

Baseline Assessment of Highways Condition and Investment

Regarding investment at a ward level, please see below “**Appendix 1 – Carriageway & Footway Resurfacing 2021- 2026**”.

Highways condition is measured on a (20m length) section by section basis which is then aggregated up into results at a street level, with an overall figure calculated for each road hierarchy level (i.e. for A, B, C and Unclassified Roads) as below for carriageways from Brent’s Highways Maintenance Transparency Report 2026–27:

A Roads

Year	Percentage of road in red category	Percentage of road in amber category	Percentage of road in green category
2023	12%	36%	52%
2024	11%	35%	54%
2025	14%	37%	49%

B and C roads

Year	Percentage of road in red category	Percentage of road in amber category	Percentage of road in green category
2023	7%	3%	90%
2024	7%	3%	90%
2025	11%	5%	84%

U roads

Year	Percentage of road in red category
2023	8%
2024	8%
2025	12%

A one-off baseline analysis of ward-by-ward highways condition will be provided, however this will require a one-off analysis by our strategic asset management

consultants and will have a cost implication. It should, however, be noted that local authorities do not normally report highway condition at ward level. Highway network is managed as a single borough-wide asset, with investment directed towards achieving the optimum overall outcome for the network rather than seeking to achieve (for instance) an equal distribution of expenditure between wards.

There are also a number of important considerations when interpreting ward-level information:

- **Ward network lengths differ significantly.** Condition is generally expressed as a percentage of the relevant network, so comparing percentages alone can be misleading. A relatively high percentage in a ward with a short network may represent considerably less highway length than a lower percentage in a ward with a much larger network.
- **Condition is only one factor in determining investment priorities.** Carriageway programmes consider a range of factors including condition and deterioration, road hierarchy, traffic volumes, network importance, safety considerations, engineering assessment and value for money.
- **Strategically important routes can therefore influence investment disproportionately.** A ward with a higher percentage of its network where maintenance should be considered may not receive greater investment than a ward containing strategically important roads carrying significantly higher traffic volumes.
- **Investment and condition are not directly comparable measures.** Expenditure in a particular year may reflect the timing and scale of individual schemes, while the condition information represents the state of the network at a particular point in time. Major schemes may also benefit a wider network beyond the ward in which the works are physically located.
- **Some investment has borough-wide or cross-boundary benefits.** This includes work on strategic routes, drainage, structures, road safety, inspections, reactive maintenance and other activities which cannot meaningfully be allocated to individual wards.
- **Small numbers can produce significant percentage changes.** Where a ward has a relatively short length of a particular asset, relatively small changes in the number of metres or kilometres in a condition category can produce substantial movements in the reported percentage.
- **Condition surveys have limitations and are not a substitute for engineering judgement.** Survey data is used alongside inspections, deterioration information, engineering assessment and other evidence when determining appropriate treatments.

The ward analysis should therefore be regarded as a baseline information exercise to improve transparency, rather than as a measure of whether individual wards have received a fair or equivalent share of highway investment. The appropriate measure of highway asset performance remains the condition and value achieved across the borough-wide network as a whole.

Factors influencing highway condition at ward level

A ward-by-ward comparison of highway condition and investment needs to be treated with some caution. The condition of the carriageway and footway network in any particular ward at a given point in time is the product of a number of factors, many of which operate over considerably longer periods than a two-year investment period. A snapshot of current condition should therefore not be interpreted simply as a reflection of the amount invested in that ward during the previous few years.

Historic investment and maintenance profiles are particularly important. Highway assets have accumulated over many decades, with different areas receiving different levels and types of investment at different times. A ward which has received substantial investment in the last two years may still contain assets that have experienced a long period of deterioration, while another ward may currently appear in better condition because it benefited from significant investment several years earlier. The timing and nature of previous interventions can therefore have a significant bearing on current condition.

