ENGLAND'S ECONOMIC HEARTLAND

Mobility Hubs Business Case Guidance

England's Economic Heartland

Acknowledgements

About us

England's Economic Heartland is one of seven sub-national transport bodies (STB) jointly funded by the Department for Transport and local authority partners. We are the forefront of planning and promoting the transport infrastructure and policy framework required to realise our region's economic potential while reducing the transport system's impact on the environment.

Our strategic role

Prioritising infrastructure investment

We advise government and its agencies on the infrastructure investment priorities that are needed to deliver the vision of the region's transport strategy, 'Connecting People, Transforming Journeys'.

Shaping the agenda

We help shape the national transport agenda by offering fresh perspectives, challenging conventional wisdoms, and representing our partners' interests and issues to Whitehall. Our collaborative relationships allow us to provide support and advice to government on the big strategic challenges facing the country such as planning for Net Zero, which EEH leads on in collaboration with the other STBs.

Developing investable propositions

Beginning this financial year, we will be bringing forward infrastructure priorities into investable propositions by producing pre-strategic outline business cases, based on a robust prioritisation framework to be agreed by our partners.

Supporting our local authorities

EEH helps local authorities realise the ambitions for their places. We develop the tools and facilitate the shared learning and best practice which allows them to understand how the big strategic challenges relate to their local areas and to identify the potential solutions, such as this 'Mobility Hubs Business Case Guidance'.

Harnessing innovation

Our region is world-renowned for its centres of scientific and technological excellence, including in future mobility. We work with private and public sector partners to harness this innovation for the benefit of the region and the wider UK.

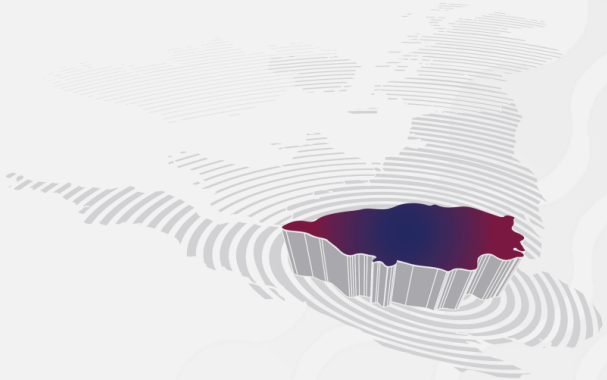
Coordinating investment

Our regional scale allows us to join up strategic transport planning across borders and modes, with a focus on place-based solutions which protect and enhance their environment and support Net Zero.

Who has developed the guidance?

The guidance has been commissioned by **England's Economic Heartland** and developed by **WSP** and **CoMoUK**, with support from and thanks to Milton Keynes Council, Oxfordshire County Council and Hertfordshire County Council for their input into the guidance.

WSP is a leading business services and engineering consultancy with a strong track record in advising clients on the development of mobility hubs. CoMoUK is the national organisation for shared transport, a charity for promoting its social, economic and environmental benefits, which has led the development of mobility hub thinking and published a range of related guidance.



What are mobility hubs?

Mobility hub projects are increasingly being promoted in the UK to help provide solutions to some of our most challenging transport issues.

"Mobility hubs are highly visible, safe, and accessible spaces where public, shared and active travel modes are co-located alongside improvements to the public realm, along with community facilities where relevant. The redesign and reallocation of space away from the private car enhances the experience for travellers and creates a more pleasant environment for everyone" (Source: CoMoUK).

Mobility hubs are a modular concept bringing together, or aggregating, a range of components, specific to each location. The combination of components should support the following elements.

Choice of sustainable modes

Including with public transport, shared mobility, such as car club, e-bikes or e-scooters*, and cycle parking provision

Visibility and accessibility

Hubs need to be part of a recognisable network with clear signage and branding, disabled access and active travel routes

Ease of switching between modes

Both in terms of physically and digitally linking the use of the different modes

Safety

The design and facilities should ensure traveller safety is a key factor by ensuring areas are well lit and covered by surveillance

Practical facilities

Good design will consider what non-transport practical additions can be included, such as shelter, toilets, wi-fi, parcel lockers and freight consolidation

Visual, social and community appeal

Enhance the area visually through green infrastructure, and provide a contribution to the social and community fabric

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

ENGLAND'S ECONOMIC HEARTLAND

Introduction

Document purpose, structure and evidence base

Introduction

Business cases and appraisal

Due to the relatively recent emergence of mobility hubs and limited examples of delivery in the UK to date, there is little good practice and precedent in the development of associated business cases to support their delivery.

Furthermore, the transport appraisal system and supporting tools and evidence have been developed for more traditional transport projects and do not necessarily apply well to some elements of mobility hub proposals.

A key stage in the development and delivery of mobility hubs is the securing of funding. Where that funding comes from government sources, a business case, supported by economic appraisal, can often be required to justify the investment of public money into a project.

Mobility hubs are not a one-size-fits-all solution, and each proposal must be designed to support specific strategic needs and challenges, whilst working within the specific conditions of its users, location and surrounding area. Hubs can vary substantially in size and complexity from major city centre transport interchanges to enhancements applied to small rural bus stops and from individual sites to an area-wide network of hubs. In addition, there is potential for the components delivered at each site to vary significantly. Therefore, the development of business cases and supporting appraisal need to be tailored to each proposal and the source of funding, and be proportionate to the scale of funding required, or service need.

What is this guidance for?

This document provides practical guidance and advice for practitioners to aid them in developing business cases and undertaking appraisal for their mobility hub proposals.

The guidance acknowledges the different scales of business case and appraisal that may be appropriate for different hub proposals, aligned to the relative scale of funding needed. In doing so, the document provides guidance for larger proposals where business cases and appraisal programmes need to be consistent with central government's HM Treasury 'Green Book' guidance[1] and the Department for Transport's (DfT) Transport Analysis Guidance (TAG)[2].

In addition, the document suggests more proportionate approaches where such levels of rigour and evidence are not required (e.g. where business cases are for local government internal governance only or proposals are at a very early stage of development prior to embarking on a TAG-compliant process).

This guidance has a particular focus on the challenges faced in rural areas where business cases can be more challenging to develop given the smaller catchments, limited mobility service provision and often smaller funding opportunities where extensive appraisal of benefits may not be possible.

To support the thinking and advice in this guidance document, consideration has been given to three hub case studies:

- Rural village: Small (proportionate approach)
- Rural railway Station: Large (full process)
- Peri-urban Network: (programme level)

Guidance structure

Existing guidance

Introduction

This document builds upon the existing suite of CoMoUK guidance to provide practitioners with advice on the development of business cases and supporting appraisal.

The documents reviewed in this section provide comprehensive advice on the development and delivery of mobility hubs, and it is not intended to repeat that same information in this guidance document. Practitioners should therefore ensure they refer to, and are familiar with, other CoMoUK guidance before reading further into this document.

Practitioners should also be familiar with the suite of TAG and Green Book guidance as this document has been developed to provide supplementary advice and does not provide a detailed commentary on each specific element of that national guidance.

References to these guidance documents and other sources are provided in the bibliography presented at the end of this document.

Evidence base review

CoMoUK have previously produced a number of resources to provide guidance for implementing and running successful mobility hubs. An overview of the existing guidance is presented below.

Mobility hubs guidance[3]

This guidance introduces the concept of mobility hubs including their demonstrated benefits and provides advice on tailoring them to local scenarios using a range of case study examples. It also signposts a number of resources covering branding, technical drawings, and monitoring and evaluation of impacts.

An introduction to mobility hubs[4]

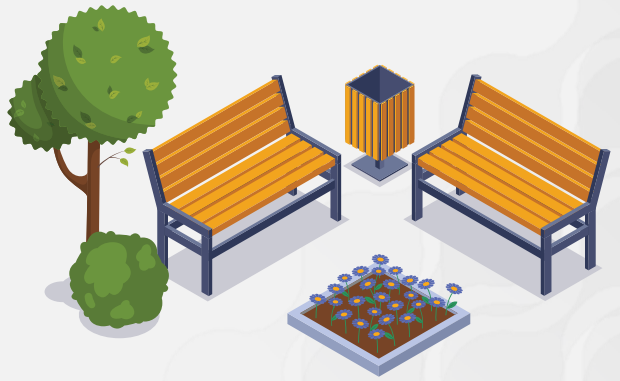
This document provides an overview of what mobility hubs and shared transport are and what they aim to achieve by breaking them down into their component parts:

- Public transport and ride hailing
- Shared mobility (e-bikes, e-scooters*, etc)
- Mobility related infrastructure (e.g. charging, bike parking, transport information, bicycle repair stand)
- Non-mobility & urban realm (e.g. parcel lockers, café, co-working space, waiting area, wi-fi, improved crossings etc)

How to plan for mobility hubs[5]

This resource builds on the document above and equips planners and developers with knowledge to consider mobility hubs at the policy-making, pre-application and planning application stages.

It explains how mobility hubs can meet various policy objectives and how to plan for them as an integral part of new developments.



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* E-scooters are currently illegal to use on public roads unless part of UK Government trials

Existing guidance

Accreditation scheme[6]

CoMoUK have developed an accreditation scheme to ensure that specific mobility hub quality standards are met. The standards consist of a combination of essential and desirable elements which grant a mobility hub either a Bronze, Silver or Gold accreditation.

Essential elements include: the provision of high quality public transport options, clear signage and a network-branded totem, a walkable location, street lighting, covered seating and the use of a consultative process to design the mobility hub.

Desirable elements provide added value and convenience to users of the hub, and might include elements such as: cars clubs, e-cargo bikes, digital journey planners, co-working pods, green infrastructure and public art.

The full list of accreditation criteria can be found by following the link to the guidance.

Mobility hubs toolkit[7]

This document aims to provide both transport professionals and interested individuals in communities with a plan on how to deal with many of the issues faced when implementing mobility hubs. It builds on the documents set out in this section and provides checklists and guidance on the following:

- Feasibility and viability – types of sites, success factors, branding, maintenance
- Business models – procurement options, operation and management, planning for costs, funding and revenue opportunities
- Community engagement and consultation – establishing clear aims, engagement plan, running consultation

Mobility hub delivery models[8]

This resource is a precursor to the business case guidance set out in this document and sets out a range of mobility hub case studies, including the components that can be brought together to form them, as well as how the leadership of different types of mobility hubs defines their overall delivery.

Funding and revenue opportunities, collaborative models and component integration also form part of the guidance to define an approach to making mobility hubs financially sustainable.

The design process – mobility hubs realised[9]

This document describes the design and delivery process that can be used by built-environment professionals to further their understanding of what a mobility hub is, how it is designed, and what different scales of mobility hubs may cost based on their constituent components.

Summary

Previous guidance developed by CoMoUK has been invaluable in promoting greater awareness of mobility hubs amongst public sector authorities and interested individuals. Furthermore, the development of various mobility hub case studies provides a structure to consider strategies for their implementation in real contexts.

However, in order to enable mobility hubs to be delivered more widely across the UK, further guidance is required to take schemes through the DfT's appraisal processes to ensure value for money, and to elaborate the full range of benefits to businesses, communities and the environment.

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Mobility hub case studies

This section presents the three indicative mobility hub case studies that have been developed to provide contextual examples through which we can demonstrate the proposed business case guidance. They are designed to represent the variety of mobility hubs that could be implemented with regard to their location, scale, objectives and typical components.

The mobility hub case studies are as follows:

1. **A rural village close to a minor A-road with a regular bus service connecting two major conurbations**
2. **A rural railway station that is currently served by an intermittent bus service**
3. **A network of mobility hubs in a peri-urban location that is well-served by bus**

Introduction

Each mobility hub case study includes the following information:

- A description of the area and land use around the site
- A concept vision stating the purpose of the hub
- A set of objectives
- A summary of the need for intervention
- A set of components brought together to form the hub
- The delivery (operational and business) models for each component and the hub overall, including an indicative procurement strategy
- Indicated roles, responsibilities and governance
- Funding sources including income
- Strategic risks and dependencies

The full detailed versions of the case studies are included in Appendix C, with an overview of each presented on the following pages.

Using the mobility hub case studies

The vision, objectives and selection of existing and proposed new components within each mobility hub case study are designed to be indicative of a typical mobility hub scheme in each location. However, in practice, these should be developed with respect to the local transport needs and challenges of local residents and organisations, through a process which involves relevant local stakeholders from an early stage.

Every location and context is different and each mobility hub will therefore require a unique set of components, which will likely result in bespoke operational and business models being created for each site.

