



**FOOTWAYS & FOOTPATHS LIFECYCLE PLAN  
2010/11**  
**PLANA CEARCALL-BEATHA SHLIGHEAN-COISE &  
CHEUMAN-COISE  
2010/11**

**March 2010**

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This document is an appendix of the Road Asset Management Plan 2010/11.

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## Footways & Footpaths Lifecycle Plan Plana Cearcall-beatha Shlighean-coise & Cheuman-coise

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## 1.0 Current Status

### Inbhe Làithreach

### 1.1 Current Issues

#### Cùisean Làithreach

The footways and footpaths asset includes only local ones which are adopted as part of the “list of public roads”. Kerbing is also included in this asset group. Some footways are shared cycleways. These have not yet been identified separately and more detail will be included in future versions of the RAMP.

It has been estimated that it would cost approximately £179 million to replace the footway network with an equivalent modern asset. Average annual investment on the asset is estimated to be around £250,000. Expenditure has bought approximately 5 km of new surface per year. The estimated return period for surfacing of footways and footpaths is once every 200 years.

Kerbing installed in the 1970’s as part of housing schemes are at the end of their useful life. There are instances where concrete kerbing has deteriorated but the footway is still intact.

There is currently no formal condition assessment regime undertaken on the asset. ([IA F1](#))

Road openings cause damage to structural layers of the footway resulting in an increased level of deterioration. Footways can also be subject to traffic loading from parked vehicles or overrunning heavy goods vehicles. This can result in significant deterioration and reduced lifecycles.

### 1.2 Current Strategies

#### Ro-innleachdan Làithreach

The following strategies are currently in place:

- Policies approved by committee relating to the management of the network
- Local Transport Strategy for Highland (draft when this Plan was written)
- TECS Service Plan

- RCW Operational Plan
- The Programme of the Highland Council 2009-2011

The Highland Council is currently reviewing its capital investment programme which will produce a list of priority schemes for the next 10 years. The amount of money which will be allocated to road projects which incorporate footways is currently unknown. The current 5 year capital programme has been agreed up to and including 2011/12. The capital programme funds schemes which are more substantial improvements, for example, road upgrading to include footways and cycleways.

Preventative maintenance treatments on footways is undertaken to prevent further deterioration of parts of the network. This includes slurry sealing, which, if applied to structurally sound footways, will extend the expected life.

There is also an annual programme of structural maintenance carried out on the network where more substantial works are undertaken, usually relating to kerbing and/or the foundation layers of a footway or path.

Condition data, inspection records, maintenance records, insurance claims and reported defects are all considered in the identification and prioritisation of sections to be considered for treatment. [\(IA F2\)](#)



Figure 1.2.1: Example of Surface  
Deterioration on a Footway

## 2.0 The Asset: Physical Parameters

### An t-So-mhaoin: Paraimeatairean Corporra

#### 2.1 General Information

##### Fiosrachadh Coitcheann

The Highland Council is responsible for maintaining locally adopted footways and footpaths within its area. The road asset equates to nearly 6,730km (4,170 miles) of public road ranging from rural single track to urban dual carriageway. The majority of the road network is rural due to the large geographical area covered by the Council. This results in a relatively low length of footway compared to the road network. As expected, there will be more footways and footpaths in urban areas. The length of the footway network is estimated to be approximately 1,700km.

##### **Explanation Note**

**Footways – pedestrian facilities adjacent to the carriageway or verge.**

**Footpaths – pedestrian facilities remote from the carriageway or verge.**

**Both may be shared use with cyclists.**

The road network and associated footways within the Highland area have been developed over many years. Footways constructed within the last 20 to 30 years were built to the design standards that were current at the time. This is normally not a significant problem except for damage which results from vehicles parking on footways or deterioration of kerbing.

Road openings by utility companies, for example, which cause disturbance to the foundation layers of a footway/path can result in increased deterioration of parts of the network. Poor quality reinstatements can reduce the life of a footway/path, resulting in more frequent maintenance treatments. There are no specific areas in the Highland which can be identified as suffering from this problem but urban areas are more prone due to concentrated populations requiring more services.

## 2.2 Asset Register

### Clàr So-mhaoin

The “list of public roads” is the definitive record used to define the scope of the asset. The list is held both electronically and in hard copy format. A copy of the list is available on the [Council website](#)<sup>(RF1)</sup>. The list contains the road name, description of the road, start and end co-ordinates and the adopted road length. Adopted roads include the footway which is adjacent to the road. Adopted footpaths, which are not adjacent to an adopted road, are listed separately if required. This, supplemented with the inventory records described below, provides the asset register for this asset group.

## 2.3 Inventory

### Clàr-cunntais

The footway asset is estimated from the road length data and is illustrated below.

**Footway Lengths by Classification of Road (March 2009)**

Class	Environment	Length (km)	Total (km)
A	Urban	126.3	127.6
	Rural	1.3	
B	Urban	155.0	155.9
	Rural	0.9	
C	Urban	165.4	166.8
	Rural	1.4	
U	Urban	1,267.7	1,267.7
	Rural	0	
Overall	Urban	1,714.5	1718
	Rural	3.5	

Table 2.3.1: Estimated Footway Length by Classification

Currently, the breakdown of construction types is unavailable. However, the majority of footways are flexible (bituminous material) with a small amount of high amenity paving and mass concrete, slabs or blocks. [\(IA F3\)](#)

The length of road in each Highland Council Area is reported annually and published on the council website:-

<http://www.highland.gov.uk/yourenvironment/roadsandtransport/roads/statistics.htm><sup>(RF2)</sup>

## 2.4 Network Hierarchy

### Rangachadh Lìonraidh

The footway and footpath network requires to be considered separately from the road network as the priorities of the users are different. To enable the appropriate management of the network, the Council has designated a hierarchy of footway/path types. The hierarchy categories reflect the function of different footways/paths as adapted for local circumstances from the Code of Practice for Highway Maintenance Management<sup>(RF3)</sup>. The Council hierarchy in relation to the Code of Practice is set out below.

ACOP Category	THC Category	Category Name	Description
1(a)	F1	Prestige Walking Zone	Prestige areas in main settlements with high public space and streetscene contribution.
1	F2	Primary Walking Route	Busy urban shopping and business areas and main pedestrian routes including links to significant public transport locations.
2	F3	Secondary Walking Route	Medium usage routes through local areas feeding into primary routes, local shopping centres, etc.
3 & 4	F4	Link and Local Access Footways/paths	Access footways/paths through urban areas, rural footways and footways associated with low usage, e.g. short estate roads to the main routes and cul-de-sacs.

