



Road Asset Management Plan 2
Argyll and Bute Council
April 2016- 19

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Document Information

Title	Argyll and Bute Council Road Asset Management Plan
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Description	This document aligns with SCOTS recommendations.

Document History

Version	Status	Date	Author	Changes from Previous Version
1.0	Draft	April 2016	J.MacCormick	Not applicable

Document Control

Version	Status	Date	Authorised for Issue by Departmental Management Team
1.0	Draft	April 2016	

Foreword

This plan sets out the council's plans for the management of the road asset over the next 3 years and beyond. It has been produced in accordance with national guidance and recommended good practices.

It is widely recognised that the application of modern asset management practices can enable improved value for money. In these challenging times it is essential that the council embraces these methods and strives to ensure that every penny spent is invested as wisely as possible. This plan forms an important part of the council's commitment to apply good asset management practices to maintain its road asset.

Connectivity is essential for economic growth and intensifies the demand that modern society places upon our road assets to reliably deliver vital goods and services to all our communities. It is therefore essential that an appropriate level of investment is put into the road network to sustain it in a condition that meets user needs and quality of life expectations. Safe, well maintained transport links are vital to the economic wellbeing of Argyll. They play a significant part in everyday life and the prosperity of our communities.

Previous harsh winters have shown that our roads are susceptible to damage when bad weather occurs and steps need to be taken to ensure that sufficient preventative maintenance is undertaken to improve the resilience of the road network and enhance the user experience whilst travelling throughout Argyll.

Increasing traffic volumes, stricter environmental constraints and a more aggressive climate means that ensuring the sustainability of our existing road infrastructure has become a significant challenge. Today's road managers have the complex task of maintaining, preserving and upgrading road assets to satisfy existing and future transportation needs within ever tighter budgets. It therefore becomes necessary to develop a proactive asset management approach that takes a more long term view of infrastructure maintenance requirements. Adopting this approach will allow improved evaluation of asset maintenance needs and the ability to better predict outcomes from a range of investment options. It will provide valuable information on what can be expected to be delivered for available monies and provide relevant decision makers with more informed choices on where available investment can contribute most to achieving corporate goals and objectives.

Document Control & Council Approval

Version Number/Date	Approved by Council
V 1.0	Approved by Council Committee (Environment, Development and Infrastructure) – date to be confirmed.
Next Update Due	Annual review of Plan to reflect changes in budgets or service standards

Responsibility for the Plan

The responsibility for the delivery of and updating of this plan are shown below

Council Officer	Responsible for
Head of Service	Review and update of RAMP

1. Introduction

Overview

The Road Asset Management Plan (RAMP) records the council's plans for the maintenance of the road asset for the period 2016 - 2019. The "road asset" comprises of Carriageways, Footways, Structures, Street lighting, Traffic Management Systems and Street furniture.

The RAMP will record the service standards that the council is aiming to deliver for each asset group. It will also detail the various maintenance strategies being adopted to achieve these standards along with associated budgets allocated to enable the delivery of desired outcomes and will also identify any risks that may prevent the plan being realised.

The RAMP will be produced as part of a suite of documents as recommended by The Society of Chief Officers of Transport Scotland (SCOTS). These documents which are currently being considered for development include;

- **Asset Management Policy Statement** – Formally confirms the council's commitment to applying asset management systems to manage road assets. *Status – Draft completed.*
- **Data Management Plan** – Records how the council manages relevant asset data. *Status – Being developed.*
- **Asset Valuation Report** – Details the results of the latest asset valuation to comply with CIPFA Transport Asset Code and Whole of Government Accounts (WGA). *Status – Developed and in use.*
- **Road Maintenance Manual** – Records the methods used and how and when the authority inspects, assesses condition, categorises and prioritises repairs, procures and manages works, treatment selection, records maintenance works data etc. *Status – under development for consideration at August EDI Committee.*
- **Annual Status and Options Report** – Summarises the status of each asset group in terms of its condition, compliance with meeting agreed standards and provides performance and other relevant data to inform the decision making process. *Status – Developed and in use.*
- **Annual Works Programme** – A programme of planned activities for Capital and Revenue Budgets. *Status – Capital programme developed, Revenue to be developed.*

