

Seal Extension Guidelines

Asset Management and Systems

1. Guideline Definitions

AADT - Annual Average Daily Traffic is measured at regular annual (or greater) intervals and adjusted for seasonal effects, using an approved traffic counter which is left in situ for 1-2 weeks.

AT - Auckland Transport

ATCOP - Auckland Transport Code of Practice

Formed Road - road either sealed or unsealed that is maintained by the roading authority.

HCV - Heavy vehicle or commercial vehicle movements are recorded as movements of a vehicle with a gross vehicle mass of greater than 3.5 tonne vehicle/axis. A heavy vehicle is considered to generate the dust equivalent to three cars, where light vehicles contribute little to the structural deterioration of the road surface.

Legal Road - has the same meaning as **road** in the Local Government Act 1974 (Section 315). In short, it covers the total area of land between road boundaries but is limited to the formed carriageway in this principle.

Legal Terminology - used in this document to describe whether an aspect or statement is a requirement under law/mandatory or good practice:

- *Must* – indicates something that is mandatory or required by law
- *Should* – indicates a recommendation
- *May* – indicates something that is optional and may be considered for use.

Maintenance Seal - the lowest-cost seal applied to an unsealed road where expensive on-going maintenance has been required.

Ownership of Road - Only formed roads that are currently owned and maintained by AT are considered for seal extension works.

2. Guideline Statement

The Mayor has outlined his vision of turning Auckland into the world's most liveable city by 2040. The Auckland Plan has identified that an efficient and integrated network of roads and public transport is vital to delivering this vision. As a Council Controlled Organisation (CCO), AT is responsible for delivering the region's transport services – from roads and footpaths to cycling, parking and public transport. Through the Statement of Intent and to contribute to the achievement of priority areas and targets contained in the Auckland Plan, AT is required to prioritise and optimise investment across transport modes and related infrastructure.

AT has developed a set of guidelines to ensure that the transport services will be delivered on a consistent basis around the Auckland region. These guidelines identify the approach AT will apply when managing the transport assets. The approach identified in the guidelines is cognizant with the Level of Service identified in the Integrated Transport Programme and Asset Management Plan.

3. Background

Auckland Transport is responsible for the provision of seal extensions for the Auckland region and these guidelines will be used to determine the priority of seal extension projects against the available budget. There is in excess of 7,300 km of legal road around the AT region and Gulf Islands, of which approximately 894 km (12%) is unsealed.

AT will undertake to maintain the unsealed roads in the region at the current level of service detailed in the Road Network Asset Management Plan and ATCOP. These guidelines do not alter the current level of service for unsealed or sealed roads or the level of funding required to maintain that level of service.

4. Purpose and Scope

The seal extension programme is funded through the LTP/RLTP. All projects within the RLTP programme are prioritised using criteria based on their strategic fit, effectiveness and economic efficiency and compete against each other for funding. There is a further prioritisation process so that the most critical to complete seal extensions are carried before the less critical ones. Subject to the seal extension programme being included in the Annual Plan, these guidelines set out the prioritisation criteria and methodology for assessing the relative merits of competing seal extension projects to determine how the funding allocated in the Annual Plan should be used.

The guidelines take into account environmental factors such as dust by considering adjacent amenities as well as social factors through the number of adjacent dwellings and incidents associated with an unsealed road. The guidelines exclude maintenance seals.

The guidelines assist Auckland Transport with:

- Prioritising seal extension requests received by AT from residents or Local Boards
- Developing the seal extension forward work programme
- The application to NZTA for funding (where applicable)

5. Guidelines

The guidelines describe the assessment process that AT uses to prioritise unsealed roads currently being considered for sealing. The outcome of the process is a ranking of the unsealed roads against the available budget identified in the Annual Plan. The process involves assessing the unsealed roads to identify the number of dwellings that may benefit from the seal extension, the amenities that are in close proximity and road safety.

