Department for Transport

Local Authority Capacity and Capability: Literature Review

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Disclaimer

1. Executive summary

Context

A literature review of local authority (LA) capacity and capability (C&C) was conducted for the Department for Transport (DfT) by University of the West of England (UWE). The review responded to two main questions:

- What are the C&C needs of LAs and what barriers do they face in addressing these needs?
- How can LAs be best supported to improve their C&C?

The review drew upon 30 documents and included unpublished items identified by DfT as well as items in the public domain. One document was a cross-cutting analysis of LA C&C; the others focused on seven different areas of LA delivery (Table 1).

Key Findings

LA capacity and capability needs and barriers

Based on the literature reviewed, C&C needs that cut across transport modes can be grouped into three broad categories:

- Commercial, bidding and brokering
- Data and evaluation
- Cross-sector collaboration and working with consultants

In the area of commercial, bidding and brokering, specific C&C needs included:

- Skills for managing more integrated working and brokerage[1] (across authorities, policy sectors, public/private/third sectors)
- Contract management skills (bus franchising contracts; electric vehicle (EV) charging-related contracts)
- Bidding skills, given the importance of being able to bid effectively to central government funding competitions.

In relation to data and evaluation, advanced data exploitation skills (such as data interpretation skills for highway defect scanning) can help improve efficiency, save money, and deliver improved customer benefits, but some LAs lack the ability to employ these effectively. Some LAs also report challenges with data sharing and a lack of C&C to carry out robust evaluation.

Effective means of knowledge exchange are necessary to support LAs to keep up with new responsibilities and technologies. Due to C&C constraints, LAs reported challenges in keeping up with the latest developments in areas such as the 'Future of Mobility', EV charging, Net Zero, and Equality, Diversity and Inclusion (EDI). Drawing on external suppliers can help to address these and broader C&C issues in the short-term, but this may not improve capability over the longer-term. LAs need to have sufficient C&C in place to be able to effectively manage relationships with consultants and enable knowledge transfer between organisations.

Based on the literature reviewed, modes of transport identified as having some specific C&C needs were active travel, bus services, EV charge point provision and highways management. The literature suggested that there is a capability gap in deploying specialist software tools for active travel. There was a mixed picture of successful LA upskilling and outsourcing.

Delivery of bus services is associated with a wide range of LA C&C issues, including a lack of technical expertise in areas such as business case development and procurement. These needs arise from changing LA responsibilities, linked to greater public control over local buses, requiring more bidding and contracting. Staff recruitment problems are also a contributing factor. Outsourcing is identified as a factor in perpetuating LA C&C deficits.

EV charge point delivery is a relatively new responsibility for LAs, and not a statutory one. C&C constraints are significant, due to the scale of the task, and the detailed technical knowledge required to secure effective delivery, usually in partnership with the private sector. Needing to influence the functioning of an emerging local market for charging infrastructure was identified as an additional challenge.

C&C needs were found to vary by LA size, type, and degree of rurality.

[1] We define 'brokerage' as the skills and abilities to negotiate agreements between different third parties with whom the LAs need to have a strong relationship, in order to achieve policy objectives.

Small LA size is associated with specific C&C concerns (lower skills diversity in staff teams, difficulty recruiting), and barriers in addressing them. Combined Authorities (CAs) appear to have some advantages due to prestige and scale.

Multi-tier governance arrangements mean that LAs need to work collaboratively to access resources in another authority, or to coordinate across institutional boundaries, which imposes additional C&C requirements.

There is limited evidence on specific C&C issues relating to rural areas.

The review identified mitigating practices that LAs have adopted in response to C&C shortfalls. These included combining functions or teams, outsourcing, adopting new practices or technologies, more effective collaboration, opting out of providing non-statutory services, and prioritising revenue-generating services.

LA support to improve C&C

The review also identified three main ways that LAs can be supported to improve their C&C:

1. **Greater certainty for funding**

   Replacing complex and multiple funding pots with a secure multi-year budget allocation could enable LAs to deliver better value for money, increasing the impact of investment through better planned and longer-term interventions.

2. **Support to build partnerships**

   Support to build partnerships with other LAs would enable particularly small and rural LAs to improve their collective buying power, enabling learning from each other's experiences and helping to build shared capacity.

3. **Improved capability for preparing bids**

   Improved capability for preparing bids could be achieved by providing frameworks and templates, access to shared data, information and lessons to improve future bidding, access to additional specialist resources, and receiving bespoke feedback on successful and unsuccessful bids.

Additionally, LAs could be helped to enhance their C&C in relation to data management. Potential enablers could include guidance on which datasets to exploit, investment in mechanisms for harvesting data, development of LA staff skills and improved collaboration with the commercial and public research sectors.

Recommendations

Based on the available literature, the report's authors have made a number of recommendations for DfT and LAs to consider. In relation to the evidence gaps identified, they have also made recommendations for future research and evaluation.

C&C constraints are holding back the delivery of national transport policies. It would be mutually beneficial for DfT to target support to help build LA C&C, which would in turn help LAs to deliver against national priorities.

- Skills which are needed by LAs include software use and data analysis, the ability to prepare strong bids for funding, contracting and collaborative working. These needs cut across the policy areas in which LAs operate.
- Better collaboration between, within and beyond LAs offers good potential to reduce C&C constraints.
- Future mobility is expected to create a growing demand for C&C to address new regulatory and legal responsibilities relating to new modes and services (e.g. e-scooters, Mobility-as-a-Service).

LAs should:

- Keep their outsourcing practices under review to ensure they are striking an appropriate balance between developing in-house C&C and buying in less frequently needed specialist skills.
- Explore where they can leverage a better return on resources by brokering relationships with others.
- Ensure they are learning good practice from other LAs which can result in cost savings or more efficient working.

Recommendations for future research and evaluation are as follows:

- There was a lack of evidence on the effectiveness and impact of interventions to improve LA C&C. Future initiatives to address C&C gaps should be accompanied by evaluation to understand whether they result in more effective outcomes.
- Evidence related to LA C&C appeared to be particularly scarce in relation to Net Zero, Equality, Diversity and Inclusion, and on the specific C&C needs of rural LAs. It is recommended that primary research is commissioned for these topics.

