

Local Highways Maintenance Transparency Report

Technical Annex 2026



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Local Highways Maintenance Transparency report – Technical Annex

This Technical Annex accompanies Warwickshire County Council's Highways Maintenance Transparency Report and provides the detailed data, methodology and supporting information required by the Department for Transport's Highways Maintenance Transparency Reporting requirements.

It explains how highways maintenance funding is invested, how highways assets are managed and maintained, and how maintenance activities are planned, prioritised and delivered across Warwickshire. The annex supports transparency and accountability by providing the detailed evidence that sits behind the main report.



Highways Maintenance at a Glance

Our Network

- **4,145km** of highways network maintained
- **1,169** highways structures owned

Planned Investment & Maintenance (2026/27)

- **121km** of roads planned for preventative surface treatment
- **32km** of roads planned for carriageway resurfacing
- **£3.4 million** invested in drainage maintenance and improvements

Pothole Repairs (2025/26)

- **12,857** potholes repaired
- **8,214** permanent repairs (**64%**)
- **4,643** temporary repairs (**36%**)

Warwickshire County Council's approach to highways maintenance is based on evidence, risk and long-term asset management principles. Through a combination of preventative maintenance, planned renewal and reactive repairs, the Council seeks to maintain a safe and resilient highways network while achieving best value from available funding.

B1 Highways maintenance funding and spending figures

This section explains how highways maintenance activities are funded and how investment is allocated across Warwickshire's highways network. Funding is received from a range of sources, including the Department for Transport (DfT) and local funding streams, and is used to maintain roads, footways, structures, drainage systems and other highways assets. The information below shows both funding allocations and how those resources are invested to support a safe, resilient and well-maintained highways network.

B1.1 Capital funding allocation sources

Capital funding supports larger-scale maintenance and renewal activities that help preserve and improve highways assets over the long term. This includes investment in carriageways, footways, structures, drainage infrastructure and other highways assets that require planned intervention to maintain their condition and performance.

Financial year	2024-25	2025-26	2026-27 (projected)
Highways maintenance capital funding allocated through DfT	£18,404,180.00	£26,224,094.00	£28,167,332.00
Other DfT capital funding utilised by local authority for highways maintenance	£2,604,106.00	£4,535,655.00	£5,277,432.50
Other Government capital funding allocated by local authority to highways maintenance	£-	£-	£-
Other capital funding allocated to highways maintenance	£3,411,175.00	£2,615,811.00	£2,461,632.00
Total Capital funding allocated to highways maintenance	£24,419,461.00	£33,375,560.00	£35,906,396.50

B1.1.2 Additional information on funding figures

Department for Transport funding remains the principal source of capital investment for highways maintenance in Warwickshire. Additional funding streams supplement this investment and help support the delivery of maintenance and improvement programmes across the network. Funding allocations can vary between years depending on national funding settlements, local priorities and the availability of specific funding initiatives.

B1.2 Spending

Understanding highways maintenance Funding

Highways maintenance activities are funded through both capital and revenue budgets.

- **Capital funding** is generally used for larger-scale renewal and improvement works that extend the life of highways assets.
- **Revenue funding** is used for routine activities such as inspections, routine maintenance, winter service operations and day-to-day repairs.

Together, these funding streams support a balanced approach to maintaining Warwickshire's highways network.

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

The following table shows total highways maintenance expenditure across Warwickshire. It demonstrates how available funding is translated into practical maintenance activity and investment across the network

Financial year	2024-25	2025-26	2026-27 (projected)
Total highways maintenance capital spend	£25,400,739.00	£33,554,257.00	£35,669,145.50
Total highways maintenance revenue spend	£16,709,038.00	£17,318,948.00	£17,326,011.00
Total spend	£42,109,777.00	£50,873,205.00	£52,995,156.50

B1.2.2. Additional information on total spending figures

Warwickshire County Council plans and manages its highways maintenance expenditure within the relevant financial year, based on the funding allocation confirmed for that year. The figures reported reflect the allocation and planned spend for each financial year and do not include any pre-spend from a preceding year or planned post-spend into a subsequent year.

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

Investment in carriageways is distributed across a range of maintenance activities, from preventative treatments designed to slow deterioration through to reactive repairs that address defects requiring immediate attention. Warwickshire County Council seeks to balance planned and reactive maintenance activities to maximise asset life and achieve value for money.

