

CET/23/65

Corporate, Infrastructure and Regulatory Services Scrutiny Committee
28 September 2023

Highways Performance Dashboard – Summer 2023

Report of the Director of Climate Change, Environment and Transport

1) Introduction

In response to the recommendations of the Planned & Reactive Maintenance: Potholes & Drainage Task Group presented to the Corporate, Infrastructure and Regulatory Services (CIRS) Scrutiny Committee in March 2019 an updated Performance Dashboard Report has been produced. The intention of this report is to provide Members with an overview of the performance of the Highways and Traffic Management Team over the summer period.

2) Reactive Works

2.1 PIP (Public Interface Portal) Enquiries

Following the extremely high numbers of publicly reported potholes across the network during the first part of the year, and the increase in repair gangs as a response, numbers have gradually stabilised through the spring and into the summer, however, remain above average for the time of year (see Appendix A). This has meant that there is still some residual pressure on inspection teams in assessing backlogs. Evening and weekend working has remained in place in some areas to assist with this.

Work is underway to improve the messaging on the ‘report a problem’ webpages to reduce the number of defects that are incorrectly reported – since January this year this represents around 55% of all reports received.

2.2 Safety Defects

Following a very challenging winter for asset condition and safety defects, the numbers recorded across the network had reduced sufficiently that Highway Safety Inspectors (HSI) were able to re-start the identification of non-safety or ‘serviceability’ defects in June. This process offers HSI’s the discretion to record defects that do not meet investigatory criteria in our Highway Safety Policy.

Since April, the service has been trialling a product called ‘Elastomac’ which is envisaged to provide a lower carbon and cost-effective means of repairing carriageway defects. The mastic product uses up to 70% recycled materials, including lorry tyres, that would otherwise be incinerated and, in the right scenarios, allows reactive works gangs to undertake repairs much more quickly when compared to conventional techniques.

2.3 Winter Service

Preparations for winter have been taking place over the summer, with the fleet of gritters receiving their annual servicing and calibration checks. Works to install solar panels on some of the salt barns have also been progressed and salt stocks are being replenished ahead of winter.

By keeping the age of the gritting vehicles under 10 years old maintenance costs are reduced and ensures the fleet is safe and appropriate for the task in hand. In preparation for this winter, 8 of our oldest/most costly gritters will be traded-in against 6 nearly new vehicles. This will reduce the secondary fleet from 12 vehicles down to 10, an appropriate balance of service resilience against financial pressures.

The preventative treatment of some cycleways and footways around Exeter will continue following the success and positive reception last winter. The trial has led to national interest, including from the National Winter Service Research Group and an invitation for colleagues to present at the annual Cold Comfort Conference held in Harrogate in May.

3) Cyclical Operations

3.1 Gully Cleaning

Progress with the gully cleaning programme through to mid August is detailed in Appendix B.

The wet waste bay facility installed at South Molton depot has so far seen disposal savings of more than £24,000 during 2023.

Over 5,000 drainage issues identified by the gully cleaning crews and highway officers have been resolved since April. The challenge remains dealing with over 15,000 outstanding reported issues with funds available.

The ongoing trial to pre inspect gullies due to be cleaned on the cyclical programme has shown 49% of gullies inspected to date do not require cleaning. The aim of the trial is to ensure plant and equipment is being deployed where it is most effective. The communities in which the trial is taking place are listed in Appendix B.

A joint trial with Devon's Flood team to place gully sensors in selected streets in Devon is in the preparation stages. It is hoped this externally funded trial will offer insight into whether technology can be used to inform policy or reaction for cyclical gully cleaning. The trial intends to run for an 18-month period from the winter period.

3.2 Grips, Easements and Buddleholes

Delivery of the programme is under review to ensure this cyclical cleaning operation is being delivered efficiently whilst remaining cost effective.

A trial has been undertaken using electric hand tools that is seeing environmental gains along with cost savings.

Progress with the cleaning programme through to mid August is detailed in Appendix B.

