



Hampshire
County Council

Highways

MILESTONE
INFRASTRUCTURE
A part of MGroupServices

Annual review

2022 – 2023



STRONGER
ROADS
TODAY



Hampshire
County Council

hants.gov.uk/roads



Dragon patcher at work in Eastleigh

A year of record breaking challenges



**Councillor
Nick Adams-King,**
Executive Lead
Member for
Universal Services

The challenge of managing Hampshire's road network over the last 12 months (period running from August to August) has been unprecedented. Anyone using roads in Hampshire and elsewhere will be fully aware of the impact that sustained wintry weather has had on our highways which has led to a record number of reported potholes and other defects and, equally, a record number of repairs. But sharply rising inflation along with shortages in labour and continued shortfalls in Government funding for road maintenance, have stretched our resources to the limit.

In July, the County Council confirmed a further increase in our road maintenance budget of £22.5 million over the next three years. This enhanced funding was a recognition of the scale of work that is required to make Hampshire's roads stronger now, and more resilient ahead of another expected period of winter damage.

Over the past 15 years, national funding from Government for local roads has continued to fall significantly in real terms. So the Government's confirmation in November of a further £132 million for Hampshire over the next eleven years goes some significant way to address the impacts of this shortfall, which has recently limited our ability to deliver planned, proactive road maintenance. Having a long-term settlement enables us to plan ahead carefully with more certainty, and to allocate and prioritise our resources more effectively. We are still examining the detail of the Government settlement, and also awaiting further guidance from the Department for Transport but, that notwithstanding, the extra money will help to tackle the challenges of unprecedented demand, inflation rises, and the impacts of weather events. Importantly it will enable us to manage our roads to a standard that our residents rightly demand. Despite this, with an estimated backlog of repairs and road maintenance now totalling £500 million pounds, it does not solve the issue of funding entirely.

Our highways service is always at the coalface of changing weather patterns, which has a profound impact on our day-to-day operations, as well as the economics of running the service. We've continued to take action to adapt to climate change now, and in the future and in April, we were selected to be part of the ADEPT SMART Places Live Labs 2 programme, a £30 million UK-wide initiative funded by the Department for Transport. Through Live Labs 2, we are working with Somerset and Cornwall Councils to explore ground-breaking ways to decarbonise routine highway maintenance along seven defined road corridors. The results, we hope, will provide a best practice template for all local authorities across the country, and it underscores our ongoing ambitions to act as an environmental leader.

As we look to the year ahead and on to 2025, budgetary pressures that are facing the County Council as a whole will continue to present us with difficult choices over where we invest our limited resources. However, I am confident that our Highways team, given its strong track record of delivery, governance, and a commitment to innovation, can rise to these challenges and continue to provide a high-quality, professional service to all our residents and road users, within the funds available.

Tim Lawton



Tim Lawton,
Assistant Director -
Highways, Engineering
and Transport

Everything we do in Highways, from fixing road defects, designing new and improved roads, dealing with severe weather events to being the day-to-day custodians of the road network, is focused on keeping traffic moving safely 24 hours a day, 365 days a year. Throughout another year of exceptional demand, I'd like to pay tribute to all our frontline teams for their continuous dedication and professionalism in providing these critical services in a safe way, often in extremely difficult and hazardous conditions, which can include working at night and at weekends.

It is testimony to the strength of our relationship with Milestone that we continue to perform robustly despite challenging industry circumstances, not least of which is staffing shortages across the sector that we collectively operate in. Our endeavours are also only possible thanks to the strong partnerships that we have with our communities as well as the borough, district, town and parish councils.

At the heart of our operations is a commitment to our workforce. We strive to ensure all staff have the skills and equipment required to work effectively and safely. This approach is embedded in everything we do, fostering a positive health, safety and wellbeing culture. We also want to attract the best people to work for us, with a focus on providing career opportunities especially for young people living in Hampshire. This is reflected in our

engagement with local schools and colleges, and the provision of apprenticeships and work placements.

Seeking and exploiting innovative solutions is another key part of the service we deliver, and this approach has already yielded added value to the highways service this year. For example, we have examined how we can more effectively prioritise and schedule work to increase productivity and hasten the repair process for potholes. Similarly, we are continuing to develop the materials produced at our Micheldever Recycling Facility, all of which go back into the road network, thereby reducing the need for new materials, and at the same time reducing costs and carbon.

