



ANNUAL STATUS AND OPTIONS REPORT



February 2025

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Carriageways

1.1 Road Length

ALL ROUTES (Kms)			MAINLAND			ISLAND			
Road Class	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
A	82.54	422.75	505.29	58.765	206.345	265.11	61.671	178.509	240.18
B	43.73	569.78	613.51	34.322	350.047	384.369	104.63	124.509	229.139
C	41.72	392.55	434.27	35.934	251.103	287.037	33.133	114.095	147.228
Unclassified	278.11	455.21	733.32	237.848	243.628	481.476	120.74	130.832	251.572
Totals (Km)	446.1	1840.29	2286.4	366.869	1051.123	1417.99	320.174	547.945	868.119

1.2 Condition

Road condition is measured by the Scottish Road Maintenance Condition Survey (SRMCS) which assesses parameters such as surface texture and cracking, smoothness and rutting. This provides an indication of the residual life of the road structure. The table below shows the current condition based on a two-year average 2022-24. It should be noted that during the covid pandemic survey vehicles were unable to access island networks which could influence the condition outputs.

2023-25 Overall, Road Condition % by Class				Road Condition Index (Red% + Amber%)
Road Class	% RED	% AMBER	% GREEN	
A	7.85	30.94	61.21	38.79
B	17.02	40.99	41.99	58.01
C	12.55	40.37	47.07	52.92
U	16.81	34.82	48.36	51.63
Urban	3.44	27.09	69.47	30.53
Rural	16.66	39.00	44.34	55.66
All	14.09	36.68	49.25	50.77

The recently received 2023-2025 RCI value shows a slight deterioration in the network overall, with a value of 50.77%. This is based on the revised 2-year average value for the completed survey works. Due to delays and disruption to the survey programme 2022 and 2023, through a combination of weather conditions affecting carriageway surfaces and logistical difficulties regards ferry and accommodation bookings, the survey provider was not able to complete a substantial section of the island network survey.

The latest survey completed in Winter 2024 includes the island networks and shows an RCI of 54% based on a single year survey. This indicates a marked deterioration of our island road network condition which officers attribute to the lack of scanning on our islands over the last 3 years and will require careful consideration and effective prioritisation of available investment to improve network condition using appropriate surface treatments.

1.3 Asset Valuation

Carriageways Valuation (These values include the regional and inflation factors for the current year)			
Road Classification	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost
Principal (A) Roads (Urban)	£243,477,338	£214,194,416	£2,656,047
Principal (A) Roads (Rural)	£528,709,818	£469,270,109	£5,072,513
Classified (B) Roads (Urban)	£231,543,236	£204,135,316	£2,529,339
Classified (B) Roads (Rural)	£382,314,340	£330,259,111	£4,083,724
Classified (C) Roads (Urban)	£91,122,828	£78,231,724	£1,122,234
Classified (C) Roads (Rural)	£245,600,490	£202,896,000	£3,238,132
Unclassified Roads (Urban)	£421,683,747	£347,832,111	£6,464,604
Unclassified Roads (Rural)	£200,882,470	£160,211,326	£2,912,363
Total	£2,345,334,267	£2,007,030,112	£28,078,957

1.4 Investment

The capital reconstruction budget for 2023/24 was £8M, of that approximately £1M was brought forward to assist with works in 2022/23 programme, as well as £414k being ring fenced for works at Cloanaig, therefore the 2023/24 programme delivered £6.6m of investment on a range of surfacing projects aimed at improving network condition across Argyll. The table details the surfacing quantities and value within each activity. The percentage split across activities shows the bulk of investment (83%) is attributed to Surface Dressing (SD) and thin surfacing works to maximise network coverage. The aim being to seal and extend surface life with a SD treatment and tackle as much deteriorated surface as possible with thin surfacing works to help reduce demand for reactive treatment works.

Surface Treatment	Length (m)	Cost (£)	Percentage
Surface Dressing	89967	£3,171,238	3.94%
Thin/Micro Surfacing (up to 25mm)	0	£0	0%
Thin Overlay (>25mm to 60mm)	12380	£1,277,573	0.54%
Moderate Overlay (>60mm to 100mm)	1513	£296,344	0.07%
Structural Overlay (>100mm)	0	0	0%
Thin Inlay (>25mm to 60mm)	6243	£1,069,209	0.27%
Moderate Inlay (>60mm to 100mm)	215	£24,478	0.01%
Structural Inlay (>100mm)	250	£58,308	0.01%
Planned Patching		£115,286	0%
Reconstruction (250mm+)	500	£613,653	0.02%
Total	111068	£6,626,090	4.86%

Argyll and Bute Council, applies annually for STTS funding from the Scottish Government. We received £958,445 in 2022/23 and a further £387,344 for 2023/24 in STTS funding which was used as supplementary income for our capital budget.

1.5 Maintenance Backlog

The SCOTS Headline Maintenance Backlog figure is calculated every two years using road condition data collected via the Scottish Road Maintenance Condition Survey (SRMCS). The calculation uses surveyed condition data with a surfacing treatment matrix and national average unit rates to determine the extent of surfacing maintenance required to bring whole network surface to an 'A1' condition with no defects.

SCOTS Headline Maintenance Backlog	2024 SCOTS Report
Headline Backlog Figure	Steady State Figure
£122,548,000	Between £11M to £14M

As can be seen in the above table, SCOTS modelling, which is used across all 32 Scottish Councils calculates that to restore our roads to A1 condition, we will require £122,548,000 investment. The steady state value to keep roads in current condition is between £11M to £14.M annually. This increase in costs was associated to material, vehicles and staff cost increases; also, petrochemical costs have seen a dramatic increase in the last 3 years. The steady state was previously £8M which shows a potential increase of over 27%. We manage our roads and improve them with various methods; however, we do not seek to manage our roads to A1 condition as this would use large amounts of our budget for only a few schemes. Instead, officers manage the works to provide best value such as surface dressing preparation and works to treat the road condition to maximise the lifespan of the road.

1.6 Winter Maintenance

Table below identifies the last 8 years of road and winter maintenance revenue budget. The 2nd and 3rd Columns identify the budget allocated for Roads and Winter and the last column identifies the percentage of that budget year on year. Therefore, we are effectively **allocating** more on winter each year with a **reduction** in Road Maintenance Activities Budget.

