



INVESTMENT AUDIT REPORT

Technical Audit of Taupo District Council

Monitoring Investment Performance

Report of the investment audit conducted under Section
95(1)(j)(i)(ii) and (iii) of the Land Transport Management Act 2003.

Jennifer Wilson-Kaio

5 December 2025

FINAL

Approved Organisation (AO):	Taupo District Council
NZ Transport Agency Waka Kotahi Investment (2024 – 2027 NLTP):	\$ 20,563,726 (budgeted programme value)
Date of Investment Audit:	3-5 December 2025
Auditor Team:	Jennifer Wilson-Kaio - Senior Investment Auditor (Lead) Marc Love – Senior Investment Auditor Rob Bullick - Principal Investment Advisor
Report No:	RAJWK - 2578

AUTHORITY SIGNATURES

Prepared by:



.....
Jennifer Wilson-Kaio, Senior Investment Auditor

Approved by:



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Vanessa Deleat, Manager Audit & Assurance

13/5/26

.....
Date

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EXECUTIVE SUMMARY

Taupo District Council's road network is generally in reasonable condition, though is showing signs of distress. While Council has made good progress with implementing the previous technical audit's recommendations, there is still room for improvement, particularly with undertaking Net Present Value analysis for pavement rehabilitation and drainage renewal projects, as Council currently does not fully comply with this NLTP funding requirement.

Network condition indicators for Pavement Integrity (PII), Surface Condition Index (SCI, and Smooth Travel Exposure (STE) show that Council's network is performing well compared against its peer group, and has maintained good, steady results over the past 10-year period. However, the current average sealing and rehabilitation rates as a proportion of the network are considered by the audit team to be low and not sustainable to meet current levels of service, and keep the network in reasonable condition.

The annual number of deaths and serious injuries listed in New Zealand's Crash Analysis System (CAS) as occurring in Taupo District on the local road network, has declined slightly across the network over recent years, though is trending up on Rural Connectors. Of particular concern, vulnerable road users (VRU's) are over-represented in all crash statistics, as well as a significant number of crashes are occurring on bends, and 'Road Factors' are being recorded as a causal factor in many reported crashes. There are opportunities to address these safety issues on the network, including reviews of the Safe System Audit processes, to ensure these are completed in full and a project is well aligned with Safe System outcomes.

AUDIT RATING ASSESSMENT

Subject Areas		Rating Assessment*
1	Previous Audit Issues	N/A
2	Network Condition and Management	Some Improvement Needed
3	Activity Management Planning	Effective
4	Data quality	Effective
5	Road Safety	Some Improvement Needed
Overall Rating		Some Improvement Needed

* Please see Introduction for Rating Assessment Classification Definitions

RECOMMENDATIONS

The tables below capture the audit recommendations and suggestions. The target implementation dates for the recommendations are as provided by Taupo District Council.

We recommend that Taupo District Council:		Target Implementation Date
R2.1	Ensures that it complies with the funding requirements set out in PIKB by undertaking routine NPV analysis for all Pavement Rehabilitation and Drainage Renewal projects.	NPV's process will be considered in the next LTP.

We recommend that Taupo District Council:		Target Implementation Date
R2.2	Ensures it enters its maintenance costs data into its inventory system on a regular basis, with an effective quality assurance process implemented to ensure clean and accurate data has been entered.	Since August 2024, enhanced QA processes have resolved this issue, ensuring accurate maintenance cost data transfer within AWM. The issue predates all current maintenance contracts.
R3.1	Reviews and updates its AMP to ensure statements and data trends align, as well as includes an improvement plan, the updated defined level of service targets and benchmarking against its peer group.	December 2026
R3.2	Updates the TIO forecast and actual quantities and expenditure annually to reflect the expected programme and delivery performance of the programme.	31 August 2026
R4.1	Investigates, identifies and implements a data improvement plan to address data gaps identified in the REG Data Quality report.	Already in progress and ongoing.
R4.2	Checks that the maintenance activity and surfacing as-built data have been updated to eliminate any gaps and ensures all this data is entered into AWM in a timely manner.	Ongoing since August 2024.
R5.1	Investigate and identify the causal road factors that have contributed to many reported crashes, so as to reduce and improve these risk factors.	Awaiting on further information 30 December or earlier.
R5.2	Review processes and systems to ensure that Safe System Audits (or exemption declarations) are completed in accordance with the Safe System Audit guidelines for all renewal and improvement projects, and within appropriate timeframes.	Ongoing

SUGGESTIONS

The table below captures the audit suggestions.