3.3 Grass cutting

Despite a challenging growing season, the planned 1st cut of rural grass has been completed by the end of August. By working alongside Torbay Council efficiencies have been realised in our operations in the south of the county.

Urban grass cutting is now 75% complete with 3 of the 4 programmed cuts completed.

4) Tree Safety Management (including vegetation)

4.1 Expert Scheduled Inspections

As of the end of August, the major road network and additional high-risk sites in seven of the eight districts had received expert tree inspections. 306 records of defective trees have been created. At the same point in the inspection programme last year (2022), 245 records had been created. This represents an increase of approximately 25%.

4.2 Ash Dieback (ADB)

The expert tree inspections have recorded 113 individual reports of ADB, which is an increase when compared with 96 records at the same point last year. This mirrors the overall increase in the total number of individual trees reported with ADB, which is 437 compared with 235 trees at this point last year.

4.3 Highway Safety Inspections

Refresher training on tree assessment was offered to the Highway Safety Inspectors (HSI) towards the end of 2022, which included an explanation of how inspection reports are triaged and assessed. This training has improved the quality of the reports received from HSIs. As of the end of July 2023, 37 tree related defects had been referred to the Tree Safety Management Team for action. At the same time last year, 237 reports had been received though many of those defects were found to present tolerable or negligible risk.

4.4 Tree Inventory

Following successful trials of the National Tree Map dataset and the companion application (App) that has been developed, the data has been rolled-out across the county. While there are some limitations with the data (because of the way it is recorded from aerial imagery and LiDAR which means it underreports the number of trees in closely spaced groups and that the locations are based on the highest point of the canopy), it does provide some valuable intelligence on our highway trees and

represents a significant improvement in understanding our trees, enabling us to improve the way we manage them. A conservative estimate is that we have approximately 1.3 million highway trees (any tree within falling distance of the highway), of which only around 20% are on Council owned or managed land.

4.5 Overgrown Vegetation

In July a new workstream was formed to trial different ways of tackling the annual problem of high numbers of overgrown vegetation reports. At the same time as dealing with the backlog and new incoming reports of vegetation the project team will be focussed on defining a new process and methodology for the management of future reports. The aim is that this methodology can be properly implemented before the growing season in 2024.

5) Digital Transformation Project

The project continues to increase pace with the successful 'go-live' of three services;

- vehicle crossings,
- scaffolds and other structures,
- minor works on the highway.

In addition, a more comprehensive traffic management form has been incorporated which enables the service to obtain more accurate information about works being planned across the network. 'Apparatus and excavation' is due to go live within the next month and a number of online forms for the Public Rights of Way team are currently in development. Temporary traffic regulation orders/notices (inc. road closures) are in the design phase with development due to start in September.

The main focus for the project team is now the customer relationship management system; ALFIE (Applications, Licences, Faults, Information and Enquiries). A significant amount of development work has taken place, building the structure of the software, and more recently the functional elements of the system. The elements due to be released, by the end of September, include a customer communication tool which allows emails to be sent and received from within the system, internal notes to enable colleagues to liaise from within the system and workflow management. Workflow management assigns a set of predetermined tasks to a team or officer. This will help colleagues to manage workloads, provide valuable performance data and provide a better overview of the stage of an application for others who are involved in the process, and those dealing with customer queries.

Design work has begun on the contractor portal and a number of usability sessions have been held with a range of applicants, including contractors, parish and town councils and statutory undertakers. The portal will make it easier for the Service to monitor compliance with insurance and accreditation requirements while allowing applicants to view and monitor their existing applications, reducing the need for telephone contact. It is hoped to have the portal live in October and work is underway on an appropriate communication strategy.

In addition to the focus on providing licence and application management system for the service, and improved access to services for organisations and citizens, the

project has also identified opportunities to transform other aspects of the highways service, including opportunities to improve revenue recovery and improve existing business processes.

