Wigan Council – Highways and Network Management

Our Highway Network

Lengths of highways, footways and cycleways

Type of highway	Length in kilometres (km)
A road	142.18km
B and C roads	112.96km
U roads	829.32km
Total roads	1084.46km
Footways	1765.40km
Other public rights of way	500km
Cycleways	182km

Highway maintenance spending figures

Year	Capital allocated by DfT (£)	Capital spend (£)	Revenue spend (£)	Estimate of percentage spent on preventative maintenance	Estimate of percentage spent on reactive maintenance
2025 to 2026 projected	£7,040,000	£7,040,000	£1,284,680	86%	14%
2024 to 2025	£6,917,000	£6,917,000	£1,284,680	86%	14%
2023 to 2024	£7,641,000	£7,641,000	£1,284,680	87%	13%
2022 to 2023	£6,478,000	£6,478,000	£1,284,680	89%	11%
2021 to 2022	£6,478,000	£6,478,000	£1,284,680	89%	11%
2020 to 2021	£6,605,433	£6,605,433	£1,173,000	87%	13%

Additional information on spending

For the context of spending, please see below table detailing the asset group that benefit from this maintenance spend and their key components:

Asset Group	Asset Components
All classification of Roads	Carriageways, Footways, Cycleways
Structures	Bridges, fences, safety barriers and retaining walls
Drainage	Gullies, Culverts, SUDS
Street Lighting	Street Lights, Illuminated signs and bollards
Traffic Signs and Street Furniture	Non illuminated traffic signs and bollards Road Markings
Environmental Assets	Highway verges, Public Rights of Way, Highway trees 'In Bloom' program

Wigan MBC road network consists of 1,084km, to which in 2020-21 we resurfaced/micro asphalt 33 miles, 2021-22, 19.6 miles, 2022-23, 16.8 miles, 2023-24, 18.8 miles, 2024-25, 16.6 miles and we plan to resurface in 2025-26, 14.3 miles.

The number of structures collate to 489, to which were maintained in 2020-21, 7, 2021-22, 4, 2022-23, 5, 2023-24, 4, 2024-25, 4 and we plan to maintain 4 structures in 2025-26.

Effective highway asset management relies on striking the right balance between **preventative** and **reactive** maintenance. This balance is crucial for ensuring long-term network resilience, cost efficiency, and user safety.

Determining the Maintenance Split

The split between preventative and reactive maintenance is typically determined through a combination of **asset condition data**, **historical maintenance records**, and **risk-based assessments**. Tools such as condition surveys (e.g., SCANNER, CVI, DVI), GIS mapping, and asset management systems help us to monitor the state of roads and associated infrastructure.

Preventative maintenance is planned based on deterioration models and lifecycle costing. Roads are assessed for early signs of wear—such as surface cracking or loss of skid resistance—before they reach a critical state. These interventions, such as surface dressing or patching, are less expensive and extend the life of the asset.

Reactive maintenance, on the other hand, is triggered by urgent issues like potholes or structural failures. These are often reported by the public or identified during inspections and require immediate attention to ensure safety.

The current trend can be often skewed towards reactive maintenance due to historical underinvestment, emergency response needs, however we are a Council that proactively aims for the method of **'prevention is better than cure'**

To have the proportion of spend on preventative maintenance that we currently adopt, several strategies have been implemented:

- **Data-Driven Decision Making**
  We have invested in better data collection and analysis tools to predict deterioration and plan timely interventions. This allows for more accurate targeting of preventative treatments. Tools such as Power BI have been really beneficial when making these decisions.
- **Lifecycle Costing**
  By evaluating the total cost of ownership over the asset's life, we can demonstrate the long-term savings of preventative maintenance compared to repeated reactive repairs.
- **Dedicated Funding Streams**
  Allocating specific budgets for preventative works ensures these activities are not deprioritised in favour of urgent repairs. The use of capital funding allows us to support long-term maintenance strategies.
- **Performance Monitoring**
  Key performance indicators (KPIs) are used in our highways service to track the ratio of preventative to reactive works. This helps in setting targets and measuring progress over time.
- **Public and Political Engagement**
  Communicating the benefits of preventative maintenance—such as fewer road closures, lower long-term costs, and improved safety—helps build support among stakeholders and the public.
- **Collaboration**
  Coordinating with utility companies and other stakeholders reduces the need for repeated excavations and allows for joint planning of preventative works.

Increasing the proportion of preventative maintenance is a strategic priority for Wigan as a highway authority. It not only reduces long-term costs but also improves network reliability and user satisfaction. By leveraging data, securing dedicated funding, and engaging stakeholders, we have been able to shift from a reactive model to a more sustainable, preventative approach that protects infrastructure and supports economic growth.

Estimate of the number of potholes filled

Estimate of the Number of Potholes Filled	
2024 to 2025	3,800
2023 to 2024	3,900
2022 to 2024	3,300
2021 to 2022	4,300
2020 to 2021	3,600

Condition of local roads

Percentage of A roads in each condition category

Year	Percentage of A roads in red category	Percentage of A roads in amber category	Percentage of A roads in green category
2020	1.9%	17.0%	81.1%
2021	1.9%	15.7%	82.4%
2022	3.3%	17.6%	79.1%
2023	2.3%	18.4%	79.3%
2024	2.4%	19.0%	78.6%

The Data for our A classified roads is collated on an annual basis with 100% of our A roads surveyed in both directions.