We suggest that Taupo District Council:	
S2.1	Considers commissioning Pavement Design reports with Failure Mode Analysis for pavement rehabilitation projects to help inform treatment selection.
S3.1	Consider including in its next iteration of the AMP, how it will inform its stakeholders of the need to review and modify its level of service targets due to funding limitations, to help manage ongoing expectations with regard to any reduced level of service due to funding limitations, as well as share more of its good news achievements with its stakeholders.
S5.1	Monitors the Kinloch Rd slip-lane and intersection with Whangamata Rd to ensure there is no masking or shadowing issue arising from vehicles in the left-turn slip lane.

1. INTRODUCTION

1.1. Audit Objective

The objective of this audit is to provide assurance that the NZ Transport Agency Waka Kotahi (hereafter NZTA) investment in Council's land transport programme is being well managed and delivering value for money. We also seek assurance that the Council is appropriately managing risk associated with NZTA investment. We recommend improvements where appropriate.

1.2. Assessment Ratings Definitions

	Effective	Some Improvement Needed	Significant Improvement Needed	Unsatisfactory
Investment management	Effective systems, processes and management practices used.	Acceptable systems, processes and management practices but opportunities for improvement.	Systems, processes and management practices require improvement.	Inadequate systems, processes and management practices.
Compliance	NZTA and legislative requirements met.	Some omissions with NZTA requirements. No known breaches of legislative requirements.	Significant breaches of NZTA and/or legislative requirements.	Multiple and/or serious breaches of NZTA or legislative requirements.
Findings/ deficiencies	Opportunities for improvement may be identified for consideration.	Error and omission issues identified which need to be addressed.	Issues and/or breaches must be addressed, or on-going NZTA funding may be at risk.	Systemic and/or serious issues must be urgently addressed, or on-going NZTA funding will be at risk.

1.3. Council Comments

Prior to this report being approved, Council was invited to comment on the auditors' findings, recommendations and suggestions. Where appropriate this report has been amended to reflect this dialogue. Any additional auditee comments are attached in the Appendices.

2. ASSESSMENT FINDINGS

Our findings relating to each subject area are presented in the tables below. Where necessary, we have included recommendations and/or suggestions.

1. Previous Audit Issues	
The previous audit with a technical component was conducted on 11th to 14th June 2018, and was a joint audit with the Procedural Team. The audit found that Taupo District Council had effective procedures for managing its network, but asset management decisions founded on inadequate data is not always providing appropriate value for money outcomes. The six technical related recommendations from that joint audit were that Council: Q.1 Provides information detailing how it is responding to the 2008 Technical Audit recommendations. Q.4 Confirms road safety audit exemption declarations will be completed and kept on contract files. Q.6 (a) Provide assurance to the Agency that unsealed road maintenance practice complies with the contract and that the unsealed network meets agreed levels of service and is safe for the travelling public. (b) Review data quality in light of the audit findings (maintenance cost) and recent reports from dTIMS and REG. Identified improvements are incorporated in the 18-21 AMP Improvement plan and delivered in a timeframe agreed with NZTA System Design and Delivery, Hamilton. Q.7 Provide evidence to the Transport Agency that the 18-21 Activity Management Plan improvement plan actions are completed to plan and on time. Q.8 Review the REG Data quality report and identify and resolve data gaps in RAMM to improve quality.	
Recommendations	There are no recommendations with respect to 'Previous Audit Issues' as these have been duly closed out by Council.
Taupo District Council's comment	Noted and acknowledged.

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2. Network Condition and Management	Some Improvement Needed
Overall, Taupo District Council's road network is generally in reasonable condition, though is showing signs of distress, and the audit found there is scope for improvement in areas such as Net Present Value analysis for pavement rehabilitation and drainage improvement work, gaps in data – which is also covered in <i>Section 4, Data Quality</i>, and road safety – which is covered in <i>Section 5: Road Safety</i>. Performance Monitoring Network Condition indicators such as Pavement Integrity Index (PII), Surface Condition Index (SCI) and Smooth Travel Exposure (STE) are used by NZTA as an indication of sealed pavement condition trends, with 100 indicating excellent condition. SCI, PII and STE are all based on Council's AWM (previously known as RAMM) data.	

