ITEM 8 -
APPENDIX 1

ASSET MANAGEMENT PLAN

Roads Infrastructure 2025-30

Revision 2 February 2025

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Document Control & Council Approval

Version Number/Date	Approved by Council
V1	Approved by Council Committee on date
Next Update Due	date

Responsibility for the Plan

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

Council Officer	Responsible for
Roads and Transportation Manager	Monitoring performance against plans and regular updating of plan

1 Introduction

1.1 Strategic Context

Our Road Asset Management Policy confirms our commitment to asset management and aligns our approach with the Council's Corporate Asset Strategy and the SCOTS Road Asset Management (RAM) Framework of Recommended Practices.

This Asset Management Plan links to the Council's Corporate Plan and translates the Corporate Outcomes/Objectives/Visions into clear, concise, and aligned Road Asset Management Objectives that are comprehensible to stakeholders. Additionally, the RAM Plan also provides high-level Strategies that direct and support the development of the individual Asset-specific maintenance process and procedures.

The Plan also outlines the information which supported the development of the Asset Management (AM) Objectives and AM approach, such as key Stakeholders, risks, options analysis
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.

1.2 Overview

This plan outlines the council's overall strategy and its intentions for how to manage the local road network to achieve their Asset Management Objectives. This plan considers stakeholder expectations, existing and future projected demands on the road infrastructure assets, anticipated resources, and risks, to deliver service standards which provide the greatest benefit against the Asset Management Objectives and the Corporate Strategy Outcomes.

This document sets out the council's strategy and aligned asset plans for the council's Road assets for the period 2025-29. The Road Asset Management Plan (RAMP) records the council's asset plans for the maintenance of the Road asset. The **"Road asset"** comprises of carriageways, footways, structures, street lighting, traffic management and street furniture.

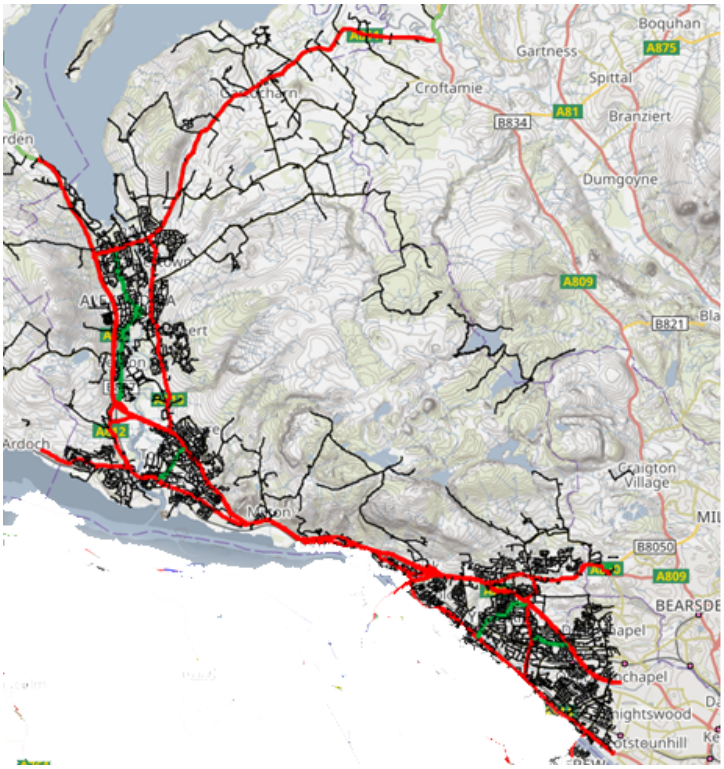
1.3 Purpose

The purpose of the RAMP is to:

- Formalise strategies for investment in Road asset groups
- Define service standards
- Improve how the Road asset is managed
- Support the delivery of better value for money across the Road service

2 Our Road Assets

Network



2.1 Road Assets

Carriageway	Structures	Road Lighting	Traffic Management
389.4km	118 Bridges 8250m Retaining Wall	16452 Street Lights	110No Traffic Signals

Footways and Cycleways	Road Drainage	Other Road Furniture
717km Footways/Cycleways	15,500 gullies	25000No Various signs/bollards, sign poles 450No Grit Bins

2.2 Assets Not Covered

Some related assets that the Road department maintain are the responsibility of other council departments. The council owned Road assets not covered in this RAMP are:

- Private Roads
- Private Bridges
- Structures & Bridges owned & maintained by other organisations
- Council owned bridges, not on or crossing the road network.
- Decorative, seasonal lighting
- Water related infrastructure that does not form part of the road network