For example, particularly in more rural locations, not every mobility hub scheme can be centred around a mode of public transport where there is no high quality provision available. In such locations, other services such as car clubs or shared and publicly available e-bikes could form the core mobility offer within the hub, resulting in a different operational model to most mobility hubs developed to date.

However, the key to applying this guidance effectively is recognition of the scale of the proposal and the subsequent proportionality of the approach required, as indicated by the case studies presented in this section.

Case study 1: Rural Village

This mobility hub is located in the centre of a rural village, with the site on the main road running through the settlement. The village is served by a low-frequency, inter-urban bus service running between rural towns and a major conurbation.

The rural village is largely residential, with approximately 1,500 residents and a variety of property types. A small number of local services exist within the village, such as a small convenience shop with a post office, a primary school, a pub that serves food, a church and a village hall. However, residents must travel into the nearest town to access additional services such as healthcare, larger retail or other services.

Beyond the village, land use is very typically rural, the vast majority being composed of agricultural land alongside a sparse number of rural businesses such as B&B hotels (or other hospitality activities) and forestry sites. This area is very sparsely populated, with only a small number of rural hamlets or isolated dwellings, for which the village serves as the closest hub for public transport, as well as local services such as the village shop/post office and primary school.

Existing provision

The existing provision at the site is bus stops located either side of the main road each with a pole, flag, timetable, bench and highway markings. The bus stops are walkable and benefit from good quality footways to the immediate area. Services are hourly in the morning and evening peaks, but much less frequent during off-peak periods during the day, the evenings and on weekends.

Concept vision

"To create and improve access to publicly-available, shared and decarbonised modes for those living in the most isolated rural communities, in order to increase connectivity and access to the mobility network, and in doing so support stronger economies, more vibrant communities and a healthier natural environment."

Existing and new components

Mobility

- Bus and school bus service
- Community car club (new)
- E-bike hire (new)
- Liftshare service (new)

Infrastructure

- Bus stop
- Footway
- Branded totem, map and signage (new)
- Zebra crossing (new)
- Drop-off / pick-up area (new)
- Cycle lockers for long stay cycle parking (new)
- Disabled parking for 'hub and ride' (new)

Traveller facilities

- Streetlights
- Shelter and seating (new)
- Information and emergency call point (new)
- CCTV
- Wi-fi
- Mobile device charging (new)
- Additional lighting (new)

Non-mobility and Urban realm

- Community noticeboard
- Planters (new)
- Parcel locker (new)

Need for intervention

Bus services in rural areas are often very limited due to smaller populations which are more sparsely located across much wider areas, resulting in lower revenues alongside greater operational costs. As such, many bus services are simply not commercially viable, leaving large swathes of rural areas underserved, with only the most crucial routes subsidised through local authority funding.

Furthermore, the first mile/last mile can be the most challenging aspect of whole-journey planning, particularly for outlying hamlets, serving as the barrier that prevents users from accessing middle-mile solutions and therefore forcing users into private vehicles for the entirety of their journey. In rural areas this is amplified due to the limited number of mobility offerings to convey users a greater distance towards onward connections.

As a direct result of poor transport connectivity, rural areas face lower performance compared to their urban counterparts across a range of indicators, such as education qualifications, average income, average expenditure, and productivity etc.

The hub will support access to the bus network for village residents, who could walk, cycle or scoot to the site and also users from deeper into the countryside who may drive or be given lifts to the site. However, the infrequency of bus services can make even shorter journeys very difficult if it is beyond a walkable distance.

Case study 2: Rural station

This mobility hub is focused on a railway station located the edge of a small rural market town centre. The rail service is half-hourly between two larger regional towns and serves other small market towns and villages. The railway station is adjacent to a bus stop that is served by an hourly bus service (not aligned to the rail timetable), covering a fraction of the train station's catchment, with services that are not timed to complement rail services.

The town centre has a small commercial core, with a town square, hosting amenities such as food stores, GP and pharmacy, hairdresser, local restaurants and coffee shops. The remainder of the town area is mostly residential, housing the town's 9,000 residents in a variety of properties including flats, town houses, terraces and detached properties. Away from the town centre, there is some employment in services and small business units on the edge of town.

Land area beyond the town boundary is relatively rural, comprising a mix of rural villages, hamlets and isolated dwellings, and open agricultural land. The town serves as the local centre for much of the adjacent rural community to access amenities, employment, and for children to access school.

Existing provision

The station has a minimal level of existing hub components. Each platform is accessed from the road which passes over the railway line via a bridge. Both platforms have lighting, a small shelter, timetable information and live train information screens.
There is a small, unsurfaced car park on one side of the railway line. There are bus stops either side of the road passing the station which have a pole, flag, timetable information and highway markings.

Concept vision

"To offer improved mobility services that increase access to and use of local railway services, in a way that revitalises the local community, in order to support stronger economies, more vibrant communities and a healthier natural environment."

Existing and new components

Mobility
- Train
- Bus (improved frequency and aligned to rail timetable)
- Hub and ride (improved parking)
- E-bike/e-scooter* hire (new)
- Car club (new)

Infrastructure
- Bus stop
- Footway
- Sheffield stands
- Branded totem, map and signage (new)
- Puffin crossing (new)
- Drop-off / pick-up area (new)
- Secure cycle lockers (new)
- Cargo bike parking (new)

Traveller facilities
- Lighting
- Ticket machines
- Brick and mortar shelter and seating (upgraded)
- Co-working space (new)
- Real-time travel information
- Information and emergency call point (new)
- CCTV (new)
- Wi-fi (new)
- ATM (new)
- Mobile device charging (new)

Non-mobility and Urban realm
- Public realm improvements (new)
- Parcel locker (new)
- Pop-up retail space (new)

Need for intervention

Local railway services can be a lifeline for towns, providing connections to adjacent towns or larger urban centres in order to access education, employment, key services or for social activities.
However, the impact of middle-mile services such as local rail can be severely diminished by a lack of appropriate first-mile/last-mile services, preventing access for many users. Bus routes that service railway stations may not capture all potential rail users, or may not be timed to coincide with rail services, creating first-mile/last-mile challenges.
In addition, a lack of first-mile/last-mile services can exacerbate social inequalities. For example, young people, the elderly, those with disabilities or those with lower income who cannot access private mobility will be left behind in cases where there are no first-mile/last-mile services, preventing them from accessing the middle-mile and onwards.
Mobility hubs of this type will therefore serve as an interchange facility, supporting first-mile/last-mile access to the railway station facilitating transfer to the middle-mile.
Given the potential for misalignment between bus and rail timetables, additional facilities such as co-working space and a café could allow people to make more productive use of their time, reducing the negative impacts of interchange time.

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

Case study 3: Peri-urban

This mobility hub is part of a wider network of hubs located in a predominantly residential suburban area. The site is well served by several bus services providing good access to the town centre.

The residential area is a mixture of older terraced houses, post war semi-detached housing, and new developments with mixed provision including flats, townhouses and many detached houses.

This site has been designed to work as part of network of mobility hubs with uniform components across all sites. The locations have been strategically selected to include a range of sites including local centres, schools, colleges and business parks to maximise coverage and make best use of the existing bus network.

Given that no mobility hub is likely to be used in isolation, consideration will need to be given in the guidance to the programme-level benefits of the network of hubs, including how multiple sites used together can generate benefits greater than the sum of their parts.

Existing provision

The existing provision at the site is bus stops located either side of the main road passing through the area each with a pole, flag, timetable, bench and highway markings. There is also a controlled pedestrian crossing between the two stops.

Concept vision

"To offer a wider range of mobility services in order to improve mobility access, to encourage the use of public and decarbonised modes, and to improve user experience through greater convenience, thereby supporting stronger economies, more vibrant communities and a healthier natural environment."

Existing and new components

Mobility

- Bus
- School bus
- Shared micromobility scheme (new)
- Car club (new)

Infrastructure

- Bus stop
- Footway
- Zebra crossings
- Branded totem, map and signage (new)
- Cycle parking shelter (new)
- Cargo bike parking (new)
- Loading bay (new)
- Cycle repair stand / pump (new)
- Public and car club EV charging – multiple (new)

Traveller facilities

- Standard shelter
- Lighting
- Real-time information
- Information and emergency call point (new)
- CCTV (new)
- Wi-fi (new)
- Mobile device charging (new)

Non-mobility and Urban realm

- Public realm improvements (new)
- Communal seating (new)
- Postbox (new)
- Parcel locker (new)
- Pop-up retail space (new)
- Co-working pod (new)
- Community noticeboard (new)

Need for intervention

Although locations such as this are typically well-served by one or a number of bus services, the poor provision of additional mobility options, and as such travel access beyond the bus routes can be limited, forcing users into private cars for those journeys.

Consequently, there is a need to provide residents of suburban locations with additional mobility options to complement the existing bus service, and to do so in a way that is easy and convenient.

As a predominantly residential location, there is also a lack of local facilities, leading to increased need for travel outside of the area to access even basic daily needs. Furthermore, the existing bus routes are mostly focussed on the radial routes into the nearby centre, poorly serving orbital routes between neighbourhoods and resulting in car use even for some shorter journeys.

The local authority area is lagging behind in the provision of EV charging infrastructure and proposes a network of charging hubs to support both residential areas which lack driveways and opportunity charging by motorists on the move.

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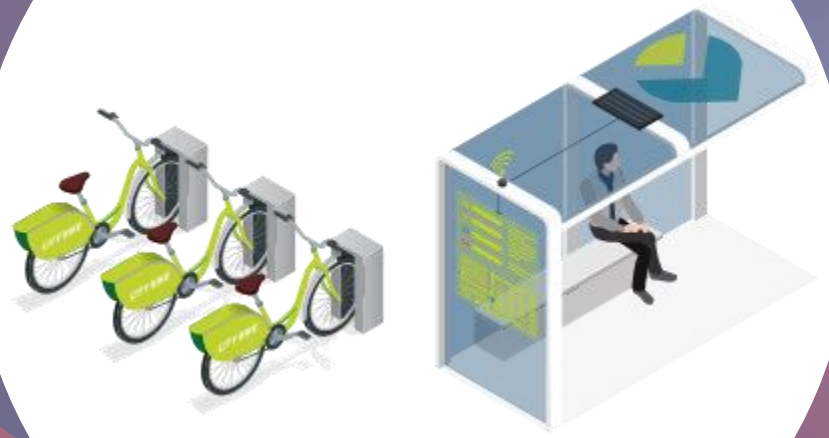
Business case and appraisal

Guidance on developing the five business case dimensions



Role of the business case

A business case should set out the necessary information to enable the appropriate decision-makers to make an informed decision. For this, the business case should set out the reasons for changing the current situation and the implications of doing so.

Given the decision to implement a mobility hub, or network of them, will impact a range of people and most likely require public funding support, the business case needs to demonstrate that the proposed intervention:

- is consistent with relevant strategies and policies
- will be effective and efficient
- will achieve 'Value for Money'
- is viable, affordable and deliverable
- has been developed through a proper process
- meets local context and stakeholder needs

Business case stages

Reflecting the lifecycle of a project, and enabling good governance through timely gateway points, there are three stages set out in the HM Treasury's Project Business Case Guidance[10], as illustrated in the diagram below.

- Strategic Outline Case (SOC)
- Outline Business Case (OBC)
- Full Business Case (FBC)

The SOC establishes the potential scope of the transport proposal, including the need for intervention, how the investment will further the organisation's priorities and government ambitions, determines the objectives, and sets out the 'preferred way forward'.

The OBC checks and builds on the conclusions made at SOC stage. Detailed economic and financial appraisals will be undertaken, and a preferred option selected, including the proposed approach for delivery.