A review of these indicators for Taupo DC shows its PII and SCI performance has been stable over the past 10-year period, with the current ratings for both comparing very well against the national Peer Group.

A review of STE data also showed the ride quality over the past 10-year period has been averaging 93%, indicating that there is no roughness issue for Council's roads, and Council compares well against its peers for this indicator as well.

The cost per km for maintenance, operations and renewals (excluding emergency works) as a three-year average (2023-2025) as of 6 November 2025, was \$11,234.00, which was lower than the National Peer Group average of \$15,439.10, refer Figure 1 below:

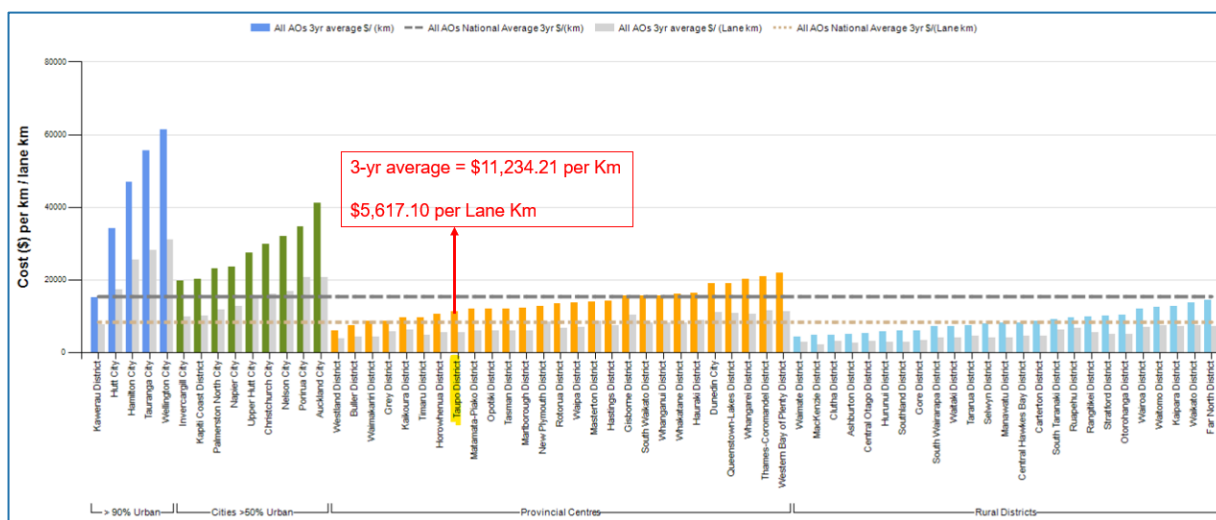


Figure 1 – Source: NZTA Reporting Portal

The 3-year pavement rehabilitation rate is 0.18%, and the 3-year average sealing rate (based on actual achievement) is 2.18%. The 3-year average rate is based on actual achievement that Council reports through to the Transport Agency via the Annual Achievement Return. These rates are not sustainable for the network, and will lead to a growing backlog of work. Council's dTIMS Analysis Report showed that at the normal budget amount of \$5m per year, an average pavement renewal rate of 0.8% would be achieved, which equates to approximately 5.8km per year. This rate was reflected in Council's Forward Works Programme (FWP) for 2025/26, however the target quantities for 2026/27 were reduced back down to a rate of 0.1%. The audit team encouraged Council to reconsider its quantities for the 2026/27 year, so that it could ensure it was able to keep up with current levels of service and keep the network in reasonable condition so as to meet the demands of the network.

Overall, the chipseal average life achieved is 16.4 years. Based on that, a target reseal rate would be 6%, and would help Council to stay on top of the network's needs. Council have currently set their target at 3%, indicating that it will continue stretching the lives of these assets so as to remain within funding limitations.

Compliance

Council generally complies with some Planning & Investment Knowledge Base (PIKB) requirements. Specifically, we noted that:

- Both the Roughness and Condition Rating surveys recorded in AWM comply with the current requirements set in NZTA's Knowledge Base.
- Bridge and structural inspections are undertaken in accordance with current best practice as documented in the NZTA S6 Bridges and other significant structures inspection policy. Council undertakes General Inspections every two years, with Principal Inspections undertaken every six years.

