



Hertfordshire County Council Additional Highway Maintenance.

Made possible by reallocated HS2 funding.

The Department for Transport have released additional funds for highway maintenance. The funding uplift is to help ensure the impact of increased highway maintenance is truly transformational for local communities and road users up and down the country. Further information regarding the additional funding from the Government is available at the following links:

Local leaders to receive £4.7 billion to transform transport across the North and Midlands - GOV.UK (www.gov.uk) £8 billion boost to repair roads and back drivers - GOV.UK (www.gov.uk)

In Hertfordshire the benefits of additional funding are outlined below:

2023/2024 additional £3.9m of funding from the Department for Transport (DfT) Road Resurfacing Fund for local highways maintenance, particularly for the resurfacing of carriageways, cycleways, and footways to prevent potholes and other road defects from occurring.

2024/25 will see an additional £7.6m of maintenance funding for Hertfordshire's highways, broadly comprising:

- £5.6m of additional DfT 'Network North' funding and

- £2m of additional funding from HCC 'Preventative Maintenance' capital funding **2025/26** will see further additional funding from both of the above sources.
- £9.1m of the DfT Network North funding (This has been assumed for our Integrated Plan, or Budget forward planning purposes as an even pro rata spread of HCC's total £88m share of the funding over the remaining years although the value for future years has not yet been confirmed)
- £3m of additional HCC 'Preventative Maintenance' capital funding.

Together these amount to an additional £19m of funding over the next two years.

It should, however, be noted that exceptional inflation over the last two years driven by international events has significantly increased construction costs and that this has reduced the buying power of both the core highway budgets and this additional funding, meaning that they will not buy as much as they would have done two years ago. Nonetheless this additional funding is much welcomed and will mean our network will be in a better condition than would have been possible without it.

When setting our objectives, the following bullet points were considered:

- £6m will focus on road assets as follows:
- **Condition Indicators:** Contribute to maintaining condition on all road classes and, if possible, look to redress reduction in U road condition following last winter but without losing focus on A, B and C roads.
- **Schemes delivered:** Planning for least 100 additional maintenance schemes across the next two years (utilising 24/5 and 25/6 funding)
- **Focus on preventative maintenance:** Especially with the additional HCC capital money. (Examples of preventative works are shown in Programme Building below).
- **Responses to further winter damage:** Should the network suffer further damage over this winter, part or all of the funding may need to be directed into 'winter recovery' type work to repair or renew damaged sections.

- **Safety related assets:** The remaining, around £1.6m will be focussed on high priority repairs to safety fences and street lights.

Allocation of Additional Funds to Schemes.

The addition funding of £3.9 million in 2023/24 was used to repair some of the immediate carriageway defects where we focussed on our Category 1 defects, or urgent repairs, mainly potholes reported by members of the public and identified by our own Safety Inspections.

We also brought together larger schemes for immediate repair, Category 6, where carrying out additional work in an area would be beneficial.

And to complement our Good Asset Management approach to highways maintenance we included additional preventative works to increase the lifecycle of carriageways and additional planned, Category 4, resurfacing works.

HCC included additional funding, meaning we could spend approximately £2million on each of the above workstreams.

It should be noted that Ringway, out Highway Maintenance Term Contractor utilised this opportunity to carry out trials of different maintenance techniques for the permanent repair of potholes rather than the usual cut and fill or temporary make safe.

Hertfordshire County Council | Funding boost doubles number of potholes repairs with over 16,500 fixed ahead of winter

- JCB Pothole Pro, utilising advanced machinery for pot hole repairs.
- Velocity patching, spray injection of pothole.
- Recycling materials in place, thermal patching. Roadmender.
- Standard repairs. Cut out faulty material and fill with new.

Future Programmed Work. 2024/2025:

Our areas for consideration whilst building a programme for delivering the additional works on site are:

- Sites in need of preventative maintenance to help maintain condition.
- Sites in need of renewal, especially following winter damage.
- Repeated sites with multiple reports of defects such as potholes.
- Junctions and bellmouths and similar areas in poor condition.
- Concrete roads with delamination or surface failures at joints.
- Primary focus on carriageways but potentially to include consideration of footways and cycleways especially where other works make it viable or as part of potential Category 1 additional/extra continuation programme.
- Replacement of substandard safety fencing.
- Replacement of defective lighting columns and cables.

