

Department of Growth

Planning, Transportation & Highways Service

**Local Highway Maintenance
Transparency Reports 2026-2027
- Technical Annex**

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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	£17,036,214	£15,280,851	£14,653,088
Other DfT capital funding utilised by local authority for highways maintenance	£0	£121,046	£0
Other Government capital funding allocated by local authority to Highways Maintenance	£0	£0	£0
Other capital funding allocated to highways maintenance	£0	£0	£0
Total Capital funding allocated to highways maintenance	£17,036,214	£15,401,897	£14,653,088

B1.1.2 - Additional information on funding figures

Capital funding allocated by DfT is administered by the West Yorkshire Combined Authority (WYCA) as part of the City Region Sustainable Transport Settlement (CRSTS)

This funding is made up of:

2024-25: Baseline allocation (CRSTS), Pothole Funding allocation, Network North Funding allocation and Public Rights of Way (PROW) 'urban' allocation.

2025-26: Baseline allocation (CRSTS) and Local Highway Maintenance Fund allocation, Traffic Signal Obsolescence Grant and Public Rights of Way (PROW) 'urban' allocation.

2026-27(projected): Baseline allocation (CRSTS), Incentive Funding allocation and Public Rights of Way (PROW) 'urban' allocation.

B1.2 – Spending

B1.2.1 - Total spending

Please confirm that you understand 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 online .	Yes
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Financial year	2024-25	2025-26	2026-27 (projected)
Total highways maintenance capital spend	£17,036,214	£15,401,897	£14,653,088
Total highways maintenance revenue spend	£5,489,382	£5,655,753	£6,296,400
Total spend	£22,525,596	£21,057,650	£20,949,488

B1.2.2 - Additional information on total spending figures

Capital spending figures do not include energy costs (eg power supplies to illuminated street furniture, etc.).

Revenue spending figures relate to the Council's highway maintenance allocations.

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	£2,656,582	£52,000	£2,030,590	£50,000
Structural carriageway maintenance	£4,250,990	£126,004	£4,823,849	£0
Planned carriageway repair / patching programmes	£1,024,895	£159,670	£763,400	£150,000
Reactive carriageway maintenance				
Reactive carriageway repairs / patching (temporary repairs)	£0	£1,357,058	£0	£1,985,000
Reactive carriageway repairs / patching (permanent repairs)	£0	£0	£0	£0
Reactive carriageway repairs / patching (total)	£0	£1,357,058	£0	£1,985,000
Other carriageway-related spend	£0	£1,511,538	£0	£1,593,200
Total	£7,932,467	£3,206,270	£7,617,839	£3,778,200

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

Capital spending for **Preventative**, **Structural** and **repair/patching** carriageway maintenance utilises baseline funding allocations (CRSTS), Local Highway Maintenance Fund allocation (2025-26) and Incentive Funding allocation (2026-27).

Revenue spending for **Preventative, Structural** and **repair/patching** maintenance utilises Council 'former trunk road' allocations.

We do not utilise capital budgets to undertake reactive temporary repairs/patching or reactive permanent repairs/patching.

Other carriageway-related spend refers to our Winter Service, which includes gritting and snow clearance. The service is funded utilising a dedicated Council revenue allocation.

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	67.52km	19.97km	11,480m ²	n/a	n/a
2026-27 projected	53.33km	20.27km	>5,643m ²	n/a	n/a

B2.1.1 – additional information on surface treatments and repairs

Does table B2.1 reflect all your carriageway-related road surface treatments & repair activities (for example, including pothole repairs)? If no , please add further information on any other types of treatments (planned to be) delivered and their extent in the table below.	Yes
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B2.1.2 – Further information and context

Preventative treatment interventions in each financial year: surface dressing, micro asphalt and crack/joint sealing.

Structural maintenance interventions in each financial year: resurfacing, reconstruction and overlay.

We do not record reactive repairs - using temporary or permanent methods - by area (m²) as the vast majority of these are potholes. In 2025-26, the number of potholes filled was 8,986. All of these were filled using temporary methods to remove immediate dangers and potential safety hazards to members of the travelling public.

