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| Report No: | RESC11-09-06 |
| File No: | |
| Date: | 5 September 2011 |
| <i>Information Only – no decision required</i> | |

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 15 September 2011
Report Author: Gary Clark, Transportation Manager
Subject: Transportation Report

EXECUTIVE SUMMARY

This report details activities in the Transportation area.

RECOMMENDATION

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Transportation Report RESC11-09-06.

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1. Operations and Maintenance

1.1 Contract 757 Tasman and Contract 758 Waimea

Routine maintenance work has been generally steady but work programmes were significantly affected by weather events during April/May (rain, flooding and slips), and again in June (flooding and snow). These events had a minor effect on network condition but more noticeable effects on the contractor's resourcing for programmed work, customer service response and contract management.

1.2 Downer bought in a new contract manager, John Panckhurst, during late 2010 and John has been instrumental in improving Downers delivery of contractual requirements. Improvements to timeliness of customer service response, fault identification and reporting are still being worked through with the contractor.

1.3 Rollover of Contracts 757 and 758 beyond 1 July 2012 is dependent on performance targets being achieved. Based on the contractor performance scores during 2010/2011, it is unlikely that the minimum target of 75% average will be achieved on both contracts.

1.4 Contract 625/788 Golden Bay

This contract area includes State Highway 60 maintenance from Riwaka Bridge to the intersection with Collingwood-Bainham Road. Contract 625 finished on 1 October 2010. Contract 788 was won by the incumbent Fulton Hogan in a competitive tender process during July and August.

1.5 The setup and transition to RAMM Contractor for Contract 788 was relatively smooth, however we are still working with Fulton Hogan to ensure they are fulfilling the requirements on fault identification and recording, where they are not yet meeting requirements.

1.6 Fulton Hogan has generally maintained the network to a good standard, although the condition during January and February was affected following the significant

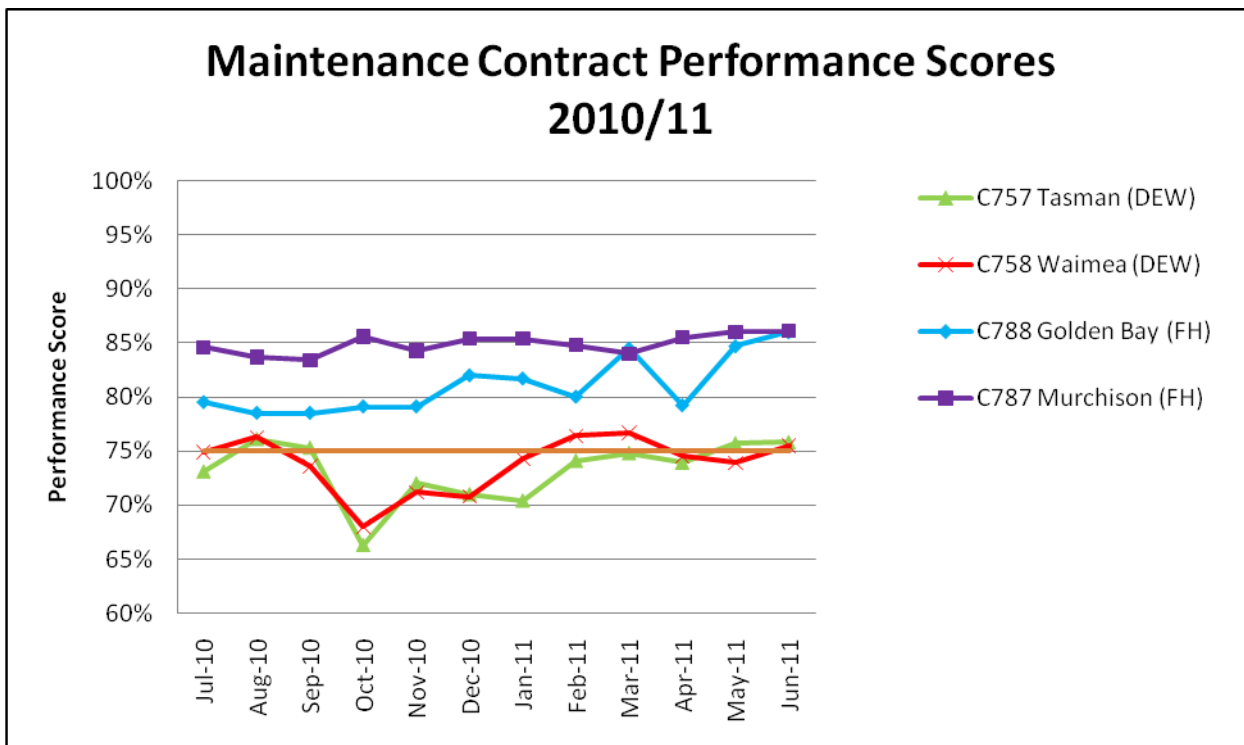
flood event in the Aorere catchment in late December 2010. The cleanup work dominated the contractor’s activities during this time.

1.7 Contract 787 Murchison

This contract started on 1 July 2010 with the contractor again being Fulton Hogan. The setup and transition to RAMM Contractor for Contract 787 was relatively smooth, however we are still working with Fulton Hogan to ensure they are fulfilling the requirements on fault identification and recording.

1.8 The network has generally been maintained to a very high level, with the contractor showing excellent response to issues.

