

Asset Management Plan 2015-2018

Recommendation

That the Board:

- i. Approves the Auckland Transport Asset Management Plan 2015-2018 as summarised in the Strategic Summary included as Attachment 1.
- ii. Authorises the issue of the Auckland Transport Asset Management Plan 2015-2018 to Auckland Council and other stakeholders.
- iii. Authorises the publication of the Auckland Transport Asset Management Plan 2015-2018 in hard copy and to the Auckland Transport internet site.

Executive summary

Auckland Transport (AT) manages the most complex and diverse transport network in New Zealand, connecting people and moving goods across New Zealand's largest and fastest growing city.

The road network provides for eight billion km of vehicle travel annually, with 2% to 6% of this travel being by heavy commercial vehicles moving over 62 million tonnes of freight. The road network has a value of just under \$12 billion.

The public transport network accommodates 79 million trips annually (2014/2015). It has a value just under \$1.4 billion including physical infrastructure and rolling stock.

The transport network is depreciating at a rate of \$261 million annually or \$715,000 daily. It is therefore critical that renewals and maintenance investment is given sufficient priority to "look after what we have".

Approximately 1% of the transport network is now in a "very poor" condition. This is equivalent to \$157 million of backlog. The Asset Management Plan (AMP) recommends \$2.88 billion of renewal investment over 10 years. This is a sustainable funding requirement.

The Long Term Plan (LTP) constrains the level of funding for renewals to \$2.13 billion over 10 years. While it sets the level of renewals funding at close to the recommended AMP levels for the first three years, it also creates a significant and widening funding gap from 2018/2019 onwards. Under this funding scenario 9.4% of transport assets would be in "very poor" condition after 10 years, equivalent to a backlog of \$968 million.

The level of renewal funding identified in the LTP will have minimal impact over the first three years (2015-2018). This will provide opportunity to revisit condition models to confirm trends and update asset management risk and intervention strategies. The revised information will be used to inform the next AMP and LTP covering the period 2018-2021.

Strategic context

The Local Government Act 2002 (LGA) requires Auckland Transport (AT) to manage its transport assets in an effective manner. The AMP enables AT to demonstrate how it is meeting this requirement for renewals and maintenance activities. It forms the basis of:

- The maintenance and renewals budgets and programmes in the Regional Land Transport Programme (RLTP) and LTP
- AT's eligibility for NZTA subsidy of its maintenance and renewals programmes

The AMP also contributes to all of AT's strategic themes, and particularly to:

- Building network optimisation and resilience
- Ensuring a sustainable funding model.

Strategic planning for network growth and associated improvements to levels of service is led by the Integrated Transport Programme. The AMP contributes by setting out the financial impacts of growth and the whole-of-life costs of new transport assets.

Background

Auckland Transport is the guardian of one of New Zealand's largest and most strategically important asset portfolios, comprising \$13.4 billion of road and public transport assets that are essential to the social and economic well-being of New Zealand's largest city.

The AMP optimises renewals and maintenance investment across AT's asset portfolio by balancing cost, risk and levels of service to develop whole of life strategies to maintain assets and to renew at the optimal time.

This is the second AMP which AT has produced, the first being in 2012. The 2012-2015 AMP integrated the systems and data of eight legacy councils, and set out a plan to maintain the condition and value of AT assets.

This 2015-2018 AMP builds on earlier achievements and aligns AT with national and international best practice standards for asset management planning. The AMP is constructed as a set of linked documents:

- A Strategic Summary, included as Attachment 1
- The Asset Management Plan
- 15 Asset Class Management Plans, technical documents prepared mainly for internal use.

Annual updates of this AMP will be published in mid-year 2016 and 2017, with AT's third AMP being published in 2018. This document will align AT's roading network and levels of service with NZTA's One Network Road Classification (ONRC), providing a greater emphasis on customer

satisfaction measures. NZTA expects that ONRC will be the basis for allocation of its contribution to maintenance and renewals of local roads from 2018 onwards.

Issues and options

Growth and demand

The AMP estimates that AT's asset portfolio is growing by 1.5% per year, through a combination of vested assets from new development and AT capital projects. This calculation is based on past trends so could prove to be an underestimate if the rate of development increases as envisaged in the Auckland Housing Accord.

Growth in the asset base means that the cost of maintenance and asset-based operations increases by around 1.5% each year, adding a cumulative \$119 million to opex funding requirements over 10 years.