2.3 Inventory Data

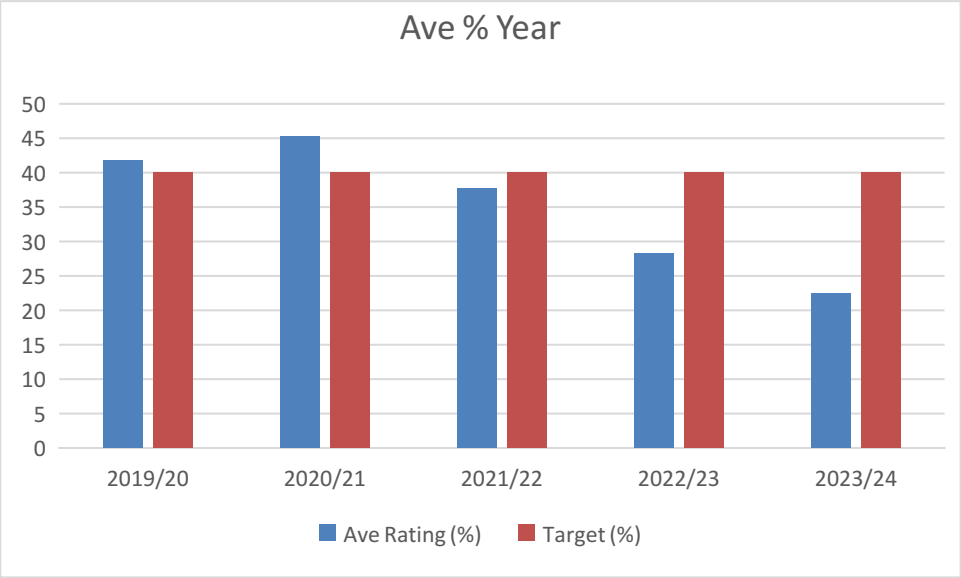
This plan is based upon currently available inventory data for Road assets, i.e. carriageway, footway, structures, street lighting, traffic signals and street furniture. For some minor Road assets inventory data is not currently held, however an attempt has been made to incorporate these assets within this plan using local estimates and sample surveys. A plan to improve asset data forms part of the council's Road asset data management plan.

3 Customer Preferences

3.1 Satisfaction Surveys

The council undertakes public satisfaction surveys for all aspects of the Council service on a quarterly basis. The results are available at www.westdunbartonshire.gov.uk - Council telephone satisfaction survey | West Dunbartonshire Council. The total number of residents interviewed as part of the survey will vary on each occasion however an average percentage across the year has been used to simplify results.

The survey provides the view and preferences of a sample of residents. The results of the survey for Roads and Transportation have been reviewed as part of the preparation of this plan. This plan has been informed by the following key findings:



The above graphs highlight the decreasing trend in customer satisfaction in the condition of roads since 2020/21. The evidence highlights that there was a significant reduction in maintenance works undertaken on the road network during COVID restrictions, this along with continuing budget pressures has caused an impact to the satisfaction results. Whilst residents' satisfaction has reduced over these years up to 2024/25 the overall condition of our roads asset, as identified through the SCOTS annual condition survey has increase slightly.

To assist in developing the plan and to ascertain the cause of the reduction in satisfaction, over the course of 2024/25 additional more in-depth surveys have been undertaken. Some of the key results of this are shown below.

3.2 Survey Results

Overall satisfaction with aspects of roads in the local area.

Aspects of Roads	Ave 2024/25
Road Surface	26%
Road Markings	51%
Road signage	70%
Street Lighting	71%
Roadworks	58%

Most common problems with regard to the quality of road surfaces.

Common problems with Road Surfaces	Ave 2024/25
Surface Water	71%
Potholes	90%
Poor Verges	70%
Unclear road markings	58%
Uneven road surfaces	76%

Highest factors contributing to the quality of road surfaces.

Contributing factors	Ave 2024/25
Heavy traffic	84%
Pothole Response/Repairs	90%
Quality of repair material	87%
Weather Conditions	90%

Most common problems with regard to the quality of footpaths

Common problems with Pavements and Footpaths	Ave 2024/25
Availability of safe crossing places	35%
Excessive surface water	45%
Lack of dropped kerbs for road crossing	37%
Poor lighting levels	33%
Uneven footway surfaces	57%
Vehicles blocking or parked on footpaths	58%

Safety of Road users.

Method of travel	Ave 2024/25
As a driver in the local area	91%
As a cyclist in the local area	80%
As someone walking on pavements and footpaths in the local area	83%

The survey results indicate that the general condition of our carriageway and footway surface is a major concern of residents with local concern over the level of potholes and quality of materials used in repairs. Additionally, residents indicate uneven footway surfaces and pavement parking as the biggest obstacle in using the footways however in general our customers feel safe using our road network.

4. Demands Asset Growth

4.1 Asset Growth

The asset grows each year due to the adoption of new roads and construction of new road links. Over the last 10 years the following additional assets have been adopted by the council:

- Carriageways, 31.47 km (8.8%)
- Footways, 55.3 km (8.35%)
- Street Lighting, 2285 columns (14.2%)

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.

