

Appendix H – Trends in Reactive Maintenance Carriageway repairs

The data shows a significant shift in Brent's approach to carriageway maintenance over the last decade, with increasing reliance on preventative maintenance techniques rather than traditional reactive pothole repairs. There are several key trends that would be useful to highlight.

Year	Reactive repairs	Injection patching Defects	Find and Fix carriageway	Total Carriageway repairs
15/16	1,295	0	0	1,295
16/17	1,780	0	0	1,780
17/18	2,423	0	0	2,423
18/19	2,476	2,759	0	5,235
19/20	1,646	26,087	0	27,733
20/21	1,251	8,959	0	10,210
21/22	1,426	5,370	0	6,796
22/23	1,075	9,643	0	10,718
23/24	1,984	3,777	0	5,761
24/25	1,861	2,362	0	4,223
25/26	1,625	5,558	1,197	8,380
Grand total	6,545	21,340	1,197	84,554

Summary Analysis

1. Reactive repairs have generally declined

Reactive repairs peaked at 2,476 repairs in 2018/19, before falling to around 1,200–2,000 repairs per year thereafter.

Year	Reactive Repairs
15/16	1,295
16/17	1,780
17/18	2,423
18/19	2,476 (<i>peak</i>)
19/20	1,646
20/21	1,251
21/22	1,426
22/23	1,075 (<i>lowest</i>)
23/24	1,984
24/25	1,861
25/26	1,625

Overall, reactive repairs are now around 35% lower than the 2018/19 peak, indicating a move away from responding to individual defects.

2. Introduction of injection patching transformed maintenance activity

Injection patching was introduced in 2018/19 and immediately became Brent's principal reactive repair method.

Year	Injection Patching
18/19	2,759
19/20	26,087
20/21	8,959
21/22	5,370
22/23	9,643
23/24	3,777
24/25	2,362
25/26	5,558

The exceptional figure in 2019/20 (26,087 repairs) reflects a large-scale preventative programme targeting multiple defects before they deteriorated into potholes. Although annual volumes subsequently reduced, injection patching continues to account for the majority of carriageway repairs.

3. Find and Fix introduced in 2025/26

2025/26 saw the introduction of the Find and Fix initiative. With 1,197 defects repaired, which represents approximately 14% of all carriageway repairs during the year. The programme combines proactive inspections with immediate repairs, reducing repeat visits and improving response times.

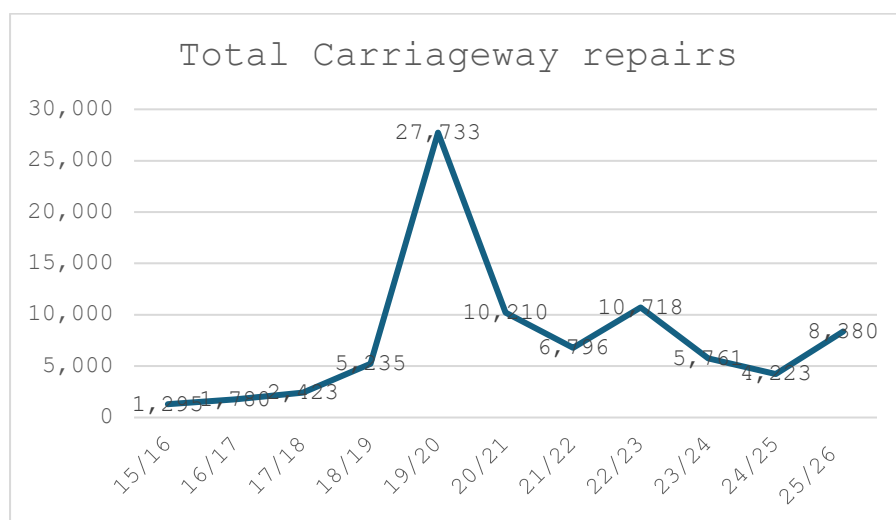
4. Overall repair volumes

Total carriageway repairs increased dramatically following introduction of injection patching.