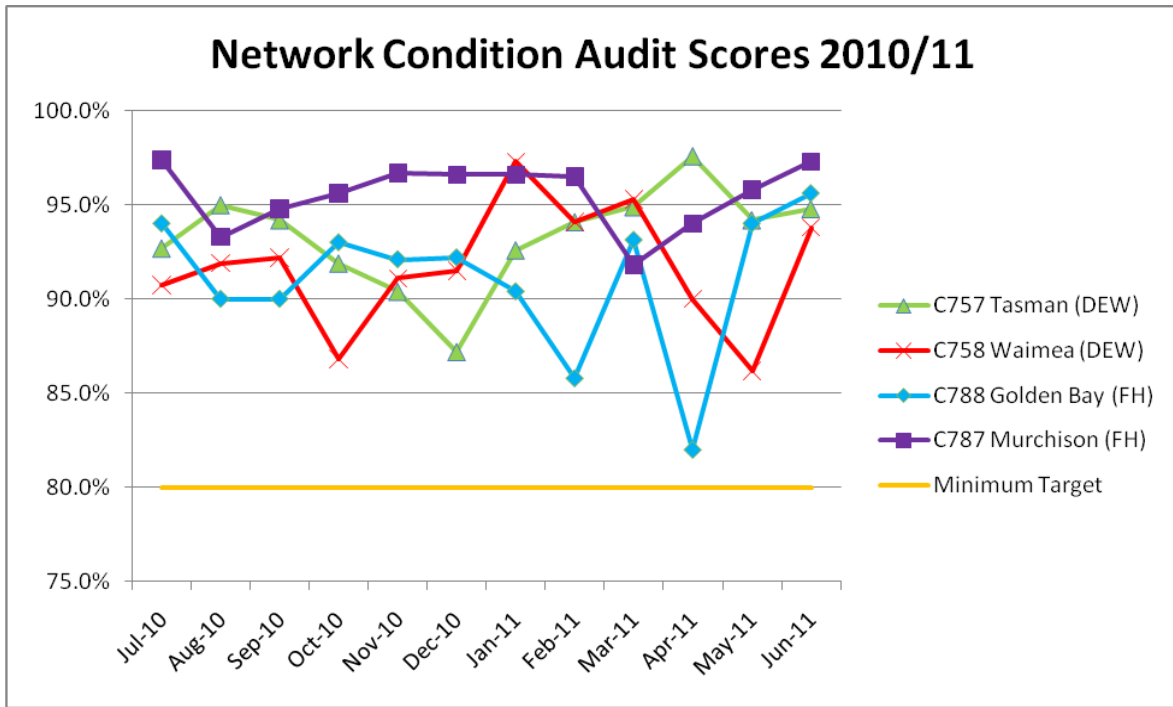
1.9 Contractor Performance



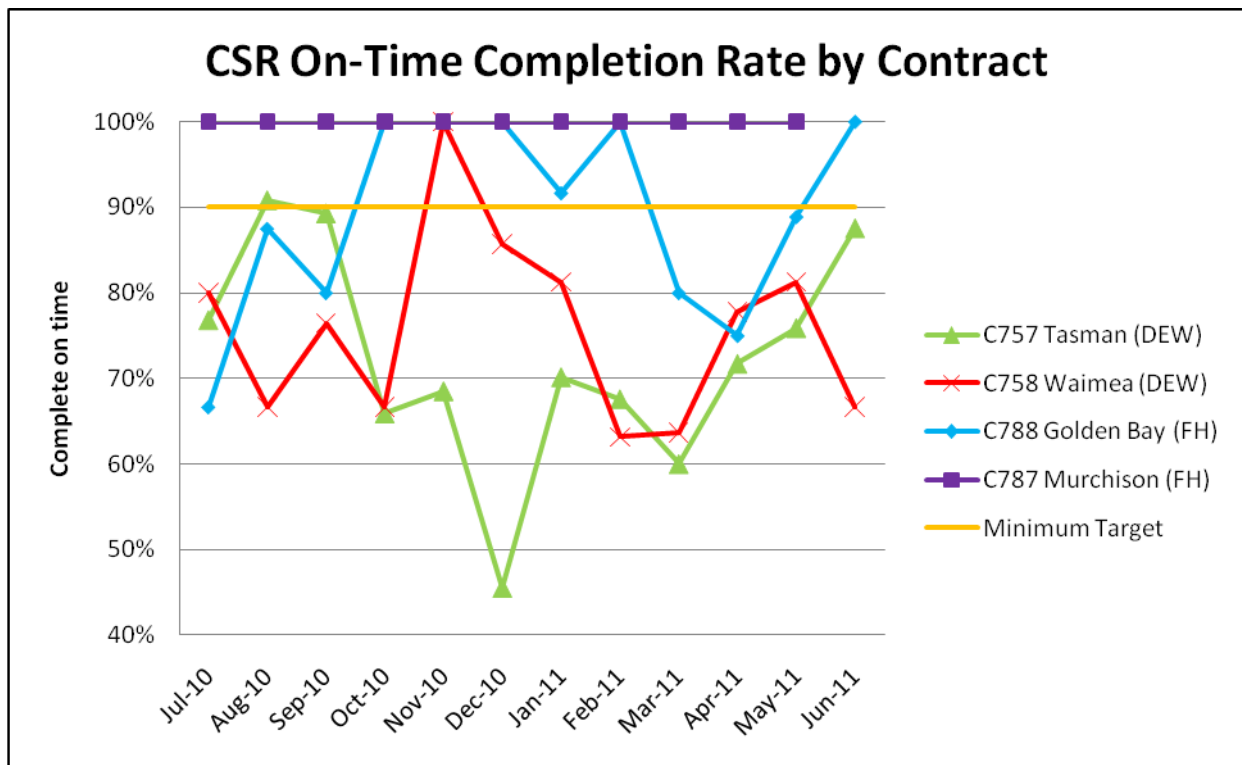
1.10 The contract performance scores are a composite score of overall achievement in the areas of Safety, Contract Management and Reporting, Asset Management, Operational Compliance, and Relationships and Customer Service.

1.11 Downer’s performance generally improved in the second half of 2010/11.

1.12 Scores for Fulton Hogan have been comparatively high throughout 2010/11, mainly due to the contractor being proactive in identifying and rectifying issues, timely response to work requests and general ownership of the Golden Bay and Murchison networks.



1.13 All network areas were maintained in a condition above the minimum standards throughout 2010/11. While this is a good result, the scores indicate that a minimum target of 90% could be realistic and provide incentive to contractors to address more minor maintenance issue which can drag on.



1.14 All contract areas, with the exception of Murchison, have struggled to consistently achieve 90% on-time completion of CSRs. Resourcing levels for this reactive type of work have been the contractors' primary challenge. In Golden Bay, Fulton

Hogan achieved the required timeliness 50% of the time (six months out of 12), while Downer in Tasman and Waimea only achieved it 8% of the time (one month out of 12 for each contract).

1.15 Levels of Service

The Levels of Service that relate to Operations and Maintenance are presented in the table below. More detailed information can be found after the table.

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|--|---|-------------------------|
| All road construction and maintenance activities comply with any required resource consents. | Actual = 100 % Consents are held for all maintenance and current capital works. There have not been any non-compliance notices issued this year. | 100% |
| We receive less than 35 complaints per year relating to the maintenance of footpaths. | Actual = 61 29 other complaints received regarding footpaths are not related to maintenance. | 35 |
| All dwellings within the District are able to access the Council's transportation network at all times unless subject to planned closures. | Actual = It is impossible to avoid all emergency road closures in the event of natural hazards. Tasman District Council aim to keep the numbers and duration of emergency closures to a minimum. | 100% |
| We are able to respond to and fix faults within the timeframes we have specified within our operations and maintenance contracts. | Actual = 75.0% of Customer Service Requests were completed within the specified timeframes. | 90% |
| We have a facility for receiving and handling emergency calls after office hours. | Actual = In place Council has an after-hours call centre that receives calls out of regular office hours. Contractors and system duty managers have duty staff who are contactable to respond to emergencies. | continue to do the same |
| All Council's contractors have adequate resources available in case of a road failure. | Actual = All Council's contractors have adequate resources available in case of a road failure. | continue to do the same |

1.16 Footpaths

Budget requests for 2012/13 onwards have been increased to enable more maintenance and renewal work to be undertaken on footpaths to better address deficiencies as both the level of service measure and community feedback suggests that the current performance is not good enough. MWH is currently packaging renewals work on footpaths so that best value can be squeezed out of the budgets, however it is likely that this will have only a minimal effect on this Level of Service measure.

1.17 Delineation

The new delineation policy has been rolled out in general terms on the network, with the most noticeable changes to date including:

- Roadmarking – full network remark completed during 2010/11 implemented the addition of edgeline markings on collector routes, and the non-marking of centrelines on local roads. The non-marking of centrelines was most noticeable on reseal sections and generated some feedback. For safety reasons, isolated centrelines were marked.
- Signs – upgrade of delineation and warning signs on arterial and tourist routes included Abel Tasman Drive, Moutere Highway, Motueka Valley Highway, Kaiteriteri-Sandy Bay-Riwaka loop.

1.18 Ongoing implementation of this policy during 2011/12 will include removal of edge marker posts on some local roads, with associated improvements to signs at safety exception locations.

1.19 Drainage

In addition to improving drainage as part of pre-reseal maintenance work, three additional packages of drainage improvements were identified during 2010/11 as follows:

- Package 1 – Moutere Highway, Queen Victoria Street, College Street. Work completed.
- Package 2 – Wai-iti Valley Road, Stock Road, Kerr Hill and Korere-Tophouse Road. The contract has been let to CJ Industries.
- Package 3 – Motueka Valley Highway. Tender document to be completed and tendered in September 2011.

1.20 Pavement Maintenance

Sealed

The 2010/11 year saw the continuation of maintenance in accordance with the maintenance Intervention strategy, particularly in scheduling and completing pre-reseal repairs a year ahead of resealing. Issues with timeliness by the maintenance contractor in 2010/11 have modified the approach to 2011/12 repairs, with the introduction of earlier milestones within the larger pre-reseal

programme. Draft reseal programmes for 2012/2013 and 2013/2014 have been developed and will be used to programme repairs.

1.21 *Unsealed*

The trial of high-fines compacted metal overlays on Trass Valley Road showed limited success in dust reduction. However, this provided an excellent base for a secondary treatment of limechip material, which has shown some dust suppression and maintenance minimisation characteristics. A limechip treatment on Eves Valley Road also generated positive results.

1.22 Further trials to build on experience to date are planned for 2011/12. This includes using different sources and blends of materials to find a balance of economy and performance. These trials may lead to long term maintenance savings with regard to gravel.

1.23 **Vegetation Control**

The revised levels of service for roadside mowing adopted as part of the new roading maintenance contracts were rolled out across Golden Bay and Murchison in 2010/11. Similar to the experience during 2009/10 in Tasman and Waimea contract areas, few negative comments were received from the general public.

1.24 An exercise is underway to update the no-spray database, to be followed by the installation of new marker pegs at no-spray sites to ensure consistency and compliance.

2. Road Safety

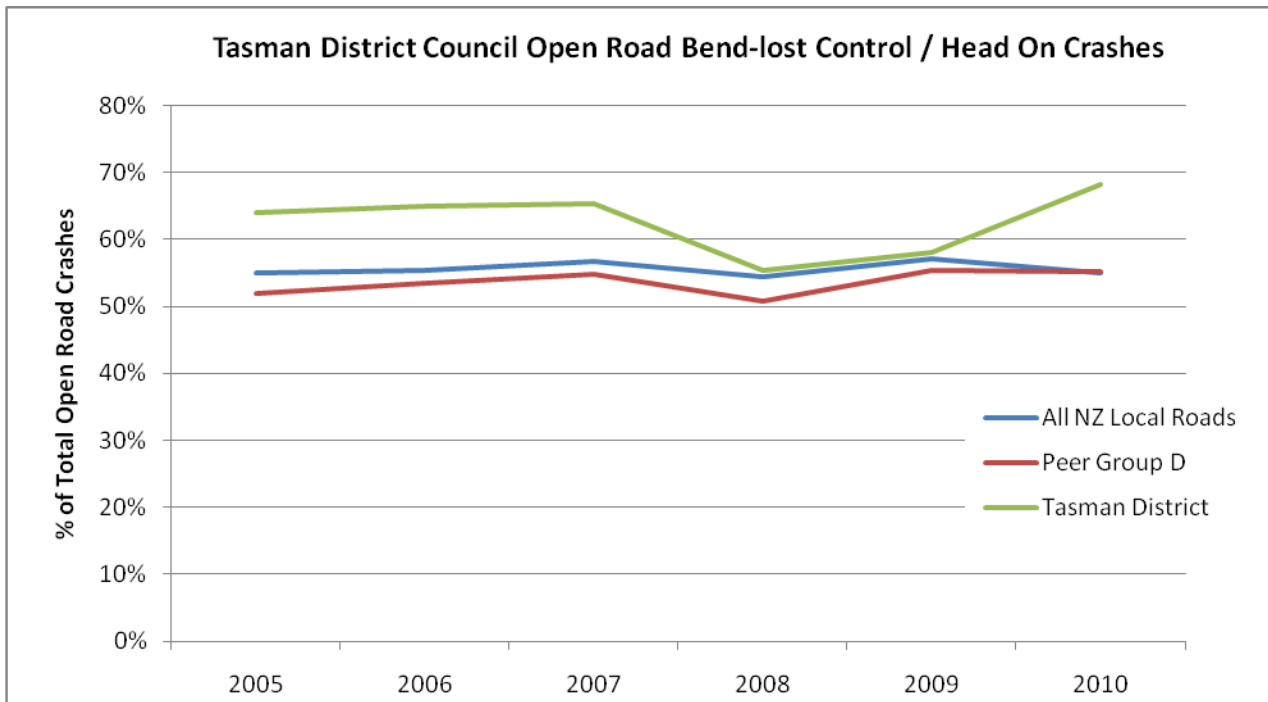
2.1 **Levels of Service – Road Safety**

The Level of Service measures for Road Safety are presented in the table below.

