

Transforming Your Council

Road & Transportation

ROAD ASSET MANAGEMENT PLAN 2018 - 2023



Foreword

This plan sets out Roads & Transportation's plans for the management of the council's carriageways, footways, structures, street lighting, traffic signals, street furniture and water related assets for the next five years. It has been produced in accordance with national guidance from SCOTS (Society of Chief Officers of Transportation in Scotland) and recommended good practices.

It is widely recognised that the application of modern asset management practices can enable improved value for money. In these challenging times it is essential that we embrace these methods and strive to ensure that every penny spent is invested as wisely as possible. The plan reflects the revenue and capital budgets set following the council's Transforming Your Council consultation in 2017.

We have now fully implemented our mobile working platform, ConfirmConnect which is facilitating improved asset management practices and helping to identify efficiencies. The whole process from an enquiry arriving at the council to repairs being completed on site is now connected and paperless.

West Lothian has some of the best roads in Scotland and this has been due to the Council's commitment to funding roads maintenance. The winter of 2017/18 was particularly severe and this has resulted in increased potholes on our roads. This together with the ongoing budget saving is going to make it a challenge to maintain the high standards the road users of West Lothian have come to expect.

From 2018 we have extended our Quality Management System to cover the whole of the Roads & Transportation Service. Our Quality Manual & Procedures comply with the requirements of the EN ISO 9001:2015 standard and will be regularly audited by internal and external auditors. This together with our highly skilled and professional workforce demonstrates that we are committed to maintaining a safe and reliable road network for West Lothian road users.



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Note:

The Roads and Transportation asset management plan (RAMP) has been developed in association with the SCOTS Asset Management Project. The plan has of a number of complementary documents, which are summarised in Appendix A and will be reviewed in accordance with the regime outlined in Appendix B.

1. Introduction

Overview

The Road Asset Management Plan (RAMP) sets out our strategies for the maintenance of the Council's road assets. The road asset comprises carriageways, footways, structures, street lighting, traffic management and street furniture. In addition the plan covers water related infrastructure such as reservoirs and culverts.

Our Road Asset Management Policy ⁽¹⁾ requires the RAMP to be produced together with a Road Maintenance Manual (RMM) ⁽²⁾. In accordance with the Council's corporate asset management strategy Strategic Outline Business Cases (SOBCs) were produced setting out ongoing capital funding proposals. These were used to inform the Capital Plan for the next ten years of investment.

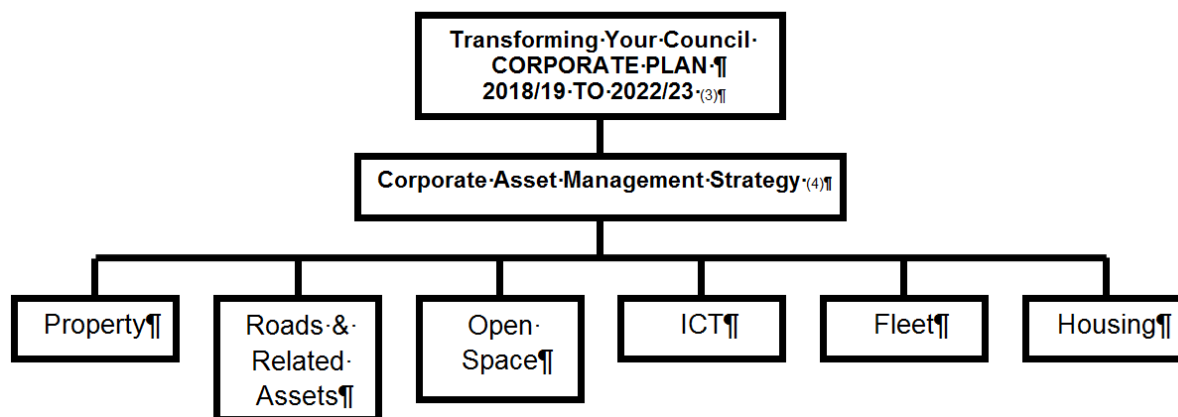
Purpose

The purpose of the RAMP is to formalise strategies for investment in road assets; and define service standards.

The plan aims to improve how the road asset is managed. It will help to achieve better value for money and improve Roads & Transportation's service delivery.

RAMP Relationship With Other Plans

The RAMP relates to other council plans as illustrated below:



The RAMP is informed directly by the SOBCs and the Quality Manual. The targets and strategies contained in the RAMP and the programme of works have been developed in-line with the council's capital budget agreed in February 2018.

Quality Management System

From 2018 the Roads & Transportation Service has extended its Quality Management System to cover the whole of the service. The Quality Manual & Procedures comply with the requirements of the EN ISO 9001:2015 standard and will be regularly audited by internal and external auditors.