Year	Percentage of B and C roads in red category	Percentage of B and C roads in amber category	Percentage of B and C roads in green category
2020	1.5%	15.9%	82.6%
2021	1.5%	11.9%	86.6%
2022	2.4%	14.5%	83.1%
2023	1.8%	15.0%	83.2%
2024	2.1%	15.9%	82.0%

The Data for our B and C roads is collated on an annual basis with 100% of our B and C roads surveyed in both directions.

Year	Percentage of U roads in red category
2020	15.2%
2021	16.9%
2022	18.6%
2023	13.1%
2024	16.4%

The condition of Wigan's unclassified roads has shown notable fluctuations over the past five years, as measured by the percentage of roads falling into the 'red' category—indicating those in the worst condition and in need of maintenance.

- In **2020**, 15.2% of U roads were in the red category.

- This figure rose steadily to **16.9% in 2021** and **18.6% in 2022**, suggesting a period of deterioration.

- A significant improvement occurred in **2023**, with the percentage dropping to **13.1%**, reflecting targeted maintenance efforts during this time

- However, by **2024**, the proportion increased again to **16.4%**, indicating a resurgence of condition issues that will need to be considered as Wigan's future planned maintenance programs are scheduled.

We use a wide range of methods to monitor the condition of Unclassified roads.

- **Visual Inspections**

  - Conducted annually by trained inspectors.

  - Focus on identifying surface defects (e.g., potholes, cracking, edge deterioration).

  - Use mobile apps/ tablets for real-time data entry

- **Condition Surveys**

  - Deploy SCANNER or similar vehicles on a rotating basis (e.g., every 3–4 years).

  - Capture high-resolution data on surface texture, rutting, and ride quality.

  - Prioritise roads with higher traffic volumes or known issues.

- **Community Reporting**

  - Encourage residents to report defects via our user-friendly online portal.

  - Integrate reports into the Council's asset management system for validation and response.

Additional information on condition

Accurate assessment of road conditions is essential for effective maintenance planning, but several factors can distort survey results.

Survey frequency on unclassified roads result in them being assessed less regularly than classified ones, leading to outdated or incomplete data. **Visual inspections**, while cost-effective, introduce subjectivity, as different inspectors may interpret road defects inconsistently.

Limited coverage due to budget constraints can result in underrepresentation of certain areas, especially rural or low-traffic roads. **Weather and seasonal effects** also play a role; for instance, surveys conducted after heavy rain or during winter may exaggerate surface damage, while dry conditions might conceal underlying issues.

The **quality and calibration of survey equipment**—such as SCANNER vehicles—can affect data accuracy. If not properly maintained, these tools may produce unreliable results. Additionally, **data entry and processing errors** can occur during manual recording or digital analysis, especially if quality control measures are lacking.

Temporary roadworks or patch repairs may give a misleading impression of road quality, masking deeper structural problems. Furthermore, **traffic volume** influences both road wear and maintenance prioritisation—roads with low traffic may deteriorate unnoticed, skewing the overall condition profile.

Together, these factors highlight the need for a balanced, well-resourced, and standardised approach to road condition monitoring, combining technology, human oversight, and community input to ensure reliable data for decision-making.

Plans

Overall strategy

Wigan Council's Highway Asset Management Strategy outlines a structured approach to managing its £1.6 billion highway infrastructure. It aims to balance customer needs, local priorities, asset condition, and available resources to guide maintenance schemes under our Highway Asset Management Plan. The strategy supports business planning and continuous improvement by promoting life-cycle-based interventions across asset groups.

Wigan, part of Greater Manchester, spans 77 square miles with a population over 330,000. Historically industrial, the borough now features extensive open spaces and ecological sites. Its highway network connects 14 densely populated towns via a ribbon-like road system. The Council is investing in infrastructure to support economic, social, and environmental renewal, while addressing areas of deprivation and promoting prosperity.

Regionally, Wigan collaborates with the Greater Manchester Combined Authority (GMCA) and Transport for Greater Manchester (TfGM) to manage the Key Route Network (KRN) and deliver integrated transport strategies. TfGM oversees public transport and coordinates with local authorities and Highways England to ensure efficient, safe, and sustainable road networks.

The strategy emphasises the importance of well-maintained roads for safety, air quality, congestion reduction, and active travel. Poor road conditions can lead to increased accidents, emissions, and long-term maintenance costs. Our strategy and approach are recognising prevention is better than cure and where possible investing in more planned maintenance methods rather than reactive.

Ultimately, Wigan Council recognises its statutory duty to maintain a high-quality highway network that supports community wellbeing, economic growth, and environmental sustainability.

