

Highways maintenance transparency reports

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A Transparency report - core report

How we maintain local roads, pavements, and the wider highway network in Luton Borough Council

A1 What we are responsible for maintaining

Luton Council is responsible for maintaining a busy urban highway network comprising:

- 457 km of carriageways (50 km A roads, 11.5 km B roads, 10.5 km C roads, and 385 km U roads)
- 774.5 km of footways
- 18,500 street-lighting columns
- 284 highway structures (183 bridges and subways + 101 busway assets)
- 27,132 highway gullies (Map16)
- other highway assets, including the cycle network, traffic signals, public rights of way, road signs, markings, safety barriers and street furniture.

Luton’s network supports residential areas, public transport, emergency services, businesses and access to London Luton Airport. High traffic levels, the age and condition of some assets, restricted road space and increasingly severe weather create significant maintenance challenges.

We use PAS 2161-certified high-definition condition surveys, and inspections to inform lifecycle planning to optimise preventative maintenance strategies to extend asset life and reduce the need for reactive repairs.

Whilst we use preventative maintenance to target what are termed amber roads, the surveys and models still drive a significant resurfacing programme that contributes to around 65% of the overall programme. Reactive maintenance using a risk-based approach remains necessary to address safety defects and unexpected asset failures.

A2 Road conditions in Luton Borough Council

A2.1 A roads

Year	Percentage of road in red category	Percentage of road in amber category	Percentage of road in green category
2023	Data unavailable	Data unavailable	Data unavailable
2024	5%	52%	43%
2025	5%	56%	38%

A2.2 B and C roads

Year	Percentage of road in red category	Percentage of road in amber category	Percentage of road in green category
2023	Data unavailable	Data unavailable	Data unavailable
2024	7%	58%	35%
2025	9%	59%	32%

A2.3 U roads

Year	Percentage of road in red category
2023	12%
2024	13%
2025	14%

A2.4 Additional information on carriageway condition

Luton uses PAS 2161 certified condition surveys and highway inspections to drive its lifecycle planning and modelling to develop its planned maintenance programme. Vaisala RoadAI and Gaist condition data support the identification of deterioration across the network and help inform treatment selection and programme development.

Preventative treatments are prioritised where timely intervention can preserve roads showing early or intermediate deterioration and reduce the need for more extensive structural repairs. Roads in poorer condition are considered for resurfacing or reconstruction, taking account of hierarchy, network use, safety risk, engineering assessment and available funding.

The figures in A2.1 to A2.3 are the published DfT official statistics required for this report. Luton's 2023 classified-road data was recorded by DfT as unrepresentative due to insufficient coverage or known data-quality issues and is therefore shown as unavailable.

A3 What we are doing about potholes and other road defects

A3.1 What is a pothole?

Luton has a defined operational manual developed from its Highway Infrastructure Asset Management Plan (HIAM) which was developed following the last code of practice – Well Managed Highway Infrastructure in October 2018. We assess potholes and other carriageway defects through a risk-based highway inspection process.

Investigatory thresholds consider the depth and size of the defect, road hierarchy, traffic use, location and likely risk to highway users. A defect meeting a threshold is assessed by an inspector to determine the appropriate response, with the highest-risk defects receiving the fastest attention.

The plan allows for a right-first-time fix for all potholes except category 1 defects.

Potholes commonly develop when water enters cracks or joints and weakens the road surface, particularly during wet weather and freeze-thaw conditions. Planned surface treatments, drainage maintenance and timely structural repairs help prevent deterioration from developing into potholes.

As a guide, we generally considers defects of 50 mm or deeper on residential roads and 30 mm or deeper on main roads, alongside the wider risk assessment.

A3.2 What we are doing to tackle potholes

As prescribed in the our HIAMP, Luton's approach is to prevent potholes through preventative maintenance and planned maintenance programmes, supported by reactive repairs where defects present an immediate or emerging risk.

The planned programme includes surface dressing, micro asphalt, asphalt preservation and asphalt rejuvenation to preserve roads before more substantial deterioration occurs, alongside structural resurfacing where renewal is required. For resurfacing programmes, we work with the suppliers to design the most durable material appropriate for the pavement. In addition, we use retexturing to recover skid resistance on carriageway surfaces.

Using PAS 2161 condition surveys, highway inspections, drainage maintenance and lifecycle planning help identify deterioration and select the most appropriate intervention. Where reactive repairs are needed, we prioritise permanent, right-first-time repairs where safe and practicable.

A temporary repair may be required where an immediate make-safe response is necessary or where weather, traffic management, materials or the extent of deterioration prevent a permanent repair at first attendance.

Based on available carriageway repair records, we estimate that 915 repair activities were undertaken in 2025-26. This comprises planned patching and temporary and permanent reactive repairs. It is an activity-based estimate rather than a separate count of individual potholes, and some planned repair areas may include multiple defects.

A3.3 How members of public can report potholes and other highway defects

Members of the public can report potholes and other highway defects through our online reporting service, by telephone or by email. Reports are logged and passed into the highway inspection and maintenance process for assessment.

