

# Asset Management Plan 2015/2018 Progress Update

## Recommendation

That the Board:

- i. Notes the report.

## Executive summary

This report gives the Board an update on progress with the development of the 2015/18 Asset Management Plan. It was reported to the Capital Review Committee on 5<sup>th</sup> June 2014.

The plan will cover the period July 2015 to June 2018, and is currently on schedule to be published in July 2015.

The plan will be significantly enhanced through a new tool AT is developing to more accurately forecast the funding required for renewals across all asset classes as well as the impacts of a reduced funding allocation for renewals.

This information is being fed into the Integrated Transport Programme.

## Strategic context

The AMP is a requirement of the Local Government Act 2002 (LGA). It is used by AT's funders (AC and the New Zealand Transport Agency (NZTA)) to ensure the robustness of AT's proposals and programmes for the management of its transport networks.

Audit New Zealand uses it as the main source of information to establish compliance with regulatory requirements and monitor performance of AT and its services.

The AMP provides the lifecycle strategies to give effect to the ITP and generate the renewal work programmes to inform the Long Term Plan (LTP).

## Background

Auckland Transport manages over \$14 billion of assets and spends in excess of \$1.6 billion annually delivering transport. Every day transport assets deteriorate in value by \$700k, (\$255m annually).

The AMP is published every three years with the next publication date in July 2015. Updates to the AMP are prepared at the end of years one and two.

## Issues and options

The production of AT's second AMP is progressing well and is on schedule. It will comprise a short main document underpinned by detailed technical documents containing analysis and commentary.

The documents will be issued in hard copy to key stakeholders as well as being available for download from the AT web site.

### Renewal optimisation

AT is developing a renewal forecasting tool to identify future renewal funding needs by balancing levels of service, cost and risk across the asset portfolio. It also allows funding scenarios to be modelled.

The tool has been peer reviewed by Auckland University. It has been demonstrated to the Auckland Council (AC), Ministry of Transport, NZTA, along with Wellington and Christchurch City Councils.

The tool takes the latest condition profile for each asset class and allows policy settings to act as levers to identify the required expenditure. It ensures assets are renewed on time to minimise reactive maintenance costs and reduce the increased risk associated with deterioration of the assets.

The policy settings are:

- Condition Level of Service (LOS) - the renewal condition intervention point
  1. No assets worse than moderate condition
  2. No assets worse than poor condition
  3. No assets worse than very poor condition
- Condition backlog – the number of assets falling below the condition LOS at any point in time
- The length of time to address the backlog
- The optimum (cost-efficient) condition profile of the asset required in the long term
- The level of growth of each asset class delivered through the capital new works programme

These are illustrated in Figure 1.

Assets typically undergo several renewal cycles. Maintenance costs, particularly reactive maintenance costs, increase as the asset deteriorates.

If the asset is not renewed it deteriorates towards eventual failure with significantly increased maintenance costs.