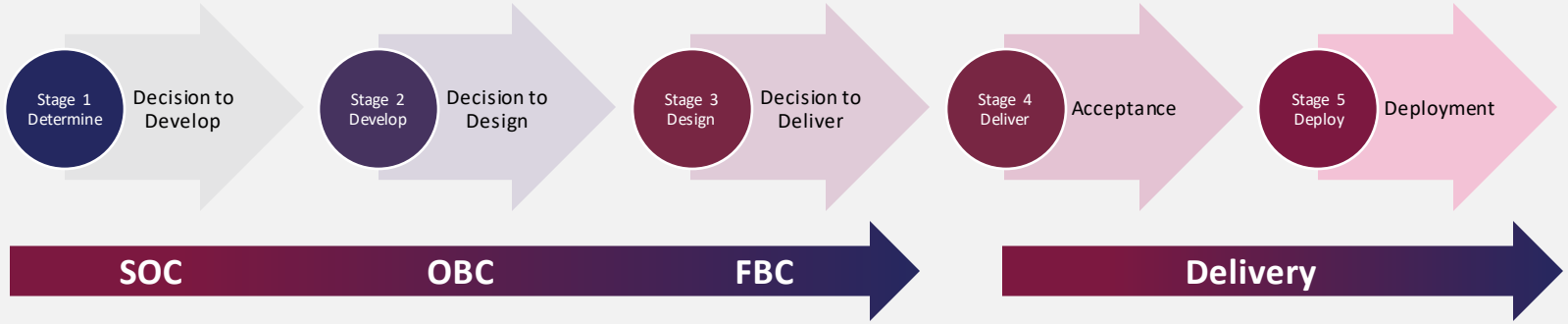
The FBC confirms the conclusions made in the OBC based on the procurement process.

Business case dimensions

The '5-Case Model' as presented by HM Treasury comprises five dimensions, each addressed in their respective cases. They are:

- Strategic case
- Economic case
- Commercial case
- Financial case
- Management case

This document focuses on the approaches to be taken for the strategic, economic, and financial cases, as CoMoUK guidance should be used to inform the commercial and management cases.



Proportionality

The guidance outlined in this document is intended to be applied in a proportional approach reflecting the following factors:

- Resources required to develop the mobility hub proposals
- Value of funding required
- The parties from which funding is being sought
- The scale of delivery risk

Proportionality and the level of detail of business cases will naturally align with the size and scale of the specific scheme. Therefore, proportional approaches should be tailored to the scale of the scheme, and target audience of the business case.

In this guidance, the three hub case studies identified earlier (small, large and peri-urban network) have been used to illustrate proportionality considerations. It is not intended that the three approaches should be considered as rigid categories, but rather examples of what to include depending on the scale of the specific scheme.

Case study examples

A brief overview of what could be included in each proportionate approach, and example scenarios of when each approach could be adopted is set out below. Further detail on what to include in each dimension, for each business case (SOC, OBC, FBC), is outlined in Appendix A.

1. Small hub (e.g. rural village)

What to include:

- A lighter touch, high-level business case which sets out the case for change and anticipates delivery through established processes

Potential uses:

- Exploratory consideration of the potential of a mobility hub
- Small / rural mobility hub with limited facilities
- Mobility hub proposals for which funding is already available

2. Large hub (e.g. rural station)

What to include:

- Alignment with DfT Green Book and TAG developed in line with project business case lifecycle

Potential uses:

- Medium to large-scale Mobility hub requiring external funding
- Mobility hub proposals with ongoing revenue support requirements

3. Network of hubs (e.g. peri-urban)

What to include:

- As for Large, developed in line with Programme business case guidance

Potential uses:

- As for Large, developed in line with Programme business case guidance

Challenges of the business case approach

While the business case approach provides a framework for considering all investment decisions, there are challenges in applying it to mobility hubs compared to more established transport projects. These particularly relate to the quantification of non-financial impacts and the estimation of the benefit to cost ratio (BCR) and associated Value for Money of a scheme. Furthermore, it is likely that all, or a significant majority of funding will have to be provided by public bodies, creating a challenge of drawing together a funding package from multiple funders and leveraging private sector contributions. This guidance will address the following challenges:

Where mobility hubs are in rural areas, lower population density will limit the scale of likely benefits and decongestion opportunities compared to those in more urban areas.

Less established methods exist for the quantification of benefits likely to be associated with the introduction of mobility hubs, e.g., service reliability, new trip opportunities and trip chaining benefits.

There is growing, but limited evidence of the value placed by users on the experiential benefits that mobility hubs can provide, e.g., trip certainty, user experience, travel behaviour change.

Conventionally, the greatest contributor to monetised benefits is journey time savings, which are unlikely to represent the core benefits for most mobility hubs.

Consideration of the cumulative effect of bringing together multiple components that reinforce behaviour and user take-up, both at a single site and with a network of mobility hubs.

Challenges

Business case and appraisal guidance

Overview

The business case draws together the project development work and presents the findings for consideration by the decision-makers at the key gateway points for the process.

Reflecting these different gateway points, the focus of the business case evolves and the emphasis on each of the five dimensions changes. The purpose of each business case for the mobility hub is:

- **SOC:** What is the rationale for a mobility hub and the case to develop the outline scope in more detail?
- **OBC:** What is the case to proceed to take the mobility hub proposal to the point of delivery?
- **FBC:** What is the case to commission the delivery of the mobility hub?

The guidance set out in this section is informed by DfT guidance, but reflects proportionality as described previously and offers worked examples based upon the three mobility hub case studies presented in the previous section.

Establishing the foundations for the case

Central to the approach for the development of business cases for mobility hubs is the application of 'logic mapping'. Logic mapping provides the framework to guide the steps in the process, to provide a structure for presenting the findings of the steps and to validate the robustness of the case for change.

Logic mapping examples for the three case studies of mobility hubs are in Appendix A.

Through logic mapping, the strategic fit and need for the scheme is established. It is particularly useful in the development of new, innovative mobility hubs; smaller scale mobility hubs where a full TAG compliant business case is not required; and instances where the benefits are less measurable using conventional approaches.

Why?

- **Context of the scheme:** identifying the current situation, challenges and opportunities and the impacts of not making changes

How?

- **Scheme inputs:** resources and activities specified for the scheme
- **Operational objectives (*Outputs*):** set out how the intervention will enable the benefits sought

What?

- **Scheme objectives (*outcomes*):** specific benefits to be realised by the intervention
- **Strategic objectives (*Impacts*):** framed by the promoter's strategic priorities for long lasting effects

Option selection process

The logic mapping process also supports a robust process of option selection based on an objective-led approach, rather than being solution-led. The diagram on the following page shows the mapping from the objectives to mobility hub 'components' which can be employed to meet them.

The list of components is not exhaustive and should be used as guidance, with additional thought given to geographically-specific interventions that could be required.

It is not expected that all components are selected for each scheme and they should be tailored depending on the strategic and scheme objectives. In an initial sift of the very long list of components, those that do not contribute to meeting the scheme objectives, which have been derived from consideration of user needs and the context of the local population, area and current activities, should be discarded.

The resulting long list of components should then be assessed against a Multi-Criteria Assessment Framework (MCAF). This should consider the performance of options against CoMoUK's Success Factors, along with affordability and deliverability.

Depending on the nature and scale of the scheme and the associated level of detail appropriate for the MCAF, a full Option Selection Report may be required.

From this analysis, packages of different components should be identified which are selected based on the needs of the mobility hub's prospective users and their propensity to engage with them. The shortlist of options should be sufficiently different to reflect the amount of information available on which to assess relative performance and enable trade-offs to be judged.

Through the later stages of the project development, the specification of the preferred option will be refined. Consequently, the options do not need to be 'perfect' at this stage.

Futureproofing

For larger schemes in particular, the rising costs of labour, inflation and more extensive site investigations can lead to projects going over budget, resulting in 'value engineering' of interventions and meaning that not all components from the option selection process can be delivered. It is therefore important to document at this stage which components are core to the service offer, and which ones could be delivered at a later date as more funding becomes available.

Designs must be futureproofed to enable additional components to be delivered cost-effectively. Whilst mobility hubs are a modular concept, many components are dependent on supporting infrastructure. For example, consideration should be given to installing ducting and cabling for EV and e-bike charging connections, as well as making full fibre connections to the site to support digital services. This will assist in achieving value for money as it is more efficient to plan for and install at the outset, rather than retrofitting at a later date.

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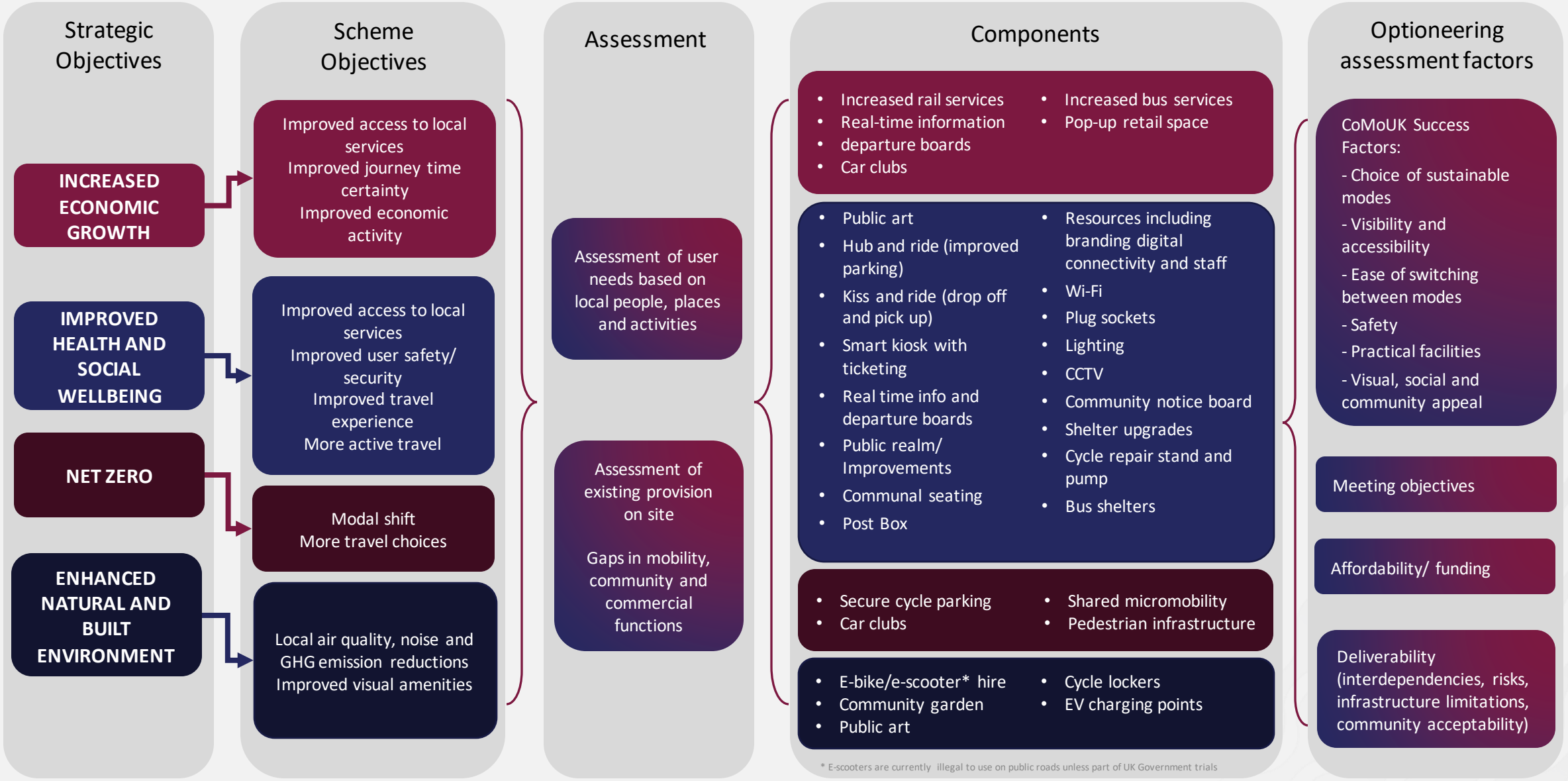
Optioneering diagram



Business case dimensions

Strategic Dimension

The Strategic Dimension sets out the following in terms of mobility hubs:

- **Organisational overview:** outline the context of the organisations responsible for the proposed mobility hub
- **The strategic context:** how does the proposed mobility hub(s) align with local authority/ wider government ambitions?
- **The case for change:** outline the current context, identify existing challenges/ problems with current services, and outline what the objectives of the proposed mobility hub(s) are aiming to achieve?

The logic mapping should be the core aspect of all approaches to the strategic dimension. Larger scale schemes will require more detail on other aspects of DfT requirements, such as the organisational overview.

If applicable, alignment and strategic fit into the surrounding network of mobility hubs and wider transport network should also be considered in the strategic dimension. For smaller, lower value proposals the logic map and a short commentary may suffice.

- At the **SOC** stage, the Strategic Case is demonstrating the clear need for change.
- At the **OBC** stage, the case for change is confirmed in light of the development of the proposals
- At the **FBC** stage, the case for change is confirmed in light of the specification of the preferred option

Appendix A outlines these requirements for a proportional approach at each stage (SOC, OBC, FBC) for each of the five cases.

