Marking Industry Association of Australia for our leadership.
- a trial of a more environmentally friendly binder additive for road sealing called ‘Talex’ (tall pitch oil from paper making process), which received a commendation from the ARRB Group for support provided to Austroads national research.
- trials of several premium cold mix products for pavement pothole repairs across a number of locations. Results indicate that they are more cost effective than traditional repairs over the longer term, as most trial repairs have remained in good condition for 12 months, whereas traditional treatments required rework within 2 to 3 months.
- trialling the use of new data recording systems to help VicRoads develop its Asset Maintenance Management System.

Hazard management works

VicRoads delivered works to prevent landslides on the arterial road network. Remedial works were performed in response to natural disasters in the Otway Ranges, South Gippsland and the Great Alpine Road. VicRoads also installed a remote monitoring system at the Victorian Comprehensive Cancer Centre after ground movements were observed during road construction.

There are also a range of ongoing programs and activities which are fundamental to operating the road system properly. These include:

- pavement maintenance
- structural maintenance and rehabilitation
- roadside maintenance
- electrical maintenance (street lighting, traffic signals and intelligent transport systems)
- registration and licensing services
- traffic management services, providing information to customers that helps them make informed travel decisions, as well as monitoring the traffic flow to respond to hazards and minimise disruption to road users.
**Objective:**

Develop the road system to improve connections between places that are important to our customers

VicRoads plays a crucial role in shaping the future of the Victorian economy and society through developing a road system that allows businesses and people to connect with each other in a reliable way.

Our priorities in 2012-13 have been to:

**Plan effective transport solutions for future residential and commercial developments in metropolitan Melbourne and regional Victoria**

In order to meet the challenges of future transport demand with both an increasing population and greater variability in how our road system is used, we need to plan for accessible and effective road links. VicRoads works with other agencies such as the Growth Areas Authority, Public Transport Victoria, and Places Victoria to prepare infrastructure plans which support growing suburbs and the needs of new businesses in new developments.

**Upgrade roads to tackle congestion**

As Victoria’s population continues to grow, some level of road congestion is inevitable. While much of our effort to manage congestion involves improving how existing roads operate, we also continue to upgrade roads to increase capacity. Congestion reducing projects include significant upgrades to the Monash (M1) and Western Ring Road (M80) freeways and initial planning for the East-West Link. To maximise capacity, managed motorway technologies are being included as part of any major developments.

**Upgrade the road system to support freight productivity**

VicRoads is heavily involved in the national heavy vehicle reforms which aim to improve productivity within the heavy vehicle industry. The Heavy Vehicle Safety and Productivity program is a Nation Building program to improve safety and productivity for heavy vehicle operations across Australia. The Government’s Moving More with Less policy, launched in April 2013 will improve the efficiency of freight movement by providing a network of selected freeways and highways across metropolitan Melbourne and regional Victoria. Transport Solutions is the Government’s regional freight initiative that provides a targeted suite of projects to reduce bottlenecks and improve transport flows in key regional areas. It was developed in collaboration with local government and industry.
**Key Performance Indicators**

**Fig 1. Average delay**

Average traffic delay has increased during morning peak, afternoon/evening peak and off peak periods over the last decade. The rate of increase differs for the three time periods, with the fastest rate of increase during the afternoon peak period.

**Fig 2. Freight density**

The last year saw an increase in the density of freight on freeways and a decline on arterials, indicating that industry is electing to reduce use of arterials to move freight. There has been relative consistency in freight network delay, though it should be noted that there was a reduction in freight movement at the time of the global economic downturn.