Where our priority is to maintain or improve the overall condition of our carriageways we produce our programme of maintenance work not just based upon condition, or worst first, but a detailed investigation of the most beneficial treatments for the total network with the budget available. We therefore have a programme of preventative works, such as surface dressing as well as the carriageway resurfacing and reconstruction. These sites are prioritised utilising a deterioration model, this model also accounts for reported defects and has an understanding of the performance of maintenance treatments, based upon learnt history specific for Hertfordshire, therefore a straightforward injection of additional funding does not simply allow the next site on a priority list to be included, the overall condition is taken into account and therefore we may drop one resurfacing site and surface dress three others if this is seen to be the best use of the budget available as the overall life expectancy of the network would be improved.

Summary of Site Specific Information.

A summary of site specific information, showing the location of sites being repaired utilising additional funding from the Government will be updated as the work progresses. Our intention is to complete 100 additional maintenance schemes over the next two years. Booking road space to avoid clashes with Utility Companies and combining works in road closures, programming Countywide operations such as Micro Surfacing and Surface Dressing, emergency works etc. can all result in sites being moved from year to year or alternative treatments undertaken.

Our proposed programme of work is published in a map based format on the Internet: Roadworks and road closures | Hertfordshire County Council. Some of the information is built on the One.Network website platform.

Sites that have been made possible by reallocated HS2 funding are additional to our standard programme of work.

These HS2 funded works will all be carriageway maintenance schemes made up of preventative works such as surface dressing, to extend the life of the carriageways and resurfacing schemes, where generally the top layer of material is removed and replaced with new material. Some replacement safety fencing and street lighting apparatus will also be included.

A target of 100 extra carriageway sites over the next 2 years has been set covering all our road classes.

When our detailed programme of individual sites is agreed the summary information will be updated here from April 2024:

Areas / roads where	Type of works	Indicative cost	Surface area	Benefits from it (eg:
work is planned	being undertaken		resurfaced (if	improved journey times
	on asset group (eg:		applicable) m2	etc)
	road resurfacing,			
	bridge repair,			
	culverts			
	maintenance,			

	cycleways, footways etc)			
Draft-100 sites	Draft-carriageway	Draft	Draft	Draft

Innovation in the delivery of highways maintenance.

Hertfordshire are a high performing Asset Management Authority and we constantly seek opportunities to improve our delivery. We are planning to trial the use of longer lasting surfacing materials to increase the lifecycle of our carriageways, reducing the frequency of roadworks.

We also continually review the performance of our preventative and permanent repairs to fine tune the intervention points utilising deterioration modelling and onsite observations.

Sustainability is an important issue and we are analysing maintenance treatments to determine the most sustainable options. Our analysis is looking at the whole life, optimising the frequency of preventative treatments before resurfacing is required.

We are reviewing our methods of condition surveys and analysis. Undertaking a trial of condition surveys utilising automated recording of visual data and analysis using AI. (Vaisala Road AI)

Our Professional Services and Highways Service Term Contracts are both currently in the process of reprocurement allowing our specifications and services provided to be fine tuned and giving us the ability to procure further expertise in the highway maintenance fields when required.

Our existing highway maintenance design teams are being reorganised to share expertise across different teams and provide expert roles to other projects such as improvement schemes.

We are embedding the ethos of "design for maintenance" across the department. Rewriting the Design Guide used by Developers and our own Teams.

We are also working with Robotiz³d on the "proof of concept" of an autonomous vehicle for inspecting and repair of carriageways utilising AI analysis of condition data:

Hertfordshire County Council | World's first pothole preventing robot passes first test with flying colours

Managing Streetworks.

A road being dug up by a utility company soon after it has been resurfaced is something we wish to avoid.

A burst watermain or gas leak requires a quick response and there is very little we can do to avoid "emergency" repairs.

