Lochaber Bus Partnership Fund: Appraisal Report

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The Highland Council
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Lochaber Bus Partnership Fund
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Lochaber Bus Partnership Fund: Appraisal Report

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Acronyms and abbreviations

Acronym	Full Name
AST	Appraisal Summary Table
BPF	Bus Partnership Fund
EqIA	Equality Impact Assessment
FSD	Fairer Scotland Duty
LA	Local Authority
NSA	National Scenic Area
OBC	Outline Business Case
PSED	Public Sector Equality Duty
RAG	Red-Amber-Green
RTP	Regional Transport Partnership
SSSI	Sites of Special Scientific Interest
SAC	Special Areas of Conservation
SBC	Strategic Business Case
SIMD	Scottish Index of Multiple Deprivation
SMART	Specific, Measurable, Attainable, Relevant and Timely
SPA	Special Protection Area
STAG	Scottish Transport Appraisal Guidance
TAG	Transport Analysis Guide
TEE	Transport Economic Efficiency
TPO	Transport Planning Objective

1. Introduction

In 2019, the Scottish Government pledged £500 million towards new bus priority infrastructure via the Bus Partnership Fund (BPF)[1], which is intended to support local authorities, in partnership with bus operators, to develop and deliver ambitious schemes that incorporate bus priority measures to tackle the negative impacts of congestion and encourage more people to travel by bus.

The Highland Council successfully secured initial funding of £2.9 million from Transport Scotland for projects in the Inner Moray Firth and Lochaber areas, with potential to secure further funding of specific projects subject to the gateway review process.

As part of the BPF, Jacobs has been commissioned by The Highland Council to undertake a Scottish Transport Appraisal Guidance (STAG)[2] -based appraisal of bus-based options around the Lochaber area.

The key aims and outcomes of the study are to:

- Afford significant priority to buses over other forms of motorised transport;
- Improve the punctuality and reliability of bus services; and
- Aid in increasing bus patronage.

The appraisal has been carried out in accordance with the STAG, as a best practice, objective-led and evidence-based approach to transport appraisal. The STAG appraisal considered options for improving transport connections for all users, paying particular attention to bus movements in line with the scope of this study.

1.1 Context and Scope

The distance travelled on Scotland's roads reached its highest level ever recorded in 2019/20, but the distance travelled on local bus services in Scotland fell by 11% between 2009/10 and 2019/20[3]. The number of passenger journeys made on local bus services in Scotland fell by 21% over the same period[4].

The COVID-19 pandemic has had a major impact on demand for bus travel. A combination of restrictions on movements and reluctance to be in shared spaces reduced bus demand

[1] Transport Scotland, Bus Partnership Fund (BPF), https://www.transport.gov.scot/public-transport/buses/bus-partnership-fund

[2] Transport Scotland, Scottish Transport Appraisal Guidance (STAG) - Managers Guide , Jan 2022, https://www.transport.gov.scot/media/50895/scottish-transport-appraisal-guidance-managers-guide.pdf

[3] Scottish Transport Statistics No 39, 2020 Edition, https://www.transport.gov.scot/publication/scottish-transport-statistics-no-39-2020-edition-pdf-only/

[4] *ibid*

by more than half[5], whilst not significantly reducing operators' costs, which has resulted in the requirement for an on-going Network Support Grant. Although demand is now increasing, a proactive policy response is required to support recovery to pre-COVID-19 levels, adding to the commercial challenges for an industry that had previously been in long-term decline.

Services within the Lochaber area are already supported by subsidy, and without action, issues such as poor accessibility for many within the region cannot be addressed, increasing inequity between people that do and do not have access to a car, and further encourage an unsustainable, carbon-intensive transport system. All these factors are in direct conflict with the aims of Fort William 2040, to be a great place to live, a connected place and a net-zero town more sustainable.

Enabling improved bus priority is one of the actions that can help reverse the circle of decline in bus use. The BPF package of improvements has the opportunity to deliver these outcomes through improving bus reliability and journey times, especially in relation to car. As a result, operators should benefit from the 'double-win' of both increased passenger revenue and reduced operating costs. This will improve network viability and, as a result:

- Deliver a more sustainable, inclusive transport system; and
- Reduce traffic congestion, and resulting air pollution and carbon emissions, by attracting more people to bus from car.

1.1.1 Scope of this Commission

The primary scope of this commission is to develop a Strategic Business Case (SBC) for improvements within Fort William and its surrounds, taking the project through to a Gateway Review with Transport Scotland. If approved the preferred option or options would proceed to Outline Business Case (OBC), as part of a separate commission to support future funding applications.

Each Business Case stage will adopt an evidence-based approach to develop credible, deliverable, effective package of measures to improve bus priority, making the case for BPF funding within the study area shown in Figure 1-1.

[5] Transport Scotland, COVID-19: Scotland's transport and travel trends during the first year of the pandemic, 2021, https://www.transport.gov.scot/media/50410/covid-19-trends-in-transport-and-travel-in-scotland-during-the-first-year-of-the-pandemic.pdf

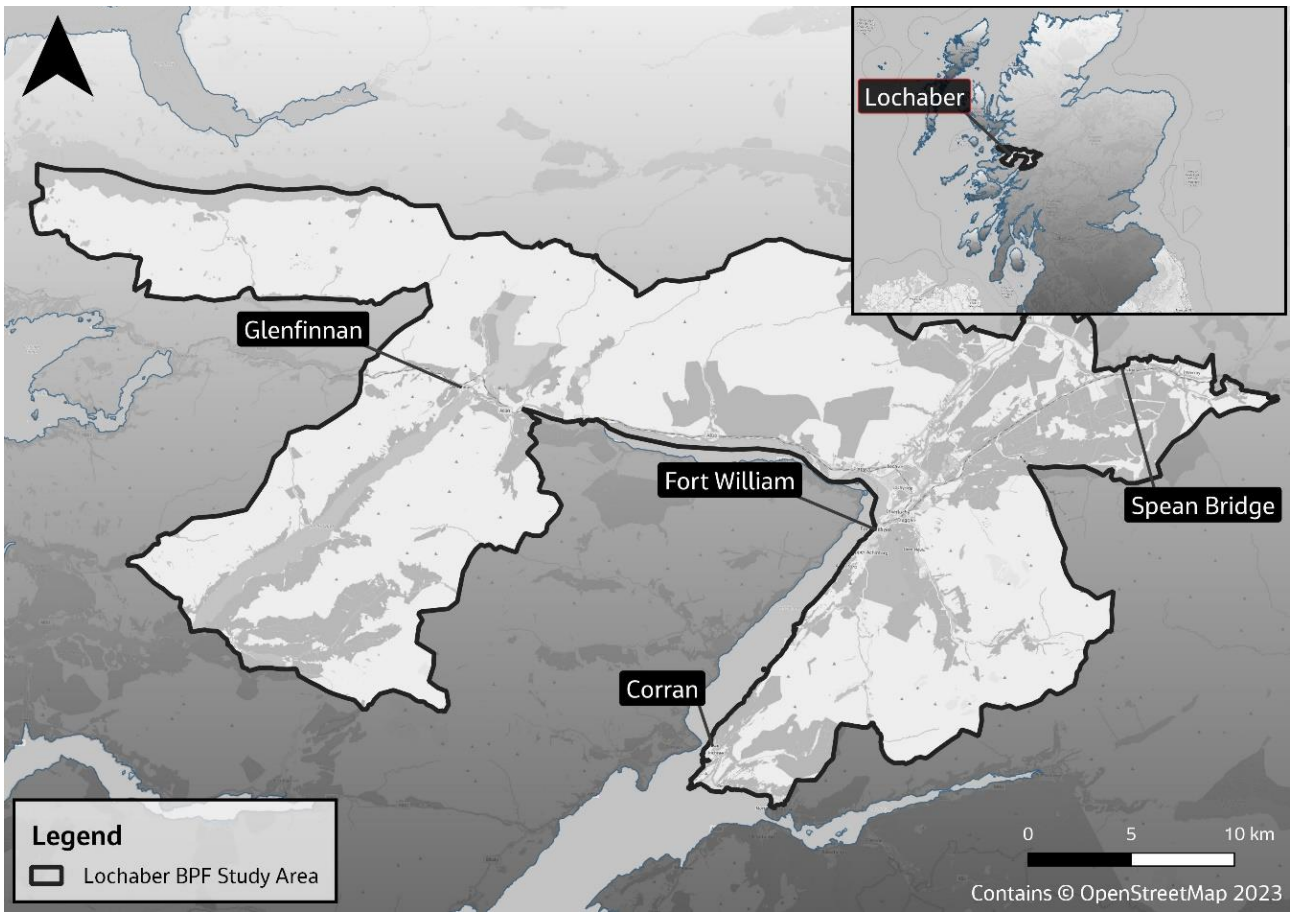

Figure 1-1: Map Showing Location of Study Area

This commission has considered the objectives and priorities of The Highland Council and the other partners in the Client Group, to identify the right package of bus priority measures for each corridor.

1.2 STAG process and Case for Change

This report sets out the Appraisal for the Lochaber Bus Partnership Fund (BPF), combining both the Preliminary and Detailed Appraisal stages. The four key phases of STAG, including the current progression of the Lochaber BPF, are illustrated in Figure 1-2 below.

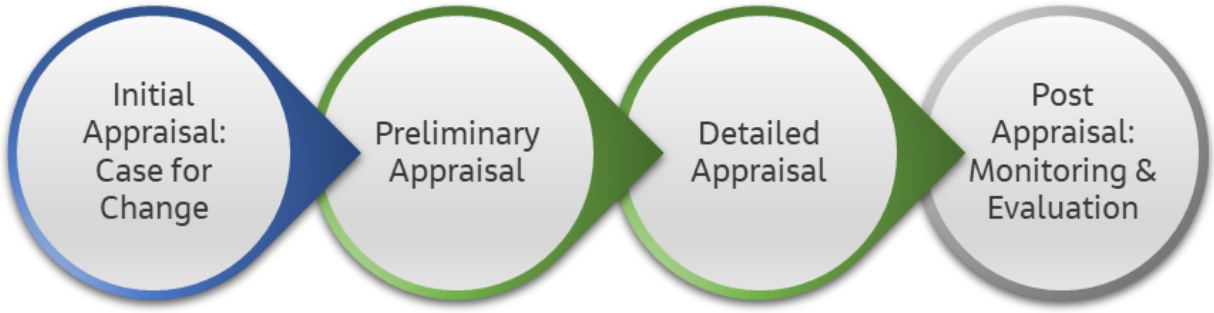

Figure 1-2: The four Key Phases to the Scottish Transport Appraisal Guidance (STAG)

STAG is a multi-criterion framework that appraises options against the Transport Planning Objectives (TPOs), the STAG criteria, established policy directives and deliverability. This

includes feasibility, affordability and public acceptability. The key parts of the STAG process as adopted for the Lochaber BPF are:

- Initial Appraisal: Case for Change – to demonstrate a clear need for change through the identification of problems and opportunities alongside constraints and risks that lead to the creation of SMART TPOs. This stage should include early engagement with stakeholders. For the Lochaber BPF, this stage has also incorporated Option Generation and Development, taking a list of stakeholder and publicly generated options and initially sifting them to create a unique list to progress to Option Appraisal.
- Option Appraisal (Preliminary and Detailed Appraisal) – this constitutes a qualitative and quantitative appraisal (as appropriate) of all options retained from the Option Sifting stage against the project specific TPOs, STAG Criteria, Established Policy Objectives and the Feasibility, Affordability and likely Public Acceptability of options.
- Post Appraisal: Monitoring and Evaluation – to determine the success of the implemented option in achieving the TPOs, performance against STAG Criteria and any impacts on established policy objectives. A plan for monitoring (gathering and interpreting information on the performance of any implemented intervention) and evaluation (identification of whether the implemented intervention is performing as intended) should be set out prior to implementation of any deliverable.