Overall, average delay in travel time across the road system has increased across all travel time periods.
### Table 1. Freight delay

<table>
<thead>
<tr>
<th>TIME OF DAY</th>
<th>2009-10 FINANCIAL YEAR</th>
<th>2010-11 FINANCIAL YEAR</th>
<th>2011-12 FINANCIAL YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak</td>
<td>0.71</td>
<td>0.64</td>
<td>0.72</td>
</tr>
<tr>
<td>PM Peak</td>
<td>0.56</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td>Off Peak</td>
<td>0.34</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>All Day</td>
<td>0.48</td>
<td>0.47</td>
<td>0.49</td>
</tr>
</tbody>
</table>

### Fig 3. Freight delay

The average freight delay results show that whilst there is variation in freight delay across the day, it remains relatively consistent across the financial years reported. This is despite the increase in total vehicle kilometres travelled in Melbourne.
Highlights

The following highlights reflect our commitment to providing better development of the road system.

Development of the Government’s Metropolitan Planning Strategy and Regional Growth Plans

The Department of Transport Planning and Local Infrastructure is leading the development of a Metropolitan Planning Strategy (MPS) to manage Melbourne’s growth and change, including links with regional Victoria.

This will outline urban planning directions to ensure that the valued aspects of Melbourne are protected while allowing for future needs.

Throughout 2012-13 VicRoads participated in an Inter-Departmental Committee overseeing the development of the MPS. VicRoads was part of a team from across the transport portfolio that shaped the transport elements of the MPS.

Delivery of the Outer Suburban Road Program

VicRoads delivered construction works for a number of outer suburban road projects, including:

- Dingley Arterial between Perry Road to Springvale Road
- Palmers Road rail overpass at Williams Landing
- Plenty Road duplication at South Morang
- duplication works on Clyde Road at Berwick and Hallam Road
- Hampton Park upgrade works, which commenced in 2012-13, remain in progress.

Construction works are progressing to upgrade Hallam Road as part of the Hallam Road Carriageway Duplication – Pound Road to Ormond Road. This will deliver a fully divided road for 2.5 kilometres between Pound Road and Ormond Road in Hampton Park. The project is expected to be completed in 2014.

Planning and construction of the Dingley Corridor

The 3.5 kilometre Springvale Road to Perry Road section of the Dingley Corridor was opened to traffic in December 2012. This new link is now carrying about 30,000 vehicles per day, reducing congestion along nearby arterial roads, particularly the sections of Cheltenham Road, Perry Road and Springvale Road.

Planning activities for the next section of the Dingley Corridor are well under way. It will be 6.4 kilometres in length between Warrigal Road Oakleigh South and Westall Road, Springvale. Construction works on this section are scheduled to commence in 2014. This section will link the previously constructed sections of the Dingley Corridor and improve connections between the Dandenong Activity Area and Moorabbin.

Planning and preconstruction work on Ballarat West Link Road

Planning and preconstruction work for Ballarat West Link Road is under way and will support employment creation in the Ballarat community. Construction for this 4.2 kilometre section is scheduled to be completed by the end of November 2014. It will involve a single carriageway with two traffic lanes, a roundabout, single span overpass of the Ballarat-Ararat railway and major culverts at Winter Swamp.

Melbourne Airport Link to the Outer Metropolitan Ring Transport Corridor (OMR) and Bulla Bypass

Planning for the Bulla Bypass and Melbourne Airport Link (linking the Tullamarine Freeway with the Outer Metropolitan Ring) is well under way. The Bulla Bypass will link the Sunbury growth areas to Melbourne’s north and Melbourne’s Airport business precinct. Melbourne Airport Link will join the northern industrial areas to the south.
M1 Upgrade evaluation

The M1 Upgrade involved construction works on 75 kilometres of the Monash and Westgate Freeways between 2007 and mid 2011 to improve congestion, safety and reduce bottlenecks. The works included undertaking capacity improvements as well as implementing electronic freeway management systems (FMS) along sections of the corridor.

The Post Completion Evaluation is conducted a year following the completion of the upgrade, and reports whether the expected benefits have been realised. Benefits realised include:

Road safety: The average number of crashes per year on the M1 has reduced by 12 per cent since upgrade construction was completed. There has been a 19 per cent decrease in the number of fatalities and 12 per cent reduction in the number of serious crashes. The average crash rate per vehicle kilometres travelled has also reduced by 23 per cent.

