Redland City Council Fleet Safety Initiative: The road to recovery

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Abstract

Due to the propensity of fleet incidents, poor organisational survey results and a lack of fleet safety systems, it was evident that Redland City Council were underperforming, experiencing a variety of work related road safety issues and possessed a low fleet safety culture. As a result of an audit process, and the identification of gaps in organisational process within the fleet safety area Redland City Council embarked upon the enormous task of strategically implementing initiatives and improving fleet safety across the organisation. The strategies utilised within the Redland City Council Fleet Safety Initiative were implemented utilising a systematic process and adopted a multi-disciplinary approach to improve overall fleet safety. Organisational initiatives targeting fleet safety aspects have benefited the Council by the development of an improved organisational culture, including safer driver attitudes and behaviour. This paper outlines the road to recovery for Redland City Council in relation to its fleet safety initiatives.

Background

Work related crashes are the most common cause of work-related death, injury and reduced productivity in the industrialised world (Wheatley, 1997). In Australia Work-related Traumatic Injury Fatality figures indicate that over the last seven years two thirds of workers killed at work was the result of motor vehicle incidents (Safe Work Australia, 2012). In addition, according to Safe Work Australia (2012) work fatalities involving motor vehicles as the primary mechanism of injury clearly accounts for the highest proportion of fatalities (46%) with the next highest mechanism of injury consisting of being hit by moving objects (12%) and falls from heights (11%). The total insurance costs of work-related road accidents in Australia has been estimated to be between 1 billion and 1.5 billion dollars (Wheatley, 1997) and the average total insurance cost of a fleet vehicular accident is 28,000 dollars (Davey & Banks, 2005). However, there are many other associated costs that are difficult to calculate and the true costs are not easily ascertained (Murray et al., 2003). The social and economic costs associated with work-related driving demonstrate the need for a greater emphasis on promoting or ensuring safer work-related driving practices.

An organisational work-related road safety situational analysis for Redland City Council was undertaken by the Centre for Accident and Road Safety-Queensland (CARRSQ). During this analysis it was recognised that there was a need to examine in more detail the ability of Redland City Council to manage the risks and comply with Workplace Health and Safety Legislation and Codes of practice associated with work-related driving and traffic management at road construction sites. In addition, a near fatal vehicle-related incident identified that the Council failed to comply with legislative requirements and fleet safety was in need of urgent address. The Council did not have a fleet safety policy nor were any fleet safety systems in place. A high number of work-related fleet incidents were also evident. For
example, following collation and analysis of work-related vehicle crash/incident claims, results demonstrated a 32% increase in incidents from 2007/08 to 2008/09.

Previously, Redland City Council fleet safety performance could have been considered less than ideal with organisational profile results indicating staff morale toward work related road safety was quite low. Results of an employee survey (see Table 1 – Year 1) indicated that employees believed that management commitment toward work related road safety was considerably low and that vehicle safety issues were not well communicated within the organisation. Employees also indicated they experienced high levels of perceived work pressure which compromised work related road safety processes. Furthermore, employees identified work related road safety issues such as time pressure, being distracted and issues associated with maintenance procedures as being below standard. There also was little in the way of a work related road safety policy indicating to employees operational requirements associated with vehicle use.

**Recent Quantitative Survey Results**

Recent organisational survey research has indicated substantial improvement to employee perceptions and issues of work related road safety. Table 1 shows results of surveys measuring Council employee’s safety climate perceptions and driver behaviour over three years. A higher score for the Safety Climate measurement scale indicates a safer employee perception of fleet safety within the Redland City Council. Whereas, a lower score for the Driver Behaviour scales represents safer driver behaviour. However, for the Maintenance scale a higher score indicates a safer behaviour in relation to maintenance of vehicles. The year 1 survey shows mean score results before implementation of initiatives. In addition, the year 2 survey results demonstrate the effectiveness of interventions/initiatives that have been developed and implemented, as reported by Council employees. Furthermore, year 3 results indicate employee perspectives a further 12 months after the second year survey, indicating if results from the second year have been maintained or whether they have improved or declined over time.