2. Initial Appraisal: Case for Change Summary

The Initial Appraisal: Case for Change is the first stage of the STAG Process, setting out the justification for taking the study forward. For the Lochaber BPF, this included:

- A review of current national, regional and local policy documents used to provide background context of the governmental local authority (LA) and Regional Transport Partnership (RTP) transport related policies;
- Determination of the geographic, socio-economic, environmental and transport context of the Lochaber BPF study area;
- The identification of problems and opportunities for the Lochaber BPF, including a combination of those derived from quantitative evidence and those raised through stakeholder engagement workshops and an online public survey;
- The creation of specific TPO's based upon the identified problems and opportunities; and
- The generation and sifting of options applicable to the Lochaber BPF.

The following chapters present the key findings and outcomes from the Lochaber BPF: Case for Change.

2.1 Policy Context

To establish the overall strategic fit of the Lochaber BPF, key elements of policy, strategy and legislation were reviewed at local, regional and national levels, considering broader topic areas including Spatial Planning, Economic Development and Climate Change. Figure 2-1 below provides an overview of the strategies and policies reviewed.

Figure 2-1: Overview of Policy, Strategy and Legislation Context

The review of the policy and context identified a focus on strengthening and enhancing multimodal connections through targeted infrastructure investment, particularly for underserved rural areas. These multimodal connections will play an important role in supporting planned growth and facilitating a sustainable and just transition toward meeting ambitious climate change targets.

2.2 Problems

The Initial Appraisal: Case for Change report identified the transport problems and opportunities relevant to the study area, which were based upon a number of data analyses, stakeholder engagement and an online public survey engagement exercise. The identified problems and opportunities were also used to subsequently inform the TPO's and the generation of a long list of potential options. A brief summary of the key problems is presented below.

Active Travel

- **Barriers to Active Travel** – Most of the active travel connections within the wider study area involve travelling on or next to the main trunk road. There is limited active travel provision on the A830, and the A82 acts as a barrier to active travel within Fort William, particularly severing the NCN from the town centre and main travel hub.

Public Transport

- **Post COVID-19 Uncertainty** – Bus patronage levels are beginning to recover to pre COVID-19 levels, however, there is uncertainty in terms of forecasting future bus patronage levels as it remains unclear if travel patterns and behaviour will return to pre pandemic levels.
- **Bus Service Frequency and Reliability** - The service frequency in the study area may limit the appeal of bus travel and contribute to geographic exclusion or isolation, particularly for residents of the outlying settlements. There are also other issues related to the attractiveness of bus as a mode such as the quality of interchange facilities.
- **Rail Service Frequency** – There is a limited number of local and longer distance rail connections, constraining the usability of rail for work commuting purposes. The existing timetabling and location of rail halts also constrains the usability of rail for travel to school.

Road Network Operation

- **Congestion and Reliability** - Southbound journey times on the A82 (between A82/A830 roundabout and Nevis roundabout) are slower and more susceptible to higher degrees of variability when compared to the northbound journey time during the peak summer period. This can cause problems for emergency services as well as public transport, as services cannot maintain a regular timetable.
- **Accidents and Resilience** – Road accidents and closures can lead to significant delays on the network and the lack of alternative routes mean diversions can be lengthy. This can result in reliability issues and a reduced confidence in the trunk road network.

- **Cost of Public Transport** - Whilst bus fares have not increased over recent years, the cheapest return bus ticket between Caol and Fort William is £2.70. The perceived cost of travelling by car (operational costs and parking costs) is the cheaper option, with parking charges being around £2 for 2 hours. Travelling by car is most certainly cheaper if the car has multiple occupants.

Socio Economic

- **Centralised Employment, Education and Health Facilities** – Due to the rurality of the study area, employment opportunities are typically located in Fort William. There are also limited healthcare and education facilities outwith Fort William, meaning travel to Fort William is required to access essential services.

Transport and Land Use Integration

- **Major Developments** - There are a number of significant developments planned, including the Blar Mhor site and relocation of the hospital to the A830. These developments, and others, will see a significant amount of traffic generated from the north of Fort William which could exacerbate existing congestion, particularly during the summer peak.

2.3 Opportunities

A summary of the key opportunities from the Initial Appraisal: Case for Change is presented below.

Public Transport

- **Accessibility** - A large proportion of the population within the study area reside within 800m of a bus stop. There is an opportunity to capitalise on this and encourage mode shift to public transport by making services more competitive with travel by car.
- **Long Distance Travel** - Integration between local and long-distance services, combined with poor waiting facilities at the bus station in Fort William can reduce the attractiveness of long-distance travel by bus. There is therefore an opportunity to encourage a mode shift to public transport for longer distance trips.

Road Network Operation

- **Shift to Sustainable Transport Options and Reducing the Reliance of Private Car** – Fort William has a higher percentage of people travelling to work by cycling and bus when compared to the national and regional averages respectively. There is also a higher proportion of people travelling short distances (under 5km) to work compared to Scotland as a whole. There is an opportunity to increase this further, while also encouraging the transfer of visitor trips to more sustainable modes of transport.

Supporting Economic Growth

- **Tourism** - There is a key opportunity to develop a strategic transport system providing sustainable travel options for travel to, from and within the study area that provides the opportunity to further enhance the attractiveness of the area as a key

tourism destination and capitalise on the growth in the tourism sector, whilst supporting the Climate Change Plan.

Transport Integration

- **FW2040** - One of the main objectives set out in FW2040 is the need to maximise opportunities for a diverse range of transport and other connecting networks including new technologies. There is therefore an opportunity for the BPF and the interventions identified by the FW2040 strategy to complement one another, enhancing any improvements made as part of either scheme to better realise the potential of both projects.

Land Use Integration

- **Integrated Sustainable Travel Choices** - 20% of commuting trip within the study area are undertaken by active modes. In addition, 67% of trips to work made in the area are less than 5km. This combination of the relatively short travel distances and propensity to travel by active modes presents an opportunity to help provide sustainable travel choices for new developments within the area.

2.4 Constraints

The physical geography of the study area is predominantly rural and presents a constraint to the types of options that could be considered. Loch Linnhe lies to the west of Fort William and Ben Nevis to the east. In addition, there are several rivers, as well as the Caledonian Canal, that pass through the study area. Significant development is planned or is already being constructed reducing the remaining land take available around Fort William.

Additional constraints identified as part of the appraisal process are presented below.

- Constrained adopted road boundary; in some places on the corridors and on some side roads, narrow carriageway width and other constraints (e.g. narrow bridges or mature trees) limits scope for bus priority interventions
- Lane improvements may be constrained by utilities present at kerbside and in central reserve
- Competition for street space with other transport needs and public space aspirations, including FW2040
- Parking enforcement is limited by current legislation which does not permit camera-enforcement of stationary offences
- Although opportunities exist for bus priority through traffic signals, they may be constrained by the need to co-ordinate signals for the overall efficiency of other road users.

2.5 Engagement

The engagement process is an important element in the identification of problems and opportunities, as well as capturing feedback on potential interventions to address the problems and opportunities raised. For the Lochaber BPF, several stakeholder engagement activities were undertaken including a series of in person and virtual workshops. This

consisted of workshops to seek the views of key stakeholders on the problems and opportunities affecting the study area, confirmation of the TPO's developed and to capture stakeholder suggestions for potential different transport options that would address these, in the following sessions:

- Stakeholder Problems and Opportunities Session – 1 November 2022;
- Elected Members Problems and Opportunities – 2 November 2022;
- Public Information Sessions – 1 and 2 November 2022; and
- Stakeholder Option Generation Session – 8 December 2022.

Key stakeholders were invited to these sessions, including:

- Bus Operators
    - Shiel Buses
- Local Authorities
    - The Highland Council
- HITRANS
- Elected Members
- Community Councils
- University of Highlands and Islands
- Local Community Groups
- Key Businesses

An online public survey was conducted using Microsoft Forms and publicised through the Highland Council website and social media platforms.

2.6 Transport Planning Objectives

TPO's are of central importance to the STAG process. In line with STAG, TPO's should align with the outcomes sought by the study, be based on a comprehensive and evidenced understanding of problems and opportunities and lend themselves to inform a clear and transparent appraisal of transport options. The TPOs are a key element of the appraisal process from initial option identification and sifting, through to preliminary and detailed appraisal and subsequent monitoring or evaluation.

An analysis was undertaken to identify the problems, opportunities and constraints that affect transport in the study area, along with a review of relevant local, regional and national policy and the aspirations of stakeholders. From this, three TPOs were considered suitable to be taken forward for appraisal at the Case for Change stage. These are presented in Table 2-1.

Table 2-1: Lochaber TPO's

TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.
TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.
TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.

2.7 Option Generation and Sifting

In keeping with the principles of STAG, the Initial Appraisal: Case for Change provided a robust method to generate, 'clean' and sift options; ensuring a broad range of options across all modes was initially considered. The approach to the generation of options for the Lochaber BPF, is summarised in Figure 2-2.