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|--|---|---------------------------|
| Bend – lost control/head on road crashes on rural roads are equal to National average by 2018. | Actual = 13% above the national average Council Actual = 68% (Local Roads only) All NZ = 55% (Local authority roads only) This reporting runs from Jan 2010 – Dec 2010 so does not match the Council reporting year. | 5% above national average |
| There are no loss-of-control crashes for all known frost potential sites. | Actual = There were two loss-of-control crashes occurring on Ice/Snow during 2010. Both occurred at known frost potential sites. This reporting runs from Jan 2010 – Dec 2010 so does not match the Council reporting year. | Nil crashes |

2.2 Bends - Loss of Control/Head On Crashes

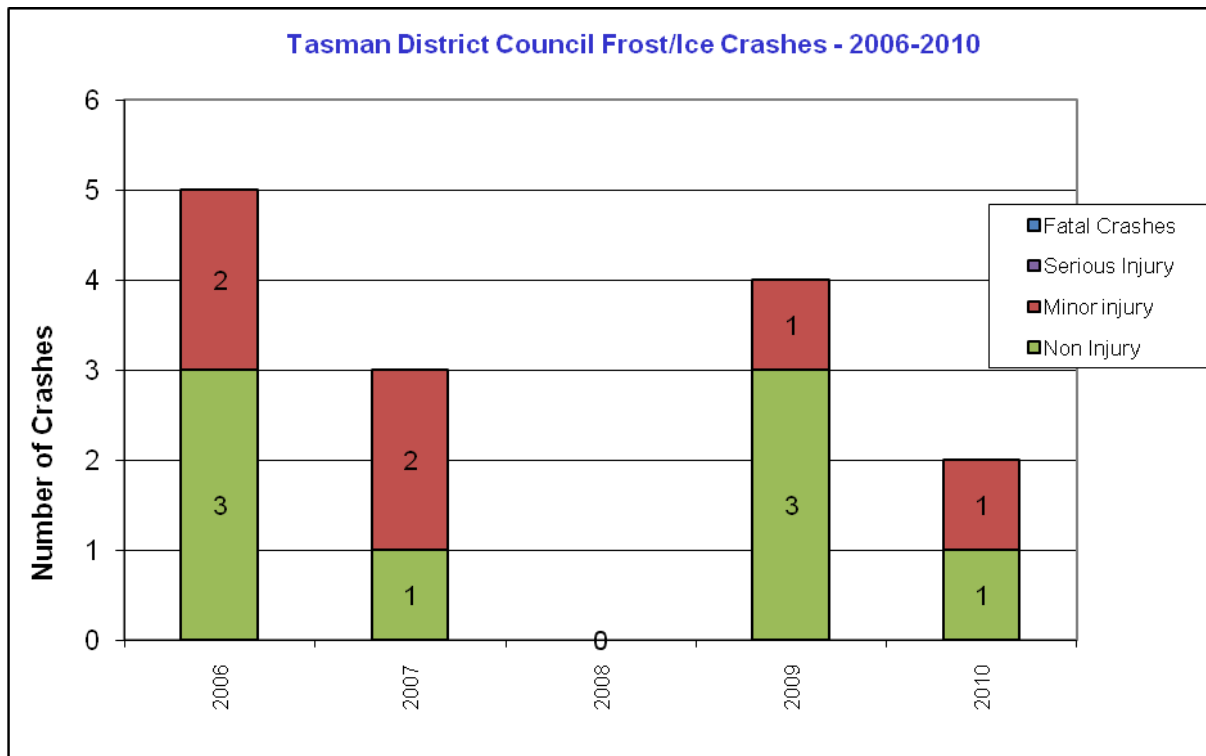
The most common movement type involved in crashes throughout the network is loss of control and head on crashes on bends which is why it is recorded as a Level of Service measure. This crash type has an even greater dominance on the open road, as opposed to urban situations. The following plot shows the trend for Tasman District, similar local authorities throughout New Zealand (Peer Group D), and all New Zealand local authority roads.



2.3 In 2010, 68 percent of open road crashes were as a result of loss of control or head on crashes on bends. Prior to the complete 2010 crash data being available, this movement type had been identified as a priority and a number of projects were targeted to this crash type in the 2010/11 minor improvements programme. This includes the development of a shoulder widening matrix targeting safety improvements on bends and a Clear Zone risk assessment tool.

2.4 Frost Sites

The following plot shows the five year crash severity data for frost/ice related crashes.



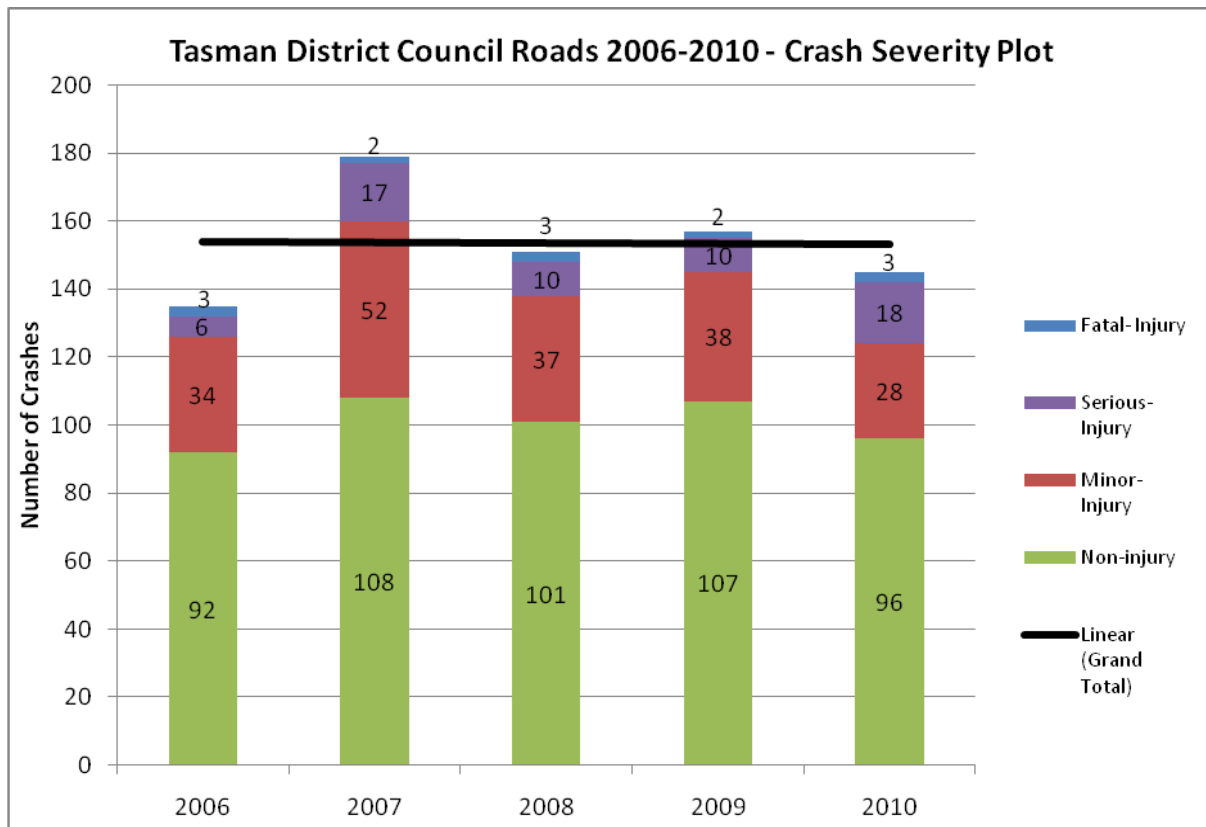
2.5 The plot shows that the crash numbers and crash severity are typically low. Whilst the level of service target of zero crashes at known frost sites has not been achieved, it is considered that striving for zero serious and fatal crashes and maintaining the low numbers of non-injury and minor-injury crashes is a more realistic target.