4.2 Traffic Growth and Composition

In 2023, 420 million vehicle miles were travelled on roads in West Dunbartonshire. With the level of proposed development over the next 5 years, an increase in traffic is inevitable. This will contribute to the accelerated wear and tear of the road assets and means increased levels of maintenance will be required in future.

Current road traffic data can be found here: Road traffic statistics - Local authority: West Dunbartonshire. Following a big decline in 2020, traffic levels have steadily increased. However, 2023 levels still remain lower than those in 2018. The overall decrease is entirely due to the decline in traffic levels observed during the pandemic and the number of people home working.

4.3 Environmental Conditions

Pressure is also being placed upon our road assets as a result of environmental conditions:

- Flooding: several areas within the district are prone to flooding. There have been several occasions that caused severe flooding difficulties which resulted in damage to property and the road network.

- Rainfall intensity: climate change is changing weather patterns resulting in more intense rainfall in localised areas.

- Harsh winters: Although the effect of climate change has in recent years seen milder winters, it is predicted that we are also likely to experience more severe events. When these occur the effects on our road condition can be significant with significant damage to road surfaces as a result of freeze/thaw action.

- Warmer Summers: recent warmer summers have caused roads to melt, with excess bitumen bleeding to the road surface and increasing the likelihood of deformation defects (such as rutting) occurring, preventing the road surface from draining effectively.

These pressures are creating a need for additional funding. If such events occur during the plan it may be necessary to revise the standards that are affordable unless additional funding is provide from central government, as occurred during previous harsh winter conditions.

5.0 Service Standards

This plan is based upon delivering the service standards indicated below. The standards reflect the current funding levels in section 6. They are the standards that Service users can expect from the Council's Road assets during the Plan period. Details of how the specific measures shown below are calculated are included in the Road maintenance manual.

5.1 SCOTS & APSE CORE PERFORMANCE INDICATORS

West Dunbartonshire Council has set Service Standards aligned to the following 16 key performance indicators defined by SCOTS & APSE (Association of Public Service Excellence) Performance Group and forms part of the annual Performance Management Recommended Practice.

	Carriageways and Footways	2023/24	2022/23	Target
Safety	Percentage of Cat 1 defects made safe within response times.	96.9	95.8	>95
	Percentage of safety inspections completed on time	80	79.3	>75
Condition	Percentage of roads network considered for maintenance treatment	27.9	27.3	<30
	Percentage of "A" Class road network which has been assessed as 'consider for maintenance treatment'.	19.2	16.8	<24
	Percentage of "B" Class road network which has been assessed as 'consider for maintenance treatment'.	19.9	14.6	<24.5
	Percentage of "C" Class road network which has been assessed as 'consider for maintenance treatment'.	23.3	21.4	<30
	Percentage of unclassified, non-principal Road's network which has been assessed as 'maintenance should be considered'.	30.2	30.2	<37
	Percentage of carriageway given a maintenance treatment	3.3	3.65	n/a
	Percentage of Footway in considered in need of treatment	18%	18%	n/a

	Percentage of footway length given a maintenance treatment	0.44%	0.5%	n/a

Street Lighting and Traffic Lights		2023/24	2022/23	Target
Safety	Percentage of street lights repairs within 7 days	98.5	98.7	>95
Safety	Percentage of traffic lights repairs within 48 hours	100	100	>98

Structures		2023/24	2022/23	Target
Condition	Percentage of primary inspections carried out on time	100	100	100
	Percentage of general inspections carried out on time	100	100	100
	Bridge Stock Condition Indicator (BCIav)	99	99	>95
	Bridge Stock Condition Index (BCIcrit)	99	99	>95

5.2 Performance Management

In addition to measuring our performance via the SCOTS & APSE process the service also monitors our performance through the Pentana Performance Management System. This allows us to report regularly on our performance against specific targets for each period and ensure actions are taken as soon as possible to address in concerns.

Most of the asset management performance data is updated annually, while other Roads and Transportation data is updated monthly or quarterly. Information will be available internally and will be reported quarterly to elected member with a performance report submitted.

5.3 SCOTS Road Condition Assessments

To aid authorities to evaluate the condition of their carriageway assets, through the SCOTS group, National road condition assessments are undertaken each year using specialist vehicles equipped with lasers and high resolution cameras.

The collected data is assessed, and a Road Condition Indicator (RCI) score assigned to both each road classification and the overall network. The RCI score indicates the percentage of the road network in need of maintenance. Unfortunately, this service is not provided for any other assets.

Each Road classification is further broken down into one of three categories;

- Green – where the road is generally in a good condition
- Amber – where the road shows deterioration and should be considered for some form of maintenance

- Red – where the road is poor overall and will require some maintenance within the next year or so

Our most recent condition assessment results are shown below :-

Roads Classification	Percentage Red	Percentage Amber	Percentage Green	**RCI**
A Class	2.61	16.62	80.77	**19.2**
B Class	1.78	18.10	80.12	**19.9**
C Class	4.21	19.11	76.68	**23.3**
Unclassified	4.77	25.38	69.91	**30.2**
Network	**4.35**	**26.72**	**68.93**	**27.9**

Whilst the satisfaction survey shows that a low percentage satisfaction rate for the road condition, in reviewing our RCI scores against those available for all other 32 local authorities our ratings are quite high with West Dunbartonshire placing 5th for overall RCI scores.