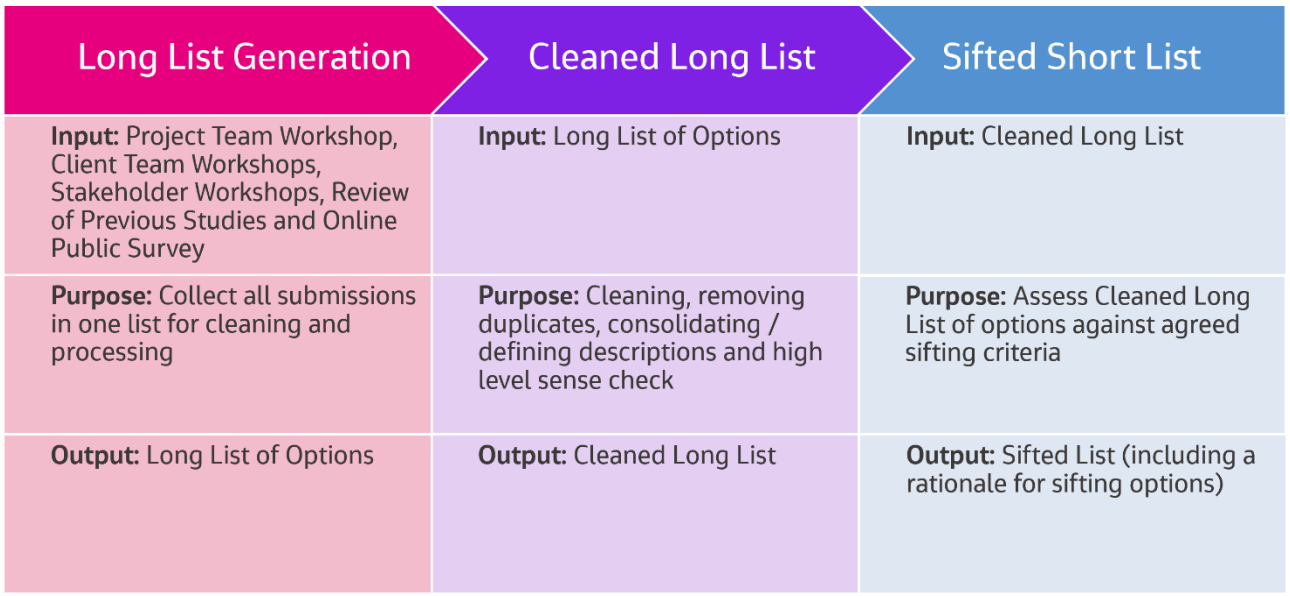

Figure 2-2: Approach to Option Generation and Sifting

2.7.1 Generation of Long List of 'Options'

The long list of initial transport options was generated using submissions received from a range of sources, including a review of options identified from local and regional studies, stakeholder engagement and public consultation. Options were also generated by the project team as part of the consultation process.

Overall, there was 2,094 submissions included in the long list.

2.7.2 Option Cleaning

Of the 2,094 individual submissions received, a number were either vague or ambiguous requiring further definition or were submissions that could not be considered an option for consideration, for example, those submissions that referenced non-transport related items. As such, an exercise was undertaken to 'clean' the long list.

Those submissions that could not be considered as options, either as a result of being poorly defined or relating to non-transport related items, were removed from the subsequent sifting process. Following the cleaning process, a total of 1,861 options were retained as part of the 'cleaned' long list of options and taken forward into the Option Sifting process.

2.7.3 Option Sifting

Figure 2-3 below demonstrates the option sifting process for the Lochaber BPF, including relevant rationales considered for the sifting out of options at this stage.

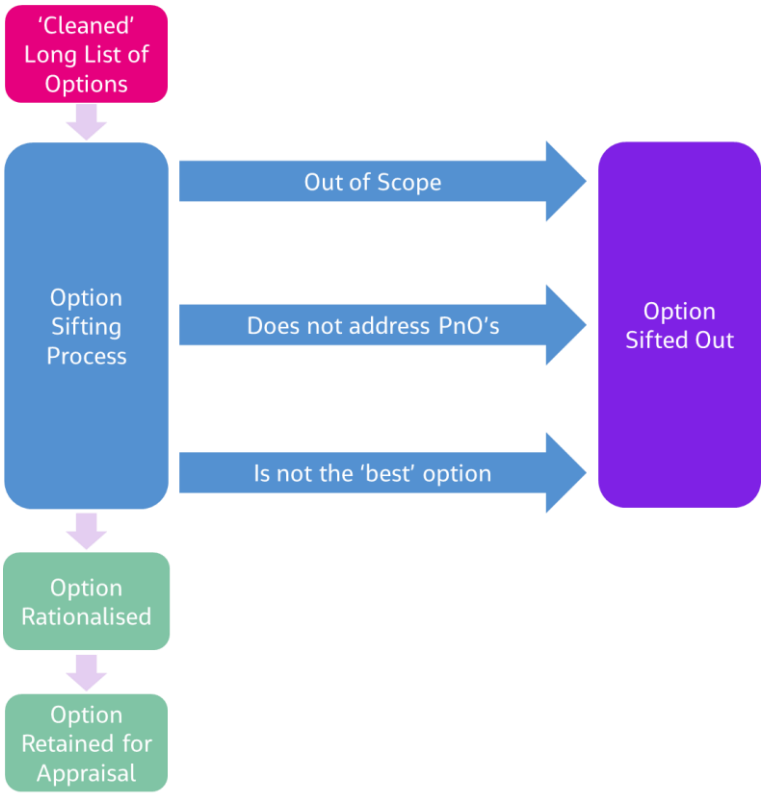

Figure 2-3: Option Sifting Methodology

Options were sifted out at this stage for one of the following reasons:

- Option is out of scope based on the BPF criteria;
- Option does not address the problems / opportunities in the region; or
- The problems/ opportunities are better addressed through another option;

Of the options retained, those with common traits were rationalised/combined to form the final list options taken forward to Preliminary Appraisal.

In summary, a total of 1,861 options were considered. Of those 1,608 were sifted out as being out of scope and 63 were being considered elsewhere. Of the remaining 190 options, 176 were identified as duplicates leaving 14 distinct options taken through to Preliminary Appraisal.

2.8 Retained Options

The 14 options specific to the Lochaber BPF that progressed through to Preliminary Appraisal are detailed in Table 2-2.

Table 2-2: List of Retained Options

ID	Option	Mode
1	New Park and Ride sites\mobility hubs North and South of Fort William on A82	Multimodal
2	New bus priority link between Inverlochy and Fort William town centre	Bus
4	Bus priority on A82 Southbound	Bus
5	Bus priority and active travel link between Caol and Inverlochy	Multimodal
8	Reconfiguration of A82 \ Middle Street \ McFarlane Way junction to provide priority to buses (for all movements)	Bus
9	Provide a new bus station within Fort William town	Bus
12	Make Nevis Bridge a bus only link, with new Fort William Bypass link	Bus
37	Bus priority link between Inverlochy and Lochy Bridge	Bus
48	Introduce bus gate on Glen Nevis Road	Bus
51	Deliver mini mobility hubs at strategic tourist locations	Multimodal
62	Bus priority on the A82 southbound between Carr's Corner and Fort William town centre.	Bus
72	Bus priority lanes and signals at the A830 junction with Lochaber High School	Bus
94	Bus Priority on A830 Southbound	Bus
95	Bus to Rail option between Banavie and Fort William.	Bus

3. Preliminary Appraisal

The 14 options carried forward from the Option Sifting were subject to a high-level preliminary appraisal, assessed against deliverability criteria and the TPOs. Any option deemed undeliverable or scoring poorly against the TPOs were not progressed for further appraisal.

Table 3-1 Preliminary Appraisal Outcome

Option Number	Option Name	Deliverable	TPO			Progress to Detailed Appraisal	Rationale for sifting
			1	2	3		
1	New Park and Ride sites\mobility hubs North and South of Fort William on A82	Yes	Yes	No	Yes	Retained	Retained
2	New bus priority link between Inverlochy and Fort William town centre	Yes	Yes	No	Yes	Retained	Retained
4	Bus priority on A82 Southbound	Yes	Yes	No	Yes	Retained	Retained
5	Bus priority and active travel link between Caol and Inverlochy	Yes	Yes	No	Yes	Retained	Retained
8	Reconfiguration of A82 \ Middle Street \ McFarlane Way junction to provide priority to buses (for all movements)	Yes	Yes	Yes	Yes	Retained	Retained
9	Provide a new bus station within Fort William town	Yes	Yes	Yes	Yes	Retained	Retained
12	Make Nevis Bridge a bus only link, with new Fort William Bypass link	No	N/A	N/A	N/A	Sifted	Option is being explored as part of STPR2 and is therefore not deliverable within this study.
37	Bus priority link between Inverlochy and Lochy Bridge	Yes	Yes	No	Yes	Retained	Retained

Option Number	Option Name	Deliverable	TPO			Progress to Detailed Appraisal	Rationale for sifting
			1	2	3		
48	Introduce bus gate on Glen Nevis Road	Yes	No	No	Yes	Sifted	Option sifted out due to poor performance against transport planning objectives.
51	Deliver mini mobility hubs at strategic tourist locations	Yes	Yes	No	Yes	Retained	Retained
62	Bus priority on the A82 southbound between Carr's Corner and Fort William town centre.	Yes	Yes	No	Yes	Retained	Retained
72	Bus priority lanes and signals at the A830 junction with Lochaber High School	Yes	Yes	No	Yes	Retained	Retained
4a	Bus Priority on A830 Southbound	Yes	Yes	No	Yes	Retained	Retained
95	Bus to Rail option between Banavie and Fort William.	No	N/A	N/A	N/A	Sifted	A number of deliverability constraints were identified when developing this option including safety concerns and a lack of sufficient timetable gaps within the current usage of the railway.

4. Option Rationalisation and Packaging

Following the Preliminary Appraisal, 11 options were taken forward to Detailed Appraisal. At this stage, options which contained similar types of interventions were rationalised, and packages developed in recognition that several of the retained options are complementary, and therefore may give a greater net benefit if delivered as a package rather than individual options.

The following options were rationalised:

- Option 4 - Bus priority on A82 Southbound, Option 62 - Bus priority on the A82 southbound between Carr's Corner and Fort William town centre, Option 72 - Bus priority lanes and signals at the A830 junction with Lochaber High School, and Option 94- Bus Priority on A830 Southbound were rationalised into a renamed Option 4 - Bus Priority on A82 Southbound and the A830 Eastbound.
- Option 5 - Bus priority and active travel link between Caol and Inverlochy and Option 37 - Bus priority link between Inverlochy and Lochy Bridge were rationalised into one option, Option 5, retaining the original name.

The options considered under each package and the package name are shown in Table 4-1 and shown graphically in Figure 4-1 to Figure 4-4.