We do not undertake reactive patching - using temporary or permanent methods – so do not record the area.

B3 – Pothole repairs

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
Category A	<u>Investigatory Levels</u> No minimum. Refers to any defect that represents an imminent risk. * In exceptional cases, where the nature and location of a defect presents a very serious risk to public safety, the defect will be considered for immediate intervention to be made safe (or permanently repaired) within 2 hours.	Any location regardless of road hierarchy and volume of vehicles.	1 day *	N/A
Category B	<u>Investigatory Levels</u> Carriageway Pothole: Depth $\geq$ 40mm Any Horiz Dim $\geq$ 300mm	Depth, surface area or other degree of deficiency of the defect or obstruction. Volume, characteristic and speed of traffic. Location relative to other highway features e.g. retaining walls, bridges, embankments, junctions and bends. Location if it could adversely affect non-highway features such as neighbouring properties. Location relative to the positioning of	7 days	N/A

		users, especially vulnerable users (eg cyclists and motorcyclists).		
Category C	<u>Investigatory Levels</u> Carriageway Pothole: Depth $\geq$ 40mm Any Horiz Dim $\geq$ 300mm	Depth, surface area or other degree of deficiency of the defect or obstruction. Volume, characteristic and speed of traffic. Location relative to other highway features e.g. retaining walls, bridges, embankments, junctions and bends. Location if it could adversely affect non-highway features such as neighbouring properties. Location relative to the positioning of users, especially vulnerable users (eg cyclists and motorcyclists).	N/A	6 weeks
Category D	<u>Investigatory Levels</u> Carriageway Pothole: Depth $\geq$ 40mm Any Horiz Dim $\geq$ 300mm	Those defects which are categorized as a very low risk following a risk assessment but do not represent a safety hazard to users of the highway network. These defects could require no further action, be monitored or be considered for a	N/A	6 months

		future maintenance programme.		
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The Council employs a risk-based approach to carriageway defects in line with *Well-managed Highway Infrastructure: A Code of Practice*. The investigatory levels listed in the above table are an initial 'starting point' for Highway Inspectors. A risk assessment matrix (probability/impact) is used for all carriageway defects, and consideration by a Highway Inspector of the additional risk and contextual factors listed may well necessitate a repair to a defect with lesser depth and/or horizontal dimensions.

Category A and Category B target response times for a permanent repair have not been provided as these vary depending on the additional risk or contextual factors. Similarly, a permanent repair to an individual pothole may not be necessary if it is located within an area identified for planned patching or resurfacing for example. In this case, the permanent repair timescale would be based on the timetable/programme for the planned patching/resurfacing work.

B3 – Pothole repairs

B3.2 – Number of potholes filled

B3.2.1 - Number of potholes filled in 2025-26	8,986
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B3.2.2 - Of these how many do you estimate were resolved using each of the following approaches?

Planned repair / patching programmes	Planned structural maintenance programmes	Reactive repair using temporary repair methods	Reactive repair using permanent repair methods
No data held	No data held	8,986	0

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

Although we record reports of potholes on individual lengths of road, we do not currently extract that data to determine the number of potholes resolved for each planned structural maintenance or planned repair/patching intervention.

We do not, as yet, undertake reactive repairs using permanent repair methods, so do not record the number.

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)	£58.64	Unit/average cost of a temporary pothole repair on your network (reactive)	£28.68
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B3.3.1 - Additional information on pothole prices (optional)

Permanent Pothole

2 men @ £19.00 x 0.75 = £28.50

Wagon @ £12.00 x 0.75 = £9.00

Cut-off saw @ £3.30 x 0.75 = £2.47

Vib plate @ £3.30 x 0.75 = £2.47

Spoil @ £8.50 x 0.1 = £0.85

Tack coat @ £18.40 x 0.1 = £1.85

6mm tarmac @ £135.00 x 0.1 = £13.50

Total £58.64

Temporary Pothole

2 men @ £19.00 x 0.25 = £9.50

Wagon @ £12.00 x 0.25 = £3.00

Vib plate @ £3.30 x 0.25 = £0.83

Tack coat @ £18.40 x 0.1 = £1.85

6mm tarmac @ £135.00 x 0.1 = £13.50

Total £28.68

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?	No
3.4.2	If yes, do you base your material and process specifications on these longevity requirements?	–
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

Expectations and requirements for the longevity of planned and reactive repairs using permanent methods will be defined within our imminent Pothole Improvement Plan.