The boundaries, applicability and scope of the Quality Management System has been determined. It covers the provision of regulatory, consultancy, and contracting services in the following service areas:

- Design Engineering
 - Flood Risk Management
 - Projects
 - Structures
- Development Management & Transportation Planning
- Network
 - Public Utilities
 - Roads Maintenance
 - Road Safety and Traffic Management
- Roads Operations
 - Operations
 - Street Lighting

2. Road Assets

Road Assets

West Lothian Council's road assets covered by this plan are:

- Carriageways 1043km (648 miles)
- Footways 1390km
- Structures 578 Bridges
- Street Lighting 46,147 Lighting Columns
- Traffic Management Systems 151 traffic signals and pedestrian crossings
- Street furniture (traffic signs (non-illuminated), safety fences, pedestrian barriers, street name plates, bins, bollards, bus shelters, grit bins, cattle grids, gates, trees / tree protection, seating, verge marker posts and weather stations
- Water related assets including: culverts, road drainage, river training structures, reservoirs, SUDS, ponds and water courses.

Assets Not Covered

Some roads related assets are the responsibility of other council services and the following are not covered in this RAMP:

- Seats/verges/vegetation
- Open Spaces
- Public Rights of Way

Inventory Data

This plan is based upon currently available inventory data for the road assets. For some street furniture 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 ⁽⁶⁾. As additional inventory data is collected it will be added to the Confirm database. A full inventory is vital for robust asset management ^(IA-1).

The mobile working platform, ConfirmConnect is now live. This powerful tool will allow us to gather inventory data and develop visual condition inspections for all the road assets ^(IA-2). In due course this condition data will drive the maintenance programme and ensure that funds are spent where there is most need.

3. Customer Expectations

Customer Consultation

National Highways & Transportation Customer Satisfaction Survey

Roads and Transportation use the National Highways & Transportation Customer Satisfaction Survey to collect public perspectives on the importance of, and satisfaction with, roads and transportation services in West Lothian. The survey deals with a wide range of themes including: accessibility, public transport, walking and cycling, congestions, road safety, and roads maintenance.

The postal survey is conducted by Ipsos MORI and supported by Measure 2 Improve, the Highways Maintenance Efficiency Programme (HMEP) and the University of Leeds Institute for Transport. Questionnaires were sent to 3300 households in each participating local authority area. In total, 112 authorities took part in this survey of which 5 were in Scotland. West Lothian Council have participated in the survey since 2016.

In 2016 West Lothian Council had a 22% response rate and in 2017 this was 21%. This is on trend with the national average of 21%. In West Lothian this amounted to 693 returns. The following tables outline the key positive areas within West Lothian Councils approach to roads and transportation and the target areas for improvement within this sector.

Local Results vs National Results 2017

The tables below show the results of the latest 2017 survey in comparison to the other 112 participating authorities. Also provided is West Lothian Councils ranking in Scotland wherein 5 authorities have taken part. This will put into context the position of West Lothian Council in the rankings as found by the National Highway and Transport Survey.

Theme	Local Score (WLC)	UK Average	UK Ranking	Scottish Ranking
Overall	60	54	2 nd	1 st
Accessibility	72	70	38 th	3 rd
Highway Maintenance	58	51	5 th	1 st
Public Transport	60	61	69 th	5 th
Road Safety	60	55	2 nd	1 st
Tackling Congestion	58	48	2 nd	1 st
Walking and Cycling	60	55	6 th	1 st

Based on the results of this survey, for overall customer satisfaction, West Lothian Council is the highest ranking local authority in Scotland and 2nd in the wider UK. Of particular note is that West Lothian Council ranked 2nd in the whole UK for customer

satisfaction under the Road Safety and Tackling congestion themes. This is a significant achievement and underlines the council's approach in these areas.

Local Results 2016 and 2017 – Positive Outcomes

The table below shows the three areas in which West Lothian Council received the highest satisfaction rates in both 2016 and 2017. The survey results are summarised into Key Benchmark Indicators (KBI) and grouped by theme. Full KBI Analysis is available for each participating authority via the NHT survey website <https://nhtsurvey.econtrack.com/Default.aspx>. Each theme is scored out of 100.

Issue by Theme	2016 WLC**	2016 NA*	2017 WLC	2017 NA
Accessibility	75	71	72	70
Road Safety	60	57	60	55
Walking and Cycling	60	56	60	55

*NA – National Average

** WLC – West Lothian Council

What can be taken from these results is the consistency of West Lothian Councils performance in these key themes. Our constituents are satisfied with our approach to easy access for all people including those with disabilities and no car. Road safety has also been identified as a positive area for Roads and Transportation, in particular the commitment to local road safety and the road safety environment. Each year, it should be noted, that the council have achieved above the national average in all areas mentioned.

Local Result 2016 and 2017 Areas for Improvement

The next table shows the three areas in which West Lothian score lowest in the survey with regards to satisfaction rates in 2016 and 2017. The subsequent information will discuss the areas in which WLC constituents feel dissatisfied with the most.

Issue by Theme	2016 WLC**	2016 NA*	2017 WLC	2017 NA
Public Transport	53	60	60	61
Highway Maintenance	57	52	58	51
Tackling Congestion	57	51	58	48

*NA – National Average

** WLC – West Lothian Council

From these results, it should be recognised that Highway Maintenance and Tackling Congestion are problem areas nationwide. Whilst the results for these themes were lower than for other themes, the council ranked 2nd in the UK for Tackling Congestion and 5th for Highway Maintenance. In addition, satisfaction scores for both themes improved in 2017 compared to 2016.