Despite the intense challenges, it has been another year of sustained delivery, and I remain immensely proud of what we continue to achieve as a service.

Simon Watson



Simon Watson,
Business Director,
Milestone Infrastructure

In last year's Annual Review, we showcased how we had scaled up to deal with the toughest storms to hit Hampshire in 30 years. This year I reflect on an even tougher winter that has stretched the service and our resources even harder. The combination of heavy rain and flooding in December and January, followed immediately by long spells of sub-zero temperatures, caused ice hazards and significant damage to the roads, resulting in record levels of potholes.

We stepped up resources, bringing in more pothole and patching gangs to address the challenge, whilst working collaboratively to change our processes and implement our Rapid Response Pothole Teams. Using newly developed technology, our teams worked around the clock to repair the roads and we broke all records by filling over 2,000 potholes in one week and over 11,000 over an intensive eight-week period. We continue to fill potholes and patch repair the roads and will retain the additional resources throughout the year in readiness for next winter and beyond.

We were delighted to be able to play our part in securing the Department for Transport Live Labs 2 funding. Working with other clients and even our competitors to develop new ways of working to reduce carbon emissions is an exciting opportunity. We have continued to invest locally in our Micheldever Recycling Facility, producing our own concrete from recycled planings.

Meanwhile we have opened a Hampshire drainage waste facility at Northington, that has reduced both the cost and the carbon emissions in gully waste. We are now three years into implementation of our award-winning Highways Carbon Reduction Strategy and later this year we will be publishing the latest update, extending our commitment to 2029.

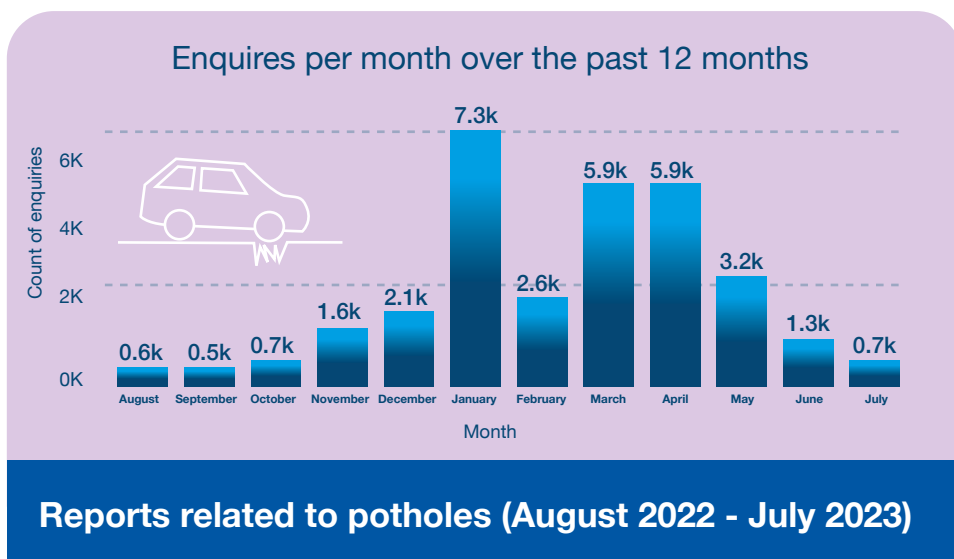
We have delivered more than ever during the last year, including some exciting projects that I am proud to showcase in this annual review. These projects have been delivered as part of our extended collaborative partnership with Hampshire through to 2029. This contract extension has enabled us to invest in local jobs and skills, whilst strengthening our relationships with key local partners who operate on our network.

In 2023 Milestone Infrastructure became the largest local authority service provider in the UK, which means we have the resources and resilience to be able to respond to local Hampshire needs. Our diverse and local supply chain of long-term partners ensures we are ready to respond. The additional funding that Hampshire County Council has committed is making a difference to tackling the pothole challenge, and we remain focused on delivering Stronger Roads Today.

Our Journey to delivering Stronger Roads Today

*“Extreme weather conditions over winter 2023 caused record levels of potholes and road defects. This unprecedented period stretched our resources to the limit, leading to an intensive focus on reactive repairs. Additional resources were mobilised to meet this demand. We enter the winter period in a stronger position to tackle the challenges that the colder, wetter weather will bring following the allocation of an extra £22.5 million over the next three years” - **Tim Lawton, Assistant Director***

Another winter of prolonged wet and freezing weather, along with many years of insufficient national funding for highway maintenance have taken their toll on the local road network in Hampshire. We are tackling this situation head on, innovating our methods of work to not only repair defects on our network, but to make our roads stronger.