Our planned repairs/patching is undertaken by in-house operational teams. Only trained and experienced operatives are employed on this type of work. Any new employees, including apprentice road workers, are positioned in gangs alongside experienced operatives.

The type of carriageway interventions and quality of work delivered is informally monitored through random site checks. The asphalt materials used for filling potholes and for planned repairs/patching have been standard for many years and have proven to be the most appropriate.

B3.4.6 - Additional information

We do not currently undertake reactive repairs using permanent methods but ensure that temporary methods used by in-house operatives are robust, providing sufficient longevity until a permanent repair can be undertaken. This involves removing all loose material from within and adjacent, drying of the base and sides, applying a tack coat and suitable compaction of asphalt fill material.

We have recently adopted the use of hotbox technology to enable more permanent first-time repairs, reducing repeat visits and improving customer satisfaction. We are also testing more durable or recycled materials aiming to extend the life of repairs and reduce environmental impact.

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

Reports to the Council's Contact Centre are logged and re-directed to the appropriate area team for inspection. Defect locations appear on the mapping portal of our highway database, Siemens 'Confirm', and remain after repairs are completed.

Multiple defect reports and repairs on a particular street over a period of time would (along with knowledge of the site gained by the area highway inspector) provide additional evidence supporting the case for planned maintenance interventions.

A response to the report (including when no action is to be taken) is provided on 'Confirm' which feeds back to the Customer Contact Centre module.

B3.5.4 - Tools used for reporting

All citizen reports to the Council's Contact Centre are logged via the Civica platform. Individual reports are given a unique reference number and routed to the appropriate highways team or officer via the Siemens 'Confirm' highways database.

B4 – Maintenance of highway structures

B4.1 Highway Structures

ID	Question	Answer
4.1.1	Number of highway structures on your highway network	2008
4.1.2	Number of highway structures with interim measures in accordance with CS470 applied?	8
4.1.3	Number of structures due a General Inspection in 2025-26 in accordance with CS450	Information not available
4.1.4	Number of General Inspections carried out in 2025-26	0

4.1.5	Number of structures due a Principal Inspection in 2025-26 in accordance with CS450	51
4.1.6	Number of Principal Inspections carried out in 2025-26	9

B5 – Asset Management

B5.1 - Asset Management Strategy and Policy

5.1.1	Please 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
5.1.2	Please provide a link to your authority's published highways asset management policy and strategy. Link	
	https://www.bradford.gov.uk/transport-and-travel/highways-asset-management/highway-infrastructure-asset-management-policy/ https://www.bradford.gov.uk/transport-and-travel/highways-asset-management/highway-infrastructure-asset-management-strategy/	
5.1.3	Please provide the date it was last reviewed or updated	Date: Updated May 2026 (both). Reviewed/ signed off July/August 2026 (both)
5.1.4	Please provide proof of the review or update.	
	Our Highway Infrastructure Asset Management Policy and Highway Infrastructure Asset Management Strategy were tabled at an Executive Member (Portfolio Holder) and Assistant Director at a Portfolio Holder Briefing on 20 th July 2026. The Policy and Strategy documents (as above) were subsequently signed off.	
5.1.5	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	

B5.1.6 - Further context (optional)

The five West Yorkshire constituent authorities collaborate through the West Yorkshire Highway Infrastructure Asset Management Board to continuously improve regional highway asset management. By sharing data, knowledge, experience and best practice, they promote consistent, evidence-based and risk-based approaches that respect local priorities, governance arrangements and statutory responsibilities.

