

Highway Maintenance Strategy Review

Date: 16th October 2024

Report of: Director of City Development

Report to: Executive Board

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

Brief summary

At the meeting of Full Council on Wednesday, 20th March, 2024, a White Paper was passed in the name of Cllr Helen Hayden, then Executive Member for Sustainable Development and Infrastructure. This called for a report to update Executive Board on the work being done to address the highways maintenance backlog in the face of the current and historical financial challenges the council faces. As part of the process, this report was presented to the Infrastructure, Investment & Inclusive Growth Scrutiny Board and a Scrutiny Statement has been prepared for the consideration of the Executive Board.

Roads suffer continual deterioration through the actions of traffic, extremes of weather and degradation of materials. A clear strategy for regular maintenance is essential to keep these assets in a safe and serviceable condition. Increases in construction costs and the extremes of climate, have placed even greater pressure on the limited financial resources that are available for this maintenance work, reinforcing the need for a clear and robust asset management process to prioritise future investment.

Potholes are an ever-present issue and tackling them is a high priority for all road users, the Council and elected Members. Recent years and particularly last year, have seen an increase in the number of potholes reported, which has added pressure on resources in tackling the prevention and repair of potholes.

This report seeks to provide an overview of our current strategy for highway maintenance, and to provide detail to Executive Board how we are responding to their concerns and the changing climate. This report address carriageway and footway maintenance issues, not Structures e.g. bridges and culverts, although a similar methodology for assessing and prioritising investment is followed and highlights comparative performance with other core cities and West Yorkshire authorities

Recommendations

The Executive Board is asked to:

- a) Note and endorse the report, including the maintenance strategy and policy set out.

- b) Note that this report was considered by Infrastructure, Investment, and Inclusive Growth Scrutiny Board at their July 2024 meeting and a Statement has been submitted to the Executive Member for Economy, Transport and Sustainable Development and attached to this report at Appendix B.

What is this report about?

- 1 The purpose of this report is to provide an understanding of the current highway maintenance strategy and investment. The causes of potholes, the reasons for the recent increase, an overview of how we deal with pothole repairs and our response to a changing climate.

Highway Maintenance Policy and Strategy

- 2 The Leeds City Council Highway Infrastructure Asset Management Strategy (HIAMS) sets out how the Council manages its highway assets to ensure the required levels of service and to make the best use of available resources.
- 3 The Strategy forms an integral part, as one of the four themes in the Action Plan of the Council's Connecting Leeds Transport Strategy, which recognises the importance of well maintained transport infrastructure to support the Council's transport vision.
- 4 The Council's highway network comprises 2,944km of carriageways and approximately 4,687km of footways. There are 640km of motorway, classified A, B and C roads and 2,294km of local roads.
- 5 Roads in Leeds are mostly of standard flexible construction, comprising layers of bituminous bound material laid on a limestone sub-base. This method is a long-proven construction which provides a reliable, skid resistant running surface, transfers vehicle loads effectively to the sub soil, and maintains structural integrity over many years providing an optimal whole life cost solution.
- 6 The Council is required to submit valuations for the highway infrastructure assets to Government known as the Whole of Government Accounts. The updated valuation in 2024 estimated the carriageway asset at £2.3bn gross replacement cost and the footway asset £0.75bn.
- 7 In line with national guidance, the highway assets are maintained using asset management principals. As early and committed adopters of an asset management approach, the Council has, as a result traditionally received the maximum level of highway maintenance funding (Band 3) through the Department for Transport (DfT) annual assessment submission.
- 8 This approach enables informed decisions to be made about investment and maintenance funding, ensuring the right treatment at the right time. The current 5-year Highways HIAMS was reviewed and updated in 2022.

Road Condition

- 9 A key element of the asset management process is to understand the current condition of the highway asset. A series of nationally recognised condition surveys are carried out across every road in Leeds over a 4-year cycle. By using the information from these surveys, the current condition of all the roads can be measured and banded according to their condition from 'Red' - roads in poor condition likely to require maintenance within 12 months, through to 'Green' - roads which are in a good or reasonable state of repair.
- 10 The road condition from these surveys as of March 2024, is shown below. More detailed historical results and comparative data across core cities and West Yorkshire authorities are shown in Appendix A1. Keeping the overall condition of the asset from deteriorating further is

known as maintaining a steady state condition. The significant investment over many years, resulting in a lower than national average percentage of streets in the poor or Red condition band, means performance compares well and/or in line with other core cities and local authorities but there has been insufficient funding to maintain a steady state condition, with the overall condition of the roads declining in recent years.

| Condition Banding | Principal A Roads % of length | Classified B and C Roads % of length | Unclassified Roads % of length |
|--------------------------|--|---|---|
| Green | 64.4% (68%) | 65.0% (63%) | 67.7% (53%) |
| Amber | 32.8% (28%) | 32.4% (31%) | 24.1% (33%) |
| Red | 2.8% (4%) | 2.6% (6%) | 8.2% (14%) |

Figure in () is national figure for England.

- 11 Information from these surveys is also used to determine the likely remaining serviceable life, and the cost of future work required each year to maintain the carriageway asset in a steady state condition.
- 12 Minimising the whole life cost of future maintenance is best achieved by a mix of preventative and structural repair treatments. Lower cost, preventative treatments such as surface dressing with bitumen and chippings to seal the surface, can prolong the remaining life of the road until structural repair works such as resurfacing are eventually required.
- 13 Information from the road condition surveys, along with the available investment, is used to prepare a long-term, prioritised programme of road repair treatments across the whole of the network. This ensures that resources are targeted at where they are most effective. In the 2024/25 programme of works 39% by length are structural works and 61% preventative treatments. By value the split is 82% structural and 18% preventative.
- 14 Appendix A2 shows the graphical representation of the condition of the road network at the start of the year, and the predicted condition at the end of the current programme year. This is predicting an overall increase in the number of roads in need of structural maintenance at the year-end (24 km or 0.8% of the network). It also details the level of annual works budget required to maintain the asset at a steady state, of £33,931,967. This underlines that we are maintaining a declining network. An increase of 24km requiring maintenance means 96 street sections (250m lengths) will have got worse at the year-end despite a programme delivery of over 736 sections within the same year.

Highways Investment

- 15 Funding for highway maintenance comes from two main sources, revenue funding for unplanned maintenance activities such as temporary pothole repairs and capital funding which can be used for most planned rehabilitation works such as resurfacing. The table and graph shown in Appendix A3 shows the allocated highways investment since 2010.
- 16 The current years planned capital maintenance programme of £28,961,043 is funded from the 2024/25 City Region Sustainable Transport Settlement (CRSTS) (£14,506,243) Network North Funding (£1,454,800) and Leeds City Council Capital Resources (£13,000,000). Appendix A3 shows the significant investment by the Council over many years to support the national funding received, being almost £200million since 2010.
- 17 Considering recent inflation rates, at current levels of funding and contract rates, it is likely that a declining network condition will have to be managed. The asset management model does however allow for planning the best outcome for different investment levels. The Service is therefore able to quickly plan and prepare for the additional Network North highway maintenance funding that may be available in the future, because of the reallocation of HS2 rail funding.