This was evident in our agile response to repairing road defects throughout May, June and July this year. After receiving almost 12,000 reports related to potholes during March and April, we put a process in place to fast-track customer reports, and enable repair crews to be deployed without the need for engineer inspections. This was supported by a ‘find and fix’ approach, enabling the crews to fix any defects that they found on the network, without the need for an order to be raised. To ensure that we captured details on the volume and location of additional potholes repaired, we developed a Survey app for deployment on our crews’ devices. We deployed repair gangs to target defects by region, maximising the effectiveness of this initiative. As a result, we repaired over 11,000 potholes via this ‘find and fix’ approach over a period of 12 weeks.

With over 5,000 miles of roads on our network and with widespread damage still evident, the need for structural repairs remains high.

Stronger Roads Today

A further £22.5 million of investment was confirmed in July which is allocated to fix thousands more potholes over the next three years. It will fund extra measures to make Hampshire’s road network stronger, and tackle the backlog of defects. This includes Rapid Response teams who can quickly mobilise to fix safety defects; more structural patching teams to deal with larger repairs; and additional spray injection patching machines to join our existing fleet of dragon patchers – both machines can repair carriageway defects much quicker than traditional methods. We will also trial new methods for fixing roads across the 2023/2024 winter period.

Preparing for winter

Planning for the winter season begins in spring with a thorough review to identify successes and areas for continued improvement. Gritting routes are analysed as part of this process, with necessary adjustments made ahead of trial runs that take place each September. This year we have been focusing on navigation improvements, using the off season to trial new technology, which is now under consideration.



We have also been working collaboratively with Hampshire Transport Management on a summer overhaul of our fleet of 42 gritter lorries. 700 hours of technicians' time was dedicated to servicing and upgrading the fleet, ensuring that we are ready for the demands of the upcoming season. Our depot facilities have undergone refurbishment, including the brine tanks that are used to pre-wet salt which makes the material more effective.

Hampshire's network of over 3,000 salt bins has been checked to assess the condition of the containers and loosen the contents.

STATS – salting numbers/emergencies

17,700

tonnes of Salt
(Enough to fill
20 Olympic
size swimming
pools)

Treated more than



140,660

miles of road
(equal to driving seven
times around the Earth,
or more than halfway
to the Moon)

Environment and Sustainability

We continue to drive forward our work to reduce carbon emissions and become more resilient to the impact of climate change, in line with the County Council's strategy. An annual report will be published in 2024 to set out in detail the progress made, with a summary of highlights as below.

Rewilding trial

We manage 15 million square metres of verges to maintain road safety, and how we do this makes a big difference to nature too. We work with the conservation charity, Plantlife UK (the organisation behind No Mow May), to ensure our work promotes biodiversity and we avoid, as far as possible, cutting back at ecologically important times of the year, particularly at sensitive sites. Our teams have identified over 220 road verges of particular ecological importance and these areas are only cut in April, and/or in late September, avoiding important flowering and seeding seasons.

In 2022, we partnered with Wildflower Turf to rewild several roadside verges, with the aim to improve biodiversity through species diversity and to lessen the amount of required maintenance. Two trial sites were seeded with wildflower mixes which we'll continue to monitor over the coming year.



Rewilding trial site in Waterlooille



Micheldever

Micheldever Recycling Facility

Our industry-leading road materials recycling facility has now been operational for over two years. We use the facility to recycle asphalt waste into materials that are used for resurfacing, saving up to 40% of carbon compared to standard hot asphalt. In 2022-23 the facility **recycled over 13,146 tonnes of waste**, saving over **237 tonnes of carbon (CO₂e*)**, which is equivalent to the estimated carbon emissions generated when driving over 850,000 miles in a petrol car.

This continued development has earned the Micheldever facility recognition within the industry, as we were highly commended in the de-carbonisation category of the 2023 Chartered Institution of Highways & Transportation Awards. We will use this momentum to expand our use of recycled materials within our planned works and routine maintenance programmes.

Northington gully waste facility

In March 2023, we opened a new Gully Waste Recycling Facility in Northington which is allowing us to safely treat gully waste on County Council premises rather than sending on to third parties for processing. The depot removes water from gully waste, reducing the quantity of waste material that goes on for treatment by external contractors. It also reduces the distance travelled by gully trucks as the facility is located at the base for gully treatment vehicles in the centre of the county.