The key concerns raised for tackling congestion were restrictions on parking on busy roads, tackling illegal on street parking and routes taken by HGVs. With regards to

Highway Maintenance the key concerns raised related to the condition of highways, cold weather gritting and the efforts to reduce traffic.

Conclusion

West Lothian Council has achieved an excellent result in this year's survey having ranked 2nd out of 112 authorities which participated UK- wide. Furthermore the council are ranked 1st in Scotland and the overall satisfaction of respondents was 6% above the national average. Our key positive outcomes were accessibility, road safety and walking and cycling whilst the areas for improvement which the survey identified were public transport, tackling congestion and highway maintenance. The survey information will be made available to residents, businesses and stakeholders via the council's website.

Customer Contacts (Enquiries/Complaints)

Customer contacts for Roads and Transportation are recorded in the council's customer relationship management system (CRM) and come to the service via our asset management software Confirm. Records for the period 2017-18 show that:

- 6577 customer enquires were received and despite an increase 69% were still closed off in the identified response time.
- 107 Freedom of Information enquiries were received and 98% dealt with within the allowable time. A slight improvement.
- 375 Roads and Transportation Complaints (Stage 1) were received and 82% were resolved within 5 days.
- 20 Roads and Transportation Complaints (Stage 2) were received and 92.5% were resolved within 20 days.

4. Demands

Asset Growth

With one of the fastest growing populations in Scotland the road network in West Lothian is constantly increasing in length. The population of West Lothian is forecast to grow by 6.6% between 2016 and 2026. The growth is strongest along the M8 corridor and in particular in Armadale, East Calder and Winchburgh. The Local Plan has identified land for up to 12,000 housing units and this growth will put significant extra pressure on the road network.

Roads built by developers, if they are constructed to the council's standards are adopted by the council. It is estimated that 7km of carriageway and 14km of footway will be constructed per annum. Along with this comes the associated lighting columns, drainage and on occasion new structures.

New assets create the need for maintenance, management and associated funding in future years as these additional assets age. The construction of road safety features (such as high friction surfaces and traffic calming) and road improvement works are ongoing and will increase the future maintenance and management needs. Generally these are small additions in the overall context of the road network, but still need to be budgeted for.

West Lothian Council is set to receive a £150 million funding package that could bring a huge economic boost to the area. The funding is part of the latest City Deal and comes from both the UK and Scottish Governments and from contributions from local councils and universities. There will be investment that will unlock up to 5,000 new homes in Winchburgh and create up to 800 new jobs. It will allow the council to fund infrastructure projects such as; new roads - including a new motorway junction from the M9

Traffic Growth and Composition

Government statistics show that there has been continued traffic growth since 2012 to levels well above pre-recession levels ([http:// www.dft.gov.uk/traffic-counts/area.php?region=Scotland&la=West+Lothian](http://www.dft.gov.uk/traffic-counts/area.php?region=Scotland&la=West+Lothian)). This growth will contribute to accelerated wear and tear of the roads and bridges. With increase traffic, increased levels of maintenance will be required.

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. In 2012, there were several occasions that caused severe flooding difficulties which resulted in damage to property and the road network.
- Rainfall intensity: climate change is changing weather patters resulting in more intense rainfall in localised areas.
- Harsh winters: this winter was particularly harsh and caused significant damage to road surfaces as a result of freeze/thaw action.

5. Service Standards

A major part of asset management is measuring performance to ensure constant improvement and for benchmarking against other councils. The SCOTS Asset Management Project has developed a set of 128 performance indicators and management statistics to assist with road asset management.

SCOTS have collected these indicators on an annual basis since 2012 and APSE are undertaking bench marking and reporting. Our results are grouped along with eight other semi urban authorities. The collection of this data goes some way to satisfying Audit Scotland, in terms of the requirements of “Maintaining Scotland’s Roads: A Follow-Up Report” in that Councils should “make greater efforts to benchmark road maintenance activities with other councils to drive out cost inefficiencies.”

The RAMP is based upon delivering the service standards below. The standards reflect the funding levels in section 6 and are the standards that users (customers) can expect during the plan period. Details of how the specific measures shown below are calculated will be incorporated into the Road Maintenance Manual. Some of the main indicators are listed below along with the change we anticipate .

Scots Performance Indicators

Asset Group	Measured By	Target Standard	
		2016/17	2022/23
Carriageways			
Safety	Percentage of Cat 1 defects made safe within response times.	71.82%*	↑
	Percentage of safety inspections completed on time	80.59%	↑
Condition	Percentage of the roads network to be considered for maintenance treatment	29.39%	↓
	Percentage of “A” Class roads to be considered for maintenance treatment	21.61%	↓
	Percentage of “B” Class roads to be considered for maintenance treatment	30.70%	↓
	Percentage of “C” Class roads to be considered for maintenance treatment	45.06%	↓
	Percentage of “U” Class roads to be considered for maintenance treatment	28.09%	↓
	Percentage of carriageway length given a maintenance treatment	1.65%	↓