- 18 The Service operates a mixed model of highway maintenance service delivery. Calling on the in-house service delivery unit, along with contract service partners, has proved robust in dealing with the risk of limited supply chain availability, due to variances in the highway maintenance workload.
- 19 Another factor affecting the ability to maintain the highway asset in a steady state condition, is the recent rise in construction costs. External factors such as rising demand and the war in Ukraine, resulted in a sharp increase in contract rates for highway maintenance work. Applying the relevant industry construction cost indices to the total funding of £23.8m in 2010/11 would require funding of approximately £34.8m to undertake the same amount of work at current contract rates.
- 20 Whilst the level of investment in highway maintenance has increased it has not kept pace with both the rate of decline of the network condition, and industry cost increases. The Highways Maintenance backlog for England and Wales, estimated in the Annual Local Authority Road Maintenance (ALARM) survey on the state of Britain's roads undertaken by the Asphalt Industry Alliance in 2024, is £16.3bn. The backlog in Leeds being estimated in 2024 at £288m.
- 21 To manage the recent sharp increases, capital funds from the (CRSTS) have been drawn down early to ensure delivery of the agreed highway maintenance programmes for 2023/24 and 2024/25 in the expectation of the future Network North funding. Without this, funding alternatives would be required such as a bid to the Council's Strategic Investment Board to maintain the highway asset.
- 22 The Chair, Scrutiny Board (Infrastructure, Investment, and Inclusive Growth) has prepared a letter attached at Appendix C to the Minister for the Future of Roads and Chief Secretary to the Treasury. The letter seeks to achieve longer term funding security for highways maintenance, a reduction in the complexity of current funding arrangements and to provide immediate certainty of the previously announced Network North funding settlement.

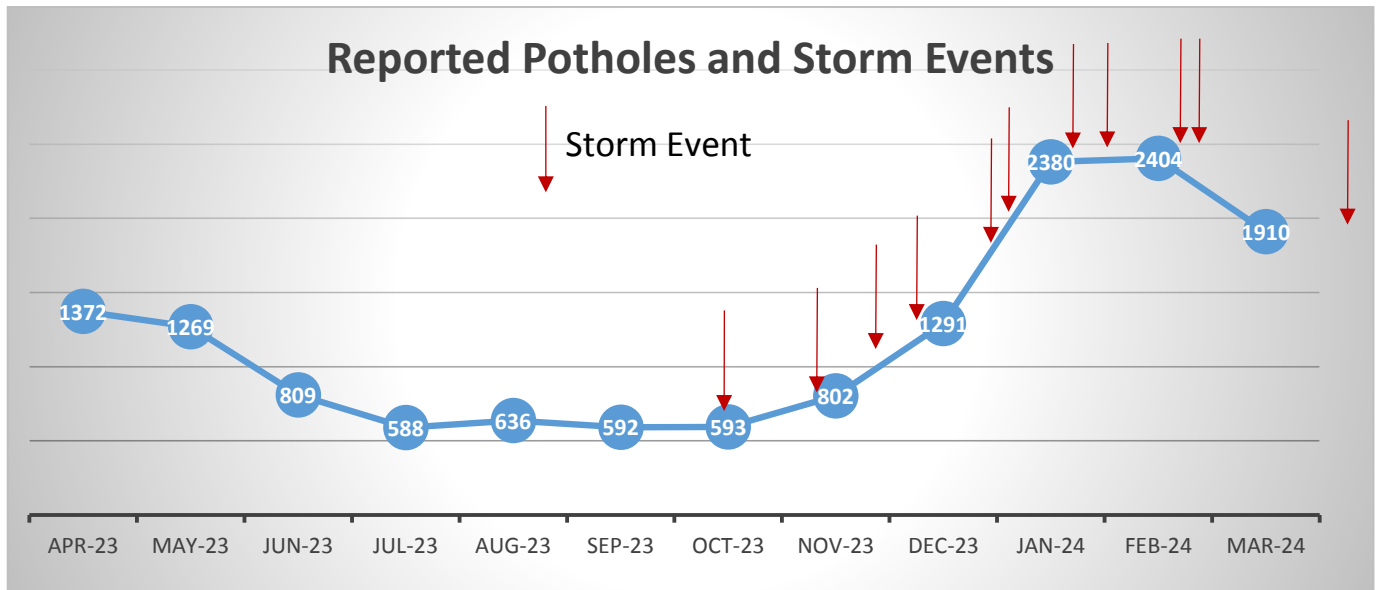
Potholes Background

- 23 Whilst there is no nationally agreed definition of a pothole, the European Research Association provided the following definition:
'a local deterioration of the pavement surface in which the material breaks down in a relatively short time and is lost causing a steep depression'.
- 24 Potholes can quickly form, increase in size, and can often be found in clusters occurring in a similar time frame. Over time the bitumen in the carriageway pavement construction ages, through the actions of oxidation, weathering, and traffic loads, becoming brittle. This makes the asphalt carriageway pavement prone to cracking, pothole formation, and general deterioration. In terms of weather, it is acknowledged that the freeze/thaw effect and wet or standing water pushed by the action of traffic into cracks in the surface, can significantly accelerate the deterioration of roads and the subsequent pothole formation.
- 25 The number of carriageway pothole reports requiring repair for the last three years are shown in the following table and a more detailed graph in Appendix A4:

| Year | Number |
|---------|--------|
| 2021/22 | 7,658 |
| 2022/23 | 8,855 |
| 2023/24 | 14,646 |

- 26 The increase last year seems to have been reflected across the country where the effects of the second wettest year since records began in 1836, with 11 named storms compared to 2 in the previous storm season, have resulted in a similar issue. The ALARM survey 2024, reported a 43% increase in potholes to 2.0 million in 2023 from 1.4 million in 2022, which does not take

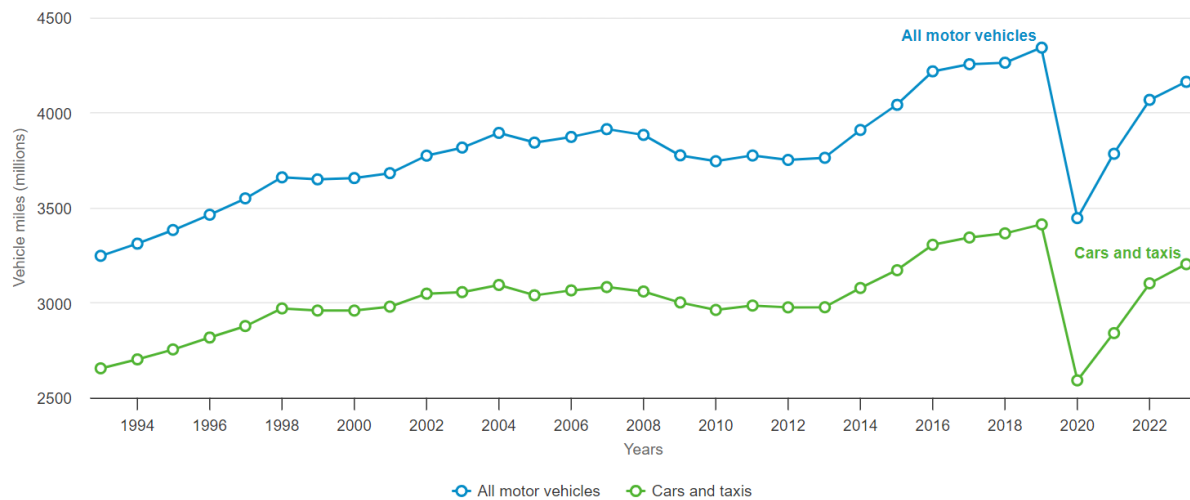
account the continued wet weather into spring. The graph below shows the 11 named storm events and the corresponding number of potholes reported each month across Leeds.