Budgets	Roads	Winter	Total	Winter %
2015-16	£3,957,298	£1,644,490	£5,601,788	29.36%
2016-17	£3,972,055	£1,836,286	£5,808,341	31.61%
2017-18	£3,832,056	£1,636,828	£5,468,884	29.93%
2018-19	£3,832,056	£1,621,674	£5,453,730	29.74%
2019-20	£3,411,055	£2,122,154	£5,533,209	38.35%
2020-21	£3,506,058	£2,122,618	£5,628,676	37.71%
2021-22	£ 3,422,540	£ 2,119,974	£5,542,514	38.25%
2022-23	£3,542,940	£2,108,942	£5,651,882	37.31%
2023-24	£3,670,665	£2,304,942	£5,975,607	38.57%

Table below shows outturn actual revenue spend on Roads and winter maintenance for the last 8 years. The proportion of spend on winter within the total revenue outturn shows a fluctuation due to unplanned weather events. This demonstrates that generally the trend is for outturns to be above the budget allocation for winter maintenance.

Spend	Roads	Winter	Total	Winter %
2015-16	£4,173,702	£1,832,248	£6,005,950	30.51%
2016-17	£4,243,332	£1,885,851	£6,129,183	30.77%
2017-18	£3,926,258	£2,669,341	£6,595,599	40.47%
2018-19	£3,765,604	£1,791,150	£5,556,754	32.23%
2019-20	£3,485,315	£2,165,845	£5,651,160	38.33%
2020-21	£ 3,360,100	£ 2,251,432	£ 5,611,532	40.12%
2021-22	£3,516,984	£2,355,154	£5,872,138	40.10%
2022-23	£3,746,846	£2,661,350	£6,408,196	41.54%
2023-24	£3,784,751	£2,663,324	£6,448,075	41.30%

Winter Treatment Information	Winter 2023-24	Average Stats since 2009-10	
Total number of planned treatment runs (equal Full Fleet)	71	78	Runs
Total aggregate annual treatment mileage travelled by all gritting vehicles on all planned routes	183,385	95,652	Miles
Total tonnage of salt used on carriageways	12,071	14,480	Tonnes
Total Winter actual spend carriageways	£2,663,324	£2,328,057	Spend

1.7 Revenue Funded Preventative Maintenance Investment Options

The value of undertaking adequate preventative maintenance works cannot be overstated. It is the most vital and fundamental function required to extend infrastructure service life, strengthen network resilience, and minimise demand for capital investment.

Below are several initial revenue budget investment options for consideration. These will all require further investigation, research, and development to progress more detailed information on which option is best suited to support council objectives within the confines of available resources.

Option 1 Reduced investment level, increased pressure on council budgets and the need to realise savings may reduce current investment levels for preventative maintenance activities. This needs careful consideration and will impact the quantity of works afforded necessary to provide adequate protection to vital road assets. It will increase demand for more expensive reactive works which is the vicious cycle essential maintenance activities are currently experiencing. It will increase future demand for capital investment far greater than initial savings realised.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Delivers short term budget savings	Less Maintenance works afforded	Doesn't support corporate objectives
	Increased asset deterioration	Difficult to demonstrate value
	Greater demand for expensive reactive maintenance works	Future demand for capital investment far greater than initial savings realised.
		Highly likely to compromise internal service delivery

Option 2 Maintain existing investment levels and consider prioritising activity funding using a risk-based approach. Prioritised activities should be delivered through a planned programme of works to maximise value for money through appropriate service standards. Combined with improved recording of maintenance works, asset information can be enhanced to assist driving an improved asset management approach that can break the current vicious cycle of reactive maintenance demands.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Maintains existing budget	No Council budget saving	Supports some corporate goals
Retains internal service delivery	Requires change in approach	Training to focus efforts on prioritised business needs
Increased focus on planned works	Needs commitment to deliver	Some investment in better mobile technology
Better data capture and analysis		Development of appropriate service standards
Better value works can be afforded		Additional resources needed to implement any changes

Option 3 Maintain or increase investment levels through a zero-based budget approach. This would essentially allocate a percentage budget for reactive maintenance with the balance of funding allocated through planned schedules and programmes of works to effectively justify and approve funding allocation against a measured works quantity to meet appropriate service standards. This would refocus effort on delivering measured work packages whilst improving capture of asset information to assist delivery of the benefits of implementing recognised asset management practices.

BENEFITS	DRAWBACKS	CONSIDERATIONS
Better control of costs	No Council budget savings	Supports Council objectives
Delivers better value maintenance services	Potential increased budget required	Implementing SCOTS Asset Management recommended practices
	Requires significant changes	Investment in better mobile technology
More informed decision making	Needs commitment to deliver	Staff training & additional resources to implement

Option 4 Consider funding some maintenance activities using capital funding allocation. Preventative maintenance is a critical activity some of which can be easily quantified (Ditching, Gully cleaning, Patching Etc.) Delivering planned measurable works would greatly enhance ability to demonstrate value and prudent stewardship of assets.

BENEFITS	DRAWBACKS	CONSIDERATIONS
Vital maintenance activities delivered	May impact capital investment on other assets	Supports council objectives
Ability to demonstrate value		Implementing SCOTS Asset Management recommended practices
Improved asset management		Investment in better mobile technology
		Staff training & Additional resources to implement

1.8 Capital Resurfacing Investment Options

The SCOTS cost projection modelling tool enables an indicative illustration of predicted road surface condition in terms of RCI to be developed for a range of investment options over a 20yr term. This allows comparisons between various levels of investment. Options 1- 4 are illustrated in the table and chart below for £2m, £3.5m, £5m and £8m respectively.