Purpose

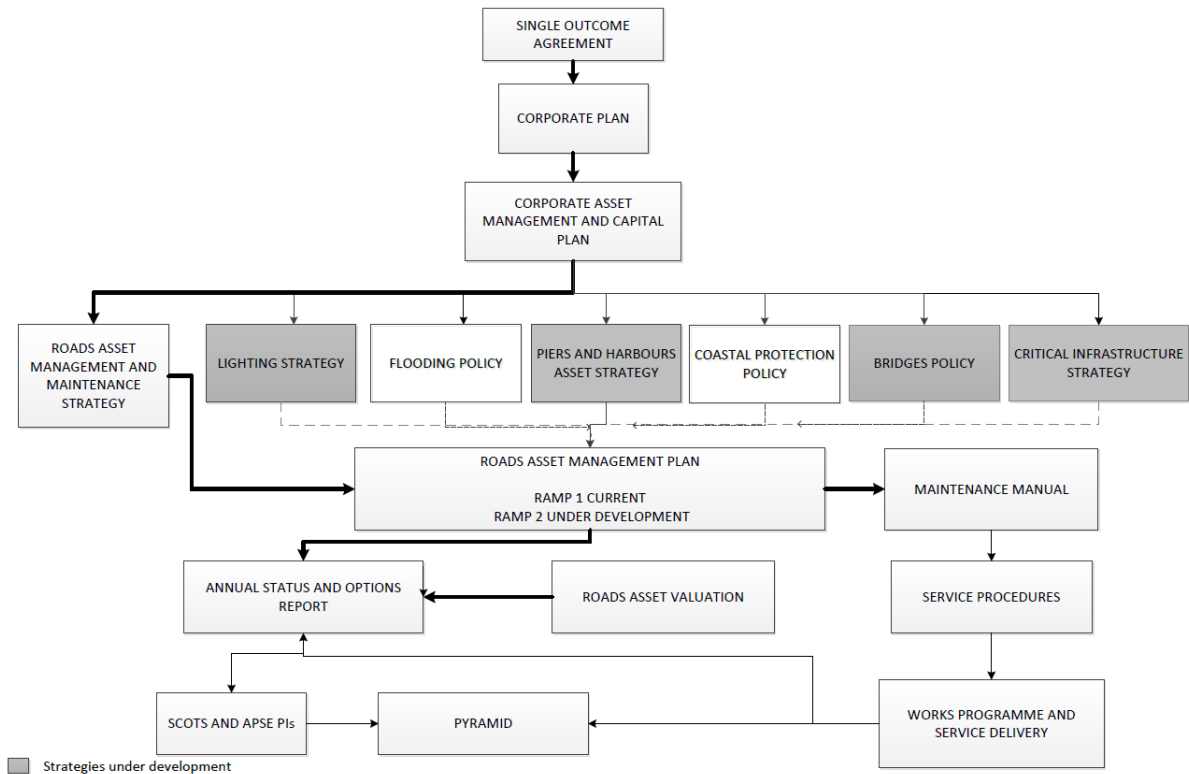
The purpose of the RAMP is to

- Formalise strategies for investment in each road asset group.
- Define service standards customers can expect to be delivered over the plan term.
- Tabulate the budgets allocated to each asset group to achieve the agreed service standards.

The plan aims to improve how the road asset is managed to enable better value and prudent stewardship of the road asset to be demonstrated.

RAMP and Other Plans

The RAMP relates to other council plans as illustrated below:



Targets and strategies contained in the RAMP are used to develop annual works programmes once the council's annual budget for roads has been agreed.

2. Road Assets

Road Assets

The council's road assets covered by this plan are:

- Carriageways 2282 km
- Footways 420 km (estimated)
- Structures 895 Road Bridges
- Street Lighting 13937 Lighting Columns
- Traffic Management Systems 11 Signalised Junctions and Pedestrian Crossings.

