

Lane Rental Funding

Approved Applications

August 2021



Lane Rental Governance Committee

Approved Funding Applications

To date a total of 84 applications for funding have been approved by [committee](#), which equates to **£27,399,485**

Where it has been possible to calculate, the estimated social cost of delay saved is £127 million.

The following table provides an overview of each bid, with a hyperlink to the industry publication produced following project completion.

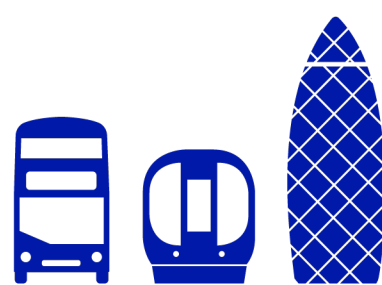
Title	Summary	Funding Requested	Social Cost of Delay Saved	Status
Supplementary Works Approvals	Feasibility study and options paper for developing a scalable supplementary works approval solution to establish the most viable and cost-effective delivery path	£100,000	N/A	Project initiation
Westway Roller Shutter Bridging Solution	Innovative 'bridging' solution to maintain traffic flow while replacement of one of only 3 roller shutter joints in the UK is undertaken	£740,000	£12,804,000	Project initiation
Automated Utility Service Mark-out System (AUSMOS)	Development of a robotic unit capable of scanning an area of interest, recording the locations of utility assets and marking out the ground in the relevant colours.	£562,640	£694,526	Project initiation
Cured In Place Pipe (CIPP) For the Gas Industry	Trial of cured in place pipe technology, a trenchless rehabilitation solution, usually used by the water industry but the first of its kind for the gas industry.	£407,065	N/A	Project initiation
Emissions Based Gas Main Replacement (Picarro)	Trial of the Picarro system to detect gas leakage via vehicle mounted sensors, to enable a more targeted approach to gas main replacement	£200,000	£1,862,000	Project initiation



Surface Live	Development of a virtual environment where interactive site meetings can be undertaken by multiple parties without the need to meet on site.	£338,250	N/A	In progress
Untethered Leakage Robot Phase I	Feasibility study and gap analysis into the potential benefit of an untethered leakage robot which could eventually replace Core&Vac	£170,000	N/A	Project initiation
VEST (VacEx Soft Touch) - System Trials	Trial the redesign of the Vacuum Excavator (VacEx) to enable the wider use of the technology	£135,000	£170,223	Project initiation
The Infrastructure Coordination Service - Expansion Phase	Expansion phase of the ICS to run for a further two years which will build upon learnings from the pilot and roughly double delivery across the three service lines, while further developing data tools, policy and exploring other potential interventions.	£3,500,000	£6,146,000	Project initiation
London RoadLab SAM	Develop an AI powered, disruption detection engine, that proactively spots and identifies issues and crisis events by sifting through the billions of social media (Twitter, Snapchat, Facebook) posts generated daily	£802,700	£1,815,000	In progress
London RoadLab Immense	Develop a software solution which will automate modelling to understand the traffic impacts of works	£943,000	£1,545,000	In progress
Distribution Network Information Modelling - Hardware R&D	R&D into a prototype that can travel in the pipe network untethered to establish the location of underground gas network in preparation for a hydrogen network	£179,982	N/A	In progress
High Volume Gas Escape Toolkit	Produce and trial a toolkit to better respond to gas escapes and expedite remediation	£491,400	£405,072	In progress

AI Road Condition Inspections	Trial the use of artificial intelligence to undertake road condition inspections to enable a standardised approach to determine the borough resurfacing / reconstruction programme.	£45,000	N/A	In progress
Future Proofing Bayliss Road	Installation of additional ducting capacity as part of a road reconstruction scheme in a future development area	£293,800	£431,218	Complete
Core & Vac Mk2	Undertake a trial of new core and vac technology to establish benefits above the current technology	£358,582	£265,974	In progress
Improving Environmental Matters arising from Roadworks	Establish a common approach to undertaking roadworks at night while exploring innovative environmental mitigation measures	£382,786	N/A	In progress
Journey Spatial Visualisation for Works	Research and development into journey and movement spatial visualisation around roadworks. This will combine smart sensors/cameras and different data sources, such as population movement from mobile operators and local highway authority data.	£210,000	N/A	Complete
Street Manager	Expand scope of the project to supersede EToN so that more functionality and user requirements can be implemented	£620,000	N/A	Complete
Kingsway Pipe Subway	Trial of fire suppression equipment within Camden's Kingsway Pipe Subway to reduce disruption caused by fire.	£450,000	3.6	Complete

