
# Local highways maintenance transparency report

2025

Coventry City Council

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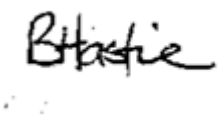
# Document Control

| Version | Description | Date | Author | Role | Approved By |
|---|---|---|---|---|---|
| 1.0 | First Version | June 2025 | Alan Carr | Asset Management Engineer | Director of City Services |

# Introduction & Purpose

The primary purpose of this document is to provide transparency on highway maintenance and asset management activities within The Council.

We can confirm that this document is reflective of the budgets and asset management practises of the highway maintenance service in Coventry.

| **Authorised by** | **Date** |
|---|---|
| Mark Adams<br>Director of City Services<br>  | 16.06.2025 |
| | |
| Patricia Hetherton<br>Cabinet member for City Services<br>  | 16.06.2025 |
| | |
| Barry Hastie<br>Director of Finances & Resources – S151 officer<br>  | 24.06.2025 |
| | |
| Alan Carr<br>Asset Management Engineer – Lead for Highways Asset Management, Document Author<br>  | 03.06.2025 |

# Our Highway Network

The highway network in Coventry isn't just comprised of roads and footways. Maintenance funding has to be spread across all asset types. The following tables show our asset 'inventory', aka what we are responsible and are required to maintain with our funding. This inventory is collected through routine surveys.

| Roads | | | Footways And Cycleways | | |
|---|---|---|---|---|---|
| **A Roads** | **B&C Roads** | **Unclassified Roads** | **Footways** | **Dedicated Cycleways[1]** | **Public Rights of Way** |
| 90.17km | 130.47km | 667.34km | 1446.71km | 24.64km | 61.9km |

[1]Dedicated cycleways only, any cycleways which form parts of the road network (e.g. marked lanes) are included within the road length figures)

| Other Assets | |
|---|---|
| **Asset Type** | **Quantity** |
| Drainage | In excess of 50,000 drainage assets |
| Bridges & Structures | 315 |
| Verges | 1,492,677m$^2$ |
| Street Lighting | 30,799 lamp columns<br>3,071 illuminated signs<br>546 feeder pillars<br>597 other lighting assets |

# Highways Maintenance Spending Figures

Highway Maintenance finances come primarily from two sources: the DfT (Department for Transport) via way of West Midlands Combined Authority (WMCA) and internal (any additional funding the council provides). Additionally periodic investment may come from successful funding bids and additional government money. This table also includes money received via the sale of council houses, this is spent on footway reconstruction, however it is ringfenced to areas of the adopted highway that also fall on land owned by Citizen Housing. The below table also excludes street lighting as funding is received via PFI and funding is a combined figure for both energy costs and asset improvements so this will be provided in a separate table.

| Highways Maintenance Spending (Excluding Street Lighting) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Planned Maintenance | | Reactive Maintenance | | Capital Total | Revenue Total | Planned Maintenance (%) | Reactive Maintenance (%) |
| | Capital | Revenue | Capital | Revenue | | | | |
| | £000s | | | | | | | |
| 2025/26[1] | 12306 | 1307 | 0 | 1833 | **12306** | **3140** | 88.41% | 11.59% |
| 2024/25 | 10461 | 347 | 0 | 1549 | **10461** | **1896** | 87.82% | 12.18% |
| 2023/24 | 8841 | 2897 | 0 | 1019 | **8841** | **3916** | 91.73% | 8.27% |
| 2022/23 | 6270 | 2950 | 0 | 1748 | **6270** | **4698** | 83.00% | 17.00% |
| 2021/22 | 9411 | 1702 | 0 | 2150 | **9411** | **3852** | 84.04% | 15.96% |
| 2020/21 | 8860 | 2362 | 0 | 2010 | **8860** | **4372** | 85.09% | 14.91% |

[1]Projection, £2m of capital funding via TfWM verbally confirmed but no received yet included.

**Note:** in the original DfT template provided, planned maintenance was referred to as 'preventative' maintenance we have re-worded this to planned as our definition of 'preventative' is surface treatments. Planned maintenance includes both surface (SD/MA) and structural treatments (resurfacing/planned patching).

The above table excludes capital funding for 'non-maintenance' improvements (such as new cycleways, road safety schemes, junction redesigns etc.). Although these schemes do improve some parts of existing assets the majority of the funding received will cover new infrastructure/designs. E.g. a small stretch of adjoining footway may be reconstructed while building a new cycleway, however going through each of these projects to quantify the amount 'maintained' has very little benefit compared to the time it would take to compile.

| Street Lighting Funding | | | |
|---|---|---|---|
| Year | Total Received via PFI | Energy Costs | PFI Maintenance |
| | £000s | | |
| 2025/26[1] | **4990** | 2500 | 2490 |
| 2024/25 | **4990** | 2643 | 2347 |
| 2023/24 | **4990** | 3765 | 1225 |
| 2022/23 | **4990** | 2210 | 2780 |
| 2021/22 | **4990** | 1690 | 3300 |
| 2020/21 | **4990** | 1162 | 3828 |

[1]Projected

## Planned vs Reactive Maintenance

All capital funding (received via the DfT/West Midlands Combined Authority is used solely on planned/preventative maintenance. Reactive maintenance is solely funded by revenue (provided by The Council) and any income gained by the service.

Revenue funding is split between the reactive work service with some also spent on planned maintenance schemes. Reactive maintenance is undertaken to address generally isolated hazards until a time in which planned maintenance (e.g. resurfacing) can be performed.

## Investment and Treatment Figures

All planned funding is allocated across multiple treatment types, proportions assigned can vary based on total received and asset type need. The following tables outlines the investment in each asset type and treatment (where quantifiable). Due to the varying nature of drainage, structures, verge and vehicle safety fence schemes, these figures will be provided as investment only (e.g. 'one' structure scheme can wildly vary in value if it's on a small footbridge or on the ring road).

| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|---|---|
| **Asset Type** | **£000s Invested** | | | | |
| Bridges & Structures | 917 | 4554 | 535 | 639 | 718 |
| Drainage | 163 | 274 | 346 | 949 | 586 |
| Footways | 3439 | 2464 | 2319 | 4879 | 2942 |
| Roads | 3330 | 4120 | 5130 | 4816 | 4697 |
| Vehicle Safety Fences | 47 | 106 | 294 | 87 | 300 |
| Verges | 22 | 117 | 87 | 37 | 91 |
| Traffic Signals | 1833 | 200 | 300 | 360 | 860 |
| Street Lighting (PFI)[1] | 3828 | 3300 | 2780 | 1225 | 2347 |

[1]Excluding energy costs

| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|---|---|
| | **Treated (km)** | | | | |
| Structural Treatments[1] | 13.16 | 13.62 | 11.64 | 11.2 | 9.85 |
| Surface Treatments[2] | 15.62 | 13 | 13.27 | 11.05 | 11.5 |
| **Roads Total** | **28.78** | **26.62** | **24.91** | **22.25** | **21.35** |
| Reconstruction | 16.77 | 10.83 | 9.18 | 18.18 | 10.17 |
| Slurry Seal | 6.89 | 13.32 | 14.67 | 11.86 | 5.63 |
| **Footways Total** | **23.66** | **24.15** | **23.85** | **30.04** | **15.8** |

[1]Resurfacing, planned patching (converted to linear extent) and recycling/retread treatments.
[2]Surface dressing, micro asphalt and asphalt rejuvenators

## Pothole Figures

| Estimate of number of potholes filled | | | | |
|---|---|---|---|---|
| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
| 4095 | 5418 | 4313 | 4992 | 4799 |

Pothole figures also include some reactive carriageway patching, although not technically a 'pothole' an area has been identified as requiring patching by the Highway Safety Inspectors. The methodology for this is the total number of individual pothole defects plus total square meterage of patching jobs (jobs under $10m^2$ only). Footway 'potholes' are not included in the figures. Any potholes covered by planned work (e.g. resurfacing) are also not included.