Travel times: Travel times on the eastern side of the city have shown an improvement, with the AM peak inbound travel times reducing by 33 per cent. On the western side of the city, travel times inbound in the AM and PM peaks have increased 9 per cent and PM peak outbound times have reduced by 5 per cent. The Monash Freeway between Toorak Road and Heatherton Road has experienced the greatest improvement with decreases in both directions during both AM and PM peak times (up to 10 minute decreases - 35 per cent faster).

Network efficiency: Traffic volumes have increased by up to 7 per cent per annum in both directions following the completion of the upgrade. Delays have reduced by up to 70 per cent in some areas, however they have increased between the west end of the M1 and city inbound direction during the AM and PM peaks by more than 25 per cent and 43 per cent respectively.

Increased commercial and industrial activity: Freight has grown between 2 to 4 per cent per annum since the completion of the M1 Upgrade, which is in line with freight flow forecasts. Travel time variation has also reduced by 20 per cent in the peak direction following completion of the upgrade.
Nation Building projects

VicRoads delivered the following Nation Building projects in partnership with the Federal Government.

**Geelong Ring Road:** Construction works on Geelong Ring Road section 4B, Anglesea Road to Princes Highway West was completed and opened for traffic in February 2013.

**Goulburn Valley Highway, Nagambie Bypass:** The 17 kilometre Nagambie Bypass upgrade of the Goulburn Valley Highway was opened to traffic at the end of April 2013. This highway is a vital transport route from the Goulburn Valley to Melbourne and also forms part of the national highway link between Melbourne and Brisbane.

**M80 Upgrade:** Construction works on the M80 Ring Road Upgrade are well underway. The 10.7 kilometre section between the Calder Freeway and Sydney Road was completed in May 2013. The Western Highway to Sunshine Avenue component is expected to be completed by December 2013 and the Edgars Road to Plenty Road section is forecast for completion by December 2014.

**Princes Highway East duplication – Traralgon to Sale:** The 4 kilometre section between Wurruk and Sale was opened to traffic in June 2013. Construction for the section between Stammers Road and Minniedale Road, Traralgon East commenced in July 2013, with completion forecast for late 2014.

**Princes Highway West duplication:** Waurn Ponds to Winchelsea and Winchelsea to Colac: Planning and preconstruction activities between Winchelsea and Colac have commenced.

**Western Highway duplication – Ballarat to Stawell:** The new carriageway for the 8 kilometre section (1A) from Ballarat to Burrumbeet was opened on 31 January 2013. A 2.9 kilometre section (1C), east of Beaufort was completed in March 2013. Significant construction works were undertaken on the 23 kilometre section (1B), from Burrumbeet to east of Beaufort and planning works from Beaufort to Ararat (Section 2) and Ararat to Stawell continue.

**Western Highway upgrade and Stawell to South Australian border:** The Western Highway is the principal road link for interstate travel between Victoria and South Australia. Current upgrade works are on schedule and due to be completed by June 2014.
Improvements to arterial roads

Projects in the planning and construction stage improving arterial roads include:

**Koo Wee Rup Bypass:** The Koo Wee Rup Bypass will provide a new 3.4 kilometre two lane arterial road link between Koo Wee Rup Road and the South Gippsland Highway. Construction is expected to begin in late 2013 and is scheduled for completion by the end of 2015.

**Ballarat-Buninyong Road upgrade:** Capacity improvement works at the Mt. Clear roundabout are ongoing, with northbound capacity improvements now being realised. Works to widen the roundabout for southbound traffic will commence in the next financial year. Planning and design for works in the Olympic Avenue – Damascus College area is ongoing, with commencement scheduled in early 2014.

**Rest Area upgrades:** As part of the Commonwealth Heavy Vehicle Safety and Productivity Program, upgrades to rest areas at Bentons Hill, Chiltern Park, Mokoan and Reef Hill have been completed. Construction works on the two remaining sites has been brought forward from next year’s program.