2. Introduction

The Department for Transport (DfT) commissioned a literature review on local authority (LA) capacity and capability (C&C) to bring together existing evidence to inform policy making and identify gaps for potential future research. The review was conducted by the University of the West of England (UWE). It had three main objectives:

- To synthesise existing evidence from research commissioned by DfT to explore the C&C of LAs in relation to the delivery of transport projects
- To identify and integrate other relevant evidence on LA C&C
- To identify strengths and weaknesses in the evidence base and, as a result, any suggested areas for further research

The review aimed to synthesise the available evidence in relation to two main research questions, underpinned by three sub-questions:

1. What are the C&C needs of LAs and what barriers do they face in addressing these needs?
    - Which issues are common across the LA C&C landscape, regardless of transport mode?
    - Do needs differ, depending on the mode of transport that the LA activity relates to?
    - How does C&C vary by different LA characteristics e.g., size, type, location, etc.?
2. How can LAs be best supported to improve their C&C?

Local Partnerships (2021a) presents a definition of what C&C are. In summary, **capacity** relates to the number of staff available to plan and deliver transport projects and **capability** refers to the skills, knowledge, and experience to deliver these projects and maintain the transport networks.

This review included 15 documents identified by DfT, some of which were reports commissioned by DfT. It also included a further 15 documents which were identified by the research team, mainly via a literature review of published sources.

The report is primarily structured around the research questions. It refers to policy themes that were prominent within the sources reviewed. Some of these themes refer to specific transport modes; others cut across the policy delivery areas. These themes can be categorised as follows:

- Overviews of LA C&C
- Net Zero
- Future of Mobility
- Active Travel
- Bus Services
- EV Charging
- Highways Management
- Data-related C&C

3. Methodology

Literature for the review was partly drawn from published and unpublished reports selected by DfT. This included research commissioned by DfT and other relevant reports and documents identified by DfT staff. To strengthen and validate the evidence the research team sought further high-quality publications through searching.

Databases and search engines were deployed as follows:

- Relevant references cited within the documents provided by DfT were followed up,
- Google searches using keywords and combinations of keywords were used to identify LA documentation, or other consultancy/public sector research reports,
- UWE Library subscription databases using key words were used to search for a mix of grey literature and academic research.

Two rounds of searches using different combinations of search terms produced a longlist of 37 pieces of additional material. This was further extended to 40 following an email appeal to the Universities' Transport Studies Group email list. The longlist was then assessed against two criteria, creating a final shortlist of 15 additional documents that were reviewed, as well as the 15 provided by DfT. The key criteria were:

- The relevance and recency of the material, and
- The extent of relevant content.

Only one document was identified which focused directly on cross-cutting C&C issues in the transport sector. This was a report commissioned by DfT from Local Partnerships (LP, 2021a). LP's research sought to understand the current state of C&C and to identify effective means of future support.

However, some cross-cutting C&C issues were also identified in other documents with a different primary focus. A summary of the 30 documents reviewed (using abbreviated titles) is provided in Table 1, indicating which of the policy themes identified in Paragraph 2.5 they address. A full list of references is available at the end of the report.

Although the available literature covered all the major policy themes outlined in Table 1, the literature's direct relevance to LA C&C was variable. Five of the 30 documents had a specific C&C focus and 11 were specifically about LAs. Overall, the amount of information

relevant to LA C&C ranged from a paragraph to the whole document, although most were between these extremes.

Given the scarcity of published evidence on the topic, the review drew on DfT documentation from relevant workshops and discussions, as well as unpublished research reports. The research included in the review was mainly qualitative. Therefore, while the report outlines a range of LA C&C needs and approaches to supporting LA C&C development, it cannot comment on the prevalence of specific types of C&C needs and identify which are most pressing.

Document reviewed	Overview of C&C	Net Zero	Future of Mobility	Active Travel	Buses	EV	Highways	Data-related
Atkins/Jacobs (2021) LA Transport Data Guidance								Yes
Atkins/White Willow (2021) LA transport data guidance								Yes
Baldwin & Shuttleworth (2021) How govts use evidence to make transport policy				Yes				
Campaign for Better Transport (2021) Nat Bus Strategy: C&C					Yes			
CBI (2020) Connecting Communities					Yes		Yes	
Cenex (2021) EV Infra Barriers						Yes		
CIHT (2019) Better planning, better transport, better places		Yes		Yes	Yes		Yes	
CIHT (2021) Response to “Planning for the Future: White Paper 2020”.							Yes	
Committee on Climate Change (2020) Policies for 6th Carbon budget		Yes						
Competition and Markets Authority (2021) EV Charging Market Study						Yes		
Dept for BEIS (2021). Written Evidence to Committee		Yes						
DfT (2016) Transport Infrastructure Skills Strategy							Yes	
Ernst & Young (2020) Review of SEND Home to School Transport					Yes			
Evans (2020) LAs & 6th Carbon Budget CC Committee		Yes				Yes		
Future of Mobility Steering Group (2019) Survey of LA C&C			Yes					
IPSOS/MORI (2021) Highways Asset Management							Yes	
KPMG (2019) Integrating planning & delivery of transport with housing				Yes	Yes			
Local Partnerships (2021a) LA C&C Research: Quantitative Report	Yes							
Local Partnerships (2021b) Role of LAs in provision of EV charging infra		Yes				Yes		
National Audit Office (2021) Local government & net zero in England		Yes						
National Infrastructure Commission (2021) Infra, Towns & Regeneration				Yes			Yes	Yes
North Highland (2018) Local Authority Data Discovery								Yes
Olowoporoku, D., Hayes, E., Longhurst, J. & Parkhurst, G. (2011) Improving road transport-related air quality in England							Yes	
Policy Exchange (2021) Charging Up: Policies to EV charge points						Yes		
Sustrans (2020) C&C Assessment - Cycling and Walking Infrastructure				Yes				
Sutton Borough Council (2021) Highways Shared Service Review							Yes	
Transport East (2021) Letter from Chair (Bentley) to SoS (Shapps)						Yes		
Transport Systems Catapult (2016) Ready for Innovation: Rural Transport			Yes		Yes			Yes
Walker (2019) Local government sector C&C workstream			Yes					Yes
Welsh Government (2021) Ministerial Letter				Yes	Yes	Yes		Yes

Table 1 Policy themes covered by each document reviewed

4. LA capacity and capability needs and barriers

This section focuses on LA C&C needs and barriers to addressing these needs. It identifies common themes in the literature which were present across different modes of transport.