- Net Present Value (NPV) analysis – Council does not fully comply with PIKB for this funding requirement. NPV analysis is not routinely undertaken to assess the best whole-of-life cost options for pavement rehabilitation and drainage improvement projects. PIKB states that “the work must be the long-term least-cost option for the approved organisation..., calculated in terms of present value (PV)”. We were only provided with a “Draft” NPV document for Lake Terrace, for Council’s Infrastructure team to discuss with the audit team. This document was incomplete and did not have any historical maintenance cost data included, as Council’s database only had maintenance cost data for the 2024/25 and 2025/26 years. This indicated that there was no NPV analysis done for the Lake Terrace rehabilitation project, and at the time of the audit, the rehabilitation work had already taken place.

We remind Council that an approved NPV assessment is a funding requirement. It is important that Council routinely undertake this analysis for pavement rehabilitation and drainage renewal projects prior to work being programmed and commenced, using actual data from Council’s AWM database for inputs such as maintenance costs, achievable seal life and actual traffic count data, to help determine more robust long-term, least-cost options to support the Forward Works Programme. Council needs to improve in this area. Please note that the latest version of the standard forms for economic evaluation can be found in the NZTA Monetised Benefits and Costs Manual¹.

NZTA are also currently working on improving and clarifying its guidance on undertaking NPV’s, which will be shared with all AO’s once completed.

Unsealed Roads

Unsealed roads make up 48km or 6% of the network length. The sample of unsealed roads travelled during our field inspection (as a whole), had reasonably good ride quality, though they were mostly low volume roads of short lengths and function as feeder routes to the spine of either the State highway or Council’s other higher classification roads. There were some areas with high shoulders (Baker Rd), however Council has a programme in place that is prioritised in order of road classification (with the higher classification roads being the higher priority) for removal of high shoulder, and the audit team commend this approach.

General

During the field inspection, we observed extensive cracking on asphalt surfaces that were in need of crack sealing or bandaging to help maintain the life of these expensive surfaces. Council advised that they are in the process of resuming this maintenance regime, which we encourage as there is a very high need for this treatment out on the network. It would be good to see Council get on top of this.

The culverts we inspected were found to be clear – though at one location on Broadlands Rd the inlet was blocked, but it was good to see Council’s processes in action when the Maintenance Contractor advised that the culvert had been inspected and a dispatch notice issued to Council which was awaiting approval. Council also advised that they are currently in the process of replacing their Culvert Markers, which we commend.

Other observations noted:

- Council is in the process of developing their Maintenance Intervention Strategy. This enables Council to have a structured approach that sets out specific condition thresholds for repairing or renewing roads. The audit team suggests Council consider commissioning Pavement Design Reports with Failure Mode Analysis, to enable Council to make more informed decisions during the design process for pavement rehabilitation that addresses root causes of pavement failure. This will help to inform treatment selection, and the NPV analysis will help to determine which option is the lowest whole-of-life cost.

- The standard of completed reseal works was observed to be generally of good quality, the exception to this was Kaahu Rd (RP 6994 to 7582) where it may have been a fabric seal that didn't quite settle. Council indicated they would monitor this.

Overall, we consider that Council's roading team are responding well to the challenges associated with delivering the transport activity. We observed good leadership, network knowledge and technical skills as well as good, effective decisions made in having two key roles brought in-house and resourced within the team for data and structures management. We commend Council for this.

¹ Refer to <https://www.nzta.govt.nz/resources/monetised-benefits-and-costs-manual>

Recommendations	We recommend that Council: R2.1 Ensures that it complies with the funding requirements set out in PIKB by undertaking routine NPV analysis for all Pavement Rehabilitation and Drainage Renewal projects. R2.2 Ensures it enters its maintenance costs data into its inventory system on a regular basis, with an effective quality assurance process implemented to ensure clean and accurate data has been entered.
Suggestions	We suggest that Council: S2.1 Considers commissioning Pavement Design reports with Failure Mode Analysis for pavement rehabilitation projects to help inform treatment selection.
Taupo District Council's comment	NPV's and associated failure mode analysis will be considered in the next NLTP funding round. Pavement designs are done inhouse to date based on local experience.

* * *

3. Activity Management Planning

Effective

Compliance

Council has an Asset and Activity Management Plan 2024 (AMP), however there were some anomalies within the AMP that were noted by the audit team, suggesting that the version submitted for our review was a Draft and yet to be updated setting out strategic priorities that are aligned with the current GPS, and proof read. Examples of such anomalies included the previous government's draft GPS priorities, a sentence advising that "We have identified three key problems" then directly below that sentence stating "The 4-key problems are..."; as well as listing 27 bridges on one page, and 26 listed on another, with REG stating there's 78 and Council's AWM database stating 79.

