

Stakeholder feedback on potential AMDS benefits

Interviews conducted with 10 small–large sector stakeholders e.g. RCAs, Councils, Maintenance Contractors and Professional Services

| Benefit | Description | Stakeholder feedback | Anecdotes and examples |
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| Short term (1 level) | 2 years, following AMDS implementation at the RCA | | |
| Cost savings and efficiency | <p><i>Efficiency:</i> A single standard will create clearer requirements for data collection, monitoring and processing; leading to improved alignment of rules and processes across RCAs and suppliers. Processes will be more accessible, efficient and predictable as a result.</p> <p><i>Cost savings:</i> Standardisation will reduce the need for data manipulation and aggregation, decreasing collection and analysis costs.</p> | <p>Stakeholders were confident AMDS would enable significant efficiencies through data collection, processing costs and licences.</p> <p>Several argued that asset monitoring requirements will increase over time, so AMDS is more likely to lead to cost-effective improvements rather than decreases in expenditure.</p> | <p>Data collection requires several devices for staff resulting in licence costs. Data standardisation has the potential to introduce greater competition (e.g. other systems allow apps to be installed on standard Android / Apple smartphones), directly or indirectly decreasing IT costs.</p> |
| Better value for money through prioritisation | <p>Better quality data will enable suppliers and asset managers to distinguish high value vs low value maintenance work. Linking maintenance expenditure with performance information allows for identification of over- or under-investment across an RCA portfolio.</p> <p>Expenditure can therefore be targeted to where it will have the greatest effect, improving outcomes without increasing costs. Currently such investigation is not possible without dedicated data analysis, often requiring external expertise.</p> | <p>Standardisation is likely lead to better value for money once systems and processes are in place. Improved prioritisation of maintenance spend was seen as a critical and large-scale AMDS benefit by several stakeholders.</p> <p>A minority of stakeholders viewed prioritisation as a longer-term or secondary impact, for example stating that such benefits depend on local capability.</p> | <p>Council asset managers provided several examples of innovative diagnostic tools enabled by better data. Core to the improvement is quick and easy access to information about asset health and criticality. Asset Managers highlighted that accessible, plain-English information is key to engaging councillors in long-term planning and spending conversations. This becomes even more important when budgets are tight, and councils must prioritise expenditure across water, roads and other infrastructure.</p> |
| Improved information sharing between stakeholders | <p>A consistent data standard will increase the efficiency and accuracy of information sharing, including between organisations using different software. The risk of clashes, use of incorrect materials, and other coordination errors will also be reduced.</p> | <p>All stakeholders agreed this would be a benefit of AMDS, with varied views as to the significance of impacts in the short term. Some argued that benchmarking and medium-term collaboration offer greater opportunities than avoiding clashes and coordination errors. Other interviewees argued that data translatability represents a huge barrier to project scoping and commissioning.</p> | <p>One data expert noted that asset condition data can take up to nine months to appear in local databases due to translation requirements and local IT restrictions.</p> <p>In another case, a roading reconstruction project was delayed for several months because of data translation requirements. Mapping technical specification data across organisations was a significant challenge.</p> |
| Other support for RCA asset | <p>Asset managers and contractors can make use of improved data when</p> | <p>Stakeholders agreed that an AMDS could</p> | <p>Interviewees noted several instances of resurfacing</p> |

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| management practice | performing day-to-day monitoring and maintenance activity, improving RCA capability. Unnecessary rework, for example, can be minimised if information about the history and condition of assets is accessible and accurate. Easier data collection and processing will similarly reduce the risk of errors and need for repeat inspections. | provide substantial improvements to decision-making transparency and data accessibility. | work occurring multiple times because, in the absence of accessible design records, incorrect assumptions were made about the materials used to construct a road or bridge. One very large supplier noted that an AMDS is critical to internal capability and performance monitoring, so have developed their own system in the absence of central / Waka Kotahi functionality. |
| Medium-term (3 – 5 years, following AMDS implementation at a significant number of RCAs) | | | |
| More transparent and consistent contracting | A single 'language' for asset management data will allow purchasers to more clearly and efficiently communicate their requirements and expectations when issuing Requests for Proposals. The ease, accuracy, transparency, and consistency of bid assessments will also be improved, allowing for greater competitive tension in the market for asset management services over time. | Procurement improvements were viewed as a highly significant impact from ADMS by the majority of interviewees, albeit but for a number of different reasons. Procurement-related benefits suggested by stakeholders included better data collection / handover clauses within contracts, more consistent KPIs, avoiding 'lock-in' to specific tools and technologies and easier comparisons of pricing across RCAs. | Following completion of a large-scale construction contract, it took an RCA asset manager some time to obtain performance data. Additional fees were ultimately required in order to translate data into a form compatible with RCA systems. This would have been avoided if AMDS requirements were included in the contract via handover clauses. One stakeholder noted that procurement options are constrained by current data systems. AMDS could lead to greater opportunities for innovation with the supply of different tools. |
| Intelligence and information sharing across councils | RCA officials will have the ability to compare asset management costs and performance across councils. Opportunities for improvement and trends over time will be easier to identify; including the potential for new technologies and techniques to improve capability and cost-effectiveness. | Benchmarking data and insights across councils were as a significant opportunity by a number of stakeholders. Some interviewees thought this benefit would be applicable to Waka Kotahi and some commented central government or REG support would be necessary to address | Several stakeholders highlighted that consistent data definitions are a core requirement for disseminating findings from local research. In one case, an RCA completed a pilot project, examining the performance of a new road surfacing material. Another RCA was also considering making use of this material, but was unable to |