A break down of our score against national position is provided below.

Road Classification	**RCI Score**	**National Rating**
A Class	**19.2**	5th
B Class	**19.9**	6th
C Class	**23.3**	2nd
Unclassified	**30.2**	7th
Overall Network	**27.9**	7th

6 Financial Summary

6.1 Asset Valuation

The Asset Valuation figures provide a financial report of the Road asset. The **Gross Replacement Cost (GRC)** represents how much it would cost to construct the Road Infrastructure from a green field site utilising modern materials, technologies, and techniques (Modern Equivalent Asset – MEA)

The **depreciated replacement cost** (**DRC)** illustrates the extent to which the asset has been consumed (used up).

The **annualised depreciation cost (ADC)** represents the average annual investment required in planned maintenance (renewal of the asset) required to maintain the asset. Comparing the annual capital investment against this figure provides an indication of whether long term funding needs are being met (or not).

Asset Type	Gross Replacement Cost (GRC)	Depreciated Replacement Cost (DRC)	Annualised Depreciation Cost (ADC)	Comments
Carriageways	£366,576,000	£319,889,000	£4,287,000	*Carriageway data validated in National street gazetteer/WDM*
Footways & Cycleways	£32,200,000	£16,106,000	£940,000	*Footways data based on sample data set 25%*
Structures	£61,000,000	£52,500,000	£1,720,000	*Structures info based on engineers estimates*
Street Lighting	£40,677,000	£31,918,000	£1,030,000	*Allows for cabling underground network*
Traffic Management	£4,060,000	£3,342,000	£250,000	*Includes variable message signs*
Street Furniture	£6,002,000	£2,997,000	£296,000	*Street furniture based on sample data set 25%*
Total	£761,055,000	£426,753,000	£8,524,000	***Total includes Land Value of £248,869,000 using rate £700k per***

6.2 Historical Expenditure

Historical expenditure invested in works on the Road asset is shown below:

Asset	Works	Historical Expenditure £ 000			
		21/22	22/23	23/24	24/25
Carriageways	Capital	£3,711	£1,790	£1,760	£1,760
	Revenue	£1,550	£1,330	£1,070	£650
Footways	Capital	£300	£170	£880	£550
	Revenue	£660	£570	£460	£280
Structures	Routine & Reactive	£100	£150	£200	£150
	Planned	£100	£100	£300	£100
Street Lighting	Routine & Reactive	£250	£330	£260	£200
	Planned	£100	£100	£300	£100
	Electricity Supply Costs	£400	£500	£900	£1000
Traffic Signals	Routine, Planned & Reactive	£550	£550	£550	£460
	Total	**£7,720**	**£5,590**	**£6,680**	**£5,250**

Note – All electricity supply costs have been removed and winter maintenance costs are included within the revenue for both carriageway and footway maintenance.

Investment in carriageways and footways was boosted in 2022/23 with an additional £1m made available to enable significant improvement works as a result of minimal maintenance works undertaken during the pandemic.

Overall, the average level of investment made over the last 4 years equates to approximately £6.31m which is below the estimated annualised depreciation, which indicates that the levels of funding is insufficient contributing to the asset's deterioration.

6.3 Planned Funding

The service standard targets shown in section 5 are based upon the following funding levels. The funding for years 1 -3 is based upon the approved short-term budget as confirmed by the council Roads committee.

Funding beyond year 3 shown below is an estimate only, based on the current 10-year Capital programme the prediction of long-term condition. It has been assumed that a level of funding identified in the Capital programme will remain at current funding levels. Any changes to these funding predictions in the future will require an update of this RAMP.

Asset	Works	Funding Required £m			Long Term Funding Assumed £m
		2025/26	2026/27	2027/28	2028-2036 pa
Carriageways	Reactive	£0.65	£0.65	£0.65	£0.65
	Planned	£1.76	£1.76	£1.76	£1.76
Footways	Reactive	£0.28	£0.28	£0.28	£0.28
	Planned	£0.55	£0.55	£0.55	£0.55
Structures	Reactive	£0.15	£0.15	£0.15	£0.15
	Planned	£0.15	£0.15	£0.15	£0.15
Street Lighting	Reactive	£0.2	£0.2	£0.2	£0.2
	Planned	£0.1	£0.1	£0.1	£0.1
Traffic Signals	Reactive	£0.4	£0.4	£0.4	£0.4
	Planned	£0	£0	£0	£0
	Totals	£4.24	£4.24	£4.24	£4.24