During the audit, Council advised us that it is currently reviewing its Level of Service definitions and targets, which we commend, as this is needed and will support them in going forward. Informing their stakeholders of any updated changes in lower level of service due to the economic environment and funding limitations will help to manage long-held expectations of yester-year, that now in reality need to be reset. We recommend that the AMP be reviewed and updated prior to being finalised in time for the next NLTP, to ensure statements and data trends align, an improvement plan and its defined level of service targets (post-review) are also included, as well as indications on how Council compares against its peer group.

We also suggest that Council inform its communities and stakeholders of its project achievements, such as the kerb & channel renewal project in Turangi that was funded through additional Crown Infrastructure Partners funding, as well as the Wairakei Culvert clearing project that was undertaken in partnership with the Cycle Taupo community group. These are good news stories that demonstrate Council's ability to receive funding from other sources to help deliver needed project work that would otherwise not get funded.

General

A review of Council's achievements against its 2021-31 Long Term Plan Service Performance targets for 2023/24, showed that there may also be a good opportunity for Council to reassess its service performance measures within its Long-Term Plan to ensure that these are realistic targets – refer Figure 2 below:

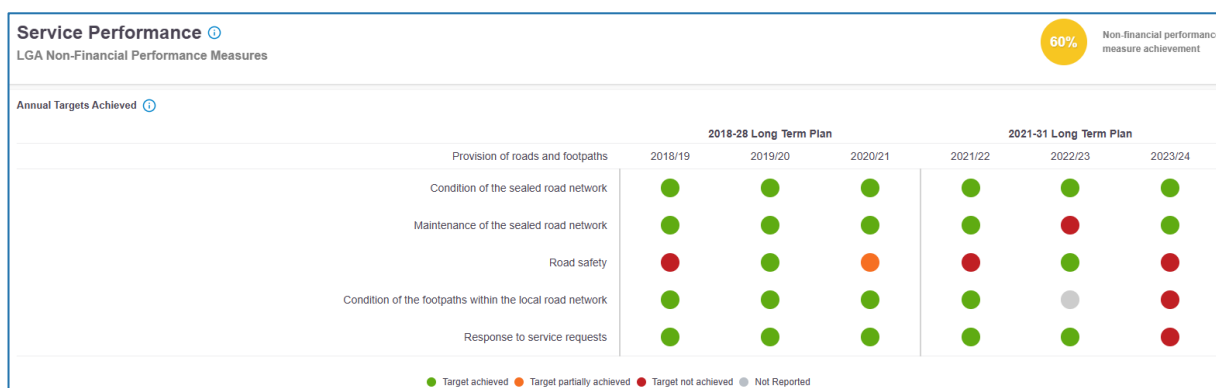


Figure 2 – Source: REG Te Ringa Maimoa

Council is also in the process of developing several FWP's, eg: structures and road safety, which we also commend, as this will enable the team to take a more proactive approach.

A review of Council's Transport Investment Online (TIO) data highlighted some issues with Council's Annual Achievement Report for the past 5 years at least, whereby Actual quantity or Actual expenditure data was missing. It is recommended that Council improve its data management processes to ensure TIO forecast quantities and expenditure are updated annually, and actual values in both quantities and expenditure are also continually updated, to align with the programme of work to be, or that has been undertaken. By updating the TIO renewal forecasts and actuals annually for Maintenance, Operations and Renewals (MOR), the forecast comparison with actual achievement will be more representative of the delivery performance for the network. This will also enable better decision-making by both Council and NZTA, should funds need to be reallocated to changing needs of a higher priority.

Recommendations	We recommend that Council: R3.1 Reviews and updates its AMP to ensure statements and data trends align, as well as includes an improvement plan, the updated defined level of service targets and benchmarking against its peer group. R3.2 Updates the TIO forecast and actual quantities and expenditure annually to reflect the expected programme and delivery performance of the programme. This will also help improve the AAR reporting.
Suggestions	We suggest that Council: S3.1 Consider including in its next iteration of the AMP, how it will inform its stakeholders of the need to review and modify its level of service targets due to funding limitations, to help manage ongoing expectations with regard to any reduced level of service due to funding

	limitations, as well as share more of its good news achievements with its stakeholders.
Taupo District Council's comment	3.1 The current AMP does include an improvement plan however we will ensure the statements and data trends align in the next iteration of the AMP. We will actively continue to advocate with council the importance of consulting the level of service with the community to align with affordability. This will remain in our improvement plan. 3.2 Noted. We will update forecast and actual quantities each financial year to align with AAR report.