We also acknowledge that there are many interpretations of how to classify 'number of potholes' and there will be a great deal of inconsistencies across different LAs, therefore we have also provided this data compiled via different methodologies in Appendix C.

# Road Network Conditions

We routinely survey our road network, classified (A, B & C) roads are surveyed every two years (one direction each year) and unclassified roads are surveyed every four years (25% of the network annually).

Our classified road condition is collected with SCANNER surveys (laser-based technology) and our unclassified road condition (alongside footways) are collected via walked DVI (Detailed Visual Inspection).

A number of parameters measured in these surveys are used to produce a road condition indicator which is categorised into three condition categories:

- Green – No further investigation or treatment required.
- Amber – Maintenance may be required soon.
- Red – Should be considered for maintenance.

From 2026/27 a new methodology will be used based on the BSI PAS2161 standard. Local Highway Authorities will be required to use a supplier that has been accredited against PAS2161. This new standard will categorise roads into five categories instead of three to help government gain a more detailed understanding of road condition in England.

Further details are available at https://www.gov.uk/government/statistical-data-sets/road-condition-statistics-data-tables-rdc#condition-of-local-authority-managed-roads-rdc01

Additionally at Coventry we also have a different in-house methodology to quantify lengths of treatment by type from the raw survey data. For unclassified road we will present the condition in both this format and the results from traditional condition surveys.

# Classified Roads / SCANNER Road Condition Index (RCI)

| Year | Percentage of A roads in each condition category | | |
|---|---|---|---|
| | Red | Amber | Green |
| 2020/21 | 1% | 18% | 81% |
| 2021/22 | 2% | 15% | 83% |
| 2022/23 | 1% | 18% | 81% |
| 2023/24 | 2% | 20% | 78% |
| 2024/25 | 2% | 20% | 78% |
| | **Red** | **Amber** | **Green** |
| National Average[1] | 4% | 27% | 69% |

| Performance Comment: | Coventrys A Road network is performing above the national average. Condition relatively stable. |
|---|---|

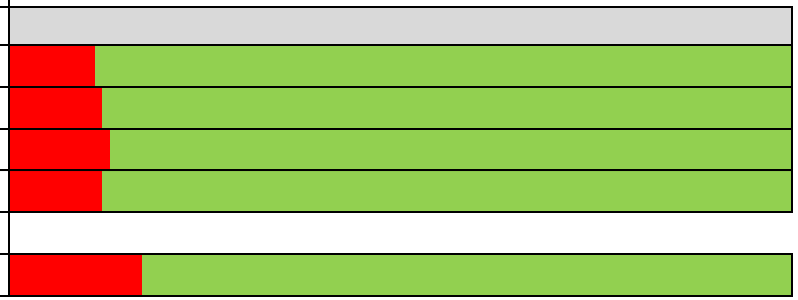
| Year | Percentage of B&C roads in each condition category | | |
|---|---|---|---|
| | Red | Amber | Green |
| 2020/21 | 2% | 16% | 82% |
| 2021/22 | 2% | 16% | 82% |
| 2022/23 | 4% | 26% | 70% |
| 2023/24 | 2% | 21% | 77% |
| 2024/25 | 3% | 19% | 78% |
| | **Red** | **Amber** | **Green** |
| National Average[1] | 7% | 31% | 62% |

| Performance Comment: | Coventrys B&C Road network is performing above the national average. Condition relatively stable. |
|---|---|

[1]National Averages are for the FY2023/24 from the DfT Published RDC0122 data file.

# Unclassified Roads – Methodology 1 - National Indicator 224b

| Year | Percentage of U roads in each condition category | |
|---|---|---|
| | **Red** | **Green & Amber[2]** |
| 2020/21[1] | - | - |
| 2021/22 | 11% | 89% |
| 2022/23 | 12% | 88% |
| 2023/24 | 13% | 87% |
| 2024/25 | 12% | 88% |
| | **Red** | **Green & Amber[2]** |
| National Average[3] | 17% | 83% |



| | |
|---|---|
| Performance Comment: | Coventrys U Road network is performing above the national average. Condition relatively stable in accordance with this methodology. |

[1]Data for 2021/21 has been disregarded: 19% Red returned from PMS system, potentially due to missing data/incomplete network coverage.
[2]Amber band not present in National Indicator 224b methodology
[3]National Averages are for the FY2023/24 from the DfT Published RDC0130 data file

## Unclassified Roads - Methodology 2 – Actual Treatment Required

This is a bespoke methodology we have developed to gain actual lengths of treatment required on the network by applying a treatment set rule to the raw observations from the DVI surveys. Data is not available pre 2022/23 as the methodology was not implemented before this financial year and time involved in backporting past data is significant. Percentage data is in terms of area of network not length, this can be converted to length if required/requested.

| Year | Percentage of U roads requring treatment | | |
|---|---|---|---|
| | Resurfacing | Surface Treatment | No Treatment |
| 2020/21 | - | - | - |
| 2021/22 | - | - | - |
| 2022/23 | 9% | 26% | 65% |
| 2023/24 | 9% | 29% | 62% |
| 2024/25 | 13% | 26% | 61% |

| | |
|---|---|
| Performance Comment: | National average not availbile for this methdology. Coventry's Unclassified network is showing signs of deterioration/extents requiring treatments increasing. |

## Additional Notes on Unclassified Road Conditions

Some data gaps are present in data pre 2021, as of 2024/25 we have full network coverage (minus very small amounts of closed roads at time of survey). We have also moved away from processing data in a traditional PMS (Pavement Management System) with the exception of providing the 224b report. Treatment required are generated via in-house developed VBA tool which reads the survey HMD files and going forward PAS2161 data is provided by our survey provider in a web portal.

We believe the differences between our methodology and the 224b reporting methodologies are due to a variety of factors, the most impactful of these being:

- Some missing network sections in our Pavement Management System, adding these in would incur consultancy costs, as these sections only affect the national indicator and are still covered by our alternate method. The cost of filling small data gaps for the purpose of this outweigh the benefits of holding the data.
- The 224b report counts any isolated sub-section classed as ‘red’ the treatment set methodology extents these into realistic treatments extents (e.g. if a road has intermittent areas of ‘red’ you wouldn’t just resurface the odd 20m at a time, the whole extent would need doing if it’s bad enough).

# Other Asset Conditions

We are only required to submit the condition of classified roads to the DfT, unclassified road condition is optional (however we do submit this each year). Other asset condition is not mandatory, however we do collect it to enable us to gain a better understanding of our transportation network and its needs. The non mandatory data we primarily collect is on our footway network. As with the unclassified carriageway data, availability pre 2021 has gaps in the survey data and the time involved in backporting the old data would be significant.

| Year | Percentage of footways requring treatment | | |
|---|---|---|---|
| | Reconstruction | Slurry Seal | No Treatment |
| 2020/21 | - | - | - |
| 2021/22 | - | - | - |
| 2022/23 | 20% | 5% | 76% |
| 2023/24 | 24% | 10% | 66% |
| 2024/25 | 25% | 9% | 66% |

| | |
|---|---|
| Performance Comment: | National average not availbile for this methdology. Coventry's footway network is showing signs of deterioration/extents requiring treatments increasing. Data post 2024 should be significantly more accurate due to full network coverage with surveys. |

We also hold condition data on our structures according to a national methodology. Our current structure stock has a gross replacement cost (aka the cost to replace all to an ‘as new’ condition) of just under **£517 million** with excess of **£5 million** worth of deterioration occurring annually. Structure condition is also available in BCI (Bridge Condition Index) format, however there is little context behind just presenting this compared to the financial figures.

# Plans & Strategy

We follow good asset management practises in line with our HIAMP (Highways Infrastructure Asset Management Plan) which can be found below:

Highways Infrastructure Asset Management – Coventry City Council

We undertake a mixture of structural and surface treatments to extend the life of our assets as much as feasibly possible with current budgets and aim to secure as much funding as possible on top of funding provided by the DfT (via way of TfWM).