Table 2.4.1: Footway/path Network Hierarchy 2010

The hierarchy was adopted in January 2010 and will require to be implemented throughout the rest of 2010. Systems require to be amended as well as an exercise to ascertain if existing resources can be used to fulfil the requirements. (IA F4)

Length data within each of the designated hierarchies is currently not available. As the amended hierarchy was adopted by the Council in January

2010, work is required to put this information into the asset database to produce hierarchy lengths. (IA F4)

## 2.5 Quality of Inventory Held

### Càileachd a' Chlàir-cunntais a Thathar a' Cumail

The records of the adopted footway/path asset are stored either electronically on the asset management database, in another electronic format or on paper in local offices. As part of the development of this plan, an assessment of the current data held was undertaken. See appendix A.

There is limited data on the footway/path asset. An action to collect and record data for footways/paths has been identified. Electronic recording of footways in the asset management database was initiated in 2010. Existing resources require to be used to collate this data, making it difficult to calculate an estimation of when it will be completed. If required, any data is currently estimated. (IA F5)

As built records of previous road improvements containing footway information are available in various electronic forms or as paper records. Collating and entering historic data is a large task which, as discussed, will continue as resources permit. There are, of course, footways/paths where construction details are not known unless investigations are carried out.

Additional inventory details, for example special surfacing, will be input into the asset management database as resources permit. (IA F5)



Figure 2.5.1: Special Surfacing

## 2.6 Asset Growth

### Fàs So-mhaoin

Accurate records of asset growth are not currently available. Based on road lengths, the footway asset is estimated to have grown by approximately 16% (238 km) since 2000 (see [Table 2.6.1](#)). The total length of footpaths has not been estimated. Growth will have occurred as a result of:

- The adoption of new roads from new developments
- Construction of new roads (upgrading existing alignments or other Council schemes)
- Construction of new footways/paths

Asset growth places increasing demands upon the Council budgets for inspection and maintenance (including winter).

Although development has slowed due to the current economic climate, it is expected that the asset will continue to grow over the duration of this plan.

This is based on the following assumptions:

1. Continued adoption of roads from new developments
2. Capital schemes in the revised 10 year programme

Year	Length (km)				
	A	B	C	U	Total
2000	121.3	107.1	145.5	1105.9	1479.8
2001	124.7	139.4	166.6	1127.1	1557.8
2002	124.7	139.4	166.6	1146.8	1577.6
2003	124.7	146.1	167.1	1154.1	1591.9
2004	127.6	148.8	166.7	1169.3	1612.4
2005	127.6	148.8	167.3	1178.4	1622.1
2006	127.6	148.8	167.3	1198.7	1642.3
2007	127.6	154.4	166.8	1217.4	1666.1
2008	127.6	154.4	166.8	1236.2	1685.0
2009	127.6	155.9	166.8	1267.7	1718.0

Table 2.6.1: Estimated Footway Length per Year

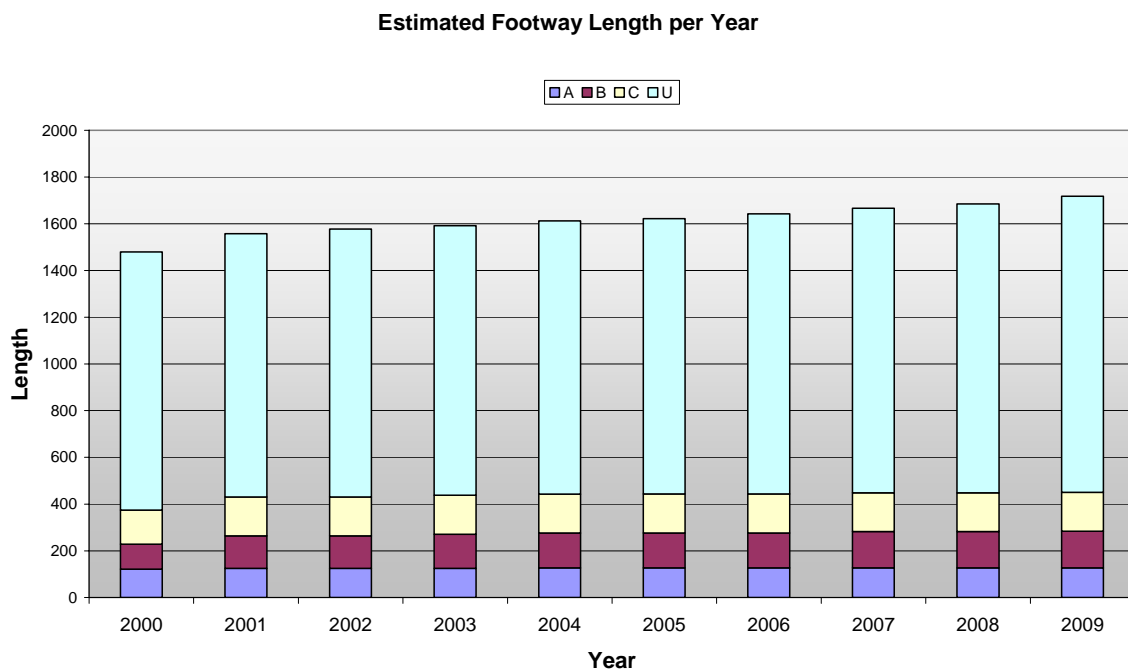


Figure 2.6.1: Estimated Footway Length per Year

### 3.0 Service Expectations

#### Dùilean Seirbheis

#### 3.1 Customer Perceptions

##### Tuigse Luchd-cleachdaidh

The Highland Council commissions an independent annual performance survey which is sent to a random sample of householders in its area. In 2009, the survey was issued to 11,000 residents and 1,807 completed questionnaires were returned.

The annual performance survey does not deal specifically with footway/path related services but gives an indication of the importance of services to the public and how well they think the Council is performing.

The data in the tables below are extracts from the 2009 survey and show the information relating to the footway/path. The 'Street cleaning' category is assumed to apply to roads and footways/paths, therefore the results are also included in the carriageways lifecycle plan. 'Pavement maintenance' is the term used in the survey for footways/paths maintenance. The full survey is available on the [Council website](#)<sup>(RF4)</sup> with the relevant tables reproduced in RAMP appendix B.

