ROADTRAFFIC SOLUTIONS

Dashboard

THE USE OF SMART MOBILITY DURING ELECTRICITY NETWORK MAINTENANCE ON LEYTON CROSS ROAD

Client: UKPN

01. INTRODUCTION

On October 21, essential maintenance on the electricity network commenced on Leyton Cross Road in Dartford. This project prioritised clear communication about anticipated delays, ensuring that residents, employees, and commuters in the area are well-informed about the project's impact.

Road Traffic Solutions is delivering smart mobility solutions for UKPN, utilizing dynamic social media campaigns to proactively update all target audiences on accessibility and any expected disruptions around the project site.

This report details the smart mobility approach for Leyton Cross Road, presenting results and analysis of the communication strategy. Additionally, it includes insights from a follow-up survey conducted after the project's completion to gather public feedback on the effectiveness of communication efforts.

Project goal

"REACHING THE RIGHT PEOPLE AT THE RIGHT TIME DIGITALLY. ENSURING A BETTER EXPERIENCE OF DISRUPTIONS THROUGH EFFECTIVE INFORMATION PROVISION."

02.
SCHEDULE

1. Two weeks before the start

2. During the project

3. After completion

START — FINISH

ANNOUNCEMENT

11 - 20 october

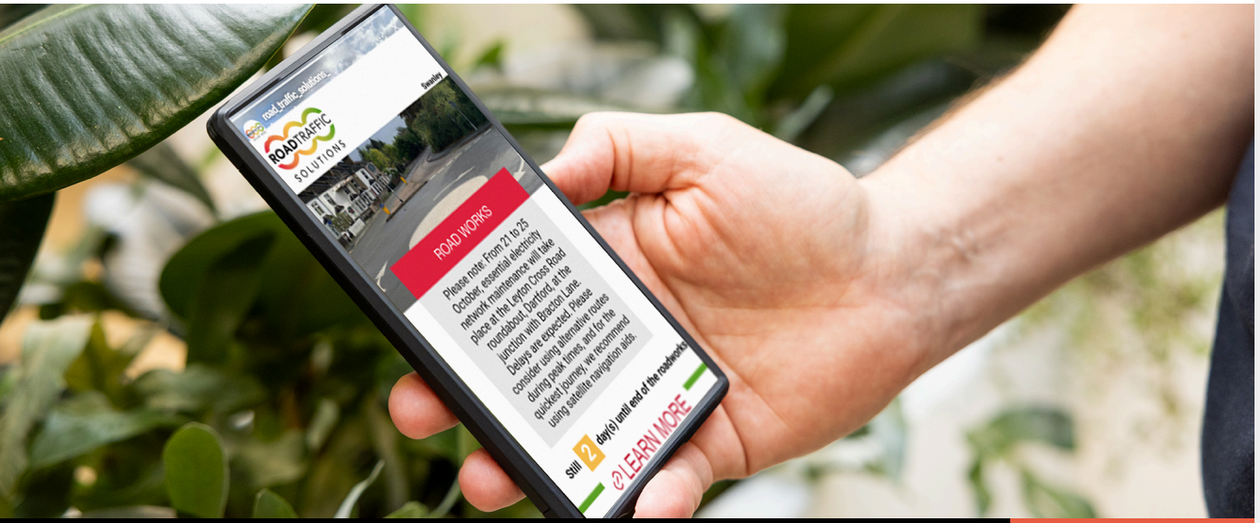
MAINTENANCE

21 - 25 october

EVALUATION

26 october - 1 november

04. COMMUNICATION & RESULTS



PHASES	AREAS	TEXT VERSIONS	ADS SIZES	PLATFORMS
3	4	4	3	2

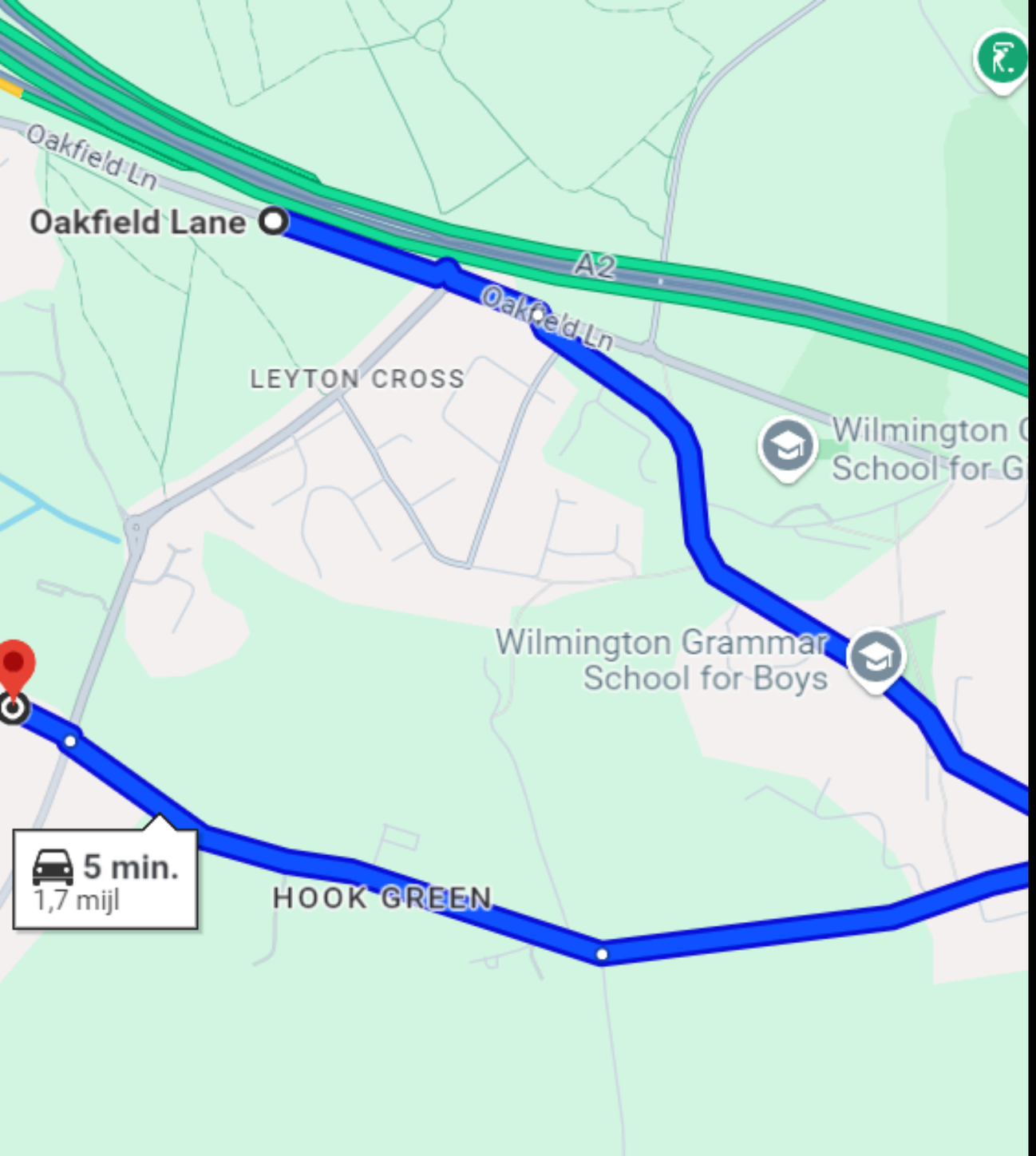
288
COMBINATIONS

AMOUNT SPENT	IMPPRESSIONS
£641.18	152.061
UNIQUE CLICKS	**REACH**
519	48.858
CPM	**COST PER CLICK**
£2.74	£0.78

Since the campaign's launch, posts have garnered over **233.799** impressions on social media, reaching and informing **57.944** unique individuals about the anticipated disruptions on Leyton Cross Road. On average, each person saw the posts more than four times across Instagram and Facebook.

The average cost per 1,000 impressions (CPM) was **£2.74.**

Additionally, the campaign generated **813** click-throughs to UKPN's website, where users could access further details about the Leyton Cross Road project.