We always aim to trial new treatments and innovations developing within the sector, specific examples include (but are not limited to):

- Trialling of new materials whether its to reduce carbon emissions, extend asset life or both
    - Our participation in the LiveLabs 2 Project in partnership with TfWM has enabled us to trial asphalt rejuvenation products
- Developing in-house coded asset management tools to make future predictions and handle existing data more efficiently without having to incur licensing fees for external software
- Undertake annual in-situ recycling programmes
- Collaborate regularly with our colleagues in the West Midlands authorities and further afield at regular benchmarking meetings and sharing best practice events (Coventry currently chair the West Midlands Pavement Asset Management Group). We also have a regular presence as MHA+ (Midlands Highway Alliance Plus), the West Midlands STOG (Sustainable Transport Officers Group and RODG (Regional Operations Directors Group).
- Collect and use asset data above and beyond the national reporting requirements to understand condition an allow for more extensive asset management

## Specific Plans for 2025/26

In addition to our core funding received as part of CRSTS (City Region Sustainable Transport Settlements) and this current extra funding provided by the DfT we have also secured an additional £3.25m from a re-base line from the VLR (Very Light Rail Project) and £969k from internal capital contributions. This is summarised below:

| Funding Source | Amount |
|---|---|
| CRSTS / DfT standard grant[1] | £3,836,400 |
| Additional DfT / Government Funding | £1,460,000 |
| CRSTS1 reallocation from major projects via TFWM[2] | £2,000,000 |
| Re-baseline of VLR | £3,250,000 |
| Council Contribution | £1,307,000 |
| Citizen Housing RTB Contribution[3] | £1,400,000 |
| CRSTS LNIP Contribution (Traffic Signals) | £360,000 |
| **Total** | **£13,613,400** |

[1]We accelerated £1m of funding as agreed by WMCA in 2022/23 to assist with the unexpected spike in inflation. Therefore all CRSTS funding was reduced by £250k for 2023/24 to 2026/27 which has been more than offset in additional funding via the re-baseline and internal contributions.
[2]Funding has been verbally confirmed but not received as of report publication
[3]Money received as a contribution of right to buy income. Can only be used on land which is both adopted highway and citizen housing owned. Generally footway reconstruction.

Works to be undertaken are city-wide depending on need based on our robust, data driven asset management scoring methodology and forward programme.

CCC HIAMP - Forward Works Programme & Prioritisation

## 2025/26 - Additional DfT Funding Summary

We plan to use the additional funding on a mix of structural treatments (e.g. resurfacing) and surface treatments (e.g. surface dressing on roads and slurry seal on footways – designed to extend asset life). The following budgets have been assigned:

| Treatment | Amount Assigned | Predicted Amount Treated | Estimated Completion |
|---|---|---|---|
| Road Resurfacing[1] | £760,000 | 3km | Spring/Summer 2025 |
| Road Surface Dressing[2] | £500,000 | 6.5km | Summer 2025 |
| Footway Slurry Seal[3] | £200,000 | 10km | Summer 2025 |
| | **£1,460,000** | | |

[1]Lengths dependent on the depth of resurfacing needed and width/class of road. Average road width and average resurfacing rate used. As of writing £330k / 1.1km of works completed (Upper & Lower Eastern Green Lane)
[2]Lengths dependent on the amount of pre-patching required and width/classification of road. As of report writing 12 schemes currently complete totalling £250k / 4.2km
[3]Lengths dependent on the amount of pre-patching required and width of footway. Slurry seal programme pending outcome of successful remedials undertaken by contractor. If these are not satisfactory the £200,000 will be reassigned to road resurfacing. If this is the case it will be ~0.6-1km of extra resurfacing.

## 2025/26 – All Funding Summary

The following table combines all funding pots and estimates extents of treatment that will be undertaken or a rough number of schemes where assets are hard to quantify (such as drainage and structures).

| Treatment | Amount Assigned | Predicted Amount Treated |
|---|---|---|
| Road Resurfacing | £2,715,400 | 8km |
| Road Retread / In-situ Recycling | £500,000 | 1.6km |
| Road Surface Treatments[1] | £1,200,000 | 12km |
| Road Planned Patching[2] | £901,000 | 14,000m² |
| Footway Reconstruction[3] | £3,050,000 | 11km |
| Footway Slurry Seal | £200,000 | 10km |
| Structures Schemes | £837,000 | Improvements on 7 structures & various city-wide principal inspections |
| Drainage Schemes | £1,600,000 | 19 large schemes and various smaller city-wide gully and culvert works |
| Vehicle Safety Fences | £150,000 | Various city-wide replacement and repairs of safety fences |
| Verge Schemes | £100,000 | 3 verge protection schemes including grass grids and/or bollarding |
| Traffic Signal Improvements | £360,000 | Various traffic signal improvements across the city |
| Unallocated (likely predominantly road resurfacing) | £2,000,000 | Verbal confirmation of funding only received in May 2025, allocation of CRSTS1 major project fund via TFWM, likely to predominantly be spend on road resurfacing (~6km) |
| | **£13,613,400** | |

[1]A mixture of multiple surface dressing sites, multiple micro asphalt sites and one asphalt rejuvenator site
[2]Inclusive of JCP PotholePro sites constituting a permanent repair (~£201k of total)
[3]Inclusive of funding received via RTB / Citizen Housing Funding as it is used to reconstruct footway on the adopted highway

**Road total:** Roughly 11.4km to be structurally treated, roughly 12km to receive surface treatments

Equivalent to 1.29% of the network resurfaced (one road every 78 years)

Equivalent to 1.35% of the network receiving surface treatments (one road every 74 years)

**Footway total:** Roughly 11km to be reconstructed, roughly 10km to receive slurry seal

Equivalent to 0.76% of the network reconstructed (one footway every 131 years)

Equivalent to 0.69% of the network receiving slurry seal (one footway every 145 years)

A full list of named road and schemes (not split by funding source) we plan to treat and treatment types can be found in Appendix 3 of the Coventry City Council Cabinet Report dated 18/03/2025:

Appendix 3 - Highways Maintenance Scheme Locations

In terms of potholes, we anticipate around the same, if not a slight reduction in the number of potholes compared to previous years, primarily down to favourable winter conditions. A rough estimate at this time of the year is between 4,250 and 4,750 (using the pothole methodology previously mentioned).

## Streetworks

The Coventry Permit Scheme is the mechanism used by the Council to co-ordinate the effective delivery of road and street works within the city. The overall aim being to minimise disruption and enable essential works to maintain and upgrade the highways network and those assets located within.

The permit scheme has been in operation for 9 years and has been largely successful in improving how and when works, that can cause disruption and inconvenience to users of the highway, are undertaken.

To ensure that the scheme is operating effectively and continues to meet its original objectives, we carry out regular reviews of the schemes performance, most recently for 2024.

This showed that the scheme has grown significantly since its inception, with both the operating costs and income generated through the scheme having more than doubled since year 1. Whilst the increase in operating costs has raised consistently year on year, the income generated by the scheme has fluctuated more significantly as programmes of works are rolled out across the city. Overall the assessment shows that the scheme continues to meet its original objectives and delivers value with a calculated Benefit to Cost Ration of 2.35:1.

In support of this we have recently combined the role of Highways Safety Inspector and NRSWA inspector to enable as much information as possible to be picked up via routine inspections on our network.

## Climate Change, Resilience and Adaptation

In line with recommendations, we have defined a ‘resilient network’ which are routes of local, regional and national geographical importance which need to be more robust to sudden extreme weather events. These form part of our scoring/scheme selection criteria and are prioritised for schemes where necessary. As part of our HIAMP we have a definition of our resilient network and how it aims to deal with potential extreme weather events resulting from climate change, this can be found here:

CCC HIAMP - Network Resilience

In the West Midlands we take a regional approach to adaptation with a regular regional meeting (Regional Adaptation Network), bringing together colleagues from highway maintenance, flood risk and other relevant departments. These meetings focus on a variety of subjects including regional data enhancement and collaborative working amongst other subjects.