27 The volume of traffic is also adding to the deterioration of carriageway pavements, in particular the disproportionate damage caused by heavy goods and public service vehicles. Following the impact from Covid-19, traffic volumes are increasing rapidly and almost returned to pre-Covid-19 levels as evidenced in the Department for Transport (DfT) statistics below.

Annual traffic by vehicle type in Leeds

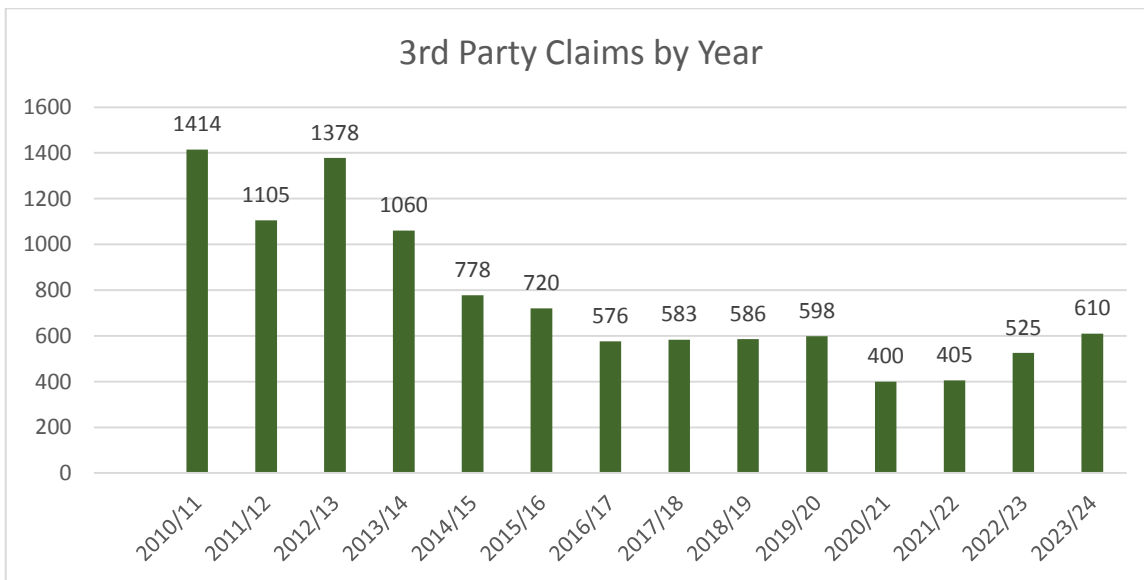
Traffic in Great Britain from 1993 to 2023 by vehicle type in vehicle miles (millions)



28 The Council has a Statutory Duty under Section 41 of the Highways Act 1980 to maintain the highway in a safe condition. The Council’s Highways Inspection Manual sets out the requirements for carrying out highway safety inspections. It contains guidance on the Council’s policy and requirements for prioritising timely repairs to safety defects, in accordance with the risk-based approach methodology described within the national Code of Practice (Well Managed Highways Infrastructure 2017).

29 Reports of potholes come from either members of the public or from the Highway Inspectors. With the exception of some high-speed roads, every road in Leeds receives a walked safety inspection at least annually, with the more strategically significant roads being inspected more frequently (quarterly or monthly) from a moving vehicle. These safety inspections identify any defects which may cause a danger or serious inconvenience to users of the highway.

- 30 The Service recognises the importance of receiving reports from members of the public to supplement information from inspections, and to ensure the earliest intervention when a pothole forms. The Council's online reporting tool allows an accurate location and description to be easily provided to help ensure prompt action to deal with the problem. Within the last 12 months 58% of the total reported potholes have been from members of the public and 42% from Highway Inspectors. This demonstrates public awareness with regards to potholes and the ease of being able to report them direct to the Council.
- 31 Identified defects are subject to a risk-based categorisation depending on their size and location in the highway. The Policy sets out the proposed repair periods, with Category 1 defects due for repair before the end of the next working day following identification. Category 2 repairs within 7 days, and Category 3 repairs within 28 days. Some Category 2 and 3 reports may be reassessed, and their repair delayed, for example where a planned maintenance scheme is proposed.
- 32 Where the Council has not been seen to fulfil its statutory duty, it may be liable for damages for personal injury or to property. Following the level of investment in recent years, the adoption of a "firm but fair" approach when dealing with insurance claims, a sustained decline in the numbers of claims received and compensation paid out, was seen; however, recently, there has been an increase in claims (all highway claims not solely pothole related) as shown in the graph below, because of increased potholes and perhaps other economic factors.



- 33 Public satisfaction with highway maintenance in Leeds is measured from participation in the National Highways and Transportation (NHT) Public Satisfaction Survey and some Key Business Indicators (KBI) are detailed below. The trend for the NHT survey was generally upwards until this year where all categories except cycle routes have fallen. Whilst some of the figures for Leeds have reduced from the levels in the 2022 survey, it is important to note that the national average has dropped by a greater percentage, and Leeds continues to perform favourably when compared with other Core Cities.

| | | Leeds City Council | | | National Average | | |
|--------|--|--------------------|------|------|------------------|------|------|
| | | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| KBI 11 | Condition of Pavements | 60% | 60% | 58% | 52% | 52% | 50% |
| KBI 13 | Condition of Cycle Routes and Facilities | 52% | 51% | 54% | 52% | 50% | 50% |
| KBI 23 | Condition of Roads | 35% | 42% | 35% | 32% | 34% | 27% |

Dealing with Potholes

- 34 The DfT in 2012 and the Association of Directors of Environment, Planning and Transport (ADEPT) in 2019 have published guidance to assist local authorities in dealing with the problem of potholes. The guidance recommends prevention through a strategic, investment approach to asset management and a right first-time approach to repair.
- 35 The 2019 ADEPT report states that "The current situation for most authorities across the country is that the condition of the road network is beyond the point where preventative maintenance techniques alone will suffice with the level of funding available".
- 36 There are two main types of pothole repair. A permanent patch repair or a temporary repair. Temporary repairs can be carried out quickly utilising small mobile teams to ensure that urgent repairs are carried out within the stated timescales. Permanent patch repairs involve the use of specialist plant and much larger repair teams, to cut out and remove all the damaged material and replace with new asphalt with straight cut edges. This may require longer road closures and the setting up of diversions as necessary. Whilst this technique is the preferred repair method, it requires much more planning in a co-ordinated programme to provide economies of scale, to avoid clashes with other works and events etc, and is far more disruptive than a temporary repair. Given the number of pothole reports, urgent temporary repairs are therefore inevitable to fulfil the statutory duty to maintain the highway in a safe condition.
- 37 By their nature urgent repairs are only temporary localised repairs and do not present a permanent solution. This can lead to repeat visits to the same location to repair newly formed adjacent damage or sometimes failure of the temporary repair itself. Temporary repairs can only be expected to last 1-2 years, or much less where there are structural defects or heavier traffic volumes.
- 38 Urgent temporary pothole repairs in Leeds are undertaken by dedicated Highways Services response teams. These teams are made up of 2 operatives operating from a single vehicle with a hot box to store the asphalt repair material at the required temperature. Compliance with the repair timescales is shown in Appendix A5. A proportion of this work has been sub-contracted due to workload and skills pressures. Some Category 2 and 3 works are occasionally aggregated, and permanent patching repair works are organised.
- 39 Following a previous review of the process, the teams use hot laid material instead of the more commonly used cold material to try and extend the life of the repair. Typically, each team repairs between 20 and 25 pothole locations each day, although this varies on the nature of the work required and the type of road, particularly if additional traffic management is required. The teams also deal with other urgent works which are not pothole related.
- 40 As part of the ongoing wider Highway Maintenance Revitalisation Programme (HMRP), to modernise the service delivery unit and drive efficiencies, a project has been established to review the whole process of pothole repairs from reporting through to repair. As well as seeking to make efficiencies and provide an improved service, a key ambition of this project is to increase the proportion of a first-time permanent patch repairs rather than temporary repairs. This may require the reallocation of resources from the preventative or structural repair programme, or provision of additional resources into a permanent patching repair programme. Consideration will be given to the weighting of public complaints in the generation of the programme to ensure that some communities are not disadvantaged.
- 41 A focus of the project will be the use of innovative solutions. An artificial intelligence (AI) solution is currently being developed in conjunction with the Council to capture the condition of highway assets as part of the driven inspections. Pothole information from these surveys will be combined with road condition data to inform a prioritised permanent patching repair programme. Innovative permanent repair techniques will also be assessed alongside the traditional permanent patch and temporary repair processes.
- 42 Following the recommendations from Scrutiny, the HMRP will include a review of current communications to ensure that in future, improved information is provided, to explain the current