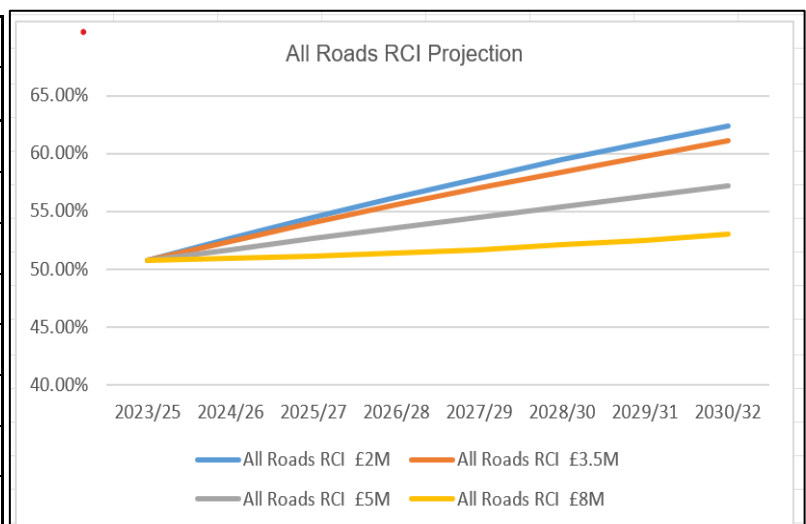
Option 1 - £2m annual investment shows **Significant deterioration** of network RCI

Option 2 - £3.5m annual investment shows **Considerable Deterioration** of network RCI

Option 3 - £5m annual investment shows **Deterioration** of network RCI

Option 4 - £8m annual investment shows **Slight deterioration** rate of network RCI

All Roads RCI				
Year	£2M	£3.5M	£5M	£8M
2023/25	50.77%	50.77%	50.77%	50.77%
2024/26	52.67%	52.42%	51.70%	50.91%
2025/27	54.48%	54.01%	52.63%	51.11%
2026/28	56.21%	55.54%	53.56%	51.39%
2027/29	57.87%	57.01%	54.48%	51.72%
2028/30	59.45%	58.42%	55.40%	52.10%
2029/31	60.96%	59.78%	56.31%	52.53%
2030/32	62.41%	61.09%	57.21%	53.01%



2.0 Footways

2.1 Length

Footways/Footpaths Cycleways Quantities by Hierarchy		
Footway Hierarchy	Length (m)	Area (sqm)
Higher Amenity Footways	41,977	117,536
Other Footways	470,174	1,001,471
Total	512,151	1,119,006
All Footpaths	9,349	11,219
Total	9,349	11,219
Cycle Lanes *	0	0

*Cycle Lanes are not listed if contiguous with the road, therefore we have zero independent cycle lanes in ABC.

2.2 Condition

Asset condition surveys are not currently undertaken due to limited resources and cost implications.

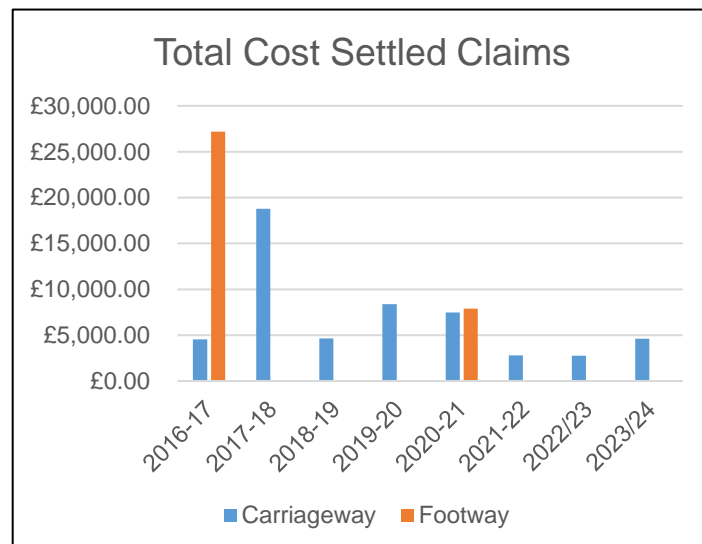
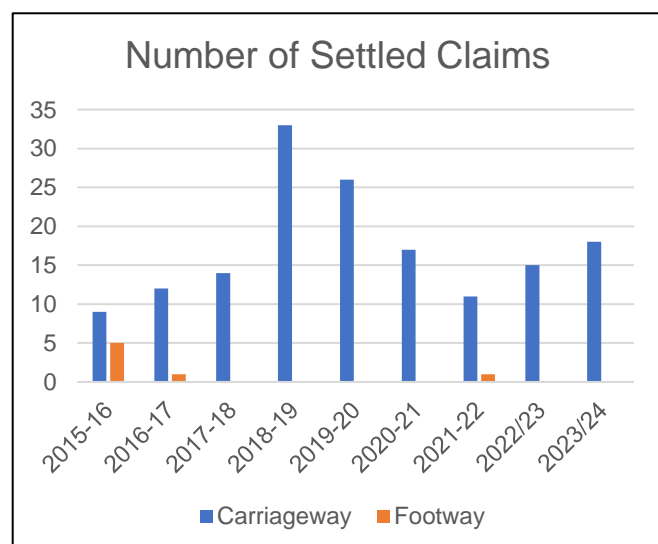
2.3 Asset Valuation

Table 2.3 Footway Valuation by Hierarchy			
Footway Hierarchy	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost
Higher Amenity Footways	£11,399,861	£9,677,319	£73,519
Other Footways	£97,735,436	£75,877,622	£963,961
Total	£109,135,297	£85,554,941	£1,037,480

2.4 Investment

Footways investment of £500k for 2022/23 was Active Travel Funding and £750k for 2023/24 from Capital investment part of which has been carried over into 2024/25 has improved certain areas, however this requires sustained investment and there was no specific Capital investment for 2024/25, and no footway allocation planned for 2025/26.

2.5 Public Liability Claims



The cost and number of liability claims is linked to the condition of our road and footway network. Budget reductions will impact the level of maintenance that can be afforded allowing road and footway condition to deteriorate. A deteriorating network condition increases the risk of potential damage or injury to road users from the greater occurrence of defects across the network.

2.6 Investment Options

Below are a few initial revenue budget investment options for consideration. These will all require further investigation, research, and development to progress more detailed information on which option is best suited to support council objectives within the confines of available resources. Investment options should be linked to the long-term maintenance strategy for the asset.

