

Activity 10.0: Road Network

Accountable Manager: John Mackie

What services are provided?

Plan, provide, operate, manage and maintain the Public Road Network, including:

- Road Infrastructure (including roadways, kerbs, channels, bridges, structures, and street lighting)
- Road Amenity (street landscaping, street trees)
- Transport Safety
- Traffic Operations
- Christchurch Transport Operations Centre customer services
- Provision of Real-Time Operations (Traffic Systems, including signals)
- Temporary Traffic Management
- Traveller Information

Why do we provide these services?

To provide safe, easy and comfortable access to homes, shops, businesses and many recreational and leisure destinations for road users. The road network also provides the corridor for utilities, such as power, telecommunications, water supply and waste disposal.

To operate the road network as an integrated whole that delivers a satisfying experience to our customer by providing a one network approach to moving people, goods and service safely and effectively via a variety of transport modes. This is through the Christchurch Transport Operations Centre Partnership (CTOC).

| What outcomes are we trying to achieve? | How do the services contribute to desired outcomes? |
|---|---|
| <p>▶ There are a range of travel options that meet the needs of the community</p> <p>▶ The transport system provides people with access to economic, social and cultural activities</p> <p>An increased proportion of journeys is made by active travel and public transport</p> <p>Streetscapes, public open spaces and public buildings enhance the look and function of the city</p> <p>Transport safety is improved</p> <p>▶ Christchurch's infrastructure supports sustainable economic growth</p> | <p><i>Providing roads and traffic management services enables private cars, commercial vehicles and public transport to move safely and easily around the city – providing access to homes, shops, businesses and recreational destinations.</i></p> <p><i>Providing a network of roads, pedestrian and cycle routes helps people access the people, places and activities they need and want to reach.</i></p> <p><i>Providing pedestrian crossings, traffic islands and signals provides safe and convenient access along and across the road network for pedestrians and cyclists.</i></p> <p><i>Providing roads and traffic management services enables public transport to move safely and easily around the city.</i></p> <p><i>Street trees and landscaping provide ecological, environmental and amenity benefits, are an integral part of the Christchurch's internationally recognised identity as the Garden City, and contribute to area character and identity and city heritage.</i></p> <p><i>The layout and design of the road network and traffic management services help to ensure that pedestrians, cyclists and vehicles can move around safely.</i></p> <p><i>Providing roads and traffic management services enables efficient links to local, regional, national and international markets and destinations.</i></p> <p><i>The road network corridor also provides access to utilities for power, telecommunications, water supply and waste disposal activities.</i></p> |

Key customers:

Customers include the community at large, but specifically the full range of road users including private, business, visitors to the city, public transport and utility operators, and emergency services. Cyclists and pedestrians also benefit from measures that enable them to have safe and convenient access along and across the road network. We work with our strategic partners, the New Zealand Transport Agency, Environment Canterbury and the New Zealand Police.

Key legislation and Council Strategies:

Local Government Act, Regional Land Transport Strategy, Greater Christchurch Transport Statement, Christchurch Transport Plan, Christchurch City Plan, Safer Journeys Strategy, New Zealand Transport Strategy 2008, Land Transport Management Act 2003

Customer

What business results must we deliver to our customers, to deliver on the outcomes?