approach to highway maintenance and the response to the financial and climate change challenges.

Funding and Costs

- 43 Funding for pothole repairs is provided from the Highway Maintenance revenue budget. The total budget allocation for 2024/25 is £4,991,000. This allocation is virtually unchanged since 2014/15 and in 2010/11 was £7,426,000. This budget covers all highway maintenance revenue activities such as, surface water drainage, general basic highway maintenance, road markings and non-illuminated sign maintenance, but excluding winter gritting operations.
- 44 A specific allocation from the highway maintenance revenue budget of £825,000 is provided for carriageway pothole repairs and £425,000 for footway pothole repairs. Last year £1,997,966 was spent on carriageway pothole repairs and £780,730 on footway pothole repairs. This situation was due to the insufficiency of the allocation, the unprecedented number of reports and the need to ensure that the Council complies with the repair timescales set out in the highway maintenance policy. The adverse variance in the budget was managed within the overall highway budget, through a combination of increased turnover by the service delivery unit, increased capitalisation, and expenditure savings in other allocations.
- 45 An in-house contract rate for undertaking an individual pothole repair is currently valued at £71.11 per pothole. This rate was originally, and simply derived by dividing the total spend by the number of pothole repairs completed. Following a recent review of the contract rates this rate was held at this level to avoid further pressure on the revenue budget. The rate is being reviewed as part of the pothole project work. The ALARM survey reported an average rate in England for a temporary pothole repair at £79.53 per pothole.
- 46 £1,212,130 of the highway maintenance revenue budget is allocated to carriageway works larger than potholing and £1,075,110 for footway works larger than potholing. This budget is used for more permanent repairs such as patching works. Last year £1,498,913 was spent on carriageway works and £1,440,211 on footway works. Again, these variances were managed within the overall service budget allocation.

What impact will this proposal have?

- 47 This is an information report and not a decision report, so it is not necessary to conduct an equality impact assessment. However, an equality impact assessment is undertaken for the annual decision report for the Highway Infrastructure Maintenance Programme (Roads).

How does this proposal impact the three pillars of the Best City Ambition?

Health and Wellbeing

Inclusive Growth

Zero Carbon

- 48 Health and Wellbeing: the highway network is a key asset for social wellbeing, connecting residents to services, public health facilities and open space. Well maintained highways reduce the risk of injuries and can contribute to an overall feeling of wellbeing derived from the quality of the local built environment. The Connecting Leeds Transport Strategy promotes improved and well-maintained highways infrastructure, in particular footways and cycling routes, which improves the health and wellbeing of residents, and visitors to the city.
- 49 Inclusive Growth: roads are vital conduits connecting businesses to customers and supply chains, and for residents to gain access to essential services and employment. A reliable, resilient highway network promotes sustained and inclusive economic growth.
- 50 Zero Carbon: dealing with the effects of climate change on the highway assets is a key priority for the HIAMS. High rainfall events and severe cold weather have a disproportionate effect on the asset condition, resulting in further pressure on limited resources. Strategic and operational

planning is essential to ensure a sustained adaptation to the future impacts of climate change to ensure a resilient highway network. Reducing the net carbon of highway operations is another key part of the strategy, promoting sound asset management to delay the need for structural repair works through timely preventative maintenance, and widening the use of lower carbon materials and recycling options.

What consultation and engagement has taken place?

Wards affected:

Have ward members been consulted? Yes No

- 51 This is an information report and as such does not need to be consulted on with the public. However, all ward members are consulted each year on the proposed annual programme of highway maintenance schemes.
- 52 The report was presented to the Infrastructure, Investment, and Inclusive Growth Scrutiny Board in July 2024. A statement has been prepared by the Board and is included at Appendix B.

What are the resource implications?

- 53 Tackling the effects of a changing climate on the highway asset, alongside the continuation and further development of the asset management led approach to the strategy, should ensure that the effects on the allocated revenue budget is minimised. The asset management model allows for different capital investment scenarios to be input, and the effects on future road condition to be assessed. This enables well informed decisions to be made about future investment.

What are the key risks and how are they being managed?

- 54 The Significant Risks identified which are mitigated in the asset management led HIAMS are:
- Financial through insufficient identified future funding to maintain the highway asset in a steady state condition, leading to increased numbers of potholes and public liability claims.
 - Increase in construction costs putting further pressure on revenue and capital budgets.
 - Shared Corporate risk from climate change as more frequent frost and rainfall events further damage the roads asset and compromise the longer-term resilience of the highway network. Ensuring that the Service works towards the progress to a net zero economy both locally and globally to lessen the impacts from climate change.
 - Shared corporate risk of city resilience by ensuring that the highway network is well maintained and reliable.
 - Shared corporate risk on keeping the city moving, to ensure that the highway network is adequately maintained and managed.
 - Reputational risk from poor public perception of the Council's ability to maintain the roads in an acceptable condition.

What are the legal implications?

- 55 The Council has a statutory duty under Section 41 of the Highways Act to maintain publicly maintainable highways. The standard required is that each road be in such repair as to render it reasonably passable for the ordinary traffic of the neighbourhood at all seasons of the year without danger caused by its physical condition.

Options, timescales and measuring success

What other options were considered?

56 This is not a decision report and so consideration of other options was not required.

How will success be measured?

57 The HIAMS contains the following performance measures:

- Customer service: How satisfied are stakeholders with the condition of roads and pavements. (NHT Public Satisfaction Survey KBI 11 and 23).
- Network safety: % Cat 1 potholes repairs completed on time, % Cat 2 potholes repairs completed on time.
- Network serviceability: % Principal Network (A roads) requiring major maintenance, % Non-Principal Classified Network (B & C roads) requiring major maintenance. (These two key performance indicators are included on the Office for Local Government's list of indicators and are also reported to Corporate Leadership Team and Scrutiny). % of Unclassified Network requiring major maintenance.
- Network sustainability: Preventative Maintenance completed (in kilometres) as a % of the total km's repaired as part of the Annual Works Programme.

What is the timetable and who will be responsible for implementation?