Reporting link: [report a pothole](#)

A3.4 What happens after a pothole is reported

Once reported, the defect is logged and assessed using the Highway Maintenance Operation Manual, which prescribes the inspection and risk-based response process. The assessment considers the defects:

- size
- location
- road hierarchy
- traffic use
- likely risk to highway users

The outcome may be an urgent make-safe response, a permanent reactive repair, inclusion in a planned maintenance programme, continued monitoring, or no immediate action where the intervention criteria are not met. The person reporting the defect is provided with an update through the Council's reporting system.

A4 What we spend to maintain the highway network and where the funding is coming from

A4.1 Spending on highways maintenance

	2024-25	2025-26	2026-27 (projected)
Total spend on highways maintenance	£10,601,030	£13,385,782	£17,721,920
Of which spent on:			
Carriageways	£5,510,055	£7,449,854	£8,873,295
Footways	£1,219,169	£1,807,707	£2,543,593
Structures (for example bridges or tunnels)	£230,362	£396,896	£1,355,801
Drainage	£390,773	£400,686	£907,833
Street lighting	£1,771,601	£1,675,925	£2,206,787
Other assets	£1,479,070	£1,654,714	£1,834,611

A4.2 Where our funding for highways maintenance comes from

Funding sources for highways maintenance	2024-25	2025-26	2026-27 (projected)
Funding received through the Department for Transport / UK Government	£2,852,000	£2,852,000	£2,964,000
[if applicable]: Additional highways maintenance funding provided by the Council or third parties	£7,749,030	£10,533,782	£14,757,920
Total	£10,601,030	£13,385,782	£17,721,920

A5 Our maintenance plans for this year

A5.1 Our plans for highways maintenance for 2026-27

Our plans for highways maintenance for 2026-27 are listed here.

- Approximately 13.6 km of roads are programmed to receive preventative surface treatments, including surface dressing, micro asphalt and asphalt rejuvenation. These treatments help preserve the existing road surface and prevent more substantial deterioration.
- Approximately 12.5 km of roads are programmed to receive planned structural maintenance, including conventional resurfacing, grouted macadam and Hardipave treatments.
- Approximately 14.6 km of footways are programmed for planned maintenance, comprising 12.9 km of reconstruction or renewal and 1.7 km of preventative treatments.
- The overall planned carriageway programme covers approximately 26.1 km and 200,190 m² across strategic routes, distributor roads and residential streets.

A5.2 Full list of planned carriageway and footway works

Our 2026-27 planned carriageway and footway maintenance programme identifies each road or street, the scheme extent and the proposed treatment. It includes preventative surface treatments, structural resurfacing, footway reconstruction and footway preventative treatments.

[Programme link for carriageway schemes and footway schemes](#)

A5.3 - How decisions are made on our maintenance plans

Luton prioritises maintenance using:

- PAS 2161 condition data
- road hierarchy
- network use
- safety risk
- lifecycle planning
- available funding

Vaisala RoadAI and Gaist condition data help identify deterioration and support programme development. Preventative treatments are considered first where timely intervention can preserve the existing road and delay more costly structural work. Roads showing more substantial deterioration are considered for resurfacing or reconstruction.

Proposed schemes are subject to engineering assessment and coordinated with traffic management, utility works and other planned activity. Programme delivery is monitored through:

- regular progress meetings
- risk registers
- milestones
- performance information

This planned, evidence-led approach supports whole-life value while maintaining capacity for urgent repairs where safety defects or unexpected failures occur.

B Transparency report - technical annex

This section of the transparency report is to provide a more detailed view of your service. It will also need to be published on your website and provided to DfT alongside the core report but does not need to have the same level of prominence on your website as the core report.

B1 Highways maintenance funding and spending figures

B1.1 Capital funding allocation sources

Financial year	2024-25	2025-26	2026-27 (projected)
Highways maintenance capital funding allocated through DfT	£2,852,000	£2,852,000	£2,964,000
Other DfT capital funding utilised by local authority for highways maintenance	0	0	0
Other Government capital funding allocated by local authority to Highways Maintenance	0	0	0
Other capital funding allocated to highways maintenance	£3,028,025	£5,890,906	£9,036,000
Total Capital funding allocated to highways maintenance	£5,880,025	£8,742,906	£12,000,000

B1.1.2 Additional information on funding figures

DfT funding is based on the total HMB allocation received including pothole funding and additional funding.

B1.2 Spending

B1.2.1 Total spending

The questions in this section (B1.2.1) relate to the spending condition set out in the 2026-27 [local highways maintenance incentive funding requirements](#). Completion of this section forms part of the evidence required to meet this incentive funding condition.

Confirm that you understand how the answers provided in this section (B1.2.1) relate to your compliance under the 2026-27 local highways maintenance incentive funding requirements, as set out to your authority via letter to your chief executive in April and [as published on GOV.UK](#).

Yes ☒ No ☐

Financial year	2024-25	2025-26	2026-27 (projected)
Total highways maintenance capital spend	£5,880,025	£8,742,906	£12,000,000
Total highways maintenance revenue spend	£4,721,005	£4,642,876	£5,721,920
Total spend	£10,601,030	£13,385,782	£17,721,920

B1.2.2 Additional information on total spending figures

Capital spend figures include DfT HMB, and Luton funding for highway maintenance. The total does not include structural maintenance, which is wholly funded from Luton contributions.