05.
SAT NAV MODIFICATION

The roundabout on Leyton Cross Road was designated as "access only," meaning that unless a driver's destination was specifically on Leyton Cross Road, they would be rerouted via alternate roads.

This setup allowed live navigation systems to redirect traffic before it reached Leyton Cross Road, reducing congestion at the roundabout itself.

As a result, drivers experienced fewer delays, and traffic flow improved as vehicles were diverted before encountering potential bottlenecks.

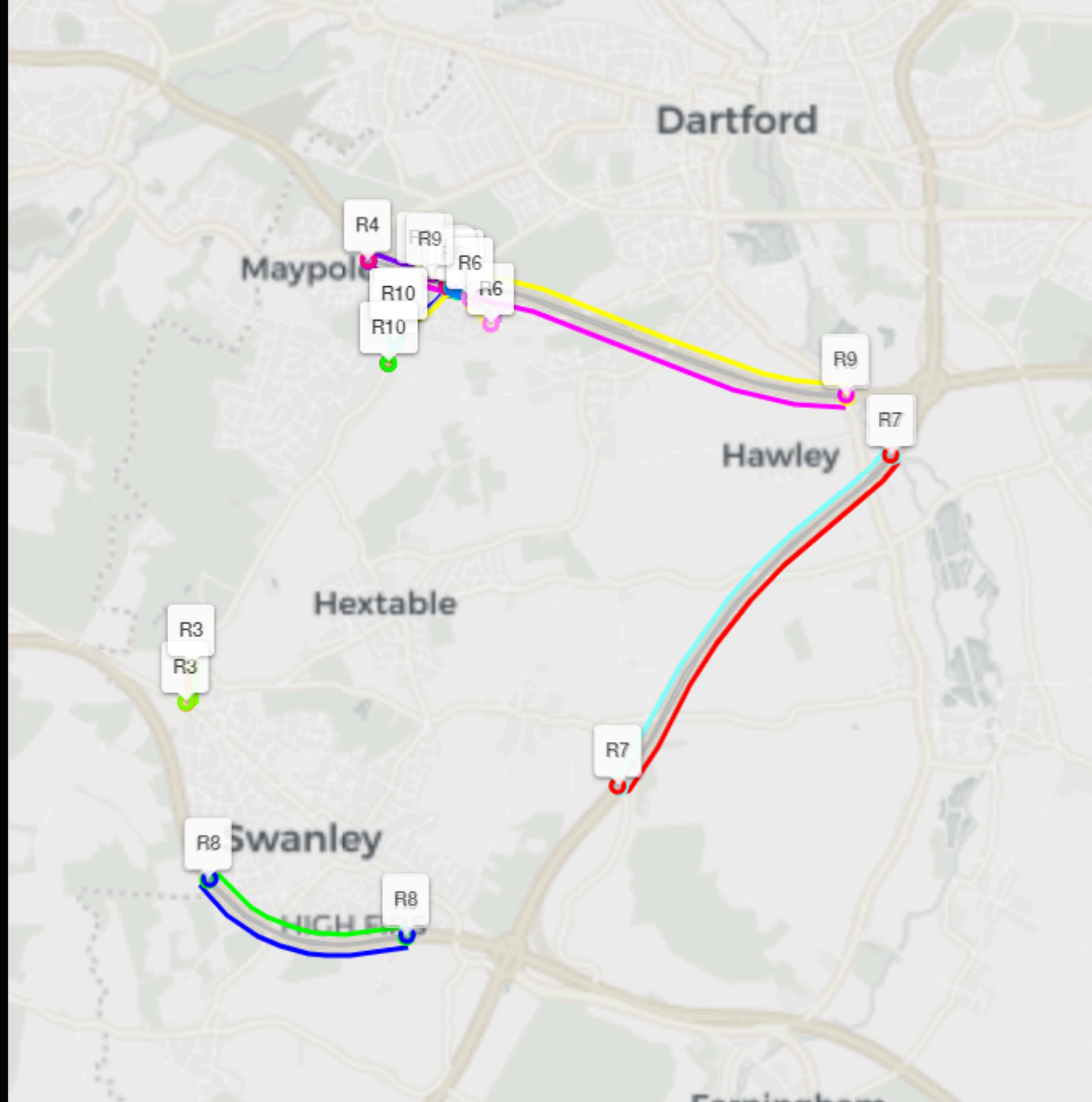
08.
LIVE TRAFFIC DATA

Before and during the electricity maintance at Leyton Cross Road, we used a tool designed to collect and visualize live traffic data. Each route is divided into segments, and data is gathered for each segment every ten minutes.

