Network overview

Road network 7,302 km

Local roads 5,091 km
Collector 950 km
Arterial 1,261 km

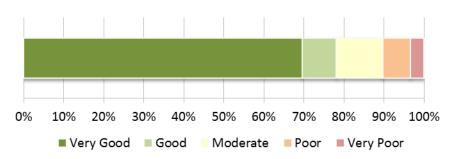
Urban 4,501 km Rural 2,801 km

Current value \$ 4.7 billion

Replacement cost \$ 6.9 billion

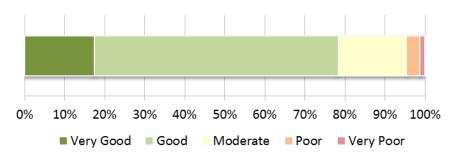
Condition profile

Pavements: Pavement surface (m2) (All)



Data source: RAMM (October 2014)

Pavements: Pavement base (m2) (All)



Data source: RAMM (October 2014)

| Asset data status | Pavement surface | Pavement base |
|-------------------|------------------|---------------|
| Age data | Moderate | Unreliable |
| Condition data | Reliable | Moderate |





Levels of service

| Outcome: | The network is of suitable quality | | | | | | | |
|-------------------------------|---|----------------------------|-----------------------------|-----------------------------------|--|--|--|--|
| LOS statement: | Road pavements are maintained in a suitable condition | | | | | | | |
| Performance meas | ure | Current Target performance | | Target date | | | | |
| Regional | | | | | | | | |
| Percentage of asph backlog | naltic concrete pavements in | 5% | 2026 | | | | | |
| Percentage of chips | seal pavements in backlog | 5% | 5% 2.4% | | | | | |
| Percentage of pave | ement base in backlog | 1% | 2.2% | 2026 | | | | |
| Percentage of netw failure | ork closed due to pavement | 0% | Ongoing currently complying | | | | | |
| Rural | | | | | | | | |
| Rural smooth trave | I exposure | 93% | Not less than 85% | Ongoing currently complying | | | | |
| Urban | | | | | | | | |
| Urban smooth trave | el exposure | 82% | Not less than 75% | Ongoing currently complying | | | | |

| Outcome: | The network is managed in the most cost-effective manner | | | | | | |
|------------------|--|------------------------|-----------------------|-------------|--|--|--|
| LOS statement: | Road pavements are managed to least whole of life cost | | | | | | |
| Performance meas | ure | Current Performance | Target Performance | Target Date | | | |
| Regional | | | | | | | |
| | st per km total of sealed ourse, AC and chipseal | \$18,400 | \$15,700 | 2025 | | | |

Current (2015) backlog

Backlog: The financial value (quantity %) of assets in a "poor" or "very poor" condition.

| | \$ value | % quantity |
|------------------------------|----------------|------------|
| Asphaltic concrete surfacing | \$33.1 million | (5%) |
| Chipseal surfacing | \$11.2 million | (5%) |
| Pavement Base | \$48.6 million | (1%) |
| Total: | \$92.9 million | - |





Strategic approach

Auckland Transport (AT) is committed to managing its pavement assets to deliver the agreed level of service, manage risk and achieve greater value for money. AT's pavement work activities adhere to the key principles of:

- The right treatments
- In the right places
- At the right times
- · For the right costs

AT uses robust asset management tools to set appropriate levels of maintenance and renewal activities for its pavement assets, to ensure that:

- Assets are maintained at the agreed level to continue to deliver optimal performance to the road users.
- Assets are programmed for renewal when they reach to 'very poor' condition.
- Reseals and rehabilitations of pavements are carried out at the most optimum time in the asset lifecycle.
- Assets are kept at the optimum condition level during their lives.

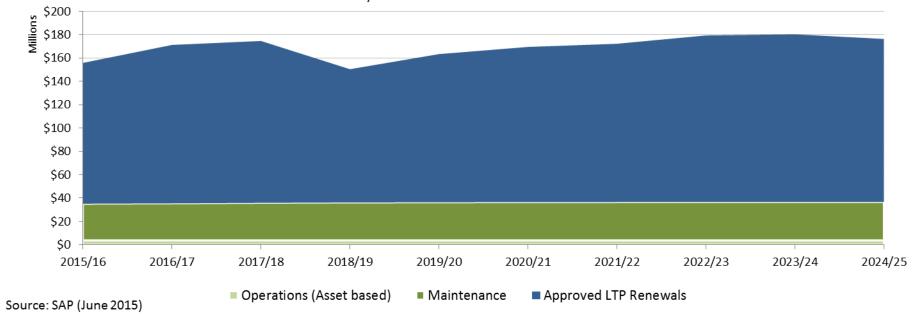




Renewal and Maintenance Costs (\$M)

| \$millions | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 10-year total |
|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
| Approved LTP Renewals (uninflated) | | \$120.7 | \$135.8 | \$138.7 | \$114.3 | \$127.0 | \$133.0 | \$135.7 | \$142.8 | \$143.7 | \$139.7 | \$1,331.4 |
| Renewal Investment Needs (uninflated) | \$126.3 | \$122.0 | \$126.9 | \$107.4 | \$137.0 | \$165.1 | \$187.8 | \$202.2 | \$211.0 | \$215.9 | \$218.3 | \$1,693.6 |
| Renewal shortfall | | -\$1.3 | \$8.9 | \$31.3 | -\$22.8 | -\$38.0 | -\$54.8 | -\$66.5 | -\$68.2 | -\$72.2 | -\$78.6 | -\$362.2 |
| Maintenance | | \$31.3 | \$31.6 | \$32.1 | \$32.3 | \$32.5 | \$32.7 | \$32.7 | \$32.7 | \$32.8 | \$32.8 | \$323.4 |
| Operations (Asset based) | | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$3.9 | \$38.7 |
| Consequential OPEX shorfall | | \$0.3 | \$0.6 | \$1.0 | \$1.3 | \$1.6 | \$2.0 | \$2.3 | \$2.7 | \$3.1 | \$3.4 | \$18.4 |
| Depreciation | \$122.0 | \$217.5 | \$227.9 | \$241.5 | \$249.8 | \$254.1 | \$260.3 | \$272.0 | \$286.6 | \$296.3 | \$309.2 | \$2,615.3 |

10-year Pavement Financial Forecast







Consequences if asset needs cannot be afforded

- The backlog will increase from \$93m to \$102m in the next 10 years and to \$134m in the next 30 years.
- Maintenance will cost \$11.6m more over the 10 year period repairing the roads because of the renewals delay, leaving even less money for renewals.
- More road potholes & seal cracking will occur. Water will penetrate the base course in localized areas.
- The sealed roading network will start to look less well managed than it has been traditionally.
- The unsealed network will not be re-metaled as frequently as it is now.

Key issues

| Issue | Recommendation |
|--|-------------------------------------|
| Funding at the level currently provided for in the long-term plan isn't financially sustainable. Eventually either a significant amount of additional money will have to be provided, or the target levels of service will have to be reduced. The long-tern plan will need to say what Auckland Transport's/The Council's intentions are. | To be compiled |
| Safety of the road network will be compromised if funding is held back indefinitely. | To be compiled |
| The ONRC is likely to be the driver behind road renewals programmes in future. | Adopt the ONRC and transition plan. |
| An increasing number of HPMV will cause an increase in deterioration. The actual effect of these heavier vehicles needs to be ascertained and should be accounted for in the LTP pavement renewals budget. A joined up approach needs to be agreed upon between AT and forestry operators, quarrying firms and other organisations that make regular use of HPMVs. | To be compiled |