In broad terms, capability needs and the barriers to addressing them can be grouped into three categories, based on the literature reviewed:

1. Commercial, bidding and brokerage skills
2. Data-sharing and advanced data capability
3. Cross-sector collaboration and working with consultants

These are considered below in turn, followed by a discussion of some of the specific capacity needs that were identified in the literature.

Commercial, bidding and brokerage skills

Commercial and legal skills are increasingly necessary in the transport sector. LAs require legal skills to enter agreements with external bodies, and commercial skills to engage in potentially revenue generating activities, such as procuring the private sector to deliver services such as bus contracts (CBT, 2021) and EV charge points (CMA, 2021; PE, 2021). A lack of sector-specific knowledge in commercial and legal teams can present a challenge for LAs, for example when negotiating Enhanced Partnerships with local bus operators (CBT, 2021:7). CMA (2021) also highlight that in the EV charging market, local monopolies can develop without effective management and oversight. LAs could lead on running competitive tendering exercises but this requires sufficient capacity and procurement skills.

Most of the current funding for transport infrastructure is available on a short-term, ringfenced basis and tends to require a competitive bidding process (NIC, 2021:7). Therefore, **having strong bidding skills** (such as drafting, business case development and analytical capability) **is crucial for LAs to obtain funding**. CBT (2021) identified

effective use of evidence and cost-benefit analysis as specific bidding skills which are sometimes lacking.

The bidding process may reward LAs with high bidding C&C over areas with potentially higher funding needs. A lack of successful bids can lead to a downward spiral of reduced capacity for an LA, which in turn reduces the likelihood of successfully competing for future funding (NIC, 2021). A DfT commissioned survey by LP (2021a) **indicated that LAs with smaller workforces bid for funding less frequently**. The teams with 75 to 100 FTE were most likely to bid at every opportunity, whereas unitary authorities with teams with only 1-25 FTE bid for about half of the funding opportunities.

Barriers to bidding for funding include capacity to bid and deliver projects, as well as financial resource, and suitability of the funding stream. LAs with good bidding C&C are more likely to also have access to other funding opportunities, such as funds designated by Highways England (now National Highways) for sustainable transport improvements (CIHT, 2019), or funding for EVs and charging infrastructure from Innovate UK (Evans, 2020).

While competitive processes are designed to help focus funding on the best projects, the fragmented nature of grant funding can also present a barrier to achieving value for money, in that it makes it difficult for local authorities to plan for the long term (NAO, 2021:10).

This review defines **brokerage skills** as the ability to negotiate agreements between third parties with whom the LAs need to have a strong relationship, in order to achieve policy objectives. For example, brokerage skills were identified as important to align travel supply and demand in rural areas (TSC, 2016) and to persuade senior council stakeholders of the benefits of investment in buses (CBT, 2021).

Brokering connections between transport operators and housing developers is important because major developments often have significant public transport implications. However, transport operators may lack the C&C to engage directly with developers, necessitating LA involvement (CIHT, 2019). LAs could position themselves as brokers to deliver sustainable transport, with input from other stakeholders (CIHT, 2019).

On the topic of Demand Responsive Transport (DRT), TSC (2016:41) argues that LAs have a position of trust within their communities (established through their service delivery role) which could be used to play a more active role in bringing together supply and demand. They could draw on established relationships with residents, employers and other local stakeholders in order to broker improvements, but they have not traditionally had the skills or capacity to play the role of a broker between these parties and transport suppliers.

Data sharing and advanced data capability

A report by North Highland (2018) explored the opportunities and challenges for transport **data sharing**, using evidence from qualitative and quantitative engagement with data end-users and covering a range of transport modes. The research highlighted a shortage of skills and expertise within LAs in relation to transport data, as well as technology and data

tools. Of the English local authorities who responded to their survey, only 18% had a dedicated team responsible for data and analytics (North Highland, 2018:14). Therefore, many LAs partner with consultants and universities to access data and undertake complex data analysis. A similar picture was identified by the Atkins and White Willow (2021) report.

DfT commissioned Atkins & White Willow (2021) to engage with LAs on how to share and exploit their transport data. This drew on a survey of staff from English local authorities, which asked respondents to identify the main barriers to data sharing. Based on 52 responses to this question, 38 (73%) cited lack of resources, 23 (44%) shortage of technical skills, and 8 (15%) lack of evidence or business skills. The survey also highlighted other barriers such as complexities around data ownership (noted by 54% of respondents) which may be linked to wider C&C constraints.

Advanced data exploitation skills can enhance transport network performance, save money, and deliver improved customer benefits, as well as offering the potential for use of new datasets. For example, data interpretation skills for highway defect scanning can support automation of the inspections. Not all LAs are able to effectively access and use existing data or generate new datasets due to limited staff resources and skills, with only a few using data to create efficiencies and cost savings; for example, Oxfordshire (Walker, 2019).

Advanced digital solutions. The 'Future of Mobility' (FoM) looks ahead at the important future trends, challenges and opportunities for the transport system. Walker (2019) notes that the FoM presents an array of new technologies, and it can be difficult to know which ones are appropriate to use and invest in. Advanced digital solutions and data exploitation are important in FoM initiatives. These require new skillsets so that LAs can work with digital innovators. Even though LA teams can be adaptable, few LA transport teams have the technological expertise to evaluate which emerging digital innovations will resolve future transport problems effectively. CBT (2021) notes this specifically with respect to 'smart' bus ticketing technologies.