B1.2.3 Spending on carriageways by type of spend in financial year 2025-26 and 2026-27 (projected)

Carriageway spend related maintenance type	Capital 2025-26	Revenue 2025-26	Capital 2026-27 (projected)	Revenue 2026-27 (projected)
Planned maintenance				
Preventative carriageway maintenance	£1,612,737	0	£1,292,295	0
Structural carriageway maintenance	£4,271,486	0	£5,955,945	0
Planned carriageway repair / patching programmes	£65,944	0	£169,200	0
Reactive carriageway maintenance				
Reactive carriageway repairs / patching (temporary repairs)	0	£110,757	0	£150,000
Reactive carriageway repairs / patching (permanent repairs)	£38,776	£651,988	£150,000	£895,295
Reactive carriageway repairs / patching (total)	£38,776	£762,745	£150,000	£1,045,295
Other carriageway-related spend	0	0	0	0
Total	£5,988,943	£762,745	£7,567,440	£1,045,295

B1.2.4 Additional information on spending on carriageways by type of spend

The totals in Table B1.2.3 are lower than the wider carriageway spending figures in Section A4.1 because they do not include associated fees. The Council's fee-recovery arrangements do not allow these fees to be reliably divided between the individual maintenance categories in the table. This includes management fees, which are calculated as a proportion of the relevant budget rather

than assigned to individual repair types. The fees have therefore been excluded from this detailed breakdown to avoid allocating them between categories without a reliable basis.

B2 Highway maintenance activity (surface treatments and repairs)

B2.1 Road resurfacing and surface treatments

Financial year	Road receiving preventative road surface treatments (length, km)	Road receiving planned structural maintenance (length, km)	Area receiving planned repair / patching programmes	Area receiving reactive repair / patching (permanent methods)	Area receiving reactive repairs/ patching (temporary methods)
2025-26	18.2 km	9.9 km	1,259 m ²	13,224 m ²	data not held
2026-27 projected	13.566 km	12.542 km	2,752 m ²	data not held	data not held

B2.1.1 - Additional information on surface treatments and repairs

Does table B2.1 reflect all your carriageway-related road surface treatment and repair activities? For example, including pothole repairs?

Yes ☒ No ☐

If no, add further information on any other types of treatments (planned to be) delivered and their extent in the table below.

Table B2.1 records Luton's principal planned carriageway maintenance activities, including:

- preventative surface treatments
- structural maintenance
- planned patching

Reactive defect repairs are managed separately through operational works orders. Where complete areas are available, these are included in the permanent and temporary reactive-repair columns otherwise, the limitations of the available data are stated.

B2.1.2 - Further information and context

Luton's carriageway programme prioritises preventative and structural maintenance to prevent deterioration and reduce future reactive demand. Preventative treatments, including surface dressing, micro asphalt and asphalt rejuvenation, are used where the existing road can be preserved. Structural resurfacing and grouted macadam are used where more substantial renewal is required.

The 2026-27 planned programme covers approximately 26.1 km and 200,190 m². Planned patching and reactive defect repairs complement this programme where localised deterioration or safety defects require attention.

B3 Pothole repairs

This section sets out how authorities identify and repair potholes and other defects in carriageways, and how this activity fits within their wider maintenance approach. The department is clear that prevention is better than cure: planned, preventative maintenance should be the foundation of a well-managed network, reducing the need for repeated reactive interventions

B3.1 Pothole/defect intervention criteria

Building on [section A3.1](#), please set out in the table below how your local authority defines potholes and other carriageway defects, and the intervention criteria that apply.

Pothole/Defect category name (as used by your authority)	Minimum investigatory or definitional threshold (e.g. depth, area, width - include units)	Additional risk or contextual factors considered (e.g. road hierarchy, traffic levels, location in carriageway)	Target response time - make safe	Target response time - permanent repair
Critical carriageway pothole	Greater than 75 mm deep and greater than 150 mm diameter	Road hierarchy, traffic use, defect position, speed, likely consequence and risk to highway users	2 hours on the Strategic Network, Main Distributor and Secondary Distributor roads. 24 hours on Link Roads and Local Access Roads	A permanent repair is completed at the first visit where safe and practicable. Where an immediate make-safe treatment is necessary, permanent follow-up is arranged through the maintenance process.
Significant carriageway pothole	Greater than 50 mm and less than 75 mm deep, and greater than 150 mm diameter	Road hierarchy, traffic use, defect position and likely risk	24 hours on the Strategic Network, Main Distributor and Secondary Distributor roads. 10 days on Link Roads. 28 days on Local Access Roads	A permanent patch or repair is considered, particularly where the response period allows the work to be planned and completed as a permanent first-time repair.
Noticeable carriageway pothole	Greater than 30 mm and less than 49 mm deep, and greater than 150 mm diameter	Road hierarchy, traffic use, location and evidence of deterioration	28 days on the Strategic Network and Main Distributor roads. No intervention on lower-hierarchy roads unless the risk assessment identifies a need for action	Where action is required, the defect may be repaired or incorporated into planned maintenance. Otherwise, the location continues to be monitored through inspections.