Table 4-1 Option Packaging Summary

ID	Option	Package 1- A830/A82 Bus priority and mobility hubs North and South of the town	Package 2- Bus Link between Caol and Inverlochy	Package 3- A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
1	New Park and Ride sites\mobility hubs North and South of Fort William on A82	✓			
2	New bus only link between Inverlochy and Fort William town centre		✓		
4	Bus priority on A82 southbound and the A830 eastbound	✓			
5	Bus priority and active travel link between Caol and Inverlochy		✓		
8	Reconfiguration of A82 \ Middle Street \ McFarlane Way junction to provide priority to buses (for all movements)			✓	
9	Provide a new bus station within Fort William town			✓	
51	Deliver mini mobility hubs at strategic tourist locations				✓

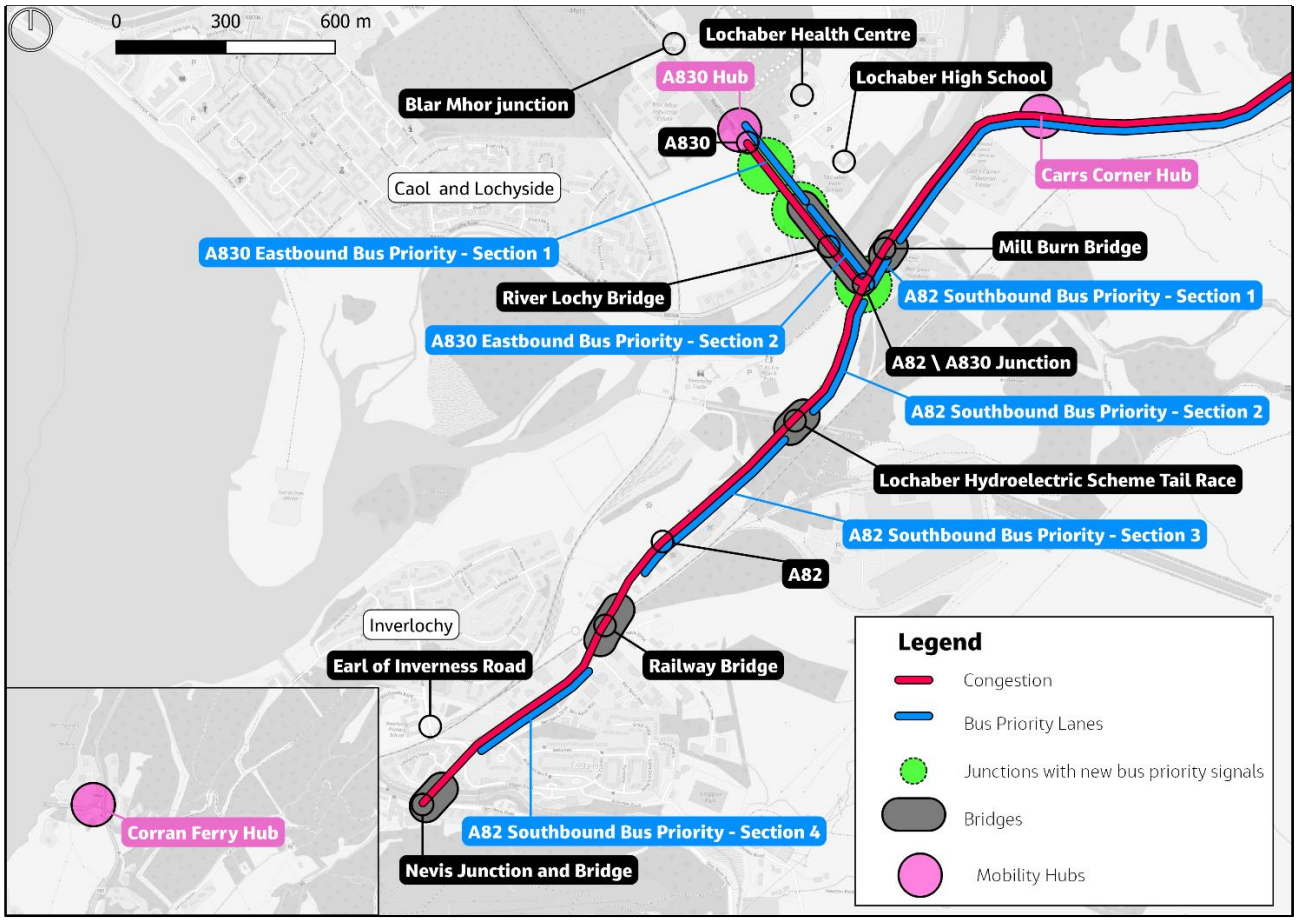

Figure 4-1: Package 1-A830/A82 Bus priority and mobility hubs North and South of the town