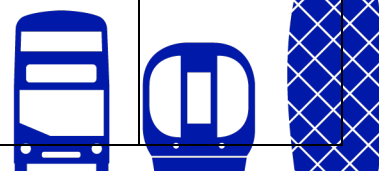
Infrastructure and Development Coordination Unit (IDCU)	To stand up a new Infrastructure Development Coordination Unit for London to facilitate improved coordination of major development and infrastructure works, to improve the efficiency and effectiveness of delivery, promoting best practice, and breaking down governance and institutional blockers. These objectives will be delivered by a two-tier structure comprising of an overarching pan-London service and a targeted area specific service.	2,870,000	N/A	Complete
Innovation Challenge	To set the industry an innovation challenge by identifying problem statements with work promoter stakeholders and then canvassing market innovators to submit their ideas to solve the issues tabled with a view to developing a new viable product that will be showcased to investors and stakeholders across the industry.	£350,000	N/A	Complete
ARI 530 Pothole, crack repair and reinstatement trial	Trial of a new pothole repair system, extensively used in the USA, which looks to reduce disruption and limit noise resulting from these types of repair.	£352,000	£530,216	Complete



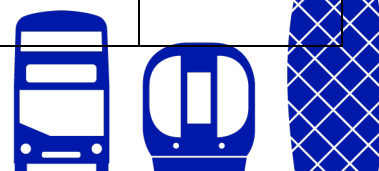
TOPAS	Update and amalgamate a number of specifications relating to traffic signals to ensure latest technology is used to ease congestion.	£10,000	£79,847	Project discontinued
Surface Playbook Stakeholder Enhancements	Series of internal and external enhancements to improve functionality within the system	£295,420	£2,320,000	Complete
Abnormal Loads	Develop a formal training course to increase the knowledge and skills required to authorise the movement of abnormal loads across London. An abnormal loads road network will also be produced.	£75,000	£96,000	Complete
Croydon Infrastructure Coordination Pilot	Project to share data on a common web map in order to promote collaborative working. This will aim to feed into the GLA's Infrastructure Mapping Application (IMA) and complement the Infrastructure Development Coordination Unit (IDCU)	£100,000	£87,190	Complete
A2/M2 Connected Corridor	Use of connected vehicle technology to manage the road network more effectively, particularly around roadworks and incidents	£720,000	N/A	Complete
Ramp trial	Two stage trial of a new ramp to assist the public, particularly, vulnerable road users. Off-street trials followed by on-street trials. Report and specification to be produced.	£115,250	N/A	Complete



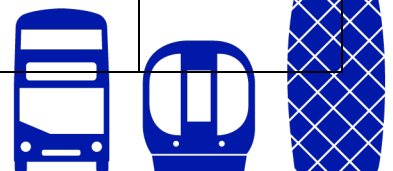
LondonWorks2 Enhancements	User lead improvements to infrastructure and functionality enhancements	£320,000	£480,000	Complete
Power Road Bridge Enabling Works	Construction of a temporary highway layout during the bridge construction to maintain traffic flow	£350,000	£940,000	Complete
Strengthening the network via plastic recycling (MacRebur)	Trial the use of recycled plastic pellets within polymer modified bitumen and stone mastic asphalt to strengthen surface and increase longevity	£90,000	N/A	Complete
Stratford Gyratory	Trial of an alternative method of temporary cycle lane segregation at works sites, which can be moved according to programme.	£8,000	N/A	Complete
Islington Extraordinary Measures	Use of extraordinary measures put in place to mitigate disruption	£100,000	£323,780	Complete
London Infrastructure Mapping Application Version 3	Continuing development and testing of the application over the next 24-month period to ensure ongoing integration with existing databases and other data source systems across the industry securely, while promoting the application with a view to wider use.	£872,963	£4,190,700	Complete
Finding and Managing Culverted Watercourses	Establishing accuracy regarding location and ownership of culverted watercourses while producing a process to resolve unidentified assets.	£111,034	£63,777	Complete



Early Trafficking On-Street Trials	Carry out a trial to stress-test the curing time required prior to trafficking of readily available concrete used in highway reinstatements	£295,825	£4,464,850	In progress
Strategic Modelling for major utility works	Trial the use of modelling for major utility works to ensure best solution is in place to mitigate disruption	£47,760	£550,380	Project discontinued
The HAUC(UK) App	Development of a smart device app which will provide the most up to date reference library and tool box talks for site operatives and street works industry stakeholders	£110,000	£936,200	Complete
Events Solution Trial	Trial of an events solution which looks to use intelligent signals in conjunction with 4G routing to enable a dynamic use of left and right hand turning during planned and unplanned events	£81,214	£444,187	Project discontinued
Nine Elms Service Corridor - Future Proofing Network	Installation of additional capacity in a regeneration area	£450,000	£795,000	Complete
Improving Traffic Management on the TLRN	Dedicated and experienced traffic management specialist to manage, coordinate, design, consult and review all aspects of traffic management (TM) documentation; in order to produce a consolidated document for works undertaken on the TLRN.	£140,000	£156,420	Complete
BIM / VaultLondon	Trial a shared data platform that will map all buried services in 2D with the aim of moving to 3D in future	£66,000	£770,000	Complete