Cross-sector collaboration and working with consultants

Strategic thinking and collaboration skills are increasingly needed for individuals and organisations involved in built environment development and transport delivery to be aligned with one another. This is important in order to achieve policy objectives which cut across sectors, for example, sustainable development requires coordinated delivery by the planning, housing and transport sectors (CIHT, 2019; KPMG, 2019; CIHT, 2021). It also needs to be aligned with public health policies to achieve jointly defined goals, notably Net Zero (BEIS, 2021; Evans, 2020).

The structure of LA transport teams can be a barrier to integrating policy by different government departments and delivering joined-up approaches (NAO, 2021; CBT, 2021). For example, LAs may need to engage with policies from different central government departments, such as planning new housing, to achieve climate change objectives. LAs need to understand any transport infrastructure deficits that will require investment to meet housing needs while maintaining the safe and reliable operation of transport networks and improving air quality (CIHT, 2019:14). Integrated working within transport teams can be

critical too; for example, cycle planners need to work with traffic engineers in planning infrastructure (Sustrans, 2020).

Soft skills, such as effective communication and community engagement, are increasingly important for the delivery of more innovative and potentially controversial schemes. These include low traffic neighbourhoods and other schemes that reallocate more road space to active travel (Sustrans, 2020), bus prioritisation, EV charge points and e-scooters.

As noted above, LAs frequently draw on consultants to support delivery of their work. In reference to the bus sector, CBT (2021:22) note concerns about insufficient availability of consultants with the relevant skills and knowledge. In addition, to get the high-quality outputs from consultant-led work, they recommend that consultants should work closely with existing LA staff to understand the local context. Use of consultancy is most effective when consultants and existing staff work together, as this enables knowledge transfer to the local authority and can have longer-lasting impacts on LA capability. When LAs are operating with a skeleton staff, this impedes effective collaboration and can contribute to a reliance on consultants over the longer-term.

Summary of key findings - LA capacity and capability needs and barriers

Based on the literature reviewed, this section has identified three types of C&C needs and barriers to addressing them, which are summarised below:

Commercial, bidding and brokerage skills:

- Strong commercial and legal skills are increasingly necessary given the need for LAs to enter agreements with external bodies (e.g. bus operators) and engage in potentially revenue generating activities.
- As most central government funding is awarded on a competitive basis, strong bidding skills are crucial for LAs. A lack of successful bids can lead to a downward spiral of reduced capacity, which in turn reduces the likelihood of successfully competing for future funding.
- Brokerage skills are increasingly needed to negotiate agreements between third parties in order to achieve LAs' policy objectives, for example facilitating agreements between transport operators and housing developers.

Data sharing and advanced data capability:

- Advanced data exploitation skills can enhance transport network performance, save money, and deliver improved customer benefits, but LAs often lack the ability to employ these effectively.
- With regards to data sharing, LAs reported several C&C related barriers, such as a lack of resources and a shortage of technical skills.

Cross-sector collaboration and working with consultants:

- Strategic thinking and collaboration across sectors are often necessary to achieve key policy objectives, such as reaching Net Zero targets. However, the structure of LA transport teams can be a barrier to working in an integrated way.
- To get the maximum benefit from consultant-led work, LAs and consultant teams should work closely together. This enables consultants to understand the local context and LAs to build their capability through knowledge transfer.

5. Capacity and capability needs by mode of transport

This section outlines C&C needs that were highlighted specifically in relation to particular modes of transport. As the literature reviewed for this report was mainly qualitative, it does not enable us to determine the scale of specific C&C issues and to identify which are most prevalent. Rather, this section aims to highlight specific emerging themes in relation to different transport modes, which could be further explored through future research.

C&C needs in relation to particular modes of transport

Table 2 summarises the needs identified in the literature by mode of transport. The below discussion expands on each of these points in more detail.

Policy Area	Capacity	Capability
Active Travel	A general problem, particularly in LAs with small teams Revenue funding is important due to the need to invest in staffing costs	Some specific capability challenges were identified around developing Local Cycling and Walking Infrastructure Plans (LCWIPs) e.g. carrying out enhanced Cost-Benefit Analysis
Bus Services	Funding and staffing are capacity problems Compounded/ perpetuated by outsourcing work at high cost	Skills shortage in sector pushing up staffing costs Capacity constraints limit staff time for upskilling
EV Charging Infrastructure	Tenfold increase in chargers required by 2030 creating capital and revenue capacity needs Dedicated staff teams required	Need for EV market dynamics expertise Commercial skills necessary for procurement
Highways Management	Clear emphasis on funding as a capacity constraint Sharing services across LAs seen as a potential efficiency gain	General need for highways departments to upgrade their IT capabilities to take advantage of the efficiencies new technologies can bring

Table 2 Summary of LA C&C needs by mode of transport

Active travel

A report by Sustrans (2020) assessing **C&C for cycling and walking** presents evidence from a range of LA types. The report suggests that many LAs would require further investment in staff to be able to deliver against larger amounts of active travel funding. Few LAs have dedicated teams for walking and cycling; some even lack a single FTE dedicated staff member. They also suggest that there is a potential shortage of qualified engineering staff for designing cycling and walking infrastructure.

A small number of LAs were identified as having limited technical capability, such as not having the skills to use the Propensity to Cycle Tool (PCT) or Geographic Information Systems (GIS). The use of these tools is important in the context of creating Local Cycling and Walking Infrastructure Plans (LCWIP). This skills gap is creating a need for outsourcing, particularly within smaller LAs, at least until they can build their own C&C. However, the report also noted that the development of LCWIPs has been an opportunity for some LAs to upskill staff (Sustrans, 2020).

Sustrans (2020) also highlight the importance of revenue funding to active travel. Compared to other types of transport delivery with relatively high capital costs, such as highway schemes, revenue funding is important due to the need to invest in staffing costs (e.g. for behaviour change initiatives) (Evans, 2020).

Bus services

Campaign for Better Transport (CBT, 2021) reviewed C&C in relation to bus planning and provision, a key public transport mode for the majority of LAs. The ability to recruit and retain staff within LAs has impacted on bus planning. CBT note that generic LA funding cuts have resulted in fewer staff, so team resilience to absence is low. In turn, the need to cover absent staff limits the possibilities for staff to attend classroom or off-site training. Junior staff are particularly affected as their opportunities for skill development are limited. Funding fluctuations in bus-related delivery were also noted as impacting on staff resources and, in turn, having insufficient capacity and capability to write strong bids for further funding.