Performance Standards for LTP

| Performance Standards for LTP | Current performance | Benchmarks | Recommended LOS | Rationale | LTP Committee Direction |
|---|---|--|---|--|-------------------------|
| Traffic Operations | | | | | |
| 10.0.1.1 Congestion: Peak travel times over 10km of the arterial road network travelled by private motor vehicles (7.30am to 9.30am and 4.00pm to 6.00pm) | 2012/13 per draft AP 10.0.1.1 Peak travel times: 18 minutes 00 seconds Council actuals Peak travel times: March 2009 – 16m30s March 2010 – 16m50s April 2011 – 19m40s March 2012 – 18m00s | Auckland March 2012 – 15m40s Wellington March 2012 – 12m00s | Travel times over 10km of the arterial road network travelled by private motor vehicles at: Peak travel times: 2013/14 no more than 19 minutes 40 seconds 2014/15 no more than 19 minutes 40 seconds | Measures the average time taken for a private vehicle to travel 10km over the arterial road network at various times of day. Although there has been some improvements to travel times post the earthquake the target is set at the April 2011 to reflect the impacts of SCIRT work programme which will undoubtedly reduce travel times considerably. However, simultaneously, progress is being made towards optimising the efficiency of the network in alignment with the road user hierarchy contained in the Christchurch Transport Plan. This is likely to result in some improved travel times along some strategic routes. <i>Source: New Zealand TA Traffic Systems Performance Monitoring</i> Note: that results are not easily comparable with other cities due to different networks and selection of roads surveyed. For this reason other cities have not been used as a benchmark reference. Impacts of SCIRT work programme have been considered. | |

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| Traffic Operations (cont'd) | | | | | |
| 10.0.1.2 Congestion: Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles (10.00am to 12.00pm) | 10.0.1.2 Interpeak travel times: 14 minutes 30 seconds Council actuals Interpeak travel times: March 2009 – 14m00s March 2010 – 14m00s April 2011 – 15m20s March 2012 – 14m30s | Auckland March 2012 – 10m40s Wellington March 2012 – 10m00s | Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles: 2013/14 no more than 15 minutes 20 seconds 2014/15 no more than 15 minutes 20 seconds | Measures the average time taken for a private vehicle to travel 10km over the arterial road network at various times of day. Although there has been some improvements to travel times post the earthquake the target is set at the April 2011 to reflect the impacts of SCIRT work programme which will undoubtedly reduce travel times considerably. However, simultaneously, progress is being made towards optimising the efficiency of the network in alignment with the road user hierarchy contained in the Christchurch Transport Plan. This is likely to result in some improved travel times along some strategic routes. <i>Source: New Zealand TA Traffic Systems Performance Monitoring</i> Note: that results are not easily comparable with other cities due to different networks and selection of roads surveyed. For this reason other cities have not been used as a benchmark reference. Impacts of SCIRT work programme have been considered. | |

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| Traffic Operations (cont'd) | | | | | |
| <p>10.0.2 How We Travel: trip proportion by private motor vehicles (total includes walking, cycling and public transport)</p> | <p>2012/13 per draft AP</p> <p>Re-establish baseline</p> <p>Private Vehicle: 2008/09 – 71.4% 2009/10 – 72.9% 2010/11 – no data</p> <p>Walking: 2008/09 – 21.8% 2009/10 – 20.6% 2010/11 – no data</p> <p>Cycling: 2008/09 – 3.1% 2009/10 – 2.2% 2010/11 – no data</p> <p>Public Transport: 2008/09 – 3.2% 2009/10 – 3.6% 2010/11 – no data</p> <p>Motorcycle & Other: 2008/09 – 1.4% 2009/10 – 0.8% 2010/11 – no data</p> | <p>Private Vehicle: Three year average 2009-11 Christchurch – 72.0% Auckland – 80.6% Wellington – 66.9%</p> <p>Walking: Three year average 2009-11 Christchurch – 20.7% Auckland – 14.4% Wellington – 25.8%</p> <p>Cycling: Three year average 2009-11 Christchurch – 3.1% Auckland – 0.9% Wellington – 0.9%</p> <p>Public Transport: Three year average 2009-11 Christchurch – 3.3% Auckland – 3.4% Wellington – 5.3%</p> <p>Motorcycle & Other: Three year average 2009-11 Christchurch – 0.9% Auckland – 0.7% Wellington – 1.1%</p> | <p>The proportion of private trips made by: 10.0.2 Private Vehicle:</p> <p>2013/14 Establish baseline Y1 2014/15 decrease baseline by 1.5%</p> <p><i>10.1.1.1 (part of Active Travel plan)</i></p> <p>Walking:</p> <p>2013/14 Establish baseline Y1 2014/15 Increase baseline by 0.5%</p> <p><i>10.1.1.2 (part of Active Travel plan)</i></p> <p>Cycling:</p> <p>2013/14 Establish baseline Y1 2014/15 Increase baseline by 0.5%</p> <p><i>10.4.1 (part of Active Travel plan)</i></p> <p>Public Transport:</p> <p>2013/14 Establish baseline Y1 2014/15 Increase baseline by 0.5%</p> | <p>Measures proportion of trips made by various means. Private vehicle includes all motorised forms of personalised transport except for motorcycles. Target is to increase walking, cycling and public transport, and decrease private vehicle use. This is in line with the intent of the Draft Christchurch Transport Plan and the Regional Land Transport Strategy.</p> <p>Target is set to reflect the likely adverse effects of the SCIRT work programme on perceptions that walking and cycling will be less safe and/or convenient.</p> <p>Note: Links to Active Travel 10.1.1 and Public Transport 10.4.1</p> <p>Source: Ministry of Transport's Household Travel Survey.</p> <p>Note: no data for the 2010/11 survey as it was not completed due to the earthquakes.</p> <p>The survey is carried out continuously throughout the year. The three year average is used to compare with other cities due to the smaller sample size in these cities, and the lack of post earthquake data in Christchurch.</p> | <p><i>Cycle lanes are covered in this plan, while footpaths and shared paths are covered in the Active Travel plan</i></p> |