The following types of data are collected: optimal travel time, usual travel time, and current travel time. This data is used to provide insights into speed differences, delay factors, and delay durations.

Data is sourced from multiple platforms, including Here Routing, Here Traffic, and Mapbox Traffic.

Ten days before the electricity maintenance began, reference data was collected. Data collection then continued throughout the duration of the roadworks.



Name: Leyton Cross Rd (Southbound, before roundab... (1)

Date

Time

Delay factor

Min.

Delay factor(%)

-2,22

Max.

Delay factor(%)

466,67

Median

Delay factor(%)

0

Average

Delay factor(%)

3,77

Delay duration

Min.

Delay duration (min)

-0,02

Max.

Current travel time (min)

4,25

Median

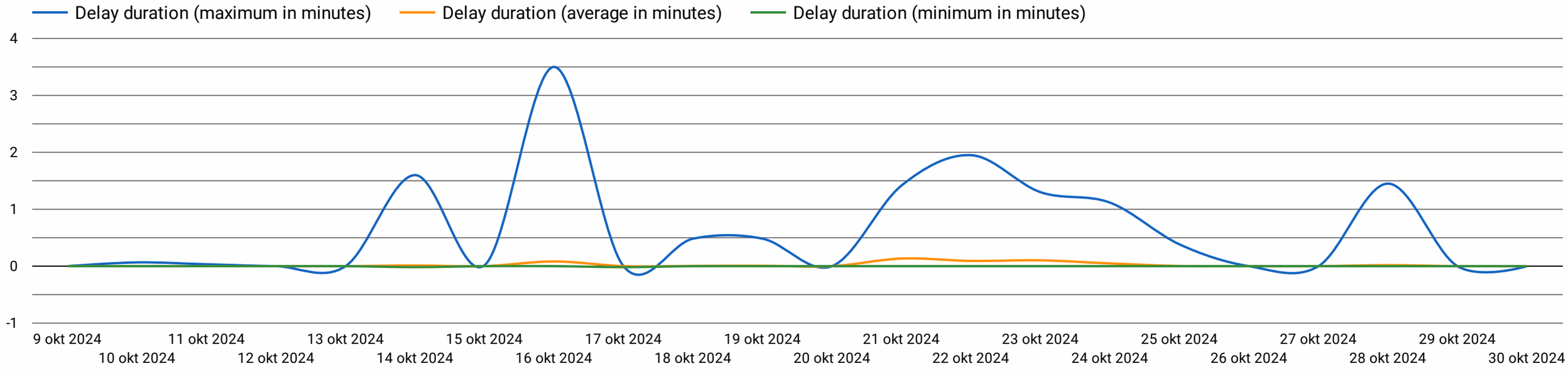
Delay duration (min)

0

Average

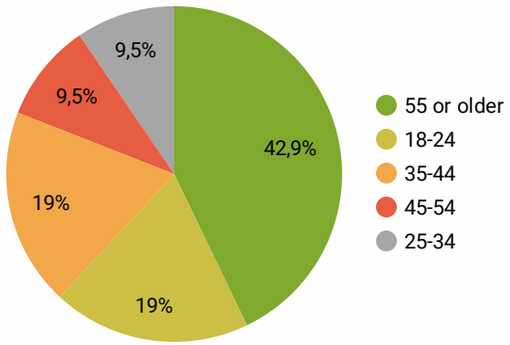
Delay duration (min)