This partnership supports common principles, improved decision-making, performance benchmarking and long-term asset management planning, enabling authorities to learn from each other and maximise public investment value.

The arrangements also help to coordinate regional priorities and respond collectively to shared challenges, including funding pressures, network resilience, severe weather impacts, service performance, and workforce capability.

Key aspects of highways asset management approach

B5.2 - Asset data This section seeks to establish whether asset management decisions are supported by appropriate and up-to-date condition data.

Please 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 (footways) Partial (cycleways)	Full (footways) Partial (cycleways)
Structures	Full	Partial
Drainage assets	Full (gullies) Partial (others)	Partial
Street lighting	Full	Full
Traffic signals	Full	Full

5.2.1 - Further context (optional)

Highway assets managed by the Council are listed in Appendix 1 of the Highway Infrastructure Asset Management Strategy.

The following systems are currently in operation to manage the Council's highway data:

- Siemens 'Confirm' Highway Management System - covering most of highway maintenance needs including highway inventory, structures, street works and works orders
- Gaist AssetStream and HighwayView
- GIS (ArcGIS)

The accuracy of existing data is described as high, medium or low. Elements with medium and low accuracies indicate that gaps exist in the inventory. These will be addressed through additional surveys if deemed beneficial, proportionate and cost effective to do so.

B5.3 – Asset data integration and management

B5.3.1 – Asset data integration

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

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

B5.3.2 - Further context (optional)

Our main digital platforms consist of Siemens 'Confirm', Gaist HighwayView, Gaist AssetStream, ArcGIS (Scheme Manager and standalone layers) and Imtrac.

'Confirm' is a recent acquisition, replacing Symology 'Insight' and whilst integration is a functionality of the system, full integration is not yet fully achieved and is an ongoing piece of work within the Service.

B5.4 – Lifecycle planning and investment decision-making

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?	No
5.4.3	Do you use lifecycle plans for structures to support investment decisions?	Yes

B5.4.4 - Evidence Summary

In 2019, the Council's asset management consultant (Gaist) produced a lifecycle model report that provided advice on maintenance solutions for the whole life of the carriageway asset. The model was a prediction of future condition based on different maintenance strategies and investment scenarios for a 20-year period.

In 2026, WSP consultants produced carriageway deterioration models for each member authority of the West Yorkshire Combined Authority (WYCA).

Lifecycle planning for the Council's highway structures is undertaken in-house using condition data and inspection reports. Identified interventions and their timings are prioritised through a risk management process.

B5.5 – Performance monitoring and continuous improvement

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	No

B5.5.5 - Evidence Summary

Our Performance Management Framework identifies numerous KPIs that are updated annually. The KPIs cover Network Serviceability (including the percentage of classified and unclassified roads requiring major maintenance), Network Safety, Network Sustainability and Customer Service.

We engage in the annual National Highways and Transport (NHT) Public Satisfaction Survey, the results of which are used to benchmark our performance against other local authorities and allow us to determine areas of least satisfaction with maintenance of the public highway. This information helps us to identify areas for improvement and, along with in-house data, prioritise future work programmes.

Link to Performance Management Framework:

<https://www.bradford.gov.uk/transport-and-travel/highways-policies-and-guidance/performance-management-framework/>

B6 - Maintaining footways and cycleways

ID	Question	Answer
6.1.1	Do you have a defined footway hierarchy (e.g. 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	6.7km
6.1.3	For 2026-27, please provide the length of footways that you have earmarked for preventative maintenance treatments	10.4km
6.1.4	Are priority footways and cycleways included in your winter service (e.g. gritting or snow clearance), and in a routine programme for keeping them clear of overgrown vegetation and debris (e.g. 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 (e.g. 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)	0km
	b. Preventative maintenance treatments (in km)	0km

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

Inspection findings, customer complaints, and condition data supplied by our highway asset management consultant are used to inform annual footway preventative and structural works programmes.