Importance of services	2009 %	2008 %	2007 %	2006 %	2005 %	2004 %	2003 %
Street cleaning	17	19	17	18	21	22	22
Pavement maintenance	14	17	14	17	16	17	23
Walking Routes, e.g. Great Glen Way	7	7	7	6	7	7	4

Table 3.1.1: Importance of Services: Appearance in Top 5

The results show that the importance of 'Street cleaning' and 'Pavement maintenance' have declined overall. The results for 'Walking routes' are fairly consistent.

The data on the satisfaction with these services shows the reverse for 'Walking routes' as it is ranked 7<sup>th</sup> in the complete survey table. 'Street cleaning' is reported in the middle of the table and 'Pavement maintenance' is 7<sup>th</sup> from the bottom. There are 41 categories of services in the survey (see appendix B).

<b>Satisfaction with services</b>	<b>2009 score</b>	<b>2008 score</b>	<b>2007 score</b>	<b>2006 score</b>	<b>2005 score</b>	<b>2004 score</b>	<b>2003 score</b>
Walking Routes, e.g. Great Glen Way	56	56	57	53	57	61	n/a
Street cleaning	30	25	16	39	42	6	0
Pavement maintenance	3	-7	-7	5	11	2	-16

Table 3.1.2: Satisfaction with Services

Satisfaction with 'Street cleaning' and 'Pavement maintenance' have improved in recent years. Results for 'Walking routes' shows little variation over recent years.

The 2009 survey included a new question on why respondents were dissatisfied with services. Pavements and litter/ street cleaning received some comments, generally as follows:

- poor maintenance of pavements (uneven and hazardous for users),
- poor cleanliness of pavements/ streets (dog fouling, litter),
- increased frequency of street cleaning required.

Although the annual performance survey provides an indication of public perceptions, it is not detailed enough to provide community priorities regarding the asset. An asset specific survey is required to assess the needs and reflect the views of the public. (IA F6)



Figure 3.1.1: Uneven Footway

### 3.2 Council Goals and Objectives

#### Amasan is Mion-amasan Comhairle

The council has published its objectives in The Corporate Plan; The Programme for the Highland Council 2009 – 2011, Strengthening the Highlands which is available on the [Council website](#)<sup>(RF5)</sup>.

The TECS Service Plan is a strategic document which sets out how the service will achieve delivery of its commitments in relation to the Programme of the council. Details of the objectives and actions are available in the Service Plan which can be accessed through the [Council website](#)<sup>(RF6)</sup>. Operational Plans support the Service Plan.

At the time of writing this version of the RAMP, the Local Transport Strategy for Highland (LTS) was in draft form. The LTS will set out the transport objectives for the area, impacting on a highland wide community to achieve sustainable integrated solutions.

### 3.3 Use

#### Cleachdadh

Traffic data is collated by TECS Integrated Transport's Transportation Team. Pedestrian counts are undertaken on a project specific basis, e.g. for introducing a new pedestrian crossing. (IA F7)

The Highland area has a significant tourist industry which has a seasonal impact on the network. For example, Fort William has a high summer pedestrian volume which decreases significantly in winter.

Annual and 'one off' events also have a significant impact within a short timeframe. Examples would include farmers markets and local street events.

Key transportation issues will be identified, when published, in the LTS and have therefore not been included in this version of the RAMP.

### 3.4 Safety Considerations

#### Beachdachaidhean Sàbhailteachd

The Highland Council is a member of the Highland Road Safety Working Group (HRSWG). Although the majority of accidents on roads are vehicle related, road safety also has an impact on footways. Pedestrians are vulnerable road users, especially children and engineering measures can be used to reduce risk.

The HRSWG has produced commitments and is currently working on setting local actions. When completed, the HRSWG Action Plan will be available on the council website.

Other initiatives the Council has to promote road safety include:-

- Go For It
- Parksmart
- Pass Plus Scheme
- Safer Routes to Schools

Details of these initiatives are available in the Road Safety section of the [Council website](#)<sup>(RF7)</sup>.

The inspection and repair regime provides a base level of safety for footway/path users. However, replacement is dependent on budgets and therefore the risk requires to be actively managed.

### 3.5 Utility Activity

#### Gnìomh Goireis

The co-ordination of works is undertaken by relevant RCW Area staff. Various members of staff are involved in the North of Scotland Roads Authorities and Utilities Committee (NoSRAUC) local RAUC(S) meetings which provides attendees with the opportunity to discuss and agree programmes of work. The meetings are attended by representatives of utility companies, the Council and the Trunk Road maintenance contractors.

Activity carried out on the network by statutory undertakers (utility companies) and private parties can have a significant impact. Anyone opening a footway/path has the responsibility to reinstate it to the required standard. However, even when that standard is met, it can be demonstrated that disturbing the foundation layers results in an increase in the number and severity of defects found. Therefore, reinstatements which are not undertaken to a satisfactory standard have a more detrimental effect on the life of a footway/path.

[Figure 3.5.1](#) gives the breakdown of start notices by some of the major utilities since the present system started recording them in 2006. Although this does not reflect the actual number of road openings, it is a good indication of the level of activity on the network. A breakdown of these figures relating to the footway and footpath network is not available.