58 The implementation of the HIAMS is a continuous process. The next refresh of the Strategy is scheduled for 2027.

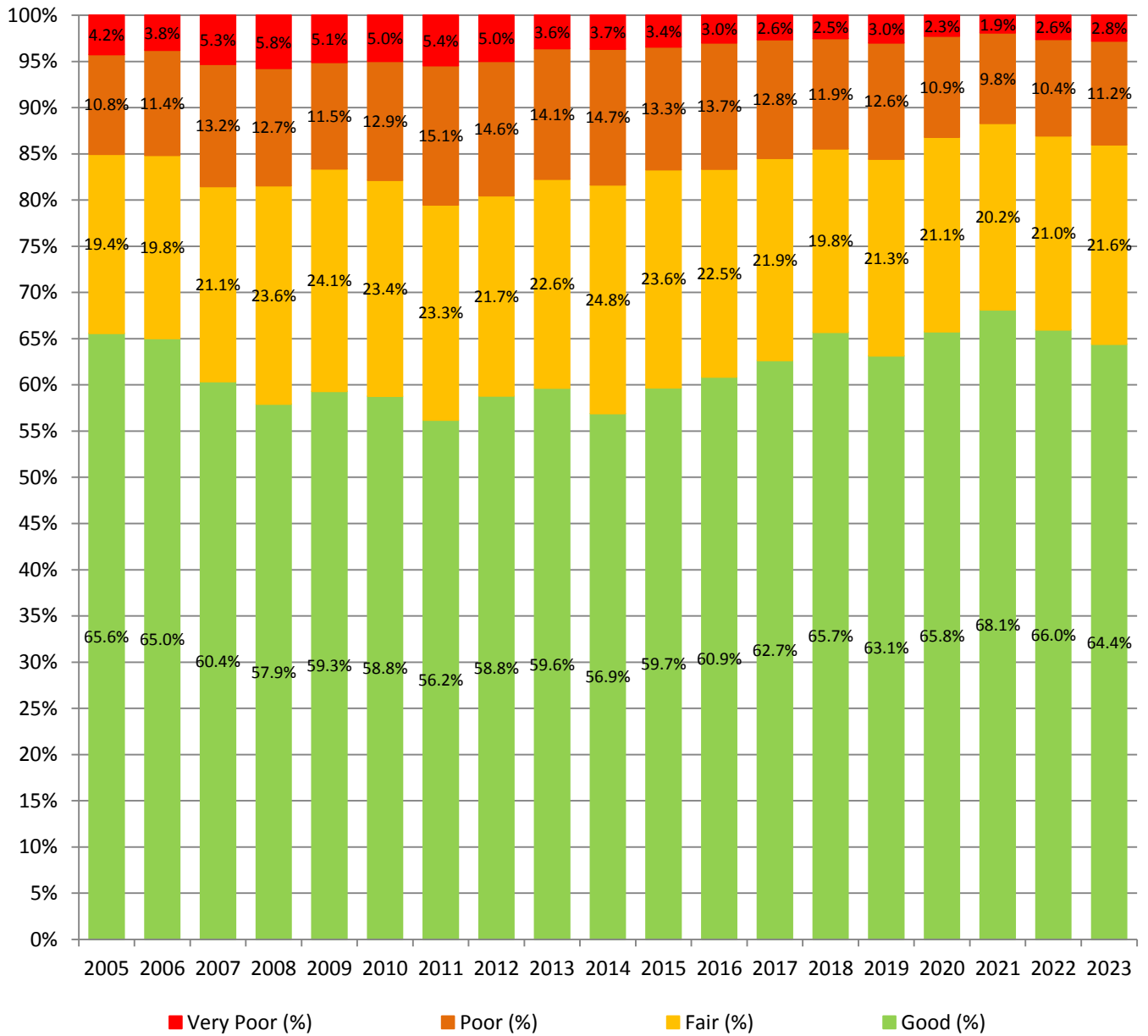
Appendices

- Appendix A – Data Tables and Graphs A1 to A5
- Appendix B – Scrutiny Board (Infrastructure, Investment & Inclusive Growth) Statement
- Appendix C – Draft Letter from Chair, Scrutiny Board (Infrastructure, Investment & Inclusive Growth) to the Minister for the Future of Roads and Chief Secretary to the Treasury

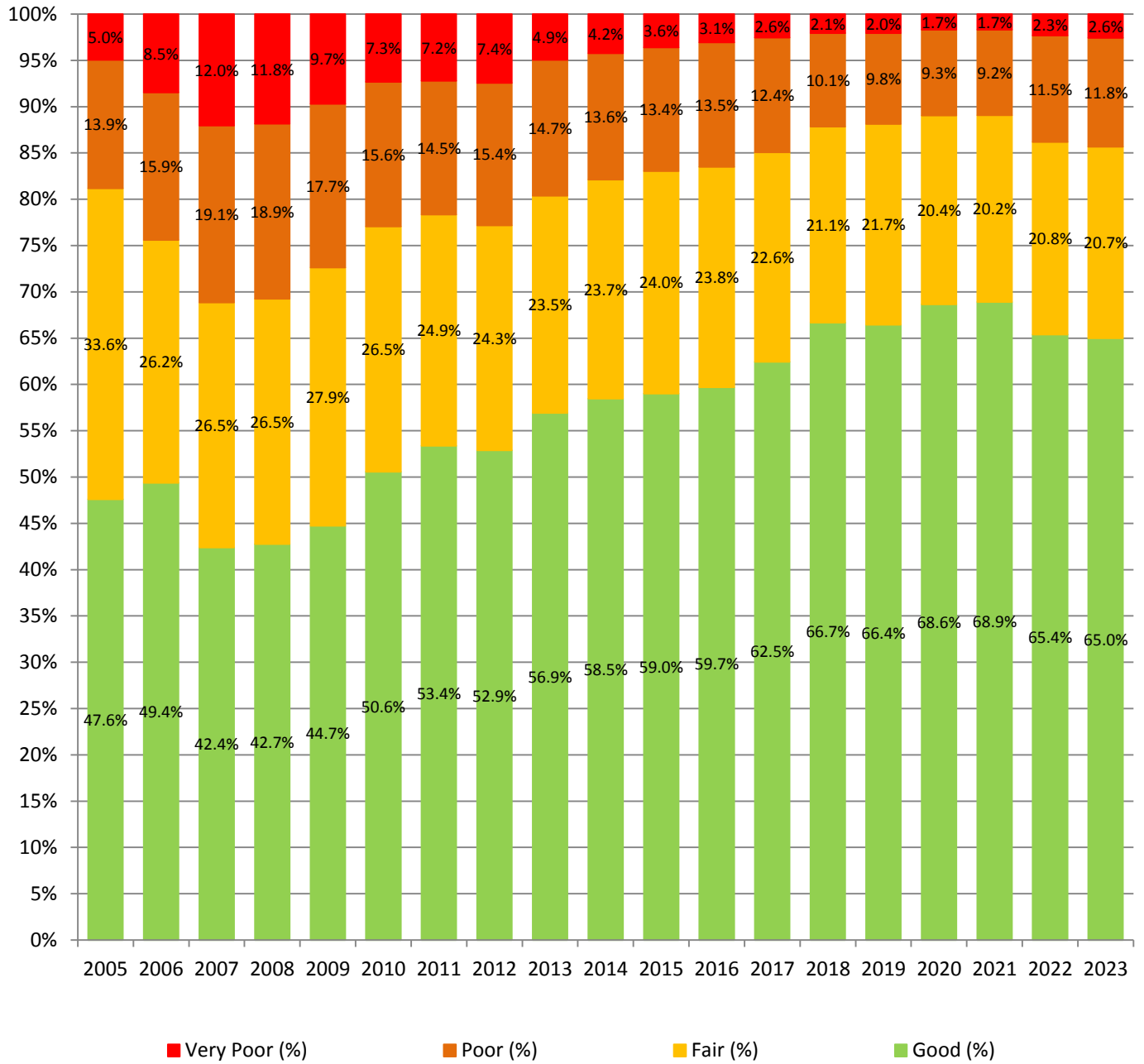
Background papers

None.