Finchley Road Extraordinary Measures	Use of extraordinary measures to reduce disruption	£100,000	£2,070,107	Complete
Augmented Reality (AR) Maps and 3D AR Planning	Trial of the latest GPS technology combined with Augmented Reality (AR) to bring existing GIS data 'alive' and 'intuitively' accessible.	£101,200	Unknown	Complete
Ardleigh Green Bridge	Extraordinary measures implemented to mitigate the impact of the works on the traffic, cyclists and pedestrians at the Ardleigh Green bridge replacement works.	£630,000	£22,903,410	Complete
Pipe Subway Expansion	Feasibility study into the expansion of the pipe subway network.	£89,755	£2,385,000	Complete
Enhance Road User Experience around Events	Development of a tool to map events around London. This will be shared with work promoters, emergency services and the public to enable better planning of activities around events.	£95,000	£334,861	Project discontinued
Public Liaison for Out of Hours Working	Trial of a new approach to out of hours working in order to establish best practice.	£350,000	£5,303,031	Complete
Safer Conditions for Road Users at Traffic Signal Outages	Produce and agree temporary traffic management layouts at key locations in the event of signals outages to expedite resolution and mitigate disruption	£80,000	£827,015	In progress
Victoria Embankment Extraordinary Measures	Extraordinary measures undertaken to mitigate disruption on Victoria Embankment	£56,145	£241,264	Complete



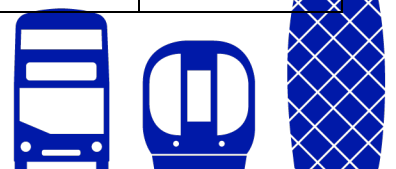
Archway Gyratory Future Proofing Network	Installation of additional ducting capacity as part of the Archway Gyratory Development Scheme to reduce the number of future interventions.	£95,334	£300,000	Complete
Improved Traffic Signal Communication Resilience	Trial of wireless mesh technology to back up traffic signal connectivity in order to reduce disruption	£187,000	£1,325,773	Complete
Managing Streetworks with Crowdsourced Data	Innovative mapping solution using GPS based crowd sourced intelligence to effect the management of London's road network where capacity is compromised by unknown events such as roadworks	£90,200	£925,000	Complete
Enhanced Communications for Utility Works	Trial of enhanced communications at known utility works to analyse and establish best practice	£150,000	£700,363	Complete
Highway Spillage Control	Carry out a trial to establish a toolkit which will allow operatives to use the best solution for different types of common spillages to avoid unnecessary carriageway resurfacing	£93,000	£24,000	Complete
Cycle Highway Trench Bridge	Design and develop a prototype bridge, which will be a lightweight durable structure to place over excavations when carrying out works on cycle Highways to aid cyclists.	£42,000	£175,450	Complete
Power Road Bridge	Maintaining pedestrian and cycle access while carrying out the Power Road Bridge replacement works	£375,000	£1,011,000	Complete



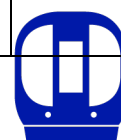
Mapping of Buried Assets using Streetview Imagery of Visible Furniture	Trial artificial intelligence photo recognition capabilities to see if improvements can be made to the recording of buried assets	£96,724	£956,940	Project discontinued
NRSWA Accreditation	Review the suitability of the current NRSWA training package offered in England with a view expanding and developing future packages for use across the UK.	£110,000	N/A	In progress
Smart Roads Programme	To carry out a feasibility design on the A2 corridor and selected ramp metering sites. Focuses on the improved management of traffic on the TLRN with added potential to provide greater control during roadworks	£1,500,000	N/A	Complete
Asphalt Solutions Research Programme	Trial laboratory stress testing on different asphalt treatment options to find the best solution which will reduce pothole formation on London's roads and increase longevity.	£111,000	N/A	Complete
Stockwell Gyratory - Future Proofing Network	Installation of additional ducting capacity as part of the Stockwell Gyratory Development Scheme to reduce the number of future interventions on the network.	£97,673	£260,000	Complete
Surface Playbook	Development of iteration 2 work to enable London Boroughs and GLA to access and interrogate details of the schemes and programmes planned for the London Road Network over the next 10 years through an interactive mapping application.	£319,000	£1,050,000	Complete
London Infrastructure Mapping Application	Development and testing of the application over the next twelve month period to ensure integration with existing databases and systems across the industry securely	£248,600	£257,000	Complete