- Street Furniture Safety fences, bollards, Traffic Signs, Grit bins etc (inventory to be established)

Assets Not Covered

The following infrastructure is not included in this RAMP:

- Roads, Footways, Footpaths and Car Parks not maintained by the Council e.g. Trunk roads, schools and parks.
- Privately owned bridges carrying public roads e.g. Network Rail, British Waterways.
- Roads, footways or cycleways that are not adopted under the Roads (Scotland) Act 1984 as Public Roads including over 80 km of private road over which there is a public right of passage.
- Drainage attenuation ponds or water related infrastructure that does not form part of the adopted public road network.
- Car Parks
- Land
- Public Rights of Way/Open spaces
- Street furniture belonging to Public Utility Companies
- Public CCTV systems

Inventory Data

This plan is based upon current available inventory data for road assets, i.e. carriageway, footway, structures, street lighting, traffic signals and street furniture. For some minor road assets inventory data is not currently held, however, an attempt has been made to incorporate these assets within this plan using locally derived estimates.

Improvements to inventory data will be updated on a continual basis. Generally inventory records will be updated on completion of any improvement maintenance activities.

3. Customer Expectations

Information relating to road user opinion would be very useful to help inform strategies and future investment plans such that they can be directed towards addressing, where possible, the issues raised.

The council operates a customer contact centre for the reporting of road faults and there is perhaps scope to capture more information from these reports that will assist gauging customer opinion and satisfaction with the services being provided or where investment preferences may be prioritised.

Customer satisfaction surveys provide a useful tool to obtain data that can assist the decision making process and the council should explore the possibilities of using them. There may be some merit in developing a suitable web based satisfaction survey tool specific to roads within the council website.

4. Demands

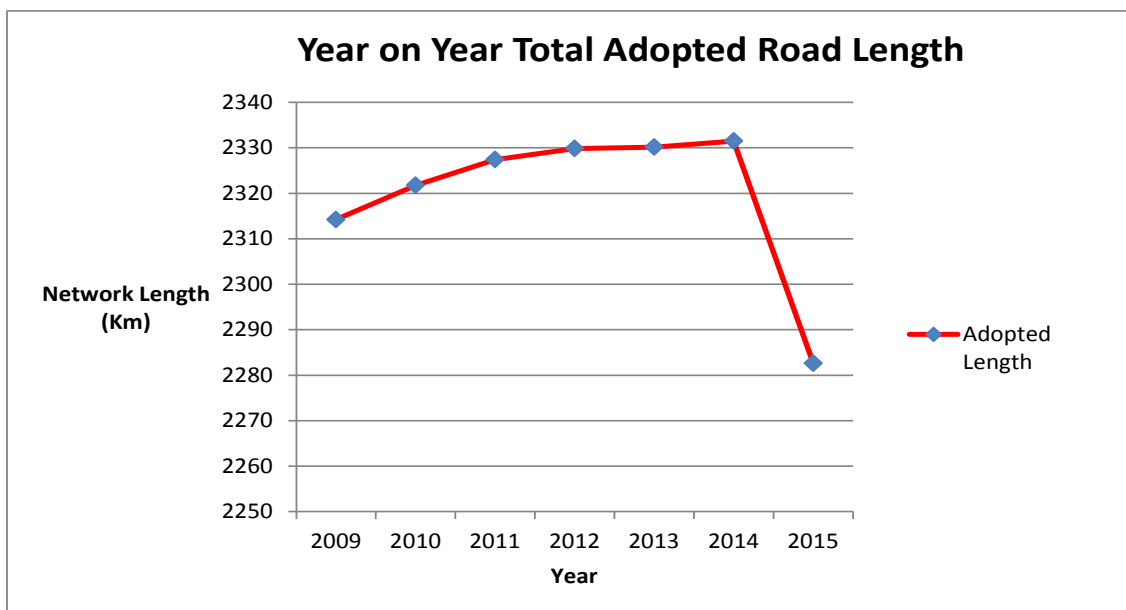
Asset Growth

The length of public adopted carriageway maintained by the council generally increases each year mainly as a result of urban developments. The exception recently being a result of the A83 KenneCraig to Campbeltown (52km) being trunked. The table below details the change in asset length between 2009–2015.