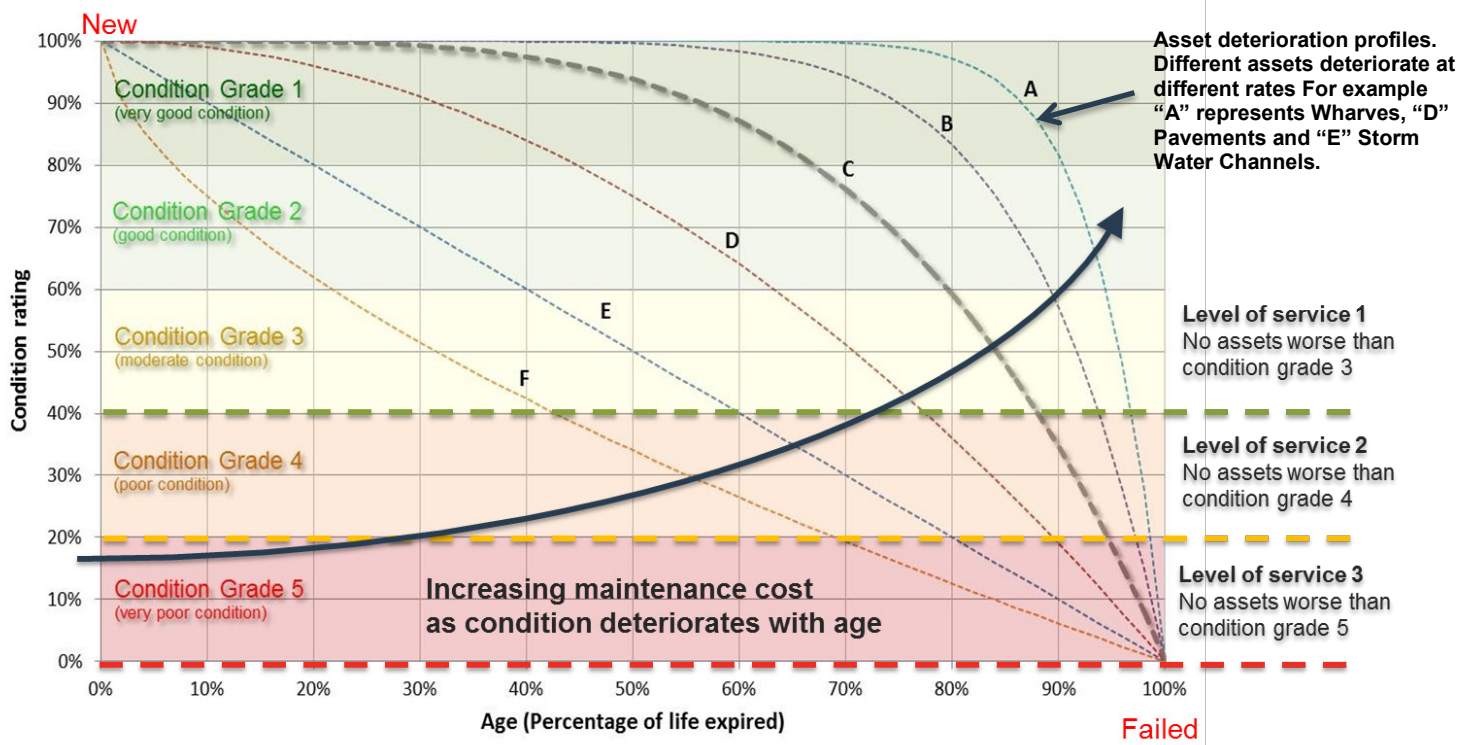


Figure 1- Illustration of policy settings

The initial policy settings have been set through a workshop held with internal stakeholders.

The tool has produced a draft of the 30-year renewal funding profile for inclusion in the ITP. This will be updated as the functionality of the tool is refined further and the policy settings are reviewed.

The current renewal investment profile summary for 2016 - 2045 is shown in Table 1. Attachment 1 shows the draft annual investment profile and the associated asset condition profile over the same period.

2016- 2045 Total	
Road	9,189,150,870
Public transport	674,440,115
Parking	123,268,584
<b>Total</b>	<b>9,986,859,569</b>

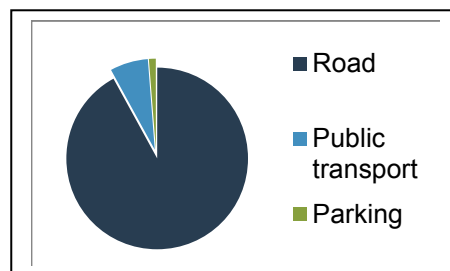


Table 1: 30 year renewal investment summary, 2016/2045 Un-inflated Dollars

The tool has estimated a higher level of required renewals spend over 30 years than in the current LTP. This requirement will be refined on an on-going basis through updated condition information provided through the rolling programme of condition surveys.

The tool has also been used to model the implications of a constrained renewal budget. This has been set at \$200m in 2015/2016 increasing by 2.5% annually in the first decade, and 1% annually in decades two and three. This gives a 30 year total of \$7,589m as shown in Attachment 2. This reflects a fiscally driven funding envelope set by Auckland Council as part of the LTP process to maintain rates at 2.5% per annum.

For the AC fiscally constrained budget, over 30 years the overall quantity of assets in a very poor condition increases to approximately 33% of the total. This would significantly increase AT's exposure to the risk of an unplanned failure, decrease overall customer satisfaction, and would require AT to spend significantly more on maintenance.

The functionality of the renewal optimisation tool is being further developed. This will allow increased accuracy and scenario modelling at a greater level of detail.




## Next steps

The AMP for 2015 to 2018 will continue to be developed over the next year. A further report will be brought to the Board in mid- 2015 seeking endorsement of the plan prior to publication.

## Attachments

Number	Description
1	Draft of the 30 year renewal investment and asset condition profile
2	Asset condition profile for constrained renewal budget

## Document ownership

<b>Submitted by</b>	Andy Finch <b>Manager, Strategic Asset Management and Systems</b>	
<b>Recommended by</b>	Peter Clark <b>General Manager, Strategy and Planning</b>	
<b>Approved for submission</b>	David Warburton <b>Chief Executive</b>	

## Glossary

Acronym	Description	Business Unit
AC	Auckland Council	Corporate
AT	Auckland Transport	Corporate
ITP	Integrated Transport Programme	Strategy and Planning
LoS	Levels of Service	Strategy and Planning
LTP	Long Term Plan	Corporate
NZTA	New Zealand Transport Agency	Corporate

