



ROADS ASSET MANAGEMENT PLAN (RAMP)

Author	Roads Performance Manager
Owner	Head of Roads & Amenity Services
Date	June 2017
Version	2.0

Foreword

The purpose of the RAMP is to enable an asset management system to be developed for managing road assets on a long term basis delivering best value. The Council need to adopt an efficient and consistent approach to asset management, with the collection, processing and recording of road inventory and road condition information, for the purpose of both local and national needs assessment, management and performance monitoring.

Roads asset management can be defined as:

“A structured, long term approach to planning optimal maintenance and eventual renewal of infrastructure.”

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 the Council embraces these methods and strives to ensure that funding is invested as wisely as possible.

This document sets out Argyll and Bute Council’s plan for road assets for the period 2017/2020 and recognises the increasing traffic volumes and occurrences of extreme weather. It is essential that an affordable level of investment is injected into the roads network to maintain the council’s largest and vital assets.

In Argyll and Bute we are responsible for a vast geographical area resulting in our road network being the largest asset that the council is responsible for. It is used daily by the majority of our residents and businesses and is fundamental to the social, economic and environmental wellbeing of our community. It is therefore vital that this asset is well managed and maintained within our designated budgets.

DOCUMENT CONTROL & COUNCIL APPROVAL

Version Number/Date	
1.0	Draft passed to Network and Standards Manager June 2017
1.1	Revised Draft passed to Head of Service July 2017
2.0	Presented to Environment, Development and Infrastructure Committee in September 2017
Next Update Due	Annual review of Plan to reflect changes in budgets or service standards April 2018

RESPONSIBILITY FOR THE PLAN

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

Position	Name	Responsible for
Roads (Network) Performance Manager	Kevin McIntosh	Review and update of RAMP

CONTENTS

Page 4	Introduction
Page 6	Inventory Data
Page 9	Customer Expectations
Page 10	Asset Valuation
Page 13	Hierarchy
Page 15	Service Standards
Page 18	RCI
Page 19	Budget Allocation
Page 20	Financial Summary
Page 21	Programme of works
Page 22	Conclusions and Recommendations

INTRODUCTION

The Road Asset Management Plan (RAMP) records the Council's plans for the maintenance of the road asset. The plan aims to improve how the road asset is managed and enable best value for money. It is essential that an affordable level of investment is put into the roads network to maintain and improve this vital asset of the council. The "roads asset" comprises of carriageways, footways, structures, street lighting, traffic management systems and street furniture.

The RAMP has been produced in accordance with national guidance and recommended good practice, developed through the Society of Chief Officers for Transportation in Scotland (SCOTS). It is part of a suite of documents required by SCOTS with other key documents being the Roads Maintenance Manual and the ASOR (Annual Status and Options Report)