**Actual Start Notices**

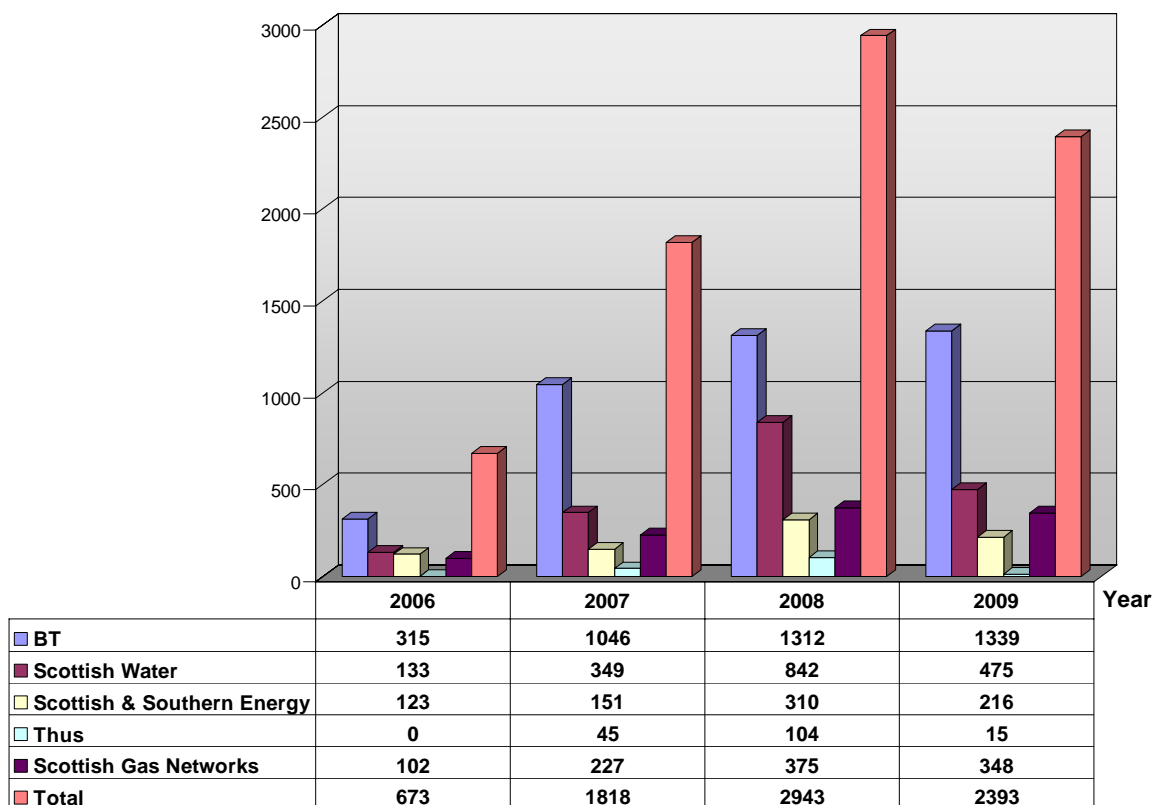


Figure 3.5.1: Statutory Undertaker Start Notices

### 3.6 3rd Party Claims

#### Tagraidhean Treas Pàrtaidh

The council receives third party claims relating to several aspects of the footway network. Claims are handled by the council's Insurance Section who keep electronic and paper records. When appropriate, incidents of claims are used as a factor in determining works priorities.

Table 3.6.1 shows a summary of the claims relating to the footway since 2006. Footpaths are not considered separately. It summarises the total number of claims, the number of claims refuted without paying compensation, the number of claims outstanding with the reserve cost for them set aside by the Insurance Section and the number of claims paid with the total amount.

Year	Total No.	No. refuted	No. Reserve	Reserve Amount	No. Paid	Total Paid
2006	24	20	1	£16,900	3	£15,600
2007	25	11	11	£78,600	3	£4,900
2008	16	9	6	£60,500	1	£500

Table 3.6.1: Third Party Claims – Footway

The cost of claims may show a reduced amount being paid out over the years. However, claims which are still outstanding and are being investigated may affect the figures shown.

### 3.7 Environmental Considerations

#### Beachdachaidhean Àrainneachd

When undertaking a project, environmental considerations are taken into account. These include, for example, regulations such as the Controlled Activities Regulations (CAR) and areas with special designations such as Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).

The Council works with other public bodies such as the Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH) to mitigate any environmental impacts from projects.

### 3.8 Network Availability Considerations

#### Beachdachaidhean Comas Lìonraidh

There are a number of streets designated as traffic sensitive within the Highland area. These are detailed in [Table 3.8.1](#) below.

STREET	START Easting Northing	END Easting Northing	RESTRICTION DURATION
High Street, Inverness	336317 951041	336399 950995	0800 - 0915 and 1630 - 1800 Monday - Saturday
Academy Street, Inverness	266491 845597	266887 845401	0800 - 1800 Monday - Saturday

<b>STREET</b>	<b>START Easting Northing</b>	<b>END Easting Northing</b>	<b>RESTRICTION DURATION</b>
A862 Station Road - Maryburgh Roundabout	255189 858158	254315 857004	0800 - 0915 and 1630 - 1800 Monday - Saturday
Sir Walter Scott Drive, Inverness	265757 841939	268744 844473	0800 - 0915 and 1630 - 1800 Monday - Saturday
Millburn Road Roundabout, Inverness	268145 845731	268162 845693	0800 - 0915 and 1630 - 1800 Monday - Saturday
King Brude Road, Inverness	264846 845205	265271 845921	0800 - 0915 Monday - Saturday
King Brude Road, Inverness	264846 845205	265271 845921	1630 - 1800 Monday - Saturday
Queensgate, Inverness	266567 845388	266672 845449	1800 - 0915 and 1630 - 1800 Monday - Saturday
Church Street, Inverness	266656 845221	266467 845565	0800 - 0915 Monday - Saturday
Church Street, Inverness	266656 845221	266467 845565	1630 - 1800 Monday - Saturday
View Place, Inverness	266630 844858	266673 844968	0800 - 0915 and 1630 - 1800 Monday - Saturday
Crown Road, Inverness	266959 845311	266856 845388	0800 - 0915 and 1630 - 1800 Monday - Saturday
Leachkin Road, Inverness	264868 845278	264782 845265	0800 - 0915 Monday - Saturday
Leachkin Road, Inverness	264868 845278	264782 845265	1630 - 1800 Monday - Saturday
Perth Road, Inverness	268164 845493	268136 845702	0800 - 0915 and 1630 - 1800 Monday - Saturday
Fraser Street, Inverness	266567 845388	266494 845352	0800 - 0915 Monday - Saturday
Fraser Street, Inverness	266567 845388	266494 845352	1630 - 1800 Monday - Saturday
Harbour Road, Inverness	266487 846171	268166 845732	0800 - 0915 and 1630 - 1800 Monday - Saturday
Margaret Street, Inverness	266617 845493	266678 845613	0800 - 0915 Monday - Saturday
Margaret Street, Inverness	266617 845493	266678 845613	1630 - 1800 Monday - Saturday
Inglis Street, Inverness	266781 845363	266810 845285	1100 - 1500 Monday - Friday
Inglis Street, Inverness	266781 845363	266810 845285	0900 - 1700 Saturday
Rose Street, Inverness	266657 845687	266700 845730	0800 - 0915 and 1630 - 1800 Monday - Saturday
Union Street, Inverness	266607 845312	266743 845392	0800 - 0915 and 1630 - 1800 Monday - Saturday
Millburn Road, Inverness	268129 845723	266888 845399	0800-0915 & 1630-1800 Monday - Saturday
Eastgate, Inverness	266920 845307	266810 845285	1100 - 1500 Monday - Friday
Eastgate, Inverness	266920 845307	266810 845285	0900 - 1700 Saturday
Shore Street, Inverness	266512 846220	266484 846173	0800 - 0915 and 1630 - 1800 Monday - Saturday
Grant Street, Inverness	266072 846061	266303 845883	0800 - 0915 and 1630 - 1800 Monday - Saturday