0,03

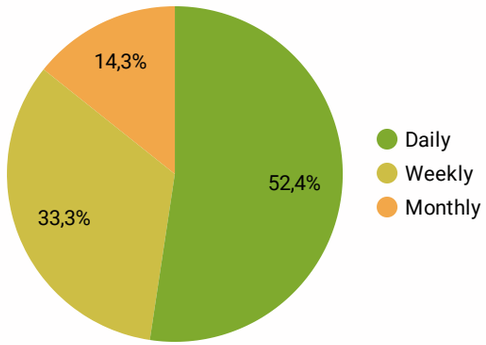


SURVEY - GENERAL QUESTIONS

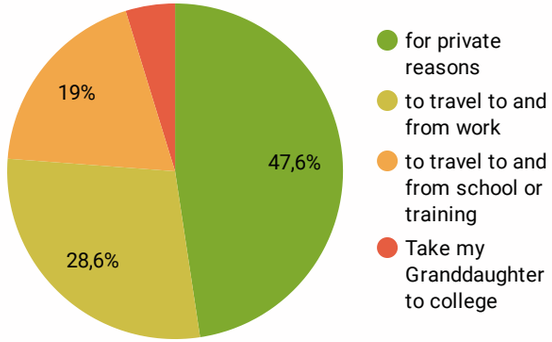
Which age group do you belong to?



How frequently do you travel on Leyton Cross Rd?

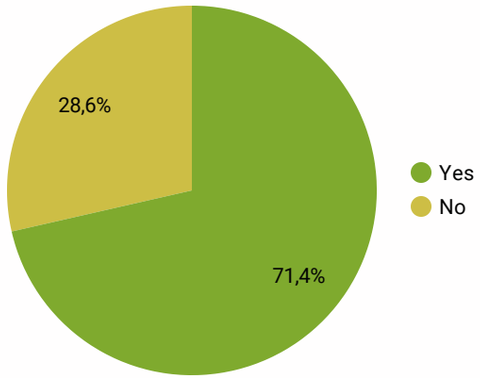


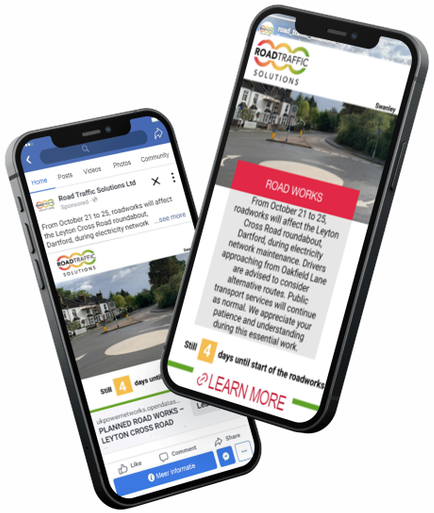
In general, what is your primary reason for using Leyton Cross Rd? Please select the statement that best applies to you: I use this route...



SURVEY - EFFECTIVENESS OF FACEBOOK AND INSTAGRAM

Communication was conducted through Facebook before and during the roadworks. Did you come across a message similar to the one on the right during this time?

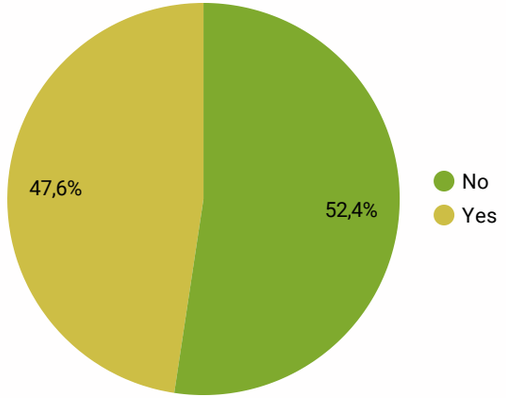


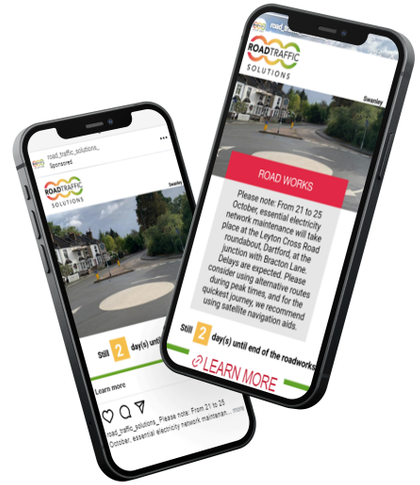


Average rating of communication:

9,13

Communication was conducted through Instagram before and during the roadworks. Did you come across a message similar to the one on the right during this time?