Carriageway spend related maintenance type	Capital 2025-26	Revenue 2025-26	Capital 2026-27 (projected)	Revenue 2026-27 (projected)
Planned maintenance				
Preventative carriageway maintenance	£6,650,837.00	£1,587,276.00	£6,636,000.00	£1,290,000.00
Structural carriageway maintenance	£11,497,140.00	£-	£12,822,270.00	£-
Planned carriageway repair / patching programmes	£3,453,801.00	£-	£3,152,100.00	£-
Reactive carriageway maintenance				
Reactive carriageway repairs / patching (temporary repairs)	£-	£3,861,765.00	£-	£3,989,335.00
Reactive carriageway repairs / patching (permanent repairs)	£1,725,460.00	£-	£1,106,000.00	£-
Reactive carriageway repairs / patching (total)	£1,725,460.00	£3,861,765.00	£1,106,000.00	£3,989,335.00
Other carriageway related spend	£1,032,321.00	£1,680,917.00	£1,169,871.00	£971,434.00
Total	£24,359,559.00	£7,129,958.00	£24,886,241.00	£6,250,769.00

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

The expenditure shown has been assigned to the most appropriate Department for Transport reporting categories using the information available from our financial records and maintenance programmes.

Preventative carriageway maintenance includes activities such as surface dressing and drainage works, including jetting and gully cleansing, where these help protect the road and slow deterioration.

Structural carriageway maintenance includes larger capital schemes that renew, strengthen or improve the long-term condition of the road, including related drainage improvement works delivered as part of the scheme.

Permanent reactive repairs include pothole repairs and other works that provide a lasting repair.

Temporary reactive repairs are mainly carried out by the Highways Area Maintenance Team (AMT). These teams undertake a wide range of activities across the highways network, and costs are recorded for the overall programme rather than for individual repairs. As a result, it is not possible to separately identify the cost of temporary carriageway repairs from other maintenance activities, so these costs have been included within the overall cost of reactive maintenance operations.

B2 Highways maintenance activity (surface treatments and repairs)

This section summarises the highways maintenance treatments delivered across Warwickshire's road network and those planned for the coming year. These activities help maintain road condition, slow the rate of deterioration and reduce the need for more extensive repairs in the future. By combining preventative treatments, structural maintenance and reactive repairs, the Council seeks to extend asset life and make effective use of available funding.

Table 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	211.45 km	31.645km	21,249m ²	26,000m ²	2,321m ²
2026-27 projected	121.44 km	37.16km	21,682 m ²	Not forecast	Not forecast

B2.1.1 Additional information on surface treatments and repairs

Maintaining a highways network involves more than repairing defects after they occur. Warwickshire County Council delivers a range of planned treatments designed to preserve asset condition, improve safety and extend the serviceable life of roads. Different treatments are used depending on the condition of the asset and the level of deterioration identified through inspections and surveys.

Preventative surface treatments

Preventative treatments are applied to roads that remain in relatively good condition. These treatments help seal the road surface, prevent water ingress and slow deterioration, extending asset life before more significant intervention becomes necessary.

Structural maintenance

Structural maintenance is undertaken where deterioration has progressed further and more substantial renewal is required. These interventions restore the road's structural condition and provide a longer-term solution.

Planned patching

Planned patching addresses localised areas of deterioration through scheduled repair programmes before defects become more widespread. This targeted approach helps preserve the surrounding carriageway and can delay the need for larger-scale renewal.

Reactive repairs

Reactive repairs are unplanned maintenance activities carried out in response to defects identified through safety inspections, customer reports or other investigations. They help maintain highways safety and serviceability by addressing defects that require action within defined response times. Depending on the nature of the defect and operational circumstances, repairs may be temporary to make the highways safe or permanent to provide a longer-term solution.

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

Reactive maintenance is demand-led and influenced by defect occurrence, location, severity, inspection findings, customer reports and weather conditions. As these factors cannot be forecast reliably, projected 2026/27 figures for reactive repairs and patching have not been included in Table B2.1. For completed years, the Council reports the extent of carriageway treated using the best available information. The 2025/26 area receiving temporary reactive repairs and patching has been estimated by multiplying the number of temporary pothole repairs by an average repair size of 0.5m². Permanent repair areas are based on recorded repair information held within the Council’s highways asset management systems.



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

Table B3.1 – Pothole/defect intervention criteria

Not all defects present the same level of risk. Warwickshire County Council uses defined investigatory criteria alongside a risk-based assessment process to determine the priority and response required. Factors such as defect size, road hierarchy, traffic levels, location and potential risk to users are considered when determining the most appropriate response.