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|---|--|--|---|--|-------------------------|
| Road Infrastructure (including roadways, kerbs, channels, bridges, structures, and street lighting) | | | | | |
| 10.0.3 Resident satisfaction: with roadway quality | 2012/13 per draft AP Re-establish baseline Council actuals: 09/10 – 63% 10/11 – N/A 11/12 – 40% | Note: surveys conducted in March each year | Residents satisfied with roadway quality 2013/14 Maintain at least the 12/13 baseline result 2014/15 Maintain at least the 12/13 baseline result | To monitor satisfaction with the appropriateness of maintenance standards and levels of service provided. To ensure the best fit between Council's allocation of resources and customer expectations. Earthquakes have significantly changed survey responses. Issues important pre-earthquakes now are lower priority for residents. The SCIRT work programme is likely to affect responses going forward and therefore it is difficult to accurately set LOS prior to obtaining the 12/13 baseline result. | |
| 10.0.4 Response Times: time taken to investigate repairs to road surfaces, once problem is identified | 2012/13 per draft AP 10.0.4.1 Arterial roads: At least 95% within 24 hours 10.0.4.2 Collector / local roads: At least 95% within 48 hours 10.0.4.3 Rural roads: At least 95% within 72 hours Council actuals: 09/10 – 97.95% 10/11 - not measured 11/12 – not measured | | Time taken to investigate repairs to road surface 10.0.4.1 Arterial roads: At least 95% within 24 hours 10.0.4.2 Collector/local roads: At least 95% within 48 hours 10.0.4.3 Rural roads: At least 95% within 72 hours | Measuring response times to investigate road repairs to ensure timely investigation/remediation. Repair and remediation is dependent on extent of damage/degradation. Target is based on best balance between cost of providing service, and residents earthquake requirement for service. | |
| 10.0.9 Street lights: operating at night | 2012/13 per draft AP At least 99% operating city wide Council actuals: 09/10 – 99% 10/11 - 99% 11/12 – 99% | | Maintain: At least 99% street lights operating city wide | Contributes to LTP LOS for choice, safety and amenity. Monitors contractor performance to ensure LOS are achieved. Council contract is performance based and the 99 per cent target is one of the measures in the contract. Other cities use measure and value contracts more driven by response times. Therefore they are not useful as benchmarks. | |

Road Network 10.0. As approved for Annual Plan 2014-15

Customer

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Non-LTP Performance Standards