Table 3.2 Asset Growth

THE ASSET	Route Type		Growth Statistics (2009-15)		2009		2015	
	Environment	Class	Length (Km)	% Percentage	length (Km)	% of network	length (Km)	% of network
	RURAL	A		-53.35	-2.31%	476.251	20.63%	422.904
B			-0.55	-0.02%	570.503	24.71%	569.956	24.69%
C			1.21	0.05%	391.341	16.95%	392.548	17.00%
U			2.34	0.10%	453.956	19.66%	456.3	19.76%
Total			-50.34	-2.18%	1892.051	81.95%	1841.717	79.77%
URBAN	A		1.63	0.07%	80.759	3.50%	82.386	3.57%
	B		2.75	0.12%	40.799	1.77%	43.552	1.89%
	C		2.05	0.09%	39.663	1.72%	41.717	1.81%
	U		12.29	0.53%	260.977	11.30%	273.264	11.84%
	Total		18.72	0.81%	422.198	18.29%	440.919	19.10%
TOTAL NETWORK (KM)			-31.62	-1.37%	2314.25		2282.64	

The Chart below illustrates the change in public adopted road length over the period 2009-2015



New assets create the need for maintenance, management and associated funding in future years as these additional assets age. This is particularly relevant to street lighting as energy costs increase immediately exacerbating the effect of rising energy prices.

Traffic Growth and Composition

Traffic count data shows that traffic volumes in Argyll and Bute are relatively low. Data on Large Goods Vehicles (LGV) is limited but the available figures suggest significant growth between 2005 and 2010. New traffic counters have been installed to obtain more detailed data on numbers and composition of vehicles on the network. The numbers of LGVs are low compared to some other areas but the impact on lightly constructed roads can be large.

The upsurge in demand for renewable energy has increased the level of activity on some minor routes, particularly during the construction phase of projects which can lead to significant damage and increased deterioration of the network within that locus.

Timber traffic also places greater demands on some routes although this is well managed through good liaison with the Argyll Timber Transport Group (ATTG) which has culminated in the development of designated timber routes and various timber management plans to minimise any potential damage to the public road network. Working together with this group has also enabled a number of road improvements to be carried out throughout Argyll.

Environmental Conditions

Pressure is also being placed upon the asset as a result of environmental conditions including:

Longer periods of inclement weather increase the risk of localised flooding and landslide which can cause significant damage to road infrastructure.

Harsh winters: previous unseasonably harsh winters have caused significant damage to road surfaces in the form of a mass of defects resulting from freeze/thaw action.

Flooding: In 2012, there was one unpredictable and very localised occasion that destroyed three bridges and closed parts of the road network for several days.

These pressures quickly expose any weakness in our road network and can cause substantial damage to valuable assets which increases demand for prompt attention to repair such damage and incurs great expense. It is therefore very important that sufficient priority is given to undertaking adequate preventative maintenance measures to improve the resilience of our network so as to minimise the effect of such severe weather events on our communities, businesses and budgets.

5. Asset Management Practice

The pressure on public finance has never been greater and it is therefore very important that we make the best use of available monies to deliver better value services to our communities. Argyll and Bute Council has been participating in the Society of Chief Transportation Officers Scotland (SCOTS) asset management project which aims to develop in partnership with other Scottish and Welsh authorities a range of recommended practices for authorities to use that will enable them to make better use of available resources to deliver and demonstrate best value services.

Knowing what you've got? What condition it is in? What does it cost to maintain? These are three key elements needed to enable good asset management to be implemented and benefits realised.

Asset Inventory

Collection of inventory data is vital to establish knowledge of the extent of each asset to be maintained. The council has invested in a pavement management system called WDM which provides a facility to record inventory and produce reports for analysis. It is crucial that processes are put in place to capture inventory data as part of routine every day activities so that the WDM database is kept up to date and current.