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 E	Carriageway: 50mm depth. Footway: 20mm trip/depth. Defects meeting the stated investigatory criteria are assessed using the risk matrix to determine category and priority.	Risk-based assessment using the Highways Safety Inspection Manual risk matrix. Factors include road/footway hierarchy and inspection frequency, network usage/traffic level, location of the defect, defect size/severity, and likelihood/impact of injury or damage. Investigatory levels may be lowered where site-specific risk/context indicates a higher risk.	2 hours	Emergency make safe/temporary response within 2 hours; permanent repair to be planned/prioritised following make safe where required.
Category 1	Carriageway: 50mm depth. Footway: 20mm trip/depth. Defects meeting the stated investigatory criteria are assessed using the risk matrix to determine category and priority.	Risk-based assessment using the Highways Safety Inspection Manual risk matrix. Factors include road/footway hierarchy and inspection frequency, network usage/traffic level, location of the defect, defect size/severity, and likelihood/impact of injury or damage. Investigatory levels may be lowered where site-specific risk/context indicates a higher risk.	Not separately specified; action/repair priority determined by risk assessment.	End of next working day
Category 2H	Carriageway: 50mm depth. Footway: 20mm trip/depth. Defects meeting the stated investigatory criteria are assessed using the risk matrix to determine category and priority.	Risk-based assessment using the Highways Safety Inspection Manual risk matrix. Factors include road/footway hierarchy and inspection frequency, network usage/traffic level, location of the defect, defect size/severity, and likelihood/impact of injury or damage. Investigatory levels may be lowered where site-specific risk/context indicates a higher risk.	Not separately specified; action/repair priority determined by risk assessment.	5 working days
Category 2L	Carriageway: 50mm depth. Footway: 20mm trip/depth. Defects meeting the stated investigatory criteria are assessed using the risk matrix to determine category and priority.	Risk-based assessment using the Highways Safety Inspection Manual risk matrix. Factors include road/footway hierarchy and inspection frequency, network usage/traffic level, location of the defect, defect size/severity, and likelihood/impact of injury or damage. Investigatory levels may be lowered where site-specific risk/context indicates a higher risk.	Not separately specified; action/repair priority determined by risk assessment.	30 days

B3.2.1 Number of potholes filled

Number of potholes filled in 2025-26 (estimate)	12,857
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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
Specific data not held	Specific data not held	4,643	8,214

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

The winter period from December 2025 to March 2026 was exceptionally challenging, with prolonged heavy rainfall followed by repeated freezing conditions causing a significant increase in pothole formation across Warwickshire. During this period, more than 30 repair gangs were deployed, working seven days a week for much of the winter period to respond to the increased demand and keep the highways network safe.

As a result of both the severe weather and the large volume of potholes requiring attention, it was not always possible to undertake permanent repairs immediately. In line with our risk-based approach to highways safety, temporary repairs played an important role to make potholes safe until a permanent repair could be completed.

Between 1 December 2025 and 31 March 2026, we carried out 3,487 temporary pothole repairs, compared with 1,500 during the same period in 2024/25. This represents an increase of 1,987 repairs (132%) year on year, demonstrating the exceptional impact of the winter weather.

Despite these difficult conditions, we continued to prioritise permanent “First Time Fix” repairs wherever possible. Over the course of 2025/26, 8,214 potholes (64%) were repaired using permanent methods, while 4,643 potholes (36%) were repaired using temporary methods, even with the exceptional winter.

Alongside reactive pothole repairs, we delivered a range of planned and preventative maintenance works during 2025/26. This included surface dressing, planned patching, carriageway resurfacing, edge of carriageway repairs and footway resurfacing. These works help improve the overall condition of roads and footways, address areas showing signs of deterioration including potholes, and reduce the likelihood of potholes forming in the future. For these wider maintenance schemes, the number of individual potholes repaired, during the works, is not recorded separately.

The Council also used proactive “Find and Fix” teams to identify and repair defects before they deteriorated further. These repairs are recorded, and the relevant pothole numbers have been included within the reactive permanent repair figure shown above.

Since the commencement of the Council’s new highway maintenance contract in May 2026, there has been a significant increase in the proportion of potholes repaired using permanent methods. This reflects both a change in the Council’s approach to pothole repairs, with a greater emphasis on permanent “First Time Fix” interventions wherever practicable, and enhanced performance monitoring through a corporate Key Performance Indicator reported to elected Members. During the first two months of the new contract, 94% of pothole repairs were completed using permanent repair methods, representing a step change from previous performance levels.