<b>STREET</b>	<b>START Easting Northing</b>	<b>END Easting Northing</b>	<b>RESTRICTION DURATION</b>
Longman Road - Rose Street Link, Inverness	266660 845733	266655 845686	0800 - 0915 and 1630 - 1800 Monday - Saturday
High Street, Inverness	266666 845213	266810 845285	1100 - 1500 Monday - Friday
High Street, Inverness	266666 845213	266810 845285	0900 - 1700 Saturday
Raigmore Hospital Access Road, Inverness	268490 844661	268483 844607	
A862 A834 Junction - Mineral Bridge, Dingwall	254780 858780	255306 859629	0800 - 0915 and 1630 - 1800
Bank Street, Inverness	266404 845489	266572 845170	0800 - 0915 Monday - Saturday
Bank Street, Inverness	266404 845489	266572 845170	1630 - 1800 Monday - Saturday
Bridge Street, Inverness	266666 845213	266572 845170	0800 - 1800 Monday - Saturday
Chapel Street, Inverness	266376 845783	266491 845597	0800 - 1800 Monday - Saturday
Friars Lane, Inverness	266404 845489	266472 845613	0800 - 1800 Monday - Saturday
Telford Street, Inverness	265927 845546	265446 845765	0800 - 0915 and 1630 - 1800 Monday - Saturday
Young Street, Inverness	266485 845145	266572 845170	0800 - 1800 Monday - Saturday
Young Street, Inverness	266415 845119	266485 845145	0800 - 0915 and 1630 - 1800 Monday - Saturday
Castle Street, Inverness	266673 844968	266682 845222	0800 - 0915 Monday - Saturday
Castle Street, Inverness	266673 844968	266682 845222	1630 - 1800 Monday - Saturday
Culcabock Road, Inverness	267665 844671	267711 844693	0800 - 0915 and 1630 - 1800 Monday - Saturday
Culcabock Road, Inverness	268176 844684	268257 844677	0800 - 0915 and 1630 - 1800 Monday - Saturday
Culduthel Road, Inverness	266719 844643	266673 844968	0800 - 0915 Monday - Saturday
Culduthel Road, Inverness	266720 844643	266673 844968	1630 - 1800 Monday - Saturday
Damfield Road, Inverness	267617 844640	267666 844671	0800 - 0915 Monday - Saturday
Damfield Road, Inverness	267617 844639	267666 844671	1630 - 1800 Monday - Saturday
Tomnahurich Street, Inverness	266338 845062	266415 845119	0800 - 0915 and 1630 - 1800 Monday - Saturday
High Street, Fort William	210198 773914	210298 774006	1100 - 1500 Monday - Friday
High Street, Fort William	210198 773913	210301 774007	1000 - 1700 Saturday
Greenhill Street, Dingwall	255076 858557	255211 858406	0800 - 0915 and 1630 - 1800 Monday - Saturday
High Street, Dingwall	255019 858748	254781 858781	11.00 to 15.00 Monday to Saturday

STREET	START Easting Northing	END Easting Northing	RESTRICTION DURATION
Station Road, Dingwall	255234 858445	255199 858218	0800 - 0915 and 1630 - 1800 Monday - Saturday
A862 A834 Junction - Greenhill Street, Dingwall	254780 858780	255076 858557	0800 - 0915 and 1630 - 1800 Monday - Saturday

Table 3.8.1: Traffic Sensitive Streets

### 3.9 Amenity Value Considerations

#### Beachdachaidhean Luach Goireis

The Council does not have a formal policy which dictates the various materials or standards which should be used in different amenity areas. There is a guidance document for new developments being prepared which will set out design standards for new developments. Once complete, the document will be available on the Council website.

Generally, pedestrianised areas are regarded as having a higher amenity value and therefore materials which are more visually acceptable are used. These are not consistent across the Highland area as individual sites require to be considered on their own merits. Higher specifications of materials have an impact on the cost



Figure 3.9.1: High Amenity Paving

of maintaining amenity areas and this is not formally recognised before projects are approved. (IA F8)

## 4.0 Management Practices

### Cleachdaidhean Stiùiridh

#### 4.1 Policies

##### Poileasaidhean

The management of the asset is governed by the following Council documents and policies:

- Single Outcome Agreement
- The Corporate Plan; The Programme for the Highland Council 2009 – 2011, Strengthening the Highlands
- Local Transport Strategy for the Highlands (under review for 2010)
- TECS Service Plan
- Roads and Community Works Operational Plan (under review for 2010)
- Roads and Transport Guidelines for New Developments (currently under revision)
- Winter Maintenance policy
- Footway and Footpath Network Hierarchy and Inspections policy (adopted January 2010)

All policies will be reviewed and updated as necessary throughout the development of the RAMP. ([IA F9](#))

## 4.2 Inspection Regime

### Rèim Sgrùdaidh

#### 4.2.1. Safety Inspections

##### Sgrùdaidhean Sàbhailteachd

Safety inspections are carried out to identify maintenance issues on the network as well as complying with our duty of care in respect of public safety. The table below details the minimum frequency with which these inspections are undertaken. The frequency of inspection is related to the footway and footpath hierarchy shown in [Table 4.2.1](#).