Priority 1F consists of seven dedicated routes gritted covering the city centre and the five main town centres.

Priority 2F are medium usage routes through local areas. Routes are gritted after Priority 1 routes are completed.

We do not employ a routine programme for keeping priority footways and cycleways clear of overgrown vegetation and debris. Such work is undertaken on an ad hoc basis, either following an inspection or customer reports via our Contact Centre.

B6.1.7 - Evidence Summary

Footways and cycleways are inspected using a risk-based approach, in line with our 'Highway Safety Inspection Manual' as detailed in the extract below:

Feature	Hierarchy	Hierarchy Description	Frequency	Method
Footway	1a	Prestige Walking Zones	Monthly	Walked
	1	Primary Walking Routes	Monthly	Walked
	2	Secondary Walking Routes	3 Monthly	Walked
	3	Link Footways	Yearly	Driven or Walked
	4	Local Access Footways	Yearly	Driven or Walked
	5	Minor Footways	Yearly	Driven or Walked
Cycleway		Cycle Lane	As for carriageway	As for carriageway
		Cycle Track	Reactive Only	Not routinely inspected
		Cycle Trails	Reactive Only	Not routinely inspected

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	27%
	b) Planned maintenance (routine/cyclical and/or risk-based)	73%
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

The Council is in possession of the following:

- 1) Inventory of district-wide 'hotspot' locations known to be at risk from surface water ponding
- 2) Inventory of district-wide 'hotspot' locations known to be at risk from river flooding
- 3) Inventory of district-wide culverts and watercourse debris screens
- 4) Inventory of district-wide gully locations
- 5) Gully Cleansing Operational Plan 2026
- 6) Extensive knowledge of rural carriageways, many without gullies or roadside ditches and with/without roadside verges, where surface water runoff from adjacent fields has caused/has the potential to cause erosion of the carriageway edge or become trapped within the carriageway.

B7.1.6 – Further context on approach to drainage asset management

We employ a risk-based and proactive approach to drainage maintenance by, for example:

- Employing more regular cyclic inspections of culverts and watercourse debris screens, and ad hoc inspections in advance of and following forecasted heavy/prolonged rainfall events
- Inspecting and cleaning gullies more regularly at known river and surface water flooding hotspots, including in advance of and following forecasted heavy/prolonged rainfall events
- Replacing old side-entry carriageway gullies when funding allows
- Highlighting and undertaking further investigation and necessary work following repeat 'blocked gully' reports which could involve a camera survey followed by excavation and repair/replacement of outlet pipework

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?	No
8.1.2	Do you or your main highways contractors support professional development through a recognised professional training scheme (e.g. Institution of Civil Engineers (ICE) or Institution of Highway Engineers (IHE))?	Yes
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 (e.g. Chartered Engineer (CEng) or equivalent competence) with responsibility for the management of highway structures (either in house or through a contracted arrangement)?	Yes

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 (e.g. HNC/HND, degree, MSc), graduate schemes etc	Yes

B8.1.7 - Evidence Summary

The Highways Service possesses a Workforce Development Plan which is generic for all 'highways' disciplines and is in the process of being updated. It refers to priorities and objectives for staff at different levels, from apprentices and graduates to senior managers. It also sets out strategies for succession planning. It is complimented by an Engineering Career Grade Competencies document.

Our Engineering Career Grade - consisting of academic, professional and competency requirements – outlines development pathways for 'highways' roles.

Several of our Highway Inspectors are currently undertaking, or have recently completed, a 2-year part-time BTEC Level 3 National Diploma in Civil Engineering.

B8.1.8 – Further context on skills/training (optional)

Annual staff appraisals are undertaken with all highway asset management staff at which learning objectives and training needs are identified.

Highway Inspector competency aligns with the 'Highway Inspector Competence Framework' (UK Roads Liaison Group). Similar frameworks are being drafted for other highway asset management staff.

We are members of the Local Council Roads Innovation Group, and give staff the opportunity to attend webinars, seminars, events, etc. offered by LCRIG that are deemed beneficial to their role.