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|--|--|---|--|---|-------------------------|
| Transport Safety | | | | | |
| 10.0.6 Safety: Road casualties (number of fatal and serious injuries) | 2012/13 per draft AP Christchurch fatal and serious injury targets - no more than 209 Council crashes actuals: 2009/10: 13 Fatal, 187 Serious (Total 200) 2010/11: 12 Fatal, 167 Serious (Total 179) 2011/12 YTD: nine Fatal, 122 serious (provisional total 131) | New Zealand 2011: 284 fatal, 1724 serious injuries nationally (Source: Fatal: Ministry of Transport, www.transport.govt.nz Zealand) Serious: NZTA, CAS) | Christchurch fatal and serious injury targets (based on five year rolling average trend line for fatal and serious injury): No more than: 2013/14 – 206.0 2014/15 – 205.0 | Targets are based on a five year rolling average. Due to high averages in the 07/08 and 08/09 years the recommended LOS up to 12/13 continues to trend up. However post 12/13 the five year rolling average (LOS) will trend down. 2009/10 – 203.3 2010/11 – 206.1 2011/12 – 207.9 2012/13 – 209.0 The government's <u>Safer Journeys: New Zealand's Road Safety Strategy 2010-2020</u> has a vision: "A safe system increasingly free of death and serious injury". <u>Safer Journeys</u> recognises a Safe System approach is required if progress is to be made reducing road deaths and serious injuries. | |
| Road infrastructure (including carriageways, kerbs, channels, bridges, structures, and street lighting) (cont'd) | | | | | |
| 10.0.7 Road Condition: Vehicle travel on smooth roads | 2012/13 per draft AP Smooth Travel Exposure – at least 60% Council actuals: 09/10 – 85% 10/11 - 78% 11/12 – N/A | Hamilton City Council – 91% National average – 86.3% (Source: NZTA http://www.smartmovez.org.nz Zealand/data/assets) | Smooth travel exposure maintained: 2013/14 at least the 12/13 result 2014/15 at least the 12/13 result (excluding red-zoned areas) | "Smooth Travel Exposure" (STE) which is a measure of the proportion of total vehicle-kilometres travelled in Christchurch which are travelled on roads defined as "smooth". "Smoothness" is measured by a machine whereas "surface condition" is a visual assessment of surface faults. Note: the higher the %, the smoother the network, to a maximum of 100%. The calculation of STE relies on traffic volumes stored in RAMM and until these are updated to reflect the post earthquake environment, STE will not provide an accurate picture of network roughness. | |

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|--|---|--|---|---|-------------------------|
| Road infrastructure (including carriageways, kerbs, channels, bridges, structures, and street lighting) (cont'd) | | | | | |
| 10.0.8 Road Condition: surface condition for sealed roads | 2012/13 per draft AP Condition Index (CI) 90 Council actuals: 09/10 – 95 10/11 - 96 11/12 – N/A | Hamilton City Council – 99.2 National average – 97.7 (Source: NZTA http://www.smartmovez.org.NewZealand/data/assets) | Target for surface conditions to be suspended until 2015/16 | Contributes to LTP LOS for safety, amenity, economy and environment. NZTA Surface condition for sealed roads - monitors carriageway condition and impact on road user costs. Note 1: the higher the CI, the better the condition of the network, to a maximum of 100 per cent. As the condition index is based on visual rating of defects in sealed carriageway surfaces only, current rating is giving false positives for temporary repairs on significantly earthquake damaged pavements. It does not take into account road roughness. The faults are being masked by the temporary repairs. The SCIRT work programme may not impact on this measure until 2015/16. | |
| 10.0.10 Manage Road Maintenance contract: to ensure contractor performance to requirements | 2012/13 per draft AP Ongoing contract audit score of at least 90% (NB: old contract format) | Council internal standard/bench-mark (Urban Parks, Waterways and Land Drainage) | The road maintenance contract is managed in accordance with the contract management plan performance criteria | Contract management training and quality assurance processes have been reviewed to ensure contract outcomes are achieved. Contract Management Plan's performance criteria includes that the works will be completed within the agreed budget; completed to contract specifications; and comply with the approved Quality Assurance System. (The contract performance is audited against the specifications per the KPI model in the Road maintenance contract). | |