The staffing problems related to bus sector C&C are wider than just having limited funding for staff. Short-term contracts and uncompetitive salaries have a negative impact on recruitment. There are few people with the appropriate skills making it a competitive recruitment market, and it is harder to recruit skilled staff outside of large cities. Hence, CBT (2021) expressed concern that replacing staff near to retirement, especially those with extensive knowledge of the bus sector, will be difficult going forward.

Bus sector C&C problems are also compounded by an over-reliance on outsourcing work to consultancies because of short-term funding, which is costly and reduces opportunities for in-house skill development. Consultancy is used both due to LA staff capacity constraints and to fill capability gaps, for example in relation to calculating Benefit Cost Ratios, conducting modelling, and writing funding bids (CBT, 2021).

Partnerships between the LA teams and commercial companies are also particularly important within the bus sector, for example because of the need to work with bus

operators to develop Enhanced Partnerships (EPs) (CBT, 2021). EPs enable multiple forms of cooperation between LTAs and operators, such as multi-operator ticketing schemes and bringing multiple local authorities together with operators to collaborate on improvements to local bus services. However, the CBT (2021) report notes that due to a lack of capacity, LA teams are focused on day-to-day operational issues at the expense of strategic planning, which could pose challenges in relation to the delivery of the National Bus Strategy.

Net Zero

Local authorities have a key role to play, but they may lack the capability and capacity to deliver in relation to the government's Net Zero Strategy (Committee on Climate Change, 2020; NAO, 2021). Committee on Climate Change argue that central government should allocate additional funding for staffing and resources to support Net Zero delivery plans, as well as encouraging collaboration between local authorities, regional government and public bodies. Better coordination has the potential to create efficiencies, reduce costs and ensure that local plans are contributing to the achievement of national objectives in a joined-up way (ibid. p.36). A report by the NAO (2021) also identified a need to clarify the roles and accountabilities of local authorities in relation to achieving Net Zero. In addition, they suggested a need for improvement in how the multiple government departments involved in delivering Net Zero objectives communicate with one another, as there is a risk of inconsistent messaging to local authorities (ibid. p. 8).

Electric vehicle charging infrastructure

The government has committed to a phase-out of new diesel and petrol cars by 2030, but a lack of EV charge points is a major barrier to achieving these ambitions (Policy Exchange, 2021). Although LAs are responsible for parking and installation of street equipment, EV charging is not one of their statutory duties, meaning that it often does not take priority (CMA, 2021). Furthermore, many local authorities lack dedicated teams to lead the roll-out of EV charge points, and provision often falls between teams responsible for other services (including planning, roads and transport, parking, the environment, climate change) (Policy Exchange, 2021). This impedes progress in improving the network of EV charging points in public spaces.

Cenex (2021: 8) identify five "significant" barriers to the development of EV charging infrastructure. Of these, two directly or indirectly relate to LA C&C:

- The lack of revenue funding made available by government is preventing local authorities from allocating staff resource to deliver and manage high-quality local charging infrastructure networks (Policy Exchange, 2021 raises similar points),
- There is no widely available source of accurate open data on the location, specification and status of EV charging infrastructure. In the UK currently, the only source of live data is privately-owned, and the only source of open data is not live. This inhibits market competition in developing software solutions to improve the EV user experience.

LAs have a particular role in charge point provision in residential urban areas where they are identified as having lead procurement responsibility (Policy Exchange, 2021). This is the case because they control, manage, and sometimes own the public realm needed for the infrastructure. CMA (2021) notes that on-street charging (along with provision in remote locations and along motorways) was proving most challenging. Due to their pivotal role, LAs were seen as a clear candidate to lead bidding for government incentives, rather than private companies, creating the need for bidding capacity and skills.

Highways management

While not specifically focused on LA C&C, a report on targeted repairs to failed road surfaces (the 'pothole fund') identified a need to improve IT capability in relation to highways management. Some LAs identified a lack of understanding of available software solutions and ability to use them in an effective way. IT skills will be increasingly important to supplement the expertise of more operations-focused colleagues within highways teams (IPSOS, 2021: 38).

Summary of key findings - C&C needs by mode of transport
Based on the literature reviewed, this section has outlined some specific C&C needs by mode of transport, covering **Active Travel, Bus Services, EV Charging** and **Highways Management**.
Active Travel is associated with a capability gap in the use of specialist software tools. There was a mixed picture of successful LA upskilling and the need to outsource.
Delivery of bus services is associated with a wide range of C&C issues, due to changing responsibilities. LAs now have greater control over local buses, requiring more bidding and contracting skills. Staff recruitment is challenging due to uncompetitive salaries and low availability of relevant skills. Reliance on outsourcing is identified as a factor in perpetuating LA C&C deficits.
EV charge point delivery is a relatively new responsibility for LAs, and not a statutory one. C&C constraints are significant, due to the scale of the task, and the detailed technical knowledge required to secure effective delivery, usually in partnership with the private sector.
In relation to **highways management**, there is a lack of understanding of available software solutions and ability to use them in an effective way. Improved data capability could strengthen the standard and efficiency of highways management processes.

6. Capacity and capability needs by characteristics of LAs

The evidence review indicated that the following characteristics have an impact on the type and intensity of C&C issues that LAs experience. These characteristics often overlap with one another.

- Typology
- Size
- Rurality

Typology

LA structure can have an impact on capacity if central government chooses to impose different funding rules. Apart from Combined Authorities (CAs), other LAs currently only have certainty for local transport funding for a maximum of three years, which restricts their ability to both plan for, and invest in, sustainable transport schemes (KPMG, 2019; Transport East, 2021).

LAs in two-tier structures face specific coordination challenges.[2] For example, the tiers can lead to housing and transport policies and plans developed by separate teams with differing priorities across multiple authorities which does not necessarily promote integration (KPMG, 2019). Additional complexity may arise from the county tier being responsible for transport planning and highways schemes and the district tier for Local Plans (CIHT 2020/2021). Two-tier structures also mean that consensus and political support must be gained from multiple sets of stakeholders, such as the politicians of different councils.