Pothole/Defect category name (as used by your authority)	Minimum investigatory or definitional threshold (e.g. depth, area, width - include units)	Additional risk or contextual factors considered (e.g. road hierarchy, traffic levels, location in carriageway)	Target response time - make safe	Target response time - permanent repair
Negligible carriageway pothole	Less than 30 mm deep	Location, progression, road hierarchy and any change in risk	Normally recorded or monitored, with no immediate intervention	No immediate repair unless subsequent inspection or a change in circumstances identifies an increased risk.

The measurements shown in B3.1 are investigatory thresholds used within Luton's risk-based inspection process. Meeting a dimensional threshold does not automatically determine the final response. Highway inspectors also consider:

- road hierarchy
- traffic levels
- speed
- defect location
- likely consequence
- the needs of different highway users

The response times shown are our targets for taking action on an assessed defect. Where possible, a permanent repair is completed at the first visit.

A temporary make-safe repair may be required where an immediate risk must be addressed or where traffic management, weather, materials or site conditions prevent a permanent repair.

Luton does not specify a separate numerical target for the subsequent permanent repair.

B3.2 Number of potholes filled

B3.2.1 Number of potholes filled in 2025-26 (estimate)

915 estimated recorded carriageway repair activities

B3.2.2 Of these how many do you estimate were resolved using each of the following approaches?

- Planned repair / patching programmes: 32 recorded planned repair areas - individual pothole count not held
- Planned structural maintenance programmes: data not held
- Reactive repair using temporary repair methods: 531 recorded repairs
- Reactive repair using permanent repair methods: 352 recorded carriageway repairs

B3.2.3 - Additional information on numbers of potholes resolved, by treatment type

Luton does not hold a separate count of individual potholes filled across every maintenance activity. The estimate is based on recorded carriageway repair activity.

Planned patching records relate to repair areas and may include more than one pothole, while permanent carriageway repair records may include other defect types. Potholes prevented or addressed through structural resurfacing are not separately counted.

The figures therefore represent the best available estimate from our maintenance records.

Caution for readers: authorities have different criteria for identifying potholes and different methodologies for counting how many they have filled or resolved. Summing the figures in the above table across authorities will therefore not provide a reliable estimate of the total number of potholes filled across England.

B3.3 Prices of pothole interventions

- Unit/average cost of a permanent pothole repair on your network (reactive): £1,300
- Unit/average cost of a temporary pothole repair on your network (reactive): £230

B3.3.1 Additional information on pothole prices (optional)

The figures are estimated average reactive repair costs. Actual costs vary depending on the size and depth of the defect, repair method, materials, traffic management requirements, location and whether an emergency attendance or follow-up visit is required.

B3.4 Defect repair quality

ID	Question	Yes/no
3.4.1	Do you set requirements to those delivering repairs about the longevity of both a) planned repairs/patching and b) reactive repairs using permanent methods?	Yes
3.4.2	If yes, do you base your material and process specifications on these longevity requirements?	Yes
3.4.3	Do you regularly monitor the appropriateness of the carriageway interventions chosen by your workforce or contractor and the quality of work delivered?	Yes
3.4.4	If yes, do you systematically record information about expected and delivered longevity of repairs?	No

B3.4.5 Evidence summary

Luton prioritises permanent, right-first-time repairs where conditions allow. Planned repairs and permanent reactive repairs are delivered using specified materials and methods, with treatment selection informed by defect risk, road hierarchy and expected service performance.

Repair quality and intervention choice are monitored through highway inspections, works supervision, programme monitoring and contractor performance arrangements.

B3.4.6 Additional information

Repair methods are selected according to:

- defect severity
- road hierarchy
- site condition
- response time
- traffic management requirements
- whether a permanent repair can be safely completed at the first visit

Temporary repairs are used where an immediate make-safe response is required or site conditions prevent a permanent first-time repair.

We monitor repair quality through inspections, supervision and contractor performance processes. Treatment and predicted service-life information is held for planned asset interventions, however delivered longevity of individual reactive repairs is not currently recorded consistently.

B3.5 Public reporting system for defects and other issues

ID	Question	Answer
3.5.1	Are defect reports from the public routinely used as an input into maintenance planning and inspection regimes?	Yes
3.5.2	Do you inform users about the outcomes from their feedback, including when no action is to be taken?	Yes

B3.5.3 Evidence summary

Public highway reports received online, by telephone or by email are logged and passed into the highway inspection process. Inspectors assess reported defects using our risk-based criteria, and the resulting information supports reactive responses, monitoring and planned maintenance decisions.

Where applicable, reporters may receive an update through our customer-reporting process, including the outcome of the assessment.

B3.5.4 Tools used for reporting

Our online road and street reporting service allows the public to report potholes and other highway defects. Reports can also be made by telephone or email and are logged within our customer-management process for assessment and response.