2.6 Knowledge of frost potential sites is continually evolving as location specific conditions alter throughout the network over time and within the period of the maintenance contracts. The gain of knowledge largely relies on network observation and the experiences of the contractor. This knowledge is collected in the RAMM database.

2.7 Prior to the end of maintenance contracts and post the winter frost season, a winter debrief session will be held with the contractor to ensure RAMM reflects the contractors on-road experience of winter. The frost potential sites will then be updated. This will ensure that any tacit knowledge of the network is not lost.

2.8 Crash Numbers

Tasman District Council's local roads crash data for the five year period 2006 to 2010 inclusive is summarised graphically by the following plot: (Note, this does not include state highways).



2.9 The data plotted shows a relatively static trend in total crash numbers for the five year period. The linear trend that has been indicated on the plot is not strongly significant and is statistically a poor fit to the data. This is particularly due to the peak crash numbers recorded in 2007. Notwithstanding, the three years 2008 to 2010 remain at similar total crash numbers despite generally increasing traffic volumes throughout the District of around 2.5%.

2.10 The number of injury crashes (minor, serious and fatal combined) remains at around 50 per annum throughout the period with the exception of 2007 during which 71 injury crashes occurred. The NZ Transport Agency Safer Journeys 2020 strategy increases the focus on serious and fatal injuries. The number of fatal and serious crashes occurring each year over the five year period shows a generally increasing trend with 21 occurring during 2010. Of the serious and fatal crashes occurring during 2010, 52% involved motorcyclists and 19% cyclists. The proportion of motorcyclists involved in fatal and serious crashes is increasing year on year, from 22% in 2006 to 52% in 2010. This should be explored further to develop appropriate response(s) within the SMS framework and Community Programmes.

2.11 There is not enough certainty in the 2011 data for the first half of this year to give any clear indication of the continuation of any trend. It is typically expected that the crash database can be delayed by up to three months while being populated by the Police and the NZ Transport Agency. We have however had one fatal crash in the first six months of 2011.

2.12 The NZ Transport Agency has not yet updated the *Tasman District Road Safety Report* which summarises the latest five year period crash data. This typically includes a Tasman District Council urban and rural roads crash rate per 100 million vehicle kilometres travelled (vkt) comparison with all New Zealand roads and similar local authorities.

2.13 Safety Management System (SMS)

The SMS identifies that loss of control on bends, failure to give way at intersections and cyclists and pedestrians are the top priorities respectively. Current crash data confirms that loss of control remains a priority. Elements of the SMS were addressed in 2010/11 as follows.

- District-wide delineation upgrades targeting out of context or potentially misleading curves on arterial routes and identified curves on Local and Collector Roads.
- Development of a shoulder widening matrix targeting loss of control on curves. Year one of a three year minor improvements programme to provide increased shoulder width on the Moutere Highway over Cut Hill has been completed.
- Development of a Clear Zone Risk assessment matrix has been completed. The matrix has been populated for the Moutere Highway and Motueka Valley Highway. This allows identification of sites that should be prioritised for guardrails. This also allows identification of sites further down the priority ranking, where the guardrail is unlikely to ever be affordable or cost-effective. These can then be treated in the short term with low cost options such as improved signage or sight rails.
- New footpaths and crossing facilities have been improved to cater for urban and rural pedestrians, including at schools. Construction of these improvements is underway and due for completion in August.

2.14 Difficult rural road and intersection geometry's have been improved.

3. Pavement Asset Condition and Performance

3.1 Levels of Service – Pavement Condition

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|---|---|---------------|
| Council keeps its Surface Condition Index (SCI) at or above 97.5%. The SCI is a nationally used index to represent surface condition and keeping it at this level will demonstrate Council is maximizing the life of the sealed surfaces. | Actual = 97.3% As reported by NZTA RAMM reports at the end of June. | SCI of 97.5% |
| The average quality of the ride experienced by motorists, as measured by the Smooth Travel Exposure index (STE), is maintained at current levels. | Actual = 96% This information is taken from the NZ Transport Agency RAMM report and covers all roads urban/rural. | 94% |

3.2 Renewals

Pavement Rehabilitation

The quality of ride experienced by motorists is measured by the Smooth Travel Exposure (STE) - the higher the value the more comfortable the ride. Pavement faults including shape issues, seal joints and patches are the main impact on this comfort level. These faults are addressed under the work activities of sealed pavement maintenance and pavement rehabilitation. The actual performance value coupled with the low quantity of pavement rehabilitation that is able to be justified shows that we are managing this level of service by balancing expenditure between the pavement rehabilitation and sealed pavement maintenance budgets.

- 3.3 A total length of 3.2 km of pavement rehabilitation was completed on the sealed network. It is becoming increasingly difficult to meet the NZ Transport Agency funding criteria under this work category resulting in additional heavy maintenance being undertaken under pavement maintenance.
- 3.4 The sealed road lengths treated were on Bartlett Road, Motueka Valley Highway and two sections on Church Valley Road, which carries a significant volume of forestry and quarrying traffic.

3.5 Sealed Road Resurfacing

The Surface Condition Index (SCI) has two components: one being the surfacing age and the other, the condition index, which combines cracking, scabbing, potholes, pothole patches and flushing. The actual SCI is equal to 97.3% which is slightly below the target of 97.5%. This difference is not an issue that requires any

action as the surfacing age depends on the accuracy and completeness of data entered into RAMM. During discussion with the NZ Transport Agency it was agreed that the condition index (CI) would be a more accurate measure of Level of Service to measure the condition of the sealed surface, combined with the Pavement Integrity Index measure for the pavement structure as discussed below.

3.6 Resurfacing was undertaken in the areas of Waimea-Tasman, Golden Bay and Murchison Lakes

3.7 The total length resurfaced District-wide was 71.5 km or in pavement surface area terms 512,300 m².

3.8 Treatment selection included a mixture of chip sealing combinations and asphaltic concrete (hot mix). Emulsified bitumen (emulsion) was used as the binder material in the urban areas of Richmond and Motueka because of the key benefit of less risk to health and safety in these populated areas.

3.9 The length completed was slightly in excess of the Annual Plan target length of 60-70km due to the inclusion of 2.3 km of sites on the ex State Highway Mapua-Ruby Bay section (paid for by NZTA) and also the use of smaller chip resurfacings.

3.10 The contract area splits of resurfacing length completed were:

- Golden Bay 12.6 km
- Waimea/Tasman 58.9 km

3.11 Pavement Condition

The RAMM Condition Rating and Roughness Surveys are undertaken every two years. This is planned for April/May 2012 with the most recent undertaken during April 2010.

3.12 The NZ Transport Agency request Annual RAMM reports as part of achievement reporting. The Pavement Integrity Index (PII) is one of the criteria calculated using RAMM software and is a combined index of the pavement faults in sealed road surfaces. It combines surface faults with rutting and shoving and the results for the last four years are listed below. The lower the value, the better the condition.

3.13 Pavement Integrity Index (All Roads)

| 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---------|---------|---------|---------|
| 3.7 | 3.7 | 3.7 | 3.8 |

3.14 For future reporting against the levels of service it is recommended that the CI replace the current SCI reporting for surfacings and also introduce the PII as a new level of service for pavements. Target values or ranges will be discussed and finalised as part of the 2012 AMP process.

3.15 Pavement Asset Management

Further strengthening of the asset management process was completed during this year with specific emphasis on supporting forward work programmes and funding requests to the NZ Transport Agency.

3.16 A summary of key tasks undertaken and/or reports submitted over this period are:

- Forest Harvesting Update and Impact on the Network – Specific emphasis was put on tracing the route travelled from forest exit point to destination. This provides key information on the estimated tonnage travelling the network over the next three years and for future use on possible high productivity motor vehicles (HPMV) prioritisation on the network.
- Falling Weight Deflectometer Testing and Analysis – Testing undertaken on selected road/street sections to determine pavement structural strength and potential pavement rehabilitation needs during 2009/10 and pavement layer investigation and test pit validation was completed during 2010/11. Results from the pavement test pit findings show that generally the actual metal depths are greater than the metal depths shown in RAMM. This correlates to a greater pavement strength and in part justifies lower quantity of rehabilitation undertaken on the network over the past three years compared to predictions forecast by dTIMS modelling.
- SCRIM (Sideways Force Coefficient Routine Investigation Machine) and High Speed Data Testing and Analysis – Physical testing was undertaken on selected road sections of the network. There were some new sections added to the testing programme however the majority of sites have been tested previously in 2008 and 2009. Analysis has shown sites failing both SCRIM and texture. This has resulted in their position in the forward work programme for treatment being reviewed. Progression of wheel track rutting on specific network sections is still to be analysed.
- dTIMS Pavement Performance Modelling on the sealed network is currently underway with the report due by the end September 2011 to assist in supporting renewal budgets prior to submission of the draft Land Transport Programme which is due at the end of November 2011.