**Table 1. Quantitative Survey Results – Scale Mean Scores (M)**

<table>
<thead>
<tr>
<th>Measurement Scales</th>
<th>Year 1 Survey</th>
<th>Year 2 Survey</th>
<th>Year 3 Survey</th>
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<tbody>
<tr>
<td><strong>Safety Climate</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Management Commitment</td>
<td>2.85</td>
<td>4.30</td>
<td>4.11</td>
</tr>
<tr>
<td>Adequacy of Fleet Safety Procedures</td>
<td>2.85</td>
<td>4.30</td>
<td>4.14</td>
</tr>
<tr>
<td>Fleet Safety Rules</td>
<td>3.15</td>
<td>4.57</td>
<td>4.23</td>
</tr>
<tr>
<td>Communication and Support</td>
<td>2.50</td>
<td>3.95</td>
<td>3.84</td>
</tr>
<tr>
<td>Work Pressure</td>
<td>2.85</td>
<td>4.30</td>
<td>3.46</td>
</tr>
<tr>
<td><strong>Driver Behaviour</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive Violations</td>
<td>1.45</td>
<td>1.35</td>
<td>1.31</td>
</tr>
<tr>
<td>Mobile Phone Use</td>
<td>2.05</td>
<td>2.01</td>
<td>2.02</td>
</tr>
<tr>
<td>Distraction/Multitasking</td>
<td>2.15</td>
<td>1.67</td>
<td>1.55</td>
</tr>
<tr>
<td>Time Pressure</td>
<td>1.90</td>
<td>1.75</td>
<td>1.81</td>
</tr>
<tr>
<td>Maintenance</td>
<td>2.00</td>
<td>3.63</td>
<td>2.39</td>
</tr>
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Safety Climate survey questions were utilised to examine Council employees’ views about their work driving environment. As a result of initiatives and interventions implemented throughout Redland City Council the safety climate has improved markedly. For example, employees have indicated vast improvements within the organisation of management commitment toward general work related road safety. These improvements have indicated that employees believe that management are substantially more committed to fleet safety than previous years. In addition, staff indicated that within the Council, work related road safety rules and policy function more effectively in relation to other work demands after implementation of initiatives/interventions. The improved results in years 2 and 3 indicate that Council have greatly improved policy and policy functions and suggests that Redland City Council have improved the platform to enable future improvement and monitoring of employee fleet operations. Council employees also demonstrated that the comprehensiveness, availability and practicality of the Council’s work-related road safety policies and procedures have greatly improved. Thus employee evidence suggests that Redland City Council is a much safer place to work in regards to fleet safety operations. Furthermore, Council staff stated that their inclusion in the development and monitoring of fleet safety policy and processes has increased and that policies/processes are communicated more effectively. These results indicate that there is more employee involvement in communicating fleet safety policy and employees believe they have an important part of the policy development and implementation process. This ensures that future policy and fleet safety processes and initiatives are consistent, practical and obtainable.

Council employees believe that it is more realistic within the Council to comply with fleet safety rules and meet expected work targets. For example, results in year 2 of the survey suggest that employees are no longer under high levels of pressure to drive in an unsafe manner in order to meet unobtainable timelines and work commitments. Thus, indicating that fleet safety has obtained a much higher priority than in previous years prior to strategic implementation of initiatives. While there was a significant improvement in survey results from the year 1 to year 2, the survey conducted in year 3 revealed a considerable drop in staff perceptions relating to work pressures. Although there are many internal (e.g., organisational changes, etc) and external factors (e.g., floods, etc) that may have increased workload, further investigation is required to ascertain major contributing factors that influenced employee perceptions relating to work pressures.

**Driver Behaviour**

Similar to the fleet safety climate results, there have been areas of improvement to driver behaviour as a result of increased work-related road safety initiatives. Results in Table 1 show an improvement across all driver behaviour scales from year 1 to year 2. Likewise, results in year 3 reveal a stabilisation of the previous year’s improved driver behaviour, and in most cases results relating to driver behaviour have continued to improve. For example, employees have indicated a reduction in aggressive driving behaviour and using a mobile phone whilst driving since the implementation of initiatives. In relation to the distraction/multitasking subscale, Council employees were required to answer questions relating to the influence of various distractions and undertaking other tasks while driving. Subsequently, Council employees indicated a reduction in adverse behaviour for the specific variables related to eating and performing administrative tasks while driving for work.
The time pressure subscale measures employees’ perceptions in relation to the safe and timely completion of work-related tasks. Table 1 results from year 1 to year 2 suggest that Council employees perceive that initiatives and changes to work schedules and processes do not compromise work-related road safety. Rather, results demonstrate an improvement in driver behaviour related to the time pressure. However, similar to the work pressure subscale in the fleet safety climate scale, results for the driver behaviour time pressure subscale from year 2 to year 3 show an increase in adverse behaviour. Again, there are many potential internal and external factors that may have influenced the time pressure results and further investigation is required to ascertain major contributing factors that influenced employee perceptions relating to time pressure.