Northington Gully Waste Treatment Plant

Further plans to expand the facility include introducing a material treatment plant. This would allow extracted materials such as sands and aggregates to be used on the network. At capacity (42,000 tonnes of gully waste), this could prevent over **3,500 tonnes of carbon (CO₂e*) annually** from being released into the atmosphere, when compared to traditional gully waste disposal methods.

Volumetric mixer

Over the year, we have trialled the use of a mobile volumetric concrete mixer. This innovative machine enables concrete to be made completely from the gravel and tarmac taken from previous road repairs and for it to be delivered to work sites right across Hampshire. The mixer's green credentials are further enhanced by the fact that it is fuelled by low carbon hydrotreated vegetable oil (fuel).

“We are always looking to innovate when it comes to the materials and resources used across highway maintenance activities, and this is a further example of how we are striving to embed sustainable and climate friendly methods in our operations.”

– **Cllr Nick Adams-King, Executive Lead Member for Universal Services**



Volumetric mixer

* CO₂e (carbon dioxide equivalent), is a way of expressing all the different greenhouse gases as a single number

The Year in Numbers



6,317
Emergencies
attended



169,350
Drainage assets
cleared



102,990
Potholes and other
carriageway
defects repaired



152,105
SqM carriageway
resurfaced

56,136
SqM heavy patching



33,938
SqM footway repaired
and resurfaced



833,676
SqM surface treated



106,375

Enquiries managed



100

Planned work schemes completed



1,486

Drop kerbs approved



4,338

Licences processed

2,331

Arboriculture jobs completed

2,328

Trees planted



7,599

Other jobs completed ▶



4,160

Hedge enquiries ▶



Major Schemes

Tunbridge, Winchester

In March 2023, we started work to refurbish the Tunbridge river crossing, located on Garnier Road, Winchester. The structure is 100 years old and the bridge deck that carries the road over the bridge needed to be replaced due to its ageing condition. These essential engineering works will ensure that the structure remains safe and in a serviceable condition for the next 100 years.

The new structure will meet modern weight standards and has been designed to be constructed with as little disruption to pedestrians and cyclists as possible. It will also complement the picturesque surroundings and nearby red brick heritage features.

During the bridge replacement works, we have also been carrying out improvements to the drainage system and nearby footpaths along Garnier Road. This forms part of the County Council's proactive maintenance programme, ensuring Hampshire's roads are more resilient to the effects of extreme weather and heavy traffic.



Tunbridge improvements

Redbridge Causeway

Work has continued on a major project to upgrade the A35 Redbridge Causeway, a major route in and out of Southampton used by around 60,000 vehicles every day, including traffic heading to the port.

In recent months, teams have completed re-waterproofing and re-surfacing work of the three bridge decks supporting the eastbound carriageway. Concrete repairs to the supporting structures of the West Bridge, East Bridge and railway piers are all progressing well.

Upon completion of the project, we will have reinforced over 100 concrete supports, whilst installing a cathodic protection system to effectively prolong the life span of the existing structures. Footways, footpaths and existing cycle routes have also been improved to make cycling and walking an easier option. This successful completion of this major engineering project in early 2024 will ensure this vital connection is able to serve Hampshire residents, commuters, visitors and freight traffic for many years to come.

Tactical diversion routes

When part of the strategic road network (motorways and trunk roads) needs to be closed for maintenance work or an incident, traffic is usually diverted onto specific local roads. These are known as tactical diversion routes.

In March, we completed resurfacing schemes on the A27 in Fareham and the A3093 in Andover to upgrade and strengthen key parts of these routes that are often used by National Highways. We delivered these time sensitive schemes, both funded by National Highways, on schedule, and despite some very challenging weather conditions.

At Walworth roundabout in Andover, our engineers identified issues with the levels on the existing road, but these were quickly resolved with excellent results (as pictured below). This was quickly followed by an equally challenging project to resurface part of the A27 in Fareham. Planned work on the nearby M27 motorway during March left our team with a very tight working window to undertake this scheme. However, this was successfully completed over 12 nights, significantly improving the surface on a well-used and critical route in South Hampshire.

The successful completion of both of these complex schemes demonstrates our excellent track record of project delivery. We recognise that working in such a fast-changing environment requires agility and our collaborative approach across all of our teams, including the supply chain, ensures that we can rise to any challenge.