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4. Data Quality	Effective
Performance Monitoring REG Te Ringa Maimoa Transport Insights' (REG) Data Quality overall score for Council the 2024/25 year was 74 out of 100, which was a reduction from the previous year's result of 81. The REG Insights report identified (as of December 2025) that the high importance areas for improvement (ie: have major data issues) relate to the following categories: • Network – Treatment Length for Timeliness • Asset Inventory – Pavement & Surfacing for Accuracy, Completeness and Timeliness • Asset Inventory – Traffic Facilities & Streetlights for Accuracy • Condition – Pavement & Surfacing for Timeliness • Asset Inventory – Structures for Accuracy • Demand/Use – Traffic Estimates for Timeliness • Condition – Drainage System for Timeliness. It is important that Council investigates, identifies and resolves these data gaps. Doing so will improve reporting at a network level and allow Council to accurately compare its One Network Framework (ONF) performance with its peers. Compliance The audit team were satisfied that the roughness and condition rating surveys are being completed by Council, and therefore NZTA can be confident with Council's data for pavement and surfacing condition. General As briefly mentioned in <i>Section 2: Network Condition and Management</i>, a review of Council's AWM database found maintenance cost data had only been entered for 2024/25 and 2025/26. There was no historical maintenance cost data in Council's inventory system. Robust maintenance costs facilitate invaluable analysis of network expenditure trends by year, by kilometre, by classification and by road – the measure of the actions taken to maintain the network inventory. They also provide a network-specific maintenance cost history that can be used in NPV calculations to justify renewal activity.	

We also observed other data anomalies in the database system such as three sites where the original surfacing date was much younger than the reseal date, eg: surfacing date of 2013 then *resealed* in 1994; a 2013 sealed surface could not have possibly been resealed in 1994. Further examples observed included missing top surface data, as well as data for some sites accessed via the Mobile Road app during the network drive-over were incongruent with information obtained from AWM, eg: Kinloch Road. AWM indicated Kinloch Road's top surface was 66 years old yet Mobile Roads data (which comes from AWM) indicated a top reseal surface dated January 2005, and onsite observation verified that Mobile Roads was more likely to be correct. This could indicate that it may be a matter of making some minor adjustments to data entry processes to ensure maintenance activity data is entered within its database to prevent anomalies or gaps, and this will assist Council when validating proposed programmes.

On a more positive note, Council has taken the proactive step of providing a dedicated resource within its Infrastructure team to manage its AWM database, which we commend, as we see this as being critical and a key step towards helping to improve Council's data and quality processes.

Recommendations	We recommend that Council: R4.1 Investigates, identifies and implements a data improvement plan to address data gaps identified in the REG Data Quality report. R4.2 Checks that the maintenance activity and surfacing as-built data have been updated to eliminate any gaps and ensures all this data is entered into AWM in a timely manner.
Taupo District Council's comment	R4.1 We now have a dedicated Asset Data Specialist within the team who is now ensuring our REG Data Quality report is updated and any gaps can be identified and addressed where appropriate. R4.2 Maintenance activities are accurate since August 2024, but we will undertake an internal audit to collectively close any gaps in asset data for example surface layers.

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5. Road Safety

Some Improvement Needed

Performance Monitoring

The annual number of Deaths and Serious Injuries (DSI's) listed in New Zealand's Crash Analysis System (CAS) as occurring in the Taupo District, has declined slightly across the network over recent years, though is trending up on Rural Connectors. Of particular concern, vulnerable road users (VRU's) are over-represented in all crash statistics (27%) for Taupo District – especially for motorcyclists (26% for serious crashes, for what is less than 1% of total traffic on the network, nationally), a significant number of crashes are occurring on bends and 'Road Factors' are being recorded as a causal factor in 11% of all crashes, as stated in CAS. We would like to see Council investigate and identify these causal factors a bit further, so as to reduce and improve these risk factors.

Compliance

We noted during the field inspection, most bridge end markers (width restrictors) were in place, compliant and in good condition, as with most delineation devices across the rural network.