6) Delivery of the Capital Programme

Design and delivery of planned maintenance works continues to go very well. In addition to the £52.8m capital settlement teams have worked hard to ensure that the additional £9.4m funding that was awarded in mid-March 2023, is being invested to maximise impact on the network.

£8 million is being invested into the strategic A-road network, typically through resurfacing and associated drainage refurbishment. Within this funding there is an additional programme of works that addresses locations of known risk of wet-road skidding following SCRIM (Sideway-force Coefficient Routine Investigation Machine) surveys. A number of schemes have already been delivered, with others programmed for delivery during September notably Dawlish Rd, Alphington and Fore Street, Heavitree.

Approximately £17 million of planned works are scheduled to be delivered via the Local Asset Capital Programme. This programme aims to prioritise schemes for lower category local roads outside of the A-road network. It is a process that brings different asset data sources and local knowledge together focusing more on the holistic needs of the network, and therefore includes a range of different work types including: resurfacing, patching, footways, drainage, cattle grids, etc. Delivery is progressing well, with a large proportion of the works delivered ahead of winter.

Approximately £6 million is to be delivered through short notice, planned works including minor hand patching and dragon patching on the more minor network. All of which are identified through centrally managed inspections and delivered via a rolling program.

Approximately £7.8 million of planned works are programmed to be delivered by specialist contractors, including surface dressing, high friction surfacing and road restraint systems. The majority of this value is allocated to surface dressing which is a preventative treatment recognising the authority's asset management approach to lifecycle planning and long-term value for money. Despite the inclement weather during the summer season, the surface dressing programme is on track to be complete by early September, which will result in approximately 150 miles of carriageway sealed from water ingress, along with increased skid resistance. A programme of micro asphalt, is due to commence at the end of Aug and be completed by mid-September. Micro asphalt is a relatively low-cost preventative surface treatment similar to surface dressing but is more suitable for urban and residential environments.

£9 million is planned to be spent on bridges and structures. These works include various pedestrian and cycleway bridges such as the replacement of the Gem Aerial Walkway on Drakes Trail which has just been completed, and a contract has been awarded for the replacement of Exe Estuary Trail Courtlands Boardwalk commencing in September and Ley Meadow Footbridge in Barnstaple later this year.

The Engineering Design Group are developing schemes including Collapark Railway Bridge and Bovey Bridge Cantilever Footway for delivery this financial year.

Bridge safeguarding schemes are planned this year for replacement of the existing parapets (similar to recent schemes at Torridge and Taw bridges) for Humber Lane and Lindridge bridges which span the A380. Joints, bearings and waterproofing schemes are being planned, including emergency work to repair a failed expansion joint to Rolls Farm Bridge, Ide.

Approximately £2.1 million is held for resilience contingency which has been drawn heavily upon, particularly due to the severe weather event in early May. This event resulted in heavy flooding, particularly in the east of Devon leading to road surface and structural damage, alongside heavy debris resulting in multiple legacy works.

The Service continues to engage with the market sector to encourage innovation that will serve to provide the Council with the means to be more versatile in meeting changing environmental, political and funding pressures. To this end approximately £3.6 million has been allocated to a Cross Asset Innovation Fund. Notable programs include a hybrid rural road maintenance trial and a retread recycling programme. The hybrid rural road trial is currently ongoing on three roads in west Devon, the learning from which will hopefully help inform maintenance practices on heavily deteriorated lower category roads. The retread recycling programme is programmed to start mid-September, through to early October across five sites in north and west Devon.

Finally, approximately £0.9 million is programmed to be spent maintaining the public right of way and cycle network, with works allocated and planned for delivery this financial year.

7) Street Lighting and Traffic Signals

The delivery of the capital LED replacement scheme continues towards completion, with a total of circa 70,000 streetlights expected to be converted to LED by the end of this financial year.

In addition, approximately 1,400 lamp columns are planned to be replaced this year as part of the ongoing asset management programme.