Footways			
Safety	Percentage of Cat 1 defects made safe within response times.	No Data*	↑
	Percentage of safety inspections completed on time	78.31%	↔
Condition	Percentage of footway area to be considered for maintenance treatment	10.14%	↓
	% of footway area treated	0.5%*	↓

Structures			
Condition	Percentage of primary inspections carried out on time	98.28%	↔
	Percentage of general inspections carried out on time	87.90%	↑
	Bridge Stock Condition Indicator (BCI _{ave})	89.68	↔
	Bridge Stock Condition Index (BCI _{crit})	81.58	↔

Street Lighting			
Safety	Percentage of repairs within 7 days	59.6%	↑
Environment	Average annual electricity consumption per street light (kWhrs)	340.58	↑

-  Targeted for improvement
  Performance to be maintained
 Anticipated decline in standard

Performance Measurement

To ensure that performance is being recorded and available corporately, the Pentana Performance Management System is used. It generates performance information scorecards based on the relevant asset objectives. These scorecards show the best and worst expected result for the period and the current level of performance.

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 to the Environment Policy Development and Scrutiny Panel.

6. Financial Summary

Asset Valuation

As at June 2018 the road asset was valued as follows:

Asset Type	Gross Replacement Cost £'000	Depreciated Replacement Cost £'000	Annualised Depreciation Charge £'000
Carriageway	£1,145,076	£992,435	£14,187
Footway	£132,676	£93,328	£2,043
Structures	£307,822	£296,433	£1,829
Street Lighting	£87,150	£48,388	£2,059
Street Furniture	£8,743	£4,369	£429
Traffic Management Systems	£8,885	£3,845	£598
Land	£680,222		
Total	£2,370,575	£1,438,799	£21,146

These figures present a depreciated replacement cost valuation of West Lothian Council's road assets for 2017/2018. It complies with the CIPFA Transport Infrastructure Asset Code ⁽⁷⁾ and will be reported in accordance with HM Treasury requirements for whole of government accounts as updated in July 2018.

The valuation figures above illustrate the massive financial value of the road asset. In theory, the annualised depreciation represents the average investment required for planned maintenance (renewal of the asset) to maintain the asset in a safe and acceptable condition.

Historical Expenditure

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

Asset	Works	Historical Expenditure (£000)				
		13/14	14/15	15/16	16/17	17/18
Carriageways	Capital	2,521	2,477	2,384	2,431	4,004
	Revenue	1,627	1,445	1,156	1,448	1,261
Footways	Capital	1,076	815	635	760	760
	Revenue	365	354	518	285	313
Structures	Capital	2,773	1,439	1,208	1,060	1,545
	Revenue	303	311	251	306	300
Street Lighting	Energy Costs	1,970	1,964	2,182	2,118	2,030
	Capital	1,279	1,629	1,634	1,964	2,539
	Revenue	3,213	3,115	3,112	3,173	2,962
Traffic Signals	Energy/Comm's Costs	Included in Street Lighting Costs				
	Capital	107	99	98	119	79
	Revenue	175	200	125	133	128
Water Related Assets	Capital	924	353	279	313	967
	Revenue	375	489	377	363	426
Road Safety & Traffic Management	Capital	2,358	2,030	3,148	1,092	546
	Revenue	65	34	41	5	38
Town Centres and Villages	Capital	127	342	432	489	856
Totals:		19,258	17,096	17,580	16,059	18,754

The historical expenditure clearly demonstrates the council's commitment to maintaining the condition of the road assets.

The ten year span of the capital budget allows a level of flexibility to be built into the maintenance programme. This can be seen in the non-linear nature of the spend profile. The flexibility is important as it allows for emergency repairs, accounts for the size of repair schemes, changes to the overall programme identified during the inspection programme and unforeseen eventualities that might be encountered during works.

The funding for town centres and villages has been made available to Roads and Transportation for improvements to the built environment. Much of the spending will be on elements of the highway asset, but it is not possible to split the spending into the various asset types.

Road safety and traffic management is a vital function provided by Roads and Transportation. The expenditure above covers road safety improvements to our carriageway and footway network. Road safety schemes are covered by the council's Accident Investigation And Prevention (AIP) Casualty Reduction Programme.

Capital Funding

The service standard targets shown in section 5 are based upon the following funding levels. The capital funding for the five years from 2018/19 to 2021/22 has been approved by the Council Executive. This decision was informed by the Strategic Outline Business Cases that were prepared by Roads and Transportation. In accordance with Financial Management Unit requirements the first three years has been allocated to named maintenance schemes.

The table below is extracted from the Roads and Related Assets – Capital Investments Strategy 2018/19 to 2027/28 and may be subject to change.