Option 1 Undertake maintenance only on a reactive basis to repair defects within revenue budget allocation		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Continues service delivery for defects	Continued long term asset deterioration	Adopting risk-based approach to managing the asset
	Growing demands for capital investment	Resource condition survey of asset to gain information on asset needs
	Rising number of public liability claims	Development of long-term maintenance strategy for asset group
	Reactive is expensive and poor value	Resource development of a prioritised list of planned works

Option 2 Increased investment in revenue planned maintenance activities		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles asset deterioration	Limited asset information and condition data	Implementing SCOTS asset management recommended practices
Planned works deliver better value	Resources required to identify, quantify, undertake works	Resource development of a prioritised list of planned works
Reduced demand for reactive works	Level of works limited within available revenue budget allocation	Development of long-term maintenance strategy for asset group
Less complaints		

Option 3 Develop business case for investment through capital budget for resurfacing/reconstruction of sub-standard footways and footpaths. Develop 3-5 year rolling programme of works that can be prioritised in line with available resources		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles deterioration and gradually improves whole asset	Limited asset information and condition data	Development of long-term maintenance strategy for asset group
Demonstrates prudent stewardship of assets	Resources required to identify scope of works	Investment in mobile technology to capture asset data
Supports corporate objectives	Requires increased levels of investment	Implementing SCOTS asset management recommended practices

Option 4 Capital investment for improvement in kerbing in conjunction with carriageway surfacing and street lighting projects. Requires a holistic planned approach across all asset groups to collaborate works programmes that support overall council goals and objectives. A Street scene approach to delivering improvements.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
All asset approach to maintenance	Requires substantial capital investment	Use of SCOTS asset management tools
		Investment in mobile technology
		Development of appropriate maintenance strategies

3.0 Street lighting

3.1 Inventory

The condition of street lighting assets is normally determined based on the age of assets. Unfortunately, there is no available historic data on the installation dates for the majority of street lighting assets.

Street Lighting Quantities (*Estimated as Asset Inventory is not complete)		Other Street Lighting Assets	
Column Material	Quantity	Other Street Lighting Assets	Quantity
Non-Galvanised Steel	2,209*	Wall Bracket	1,196
Galvanised Steel	9,196*	Wooden Pole	110
Concrete	29	High Mast Column	0
Aluminium (pre-2000)	1,119	Control Cabinet	751
Aluminium (post 2000)	0	Other	0
Stainless Steel	8	Total	2,057
Cast Iron	0	Cable Assets (Estimated)	Quantity (m)
Total	12,561*	Cable under Carriageway (10%)	43,050
Luminaires	Quantity	Cable under Footway (50%)	215,250
All	13,896*	Cable under Verge (40%)	172,200
Total	13,896	Total	430,500

Illuminated Sign Assets	
Illuminated Signs	Quantity
Signs	433
Bollards	46
Total	479

3.2 Condition

Following previous investment in replacement of luminaires with new low energy LED Lanterns, data has been collected on the condition of columns and apparatus across the network. Initial LED replacement works highlighted an estimated number of columns in very poor condition and unsuitable for installing new LED lanterns as per the below table.

% Total Asset	
1- V. Good	33.95%
2 - Good	63.96%
3 - Fair	1.25%
4 - Poor	0.84%

3.3 Valuation

Street Lighting Valuation			
Column Assets (*Estimated as Asset Inventory is not complete)	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost
Non-Galvanised Steel*	£4,102,436	£396,174	£164,097
Galvanised Steel*	£17,113,977	£6,365,232	£570,466
Concrete	£29,639	£988	£988
Aluminium (pre-2000)	£1,182,740	£49,737	£29,569
Aluminium (post 2000)	£0	£0	£0
Stainless Steel	£8,164	£7,348	£117
Cast Iron	£0	£0	£0
Cable Assets			
Cable under Carriageway	£3,809,405	£2,001,951	£63,490
Cable under Footway	£17,026,645	£8,949,015	£283,777
Cable under Verge	£11,544,419	£6,066,921	£192,407
Other Street Lighting Assets			
Wall Bracket	£641,402	£519,731	£16,035
Wooden Pole	£112,257	£22,451	£2,245
High Mast Column	£0	£0	£0
Control Cabinet	£225,245	£99,216	£4,505
Total*	£55,796,330	£24,478,763	£1,327,696
Luminaires Assets			
Total*	£2,950,781	£2,040,139	£147,539
Illuminated Signs Assets			
Signs	£257,626	£126,326	£10,305
Bollards	£18,463	£9,167	£738
Total	£276,089	£135,493	£11,043
All Assets Total	£59,023,200	£26,654,395	£1,486,278

3.4 Investment

Funding	Funding source	Current Year	
		2024-25(£m)	2025-26(£m)
Block Allocation	Scottish Government	0.150	0.000
Block Allocation Carried Forward	Scottish Government	0.175	0.369
Additional Council Allocation	Council	0.300	0.321

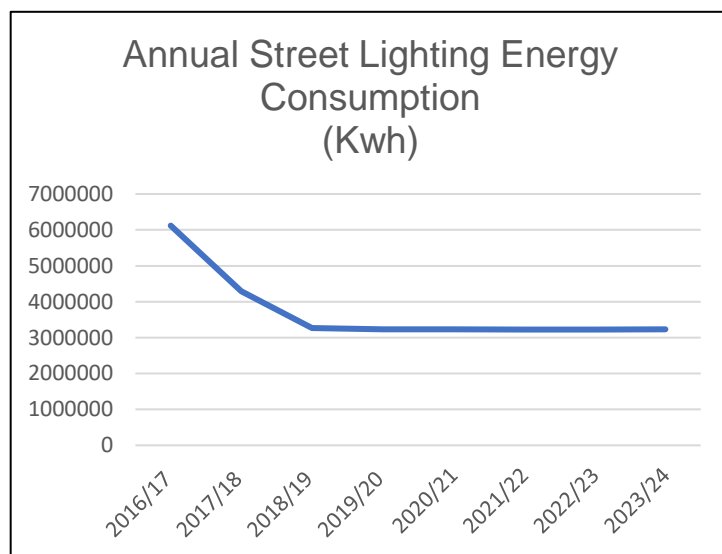
The replacement of deteriorated assets that have reached the end or beyond their expected service life is currently not part of a longer-term maintenance strategy or plan. For many years the need to deliver investment savings has overridden the need for asset renewals. This reduced funding has delayed asset renewal projects creating an even older and more fragile asset base leading to a growing backlog of outages and reactive maintenance demands on very limited resources.