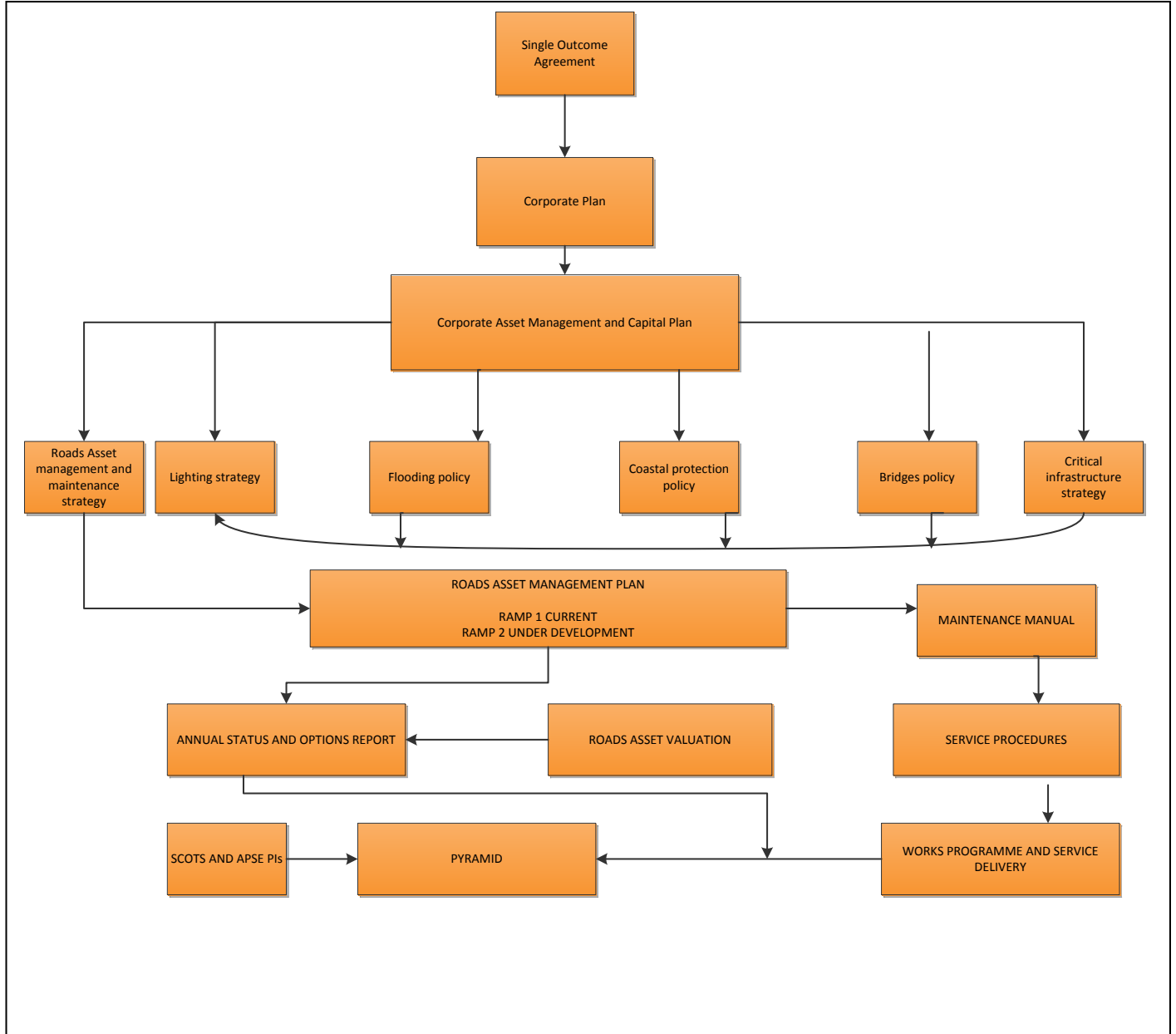
The purpose of the RAMP:

- To formalise strategies for investment in Road Asset groups

- To define service standards

- To identify and take account of the needs of road users and stakeholders

The RAMP relates to the Council’s other strategic documents and plans as illustrated below:



The RAMP informs the Annual Status and Options Report and the Road Maintenance Manual by defining targets and strategies used to develop annual works programmes when the council’s budget for roads has been agreed.

Inventory Data

The collection of inventory data is vital. We need to have an accurate record of what we have, how much we have and this should be recorded on an ongoing basis.

This plan is based upon currently available data for Roads assets. For some minor Roads Assets inventory data is not currently held therefore the information regarding these assets are estimations.

Improvements to inventory data collection must be delivered by the available resources and within current funding parameters.

WDM is the council's Roads Maintenance Management system. It uses server based technology to deploy modules using client and web browser interfaces. All modules adopt a common GUI and feature query building, map presentation, reporting and data collection platform. In Argyll and Bute we currently use the Lighting Management System (LMS), the Pavement Management System (PMS), the Structure Management System (SMS) and the Routine Maintenance System (RMS) which has been designed for managing both cyclic and non-cyclic maintenance operations.