Network Category	Hierarchy Description	Frequency
F1	Prestige Walking Zone	1 month
F2	Primary Walking Route	1 month
F3	Secondary Walking Route	3 months
F4	Link and Local Access Footways/paths	1 year

Table 4.2.1: Safety Inspection Frequency

The inspection regime is based upon the recommendations of the Code of Practice for Highway Management<sup>(RF3)</sup>. Variations from the ACoP have been made to reflect local requirements. Footways/paths require to be categorised according to the revised hierarchy and inspection routes will be revised thereafter as necessary. ([IA F4](#))

#### 4.2.2. Service Inspections

##### Sgrùdaidhean Seirbheis

Service inspections are designed to identify deficiencies that compromise the reliability, quality, comfort and ease of use of the network. Although not intended for identifying defects that could compromise user safety, any such defects observed during service inspections will be recorded and dealt with in the same way as safety inspections. Service inspections are undertaken as necessary with available resources. They include New Roads and Street Works Act (NRSWA) inspections which assess reinstatements of footway/path openings, e.g. by a utility company. A formal, structured service

inspection on the footway/path is not currently undertaken. However, detailed inspections of the footway/path are carried out as necessary to assist with the prioritisation of works. ([IA F10](#))

#### 4.2.3. Reactive Inspections

##### Sgrùdaidhean Ais-ghnìomhach

Reactive inspections are undertaken when a potential defect or issue is reported by the public or from another source, e.g. the police. Defects found during reactive inspections are recorded in the same way as those from safety inspections. Defects are categorised and repairs undertaken within the appropriate timescales. The public is able to notify the Council of footway/path defects by the following means:

- Website
- E-mail
- Phone (local office, service centre and emergency contact number for out of hours service)
- Personal contact at Council office or service point
- Via their local councillor

#### 4.2.4. Road Inspectors

##### Luchd-sgrùdaidh Rathaid

Inspections are undertaken by road inspectors or an appropriate officer as necessary. The inspectors are formally trained, gaining the Roads and Highways Inspectors Award SVQ Level F. They also receive supplementary training through the Council and have extensive practical experience as road inspections are only part of their duties.

#### 4.2.5. Inspection Records

##### Clàraidhean Sgrùdaidh

Inspections are recorded in two ways, electronically and on paper. The asset management database is used as the electronic method to record inspections and any defects found with the resulting action if appropriate. Where an office has not yet moved to electronic recording, paper copies holding relevant information are kept ([IA F11](#)). Inspection records provide a valuable resource

in enabling maintenance works to be planned. They also form the basis of the council defence against 3rd party liability claims.

#### **4.3 Condition Assessment**

##### **Measadh Staid**

Currently, there is no formal process for undertaking condition assessments of footways/paths. A common method to assess condition is being developed as part of the SCOTS project. [\(IA F1\)](#)

#### **4.4 Construction/Asset Acquisition**

##### **Togail/Buannachd So-mhaoin**

New assets are typically acquired from either adoption or from taking over improvement works completed by contractors on behalf of the Council. Typically, adoption processes will be well detailed. However, similar formality does not always exist in relation to new improvement schemes. Footways/paths are rarely adopted on their own and generally form part of a road scheme.

A critical question may be to document how the long term costs of new works are assessed. This is often not an explicit part of the design process and can lead to the addition of new assets that have overly onerous ongoing maintenance requirements. [\(IA F8\)](#)

As part of the handover of the asset, all known information is supplied to the Council for analysing and storing. As built information is supplied but needs to be in a compatible electronic format to allow the efficient transfer of information into the asset management database. New assets to be adopted are inspected to confirm they are at an acceptable standard of completion, not to assess the long term costs. The above information allows the new asset to be linked with those with similar attributes, which leads to an allocated maintenance strategy and a corresponding life cycle plan for the remainder of its life. [\(IA F12\)](#)

#### 4.5 Routine Maintenance

##### Cumail Suas Cunbhalach

Defects recorded are categorised with the responses as follows.

Category	Description	Response
1	Immediate / imminent hazard or risk of short term structural deterioration.	Immediate action to protect public if necessary. At least temporary repair within 24 hours <sup>(1)</sup> .
2H	High level of hazard or risk.	7 days
2M	Medium level of hazard or risk.	21 days
2L	Low level of hazard or risk.	42 days
3	Negligible impact	Annual planned work as resources permit.

Table 4.5.1: Defect Categories

There are currently no target compliance rates for these responses as they were reviewed in 2009/2010. It is expected that a target response will be introduced in 2010 as all inspectors move towards electronic recording of defects, thereby enabling compliance to be measured. (IA F13)

#### 4.6 Operational/ Cyclic maintenance

##### Cumail Suas Obrachail/Cearcallach

No cyclic maintenance activities are carried out on this asset except for weed killing, drain cleaning and street cleaning.

Weed killing is undertaken on kerb lines and blocked areas as necessary. Cleaning of drainage channels located in the footway are undertaken as necessary and are most likely be carried out in conjunction with carriageway drain cleaning.

#### 4.7 Planned Maintenance: Renewals

##### Cumail Suas Dealbhte: Ùrachaidhean

Planned maintenance activities generally comprise asset renewals. It is this area that often becomes the focus of long term asset planning.

Preventative maintenance is defined as maintenance that is economically preventative i.e. the application of the preventative measure prevents large future costs having to be incurred to achieve the same outcome. For example, slurry sealing is used to prevent water ingress to the layers below the surface of a footway/path. It is important to make this distinction as most maintenance treatments can be considered to be preventative from an engineering perspective as they may prevent the defect that is being repaired from growing. To determine if an activity is truly economically preventative requires the application of lifecycle cost analysis (LCA). Currently, we do not have the data required to undertake lifecycle cost analyses of assets. (IA F14)

At a local level reports from inspectors, defect levels, accident reports and engineering judgement are used to identify sites and prioritise schemes. This is not based on a set level of criteria but engineering experience is used to assess all of the works required to the asset. Programmes are produced annually by each Area. Scheme prioritisation is currently undertaken at a local level within available budgets. There is no process in place to prioritise schemes across the whole Highland area.

Information and systems require to be developed to establish levels of criteria which would be used locally as a prioritisation tool. (IA F15)

## 4.8 Disposal

### Cur An Dàrna Taobh

The disposal of any footway/path asset is relatively rare. The main reason for a section of footway/path to be considered for disposal is that the associated road alignment has been improved, thereby making remaining sections of the previous alignment surplus to requirements. Some sections of a road may require to be left as accesses to properties but others will be transferred, if feasible, back to the landowner. The reduction in pedestrian use of a section of footway/path would lead to a change in its maintenance strategy.