The LED project highlighted the condition of assets and the growing need for action to develop a longer-term maintenance strategy for investment in asset renewals. Table 3.4 provides, and indicative treatment cycle based on current average expected asset renewal and clearly illustrates the present investment strategy is unsustainable.

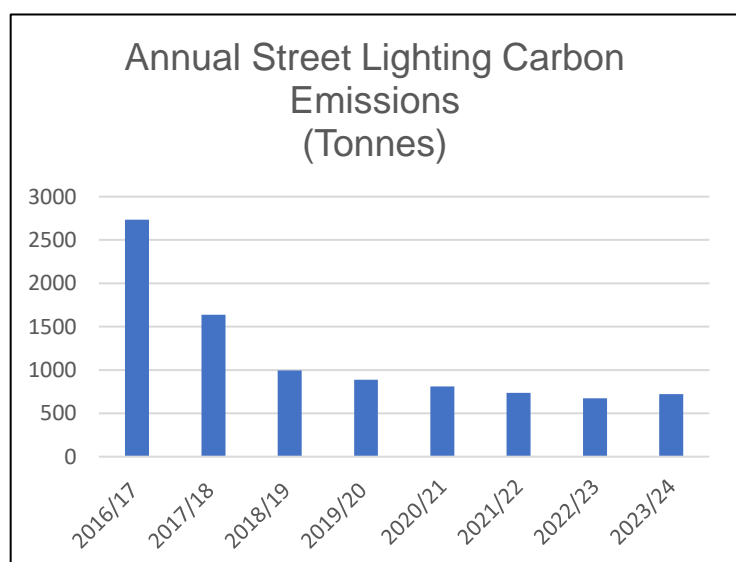
Treatment <small>(*Estimated as Asset Inventory is not complete)</small>	Expected Service Life (Yrs)	Annual Quantity (Ave)	Inventory (No.)	Treatment Cycle (Years)
Column Replacement	30	25 No.	12561*	522
Cable replacement	60	750 Lin m.	430,500 (Lin.m)	574
Luminaire (LED)	20	N/A	13896*	All new assets

3.5 Energy Consumption

Year	Total	Unit
2016/17	6119183.7	kWh
2017/18	4288415.2	kWh
2018/19	3267835.1	kWh
2019/20	3232557.7	kWh
2020/21	3228999	kWh
2021/22	3224175	kWh
2022/23	3224175	kWh
2023/24	3232362	kWh



Year	Carbon Total	Units
2016/17	2733	Tonnes CO2
2017/18	1636	Tonnes CO2
2018/19	996	Tonnes CO2
2019/20	889	Tonnes CO2
2020/21	810	Tonnes CO2
2021/22	738	Tonnes Co2
2022/23	673	Tonnes Co2
2023/24	720	Tonnes Co2



3.6 Investment Options

Below are a few initial revenue budget investment options for consideration. These will all require further investigation, research, and development to progress more detailed information on which option is best suited to support council objectives within the confines of available resources. Investment options should be linked to development of a long-term maintenance strategy for the asset.

Option 1 Undertake maintenance only on a reactive basis to repair defects within existing revenue budget allocation

BENEFITS	DRAWBACKS	CONSIDERATIONS
Continues service delivery for defects	Continued long-term asset deterioration	Adopting risk-based approach to managing the asset
	Growing demands for capital investment	Resource condition survey of asset to gain information on asset inventory, condition Etc.
	Rising number of public liability claims	Development of long-term maintenance strategy for the asset group
	Reactive maintenance is expensive and poor value	Resource development of a prioritised list of planned works

Option 2 Increased investment in planned revenue maintenance activities

BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles worst asset deterioration	Limited asset information and condition data	Implementing SCOTS asset management recommended practices
Planned works deliver better value	Resources required to identify and quantify works	Current use, Is it needed? Can it be removed?
Reduced demand for reactive works	Level of works limited within available revenue budget allocation	Resource development of a prioritised list of planned works
Less complaints		Development of long-term maintenance strategy for the asset group

Option 3 Develop a business case for investment through capital budget for replacement of obsolete, damaged and deteriorated assets particularly vehicle safety barriers. Align the business case to a suitable long-term maintenance strategy for the asset group.

BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles deterioration and gradually improves whole asset.	Limited asset information and condition data	Development of a long-term maintenance strategy for the asset group
Demonstrates prudent stewardship of assets	Resources required to identify scope of works	Investment in mobile technology to capture asset data
Supports corporate objectives	Requires increased levels investment	Implementing SCOTS asset management recommended practices

Option 4 Business case development for capital investment in conjunction with other asset groups that aligns with the Road Asset Management Plan

BENEFITS	DRAWBACKS	CONSIDERATIONS
Whole asset approach to maintenance	Requires substantial capital investment	Use of SCOTS asset management tools
	Requires significant improvement in asset data	Investment in mobile technology
		Development of appropriate maintenance strategy