Breakdown of our assets

ASSET GROUP	ASSET ELEMENTS	Quantity/Unit
Carriageways	Carriageway including passing places	2310 KM
Car Parks	Off Street car parks, on street car parking	114
Cycleways/paths	Cycleways – adjacent to or part of the road	
Drainage	Small culverts, gullies, ditches	9672
Environmental	Verges, cuttings	
Footways/Paths	Footways – adjacent to the carriageway	420 KM estimated
Lighting	Lighting columns, lamps, brackets, cabling, pillars, ducts, illuminated signs and bollards	14,422 Lighting columns
Road Markings	All lines, coloured surfacing	Covering 599.17m
Road Restraint Systems	Vehicle safety barriers, pedestrian barriers	Covering 178.28m
Signs	Non Illuminated signs	5009
Street Furniture	Benches, Seats, litter bins, non-illuminated bollards, cycle stands, etc.	6893
Structures	Bridges, retaining walls, large culverts	2825
Traffic Signals	Signalised junctions, signalised pedestrian crossings, detection equipment, cabling, ductwork and bollards	11 signalised Junctions and pedestrian crossings

Assets not covered

The following infrastructure is not included in this RAMP:

Roads, Footways 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.

Land

Public rights of Way/Open spaces

Street furniture belonging to Public Utility Companies

Public CCTV systems

Asset Growth

The asset growth is minimal each year due to the adoption of new roads.

Road lengths total (Km)

April 2016 – 2308.54

April 2017 – 2310 Km Increase of 1.458km to our unclassified roads

New assets create the need for maintenance and associated funding in future years as these additional assets age.

Traffic Growth and Composition

Timber traffic places demand on some of our routes although this is well managed through regular liaison with the Argyll Timber Transport Group. Suitable routes and management plans have been developed 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.

The introduction of Road Equivalent Tariffs (RET) which underpins the Scottish Government commitment to providing cheaper ferry fares along with an increase in interest in our island's distilleries have resulted in more visitors to the west coast. More money is being invested in Fish farms resulting in more employees and more traffic. All these developments are great for the local economy but place greater demands on roads asset.

Environmental Conditions

Long periods of inclement weather can put further pressure on the assets. Winters have caused significant damage to road surfaces as a result of increased incidents of freeze thaw cycles. Localised flooding and landslides can cause significant damage to road infrastructure. 23% of our A roads are constructed on peat. These incur greater construction and maintenance costs and may require restrictions on the weight of vehicles using the road. We also have a number of unbound roads which are difficult to maintain. It is therefore important that sufficient priority is given to undertaking adequate preventative maintenance measures to improve the resilience of our network.

Utility Activity and the Importance of the SRWR

Utility activity can have an effect on the maintenance of the road assets. Statutory undertakers are responsible for carrying out their own reinstatements although these may be contracted and/or sub-contracted to others. The recording of reinstatements allow for guarantee periods to be enforced by the Roads Authority, a 2 year guarantee period for standard depth excavations and a 3 year period for deep excavations. Both Roads Authorities and Undertakers (Utilities) have a statutory duty to register works on the Scottish Roadworks Register (SRWR). The register is a central tool for road works authorities and utility companies to use to assist them in the planning and coordination of works on Scottish roads. The general public's perception of poorly co-ordinated road works is typified by a road being dug up within months of being newly resurfaced by an undertaker or roads authority. The primary objectives are to aid the co-ordination of works to minimise the chance of this occurring and protect our new surfaces and reduce future maintenance costs.

CUSTOMER EXPECTATIONS

The expectations of road users need to be sought and understood as part of the asset management process. Customer satisfaction surveys would be a useful tool to obtain data and gauge customer opinion and the department is considering how these could be used.

The Council provides a front line service to customers on behalf of all the Council departments through the Oracle Frontline CRM Solution both over the telephone and via face to face contact at local customer service points throughout the area.

The council makes use of social media posting relevant information for road users whilst encouraging the travelling public to engage with this interface providing updates on road conditions, weather and travel.

Our Transformation Projects Manager is currently working on measures to improve customer services in Roads, modernising and developing better communications and customer feedback models that will lead to improved customer satisfaction and ensure that roads and lighting faults are dealt with timeously.