B4 Maintenance of highway structures

Please set out information about other highway structures and assets

B4.1 Highway structures

ID	Question	Answer
4.1.1	Number of highway structures on your highway network	284
4.1.2	Number of highway structures with interim measures in accordance with CS470 applied?	N/A
4.1.3	Number of structures due a general inspection in 2025-26 in accordance with CS450	109
4.1.4	Number of general inspections carried out in 2025-26	109
4.1.5	Number of structures due a principal inspection in 2025-26 in accordance with CS450	33
4.1.6	Number of principal inspections carried out in 2025-26	33

B5 Asset management

This section focuses on asset management practices that underpin how the authority plans, prioritises and delivers highways maintenance. It is intended to provide confidence that decisions are evidence led, risk based and aligned to whole life value, in line with the code of practice for well managed highways infrastructure.

B5.1 Asset management strategy and policy

The questions in this section (B5.1) relate to the asset management condition set out in the 2026-27 [local highways maintenance incentive funding requirements](#).

Completion of this section forms part of the evidence required to meet this incentive funding condition.

B5.1.1 Confirm that you understand the answers provided in this section (B5.1) relate to your compliance under the 2026-27 local highways maintenance incentive funding requirements, as set out to your authority via letter to your chief executive in April and as published online.

Yes ☒ No ☐

B5.1.2 Please provide a link to your authority's published highways asset management policy and strategy.

<https://www.luton.gov.uk/council-elections/strategies-policies-plans/highways-asset-management-policy-strategy>

B5.1.3 Provide the date it was last reviewed or updated.

July 2026

B5.1.4 Provide proof of the review or update.

The published Highway Asset Management Policy and Strategy on our website confirms that the document is version 8.0 and was last reviewed in July 2026. This is within the 24-month review period required for the 2026-27 incentive funding condition.

B5.1.5 If your asset management policy or strategy has not been reviewed or updated since 1 August 2024, please confirm that it will be reviewed or updated by 30 September 2027 and provide a brief timetable for doing so.

Not applicable. The published Highway Asset Management Policy and Strategy was last reviewed in July 2026, which is after 1 August 2024 and within the review period for the 2026-27 incentive funding requirement.

B5.1.6 Further context (optional)

Our Highway Asset Management Policy and Strategy sets out a data-led, risk-based and lifecycle approach to managing the highway network. Condition information, asset hierarchy and expected service life support investment decisions and treatment selection.

The strategy prioritises intervention at the appropriate stage of an asset's lifecycle, helping to extend asset life, achieve whole-life value and reduce reliance on reactive maintenance.

Key aspects of highways asset management approach

To get a sense of how each local highway authority is implementing best practice for asset management, we ask that you provide the following information across a sample of key areas.

B5.2 Asset data

This section seeks to establish whether asset management decisions are supported by appropriate and up-to-date condition data.

Complete the table below for your key highway assets.

Asset type	Asset inventory held (None / Partial / Full)	Condition data held (None / Partial / Full)
Carriageways	Full	Full
Footways and cycleways	Full	Full
Structures	Full	Full
Drainage assets	Partial	Partial
Street lighting	Partial	Partial
Traffic signals	Full	Full

5.2.1 -Further context (optional)

Asset information is held across specialist systems including:

- Gaist
- Vaisala RoadAI
- Symology
- Map16
- AMX/AMEX
- IMTRAC,

Relevant spatial information is displayed through our corporate GIS. Carriageway condition is supported by UKPMS and local condition-survey data, while Footway Management Surveys support footway maintenance planning. Drainage information remains partial because some drainage systems and footway drainage assets are not fully recorded.

B5.3 Asset data integration and management

This section seeks to understand the maturity of how asset data is managed and integrated to support planning and investment decisions.

B5.3.1 Asset data integration

How is asset inventory and condition data for your key highway assets primarily managed?
(indicate one option with an X)

1. Discrete spreadsheets or documents held by individual teams
2. Multiple digital platforms with limited integration
3. A single digital platform or a set of connected platforms used across the highways service X
4. Other (please set out in further context)

B5.3.2 - Further context (optional)

Asset data is managed through a set of connected systems including:

- Symology
- Map16
- AMEX
- IMTRAC
- Cadcorp GIS

These systems support:

- asset inventory
- condition data
- inspections
- lifecycle planning
- maintenance programming

We use this information to support evidence-based decision-making and planned highway maintenance programmes.

B5.4 Lifecycle planning and investment decision-making

This section focuses on whether the authority uses **lifecycle planning** to inform maintenance investment decisions, rather than relying solely on reactive demand or short-term pressures.

ID	Question	Yes / No
5.4.1	Do you use lifecycle plans for carriageways to support maintenance investment decisions?	Yes
5.4.2	Do you use lifecycle plans for footways to support maintenance investment decisions?	Yes
5.4.3	Do you use lifecycle plans for structures to support investment decisions?	Yes

B5.4.4 Evidence summary

Luton uses PAS 2161 certified condition information and lifecycle planning to support maintenance investment decisions. For carriageways, survey data, treatment history and predicted service life are used to identify appropriate interventions and develop planned programmes.

Footway condition surveys support forward maintenance planning, while AMX/AMEX is used to record structures condition, develop lifecycle plans and prioritise schemes.

B5.5 Performance monitoring and continuous improvement

This section focuses on whether the authority monitors the effectiveness of its asset management approach and uses performance information to inform ongoing investment and prioritisation decisions.