For planned work, such as replacing a whole length of water pipe to prevent reoccurring leaks, we rely on Government Legislation,

The New Roads and Streetworks Act 1991 and the Traffic Management Act 2004, these pieces of legislation control the planning and standards of reinstatement of works undertaken by utility companies.

A permitting system is used to control the work that can be undertaken. Every item of work undertaken on the highway requires a permit to be issued by Hertfordshire County Council, which allows the programming, site inspections and site specific restrictions to be implemented.

• We proactively engage with all of the main Statutory Undertakers that operate within the county to manage performance. We typically issue FPN's for non-compliance in the region £1 million each year, although some variances do apply year to year.

All our planned roadworks and road closures are published on the web:

Roadworks and road closures | Hertfordshire County Council

Appendix 1 Funding Information:

Future Planned Budget Allocations for Capital Investment in Highways.

(Data from INTEGRATED PLAN 2024/25-2027/28)

Scheme	Description	2024/25	2025/26	2026/27	2027/28
		£,000	£,000	£,000	£,000
Bridge Asset	HCC has a statutory duty to maintain highway bridges.	6,676	6,877	6,877	6,877
management and	Successful management of bridges will also prevent				
maintenance service	network disruption				
Climate Change	To provide additional capital funding to improve drainage	2,000	2,000	-	-
Response	in response to highways flooding brought about by				
	increasing and changing rainfall patterns.				
Highways maintenance	This is an ongoing programme to extend the life of the	47,422	48,845	48,845	48,845
	highways infrastructure, including carriageways,				
	footways & cycleways and highway drainage systems,				
	ensuring they meet their full service potential and				
	preserve their value to Hertfordshire. This is delivered by				
	means of a county-wide programme of targeted				
	preventative treatments on identified sections and				
	repair/rehabilitation of failing/failed sections when				
	practicable.				

Highways Maintenance	To fund additional category 1 works (emergency reactive	3,000	-	-	-
category 1 delivery	repairs) in 2023/24 as a result of the adverse weather				
	the previous winter, ensuring HCC discharges its legal				
	duty to keep the network safe.				
Highways Maintenance	Additional highways maintenance funding from the	5,608	9,134	9,134	9,134
government funding	Department for Transport, for local road resurfacing and				
	wider maintenance activity. The minimum additional				
	funding allocation has been confirmed as £87.813m				
	between 2023/24 - 2033/34, with the allocations for				
	2023/24 and 2024/25 also confirmed. The year on year				
	profile for 2025/26 onwards has not yet been finalised				
	and therefore the balance of grant has been pro-rated				
	over the remaining grant period.				
Highways maintenance -	Additional investment in preventative maintenance,	2,000	3,000	-	-
preventative maintenance	keeping the network serviceable through surfacing				
	works to improve condition and reduce defects forming.				
Safety Barriers	Programme to maintain, replace and refurbish the safety	1,164	1,205	1,205	1,205
refurbishment/	barrier infrastructure across Hertfordshire's highway				
replacement programme	network.				

Street Lighting Private	Investment to replace the existing private cable network	368	381	381	381
Cable Network	with new cabling.				
Refurbishmen t					
Street Lighting	Ongoing maintenance and replacement of the existing	6,063	6,275	6,275	6,275
Refurbishment/	street lighting and illuminated signs infrastructure.				
Replacement Programme					
Traffic Signals	Ongoing programme to replace and refurbish traffic	2,251	2,330	2,330	2,330
Refurbishment/	signals to ensure the safe, fully functional and reliable				
Replacement Programme	operation of these assets which is vital to effective				
	performance of the highway network.				
Unlit Regulatory Signs	Replacement of Highways unlit regulatory signs,	401	-	-	-
Replacement Programme	ensuring enforcement of Traffic Regulation Orders and				
	increase highways safety.				

Example of Typical Years of Allocation for Highway Maintenance Capital Funding.