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|--|---|--|---|---|---|
| Road Amenity (street landscaping and street trees) | | | | | |
| 10.0.11 Maintain street trees | 2012/13 per draft AP Six year proactive maintenance cycle (this equates to 10,500 trees per year receiving programmed maintenance – i.e. all trees over a six year period) Council actuals: 09/10 - 8,125 10/11 - 7,365 11/12 - 8,125 | Auckland City Council six year maintenance cycle Tauranga City Council maintenance cycle twice per annum Hamilton City Council one to three year maintenance cycle dependant on road hierarchy | 10.0.11.1 At least 2,350 trees part of programmed maintenance, plus reactive maintenance across all arterial and collector routes as required 10.0.11.2 At least 735 notable, heritage, and other protected trees in streets part of programmed maintenance, plus reactive maintenance as required 10.0.11.3 At least 6,300 trees part of programmed maintenance, plus reactive maintenance as required across all other urban roads | There are currently approximately 63,000 street trees of varying sizes. The bigger the tree the more it costs to maintain. To achieve the current LOS of a six year maintenance cycle 10,500 trees per year require programmed maintenance. If all trees irrespective of size are to be maintained within the six year cycle this is not achievable within the current budget. To meet the required numbers of trees to be maintained we are maintaining a disproportional number of small trees to large trees. This means that for small trees (i.e. <six metres) the actual LOS is six years while for large trees (i.e. >10metres) the actual LOS is 21 years. The 2013/14 proposed change in maintenance regime gives a more targeted approach to where the city's high profile and significant trees are. It also targets the routes that have a higher tree risk liability. The three street trees LOS have been determined using an appropriate LOS for each tree size located within each of the road hierarchies. These LOS equate to an average seven, eight, and 10 year maintenance cycle for trees located in each road hierarchy respectively. This contributes to the LOS for an attractive and well designed urban environment, Christchurch's culture and heritage being valued, and that Christchurch is a good place to do business. Programmed maintenance is undertaken to maintain safety for road users (including vehicles) and adjacent residents, uninterrupted supply of electricity, tree health and amenity values. Programmed maintenance includes: overhead services clearance, removal of dead/dying/diseased branches, branches obstructing walkways/cycle ways/roads, other pruning to maintain health and structural integrity of the trees, formative pruning, establishment maintenance. | <i>Note that street trees lost in demolitions (central city) should not be occurring. GM City Environment to remind CERA/SCIIRT that this is not to occur.</i> Response: Noted. Trees are retained where practical. <i>When SCIIRT reaches certain streets (tree-lined with power-line issues) SCIIRT to report back to Council for consideration of under- grounding, on a one-off basis.</i> Response: Noted. <i>Consider carefully how the frequency of tree maintenance is communicated to the public so that the Council policy can be easily understood and it is made clear that this is not a reduction in the LoS</i> Response: Noted |

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|---|---|--|---|---|-------------------------|
| Road Amenity (street landscaping and street trees) (cont'd) | | | | | |
| 10.0.11 Maintain street trees (cont'd) | 2012/13 per draft AP 95.57% of trees compliant with Electricity (Hazards from Trees) Regulations 2003 Council actuals: 09/10 - 97.25% 10/11 - 97.57% 11/12 - 96.37% | Electricity (Hazards from Trees) Regulations 2003 require 100% compliance | 10.0.11.4 Maintenance of streets trees complies with Electricity (hazards from trees) Regulations 2003 at all times 2013/14 – 95.57% 2016/17 – 96.57% 2020/21 – 97.57% 2030/31 – 100% | The 2013/14 target has not changed, and equals the 2012/13 target, however both of these are an increase over the 2011/12 target of 95.32% of trees complying. | |