The Central Management System (CMS) that allows control of lighting levels continues to expand beyond Exeter, with a target of covering circa 80% of Devon's total lanterns across a 2-year roll-out programme. There are already 22,000 streetlights connected to this system and Tiverton, Barnstaple, Ilfracombe, Ivybridge and Tavistock have been added to the programme.

The combined impact of the above programmes is a continued drive to reduce carbon and energy usage. A decade ago, the County Council's energy usage was circa 31m kWh, whereas by the end of 2022/23 this had dropped to 13m kWh, a reduction of 57%. Similarly, the associated carbon emissions for the same period have dropped from 9.5 tonnes of CO₂ to just 2.8 tonnes, a reduction of 70% and

continues to drop as the LED roll out is finalised and the installation of the CMS provides options for the future of lighting.

8) Traffic Management

8.1 Planned Works

The condition of the lining assets has been an important focus for the Traffic Management Team which delivers our Parish Remark programme of lining in our communities with priorities identified by our Neighbourhood Highways team.

The budget currently available represents only a small portion of the asset value. Recent inventory gathering has placed a total replacement value on our lining asset of approximately £18m.

Since April 23, parish remarks have been undertaken in 6 of our communities with works planned in a further 13. The main road remarks and road stud replacement programme has completed 8 locations with a further 12 locations planned. Details of these locations can be seen in Appendix C.

In order to improve the lining assets a proposal to utilise Methyl Methacrylate (MMA) lining as standard across the county has been developed. The cost of applying MMA is higher than traditional thermoplastic material but it has a far greater life span offering much improved value for money in the long term. A further benefit is that this is a cold laid product, as opposed to thermoplastic that is laid at temperatures in excess of 200 degrees centigrade, improving the safety of our workforce.

Following a review, it has been identified that the condition of our rural give way markings was an area for improvement and that these provided important information to drivers. As such a new workstream has been developed to systematically remark these features in rural areas. There are approximately 6,000 markings that will be treated through this project that is anticipated to take 4-5 years to complete. Since April 2023, our contractor has delivered works to approximately 80 junctions in the South Hams area where works will continue through the year, the expectation being that the whole of that District area will be treated this financial year.

8.2 Programme

Each year our Traffic Management team delivers an extensive programme of work including high profile projects such as our waiting restriction, speed limit, and residents parking projects, along with maintenance of signing, lining, and road studs. Including most recently the launch of new residents parking schemes in Topsham and Exmouth.

Since April, 162 requests for waiting restrictions have been delivered through the Highways and Traffic Orders Committees (HATOC) Waiting Restriction Programme and work has continued on 20mphs limits in Winkleigh, Atherington, Ashburton and Tiverton, which will be implemented later this financial year. In addition, the team have progress 350 applications for new or the remarking of disabled bays and 56

applications for new or the remarking of Access Protection Markings which have been processed and orders for works placed.

A total of 26 Traffic Regulation Orders have been advertised and 24 sealed.

Following agreement of new Policy at Cabinet on the 9 November 2022, additional work has been bought into that programme to deliver reviews of parking management in 8 of our communities, the application to Department for Transport for Moving Traffic Enforcement powers, and relaunch of our offer of sponsorship of highway assets. As such the delivery programme has been reviewed to ensure key tasks are delivered, the team provide regular updates to members on their programme and a link will be circulated for Members.

9) Carbon Reduction Project

The infrastructure for electric vehicles has been extended, with 8 charging points in place throughout various DCC locations such as Great Moor House and a number of depots. The service is operating with 13 electric vehicles across the Neighbourhood Teams and Civil Parking Enforcement with a further order expected shortly.

Since April 2023, the service has been able to use hydrated vegetable oil (HVO), as an alternative fuel to diesel. This has been rolled out in the north and west areas of the county. The HVO is derived entirely from food waste and has an associated reduction in carbon emissions in the order of 90% when compared with diesel at no increased cost.

