Bureau of Meteorology

Long distances and remote locations: Keeping drivers safe

No. of Staff: 1700 (200 drivers)
Fleet: 70

Image: Bureau of Meteorology staff maintaining Automatic Weather Station on Barrow Island WA, photographer Neil Drummond, Bureau of Meteorology
Case Study:

Maximising safety for drivers travelling long distances in remote areas

Key Outcomes:

- Improving road safety has many benefits, including significant bottom line savings in insurance claim and other costs
- Clearly defined and communicated safety policies and procedures make it easier for employees to follow processes that maximise their safety
- Staff and management support is critical in the success of any road or other workplace safety initiative
- A vehicle is a workplace, and consultation with drivers on programs affecting their workplace is vital in gaining acceptance and engagement
- Effective training can challenge driving habits and attitudes and involving drivers in identifying safer driving strategies promotes ‘buy in’
- Road and workplace safety matters, internally to employees and externally to your organisation’s reputation

Synopsis:

When its staff identified driving as a key safety risk, the Bureau of Meteorology took action to minimise the risk its people faced driving long distances in remote areas. Through management and employee support, the Bureau has improved driver safety and saved tens of thousands of dollars in claim costs along the way.
Introduction

To provide its services, the Bureau maintains an extensive infrastructure network across Australia. Staff are exposed to risk as they travel long distances to conduct maintenance and inspections, in varying and challenging terrain.

Driving was identified as a key risk for staff at the Bureau’s 2010 health and safety conference, which included health and safety representatives and management.

As a result driving was incorporated into the Bureau’s strategic work health safety (WHS) action plans, with the organisation undertaking a comprehensive program to address the risk.

Driving is one of the most dangerous activities that any organisation undertakes. The Bureau has a zero harm target and has implemented policies and procedures to govern driving behaviour and drive towards that goal. As part of their employment, staff are expected to know and follow these procedures.

A positive road safety culture is important to the Bureau because it protects its people and represents the successful integration of safety into business as usual; safety should be considered routinely in the conduct of its business.

As well as successfully tackling risk, the Bureau’s road safety program has driven a significant reduction in claim costs – cutting the average cost per claim in half and reducing the average cost per vehicle by two-thirds – and has resulted in such external recognition as the Australasian Fleet Management Association Fleet Safety Award.

Organisation overview

The Bureau of Meteorology provides a wide range of critical services nationally and internationally that are fundamental to our daily lives, safety, businesses and well-being, including:

- 24/7 forecast and warning services;
- maintaining infrastructure in remote locations;
- delivering round-the-clock forecasts and warnings, information services and research relating to weather, climate and water;
- responding during severe weather events such as storms, fires, floods, tropical cyclones and tsunami; and
- space weather.

Information and services provided by the Bureau allow governments, industry and the community to make informed safety, security and economic decisions.

The Bureau employs about 1700 staff, with 200 staff driving for work-related tasks. Located around the country in each state and territory, its fleet of 70 vehicles is made up of passenger, 4WD and light commercial vehicles.

Passenger vehicles are mainly used in regional offices for suburban tasks. Operational vehicles, which make up just over half of the fleet, are either all or four wheel drives and are geared for long distance driving and transporting meteorological equipment and tools used as part of regular infrastructure inspection and maintenance.
**Safeguarding the Fleet**

Passenger vehicles used for the Bureau's fleet have a five star ANCAP safety rating. That standard is stipulated in Australian Government Fleet policies, including the Fleet Vehicle Selection Policy, which the Bureau is required to follow.

Other factors considered in vehicle selection for operational vehicles include suitability and comfort of seating for long distance driving; fitting of a second spare tyre for remote long distance travel; and the location of spare tyre and equipment to reduce manual handling risks. Vehicles should also provide good fuel efficiency and be environmentally friendly.

The Bureau acknowledges that vehicles are considered a workplace under WHS laws, and ensures vehicles undergo regular maintenance. It also meets regularly with its fleet provider to discuss the operation of its fleet, including using its fleet provider’s reports to analyse fleet operations, such as fuel usage.

**Safeguarding Drivers**

All Bureau drivers are aware of its policies and procedures governing work health and safety, and are required to comply. The key road safety strategy is the Bureau's Safe Driving Procedure, which covers several areas including expected and general safe driving behaviour; compliance; hazard identification and risk control; fatigue and driving times; and communication plans for long distance or remote travel.

