Appendix I: Recommendation Appraisal Summary Tables

December 2022

1. Detailed Appraisal Summary

**An ‘Appendix I: Recommendation Appraisal Summary Tables (ASTs) Explanatory Note’ accompanies this AST.**

* 1. Recommendation 22 – Framework for the delivery of mobility hubs

**Recommendation Description**

Improving links between public transport services, active travel (walking, wheeling and cycling) and shared transport makes it easier for people, particularly those without a car, to get to and from their destination. This addresses one of the main barriers to uptake of public transport services.

Mobility hubs are facilities where various types of transport, and potentially other services, inter-connect. [CoMoUK define a mobility hub](https://www.como.org.uk/documents/comouk-mobility-hubs-guidance) as “A recognisable place with an offer of different and connected transport modes supplemented with enhanced facilities and information features to both attract and benefit the traveller” . They support changing travel patterns which results in a greater reliance on local facilities, such as increased home-working and promotion of liveable places – including 20-minute neighbourhoods. Mobility hubs can be developed in various contexts, including rural and island communities, and services can be tailored to support specific locational characteristics and needs.

Building on [existing guidance produced by CoMoUK](https://www.como.org.uk/documents/comouk-mobility-hubs-toolkit) , this recommendation covers the preparation of a delivery framework for mobility hubs, in collaboration with stakeholders, to facilitate the creation of high-quality mobility hubs across Scotland. To ensure their effectiveness, the framework would include guidance, building on best practice and work undertaken elsewhere, to allow robust assessment and coordination of future funding decisions on mobility hubs, including determination of the most appropriate locations and facilities for different mobility hub typologies (covering both urban and rural contexts), design principles, methods of community engagement and delivery models.

The creation of a recognisable network of high-quality multi-modal mobility hubs across Scotland would support the priorities of the NTS2 by increasing the attractiveness and visibility of public and shared transport, through bettering connectivity, improving links between public, active and shared transport options, and providing seamless travel opportunities, particularly for those without access to a private car. A nationally-led framework for the delivery of mobility hubs would provide all stakeholders and delivery partners with a clear template and pathway for action, and give national government a guiding hand in planning and providing a network of hubs which is coherent, integrated, and delivers against its many social, economic, and environmental targets and policy objectives.

* 1. Relevance

**Relevant to active travel and public transport users across Scotland**

Mobility hubs align with wider policy goals to support a reduction in private vehicle use and kilometres travelled by car by increasing the attractiveness and convenience of active travel and public transport options.

[Survey data indicates that 23% of car/van users who could use public transport for travel to work, but do not, said this was because there was no direct route, with 20% saying it was because of inconvenience](https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-results-from-the-scottish-household-survey-1/table-14-travel-to-work-reasons-reasons-why-public-transport-is-not-used-for-travel-to-work-2014-20181-combined/). This recommendation could improve the directness of routes and convenience, improving ‘first and last mile’ connections and supporting transfer between services.

Aside from the benefits related to bringing transport facilities and services together, the creation of mobility hubs gives the opportunity to reshape the local environment through enhanced placemaking and urban realm improvements, providing wider social, economic and environmental benefits.

* 1. Estimated Cost

**Less than £25 million**

It is anticipated that only a modest budget would be required to support the initial development of a nationally-led mobility hubs framework. Through best practice review and engagement with transport operators, service providers and local authorities across the country, this framework would provide guidance around delivery models for mobility hubs and the toolkit necessary to support the identification of appropriate locations, including the range of travel options suitable for different site types.

The capital costs for implementing mobility hubs would vary depending on scope. Due to the limited number of schemes in existence, [CoMoUK are actively looking at ways to benchmark exemplar costs](https://www.como.org.uk/documents/comouk-mobility-hub-delivery-models) . In addition to capital costs, there would be revenue costs to support their operation and maintenance, however mobility hubs also have potential to generate income streams to support their sustainability.

* 1. Position in Sustainable Investment Hierarchy

**Reduces the need to travel unsustainably**

This recommendation would also contribute to six of the 12 NTS2 outcomes, as follows:

* Provide fair access to services we need;
* Be easy to use for all;
* Help deliver our net-zero target;
* Get people and goods to where they need to get to;
* Use beneficial innovation; and
* Be safe and secure for all.
  1. Summary Rationale

**Summary of Appraisal**

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This recommendation makes an overall positive contribution to all of the STPR2 Transport Planning Objectives (TPOs), STAG criteria, and Statutory Impact Assessment (SIA) criteria. While schemes would positively contribute to environmental objectives by supporting modal shift to sustainable modes, specific environmental impacts would be dependent on the specific locations of identified mobility hubs.