4.0 Structures

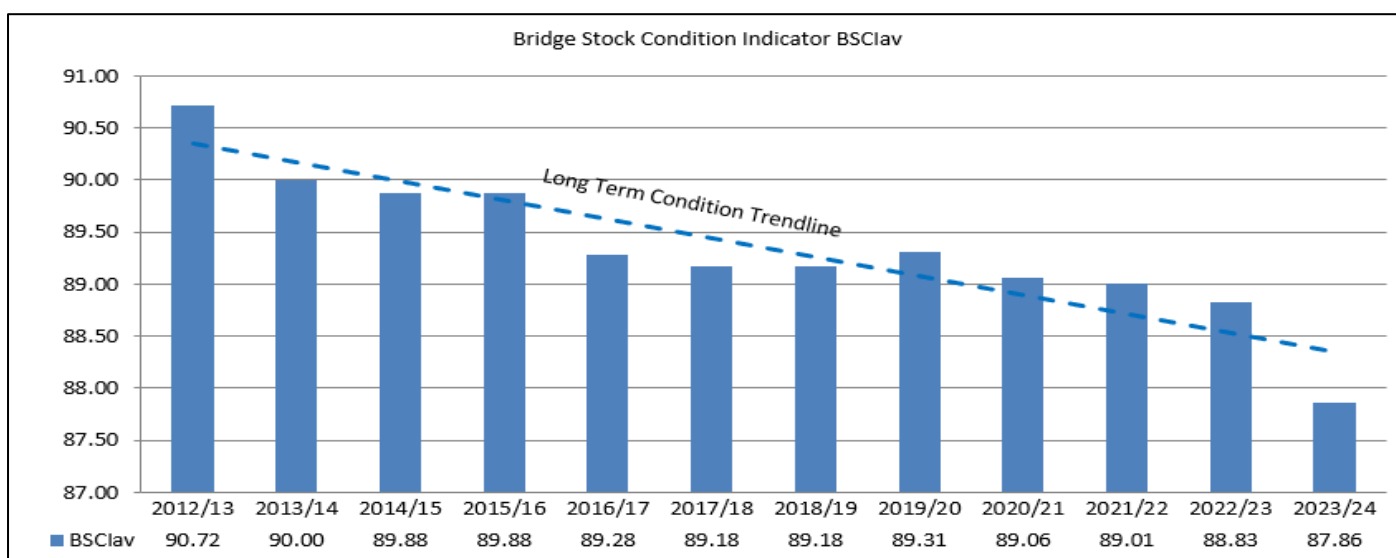
4.1 Assets

Table 4.1: Structures Inventory	
	Quantity
Road Bridges	890
Footbridges	11
Unusual Structures (cast Iron Bridges)	2
Retaining Walls	961
Coastal Protection	923
Height, Sign and Signal Gantry	0
Culverts	294
Subways Bridge stock condition is	0
Total	3081

Previously our Asset Management system was only able to record Coastal Protection assets under the Retaining wall category. This aligns with how SCOTS asset Management Returns are produced. Previous ASOR Reporting was consequently a single retaining wall line combining Retaining Wall and Coastal Protection asset stock. Coastal protection asset type has now been implemented in our asset management system and retaining walls and coastal protection are recorded and reported separately. Coastal protection assets typically comprise of coastal/tidal retaining sea walls, rock armour protection and other systems such as embankments, reinforced soil solutions, gabion baskets.

4.2 Condition

Our bridges and structures are inspected and assessed to comply with the “*Well-managed highway infrastructure*” Code of Practice. Data gathered from bridge inspections is used to calculate a Bridge Stock Condition Indicator value which can enable analysis and trending of condition information. The condition results since 2012/13 are illustrated in the chart below which shows a steady decline in overall bridge stock condition from a reduction in capital investment with revenue investment being prioritised towards reactive repairs.



The long-term trend line in blue shows a continued deterioration of assets with condition of less critical structures expected to decline further without increased levels of investment. There are currently 53 structures subject to special monitoring precautions and 28 bridges that have failed the European standard assessment (prior to restrictions). 15 bridges are currently subject to acceptable weight restrictions.

Bridges are subject to principal inspections every 6 years and general inspections every 2 years.

4.3 Asset Valuation

Structure Type	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost
Road Bridges	£115,437,382	£108,633,390	£1,267,044
Footbridges	£2,934,648	£2,925,146	£2,117
Unusual Structures	£2,286,856	£1,876,450	£18,390
Retaining Walls	£166,492,505	£166,442,331	£20,470
Height, Sign and Signal Gantries	£0	£0	£0
Culverts	£3,533,754	£3,542,437	£294
Subways	£0	£0	£0
TOTALS	£290,685,145	£283,419,754	£1,308,315

4.4 Investment

PLANNED INVESTMENT							
		2024-25	2025-26	2026-27	2027-28	2028-29	Comments
CAPITAL	Bridge Strengthening /Replacement Programme	£141k	£293k	£400k	£400k	£400k	Bridge & Retaining Wall: <ul style="list-style-type: none"> • Strengthening • Replacement
	Local Bridge Maintenance Fund – Grant Funding Secured	£213k	£1,777k	£1,000k	£1,000k	£1,000k	
	Coastal Protection	£96k	£150k	£150k	£150k	£150k	Coastal Protection Strengthening repairs
	Ardbeg Seawall / Bute Sea Wall Repairs	£274k	£359k	TBC	TBC	TBC	Repairs of asset following December 2021 storm damage
	Coastal Change Adaptation	£55k	£250k	£250k	TBC	TBC	Secured funding for Coastal Change Adaptation
REVENUE	Structural Maintenance	£231k	TBC	TBC	TBC	TBC	Bridges & Retaining Walls: <ul style="list-style-type: none"> • Maintenance & Repair, • Inspection, • Asset Management • Abnormal Load Monitoring, • Technical Approval Budget confirmed Annually
	Structural Assessment	£64k	TBC	TBC	TBC	TBC	Assessment of Bridges & Retaining Walls. Budget confirmed Annually
	Coastal Protection	£180k	TBC	TBC	TBC	TBC	Inspections, Maintenance & Repairs, Asset Management Budget confirmed Annually

4.5 Maintenance backlog

Headline Backlog Figure	Steady State Figure	Source
£32.4m	N/A	Argyll and Bute Council Asset Management Reporting

4.6 Flood Risk Management

Argyll and Bute Council has a statutory duty under the Flood Risk Management Act (Scotland) 2009 to reduce the overall flood risk through Local Flood Risk Management Plans subject to funding availability. This includes Flood Incident Investigation, Waterbody Assessments, Provision of Flood Consultancy (General Flood Advice), Clearance and Repair Works, Mapping, Flood Risk Assessments, Flood Studies,

Flood Monitoring Network, Production and Update of Local Flood Risk Management Plans. These works are undertaken in conjunction with the Scottish Environment Protection Agency (SEPA) and other *responsible authorities* as defined under the Act. The current budget allocation for flood risk management are shown in table below.