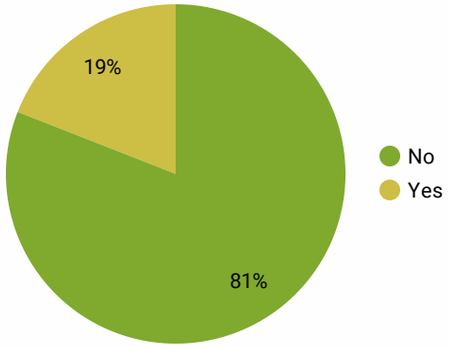


Average rating of communication:

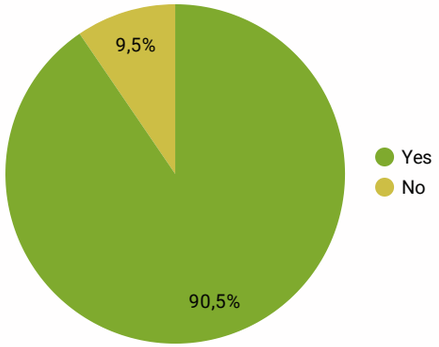
9,2

SURVEY - CLOSING QUESTIONS

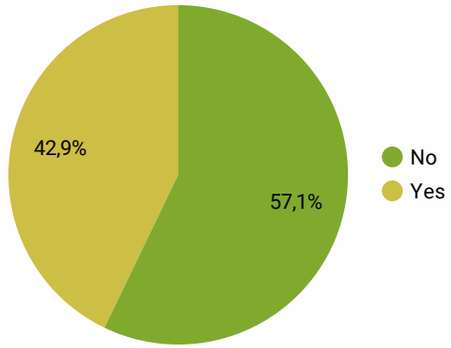
Would you have been aware of the work and disruptions if you hadn't seen the information on Facebook or Instagram?



Did you find the information provided through the above channels to be clear and understandable?



Have you changed your travel habits during the roadworks based on the information you received through the above channels? (For example, working from home, carpooling, or taking different routes.)



	Do you have any additional suggestions you would like to share?	Record Count ▲
1.	Very useful information, thank you	1
2.	All information has been clear thank you	1
3.	Advertise more roadworks on facebook,and tell govermont to fix all other potholes and stpp stealing please tax money	1
4.	Keep up the good work, best road works execution in dartford. Very impressed	1
5.	Longer timings on the main road compared to the side road was a brilliant idea, keep up the good work, best set of temporary traffi...	1

1 - 5 / 5

CONLUSION

During the recent electricity maintenance on Leyton Cross Road, we leveraged smart mobility to keep road users and local residents informed about the upcoming works, allowing them to plan alternate routes and avoid unnecessary delays.

Our Dynamic Social Media Campaign counted down to the start of the works, giving clear information on the exact start date. Once the work began, the campaign provided a countdown to the completion, ensuring ongoing updates regarding the maintenance.

The campaign reached over 57,000 people and achieved more than 233,000 impressions. Communication on both Facebook and Instagram received an impressive rating of 9.2/10.

Feedback from the survey highlighted that residents found the information exceptionally clear and useful, and many expressed a desire for more frequent updates of this kind.

Our analysis of live traffic data for Leyton Cross Road indicates that the average delays were minimal. On the first day, a few peak periods showed delays of approximately 5 minutes, but outside of these brief intervals, the data reveals almost no significant delays.

APPENDIX 1
TEXT VERSIONS

Social media message 1

Please note: From 21 to 25 October, essential electricity network maintenance will take place at the Leyton Cross Road roundabout, Dartford, at the junction with Bracton Lane. Delays are expected. Please consider using alternative routes during peak times, and for the quickest journey, we recommend using satellite navigation aids.