Finally, the maintenance subscale provides an indication of whether drivers are periodically checking tyre pressure and fluid levels instead of relying totally on scheduled service maintenance programs. In contrast to other behaviour items reported earlier, a high score on this item indicates that drivers do carry out pre journey maintenance checks and do check fluid and tyre pressure levels between scheduled servicing programs. Therefore, the results from year 1 to year 2 surveys indicate a substantial improvement in the frequency and completion of pre journey checks across the Redland City Council vehicle fleet. However, the year 3 survey revealed a considerable reduction in driver behaviour relating to maintenance checks. This decrease in vehicle maintenance checks coincides with an increase in driver reported work/time pressures, therefore suggesting that time/work pressure may influence drivers to forego maintenance checks in an attempt to increase time required for completion of core work-related tasks/jobs.

**Steps in the Road to Recovery**

In response to the propensity of fleet incidents, poor initial organisational survey results and a lack of fleet safety policy and procedures the Council has progressively adopted a multi-disciplinary approach to improve overall fleet safety. Redland City Council has embarked on developing and strategically implementing a number of fleet initiatives designed to subsequently improve work related road safety within the Redland City Council and meet legislative compliance. Strategies utilised in the Redland City Council Fleet Safety Initiative are included below:

*South-East Queensland Council’s Fleet Safety Benchmark Project (CARRS-Q)*

Redland City Council has participated in a benchmark project that aims to develop benchmarks across key performance indicators and research informed factors known to influence driver behaviour. An initial baseline survey has already been administered throughout each council within the first 12 months of the project to develop an industry baseline of factors influencing driver behaviour. A second and third benchmark survey have also been administered and analysed to provide ongoing benchmark data and subsequent evaluation of the effectiveness of work related road safety initiatives. The project also provides the opportunity to further evaluate the ongoing effectiveness of future fleet safety initiatives.

*Legal Liability Project*

Redland City Council Fleets department has engaged assistance from qualified legal personnel (e.g. Barrister), experienced within the road safety arena, to provide information
and advice in relation to their legal liability and additional fleet safety, chain of responsibility, occupational health and safety and common law requirements.

**Fleet Situational Analysis (CARRS-Q)**

The Redland City Council engaged CARRS-Q to assess the situation of the Council’s work-related road safety programs and procedures. The aim of this diagnostic process was to demonstrate an awareness of the gaps in the Council’s fleet safety programs. The Situational Analysis provided Council with an identification of the risks and deficiencies in our work-related road safety program, policy and procedures and further inform future initiatives and intervention strategies. The CARRS-Q Work Related Road Safety Situational Analysis utilised three sources of data:
- Structured interviews with all levels of staff (operational to senior management);
- Current documentation relating to vehicle operations within Council; and
- Examples of crash or incident data.

**Presentation at CARRS-Q Work-Related Road Safety Seminar**

Following a serious council vehicle incidents, Redland City Council delegates offered to actively participate in a work related road safety seminar and workshop to share lessons learned, and highlight deficiencies and improvements made with other organisations.

**Communication Packages and Tool Box Talks**

Fleet safety has now become a standard agenda item in all team briefs and tool box talks with a range of specific fleet safety topics systematically addressed. This ensures that fleet safety stays high on everyone’s mind and enables staff to share experiences, obtain fleet safety knowledge, and provides an avenue to highlight problem issues.

**Fleet Safety Seminars/Workshops**

Attendance at seminars has provided additional information for improvement of the Redland City Council fleet program. Subsequently, Council fleet team members have actively implemented new interventions and improvement strategies. For example, they have introduced more effective and efficient crash investigation processes.

**4WD Driver Training**

In response to identifying particular 4WD issues Redland City Council has engaged a registered training provider to provide targeted auditing and training and education to specific 4WD users. This training specifically addresses issues of particular relevance to 4WD operation within the Redland region.

**E-Learning Programs**

Recently, Redland City Council engaged RACQ services to provide all employees with the opportunity to participate in an online driver educational and assessment program.
Mini Workshops (Tyre changing and vehicle maintenance, etc)

Redland City Council in response to deficiencies in training needs associated with employees possessing a lack of information regarding general maintenance of vehicles, have implemented a series of maintenance workshops. These workshops educate staff about changing tyres, checking fluid levels and general maintenance issues relating to better safety performance. Recent unsolicited feedback has suggested that staff have found these workshops extremely helpful, however ongoing formal evaluation is progressing to determine the safety impact of these workshops.