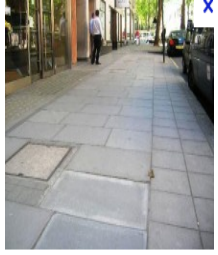







Reliable inventory data offers valuable information on which to establish necessary programmes of maintenance, budget and resource requirements as well as providing important information to relevant decision makers on future investment needs.

Asset Condition

At present asset condition is recorded for only a very limited number of assets namely carriageway surface condition, bridge condition and street lighting to satisfy national performance reporting requirements. However the road asset comprises many different elements and most of these do not have condition regularly assessed other than through faults being reported via the contact centre or as part of the normal safety inspection regime .

Collecting condition data would facilitate the ability to prioritise investment and align it more on asset needs rather than historical spend. This in turn would provide strong supporting data to substantiate business case development for future investment and allow available monies to be prioritised towards those areas that would contribute the most to meeting user needs and achieving the council corporate goals and objectives.

The SCOTS asset management project has developed a simple condition index that can be used to provide a visual assessment of condition on any asset. The index uses a four level assessment technique that is designed to be used by existing staff with minimal training. The project has developed a number of these indexes with associated training manuals for use by authorities. A sample of an illustrative footway index is provided below;

Illustrative Footway Condition Index			
Condition Level	Description	Examples	Comment
1	As New	Brand New footway, recently resurfaced or good sound condition with no defects.	 
2	Aesthetically Impaired	Sound footways with patching, Modular footways with sound bituminous patches. Modular footways with elements of different colour/age/material. Faded bituminous materials	 
3	Functionally Impaired	Cracked but level flags/blocks. Minor surface deterioration/fretting/ cracking	  
4	Structurally Unsound	Cracked uneven slabs Major fretting and potholing Poor shape , potential trip hazards etc	 

Implementing the use of such indexes by existing staff would over time provide valuable information on asset maintenance needs and treatment options to be considered for future investment.

Maintenance Cost

Another vital aspect of good asset management is the ability to understand accurately the cost of maintaining an asset in such a condition as will allow it to perform its intended function. Such information can only be obtained by ensuring adequate attention is given to recording accurately the costs against the asset in terms of the physical quantities and type of work undertaken. Capturing this data facilitates detailed drill down of maintenance costs for each asset and can quickly identify areas of concern so that prompt action can be taken to address any issues found and therefore keep things on track. Possessing accurate and reliable data on maintenance costs is an essential tool for managers to make more informed choices in the decision making process particularly within the current financial climate.

All maintenance activities will be categorised in line with the need for local authorities to meet with HM Treasury requirements for Whole of Government Account (WGA).

6. Service Standards

A fundamental part of the road asset management plan is establishing appropriate service standards for core maintenance activities. This will be the levels of service that our communities can expect to be delivered over the plan period. The key difference to previous plan being that compliance in delivering the agreed service standard will be monitored and reported on via the Annual Status and Options Report. Monitoring performance across each administrative area will help drive service improvements and demonstrate the delivery of better value for money.

Defining appropriate service standards is a key function of good asset management and facilitates better planning of necessary maintenance works to make best use of available resources and help reduce peak demands on limited resources.

Establishing target levels of service is reasonably straight forward and requires some basic information

- Activity to be targeted – For example , Gully cleaning, Ditch Cleaning, Patching Etc.
- Asset inventory – This is advantageous but can be estimated should none exist.
- Target level of service – This is the desired frequency of service that the activity will be undertaken for example Clean ditch every 5 years.
- Maintenance cost – This is the cost for a single service event per unit of measure. This can be initially estimated and refined thorough monitoring the activity.
- Activity Budget – This is the funding allocated to that activity code.

By using the available data target levels of service can be established so that a physical quantity of works, based on a standard unit of measure can be determined for each core maintenance activity

budget. This information can then be used to develop annual programmes of work to deliver the desired levels of service.

Appropriate levels of service can be attributed to each road maintenance hierarchy so that service intervals can be aligned with the functionality and use of that route hierarchy.