In order to be able to integrate effectively with other services, LAs must have some C&C in areas that they are not responsible for. For example, air quality management is a district-

[2] Two-tier structures are those in which responsibilities for services are divided between two authorities, for example, County Councils responsible for services across the whole of a county, like transport and planning, with District, Borough or City Councils covering a smaller area, being responsible for other services like rubbish collection and housing.

level environmental health department responsibility, but the primary cause of poor air quality in urban areas is vehicle traffic, a county-level highways department responsibility (Olowoporoku et al., 2017). For these reasons, LAs which are part of tiered local government will require additional C&C to enable them to engage with a wider, more complex set of stakeholders (including other LAs). They need to have enough technical competence and knowledge to engage and understand the context of services they don't themselves deliver.

Size

Unsurprisingly, the evidence from this review consistently showed that smaller LAs have less capacity. Whilst their total activity may be lower, reflecting a lower population, the range of functions that they need to provide will not be proportionately lower. This brings capability challenges, as smaller LAs cannot employ specialists across all areas of work.

It can be harder for small and even medium-size authorities to recruit and retain transport staff, due to perceived lack of career opportunity and the prestige of working for a large urban authority or CA. Smaller authorities are less likely to be able to dedicate officer time to non-essential/operational work, such as innovation and improvement, resulting in an increasing gap between smaller and larger LAs.

Some specific champion and leadership roles are only found in very large authorities or CAs, for example 'cycling commissioners', perceived as important political enablers for active travel investment (Sustrans, 2020).

There are discrepancies between LAs' abilities to engage with Future of Mobility (FoM) (Walker, 2019). Larger LAs are more likely to take the initiative in leading a response to FoM. Smaller LAs, although attempting to engage with FoM, do not see it as core activity due to capacity constraints and more pressing issues that they need to devote their resources to.

Regarding staff technical knowledge of bus planning and provision, the CBT (2021) report notes that larger LTA teams have better technical expertise compared to smaller LTAs. While senior/long-standing staff are a valuable resource for their knowledge base, they note that they can be less open to any innovative or radical change.

Larger and more experienced authorities find it easier to source the C&C for effective bid writing for central government grants, which means they are more likely to be successful, potentially creating a structural difference in performance (NIC, 2021) (See also paragraph 4.5 on bidding skills).

Rurality

Rurality can be a compounding factor. Rural authorities are often smaller in terms of staff capacity, and roles in a rural area may attract a smaller pool of talent. This is a significant issue, given that about half of LAs have significant rural areas (TSC,2016).

Summary of key findings - C&C that varies by different LA characteristics

Based on the literature reviewed, this section has outlined that three LA characteristics may have an impact on LA C&C: **typology**, **size,** and **rurality.**

In relation to **typology**, multi-tier governance arrangements mean that LAs need to work collaboratively to access resources in another authority, or to coordinate across institutional boundaries. This imposes additional C&C requirements.

Small LA **size** is associated with specific C&C needs, and particular barriers in addressing them. Recruitment may be harder as staff may be more attracted to working in large urban authorities. Larger LAs are likely to have more resources for bid writing, which can increase their chances of attracting funding compared to smaller LAs. Combined authorities are seen as having advantages, due to prestige and scale.

Rurality. There is limited evidence about specific C&C issues relating to rural areas, but rural LAs are often smaller in terms of staff capacity, and it may be more difficult to recruit staff with the relevant skills.

7. How LAs can be supported to improve their C&C

The review found that LAs respond to C&C deficits in number of ways, which are outlined below:

- **Combining functions or teams**, to find ways of 'better working' or economies of scale and/or scope. For example, Kingston and Sutton set up a shared environment service for Highways (Sutton Borough Council, 2021) and London Highways Alliance Contract brings together the boroughs and Transport for London (DfT, 2016).
- **Outsourcing** to buy in the additional capacity, although with implications for budgets and building future in-house capability (skills, experience).
- **Adopting new practices or technologies** which seek to mitigate capacity constraints, such as more effective data sharing, which can be aided by guidance and templates.
- **More effective collaboration** with allied functions (such as transport and planning) to reduce or manage future capacity demands. For example, the Greater Manchester CA integrated its transport and spatial plans (KPMG, 2019) by producing the Transport Strategy 2040. This is also reflected in the city region's Spatial Framework. Both documents are tied to the same long-term economic and population projections, and address how these will be accommodated from a housing, employment and transport perspective.
- **Opting out of the provision of non-statutory services:** LAs have statutory requirements to provide services, and providing EV charge points is not one of them, so some LAs have opted not to engage with this programme (Local Partnerships, 2021b).
- **Prioritising service provision that generates revenue streams** to support LA activities, and potentially C&C. Notably, the provision of EV charge points can be a revenue-generating activity (Local Partnerships, 2021b).

The available evidence suggests that LAs can best be supported to improve their C&C by addressing the areas outlined below:

Greater certainty of funding

Several reports suggested that longer-term and more flexible funding pots would enable longer-term planning of interventions which has the potential to increase the impact of funding (Transport East, 2021, LP, 2021a). For example, (KPMG (2019) and CIHT (2019) recommended devolved funding similar to that provided for National Highways. The National Infrastructure Commission (2021) suggested replacing complex and multiple funding pots with secure multi-year budget allocation.

Devolution is helping to address LA concerns around transport budget certainty and retention of skills. There have been positive developments in CAs where transport funding is allocated for periods of more than three years and the economies of scale mean that they can attract and retain skilled staff (DfT, 2016).

Support building partnerships and learning from other LAs

From case studies in Essex and Sussex (TSC, 2016), the recommendation is to build partnerships with other LAs, rather than rural local authorities aiming to tackle their challenges in isolation. By joining forces with other LAs it may be possible to improve collective buying power, enabling learning from each other's experiences and helping to build shared capacity. Some LAs have been early adopters in exploiting transport data, both in-house and with other partners. North Highland (2018) suggests these LAs can become exemplars for the LAs who are late adopters.