Economic Dimension

The Economic Dimension will vary in length and detail depending on the size of the scheme and the business case stage. It should summarise the option selection process, recognising its importance in reaching the final shortlist of options, and relate back to the objectives and the case for change set out previously in the strategic dimension.

Option selection

The option selection approach, using the logic mapping and development of a proportionate MCAF, should be outlined and the resulting preferred way forward/ shortlist of options presented alongside the rationale for the decision.

For the option appraisal, a proportional approach should be taken recognising the level of certainty over assumptions and inputs, the nature of the options and the business case stage. The approach is likely to include both quantitative and qualitative appraisal.

Modelling options

A notable difference between mobility hub business cases and traditional business case appraisal analysis is that the key aspects that will inform the economic appraisal are:

- Mode shift from car to active/ public transport modes to/ from the hub
- Uptake of proposed services
- Aggregation of activity and simplification of journeys

These variables are likely to be caused by improved journey time certainty and improved user quality, instead of the traditional journey time savings.

More research is necessary to determine the geographical extent / catchment of a scheme, which will vary with the nature, scale and location of the hub. A geographical catchment is important to define for mobility hubs as the majority of the impacts are place-based and will affect those in close proximity to the hub. The scale of hub improvements is proportional to the catchment the hub will affect. More detail on catchments is provided on the following page.

A potential method to measure the mode shift/ uptake of a scheme could be through the use of propensity to travel/change data. For example, datasets such as Experian's Mosaic data assign a set of characteristics and behavioural propensities (e.g. wealth, number of children, attitudes) to a population dependent on the demographics living within the study area.

For larger scale schemes, OBCs and FBCs, where it is necessary to assess schemes quantitatively, it may be possible to implement willingness to pay surveys in proximity to the proposed hub location or draw on case studies.

It is inherently difficult to quantitatively measure the impacts for mobility hubs compared to traditional schemes. Consequently, much of this guidance highlights the importance of qualitative assessment for mobility hubs until more robust quantitative evidence has been developed.

Appraisal techniques

Due to the wide range of outputs and potential benefits to be appraised, a number of techniques have been set out in the table on the following page. The techniques vary depending on the impact to be measured, and whether there are existing tools in place to monetise it.

For smaller, more rural case studies at the SOC stage, the Economic Case is likely to only include qualitative techniques. Quantitative techniques should be used at OBC/ FBC stage, and potentially SOC stage for larger schemes.

The Value for Money Framework (VfM) guidance sets out the typical impacts of a transport proposal. These are grouped into:

- Established Monetised Impacts: which are included in initial and adjusted metrics (Benefit Cost Ratio)
- Evolving Monetised Impacts: Included in adjusted metric (Adjusted BCR)
- Indicative Monetised Impacts: Considered after the metric
- Non-monetised Impacts: Considered after the metric

Established and evolving monetised impacts are quantitative, whilst indicative and non-monetised impacts are qualitative.

However, as a result of aggregating multiple services into one location, there will be additional monetised and non-monetised benefits specific to mobility hubs which are not captured in the Value for Money Framework impacts.

Quantitative appraisal techniques

Quantitative appraisal techniques are more likely to be used at OBC and FBC stage for mobility hubs. A list of quantitative appraisal techniques and the potential outputs (the components) they could be used to assess are outlined in the table on the following page. These techniques monetise impacts in line with DfT TAG. Basic knowledge of TAG is assumed.

Catchment analysis

Where it is not possible to undertake TAG-compliant assessments, an alternative method of quantification might consider the number of likely beneficiaries of an intervention with regard to time catchments. For example, isochrone mapping could demonstrate the number of people within a fifteen-minute walk and cycle ride from a hub. This can support justification for implementing associated infrastructure and facilities at the hub.

It should also be considered that different types of components will have different catchment profiles depending on how they integrate with the function of the hub. For example, standard infrastructure such as street lighting and seating will not have a catchment per se, instead it is ancillary to the hub.

Conversely, mobility-related components such as cycle parking, bus stops and car clubs will largely attract users from a defined geography, as will local services such as pop-up retail, and community space, albeit from a much wider catchment which may attract users moving through the hub as part of a network, depending on service provision elsewhere.

Practitioners should also be mindful of double-counting benefits derived from catchments. For example, a number of bus stops in a village will have overlapping catchments, but users will only travel to their nearest for their direction of travel. However, a parcel locker located at a hub may serve an entire village or play a part in a longer chain of trips, giving it a much larger catchment.

Quantified impacts

Table 1 – Quantitative appraisal techniques

Impact	Potentially resulting from…	Appraisal technique
Travel time savings	Reduction in interchange time due to Integration of mobility services Decongestion due to reduction in traffic due to trips shifting to shared modes, cycles, etc. or reduction in trip chaining	Valuation of user travel time changes (TAG UNIT A1.3) Valuation of Marginal External Cost (TAG UNIT A5.4)
Noise	Reduction in internal combustion engine (ICE) car mileage due to trips shifting to electric vehicles, shared modes, cycles etc. or fewer trips or trips not being made due to provision of facilities at mobility hub	Valuation of Marginal External Cost (TAG UNIT A5.4)
Local air quality	Reduction in ICE car mileage due to trips shifting to electric vehicles, shared modes, cycles etc. or fewer trips or trips not being made due to provision of facilities at mobility hub	Valuation of Marginal External Cost (TAG UNIT A5.4)
Greenhouse gases	Reduction in ICE car mileage due to trips shifting to electric vehicles, shared modes, cycles etc. or fewer trips or trips not being made due to provision of facilities at mobility hub	Valuation of Marginal External Cost (TAG UNIT A5.4)
Physical activity	Increase in cycling and walking activity	Reduction in risk of premature death and reduced absenteeism (TAG UNIT A5.1)
Journey quality	Enhancements to the experience of travelling due to infrastructure and service provision and improvements	Valuation of journey quality impacts (TAG UNIT A5.1)
Accidents	Reduction in highway traffic due to trips shifting to shared modes, cycles, etc. or reduction in trip chaining	Valuation of Marginal External Cost (TAG UNIT A5.4)
Infrastructure maintenance	Reduction in wear and tear on highway due to reduction in highway traffic due to trips shifting to shared modes, cycles, etc. or reduction in trip chaining	Valuation of Marginal External Cost (TAG UNIT A5.4)
Vehicle operating costs	Reduction in ICE car mileage due to trips shifting to electric vehicles, shared modes, cycles etc. or fewer trips or trips not being made due to provision of facilities at mobility hub	Valuation of fuel and non-fuel costs (TAG UNIT A1.3)
Indirect tax	Reduction in fuel duty resulting from reduction in ICE car mileage due to trips shifting to electric vehicles, shared modes, cycles etc. or fewer trips or trips not being made due to provision of facilities at mobility hub Increased expenditure on public transport fares resulting from more attractive interchange	Valuation of indirect tax impact (TAG UNIT A5.4/ UNIT A5.1)
Revenue	New and increased use of mobility and wider services provided by the mobility hub, e.g. revenue generated by e-bike hire, rental income from parcel lockers etc.	Estimation of revenue streams (see page 26)
Employment	Introduction of mobility and wider services at mobility hub (direct and indirect job creation and/or increased job security), e.g. coffee shack, cycle repair etc.	Estimation of number of jobs created and/or jobs gaining greater job security Valuation of Gross Value Added (GVA) of employment
Operating costs	Introduction of mobility and wider services at mobility hub	Estimation of operating costs (TAG UNIT A1.2)
Capital costs	Introduction of mobility and wider services at mobility hub	Estimation of capital costs (TAG UNIT A1.2)

Qualitative appraisal techniques

Qualitative appraisal techniques are likely to form the main economic assessment of more rural schemes, especially at the SOC stage. For these case studies, the Economic Case should be orientated more towards the qualitative impacts. A list of qualitative appraisal techniques, and the potential outputs (the components) they could be used to assess them, are outlined in the table on the following page.

Reference should also be made to the reasoning behind higher weighting of qualitative impacts for mobility hub appraisal in comparison with traditional business cases. This should be presented in the social and distributional impacts assessment, which should form part of the economic case for all stages. For example, improved bus services are likely to benefit those who cannot drive (young and elderly people) more. These kinds of distributional impacts should be assessed in the qualitative section of the economic appraisal.

In smaller mobility hub schemes and those which are not directly focussed on implementing mobility-related infrastructure, it may be necessary to provide additional qualification of the specific impacts, for example using psychoanalytical approaches such as the Theory of Change and Attitude-Behaviour Context (ABC) model.

Benefits of aggregation

Bringing together of a range of components at a mobility hub provides the opportunity for greater overall benefits to be realised due to aggregation. This is greater than the sum of the individual components in isolation. This should be reflected in the qualitative assessment and where possible quantified through the application of an uplift factor. This could be from evidence, where available, or through upside assumptions for the propensity for the services to be used based on consideration of the complementarity between components.

The beneficial aggregation of the components at mobility hubs (and a network of hubs) will reduce the need and distances to travel, and where travel is required increase the convenience and attractiveness of shared and sustainable means of mobility, therefore generating positive externalities.

For example, a user of a mobility hub in Case Study 1 may use cycle parking at the bus stop to connect the first mile/ last mile section of their journey to the main trunk of their journey. If there are also parcel lockers at the bus stop, this can be integrated into the existing mobility hub trip, and therefore reduce the need for an additional trip to collect the parcel from a separate location.

Value for Money Statement

The Value for Money statement in the economic dimension should consider all the quantitative and qualitative impacts identified. At OBC stage, the Value for Money statement should identify the preferred option, which gives the best Value for Money. Due to limitations associated with BCR calculations, especially in more rural areas, the Value for Money statement should also consider wider economic and social impacts of the hub.

The Value for Money statement should outline the Value for Money category, benefit-cost ratio and non-monetised impacts such as social and distributional impacts and wider economic impacts.

Qualified impacts

Table 2 – Qualitative appraisal techniques

Impact	Potentially resulting from…	Appraisal technique
Security	Introduction of CCTV, improved lighting, more activity in an area etc. due to mobility hub	Qualitative assessment of level of change with and without the mobility hub and the number of people affected
Access to services	Provision of services at the mobility hub, e.g. ATM, weekly outreach service Increase in mobility opportunities, e.g. shared vehicles, e-bikes etc. increasing the range of opportunities (health, educational, social, employment etc.) that can be accessed	
Affordability	Increase in affordable mobility services, e.g. shared vehicles, e-bikes etc.	
Severance	Provision of safe crossing and access routes to the mobility hub	
Option and non-use value	Provision of services at the mobility hub, e.g. ATM, weekly outreach service Increase in mobility opportunities, e.g. shared vehicles, e-bikes etc. increasing the range of opportunities (health, educational, social, employment etc.) that can be accessed	
Landscape	Introduction of infrastructure and services into the local environment or betterment of the local environment due to the mobility hub Introduction of CCTV, improved lighting, more activity in an area etc. due to mobility hub Provision of services at the mobility hub, e.g. ATM, weekly outreach service Increase in mobility opportunities, e.g. shared vehicles, e-bikes etc. increasing the range of opportunities (health, educational, social, employment etc.) that can be accessed Increase in affordable mobility services, e.g. shared vehicles, e-bikes etc. Provision of safe crossing and access routes to the mobility hub	Qualitative assessment of level of change with and without the mobility hub and the significance of the natural and built environments affected
Townscape		
Historic Environment		
Biodiversity		
Water Environment		

Business case dimensions

Benefit-Cost Ratio

As it is advised that quantitative techniques are only used for large scale schemes or at OBC/ FBC stages, and due to the challenges outlined earlier in the section (e.g. lack of journey time savings), the benefit-cost ratio should not be deemed to be the defining metric for the assessment of mobility hubs.

The Present Value of Costs (PVC) and Present Value of Benefits (PVB) should include key costs, with explanation of how they have been derived. CoMoUK have provided some example costs of different schemes in their document: The design process - mobility hubs realised.

Assessment of benefits in non-mobility focussed hubs

In many smaller and more rural locations, there may not be enough demand to warrant a high quality public transport service upon which a mobility hub might be based. Some hubs may be based on alternative modes such as community car clubs or an e-bike hire service, whereas others may focus more on reducing the need to travel.

For example, digital hubs providing high quality fibre connections can host a range of facilities such as medical triage and screening services, digital outreach and training programmes, as well as providing space for remote working. This could potentially reduce the need for people to travel and enhance accessibility to key services for residents living nearby.