Once target service levels are agreed then compliance with achieving agreed levels of service can be monitored and reported on across each administrative area and this will act as a driver for continued service improvements. Agreed or new target levels of service will be added to future versions of this plan or at the next planned review.

Applying target levels of service will enable annual programmes of work to be developed that allow longer term planning and the ability to accurately assign sufficient resources to achieving the desired level of service. Monitoring delivery of service against these targets will help reduce expensive reactive maintenance and ensure that adequate preventative maintenance is undertaken to extend the service life of assets and improve the resilience of the network to severe weather events.

Regular review of target levels of service will be required so that any changes to maintenance costs or available budgets can be reflected in the level of service that users can expect to be delivered. When fully developed agreed levels of service will enable the implications of changes to future investment levels to be presented in the Annual Status and Options Report so that relevant decision makers can make more informed choices.

7. PERFORMANCE INDICATORS

Performance indicator data is already collected for the annual SCOTS /APSE performance return. These indicators are collected across Scottish and Welsh authorities and can be used for comparison or benchmarking purposes. The council also operates a system called Pyramid which enables local indicators to be developed for use by the authority.

Performance indicators can provide useful information however at present limited use is made of them to assist with driving forward potential service improvements. Development and monitoring of new target levels of service as previously described in section 6 will require processes to be put in place that enables data to be captured and evaluated regularly, quickly and efficiently. These processes wherever possible should be automated so as to minimise staff time.

Careful thought is needed before establishing a performance indicator firstly to ensure that it will actually be useful and actually drive the desired behaviour and secondly so that staff time is not wasted collecting data just for the sake of it.

As part of this plan it would be beneficial to examine existing performance indicators to evaluate how well they serve our needs and to critically review them so that moving forward only those indicators that are deemed useful and that drive the desired behaviour are populated. As part of the review consideration should also be given to how the data for each indicator is collected and how this can be automated as much as possible.

8. Financial Summary

Asset Valuation

As at April 2015 the Road asset is valued as follows:

Asset Type	Gross Replacement Cost £000	Depreciated Replacement Cost £000	Annualised Depreciation Charge £000
Carriageway	£2,190,824	£1,910,048	£19,935
Footway	£64,050	£46,202	£811
Structures	£560,561	£0	£0
Street Lighting	£45,757	£24,668	£1,179
Street Furniture	£9,977	£4,977	£482
Traffic Management Systems	£451	£204	£23
Land	£233,280		
Total	£3,104,900	£1,986,098	£22,430

The valuation figures above illustrate the massive financial value of the road asset. The current method of valuation of these assets requires the council to report asset value on the basis of historical cost. This will be replaced by figures calculated on the basis of a depreciated replacement cost in future.

In theory the annualised depreciation represents the average investment required in planned maintenance (renewal of the asset) to maintain the asset in its current condition.

Historical Expenditure

Historical expenditure invested in maintenance works on the road asset is shown in the table below;

Asset	Works	Historical Expenditure £				
		10/11	11/12	12/13	13/14	14/15
Carriageways	Capital	£4.64m	£8.11m	£9.05m	£8.26m	£7.42m
	Revenue	£6.02m	£4.80m	£4.23m	£3.96m	£4.93m
Footways	Capital	£144k	£0 *	£271k	£82k	
	Revenue	£187k	£62k	£226k	£187k	
Street Lighting	Energy Costs	£450k	£607k	£841k	£662k	£693k
	Capital	£741k	£729k	£533k	£551k	£563k
	Revenue	£624k	£815k	£375k	£357k	£388k
Traffic Signals	Energy Costs	Not applicable as included in Street Lighting energy cost				
	Capital					
	Revenue	£27k	£25k	£33k	£148k	£272k
Totals:						

Planned Funding

The funding for essential road maintenance services has been steadily reduced over recent decades apart from the occasional injection of additional investment being targeted towards addressing a particular issue. Whilst these additional funds are very welcome and make a substantial difference in the short term there needs to be more focus on planning future maintenance needs over the longer term. The ability to ascertain certainty of funding over a longer term enables road maintenance activities to be delivered much more cost effectively and therefore can provide some much needed savings in already stretched maintenance budgets.