The table below provides information and detail on the number of Roads and Lighting faults reported to the council in 2016/17

SERVICE AREA	Email	Telephone	Face to Face	Website
Road Faults	236	1213	289	191
Winter Maintenance	15	115	21	21
Lighting Faults	88	1189	268	171

The table below provides information on the number of Roads and Lighting faults that Elected Members reported to the council in 2016/17

Road Faults	146
Road Signage	13
Traffic Management	8
Winter Maintenance	8

Requests for service from Elected Members come in through our Members Casebook where they are picked up and distributed to the appropriate local area where they are dealt with timeously and if necessary a service request is generated

Asset Valuation

Road Asset Management Plan

Asset Type	Gross Replacement Cost	Depreciated replacement cost	Annual depreciation charge
Carriageway	£2,146,238,607	£1,803,468,407	£27,085,333
Footways	£68,219,717	£54,147,275	£642,157
Street Lighting	45,756,683	£24,667,593	£1,178,871
Structures	£551,022,444	£543,723,485	£1,287,312

Data source – WGA valuation spreadsheet 2016

The valuation figures above illustrate the massive financial value of the roads asset. The Council are required to report these figures annually and on the basis of a depreciated replacement cost.

Historical expenditure

Carriageways Investment in £ millions							
Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Capital	£7.02	£4.64	£8.11	£9.05	£8.26	£7.42	£5.11
Revenue	£3.13	£6.02	£4.80	£4.23	£3.96	£4.93	£3.61
Total Spend	£10.15	£10.66	£12.91	£13.28	£12.22	£12.36	£8.72
Footways (Revenue)	£215,907	£186,990	£61,675	£226,263	£187,066	167,127	163,232
Footways (Capital)	Nil	£144,057	£0	£271,265	£81,609	272,156	156,987
Cycleways (Capital)	Nil	£552,449	£0	£93,954	65,341	£0 (all work grant funded)	£0 (all work grant funded)

Street Lighting							
Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Capital	£585,647	£740,616	£729,376	£532,925	£551,264	£562,800	£156,266
Revenue	£619,130	£623,624	£815,379	£375,416	£356,724	£387,984	£510,855

The above information shows a gradual increase in expenditure from 2010/11 and 2013/14 then a reduction in 2015/16 which coincides with reducing budgets across the country. The trend is likely to continue downwards as councils are expected to find more savings in the coming years.

Carriageways

The strategy for carriageways is to invest where possible in preventative maintenance in order to reduce the rate of deterioration of the asset. This includes treatments such as surface dressing to seal the carriageway surface and prevent ingress of water.

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 standards	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 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 contribute to improving network condition and communities quality of life expectations

Street Lighting

The aim of the maintenance strategy is to ensure that all street lights are operating 99% of the time and all columns are in a safe condition. If a “dark lamp” is identified the council work within a five working day response time to have it repaired. If the dark lamp is part of a section fault then the repair time increases to within a 20 working day response period. A programme of lantern replacement with new energy efficient (LED) lanterns is underway.

Category	Strategy	Comments
Routine and reactive repair	Repair of defects to current intervention standards and response times.	The strategy requires the deployment of available resources on emergency and other non-emergency repairs.
Planned Maintenance Preventative	Bulk lamp change	No bulk lamp changes are undertaken due to the LED replacement programme.
Planned Maintenance Corrective	Programme of structural renewal	Columns are renewed as resources and funding allows, there are no set targets.
Carbon/Energy reduction	Programme of lantern replacement	The LED replacement programme is expected to be completed by the end of March 2018

Footways

The strategy for footways is to invest where possible on preventative maintenance to reduce the rate of deterioration of the asset.

Category	Strategy	Comments
Routine and Reactive Repair	Repair of defects to current intervention standards and response times.	The strategy requires the deployment of available resources on emergency and non-emergency repairs such as slab replacement, patching, kerb replacement.
Planned Maintenance Preventative	A programme of preventative treatment of bituminous footways in the initial stages of deterioration.	Works are prioritised on a needs basis at area level.
Planned Maintenance Corrective	Programme of resurfacing/renewal or strengthening of footways.	Asset data is being collated for footway condition. The annual scanner survey system surveys carriageways. Footway condition is assessed by safety inspections.

Structures

The Council's structures team carries out regular inspections on the bridges.