The age and construction history of the asset also varies considerably within and between wards. Different roads and footways were constructed at different times, to different standards and using different materials and construction techniques. Consequently, two roads receiving similar levels of traffic and similar maintenance expenditure may nevertheless deteriorate at different rates because of differences in their underlying construction and remaining structural life.

For **carriageways** traffic loading is an important influence. Roads carrying high volumes of traffic, particularly heavy vehicles and buses, experience substantially greater loading than lightly trafficked residential roads. Turning movements, braking and acceleration can also place additional stresses on the carriageway. The nature of the traffic using a road can therefore influence deterioration independently of the amount of maintenance investment undertaken.

For **footways**, the pattern and density of development can be particularly significant. Areas with higher housing density and limited off-street parking may experience greater levels of vehicle overrun onto footways, particularly where vehicles mount the footway to park or access properties. This can cause cracking, rocking and breakage of slabbed paving materials and can result in deterioration rates that are higher than would otherwise be expected from pedestrian use alone. Conversely, areas with greater availability of off-street parking may experience less vehicle overrun.

The **materials used in the original construction** are also relevant. For example, older slabbed footways can be relatively brittle when subjected to repeated vehicle overrun. Materials and construction methods that were appropriate when the footway was originally built may therefore be less suited to the demands placed upon it today, particularly where vehicle ownership, vehicle weights and parking patterns have changed over time.

There can also be **latent problems associated with street trees**. Trees may have been planted many decades ago using species or planting arrangements which were not fully suited to the constrained urban environment in which they were placed. As trees mature, their root systems can progressively disrupt footways, kerbs and other highway infrastructure. This can create defects many years after the original

construction and can make the subsequent maintenance requirement considerably greater than might be expected from the age or usage of the footway alone.

Weather and climate are increasingly important factors. More intense rainfall can increase surface-water flows and place greater demands on drainage systems. At the same time, longer periods of wet weather can leave the underlying highway structure and subgrade saturated for longer periods. Water within the pavement structure can weaken the supporting layers, making the carriageway more susceptible to deformation, cracking and pothole formation, particularly when combined with traffic loading. These effects can vary considerably according to local ground conditions, drainage arrangements and the underlying construction of individual roads.

Accordingly, ward-level condition should be viewed as the outcome of the interaction between the characteristics and history of the assets in the ward, their current use and environmental exposure, and the investment and maintenance interventions undertaken over many years. The amount invested in a ward during the last two years is therefore an important factor, but it is only one of the factors determining the condition observed today.

For this reason, a one-off ward-by-ward baseline is valuable in establishing the current position and identifying where investment has been directed, but it should not be used on its own to infer that differences in current condition are caused by differences in recent investment. A meaningful assessment of investment effectiveness would need to take account many factors the effects of which are hard to disentangle, as well as the investment undertaken during the period being reviewed.

In Conclusion

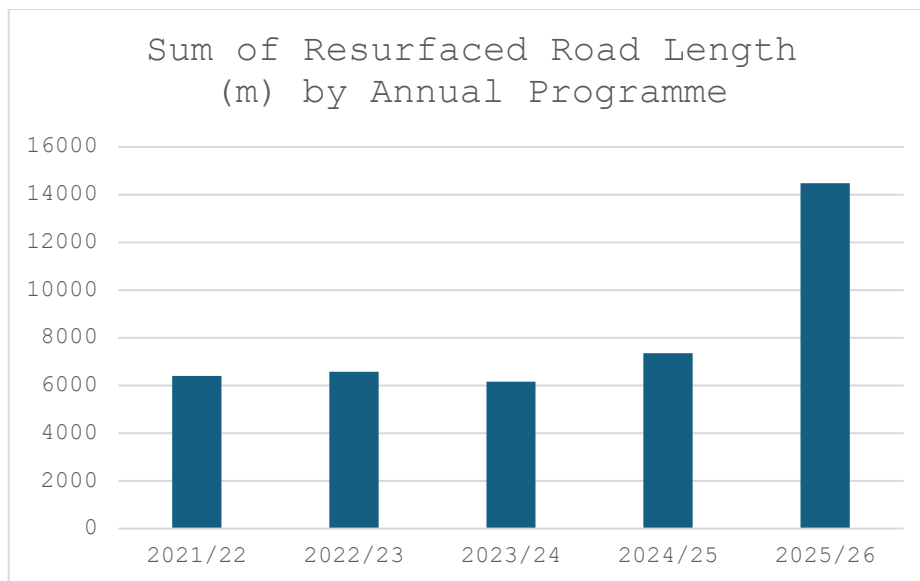
Ward-level highway condition is the result of a long-term interaction between asset age and construction, historic investment, traffic and parking pressures, materials, drainage, trees and changing weather conditions. The investment made over the last few years is therefore a part of the picture, but it should not be treated as the sole explanation for differences in current condition. The baseline analysis should provide a factual starting point for understanding these differences and informing future investment decisions, rather than attributing condition outcomes to recent expenditure alone.