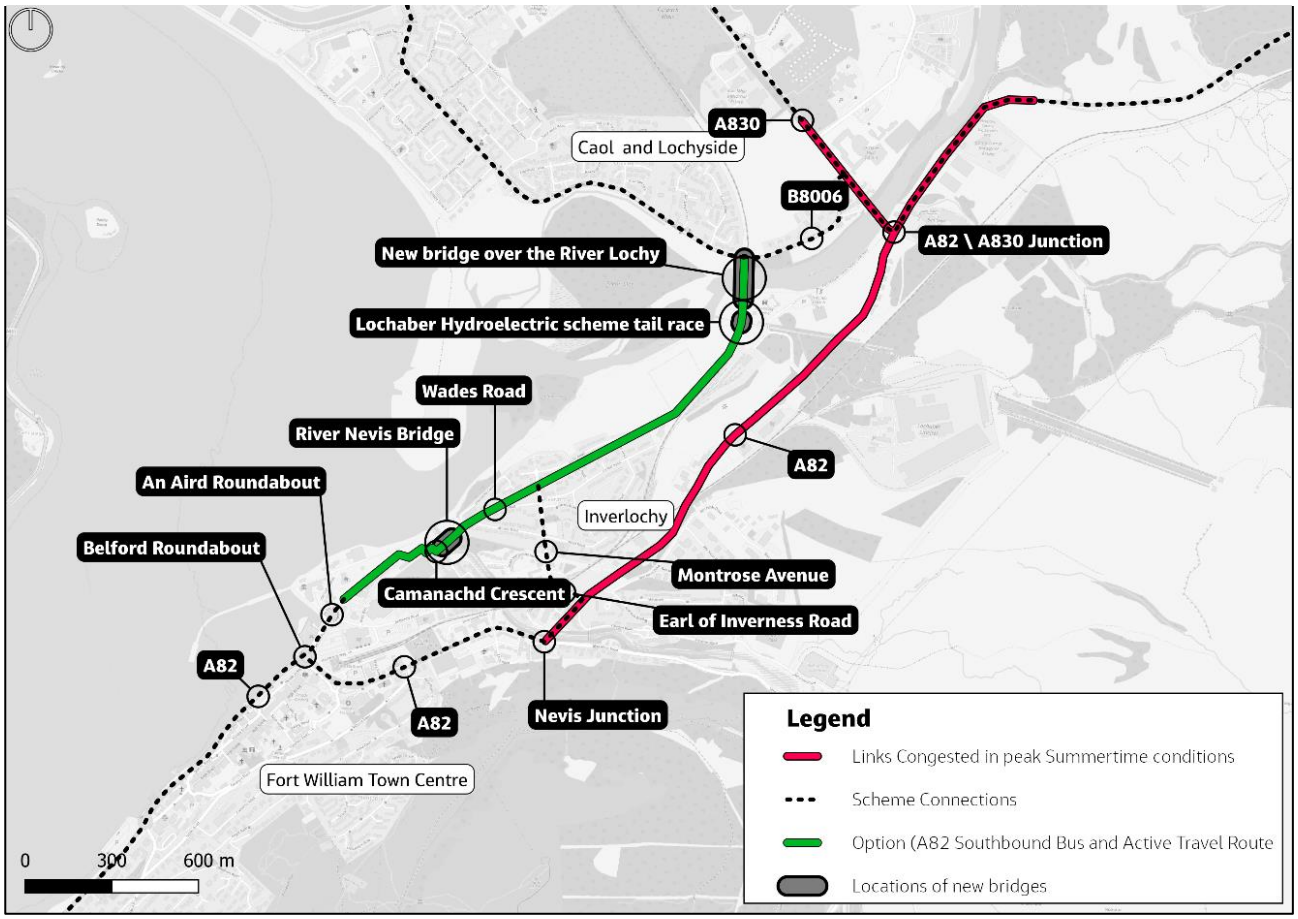

Figure 4-2: Package 2-Bus Link between Caol and Inverlochy

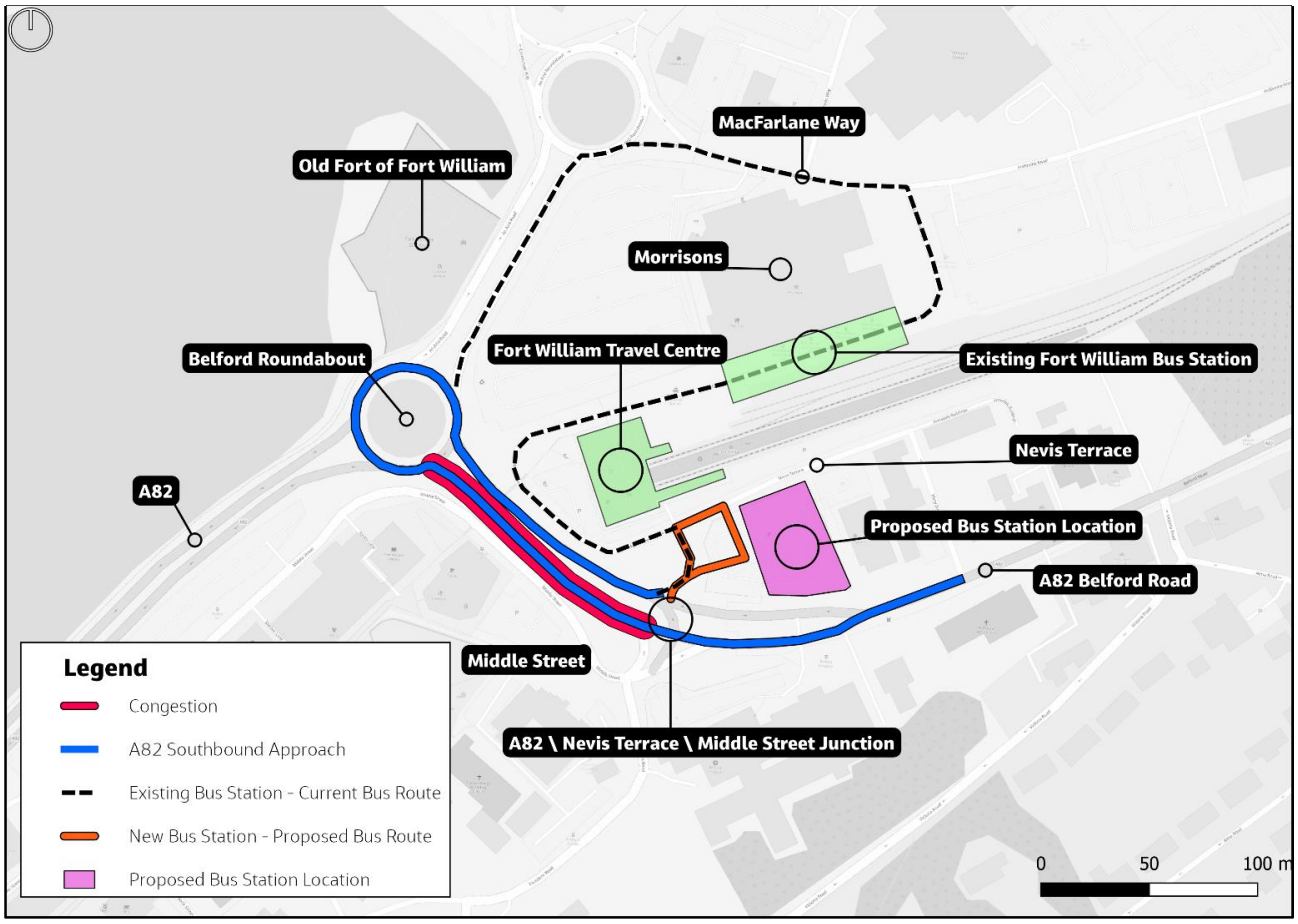

Figure 4-3: Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades

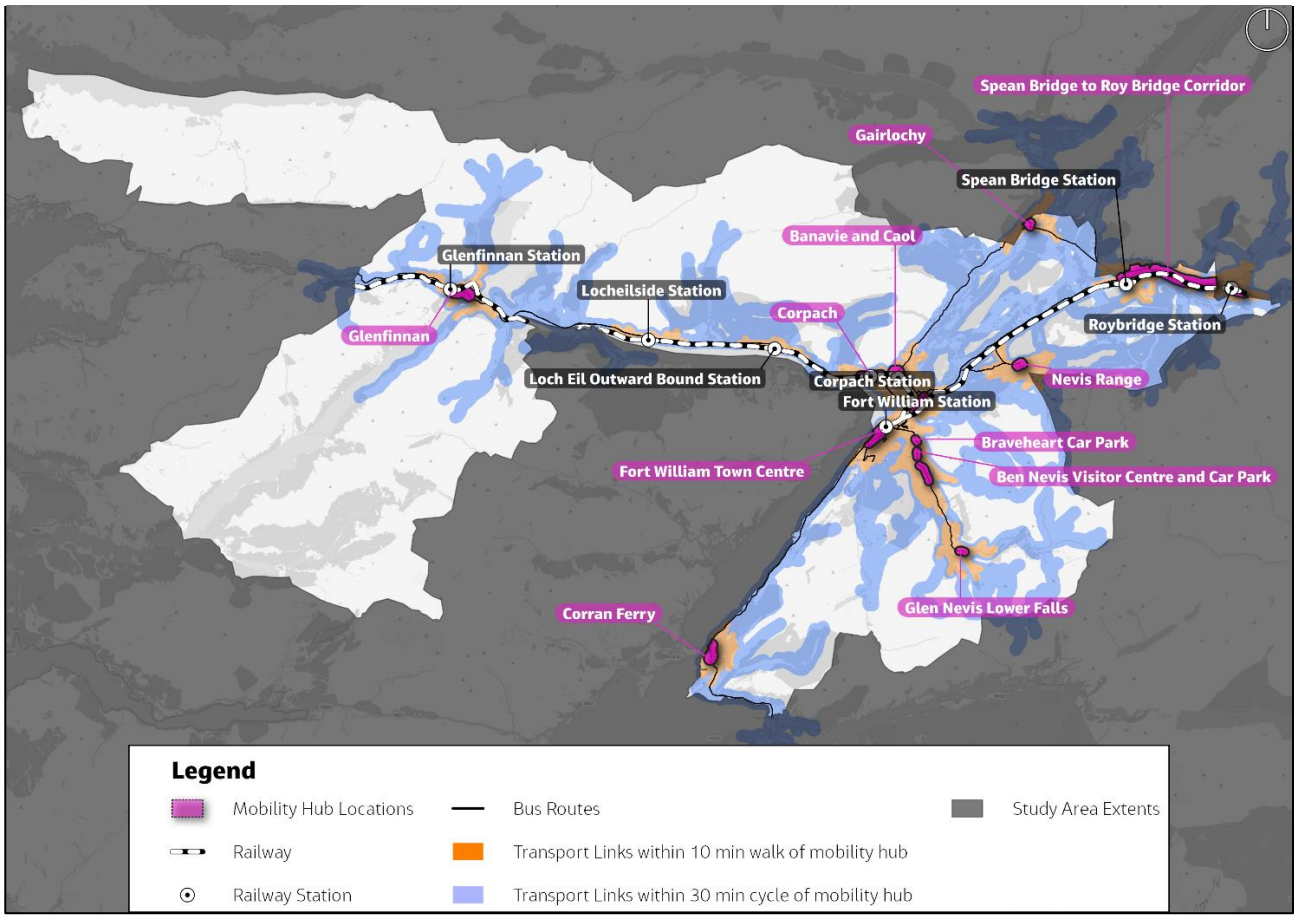

Figure 4-4: Package 4- Mini Mobility Hubs

5. Approach to Detailed Appraisal

5.1 Transport Planning Objectives

5.1.1 Derivation of Objectives

Following consideration of the problems, opportunities and constraints described in Chapter 2 and the wider evidence base included in the Case for Change report, four TPOs were established to appraise packages targeted at improving bus provision within the study area. In accordance with STAG, the TPOs are focused on the outcomes sought in the study area, as opposed to any of the options planned to achieve them.

The TPOs were then revised and refined to reflect comments received from the client group and Transport Scotland. Though the key theme of each TPO has remained consistent, the fourth TPO was removed as it was measuring a similar outcome to TPO 3. The TPOs which have been developed for this appraisal are therefore as follows:

Table 5-1: Lochaber BPF TPOs

TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.
TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.
TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.

STAG calls for TPOs to be made Specific, Measurable, Attainable, Relevant and Timely (SMART). Table 5-2 shows how the three TPOs meet these criteria.

Table 5-2: TPOs made SMART

TPO	Specific	Measurable	Achievable	Realistic	Timebound	Indicators
1. To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	The TPO aims to reduce the average bus journey time on the A82 and A830 between Corpach and Belford Roundabout during the peak summer season to within 2 minutes of the annual average journey time. The annual average journey time is approximately 10 minutes 20 seconds.	Reduced bus journey times on the A830 and A82 from a 2019 peak summer period, as measured by INRIX	It is anticipated that a combination of targeted interventions could reduce journey time variability in line with the target. Reducing bus journey times to within 20% of the 2019 average journey time means bus journey times need to be within approximately two minutes of the average 2019 journey time.	The TPO is supported by technical analysis and engagement findings, and the indicators have enabled the assessment of the level of achievement	To be achieved by 2026.	1. Reducing average bus journey times 2. Operational savings 3. Improved perception of buses in Fort William amongst users and non-users
2. Improve integration between local and long bus services, with 80% of local services stopping	The TPO aims to remove barriers to integration between local and long-distance services.	Measured using the number of local services that serve a bus stop within 100m walk of a bus stop	Revising bus routes or moving bus stop locations could improve integration between local and	Transport Integration has been highlighted as a key P and O theme within this study and this TPO	To be achieved by 2026.	1. Proximity of local and long-distance stops

TPO	Specific	Measurable	Achievable	Realistic	Timebound	Indicators
points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.		serviced by longer distance services.	longer distance services.	aims to address this by removing barriers to integration.		
3. Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	The TPO aims to measure a mode shift from private car to more sustainable means of travel through a reduction in traffic volumes in the study area, particularly on the most congested part of the network, the A82 between the A830 and Fort William.	Measured using observed traffic data on the A82 south of the A830/A82 roundabout compared against a 2019 baseline.	It is likely that a combination of targeted interventions could result in a mode shift in line with the target. Reducing traffic volumes by 10% equates to approximately 80 vehicles an hour or 480 vehicles across the six-hour period.	There are significant opportunities within Fort William that could be capitalised upon to realise a mode shift to more sustainable means of transport.	To be achieved by 2026	1. Reduction in traffic volumes on the A82

5.2 STAG Criteria

Each package was subject to a qualitative appraisal against each of the five new STAG criteria shown in Table 5-3, with qualitative information added where available. These were revised in early 2022 with the publication of a STAG Manager's Guide, but no updated technical guidance has yet been published.

Table 5-3: New STAG Criteria

STAG Criteria	Description
Environment	Highlights the environmental impacts against eight sub-criteria
Climate Change	Comprises three sub-criteria of Greenhouse Gas Emissions; Vulnerability to the Effects of Climate Change and Potential to Adapt to the Effects of Climate Change
Health, Safety and Wellbeing	Comprises five sub-criteria of Accidents, Security, Health Outcomes, Access to Health and Wellbeing Infrastructure and Visual Amenity
Economy	Comprises two sub-criteria of Transport Economic Efficiency and Wider Economic Impacts
Equality and Accessibility	Comprises five sub-criteria of Public Transport Network Coverage, Active Travel Network Coverage, Comparative Access by People Group, Comparative Access by Geographic Location and Affordability

The following sections provide a breakdown of specific the STAG assessment criteria:

5.2.1 Environment

This assessment considers the performance and likely impacts of packages at a qualitative level against the following Environment sub-criteria: Biodiversity and Habitats, Geology and Soils, Land Use (including Agriculture and Forestry), Water, Drainage and Flooding, Air Quality, Historic Environment, Landscape, Noise and Vibration.

5.2.2 Climate Change

The assessment considers the performance of packages against the three Climate Change sub-criteria: Greenhouse Gas Emissions, Vulnerability to the Effects of Climate Change and Potential to Adapt to the Effects of Climate Change.

5.2.3 Health, Safety and Wellbeing

The criterion involves an appraisal impact of the packages on five sub-criteria: Accidents, Security, Health Outcomes, Access to Health and Wellbeing Infrastructure and Visual Amenity with consideration given to the following:

- **Accidents:** The likely impacts the package would have on the number of people killed or injured in transport accidents; and the likely impact the package would have on the risk of travelling by means of accident rates.

- **Personal Security:** The likely impact of the package on crime and the impact that the package is likely to have on peoples' fear of crime.
- **Health Outcomes:** The impact the package is likely to have on the population's physical fitness (e.g. obesity).
- **Access to Health and Wellbeing Infrastructure:** The impact the package is likely to have on access to health centres, places of exercise (gyms, swimming pools, etc.), parks and community centres.
- **Visual Amenity:** The likely impact of the package on views experienced at and around its location.

Across these health, safety and wellbeing criteria, a qualitative assessment is made of each package's performance and scored using the scoring scale detailed in Table 5-4.