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)	Unit/average cost of a temporary pothole repair on your network (reactive)
£97.54 for a 1m ² pothole repair. £150.49 for a 2m ² pothole repair.	£81.60 (This is an estimated cost based on Highways Area Maintenance Team labour plus material costs).

B3.3.1 Additional information on pothole prices

Permanent pothole repair costs are based on fixed contract rates of £97.54 for a 1m² repair and £150.49 for a 2m² repair. The reported temporary repair cost of £81.60 per repair is an average estimate and may vary slightly depending on factors such as the amount of materials used, defect location, and operational requirements such as traffic management requirements. Temporary repairs are used to make defects safe quickly where an immediate response is required, particularly during periods of severe weather or increased defect volumes. Warwickshire County Council seeks to undertake permanent repairs wherever practicable, as these provide the most durable and cost-effective long-term solution.

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?	Yes

B3.4.5 Evidence Summary

Warwickshire County Council's highways maintenance contract includes defined quality and durability requirements for both planned carriageway repairs, including patching programmes, and reactive repairs delivered using permanent methods. Material specifications, construction methods and workmanship standards are aligned with these requirements through the term maintenance contract. The appropriateness of repair interventions and the quality of completed works are monitored

through a programme of inspections, quality audits and key performance indicators. Where works do not meet the required standard, defects are formally raised through the contract management process, with agreed remedial works completed within specified timescales. Information on repair activities and subsequent performance is recorded within the highways asset management system to support ongoing monitoring and continuous improvement.

B3.4.6 Additional information

Additional assurance is provided through Warwickshire County Council's highways maintenance contract with Balfour Beatty Living Places, which incorporates performance management arrangements, quality audits and a comprehensive suite of KPIs. These measures support the consistent delivery of safe, durable and high-quality repairs, while providing clear accountability for performance. The contract is underpinned by collaborative client-contractor working and a focus on continual improvement. Digitally-enabled management systems and operational control functions provide visibility of works, defects, inspections and remedial actions, helping to strengthen oversight, support evidence-based decision making and improve the efficient management of the highways network.

B3.5 Public reporting system for defects and other issues

ID	Question	Yes/no
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

Warwickshire County Council's public fault reporting system feeds directly into highways locality teams, where reports are reviewed, inspected and used to inform maintenance planning. Reported defects are triaged and, where necessary, escalated for repair. Customers with accounts receive automated updates on inspection outcomes and progress through key stages such as raised, issued and completed. The system provides transparency, clear communication and status tracking, including where no further action is required.

B3.5.4 Tools used for reporting

Warwickshire County Council's [online reporting tool](#) allows residents to report highways issues such as potholes, flooding, drainage, lighting, traffic signals, signs, vegetation and rights of way concerns. Users can also track pothole reports and view inspection information.



B4 Maintenance of highways structures

Highways structures are an important part of Warwickshire's transport network and include bridges, retaining walls, culverts and other assets that support the safe movement of people and goods. This section provides information on the size of the structures portfolio and the inspection activities undertaken to help ensure these assets remain safe, reliable and available for use.

B4.1 Highways Structures

ID	Question	Answer
4.1.1	Number of highways structures on your highways network	1,509 on inspection programme of which 1,169 are WCC owned, 340 are owned by 3rd parties
4.1.2	Number of highways structures with interim measures in accordance with CS470 applied?	84 – 37 of which with enhanced monitoring and 47 with weight restrictions
4.1.3	Number of structures due a General Inspection in 2025-26 in accordance with CS450	766 – including UW & Confined space special inspections
4.1.4	Number of General Inspections carried out in 2025-26	757
4.1.5	Number of structures due a Principal Inspection in 2025-26 in accordance with CS450	48
4.1.6	Number of Principal Inspections carried out in 2025-26	30

The remaining inspections have been rescheduled into the current programme year due to access, operational or resource constraints and continue to be managed through the Council's risk-based structures management processes.



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

ID	Question	Answer
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. Asset Management Policy https://api.warwickshire.gov.uk/documents/WCCC-723747648-1904 Asset Management Strategy https://api.warwickshire.gov.uk/documents/WCCC-723747648-5268	
5.1.3	Please provide the date it was last reviewed or updated	June 2025
5.1.4	Please provide proof of the review or update. The issue date of each document is shown on the front cover, and both documents have been reviewed annually since their initial publication. Warwickshire County Council is currently undertaking a comprehensive review and update of its Highways Asset Management Policy and Strategy to reflect evolving asset management practices, organisational priorities and national guidance. Publication of the revised documents is anticipated within the next 12 months.	
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. N/A	

B5.1.6 Further context

The draft Highways Asset Management Policy & Strategy is currently progressing through internal consultation and approval. A supporting Highways Infrastructure Asset Management Plan is also being developed to provide a more detailed framework for the management of Warwickshire's highways assets and is expected to be finalised during the same period.