There are also a range of ongoing programs and activities which are fundamental to maintaining an efficient road system. These include the development of the High Productivity Freight Policy and working with the Growth Areas Authority and local governments to develop policies and guidelines to support growth areas.
Objective: Improve Road Safety

VicRoads is committed to ensuring all users on Victoria’s roads arrive at their destination safely. VicRoads has partnered with the Transport Accident Commission, Victoria Police, the Department of Justice and other stakeholder groups to achieve this vision. In 2012-13 the Victorian Government announced the Road Safety Strategy 2013-22, which aims to reduce fatalities and serious injuries by more than 30 per cent.

Our priorities in 2012-13 have been to:

Improve when and how people and vehicles are granted access to the road network

Using the road system is a privilege not a right. This is an important road safety message that implies granting access to the road system comes with certain responsibilities that are shared by all customers to ensure that everyone arrives at their destination safely.

VicRoads manages a number of programs to improve the community’s understanding of their responsibilities, with a particular emphasis on novice drivers and vulnerable road users. Our registration and licensing system continues to serve as an important entry point, in permitting both vehicles and people access to the road system, by ensuring that they maintain vehicle safety standards and are equipped with the necessary driving skills. Our RandL program is a significant upgrade of the registration and licensing system, which will help us support the growing demand for road system access.

Build safety into road design, road operations and vehicles with a focus on integrating these elements

VicRoads implements major infrastructure programs to address high risk safety issues across the road network.

In March 2013, the Government announced a $1 billion investment in safer roads as part of Victoria’s new ten year Road Safety Strategy. The Transport Accident Commission funded Safer Road Infrastructure Program (SRIP) and National Blackspot Programs provide infrastructure treatments to sites across the road network to reduce the impact of crashes.

VicRoads is also a leader in road safety engineering with a particular emphasis on building safety into the design of our roads including speed limits, signage and road condition.

The Heavy Vehicle Safety and Productivity Program is a Nation Building Program to improve safety and productivity for heavy vehicle operations across Australia.

Assist people to take responsibility for making safe choices

Taking responsibility for making safe choices is an ongoing commitment that all road users must share. VicRoads manages specific programs around road user behaviour that aim to educate the population of the importance of making safe choices. The L2P and Keys Please Programs are youth targeted programs emphasising the importance of young people achieving a minimum of 120 hours experience. The programs provide support for those people without access to driving instructors or supervisors, and education for young people in schools across the state.
Key Performance Indicators

Fig 1. Crashes involving 18-25 year old persons

The number of serious casualty crashes per 10,000 registered vehicles and per 10,000 licences held has been declining since 2007. The Road Safety Strategy 2013-22 aims to further reduce these numbers resulting in safer roads for all Victorians.

Fig 2. ANCAP Trends – Vehicle models

Australasian New Car Assessment Program trends – vehicle models

The number of five star safety vehicles among the vehicles tested by the Australasian New Car Assessment Program (ANCAP) is increasing. Before 2000 there were none, however in 2000-04, they made up 14 per cent of new vehicles for sale. By 2009-10, they made up the majority of new vehicles for sale, at 62 per cent. This measure shows that vehicles available for sale today are safer than they were before 2000.
Table 1. Estimated crash reductions from Safer Road Infrastructure Programs

<table>
<thead>
<tr>
<th>EVALUATION</th>
<th>SAFER ROAD INFRASTRUCTURE PROGRAM</th>
<th>% CASUALTY CRASH REDUCTIONS</th>
<th>% SERIOUS CASUALTY CRASH REDUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Safer Road Infrastructure Program 1</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>2</td>
<td>Safer Road Infrastructure Program 2</td>
<td>33%</td>
<td>44%</td>
</tr>
<tr>
<td>3</td>
<td>Safer Road Infrastructure Program 3</td>
<td>31%</td>
<td>To be determined in 2013-14</td>
</tr>
</tbody>
</table>

A ‘serious casualty crash’ is a crash in which the most seriously injured road user was killed within 30 days due to the crash or transported/admitted to hospital as a result of the crash (i.e. a fatal crash or a serious injury crash).

A ‘casualty crash’ is a crash in which a road user received an injury of any severity (i.e. a fatal crash, serious injury crash or other injury crash).