Programme Detail	2019/20 (000)	2020/21 (000)	2021/22 (000)	2022/23 (000)
Carriageway Surfacing & Surface Treatment*	£33,812	£30,891	£28,960	£34,021

Footway & Cycleway Surfacing &	£6,454	£7,941	£6,758	£6,079
Surface Treatment*				
Drainage Schemes	£1,917	£2,388	£2,466	£2,379
Structures Capital Maintenance	£4,341	£5,471	£5,552	£5,320
Schemes				
Street Lighting Replacement	£2,483	£5,640	£5,214	£5,558
ITS Refurbishment	£644	£1,984	£1,993	£2,148
Safety Barrier	•	£945	£1,099	£1,292
Replacement/Refurbishment				
Total	£49,651	£55,260	£52,042	56,797

Example of Typical Years Carriageway Maintenance Workstreams Delivered.

Treatment	Delivered	Delivered	Delivered	Delivered	Delivered	Delivered
Туре	2020/21	2020/21	2021/22	2021/22	2022/23	2022/23
	Area (m ²)	Cost	Area (m²)	Cost	Area (m2)	Cost
		(000)		(000)		(000)
Surface	760,815	£7,157	983,248	£7,122	896,597	£6,267
Dressing	700,013	27,137	903,240	21,122	090,391	20,207

A Road	233,847	£8,336	157,618	£7,197	118,911	£7,976
Surface Inlay	233,047	20,000	137,010	21,191	110,911	21,910
Local Road	291,056	£3,214	226,743	£1,879	252,462	£4,023
Micro Asphalt	231,000	20,214	220,740	21,079	202,402	۲۳,025
Local Road	403,965	£12,184	437,374	£12,762	250,462	£15,755
Surface Inlay	400,000	212,104	407,074	212,102	200,402	210,700
Total	-	£30,891	-	£28,960	-	£34,021

DfT and HCC Funding Previous 5 Years:

HMR, Highway Maintenance Roads Budget,

2023/24 (BI2FEB24)

County Capital	Carriageway Maintenance	16,689,656
County Capital	Footways	3,185,247
County Capital	Drainage	2,935,097
County Capital	HLB Virement	4,184,179
DfT HM grant	Carriageways	12,350,000
DfT PHG grant	Carriageways - additional grant	9,880,000
DfT LT grant	Carriageways	1,000,000

2022/23

Budget Area	Item	
County Capital	Carriageway Maintenance	16,440,152
County Capital	Footways	3,137,629
County Capital	Drainage	2,891,219
County Capital	HLB Virement	4,582,000
County Capital	2021/22 Reprogramming	
DfT HM grant	Carriageways	12,350,000
DfT PHG grant	Carriageways - additional grant	9,880,000
County Capital	21/22 Reprogramming	2,429,000

2021/22

County Capital	Carriageway Maintenance	15,021,422
County Capital	Footways	2,866,862
County Capital	Drainage	2,641,716
County Capital	20/21 Reprogramming	(750,000)
County Capital	20/21 Reprogramming	3,207,400
DfT HM grant	Carriageways	12,350,000
DfT PHG grant	Carriageways - additional grant	9,880,000
County Capital	Maintenance covid pressure	1,260,000

2020/21 (BI2)

County Capital	Carriageway Maintenance	18,014,000
County Capital	Footways	3,438,000
County Capital	Drainage	3,168,000
County Capital - Reprogramming	Carriageway Maintenance	535,000
County Capital	Saftey Barriers	1,100,000
County Capital	Tfr to Covid contingency	-7,500,000
LTP Capital Dft Grant	Carriageways	17,310,000
Additional DfT Grant	Dft PHG	9,862,000
LTP Grant ADD	Skid Resistance	

2019/20 (BI3)

County Capital	Carriageway Maintenance	18,538,000
County Capital	Footways	2,884,000
County Capital	Drainage	2,440,000
County Capital - Reprogramming	Carriageway Maintenance	1,728,000
County Capital	One and Done to ITP	-122,000
County Capital	Transfer to LED	-845,000
LTP Capital Dft Grant	Carriageways	17,310,000
Additional PH Grant	Dft PHG	889,480
LTP Grant ADD	Skid Resistance	135,000