6.4 Carriageways Investment Strategy

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	Minor carriageway defects are identified during the ongoing routine inspection programmes or customer reports. Where defects are identified these are carried out by our roads operatives in line with agreed timescales. In response to concerns regarding the number of repeat defects and materials quality the service will also work towards transitioning to the use of hot materials for repairs.
Planned Maintenance Preventative	A programme of preventative treatment or Roads in the initial stages of deterioration.	The service has set aside a proportion of the Capital funding to undertake structural patching works. The aim of these works is to address locations which are in general in good condition with sections starting to deteriorate. It is hoped through the process we can extend the life of those assets.
Planned Maintenance Corrective	Programme of resurfacing where a preventative treatment cannot be applied	Where surface conditions have deteriorated to such an extent that they can only be resolved through resurfacing locations will be prioritised via the condition assessment process. Those that cannot be addressed with the current funding will be safely maintained until additional funding becomes available.

6.5 Footways Investment Strategy

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	Minor carriageway defects are identified during the ongoing routine inspection programmes or customer reports. Where defects are identified these are carried out by our roads operatives in line with agreed timescales. In response to concerns regarding the number of repeat defects and materials quality the service will also work towards transitioning to the use of hot materials for repairs..
Planned Maintenance Preventative	A programme of preventative treatment of bituminous footways in the initial stages of deterioration.	The service has set aside a proportion of the Capital funding to undertake structural patching works. The aim of these works is to address locations which are in general in good condition with sections starting to deteriorate. It is hoped through the process we can extend the life of those assets.
Planned Maintenance Corrective	Programme of resurfacing/renewal of footways.	Where surface conditions have deteriorated to such an extent that they can only be resolved through resurfacing locations will be prioritised via the condition assessment process. Those that cannot be addressed with the current funding will be safely maintained until additional funding becomes available.

Carriageway and Footway Strategy Overview

The investment level is not sufficient to address all locations in need of resurfacing. Locations will be prioritised based on the outcome of condition assessments. These assessments will evaluate each location based on current condition, traffic volume/speed, road categorisation, and volume of defects to generate and overall score. This score will dictate its position on any future resurfacing programmes. Details of the condition assessments and method of repair are detailed in appendix A.

As part of the SCOTS Roads Asset Management team a series of cost and condition projection tools have been developed for carriageways. This tool allows authorities to analyse what impact the current level of investment will have on the condition of their carriageway asset over the longer term.

Details of the impact of the current level of investment can be found in Appendix B and C.

6.6 Street Lighting Investment Strategy

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	Defects are recorded via reports from the Public or identified during other operations. Response times are set dependent on nature of work the defect
Planned Maintenance Corrective	Programme of structural renewal	Columns replacements are undertaken annually based on the age, condition and fault levels prioritised by risk. The current funding allows for the replacement of approximately 45 columns per year.

Our Roads Street Lighting team will address any individual repairs as they are reported in line with the agreed timescales. Our column replacement programme will be reviewed annually and the columns in most need of attention or at risk of collapse. There are currently 5000 columns within our network installed before 1975 which have exceeded their life expectancy. (See appendix C)

6.7 Structures Investment Strategy

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	During bridge inspections defects are identified. If repairs are simple and considered to be a high priority, these are arranged immediately. More complex repairs are tendered using or existing framework contracts
Refurbishment	Refurbishment of structures that have deteriorated into a poor or very poor condition	Structural improvement works highlighted through our inspection programme are undertaken when identified. Where significant works are required, these will be escalated through the appropriate channels for additional Capital funding.

6.8 Traffic Signals

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	Defects are recorded via reports from the Public or identified during other operations. Response times are set dependent on nature of work the defect Works are undertaken by our term maintenance contractor.
Refurbishment of traffic signals	Refurbishment of junction that have deteriorated or the equipment has become obsolete/unreliable	There is no current annual funding in place for traffic signals however where identified these are escalated through the appropriate channels to request additional Capital funding.

7.0 Risk Approach

The risks that could prevent achievement of the standards specified in this plan (section 6) are:

Plan Assumption	Plan Risks	Action If Risk Occurs
The plan is based upon winters being “normal”	Adverse weather will create higher levels of detects and deterioration than have been anticipated.	Budgets and predictions will be revised and this plan updated if abnormally harsh winters occur
Available budgets have been assumed as shown in section 6	External pressures mean that council reduce the funding available for roads	Target service standards will be revised to affordable levels.
Construction inflation will rise further	Construction inflation will increase the cost of works (particularly oil/bitumen costs as they affect the cost of road surfacing materials).	Target service standards will be revised to affordable levels.
Levels of defect and deteriorate are based on current data which is limited for some assets (e.g. footways)	Assets deteriorate more rapidly than predicted and the investment required to meet targets is insufficient.	Split between planned and reactive maintenance budgets will be revised.
Resources are available to deliver the improvement actions	Pressures on resources mean that staff are not allocated to service improvement tasks such that the predicted benefits cannot be fully achieved.	Target dates will be revised and reported.