Fig 3. Metropolitan Speed Zone Surveys
The 85th percentile of traffic speeds under different speed limits have decreased over time, although they remain above posted speed limits. With lower speed limits, the reduction trend is taking longer, whilst the 85th percentile speeds for the 80km/h zone is marginally above the limit.
Customer service performance measures

Significant improvement in staff productivity and quality of service in Customer Services under VicRoads Registration and Licensing division has resulted in improvement across all key service delivery areas. A drive test appointment is now provided on average within three weeks which is down from five weeks two years ago. Customers now wait less than ten minutes on average for counter service and telephone calls are being answered within the four minute target most of the time.

In addition to the above, the average time to action a medical case file where a driver’s fitness to drive is being assessed, has been reduced from 15 days to 72 hours which is a boost for road safety outcomes and customer experience. Customers rated their satisfaction with their overall customer experience provided by VicRoads Customer Services at 90 per cent in 2012-13 against an aggressive 85 per cent target. Importantly the improvements across multiple fronts were delivered under budget.

The Registration and Licensing division is embarking on a modernisation and innovation program that will further improve the services it offers customers.

Table 2. Customer service performance measures

<table>
<thead>
<tr>
<th></th>
<th>TARGET</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>85% of customers satisfied with registration and licensing services</td>
<td>90%</td>
<td>89%</td>
<td>90%</td>
</tr>
<tr>
<td>Efficient services</td>
<td>80% of customers served within 10 minutes</td>
<td>69%</td>
<td>71%</td>
<td>77%</td>
</tr>
<tr>
<td></td>
<td>80% of telephone calls answered within 30 seconds</td>
<td>49%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>Customer waiting for drive test appointment no longer than 4 weeks</td>
<td>4.8</td>
<td>4.3</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>The average speed to answer customer calls no longer than 240 seconds</td>
<td>296</td>
<td>233</td>
<td>205</td>
<td></td>
</tr>
</tbody>
</table>

1 The 2012-13 actual is lower than target due to the call demand exceeding the VicRoads call centre capacity. The measure is being superseded in 2013-14 by the Average Speed of Answer, which reflects the average time taken to answer a call.
Highlights

Some highlights in improving road safety include:

Launch of the Road Safety Action Plan
VicRoads worked with our road safety partners (the Transport Accident Commission, Victoria Police and Department of Justice) and consulted widely with stakeholders to develop the future direction for road safety in Victoria. In March 2013 the Victorian Government released Victoria’s Road Safety Strategy 2013-22 and Victoria’s Road Safety Action Plan 2013-16. The Strategy sets a target to reduce fatalities and serious injuries by more than 30 per cent over the next ten years. The Action Plan outlines specific infrastructure, speed, road user behaviour and vehicle safety initiatives that will be implemented over the next four years in pursuit of these targets.

Consistent with an increased focus on serious injury in the Strategy, VicRoads made a submission to the Parliamentary Road Safety Committee Inquiry into Serious Injury. This submission provided input on potential ways to improve our understanding of the cost of serious injuries and approaches to reducing injury related road trauma. It also dealt with a commitment in the Strategy to establish a new measure for the most severe injuries.

Road Safety Act review
The 2012-13 financial year marked the completion of the Road Safety Act review. Two Bills are currently underway to implement the outcomes of the review. These are the Road Legislation Amendment (Use and Disclosure of Information and Other Matters) Bill 2013 (tabled in Parliament) and the Road Safety Amendment Bill. Output from the review is also informing the development of alcohol interlock legislation.

Implementation of driver licensing initiatives identified in the Community Sentencing Reform Package
The Victorian Government’s Community Sentencing Reform project aimed to replace the variety of community sentencing orders with a single Community Correction Order, and to give courts wider sentencing powers. One of these court powers will be a new ability to impose driver licensing sanctions for non-driving offences. The driver licensing sanction reforms are contained in the Road Safety and Sentencing Acts Amendment Bill 2013, which was introduced to Parliament on 12 June 2013. Under the Bill, driving disqualifications for serious driving offences and the new driving bans for non-driving offences will be treated consistently.