All contractors delivering new construction and maintenance works on behalf of the Council have been required to provide returns on their operations via the new web portal developed on behalf of the Service. These returns allow an estimate of the total carbon emissions associated with the works to be calculated. Although early in the journey, this data is being used to understand trends and patterns for carbon hotspots which in turn will focus efforts to reduce or eliminate carbon. The service has also used the data to develop a Highways Decarbonisation Strategy. Governance arrangements have been established which saw a revised carbon board meet in July.

Work with software suppliers has led to the development of number of carbon dashboards that will give the ability to understand and view carbon emissions when setting programmes of work. Although in its early stages, this is a major step towards truly embedding carbon reduction into our work programmes.

Meg Booth

Director of Climate Change, Environment and Transport

Electoral Divisions: All

Cabinet Member for Highway Management: Councillor Stuart Hughes

Local Government Act 1972: List of Background Papers

Nil.

Contact for enquiries:

Name: Robert Richards

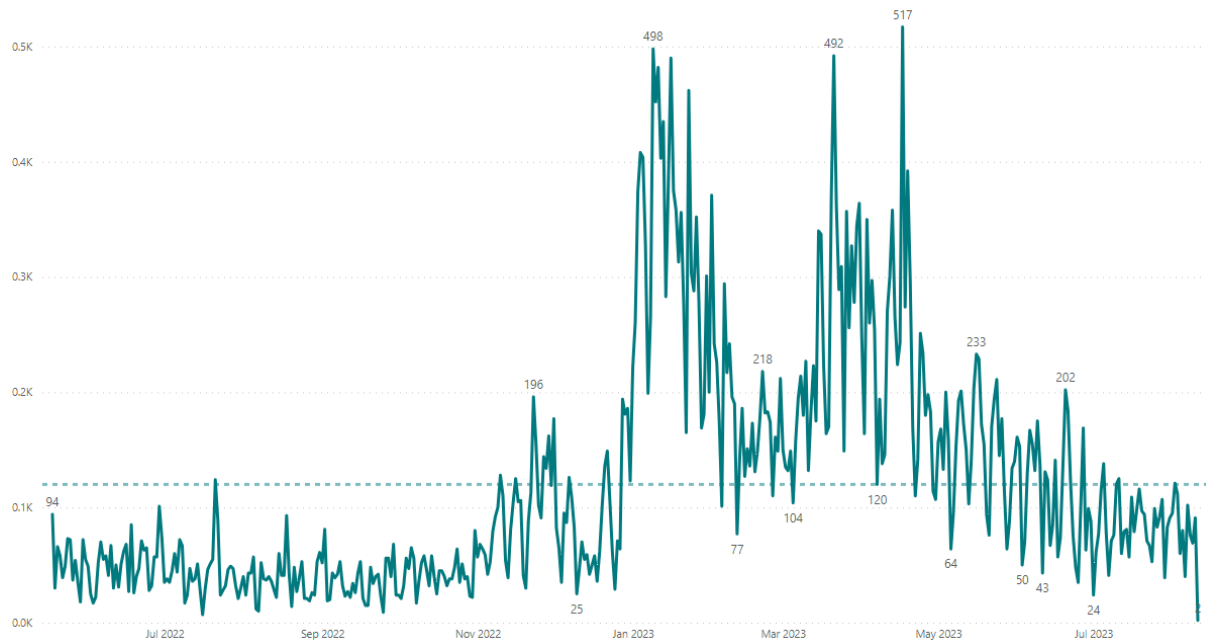
Telephone: 01392 383000

Address: County Hall, Exeter. EX2 4QD

Highways Performance Dashboard Summer 2023 - Final

Appendix A to CET/23/65

Public reports of potholes received since July 2022



Number of potholes recorded across the Devon network per month/year to 10 August 2023