Key aspects of highways asset management approach

B5.2 Asset data - Effective asset management relies on accurate and up-to-date information. Warwickshire County Council maintains asset inventories and condition information for its key highways assets to support maintenance planning, investment decisions and performance monitoring.

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

B5.2.1 Further context

Warwickshire County Council has a dedicated footway inspector who is actively surveying the network to verify asset condition, improve inventory records and strengthen the quality of information available to support maintenance planning and investment decisions. This work is helping to improve understanding of the extent, condition and performance of footway assets, ensuring future maintenance priorities are based on reliable and up-to-date information. As surveys progress, the enhanced dataset will support more effective asset management, prioritisation and long-term investment planning.

The Council maintains a comprehensive asset inventory for highways gullies; however, there are currently gaps in understanding how some piped sections of the drainage network interact and connect. Further investigation and network mapping are therefore being undertaken to enhance asset knowledge, support risk-based maintenance planning and improve the Council's ability to identify, prioritise and address drainage-related issues across the network.

B5.3 Asset data integration and management

B5.3.1 Asset data integration

How is asset inventory and condition data for your key highways 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

Warwickshire County Council currently utilises a suite of highways management and asset information systems that support the delivery and management of its core highways services. The Council is actively working to strengthen integration and data exchange between these systems, reducing manual processes and improving the availability of consistent, high-quality information across the service. While certain specialist asset systems, including those supporting structures, bridges, traffic signals and other specialist disciplines, are managed separately, opportunities for integration and information sharing continue to be reviewed where they deliver operational benefits. In parallel,

the Council is exploring emerging technologies, including artificial intelligence and advanced automation capabilities, to enhance operational efficiency, data-driven decision-making and customer service outcomes.

B5.4 Lifecycle planning and investment decision making

Lifecycle planning helps determine the most appropriate maintenance treatment and intervention point for highways assets. By understanding how assets deteriorate over time, the Council can target investment where it delivers the greatest benefit and long-term value.

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

Warwickshire County Council uses lifecycle planning to inform maintenance investment decisions for carriageways, footways and structures. Decisions are based on condition data, inspections, customer reports, risk assessments, deterioration modelling and engineering judgement, helping identify the most appropriate intervention point to maximise whole-life value. For carriageways and footways, lifecycle planning supports the prioritisation of planned and preventative maintenance. For structures, inspection data and specialist tools, including SAVI, BridgeStation and the London Bridges Engineering Group Value for Money module, are used to assess condition, forecast future needs and prioritise investment. Lifecycle planning principles help target resources towards the highest-priority risks and deliver value for money.

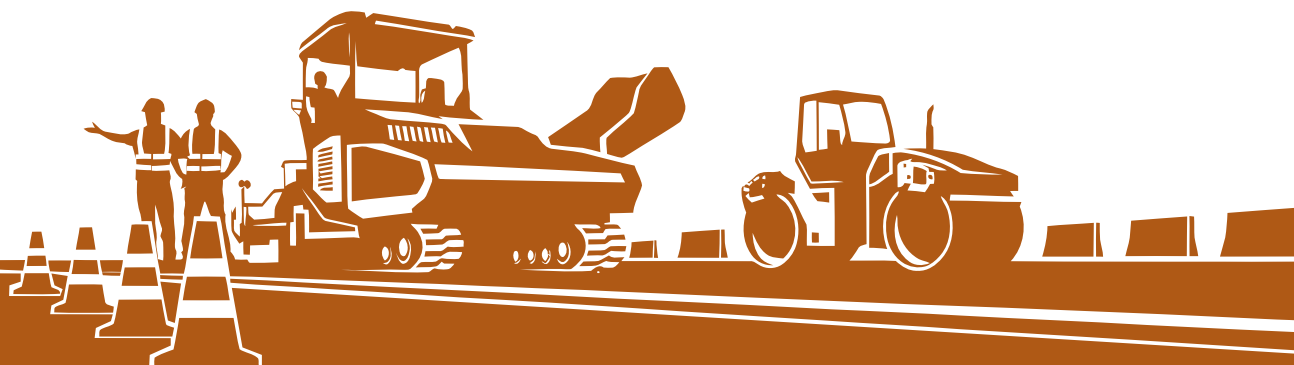
B5.5 Performance monitoring and continuous improvement

Monitoring performance helps the Council understand whether maintenance activities are delivering the intended outcomes. Performance information supports continuous improvement and helps inform future investment decisions.