Social media message 2

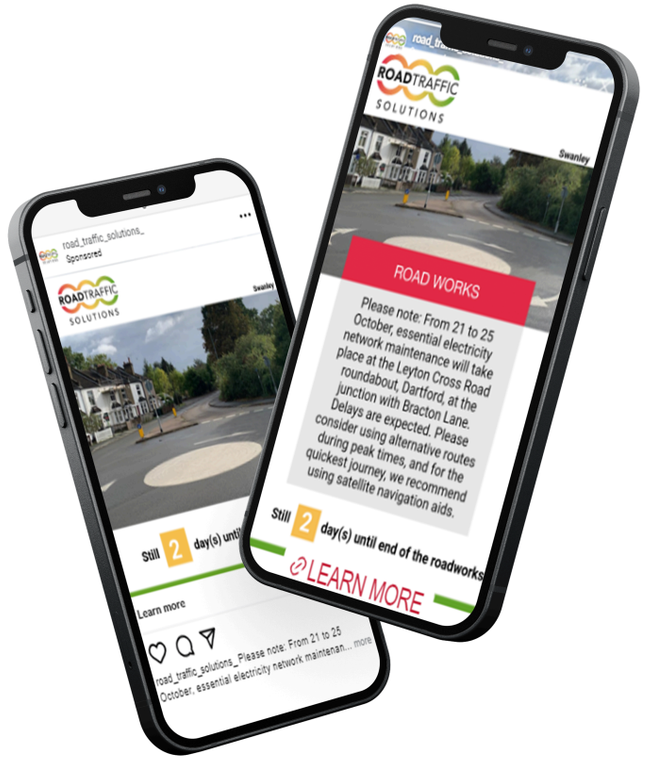
Please be aware that essential roadworks will be carried out at the Leyton Cross Road, Dartford roundabout from 21 to 25 October for electricity network maintenance. Drivers approaching from Oakfield Lane are advised to use alternative routes during peak times. We recommend using a live satnav for real-time updates.

Social media message 3

From October 21 to 25, roadworks will affect the Leyton Cross Road roundabout, Dartford, during electricity network maintenance. Drivers approaching from Oakfield Lane are advised to consider alternative routes. Public transport services will continue as normal. We appreciate your patience and understanding during this essential work.

Social media message 4

Please be advised that roadworks are scheduled to take place on Leyton Cross Road roundabout, Dartford, from Monday October 21 to 25 for electricity network maintenance. Traffic delays are expected due to temporary traffic lights. We recommend allowing extra time for your journeys or using alternate routes to avoid inconvenience



APPENDIX 2
QUESTIONS & RESPONSE

[redacted]
More roadworks for no reason this needs to stop !

2w Like Reply Hide

Author
Road Traffic Solutions Ltd
Neil Felstead We acknowledge that roadworks may cause some inconvenience, but these works are crucial for the maintenance of the local electricity network. While the physical area of the work may seem limited, legal regulations require us to establish safety zones to ensure the protection of our workforce and to provide space for necessary construction vehicles. Please be assured that we are working diligently to complete the project as swiftly and efficiently as possible, with the aim of minimising any disruption. We sincerely appreciate your patience and understanding during this period.

1w Like Reply

[redacted]
Why is it 3 way lights?

2w Like Reply Hide

Author
Road Traffic Solutions Ltd
Gem Sayers Thank you for your inquiry. We considered implementing 2-way signal control for the works, in conjunction with 'Traffic Under Signal Control' (TUSC) for traffic entering from Bracton Lane. However, the risk assessment identified two key concerns.

Firstly, the limited visibility when entering from Bracton Lane would make it challenging for drivers to accurately assess the speed of oncoming traffic. Secondly, due to the location of the work area and the coning setup, vehicles exiting Bracton Lane would be required to briefly cross into the opposite lane to head south. This approach allows for smoother traffic flow, and the third traffic light facilitates this movement.

We have significantly reduced the green light duration for the traffic signal controlling vehicles exiting Bracton Lane. Additionally, we have activated the radar control feature for the same signal, meaning it will remain red until a vehicle is detected. These measures are intended to improve traffic flow in both directions on Leyton Cross Road.