4. Bridges

4.1 Levels of Service – Bridges

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|--|--|--|
| We can reduce the number of speed or weight restricted bridges by 1 per year for the next 10 years until only 18 remain. | Actual = 26 4 weight or/or speed restrictions were removed in 2010/11 from the list. Two were replaced with concrete box culverts (Baxter and McCullum), one was removed by reassessment through undertaking detailed structural analysis (Cooks Creek) and one was swept away in the December Flood (James Road). | Restricted Bridges Remaining: Year 2 = 26 |

4.2 Four bridges with vehicle posting restrictions were removed in the 2010/11 period. Two of these bridges, McCullum and Baxter bridges, were originally timber bridges, and have been replaced with precast concrete box culverts. Cooks Creek Bridge on McKay Pass road had its posting removed after a capacity analysis demonstrated that the bridge has sufficient capacity to carry Class 1 loads. The fourth bridge was the James Road Bridge, which was washed away in the December 2010 floods and is being replaced with a new bridge capable of carrying Class 1 vehicles. Removal of speed or weight restrictions will need to be reviewed as a priority for Council however this needs to be balanced against the push to allow HPMV on the network. At this stage, however the mechanism for funding is still unclear.

4.3 Bridge Maintenance and Inspections

Routine bridge inspections for the 2010/11 period were completed for 238 bridges: being 226 road bridges and 12 footbridges. In addition eight bridges were added to the bridge inventory which had previously been omitted. These bridges were located on Higgins Road, Lord Rutherford Road, Telenius Road, Redwood Valley Road, Waireka Road, Waitapu Wharf Road, Anatoki Track Road and Snake Creek Road.

4.4 Adcock and Donaldson have completed the second year of the Bridge Maintenance Contract 790, Separable Portion B. The bridge maintenance work is based on work identified during the routine bridge inspections that falls outside the scope of the road maintenance contracts. The 2011/12 period is the final year of Contract 790 in which Separable Portion C bridge maintenance work including outstanding work not completed for Separable Portion B due to the road maintenance funding shortfall. This portion of the work is programmed to commence in October 2011.

4.5 Bridge Renewals

Based on the bridge structural components maintenance priorities matrix and available budgets, two contracts were awarded to Adcock and Donaldson in the 2010/11 financial year. In total eight bridges with various structural defects to be repaired were identified in the two contracts. Six of the bridges have been completed, with two remaining to be completed by the end of September 2011. A further list of bridges will be chosen from the structural components maintenance priority list to be programmed for repair within the 2011/12 financial year and again be tendered via the supplier panel for bridging.

4.6 Bridge Emergency Works

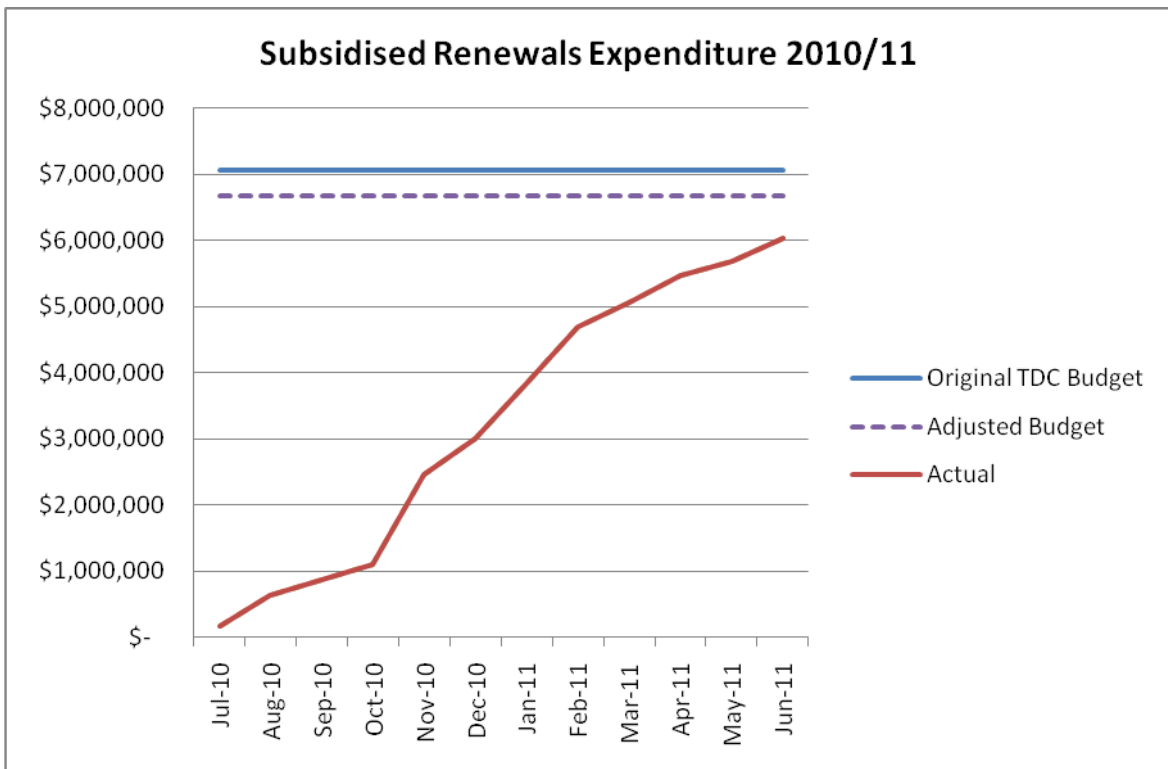
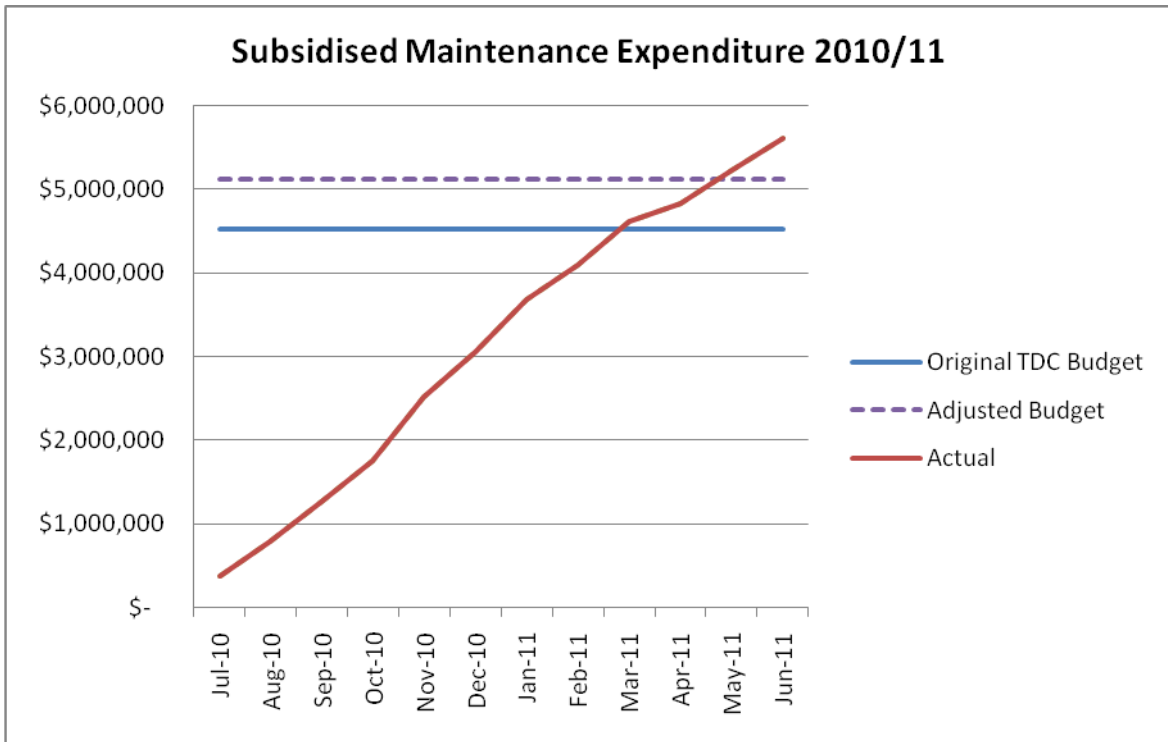
Several bridges were damaged or washed away during the December 2010 flood event. The majority of bridges came out of the flood with only minor repairs and debris clearance required. Two bridges were washed away and three others required major underpinning or concrete repairs to ensure that they could remain trafficable. The bridges washed away were the James Road bridge, a 61 m span suspension cable road bridge, and Salisbury suspension footbridge. A contract has been awarded for the construction of a new 62 m span bridge to replace the James Road Bridge, which is due for completion by the end of the year.