ID	Question	Yes / No
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

Warwickshire County Council monitors condition and performance through service and corporate performance frameworks. Data from inspections, condition surveys, asset management systems, customer enquiries and contract performance indicators is used to assess network performance and inform maintenance planning, prioritisation and investment decisions. Carriageway condition trends are reviewed annually and reported to elected members alongside current investment levels and future funding requirements, helping assess the impact of maintenance investment on network condition. Footways and other asset groups are expected to be incorporated into future reporting arrangements. The Council also undertakes value-for-money reviews, including benchmarking during highways contract procurement, to help ensure effective service delivery and value for money.



B6 Maintaining footways and cycleways

Warwickshire County Council uses a risk-based approach to inspecting and maintaining footways. Inspection frequencies are determined according to the function and usage of a footway, helping ensure maintenance resources are focused where they are likely to deliver the greatest benefit and manage the highest risks. Planned maintenance programmes are informed by inspections, condition surveys and available funding.

ID	Question	Yes / No
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	12 km
6.1.3	For 2026-27, please provide the length of footways that you have earmarked for preventative maintenance treatments	0 km
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)?	No
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)	N/A
b.	Preventative maintenance treatments (in km)	N/A

B6.1.6 Warwickshire County Council uses a risk-based approach to inspecting and maintaining footways in accordance with the principles set out in Well-managed Highways Infrastructure: A Code of Practice. Inspection frequencies are determined according to the function and usage of each footway, helping to ensure resources are focused where they are most needed.

In general, the busier the footway, the more frequently it is inspected. Dedicated monthly walked inspections are undertaken on the most heavily used footways to identify defects that may present a safety risk and require repair. This approach helps the Council prioritise maintenance activity and maintain a safe and accessible network for pedestrians.

Further information about footway safety inspections is available at: www.warwickshire.gov.uk/roads-transport/highway-safety-inspections

B6.1.7 Evidence Summary

Warwickshire County Council uses a dedicated footway condition survey that provides a consistent assessment of condition across the network and broadly aligns with the principles of the Department for Transport's road condition reporting. Each footway is assigned a condition rating between 1 and 5, where 1 represents little or no deterioration and 5 represents a critically deteriorated asset.

Condition ratings are used alongside inspection records and local knowledge to identify maintenance needs and determine the most appropriate intervention, ranging from localised repairs through to full reconstruction. This evidence-based approach supports maintenance planning, investment prioritisation and the long-term management of the footway network.

B7 Drainage

Highways drainage plays a vital role in protecting the road network from surface water, standing water and flood-related damage. Effective drainage helps maintain road condition, improve network resilience and reduce the risk of water contributing to asset deterioration. This section explains how Warwickshire County Council manages and maintains its drainage assets, and how drainage information is used to support maintenance planning and investment decisions.

ID	Question	Yes / No
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?	Yes
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

Warwickshire County Council adopts a predominantly planned and risk-based approach to drainage asset management, with approximately £1.7 million invested annually in gully cleansing, £0.8 million in planned drainage improvements and preventative interventions, and £0.9 million in reactive maintenance activities. Drainage assets are managed through digital systems that link asset inventory, inspection history and maintenance records, helping to inform risk-based decision-making. Inspection outcomes, gully condition data and maintenance records are combined with customer enquiries and flood-risk information through Power BI and other reporting tools to identify priorities, target preventative interventions and support investment decisions aimed at reducing flooding, standing water and asset deterioration.

B7.1.6 Further context on approach to drainage asset management

Warwickshire County Council manages approximately 115,000 highways gullies using a risk-based maintenance approach aligned with the principles of the Well-managed Highways Infrastructure Code of Practice. Gullies at locations with a history of flooding, higher rates of silt accumulation or other known drainage issues are

cleansed more frequently, typically on three-monthly, six-monthly or annual cycles depending on assessed need. Lower-risk gullies are generally maintained on a two-year cleansing cycle. Cleansing frequencies are reviewed where flooding occurs, asset information changes, or concerns are raised by residents and other stakeholders, with adjustments made where supported by evidence.