PLANNED INVESTMENT				
		2024-25 £m	2025-26 £m	Comments
CAPITAL	Flood Protection	1.213	0.500	<ul style="list-style-type: none"> Tigh Dearg Rothesay FPS Performance
	Helensburgh Flood Mitigation	0.000	0.427	
	Campbeltown Flood Protection Scheme	1.780	0.010	Design & Construction of Flood Protection Scheme. 80% of costs at contract award funded by Scottish Government. All other costs funded by ABC.
REVENUE	Flood Management	0.222	0.222	<ul style="list-style-type: none"> Flood Incident Investigation Waterbody Assessments Provision Of Flood Consultancy (General Flood Advice) Clearance and Repair Works Mapping Flood Risk Assessments Flood Studies Flood Monitoring Network Production and Update of Local Flood Risk Management Plans Budget confirmed Annually
	Flooding Direct Costs	0.101	0.101	Works by ABC Operational Services Budget confirmed Annually

4.7 Match Funding Opportunities

Under Cycle 1 the Council has been successful in securing funding for flood studies and physical works such as those underway in Campbeltown. These studies and physical works have been 80% funded by Scottish Government and 20% by the Council. At the time of writing, the next round of flood funds has not been released, and it is currently unknown as to what, if any, funding will be available and over what period.

4.8 Investment Options

Below are a few initial revenue budget investment options for consideration. These will all require further investigation, research and development to progress more detailed information on which option is best suited to support council objectives within the confines of available resources. Investment options be linked to development of a long-term maintenance strategy for the asset.

Option 1 Undertake maintenance only on a reactive basis to repair defects within existing revenue budget allocation		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Continues service delivery for defects	Continued asset deterioration	Development of a long-term maintenance strategy
	Increased risk of more weight restrictions or road closures	Strengthen the business case for investment
	Impacts economy and vital transport links	Explore funding opportunities Etc. (Flood prevention Etc)
	Reactive maintenance is expensive and poor value	

Option 2 Increased investment in revenue planned maintenance activities		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Continues service delivery for defects	Asset deterioration remains greater than investment	Development of long-term maintenance strategy
Tackles some preventative maintenance backlog	Impacts economy and vital transport links	Strengthen the business case for investment
Contributes to lowering risk of more weight restrictions or road closures	Reactive maintenance is expensive and poor value	Explore funding opportunities Etc. (Flood prevention Etc)

Option 3 Develop business case for investment through capital budget for strengthening and refurbishment of structures. Development and implementation of an appropriate long-term maintenance strategy for the group. Continued improvement in asset management.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Contributes to development of more sustainable asset management regime	Requires investment	Development of a long-term maintenance strategy
Planned preventative maintenance programme of works	Requires resource to develop business case	Strengthen the business case for investment
More sustainable asset condition		Explore funding opportunities Etc. (Flood prevention Etc)
Supports corporate objectives		Resources to undertake increased workload

Option 4 Development of a successful business case for investment to tackle deterioration and improve overall asset conditions as part of a developed asset management process.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Sustainable asset management regime	Requires substantial level of investment	Development of a long-term maintenance strategy
Improves asset condition	Requires resource to develop successful business case	Resources to undertake / manage increased workload and project design and development
Reduced weight restrictions	May require additional data capture to support business case development	Explore funding opportunities Etc. (Flood prevention Etc.)
Supports corporate objectives		

5.0 Traffic Signals

5.1 Inventory

Traffic Signal Types	Quantity	Other Traffic Management System Types	Quantity
Traffic Signal (Junction)		Information Systems	2
Minor Junction	0	Safety Cameras	0
Medium Junction	11	Variable Message Signs	2
Major Junction	0	Vehicle Activated Signs	18
Complex Junction	0	Real Time Passenger Information	0
Traffic Signal (Pedestrian Crossing)			
Single Carriageway	14		
Double Carriageway	0		
Total	25	Total	22

5.2 Valuation

Traffic Signal Types	Quantity	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost
Junctions	11	£589,652.61	£328,329.30	£24,568.86
Pedestrian Crossings	14	£333,540.87	£135,500.98	£14,592.41
Total	25	£923,193.48	£463,830.28	£39,161.27

5.3 Investment

Traffic management systems require specialist contractors to undertake regular inspection and necessary maintenance. Increasing reactive maintenance costs are being incurred as some assets are functioning beyond their expected service lives and when problems arise replacement of obsolete parts is difficult to procure.

Many traffic management assets have had essential works postponed over time due to budget restrictions. Although it is the smallest asset group delays in asset renewal particularly electronic hardware can lead to parts becoming obsolete as advances in technology become available. A recent survey has highlighted the need for some urgent repairs to bring systems up to date. Historically junctions and pedestrian crossing have been replaced ad hoc in response to system failures or inability to obtain replacement components. Generally, this equates to approx. one junction or crossing per year. The table below provides an indicative illustration of the asset renewal cycle.

Planned Investment Budgets	2024-25	2025-26
Capital	£-Nil	£-Nil
Revenue	£45k	£45k
Total Budget	£45k	£45k

5.4 Investment Options

Below are a few initial revenue budget investment options for consideration. These will all require further investigation, research and development to progress more detailed information on which option is best

suiting to support council objectives within the confines of available resources. Investment options should be linked to development of a long-term maintenance strategy for the asset.

Option 1 Continue to fund Traffic Signals within existing annual allocation of £45k revenue budget		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Maintains existing service	Specialised works undertaken by external contractors	Revised tender for routine inspection and maintenance
	Deteriorated asset base drives increasing reactive maintenance costs	Require additional resource to develop appropriate business case
	Requires occasional capital investment to replace obsolete / defective equipment	

Option 2 Utilise latest condition survey data to develop an appropriate business case for investment in renewal of apparatus		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Improved asset reliability	Requires investment	Resource and staff training to improve asset knowledge
Reduced maintenance costs	Requires resource to develop suitable business case for investment using capital budget	Development of a suitable maintenance strategy for the asset
		Requires resource to procure tenders and administer / supervise potential contract works

Option 3 Produce a business case based on latest survey data to upgrade all apparatus to meet compliance with current standards over a three to five year period.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Modernises asset to meet current standards	Requires investment	Resource to manage and supervise works
Improves reliability	Require resource to develop suitable business case for investment using capital budget	Resource required to procure tender documentation and administration of same
Reduces reactive maintenance		Use SCOTS Asset management tools
Improves user experience		

Option 4 Utilise latest condition survey data to identify asset needs. Address any priority repairs and progress a maintenance strategy as part of the RAMP to develop a long-term investment plan over three-five years to bring asset condition to meet compliance with current standards.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Modernises asset to meet standards	Require investment	Resources to manage and supervise works
Improves reliability	Requires resources to develop suitable business case for investment using capital budget.	Resources required to procure tender documentation and administration of same
reduces reactive maintenance costs		Use SCOTS asset management tools
Improves user experience		Assess need for individual assets. Can they be removed? Are alternative control measures available?