ID	Question	Answer
5.5.1	Do you have a defined set of key performance indicators (KPIs) to monitor the outcomes of your highways asset management approach?	Yes
5.5.2	Are these KPIs reviewed on a regular basis (at least annually)?	Yes
5.5.3	Are KPI trends used to inform maintenance planning, prioritisation or changes to forward programmes or investment decisions?	Yes
5.5.4	Have you conducted a value for money review or peer review of your service in the last 3 years	Yes

B5.5.5 Evidence summary

Luton uses an embedded performance framework to monitor:

- asset condition
- service delivery
- contract performance
- asset-management objectives

Performance information is reported to senior management quarterly and is used to identify corrective and preventative actions. The service also participated in an LGA Highways Peer Challenge in 2025, with the findings used to support service improvement and future planning.

B6 Maintaining footways and cycleways

ID	Question	Answer
6.1.1	Do you have a defined footway hierarchy (such as based on footway function and usage levels) that underpins a risk-based approach to inspection frequencies and maintenance programmes?	Yes
6.1.2	For 2026-27, please provide the length of footways that you have earmarked for structural maintenance / reconstruction / renewal	12.9 km
6.1.3	For 2026-27, please provide the length of footways that you have earmarked for preventative maintenance treatments	1.7 km
6.1.4	Are priority footways and cycleways included in your winter service (such as gritting or snow clearance), and in a routine programme for keeping them clear of overgrown vegetation and debris (such as sweeping, cutting back)?	Yes
6.1.5	For 2026-27, are you planning to deliver structural or preventative maintenance to cycleways which is not yet covered as part of your carriageway maintenance programmes or footway maintenance programmes (such as segregated cycleways that are not shared with pedestrians or motorists). If yes, please set out the length of such cycleways that you have earmarked for:	No
	a. Structural maintenance / reconstruction (in km)	0 km
	b. Preventative maintenance treatments (in km)	0 km

B6.1.6 Provide any brief additional information you consider helpful in explaining your approach to maintaining footways and cycleways

Luton's planned footway programme for 2026-27 includes approximately 12.9 km of structural maintenance or reconstruction and 1.7 km of preventative treatments. Footway hierarchy, condition surveys and risk-based inspections support the selection and prioritisation of schemes.

Priority footway salting beats are included in the winter service plan, and on-road cycle routes are treated where they form part of the existing salting routes. Routine vegetation and debris clearance arrangements are managed separately. Cycleway maintenance forming part of the carriageway or footway is delivered through the relevant maintenance programme.

B6.1.7 Evidence summary

The 2026-27 footway programme provides the structural and preventative maintenance lengths reported above. Luton's operational manual sets out the footway hierarchy and risk-based inspection approach, while footway management surveys provide condition information for planned maintenance.

The winter service plan identifies priority footway salting beats and confirms that on-road cycle routes are treated where they form part of salting routes. No separate standalone cycleway structural or preventative maintenance programme is planned outside the carriageway and footway programmes.

B7 Drainage

ID	Question	Answer
7.1.1	Please provide an estimate of your drainage maintenance expenditure split (in percentages) between:	
	a) Reactive (incident- or failure-driven) maintenance	20%

ID	Question	Answer
	b) Planned maintenance (routine/cyclical and/or risk-based)	80%
7.1.2	Does your authority utilise a digital drainage management platform, covering asset inventory, inspection history, sensor data, and risk scoring?	No
7.1.3	Do you maintain a record of locations where drainage issues are known to cause or contribute to carriageway deterioration or surface water ponding?	Yes
7.1.4	Do you utilise smart sensors or other remote monitoring technologies to monitor performance of your drainage assets. If yes please provide some high level information in bullet points below	No

B7.1.5 Evidence summary

Luton manages highway drainage through a planned, risk-based maintenance programme supported by Map16. Gully-cleansing frequencies are determined using:

- resilient-network status
- known flooding locations
- road hierarchy
- gradients
- recorded silt levels

Map16 records:

- drainage assets
- cleansing activity
- condition information
- flooding incidents

Reactive responses are used where blocked drainage, standing water or flooding presents an immediate or emerging risk.

B7.1.6 Further context on approach to drainage asset management

Planned cleansing frequencies range from quarterly treatment at known flooding sites to longer cycles on lower-risk parts of the network. Flooding incidents are logged and monitored until resolved, with high-risk incidents receiving an urgent response.

Higher-risk locations, including the resilient network, flood-susceptible areas, steep gradients, tree-lined roads and gullies with high silt levels, receive more frequent attention. Map16 supports programme management by recording cleansing dates, asset condition, silt levels, blockages, photographs and flooding locations.