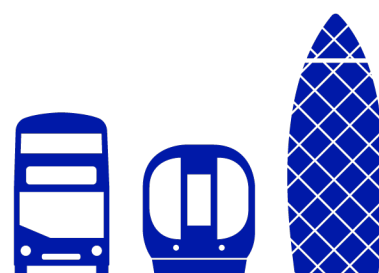
Bridge Strike Mitigation Programme	Install telemetry and CCTV at 8 over height vehicle detectors protecting the 4 highest risk structures to analyse data captured and establish future mitigation.	£175,000	£318,653	Complete
Moving Variable Messaging Signs (Taxi Top)	Trial of displaying traffic related information on taxis. Targeted messages will inform road users of traffic conditions and planned works at 50 areas where there are known or expected delays as a result of roadworks.	£97,750	N/A	Complete
Inter-Agency CCTV Video Sharing	Develop a future digital CCTV 'sharing' interface protocol to ensure the continuation of service from analogue. Joint funding arrangement sort between LRGC, the Metropolitan Police and Highways England.	£150,000	£1,443,750	Complete
Improving the visibility and Resilience of our Buried Services	Establish a standard national format for gathering and recording underground apparatus spatial data in the form of a Publicly Available Specification (PAS)	£37,000	£20,000,000	Complete
Improving bound layer reinstatement process	Independent assessment of bagged bituminous material for compliance with industry standards. Benefits identified include reductions in material waste, travel time between asphalt plants and site; and overall reinstatement time.	£27,825	N/A	Complete
Advanced Inspection Device for Large Diameter Cast Iron Mains	Development of a crawler system capable of traversing Weko Seals within gas mains between 24"-48" pipe to enable pre-inspection of mains prior to rehabilitation and accurate mapping of buried infrastructure.	£320,687	£5,809,000	Complete
Southwark Borough - Future Proofing Network	Installation of additional ducting capacity to future proof network ahead of proposed known developments in the locality	£398,932	£640,000	Project discontinued



Multi-sensor Robotic Inspection Survey	Trial of multi-sensor inspection survey robot for use on large sewers to determine levels of deformation, corrosion and sediment build-up without excavation.	£40,664	£60,000	Complete
Elephant & Castle - Shared Ducting Strategy	Utilise the soon to be redundant subway by installing additional ducting capacity during the major improvement scheme of the roundabout	£134,200	£384,000	Complete
Cycle Highway 5 Inner - Future Proofing Network	Installation of additional ducting capacity, as part of the Cycle Highway scheme, with the intention of reducing future interventions of the network	£75,100	£264,000	Complete
Utilisation of TUCA for pan-London / National Training and R&D	Develop a business case for expanding the current remit of the Tunnelling and Underground Construction Academy (TUCA) to include training and R&D with Utilities companies, highway authorities and developers.	£35,000	N/A	Complete
Congestion Reduction Coordinator Resource	Provide funding for dedicated, experienced and technically astute resources who can proactively lead on strategically reducing highway congestion as a result of roadworks.	£285,200	N/A	Complete
North South Cycle Highway - Future Proofing Network	Installation of additional ducting capacity, within locations of known development as part of the cycle highway scheme, with the intention of reducing future interventions of the network	£275,000	£996,800	Complete
Pan-London Ironworks Summit / Workshop	Facilitate a Pan-London Ironworks Summit at the Transport Research Laboratory (TRL) to establish proposals which will reduce the amount of ironwork failures on the network.	£5,000	N/A	Complete
Hammersmith Flyover - Reducing the Adverse Effects of Roadworks	Use of extraordinary measures in order to dramatically reduce the overall impact of the works, mitigate traffic disruption and ensured safe working practices were maintained	£436,500	£1,654,000	Complete



Remote Access Portable Traffic Signals Control Equipment	Development of portable traffic signal control system which can be remotely controlled from TfL's Urban Traffic Control system. Potential to reduce the overall impact of works.	£483,000	£5,500,000	Complete
SGN Large CISBOT	Development of CISBOT robot, which repairs live cast iron gas pipes internally, so that it can operate within larger 30" cast iron gas mains. This will expand upon the ability to reduce the negative impact of works.	£252,735	£2,247,000	Complete
SOLO - Unmanned sewer inspection robot	Trial of autonomous sewer inspection robot from the USA which if proved successful will gather data quicker, with minimal traffic disruption and provide the ability to analyse remotely	£50,000	£900,000	Complete
Funding of Appendix A9 trial for Keyhole Technology	An appendix Trial of Keyhole Technology in order for it to be recognised as an industry standard within the Specification for the Reinstatement of Openings in Highways (SROH).	£31,500	£805,000	Project discontinued
TOTALS	75 Applications	£27,399,485	£127,056,210	58 completed 6 discontinued



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EVERY JOURNEY MATTERS