We are an Approved Employer with the Institution of Civil Engineers able to offer training agreements for staff at all professional levels up to Chartered Engineer.

We are members of the CIPFA Highways Asset Management Planning network and relevant staff attend each of the three series held each year.

We often approach (or are approached by) suppliers/contractors which provides excellent opportunities for staff to learn about new materials and technologies and gain CPD accreditation.

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 agreed this with senior decision-makers	Yes
9.1.3	If yes, when did you last update this.	2021 See B9.1.8 and B9.1.9
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	No
	- Heat-resilient materials or surface treatments	No
	- Tree planting / shading for heat management	Yes
	- Other (please specify) - Bradford Clean Air Zone - Electric vehicle charging points - Cycling and walking infrastructure (Active Travel)	Yes
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.	No
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

The impacts of climate change on our highway network are highlighted in our Highway Infrastructure Asset Management Strategy (Section 7, Page 10) and Highway Infrastructure Asset Management Policy.

Locations subject to heat damage, landslides, subsidence and erosion are not formally recorded.

Drainage maintenance and upgrades are undertaken annually, targeting known locations of flooding and surface water ponding. Culvert collapses causing carriageway subsidence and sinkholes are also treated as a priority. (See also B7.1.5 and B7.1.6 above).

Tree planting is limited to those parts of our network consisting of public spaces or where streetscape improvement schemes have been implemented.

B9.1.9 - Further context on your adaptation / resilience activities

The Council is developing an updated resilient network plan following the DfT supported Highways Emergency Preparedness, Response & Recovery - Yorkshire Regional Workshop on 6 June 2025 highlighting the publicly accessible data sets which can be used

for this purpose. Development of the network is expected to be completed later this year aligning with the promotion of a lane rental scheme for Bradford.

A plan of our existing resilient network can be viewed at:

<https://www.bradford.gov.uk/transport-and-travel/highways-policies-and-guidance/local-highway-maintenance-transparency-reports/>

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?	No

B10.1.4 - Evidence Summary

We have used innovative road resurfacing materials, including the use of recycled plastic and rubber crumb in asphalt mixes.

We use Warm Mix asphalt materials in our roads and footways where appropriate.

We have used surface dressing as a preventative treatment for many years and have increased its use since 2019.

We have used Miles Macadam (low carbon) products for many years on some of our heavily trafficked and concrete roads.

We have used Holcim SuperCurve (low carbon) asphalt in recent years. We are seeking to incorporate ACLA (carbon negative aggregate) into SuperCurve as part of our upcoming resurfacing package.

B10.1.5 - Further context on your innovation activities

We have used Velocity spray injection patching at appropriate sites.

In 2025, we trialled a JCB Pothole-Pro machine (which didn't produce improvements in pothole repair performance over current methods).

In 2025, we trialled Roadmender Elastomac and currently considering its introduction.

We have recently hired a hotbox-equipped vehicle and seeking to procure additional units including depot-based static hotboxes, which will support a 'right first time' approach to permanent reactive repairs.

We are exploring the integration of EVs, having trialled an electric gritter in 2024/25.

We are establishing a trial of Utterberry sensors on several structures to provide remote monitoring of performance.

10.2 – Examples of innovations that have been adopted

1) As B10.1.4 and B10.1.5 above.

2) Use of Gaist since 2018 for our annual carriageway and footway network condition surveys. At that time, Gaist were already employing a 5-grade condition rating system and are now DfT accredited in line with the new road condition monitoring data standard PAS 2161.