Improve capability for preparing bids

In relation to the need for bidding skills which was noted in section 4, LP (2021a) outlined four categories of support that LAs would find useful:

1. Frameworks, templates, and other material to help standardise and increase the efficiency of bidding and project delivery,
2. Access to shared data, information and lessons which can be used to improve future bidding and delivery,
3. Access to additional specialist resources,
4. Specific feedback on successful and unsuccessful bids. In relation to this point, NIC (2021) mentioned coaching and feedback as relevant mechanisms for upskilling. They suggested that LAs that have historically lost out in funding competitions should receive targeted support.

LP (2021a) also suggested simplifying the bidding process, moving away from competitive bidding and integrating central government policy initiatives to alleviate the need to submit funding applications multiple times.

Some of the ways that LAs can be helped to enhance their C&C are linked to specific policy areas and examples are provided below.

Future of Mobility

Enabling LAs to identify FoM technologies that will generate revenue could be beneficial, because the money could be used to enhance C&C (Walker, 2019).

Larger and better resourced teams appear to be better positioned to reap the benefits of FoM. One way that they achieve this is through collaborative working with technology developers, universities, and consultancies which support their exploitation and the development of digital solutions, trials and implementations (Walker, 2019; FoMSG, 2019). Given the complexities of data analysis, access to specialist expertise may be the appropriate response to addressing this gap. However, as the FoM becomes more current, there should be gradual upskilling and dissemination internally within LAs.

Bus services

The CBT (2021) report suggested several areas of support that would benefit LAs in relation to buses. These are outlined in Table 3 and Table 4 below.

Internal capacity and capability gaps	Support required
Small overall team size focused on operational priorities	Capacity funding to address immediate needs and training for the longer term
Limited technical expertise and commercial acumen	Standardised frameworks/templates and technical/ commercial training Secondments between bus operators and LTAs
Limited capacity and expertise to develop funding bids	More iterative development of proposals and detailed feedback on unsuccessful applications
Difficulty recruiting and attracting new entrants	Developing a dedicated bus training qualification BCoE-supported secondments and multi-authority hires Measures to increase the status and remuneration of bus profession
Impending retirement of long-serving staff members	On-the-job training, skills and knowledge exchange for existing employees New hires to release capacity among experienced staff for training and handover
Reliance on consultancy support for more specialised tasks or periods of intense demand	Standardised materials to develop LTAs' consultancy specifications Central register of consultancies and experts and a standardised rate card for services

Table 3 Summary of internal C&C gaps and support required, reproduced from CBT (2021) report

External barriers	Support required
Complexity of managing relationships with elected representatives and highways/planning teams within constituent authorities and managing cross-border routes with neighbouring authorities	Stakeholder engagement training
Lack of support from senior leaders and elected representatives	Toolkits, briefings and training provision for elected representatives and a public campaign on the benefits of improved bus provision
Siloed working and lack of understanding of buses among support teams (highways, planning, legal, etc.)	Toolkits, briefings and training provision for local authority support teams
Limited understanding of EPs among legal teams	Detailed guidance, templates and briefings for LTA legal teams with examples of what EPs can and cannot include
Reliance on short-term allocations and competitive funding pots	Longer funding periods

Table 4 Summary of external barriers and support required, reproduced from CBT (2021) report

EV charging provision

At the time of writing, the government had announced plans to legislate for changes to the planning system to require EV charger provision in new housing developments. This can be expected to create an additional specialist activity for LA development control staff. Cenex (2021) identified specific actions to address barriers preventing the growth and effective operation of the UK's electric charging infrastructure network. The suggested actions which would need to involve LAs are listed below:

1. LAs to lead or facilitate charge point installations
2. 'Charge point teams' were proposed as a specific solution. This was also mentioned in a report by Policy Exchange (2021). Charge point teams might operate as temporary 'surge' capacity, bringing specialist skills around strategic planning for charge point networks. They would provide knowledge about how to coordinate delivery with those responsible for development control and energy supply. Expert knowledge of EV charging-related legislation, regulations, and delivery needs would be necessary for effective staffing of these teams.
3. Central government to produce official guidance to support LAs to deliver EV charging infrastructure of appropriate quality and quantity to meet demand.
4. The establishment of a government-sponsored LA EV charging roll-out network, with an independent secretariat.

Highways management

IPSOS/MORI (2021) reported that LAs perceive funding for Highways Management as insufficient to maintain their assets. Other than a lack of funding, no specific barriers to delivery were identified. However, they also outlined some financial efficiency-oriented strategies of combining teams within the LA, or functions within the teams, or out-sourcing functions.

There was demand for DfT support for one-off initiatives that would give a long-term return in reducing C&C gaps, for example, funding mapping surveys or commissioning these centrally (IPSOS/MORI, 2021). This could help to overcome resource constraints for enhancing asset inventories (e.g., signage, lighting, culverts, gullies) and for footways, that would then be maintainable with existing resource.

There was also seen to be scope for greater coordination by DfT in terms of templates to ensure comparability of data. This could support LAs to collect additional data types, relating to higher-level objectives such as sustainability. As noted above, templates for bidding and data submissions have been identified as a practical way of supporting LA capability and saving staff time.

Ipsos (2021) suggested several potential C&C-related interventions, namely:

1. Systems of asset management which could more effectively manage and integrate the collection and sharing of data across highways functions
2. Data interpretation skills with respect to software-driven asset management processes e.g., for sense-checking purposes
3. Collaboration with allied functions within the LA that create new traffic demands, notably spatial planning and housing or external data providers e.g. on public transport or insurance claims
4. Training and guidance on asset resilience to climate change (flooding, drainage capacity, heat and drought-related deterioration)
5. Sharing of best practice and experiences.

Data

LAs hold transport data that can be used to improve: (i) transport efficiency, (ii) air quality, (iii) user experience; as well as enable innovation (North Highland 2018). The North Highland report (2018) indicates that LAs' own data has commercial potential and value to external parties, but LAs need the following support in order to effectively exploit the data:

1. Guidance on which data sets to exploit
2. Investment in mechanisms for harvesting data
3. Development of LA staff skills
4. Improved collaboration with commercial and research sectors

LA teams also lack access to the latest datasets and modelling technology to help them plan better networks. TSC (2016:41) highlights the potential for councils to partner with third-party specialists to employ new data sources and modelling techniques.