Delivery of the young driver Graduated Licence System (GLS)
The continuation of Victoria’s Graduated Licensing System in 2012-13 provided a structured introduction to driving. It helped new drivers to be safer by preparing them for solo driving through an extended learning period; testing learner readiness to drive independently; protecting probationary drivers from high risk situations; and motivating probationary drivers to drive more safely. Preliminary evaluation of the Graduated Licensing System to date indicates a 23 per cent reduction in young driver casualty crashes and 31 per cent reduction in young driver fatal and serious injury crashes.

Redevelopment of the VicRoads Registration and Licensing System (RandL)
Following the re-mobilisation of the RandL project in early 2012, work recommenced on the RandL system business requirements validation and detailed design. Whilst this design work was progressing, the core RandL system build commenced. Consultation with key registration as well as licensing internal and external stakeholders continued throughout the detailed design process. Change management and planning for deployment RandL has commenced.

Establishment of National Heavy Vehicle Regulator
The new National Heavy Vehicle Regulator commenced limited operations in January 2013 providing National Heavy Vehicle Accreditation Scheme (NHVAS) and Performance Based Standards (PBS) services. In February 2013, a new heavy vehicle national law and national regulations were developed and hosted in Queensland. In May 2013, the Standing Council on Transport Infrastructure (SCOTI) agreed that the National Heavy Vehicle Regulator would undertake all regulatory functions by 1 September 2013, subject to proclamation of enabling legislation by all states and territories. Victoria’s enabling legislation received Royal Assent in June 2013. Extensive work to prepare for the operational commencement of the National Heavy Vehicle Regulator will continue into the 2013-14 financial year.
Access for High Productivity Freight Vehicles to support increased productivity

The ‘Moving More with Less’ policy was launched during 2012-13. This new policy allows for longer High Productivity Freight Vehicles to use more of the road network to transport goods to consumers, with the aim of reducing freight costs and lowering the number of trucks on Victorian roads. Longer vehicles have access to high-quality sections of freeways and some highways. Accompanying safety measures have been imposed to ensure the continued safety of all road users.

Develop improved conditional registration arrangements for non-standard vehicles

The conditional registration review project has examined the issues associated with vehicles subject to conditional registration. It has developed a standardised set of conditions that will simplify current registration processes, improve adherence to conditions by vehicle operators and improve enforcement and road safety outcomes.

Targeting run-off-road and intersection crashes through the Safer Road Infrastructure Program and Blackspot Program

In 2012-13, VicRoads continued development and implementation of the Safer Road Infrastructure Program to address run-off-road and intersection crashes. The year saw the completion of 91 projects with expenditure of $76 million. In addition to this, 32 new intersection projects valued at $13.3 million and 10 new run off road treatments valued at $13.7 million were approved.

Implementation of the Speed Limit Review recommendations

During 2012-13, the Victorian Speed Limit Review was launched following significant public consultation. The Year 1 outcomes (of the four year program) were implemented, including simplifying speed limits at locations nominated by community and stakeholders, and developing 40km/h Speed Zone guidelines to improve safety for pedestrians.

Safe driving course for hoon offenders

From 20 February 2013, drivers and riders detected for high level speeding, loss of traction or street racing offences have their vehicles impounded or immobilized. They are then convicted in court and must complete a VicRoads Safe Driving Program if they have not done so before. VicRoads has appointed six providers to deliver this group behaviour change program across Victoria, with 2,500 participants per year expected.

Current initiatives

A range of programs are being delivered to improve road safety in Victoria. Some of these are listed below.

P Drivers Project

The P Drivers Project is one of the largest and most complex scientific research studies undertaken into young driver behaviour change. The project seeks to reduce the number of crashes through promoting safe driver behaviour for newly licensed P Drivers aged between 18-21 in Victoria and 17-22 in New South Wales. A total of 22,694 newly licensed P Drivers were recruited for the project to the end of the 2012-13 financial year.