Asset	Works	Agreed Budgets (£k) (June 2018)				
		18/19	19/20	20/21	21/22	22/23
Carriageways	A Class Roads	179	494	301	705	395
	B Class Roads	477	249	235	184	185
	C Class Roads	438	257	333	374	273
	U Class Roads	1,168	1,079	1,389	856	822
	Non-Adopted	0	50	50	50	50
Footways	Capital	235	250	125	148	145
	Non-Adopted	40	40	40	40	40
Structures		1,747	4,097	1,368	1,008	1,008
Street Lighting		2,489	2,531	2,574	2,555	2,591
Traffic Signals	Junctions	180	180	180	180	180
	Pedestrian	100	100	100	100	100
Street Furniture	Bus Passenger Infrastructure	24	22	23	24	25
	Conversion of Part Time 20mph Signs to Full Time 20mph Zones	6	20	20	20	0
	Road Traffic Signs	90	90	90	90	90
Other	Road Casualty Reduction Schemes	339	200	200	200	200
	Disabled Persons Parking	25	25	25	25	25
	Cycling, Walking and Safer Streets	390	542	541	541	581
	Flood Prevention and Drainage	763	622	1,596	1,485	961
	Town Centre and Villages	1,276	141	141	141	125
Totals:		10,500	11,522	9,361	8,721	7,791

The Capital Investment Strategy for 2018/19 to 2027/28 was agreed in February 2018 and represents a reduction of about 40% over the previous years. The revenue budget is agreed every two years and it is anticipated that there will be a 30% reduction over the above period. Revenue allocation is made by the service manager and is generally based on the proportions of expenditure in previous years.

The actual spend during these five years will depend on the programme of works for each asset group. The programme will be generated in accordance with the strategies set out in Section 7. A three year rolling programme of named schemes has been developed based on the results of condition surveys ensuring funding always goes to the assets in most need.

In line with asset management best practice we intend to start monitoring the spend in terms of reactive and planned maintenance (IA-3). As our asset management planning develops, reactive maintenance should decline as planned maintenance is undertaken on the assets in the worst condition.

Revenue Funding

The Roads and Transportation revenue budget is split between the various teams based on the pattern of historical spending. The table below is extracted from the Roads Services Costing 2018/19 summary provided by the Financial Management Unit.

Asset / Activity	Total Budget (£k)
Network Activities (all carriageways and footways)	4,058
PU Admin and Inspection	10
Flood Management	386
Winter Maintenance	2,126
Street Lighting	2,883
Structures	296
Road Safety	43

7. Asset Investment Strategies

The strategies in this section have been determined using predictions of future asset condition for periods of up to 20years. The predictions enable strategies to be created to look at the whole life cost of maintaining the asset. Investment strategies for the major asset types are summarised below. These strategies are designed to enable the service standards in section 5 to be delivered.

Investment between Asset Types

In comparison to historical investment, future investment (2018/19 to 2027/28) is planned to be:

- Carriageways: level of investment has dropped,
- Footways: level of investment has dropped
- Structures: level of investment has dropped
- Street lighting: level of investment will be maintained
- Traffic signals: level of investment will be maintained
- Water Related Assets: level of investment will be maintained

Carriageways

Our carriageways will be maintained in accordance with the Well-managed Highway Infrastructure - Code of Practice ⁽⁸⁾ and the Road Maintenance Manual.

Category	Description	Basis of Strategy
Planned Maintenance Preventative (Capital Funding)	A programme of preventative treatment to carriageways in the initial stages of deterioration.	<ul style="list-style-type: none"> • From visual inspections and automated condition surveys a programme of works will be developed targeting the carriageways identified as most in need of major works. • Maintenance treatments such as surface dressing will be adopted to maximise the life of the carriageway assets. • To ensure cost effective implementation of the programme the works will be carried out both by the council workforce and private sector contractors • Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.
Planned Maintenance Corrective (Capital Funding)	A programme of resurfacing where a preventative treatment cannot be applied	<ul style="list-style-type: none"> • For roads that have severe deterioration more significant repairs are required such as resurfacing or reconstruction. • The procurement strategy for these carriageways is as above.
Routine and	Repair of	<ul style="list-style-type: none"> • Minor carriageway defects are identified

<p>Reactive Repairs (Revenue Funding)</p>	<p>carriageway defects considered to be of high priority to current intervention standards and response times.</p>	<p>during the ongoing inspection programmes.</p> <ul style="list-style-type: none"> Defects are also identified due to customer enquiries and reports from elected members. If the repairs are considered to be of high priority the works will be carried out by the council workforce. Works will be carried out by the council workforce.
<p>Planned Maintenance Preventative & Corrective (Revenue Funding)</p>	<p>Minor planned maintenance schemes</p>	<ul style="list-style-type: none"> From the inspection process above a programme of minor preventative and corrective schemes will be developed. To ensure cost effective implementation of the programme the works will be carried out both by the council workforce and private sector contractors Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.

A skid resistance strategy has also been developed and has been approved by the Council Executive. This strategy will assist the council meet its statutory duties and will aid our prioritisation and decision making for A and B class routes.

Footways

Our footways will be maintained in accordance with the Well-managed Highway Infrastructure - Code of Practice ⁽⁸⁾ and the Road Maintenance Manual.

Category	Description	Basis of Strategy
<p>Planned Maintenance Preventative & Corrective (Capital Funding)</p>	<p>A programme of preventative treatment (in the initial stages of deterioration), resurfacing and renewal of footways.</p>	<ul style="list-style-type: none"> From inspection a programme of works will be developed targeting the footways identified as most in need of major works. To ensure cost effective implementation of the programme the works will be carried out both by the council workforce and private sector contractors Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.
<p>Routine and Reactive</p>	<p>Repair of Footway defects considered</p>	<ul style="list-style-type: none"> Footway defects are identified during the ongoing inspection programmes.