To have confidence in the level of investment available over at least three future years permits longer term programmes of less expensive preventative works to be planned sufficiently well in advance to make the most effective use of available resources and so that potential economies of scale can be realised from the supply chain.

Efforts should be made wherever possible to ascertain future investment level such that would enable more longer term plans to be developed and help reduce the whole life cost of sustaining our vital road asset infrastructure to a minimum.

Funding beyond year 3 below is an estimate included solely to allow the prediction of long term asset condition. In the absence of data it will be assumed that a level of funding similar to current funding

levels (the average of the last 3 years) will be provided. Any changes to these funding predictions in the future will require an update of this RAMP and the target levels of service that can be afforded.

Asset	Works	Funding £k			Long Term Funding Assumed £k
		16/17	17/18	18/19	Y1-Y20 pa
Carriageways and Footways	Revenue	£3.97m			
	Capital	£4.75m			
Street Lighting	Revenue				
	Capital	£4.6m*			
Totals:					

- £4.6m represents the total capital investment required to deliver the energy efficiency scheme which has been approved by Council and has an estimated delivery programme of two years commencing April 2016.

9. Asset Investment Strategies

Individual asset groups may develop more specific and more detailed strategies beyond the scope of this plan. The table below provides a broad outline of the strategies being used to maintain the respective asset groups over the plan period.

Carriageways

Category	Description	Basis of Strategy
Reactive Repair	Repair of defect to current intervention standards and response times.	It is intended to facilitate an increase in the number of defects repaired on a permanent right first time basis and reduce the number of temporary repairs requiring repeat visits.
Planned Maintenance Preventative	A programme of planned maintenance activities to meet with agreed service	To ensure an adequate level of identified preventative maintenance is undertaken annually to improve resilience of the carriageway to adverse weather events, reduce the rate of deterioration, protect investment, increase the

	standards.	service life of treatments and lower whole of life costs.
Planned Maintenance Corrective	A programme of prioritised capital funded treatments	The strategy consists of investing in a programme of planned surfacing treatments that are targeted towards specific sections of the network based on several factors such as network condition, traffic, value, lifecycle cost etc. that will contribute to improving network condition and communities quality of life expectations.

The road network is recognised as being in the poorest condition in Scotland (Scottish Road Machine Condition Survey results). However, the investment over the last five years has resulted in a decline in the deterioration with the Road Condition Index (RCI) improving. Without this investment, the road condition would have deteriorated to a very poor condition. The strategies will aim to prioritise the application of treatments earlier in the deterioration cycle and apply low cost preventative treatments (such as surface dressing) where possible before they deteriorate to a condition where more expensive treatments are necessary. However there will be a high demand over the foreseeable future to restore parts of the network which have already deteriorated beyond the scope of low cost preventative treatments and therefore corrective treatments will need to be prioritised to gain maximum benefit and value from available budgets.

Footways

Category	Description	Basis of Strategy
Reactive Repair	Repair of defect to current intervention standards and response times.	The strategy is intended to facilitate an increase in the number of defects repaired on a permanent right first time basis and reduce the number of temporary repairs requiring repeat visits.
Planned Maintenance Preventative	A programme of planned maintenance activities to meet with agreed service standards.	Current investment levels limit the ability to undertake widespread treatments and therefore treatments are prioritised within the confines of available funding to those areas that are in the worst condition or are likely to reduce the need for reactive treatments.
Planned Maintenance Corrective	A programme of prioritised capital funded treatments	Corrective treatments will be proportionate to the level of capital investment and will be targeted towards those areas that are likely to reduce demands for reactive treatments

The level of investment is available to be insufficient to prevent some deterioration of condition occurring however the level of deterioration shall be minimised through the use of the proposed appropriate preventative maintenance investment.