Bureau drivers are expected to demonstrate safe driving behaviours such as:

- Be well rested and fit to drive;
- Do not drive under the influence of alcohol or drugs (including prescription drugs if it impairs driving ability);
- Always wear seatbelts;
- Do not use hands free mobile phones while driving or any mobile device while in control of a vehicle;
- Drive with headlights on at all times;
- Reduce speed in bad weather, in poor visibility and on poor quality roads;
- Do not use cruise control on unsealed or winding roads, or during wet weather;
- Avoid driving at dawn, dusk and at night;
- Stop and assess conditions before proceeding, for example, in creek crossings; and
- Do not smoke inside vehicles.

Drivers are also expected to comply with local road traffic by-laws and State and Territory driving laws, and are required to act in a professional manner as outlined in the Australian Public Service Values and Code of Conduct.
Driver Preparation and Planning

Bureau drivers are required to perform a vehicle inspection check before undertaking a long-distance journey. Reflecting the distances and remote locations drivers often work in, the pre-trip checklist includes such essentials items as sufficient water and fuel and a portable fridge; communications and navigation tools, like a satellite phone and GPS; and a personal locator beacon and first aid kit.

Each vehicle should have an inflated spare tyre, car jack, wheel brace, tyre pump, reflective emergency warning triangles, fluoro vest, wheel chocks, tyre gauge and shovel as well as an Emergency Folder that includes emergency contact numbers and basic medical advice for snake bite and heat stroke. This red A5 folder has laminated pages to protect information from being damaged.

If the vehicle fails the pre-trip inspection, the driver should not proceed. If this happens mid-journey, the vehicle will be picked up by a local tow truck service and staff returned to base. The Bureau has previously taken this action when the roadworthiness of a vehicle was questioned mid-journey.

The Bureau’s Safe Driving Procedure outlines that drivers should make a risk assessment of work to be undertaken, including length of active work time and travel distance involved, and also outlines development of communications plans with escalation processes for illness or adverse events, such as weather or road conditions. The procedure also sets down limits for driving alone and in pairs and when rest breaks are required.

Managing Fatigue

As with all organisations where long-distance driving is required, fatigue is a key consideration in addressing road safety for the Bureau of Meteorology.

Drivers should be well rested as part of adhering to the Bureau’s driving fatigue management principles. Those principles include adhering to mandated driving breaks and driving times; having accommodation booked in advance; being well nourished in preparation for driving; maintaining a good level of hydration, including having water in the vehicle; and following napping guidelines.

These fatigue principles are defined in the Bureau’s workplace safety procedures and it is mandatory for drivers to follow them.

Agreed journey plans, which must be written up for each long-distance journey, should reflect mandated driving breaks and driving times and outline where drivers will be staying overnight at specific points on the journey. Failure to follow specified call-in times triggers an escalation process that includes engagement of emergency services; staff are aware of this and adhere to the call-in process.

Safe driving behaviours

- Be well rested and fit to drive
- Don’t drive under the influence of alcohol or drugs
- Wear seatbelts at all times
- Do not use hands free mobile phones while driving or any other mobile device while in control of a vehicle
- Always drive with headlights on
- Reduce speed in bad weather, in poor visibility and on poor quality roads
- Avoid driving at dawn, dusk and at night
- Stop and assess conditions before proceeding, e.g. creek crossings
**Claims Cost Cut**

The Bureau's focus on road safety as part of its work health and safety program has resulted in better informed and better educated drivers, which translates into safer drivers. Road safety outcomes have also included some major bottom line benefits, with a significant downward trend in claims costs and in driver at fault claims.

Analysis of fleet data shows that in the four years since driving was identified as a key risk, the number of driver at fault claims (as a percentage of claims) has dropped from 17 per cent to 9 per cent.

**The average cost of claims per vehicle has dropped from $1,196 to $405, almost one-third the average cost just four years earlier.**

The average cost per claim has dropped more than 50 per cent, from $5,380 in 2010/11 to $2,542 – in the 2013/14 financial year.

As well as the Safe Driving Procedure, the road safety focus has resulted in several processes that help keep drivers safe by outlining expectations and required procedures. These include the Driving and Mobile Phone Use Procedure, a Driving Communication Plan Checklist, the Vehicle Pre-trip Checklist and a Vehicle Emergency Reference Guide.