5.2.4 Economy

A high-level qualitative assessment of the likely economic impacts of a package has been undertaken, with consideration given to the following:

- **Connectivity:** The impact of the package on end-to-end journey times, however any impact on the cost of travel has not been included at this stage.
- **Reliability**: The impact of the package on day-to-day variability in journey times or average delay and the effect of the package on the number of incidents that impact route reliability has been considered qualitatively.
- **Resilience**: The impact of the package on the resilience of transport infrastructure has been considered qualitatively.
- **Wider Economic Impacts:** The package's likelihood to improve accessibility to key locations, such as business districts, or the ability to stimulate development in areas identified for regeneration and an identification of the particular groups of people likely to be affected by the package has been considered qualitatively, where appropriate.

5.2.5 Equality and Accessibility

The criterion involves an appraisal of the packages impact on Equality and Accessibility, with consideration of five sub-criteria:

- **Public Transport Network Coverage:** Consideration is given to the package's contribution in improving coverage of the public transport system to access employment, health, education, and local services.
- **Active Travel Network Coverage:** Consideration is given to the package's contribution in improving coverage of walking and cycling facilities to access employment, health, education, and local services.
- **Comparative Access by People Group:** Consideration is given to the distribution of a package's impacts by people group, particularly vulnerable societal groups such as low income, disabled, children, and the elderly.

- **Comparative Access by Geographic Location:** Consideration is given to the distribution of a package's impacts by geographic location, including Community Regeneration Areas and areas of deprivation defined by the Scottish Index of Multiple Deprivation (SIMD).
- **Affordability:** Consideration is given to the package's contribution in reducing transport poverty by increasing travel choice to disadvantaged and vulnerable users and improving mobility and inclusion.

5.3 Cost to Government

STAG requires that the net cost of the packages be assessed from a public spending perspective, which is then compared with its total benefits, allowing an overall value-for-money assessment to be made.

With the development of alternative packages, infrastructure costs have been estimated on the basis of benchmarked costs for each of the option types included utilising outturn costs of similar options or elements of options. Cost ranges have been applied to reflect the early stage of option development. The cost estimates will be refined at the OBC stage.

5.3.1 Operating and Maintenance Costs

Although there will be operating and maintenance implications for either the national or local roads authorities depending on the measures implemented, it is expected that these will be co-ordinated with ongoing operations and maintenance programmes. For example, the operation of improved bus detection at signals and the maintenance of bus lanes would be undertaken as part of established annual programmes.

5.4 Scale of Impacts

In appraising packages, STAG methodology suggests the use of a seven-point assessment scale. The assessment scale is used to proportionately rank each package against the relative size and scale of impacts associated with that package. For the Lochaber BPF detailed appraisal this has been expanded to include no or negligible relationship and uncertain scoring to create a nine-point scale as shown in Table 5-4.

In some parts of the appraisal, it has only been possible to provide a high-level assessment of the package and it has not been possible to quantify all the associated impacts. Therefore, the package has been scored as uncertain as further detailed work is required.

This approach to scoring has been used to appraise the packages against the Lochaber TPOs, STAG Criteria and EqIA, with the deliverability elements not scored.

Table 5-4: Appraisal Scoring Summary

Impact	Symbol and Shading	Description
Major benefit	+ + +	The package has a major positive contribution to the achievement of the objective or has a major (positive) benefit on the appraisal criterion.
Moderate benefit	+ +	The package has a moderate positive contribution to the achievement of the objective or has a moderate (positive) benefit on the appraisal criterion.
Minor benefit	+	The package contributes to the achievement of the objective but not significantly or has a minor (positive) benefit on the appraisal criterion.
No benefit or impact	0	The package is related to but does not have any direct effect on the achievement of the objective or has no effect (neither positive or negative) on the appraisal criterion, or the assessment of the category is neither positive nor negative.
Minor negative impact	-	The package detracts from the achievement of the objective but not significantly or has a minor (negative) impact on the appraisal criterion.
Moderate negative impact	- -	The package has a moderate negative impact on the achievement of the objective or has a moderate (negative) impact on the appraisal criterion.
Major negative impact	- - -	The package has a major negative impact on the achievement of the objective or has a major (negative) impact on the appraisal criterion.
No or negligible relationship	N/A	The package is not related or does not have any direct effect on the achievement of the objective or has no effect (neither positive or negative) on the appraisal criterion, or the assessment of the category is neither positive nor negative.
Uncertain	?	The package is related but it is not possible to determine the effect of the package on the achievement of the objective (neither positive or negative) the appraisal criterion, or the assessment of the category is neither positive nor negative.

5.5 Delivery Criteria

Each package is assessed qualitatively against the Deliverability criteria. The individual considerations within the Deliverability criteria are Feasibility, Affordability and Public Acceptability. These criteria are not scored but a qualitative appraisal is produced to ascertain the key factors and likely outcomes.

5.5.1 Feasibility

The Feasibility criterion involves a preliminary assessment of the feasibility of construction or implementation and operation (if relevant) of a package and the status of its technology (e.g. proven, prototype, in development, etc.). As well as this, it considers any cost, timescale or deliverability risks associated with the construction or operation of the package, including consideration of the need for any departure from design standards that may be required.

5.5.2 Affordability

This criterion considers the scale of the financing burden on the promoting authority and other possible funding organisations. The risks associated with these are also considered, together with the level of risk associated with a package's ongoing operating or maintenance costs and its likely operating revenues where applicable.

5.5.3 Public Acceptability

A qualitative assessment of whether there are likely to be any issues around public acceptability of each package is undertaken. To support this, reference is given to supporting evidence from the findings of the online survey and stakeholder consultation undertaken during the development of the Initial Appraisal: Case for Change.

5.6 Equality Impact Assessment

A high-level Equality Impact Assessment (EqIA) has been undertaken to assess the potential for the packages considered in this appraisal to impact on different population groups. An EqIA is an effective mechanism of enabling The Highland Council to fulfil their duties related to The Equalities Act 2010 (Specific Duties) (Scotland) Regulations 2012, the Public Sector Equality Duty (PSED), the Fairer Scotland Duty (FSD) and the Children and Young People (Scotland) Act 2014.

Although the PSED, FSD and duty on Local Authorities relating to child rights and wellbeing focus on different but overlapping population groups, they are united in their aim to understand and address inequalities. As these three assessments are related, the EqIA consists of a combined framework, to enable effective analysis of the interrelationships and avoid duplication but encompassing three broad groups:

People with protected characteristics as defined in the Equality Act 2010 (see Table 5-5)

- Those vulnerable to falling into poverty (for example unemployed people, single parents, homeless people, carers and vulnerable families)
- Geographical communities (for example urban, suburban and rural communities).

Table 5-5: Equality Act 2010 - Protected Characteristic Groups

Protected Characteristic Group	Definition
Age	Referring to people of a particular age or age range (for example 18- to 30-year-olds)
Disability	A disability is a physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities
Sex	A man or woman
Race	A group of people defined by their race, colour, and nationality (including citizenship), ethnic or national origins.
Pregnancy or maternity	Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after birth and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth and includes treating a woman unfavourably because she is breastfeeding.
Gender reassignment	A person who is intending to, or is, undergoing a transition, or has transitioned from one gender to another.
Religion or belief	Religion has the meaning usually given to it, but belief includes philosophies such as lack of belief (atheism). Generally, a belief should affect life choices for it to be included in the definition.
Sexual orientation	Whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.

An EqIA screening and full assessment will be undertaken following selection of the preferred package or packages for the study area. As part of the STAG assessment presented in this report, the Equality and Accessibility element has considered the effects on certain population groups and geographical areas for each package. This has been supplemented by a specific section on EqIA to provide an initial appraisal of each package.

6. Quantitative Modelling and Operational Assessment

6.1 Overview

Where applicable, modelling of the packages has been undertaken using the 2017 microsimulation traffic model, developed as part of another study, in Paramics - an industry standard software package that is used to assess the performance of road networks under variable conditions. Future year models were also developed to reflect the proposed development in the area, however the future year scenarios were developed prior to both COVID-19 and a change in policy from the Scottish Government, which are likely to have an impact on travel patterns and are therefore unlikely to represent a plausible future year scenario. Traffic levels within the area are approaching pre COVID-19 levels and as such, the 2017 base model has been used as the most appropriate tool for this assessment.

The 2017 base model used in this assessment was developed using data collected in August 2017, as August represents the busiest month in terms of traffic volumes within Fort William. The model represents the PM peak period between 1500 and 1900, again as the busiest time period. The extent of the modelled network is shown in Figure 6-1.