Andover resurfacing

Recruitment and skills

We pride ourselves on providing opportunities for our people to gain new skills and develop their careers. Recruiting locally and upskilling our teams ensures that we remain agile and can continually improve the quality of our service.

Attracting new talent

Across the year, our team has taken part in events to engage with young people across Hampshire, with a view to providing information on a career with Highways. This includes careers fairs, mock interviews and CV workshops.

In February, we attended 'Get Inspired: Basingstoke & Test Valley', a Science, Technology, Engineering and Maths (STEM) fair. Through this event, we met over 500 secondary school students. Pupils were invited to name two of our gritter lorries at the event - the two winning names were 'Elvis Spreadsley', suggested by Daniel Owen (year 10) from Brighton Hill Community School, and 'Grit of Thrones', submitted by Paige Rhodes (year 9) from The Costello School. Both winning students received a visit from the newly branded gritter vehicles.



Gritter visit to The Costello School

During the last year, we have recruited:



9 new Highways Operative apprentices



10 new Highways Engineer apprentices

We are well placed to offer young people in Hampshire opportunities to gain work experience and give them a first step on the career ladder. We already offer short term work placements to local college students; and we are now exploring the development of longer placements that could count towards a formal qualification such as a T Levels, which combine practical experience with classroom learning.

Skills development

Our Highways Operation Centre staff manage high volumes of customer queries (they have dealt with over 106,000 in the last year alone). To improve our service, 23 members of staff from the team have this year completed accredited training courses run by the Institute of Customer Service. These courses have helped to develop, refresh and improve customer service skills, supporting our commitment to improved operational performance through service excellence.

Furthermore, 17 colleagues across our Highways teams have undertaken apprenticeships. Subject areas covered include data science, leadership and management skills.

Nicolle Cloete

Nicolle, our Totton Depot Coordinator, has been a member of the Highways team since 2017. As an aspiring team leader, she has been undertaking a Level 3 Leadership & Management apprenticeship this year. This has enabled Nicolle to grow her understanding of how to successfully manage people, tasks, and projects.

As part of her development, Nicolle mentored a student who completed a supported internship placement at our Totton depot between May and August of this year. Whilst overseeing this placement, Nicolle was able to apply the knowledge and skills she was building through her apprenticeship.



Nicolle Cloete

“Our supported intern wasn’t particularly forthcoming with their ambitions at first. Fortunately, I was able to apply what I have learned to identify their motivations and determine what made them feel comfortable. This enabled me to tailor their learning programme, targeting the student’s areas of development and prepare them for future employment.

Learning about behavioural styles has improved my confidence when it comes to delivering feedback. This certainly helped with the mentoring and it’s improving my level of influence when it comes to everyday activities as part of our service. I’m really appreciative of the opportunity to develop my skillset and I’m looking forward to furthering my career with Highways as a result.” – **Nicolle Cloete - Depot Coordinator**

What We Deliver - Every Day





Going the Extra Mile

Hythe Marina culvert collapse

In May 2023, a culvert collapsed on the only road into Hythe Marina village, leaving a void that was 8 metres long and 3 metres wide. Our teams quickly closed the road to all traffic, other than for emergency access. After consulting the leaseholder of the property, we agreed to erect a temporary bridge, which would allow for limited access.

Our engineers had to consider many challenges when planning this operation, such as: the limited space for traffic, allowing room for the culvert repair alongside the temporary structure and the requirements for routing pedestrians through the site.

This complex task was completed within three working days, thanks to effective partnership working with several agencies. The process began with the bridge lifted into place via a crane, before we built small ramps leading up each side. To finish the project, we applied a layer of asphalt over the structure, ensuring that road users could cross the bridge safely.

The bridge remained in place for 10 weeks, until a permanent repair could be safely carried out.

Caught in a prickle!

In June 2023, one of our Highway Engineers got a spiky surprise when attending to a report of a missing drainage cover in Eastleigh. Liam Houghton arrived on site to find that a hedgehog had taken up residence in the drainage pipe.

The hedgehog had rolled into a tight spiky ball making it more challenging to extract safely. Liam called on a local animal expert to assist so that the animal could be carefully removed.

Following a check-up by a vet, the hedgehog was diagnosed with dehydration and given a course of antibiotics. After five-days and a clean bill of health, we were able to return the animal back into the area where she had been found.



A helping hand



Hythe Marina temporary bridge



Hampshire
County Council

Highways