It is unlikely that any transport-derived benefits could be accurately calculated from such a hub, and the smaller scale of the intervention would necessitate an approach similar to that of Case Study 1, where the impacts are predominantly assessed qualitatively with respect to the impacts on accessibility and access to services which would otherwise be difficult to reach without travelling a considerable distance.

Summary

The findings from the appraisal should be summarised and related back to the scheme objectives to provide an 'in the round' conclusion on the merit of the mobility hub proposals given the anticipated benefits and costs, and hence its value for money.

The Economic Dimension will vary in length and detail depending on the scale of the scheme and the business case stage.

- At the **SOC** stage the Economic Dimension will outline the optioneering process, and evaluate the shortlist of options, predominantly using qualitative appraisal techniques
- At the **OBC** stage it will identify the preferred option
- At the **FBC** stage it will confirm the preferred option and the Value for Money of the hub

Business case dimensions

Financial Dimension

The Financial Dimension sets out the following in terms of mobility hubs:

- **Capital costs:** The capital costs for the hub should be set out along with the year of spend.
- **Operational costs:** The operational costs of the hub should be profiled annually.
- **Potential revenue streams:** Potential revenue streams for the hub should be identified and profiled annually (e.g., from commercial activities).
- **Funding requirement:** The required funding should be set out demonstrating that it will cover the costs for the mobility hub, or identifying shortfalls. The sources of funding and financing should be identified.
- **Key financial risks:** Risks associated with the funding of the hub should be set out.

The Financial Dimension should be informed by the CoMoUK Mobility Hub Toolkit, which identifies potential sources of funding for mobility hubs. These include funding sources such as local government funding, communities funding, sources of revenue generated by the hub, and active travel delivery funding schemes. Example costs for different scales of mobility hub can be found in The design process – mobility hubs realised.

This dimension should also consider that a mobility hub may form part of a wider network and therefore a wider programme of costs, potentially resulting in savings and resource efficiencies gained from consolidated efforts across multiple sites.

- At the **SOC stage** the Financial Dimension considers the likely funding requirement and likelihood of required funding being available
- At the **OBC stage** it demonstrates the identification of required funding and 'in principle' agreement of funders
- The **FBC stage** will confirm that the funding is in place

Commercial Dimension

The Commercial Dimension sets out the following in terms of mobility hubs:

- **Commercial viability**: Outline the approach taken to assess the commercial viability of the hub.
- **Procurement strategy:** Detail the procurement strategy and purchasing options for the hub to secure the economic, social and environmental aspects identified in the economic dimension.

The proposed procurement strategy should align with CoMoUK Mobility hub delivery models guidance, which sets out potential procurement strategies for different types of hubs.

- At the **SOC stage** the Commercial Dimension will consider the likely commercial approach and procurement route for the delivery and operation of the hub
- The **OBC stage** demonstrates the identification of a commercially viable route for the delivery and operation of the hub
- At the **FBC stage** the commercial and procurement approaches for the hub are confirmed

Business case dimensions

Management Dimension

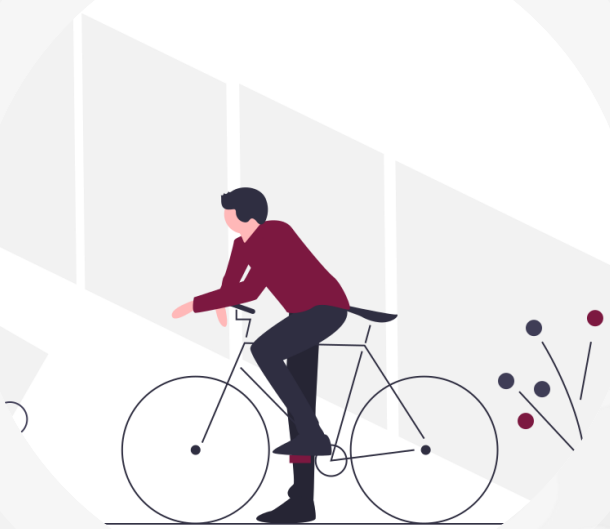
The Management Dimension sets out the following in terms of mobility hubs:

- **Evidence of similar projects**: Research into other schemes and mobility hubs should be detailed
- **Governance, organisational structure and roles:** Detail the governance environment that the organisation delivering the mobility hub operates in, outlining key roles and other stakeholders. A robust delivery plan with clear roles and responsibilities should be developed, especially where combining existing and new components which may have different maintenance and operating regimes.
- **Assurance:** Assurance strategy and plan with key assurance and approval milestones to deliver the mobility hub.
- **Communications and stakeholder management:** The stakeholder management process for the hub will outline how stakeholder views will be incorporated into the option selection process and development of the hub.

As the mobility hub proposals are developed through the business case stages, the Management Dimension should capture an up-to-date position on the governance of the project, including key approvals provided, project programme, the management of risks and stakeholders, and the approach for benefits realisation.

Larger scale schemes will require more detail on each aspect, consistent with DfT management dimension requirements.

- At the **SOC** stage the Management Dimension sets out the key roles, responsibilities and governance for managing the development of the project
- At the **OBC** stage it demonstrates that robust project management has been followed and the approach for project implementation of the mobility hub
- At the **FBC** stage the Management Dimension confirms the governance processes in place and the approvals granted



ENGLAND'S ECONOMIC HEARTLAND

Summary and next steps

Concluding remarks and setting out further work needed

Summary

In summary, this guidance sets out the approaches that should be used in developing business cases for mobility hubs. The approaches summarised are for the three business case stages:

- **Strategic Outline Case**
- **Outline Business Case**
- **Full Business Case**

Due to the varying nature of mobility hubs, a proportionate approach is advised, depending on the size and scale of and the audience for whom it is being produced.

Logic mapping

The logic and benefits mapping laid out in this document provides general guidance for the interrelations between benefits, objectives, and outputs.

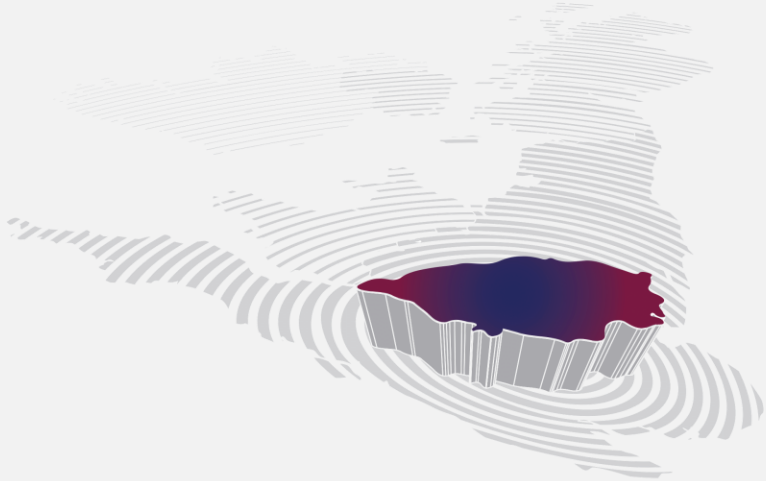
Logic map guidance is outlined for three general case studies of mobility hubs of different scales:

1. **Rural village** close to a minor A-road with a regular bus service connecting two major conurbations
2. **Rural railway station** that is currently served by an intermittent bus service
3. **Network of mobility hubs** in a peri-urban location that is well-served by bus.

Using this guidance

The outputs in the logic maps can be used as a toolkit to achieve the desired objectives/ benefits. Optioneering assessments and logic mapping should be used a basis for the Strategic and Economic dimensions of the business case approach for mobility hubs.

For larger-scale and more developed proposals, economic appraisal techniques to measure the costs and benefits of mobility hub schemes have been outlined. Quantitative and qualitative appraisal techniques should be used to capture the full range of benefits resulting from the implementation of mobility hubs and provide the basis for the overall Value for Money assessment.



Next steps

Given the relatively recent emergence of mobility hubs as a concept, sharing experience and best practice of scheme development will be essential to maturing techniques for the quantification and qualification of benefits.

Whilst this guidance sets out an approach to developing compliant business cases, as our understanding of mobility hubs develops and appraisal techniques are refined, it will be possible to progressively develop more robust analyses and refine and update this guidance.

Further information

Throughout this document, relevant guidance has been signposted where existing and established appraisal techniques can be used to derive the benefits of mobility hubs.

Further information on the process for the development and deployment of schemes can be found within the guidance previously published by CoMoUK, which is listed alongside other relevant guidance in the bibliography.

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Bibliography

1. HM Treasury, Green Book: https://www.gov.uk/government/collections/the-green-book-and-accompanying-guidance-and-documents
2. Department for Transport, Transport Analysis Guidance: https://www.gov.uk/guidance/transport-analysis-guidance-tag
3. CoMoUK, Mobility hubs guidance: https://www.como.org.uk/documents/CoMoUK-mobility-hubs-guidance
4. CoMoUK, An Introduction to Mobility Hubs: https://www.como.org.uk/documents/comouk-mobility-hubs-an-introduction-to-mobility-hubs-for-planners-and-developers-in-scotland
5. CoMoUK, How to Plan for Mobility Hubs: https://www.como.org.uk/documents/how-to-plan-for-mobility-hubs-a-guide-for-planners-and-developers-in-scotland
6. CoMoUK, Accreditation Scheme: https://www.como.org.uk/mobility-hubs/accreditation
7. CoMoUK, Mobility Hubs Toolkit: https://www.como.org.uk/documents/comouk-mobility-hubs-toolkit
8. CoMoUK, Mobility Hub Delivery Models: https://www.como.org.uk/documents/comouk-mobility-hub-delivery-models
9. CoMoUK, The design process – mobility hubs realised: https://www.como.org.uk/documents/the-design-process-mobility-hubs-realised
10. HM Treasury project Business Case Guidance: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/749086/Project_Business_Case_2018.pdf

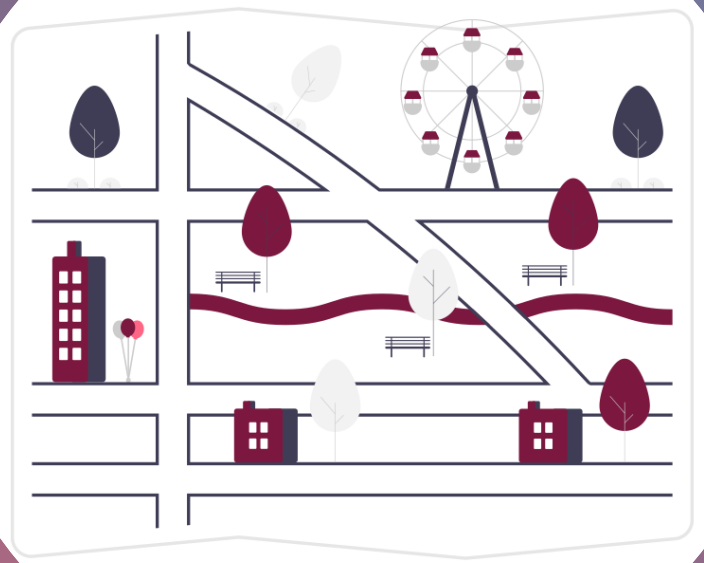
Glossary

Terminology	Definition
Component	A modular 'ingredient' of a mobility hub which can be combined with a variety of others to achieve specific objectives. Components come in a variety of forms, including mobility services and infrastructure, community and commercial services, and resources such as staffing or digital connectivity.
Active Mode Appraisal Tool	A spreadsheet tool developed by the Department for Transport to calculate the benefits of construction new cycling infrastructure and attracting new riders.
Appraisal	The act of assessing the merits, benefits and costs of a scheme.
Attitude-Behaviour Context (ABC) Model	Psychological model used to understand behavioural change as a result of and individual's attitudes and their environment.
Benefit to cost ratio (BCR)	The ratio between the calculated economic benefits of a scheme and the costs to implement it.
Full Business Case (FBC)	The FBC provides all the information needed to support a decision to award a contract and commit actual funding, and should provide a basis for the necessary project management, procurement process, monitoring, evaluation and benefits realisation.
Logic map	A depiction of the relationships between proposed interventions and their intended effects.
Optioneering	The process of selecting the best intervention from a number of options, often through a range of assessment approaches including economic, social and environmental considerations.
Outline Business Case (OBC)	The OBC includes a full economic appraisal and provides a basis for approval of the project need, objectives and preferred option. This should include detailed option appraisal and selection of a preferred option in terms of e.g. nature, scale and location of service provision.
Strategic Outline Case (SOC)	A preliminary document that introduces the basic project concept and contains enough detail to support an informed decision on whether to proceed to an OBC. It should include a preliminary assessment of strategic fit, options, value for money, affordability and achievability.
Theory of Change	Psychological Model used to provide a description and illustration of how and why a desired change is expected to happen in a particular context.
Value for Money (VfM)	A framework which ensures that public resources are used in a way that maximises public value.