Appendix 1 – Carriageway & Footway Resurfacing 2021- 2026

1. Carriageways -Overall Programme 2021- 2026

- Approximately 100 major carriageway resurfacing schemes have been delivered or programmed.
- The programme covers every ward in Brent, demonstrating a borough-wide approach.
- Schemes range from short local repairs of 40–100m to major strategic resurfacing schemes exceeding 1.5km.
- Investment has included both residential roads and the principal road network (A-roads and B-roads).

Programme	Sum of Length (km)
2021/22	6.400
2022/23	6.569
2023/24	6.154
2024/25	7.351
2025/26	14.472
Total Over Five years	40.946 km



1.1 Carriageways - Programme Coverage and Network Condition

Brent maintains approximately 469.5 km of carriageway. Although around 100 resurfacing schemes have been delivered between 2021/22 and 2025/26, only a small proportion of the network can be renewed each year, meaning that full network renewal would take many decades.

Annual condition surveys show that, whilst increased investment has helped stabilise and gradually improve overall network condition, deterioration continues elsewhere as roads age and traffic volumes increase.

The resurfacing programme therefore adopts a risk-based asset management approach, prioritising investment using condition survey data, engineering assessments and network importance to maximise the benefits of available funding.

Although recent survey results indicate that this strategy is improving network condition, a significant maintenance backlog remains, and sustained long-term investment will be required to continue improving the network and reduce future reactive maintenance.

Using our figures:

- Total Brent carriageway network: 469.5 km
- Major resurfacing completed over five years: 40.946 km

This equates to:

- 8.19 km resurfaced per year ($40.946 \div 5$)
- Approximately 1.74% of the network renewed each year ($8.19 \div 469.5 \times 100$)

At this average rate:

- ***$469.5 \text{ km} \div 8.19 \text{ km/year} = \text{approximately 57 years to resurface the entire carriageway network once.}$***

1.2 Carriageways - Comparison with the National Average (ALARM Survey)

The findings of the Annual Local Authority Road Maintenance (ALARM) Survey indicate that English local authorities typically report an average carriageway resurfacing cycle of around 60 to 100 years, with many councils extending beyond this because available funding has not kept pace with asset deterioration. The survey also consistently reports a substantial national maintenance backlog, with councils increasingly adopting a risk-based approach.

Against this benchmark, Brent's implied average resurfacing cycle of approximately 57 years compares favourably and is marginally better than the national average reported through the ALARM Survey. This reflects the significant capital investment made by the Council in recent years, supplemented by Strategic Community Infrastructure Levy (SCIL) funding and an asset management approach that targets structural maintenance where it will deliver the greatest long-term benefit.

However, a theoretical 57-year resurfacing cycle should not be interpreted as meaning every road will be resurfaced every 57 years. In practice, heavily trafficked A roads and principal bus routes will require resurfacing more frequently due to higher traffic loading, whereas lightly trafficked residential roads may remain serviceable for considerably longer. The Council therefore prioritises investment based on objective condition survey data, engineering assessments, road hierarchy and network importance rather than adopting a fixed renewal cycle.

