

# 2005-2025 Roads

Asset Management Plan  
Supplement – April 2017

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Front Cover image - Pennant Hills Road

## Hornsby Shire Council

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## 1.0 Introduction

This asset management plan supplement applies to Roads within the Hornsby Shire. It supplements the 2005 – 2025 Roads Asset Management Plan (February 2013) and should be read in conjunction with the Asset Management Framework (January 2016). It provides supplementary information on the current and target levels of service of Council's Roads assets and expenditure forecasts for the next 10 years.

## 2.0 Current Position

### 2.1 Current Assets

The assets covered by this plan include the following types:

- Sealed Road Pavement – Local Roads and Regional Roads
- Unsealed Road Pavement – Local Roads
- Road Furniture (Fences, Signs, Lines)
- Road Furniture (Traffic Facilities)
- Footpaths
- Cycleways
- Kerb and Guttering
- Bridges and Culverts
- Car Parks

Roads generally are defined in both administrative and functional hierarchies. The common road functional classifications as defined by AUSTRROADS and the administrative class as adopted by Roads and Maritime Services NSW are summarised in the following Table 1 and Table 2:

Table 1: Common Road Classifications

Functional Class	Description	Administrative Class
6	These roads are principal avenue of communication for mass traffic movements	State
7	The supplement Class 6 and distribute traffic to local streets	Regional and Collector
8	Access to abutting property	Local
9	Mainly laneways	Laneway

Table 2: Details of Road Asset Hierarchy

Administrative Class	Functional Class	Length (km)	% Network	Responsible Authority
State	6	127	100	RTA
Regional	7	37	6	Council (with RTA funding assistance)
Collector	7	59	9	Council
Local	8	563	85	Council

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## 2.2 Levels of Service of Assets

A key objective in asset management is the determination of the Asset Condition Index (or Level of Service (LOS) provided by each asset as shown in Table 3. The LOS is determined by the assessment factors of Condition, Standards and Codes of Practice, and Legislative Compliance.

Table 3: Target Levels of Service

Description	Target Service Level
1. Percentage of Sealed Road network rated in "good" condition	>68%
1a. Percentage of sealed road network rated in "very poor" condition	<2%
2. No. of complaints per 100km of unsealed roads	<35
3. No. of successful insurance claims on footpaths per 100km	<1
4. No. of km of existing footpath reconstructed per year	3.0
5. Average/maximum response time for essential footpath maintenance work, work days	5/15
6. Response time to patch potholes on sealed road pavement, work days	<3
7. Percentage of local access roads with road roughness of <150 counts/km	95%
8. Percentage of local collector roads with road roughness of <100 counts/km	100%

### 2.3 Financial Sustainability Ratio

Council's Long Term Financial Plan 2014/15 to 2023/24 defines one of its four key objectives is to achieve/maintain TCorp financial sustainability benchmarks.

TCorp considers that a Council needs to be assessed with a Financial Sustainability Rating (FSR) at a Moderate or higher level to be acceptable in terms of their sustainability. A Moderate level FSR is, on average, equivalent to marginally exceeding the benchmarks utilised in TCorp's assessment process.

Hornsby Shire Council received a **Moderate FSR** from TCorp during their 2012 assessment of NSW Councils.

Key financial indicators are endorsed by the Office of Local Government and are a requirement to report on in Council's annual financial statements. The indicators to be measured, relating to asset management, are:

Indicator	Quantitative Measure	Definition	Benchmark
Infrastructure Backlog Ratio	This ratio shows what proportion the backlog is against total value of a council's infrastructure	Estimated cost to bring assets to a satisfactory condition / total infrastructure assets	<2%
Asset Maintenance Ratio	Compares actual versus required annual asset maintenance	Actual maintenance / Required asset maintenance	>100%
Buildings and Infrastructure Renewals Ratio	Compares the proportion spent on infrastructure asset renewals and the assets deterioration	Asset renewals / Depreciation of building and infrastructure assets	>100%
Capital Expenditure Ratio	This indicates the extent to which a Council is forecasting to expand its asset base with capital expenditure spent on new assets, and replacement and renewal of existing assets	Annual Capital Expenditure / Annual Depreciation	>1

Source: Hornsby Shire Council Long Term Financial Plan 2014/15 to 2023/24

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## 2.4 Asset Management Maturity

In 2011, the Independent Pricing and Regulatory Tribunal (IPaRT) approved a Special Rate Variation (SRV) on an ongoing basis that it is to be allocated towards asset renewal works.

The SRV funds have resulted in an additional \$750,000 per annum allocated to road asset renewal works, as detailed in the annual Operational Plans.

The additional funding provided for the asset renewal works has enabled Council to elevate its Road pavement condition index for sealed pavements (PCI) from 0.75 to 0.82:

PCI	Pavement Condition Index Indicators for Sealed Pavements
10	<ul style="list-style-type: none"> <li>■ International Roughness Index (IRI) score between 1 to 3</li> <li>■ No cracking</li> <li>■ Average rutting less than 5mm</li> <li>■ No patches</li> </ul>
9	<ul style="list-style-type: none"> <li>■ International Roughness Index (IRI) score between 2 to 4</li> <li>■ Percentage of road surface subject to cracking &lt;5%</li> <li>■ Average rutting less than 10mm</li> <li>■ Percentage of road surface patched 5% to 10%</li> </ul>
8	<ul style="list-style-type: none"> <li>■ International Roughness Index (IRI) score between 3 to 5</li> <li>■ Percentage of road surface subject to cracking 5% to 15%</li> <li>■ Average rutting less than 15mm</li> <li>■ Percentage of road surface patched 10% to 20%</li> </ul>
7	<ul style="list-style-type: none"> <li>■ International Roughness Index (IRI) score between 4 to 6</li> <li>■ Percentage of road surface subject to cracking 15% to 25%</li> <li>■ Average rutting less than 20mm</li> <li>■ Percentage of road surface patched 10% to 20%</li> </ul>
6	<ul style="list-style-type: none"> <li>■ International Roughness Index (IRI) score between 5 to 7</li> <li>■ Percentage of road surface subject to cracking 25% to 35%</li> <li>■ Average rutting less than 25mm</li> <li>■ Percentage of road surface patched 20% to 30%</li> </ul>





Pennant Hills Road

In 2013, consultants Morrison Low carried out an asset management maturity assessment for Hornsby Shire Council using the same methodology as for the state-wide asset management practice audits carried out for the Office of Local Government (OLG). This assessment provided Council with the opportunity to understand how its asset management practices, systems and processes compared with other Councils across NSW.

The result of the 2013 Audit was that Council scored a "C" or a Core level assessment.

Council subsequently adopted a detailed asset management improvement plan with the aim of achieving a "B" or Excellent level rating.

Following the implementation of the detailed actions and activities outlined in the improvement plan, a further audit was carried out in 2015.

The result of the 2015 Audit was that Council scored a "B" that indicates that it is now at an advanced level of competence in asset management, placing Hornsby Shire Council above average of NSW Councils.