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|---|---------------------|---|--|--|-------------------------|
| Christchurch Transport Operations Centre customer services | | | | | |
| 10.0.12 Customer requests for travel information are responded to in a timely manner | New LOS | NZTA target – 10 days | More than 95% of responses are delivered within 10 days | Time frames as per CTC partners, CCC, NZTA and ECan. All requests for service to be lodged in a system to enable tracking of teams performance. | |
| 10.0.13 Customer complaints about transport operations reduce over time | New LOS | Currently no known benchmarks set within NZ | Reducing number of complaints as assessed by time of day, by network classification: 2014/15 – Establish baseline | Customer complaints are a useful source of insight into customer needs and where the hotspots and trending issues are. This enables focused efforts to address issues of concern either through education or resolution of the issue. | |
| 10.0.14 Customer are satisfied with road network operations | New LOS | Currently no known benchmarks set within NZ | Increasing trend in number of people who are satisfied with how efficiently the transport system operates: 2014/15 – Establish baseline | Operations include travel times and ease of navigating the network etc. Understanding customer requirements for travel efficiency enables a balance between transport operations efforts and customer needs to be found. | |

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|--|--|---|---|--|-------------------------|
| CTOC Provision of Real-Time Operations (Traffic Systems, including signals) | | | | | |
| 10.0.5 Response Times: time taken to investigate/undertake repairs to traffic signal faults, once identified | <p>Targets being met</p> <p>New LOS</p> | <p>North America Flashing yellow – two hours Black-out – two hours Lanterns out of alignment – two hours Lamp out – one day Pedestrian audio tactile not working – five days</p> <p>From JTOC: Auckland Transport – ITS assets 98% availability</p> <p>NZTA Auckland – 95% availability</p> | <p>On-site response to traffic signal faults (24/7) within:</p> <p>10.0.5.1 1.5 hours (for Flashing yellow; Black-out; lanterns out of alignment (Conflict))</p> <p>10.0.5.2 Five days for Lamp out (one in group, excluding overheads); Pedestrian audio tactile not working</p> <p>10.0.5.3 Decreasing number of hours of ITS (Intelligent Transport System) system failures: 2014/15 – Establish baseline</p> <p>10.0.5.4 Decreasing number of hours of communications failures: 2014/15 – Establish baseline</p> <p>10.0.5.5 Decreasing number of non-functioning Intelligent Transport System assets: 2014/15 – Establish baseline</p> | <p>For transport system efficiency (reducing congestion), ITS (Intelligent Transport System) assets need to be operational. By operating the current network as well as reasonably practicable, this will defer major capital investment. A further benefit of this is improved safety.</p> <p>Response to immediate faults focuses the team on short term acute issues.</p> <p>Monitoring trends in ITS failures and non-functional ITS elements ensures that maintenance and renewal programmes to the ITS assets targets appropriate levels of service and therein achieves transport system efficiency outcomes sought. This is focused on long term chronic issues.</p> | |

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| CTOC Provision of Real-Time Operations (Traffic Systems, including signals) (cont'd) | | | | | |
| 10.0.15 Unplanned network incidents (crashes, weather events etc_ are responded to | New LOS | Currently no known benchmarks set within NZ | <p>10.0.15.1 Time from validation to incident to notification of appropriate agencies/resources less than 2 minutes</p> <p>10.0.15.2 Decreasing time from resource notification to response onsite: 2014/15 – Establish baseline</p> <p>10.0.15.3 Decreasing time from response onsite to incident cleared: 2014/15 – Establish baseline</p> | Timely detection, notification of resources and clearing the incident will reduce the delays and operate the existing network as well as reasonably practicable. A further benefit is improved safety through reduction of crash risk as a result of congestion created. | |
| 10.0.16 Productivity (transport system efficiency) of the road network improves | New LOS | Currently no known benchmarks set within NZ | <p>Increasing volume of people and freight tonnes travelling on strategic routes 2014/15 – Establish baseline</p> | <p>Aiming for upward trend will achieve higher transport system efficiency. This results in better use of existing infrastructure and deferring major capital investment.</p> <p>This will result in some modes being prioritised over others inline with strategic planning.</p> | |
| 10.0.17 Real time road network operational state improves through decreased travel times | New LOS | Currently no known benchmarks set within NZ | <p>10.0.17.1 Travel times on strategic routes trending downwards (includes core Public Transport corridors): 2014/15 – Establish baseline</p> <p>10.0.17.2 Travel time reliability trending upwards (includes core Public Transport corridors): 2014/15 – Establish baseline</p> | <p>Aiming for trends referenced will achieve higher transport system efficiency and reduced costs to network users. This results in better use of existing infrastructure and deferring major capital investment.</p> <p>This will result in some modes being prioritised over others inline with strategic planning.</p> <p>Further by targeting real time monitoring this supports incident detection targets.</p> | |