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**Reduction in claims costs 2010/11-2013/14**

<table>
<thead>
<tr>
<th>BOM Fleet Data</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
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<tbody>
<tr>
<td>Kilometres travelled a year</td>
<td>1,496,446</td>
<td>1,463,759</td>
<td>1,290,811</td>
<td>1,205,958</td>
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<tr>
<td>Accident rate per 100 vehicles</td>
<td>22</td>
<td>25</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Driver at fault as a % of claims</td>
<td>17%</td>
<td>16%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Average cost per vehicle</td>
<td>$1,196</td>
<td>$1,207</td>
<td>$530</td>
<td>$405</td>
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<tr>
<td>Average cost per claim</td>
<td>$5,380</td>
<td>$4,890</td>
<td>$5,451</td>
<td>$2,542</td>
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</tbody>
</table>

**Note:** Claims costs are subject to alter over time until finalised, due to recoveries, additional legal demands and late reported claims.
Education and Compliance

An education and training program for drivers and their managers and supervisors is a key part of the Bureau’s road safety focus.

Defensive driving and four wheel drive training is ongoing and the Bureau has also provided safety behavioural based driver training through the Monash University Accident Research Centre (MUARC), based on the centre’s analysis of areas of driving risk for the Bureau.

The MUARC training engaged drivers in a program designed to challenge their beliefs regarding unsafe driving practices and to enhance their own capabilities as safe drivers. The Bureau considered the cost of the MUARC training ‘very reasonable’.

The Bureau also ran a program with MUARC aimed at supporting managers and supervisors of drivers to understand their roles in managing driving-related risks.

If staff are found not to be driving safely or not following mandated processes, the Bureau’s normal disciplinary protocols for failing to follow direction are implemented. If an unsafe driving situation occurs, it is reported through the Bureau’s online hazard, incident and injury system and followed up by managers. This may result in additional training for drivers or other actions depending on the issue.

In addition to complying with Bureau policies and procedures, its drivers are required to comply with road rules and must be licensed. If infringement notices are received – a rare occurrence – staff are required to pay the fine, accrue the demerit points and provide an explanation to their managers.

Challenges in Implementation

The Bureau of Meteorology has been servicing meteorological infrastructure throughout Australia for decades and has low driver at fault incidents and penalties. This good driving record saw resistance from some Bureau drivers regarding the need for change. However, as driving was still considered one of the Bureau’s higher risks – as identified by staff themselves in the 2010 health and safety conference – a broad and comprehensive consultation was undertaken to inform initiatives to further mitigate the risks of driving.

Research suggests driver behaviour is often resistant to change and with an average driver age of 46, the Bureau was likely to encounter set driving patterns. The Bureau addressed this challenge through the training and education program delivered by MUARC, which aimed to highlight unsafe driving practices and enhance staff capabilities as safe drivers.

Drivers were surveyed and actively engaged in identifying hazardous activities and generating their own strategies to improve safe driving practices.

Image: Remote outback maintenance of Bureau of Meteorology’s observation equipment, photographer Gavin Heatherington-Tait, Bureau of Meteorology
Everyone was encouraged to contribute their ideas and the exercise drew positive feedback, including that it “challenged us to think about what affects our driving behaviour”.

MUARC training has also focused on helping managers who supervise drivers to manage staff driving behaviours and practices, and external speakers delivered safe driving messages during national work health and safety events early in program implementation.

A key outcome of the implementation process was that work and road safety initiatives only succeed where there is buy in and ownership of the outcomes, both from drivers and management.

The Consultation Key

Management leadership and consultation with Bureau staff have also been critical factors in the success of the Bureau’s road safety program.

To ensure Bureau staff had the opportunity to contribute to the Safe Driving Procedure and Driving and Mobile Phones Policy and Procedure, these documents underwent a formal consultation process.

All new Bureau WHS policies and procedures undergo two rounds of consultation with all feedback received considered and responded to. Due to the significance of the responses, the Safe Driving Procedure underwent three rounds of consultation with feedback either accepted or if not accepted a response provided explaining why.

The finalised procedure was circulated to all Bureau staff and also featured in the Bureau’s health and safety newsletter. Local managers ensure that the provisions of the procedure are adhered to.

The Driving and Mobile Phone Use Policy and Procedure, which prohibits the use of hands free mobile phones while driving on Bureau-related business, was also the subject of an open, nationally video-conferenced consultative forum.

Another key conclusion from the introduction of road safety programs was the importance of senior management support. The Bureau Executive reviews and endorses all workplace health and safety policies and procedures; ensures the provision of resources to enable the delivery of programs, such as the safe driving program; and endorses the time needed by staff to participate in training.

Their support has been active, visible and critical to increasing the adoption of improved workplace practices and a change in culture leading to a safer working environment.

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