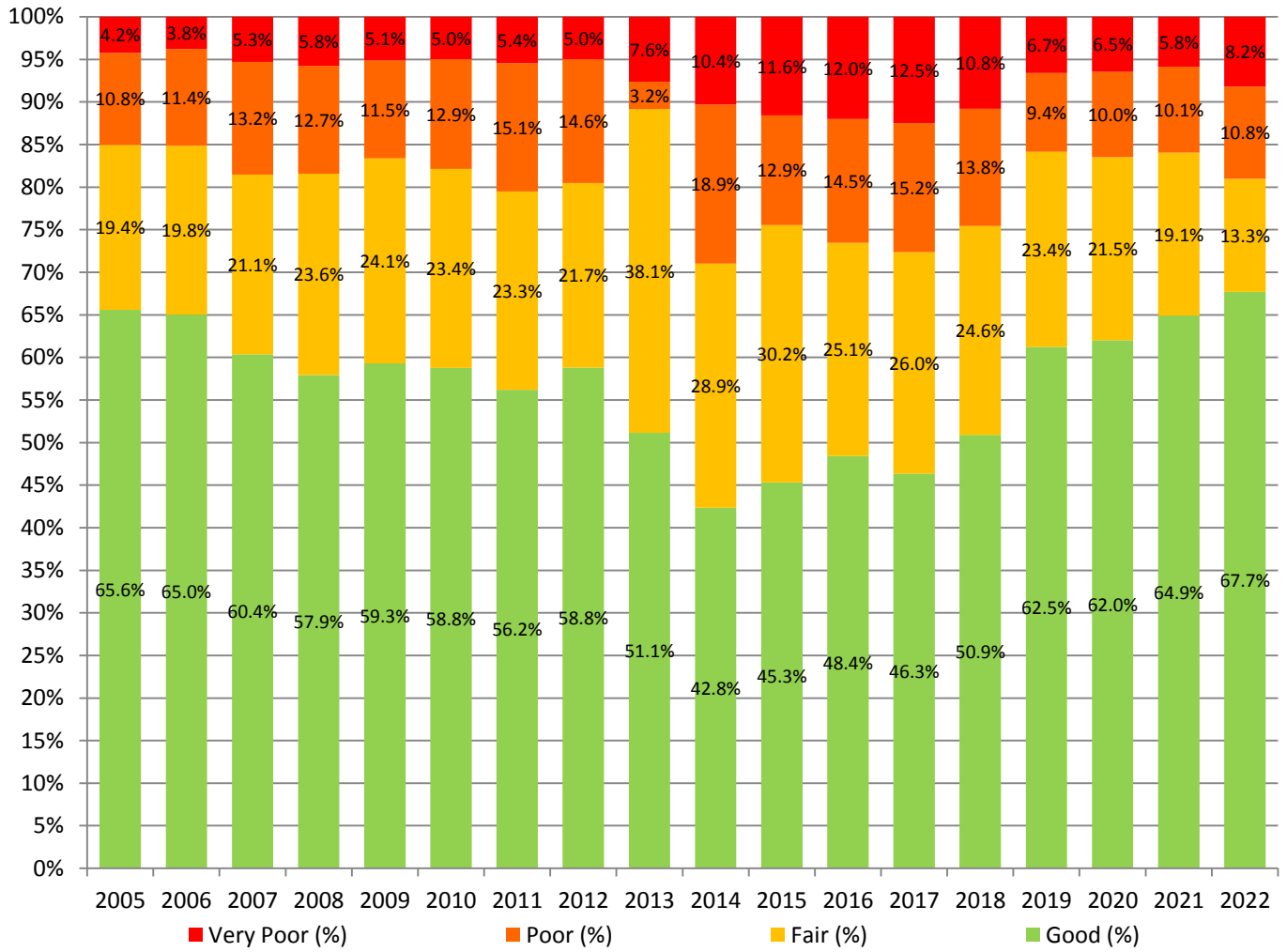
Principal Network Condition (A-Roads) by Year



Distributor Network Condition (B&C Roads) by Year



Unclassified Road Network Condition by Year



Percentage of roads and motorways where maintenance should be considered, by local authority in England (2023)

| Region | Local Authority | A Roads | B & C Roads | Unclassified Roads |
|--------------------------|------------------------------|---------|-------------|--------------------|
| North East | Newcastle upon Tyne | [x] | [x] | [x] |
| North West | Manchester [note 3] | 8 | 9 | 16 |
| North West | Liverpool [note 3][r] | 10 | 16 | 16 |
| Yorkshire and the Humber | York UA [note 3] | [x] | [x] | [x] |
| Yorkshire and the Humber | Sheffield [note 9] | 2 | 3 | 10 |
| Yorkshire and the Humber | Bradford [note 3] | 7 | 9 | 18 |
| Yorkshire and the Humber | Calderdale [note 3, 4] | [x] | [x] | [x] |
| Yorkshire and the Humber | Kirklees | 4 | 4 | 28 |
| Yorkshire and the Humber | Leeds | 3 | 3 | 20 |
| Yorkshire and the Humber | Wakefield | 3 | 3 | 12 |
| East Midlands | Nottingham UA [note 3, 9] | 9 | 11 | 13 |
| West Midlands | Birmingham | 5 | 4 | 9 |
| South West | Bristol, City of UA [note 3] | 9 | 11 | 15 |

X = no data available or submitted

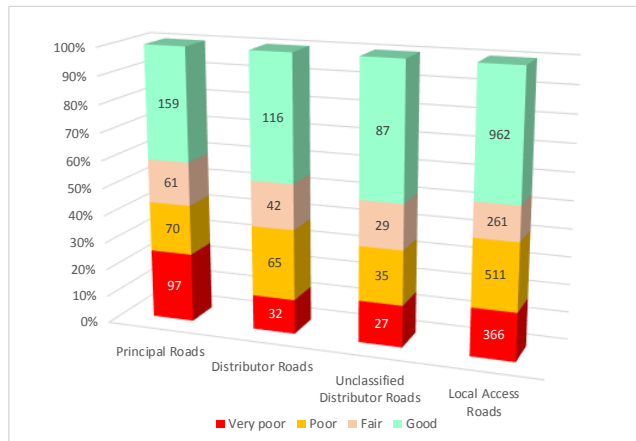
Extracted from data about the condition and maintenance of roads by local authority and National Highways, produced by the Department for Transport; Road condition statistics: data tables Last updated 14 December 2023

Appendix A2 – Current and Predicted Road Condition

Current Road Network Condition (2024) and Predicted Road Network Condition (2025) after proposed work undertaken