Category	Strategy	Comments
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

Street Furniture

Annual inspections are carried out to identify furniture in need of replacement

Category	Strategy	Comments
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 to make the most effective use of the available resources to carry out necessary repairs
Replacement of assets	Renewal of assets that have deteriorated beyond repair	Assets are replaced only when they are no longer able to fulfil intended function or in response to being damaged. In this case efforts would be made to recover the costs from third parties.

Based on the “well-maintained Highways” the code of practise for Highway Maintenance Management and in order to prioritise the allocation of available funds it is necessary to establish a hierarchy of roads, footways and cycleways within the network. This has been determined to reflect the needs, priorities and actual use of each road.

Table 1 – Carriageway Hierarchy

Carriageway Category	Hierarchy Description	Type of Road General Description	Description
1	Motorway	N/A	N/A
2	Strategic Route	Principal A Roads between Primary destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits generally in excess of 40mph with few junctions
3a	Main Distributor	Major Urban Network & Inter-Primary links. Short to medium distance traffic	Routes between strategic routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40mph or less
3b	Secondary Distributor	Classified Roads (B & C Class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions	In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 30mph speed limits and high pedestrian activity
4a	Link Road	Roads linking between the Main & Secondary Distributor Network with frontage access and frequent junctions.	In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always suitable of carrying two way traffic. In urban roads they are residential or industrial with 30mph speed limit.
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often single lane and unsuitable for HGV. In residential areas they are residential loop roads or cul-de-sacs.

An effective regime of inspection, assessment and recording is a crucial part of road maintenance. It will provide the basic information for addressing the key objectives of the road maintenance plan.

Tables (1 & 2) showing the hierarchy's are also used to determine the frequency that safety inspections are carried out on any part of the network. The basis of establishing the frequency of inspection is where it is based in the hierarchy. Table 3 shows the frequency of safety inspections in relation to the hierarchy.

Table 2 Footway Hierarchy

Category	Category Name	Description
1(a)	Prestige Walking Zones	Very busy areas of town centres with high public space and Street scene contribution.
1	Primary Walking Routes	Busy urban shopping and business areas and main pedestrian routes.
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.
3	Link Footways/ Footpaths	Linking local access footways through urban areas and busy rural footways.
4	Local Access Footways/ Footpaths	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs

Table 3 – Safety Inspection Frequency

Feature	Description	Category	Frequency
Roads	Strategic Routes	2	Up to 12 pa (min 10)
	Main Distributor	3(a)	Up to 12 pa (Min 10)
	Secondary Distributor	3(b)	Up to 12 pa (Min 10)
	Link Road	4(a)	4 pa
	Local Access	4(b)	Annually
	All other locations (car parks)		Annually
Footways	Prestige Walking Zone	1(a)	Up to 12 pa (Min 10)
	Primary Walking Routes	1	Up to 12 pa (Min 10)
	Secondary Walking Routes	2	4 pa
	Link Footway	3	2 pa
	Local Access Footways	4	Annually
Cycle Route	Part of Carriageway	Yet to be categorised	
	Remote from Carriageway		
	Cycle Trails		

Service Standards

This plan is based upon delivering service standards to each asset type. This will be the levels of service that our communities can expect to be delivered over the plan period. 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 requires some basic information

Activity to be targeted – For example, patching, gully maintenance

Asset inventory – if available

Target level of service – this is the desired frequency of service

Maintenance cost – the cost for a single service event per unit of measure

Activity budget – the funding allocation for the activity code

By using the available data the target level 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.

