



## **Strategic Transport Leadership Board**

29 September 2023

### **Agenda Item 8 – Supporting Future Ready Roads: Electric Vehicle Insights report and Smart Corridor Study**

*Recommendation:*

**It is recommended that the Board:**

- a) Notes the publication of the Electric Vehicle Insights Study – Highlights Report**
- b) Approves the proposed next steps for EEH's support for Electric Vehicle (EV) infrastructure**
- c) Notes the draft outcomes of the Smart Corridor Study and agrees to support a further stage of work on the project.**

#### **1. Purpose**

- 1.1. This paper sets out EEH's work to support the rollout of electric vehicle charging infrastructure and smart corridors.

#### **2. Key points to note**

- 2.1. EEH and Transport East's 'ELVIS' report, published in August 2023, highlights the key points for consideration when undertaking supplier engagement, procurement and a local authority gap analysis exercise for EV infrastructure and identified key opportunities for the region.
- 2.2. EEH is committed to continuing to support authorities in the delivery of EV infrastructure and have convened several meetings for our authority partners with procurement framework managers, delivery partners and consultants.
- 2.3. We will also support the formation of a 'task and finish' EV officer working group for authority officers once in place.
- 2.4. EEH's Innovation Working Group (chaired by Greater Cambridge Partnership) has commissioned City Science to undertake research to show the potential for Intelligent Transport Systems (ITS) and smart signalised junctions/smart junctions within the region, which is nearing completion.
- 2.5. EEH will, with partners, look to support the formation of consortium to bid for UKRI funding to look at how emerging AI technology could be used to develop and improve junction management and improve connectivity issues in the region.

### **3. Context**

- 3.1. The regional transport strategy, published by England's Economic Heartland in 2021, sets out our commitment to supporting innovation, recognising the pivotal role of the region's authorities in developing new mobility solutions and supporting fleet decarbonisation to improve connectivity and enable low carbon growth.
- 3.2. This position was reinforced in July 2023, where the Strategic Transport Leadership Board confirmed the importance of making the best use of the region's road infrastructure while at the same time ensuring it is well prepared for a low carbon future.
- 3.3. EEH is leading on work to support both with the transition to low and zero emission vehicles and in developing a region-wide approach to developing smart corridors.

### **4. Electric Vehicle Insights Study (ELVIS) Report: key findings**

- 4.1. To support local transport authorities with the transition to low and zero emission vehicles, and in response to the Office for Zero Emission Vehicle's electric vehicle (EV) infrastructure strategy, EEH and Transport East commissioned two discrete workstreams.
- 4.2. This consists of an EV infrastructure planning tool, demonstrated to the Board in December 2022, and a comprehensive report made available to all partner authorities, the ELVIS report.
- 4.3. The ELVIS report, published in August 2023, highlights the key points for consideration when undertaking supplier engagement, procurement and a local authority gap analysis exercise for EV infrastructure and identified key opportunities for the region.
- 4.4. The report outlines key proposed roles and responsibilities for different actors in the EV charge point ecosystem including the role that EEH should continue to play regarding supporting delivery:
  - a) Providing regional strategic direction, tools, and guidance
  - b) Develop and monitor regional targets
  - c) Facilitate knowledge sharing and upskilling
- 4.5. The report goes on to outline the role of national government, particularly in relation to funding and supporting equitable distribution of infrastructure, and the requirement for further engagement with large private sector actors – particularly those controlling large car parking assets near to on in conurbations e.g. supermarket chains/NCP.
- 4.6. The report highlights the opportunity for local authorities to take an innovative approach to delivery and realise revenue opportunities through collaboration with other partner authorities and charge point providers.
- 4.7. It outlines that there is no single actor who can deliver the forecasted infrastructure needs outlined in the EV:Ready Tool.
- 4.8. EEH are committed to continuing to support authorities in the delivery of EV infrastructure and have convened several meetings for our authority partners with procurement framework managers, delivery partners and consultants. We will also support the formation of a 'task and finish' EV officer working group for authority officers once in place.

### **5. Proposed next steps on EV**

- 5.1. To underpin this workstream EEH, working with Transport East, is focusing on:
  - a) Data update: Engaging WSP (the developer of the tool) to update the current charge point location data.
  - b) Supplier engagement: Undertaking several supplier engagement events across the EEH and Transport East region enabling partner authorities to meet and discuss requirements with EVCI suppliers and each other.
  - c) Based on past engagement with LTAs and the work undertaken as part of the ELVIS report, developing a 'Next steps: 10-point action plan' for authorities to support (new) EV officers. This will include an element of direct consultancy support for authorities.



5.2. Separately EEH will begin engagement with Distribution Network Operators (DNOs)/ Energy System Operators with the aim to convene a forum for local transport authorities and DNOs to discuss blockers to deployment and understand the new approach to delivering grid connections.

## **6. Smart Corridors – Phase 1**

6.1. As previously set out to the EEH Board, the Innovation Working Group (chaired by Greater Cambridge Partnership) has commissioned City Science to undertake research to show the potential for Intelligent Transport Systems (ITS) and smart signalised junctions/smart junctions within the region.

6.2. This study aims to:

- a) Consolidate and update knowledge regarding cutting-edge applications of smart junctions
- b) Categorise smart junction applications into their respective impacts (e.g. modal shift, congestion etc.)
- c) Consolidate regional data and evidence to inform priorities for EEH
- d) Prioritise potential interventions to maximise desired impacts (including minimising embodied carbon)
- e) Produce clear, evidence-based recommendations for next steps.

6.3. Work is nearing completion on the first phase of work for project.

6.4. Draft recommendations being made in the report include:

- a) addressing local transport authority knowledge gaps to highlight opportunities – this includes reviewing and optimising current junction management systems
- b) expanding funding sources to include BSIP, active travel and air quality funding streams
- c) undertaking further smart junction feasibility studies at a local level
- d) once identified, building a TAG based business case for the solution
- e) development of additional use cases of smart junction technology on corridors as further work and evidence is developed and published.

## **7. Next Steps on Smart Corridor work**

7.1. EEH will integrate key bus corridor studies work into the final draft of the report.

7.2. The EEH Innovation Working Group will continue to explore next steps for this project. EEH is recommending that the Board continues to commit to taking this workstream forward and have proposed a small amount of further funding in the 2023/24 business plan to support it.

7.3. EEH will, with partners, look to support the formation of consortium to bid for UKRI funding (Bridge AI) to look at how emerging AI technology could be used to develop and improve junction management and improve connectivity issues in the region.

**James Golding-Graham**  
**Head of Decarbonisation and Innovation**  
**September 2023**