A link to our policy which is available online is below:

[Highway Asset Management Strategy](#)

Delivering Innovation and efficiency

Delivering innovation and efficiency in highway management requires a strategic blend of best practices, modern technology, and collaborative working. At the core of best practice is **asset management planning**, which ensures that maintenance and investment decisions are data-driven, prioritised by need, and aligned with long-term goals. This includes adopting a **whole-life cost approach**, where interventions are timed to maximise asset life and minimise future costs.

Digital innovation plays a key role. we are increasingly looking into the use Geographic Information Systems (GIS), AI-powered condition surveys, and predictive analytics to monitor road conditions and forecast deterioration. These tools enable more accurate planning and reduce the need for reactive maintenance, which is often more costly and disruptive.

Engaging with communities and stakeholders ensures that highway services reflect local needs and build public trust. Digital platforms for reporting defects and tracking repairs enhance transparency and responsiveness.

By embedding these practices, highway authorities can deliver safer, more reliable, and cost-effective networks that support economic growth and environmental sustainability.

We also recognise that **benchmarking** with other local authorities is a powerful tool for driving performance, innovation, and efficiency in highway management. By comparing performance metrics, we are able to identify strengths and weaknesses in their operations, enabling targeted improvements and fostering a culture of continuous learning.

One of the key benefits is the ability to **adopt best practices**. Learning from the successes and challenges of peer authorities allows councils to implement proven strategies more quickly and effectively, reducing the need for trial and error. This can lead to **cost savings**, as more efficient methods of maintenance, procurement, and service delivery are identified and adopted.

Benchmarking also encourages **innovation**. Exposure to new technologies, materials, and management approaches used by others helps councils stay ahead of industry trends and regulatory changes. It supports **evidence-based decision making**, providing a solid foundation for prioritising investments, justifying funding bids, and shaping policy.

We are members and strong participants of several networks to improve our services such the Association of Public Service Excellence **(APSE)** and the Local Council Roads Innovation Group **(LCRIG)**

Specific plans for 2025 to 2026

- Details on the areas our network will be benefiting from this maintenance this year is available online via the following link: Highway maintenance
- We anticipate that the split between planned and reactive maintenance will be around 85%/15% in favour of planned maintenance
- We are planning on resurfacing 14.3 miles of carriageway in 2025/26
- We are planning on improving at least 42 footways in 2025/26
- Details on the structures we plan on maintaining in 2025/26 are available online via the following link : Highway maintenance
- We estimate that around 3700-4000 potholes will be filled during 2025 to 2026?

Streetworks

Wigan is one of the 10 authorities within Greater Manchester that work in collaboration as part of the Greater Manchester Road Activity Road Activity Permit Scheme **(GMRAPS)**

The Greater Manchester Road Activity Permit Scheme (GMRAPS) is designed to enhance the strategic and operational management of the highway network across the ten Greater Manchester Highway Authorities. Its primary aim is to improve the planning, scheduling, and coordination of roadworks and other activities to minimise disruption and delays for all road users.

By facilitating better coordination, GMRAPS supports local authorities in fulfilling their Network Management Duty under the Traffic Management Act (TMA). It enables a more constructive resolution of conflicts between

competing demands for road space and time, such as traffic flow, utility works, and infrastructure maintenance.

GMRAPS promotes effective collaboration not only within individual Permit Authorities but also between them, as well as with Transport Authorities, Bridge Authorities, National Highways, and neighbouring Highway Authorities. This integrated approach ensures a more seamless and efficient management of the region's road network.

The scheme's specific objectives include ensuring the safety of road users, workers, and residents near roadworks; reducing inconvenience and disruption; and protecting the structural integrity of roads and underground apparatus. It aims to minimise congestion, environmental impact, and disruption to the public and business community, while also improving public engagement and accessibility for people with disabilities.

Overall, GMRAPS represents a proactive and collaborative model for managing road activities, supporting a safer, more efficient, and user-focused highway network across Greater Manchester

Climate change, resilience and adaption

Decarbonising highway maintenance operations is essential to achieving our net-zero targets and ensuring the long-term sustainability of road infrastructure. This requires a shift in both materials and methods, alongside a deeper understanding of the risks posed by climate change to the highway network.

- **Low-Carbon Materials and Processes**
  One of the most effective ways we aim to reduce emissions is by using low-carbon materials such as warm-mix asphalt, recycled aggregates, and geopolymer concrete. These alternatives reduce the energy required during production and application. Additionally, we have been trialling a range of electric maintenance vehicles and machinery which will significantly reduce our operational emissions.

- **Smarter Maintenance Planning**
  We use data-driven asset management systems helping us to optimise maintenance schedules, reducing unnecessary works and associated emissions. Predictive analytics have helped us identify early signs of deterioration, allowing for timely, less carbon-intensive interventions.

- **Resilient Design and Materials:**
  We also aim to Incorporate permeable surfaces, sustainable drainage systems (SuDS), and heat-resistant materials to help our roads withstand climate impacts. We are also looking to improve our drainage infrastructure to help combat the more frequent severe weather events.

- **Collaboration and Innovation:**
  Working with academia, industry, and other authorities fosters innovation in sustainable practices and technologies.

  By integrating carbon reduction with climate adaptation, we can future-proof Wigan's network, reduce environmental impact, and deliver safer, more reliable infrastructure for all users.