Repairs (Revenue Funding)	to be of high priority to current intervention standards and response times.	<ul style="list-style-type: none"> Defects are also identified due to customer enquiries and reports from elected members. If the repairs are considered to be of high priority the works will be carried out by the council workforce.
Planned Maintenance Preventative & Corrective (Revenue Funding)	Minor planned maintenance schemes	<ul style="list-style-type: none"> From the inspection process above a programme of minor preventative and corrective schemes will be developed. To ensure cost effective implementation of the programme the works will be carried out both by the council workforce and private sector contractors Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.

Structures

Our structures (road bridges, underpasses, footbridges, culverts, retaining walls and a cattle grid) will be maintained in accordance with the Well-managed Highway Infrastructure - Code of Practice ⁽⁸⁾ and the Road Maintenance Manual.

Category	Description	Basis of Strategy
Assessment & Strengthening Of Weak Bridges (Capital Funding)	Strengthening of bridges that have unacceptable weight restrictions	<ul style="list-style-type: none"> All council owned bridges have been assessed in accordance with BD34/90, BD46/92 and BD50/92. Interim measures applied to sub-standard bridges in accordance with 'BD 79/13 – The Management of Sub-Standard Highway Structures,' Only Skolie Burn Bridge remains in the programme
Planned Maintenance Preventative & Corrective (Capital Funding)	Major Refurbishment of structures that have deteriorated into a poor or very poor condition or require costly maintenance.	<ul style="list-style-type: none"> All council owned bridges are regularly inspected and given a bridge condition indicator score (BCI). Defect information is also recorded. A repair programme is developed targeting the structures with the lowest BCI scores. Defect information is also reviewed to identify components that need replaced. Similar works are grouped to ensure cost effective procurement. Works are tendered in accordance with

		the 'Standing Orders for the Regulation of Contracts' using Public Contracts Scotland.
Bridges General - Routine and Reactive Repair (Revenue Funding)	Urgent minor repairs to structures: <ul style="list-style-type: none"> • Potholes • Accident Damage • Vandalism 	<ul style="list-style-type: none"> • During bridge inspections defects are identified. If repairs are simple and considered to be a high priority, these are arranged immediately through Operational Services. • More complex repairs are tendered using a Quick Quote through PCS. •
Planned Maintenance Activities (Revenue Funding)	Maintenance works including: <ul style="list-style-type: none"> • Carriageway Patching and Joint Repairs • Fencing and Guardrails • Minor Masonry Repairs • Minor Concrete Repairs • Maintenance Painting • Scour Repairs • Graffiti cleaning 	<ul style="list-style-type: none"> • Defect information is reviewed to identify bridge components at the end of their service life. • Sites are identified during bridge inspections. • Similar works are grouped to ensure cost effective procurement. • Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using Public Contracts Scotland.

Street Lighting

Our street lighting will be maintained in accordance with the Well-managed Highway Infrastructure - Code of Practice ⁽⁸⁾ and the Road Maintenance Manual.

Category	Description	Basis of Strategy
Backlog and Lifecycle Investment (Capital Funding)	Replacement of ageing equipment which has exceeded its life expectancy.	<ul style="list-style-type: none"> • A replacement programme is developed based on age profile, condition of equipment and fault levels. • Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.
Planned Maintenance Activities (Revenue Funding)	<ul style="list-style-type: none"> • Electrical Testing • Sign / Bollard Washing. • Lantern Replacements. 	<ul style="list-style-type: none"> • To comply with requirements of 17th Edition I.E.E. Wiring Regulations. • In accordance with the UK Lighting Board Code of Practice. • Determined through fault level, age profile and energy efficiency.

Reactive Maintenance	Repair of “non routine” defects such as dark lamps, cable faults and vandalism.	Defects are recorded via night inspections, reports from the Public, or identified during other operations. Response times are set dependent on nature of defect, with emergency works attended within a 2hr period. This work is carried out by our own operatives within “Roads Lighting”.

Traffic Signals

Our traffic signals will be maintained in accordance with the Road Maintenance Manual.

Category	Description	Basis of Strategy
Routine and Reactive Repair	Repair of defect to current intervention standards and response times as per current maintenance contract	Design Manual for Roads and Bridges, TA84/06-Code of Practice for Traffic Control and Information Systems for all purpose roads
Refurbishment / replacement of signalised junctions	Refurbishment of junctions that have deteriorated or the equipment has become obsolete / unreliable	Based on a minimum service life of 15 years as stated in Highways Agency document TR2500a section 3.2-Specification for Traffic Signal Controller
Refurbishment / replacement of signalised crossings	Refurbishment of junctions that have deteriorated or the equipment has become obsolete / unreliable	Based on a minimum service life of 15 years as stated in Highways Agency document TR2500a section 3.2-Specification for Traffic Signal Controller

Street Furniture

The collection of information on the street furniture asset is required to comply with the Code of Practice on Transport Infrastructure Assets: Guidance to Support Asset Management, Financial Management And Reporting (7). The street furniture asset is made up of fourteen components, all associated with the road network and maintained by various council departments.