We are also active participants in the ADEPT LiveLabs2 project focusing on decarbonization of local roads. So far through this project we have trialled various innovative treatments such as asphalt rejuvenators and biobinders, the aim of the West Midlands arm of this project is to catalogue an array of low carbon treatments and materials along with relevant performance data.

For many years we have also undertaken a large programme of surface dressing and micro asphalt treatments as well as using warm mix asphalt (with savings of 4kg $CO^2$ per tonne of material used). Extended the life of the carriageway asset via surface treatments is essential in reducing the carbon emissions of the highway maintenance service as having to perform deeper, more expensive resurfacing (down to the binder course) both costs considerably more and emits more carbon (the highest carbon binder course emits 1.25x in material production than the highest carbon surface course

material). Additionally, as previously mentioned we are looking at other surface treatments (rejuvenators) to extend asset life.

Feedback and comments welcome: highwaystechnicalservices@coventry.gov.uk

# Appendices

This document contains the following Appendices. We have provided extra supporting information to highlight the challenges local highway authorities case and clear any misconceptions that may arise from the general public and beyond, supported by robust data.

**Appendix B – Additional Data Request**

Additional data requested by the DfT as part of the transparency reporting. Not due until October 2025, however at Coventry we are submitting this with the main body of the report.

**Appendix C – Pothole Methodologies**

The DfT have requested ‘number of potholes filled’ this is subjective and will differ between LAs, we have presented five different ways this can be represented (along with our preferred option).

**Appendix D – Financial Methodology**

The methodology used to compile the financial information in this report and the different sources of funding used for highway maintenance in Coventry.

**Appendix E – Common Misconceptions**

Common misconceptions around highway maintenance and our evidence addressing them

# Appendix B – Additional Data Request

## Asset Valuation

Although not required since 2019 Coventry have performed asset valuation using the previous HAMFIG/CIPFA methodology. Using a simplified methodology of applying inflation to the 2018/19 return. The below table shows the original return (adjusted for 2024/25 inventory extents) and the inflated value:

| | GRC Value (£000s)[2] | | | | | | |
|---|---|---|---|---|---|---|---|
| **Asset** | **2018/19** | **2019/20** | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **2024/25** |
| Carriageway | 1,201,332 | 1,222,956 | 1,233,963 | 1,266,046 | 1,381,256 | 1,482,087 | 1,501,355 |
| Footways & Cycleways | 255,841 | 260,446 | 262,790 | 269,623 | 294,158 | 315,632 | 319,735 |
| Structures | 430,687 | 438,439 | 442,385 | 453,887 | 495,191 | 531,340 | 538,247 |
| Street Lighting | 55,424 | 56,422 | 56,929 | 58,410 | 63,725 | 68,377 | 69,266 |
| Traffic Signals | 17,044 | 17,351 | 17,507 | 17,962 | 19,597 | 21,028 | 21,301 |
| Street Furniture | 99,760 | 101,555 | 102,469 | 105,133 | 114,701 | 123,074 | 124,674 |
| Land | 1,751,111 | 1,782,631 | 1,798,675 | 1,845,440 | 2,013,376 | 2,160,352 | 2,188,436 |
| **TOTAL** | **3,811,199** | **3,879,800** | **3,914,718** | **4,016,501** | **4,382,004** | **4,701,890** | **4,763,014** |
| **TOTAL (minus land)** | **2,060,088** | **2,097,169** | **2,116,043** | **2,171,061** | **2,368,628** | **2,541,538** | **2,574,578** |

[1]GRC = Gross Replacement Costs – aka the cost to replace all assets to an as new condition regardless of current condition
[2]Land excluded as land values remain constant regardless of the condition of the asset 'on' the land

The value of Coventry's highway assets have increased by over £514m since 2018/19. In that same time, only £23.6m was received via the DfT/WMCA in the form of HMB/CRSTS. This equates to only 4.6% of the increase in the GRC of highway assets. And in terms of 24/25 total GRC only 0.15% of the total was received during that financial year in the form of standard maintenance grants.

## Investment vs Asset Value

There are multiple ways to look at expenditure vs asset values. We have taken the approach to take expenditure as a percentage based on the asset value in that particular year (aka compare 2023 investment to 2023 value etc.). We will present this data in five different scenarios:

- Planned maintenance (capital and revenue) only: actual investment which has been used on planned, permanent repairs (that contribute to renewal of asset life)
- All expenditure (planned and reactive): a hypothetical scenario showing the impact of (or lack of) spending all reactive funding received on planned maintenance instead
- DfT/TfWM grant funding only: investment as a percentage of asset value using funding only received from the DfT/TfWM (standard grants)
- Planned maintenance (capital and revenue) excluding street lighting: as street lighting funding is a large amount (and ringfenced) this can skew overall figures. In this scenario the GRC of street lighting will also be excluded from the total.
- Planned maintenance (capital and revenue), by asset type as a % of individual asset GRC/value (excluding street furniture as this is primarily managed reactively)

Asset renewal % differs to figures such as percentage of the network renewed as the WGA methodology covers all layers of carriageway, whereas resurfacing will only renew the top one or two layers; no renewal occurs of the base layers.

In addition to using the WGA / asset valuation methodology we will also present our own lifecycle planning results to ensure we show multiple sides of the story as although highway assets are underfunded, we believe the WGA method exaggerates this and makes things appear worse than they actually are.

## Scenario 1 – Total Planned Maintenance Investment as a % of Asset Value / GRC

| | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **2024/25** |
|---|---|---|---|---|---|
| Total Asset GRC[1] (£000s) | 2116043 | 2171061 | 2368628 | 2541538 | 2574578 |
| Planned Maintenance Investment (£000s) | 15050 | 14413 | 12000 | 12963 | 13155 |
| % of value renewed | 0.71% | 0.66% | 0.51% | 0.51% | 0.51% |

[1]Excluding land GRC

Average annual renewal rate **0.58%** / assets renewed on average every **172 years**

## Scenario 2 – All Maintenance (planned and reactive) Investment as a % of Asset Value / GRC

| | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **2024/25** |
|---|---|---|---|---|---|
| Total Asset GRC[1] (£000s) | 2116043 | 2171061 | 2368628 | 2541538 | 2574578 |
| Amount Invested (£000s) | 17060 | 16563 | 13748 | 13982 | 14704 |
| % of value renewed | 0.81% | 0.76% | 0.58% | 0.55% | 0.57% |

[1]Excluding land GRC

Average annual renewal rate **0.65%** / assets renewed on average every **154 years**

**Scenario Notes:** combing all reactive and planned maintenance spend will still result in significant underfunding of highway assets while also opening up the LA to significant claim liability.

## Scenario 3 – DfT/TfWM Grant Funding Only as a % of Asset Value / GRC

| | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **2024/25** |
|---|---|---|---|---|---|
| Total Asset GRC[1] (£000s) | 2041607 | 2094689 | 2285306 | 2452133 | 2484011 |
| Amount Invested[2] (£000s) | 2920 | 3550 | 4980 | 5501 | 4275 |
| % of value renewed | 0.14% | 0.17% | 0.22% | 0.22% | 0.17% |

[1]Excluding land GRC and assets not funding out of standard HMB/CRSTS funding (signals and lighting)
[2]DfT/TfWM grant funding only.

Average annual renewal rate **0.18%** / assets renewed on average every **556 years.**

## Scenario 4 – Total Planned Maintenance Investment (excluding street lighting) as a % of Asset Value / GRC

| | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **2024/25** |
|---|---|---|---|---|---|
| Total Asset GRC[1] (£000s) | 2059114 | 2112651 | 2304903 | 2473161 | 2505312 |
| Amount Invested[2] (£000s) | 11222 | 11113 | 9220 | 11738 | 10808 |
| % of value renewed | 0.54% | 0.53% | 0.40% | 0.47% | 0.43% |

[1]Excluding land GRC and Street Lighting GRC
[2]All planned maintenance funding exclusive of street lighting PFI funding.

