
Connected Intelligent Transport Systems

Research Report Update



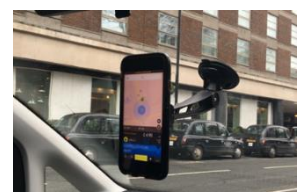
Project Title **Westminster Connected Parking Initiatives**

Overview This project aims to make parking in Westminster “connected”, to reduce congestion, help manage emissions and support local businesses. It aims to make use of Westminster City Council’s existing parking sensor data by making it open to other users, in particular by providing an end to end seamless solution drivers can locate free spaces and then paying for them with a “One Click” connected system.

It also tests innovative new sensors for taxi rank management, and explores the value of exploiting our parking data better through both “big data” analysis and via opening up our data to local businesses and the community for innovative ideas.

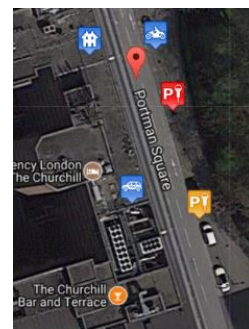
Objectives The City of Westminster, particularly the West End, is a uniquely busy place and we continue to seek ways to manage parking in a way that keeps the city moving. Our specific aims are to:

- **Reduce overall parking emissions and congestion** by detecting where there are free spaces using in-road sensors and disseminating this data in our Parkright App and through an open API to allow other users access.
- **Help people to park more effectively.** Our focus is understanding the benefit to customers of a connected parking approach, as a precursor to connected vehicles, and the cost and time savings they make
- **Reduce Taxi Over-ranking.** Ranks help customers find a taxi quickly and easily, but sometimes the busiest ranks develop queues while others remain empty. We want to explore with the help of the LTDA how to use technology to reduce this for mutual benefit.
- **Optimise Parking Operations.** We collect huge volumes of data about parking, analysing it to see underlying patterns and what they mean for our future parking operations and policy is key.
- **Stimulate innovation.** By making our live location data available to others, we aim to encourage new solutions for mobility in Westminster from academics, app developers and the community.



Technology Activities:

- **AppyParking's** "One Click Parking" uses Westminster's sensors to locate spaces, guide drivers to them and then pay for just parking time actually used, detecting the location and movement of vehicles automatically. This is being tested by service fleet and coach businesses in Westminster
- **Cleverciti** - camera based sensors for detecting over ranking and also a dashboard with email alerts, along with integration of available ranks into ParkRight for use by taxi drivers to find ranks with spaces
- **Conduent** have used their MERGE suite and other big data tools to analyse historic parking occupancy data and investigate the potential for new ways of ensuring compliance, optimising use of parking spaces and undertaking "what if" tests.



Milestones and Deliverables:

- Westminster's ParkRight app has been updated, with an API providing data to many users including AppyParking, satnav companies and parking innovators
- 30 camera based taxi rank sensors installed on lighting columns and now reporting live availability to both Westminster Council and taxi drivers via ParkRight
- "One Click Parking" pilot demonstrated to the Roads Minister and rollout to 150+ service vehicles underway, including Handy Squad, Polytec, John Lewis, National Express and Express Vending in the coming weeks.
- Big Data first analysis complete and workshop with parking teams held to define next steps and potential uses for optimising operations
- Hackathon held with over 60 participants, and winners awarded for suggesting an innovative payment approach - "Transcoin"
- Complete back office integration of payment underway. This is essential to prevent customers who pay via app receiving penalties
- Customer centred benefits assessment and "lessons learned" report for other LAs underway – delivery early 2018
- Smarter parking showcase for other LAs and Industry held at City Hall to share early findings and bring partnerships together



Partners:



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