Street Lighting

Category	Description	Basis of Strategy
Reactive Repair	Repair of defect to current intervention standards and response times.	Response to reported defects due to our wide geographical area will be prioritised in terms of making the most effective use of available resources to carry out necessary repairs or outages.
Planned Maintenance Preventative	A programme of planned maintenance activities to meet with agreed service standards.	Planned maintenance is undertaken to ensure compliance with electrical safety regulations. Approved investment in replacement LED lighting units will help reduce demand for reactive works.
Planned Maintenance Corrective	Programme of Capital funded Asset renewals	Street lighting assets are generally replaced based on the age profile of assets. Limited data exists for installation dates and therefore assets are currently replaced based on an assessment of condition by engineering staff within the limits of available funding.
Invest to save		The council has recently approved significant investment for replacement of lamps with new low energy LED Lanterns. The details are yet to be decided, however, this will include installation of new equipment that will reduce energy consumption and annual energy costs.

The recently approved LED lighting scheme will result in all luminaires being replaced and a minimum number of columns also being replaced. This will bring apposite change to the overall asset condition as well as significantly reducing the amount of energy consumed.

Structures

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	The strategy requires the deployment of a bridge repair team to carry out emergency works and other non-emergency repairs.
Strengthening (council structures)	Strengthening of bridges currently assessed as being weak.	The strategy involves planning necessary strengthening works in line with asset condition and available budgets.
Bridge renewal	Replacement or refurbishment	The strategy provides treatments based on the level of capital funding available.
Other Specific		

Traffic Signals

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	The strategy requires the use of external specialised contractors to undertake necessary repairs.
Refurbishment of Traffic Signals and Pedestrian Crossings	Refurbishment of junctions/crossings that have deteriorated or the equipment has become obsolete/unreliable	The strategy allows for renewal / refurbishment of at least one junction/crossing on average every 2-3 years based on expected service life of 20 years.

Street Furniture

Category	Description	Basis of Strategy
Routine and reactive Repair	Repair of defect to current intervention standards and response times	Response to reported defects due to our wide geographical area will be prioritised in terms of making the most effective use of available resources to carry out necessary repairs.
Replacement of assets	Renewal of assets that have deteriorated beyond	Assets are replaced generally only when they are no longer able to fulfil intended function or in response to being damaged. Efforts will be made to recover damage costs from third parties where possible.

10. Programme of Works

Programmes of work will be established for both capital and revenue funded maintenance budgets. These programmes should be developed to take a longer term view of necessary maintenance activities by creating at least a three to five year rolling programme of works in line with predicted future investment levels.

For capital funded works an annual programme is currently issued detailing a list of identified schemes to be delivered over the coming financial year.

For revenue funded works an annual programme of works should be developed that will ensure the target levels of service can be delivered within each respective administrative area. As initial target levels of service become more settled then programmes can be developed over a longer term of at least three years. Revenue activities are moving towards unit costs which will enable programmes to detail what can be delivered rather than how much money is available.

11. Risks to the Plan

The risks that could prevent achievement of this plan are outlined below;

Plan Assumption	Risk	Action If Risk Occurs
The plan is based upon winters being normal	Adverse weather will create higher levels of defects and deterioration than have been allowed for.	Budgets and predictions will be revised and this plan updated if abnormally harsh winters occur.
Available budgets have been assumed as shown in section 7	External pressures mean that funding available for roads is reduced	Target service standards will be revised to affordable levels
Construction inflation will remain at level similar to the last 5 years.	Construction inflation will increase the cost of works (particularly oil costs as they affect the cost of road surfacing materials)	Target service standards will be revised to affordable levels.
Resources are available to deliver the target service standards	Pressures on resources mean that staff are not allocated to service improvement tasks such that the predicted benefits cannot be fully achieved	Plan will be revised and reported.

12. Plan Review

This plan has been developed in line with the SCOTS recommended practices and will be reviewed and updated as necessary to take account of any relevant changes. In any case the plan will be reviewed at least once each year.

References

- 1) Road asset Management & Maintenance Strategy
- 2) Annual Status and Options Report