Appendix A – Carriageway and Footway Condition Assessments

A.1 Carriageway Assessments

Using the information provided through the SCOTS road condition assessments as a base, Roads officers will undertake a visual inspection of each location to generate an overall condition score. Each element of the road condition is evaluated with a weighted matrix to take into account the road speed and categorisation.

Section	Score Rating					Total Score
Surface Condition	0	6	10	14	20	
Structural Condition	0	6	10	14	20	
Ironwork Condition	0	3	7	9	12	
Centre Joint Condition	0	6	10	14	20	
Defects reported p/a	0	6	10	14	20	
Road Speed and Classification	0%	3%	7%	11%	15%	
Overall Score						

A.2 Footway Assessments

Unfortunately, the SCOTS group are unable to provide the same level of detail regarding RCI scores for the footway condition. Instead, the service relies on information gathered by our officers during routine inspections and through customer enquiries. Where a location is considered to be in need of additional repairs or possible future resurfacing officers will undertake a condition assessment using similar criteria to Carriageways.

Section	Score Rating					Total Score
Surface Condition	0	6	10	14	20	
Kerb Condition	0	6	10	14	20	
Ironwork Condition	0	3	7	9	12	
Defects reported p/a	0	6	10	14	20	
Footway Classification	0%	3%	7%	11%	15%	
Overall Score						

A.3 Carriageway and Footway Programme

Using the information generated by the above, the Roads service develop a rolling programme for additional repairs based on the available budget. Those locations which score the highest are prioritised for the coming years programme.

The scores are reviewed regularly to ensure the location has not deteriorated faster than expected.

Appendix B – Carriageway Investment Impact

As part of the SCOTS Roads Asset Management team, a series of cost and condition projection tools have been developed. These tools allow authorities to analyse the current level of investment and the impact these will have on their carriageway assets.

Additionally, through the national condition survey programme they have generated Steady State figure for each authority.

The Steady State figure is the level of capital investment required to maintain the carriageway asset in its current condition, West Dunbartonshire Council is currently £2.122m per annum.

The current Roads and Infrastructure budget is £2.54m per year. This budget is used to cover a number of road improvements including carriageway resurfacing, footway resurfacing, drainage improvements and structural improvements to our bridge stock.

A breakdown of the Roads and Infrastructure budget is provided below:

Carriageway Resurfacing	£1,350,000
Footway Resurfacing	£490,000
Structures	£150,000
Drainage	£150,000
C/Way and F/Way Structural Patching	£400,000

The funding provides a maximum overall budget for carriageway repairs £1,750,000 which is 18% below the required Steady State figure.

The latest National condition survey was undertaken in 2024. Table 4 below shows the current RCI scores for each road classification as well as our overall RCI score. Table 5 shows the length of road that is considered to be in need of repair.

Roads Classification	Percentage Red	Percentage Amber	Percentage Green	RCI
A Class	2.61	16.62	80.77	19.2
B Class	1.78	18.10	80.12	19.9
C Class	4.21	19.11	76.68	23.3
Unclassified	4.77	25.38	69.91	30.2

Network	**4.35**	**26.72**	**68.93**	**27.9**

Using the previous 3 years investment to set a baseline and the 10-year Capital investment plan we can use the SCOTS cost projection modelling to assess the impact on our spending profile on future RCI scores as well what result any potential change may have.

Current Investment

All Roads (Option 1)				
Year	Red	Amber 1	Green	RCI
2022/24	4.36	23.57	72.07	27.93%
2023/25	4.47	25.47	70.06	29.94%
2024/26	4.53	27.35	68.12	31.88%
2025/27	4.58	29.17	66.25	33.75%
2026/28	4.64	30.91	64.45	35.55%
2027/29	4.69	32.60	62.71	37.29%
2028/30	4.75	34.21	61.04	38.96%
2029/31	4.82	35.77	59.42	40.58%
2030/32	4.88	37.26	57.85	42.15%
2031/33	4.98	38.67	56.34	43.66%
2032/34	5.12	39.99	54.89	45.11%