Summary of key findings - LA practices and how they can be supported to improve their C&C
Based on the literature reviewed, this section has outlined approaches which LAs may take to improve their C&C. It has also summarised three main ways that they can be supported to improve their C&C: greater certainty of funding, building partnerships and learning from other LAs, and improving capability for preparing bids.
Greater certainty of funding, by replacing complex and multiple funding pots with a secure multi-year budget allocation, could enable LAs to increase the impact of investment through better planned, better maintained, and longer-term interventions.
Building partnerships with other LAs would enable improvements in collective buying power, learning from each other's experiences and building shared capacity. This could be particularly beneficial for smaller and/or rural LAs.
Improving capability for preparing bids could involve providing frameworks and templates; access to shared data, information and lessons to improve future bidding and delivery; access to additional specialist resources; and specific feedback on successful and unsuccessful bids.
Other ways LAs can be helped to enhance their C&C include guidance on which datasets to exploit, investment in mechanisms for harvesting data, development of LA staff skills, and improved collaboration with commercial and research sectors.

8. Recommendations

This section proposes recommendations based on the review of the literature. It is split into three sections: recommendations for DfT, recommendations for LAs and recommendations for further research based on gaps in the available evidence.

Recommendations for DfT

1. **Target support to help build LA C&C to deliver national transport policies**. The available literature identified several examples where C&C constraints are limiting the ability of LAs to deliver national transport policies. The need for software use and data analysis skills cuts across most delivery areas, as do bidding, contracting and collaborative working skills. It would be mutually beneficial if the DfT could target support to help build LA C&C, which would in turn help LAs to deliver against national priorities.

2. **Provide more central support to help LAs negotiate the increasingly complex requirements to be legally compliant**. Specific legal and commercial skills are now in greater demand. This is due to a wider range of LA responsibilities than previously, which is linked to changes in government policies and the rise of new technologies. In particular, the review identified particular C&C needs for bus planning and EV charging delivery. It can be expected that further needs will also arise in relation to new mobility services (such as e-scooters). In addition, the growing importance of data, and the need for legally compliant management of shared personal data (for example through initiatives such as Mobility-as-a-Service), could bring a need for greater specialist legal knowledge.

Recommendations for LAs

1. **Balance the development of in-house C&C and out-sourcing specialist skills**. There is a debate about whether it is most efficient and effective to develop additional C&C within an LA or to source the required skills from outside. The appropriate decision is likely to depend on the situation. For example, there is a strong case for procuring specialist skills when the need is relatively short-term and/or is related to a step-change in provision (e.g. delivering EV charging points). Similarly, in relation to data there should be a distinction between ‘routine’ and

'advanced' data management and analysis skills. Arguably, all LAs should aim to build up routine data C&C, whereas buying in support for special projects, such as setting up new asset management systems, might be more appropriate. LAs should appraise their circumstances and assess an appropriate balance between in-house C&C and out-sourcing specialist skills.

2. **Discover the multiplying benefits of brokering**. LAs' roles increasingly involve engagement and integrated working: with other LAs, perhaps through shared resource, with other parts of the public sector, with private sector providers where the LA represents the public interest or working with the voluntary sector. These relationships require resource to develop and careful management to maintain. They may also involve performance management in the case of contracts. LAs should explore where they can leverage better return on resources by brokering relationships with others.

3. **Learn from the good practices of other LAs**. Some LAs' responses to C&C deficits could be beneficial if adopted by other LAs, due to either unlocking future cost savings or promoting more efficient working. These are outlined below:

    - Continuing Professional Development to ensure sufficient skills to use new technologies (e.g., highway surface scanners, unfamiliar infrastructure (e.g., the electric supply grid) and new techniques (e.g., intervening in the market for EV charging).
    - Enhanced collaboration with other LAs to address C&C is also important and could have particular benefit for small and rural LAs that largely tackle their challenges in isolation (TSC, 2016). STBs already coordinate collaboration across multiple LAs, but they also recognise the need to collaborate across partners beyond the region, i.e., with other neighbouring STBs and LAs (Transport East, 2021).
    - Specific capacity resources such as 'Champions' and task-oriented teams can generate momentum and focus. They were already seen as important for bus services, active travel and EV charger delivery, but might be extended to other policy areas, such as Net Zero and the application of IT solutions.

4. **Use specialist external teams to provide surge capacity**. It is worthwhile for LAs to identify in what scenarios using specialist external teams, or shared teams, perhaps supporting a number of LAs, would be beneficial. These can be used for 'surge' capacity and capability, or for longer-term projects if there's a particular specialism required for the project.

Recommendations for further research

1. **Evidence on the effectiveness of C&C Interventions.** There was a lack of evidence on the effectiveness and impact of interventions to improve LA C&C. Future initiatives to address C&C gaps should be accompanied by evaluation to understand whether they result in more effective outcomes (e.g. greater success in attracting competitive funding following training on bidding skills), or greater

productivity in achieving the same outcomes (e.g. as a result of training to deploy automation technologies or skills to enhance collaboration with partner organisations).

    - The review also highlighted some specific knowledge gaps on the extent of C&C deficits, highlighted below, that could be the focus of further research about C&C needs.

2. **Evidence on the C&C for managing and monitoring the transport contribution to Net Zero**. For some areas of activity, notably managing and monitoring the transport contribution to Net Zero, the evidence on C&C was limited, in that it was mainly cross-sectoral, not specific to transport. It is likely that these responsibilities are still being identified, and therefore C&C needs are not yet reflected in the literature.

3. There was also **limited published evidence on C&C in relation to meeting the equality, diversity and inclusion aspects of transport policy**. Under the Equalities Act 2010, LAs have a duty to make reasonable adjustments to schemes to protect people with certain protected characteristics, such as disability. This could be explored with targeted research.

4. There is **limited evidence on specific C&C issues relating to rural areas**. This is partly because rurality is also linked to size and typology, but there is also a clear evidence gap.

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