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| CTOC Provision of Real-Time Operations (Traffic Systems, including signals) (cont'd) | | | | | |
| 10.0.18 Percentage of network remaining available due to unplanned events | New LOS | Currently no known benchmarks set within NZ | Less than 2km of lane kms not available in peak periods on strategic routes (by period of the day, by network classification) | <p>The recommended LOS is a interim target so there is something to measure against. It is anticipated that this figure is generous and a much smaller figure can be used.</p> <p>Minimising the impact of an incident will reduce the delays and operate the existing network as well as reasonably practicable. A further benefit is improved safety through reduction of crash risk as a result of congestion created.</p> | |
| 10.0.19 Productivity of the road network improves | New LOS | Currently no known benchmarks set within NZ | <p style="text-align: center;">10.0.19.1 Debriefs conducted for all serious incidents</p> <p style="text-align: center;">10.0.19.2 Debrief reports with agreed actions captured in CTOC lessons learned database</p> <p style="text-align: center;">10.0.19.3 100% of all agreed actions implemented</p> | <p>Establishing a learning culture enables CTOC to lead the incident response industry for improved incident management.</p> <p>Minimising the impact of an incident will reduce the delays and operate the existing network as well as reasonably practicable. A further benefit is improved safety through reduction of crash risk as a result of congestion created.</p> | |

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| CTOC Provision of Real-Time Operations (Traffic Systems, including signals) (cont'd) | | | | | |
| 10.0.20 Real time traffic signal optimisation | New LOS | Currently no known benchmarks set within NZ | Increasing number of real time interventions to optimize the network, specifically traffic signal operation: 2014/15 – Establish baseline | This measure focuses the team on acute issues with traffic signal operations. Aiming for upward trend will achieve higher transport system efficiency. This results in better use of existing infrastructure and deferring major capital investment. | |
| 10.0.21 Corridor optimisation | New LOS | Currently no known benchmarks set within NZ | Decrease in travel time due minor network capacity improvements (traffic signal optimization and low cost improvements): 2014/15 – Establish baseline | This measure focuses the team on chronic issues with transport system efficiency. Further if focuses on both soft (traffic signal) and hard (minor capital) changes. Aiming for downward trend will achieve higher transport system efficiency. This results in better use of existing infrastructure and deferring major capital investment. | |

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| CTOC Temporary Traffic Management | | | | | |
| 10.0.22 Traffic Management Plans are processed in a timely fashion | New LOS | Currently no known benchmarks set within NZ | 100% of Traffic Management Plans processed in less than 4 days. | Traffic Management Plan (TMP) applications processed times less than 4 days and decreasing. This time, is from when submitted into TMP system to when final approval given. CTOC is not responsible for all of this time. Short TMP processing times, indicates high industry competency, therefore reduced churn and overhead cost. It is therefore how well CTOC is leading the industry. Lastly measuring this activity allows informed decision making regarding balance of effort between TMP processing times and site optimisation activities 10.0.25. | |
| 10.0.23 Traffic Management Plans are of high quality | New LOS | Currently no known benchmarks set within NZ | More than 99% Traffic Management Plan (TMP) applications are of a high quality. | A low number of TMPs declined, indicates high industry competency, therefore reduced churn and overhead cost. It is therefore how well CTOC is leading the industry. | |
| 10.0.24 Limit the percentage of the network not available due to planned events | New LOS | Currently no known benchmarks set within NZ | Targeting a downward trend of lane kilometers not available on strategic routes during peak periods: 2014/15 – Establish baseline | Lane kilometers not available due to planned events by period of the day by network classification. Aiming for downward trend will retain transport system efficiency on strategic portions of the network during highest demand periods of the day. During the rebuild there is a need to allow increased lane kilometre, for rebuild efficiency, however this measure balances this against the need to keep traffic moving. | |