ENGLAND'S ECONOMIC HEARTLAND

Appendix A

Logic Mapping



1) A rural village close to a minor A-road with a regular bus service connecting two major conurbations

Context	Inputs	Outputs	Outcomes	Impacts
Rural, village setting	More bus drivers	Improved bus and school bus services	Increased bus patronage	Support strong rural communities and economies
Small number of local services	More buses	Small fleet of community e-bikes for rental through a 'library'	Reduce carbon and air pollutant emissions	Improved access to services, education, healthcare and employment
No significant local employment	Funding for material improvement of mobility hub	Provision of a lift share service	Improved rural connectivity	Decarbonisation of the (rural) transport network
Infrequent bus services to closest conurbation	Staff	Drop-off/ pick-up space (Kiss & Ride)	Higher uptake of active and decarbonised modes for first-mile/ last-mile journeys	Healthier natural environment and support more vibrant communities
Poor access to existing public transport services		More disabled parking	Reduce the use and ownership of private motor vehicles	
Poor quality of bus infrastructure		More secure (long stay) cycle parking	Provide integration between private vehicles and public modes of transport	
No rural connections beyond villages		Provision of community car clubs		
High operational costs of services		Improved infrastructure such as shelter, seating, CCTV, lighting etc		
Low existing patronage of current services				

2) A rural railway station that is currently served by an intermittent bus service

Context	Inputs	Outputs	Outcomes	Impacts
A small rural market town railway station	More bus services/ drivers	Improved bus frequency, reliability, and alignment to rail service	Reduce the use and ownership of private motor vehicles	Revitalisation of the local community
Located on a railway line between two regional towns	More rail services/ drivers	E-bike / E-scooter* hire	Provide integration between private vehicles and public modes of transport	Support local economy, encouraging growth and more vibrant communities
Half-hourly rail services	Funding for material improvement of mobility hub	Improved station parking (Hub & Ride), and the implementation of car clubs	Reduce congestion, carbon, and pollution in town	Decarbonisation of the (rural) transport network
Irregular, disjointed existing bus service to adjacent bus stop	Staff	Drop-off/ pick-up space (Kiss & ride)	Increase the use of bus, rail and decarbonised mobility services	
The town is the local centre for surrounding rural area		Improved infrastructure such as shelter, seating, CCTV, lighting etc	Improve access to active and decarbonised modes of travel	
Limited existing station parking		Kiosk and other commercial functions		
Poor first-mile/ last-mile infrastructure				

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

3) A network of mobility hubs in a peri-urban location that is well served by bus

Context

- Part of a wider network of hubs
- Located in a residential, suburban area
- A number of existing bus routes
- No notable interchange infrastructure
- Poor provision of additional mobility services
- Lack of nearby facilities
- Bus routes predominantly radial, into the town centre
- High car usage for shorter, orbital trips

Inputs

- Funding for material hub improvements
- Staff

Outputs

- Implementation of EV charging
- Shared micro mobility scheme offering bike / E-bike / E-scooter* hire
- Improved station parking (Hub & Ride), and the implementation of car clubs
- Drop-off/ pick-up space (Kiss & ride)
- Improved infrastructure such as shelter, seating, CCTV, lighting etc
- Implementation of communal seating
- Secure cycle parking and repair stand/ pump
- Potential for pop-up retail space, post box and parcel lockers

Outcomes

- Reduce the use and ownership of private motor vehicles
- Provide integration between private vehicles and public modes of transport
- Reduce congestion, carbon, and pollution in town
- Increase bus patronage through improved access to bus services
- Improve access to active and decarbonised modes of travel

Impacts

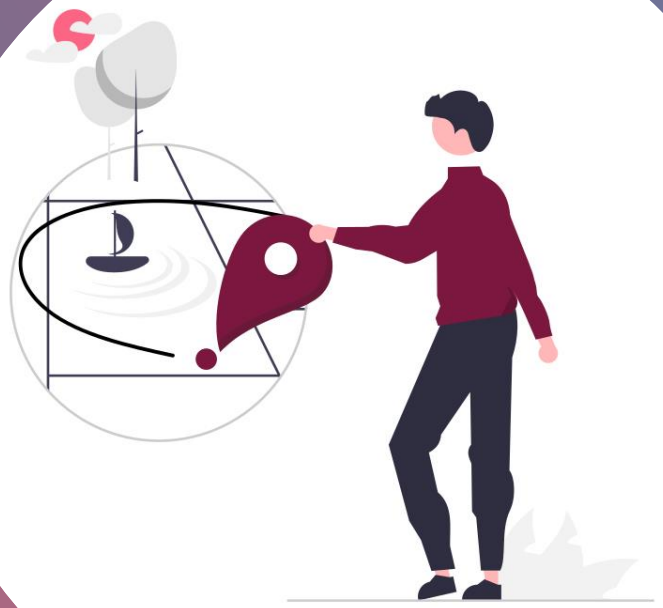
- Revitalisation of the local community
- Improved access to local services including healthcare, schools and shops
- Decarbonisation of the (rural) transport network

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

ENGLAND'S ECONOMIC HEARTLAND

Appendix B

Summary of business case guidance



Strategic Dimension	Small (e.g. a rural village close to a minor A-road with regular bus service)	Large (e.g. rural railway station on the edge of a town)	Network (e.g. network of hubs in a peri-urban location that is well served by bus)
STRATEGIC OUTLINE CASE	The case for change should be established through setting out the rationale for the scheme based on demonstrating its need and strategic fit. Aligned with these, the scheme objectives should be developed. This should be undertaken through the logic mapping process.		
	For a small scheme the strategic case should present the logic mapping (e.g. Appendix A1) and a concise summary of the approach and key findings of the process. It is anticipated that several mobility hub options should be identified to address the scheme objectives (e.g. different combinations of components and/or higher and lower cost options).	For a large scheme the case for change should reflect the DfT's business case guidance in a proportional manner reflecting the nature and scale of the proposals, with logic mapping demonstrating the alignment of strategic priorities, scheme objectives and the emerging options. A structured Options Selection process should be undertaken and reported to identify a short list of options from a long list, based on a Multi-Criteria Assessment Framework based upon the scheme's objectives and CoMoUK's Success Factors, along with affordability and deliverability.	For a network the case for change should reflect the DfT's business case guidance in a proportional manner reflecting the nature and scale of the proposals, with logic mapping demonstrating the alignment of strategic priorities, scheme objectives and the emerging options. A structured Options Selection process should be undertaken and reported to identify a short list of options from a long list, based on a Multi-Criteria Assessment Framework based upon the scheme's objectives and CoMoUK's Success Factors, along with affordability and deliverability. For a network this is likely to consider both options at mobility hubs and options for the location and number of hubs in the network.
OUTLINE BUSINESS CASE	The case for change established in the SOC should be reviewed to confirm it remains the case, with appropriate revisions to capture developments in context since the SOC. As part of this the logic mapping should be reviewed and revised as appropriate. Measures of success should be identified for the delivery of the scheme. Further option development work since the SOC should be documented.		
FULL BUSINESS CASE	Subject to governance requirements and agreement with funders it may not be necessary to produce a revised strategic case at FBC stage. If a revised strategic case is required, the OBC document should be reviewed and it should be ensured that all elements are up-to-date and a clear case for the delivery of the preferred option is described.	The strategic case should be reviewed and it should be ensured that all elements are up-to-date and a clear case for the delivery of the preferred option is described.	

Economic Dimension	Small (e.g. a rural village close to a minor A-road with regular bus service)	Large (e.g. rural railway station on the edge of a town)	Network (e.g. network of hubs in a peri-urban location that is well served by bus)
STRATEGIC OUTLINE CASE	The value for money of the scheme should consider the social, economic and environmental impacts. These should be set out for the short list of options identified in the strategic Dimension .		
	For a small scheme it is anticipated that the assessment will be largely qualitative and should reflect a user-centric/place-based approach to identify (and quantify where possible) the likely population catchment of the hub, their propensity to use it and the resulting benefits (as described in Table 1). The relative performance of the short-listed options should be clearly set out, with any key trade-offs between options identified. Uncertainties around the likelihood of the anticipated benefits being realised should be noted. At this stage, reflecting a proportional approach, no value for money metrics are required and option costs are considered in the financial case.	For a large scheme or network the initial value for money assessment should reflect the DfT's business case guidance in a proportional manner reflecting the nature and scale of the proposals. Appraisal techniques (as described in Table 1) should be used to provide indicative levels of beneficiaries and benefits (e.g. catchment analysis, air quality benefits). It is anticipated that the assessment will be a combination of quantified and qualitative analysis and it should reflect a user-centric/place-based approach to identify the anticipated nature and scale of impacts, including costs. The relative performance of the short listed options should be clearly set out, with any key trade-offs between options identified. Uncertainties around the likelihood of the anticipated benefits being realised should be noted.	
OUTLINE BUSINESS CASE	The initially identified benefits presented in the SOC should be reviewed in light of the development of the mobility hub proposals and the preferred option identified. A value for money statement should be produced setting out the scheme cost (consistent with the financial case) and the benefits, drawing on: - the logic mapping, - evidence to substantiate the anticipated scale of impact, number of beneficiaries and social distribution of beneficiaries, and - valuation of benefits where proportionate to estimate. The statement should also address the limitations of any quantitative appraisal techniques and uncertainties over the costs and benefits. Based on the value for money statement the preferred option should be identified.	The emerging level of value for money established in the SOC should be reviewed in light of the development of the mobility hub proposals and the preferred option identified. Areas of uncertainty identified in the SOC should be sought to be addressed through refinement of the analysis and sensitivity testing should be used to ensure confidence in the findings. The findings of the assessments should be documented in DfT's Appraisal Summary Table. The estimated benefit to cost ratios and wider considerations of the impacts of the options should be considered in the round to inform a value for money statement, drawing on: - the logic mapping, - evidence to substantiate the anticipated scale of impact, number of beneficiaries and social distribution of beneficiaries, and - valuation of benefits where proportionate to estimate. The statement should also address the limitations of any quantitative appraisal techniques and uncertainties over the costs and benefits. Based on the value for money statement the preferred option should be identified.	
FULL BUSINESS CASE	Subject to governance requirements and agreement with funders it may not be necessary to produce a revised Economic Dimension at FBC stage. If a revised Economic Dimension is required, the OBC document should be reviewed and revised as appropriate to ensure the costs and benefits presented are consistent with the proposed option for delivery and continue to demonstrate value for money, as set out in the value for money statement.	The economic case should be reviewed and revised as appropriate to ensure the costs and benefits presented are consistent with the proposed option for delivery and continue to demonstrate value for money, as set out in the value for money statement.	

Financial Dimension	Small (e.g. a rural village close to a minor A-road with regular bus service)	Large (e.g. rural railway station on the edge of a town)	Network (e.g. network of hubs in a peri-urban location that is well served by bus)
STRATEGIC OUTLINE CASE	Initial consideration of the affordability of the mobility hub should be based on the likely quantum of funding required and its likely availability from identified sources. This should include identifying if capital and revenue funding is likely to be required.		
	For a small scheme at this stage, a proportional approach should be applied to enable a view to be set out on the realism of the mobility hub proposals being affordable. This could be through comparison of known available funding and evidence of the cost of comparable proposals.	For a large scheme or network it is anticipated that a concept design or scope would be available from which an initial cost estimate based on unit rates could be derived. Benchmarking against comparable schemes is also recommended. The CoMoUK Mobility hub delivery models document provides details of potential funding sources.	
OUTLINE BUSINESS CASE	A cost estimate for the delivery and operation of the preferred option should be set out, along with an estimate of any capital and revenue receipts. Key risks and uncertainties for these estimates should be described. A funding profile, identifying the source of funding should be provided, as well as a risk allowance consistent with the key risks and uncertainties identified.		
FULL BUSINESS CASE	Confirmation of the cost estimate as established through the procurement process should be set out along with the agreed funding profile necessary to cover it. Additional funding streams such as revenue generated from components such as parcel lockers, co-working spaces and pop-up retail should also be identified to provide further support for the financial model. Outstanding risks and the approach to their financial management should be described.		