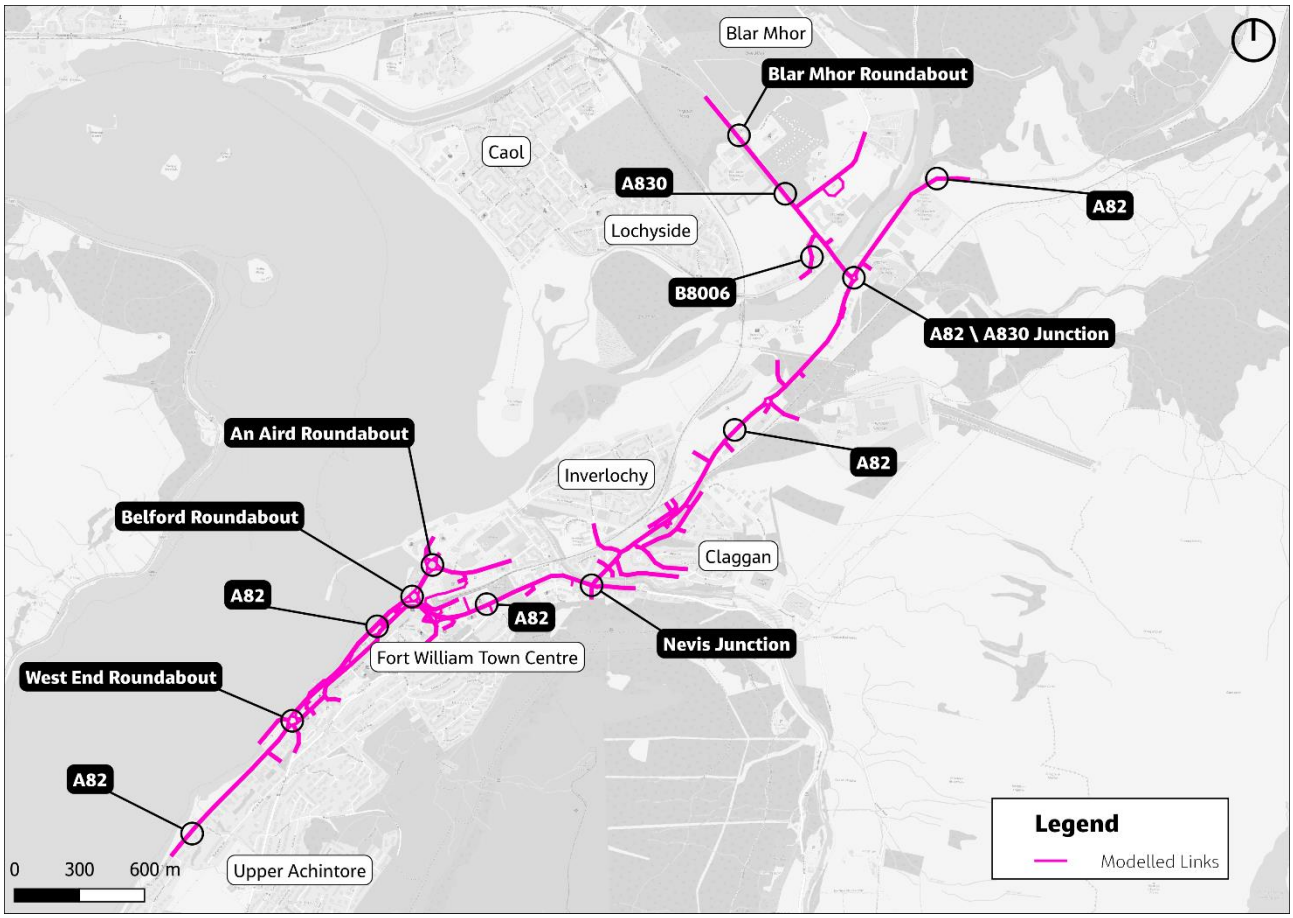

Figure 6-1: 2017 S-Paramics Base Model Extents

For Packages 1 and 2, traffic modelling has been undertaken to consider the journey times on key routes, with and without the packages included, for buses and general traffic. This allows a relative assessment, enabling a comparison between the base and each package to be made.

For each of the two modelled packages, the models were updated to reflect the new infrastructure and the demand changed to reflect the mode shift anticipated as a result of the new infrastructure. As the model does not contain a variable demand element within it, the mode shift has been represented in the model by manually reducing the volume of traffic included in the model. To ensure the level of mode shift was not unrealistic, a number of sensitivity tests were undertaken. As the scale of mode shift increases, general traffic journey times would reduce as private car demand reduces. Therefore, sensitivity tests were undertaken to determine a realistic level of mode shift that maintains a significant differential between bus journey times and general traffic, maintaining the attractiveness of the bus services that would utilise the bus priority infrastructure.

Given the likely scale of impact associated with Packages 3 and the types of interventions included in Package 4, these were not modelled. Journey time benefits for Package 3 were calculated using google maps, and mode shift calculations for Package 4 was based on a number of assumptions. The method of identification of the likely impact of each of the four packages is as follows.

Package 1 – Bus priority on A82 Southbound and the A830 Eastbound

This package would involve the introduction of new bus priority lanes on the A830 eastbound and on the A82 southbound, as shown in Figure 4-1 (Section 4). Where these would be included, only buses, cyclists and emergency vehicles are eligible to use them, allowing buses to travel unhindered, parallel to the general traffic lanes.

On the A830, bus priority lanes would be included on the eastbound carriageway between the Lochaber health centre and the A830 \ A82 junction. As part of this package, the junctions on the A830 that provide access to the Lochaber Health Centre, Caol (via the B8006) and the A82 \ A830 junction would be signalised in order to provide buses priority at these junctions.

On the A82, bus priority lanes would be provided where there is land available between the Fort William Golf Club and the Earl of Inverness Road. The bus lanes would not be contiguous as the bridges traversing the Mill Burn, the Lochaber Hydroelectric scheme tail race, the West Highland Line and the River Nevis represent constraints in terms of delivery. There are also some constraints in terms of land availability that would further limit where bus priority lanes can be delivered.

Although this package includes the delivery of mobility hubs, these have not been explicitly modelled as part of the modelling exercise. Instead, they have been represented in the model through the application of mode shift from travel by private car to bus.

Given the location of the infrastructure proposed as part of this package, the bus priority lanes would primarily target those people travelling either from the A830 or the A82 towards Fort William in the southbound direction. The level of mode shift applied to the traffic volumes within the model has been determined using traffic data collected as part of the model development exercise. The data shows that in August of 2017 there were approximately 2,700 vehicles travelling eastbound on the A830 that turn right onto the A82 southbound toward Fort William (during the period 12:00 PM to 6:00 PM) and approximately 1,900 vehicles travelling on the A82 southbound from Torlundy towards Fort William, a total of 4,600 vehicles. Assuming that a mode shift of 10% is achieved, this will result in the removal of 460 vehicles from the road network during the period 12:00 PM to 6:00 PM.

This reduction is seen as moderate and realistic given that it equates to approximately 76 vehicles per hour and maintains a significant benefit to bus journey time compared to general traffic as discussed in the follow section. This reduction would be facilitated by the provision of bus priority infrastructure, the inclusion of mobility hubs and new opportunities for people to cycle on the A830 and the A82 (making use of the relatively low trafficked bus priority lanes), which combined make sustainable modes of travel more attractive, particularly during peak congestion.

Package 2 - Bus link between Caol and Inverlochy

This package would deliver a new bus only link between the B8006 and An Aird to allow buses to travel southbound between Caol and Fort William Town Centre, thereby removing the need for buses to travel via the often-congested A82 southbound. General traffic would not be permitted to use the new link and would continue to be required to travel via the A82 in order to reach Fort William.

The route would follow a similar route to the existing Black Parks Road, connecting into the local road network in Inverlochy, utilising the residential streets in order to travel towards the River Nevis. The route would then continue over the River Nevis and connect to An Aird Roundabout via a new link for onward travel via the A82. The general layout can be seen in Figure 4-2 (Section 4).

The modelled change in traffic volumes and general traffic journey times have been calculated using the same method applied under Package 1. Bus journey times have been calculated on a route between Blar Mhor and Belford Road Roundabout, travelling via the new bus priority link.

Package 3 - Belford Road Bus Priority

This package would reconfigure the junction between the A82, Nevis Terrace and Middle Street, removing the central reserve to allow buses to turn right from Middle Street to the A82 and from the A82 to Nevis Terrace, providing access to the bus station for southbound A82 traffic. Buses from Middle Street would also be able to travel straight across the junction to Nevis Terrace and onto the bus station. The junction would be signalised to provide bus priority for these movements, removing any delay associated with the right turn movement. The general layout can be seen in Figure 4-3 (Section 4).

Given the scale of interventions included as part of this package, combined with the low level of journey time improvement anticipated to be delivered, no modelling was undertaken using the traffic model. Bus journey time savings were instead calculated by determining the length of time that buses need to travel southbound on the A82 from its junction with Nevis Terrace, U-turning at Belford roundabout before continuing northbound toward Nevis Terrace to access the bus station (assuming buses travel at freeflow speeds). As this roundabout is known to be congested during peak summer months, an upper threshold of 2 minutes was taken for this movement in peak summer conditions. Free flow speed was used to calculate the lower limit of 30 seconds.

Associated with this package is a level of disbenefit to general traffic. The introduction of the bus priority signals would delay general traffic whilst the bus priority signal is active. This level of delay has been determined by calculating the length of time that the general traffic signal at the junction would be at red. This equates to approximately 21 seconds each time the bus priority signal is called, with an additional 5 seconds added on for

acceleration and deceleration. Given the number of buses anticipated to use this junction, the disbenefit to the average vehicle is anticipated to be negligible.

It has been assumed that this package on its own would not deliver a mode shift.

Package 4 - Deliver mini mobility hubs at strategic tourist locations

As part of this package, 22 locations associated with key tourist attractions within the study area have been identified as potential locations for the inclusion of a mini mobility hub. At each of these locations a mini mobility hub comprised of new bus stops, cycle parking and cycle facilities, new connections with the existing active travel network and general improvements to the areas aimed at improving the sense of place. The locations at which mobility hubs are proposed are shown in Figure 4-4 (Section 4).

It has been anticipated that the introduction of the mobility hubs would deliver marginal benefits in terms of journey time savings. Visitors to the area would be expected to make use of the hubs to travel between locations, however this package is not anticipated to have a significant beneficial impact of the level of congestion on the A82 southbound between Blar Mhor and Belford roundabout.

Package 4 has therefore not been modelled and the level of journey time benefit realised is assumed to be zero for the purposes of the assessment.

6.1.1 Journey Time Assessment

This section summarises the journey time benefits and disbenefits associated with each of the packages using the modelling methodology described above. Journey time results are presented in minutes and compared against the baseline scenario (for the peak hour 1700 to 1800), and the difference is also shown with a negative value indicating a journey time reduction. This is shown in Table 6-1.

Table 6-1: Modelled Journey Time Results

Scenario		General Journey Times between Blar Mhor and Belford Roundabout	Bus Journey Times between Blar Mhor and Belford Roundabout
2017 S-Paramics Base	Modelled Journey Time	18.5	18.5
Package 1	Modelled Journey Time	16.3	10.8
	Change from 2017 Base	-2.2	-7.7
Package 2	Modelled Journey Time	16.3	4.9
	Change from 2017 Base	-2.2	-13.6

Modelling results show that when compared against the baseline, general traffic journey times on the route between Blar Mhor and Belford Roundabout would be improved by approximately 2.2 minutes for both Package 1 and 2. The improvement in general traffic journey times is a result of the mode shift from private car to sustainable modes, resulting in lower traffic volumes and quicker journey times on the A82 southbound.

Bus journey times are improved by 7.6 minutes and 13.5 minutes for Packages 1 and 2 respectively. The bus journey time reduction anticipated under Package 1 is a result of the bus priority lanes and signals introduced on the A830 and the A82 allowing buses to circumvent queuing and delay caused by general traffic and reach the end of the route faster than when compared to the baseline. The bus journey time reductions under Package 2 are anticipated to occur as a result of the inclusion of a new, dedicated bus only link located in the vicinity of Black Parks Road, providing buses with an unopposed route between the B8006 and An Aird.

6.2 Economic Assessment

A full economic assessment to calculate the Transport Economic Efficiency (TEE) has not been undertaken at this stage of appraisal as the exact form of the packages are not yet known, and future year demand scenarios that represent a plausible future are not available. However, to provide a comparative assessment, a high-level economic assessment has been undertaken.

The economic assessment has been undertaken by monetising the journey time savings identified in Table 6-1 to provide a total monetised level of benefit, by mode, over a 60-year appraisal period. There have been some assumptions made with regards to the parameters used in the process that relate to the value of time, vehicle occupancy and annualisation, that are detailed below.

The value of time and value occupancy data used in the process has been determined using the information provided in the transport analysis guidance (TAG) data book[6].