	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Avg
April	3,489	9,782	3,741	6,505	3,904	2,981	4,627	5,004
May	4,329	6,339	3,344	4,764	4,248	3,493	4,181	4,385
June	3,293	5,120	3,713	5,179	5,743	2,948	3,731	4,247
July	3,148	5,225	2,719	4,040	4,301	2,759	3,466	3,665
Aug	3,352	4,423	2,041	3,071	3,845	2,343	3,766	3,263
Sept	2,831	3,378	2,745	3,297	2,874	2,132		2,876
Oct	3,750	3,137	3,013	2,465	2,545	1,477		2,731
Nov	4,316	3,434	3,931	3,349	2,697	2,648		3,396
Dec	3,766	3,533	3,393	2,465	2,723	2,432		3,052
Jan	7,408	5,770	6,694	5,181	3,494	7,376		5,987
Feb	7,687	5,121	5,269	5,619	2,972	4,308		5,163
March	8,523	6,706	7,884	6,190	4,917	4,888		6,518
Total	55,892	61,968	48,487	52,125	44,263	39,785	19,771	46,025

Appendix B to CET/23/65

Gully Cleaning Programme

As of 13/08/2023 (37% through the financial year)

	Total Programmed	Gullies Attended	Remaining	% Complete Overall
Exeter	37,436	8,176	29,260	22%
East & Mid Devon	27,408	7,985	19,423	29%
Teignbridge	16,596	7,959	8,637	48%
South Hams	13,571	4,931	8,640	36%
West Devon	22,175	8,630	13,545	39%
Torridge	16,196	5,216	10,980	32%
North Devon	22,352	6,947	15,405	31%
Totals	155,734	49,844	105,890	32%

Gully Inspection Trial - Communities

Appledore
Ashburton
Berrynarbour
Bickleigh
Bideford
Buckland Monachorum
Combe Martin
Cornwood
Crediton
Exeter City
Exminster
Exmouth
Fremington
Ilfracombe
Lamerton
Moretonhamptead
Newton Poppleford & Harpford
Northam
Orchard Hill
Shaugh Prior
Sparkwell
Tavistock
Tedburn St Mary
Upton Pyne
Westward Ho!

Grips, Easements and Buddlehole Cleaning Programme

As of 13/08/2023 (37% through the financial year)

	Total Asset Programmed	Total Assets Cleaned	Left to Attend	% Complete
South Devon	12,673	4,363	8,310	34%
North Devon	14,341	5,252	9,089	37%
West Devon	20,188	7,768	12,420	38%
Torridge	22,033	7,082	14,951	32%
East Devon	42,680	13,149	29,531	31%
Totals	111,915	37,614	74,301	34%

Appendix C to CET/23/65

Traffic Management Programme

Since April 23, parish remarks have been undertaken in 6 of our communities

Bovey Tracey
Cullompton (on going)
Dartington (on going)
Exminster (on going)
Tedburn St Mary (on going)
Topsham

With further works planned for the remainder of financial year:

Axminster
Broadclyst
Colyton
Dartmouth
Ilsington
Mary Tavy
Newton Poppleford
Northam
Pinhoe
South Molton
St David's & Haven Banks
Staverton
Tavistock

Since April 23, main road remarks and road stud replacement have been undertaken on:

- A39 County Gate - Blackmore Gate
- A3079 Brandis Corner - Fowley Cross
- A376 Exmouth - Clyst St George
- B3344 Bovey Tracey - Chudleigh Knighton
- B3387 Bovey Tracey - Widecombe in the Moor
- C454 Heathfield roundabout - A383 Goodstone
- C90 Knighton Heath - Clay Lane
- C156 Ashburton - Buckfastleigh

With further works planned on:

- A361 Bolham roundabout- South Molton
- A3122 Totnes Cross - Dartmouth sea front
- A382 Heathfield Roundabout - Whiddon Down roundabout
- A388 Cornwall - Liftondown
- A388 Holsworthy - Cornwall
- A388 Landcross - Holsworthy
- B3178 Exmouth - Knowle Hill roundabout
- B3180 Knowle Hill roundabout - Four Firs
- B3227 South Molton - UMBERLEIGH
- C463/C465 Lewtrenchard - Pitland Corner
- C773 Bovey Tracey - Manaton
- Tesco loop Ilfracombe