Table 6 Predicted 10-year RCI results

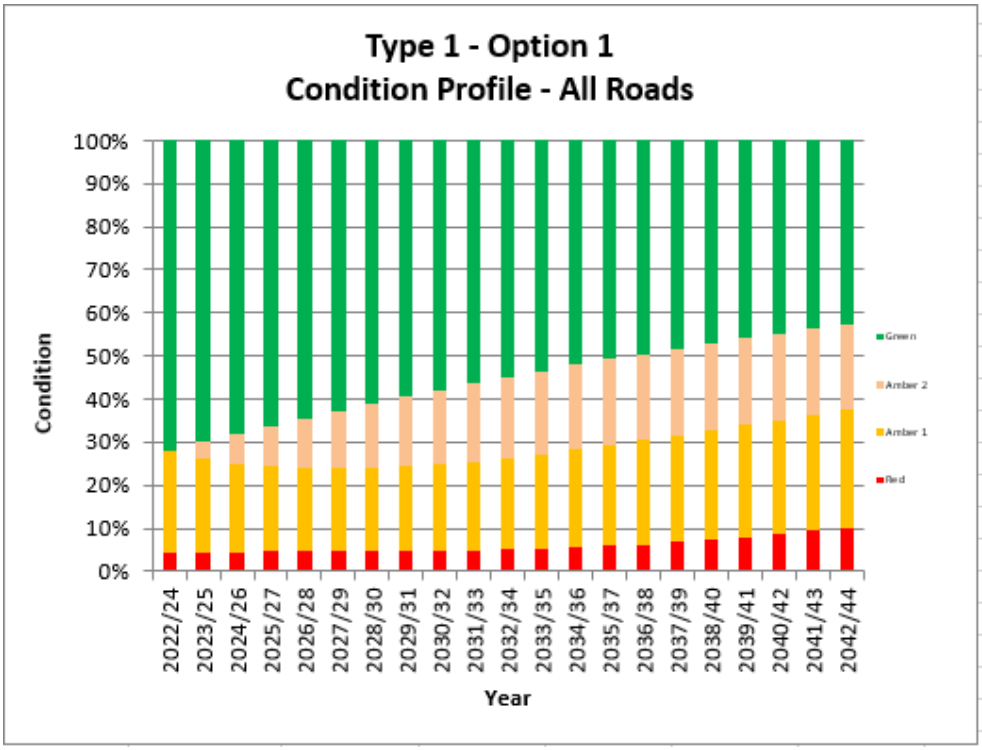


Diagram 1 - Current investment condition profile

Based on our current 10-year investment plan the modelling shows that our overall RCI of 27.9 will reduce to 45.1 over the next 10 years. This is likely to have a significant impact on our Revenue budget as we will see an increase in Revenue costs to undertake pothole type repairs as a result of the decrease in overall asset condition.

The above figures show an overall decrease in condition over the next 10 years with a total of 45% or 175km of our 389km of roads considered in need of attention. This is a 60% or 83km increase from current levels which will be deemed in need of repair.

Using the same modeling tools we can also review the impact on the road condition as a result of any future increase or decrease in Capital spend what the impact may be on our RCI scores as a result of any reduction in capital spend.

Reduction In Capital spend by 10%

In considering the impact of a 10% reduction in capital investment we can see that the RCI score over the next 10 years will be further reduced to 46.3% of the network in need of repair.

All Roads (Type 1 - Option 2)				
Year	Red	Amber 1	Green	RCI
2022/24	4.36	23.57	72.07	27.93%
2023/25	4.59	25.51	69.90	30.10%
2024/26	4.76	27.44	67.80	32.20%
2025/27	4.89	29.32	65.79	34.21%
2026/28	5.01	31.14	63.86	36.14%

2027/29	5.12	32.88	62.00	38.00%
2028/30	5.24	34.55	60.21	39.79%
2029/31	5.39	36.12	58.49	41.51%
2030/32	5.56	37.61	56.83	43.17%
2031/33	5.78	38.99	55.23	44.77%
2032/34	6.03	40.28	53.69	46.31%