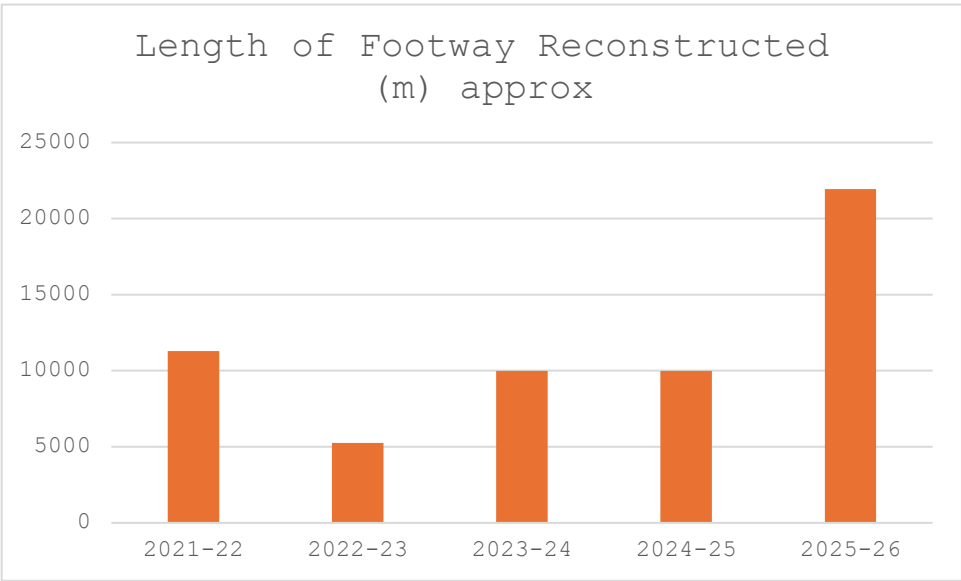
2. Footways -Overall Programme 2021- 2026

2.1 Programme Analysis

Brent has reconstructed 58.46 km of footways over the five-year period, averaging 11.69 km per year. The programme has accelerated significantly in recent years, with 2025/26 representing by far the largest annual investment, delivering almost 22 km of reconstructed footway—more than double the annual average of the preceding four years. This was due to an allocation of approx. £4.5m of SCIL funding for footways over and above that allowed as part of the £3.5m base-level capital highways maintenance funding. This reflects the

Council's increased investment in renewing ageing footway infrastructure and addressing areas of greatest need.

Year	Length Reconstructed (m)
2021/22	11,296
2022/23	5,245
2023/24	9,992
2024/25	9,992
2025/26	21,935.52
Total	58,460.52 m (58.46 km)



2.2 Network Coverage

Brent maintains approximately 847 km of adopted footways. Over the last five years:

- 58.46 km has been reconstructed.
- This equates to 11.69 km per annum.
- Approximately 1.38% of the footway network is reconstructed each year.

At this average rate:

- ***847 km ÷ 11.69 km/year = approximately 72 years to reconstruct the entire footway network once.***

2.3 Comparison with Other Authorities

Unlike carriageways, there is no nationally recognised equivalent to the ALARM Survey that reports average footway reconstruction frequencies across local highway authorities. The ALARM Survey focuses primarily on carriageway condition and maintenance backlogs.

Benchmarking information published in highway asset management strategies from authorities such as Thurrock, West Berkshire, Plymouth and Westmorland & Furness demonstrates that councils generally monitor the percentage of footways requiring maintenance, lifecycle modelling and overall condition rather than reporting an average reconstruction cycle.

These authorities similarly adopt risk-based asset management approaches. There is an indication that, similar to Brent under current funding levels, maintaining footways in a steady-state condition remains a challenge and continued long-term investment is required