Commercial Dimension	Small (e.g. a rural village close to a minor A-road with regular bus service)	Large (e.g. rural railway station on the edge of a town)	Network (e.g. network of hubs in a peri-urban location that is well served by bus)
STRATEGIC OUTLINE CASE	Initial consideration of the commercial viability of the mobility hub should be based on the emerging nature of the proposed options and consideration of the appropriateness of the promoter's conventional procurement routes.		
	For a small scheme at this stage, a proportional approach should be applied to enable a view to be set out on the realism of the mobility hub proposals being viable. This could be through comparison of delivery model requirements with the experience of the promoter. The CoMoUK Mobility hub delivery models document sets out potential procurement strategies for different scales of mobility hubs.	For a large scheme or network, consideration of commercial viability should reflect the DfT's business case guidance in a proportional manner reflecting the nature and scale of the proposals. This is anticipated to include identification of different procurement approaches and delivery models. The CoMoUK Mobility hub delivery models document sets out potential procurement strategies for different scales of mobility hubs.	
OUTLINE BUSINESS CASE	A proposed delivery model for the preferred option should be set out addressing both delivery and operations. This should confirm that the proposed delivery model is the most appropriate approach and that procurement processes are in place. Key risks and uncertainties and how they will be managed should be described.		
FULL BUSINESS CASE	Subject to governance requirements and agreement with funders it may not be necessary to produce a revised commercial case at FBC stage. If a revised commercial case is required, confirmation of the procurement route being followed and the proposed delivery models should be set out along with confirmation that they remain valid and achieve public value. Outstanding commercial risks and the approach to their management should be described.	Confirmation of the procurement route being followed and the proposed delivery models should be set out along with confirmation that they remain valid and achieve public value. Outstanding commercial risks and the approach to their management should be described.	

Management Dimension	Small (e.g. a rural village close to a minor A-road with regular bus service)	Large (e.g. rural railway station on the edge of a town)	Network (e.g. network of hubs in a peri-urban location that is well served by bus)
STRATEGIC OUTLINE CASE	Initial consideration of the requirements to ensure the deliverability of the mobility hub and the associated benefits forecast should be based on the emerging nature of the proposed options and consideration of the promoter's capability and capacity to effectively manage the process.		
	For a small scheme at this stage, a proportional approach should be applied to enable a view to be set out on the realism of the mobility hub proposals being delivered and the expected benefits achieved. This is likely to draw on the promoter's experience of implementing similar schemes and consideration of the risks and requirements to be addressed. The required steps and approvals to deliver the scheme should be set out along with the key risks.	For a large scheme or network, consideration of deliverability should reflect the DfT's business case guidance in a proportional manner reflecting the nature and scale of the proposals. This is anticipated to include identification of: - Governance, organisation structure and roles to deliver the project - Evidence of similar projects to recommend the approach being proposed - Approach and milestones for assurance and approvals - Key risks and approach for risk management	
OUTLINE BUSINESS CASE	The initially outlined approach for the project management of the scheme should be confirmed for the preferred option and the associated activities, programme, roles and responsibilities, and benefits management plan (drawing on the logic mapping presented in the strategic case) set out. This should demonstrate that the proposed approach is appropriate and proportionate for ensuring the outputs and outcomes of the proposals are achieved. Key risks and uncertainties and how they will be managed should be described.		
FULL BUSINESS CASE	Subject to governance requirements and agreement with funders it may not be necessary to produce a revised management case at FBC stage. If a revised management case is required, confirmation of the approach taken to project manage the delivery of the scheme should be set out along with the assurance and approval milestones undertaken. The monitoring and evaluation plan should be confirmed.	The management case should be updated as necessary to confirm the approach taken to project manage the delivery of the scheme, including the assurance and approval milestones undertaken. The monitoring and evaluation plan should be confirmed along with arrangements for project closure.	

ENGLAND'S ECONOMIC HEARTLAND

Appendix C

Detailed mobility hub case studies

Case study 1: Rural village

A rural village close to a minor A road with a regular bus service connecting a rural area to a major conurbation	
Area and land use	This mobility hub is located in the centre of a rural village, with the site on the main road running through the settlement. The village is served by a low frequency, inter-urban bus service running between rural towns and a major conurbation. The rural village is largely residential, with approximately 1,500 residents and a variety of property types. A small number of local services exist within the village, such as a small convenience shop with a post office, a primary school, a pub that serves food, a church and a village hall. However, residents must travel into the nearest town to access additional services such as healthcare, larger retail or other services. The village has a small primary school, but secondary school children must travel to the nearest town. The village has no significant employment other from those services mentioned and home-workers. Beyond the village, land use is very typically rural, the vast majority being composed of agricultural land alongside a sparse number of rural businesses such as Bed & Breakfasts (or other hospitality activities) and forestry sites. This area is very sparsely populated, with only a small number of rural hamlets or isolated dwellings, for which the village serves as the closest hub for public transport, as well as local services such as the village shop/post office and primary school. The local villages are interdependent and over time clusters have created a support network of services. However, given their distribution, accessing them is often reliant on having access to a car, especially outside of timetabled hours for public transport.
Existing provision	The existing provision at the site is bus stops located either side of the main road each with a pole, flag, timetable, bench and highway markings. The bus stops are walkable and benefit from good quality footways to the immediate area. Services are hourly in the morning and evening peaks, but much less frequent during off-peak periods during the day, the evenings and on weekends.
Concept vision	"To create and improve access to publicly-available, shared and decarbonised modes for those living in the most isolated rural communities, in order to increase connectivity and access to the mobility network, and in doing so support stronger economies, more vibrant communities and a healthier natural environment."
Objectives	• To provide integration between private vehicles and publicly-available, shared and decarbonised modes; • To improve access to local bus services, thereby increasing bus patronage; • To create and improve access to active or decarbonised modes such as cycles/e-cycles/e-scooters*, thereby increasing usage; • To reduce the use and ownership of private motor vehicles, particularly for single-occupancy journeys while providing on-demand access to vehicles when use of other modes is not feasible; • To reduce carbon and air pollutant emissions; • To improve rural connectivity • To support strong rural communities and economies, with greater access to retrial, services, education, health care and employment opportunities • To provide an inclusive, convenient, enjoyable, safe and high-quality experience for customers

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

Need for intervention	Bus services in rural areas are often very limited due to smaller populations which are more sparsely located across much wider areas, resulting in lower revenues alongside greater operational costs. As such, many bus services are simply not commercially viable, leaving large swathes of rural areas underserved, with only the most crucial routes subsidised through local authority funding. Furthermore, the first mile/last mile can be the most challenging aspect of whole-journey planning, particularly for outlying hamlets, serving as the barrier that prevents users from accessing middle-mile solutions and therefore forcing users into private vehicles for the entirety of their journey. In rural areas this is amplified due to the limited number of mobility offerings to convey users a greater distance towards onward connections. The quality of infrastructure supporting rural bus services is also poor with isolated, low quality and poorly lit waiting environments that often offer only very limited protection from the wind and rain. As a direct result of poor transport connectivity, rural areas face lower performance compared to their urban counterparts across a range of indicators, such as education qualifications, average income, average expenditure, and productivity etc. The hub will support access to the bus network for village residents, who could walk, cycle or scoot to the site and also users from deeper into the countryside who may drive or be given lifts to the site. However, the infrequency of bus services can make even shorter journeys such as a trip to a neighbouring village very difficult if it is beyond a walkable distance. Providing a small fleet of publicly available e-bikes can offer a flexible alternative that reduces car dependency for shorter journeys, whilst also facilitating last mile connections for people visiting from elsewhere. When travelling longer distances to locations poorly served by public transport, a car club vehicle and a Liftshare service could plug a large gap in transport provision and provide lifeline access to critical services such as healthcare outside of timetabled hours. Small villages often have a strong sense of community with local facilities such as a community centre or a church being central to village life and cohesion. As such, it makes sense for such places to also act as an anchor for the hub, making best use of existing facilities whilst also helping to increase patronage at nearby amenities. Digital connectivity at the hub may also allow services to be hosted from the hub location where installing full fibre connections to the outlying properties would be prohibitively expensive. The options considered were: • No intervention • Basic improvement to bus waiting facilities – discounted due to limited potential to increase patronage and serve needs of wider rural area • Village centre hub (preferred) with shared e-bikes and car club.

Components	**Mobility Services** • Bus and school bus – supporting Hub & Ride and Kiss & Ride (existing services) • Community car club (new) • Small fleet of community e-bikes for rental through a 'library' approach (new) • Liftshare service (new) **Mobility Infrastructure** • Branded totem, map panel and finger post (new) • Pedestrian footway to village (existing) • Zebra crossing (new) • Drop-off/pick-up space (new) • Bus stop (existing) • Cycle lockers for long stay cycle parking (new) • Disabled parking for hub and ride (new) **Traveller facilities** • Standard shelter and seating (new) • Information and emergency call point (new) • CCTV (new) • Streetlighting (existing) • Lighting (new) • WiFi (new) • Mobile device charging (new) **Place-making functions** • Planters (new) **Commercial functions** • Parcel locker – for local deliveries and returns (new) **Community functions** • Community noticeboard **Resources** • Consistent branding (new) • Digital connectivity (new) • Electricity (new) • Unstaffed (existing) • Volunteers to run community e-bike library and community car club

Roles, responsibilities and governance	The bullets below list the roles and responsibilities for the mobility hub, with likely candidates for each role: **Hub commissioner** - organisation that commissions and directs the development of the hub • Local government (county council) **Hub lead** - organisation that operates the hub on a day-to-day basis • Local government (county councils) **Component operator** - operators of individual or packages of components within the hub (where appropriate) • Hub lead • Bus operator • Community e-bike library and community car club operator • Liftshare service operator • Parcel locker operator
Funding sources	• National government funding pots such at the Levelling Up Fund, Bus Service Improvement Plan funding or Active Travel funds etc. • Local authority transport budget • Rent and business rates from component operators (i.e. parcel lockers, and car club) • Commercial investment (e.g. bus operator) • Advertising/sponsorship
Delivery models	 Due to the particularly small scale, the relatively few components, and the limited commercial attractiveness, mobility hubs of this type will typically be directly operated by the hub lead, in this case the local highway authority.

Risks	• Limited user uptake due to the rural setting, leading to small revenues creating a challenging financial case for components • Due to the challenging financial case, local government funding will likely be required • Loss of rural bus service • Withdrawal of other operators, which in turn could reduce revenue • Increase in traffic in area due to Hub & Ride and Kiss & Ride being attracted to the site
Dependencies	• Electricity network capacity for the EV chargers • Business case for commercial component operators • Digital connectivity • Local authority resources • Continued operation of bus service • Land availability • Statutory processes

Case study 2: Rural railway station

A rural railway station that is currently served by an intermittent bus service	
Area and land use	This mobility hub is focused on a railway station located the edge of a small rural market town centre. The rail service is half-hourly between two larger regional towns and serves other small market towns and villages. The railway station is adjacent to a bus stop that is served by an hourly bus service (not aligned to the rail timetable), covering a fraction of the train station's catchment, with services that are not timed to complement rail services. The town centre has a small commercial core, with a town square, hosting amenities such as food stores, GP and pharmacy, hair dresser, local restaurants and coffee shops. The remainder of the town area is mostly residential, housing the town's 9,000 residents in a variety of properties including flats, town houses, terraces and detached properties. Away from the town centre, there is some employment in services and small business units on the edge of town. Land area beyond the town boundary is relatively rural, comprising a mix of rural villages, hamlets and isolated dwellings, and open agricultural land. The town serves as the local centre for much of the adjacent rural community to access amenities, employment, and for children to access school.
Existing provision	The station has a minimal level of existing hub components. Each platform is accessed from the road which passes over the railway line via a bridge. Both platforms have lighting, a small shelter, timetable information and live train information screens. There is a small, unsurfaced car park on one side of the railway line. There are bus stops either side of the road passing the station which have a pole, flag, timetable information and highway markings.
Concept vision	*"To offer improved mobility services that increase access to and use of local railway services, in a way that revitalises the local community, in order to support stronger economies, more vibrant communities and a healthier natural environment."*
Objectives	• To act as an interchange between local bus and rail services; • To provide integration between private vehicles and publicly-available, shared and decarbonised modes; • To improve access to active or decarbonised modes such as cycles/e-cycles/e-scooters*; • To reduce the use and ownership of private motor vehicles, particularly for single-occupancy journeys while providing on-demand access to vehicles when use of other modes is not feasible; • To increase use of bus, rail, and decarbonised mobility services; • To reduce congestion in town; • To reduce carbon, air and noise pollution emissions; • To increase the quality of the local public realm, creating a more pleasant and attractive environment for the local community to live, work and play; • To improve rural connectivity; • To support strong rural communities and economies, with greater access to services, education, and opportunities • To provide an inclusive, convenient, enjoyable, safe and high-quality experience for customers