Safe System Audits

Council is generally complying with NZTA's requirements to undertake Safe System Audits (SSA) at key stages of a project's development and implementation. If there is justification for not conducting an SSA at a particular stage, then an exemption declaration form must be completed and filed.

Six Safe System Audits (SSA's) were reviewed as part of this audit. These were:

- 1) Kiddle/Arrowsmith/SH5 roundabout Design Stage audit,
- 2) Kiddle/Arrowsmith/SH5 roundabout Post Construction Stage audit,
- 3) Minor Accessibility Improvements Design Stage audit,
- 4) Minor Accessibility Improvements Post Construction Stage audit,
- 5) Wairakei Drive/Huka Falls Road roundabout Design Stage audit,
- 6) Wairakei Drive/Huka Falls Road roundabout Post Construction Stage audit.

Of most concern, the majority of the SSA's that were provided for review were incomplete and missing significant components. There were no comments or responses to indicate what decisions or actions would be taken for any of the recommendations, especially for those rated Serious and Significant for Severity Outcomes, as well as no inputs noted by the Safety Engineer.

There were no exemption declaration forms provided to the audit team for review for any pavement rehabilitation work completed last construction season, or for this year's. This was raised in previous audit reports, and there was a commitment by Council for these to be completed and kept on contract files. A safe system was also identified in Council's AMP as one of the key problems for this district. Therefore, we recommend Council follow through with the process guidance so as to ensure it is meeting this funding requirement and also managing its risks out on the network, within appropriate timeframes.

General Observations

Council is to be commended on the new roundabouts that are improving traffic flow on key routes such as Crown/Taharepa Rds, and Taharepa/Tauhara Rds with AC Baths Ave. Another example of positive activity undertaken for road safety is the Kinloch Rd slip lane improvement work, however we have questioned Council as to where is the SSA (for any stage) that was completed for this project – as one was not submitted to us for review, and we also encouraged Council to monitor the site, to make sure that there is no masking or shadowing issue arising from vehicles in the left-turn slip lane obscuring on-coming traffic for those drivers in the right-turn lane heading out of Kinloch Rd.

Similarly, we commend, and support, the planned safety improvement work for some sites located on Poihipi Rd. During the network driveover, we could see that the need was justified as we travelled through the identified sites.

In addition to those works listed above, the integration of project and maintenance work programmes for the White Road intersection improvements project, to ensure good timing of the improvement work with the site's planned pavement rehabilitation, also demonstrated good collaboration efforts amongst Council's respective teams.

Some areas for improvement that were also noted included:

- Curve chevrons need to be placed on the Broadlands Rd curve where there have been multiple vehicle run-off crashes,
- Incorrect signage at new roundabouts should be replaced with the correct R2.3 sign (circulatory symbol) – refer photos below:



- Removal of old line marks with blackout have begun to fade (eg: on Te Heu Heu Rd and Wairakei Dr) and have become prominent and confusing for drivers, especially when it rains – refer photo below:



Recommendations	We recommend that Council: R5.1 Investigate and identify the causal road factors that have contributed to many reported crashes, so as to reduce and improve these risk factors. R5.2 Review processes and systems to ensure that Safe System Audits (or exemption declarations) are completed in accordance with the Safe System Audit guidelines for all renewal and improvement projects, and within appropriate timeframes.
Suggestions	We suggest that Council: S5.1 Monitors the Kinloch Rd slip-lane and intersection with Whangamata Rd to ensure there is no masking or shadowing issue arising from vehicles in the left-turn slip lane.
Taupo District Council's comment	R5.1 We have requested some further information on the years these crashes occurred so we can delve into the causal road factors. Any improvements required to address these would require options and budget availability. As it is unlikely these improvements would be subsidised based on the last GPS/NLTP these improvements will need to be prioritised. Based on political and financial climate for local councils these projects would be seen as nice to have. R5.2 Transport team were very under-resourced since the last audit period but have filled vacancies and now have a full complement. This under resourcing meant some gaps did appear in our documentation e.g. signatures and responses of safety audits. To overcome this, we started to develop guidelines to provide consultants and project managers. During the procedural audit in March, we had completed exemption forms and the auditor sighted the draft guidelines. S5.1 Will monitor the crashes at the Kinloch Road and Whangamata Rd.