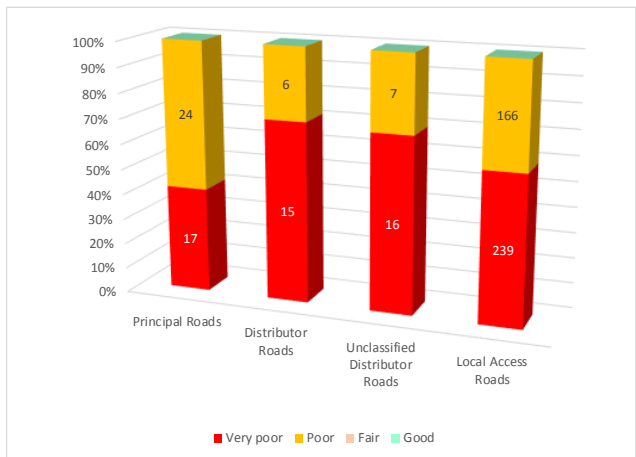
Current Network Condition (Carriageway) in Km by Road Type (08/01/2024)

| Asset Group | Principal Roads | Distributor Roads | Unclassified Distributor Roads | Local Access Roads | Total km |
|--------------|-----------------|-------------------|--------------------------------|--------------------|-------------|
| Good | 159 | 116 | 87 | 962 | 1324 |
| Fair | 61 | 42 | 29 | 261 | 393 |
| Poor | 70 | 65 | 35 | 511 | 681 |
| Very poor | 97 | 32 | 27 | 364 | 520 |
| Total | 387 | 255 | 178 | 2098 | 2918 |



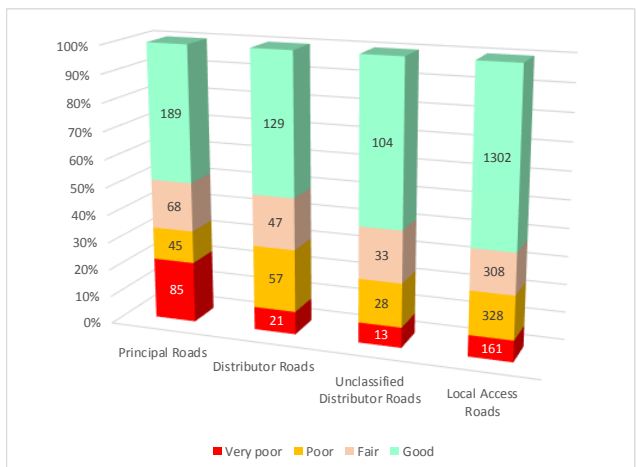
Proposed Infrastructure Maintenance Works in Km by Road Type

| Asset Group | Principal Roads | Distributor Roads | Unclassified Distributor Roads | Local Access Roads | Total km |
|--------------|-----------------|-------------------|--------------------------------|--------------------|------------|
| Good | 0 | 0 | 0 | 0 | 0 |
| Fair | 0 | 0 | 0 | 0 | 0 |
| Poor | 15 | 5 | 5 | 24 | 49 |
| Very poor | 15 | 14 | 10 | 49 | 89 |
| Total | 31 | 19 | 15 | 73 | 138 |



Predicted Network Condition (Carriageway) in Km by Road Type (31/03/2025)

| Asset Group | Principal Roads | Distributor Roads | Unclassified Distributor Roads | Local Access Roads | Total km |
|--------------|-----------------|-------------------|--------------------------------|--------------------|-------------|
| Good | 179 | 127 | 96 | 970 | 1374 |
| Fair | 68 | 47 | 33 | 308 | 456 |
| Poor | 54 | 58 | 30 | 470 | 612 |
| Very poor | 86 | 23 | 19 | 349 | 477 |
| Total | 387 | 255 | 178 | 2098 | 2918 |



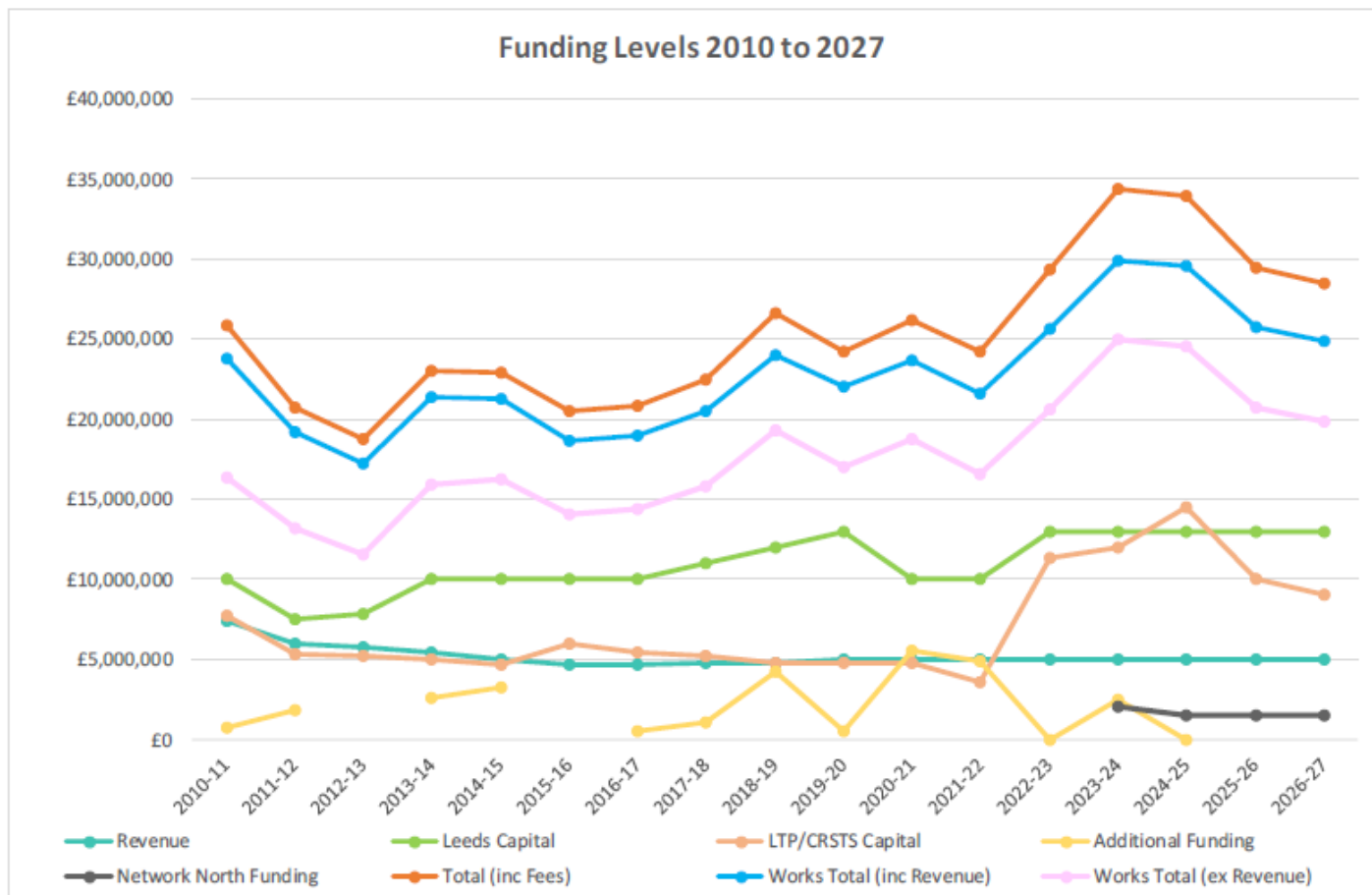
Summary

| | |
|---|-------------|
| Works Spend Required to Maintain Steady State | £33,931,967 |
| Actual Works Allocation | £28,961,043 |
| Increase / Shortfall | -£4,970,924 |