Improvements which result in redundant sections of a road or footpath being left, require a stopping up order and deletion from the “list of public roads”.

This removes the future maintenance responsibility for the associated footway or footpath from the Council. A stopping up order returns the relevant section to the landowner. This can have maintenance liability consequences for the landowner. In some instances, redundant sections are dug out and the land is returned to its original state.

## 5.0 Investment

### Airgead an Seilbh

#### 5.1 Historical Investment

##### Airgead an Seilbh gu h-Eachdraidheil

The actual historical investment in £000s for the last 5 years is detailed below.

	2004/05	2005/06	2006/07	2007/08	2008/09
Revenue	£000s	£000s	£000s	£000s	£000s
Footways	372.8	361.5	275.5	161.7	232.9

Table 5.1.1: Historical Investment

Safety related reactive maintenance is not specifically separated from the financial budget headings used. It is included in the figures above.

Detailed information relating to Capital schemes is unavailable.

#### 5.2 Output from Investment

##### Toradh bho Airgead an Seilbh

Detailed information relating to the output from investment is not currently available (IA F16). However, parts of the investment levels above have been able to purchase the following outputs which include some new footway construction lengths under 'Reconstruction':

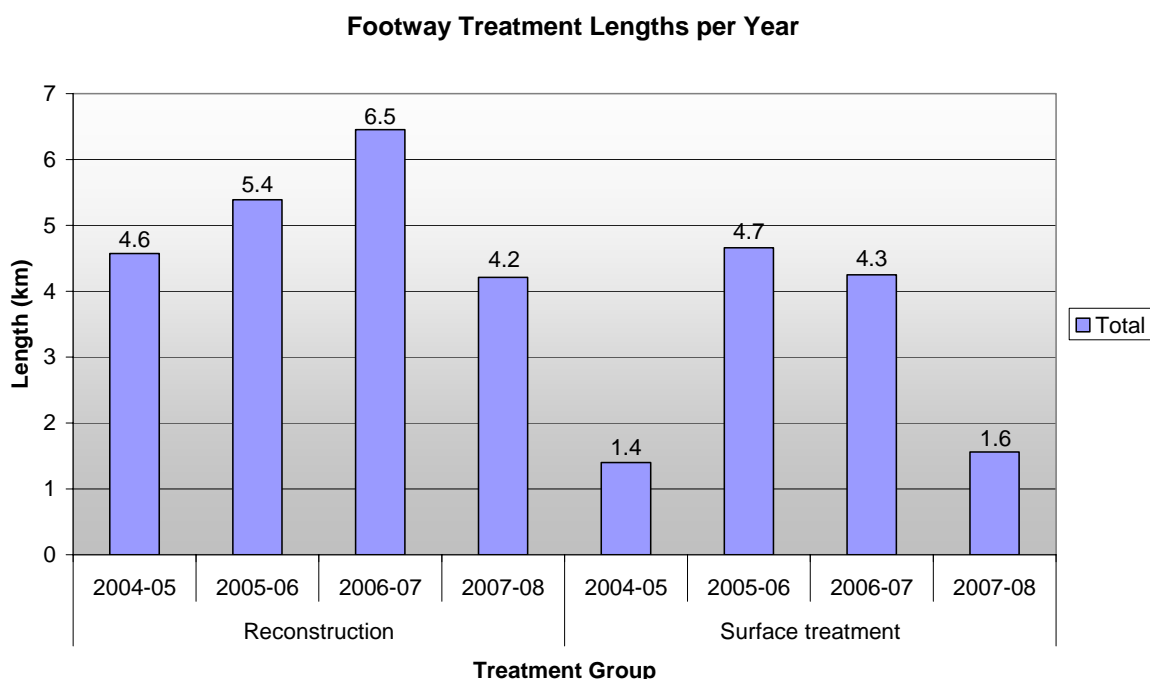


Figure 5.2.1: Treatment Lengths per Year

### 5.3 Forecasting Financial Needs

#### Ro-innse Feuman Ionmhasail

Currently, no formal process for forecasting financial needs exists (IA F17). Projections would provide information regarding the long term budgetary requirements for the footway/path asset.

### 5.4 Valuation

#### Luachadh

An initial valuation for the Gross Replacement Cost (GRC) of the footway asset has been completed. The valuation is based on estimations and will be refined as data collection progresses. The GRC for the footpath asset has not been estimated.

The GRC for the footway asset has been calculated at approximately £179,400,000 (£179.4 million). This is based on the actual road lengths multiplied by a factor, then using unit replacement costs calculated from historic rates. The valuation summary is contained in appendix E.

The valuation will be developed as data is collated. This will result in the eventual production of the Depreciated Replacement Cost (DRC) and Annualised Depreciation cost (ADC). [\(IA F18\)](#)

## 6.0 Forward Works Programme

### Prògram Obraichean Adhartach

#### 6.1 Existing Programmes

##### Prògraman Làithreach

Currently, schemes are prioritised at a local level as described in [section 4.7](#). Resurfacing, replacement and minor works programmes are compiled annually and presented to Ward Business Meetings (WBM) for ratification. Other types of treatment are also programmed annually and circulated for internal use. Works programmes are dependent on budgets rather than necessity.

#### 6.2 Programme Co-ordination

##### Co-òrdanachadh Prògraim

There is currently no formal process to co-ordinate works programmes within the council although it is undertaken on an ad hoc basis between elements of the Service. Works are co-ordinated with external organisations on a more local level through the local NoSRAUC meetings as described in [section 3.5](#) above. Works require to be notified through the Scottish Road Works Register (SRWR) which facilitates collaborative working to ensure joint road works are undertaken where possible.

An improvement action has been identified to investigate the creation of a co-ordinated programme of works which incorporates all of the individual asset groups. ([IA F19](#))

#### 6.3 Option Appraisal

##### Measadh Roghainnean

There are no formal documented option appraisal processes. Alternatives are currently assessed by individuals using engineering judgement to determine treatment types and levels. ([IA F2](#))

At the time of writing this document, the Council was currently reviewing the Capital Project Programme and undertaking option appraisal as part of the

process. The results were not yet available for inclusion in this version of the RAMP.