3) Smart Street Lighting Project, a 5-year district-wide LED lantern and ageing column replacement project to protect the environment, reduce energy costs, replace obsolete lighting units and replace ageing columns. <https://www.bradford.gov.uk/transport-and-travel/highways/the-smart-street-lighting-project/>

4) Examples of innovations used in our Traffic Signals team include:

- Use AI camera detection for pedestrian crowds, cyclists and equestrian road users and to give priority
- Use AI to give bus priority
- Have introduced new traffic management system with strategy manager facilities to prioritise road users / various scenarios / bus priority / control
- Use of aluminium poles, contributing to circular economy
- Starting to introduce detectors engineered specifically for kerbside detection, identifying and determine volumetric pedestrians and cyclists in the waiting area, providing valuable data to support adaptive pedestrian signal control and improve safety for all Vulnerable Road Users (VRUs)
- Use of I/P linking junctions/ pedestrian crossings together through fibre optics / 5G and wireless
- Starting to use downloadable plans to maintain control of junctions etc when there are communication failures

5) Our Structures team have:

- Trialled and are starting to adopt the use of drones for culvert and bridge inspections
- Implemented smaller scale culvert lining works using inflatable flexible resin sock technology and are seeking to use this for larger culvert works where appropriate

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?	Yes
11.1.3	Do you seek input from utility companies when determining your highways maintenance programme to help reduce disruption?	Yes
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?	Yes

B11.1.6 - Evidence Summary

Monitoring and enforcement of utility works forms part of our permit scheme

When available, reports are published on <https://www.bradford.gov.uk/transport-and-travel/permits-and-licences/city-of-bradford-permit-scheme/>

We issue a NRASWA section 58 (3 months) notice to utility companies of our intended work, giving them time to notify us of their planned work or complete any work prior to the 3-year embargo period commencing.

B11.1.7 - Further context

Permit Scheme Evaluation and Traffic Sensitive reviews are due to be completed in 2026 ahead of a Lane Rental application submission.

Our most recent permit scheme evaluation was completed for the 2022/23 year.

Early liaison with utility companies is often necessary where highway maintenance schemes is likely to impact access to utility infrastructure.

B12 – Managing highways maintenance contracts effectively

Only answer this section if you utilise a contractor to deliver any of your **carriageway** maintenance operations, including: structural maintenance, planned repairs / patching, or 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 (please specify in further context)
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?	Yes

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?	N/A

12.1.5 - Evidence Summary

Our 'highway maintenance' service includes in-house operational teams responsible for reactive repairs and planned repairs/patching. 'External' contractors occasionally undertake some planned patching work.

Our structural maintenance is undertaken by external contractors through the Surfacing and Planing Works Yorkshire Highway Alliance Contract. Although there are several KPIs defined within the contract, these are not actively monitored. However, officers from each participating authority meet on a regular basis to discuss various issues, including performance. Unit costs/rates are reviewed on an annual basis.

Similarly for our preventative maintenance work undertaken through the Surface Dressing of Footways and Carriageways Yorkshire Highway Alliance Contract.

B12.1.6 - Further context

The Council has several members of 'highway maintenance' technical staff who have extensive knowledge and experience gained with the Council over multiple decades. This local knowledge of our highway network, of historical interventions, material types used/available and performance over the years, provide an invaluable and unquestionable capability to assess road condition and the type of interventions required at the appropriate time.

In the main, maintenance interventions are stipulated by these technical staff and not proposed by contractors. Any suggestions or recommendations made by contractors would be assessed and discussed prior to any agreement being reached.

In addition to these in-house arrangements, condition data supplied by our highway asset management consultant, Gaist, is assessed following their annual surveys and analysis.

Using this evidence, annual priority works programmes for preventative treatments and structural interventions are compiled for approval by elected members.

We confirm that the City of Bradford Metropolitan District Council has completed and published the report in line with the published transparency reporting requirements.

Highways Services Manager

Name: Richard Gelder

Date: 27/08/2026

Signature:

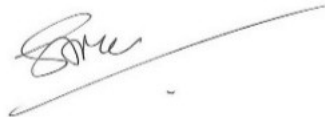
A handwritten signature in blue ink, appearing to read 'R Gelder', with a large, sweeping flourish at the end.

Section 151 Officer

Name: Steven Mair

Date: 03/09/2026

Signature:

A handwritten signature in black ink, appearing to read 'S Mair', with a long, horizontal flourish extending to the right.