Construction of these sites is likely to be feasible, affordable and publicly acceptable, depending on local characteristics and the scale of intervention.

Details behind this summary are discussed in Section 3, below.

1. Context
   1. Problems and Opportunities

This recommendation could help to tackle the following problems and opportunities:

**Relevant Problem & Opportunity Themes Identified in National Case for Change**

* **Changing Travel Behaviour:** changing people’s travel behaviour to use more sustainable modes would have a positive impact on the environment, as well as health and wellbeing.
* **Information and Integration:** high-quality journey planning information, both digital and physical, is important to enable a resilient transport system that allows people and goods to get to where they need to get to. Some journeys are not possible due to a lack of connections or accessible modes of transport, and long wait times, the need for multiple tickets and complex connections deter people from some public transport services resulting in many running below capacity.
* **Spatial Planning:** the places where people live and work can have important impacts on health and wellbeing. The current and future transport needs of people should be at the heart of planning decisions to ensure sustainable places.
* **Physical Activity:** the importance of active travel is becoming more evident as the consequences of physical inactivity are studied. [It is recognised that one of the most effective ways to secure the required 30 minutes of moderate activity per day is to reduce reliance on motorised transport, changing the means of everyday travel to walking and cycling](https://www.gov.scot/publications/preventing-overweight-obesity-scotland-route-map-towards-healthy-weight/) .
* **Decline in Bus Use:** bus is particularly important to areas which are not served by the rail network, including much of rural Scotland. It can be an important element in multi-modal journeys and is a sustainable and space-efficient mode of travel. [Reducing passenger numbers risks driving down revenues and making some services unviable, resulting in cancellations and, in some cases, communities being isolated](https://www.stagecoachgroup.com/media/news-releases/2017/2017-11-20.aspx) .
* **Global Climate Emergency:** the Scottish Parliament committed to an ambitious target of net zero emissions by 2045 and transport needs to play its part. Transport is currently Scotland’s largest sectoral emitter, responsible for 37% of Scotland’s total greenhouse gas emissions (greenhouse gas emissions encompass CO2 emissions) in 2018 ([National Atmospheric Emissions Inventory 1990-2017](https://naei.beis.gov.uk/reports/reports?report_id=981)) . Our transport system needs to minimise the future impacts of transport on our climate.
* **Safety and Security:** Scotland’s transport system needs to be safe. Whilst the [number of road accident casualties reduced by 11% between 2017 and 2018](https://www.transport.gov.scot/publication/reported-road-casualties-scotland-2018/) , the number of fatalities has increased. Many women and disabled people feel vulnerable when using public transport – particularly at bus stops, train stations or other transport interchanges.
  1. Interdependencies

This recommendation has potential overlap with other STPR2 recommendations and would also complement other areas of Scottish Government activity.

Other STPR2 Recommendations

* Behavioural change initiatives (6);
* Improving access to bikes (9);
* Clyde Metro (11);
* Edinburgh and South East Scotland Mass Transit (12);
* Aberdeen Raid Transit (13);
* Supporting integrated journeys at ferry terminals (18);
* Infrastructure to provide access for all at railway stations (19);
* Investment in Demand Responsive Transport and Mobility as a Service (20);
* Improved public transport passenger interchange facilities (21);
* Smart, integrated public transport ticketing (23); and
* Zero emission vehicles and infrastructure transition (28).

Other areas of Scottish Government activity

* [Climate Change Plan 2018 - 2032 Update](https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/) - commitments to reduce private vehicle kilometres by 20% by 2030;
* [National Transport Strategy](https://www.transport.gov.scot/our-approach/national-transport-strategy/) (NTS2) - the Sustainable Travel Hierarchy;
* [Bus Partnership Fund](https://www.transport.gov.scot/public-transport/buses/bus-partnership-fund/) ;
* [City Region Deals](https://www.gov.scot/policies/cities-regions/city-region-deals/);
* [Regional Growth Deals](https://www.gov.scot/policies/cities-regions/regional-growth-deals/);
* [MaaS Investment Fund](https://www.transport.gov.scot/our-approach/mobility-as-a-service/maas-investment-fund-mobility-as-a-service/); and
* [Low Carbon Travel and Transport Challenge Fund](https://energysavingtrust.org.uk/service/low-carbon-travel-and-transport-challenge-fund/).

1. Appraisal

This section provides an assessment of the recommendation against:

* STPR2 Transport Planning Objectives (TPOs);
* STAG criteria;
* Deliverability criteria; and
* Statutory Impact Assessment criteria.