5. Budgets and Expenditure

5.1 Levels of Service

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|--|--|--------------------------|
| Road maintenance reseals and the pavement rehabilitation budgets are managed to within the range $\pm 2\%$. | Actual = + 0.05% Variance of + 0.05% across the subsidised maintenance, reseals and pavement rehabilitation budgets. | $\pm 2\%$ against budget |

5.2 The following graphs and table summarises the subsidised maintenance and renewal expenditure during 2010/11.



5.3 2010/11 Subsidised Expenditure

| Maintenance and Operation of Local Roads | Allocated \$ | Total Expenditure to 30 June 2011 \$ |
|--|---------------------|---|
| Sealed pavement maintenance | 708,225 | 1,020,861 |
| Unsealed pavement maintenance | 353,280 | 317,532 |
| Routine drainage maintenance | 201,500 | 171,242 |
| Structures maintenance | 341,000 | 205,558 |
| Environmental maintenance | 1,167,000 | 1,319,034 |
| Traffic services maintenance | 469,000 | 737,449 |
| Operational traffic management | 12,000 | 1,148 |
| Cycle path maintenance | 26,000 | 13,982 |
| Network and asset management | 1,321,000 | 1,827,353 |
| SUBTOTAL | 4,599,005 | 5,614,159 |
| Unsealed Road Metalling | 1,230,000 | 1,063,425 |
| Sealed Road Resurfacing | 2,250,000 | 2,390,245 |
| Drainage Renewals | 557,000 | 1,053,580 |
| Pavement Rehabilitation | 1,337,000 | 647,860 |
| Structures Component Replacements | 310,000 | 312,450 |
| Traffic Services Renewals | 535,000 | 354,455 |
| Associated Improvements | 604,000 | 205,120 |
| SUBTOTAL | 6,823,000 | 6,027,135 |
| Carryover from 2009/10 | 461,760 | |
| TOTAL | \$11,883,765 | \$11,641,294 |

5.4 Expenditure during May-June was less than budgeted primarily due to weather effects. Responding to a number of flooding, slips and snow storm events affected completion of budgeted/programmed works during this period.

5.5 Costs associated with flooding, slips and snow events (approximately \$250,000) were funded from emergency reinstatement rather than maintenance and renewals.

5.6 Despite earlier requests, an invoice from the NZ Transport Agency for \$35,000 of CMA was not received until after the cutoff date for final subsidised claims.

5.7 Emergency Works

The Level of Service measure that targets 100% access to all dwellings within the District is not achievable due to natural hazards. Furthermore, no formal measurement method has been developed. It is recommended that this Level of Service is reviewed during the 2012 AMP to a realistic measure that is SMART, ie specific, measurable, attainable, relevant and timely. Notwithstanding the above, MWH, Council and contractors have kept the numbers and durations of road closures to a minimum in 2010/11. This year, all outstanding emergency works from events in 2008/09 and November 2009/10 have been completed or are with contractors to complete.

5.8 The following table summarises the works completed in 2010/11.

5.9 Emergency Works Completed

| Event Name | Expenditure | Comment |
|----------------|-------------|--|
| 2008/09 sites | \$315,920 | Kaiteriteri-Sandy Bay Culvert 8, Cobb Lower Road RP3.6, Abel Tasman Drive RP16.4, Aniseed Valley Rd 1.5km past seal end. |
| 2009/10 sites | \$265,000 | Wairoa Gorge Guardrail, Aniseed Hill. |
| May 2010 sites | \$68,000 | Hinetai Road. |
| December 2010 | \$1,011,511 | Cleanup and reinstatement at numerous sites. James Road bridge replacement has separate funding allocation in 11/12. |
| May 2011 | \$224,873 | Cleanup and reinstatement at numerous sites. |

6. 2011/2012 Focus

6.1 Safety Systems

The philosophy and safety targets of the Safety Management System (SMS) will continue to be pursued by developing systems that record, report and prioritise a range of deficiencies. This allows funds to be allocated to treat deficiencies in an efficient and consistent manner throughout the District and maximise progress towards the goals set out by the SMS. It is very clear that in order to gain maximum Minor Improvement Allocation from the NZ Transport Agency that robust prioritisation consistent with the GPS will be needed. The current matrix is a sound base to work from but will need refining once the NZ Transport Agency's rules are known.

6.2 The Tasman District Clear Zone Risk Assessment tool has also been developed and populated for the Moutere Highway and Motueka Valley Highway. During the 2011/12 period this tool called SKIDDY will be consolidated and budget strategies developed. The strategies are particularly relevant to locations where, given the site ranking, expensive treatments will not be affordable in the foreseeable future. This will allow low cost treatments to be programmed.

6.3 Work has already begun in the 2011/12 period to maximise the use of the large amounts of network data collected by the SCRIM survey completed during April 2011. MWH have set up a data analysis tool which is able to output relevant data for sections of the network. The outputs will initially be used to discuss and develop a SCRIM policy to ensure skid resistance is appropriately prioritised at high risk areas. The data analysis tool also allows site specific investigation when required.

6.4 A review and update of the Safety Management System is needed. The latest crash trends (including motorcyclist over-representation) and the consideration of the NZ Transport Agency Safer Journeys strategy needs to be considered. The NZ Transport Agency strategy has seen an emphasis in priority on high severity and fatal crashes and has resulted in a move to develop predictive risk scores to identify high risk roads as well as continued identification and treatment of crash clusters (black spots etc). This is currently missing from the SMS.

6.5 Maintenance Contracts

During 2011/12, new roading maintenance contracts will be prepared to replace Contract 757 (Tasman) and Contract 758 (Waimea) from 1 July 2012. Work is underway to identify what maintenance strategies and intervention levels should underpin these contracts, as well as the appropriate contract structures and payment mechanisms. In particular, slightly different strategies for the following activities are being developed to balance levels of service and costs:

- unsealed maintenance – possible use of compaction and use of alternative materials such as limechip;
- vegetation control – reducing mowing frequency;
- litter collection – transfer emptying of roadside litter bins to refuse or parks and reserves contractor to realise organisational efficiencies; and
- drainage maintenance – significantly increase water table cleaning and renewal programme.

6.6 Data Sharing Initiatives

Matrices

Development and refinement of the matrices will be continued over time, but during 2011/12 it is proposed to integrate matrices into T3 (computer software) to enable robust identification of opportunities with other work streams. This integration will be dependent on costs which will be investigated early in 2011/12. There is potential to use a summer student to migrate the data and spatially identify each site.

6.7 RAMM to Explore Tasman

MWH is currently trialing the migration of RAMM asset data so it can be viewed in Explore Tasman. Initially culverts and soak pits are being exported. If successful, a routine update would be undertaken with the master data set staying in RAMM.

7. Projects

7.1 Stringer Road Upgrade

The road is now sealed up to the 1.6km mark. There is approximately 200m of pavement remaining to construct and seal. The work has been suspended until the exposed subgrade (earth surface on which pavement is to be built) has dried

sufficiently to be strong enough to allow gravel trucks to traverse it without over-stressing it. The job should be well completed before Christmas 2011.

7.2 Contract New Footpaths and Pram Ramps 2010/11

This contract is almost complete with the finishing of the Champion Road new path with associated kerb and road widening.

7.3 New pram ramps for both 2010/11 and 2011/12 were also completed under this contract.

7.4 Crescent Street Partial Closure

The work involving the closing of Crescent Street and associated work at Blair Terrace will be undertaken later this month. The contract was awarded to Concrete and Metals.

7.5 A letter covering the partial closure and informing residents of the extent of work particularly at the Blair Terrace end was sent out in late August 2011. The work is due to start later this month.

7.6 Pedestrian Improvements

This work was funded from the 2010/11 Subsidised Roding Minor Improvements Budget. All ten sites are now completed with only minor work to tidy outstanding markings and delineation markers.

7.7 **The Wensley Road/Waverley Street** intersection upgrade will have further remedial work undertaken to improve sightline issues on the northern corner and modify the tactile pavers in the central refuge.

7.8 Wharf Road Walkway

The consent for this work was issued last month with the Erosion and Sedimentary Control Plan also being approved.

7.9 The work is due to start in mid September and is being undertaken by Keep Motueka Beautiful.

7.10 Moutere Highway Curve Shoulder Widening – Cuts Hill Section

The second portion of work which is being funded from the 2011/12 Subsidised Roding Minor Improvements budget is underway.

7.11 Collingwood Destination Signage Upgrade

The new destination signage that was consulted on earlier this year is to be manufactured and installed over the next couple of months and will be in place for the summer tourist season.

7.12 Riwaka Kaiteriteri Road Upgrade –Turners Bluff

This project is still being worked through and a conclusion is expected this month.

7.13 Salisbury Road/Arbor Lea Avenue Intersection Signalising

Fulton Hogan have started on the installation of traffic signals at this intersection. The Ministry of Education is contributing 50% of the cost of the work as a new vehicle access into the college is part of the intersection upgrade. The project was initiated through the planned expansion of the college.

7.14 Murchison Gateway Signage

This project is being investigated with the NZ Transport Agency regarding suitable locations for the structures. Hopefully a start on the structures will be made shortly.

7.15 Aranui Road Upgrade

Consultation on the proposal to upgrade the western side of Aranui Road between Mapua Drive and near where the footpath ends opposite the tennis courts is currently being undertaken. Funding was allocated in the Long Term Plan in this financial year for this upgrade work.

8. Community Programmes

8.1 Motorbikes

8.2 Training courses

During the 2010/11 financial year 11 training/up-skilling courses were run across Tasman and Nelson. Of these, four were refresher/advanced courses and at an off road training venue, five were intermediate courses and at an off road training venue, and one on-road intermediate and one on-road advanced. Overall 116 riders attended a course.