Average annual renewal rate 0.47% / assets renewed on average every **214 years.**

## Scenario 5 – Total Planned Maintenance Investment by asset type as a % of Asset Value / GRC

| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|---|---|
| Carriageway GRC (£000s) | 1,201,332 | 1,222,956 | 1,233,963 | 1,266,046 | 1,381,256 |
| Carriageway Investment[1] (£000s) | 3493 | 4394 | 5476 | 5765 | 5283 |
| **Carriageway Renewed** | **0.29%** | **0.36%** | **0.44%** | **0.46%** | **0.38%** |
| Footway GRC (£000s) | 255,841 | 260,446 | 262,790 | 269,623 | 294,158 |
| Footway Investment (£000s) | 3439 | 2464 | 2319 | 4879 | 2942 |
| **Footway Renewed** | **1.34%** | **0.95%** | **0.88%** | **1.81%** | **1.00%** |
| Structures GRC (£000s) | 430,687 | 438,439 | 442,385 | 453,887 | 495,191 |
| Structures Investment (£000s) | 917 | 4554 | 535 | 639 | 718 |
| **Structures Renewed** | **0.21%** | **1.04%** | **0.12%** | **0.14%** | **0.14%** |
| Street Lighting GRC (£000s) | 55,424 | 56,422 | 56,929 | 58,410 | 63,725 |
| Street Lighting Investment (£000s) | 3828 | 3300 | 2780 | 1225 | 2347 |
| **Street Lighting Renewed** | **6.91%** | **5.85%** | **4.88%** | **2.10%** | **3.68%** |
| Traffic Signals GRC (£000s) | 17,044 | 17,351 | 17,507 | 17,962 | 19,597 |
| Traffic Signals Investment (£000s) | 1833 | 200 | 300 | 360 | 860 |
| **Traffic Signals Renewed** | **10.75%** | **1.15%** | **1.71%** | **2.00%** | **4.39%** |
| Street Furniture GRC (£000s) | 102469 | 105133 | 114701 | 123074 | 124674 |
| Street Furniture Investment (£000s) | 22 | 117 | 87 | 37 | 91 |
| **Street Furniture Renewed** | **0.02%** | **0.11%** | **0.08%** | **0.03%** | **0.07%** |

[1]Carriageway investment inclusive of drainage (based on WGA methodology)

## Investment vs Actual Asset Need (Coventry Lifecycle Planning Methodology)

We can also change the methodology above to determine investment vs asset need, particularly for carriageway assets as if good asset management practises are applied it is very rate that any layer beneath the binder will need to be replaced for the carriageway. Therefore, we believe using % of GRC renewal paints a worse picture than in reality. Our lifecycle planning methodology uses treatment interval principals for deep resurfacing, shallow resurfacing and surface treatments based on road class and usage:

| Road Class | Asset Group Area ($m^2$) | Structural Maintenance Interval (years) | Surface Treatment Interval (years) | Deep Resurfacing Rate (£/$m^2$) | Shallow Resurfacing Rate (£/$m^2$) | Surface Treatment Rate (£/m2) |
|---|---|---|---|---|---|---|
| A | 721440 | 40 | 13 | 65.7 | 31.16 | 13 |
| B | 552880 | 42 | 14 | 60.48 | 28.57 | 12 |
| C | 483516.8 | 42 | 14 | 55.25 | 25.97 | 11.06 |
| U (standard) | 4201388.8 | 60 | 20 | 51.03 | 23.37 | 12.84 |
| U (cul-de-sac) | 897394.4 | 80 | 20 | 43.8 | 20.78 | 12.84 |

Using the above table and the assumption that a ratio of 1:3 deep to shallow resurfacing the annual asset need can be determined from the above table:

| Road Class | Asset Group Area ($m^2$) | Deep Resurfacing Annually ($m^2$) | Shallow Resurfacing Annually ($m^2$) | Surface Treatments Annually ($m^2$) | Deep Resurfacing Annually (£000s) | Shallow Resurfacing Annually (£000s) | Surface Treatments Annually (£000s) | Overall Total Needed (£000s) |
|---|---|---|---|---|---|---|---|---|
| A | 721440 | 4509 | 13527 | 55495.4 | 296 | 422 | 555 | **1273** |
| B | 552880 | 3291 | 9872.9 | 39491.4 | 199 | 282 | 355 | **836** |
| C | 483516.8 | 2878.1 | 8634.2 | 34536.9 | 159 | 224 | 311 | **694** |
| U (standard) | 4201388.8 | 17505.8 | 52517.4 | 210069.4 | 893 | 1227 | 2311 | **4431** |
| U (cul-de-sac) | 897394.4 | 2804.4 | 8413.1 | 44869.7 | 123 | 175 | 494 | **792** |
| **TOTALS** | **6856620** | **30988.3** | **92964.6** | **384462.8** | **1670** | **2330** | **4026** | **8026** |

So, an annual carriageway investment of **£8.03m** is needed to treat the carriageway network in Coventry to design life. This is **~124,000$m^2$ / 16.5km / 1.86% of the network** of structural treatments and **~385,000m2 / 51km / 5.75% of the network** of surface treatments. It is also important to note that if sufficient surface treatments are not undertaken then the percentage of 'red' roads will increase at a faster rate.

Compared to the WGA methodology £8.03m equates to only 0.53% of asset value renewed which paints a more negative picture than using treatments and design life.

A similar methodology has been applied across other asset types, the process / working will not be explained in detail in this document, but can be found within our HIAMP:

CCC HIAMP - Lifecycle Planning and Asset Plans

| Asset | Annual Need | | Cost of Annual Need (£000s) |
|---|---|---|---|
| | Amount | Unit | |
| Carriageways - Structural Treatment | 16.5 | km[1] | 4000 |
| Carriageways - Surface Treatment | 51 | km[1] | 4026 |
| Footways - Reconstruction | 17.55 | km[1] | 4914 |
| Footways - Slurry Seal | 71.63 | km[1] | 1490 |
| Structures | 1 | % renewal | 5382 |
| Drainage | no. schemes | ~35 | 1100 |
| Vehicle Safety Barriers | no. schemes | ~6 | 150 |
| Verges | no. schemes | ~27 | 540 |
| **TOTAL** | **-** | **-** | **21602** |

[1]Derived from initial result presented as $m^2$

The total need of £21.6m a year equates to 0.92% of the WGA GRC (of the selected assets) annually. Compared to the projected 25/26 planned maintenance budget this is need of only **1.59x** more. I believe this can be translated to other authorities by multiplying asset value by 0.0092 to get a rough financial figure of annual need (albeit not split by asset type).

# Customer Satsifaction & Performance

We have participated in the NHT Resident Satisfaction Survey every year since 2015. In addition to the result provided from the survey we also perform some bespoke reporting using the raw csv data to suit the survey more to the needs of the highway maintenance service in Coventry, creating our own indicators using an amalgamation of individual indicator satisfaction results collected by the NHT. This is primarily so we can gauge satisfaction in different areas rather than the 'highways' service as whole.

We also perform this custom analysis on behalf of all other participating members of the West Midlands Combined Authority so data can easily be benchmarked between us, the regional average and the national average.