Need for intervention	Local railway services can be a lifeline for towns, providing connections to adjacent towns or larger urban centres in order to access education, employment, key services or for social activities, However, the impact of middle-mile services such as local rail can be severely diminished by a lack of appropriate first-mile/last-mile services, preventing access for many users. Bus routes that service railway stations may not capture all potential rail users, or may not be timed to coincide with rail services, creating first-mile/last-mile challenges. In addition, a lack of first-mile/last-mile services can exacerbate social inequalities. For example, young people, the elderly, those with disabilities or those with lower income who cannot access private mobility will be left behind in cases where there are no first-mile/last-mile services, preventing them from accessing the middle-mile and onwards. Mobility hubs of this type will therefore serve as an interchange facility, supporting first-mile/last-mile access to the railway station facilitating transfer to the middle-mile. Given the potential for misalignment between bus and rail timetables, additional facilities such as co-working space and a café could allow people to make more productive use of their time, reducing the negative impacts of interchange time. The options considered were: • No intervention • Basic improvement to bus waiting facilities – discounted due to limited potential to increase patronage and serve needs of wider rural area • Station mobility hub – preferred option

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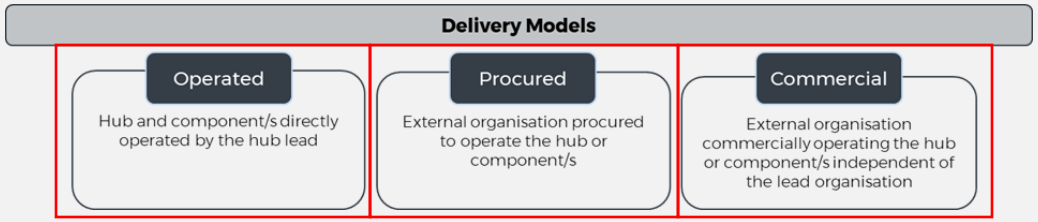
Components	**Mobility Services** • Train (existing) • Bus (improved - bus operator increasing frequency to half-hourly as part of proposal and timetable aligned to rail service) • E-bike / e-scooter* hire (new) • Hub & ride (improved parking provision) • Kiss & ride (improved with drop-off/pick-up space) • Car club (new) **Mobility Infrastructure** • Branded totem, map panel and fingerpost (new) • Pedestrian footway (existing) • Puffin crossing (new) • Traffic calming (new) • Drop-off/pick-up space (new) • Loading bay (new) • Bus stop (existing) • Sheffield stands (existing) • Secure cycle lockers (new) • Basic cargo bike parking (new) • E-bike / e-scooter* hire docks (new) • Car parking (improved – surfaced and marked out) • Disabled parking (new) **Traveller facilities** • Platform shelter upgrade – brick and mortar (new) • Co-working space – housed in platform building (new) • Bus shelters (new) • Smart kiosk with ticket purchase (existing) • Real-time travel information and departure boards (improved – now includes bus alongside) • Information and emergency call point (new) • CCTV (new) • Lighting (existing) • WiFi (new) • Mobile device charging (new) **Place-making functions** • Public realm improvements (new) **Commercial functions** • Parcel locker (new) • ATM (new) • Kiosk (coffee kiosk or coffee horsebox) for site users and passing traffic (new) **Community functions** • Not applicable **Resources** • Consistent branding (new) • Digital connectivity (new) • Electricity (existing) • Unstaffed – apart from the kiosk (existing)

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

Delivery models	 As the railway station and bus stops are pre-existing, the space will already function as a transport interchange. As such some of the mobility hub components already exist at the site, such as some pedestrian and cycle facilities, user facilities, and maintenance etc and will be operated directly by the station operator (the Hub Lead). Other new elements may be procured (e.g. the e-bike and e-scooter hire) whilst others will be operated commercially (e.g. the kiosk, parcel lockers and car club)
Roles, responsibilities and governance	The bullets below list the roles and responsibilities for the mobility hub, with likely candidates for each role: **Hub commissioner** - organisation that commissions and directs the development of the hub • Local government (county council) **Hub lead** - organisation that operates the hub on a day-to-day basis • Station operator (the train operation company) **Component operator** - operators of individual or packages of components within the hub (where appropriate) • Hub lead • Bus operator • E-bike and e-scooter* operator/s • Parcel locker operator • ATM operator • Kiosk operator • Car club operator
Funding sources	• National government funding pots such at the Levelling Up Fund, Bus Service Improvement Plan funding or Active Travel funds etc. • Local authority transport budget • Train operating company • Rent and business rates from component operators (i.e. parcel lockers, and car club) • Commercial investment (e.g. bus operator) • Advertising/sponsorship

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Risks	• Limited user uptake due to the rural setting, leading to small revenues creating a challenging financial case for components • Due to the challenging financial case, local government funding will likely be required • Loss of bus or rail service • Change in the way the rail network is operated • Withdrawal of other operators, which in turn could reduce revenue • Increase in traffic in area due to Hub & Ride and Kiss & Ride being attracted to the site
Dependencies	• Business case for commercial component operators • Digital connectivity • Local authority resources • Continued operation of bus and rail service • Land availability • Statutory processes

Case study 3: Peri-urban location

A network of mobility hubs in suburban locations that is well served by bus, with no notable interchange infrastructure	
Area and land use	This mobility hub is part of a wider network of hubs located in a predominantly residential suburban area. The site is well s erved by several bus services providing good access to the town centre. The residential area is a mixture of older terraced houses, post war semi-detached housing, and new developments with mixed provision including flats, townhouses and many detached houses. This site has been designed to work as part of network of mobility hubs with uniform components across all sites. The locatio ns have been strategically selected to include a range of sites including local centres, schools, colleges and business parks to maximise coverage and make best use of the existing bus netw ork. Given that no mobility hub is likely to be used in isolation, consideration will need to be given in the guidance to the prog ramme-level benefits of the network of hubs, including how multiple sites used together can generate benefits greater than the sum of their parts.
Existing provision	The existing provision at the site is bus stops located either side of the main road passing through the area each with a pol e, flag, timetable, bench and highway markings. There is also a controlled pedestrian crossing between the two stops.
Concept vision	*"To offer a wider range of mobility services in order to improve mobility access, to encourage the use of public and decarbon ised modes, and to improve user experience through greater convenience, thereby supporting stronger economies, more vibrant communities and a healthier natural environment."*
Objectives	• To provide integration between private vehicles and publicly-available, shared and decarbonised modes; • To offer increased choice of mobility services; • To improve access to local bus services, thereby increasing bus patronage; • To reduce the use and ownership of private motor vehicles, particularly for single-occupancy journeys while providing on-demand access to vehicles when use of other modes is not feasible; • To create and improve access to active or decarbonised modes such as cycles/e-cycles/e-scooters*, thereby increasing usage; • To reduce carbon, air and noise pollution emissions; • To increase the quality of the local public realm, creating a more pleasant and attractive environment for the local community to live, work and play; • To provide an inclusive, convenient, enjoyable, safe and high-quality experience for customers • To support strong and connected communities and economies, with greater access to retail, services, education, health care an d employment opportunities

Need for intervention	Although locations such as this are typically well served by one or a number of bus services, the poor provision of additional mobility options, and as such travel access beyond the bus routes can be limited, forcing users into private cars for those journeys. As such, there is a need to provide residents of suburban locations with additional mobility options to complement the existing bus service, and to do so in a way that is easy and convenient. As a predominantly residential location, there is also a lack of local facilities, leading to increased need for travel outside of the area to access even basic daily needs. Furthermore, the existing bus routes are mostly focussed on the radial routes into the nearby centre, poorly serving orbital routes between neighbourhoods and resulting in car use even for some shorter journeys. The local authority area is lagging behind in the provision of EV charging infrastructure and proposes a network of charging hubs to support both residential areas which lack driveways and opportunity charging by motorists on the move. The options considered were: • **No intervention** • **Basic improvement to bus facilities** • **Mobility hub (mobility only)** • **Mobility hub (mobility, EV charging and additional commercial functions) – preferred option**

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Components

Mobility Services (core)

- Bus (existing)
- School bus existing)
- Shared micromobility scheme offering bike / e-bike / e-scooter / e-cargo bike hire (new)
- Car club (new)

Mobility Infrastructure (core)

- Branded totem, map panel and fingerpost (new)
- Pedestrian footway (existing)
- Segregated cycleway (new)
- Zebra crossings (existing)
- Loading bay (new)
- Bus stop (existing)
- Secure cycle parking shelter (new)
- Basic cargo bike parking (new)
- Bike / e-bike / e-scooter* hire docks (new)
- Cycle repair stand / pump (new)

Mobility Infrastructure (optional)

- Car club spaces (new)
- Multiple, publicly-accessible EV chargers (new)

Traveller facilities

- Standard shelter (existing)
- Real-time travel information (existing)
- Information and emergency call point (new)
- CCTV (new)
- Lighting (new)
- WiFi (new)
- Mobile device charging (new)

Place-making functions (core)

- Public realm improvements (new)
- Communal seating (new)

Place-making functions (Optional)

- Public art installation
- Community garden

Commercial functions (core)

- Post box (new)
- Parcel locker (new)

Commercial functions (optional)

- Pop-up retail space (new)
- Co-working pod (new)

Community functions (core)

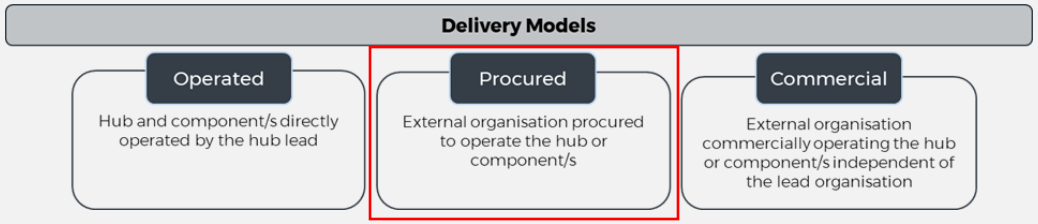
- Community notice board (new)

Resources

- Consistent branding (new)
- Digital connectivity (new)
- Electricity (existing)
- Staff (new)

* E-scooters are currently illegal to use on public roads unless part of UK Government trials

Delivery models



Mobility hubs of this type are typically one in a network, serving peri-urban settlements across the urban periphery. Due to the scale of this network, the mobility hub lead will procure an external company to deliver and operate the hub site and some of the components, with some components also being operated commercially.

To work successfully as a network, analysis of the locations, local activities and trip distributions across the area will need to be studied to ensure that the people can move through multiple hubs in a way that could be competitive with travelling by car. This will need to include some thought for how smaller community hubs can feed into larger hubs which may be located on high frequency bus corridors, as well as the role of larger transport interchanges in enabling travel to destinations further afield.

Roles, responsibilities and governance

The bullets below list the roles and responsibilities for the mobility hub, with likely candidates for each role:

Hub commissioner - organisation that commissions and directs the development of the hub

- Local government (county council)

Hub lead - organisation that operates the hub on a day-to-day basis

- Private sector (procured)

Component operator - operators of individual or packages of components within the hub

Hub lead

- Bus operator

- E-bike, e-scooter*, e-cargo bike operator/s
- Parcel locker operator
- Post box operator
- Co-working pod operator
- EV charging operator
- Car club operator

Funding sources

Capital budgets

- National government funding pots such at the Levelling Up Fund, Bus Service Improvement Plan funding or Active Travel funds etc.
- Local authority transport budget
- Bus operator

Revenue funding

- Rent and business rates from component operators (i.e. convenience retail store, community café, parcel lockers, pop-up retail and car club)
- Commercial investment (e.g. bus operator, EV charging)
- Advertising/sponsorship

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Risks	• Limited user uptake due to the peri-urban setting, leading to small revenues creating a challenging financial case for components • Due to the challenging financial case, local government funding will likely be required • Loss of bus services • Withdrawal of shared micromobility operator • Withdrawal of other operators, which in turn could reduce revenue • Increase in traffic in area due to commercial functions
Dependencies	• Shared use micromobility scheme • Business case for commercial component operators • Digital connectivity • Local authority resources • Continued operation of bus service • Land availability • Statutory processes

(End of appendix)

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