Year	Total Repairs
15/16	1,295
16/17	1,780
17/18	2,423
18/19	5,235
19/20	27,733
20/21	10,210
21/22	6,796
22/23	10,718
23/24	5,761
24/25	4,223
25/26	8,380

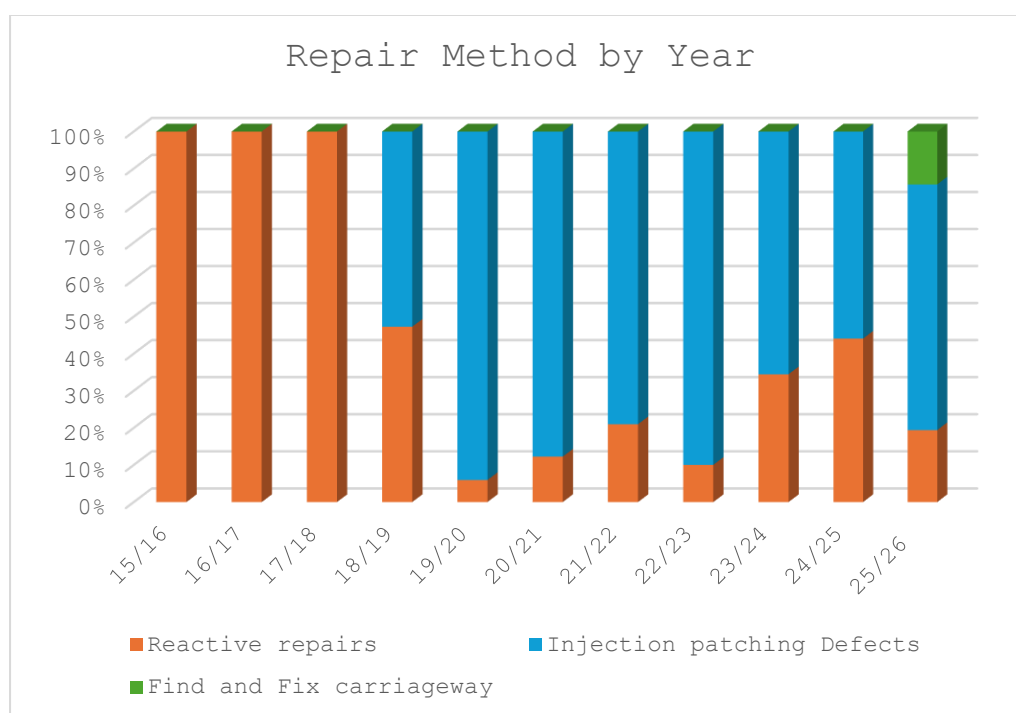
The data demonstrates that Brent has delivered substantially more repairs than would have been possible using conventional reactive pothole repairs alone.