We also place high importance on contextualising the results:

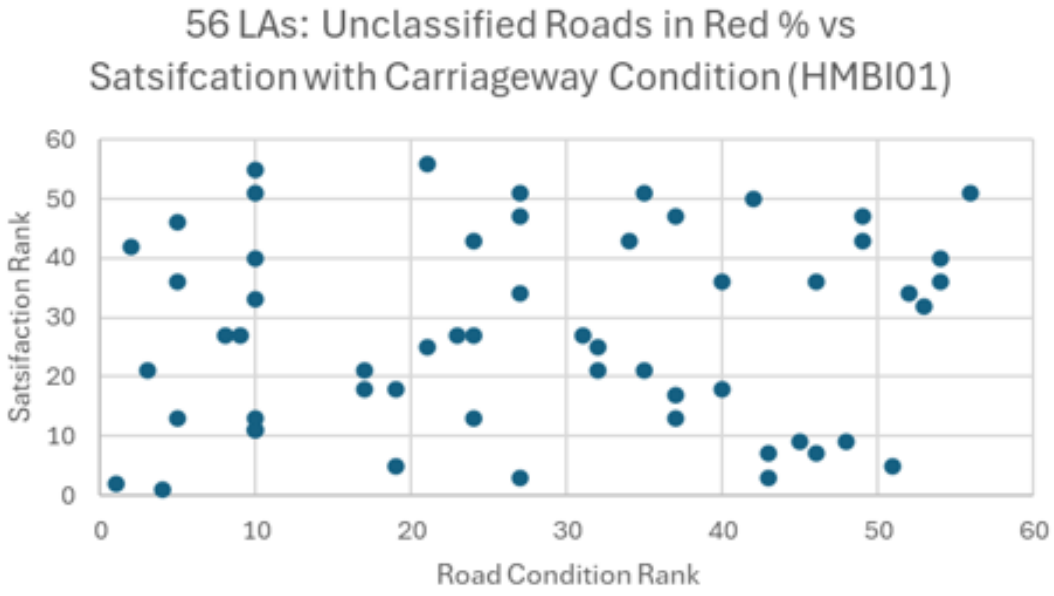
- A drop in satisfaction in one area may be cause for panic, however the drop may be significantly less than the national average:
    - E.g. overall Satisfaction regarding the condition of road surfaces dropped 2% between 2023 and 2024, however drop nationally was 10%.
- High performance in an area may also be due to a 'geographic advantage'
    - E.g. the satisfaction with local bus services was 61% in 2024 compared to a national average of 55%, this could very well be down to the fact we are a majority urban, city authority where bus services will naturally be more frequent than primarily rural local authorities. This would also apply to other indicators such as 'dealing with mud on the road'
- Results from the survey showed resident believed we should be spending less on 'cycle routes / lanes' however this stems from a misconception that these are being funded at the expense of other assets. These are funding by bids to central government, we either get the funding and use it on cycle infrastructure, or we don't get the funding for anything.

When clear underperformance is noticeable compared to authorities of similar composition (and backed up by other sources of data such as condition then this will become an action point:

- For example, in 2022 satisfaction with footway condition was 1% below national average and more importantly, 3% below the regional average. The following table shows footway investment between 2021/22 (1 year prior to the survey) and 2024/25 (2 years post survey).

| | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|---|
| Investment in Footways (Planned Maintenance) (£000s) | 2464 | 2319 | **4879** | 2942 |

It is also worth considering the subjective nature of the NHT survey, in 2024 we undertook some additional in-house custom analysis comparing public satisfaction with carriageway condition (ranked) vs condition of local roads (ranked), as shown in the below graph, there is very little correlation:




## Performance Management Framework (PMF)

We hold a PMF with data going back to 2016/17 (where available) and is a ‘single source of truth’ for all figures, condition headlines and inventory data. There are over 120 measures however not all of these have a performance target / level of service applied and are held mainly for supporting information regarding our highway network.

| Lookup ID | Indicator Type | Reported | Asset | Asset Group | Data Type | Description | Benchmarks Availible | Method | System Source | Additional Notes | Value | 16/17 | 17/18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C005 | National | DfT, NHT | Carriageway | All | Condition | **Percentage of A roads where maintenance should be considered** | 0 | Report from CONFIRM | CONFIRM | | % | 1.00% | 1.00% |
| C006 | National | DfT, NHT | Carriageway | BC | Condition | **Percentage of B & C roads where maintenance should be considered** | 0 | Report from CONFIRM | CONFIRM | | % | 2.00% | 2.00% |
| C007 | National | DfT, NHT | Carriageway | U | Condition | **Percentage of U roads where maintenance should be considered** | 0 | Report from CONFIRM | CONFIRM | Prior to 2020 the DVI data was not loaded correctly with only a small sample of valid data present, leading to a large difference in condition | % | D* | D* |
| C008 | Internal | N/A | Carriageway | All | Condition | **Percentage of A roads requiring resurfacing** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C009 | Internal | N/A | Carriageway | B | Condition | **Percentage of B roads requiring resurfacing** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C010 | Internal | N/A | Carriageway | C | Condition | **Percentage of C roads requiring resurfacing** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C011 | Internal | N/A | Carriageway | U | Condition | **Percentage of U roads requiring resurfacing** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C012 | Internal | N/A | Carriageway | All | Condition | **Percentage of entire network requiring resurfacing** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 22/23 | % | H* | H* |
| C013 | Internal | N/A | Carriageway | All | Condition | **Percentage of sections requiring resurfacing** | 0 | Treatments rounded up to an entire sections | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C014 | Internal | LCP | Carriageway | A | Condition | **Percentage of A roads requiring surface treatment** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C015 | Internal | N/A | Carriageway | B | Condition | **Percentage of B roads requiring surface treatment** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C016 | Internal | N/A | Carriageway | C | Condition | **Percentage of C roads requiring surface treatment** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C017 | Internal | N/A | Carriageway | U | Condition | **Percentage of U roads requiring surface treatment** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C018 | Internal | N/A | Carriageway | All | Condition | **Percentage of entire network requiring surface treatment** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | CW FPW | Not derived prior to 22/23 | % | H* | H* |
| C019 | Internal | N/A | Carriageway | All | Condition | **Percentage of sections requiring surface treatment** | 0 | Treatments rounded up to an entire sections | CW FPW | Not derived prior to 23/24 | % | H* | H* |
| C020 | Internal | N/A | Footway | All | Condition | **Percentage of footway network requiring reconstruction** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | FW FWP | Not derived prior to 22/23 | % | H* | H* |
| C021 | Internal | N/A | Footway | All | Condition | **Percentage of footway network requiring slurry seal** | 0 | AECOM Treatment Set data, via VBA tool. Held in the FWP. | FW FWP | Not derived prior to 22/23 | % | H* | H* |

**Extract from our PMF with description of data item, type of data, brief notes on methodology and any other supporting information required**

A selection of these measures are reported in our HIAMP and asset plans setting ourselves realistic, achievable targets. For example, under current (and projected budgets) we can not commit to improvement of carriageway condition, but we are confident that these funding levels will keep Coventry's carriageway network above the national average. For items where a benchmark/data from other authorities is not available (such as footway data) we have set ourselves a realistic percentage target. The following table is a direct extract from our HIAMP of our scored performance measures; these could also be referred to as KPIs:

**Table 7.1 – Current Levels of Service**

| Measure | Value | Benchmark | LoS | Notes |
|---|---|---|---|---|
| Principal roads (A roads) in a good/acceptable condition | Whole % | National Average | >/= National Average | Collected by the DfT (inverse) and published in Council corporate performance reports |
| Non-principal classified roads (B and C roads) in a good/acceptable condition | Whole % | National Average | >/= National Average | Collected by the DfT (inverse) and published in Council corporate performance reports |
| Unclassified roads in a good/acceptable condition | Whole % | National Average | >/= National Average | Collected by the DfT (inverse) and published in Council corporate performance reports |
| Pavements in a good/acceptable condition | Whole % | N/A[1] | 70% | Published in Council corporate performance reports |
| Ensure resident Satisfaction for Carriageway, Footway, Cycleway and Drainage maintenances achieves or exceeds National average | Yes/No | National Average | >/= National Average | Published in Council corporate performance reports |
| Maintain a robust & effective asset management database for all Carriageway and Footway Assets | Whole % | N/A | 95% data completeness | Published in Council corporate performance reports |

[1]No national reporting requirements are present for Footway condition, CCC methodology is % requiring treatment according to data-driven treatment set rules