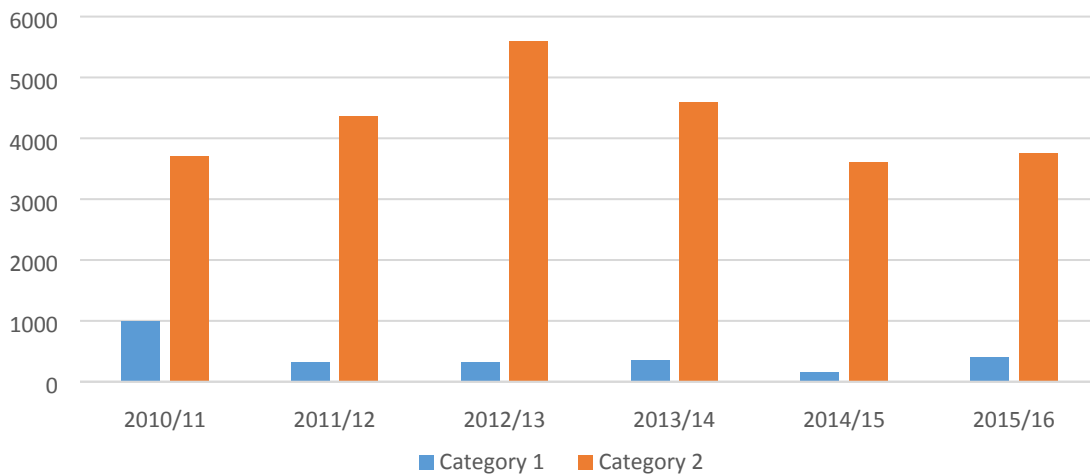
Intervention Levels and Response Time for Defects

Category 1: represent a high risk to road users and should be corrected or made safe at the time of inspection, if reasonably practicable. If it is not possible to correct or make safe the defect at the time of inspection, emergency repairs to make safe should be carried out within 36 hours.

Category 2: repair within 7 calendar days allowing a more proactive approach to be adopted for those defects that represent a medium risk to road users or because there is risk of short term structural deterioration.

The table below details the number of category 1 and 2 defects identified in Argyll and Bute and reported to APSE/ SCOTS since 2010/11. The graph shows a general downward trend 2012 - 2015, indicating less reactive maintenance being required however there was a slight increase in the category 1 and 2 defects identified/recorded in 2015/16.

Carriageway Defects



Performance Indicators from SCOTS Comparison Report (Society of Chief Officers of Transportation in Scotland)

SERVICE	Measured By	Performance	
		2011/12	2015/16
Carriageways			
Safety	Percentage of Cat 1 defects made safe within response times	75.08%	93.21%
	Percentage of safety inspections completed on time	63.75%	85.25%
Condition	Percentage of all roads to be considered for maintenance treatment	58.81%	57.7%
	Percentage of "A" Class roads to be considered for maintenance treatment	47.66%	44.5%
	Percentage of "B" Class roads to be considered for maintenance treatment	67.42%	65.0%
	Percentage of "C" Class roads to be considered for maintenance treatment	64.77%	62.6%
	Percentage of unclassified, non-principal roads network where maintenance should be considered	56.54%	58.6%
	Percentage of carriageway length treated	6.08%	3.61%

Service	Measured by	Performance	
Street Lighting		2011/12	2015/16
	Percentage of repairs within 7 days	96.9%	89.4%

Structures		2011/12	2015/16
Condition	No of Council owned bridges failing assessment	16	28
	No of Council bridges weight restricted (excluding acceptable weight restrictions)	12	10
	Bridge Stock Condition Indicator (An alternative method is used to assess the condition of our bridges)	92%	89.04%

Performance indicator data is 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. Presented on scorecards for the service and for each area, these are scrutinised by councillors and senior management on a quarterly basis.

Asset management planning includes making informed budgetary decisions taking into account the strategic options presented.

Noted that the Audit Scotland report identifies Argyll and Bute Council as the fifth most improved and one of the fastest improving councils due to our increased investment in roads maintenance, while (at the time of writing the report in August 2016) ranking roads condition in the area lowest in Scotland

The results of the RCI survey are used to classify roads into 3 categories:

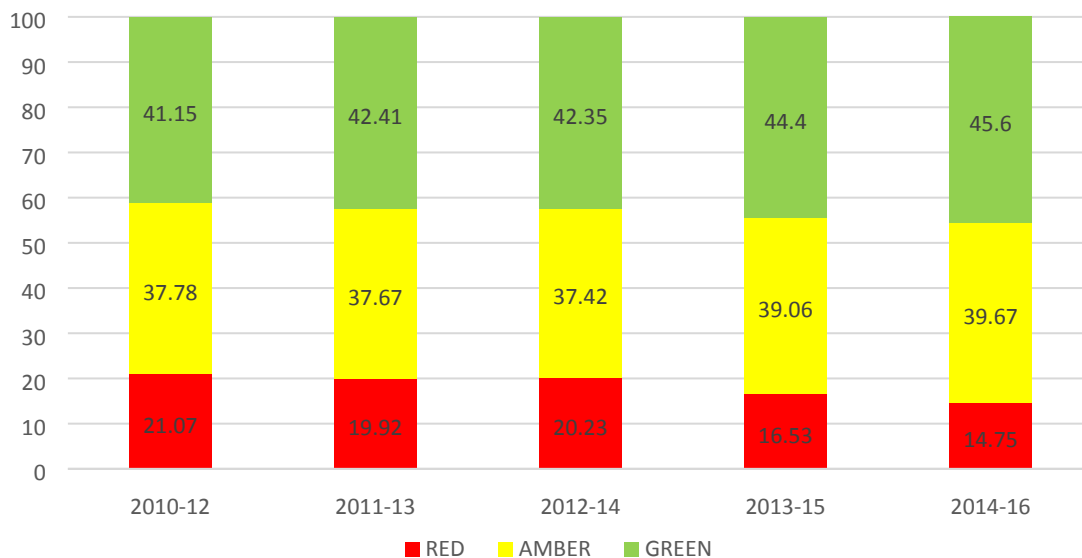
GREEN - roads are in acceptable condition.

AMBER - some deterioration is apparent on the roads and should be investigated to determine the best time to carry out planned maintenance treatment.

RED – roads are in poor condition and are likely to require repairs within one year.

Road Condition Survey results for Argyll and Bute from 2009 – 2016 are shown below. Argyll and Bute roads do not score well against the national road condition survey which produces the Road Condition Index. The national survey is not designed to assess peat roads which reduce the Council’s score.

Road Condition Index survey results 2010-2016



An increase in the green category is a direct result of increased investment from 2012-2015 plus our strategic approach to roads maintenance.

Budget Allocation 17/18

Asset management planning includes making informed budgetary decisions. Ideally the service standard targets will be based upon the following predicted funding levels for the next 3 years, however we only know about this year's funding. Updates required to the RAMP will be made as the budgets allocations are made available

Asset	Works	Funding		
		17/18 £'000	18/19 £'000	19/20 £'000
Carriageway	Revenue	3,040	2,938	2,938
	Capital	3,500	2,419	4,615
Footways	Revenue	270	300	300
	Capital	500	0	0
Structures	Revenue	231	231	231
	Capital	600	39	250
Street Lighting	Revenue	327	327	327
	Capital	385	385	385
Traffic Signals	Revenue	103	47	47
Traffic Management	Capital	67	0	0
Street Furniture	Revenue	188	188	188
Winter Maintenance	Revenue	1,637	1,637	1,637
Totals		10,848	8,511	10,918

Note: 2018/19 & 2019/20 figures are estimates based on 2017/18 budgets plus any savings which are likely to be applied during the council's budget setting process. 2017/18 figures are taken from the capital monitoring as at July 2017. Future years are taken from capital monitoring where applicable or based on the block allocation and are subject to change. Longer term funding allocation is currently unknown.

Asset Investment Strategies

The strategies in this section will be developed using the predictions of future condition over a 20 year period. The predictions enable strategies to be created to look at the whole life cost of maintaining the asset. Using long term predictions means that decisions about the funding levels can be taken with due consideration of the future maintenance funding liabilities that are being created. Investment strategies for the major asset types are summarised below.