The seven-point assessment scale has been used to indicate the impact of the recommendation when considered under the ‘Low’ and ‘High’ Transport Behaviour Scenarios (which are described in Appendix F of the Technical Report).

* 1. Transport Planning Objectives

1. A sustainable strategic transport system that contributes significantly to the Scottish Government’s net-zero emissions target



The contribution of mobility hubs to the net zero target would depend on the nature and location of the facilities provided. However, in general, [a successful multi-modal hub would be expected to generate increased demand for public transport and active travel](https://documents.hants.gov.uk/transport-fundingbids/july-2017/App7KPMGBRTEvaluationGosportFareham.pdf), in turn promoting mode shift from car, minimising carbon emissions and supporting delivery of this objective.

Mobility hubs should also increase the attractiveness and competitiveness of public transport, ensuring that the network remains viable for those who need it (particularly in the context of the COVID-19 pandemic which risks a longer term shift to private car use).

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.

1. An inclusive strategic transport system that improves the affordability and accessibility of public transport.



Mobility hubs would improve accessibility by decreasing the distance between transport services (and other services), reducing the disbenefit associated with interchange, especially for those with reduced mobility.

[A European Environment Agency report](https://www.eea.europa.eu/publications/the-first-and-last-mile) into the first and last mile of travel found that, for passenger transport, good first/last/only mile (F/L/O mile) options have the potential to modify the characteristics of public transport and to reduce the overall costs of trips made by public transport (specifically the sum of the monetary costs of a journey, such as fares, and non-monetary costs relating to the monetised value of travel time), thereby making it more attractive. In short, mobility hubs have the potential to make public transport more attractive relative to the private car, by making the first and last leg of public transport journeys more convenient and creating a more seamless travel experience.

This recommendation is therefore expected to have a moderate positive impact on this objective in both Low and High scenarios.

3. A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing.



The development of mobility hubs has the potential to support the ambitions to develop more liveable neighbourhoods, reflected in government aims for 20-minute neighbourhoods, by improving access to an array of sustainable travel choices for everyday journeys. This could reduce private car dependency and increase walking, wheeling, cycling, and public transport use, positively contributing to the development of more liveable places and supporting health and wellbeing outcomes.

Mobility hubs are not just a point of convergence for multi-modal transport options; they comprise several different components which overall contribute to the hub being an interface between the transport network and the surrounding environment. This includes both mobility and non-mobility urban improvement components. Complementing mobility related components such as shared mobility (for example, bike share), EV charging points, and public transport stops/platforms, logistics hubs, parcel lockers, urban improvements such as landscaping and rest points, outdoor cafes/co-working spaces and phone charging points can increase their attractiveness and utilisation. By improving public realm, mobility hubs can enhance the sense of place.

Multi-modal transport hubs could be developed from existing transport hubs (for example, bus/rail stations and ferry terminals) as well as other appropriate sites within cities, towns and villages across Scotland. New hubs would make multi-modal journeys more attractive, potentially increasing active travel and therefore improving health. Reduced car use would also result in reduced emissions, improving health.

Overall, this recommendation is expected to have a moderate positive impact on this objective in both Low and High scenarios.

4. An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland.



[The need for integration to encourage modal shift from private vehicle use is highlighted in NTS2](https://www.transport.gov.scot/publication/national-transport-strategy-2/) . Deterrents which discouraged commuters choosing sustainable travel modes have been identified, including a lack of connections or accessible modes of transport, long wait times, and the need for multiple tickets.

The main purpose of this recommendation is to improve physical integration between and within public transport modes, as well as interchange with active travel and interchange from car in the case of P&R. To maximise benefits, the recommendation would need to be supported by the provision of integrated ticketing and integrated routeing and timetabling, noting that routeing and timetabling is outside the scope of STPR2.

In terms of inclusive growth, there could be a positive impact on social inclusion from the development of mobility hubs. The [2019 Scottish Household Survey](https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-2019-results-from-the-scottish-household-survey/table-18b-car-bicycle-access-households-with-bicycles-cars-vans-available-for-private-use-2019/) indicated that 48% of the most deprived households (Scottish Index of Multiple Deprivation quintile 1) do not have access to a car, so actions taken to reduce the disbenefits associated with public transport interchange could help to improve accessibility to employment and education, and therefore help to deliver inclusive growth.

This recommendation is expected to have a minor positive impact on this objective in both Low and High scenarios.

5. A reliable and resilient strategic transport system that is safe and secure for users.



Consolidating different travel options within a single location could potentially increase resilience of the transport network given that mobility hubs offer multiple travel options, thereby providing users with alternatives in the event that one travel option fails. The provision of Real Time Passenger Information (RTPI) at mobility hubs could result in benefits from a reduced perception of unreliability.