# Asset Management Documentation

As of the 2025 review of our highways asset management documental (the HIAMP), we have split the document into multiple sections to improve accessibility, when enquiries around asset management arise they are primarily focused on one area (such as scheme selection methodology) so now, in these cases the stakeholder can be linked to a 4-5 page document rather than referring them to a 65+ page document where they may only be interested in one small section. Our HIAMP (including asset management policy, strategy and resilience plan) may be found here:

Highways Infrastructure Asset Management – Coventry City Council

# Annual Reporting Requirements

We have plans in place to return all the data requested by the DfT for the following:

- 130-01: principal roads where maintenance should be considered
- 130-02: non-principal classified roads where maintenance should be considered
- 130-03: skidding resistance data
- 130-04: carriageway work done from April 2024 to March 2025
- 251-01: winter salt stock holdings for winter 2025

## Additional Data Collected

In addition to the data requested by the DfT we also collect and hold data on:

- Carriageways (excluding national indicator condition) – 25% of the network annually
    - Inventory data (widths, material etc.)
    - Treatments sets derived from the defect observations collected via the survey and processed by an internally developed VBA based tool
        - Extents of resurfacing, planned patching, recycling and surface treatments needed across the entire network
    - Reactive works data normalised to a per/100m level to aide in ranking of upcoming/potential planned work schemes
- Footways (and off carriageway cycleways):
    - Condition and inventory data collected covering 100% of the network (including remote footways) on a four year cycle (25% of the network annually)
    - Treatments sets derived from the defect observations collected via the survey and processed by an internally developed VBA based tool
        - Extents of reconstruction (modular), reconstruction (bituminous) and slurry seal required across the entire network
    - Additional georeferenced data from Highway Inspectors highlighting areas of footway likely to deteriorate within the next year
- Structures
    - A regime of principal and general inspections held within our asset management system (BridgeStation) detailing the condition of individual elements of each structure
- Verges
    - Condition collected alongside footways (metalled verges only)
- Custom processing of NHT survey (as previously stated)

# Appendix C – Pothole Methodologies

The table below shows interpretations of 'potholes' filled derived from an export from our asset management system covering the period 2020/21 to 2024/25.

| Financial Year | Methodology | | | | |
|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** |
| | **True Potholes Only** | **True Potholes + each 5m² of patching counted as one pothole** | **True Potholes + total m² of patching (Priority 1 jobs only)** | **True Potholes + m² of patching (jobs of <10m² only)** | **True Potholes + total m² of patching** |
| | **Estimated No. of Potholes** | | | | |
| 2020/21 | 1077 | 1758 | 2942 | 4095 | 4484 |
| 2021/22 | 1097 | 2819 | 3418 | 5418 | 9706 |
| 2022/23 | 1069 | 4742 | 4207 | 4313 | 19435 |
| 2023/24 | 1001 | 3155 | 5349 | 4992 | 11775 |
| 2024/25 | 611 | 1765 | 5282 | 4799 | 6383 |
| **Total 20/21 to 24/25** | **4855** | **14239** | **21198** | **23617** | **51783** |

Methodology 1: True Potholes Only – This method is the total number of 'Pothole Fill' schedule of rate items quantities completed.

Methodology 2: True Potholes plus every 5m² of reactive patching is counted as one pothole (true potholes + total amount of patching done divided by 5)

Methodology 3: True Potholes plus the total $m^2$ of reactive patching performed (priority 1/highest priority jobs only)

Methodology 4 (preferred): True Potholes plus the total $m^2$ of reactive patching performed, excluding any patching job >=10$m^2$

Methodology 5: True Potholes plus total $m^2$ of reactive patching regardless of job size

**Additional notes & considerations:** The reduction of 'true pothole' jobs aka temporary fills shows movement away from temporary works in our reactive service to larger areas of robust patching reducing repeat visits and holding the asset together longer until a planned treatment (resurfacing) can be performed.

# Appendix D – Financial Methodology

## Budget vs Outturn

Financial figures can be represented in a variety of ways. The methodology we have chosen is using end of financial year outturn figures which will differ from budget setting at the start of each financial year due to factors such as:

- **Invoice payment/receipt**: if works are completed late into the financial year (February/March) invoices may not be received until mid-April the following year, so in these instances a scheme complete in March 2023 (22/23 financial year), would have its spend recorded in the 23/24 financial year. In these instances funding is set for an accrual to be brought forward into the first quarter of the following financial year.
- **Bringing works forward**: sometimes is makes sense to deliver two years worth of a treatment at the end of one financial year to take advantage of lower contract rates and economies of scale to get greater value out of taxpayer funds. For example, in 2024/25 the Micro Asphalt Programme was delivered alongside the 2025/26 programme sites (all in March 2024).
- **Multi-year funding sources**: it was confirmed for the 2024/25 financial year we were to gain an extra £10m via re-baseline of the VRL (very light rail) funding towards highway maintenance. Conditions of this funding are that it is required to be spent by the end of the CRSTS1 period (end of FY 2026/27). It was unfeasible to spend this all within the first year due to delivery capacities, however if extra capacity does become available more of this funding can be used (e.g. at the start of 24/25 we predicted we could spend £4m of this within the financial year, but by the end of year managed to drawn an extra £467k forward bringing the total re-base spend in 24/25 to £4.467m).

## Budget Sources & Description

Various budget sources are received for maintenance of highway assets, these include:

- DfT Highway Maintenance Block (HMB) / CRSTS (City Region Sustainable Transport Settlements)
    - Most LAs receive funding directly from the DfT in the form of the HMB, however as part of the West Midlands Combined Authority, we receive a share of the CRSTS funding (via TfWM). CRSTS is assigned both to maintenance and major projects. Initially just under 12% of the regional CRSTS settlement was assigned to maintenance with 88% being for major projects.
- Local Network Improvement Plan (LNIP – via CRSTS)
    - A small proportion of this funding is sued at Coventry for asset maintenance (for traffic signals) with the majority going towards non-maintenance projects such as road safety schemes, vulnerable user improvements etc.
- Additional periodic DfT funding (e.g. Pothole Fund, Network North etc.)
    - These are period extra funding amounts available to the majority of local authorities usually between 10 and 40% of HMB/CRSTS funding generally given in-year
- Citizen Housing Fund
    - This is funding raised via the sale of ex-council houses; this is ringfenced to be used on land owned by Citizen Housing (but also forming part of the adopted highway network). Generally used for footway reconstruction but with agreement between The Council and Citizen Housing other works may be performed (such as verge reconstruction and the installation of parking bays etc.)
- Successful Bids
    - Funding is also available via success bids such as a multi-year, multi-million-pound investment for works on the Swanswell Viaduct and the £10m re-baseline from the VLR
- Other Minor Contributions

    - Occasionally we also receive minor contributions from the Environment Agency (e.g. £90k in 2024/25) or other projects (£138k in 2024/25 for asphalt rejuvenator trials).
- Internal Contribution
    - Funding provided by the council (via revenue) to supplement other funding sources for capital highway schemes (average of ~£1.5m annually between 2020/21 and 2024/25).

## Reactive vs Planned Maintenance

We undertake both reactive and planned maintenance to meet our statutory duty under the Highways Act. Reactive maintenance primarily composed of isolated defects that can potentially cause a hazard to users of the highway. These are primarily sourced via routine Highway Safety Inspections but occasionally come in ad-hoc via customer reports. Reactive maintenance is funded solely via revenue funding.

As reactive jobs/hazards have a response time under our Highway Inspection Policy, it is unfeasible to mobilise a planned maintenance treatment (such as large extents of patching/resurfacing) during a financial year and still meet the response time, opening the authority up to significant risk.

Where feasible, multiple reactive defects in close proximity will be treated via planned maintenance when the in-year budget is available and timescales suit. In 2022 we purchased a JCB PotholePro (PHP) to undertake large areas of robust patching. Where a reactive defect/batch of reactive defects is suitable for PHP, works are planned and undertaken. As the PHP performs high quality long-lasting repairs this is defined as planned maintenance (e.g. we have used the PHP to undertake pre-patching for surface dressing sites in some instances).