8.3 The courses were aimed at all types of riders – any age, on any type and size of bike and at any level of riding experience. Each course was specific to a level of rider eg, beginner, intermediate, advanced. The courses were subsidised and only cost each rider \$20 per course. The database of names continues to grow.

8.4 Comprehensive print media, along with some accompanying radio coverage was put in place as soon as training dates had been organised. Having articles and advertisements in all local papers/newsletters at the same time generated lots of enquiries. Local riders and their stories were used in some of the promotion which gave the training a local element and using a young scooter rider generated enquiries from parents who wanted to get their teenagers on a course.

8.5 During the year it proved difficult to persuade college scooter riders they could benefit from attending a course with the only attendees those signed up by their parents. Schools were not receptive to establishing a travel permit programme which would ensure every student that rode a scooter or motorbike had to attend a training course before being allowed to ride to college. However this is to be a

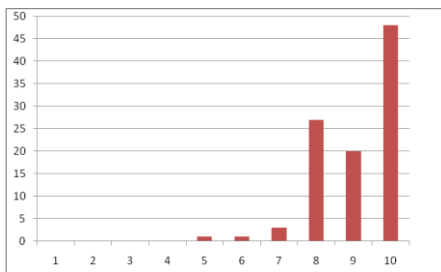
focus during the 2011-2012 year and will involve a joint collaboration from the Councils, ACC and the Police.

8.6 Eight motorbike training courses are proposed from September to February 2012.

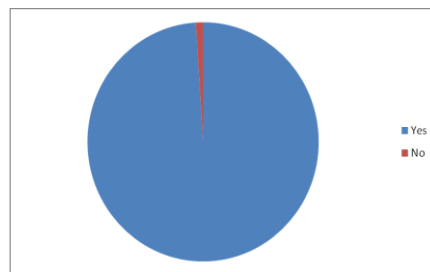
8.7 Feedback from each rider who attended a course was sought through an evaluation form. These have been collated and mainly show that riders are happy with the training they have received. New evaluation forms have been prepared so that further information can be collected and will also ensure each rider is achieving the course objectives.

8.8 Evaluations from Tasman/Nelson courses 2010-11

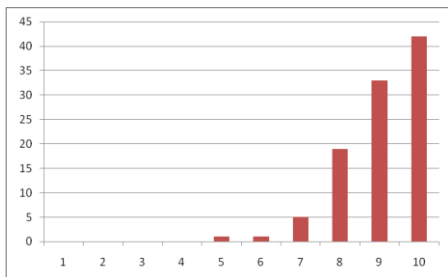
Did the course meet your expectations?



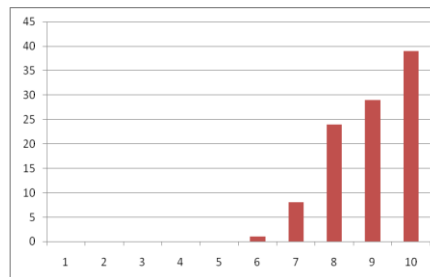
Will you change the way you ride?



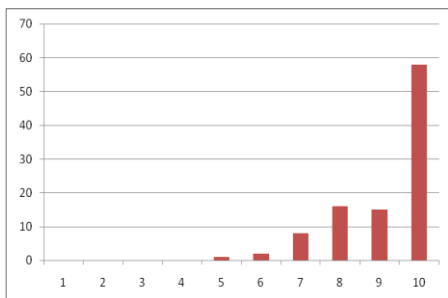
How well was the course structured?



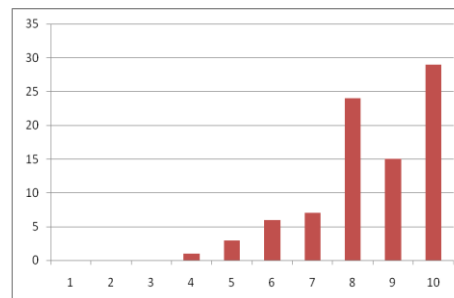
Rate the duration of the course



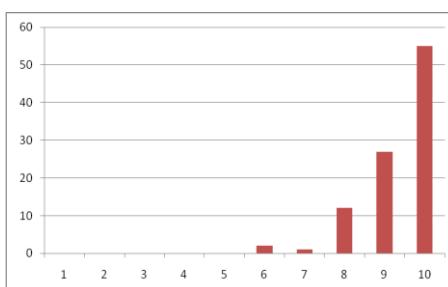
How would you rate the instructor/student ratio?



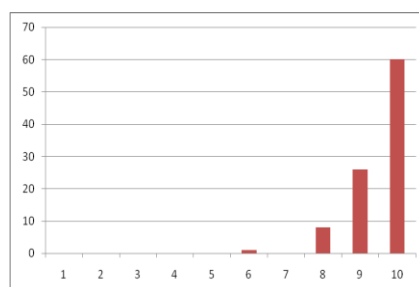
Did you find the hand-outs helpful?



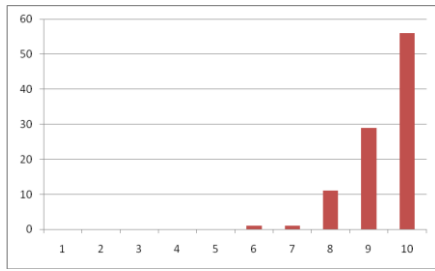
Were the instructors clear and concise?



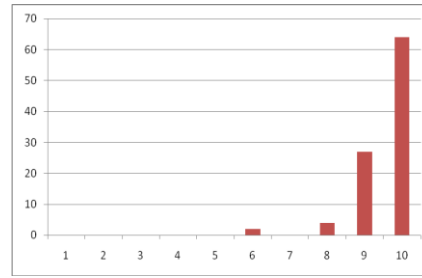
Were the instructors knowledgeable?



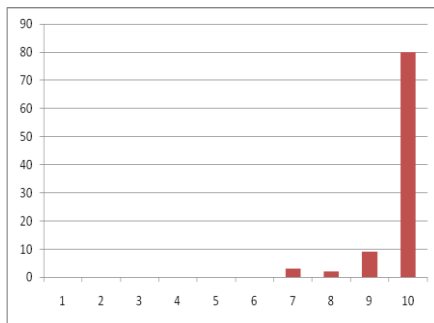
How well did the instructors listen to course participants?



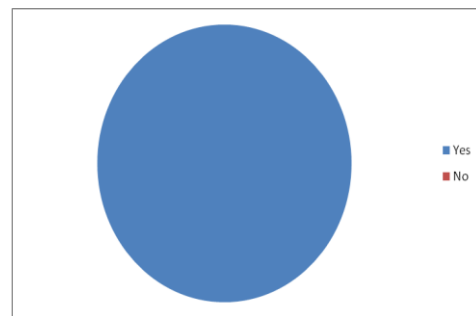
Did the instructors put the group at ease?



Did the course provide value for money?



Would you recommend the course to others?



| <i>Which aspects of the course had most impact on you and your riding?</i> | | <i>Are there any aspects you would like included in the course?</i> | |
|--|----|---|---|
| Braking | 52 | No, it covered everything I needed | 9 |
| Eyes up | 24 | More practical out on the road | 4 |
| Cornering | 17 | More cornering practice | 4 |
| Counter steering | 7 | Braking - emergency and wet weather | 4 |
| Practical part | 5 | More about dressing well | 1 |
| Vanishing point | 5 | More on intersection safety | 1 |
| Slow riding | 4 | Pillion riding | 1 |
| Everything | 4 | Full lock turning | 1 |
| Increase in my confidence | 3 | Tight turns from standstill | 1 |
| Foot peg steering | 2 | | |
| Road positioning | 2 | | |
| Riding with others | 2 | | |
| Checking your bike over | 2 | | |
| Taking something away to practice on | 2 | | |
| Safety bubble | 1 | | |
| General review of the basics | 1 | | |
| The bikes capabilities | 1 | | |
| Watching more experienced riders | 1 | | |
| Smooth riding | 1 | | |
| Positive thinking | 1 | | |

| <i>What did you enjoy/not enjoy about the course?</i> | | <i>Any other feedback?</i> | |
|--|----|--|----|
| Enjoyed it all | 24 | Thank you, great course | 15 |
| Enjoyed the practical part | 9 | Can't wait for the next course | 7 |
| Instructors were great, helpful and humorous and reassuring | 9 | All motorcyclists should be made to do this course | 5 |
| Enjoyed learning more skills | 7 | Great to learn new techniques | 3 |
| Good to meet local bikers | 6 | Great food | 3 |
| Enjoyed practicing braking | 5 | Terrific to see support from agencies | 2 |
| Enjoyed gaining confidence | 4 | Very affordable | 1 |
| Great food | 3 | Good to have police motorcyclist along | 1 |
| Enjoyed practicing cornering | 2 | Would like tips on picking up my bike | 1 |
| The venue and space was great | 1 | | |
| Great to be able to ride within our own skill level with no pressure | 1 | | |
| Good to have police motorcyclist along | 1 | | |
| More practical time needed | 1 | | |
| Would have liked more tuition on reverse steering | 1 | | |

8.9 The Police started an operation targeting motorcyclists in mid-July. In some cases instead of issuing a ticket the offenders were referred to a Tasman District Council Roadsafte training course as an alternative resolution. If the rider successfully completes the course no infringement notice will be issued. If the course is not completed then an infringement notice is issued for the relevant offence. This operation will continue in force indefinitely, success will be measured by Police checks on riders who have successfully completed the course to ascertain if they have been involved in any crashes etc.