The cyclical gully cleansing programme is supported by reactive drainage maintenance and jetting activities, which target issues within the wider drainage network, including pipes and connecting infrastructure. Locations requiring repeated intervention are subject to further investigation and may be considered for inclusion within the Council's capital drainage improvement programme where more substantial repairs, renewals or capacity improvements are required.

Warwickshire County Council has previously trialled smart gully sensors at a high-risk location with a known history of rapid silt build-up and flooding. The trial is helping to improve understanding of drainage asset performance and assess whether sensor technology can support a more proactive approach to maintenance by identifying changing asset conditions and highlighting where early intervention may be required before flooding or more significant defects occur.

B8 Skills and training

A skilled and knowledgeable workforce is essential to maintaining and improving Warwickshire's highways network. This section explains how Warwickshire County Council supports professional development, maintains technical competence and invests in the next generation of highways professionals to help ensure the continued delivery of safe, effective and sustainable highways services.

ID	Question	Yes / No
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 (e.g. Institution of Civil Engineers (ICE) or Institution of Highways Engineers (IHE))?	Yes
8.1.3	Does your authority contribute towards the cost of professional membership or professional development required for relevant highways roles?	Yes
8.1.4	Do you employ a professionally qualified engineer (e.g. Chartered Engineer (CEng) or equivalent competence) with responsibility for the management of highways 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

Warwickshire County Council defines competence requirements for asset management roles through job descriptions and person specifications, including relevant qualifications, professional registration, technical knowledge or equivalent experience. The Council supports ongoing professional development across highways maintenance, asset management and civil engineering functions through training, qualifications, professional memberships and participation in sector networks such as ADEPT, ICE, IHE, IHIE, CIHT and the Transport Technology Forum. Training is monitored through a corporate learning system, with a baseline of three development days per employee each year. The Council also encourages knowledge sharing and continuous improvement through participation in industry working groups and professional communities.

B8.1.8 Further Context on Skills and Training

Warwickshire County Council is committed to developing future highways and engineering professionals through a range of early careers initiatives. The Council operates an ICE-accredited civil engineering training scheme and supports graduate trainees, degree apprentices, technicians, T Level placements and HND students across engineering and highways-related disciplines. Working with education providers, including the University of Warwick, apprentices and graduates gain practical experience across infrastructure, highways maintenance, structures and asset management activities while working towards recognised qualifications and professional registration. Where opportunities have arisen, officers have also contributed to local university Industrial Advisory Panels, helping to promote careers in highways and civil engineering and strengthen links between education and industry.

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.	04/2026
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 / landslide mitigation	No
	Heat resilient materials or surface treatments	No
	Tree planting / shading for heat management	Yes
	Other (please specify)	No
	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.	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

Warwickshire County Council recognises that severe weather and longer-term environmental pressures are increasing the risks faced by highways infrastructure. Network resilience is therefore considered through the Council's highways asset management approach, including maintenance planning, investment prioritisation and long-term asset management activities. Risks such as flooding, prolonged rainfall, drought, extreme temperatures and freeze-thaw cycles are considered alongside condition, safety and serviceability when managing highways assets.

The Council maintains a published resilient highways network and records locations that are repeatedly affected by flooding, standing water and other weather-related impacts. This information is used alongside inspection records, condition data, customer reports and local knowledge to help identify vulnerabilities and support investment decisions. Adaptation measures are incorporated where appropriate through highways maintenance, renewal and improvement schemes, including targeted drainage improvements, Sustainable Drainage Systems (SuDS), Natural Flood Management measures and tree planting initiatives that can improve network resilience while supporting wider environmental objectives.

B9.1.9 Further context

Warwickshire County Council continues to develop its understanding of how weather and environmental pressures affect the long-term performance of highways assets. Heavy rainfall, flooding, prolonged wet weather, drought conditions and temperature fluctuations can accelerate deterioration and increase maintenance requirements. Understanding these risks helps ensure that available funding is targeted effectively and that maintenance interventions provide the best whole-life value.

Resilience considerations are incorporated into maintenance planning, asset renewal and improvement activities where appropriate. This includes opportunities to improve drainage, manage surface water, reduce flood risk and strengthen the resilience of critical routes. The Council's resilient network helps identify routes that are particularly important for maintaining connectivity during severe weather events and supports the prioritisation of inspection, maintenance and recovery activities. Warwickshire County Council will continue to review its asset management approach as asset data, industry knowledge and best practice evolve.