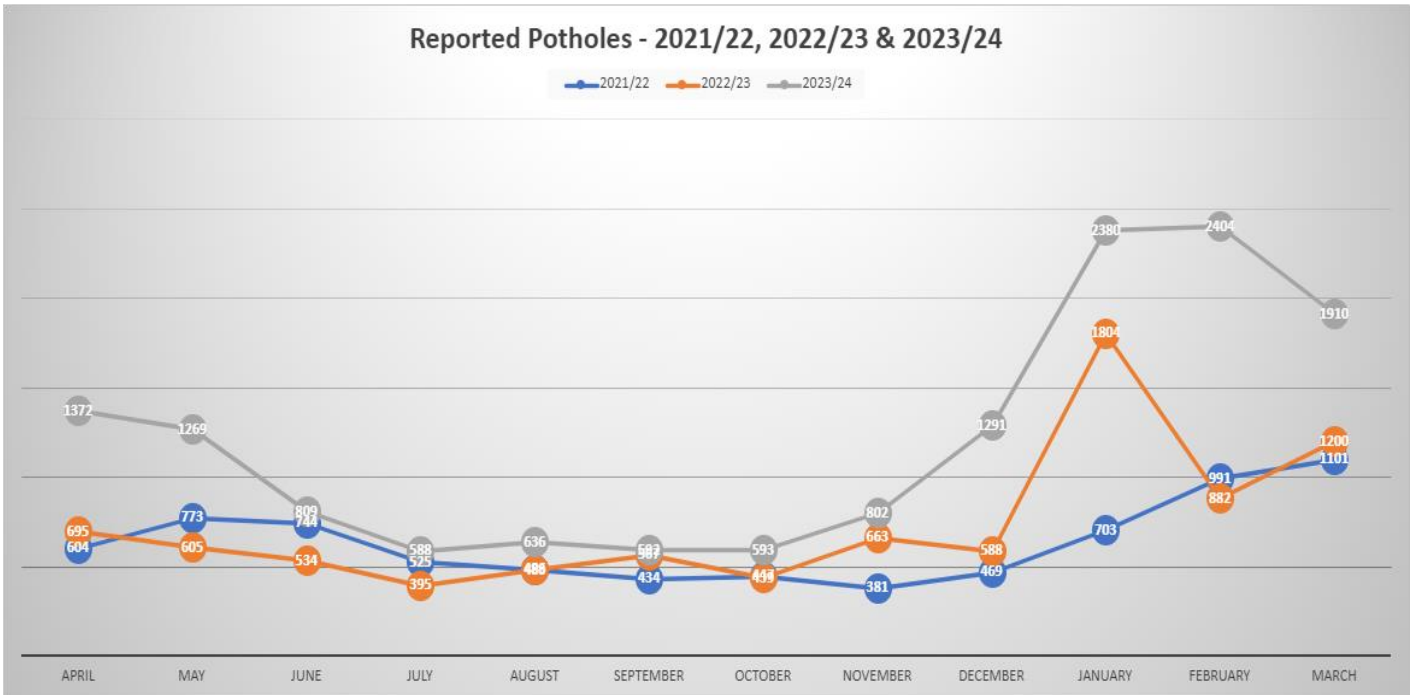
| | | |
|---------------------------------|-----|-------|
| Predicted Deterioration | 162 | 5.5% |
| Predicted Improvement | 138 | 4.7% |
| Net Improvement / Deterioration | -24 | -0.8% |

Appendix A3 – Highways Maintenance Investment

| Year | Revenue | Leeds Capital | LTP/CRSTS Capital | Additional Funding | Network North Funding | Total (inc Fees) | Works Total (inc Revenue) | Works Total (ex Revenue) |
|----------------|--------------------|---------------------|---------------------|--|-----------------------|---------------------|---------------------------|--------------------------|
| 2010-11 | £7,426,000 | £10,000,000 | £7,704,000 | £774,000 | | £25,904,000 | £23,827,702 | £16,401,702 |
| 2011-12 | £6,000,000 | £7,500,000 | £5,364,000 | £1,841,000 | | £20,705,000 | £19,201,776 | £13,201,776 |
| 2012-13 | £5,755,000 | £7,800,000 | £5,228,000 | | | £18,783,000 | £17,265,373 | £11,510,373 |
| 2013-14 | £5,455,000 | £10,000,000 | £5,005,700 | £2,587,000 | | £23,047,700 | £21,323,354 | £15,868,354 |
| 2014-15 | £4,971,110 | £10,000,000 | £4,643,000 | £3,286,082 | | £22,900,192 | £21,223,155 | £16,252,045 |
| 2015-16 | £4,611,110 | £10,000,000 | £5,916,000 | | | £20,527,110 | £18,684,029 | £14,072,919 |
| 2016-17 | £4,611,110 | £10,000,000 | £5,430,117 | £475,000 | | £20,838,106 | £19,016,417 | £14,405,307 |
| 2017-18 | £4,712,278 | £11,000,000 | £5,242,484 | £1,026,000 | | £22,465,581 | £20,463,791 | £15,751,513 |
| 2018-19 | £4,712,278 | £12,000,000 | £4,740,000 | £4,192,000 | | £26,631,581 | £24,052,045 | £19,339,767 |
| 2019-20 | £4,968,210 | £13,000,000 | £4,740,000 | £541,847 | | £24,237,360 | £22,026,788 | £17,058,578 |
| 2020-21 | £4,968,210 | £10,000,000 | £4,740,000 | £5,542,873 | | £26,238,386 | £23,696,935 | £18,728,725 |
| 2021-22 | £4,975,932 | £10,000,000 | £3,551,605 | £4,828,381 | | £24,177,013 | £21,575,854 | £16,599,922 |
| 2022-23 | £4,975,932 | £13,000,000 | £11,369,312 | in CRSTS | | £29,345,244 | £25,627,891 | £20,651,959 |
| 2023-24 | £4,975,932 | £13,000,000 | £11,937,778 | £2,450,982 | £2,036,200 | £34,400,892 | £29,912,339 | £24,936,407 |
| 2024-25 | £4,991,000 | £13,000,000 | £14,506,243 | Pothole fund now included in CRSTS funding | £1,454,800 | £33,952,043 | £29,534,257 | £24,543,257 |
| 2025-26 | £4,991,000 | £13,000,000 | £10,028,233 | | £1,454,800 | £29,474,033 | £25,739,333 | £20,748,333 |
| 2026-27 | £4,991,000 | £13,000,000 | £9,004,995 | | £1,454,800 | £28,450,795 | £24,872,182 | £19,881,182 |
| Total | £88,091,102 | £186,300,000 | £119,151,467 | £27,545,165 | £2,036,200 | £425,677,436 | £307,897,449 | £234,779,347 |
| Average | £5,181,830 | £10,958,824 | £7,008,910 | £2,754,517 | £509,050 | £26,669,030 | £21,992,675 | £16,769,953 |



Appendix A4 – Monthly Reported Potholes by Year



Appendix A5 – Pothole Repair Performance

Percentage of potholes reported repaired within service standard.

| Year | Cat-1 | | Cat-2 | | Cat-3 | | Cat-1&2 | | All Categories | |
|---------|--------|-----|--------|-----|--------|-----|---------|-----|----------------|-----|
| | Number | % | Number | % | Number | % | Number | % | Number | % |
| 2021/22 | 1,697 | 87% | 2,882 | 76% | 3,079 | 81% | 4,579 | 80% | 7,658 | 80% |
| 2022/23 | 911 | 81% | 3,393 | 86% | 4,551 | 85% | 4,304 | 85% | 8,855 | 85% |
| 2023/24 | 1,421 | 90% | 7,012 | 93% | 6,213 | 78% | 8,433 | 93% | 14,646 | 87% |