8.10 Child restraints

The new presenter for the joint council/Plunket Booster Rooster and Buckle Bear programme is arranging presentations in Motueka, Murchison and Takaka. Contact has been made with all early learning centres and all junior schools and the number of bookings has increased. Nationally, Safekids now provides resources which the presenter can take into early learning centres and schools to further reinforce the safety messages.

8.11 Cycle promotion/safety

The annual Bike Wise challenge will be held in February 2011. Nationally the Bike Wise team have several new campaigns including Big Bike Fix Up and Lights on Bikes which will be used at a local level to increase cyclist numbers and their safety.

8.12 The Golden Bay cycles on footpaths project will be run during this term as a reminder to cyclists to push their bikes on the footpaths and not cycle on the footpaths along Commercial Street in Takaka.

8.13 Roadside safety billboards

The NZ Transport Agency has recently funded a number of new images for billboards and these will be used in the next round of swaps to highlight road safety issues on local roads.

8.17 Budgets and planning for 2012 – 2015

The new version of the Communities at Risk Register has just been released so a funding application can now be put together for the subsidy for road safety programmes. This Register ranks the total number of fatal and serious crashes within the Tasman District compared to other territorial local authorities (TLA) in New Zealand to decide what funding each TLA will be given. The Safer Journey 2020 Strategy is also used in this funding application.

9. Rivers

9.1 Assessment of Asset Condition and Performance

Levels of Service

| We will know we are achieving this when..... | Current Performance | Year 2 Target |
|--|--|-----------------------------------|
| All river maintenance and construction activities comply with any required resource consents. | Actual = 100% Resource consents held are: <i>Global</i> – for works in rivers and some gravel extraction; and <i>vegetation spraying</i> . Contracts include the conditions of the consents and performance measures include requirements to meet the resource consents. The contractor has not received any non-compliance with respect to the resource consents by council's consultants nor the Environment & Planning Department. | 100% |
| The 285kms of X and Y classified rivers are cleared of Crack Willow (pest tree species) at a rate of 15kms of river length per year. | Actual = Year 1 – 18.5 km Actual = Year 2 – 14.9 km | Year 2 = 30km (cumulative totals) |
| Council prepares and investigates new schemes in line with the community needs. | Actual = 100% New schemes are investigated and designed in line with community expectations, needs and desired level of service. | 100% |
| The Riwaka River stopbanks are maintained to a one-in-20 year flood return standard. | Actual = 30% Council completed an audit of the flood capacity and condition of the Riwaka flood banks in 2006. | 30% |
| The Lower Motueka River stopbanks is maintained to a one-in-100 year flood return standard. | Actual = 30% Council completed an initial modelling for flood capacity and completed a walk over condition survey in 2006. Further | 30% |

| | | |
|--|---|-------------------------|
| | planning, modelling and public consultation commenced in 2009/2010 and will extends through to 2011 /12. | |
| The Waimea River stopbanks are maintained to a one-in-50 year flood return standard. | Actual = 100% The stopbanks are recorded as being designed to a 1 in 50 year flood return standard. To date, works associated with the banks has been the maintenance and placement of new erosion protection works. | 100% |
| Rivers are maintained within the X and Y classification area to the annual allocated budget. Capital projects are carried out on time, within budget and to the appropriate standard. | Actual = 100% | 100% |
| All River Z rating enquires will be responded to within 10 working days. | Actual = 75% Because of the significant flood event of 28 December 2010 and subsequent high number of River Z enquires not all requests were able to be responded to within 10 days. | 100% |
| The public are able to access the Council's rivers systems unless for safety reasons they are restricted by the undertaking of annual river maintenance works programme. | Actual = 100% | 100% |
| An annual rivers maintenance programme as agreed with the communities is constructed to Council standards. | Actual = In place and operating | In place and operating |
| River Care Groups, Iwi, Fish and Game and DoC are consulted annually on the rivers annual maintenance programme. | Actual = Council consult with River Care groups, iwi, Fish & Game and DoC on their annual maintenance programmes | continue to do the same |
| We are able to respond to enquiries within timeframes specified within our operations and maintenance contracts. | Actual = 100% | 100% |
| We receive less than 12 complaints per year relating to the maintenance of river works. | Actual = 1 We received 2 complaints relating to river maintenance. The rest of the complaints received related to non-scheduled maintenance items such as dumping of rubbish in rivers. | < 12 |
| We have a facility for receiving and handling emergency calls after office hours. | Actual = In place Council has an after-hours call centre that receives calls out of regular office hours. Contractors and system duty managers have duty staff who are contactable to respond to emergencies | 100% |

| | | |
|--|--|------|
| We have a monitoring system in place to provide information of the key river flows. | Actual = Council has recently developed a new rainfall and riverflow data system. This is capable of supplying up to date information 24 hours a day through the internet | 100% |
| The Council's rivers Maintenance Contractor have adequate resources available in case of major flood damage. The rivers maintenance contractor is available to respond to emergencies. | Actual = 100% | 100% |

- 9.2 This year saw some disruption to the annual works programme due to the significant flood event in December 2010. The main flood damage that occurred in the fully maintained river system was in the Aorere River where a return flood event of 169 years was recorded. This resulted in an extra \$1.3 million being required to be spent in repairing flood damaged work in the fully maintained "Y" classified area in the Aorere River. However not all the work required was completed by 30 June 2011.
- 9.3 The last three months of the financial year have been extremely wet and has resulted in some delays to the scheduled items in the AOMP Priority 1 works. However with the re-prioritising of Priority 1 works and other approved additional tasks, 98% of the programme was completed as at 30 June 2011. The river protection assets in the X and Y classified areas are being maintained to a standard consistent with annual maintenance requirements identified in the River Activity Management Plan.
- 9.4 The original allocated AOMP maintenance programme for the year was \$1,407,937. The expenditure on the original AOMP Priority 1 scheduled items was \$1,057,035 with an additional \$322,152 spent on other maintenance tasks not originally scheduled, to give a total expenditure on the AOMP of \$1,379,187.
- 9.5 All maintenance work carried out has been undertaken under the Tasman District Council global consent and discharge permit for the control of vegetation. There were no reported compliance issues related to the AOMP nor the additional works undertaken on approved River Z works. No complaints were received from Nelson Marlborough Fish & Game or the Department of Conservation relating to any river works.
- 9.6 There was again a high demand for River Z subsidy assistance which exceeded the approved subsidy budget with several applications not being approved as of the 30 June 2011.
- 9.7 There have been approximately 50 applications for Tasman District Council for funding assistance for River Z works which includes flood damage relating to the December 2010 floods.

- 9.8 There has been two minor gravel relocation works carried out in the Motupiko River to assist in bank protection works. This work was done in conjunction with Fish and Game who relocated fish at both sites where work was undertaken.
- 9.9 A new rivers global resource consent application was made on the 30 November 2010 to replace the existing rivers global consent which expired on 30 June 2011. The new resource consent is being processed by the Tasman District Council. The existing conditions of the global consent will apply until the new consent is issued.
- 9.10 There was some criticism received of the contractors removal of crack willow in the Sherry River. While this work was consistent with the contract specifications, it did not meet community expectations.

9.11 Rivers Maintenance Contract 760

The River Maintenance Contract 760 commenced on 1 July 2009 for a two year term with a right of a further three annual renewals.

- 9.12 At the review point for the offer of Separable Portion 2 the contractor had achieved a performance score of 77% which was above the required performance levels.
- 9.13 The Council offered Ferguson Bros Limited the Separable Portion 2 on the same terms and conditions which Ferguson Bros Limited subsequently declined.
- 9.14 Council's Confirm asset management system has not fully met the requirements originally intended for the management of the contract and recording of data.

9.15 Rivers Maintenance Contract 840

As a result of Ferguson Bros Limited declining Contract 760 roll over, tenders were called for the new River Maintenance 2011-2014. Six tenders were received for Contract 840 with the successful tenderer being Taylors Contracting Company Limited.

9.16 Proposed Annual Operation and Maintenance Programme (AOMP) 2011/2012

The draft river maintenance programme for the 2011/2012 year has been scheduled by MWH Ltd and has been reviewed and approved for release by the Tasman District Council.

- 9.17 Due to delays in finalising the AOMP through other flood damage work priorities, Rivercare groups meetings to discuss the work programme and other matters relating to river management have been deferred to November 2011.

10. TENDERS

| No. | Contract name | No. of tenders | Successful tenderer | Amount | Highest amount | Council estimate | Budget for this item | Comment |
|-----|--|----------------|---------------------|-----------|----------------|------------------|----------------------|---|
| 826 | Roadside Drainage Improvements – Package 2 | 3 | C J Industries | \$158,616 | \$215,840 | \$199,060 | - | Part of total traffic services maintenance and renewal budget |

11 RECOMMENDATION

11.1 That the report be received.

12 DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Transportation Report RESC11-09-06.