Figure 6.3.1: Typical Residential Footways

## 7.0 Risk

### Cunnart

### 7.1 Risk identification

#### Comharrachadh Cunnairt

There are various forms of risk from strategic corporate risks to specific asset ones. Corporate risks are identified at the top management level and specific service related risks can be identified either at management or officer level. This ensures that all potential impacts from every level are identified and addressed.

Individual asset risks have not yet been defined and a risk register requires to be developed. ([IA F20](#))

### 7.2 Risk Evaluation

#### Measadh Cunnairt

Corporate risks are evaluated using the STORM© methodology discussed in section 8 of the main RAMP document. The evaluation method of individual asset risks requires to be agreed by management. ([IA F21](#))

### 7.3 Risk Control

#### Smachd Cunnairt

To manage risks, there are three main options which are used. These are to:-

- transfer risk – through insurance/ outsourcing/ partnerships
- control risk – mitigate through appropriate measures
- accept risk – understand and live with risk

When controls are put in place against risks, the risks will be reassessed and the risk register will be updated with any new information. This will form part of the review process.

## 7.4 Review and Reporting

### Ath-bhreithneachadh is Aithris

An improvement action has been identified to introduce a formal process to review the developing roads risk register. ([IA F22](#))

Current corporate risks are reviewed at the TECS Quarterly Performance Review and reported annually to Members.

## 7.5 Risk register

### Clàr Cunnairt

Individual asset risks registers have yet to be developed ([IA F20](#)). However, the risk register for the service is contained within the TECS Service Plan, May 2009 which is available on the [Council website](#)<sup>(RF6)</sup>. The risk register is also reproduced in section 8.7 of the main RAMP document.

## 8.0 Works Delivery and Procurement

### Libhrigeadh is Solar Obraichean

Reactive maintenance is undertaken internally by the Roads and Community Works Direct Labour Organisation (DLO). This is the internal workforce used to carry out tasks such as patching and drainage maintenance. Sub-contractors may be used to undertake reactive maintenance where budgets allow and the internal workforce is unavailable. Planned works can be either sub-contracted or undertaken internally.

Capital or major works are tendered in line with the Council's Contract Standing Orders (CSO). The Highland Council Procurement Manual provides guidance on the relevant procedures and legislation. European regulations may also apply to the tendering of works or the provision of services. Tenders are evaluated on quality and cost with the majority of the weighting against the former. This ensures that value for money is obtained. The type of contract which is used also has an effect on the cost of works as the proportion of risk to be managed is taken into account by tenderers.

As examples, tenders to procure works across the Highland area include:-

- Road Markings and Studding
- Quarry Products (re-surfacing)
- Footways and Kerbing
- Individual capital projects, e.g. footway renewal



Figure 7.5.1: Completed Project

## **9.0 Performance Measurement**

### **Tomhas Coileanaidh**

### **9.1 Performance Measurement**

#### **Tomhas Coileanaidh**

Performance is measured nationally by Statutory Performance Indicators (SPIs).

### **9.2 Performance Indicators: National**

#### **Comharran Coileanaidh: Nàiseanta**

There are currently no SPIs applicable to the footway or footpath network.

### **9.3 Performance Indicators: Local**

#### **Comharran Coileanaidh: Ionadail**

Current internal performance indicators relate to the Programme of the Highland Council and are general statements which do not link directly to the management of the footway/path network. An improvement action has been identified to develop internal indicators as part of the SCOTS project. ([IA F23](#))

### **9.4 Performance Reporting**

#### **Aithris air Coileanadh**

Performance is reported at the TECS Quarterly Performance meetings and the SPIs are also reported annually to Audit Scotland. All council performance indicators are published publicly.

## 10.0 Future strategies

### Ro-innleachdan Ama Ri Teachd

The development of lifecycle planning should enable the evolution of improved strategies for the management of the asset. Focusing on achieving a better long term outcome may identify a need to invest in different treatments or in different parts of the asset.

It is the intention to further develop lifecycle plans and link the budget process to levels of service. (IA F24)



Figure 9.4.1: Footway Improvement

## 11.0 Service Improvement Actions

### Gnìomhan Leasachadh Seirbheis

The following improvement actions were identified through development of the carriageways lifecycle plan.

IA Number	Action	Proposed Implementation Date	Responsibility
IA F1	Develop a method for condition assessment as part of the SCOTS project.	TBC	TBC
IA F2	Formalise scheme optional appraisal.	TBC	TBC
IA F3	Develop an asset information strategy to define the information required including the method for collecting and updating the asset register.	TBC	TBC
IA F4	Apply hierarchy to assets, record information in asset management database and investigate resources required to comply with inspection regime.	TBC	TBC
IA F5	Develop and implement a programme for data collection and update through the asset information strategy.	TBC	TBC
IA F6	Develop an asset specific survey.	TBC	TBC
IA F7	Identify data already collected for a sample of sites across Highland.	TBC	TBC
IA F8	Develop a procedure to assess the ongoing maintenance liability of new assets and ensure these figures are included within the design calculations or added to the service plan.	TBC	TBC
IA F9	Review and update related policies as necessary.	TBC	TBC

<b>IA Number</b>	<b>Action</b>	<b>Proposed Implementation Date</b>	<b>Responsibility</b>
IA F10	Formalise method of recording inspections through asset information strategy.	TBC	TBC
IA F11	Continue supporting remaining offices to move towards using electronic inspection method.	TBC	TBC
IA F12	Identify procedures to incorporate new assets into management systems.	TBC	TBC
IA F13	Develop and implement target response rates for defect rectification.	TBC	TBC
IA F14	Work towards producing lifecycle cost analysis for assets.	TBC	TBC
IA F15	Establish levels of criteria to be used as a prioritisation tool.	TBC	TBC
IA F16	Establish process to record outputs from investment.	TBC	TBC
IA F17	Forecast long term financial requirements for maintenance.	TBC	TBC
IA F18	Complete valuation as data improves.	TBC	TBC
IA F19	Investigate creating a co-ordinated programme of works which incorporates all of the individual asset groups.	TBC	TBC
IA F20	Develop an asset specific risk register.	TBC	TBC
IA F21	Agree risk evaluation method.	TBC	TBC
IA F22	Define formal process to review asset specific risks.	TBC	TBC
IA F23	Develop local performance indicators as part of the SCOTS project.	TBC	TBC
IA F24	Link the budget process to levels of service.	TBC	TBC

Table 11.1: Footway & Footpath Improvement Actions