B8 Skills and training

ID	Question	Answer
8.1.1	Do you have an up-to-date training and development plan for those responsible for highways asset management in your authority?	Yes
8.1.2	Do you or your main highways contractors support professional development through a recognised professional training scheme (such as Institution of Civil Engineers (ICE) or Institution of Highway Engineers (IHE))?	No
8.1.3	Does your authority contribute towards the cost of professional membership or professional development required for relevant highways roles?	No
8.1.4	Do you employ a professionally qualified engineer (such as Chartered Engineer (CEng) or equivalent competence) with responsibility for the	Yes

ID	Question	Answer
	management of highway structures (either in house or through a contracted arrangement)?	
8.1.5	Does your authority define competence requirements for key highways asset management roles and take steps to address any identified gaps (either directly or through contractual arrangements)?	Yes
8.1.6	Do you or your main contractors support early career development in your local area, for example through apprentice schemes, traineeships or pre-apprenticeship programmes, sponsored qualifications (such as HNC/HND, degree, MSc), graduate schemes etc	Yes

B8.1.7 Evidence summary

We regularly conduct appraisals and identify opportunities for officers to attend CPD courses and further develop their knowledge of the latest carriageway surfacing and treatment techniques. This helps ensure that investment is targeted towards the continuous improvement of the carriageway and footway network.

- Officers have attended courses provided by the Road Surface Treatments Association within the last 12 months.
- Senior staff hold diplomas in surface treatments and carriageway surfacing, as well as BSc (Hons) qualifications in construction management.
- Staff also hold HNCs or higher qualifications.
- Officers regularly attend networking and training events, including LCRIG conferences and training sessions.

B9 Adapting roads to withstand climate pressures

Climate and environmental factors, such as heavy rainfall, prolonged heat, and freeze-thaw cycles, are integral to effective highways asset management, as they influence asset performance, deterioration rates and long-term resilience.

Understanding both the impacts of a changing climate and the carbon implications of maintenance activities supports better decision-making, helping authorities to optimise durability, manage risk and deliver best whole life value from their assets.

ID	Question	Yes/no
9.1.1	Have you updated your asset management policy and strategy to reflect the increased probability of extreme-weather and/or geohazards now and in the future?	Yes
9.1.2	Have you identified your resilient network and agree this with senior decision-makers	Yes
9.1.3	If yes when did you last update this.	October 2025
9.1.4	Have you identified locations that are repeatedly affected by extreme weather (e.g. flooding, heat damage, storms)?	Yes - formally recorded
9.1.5	Which climate-adaptation measures are currently implemented on your network?	
	- Targeted drainage upgrades or maintenance	Yes
	- Natural flood management / SuDS	Yes
	- targeted slope / ground stability / landslip mitigation	Yes
	- Heat-resilient materials or surface treatments	Yes
	- Tree planting / shading for heat management	No
	- Other (please specify) Other climate-adaptation measures	Yes (if yes, please specify)

ID	Question	Yes/no
	Yes - resilient network planning, winter service arrangements, weather monitoring, emergency response, traffic management and communications procedures.	
	- None of the above	No
9.1.6	Have you measured and benchmarked the greenhouse gas emissions from your highways maintenance service using a recognised industry standard? Or do you have arrangements in place to do this, such as by signing up to the DfT funded ADEPT Carbon Leadership Programme.	Yes
9.1.7	Have you formally engaged with the DfT funded ADEPT live labs 2 Programme, to understand what lessons your authority can utilise to increase the efficiency of your operations and support decarbonisation efforts?	No

B9.1.8 Evidence summary

Luton has a defined resilient network plan which sets out how the highway network is managed in response to severe weather, including flooding, snow, ice and extreme heat. Locations susceptible to flooding are identified through the resilience network plan, surface water management plan and drainage records.

Drainage maintenance is prioritised using:

- risk and flood susceptibility
- resilient network status
- silt levels

Sustainable drainage systems (SuDS) are promoted and implemented through the planning process for major developments, helping manage surface water runoff and improve network resilience. We support carbon reduction activity through the ADEPT Carbon Leadership Programme.

B9.1.9 Further context on your adaptation / resilience activities

Luton's resilience approach combines planned asset maintenance with operational severe-weather response. Drainage cleansing frequencies are based on flood risk, resilient-network status, gradients, tree cover and recorded silt levels.

Structures and embankments are inspected through defined programmes, while carriageway condition and lifecycle planning are used to identify preventative and structural maintenance needs.

During severe weather, forecast information, standby staff, contractor resources, traffic-management procedures and public communications support the response. The resilience network plan aims to restore key routes to serviceability within two hours following the end of a severe-weather event.

B10 Innovation

ID	Question	Yes / No
10.1.1	Do your procurement and contracting approaches encourage and reward innovative practice?	Yes
10.1.2	Can you demonstrate that innovative materials and practices are regularly reviewed and, where appropriate, integrated into business as usual operations?	Yes
10.1.3	If you have conducted innovation trials, have you shared the findings of these publicly or with professional networks?	Yes

B10.1.4 Evidence summary

Luton reviews and adopts innovative materials, technologies and maintenance methods where these provide operational, environmental or whole-life benefits. We use PAS 2161-certified technology for condition surveys and Asphalt IQT to capture asphalt carbon and are trialling the KaarbonTech approach to drainage maintenance.

Innovations adopted into operational use include:

- warm-mix asphalt
- elastomac
- jet-patching repair methods
- carbon-neutral grouted macadam
- risk-based drainage management
- AI-assisted highway inspections
- HVO fuel

Innovations are reviewed with the term maintenance contractor and recorded through contract and service-improvement arrangements using ISO 44001 collaborative systems.

