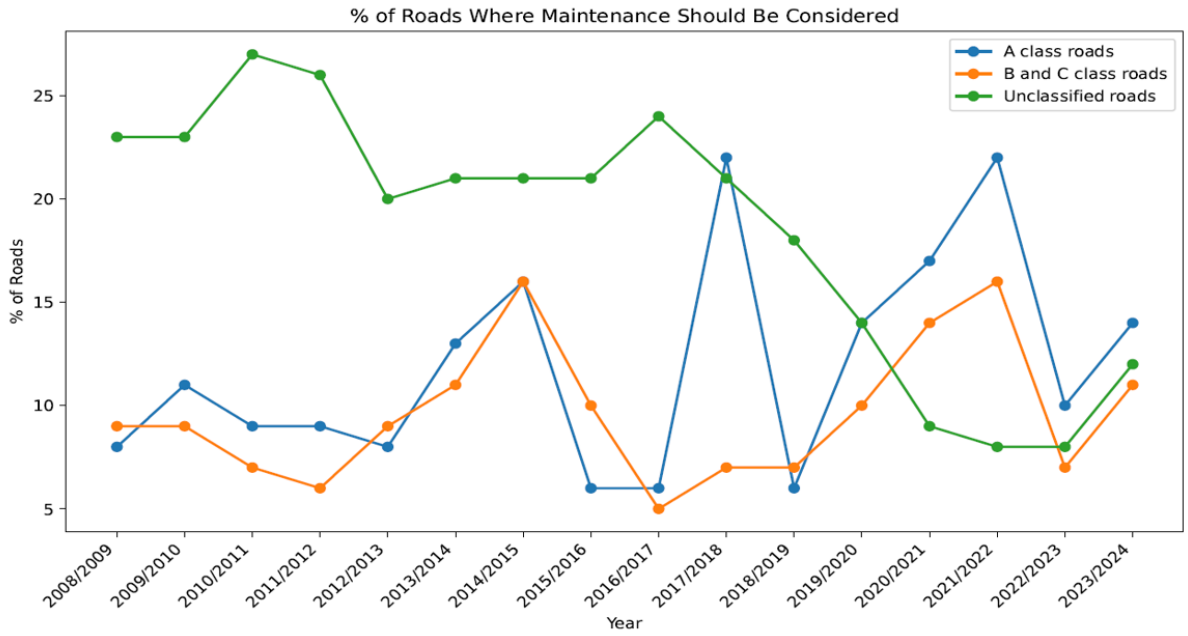
Appendix C - Highway Structural Condition over time

1.0 Carriageway Structural Condition



1.1 Interpretation of Trends

This graph shows the percentage of roads where maintenance should be considered based on condition survey data. Lower percentages indicate a greater proportion of the network is in good condition, whilst higher percentages suggest a greater maintenance need. The trends differ significantly across the three road classifications.

1.2 Overall observations

The data demonstrates a long-term improvement in the condition of the unclassified road network, whereas the condition of the A roads and B and C roads has fluctuated more noticeably over the period. This reflects the differing challenges associated with maintaining strategic routes carrying high traffic volumes compared with residential roads.

1.2.1 A Class Roads

Trend: Highly variable with no sustained long-term trend.

- Between 2008/09 and 2013/14, the proportion requiring maintenance remained relatively low (around 8–13%).
- There was a marked improvement in 2015/16–2016/17, when only around 6% of the network required maintenance.
- A sharp deterioration occurred in 2017/18, rising to approximately 22%, representing the highest value in the series.
- Following a significant improvement in 2018/19, maintenance need increased again during 2020/21–2022/23, before improving to around 14% in 2023/24.

Interpretation: The volatility is typical of a relatively small strategic network where the condition indicator can change significantly depending on whether one or two major roads have been resurfaced or have deteriorated. These fluctuations often reflect the timing of major capital investment programmes rather than a gradual change in asset condition.

1.2.2 B and C Roads

Trend: Moderate fluctuations but relatively stable over the long term.

- Values generally remained between 6% and 10% during the early years.

- Maintenance need increased to approximately 16% in 2014/15 before improving again over the following two years.
- A second deterioration occurred between 2019/20 and 2022/23, peaking at approximately 16%.
- The latest year shows improvement to around 11%.

Interpretation: The classified road network has experienced cyclical deterioration and renewal, reflecting the timing of resurfacing programmes and available capital funding. Although conditions fluctuate, there is no evidence of sustained long-term decline.

1.2.3 Unclassified Roads

Trend: Strong long-term improvement.

- At the beginning of the period, approximately 23–27% of unclassified roads required maintenance.
- Values remained above 20% until around 2016/17.
- From 2017/18 onwards, there was a sustained downward trend.
- By 2021/22–2022/23, only around 8–9% required maintenance.
- Although there is a slight increase to around 12% in 2023/24, this remains substantially better than the position fifteen years earlier.

Interpretation - This represents the clearest long-term improvement shown in the graph. The reduction is likely to reflect sustained investment in residential roads through capital maintenance programmes and demonstrates that long-term investment can significantly improve overall network condition.

1.2.4 Comparative trends

Several notable trends emerge:

- During the early years, unclassified roads were consistently in the poorest condition, with maintenance need approximately three times higher than the A road network.
- By 2022/23, this relationship had reversed, with unclassified roads recording the lowest proportion requiring maintenance.
- In recent years, the highest maintenance need has been observed on the A road network, reflecting the greater traffic loading and faster deterioration experienced by principal routes.