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What business results must we deliver to our customers, to deliver on the outcomes?

Non-LTP Performance Standards

| Non-LTP Performance Standards | Current performance | Benchmarks | Recommended LOS | Rationale | LTP Committee Direction |
|---|---------------------|---|--|---|-------------------------|
| CTOC Temporary Traffic Management (cont'd) | | | | | |
| 10.0.25 Temporary traffic management optimised to achieve higher transport system efficiency | New LOS | Currently no known benchmarks set within NZ | Increasing number of real time interventions to optimize the network, specifically temporary traffic management: 2014/15 – Establish baseline | This measure focuses the team on acute issues with temporary traffic management. Aiming for upward trend will achieve higher transport system efficiency of approved sites during the rebuild. | |

Customer

What business results must we deliver to our customers, to deliver on the outcomes?

Performance Standards for LTP

| Performance Standards for LTP | Current performance | Benchmarks | Recommended LOS | Rationale | LTP Committee Direction |
|---|---------------------|---|--|---|-------------------------|
| CTOC Traveller Information | | | | | |
| 10.0.26 Planned event travel time information is made available to enable smart travel choices | New LOS | Currently no known benchmarks set within NZ | Planned event information is made available via appropriate channels in less than 3 days for 98% of planned events. | Timely information is provided to travelling customers in a timely fashion so they may make smarter choices. Drivers making smarter choices will achieve greater transport system efficiency. | |
| 10.0.27 Unplanned event travel time information is made available to enable smart travel choices | New LOS | Currently no known benchmarks set within NZ | Upon validation, unplanned event information is made available via appropriate channels in less than 3 minutes, between the hours of 0600 - 1800 | Timely information is provided to travelling customers in a timely fashion so they may make smarter choices. Drivers making smarter choices will achieve greater transport system efficiency. | |

Customer

What business results must we deliver to our customers, to deliver on the outcomes?

Non-LTP Performance Standards

| Non-LTP Performance Standards | Current performance | Benchmarks | Recommended LOS | Rationale | LTP Committee Direction |
|--|---------------------|---|--|--|-------------------------|
| CTOC Traveller Information (cont'd) | | | | | |
| 10.0.28 Traveller Information System (TIS) consistently available for travelling customers to use | New LOS | Currently no known benchmarks set within NZ | Traveller Information system on-line between 0600 – 1800 daily with less than 2 hours down time per month. | Traveller information needs to be reliably accessible to encourage uptake of traveller information which enables travelling customers in a timely fashion so they may make smarter choices. Drivers making smarter choices will achieve greater transport system efficiency. | |
| 10.0.29 Print media made regularly available for travelling customers to use | New LOS | Currently no known benchmarks set within NZ | No more than 5 print media deadlines missed for traveler information per year | Traveller information needs to be reliably accessible to encourage uptake of traveller information which enables travelling customers in a timely fashion so they may make smarter choices. Drivers making smarter choices will achieve greater transport system efficiency. | |
| 10.0.30 Increase uptake of traveller information | New LOS | Currently no known benchmarks set within NZ | Increasing uptake of traveler information for channels that can be measured i.e. websites, social media, emails: 2014/15 – Establish baseline | Increased consumption of travel information enables travelling customers in a timely fashion so they may make smarter choices. Drivers making smarter choices will achieve greater transport system efficiency. | |