L2P – learner driver mentor program

Through funding from the Transport Accident Commission, VicRoads has supported 59 local government and community based organisations across Victoria to provide supervised on-road driving experience to learner drivers who have difficulty accessing a car and/or supervising driver. Participants are now collectively accruing over 13,000 driving hours per quarter, and L2P has helped ensure that close to 1,800 young people receive supervised driving practice.

Keys Please

Keys Please is an in-school session for Year 10 students offering information, strategies and practical ideas about how to use the learner driver period to help them become safer drivers. 550 Keys Please sessions were delivered to 45,500 students in 440 schools during the 2012-13 financial year.
Objective: Make the road system more environmentally sustainable

VicRoads takes its environmental responsibility seriously and is committed to ensuring it minimises pollution and the impact on natural resources. VicRoads understands that by making the road system more environmentally sustainable it will contribute to dealing with challenges such as climate change, now and into the future. Our priorities in 2012-13 have been to:

Manage the road system to help reduce Victoria’s carbon emission

The transport system has a large carbon footprint, so sustainability is a core consideration of all our activities – from constructing and operating roads, to the way we deliver our services. VicRoads has continued to plan, manage and develop the road system to help reduce Victoria’s carbon emissions and minimise the impact on the environment.

Initiatives in this space include trials of new lighting technologies and materials, installation of solar powered barriers on the M80 and the development of a renewable energy roadmap. Video conferencing has increased both internally (at VicRoads sites) and externally to reduce the impact of travel as well as costs.

Protect and enhance the natural environment and cultural heritage

Protecting the biodiversity of Victoria’s native plants and animals is a high priority, as is finding ways to conserve our natural resources. Protecting places of cultural importance through working with our Aboriginal and non-Aboriginal stakeholders also continues to be a key priority.

Some key activities include the development of environmental mapping and integration with spatial information systems to support flora and fauna assessments. Other initiatives include the development Fauna Sensitive Road Design Guidelines which aim to advise the design of structures to promote fauna movement.

Adapt the management of the road network to a changing climate

The increased frequency of extreme weather events, such as severe flooding and intense bushfires, has impacted on Victoria’s road infrastructure. In response VicRoads has initiated an assessment of climate change impacts on assets, including the mapping of impacts such as sea level rise over the road network. Work has also begun on utilising this information in developing a climate change adaptation plan.

VicRoads continues its close working relationship with Aboriginal communities to deliver positive cultural heritage outcomes
Key Performance Indicators

Fig 1. Increase in CO₂ emissions compared with increase in vehicle kilometres travelled (VKT)

The relationship between the change in emissions and vehicle kilometres travelled is comparable. The aim is for CO₂ emissions to increase at a rate less than the rate of increase of vehicle kilometres travelled (VKT).

Emissions growth has oscillated below or at travel growth since 2004.
Table 1. Permitted vegetation removal versus vegetation offsets purchased

<table>
<thead>
<tr>
<th>FINANCIAL YEAR</th>
<th>VEGETATION TYPE</th>
<th>PERMITTED VEGETATION REMOVED</th>
<th>VEGETATION OFFSETS PURCHASED</th>
<th>RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>Habitat Hectares</td>
<td>2.90</td>
<td>10.24</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>Large Old Trees</td>
<td>78</td>
<td>136</td>
<td>1.17</td>
</tr>
<tr>
<td>2010-11</td>
<td>Habitat Hectares</td>
<td>17.99</td>
<td>15.62</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>Large Old Trees</td>
<td>254</td>
<td>452</td>
<td>1.18</td>
</tr>
<tr>
<td>2011-12</td>
<td>Habitat Hectares</td>
<td>2.32</td>
<td>52.40</td>
<td>1.225</td>
</tr>
<tr>
<td></td>
<td>Large Old Trees</td>
<td>171</td>
<td>1021</td>
<td>1.60</td>
</tr>
<tr>
<td>2012-13</td>
<td>Habitat Hectares</td>
<td>3.4</td>
<td>26.96</td>
<td>1.79</td>
</tr>
<tr>
<td></td>
<td>Large Old Trees</td>
<td>100</td>
<td>618</td>
<td>1.62</td>
</tr>
</tbody>
</table>

VicRoads ensures that it meets the 3-step approach under the Native Vegetation Management Framework which specifies that native vegetation impacts should firstly be avoided and then minimised. If clearing must occur, clearing must be offset. Our habitat hectare offsets purchased relative to what was removed substantially decreased from last financial year whereas the number of old tree offsets purchased, to those removed, has remained unchanged.