The cost of renewals also increases over the 10 years of the AMP. Although the relationship between asset growth and costs is more complex for renewals than for maintenance, in the long term a growing asset portfolio inevitably means higher renewals costs. In part this is a consequence of past decisions on vested and growth related assets, and the passage of time between construction and the need for renewal work.

Recommended and approved funding – Renewals

The LTP has provided sufficient funding to keep up with network renewals in the three years from 2015/2016 to 2017/2018. This will enable AT to manage network assets to current levels of service, with less than 1% of network assets in very poor condition.

From 2018/2019 onwards, LTP funding does not allow AT to maintain assets in their current condition. It is expected that by 2025, 9.4% of transport assets will be in very poor condition. This represents a significant deterioration of the network and a loss of investment value.

Recommended and approved funding – maintenance

For roads, footpaths and parking, maintenance budgets as approved in the LTP are aligned with the AMP recommendation in 2015/2016, but do not increase at all thereafter.

For public transport, maintenance budgets increase by an average of 1.9% per year over the 10 years of the LTP.

The priority given to public transport maintenance budgets aligns with AT's strategic themes and reflects the need for maintenance services to increase as patronage grows. Patronage grew in 2014/2015 by 9.4% to over 79 million trips, and LTP targets equate to a 3.4% year-on-year growth in patronage over the coming decade.

While the road network is growing in length through new development, use of the road network measured as vehicle kilometres travelled is not increasing. There were 8 billion km of vehicle travel on Auckland local roads in 2014, a figure that has not changed significantly since 2006.

The gap between asset needs and funding widens each year due to:

- inflation
- growth in the asset base
- increased use of the road network as Auckland's population and economy grows
- public transport patronage growth (LTP patronage targets equate to an average of 3.4% growth per year over the coming decade.)
- the impact on maintenance costs of the shortfall in renewals funding – assets in worse condition have higher maintenance requirements

Funding impacts on risk

Deteriorating asset condition resulting from the shortfall in maintenance and renewals budgets will increase network and organisational risk. This includes:

- Health & Safety – increased risk of asset failure leading to injuries or impacts to staff, agents or the public.
- Reputation – adverse media coverage, community concerns, legal challenges or damage to stakeholder confidence, risk to achieving the customer satisfaction measures in AT's Statement of Intent.
- Finance – increased whole of life costs because maintenance and renewals work is not done at the optimal time. Risk of loss of investment value and inability to rebuild that investment.
- Environment – increased impacts on air, land and water. For example maintaining cesspits to a lower level of service leads to more pollutants entering waterways and to a higher risk of flooding and slips.
- Service Delivery/Asset Management - an increasing proportion of assets in poor and very poor condition, for example road pavements which are noticeably rough, with potholes that allow water into the construction layers.

Next steps

Beginning in 2016/2017, there will be a gap between maintenance requirements and available funding which will widen each year. From 2018/2019, there will also be a gap between renewals requirements and funding.

To mitigate negative outcomes for the network, users and stakeholders, it will be necessary to:

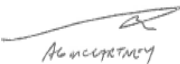
- Reprioritise work from lower-risk to higher-risk assets (for example from low volume roads to arterials)
- Closely monitor network condition and customer satisfaction for negative trends
- Enhance condition and network needs forecasting capability
- Develop options for reducing levels of service and increasing the level of managed risk, in line with approved levels of funding

An annual update to the Asset Management Plan will be prepared and will inform the optimisation of maintenance budgets in 2016/2017 and 2017/2018.

AT will work closely with NZTA and Auckland Council in preparing for the 2018 LTP, to ensure that the consequences of approved funding levels are clear, and that the trade-offs between cost, risk and levels of service are transparent.

Attachment

Attachment Number	Description
1	Asset Management Plan Strategic Summary

Submitted by	Siri Rangamuwa AM Planning Manager	 pp
Recommended by	Andy Finch Manager, Strategic AM and Systems	
Recommended by	Tony McCartney Group Manager Road Corridor	
Recommended by	Greg Edmonds Chief Infrastructure Officer	
Approved for submission	David Warburton Chief Executive	

Glossary

Acronym	Description
AMP	Asset Management Plan
AT	Auckland Transport
LGA	The Local Government Act 2002
LTP	Long Term Plan
ONRC	One Network Road Classification
RLTP	Regional Land Transport Programme
NZTA	New Zealand Transport Agency