This illustrates how sustained investment has improved residential road condition while maintaining the condition of heavily trafficked strategic roads remains more challenging.

2.0 Footway Structural Condition

2.1 Surveys

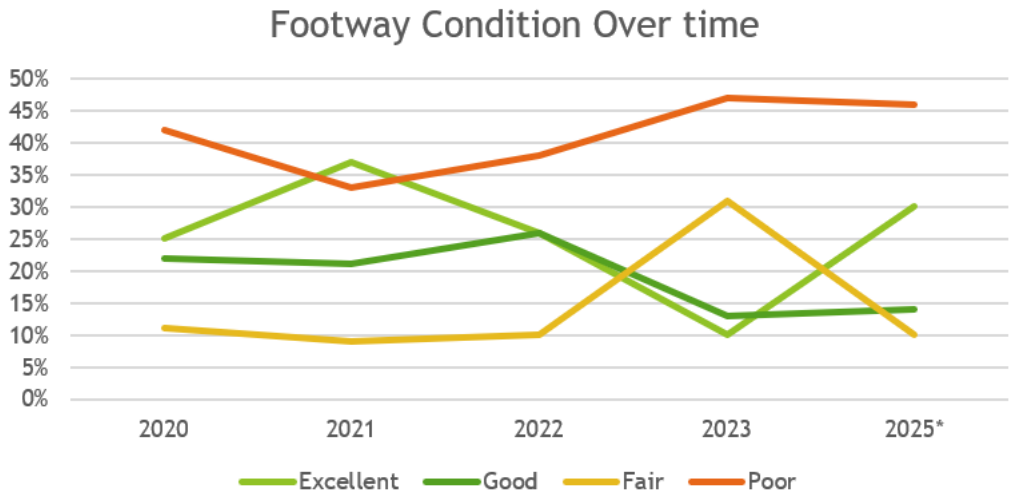
Footway condition is monitored through independent condition surveys and analysed using the Council's asset management system.

The 2025 results have been modelled using the asset management system, which applies deterioration curves and takes account of completed footway reconstruction schemes together with predicted asset deterioration since the previous survey. As the previous footway improvement programme was delivered over the period 2023–2026, it was considered inappropriate to undertake further condition surveys during its implementation, as the results would not have provided a stable representation of the network while significant reconstruction works were ongoing. Fresh condition surveys are being procured currently.

This provides a robust estimate of current network condition and supports long-term asset management planning.

Year	Excellent	Good	Fair	Poor
2020	25%	22%	11%	42%
2021	37%	21%	9%	33%
2022	26%	26%	10%	38%
2023	10%	13%	31%	47%
2025*	30%	14%	10%	**46%**

*2025 condition modelled using Asset Management software.



2.2 Trend Analysis

The footway condition data shows considerable variation over the period.

- Between 2020 and 2022, the network remained relatively stable, with between 47% and 58% of footways assessed as being in Good or Excellent condition.
- In 2023, the condition deteriorated significantly, with the proportion of footways in Poor condition increasing to 47%, whilst those in Good or Excellent condition reduced to 23%. This reflects the cumulative effects of ageing infrastructure and a period in which deterioration exceeded the level of structural renewal.
- The 2025 asset management model indicates a mixed picture. The proportion of footways in Excellent condition has increased substantially from 10% to 30%, reflecting the benefits of the extensive reconstruction programme undertaken during 2025/26. However, the proportion classified as Poor remains almost unchanged at 46%, indicating that while reconstructed footways have significantly improved, deterioration elsewhere across the network has continued at a similar pace.

This demonstrates the dynamic nature of managing a large highway asset. As some footways are renewed and move into the Excellent category, others continue to deteriorate into poorer condition, meaning that overall network condition improves only gradually unless investment consistently exceeds the underlying rate of deterioration.

2.3 Relationship with Investment

Between 2021/22 and 2025/26, Brent reconstructed approximately 58.5 km of footway, including almost 22 km during 2025/26, representing the largest annual investment during the period.

Although this level of investment has delivered significant improvements on treated routes, the 2025 condition model demonstrates that it is not yet sufficient to reduce the overall proportion of the network requiring structural maintenance. This reflects the fact that deterioration continues across untreated sections of the network as footways age and are subjected to continued use and environmental effects.

2.4 Asset Management Implications

The results reinforce the importance of Brent's risk-based asset management approach. Investment is targeted using condition surveys, engineering assessments, pedestrian usage and footway hierarchy to ensure that available funding is directed towards those locations where reconstruction will provide the greatest long-term benefit.

The increase in the proportion of the network classified as Excellent demonstrates that the reconstruction programme is delivering high-quality, long-lasting renewals. However, the persistence of a high proportion of Poor footways indicates that the existing maintenance backlog remains substantial and that continued sustained investment will be required if overall network condition is to improve significantly.

2.5 Conclusion

The figures indicate that Brent's enhanced footway reconstruction programme is successfully improving the condition of those footways that have been treated, as reflected by the significant increase in the proportion of the network classified as Excellent. However, the proportion of the network remaining in Poor condition has changed very little, demonstrating that deterioration elsewhere continues to offset many of these gains.

This highlights the scale of the footway maintenance backlog and reinforces the need for sustained long-term investment. The Council's risk-based asset management approach ensures that limited resources are targeted where they will deliver the greatest whole-life benefit, but meaningful improvements in overall network condition will require investment to be maintained over many years.