Interaction column (monthly)

Previously, work related road safety was not even on the radar for promotion within the organisation. Currently, a monthly newsletter column focuses on a particular fleet safety issue and endeavours to inform employees about issues to improve their vehicle safety. Examples include road rule changes, policy changes and implications, mobile phone use, and other work related road safety issues.

RACQ – Driver Training

High risk employees are now required as part of professional and personal development to undertake specialist RACQ training and education programs. These programs target specific issues identified within driver and organisational profiles and provide the employees with the necessary knowledge and skills to become better safer drivers.

Revised “New” vehicle inductions

Vehicle inductions previously were non-existent within Redland City Council. However, upon results obtained within recent audits highlighting areas worthy of improvement Redland City Council has implemented a complete induction process for all new employees and vehicle changeover.

Revised Policies and Guidelines

Redland City Council has now developed and obtained sign off on a newly developed council work related policy and procedure guideline which details the operational and council requirements for all vehicle use within Redland City Council.

Car Park Tyre patrols (Bridgestone)

Low tyre pressures are not only an environmental issue but also have safety implications. Redland City Council in conjunction with Bridgestone are actively engaged in conducting car park patrols to determine tyre pressure levels of council vehicles. Results of this audit are actively communicated to staff and department heads with a view to improving the regular checking of correct tyre pressures.

Electronic Key Management System

All employees within Redland City Council must provide appropriate licences for vehicle use. This information is electronically recorded enabling successful activation of a management
system for vehicle use. This process guards against inappropriately approved or licenced operators driving a vehicle with which they are unqualified to operate.

Introduction of a Servicing and workshop facility on North Stradbroke Island

Recent expansion to Fleet Services infrastructure includes a “stand alone” workshop facility at the Council Depot on North Stradbroke Island (1.5 Hrs Journey from the mainland) which consists solely of a lockable stand alone building containing a Vehicle Hoist, compressor and workbench. The Fleet Services support vehicle will be utilised in attendance at the site and will provide all relevant and necessary ancillary tools and sundries etc. Following the identification of our need to address Compliance with Health and Safety legislation in respect of our satellite operations on North Stradbroke Island our strategies focused on both staff training and relevant and suitable infrastructure and facilities being made available. All of which were considered critical in the overall Staff Training and Facility Plan. The requirement for this facility is planned to increase as a greater emphasis is placed on the responsibility of the organisation to provide appropriate and adequate training and ensure that the staff are properly skilled to operate the equipment – in this instance the new motor vehicle servicing facility on the island.

Following a near fatal incident on the island it was identified that Council’s failure not to comply with legislative requirements was in need of address. Council’s actions since have demonstrated a pro-active attitude to work-related road safety as well as a facility that will assist the achievement of both time and financial savings in the Fleet operations appertaining to the island assets. Such liability appears obvious to the fleet operator, however, workers are anecdotally “self sufficient” on the island and as such it is from experience and necessity that the provision of the correct training, tools and infrastructure exists. As an added bonus, the facility exists for the Fleet operation to be able to operate “on site”.

Collaboration and Training

A partnership comprised of a Fleet Services, WH&S, CARRS-Q, Redland City Council policy makers and individual staff have devised and provided a raft of Training courses in conjunction with RACQ and associates. The Council offers challenging and dynamic training opportunities, promoting involvement from individual departments and employees interested in assisting in the identification, development and improvement of Council’s programs and Duty of Care issues and obligations. All of which have proved hugely successful to date and as a contributory factor to our current and future plans and aspirations.

Fleet Log Book

Provides a ‘one stop shop’ for drivers to utilise for daily and weekly pre-start checks, Council information relating to fleet policies/procedures, servicing and repairs. The log book was designed as a tool to assist drivers meet their own obligations in relation to Council fleet requirements, such as, reporting and recording fleet-related issues, provide information, guidelines and advice. In addition, the log book provides Council with the necessary information and records to address some of the additional requirements of health and safety legislation.
Fleet Safety Program Difficulties and Solutions

The strategies utilised within the Redland City Council Fleet Safety Initiative were implemented utilising a systematic process. Deficiencies in Council’s fleet safety were identified utilising a Risk Management process with the assistance of a suitably experienced and qualified external organisations in the area of fleet safety. Difficulties involved gaining management commitment and collaboration with other Council departments to enable the implementation of initiative strategies. Initially, Council fleets personnel gained management commitment by highlighting the inadequacies and negative aspects of current fleet procedures and safety. This involved attending a series of workshops and conducting a complete auditing process of the vehicle fleet operations. A partnership was developed between Council Fleet Services and the Council’s Workplace Health and Safety department to target and implement initiative strategies throughout the Council.