Table 7 – Impact with 10% reduction

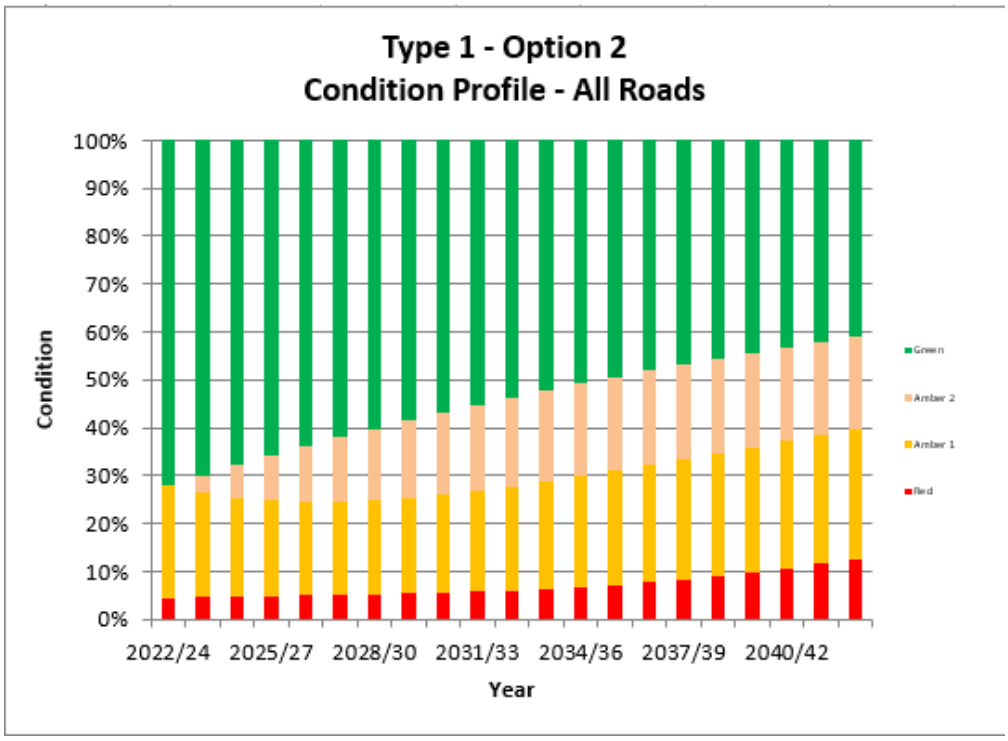


Diagram 2 – 10% reduction investment profile

Our road network, in particular our carriageways have been subject to a number of investment streams in the years leading up to COVID with particular focus previously on our A Class Road network.

In more recent years, whilst our investment levels have reduced, we have managed to maintain a reasonable steady RCI figure, however it is important to note that even with these positive figures the roads satisfaction surveys have shown a decline over the last few years to an all-time low of 23%

A more recent in-depth assessment of these figures highlights a number of complaints in regard to the road service however responses give similar consistent complaints in regard to the general condition of our roads and the number of potholes.

The Cost and condition projections undertaken highlight that even with current spending the overall condition of our asset will continue to decrease over the coming years with almost 50% of our network being considered as in need of maintenance treatment.

As with any asset a gradual decline in condition will result in increased revenue and maintenance costs and may need significant increased investment as part of future budget allocations to bring the asset back to the conditions currently experienced.

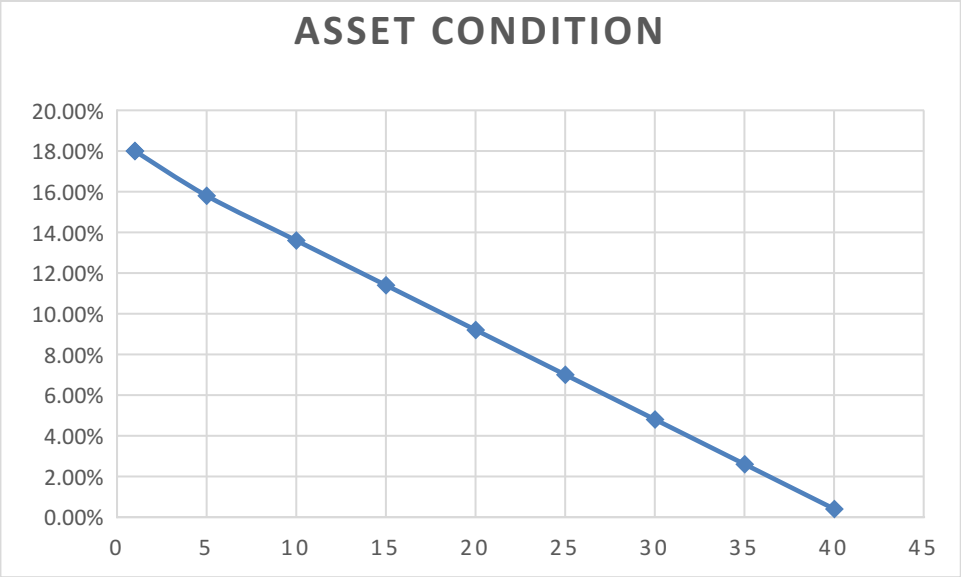
As pressures continue to increase on all budgets across the authority it is important that the impacts are fully assessed to ensure informed decisions can be made.

Appendix C – Footway and Street Lighting Investment impacts

C.1 Footway Impact

Current condition assessments highlight that 18% of our 717km of footways are in need of maintenance treatment. Based on the current level of Capital investment it would take 41 years to bring all locations into an acceptable standard.

	Percentage	Distance
Footway In Need of Repair	18%	129km
Footway Resurfaced Each Year	0.44%	3.1km
No of Year to Fully Repair	41 years	



C.2 Street Lighting Impacts

The service currently has 16452 street lighting columns. A street lighting column is considered to have a life expectancy of 30 years. Recent figures show that 73% of our columns have exceeded this 30-year useful life. Our column assets can be split into 3 categories: -

Age	No of Columns
Pre 1975 Installation	5429
1975 – 2000 Installation	6580
2000 to Date Installation	4443

Although there has been significant investment in recent years to convert our street lighting lamps to LED there has been limited investment in our column replacement programme. The service currently receives £100,000 per annum for street lighting upgrades which allows us to replace approx. 45-50 columns per year. There is a risk of failure in columns that have exceeded their life expectancy.