New interchanges could also improve personal safety and security through better lighting and CCTV coverage, increased passenger assistance, and improved accessibility for those with reduced mobility. If accompanied by placemaking enhancements and other amenities and services in addition to transport, safety and perceptions of safety would also be anticipated to improve due to ambient security from others using the mobility hub.

Overall, this recommendation is expected to have a moderate positive impact on this objective in both Low and High scenarios.

* 1. STAG Criteria

1. Environment



See Strategic Environmental Assessment (SEA) below.

This recommendation is expected to have a minor positive effect on this criterion in both the Low and High scenarios.

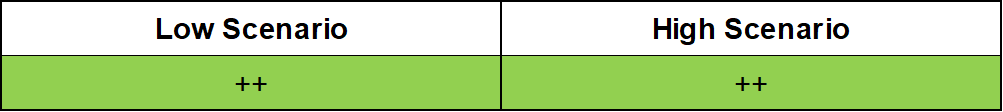
2. Climate Change

In combination with walking, wheeling, and cycling, public transport provides a key mode of transport for replacing car journeys, with [research showing that the average number of cars per household rises as public transport accessibility decreases](https://content.tfl.gov.uk/residential-parking-provision-new-development.pdf) . Mobility hubs have the potential to reduce the need to travel unsustainably through increasing the attractiveness of active travel and public transport, in turn contributing to climate change objectives.

This recommendation is not expected to impact vulnerability to the effects of climate change or potential to adapt to the effects of climate change.

This recommendation is expected to have a minor positive impact on this criterion in both the Low and High scenarios.

3. Health, Safety and Wellbeing



Where mobility hubs contribute to reducing car use, there is a likely, small net decrease in accidents due to reduced private vehicle movements. In addition, where a new mobility hub brings services closer together, there could be improved (both actual and perceived) personal safety levels through reduced walking distances. Mobility hubs could also improve personal safety and security through better lighting and CCTV coverage, increased passenger assistance and improved accessibility for those with reduced mobility. Natural surveillance and ambient safety would also be improved through greater pedestrian activity associated with placemaking improvements and the provision of wider services and amenities at mobility hubs which encourage their usage.

This recommendation is likely to result in an increase in walking and cycling as part of a multi-modal journey, which would increase physical activity with potential benefits to health. Reduced emissions from transport due to modal shift away from car could also improve air quality and result in minor improvements to health.

Mobility hubs would be expected to improve connectivity and thus access to health and wellbeing infrastructure is also expected to improve. There is no anticipated impact on visual amenity.

It would also be anticipated that the mobility hubs delivery framework would provide guidance on the means by which hubs can provide added social and wellbeing value to their local community. This could include, for example, urban realm improvements, village/town centre greening, or the provision of shared spaces that incorporate rest facilities, such as benches, which encourage people to come together for enjoyment/social purposes, thus providing wider health and wellbeing benefits.

Overall, this recommendation is expected to have a moderate positive impact on this criterion in both the Low and High scenarios.

4. Economy



[Congestion is estimated to have cost the UK economy £6.9 billion in 2019](https://www.transportxtra.com/publications/local-transport-today/news/64673/congestion-cost-uk-economy-6-9-billion-in-2019), so action taken to increase the attractiveness of public transport and increase modal shift from car would be beneficial to the economy due to increased transport economic efficiency. Mobility hubs could reduce car use by enhancing ‘first and last mile’ connectivity. The development of mobility hubs could also improve accessibility to employment and education for those without access to a car.

Mobility hubs have the potential to provide wider economic impacts. The role of infrastructure investment in stimulating economic recovery is widely acknowledged and can act as a catalyst for economic growth, important following the COVID-19 pandemic. Specifically, [research has suggested that transport infrastructure investment can encourage regeneration in the surrounding area, improving the overall attractiveness of a location to locate or invest in, which can impact on the pattern of development and / or land values, supporting economic growth](https://www.raildeliverygroup.com/files/Publications/2018-03_local_economic_benefits_of_station_investment.pdf).

Overall, this recommendation is expected to have a minor positive impact on this criterion in both the Low and High scenarios.

5. Equality and Accessibility

Mobility hubs could improve accessibility by decreasing the distance between services, reducing the disbenefit of interchange, especially for those with reduced mobility. They could extend the reach of the public transport network and better connect it with the active travel network.

This recommendation could improve access in harder to reach areas, and provide an affordable travel option, reducing forced car ownership and reliance on taxis for people without access to a car.

In terms of social inclusion, mobility hubs could have a beneficial impact. Please refer to EqIA/ICIA/FSDA/CRWIA Assessment in the next section.

