READING BOROUGH COUNCIL

REPORT BY DIRECTOR OF ENVIRONMENT AND NEIGHBOURHOOD SERVICES

TO:	TRAFFIC MANAGEMENT SUB-COMMITTEE		
DATE:	11 JANUARY 2018	AGENDA ITEM:	14
TITLE:	PROJECT FUNDING AWARDS – C-ITS AND SMART CITY CLUSTER		
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1.   EXECUTIVE SUMMARY

1.1   This report informs the Sub-Committee of two capital funding awards for transport related projects; Co-operative Intelligent Transport Systems (C-ITS) and Smart City Cluster.

1.2   The C-ITS project award is £250K direct from the Department of Transport (DfT). The Smart City Cluster award is £1.73M and funded via the Thames Valley Berkshire Local Enterprise Partnership (LEP).

1.3   The C-ITS project has a total project cost of £337.5K with the additional £87.5K match funding from EU projects and Reading Buses. The Smart City Cluster is not match funded so the total budget is £1.73M however there is a challenge fund element to the project where additional external funding is a requirement.

1.4   A summary of both projects is included within this report.

1.5   The Sub-committee is asked to support an officer recommendation to Policy Committee (19th February 2018) to grant spend approval of both awards in order to deliver the objectives of both projects.

2.   RECOMMENDED ACTION

2.1   That the Sub-Committee notes the report.

2.2 **That the Sub-committee is asked to support an officer recommendation to Policy Committee in February for spend approval of both awards (C-ITS £250K, Smart City Cluster £1.73M) totalling £1.98M of grant funding to deliver the objectives of the two projects.**

3. POLICY CONTEXT

3.1 The proposals are in line with Reading Borough Council's Local Transport Plan (LTP3) and current central government and local government policies. The transport elements of both projects meet our current traffic management policies and standards.

4. BACKGROUND, PROPOSALS AND RECOMMENDATIONS

4.1 This report informs the Sub-committee of two capital funding awards for transport related projects; Co-operative Intelligent Transport Systems (C-ITS) and Smart City Cluster.

4.2 The C-ITS project award is £250K direct from the Department of Transport (DfT). The Smart City Cluster award is £1.73M and funded via the Thames Valley Berkshire Local Enterprise Partnership (LEP).

4.3 The C-ITS project has a total project cost of £337.5K with the additional £87.5K match funding from EU projects and Reading Buses. Cooperative systems better enable network managers to properly balance all transport modes to improve the overall highway network efficiency. This proposal looks to improve street works information, parking information and highway network optimisation to the benefit of all road users within the context of sustainable transport policies.

4.4 This C-ITS project will deliver a new data engine linked to the Universal Transport Management & Control (UTMC) system which will anticipate the data from the rollout of C-ITS units in vehicles and enhance the use of public transport C-ITS. It will also demonstrate the potential of bicycle C-ITS in intersection management.

4.5 The C-ITS £250K funding award is matched with EU project funding from the SIMON and EMPOWER projects as well a contribution from Reading Buses resulting in a total project cost of £337.5K. The full business case submission complete with project costs is provided on the Reading Borough Council website at:
http://www.reading.gov.uk/transport-schemes-and-projects

4.6 The Smart City Cluster project is a two year £1.73m smart city project which is being funded through a capital grant from the Thames Valley Berkshire Local Economic Partnership. There is no

requirement for match funding and there is no direct cash funding required to be secured from other sources. However, this award is expected to promote additional external funding as explained in 4.9 and 4.10.

4.7   The purpose of the project is threefold:
- To deliver a smart city communications and data platform to enable the development and application of Internet of Things (IoT) technology across Reading, Bracknell, Newbury and West Berkshire;
- To deliver smart city solutions that address local authority/city challenges around transport, energy, assisted living and the environment through two challenge fund calls;
- To create a cross authority/cross sector steering group which can further the development of the smart city agenda in the region and create further investment opportunities.

4.8   The smart city platform will consist of:
- **A Low Powered Wide Area Network (LPWAN)** across Reading, Bracknell, Wokingham and West Berkshire. LPWAN is a low cost platform which is designed for IoT sensors which only individually transfer small amounts of data. For example the disabled bay parking studs in Reading sit on a propriety LPWAN solution which enables all 80 studs to communicate directly to a single base station and because it is low powered, batteries in the studs can last for 5 years. Through installing a LoRa Network (the IoT platform promoted by the digital catapult) and SigFOX, a commercial platform we will be covering the main platforms for IoT development and there is industry interest in commercially developing solutions off these platforms.
- **Traffic Signal Smart communication devices** - It will be possible to switch the monitoring of a large number of signal communications from broadband to LoRa. The expected communications revenue saving will more than cover the ongoing revenue costs associated with the operation and maintenance of the LoRa network, ensuring a reliable well maintained network on to which others can build.
- **A33 Wireless Communications Backhaul**. A replacement of ageing equipment on the A33 corridor to the south of Reading which will also form part of the LoRa backhaul.
- **Smart Data Platform** building on Reading Borough Council's open data platform (currently transport data only) to

enable sharing of information between different smart systems.

4.9   Smart applications will be delivered on the platform through the award of Challenge Funds to business. These will be grant funds which will be let through two rounds of competition and will require in-kind contribution from the applicants. Competitions will be around transport, energy, assisted living and the environment and the details of these calls will be determined by a steering group such that they address real city challenges. In addition, there will be some direct procurement of smart technologies including air quality monitors.

4.10   The formation of the steering group is also a key outcome from the project and its role will be threefold,
- to provide the necessary governance for the delivery of the £1.73m investment,
- as a knowledge exchange platform to optimise the potential smart city opportunities,
- as a platform to identify and steer public and private funding investment to help ensure that the project's delivery is much large than the actual value of the LEP investment.

4.11   The Sub-committee is asked to support an officer recommendation to Policy Committee (19th February 2018) to grant spend approval of both awards in order to deliver the objectives of both projects.

5.   CONTRIBUTION TO STRATEGIC AIMS

5.1   These proposals contribute to the Council's strategic aim to:

- Safeguarding and protecting those that are most vulnerable
- Providing the infrastructure to support the economy.
- Keeping the town clean, safe, green and active.
- Remaining financially sustainable to deliver these service priorities

These proposals also contribute to developing Reading as a Green City with a sustainable environment and economy at the heart of the Thames Valley.

6.   COMMUNITY ENGAGEMENT AND INFORMATION

6.1   Both projects require community engagement for them to be successful. The funding awards encourage community involvement with opportunities to get involved through competition funding.

7. LEGAL IMPLICATIONS

7.1   Procurement of the smart city platform including WPWAN, Backhaul and the ODS will build on existing contacts or use standard government frameworks.

7.2   Allocation of the grant funding through competition will be based directly on the approach used in previous challenge funds and will be executed through current procurement procedures. Match funding which we will base on Innovate UK guidance.

8. EQUALITY IMPACT ASSESSMENT

8.1   In addition to the Human Rights Act 1998 the Council is required to comply with the Equalities Act 2010. Section 149 of the Equalities Act 2010 requires the Council to have due regard to the need to:-

- eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;

- advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;

- foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

8.2   The Council does not consider that the proposals will have a direct impact on any groups with protected characteristics. However, this will be reviewed as a part of the project implementation and assessed throughout as appropriate.

9. FINANCIAL IMPLICATIONS

9.1   Both projects are capital grant awards as detailed within this report. Procurement and challenge funding is explained in section 7. LEGAL IMPLICATIONS

10. BACKGROUND PAPERS

10.1 None