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| More accurate planning and forecasting | <p>Data will enable officials and suppliers to better anticipate future maintenance requirements. Quick and reliable asset monitoring information will also enable quicker analytics – risks and opportunities can then be acted upon quickly.</p> | <p>practical and technical challenges.</p> | <p>translate or learn from the research due to incompatible data.</p> |
| | <p>Consistent and long-term data can also improve the accuracy and sophistication of forecasting such that resilience and strategic alignment can be improved. Improved data trends will also allow organisations to have better reporting programmes linked to customer satisfaction and feedback.</p> | <p>This was consistently agreed upon as a key benefit of AMDS. Significant delays between data collection and reporting, sometimes extending to several months, is a common occurrence at RCAs.</p> <p>Interviewees agreed that asset management could be significantly improved if customer and condition information could be acted upon more quickly (e.g. with data becoming accessible within days, rather than months)</p> | <p>One asset manager noted that their last Activity Management Plan (AMP) document required over 800 hours to prepare. Approximately one third of this time was spend cleaning data and translating asset management data into a usable form.</p> <p>At one RCA in a region with limited internet coverage, asset condition data is stored within monitoring devices until a manual synchronisation is performed. Due to the challenge involved in syncing devices, data is only transferred once every 3-6 months.</p> |

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| Long-term (5+ years, following implementation across the majority of RCAs) | | | |
| Evidence based local funding and NLTP prioritisation | Greater confidence in data to help ensure prioritisation planning at the national level and bidding by RCAs is evidence based. This will also contribute to more equitable and transparent LTP funding allocations. | All stakeholders agreed that better targeting of government funding would be a benefit of AMDS in the long term. A modern, comprehensive standard has the potential to better recognise diverse drivers of service quality. | A number of interviewees noted that it was difficult to have local concerns recognised under current systems and processes, for example mountainous terrain or high levels of salt in the air. Stakeholders also noted that funding-related discussions involve back and forth due to the challenge in comparing RCAs. |
| Improved mobility and transferrable skills | Officials and contractors providing asset management services must currently acquire RCA-specific, non-transferrable knowledge. This extends to experienced practitioners, who must learn a new set of tools and processes when changing employers. A consistent standard will reduce training requirements in the long-term. | This was seen as a significant opportunity by roughly a third of those interviewed. It was also noted that standardisation will support greater mobility across the country. Other stakeholders viewed training as primarily a requirement for effective AMDS implementation, rather than a source of benefit. | One asset manager noted that regional terminology can vary significantly across the country, describing a move between RCAs as "like going to a different country and learning a foreign language". |
| Enabling innovative asset management technologies | An up-to-date standard is necessary for other asset management systems to function across organisations, for example functional and spatial visualisations through Building Information Modelling (BIM), as well as automated data collection and processing via on-board cameras. A consistent data standard also increases the potential scale for deployment of new technologies, for example if a group of councils wishes to invest in an upgrade. | Several stakeholders considered this the most significant benefit of implementing AMDS. As well as permitting existing systems (e.g. BIM and LIDAR), it was noted that AMDS would provide greater opportunity for innovation and incentives for creating of new tools by reducing development costs and increasing the size of the potential market. | A council official noted that in the current state, any new IT needs to be highly tailored to work at individual councils. Currently there is a large initial setup cost to get these systems working – even where the same technology has been implemented elsewhere. |
| Improved investment decision-making at a national level | Accessible and reliable information can improve strategic planning and portfolio management at the national level, increasing the ability of senior leaders to | This was seen as a key long-term benefit of AMDS by all stakeholders. | Stakeholders agreed that AMDS would improve the Agency's ability to understand cost drivers. Two asset managers, for example, noted that local geography |

understand and respond to emerging trends. Standardised data reduces the time required for officials to prepare updates and briefings as well as allowing recommendations to be made with greater confidence.

and weather directly affect maintenance costs, but current systems and funding arrangements do not consider this information. More consistent data and analysis would support evidence-based decision making.
