

COOPERATIVE-INTELLIGENT TRANSPORT SYSTEMS (C-ITS) PLATFORM

PORTSMOUTH CITY COUNCIL

NOVEMBER 2017

PURPOSE

This document provides a high level interim project report to provide an overview of the objectives, methodology, and progress to date within the Portsmouth C-ITS Platform Project.

PROJECT OVERVIEW AND SMART CITY AMBITIONS

The innovative project establishes an on-street test environment within Portsmouth to prove the viability of available communication technology that will not only provide the Council with additional 'real time' information on how the road network is performing, but also give support to road users to enhance their journey experience and improve road safety.

This is a critical part of achieving the city council's vision of developing and implementing cutting edge technology that improves road safety, delivers more consistent journey times for all forms of transport and by harnessing 'big data', provide real time information enabling residents and visitors to make informed travel choices.

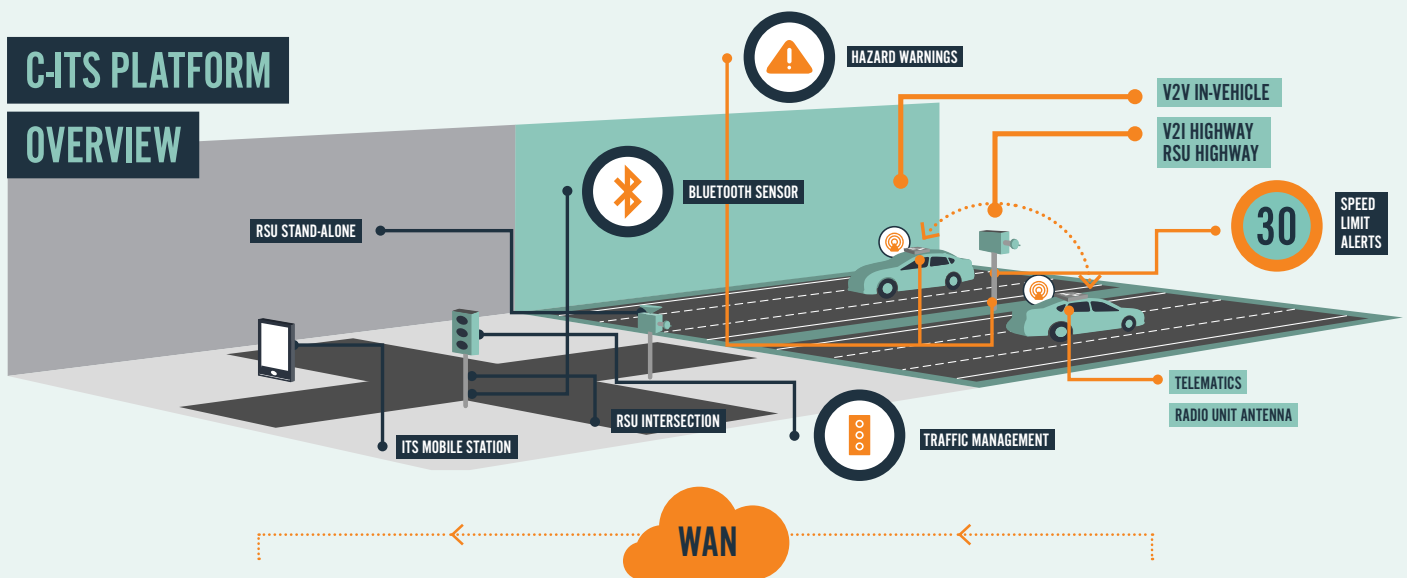
PROJECT OBJECTIVES

The key project objectives are:

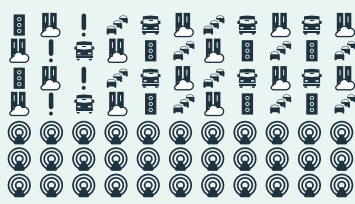
- Explore the benefits and issues of using bluetooth sensors to calculate journey times and to reveal origin, destination & routing information of journeys made on the road network.
- Investigate the creation of a "big-data" platform to combine real-time information from sensors and other data-sources, which can then be accessed by a variety of applications.
- Small-scale trial of V2X technologies to demonstrate connectivity, compatibility and explore various use-cases by creation of a technology "test-bed", connecting to traffic signal controls.
- Use project findings to plan for further deployment of CITS technology throughout Portsmouth.

C-ITS PLATFORM

OVERVIEW



SENSOR DATA



DATA PLATFORM



APPLICATIONS



PROGRESS

Significant progress has been made to date across the above objectives, and the project is on track to deliver in accordance with the close of the project in March 2017. Key highlights are shown below:

- Procurement of data platform
- Creation of a sensor network to create an origin-destination matrix, and capture journey times at a key entry point into the Portsmouth Network, as shown below
- 20 bluetooth sensors installed October 2017

NEXT STEPS

The following steps are planned, culminating in a report with our findings in March 2018:

- Initial testing of sensors and logic - November 2017
- Live data capture - December 2017 to February 2018
- Data platform options - December 2017
- V2X equipment procurement - December 2017
- V2X trials including signal control - January to February 2018