Overall, this recommendation is anticipated to have a minor positive impact on this criterion in both the Low and High scenarios.

* 1. Deliverability

1. Feasibility

This recommendation covers provision of new mobility hubs. Such interventions are proven concepts and readily feasible, subject to local characteristics and the scale of the intervention. However, if technological advances are required to support the provision of mobility hubs, the availability of appropriate technology would also need to be considered, as would the extent to which passengers could access this technology. There is also a risk that the lack of control over route and timetable integration between services and between modes may reduce the benefits that can be achieved.

2. Affordability

Affordability would depend on the scale of the intervention, with individual small-scale schemes likely to be relatively affordable, although provision of a network of mobility hubs would be more costly. As mobility hubs have the potential to cover several modes, the proposed framework for their delivery should seek to provide guidance on multi-partner funding arrangements and delivery models to adopt. This should extend to guidance on their potential for income generation, such as through rental of commercial space to cafés and retail outlets.

3. Public Acceptability

The public acceptability of new facilities may depend on their location, scale, journey time impact (if services need to be re-routed), and the ability to access any associated journey planning apps. However, the recommendation should be acceptable, especially when combined with other measures such as integrated ticketing and improved public realm. It is to be noted, however, that where road space reallocation or associated enhancements such as reconfigured or improved public realm, for example, is required to support the development of a new mobility hub, such schemes have the potential to attract initial opposition from road users.

* 1. Statutory Impact Assessment

1. Strategic Environmental Assessment (SEA)



This recommendation would likely result in positive effects on the SEA objectives for reducing greenhouse gas emissions (Objective 1) and improving air quality (Objective 3), due to promoting modal shift to more sustainable transport options. Positive effects are anticipated on quality of life and road safety (Objectives 4 and 7) due to an expected increase in sustainable access to essential services and, where interchange reduces car use, this is likely to result in a small net decrease in accidents. The significance of effects is dependent on the alternatives being safe, affordable, and available for all users. Positive effects are also expected for noise and vibration and developing high quality places (Objectives 5 and 6) due to expected reductions in noise from private vehicles and improvements to the public realm.

There is the potential for negative environmental effects during construction and operation, on natural resource usage, water environment, biodiversity, soil, cultural heritage and landscape and visual amenity (Objectives 9 to 14), depending on the design and location of the interventions.

As part of the delivery framework for mobility hubs, guidance would be expected on the potential need for further environmental assessment to support the planning and implementation of different types of mobility hubs depending on their setting.

The recommendation is related to, but unlikely to have any effect on the achievement of SEA Objective 2 (climate adaptation) and is therefore considered neutral.

Overall, this recommendation is expected to have a minor positive effect on this criterion in both Low and High scenarios.

2. Equalities Impact Assessment (EqIA)



All users with protected characteristics could benefit from new facilities associated with mobility hubs, but there could be a specific beneficial impact from fewer barriers to travel for those with reduced mobility if improved interchange decreases the distance between public transport services and allows for step-free transfers.

This recommendation is therefore expected to have a minor positive impact on this criterion in both Low and High scenarios.

3. Island Communities Impact Assessment (ICIA)



This recommendation is not considered directly or indirectly relevant to island communities, although there may be indirect benefits for those travelling from islands to the mainland when using mobility hubs elsewhere on the transport network, such as rail stations or ferry terminals.

This recommendation is therefore expected to have a neutral impact on this criterion in both Low and High scenarios.

4. Children’s Rights and Wellbeing Impact Assessment (CRWIA)



While this recommendation is not targeted directly at children and young people, mobility hubs could have a beneficial impact for them, given that those under 17 are not able to drive and improved interchange associated with mobility hubs could increase the attractiveness of public transport. In addition, where interchange brings services closer together, this could improve personal safety and security by reducing the distance walked, the provision of CCTV and ambient safety associated with increased people using the mobility hub.

This recommendation is therefore expected to have a minor positive impact on this criterion in both Low and High scenarios.

5. Fairer Scotland Duty Assessment (FSDA)



Mobility hubs could provide a beneficial impact on reducing inequality. The [2019 Scottish Household Survey](https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-2019-results-from-the-scottish-household-survey/table-18b-car-bicycle-access-households-with-bicycles-cars-vans-available-for-private-use-2019/) indicated that 48% of the most deprived households (Scottish Index of Multiple Deprivation quintile 1) do not have access to a car, so actions taken to reduce the disbenefits associated with public transport interchange could help to improve accessibility to employment, education, healthcare, and leisure activities for those most in need.

This recommendation is therefore expected to have a minor positive impact on this criterion in both Low and High scenarios.