Seal extensions will be given the highest priority without further assessment where:

- a) The benefits associated with sealing the road are likely to be sufficient to gain a subsidy from NZTA
- b) The road proposed for seal extension is a special case where either the Local Board or Auckland Council has resolved to fully fund the seal extension

If neither of the above criteria applies for the seal extension, the road must be assessed using the following process:

Assessment Process

A two stage assessment is proposed:

1. An assessment of the physical characteristics of the road
2. Regional and local priority adjustment

Stage 1- Physical characteristics

The unsealed roads being considered in any given year are assessed using Table 1 to produce a numerical total score.

Table 1 Assessment criteria and scoring for the physical characteristics of unsealed roads

Traffic Movements (AADT)	Score	Dwellings/km (<100m from road)	Score	Amenities¹	Score
1-50	2	1-2	1	1-2	1
51-100	4	3-4	2	3-5	2
101-200	6	5-10	3	6-10	3
201-500	8	11-15	4	>10	4
>500	10	16-20	5		
		>20	6		
Score:		Score:		Score:	
Gradient² (%)	Score	Incidents³	Score	HCV⁴	Score
<1	1	1	1	1-5	2
1 – 5	2	2-3	2	6-10	4
5.1 – 8	3	4-5	3	11-15	6
8.1 – 12.5	4	6-10	4	16-20	8
>12.5	5	>10	5	>20	10
Score:		Score:		Score:	
Total Score⁵:					

1. *Amenities* refers to amenities less than 100m from the road where dust may be a nuisance factor include:
 - a community hall, place of worship or reserve, or
 - a place of work (dairy shed or commercial premises), or
 - road forms part of a school bus route, or
 - orchard or food crops, or
 - a residential house.
2. *Gradient* is used in this assessment as a proxy for the maintenance cost of the unsealed road.
3. *Incidents* refers to the documented number of serious safety incidents or accidents that have occurred on the unsealed road in the previous five years.
4. *HCV* is recorded as movements of a vehicle with a gross vehicle mass of greater than 3.5 tonne vehicle/axis.
5. *Total Score* is the sum of the scores of the six factors in the table.

The weightings for vehicle movements and heavy vehicles have been increased in the assessment to reflect usage and potential damage to the unsealed road which impact on the level of routine maintenance required. Any spurious or unreliable traffic data should be validated.

Commercial activities, tourism and associated events will be reflected in the scores assigned to Traffic Movements and Amenities.

Stage 2- Regional and Local Priority Adjustment

The total score determined through stage 1 of the assessment is then adjusted for the regional and local value of sealing the road:

1. **High Priority Value - Total Score + 30%**
 - Sealing an unsealed through route or diversion route
 - Improves access to a regional park or regionally significant walk
 - Improves access to identified growth areas
 - Promotes economic growth/tourism, such as completion of a scenic route
 - Promotes the outcomes of the unitary plan
 - Promotes significant improvements to water quality in sensitive catchments or marine environments

2. Medium Priority Value - Total Score + 15%

- Improves access to a bushwalk, beach or local facility
- Improves access to local community amenities reducing community isolation
- School bus route

3. Low Priority Value - Total Score + 0%

- All other unsealed roads
- Roads that have significant physical or economic barriers to undertaking seal extension works

Using the two stage assessment described above, the prioritised seal extension list identifies the initial priority of roads for sealing. A further refinement of priorities within the highest priority roads will be carried out during the programme feasibility, investigation and design processes phases to create a final programme of seal extension projects.

6. Monitoring and Review

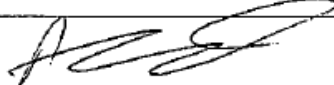

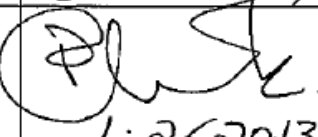
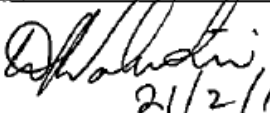
These guidelines shall be reviewed as part of the three year review cycle aligned to the LTP.

7. Related Guidelines

The seal extension guideline relies on the reseal guideline to determine the seal material to be used.

8. Document Status

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