Table 2. Cultural heritage indicator

<table>
<thead>
<tr>
<th></th>
<th>METRO SOUTH EAST</th>
<th>METRO NORTH WEST</th>
<th>NORTHERN</th>
<th>NORTH EASTERN</th>
<th>SOUTH WEST</th>
<th>WESTERN</th>
<th>EASTERN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Pre 2012-13</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2012-13</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Net increase over the base year</td>
<td>5</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Cultural heritage signs, installations or structures aim to interpret both Aboriginal and non-Aboriginal cultural heritage to reveal the meaning and significance of places in ways which are memorable and enriching. An increase in these initiatives across VicRoads aspires to increase the awareness of road users on the cultural significance of the land they are travelling through.
Highlights

Some highlights of the year in developing the network include the following:

**VicRoads recognised for sustainability**
VicRoads was recognised as a finalist for the 2012 ‘Banksia Awards Built Environment – Harmonious Mannmade Landscape’ category. INVEST, VicRoads’ sustainability rating tool, was considered for its leadership and innovation through integrating sustainability principles in designing and building infrastructure of the future.

**LED street lighting trials**
Initial indications on LED lighting is that electricity consumption is reduced by approximately 40 per cent. They have been installed in two locations; Sunshine Avenue in Keilor Downs and at an intersection at the new Nagambie Bypass.

**Renewable energy roadmap**
This seeks to guide cost effective development of renewable energy technology across the road network, highlighting the value of renewable electricity generation at locations that cannot be cost effectively connected to the electricity grid.

**Solar powered barrier on the M80**
Initial construction of a solar powered barrier on the M80 Ring Road in Sunshine commenced in the 2012-13 financial year. This will supply power into the electricity grid when energy demand is high and offset part of the electricity that VicRoads draws out of the grid at night for street lights.

**Trial the use of sustainability attributes within tender documentation**
A methodology to assess the sustainability attributes of road project tender submissions was trialled. Its intention is to enable the sustainability benefits of proposed materials and sustainable technologies to be evaluated, while also providing value for money within the procurement process.

**Review of INVEST**
We initiated a review and update of INVEST, so that sustainability principles can influence planning decisions and assessment of project options.

**Investigate the potential use of recycled materials and/or low emission material for road construction**
VicRoads concluded a trial of warm mix asphalt on the Old Hume Highway in Campbellsfield. The results of this trial and other warm mix asphalt trials have demonstrated that the technology should be accepted for road construction. A specification for material has been developed which has allowed it to be adopted in VicRoads asphalt works.

**Working with Aboriginal stakeholders**
VicRoads continues its close working relationship with Aboriginal stakeholders to deliver positive cultural heritage outcomes. ‘Welcome to Country’ signs recognise the traditional Aboriginal owners of our land, which have been installed at two sites on the road network.

**Action on climate change**
Assessment on the impacts of climate change on the road network has been initiated by VicRoads. This includes mapping the projected climate change impacts, such as potential sea level rise over the road network. We have commenced work to utilise this information in developing a climate change adaptation and mitigation plan.

**Implementation of the new Fauna Sensitive Road Design Guidelines**
VicRoads developed the Fauna Sensitive Road Design Guidelines which will assist VicRoads staff in designing, constructing and maintaining structures that promote the movement of wildlife across roads. These guidelines are in response to ongoing stakeholder concerns and fauna killed on the road network.

**Innovative low noise pavement trial**
VicRoads commenced a long term trial to assess a range of low noise road surfaces. This trial is the second in the world to test open graded asphalt with surface grinding to provide even greater noise reduction than normal.