The partnership between Council Fleet Services and workplace health and safety has initially addressed current and emerging issues of work and driving related health and safety in Council. The partnership has taken the lead in Driver Training and Safe Practice promotion by developing and promoting the use of data from multiple sources including advice and guidance obtained through our coalition with CARRS-Q and the RACQ. The data allows Council to identify and improve areas of concern within their current Policies etc and further evolve and promote the changes required to achieve their obligations, providing sometimes unique and comprehensive portrait solutions to the areas identified as in need of improvement.

By combining resources and procedural best practices, the partnership optimizes the benefits of using all pertinent data, and is gaining insights into the broader effects of work-related road safety. Some of our recent accomplishments include:

- The consolidation and review of Accident and Incident Reporting Procedures;
- The Provision of the correct tools and facilities for Employees to carry out daily maintenance and “on site” adjustments and replacements, etc;
- Changes to the general work-related road safety (WRRS) practices around council facilities and workshops (ie., barriers, clothing requirements, etc);
- The introduction of the Council’s WRRS Guideline and subsequent updates to related documents;
- The provision of a new Vehicle Inspection facility at the Depot on the mainland and all relevant associated training; and
- The identification and required outcome following the identification of Non Conformance Vehicle Conditional Use Registration issues.

Fleet Safety Program Outcomes

Details regarding the outcomes and results of the initiative strategies are stated within the following sections. In addition, the implementation and success of the Redland City Council Fleet Safety Initiative far exceeded the original expectations. Working in collaboration with external and internal organisations/departments has provided the knowledge, skills and drive enabling a successful implementation of the initiative strategies. The general benefits to Council fleets in undertaking initiatives targeting fleet processes and safety can be highlighted by a number of central reasons incorporating societal, legal, business, marketing, culture, and financial reasons. For example:
Business

Adopting a safer fleet practice and research initiatives resulted in less downtime for Council fleets associated with repairs or replacement of damaged vehicles. It also results in less employee sick leave and worker downtime for employees recuperating from crash related injuries.

Legal

Within today’s increasing litigious environment and increasing responsibility in terms of Workplace Health and Safety and Chain of Responsibility, Council fleets are benefiting by participating in initiatives aiding the development of high standards of fleet safety practice. Adopting a best practice model of fleet safety demonstrate initiatives in legal responsibility, thus reducing the possibility of legal expenses and other associated costs.

Financial

Adopting a safer fleet environment is continually contributing to a substantial financial benefit to Council, not only in reduced vehicle damage and maintenance costs but also in terms of downtime, vehicle replacement costs, risk exposure, public liability, workers compensation and insurance premiums.

Societal

A reduction in Council fleet vehicle crashes assists society in terms of decreasing workplace injury. A reduction in crash rates would be of benefit to employees and their families in terms of decreasing injury trauma, psychological and physical rehabilitation, and possible financial burden.

Marketing

Participation and development of comprehensive multi-pronged initiatives has created numerous marketing opportunities for Council fleets in terms of the promotion of a safety culture and the marketing of fleet safety within the Council and throughout the wider community.

Culture

Organisational initiatives targeting safety aspects have benefited the Council by the development of an improved organisational culture. Employee wellbeing is shown to be a valuable resource and fleet safety initiatives have conveyed to employees that they are valued and that management cares.

Summary

Previously in relation to fleet safety, evidence demonstrates that Redland City Council was underperforming, experiencing a variety of work related road safety issues and possessed a low safety culture. As a result of an audit process, and the identification of gaps in organisational process within the fleet safety area Redland City Council embarked upon the enormous task of strategically implementing initiatives and improving fleet safety. This
The process has commenced a multipronged approach to systematically address areas of deficiency, improve work-related road safety culture and ensure that Redland City Council and its employees are safer within the city and the operational fleet environment.

Although the road to recovery is still continuing, preliminary results are encouraging and have demonstrated a number of substantial improvements across a wide variety of areas associated with fleet safety operations. Not only have the fleet safety initiatives been implemented, they have demonstrated an improvement in fleet safety within Redland City Council. The overall multipronged approach has required substantial resources, product championing, industry involvement, and budget allocations. Furthermore, Redland City Council have consistently demonstrated structural and procedural changes to accommodate the processes and initiatives required to obtain these substantial improvements ensuring a safer work-related road safety environment.

References