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3. APPENDICES

APPENDIX A

Council Feedback

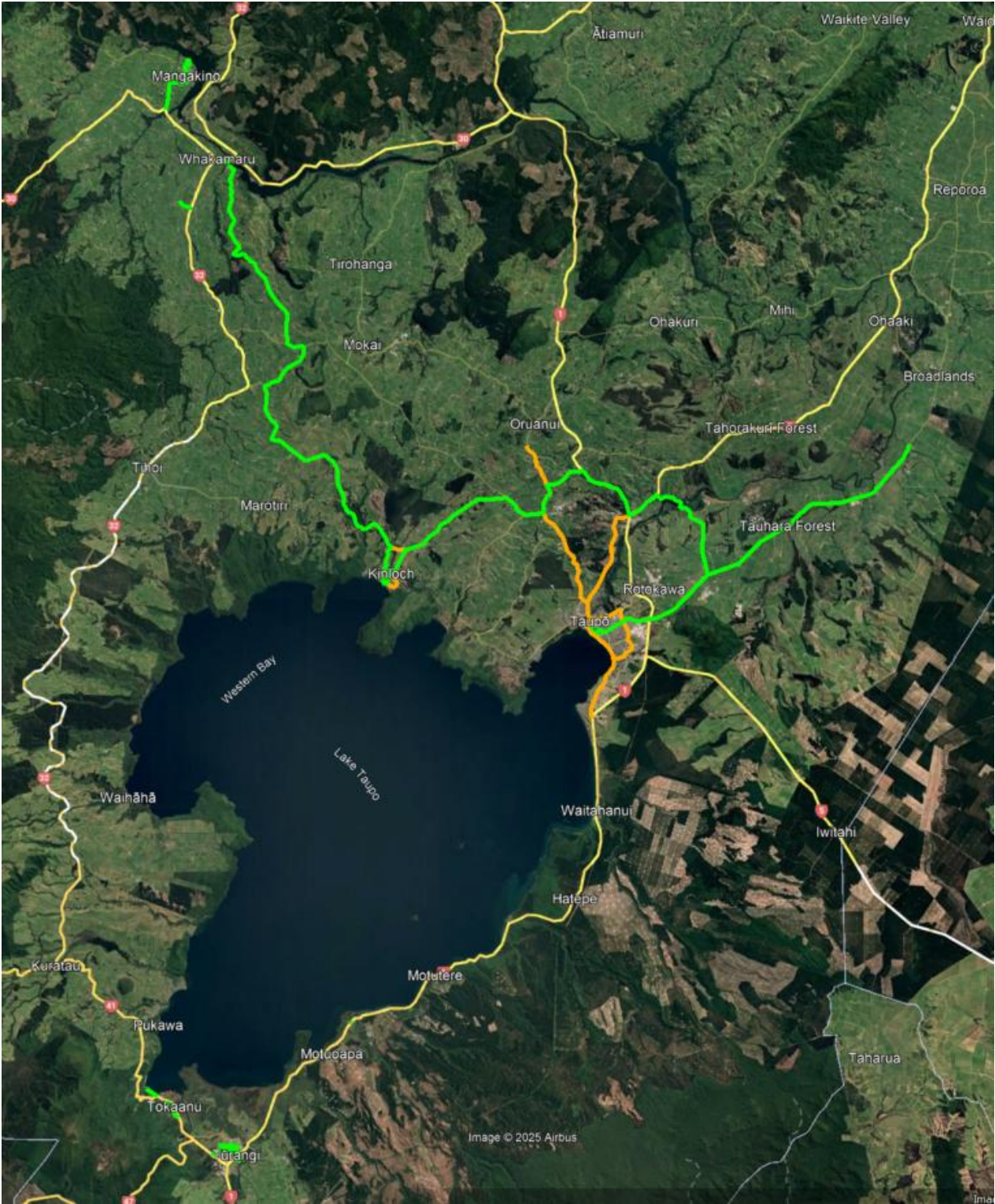
APPENDIX B

Network Field Inspections

Day One (orange line):



Day Two (green line):



APPENDIX C

Sample of Audit Photos

Some examples of good practice:



Example of good traffic management set up on Broadlands Rd



New roundabout providing effective flow of traffic at Taharepa/Tauhara Rds



Example of cycle lane green paint work

Examples of areas needing improvement:



Detritus blocking drain sumps in urban area



Example of high shoulder that caused water to pond



Example of extensively cracked AC



An example of missing bridge end markers on both ends of Wairakei Steam Pipes Bridge on Wairakei Dr.