Investment between Asset Types

In comparison to historical investment future investment is planned to be:

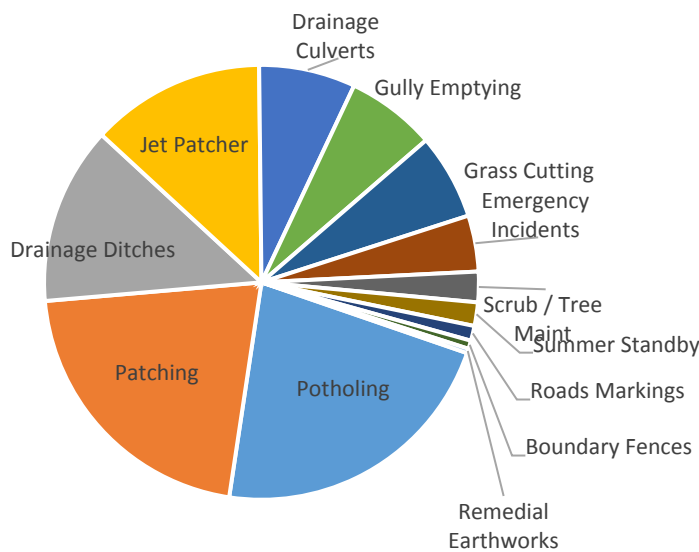
- Carriageways: Reduced revenue and capital funding forecast in 2018/19
- Footways: Maintained at similar levels with additional capital for 2017/18
- Structures: Maintained at similar levels (Revenue) Reduced (Capital)
- Street lighting: maintained at similar levels plus additional investment in LED project
- Traffic signal: Reduced revenue and capital funding forecast

Financial Summary

Revenue

Revenue funding within roads is split between a number of activity headings based on historical precedence and identified need. Works carried out under the revenue budget can be classified as Reactive, Planned Preventative and Planned defect repairs following the inspection process in accordance with defined RAMP strategies. The graph below shows an indicative split of how we spent our £3.61m revenue budget in 2015/16.

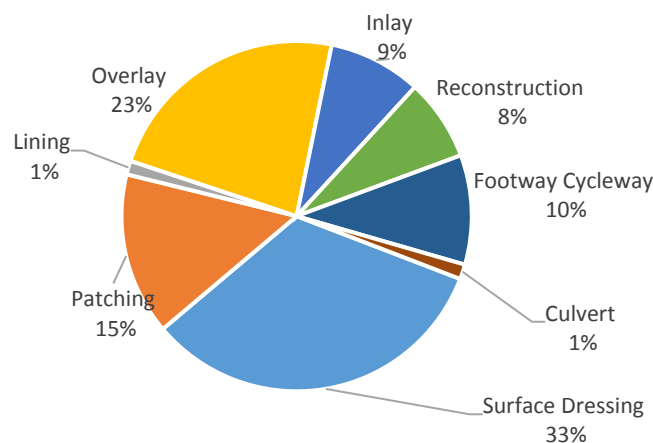
Revenue split by Activity 2015-16



Capital

Expenditure from Argyll and Bute Council's capital fund is required to cover expenditure on works of lasting value that extend the life of that Asset. The total capital expenditure was £5.11m

Capital Programme 2015-16



Sources of funding include Sustrans and the Forestry

Programme of Works

Programmes of work will be created in line with available budgets for both revenue and capital works.

For capital works an annual programme will be developed detailing a list of schemes to be delivered throughout the coming year.

For revenue works an annual programme based on the delivery of the target levels of service will be established for the coming year.

Risks to the Plan

No	Risks	Description	Action if Occurs
1	Budgets – assumed to be Current Levels	External pressures may result in available funding being reduced	Revise strategies and standards to affordable levels
2	Environmental conditions	Adverse weather will create higher levels of defects and deterioration than have been allowed for	Budgets may require to be managed and redistributed
3	Data – incomplete collation	Not all assets have the same level of data recorded which may result in higher levels of deterioration than expected.	Revisit the distribution between planned and reactive maintenance budgets.
4	Reorganisation – resourcing issues	Changes in staff may result in inability to deliver works	Revise strategies to achievable levels.

Conclusions and Recommendations

This Road Asset Management Plan offers a consistent approach for council to manage the road assets in relation to carriageways, footway, structures, street lighting and traffic management system. This includes:

- Focussing on the condition of the network taking into account the hierarchy and available budgets.
- Managing energy reduction but ensuring that energy costs are monitored in connection with the introduction of the new LED scheme.
- Make improvements to the customer feedback tools that the council are currently using.