Our street furniture will be maintained in accordance with the Road Maintenance Manual.

Category	Description	Basis of Strategy
Routine and Reactive Repair	Street furniture assets replaced when they are damaged or at the end of their useful life.	<ul style="list-style-type: none"> • Cyclic maintenance activities such as sign cleaning and bus shelter washing will be ongoing. • There are no formal inspections of street furniture, but works required will be identified during carriageway and footway inspections. • Replacement and repair works will generally be completed by the council's workforce or specialist contractors if required. • Works are tendered in accordance with the 'Standing Orders for the Regulation of Contracts' using The TRIPS Term Contract or equivalent.
Planned Maintenance Preventative	N/A	N/A
Planned Maintenance Corrective	Replacing street furniture assets because of legislation change or council priorities	<ul style="list-style-type: none"> • Where changes in legislation or the design codes come into force assets may need to be replaced. • Town centre development schemes may require signs and street furniture to be replaced.

To better manage these assets the inventory information will be gathered into the Confirm Database (IA-1).

Water Related Assets

Water-related infrastructure (open watercourses, flood prevention schemes, river revetments, flood storage devices, drains, culverts, headwalls and trash screens) will be inspected regularly in accord with the current inspection and maintenance regimes and cleaned and repaired as and when required. The council's duties under the Flood Risk Management (Scotland) Act 2009 extend to the maintenance of some privately owned assets as well as those owned and adopted by the council.

Category	Description	Basis of Strategy
Assessment of assets leading to planned capital investment	Open watercourse assessment, culverted watercourse assessment, flood prevention schemes, river	<ul style="list-style-type: none"> • To meet the Council's legal obligations under the Flood Risk Management (Scotland) Act 2009. • The frequency of inspection is dictated by the history of flooding, the impact of flooding and condition. • Works arising from the inspection will be

	revetments, culvert headwalls and screens and environmental mitigation schemes.	undertaken by the council's own Road Operations team, term contractors and framework consultants procured through Public Contracts Scotland.
Backlog and lifecycle capital investment	Refurbishment of assets that have deteriorated into a poor condition or require costly maintenance.	<ul style="list-style-type: none"> Regular assessment of condition in terms of cleanliness and structural integrity. The assessment work is undertaken by specialist contractors procured through Public Contracts Scotland. Works arising from the inspection will be undertaken by term contractors and framework consultants procured through Public Contracts Scotland.
Reservoir specific capital investment	Responding to guidance and demands detailed in the annual report of the ICE All Reservoirs Panel Supervising Engineer and the ten year report following inspection by the ICE All Reservoirs Panel Inspecting Engineer	<ul style="list-style-type: none"> Large Raised Reservoirs are subject to statutory inspection by ICE All Reservoirs Panel Engineers. Supervising Engineers (Annually) and Inspecting Engineers every ten years. The Engineers findings from time-to-time dictate actions required in the interests of safety. An Asset Management Report prepared by external consultants to plan investment to avoid mostly non-safety related significant maintenance backlog and for reservoirs that do not fall within the ambit of the Reservoirs (Scotland) Act 2011.
Water-related infrastructure General - Routine and Reactive Repair (Revenue Funding)	Urgent minor repairs to assets often following severe weather or to repair damage.	<ul style="list-style-type: none"> During asset inspections, defects are identified. If repairs are simple and considered a high-priority, these are arranged immediately through relevant term contractors. More complex repairs are tendered using a Quick Quote through PCS.
Planned Maintenance Activities (Revenue Funding)	Maintenance works including: <ul style="list-style-type: none"> Culvert inspection & clearance Removal of obstructions Minor repairs to revetments, masonry or concrete. Scour Repairs 	<ul style="list-style-type: none"> CCTV reports are reviewed to identify components at the end of their service life as well as cleansing requirements Similar works are grouped to ensure cost-effective procurement. Works are undertaken by term contractors Larger projects may be tendered in accordance with the 'Standing Orders for the Regulation of Contracts' through Public Contracts Scotland.

	<ul style="list-style-type: none">• Clearance and Repairs to trash screens	
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Quality Manual

Each of the asset groups above will have a range of dedicated process maps in the Quality Manual, which will provide full details of how these strategies will be implemented (IA-3).

8. Risks to the Plan

The risks that could prevent achievement of the standards specified in this plan (section 5) are:

Plan Assumption	Plan Risks	Action If Risk Occurs
The plan is based upon winters being normal	Adverse weather will create higher levels of defects and deterioration than have been allowed for.	Budgets and predictions will be revised and this plan updated if abnormally harsh winters occur.
Available budgets have been assumed as shown in section 6	External pressures mean that council reduce the funding available for roads	Target service standards will be revised to affordable levels. The budget for capital is set for five years. Therefore low risk during plan period.
Construction inflation will remain at level similar to the last 5 years.	Construction inflation will increase the cost of works (particularly oil costs as they affect the cost of road surfacing materials)	Target service standards will be revised to affordable levels.
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. The footway inspections now ongoing are a case in point.	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 improvement actions	Target dates will be revised and reported.