Figure 1. Total Carriageway Repairs by Year



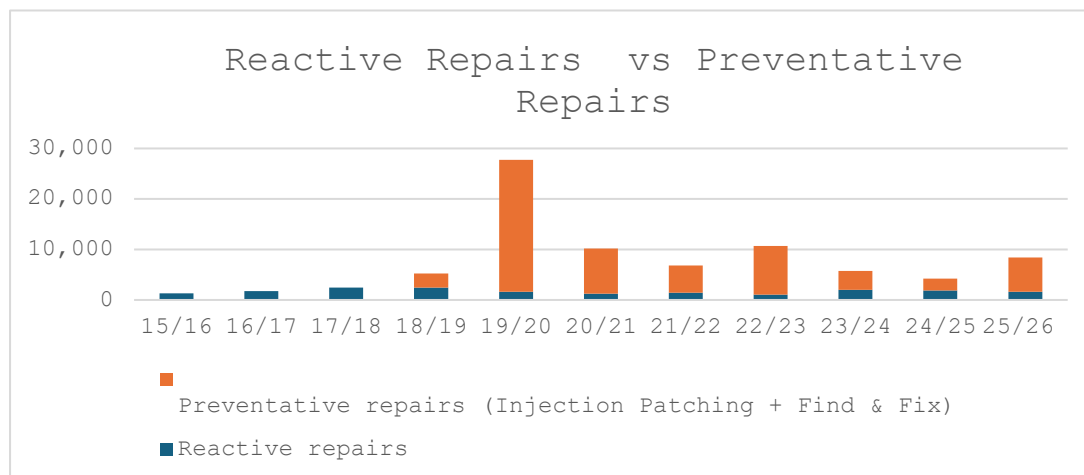
Following the introduction of injection patching in 2018/19, the overall number of carriageway defects repaired increased substantially. The exceptionally high number in 2019/20 reflects a proactive programme treating large numbers of defects, including many below the Council's investigation level, before they deteriorated into potholes.

Figure 2. Repair Method by Year



Since 2018/19, injection patching has become Brent's principal carriageway repair technique, enabling significantly more defects to be treated than would have been possible through traditional reactive repairs alone.

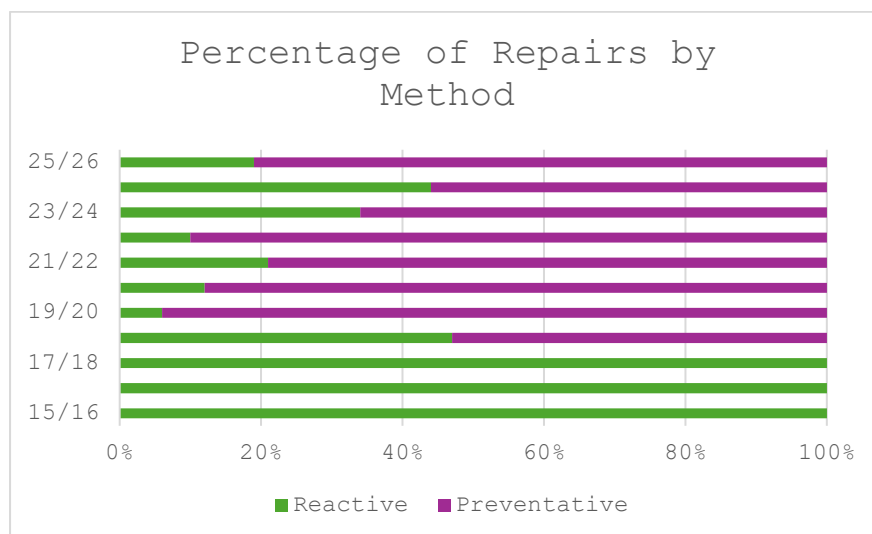
Figure 3. Reactive Repairs vs Preventative Repairs



This is a powerful illustration that whilst the numbers of reactive repairs remain relatively stable, preventative maintenance has become the dominant maintenance activity.

Figure 4. Percentage of Repairs by Method

This removes the effect of differing annual workloads and shows how the maintenance strategy has evolved. This makes the strategic shift from reactive repairs to preventative repairs immediately obvious.



Summary

The figures illustrate a clear evolution in maintenance strategy. Between 2015/16 and 2018/19, maintenance activity relied predominantly on reactive repairs to individual potholes. From 2018/19 onwards, Brent increasingly adopted preventative techniques, particularly injection patching, enabling many more defects to be treated at lower cost before they deteriorated. This approach provides several operational benefits:

- more defects repaired for the available budget;
- earlier intervention before defects become hazardous;
- reduced disruption compared with conventional patching;
- improved overall network resilience.

The introduction of the Find and Fix programme in 2025/26 represents a further development, combining proactive inspection with immediate repair of defects identified on site.