## Attachment 1- Draft of the 30 year renewal investment and asset condition profile

### 2014/2015 Un-inflated Dollars ('000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Road	190.7	210.0	201.0	238.8	271.3	299.9	317.5	328.4	334.2	337.5
Public transport	6.8	8.7	13.8	12.8	11.4	11.5	12.0	12.4	12.7	12.9
Parking	2.5	1.9	3.0	3.3	3.7	4.3	4.2	4.4	4.4	4.4
<b>Total</b>	<b>200.0</b>	<b>220.6</b>	<b>217.8</b>	<b>254.9</b>	<b>286.4</b>	<b>315.7</b>	<b>333.7</b>	<b>345.1</b>	<b>351.3</b>	<b>354.8</b>

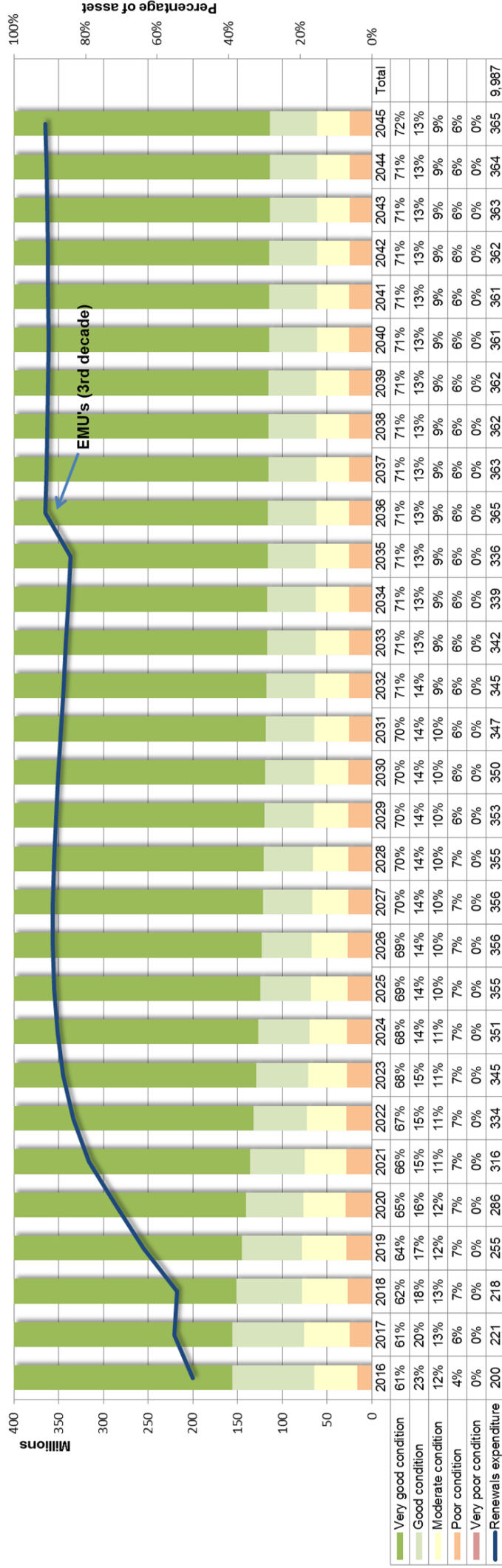
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Road	339.0	338.8	337.5	335.5	333.0	330.3	327.5	324.9	322.0	319.4
Public transport	12.9	13.0	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8
Parking	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.2	4.2	4.2
<b>Total</b>	<b>356.3</b>	<b>356.1</b>	<b>354.8</b>	<b>352.7</b>	<b>350.1</b>	<b>347.3</b>	<b>344.5</b>	<b>341.9</b>	<b>339.0</b>	<b>336.4</b>

	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Road	317.5	316.1	315.0	314.3	313.9	313.9	314.2	314.8	315.6	316.8
Public transport	42.8	42.9	42.9	43.0	43.0	43.1	43.2	43.3	43.4	43.5
Parking	4.2	4.3	4.3	4.3	4.4	4.4	4.5	4.6	4.6	4.7
<b>Total</b>	<b>364.5</b>	<b>363.2</b>	<b>362.2</b>	<b>361.6</b>	<b>361.3</b>	<b>361.4</b>	<b>361.9</b>	<b>362.6</b>	<b>363.6</b>	<b>365.0</b>

#### Note:

- Growth is based on analysis of the ITP base case dated March 2014. Changes to the ITP base case will require changes to the analysis.
- AIFS expenditure has been excluded as it is identified as new capital rather than renewals
- Parking enforcement expenditure has been excluded as it is identified as new capital rather than renewals
- DMU rolling stock expenditure has been excluded as it is included in the ITP base case
- No allowance has been made for the Wiri maintenance depot (no current information)
- No allowance has been made for corporate renewals
- An allowance of \$30m/year has been made for EMU renewals in years 2036-2045

### Asset Condition Profile





### Attachment 2- Asset condition profile for constrained renewal budget