For the purpose of planned/reactive maintenance percentage split we have defined reactive maintenance budgets as the total spent by our reactive service minus the amount spent via operation of the PHP machine.

All funding received via other sources (CRSTS, VLR re-base line, Citizen Housing etc.) is solely used for planned maintenance.

# Appendix E – Common Misconceptions

Many common misconceptions exist around highway maintenance services in Local Authorities around the UK. This section outlines common misconceptions stakeholders may have and backs them up with robust data. Highway Maintenance Services in the UK have got significantly more efficient over the last decade with good asset management practises. Additionally, we are always looking at new developments and technology in the industry to improve the efficiency of the highways service in Coventry.

- **Misconception 1: Councils are 'wasting' money on reactive repairs instead of doing a 'proper job'.**
    - We spend much more annually on planned works (resurfacing etc.) than we do on reactive repairs.
    - Highway Maintenance Funding is limited. Even combining both reactive maintenance funding and planned maintenance funding there is still not enough to treat all assets that area deteriorating. Even if we spent ALL our reactive maintenance budget over the last 5 years on carriageway treatment only this would equate to an average of 0.73% of the network resurfaced annually and a total of **3.64%**

| Financial Year | Reactive Maintenance Spend | Additional Carriageway Resurfacing (km) | Additional Carriageway Resurfacing (network %) |
|---|---|---|---|
| 20/21 | 2010 | 7.66 | 0.86% |
| 21/22 | 2150 | 8.19 | 0.92% |
| 22/23 | 1748 | 6.66 | 0.75% |
| 23/24 | 1019 | 3.88 | 0.44% |
| 24/25 | 1549 | 5.9 | 0.67% |
| **TOTAL** | **8476** | **32.29** | **3.64%** |

The above also does not consider other asset types reactive maintenance is performed on (footway defects, hazardous bollards etc.). Performing zero reactive maintenance would result in a scenario where it is extremely likely The Council will lose all claims against.

Assuming (extremely generously) that the claim amounts received will be remain the same, an average of 149 claims would be received each year, and based on an average settled claim value of £1,515 costs to the authority from lost claims would exceed £225,000 annually, however this would likely be much more since the reactive service currently fill in excess of 4,000 potholes annually and address in excess of 5,000 footway defect annually. Each unaddressed defect is a potential successful claim against the authority. Assuming a 25% reduction in defects due to more works being undertaken this is still ~6,750 defects all with no defence and a potential liability risk in excess of £10.2m annually.

Additionally a make safe repair is sometimes the only option to minimise disruption on the network until a more permanent repair can be undertaken which requires organisation of a permit and longer closures. Organising long road closures in advance gives users more warning and time to plan alternate routes.

- **Misconception 2: Councils are wasting money by building new cycleways instead of fixing roads**
    - New cycleways are funding via government grants that we must apply for. This leaves us in a situation where we either:
        - Do not apply for the funding, and don't build anything
        - Apply for the funding and build a cycleway while also improving surrounding infrastructure (such as resurfacing the adjacent road or reconstructing adjacent footways)

- **Misconception 3: Councils are getting the money from the DfT but not spending it on highways**
    - At Coventry none of the funding received via the DfT/TfWM has been used outside the highway service and has all been used on planned/preventative maintenance.
    - Additionally, this funding has to be used on multiple asset types (footways, drainage, bridges/structures, not just roads).
    - If we look at all maintenance block funding received from the DfT/TFWM since 2020 and assume we spent it all on carriageway resurfacing, we get the following:

| Financial Year | Funding Received via DfT/TfWM[1] | Carriageway Resurfaced (km) | Carriageway Resurfaced (network %) | 1 Road Treated every x years |
|---|---|---|---|---|
| 20/21 | 2920 | 16.34 | 1.84% | 54 |
| 21/22 | 3550 | 20.54 | 2.32% | 43 |
| 22/23 | 4980 | 23.11 | 2.61% | 38 |
| 23/24 | 5501 | 26.82 | 3.02% | 33 |
| 24/25 | 4275 | 18.29 | 2.06% | 48 |
| **AVERAGE** | **4245.2** | **21.02** | **2.37%** | **43.2** |

[1]£000s, includes all HMB/CRSTS funding, pothole funds, network north etc

The above table shows that even if we spent all government funding received on carriageway resurfacing on average over the last five years, we resurface one road ever 43.2 years. This is in-line with the RSTA recommendations of every 40 years, so our road network would remain in a steady condition/potentially improve slightly. However, every other asset type would not be funded leading to serious deterioration in footways, bridges, vehicle safety fences, verges and drainage assets.

Additionally, this can also be performed for footways and bridges/structures.

| Financial Year | Funding Received via DfT/TfWM[1] | Footways Reconstructed | | | Structures Renewed (% of GRC) |
|---|---|---|---|---|---|
| | | km | % | | |
| 20/21 | 2920 | 15.94 | 1.10% | | 0.66% |
| 21/22 | 3550 | 19.02 | 1.32% | **OR** | 0.78% |
| 22/23 | 4980 | 24.35 | 1.68% | | 1.01% |
| 23/24 | 5501 | 23.92 | 1.65% | | 1.04% |
| 24/25 | 4275 | 15.83 | 1.09% | | 0.79% |
| **AVERAGE** | 4245.2 | 19.81 | 1.37% | | 0.86% |

[1]£000s, includes all HMB/CRSTS funding, pothole funds, network north etc

- **Misconception 4: You've resurfaced a road and there was nothing wrong with it, you're wasting money**
    - Generally, when a road has been treated when there is 'nothing' wrong with it, this is a surface treatment (surface dressing or micro asphalt), these are thin surfacing treatment that seal the surface of the road and prevent further deterioration and extend the life of a road. E.g. applying surface treatments are 2-5x cheaper than resurfacing (depending on resurfacing depth). If these roads were left, they would likely deteriorate requiring a resurfacing treatment within the next five years. Periodically applying surface treatments works out just under 50% cheaper than resurfacing over the life of a road using the below example of typical 'A' road.

| **Resurfacing Only** | | |
|---|---|---|
| **Year** | **Treatment Required** | **Cost** |
| 15 | Shallow resurf | £233,700 |
| 30 | Deep resurf | £492,750 |
| 45 | Shallow resurf | £233,700 |
| 60 | Deep resurf | £492,750 |

| **Periodic Surface Treatments** | | |
|---|---|---|
| **Year** | **Treatment Required** | **Cost** |
| 10 | Surface Dressing | £97,500 |
| 20 | Surface Dressing | £97,500 |
| 30 | Surface Dressing | £97,500 |
| 40 | Surface Dressing | £97,500 |
| 50 | Surface Dressing | £97,500 |
| 60 | Deep resurf | £492,750 |

Total Life Cost: £1.45m

Total Life Cost: £980k

Surface Treatment Savings: £470k / km - 48%

When scaled up to the size of our carriageway network (887km) this is a potential saving of just under £417m over the life of all of our roads if sufficient funding was provided to undertake all necessary surface treatments at the correct time.

Additionally, using 24/25 carriageway budgets as an example, performing structural (resurfacing treatments only) would result in 15km of total road treatment (1.69% of the network) compared to an actual treatment length of 22.25km (2.51% of the network) and the network deteriorating much faster.

- **Misconception 5: You've got the money, get on with it**
    - The time between receipt/confirmation of funding for a scheme and works being undertaken can be up to four months. Road space/permitting/diversions needs to be arranged, sites need to be robustly measured by the engineer and the scope agreed with contractors. Even a scheme measured and in reserve can have a scope change due to deterioration that has occurred since the last site visit.
    - Additionally, other types of treatment are seasonally specific (e.g. surface dressing) so if funding is announced in June and is required to be used by the end of the financial year it is very unlikely that this can be used for any preventative treatments as there will be insufficient time between receipt of funding and end of the suitable season to perform these treatments.