B10.1.5 Further context on your innovation activities

Innovation supports Luton's planned maintenance and asset-management approach. Condition data and AI-assisted surveys help identify the right intervention, while preventative and lower-carbon treatments aim to extend asset life and reduce future reactive demand.

Map16 supports risk-based drainage maintenance, and alternative repair methods are used where they improve efficiency, durability or carbon performance. Learning is supported through contractor collaboration, benchmarking groups and participation in highway-sector networks.

10.2 Examples of innovations that have been adopted

Luton has adopted a number of innovations within highway maintenance and asset management. These include the following.

- Gaist Condition Surveys
- NHT Carbon Cost Tool
- Asphalt IQT Carbon tracker app and chip
- Warm mix asphalt - has been adopted for carriageway works to reduce production temperatures and associated carbon emissions while maintaining required performance – its use forms part of Luton's approach to lower-carbon planned maintenance.
- Road Mender patching - is used as an alternative method for localised carriageway repairs. It supports permanent patching with less disruption and lower carbon than some traditional repair methods. The treatment is used through the operational patching programme where site conditions are suitable.
- Jet Patching as an alternative to traditional carriageway repairs, two visits per year.
- Carbon Neutral Grouted Macadam programmes - is used within the planned carriageway programme where a durable, rut-resistant surface is required. It combines an open-graded asphalt layer with cementitious grout and is particularly suitable for heavily trafficked or high-stress locations. The 2026-27 programme includes grouted-macadam schemes.
- AI-assisted driven inspections - Vaisala RoadAI is used to support driven highway inspections and road-condition assessment. The imagery and condition information help identify deterioration, support treatment selection and inform planned maintenance programmes.

- Risk-based drainage management - Map16 is used to record drainage condition, maintenance history, silt levels, blockages and flooding locations. This information supports risk-based gully-cleansing frequencies and prioritisation of known flooding locations. Trialling the use of KaarbonTech drainage asset management system.
- HVO for gritter fleet - introduced as part of lower-carbon operational delivery.

B11 Working with utility companies to reduce disruption to road users

ID	Question	Yes / No
11.1.1	Do you routinely monitor and enforce utility works quality as part of your streetworks management?	Yes
11.1.2	Have you undertaken a senior-endorsed assessment of whether a lane rental scheme would be suitable for your area?	No
11.1.3	Do you seek input from utility companies when determining your highways maintenance programme to help reduce disruption?	No
11.1.4	Have you conducted and published a permit scheme evaluation within the last three years?	No
11.1.5	Have you conducted a traffic sensitive review in the last three years?	No

B11.1 Evidence summary

As part of NRSWA we carry out sample, routine and third-party inspections in order to monitor the quality of utilities reinstatement and on-site safety when setting out roadworks. We have not carried out the traffic sensitive street review or permit scheme evaluation due to changeover in staff, but it is aimed to be completed by end 2026/2027 financial year.

B12 Managing highways maintenance contracts effectively

Only answer this sections if you utilise a contractor to deliver any of your carriageway maintenance operations, including:

- structural maintenance
- planned repairs / patching
- reactive repairs / patching

ID	Question	Yes / No
12.1.1	Does your authority retain in-house technical capability to independently assess maintenance interventions proposed by contractors?	Yes
12.1.2	Do you routinely analyse actual unit costs (for example £/m ² of road surface treatments, or £/pothole repair) for core highways maintenance activities delivered under contract and compare them against benchmarks or historic performance?	No
12.1.3	Do you have defined KPIs for your highways maintenance contract(s), and are they actively monitored by your authority to manage performance?	Yes
12.1.4	If reactive pothole repairs are delivered by a contractor, do your contracting arrangements incentivise single-visit permanent repairs where it is safe and appropriate to do so?	No

12.1.5 Evidence summary

Luton retains a client-side highways team responsible for engineering, project management, inspections and oversight of contractor-proposed maintenance interventions. Volker Highways delivers planned and reactive maintenance under our term service contract NEC3. Contract

delivery is monitored through regular programme meetings, KPIs, milestones, risk registers, RAG reporting and performance information.

These arrangements provide oversight of programme delivery, quality and contractor performance. We have a contract governance model that prescribes monthly operational board meetings and quarterly strategic board meetings.

B12.1.6 Further context

The main highway maintenance contract operates as an NEC3 term service contract. Most planned and routine maintenance is delivered through option A using a schedule of rates, while some reactive activity is delivered using cost-reimbursable arrangements.

Programme and contract performance are reviewed regularly by council officers, the contractor and Finance, covering:

- progress
- risks
- milestones
- costs
- quality
- KPIs

Planned and preventative maintenance is programmed using condition information and engineering assessment, while reactive activity addresses safety defects and unexpected failures. Permanent first-time repairs are prioritised, where safe and practicable.

Approval and sign-off

Head of Service

Name: Mark Araanson

Signature: [approved]

Date: 2 September 2026

Section 151 Officer

Name: Darren Lambert

Signature: pp 

Date: 10 September 2026

Portfolio Holder

Name: Javeria Hussain

Signature: [approved]

Date: 5 September 2026