6.0 Street Furniture

6.1 Assets

Table 6.1 Street Furniture Quantities

Street Furniture Assets	Quantity of Assets	Unit
Traffic Signs (non-illuminated)	5,152	Number
Safety Fences	610	Length (m)
Road Blockers	Currently No Data in the system	Number
Hostile Vehicle Barriers	Currently No Data in the system	Length (m)
Pedestrian Barriers	4	Length (m)
Street Name Plates	Currently No Data in the system	Number
Bins	Currently No Data in the system	Number
Bollards	318	Number
Bus Shelters	119	Number
Grit Bins	581	Number
Cattle Grids	161	Number
Gates	Currently No Data in the system	Number
Trees	Currently No Data in the system	Number
Seating	Currently No Data in the system	Number
Verge Marker Posts	2,318	Number
On-Street Parking Meter	92	Number
Electric Car Charging Points	35	Number
Milestones	Currently No Data in the system	Number
Information Boards	Currently No Data in the system	Number
Bike Parking Lockers	Currently No Data in the system	Number
Bike Parking Stands	Currently No Data in the system	Number
Automatic Trash Screens	Currently No Data in the system	Number
Watercourse Telemetry	Currently No Data in the system	Number
Weather Stations	14	Number

6.2 Condition

Asset visual condition surveys are not currently undertaken due to limited resources and cost implications. Asset condition is normally determined using asset installation data and a default service life in years. Argyll and Bute Council have very limited data available regarding installation dates of historical assets which limits the ability to provide detailed analysis of current asset condition.

6.3 Valuation

Street Furniture Valuation			
Street Furniture Assets	Gross Replacement Cost	Depreciated Replacement Cost	Annualised Depreciation Cost

Traffic Signs (non-illuminated)	£167,697.60	£83,852.06	£8,384.88
Safety Fences	£47,641.00	£23,820.50	£2,382.05
Road Blockers	Currently No Data in the system		
Hostile Vehicle Barriers	Currently No Data in the system		
Pedestrian Barriers	£312.40	£168.70	£12.50
Street Name Plates	Currently No Data in the system		
Bins	Currently No Data in the system		
Bollards	£20,698.62	£10,168.36	£827.94
Bus Shelters	£1,503,877.59	£757,625.73	£75,193.88
Grit Bins	£75,625.14	£39,079.50	£5,041.68
Cattle Grids	£838,279.45	£411,017.27	£33,531.18
Gates	Currently No Data in the system		
Trees	Currently No Data in the system		
Seating	Currently No Data in the system		
Verge Marker Posts	£60,343.91	£31,188.10	£4,022.93
On-Street Parking Meter	£394,531.20	£197,694.44	£19,726.56
Electric Car Charging Points	£804,083.50	£447,989.38	£80,408.35
Milestones	Currently No Data in the system		
Information Boards	Currently No Data in the system		
Bike Parking Lockers	Currently No Data in the system		
Bike Parking Stands	Currently No Data in the system		
Automatic Trash Screens	Currently No Data in the system		
Watercourse Telemetry	Currently No Data in the system		
Weather Stations	£257,660.32	£132,511.02	£12,883.02
Total	£4,170,750.74	£2,135,115.04	£242,414.96

6.4 Investment

The street furniture asset consists of many different individual assets all of which deteriorate at different rates. Generally, assets deteriorate to the point where they stop performing their intended function and are replaced with new items in line with available funding. Table 6.4 below provides an indication of the renewal cycle for some street furniture assets based on previous year budget allocation and estimated asset renewal rates to calculate an indicative renewal cycle based on current funding allocation.

Item	Budget Allocation 2024-25	Current Inventory Data	Annual Replacement Quantity	Indicative Renewal cycle (Years)
Cattle Grid	£54,000	162	1.6	101
Traffic Signs	£30,000	5010	173	29
Vehicle Safety Fence	£100,000	616289	653	94

6.5 Investment Options

Below are a few initial revenue budget investment options for consideration. These will all require further investigation, research, and development to progress more detailed information on which option is best

suitable to support council objectives within the confines of available resources. Investment options should be linked to development of a long-term maintenance strategy for the asset.

Option 1 Undertake maintenance on a reactive basis to repair defects within existing revenue budget		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Continues service delivery for defects	Continued long-term asset deterioration	Adopting risk-based approach to managing the asset
	Growing demands for capital investment	Resource condition survey of assets to gain information on inventory, condition Etc,
	Rising number of public liability claims	Development of a long-term maintenance strategy for the asset group
	Reactive maintenance is expensive and poor value	Resource development of a prioritised list of planned works

Option 2 Increased investment in planned revenue maintenance activities		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles worst asset deterioration	Limited asset information and condition data	Implementing SCOTS asset management recommended practices
Planned works deliver better value	Resources required to identify and quantify works	Current use, is it needed? Can it be removed?
Planned works deliver better value	Level of works limited to available revenue budget allocation	Resource development of a prioritised list of planned works
Less complaints		Development of a long-term maintenance strategy for the asset group

Option 3 Develop a business case for investment through capital budget for replacement of obsolete, damaged and deteriorated assets particularly vehicle safety barriers. Align the business case to a suitable long-term maintenance strategy for the asset group.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Investment tackles deterioration and gradually improves whole asset	Limited asset information and condition data	Development of a long-term maintenance strategy for the asset group
Demonstrates prudent stewardship of assets	Resources required to identify and quantify scope of works	Investment in mobile technology to capture asset data
Supports corporate objectives	Requires increased levels of investment	Implementing SCOTS asset management recommended practices

Option 4 Business case development for capital investment in conjunction with other asset groups that aligns with the Road Asset Management Plan (RAMP) and council priorities.		
BENEFITS	DRAWBACKS	CONSIDERATIONS
Whole asset approach to maintenance	Requires substantial capital investment	Use of SCOTS asset management tools
	Requires significant improvement in asset data	Investment in mobile technology
		Development of appropriate maintenance strategy

7. Road Operations Projects

Photographs of recent projects can be viewed at Appendix Two.