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

Warwickshire County Council actively trials and evaluates new materials, technologies and working practices that have the potential to improve the efficiency, performance and long-term sustainability of highways maintenance activities. New materials and techniques are tested in real-world conditions to assess their performance, practicality and value before wider adoption. Successful innovations are incorporated into operational delivery where they demonstrate clear benefits. The Council is also exploring the use of recycled railway ballast within highways maintenance activities and undertaking trials with industry partners, including JCB and Multevo, to assess emerging equipment, technologies and delivery techniques. Warwickshire participates in MHA+ to share knowledge and best practice.

B10.2 Examples of innovations that have been adopted

Foam Mix Binder Courses

Warwickshire County Council has successfully moved Foam Mix from trial use into routine operational delivery. Foam Mix is now the default material for most footway resurfacing schemes, unless site conditions or heavy vehicle overrun requirements make an alternative material more appropriate. During the last year, more

than 27,000m² of footways were delivered using Foam Mix, demonstrating large-scale adoption across the network. The material has helped improve construction efficiency, reduce material and transportation demands, and support more sustainable maintenance practices while maintaining required performance standards. Foam Mix has also been used on selected lower-category roads where site conditions and network requirements make it a suitable alternative to conventional construction methods.

Lower Temperature Asphalt

Warwickshire County Council has adopted the use of lower temperature asphalt on suitable highways maintenance schemes following successful trials and operational use. The material can be produced and laid at lower temperatures than conventional asphalt, reducing energy consumption during manufacture and construction while maintaining required engineering performance. In addition to potential environmental benefits, lower temperature asphalt can support efficient scheme delivery and reduce disruption where site conditions allow. The Council continues to consider its use as part of a wider approach to improving the efficiency, durability and sustainability of highways maintenance activities.

B11 Working with utility companies to reduce disruption to road users

Utility companies carry out essential works on and around the highways network to maintain and improve services such as water, gas, electricity and telecommunications. Effective coordination between highways authorities and utility companies helps minimise disruption, improve the quality of reinstatements and ensure works are delivered safely and efficiently. This section explains how Warwickshire County Council works with utility companies to manage and coordinate these activities

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?	Yes
11.1.4	Have you conducted and published a permit scheme evaluation within the last three years?	Yes
11.1.5	Have you conducted a traffic sensitive review in the last three years?	No currently in progress

B11.1.6 Evidence Summary

Warwickshire County Council routinely monitors and enforces utility works through a team of six NRSWA Inspectors, who undertake a range of inspections to ensure compliance with permit conditions and statutory requirements. Issues are escalated and managed through an Enforcement and Compliance Manager, who works directly with Statutory Undertakers to address non-compliance where required.

The authority works collaboratively with utility companies to minimise disruption, including through quarterly Network Coordination meetings attended by internal teams and external Statutory Undertakers. These meetings ensure forward planning and coordination of major works programmes, with utilities required to share details of major works over a rolling 12-month period.

B11.1.7 Further context

WCC permit scheme evaluations can be found [Apply for a roadworks permit: About the roadworks permit scheme - Warwickshire County Council](#)

A traffic sensitive review is currently in progress, with Geoplace commissioned to undertake the review. This is being actively progressed in collaboration with the authority's NSG Champion.

B12 Managing highways maintenance contracts effectively

Effective contract management helps ensure highways maintenance works are delivered safely, efficiently and in accordance with agreed standards. This section explains how Warwickshire County Council manages its highways maintenance contracts, monitors performance, assesses value for money and works with delivery partners to achieve high-quality maintenance outcomes for the highways network.

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?	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?	Yes

B12.1.5 Evidence Summary

County Highways and Engineering Design Services employs highly skilled and experienced staff across all highways maintenance disciplines. This expertise provides the technical, contractual and operational knowledge required to challenge proposed maintenance interventions, ensuring they are appropriate, proportionate and aligned with relevant standards, asset management principles and industry best practice. We actively engage with industry groups such as the MHA+ and work directly with other highways authorities to benchmark costs and compare delivery approaches. Performance is supported through a comprehensive suite of contract KPIs, developed in response to lessons learned from previous contracts and monitored on a quarterly basis to drive continual improvement and value for money.

B12.1.6 Further context

Warwickshire County Council uses a “price per defect” model for reactive pothole repairs. This incentivises permanent first-time repairs where it is safe and appropriate to do so, as follow-up visits following an initial make-safe response are not separately funded under the same arrangement. This supports the Council’s corporate KPI target that 90% of issued pothole repairs are completed as permanent rather than temporary repairs.