Roads & Transportation also have an established set of business risks, which were comprehensively reviewed corporately in 2018. The risks are recorded in Pentana, along with the assessment of likelihood/probability, impact and actions being taken to mitigate the risk. These risks have been developed in accordance with the councils Risk Management Standards Guide ⁽⁹⁾.

Reference	Business Risks
RTS001	Failure to deliver a winter service in accordance with council policy
RTS002	Death or injury due to ageing lighting column
RTS003	Death or injury due to electrocution by unsafe lighting column or traffic light
RTS004	Damage to underground services by council employees or contractors
RTS005	Failure to maintain roads and related infrastructure
RTS006	Flooding causing damage to roads, buildings and infrastructure

9. Improvement Plan

Service Improvement Actions

Service improvement actions have been identified for all the asset groups and can be found in the Maintenance Manual. The main improvement actions are as follows:

Ref.	Action	Proposed Implementation Date & Duration	Estimated Cost of Implementation	Responsible Officer
IA-1	Ensure that full inventory data is collected for all assets and added to Confirm.	31 August 2021	Minor cost implication	All asset managers
IA-2	Implement inspection procedures for all asset groups using ConfirmConnect.	31 August 2022	Minor cost implication	All asset managers
IA-3	Develop the Quality Manual and procedures.	31 December 2019	Minor cost implication	All asset managers

Progress Reporting

Reporting against the improvement action milestones will be undertaken by the Roads and Transportation Manager; a review of progress will be undertaken on a monthly basis along with the asset lead engineers, who will provide an estimate of the percentage completion towards each milestone.

A Road Asset Management & Performance Update will be submitted to the Environment Policy Development and Scrutiny Panel annually. Performance data is in Pentana and is reviewed and reported to the Performance Committee.

10. References

1. Road Asset Management Policy - SCOTS Asset Management Project 2013
2. Road Maintenance Manual - SCOTS Asset Management Project 2013
3. Transforming Your Council CORPORATE PLAN 2018/19 to 2022/23 - West Lothian Council 2018
4. Corporate Asset Management Strategy – West Lothian Council 2013/18
5. Roads And Transportation Services Quality Management System Manual & Procedures – West Lothian Council 2018
6. Road Asset Data Management Plan - SCOTS Asset Management Project 2013
7. Code of Practice On Transport Infrastructure Assets: Guidance To Support Asset Management, Financial Management And Reporting (Published by The Chartered Institute of Public Finance & Accountancy – 2010)
8. Well-managed Highway Infrastructure - Code of Practice (Published by TSO – October 2016)
9. Risk Management Standards Guide – West Lothian Council

Appendix A Asset Management Documentation

The documentation required to support asset management processes are:

1. Asset Management Policy Statement

The asset management policy statement confirms the council's commitment to:

- applying asset management systems to manage road assets;
- publishing an Asset Management Plan; and
- reporting achievements and performance annually;

Updating: Reviewed annually and updated if required.

2. Quality Manual

The Quality Manual will record the systems and methods used to manage the road assets. The manual should define how and when the authority:

- Inspect.
- Categorise and prioritise reactive repairs.
- Assess condition.
- Identify and prioritise sites for resurfacing (or strengthening / replacement).
- Prepare works programmes.
- Procure and manage works.
- Records and respond to customer contacts.

Updating: Reviewed annually and updated if required. It is not expect to require extensive change year to year.

3. Asset Status and Options Report (ASOR)

Specific investment strategies should be compiled for the major asset groups of carriageways, footways, structures, street lighting, drainage and traffic signals. Each strategy should define how the target service standards are to be delivered. In particular they should address the types of works that are planned and state the approach to be taken for example if a "prevention is better than cure" approach has been adopted. In line with the Council's corporate asset management strategy the latter document has been replaced with Strategic Outline Business Cases (SOBCs).

Annual status reports will be prepared for the Environment Policy Development and Scrutiny Panel annually and performance data is reported to the Performance Committee.

4. Road Asset Management Plan (RAMP)

The RAMP will record the service standards that the council is aiming to deliver for each asset group. These standards should be based upon detailed predicted budget levels in the short term (5yrs) and general budget level predictions over the longer term (10yrs). The plan should identify any risks that may prevent the plan being realised. The plan should reflect local context in terms of traffic levels, customer preferences and the council's corporate strategies. The RAMP should be in a format suitable for public use.

5. Annual Programme

Detailed annual programmes will be prepared for each asset group. They will identify schemes, roads to be surfaced, bridges to be maintained, streets where lighting it so be changed etc.

Updating: Reviewed annually and updated so that there is a three year programme of named schemes.

Appendix B Annual Updating Regime

SCOTS RAMP - Annual Programme												
The asset management planning documentation will be updated as shown below:												
Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 Data Assessment		■	■									
2 Road Asset Valuation				■	■							
3 Performance Indicator Return						■	■					
4 RAMP Review & Update								■	■			
5 Annual Status Reports and EnvPDSP Update									■	■		
6 Quality Manual Update											■	■
7 Asset Inspection Records	■	■	■	■	■	■	■	■	■	■	■	■
8 Works Programme	■	■										

Roads & Transportation Road Asset Management Plan 2018-2023

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September 2018

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