The value of time has been determined using the information in section A1.3.6 of the TAG data book that details a value for car based commuting trips by year of assessment. For the purposes of this study, an assessment year of 2026 has been assumed on the basis that three years from the time of writing would provide a sufficient amount of time to deliver any of the packages identified.

The value of time is per vehicle, and applicable to determining car-based benefits. However, this value is not applicable for individuals' using buses. To account for this, TAG section A1.3.3 details an occupancy value for vehicles (1.16 persons). Dividing the cost per vehicle per hour by the level of occupancy provides a value of time per person, per hour which was then used in calculating bus-based benefits.

It is these values of time that have been applied to the journey time savings identified in Table 6-1 when calculating the monetised benefits for travel by car and by bus to calculate the PM peak period benefits, which were then factored to a daily total monetised benefit using traffic flow information.

Normally, daily journey time savings would annualised to a full year as part of an economic assessment. However, the benefits associated with these packages are only likely to be realised during the peak season (May to September), and primarily in the PM Peak. During the off-peak season, there is very little congestion within Fort William and so the potential for journey time savings is limited. It has therefore been assumed that, for each year of the

[6] UK Government, Transport Analysis Guidance – Data Book, Jan 2023, https://www.gov.uk/government/publications/tag-data-book

assessment, there are no benefits accrued in the off-season period (January to April and October to December). As there is a minor journey time benefit to Package 3 in the off-season, this has been included within the benefits calculation for this package.

The annualised benefits associated with the delivery of the packages during the peak season were then discounted over a 60-year period.

6.2.1 Economic Assessment Results

This section summarises the results of the economic assessment, detailing the monetised benefits and disbenefits associated with each of the packages using the methodology described above. Monetised benefits or disbenefits are shown in millions of pounds, by mode for the full 60-year appraisal period, discounted to 2010 values. This is shown in Table 6-2.

Table 6-2: Calculated Economic Benefits

Scenario	Monetised Benefits (Millions £)		
	General Traffic	Buses	Total
Package 1	£5.5	£6.1	£11.6
Package 2	£5.5	£10.8	£16.3
Package 3	-£0.4	£1.6	£1.2
Package 4	£0.0	£0.0	£0.0

As discussed in Section 5.3, infrastructure costs have been estimated on the basis of benchmarked costs for each of the option types included within each package, utilising outturn costs of similar options or elements of options. Cost ranges have been applied to reflect the early stage of option development. This has derived the cost estimates for each package, as shown in Table 6-3.

Table 6-3: Cost Estimates

Cost	Package 1	Package 2	Package 3	Package 4
Low	£10m	£23m	£8m	£4m
High	£12m	£38m	£10m	£5m

Package 1 shows a total economic benefit of approximately £11.6m over the 60-year assessment period. This is comprised of £5.5m benefit for road-based trips in private vehicles (general traffic) and £6.1m benefit for bus-based trips.

Package 2 shows a total of approximately £16.3m over the 60-year assessment period. This is comprised of £5.5m benefit for road-based trips in private vehicles (general traffic) and £10.8m benefit for bus-based trips. The relatively high level of bus benefits in Package 2 (compared to Package 1) can be attributed to the delivery a dedicated bus priority link providing a fast and direct route for buses traveling southbound, however it should be noted that this package is anticipated to be considerably more expensive than package 1.

For Package 3, there are some marginal benefits realised for buses, associated with the localised improvements anticipated as a result of the delivery of the package. For private vehicles (general traffic), there is a marginal disbenefit of approximately £0.4m. Overall, the package realises benefits of approximately £1.2m in total.

Package 4 is not expected to deliver any journey time savings and therefore will not deliver any traditional monetised benefits. However this package could be delivered in conjunction with Package 1 or 2, making it more attractive to tourists as a package for sustainable travel and it is anticipated to result in other benefits associated with health and wellbeing that have not been monetised at this stage.

6.3 Reporting

Appraisal Summary Tables (ASTs) have been produced for each package considered as part of the Appraisal and are provided in Appendix A.

ASTs are used to assist decision makers and reviewers by providing a summary of the outcome of the appraisal in a consistent format. The ASTs include a brief description of the package, background information about the study area and summarises the appraisal of how each package performs against the relevant TPO's, STAG Criteria and Equality Impact Assessment.

7. Detailed Appraisal Summary

This chapter summarises the outcomes of the Detailed Appraisal for the Lochaber BPF, including the likely positive and negative impacts of each package. A full Preliminary Appraisal (in line with STAG) was determined to not be necessary, as it would not sift the rationalised options any further, with a high-level preliminary appraisal undertaken prior to Detailed Appraisal. More information on the appraisal for each package can be found within the AST's.

7.1 Outcomes of Detailed Appraisal

Table 7-1 summarises some of the key details and scoring of each option against the metrics considered under the previous section, including the TPO's and STAG criteria.

Table 7-1: Key Summary Points of Detailed Appraisal

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
		Lochaber BPF TPO's		
TPO1- To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	+++	+++	+	+
	• This package would result in an approximate reduction in bus journey times on the A82 southbound (between Blar Mhor or Torlundy and Belford Roundabout) during peak periods of 7 minutes and 30 sections. Bus journey times of approximately 11 minutes are anticipated, which meets the target of this objective. • Whilst this package is anticipated to result in significant benefits to buses, services	• This package would result in an approximate 13-minute bus journey time saving southbound between Corpach and Belford Roundabout during peak periods. Bus journey times of approximately 5 minutes are anticipated which exceeds the target of this objective. • Whilst this package is anticipated to result in significant benefits to buses, services travelling from Torlundy would continue to be	• This package would reduce conflicts between buses and general traffic, reducing delay and delivering journey time savings for buses of up to 2 minutes during peak periods. Whilst this would contribute to this TPO, it would not fully meet the target journey time.	• This package is anticipated to reduce delays by encouraging a mode shift to alternative means of travel, particularly between May to September when visitor numbers are at their highest. • It is recognised the proposed package would not fully rectify congestion on the A82 and bus journey times would continue to be impacted by congestion.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	would continue to be impacted by delays where bus priority lanes cannot be provided.	impacted by delays on approach to the A82/A830 junction.		
TP02- Improve integration between local and long-distance bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.	0 • This package is not anticipated to have a direct impact on the integration of public transport in the study area.	0 • This package is not anticipated to have a direct impact on the integration of public transport in the study area.	+++ • By improving journey times for buses in and out of the bus station and relocating the bus station to a more convenient location, a greater number of local services are anticipated to stop at the bus station, increasing the number of local and long-distance services that stop within 100m of each other.	0 • Whilst this package has the potential to impact on this objective as it would provide additional stopping locations, the mobility hubs are not anticipated to attract long distance services.
TP03- Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480	+++ • Bus priority has the potential to increase the attractiveness of bus, particularly	+++ • Bus priority has the potential to increase the attractiveness of bus, particularly	+ • This package has the potential to delivery journey time savings, which could	+ • Mobility hubs have the potential to deliver a reduction in traffic volumes by increasing

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	during peak times, through reducing journey times by approximately 7 and a half minutes. This should encourage mode shift and therefore a reduction in traffic volumes on the A82. • Additionally, bus priority lanes also provide improved provision for cyclists, which could result in further mode shift.	during peak times, through reducing journey times by approximately 13 minutes. This should encourage mode shift and therefore a reduction in traffic volumes on the A82.	encourage mode shift to bus leading to a reduction in traffic volumes on the A82, however these are likely to be minor. • As this package would increase integration between local and long-distance services, it has the potential increase the attractiveness of public transport and encourage mode shift.	the attractiveness of bus and therefore encourage mode shift from private car to more sustainable modes. • Introduction of cycle hire stations would encourage onward journeys by bikes and integrating rail stations would enable onward travel by train.
STAG Criteria				
Environment	+	?	+	?
	• Bus priority measures are likely to have a positive impact on quality of life, with potential benefit to air quality, noise and	• Bus priority measures are likely to have a positive impact on quality of life, with potential benefit to air quality, noise and	• Introduction of bus priority may encourage mode shift, which may contribute to a decrease in	• Mini mobility hubs are likely to have a positive impact on quality of life, sustainable accessibility and safety by providing a sustainable alternative

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	vibration as the package is anticipated to encourage mode shift. • There are possible positive impacts on biodiversity anticipated. There are no SSSI sites within the vicinity of the proposed package however there are a number of listed structures within the vicinity which require consideration. • Elements within the proposed package are located close to two rivers and could be vulnerable to flooding. • There is the possibility for negative environmental	vibration as the package is anticipated to encourage mode shift. • There are possible positive impacts on biodiversity anticipated. There are no SSSI sites within the vicinity of the proposed package however there are a number of listed structures within the vicinity which require consideration. • Elements within the proposed package are located close to two rivers and could be vulnerable to flooding. • There is the possibility for negative environmental impacts during construction.	greenhouse gas and local emissions. • This package has the potential to improve access to the Fort William Fort Scheduled Monument Immediately North of Belford Roundabout. • There is the possibility for negative environmental impacts during construction.	for visitors accessing key tourist sites. • The package promotes a more sustainable use and management of the existing transport network. • Several of the proposed locations fall within SSSI, SAC, SPA and NSA. There is likely to be adverse impacts on biodiversity and landscape during construction. • This package is scored uncertain due to the potential cumulative impacts in greenfield sites.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	impacts during construction.	• This packed is scored uncertain due to the potential cumulative impacts in greenfield sites.		
Climate Change	+	+	+	+
	• The proposed package is likely to result in a reduction of greenhouse gas emissions and improved air quality.	• The proposed package is likely to result in a reduction of greenhouse gas emissions and improved air quality.	• The proposed package is likely to result in a reduction of greenhouse gas emissions and improved air quality.	• The proposed package is likely to result in a reduction of greenhouse gas emissions and improved air quality.
Health, Safety and Wellbeing	+	+	+	+
	• Bus priority measures are anticipated to result in a mode shift to bus and active modes, improving health and wellbeing. • A reduction in car use could result in a reduction in KSI.	• Bus priority measures are anticipated to result in a mode shift to bus and active modes, improving health and wellbeing. • A reduction in car use could result in a reduction in KSI. • The proposed package has the potential to affect	• This package includes the provision of a new bus station which would improve placemaking within its vicinity, encouraging walking and cycling. • The package could also result in a mode shift to bus and active modes, improving health and wellbeing.	• The inclusion of cycle hire and bike storage could lead in increased cycling, resulting in health benefits, and any mode shift to bus and active modes could improve health and wellbeing. • A reduction in car use could result in a reduction in KSI.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
		visual amenity given the proposed route passes through green space close to the Great Glen Way.	• A reduction in car use could result in a reduction in KSI.	
Economy	+++	++	--	+
	• The package is anticipated to result in an approximate 7-and-a-half-minute reduction in bus journey time which is estimated to result in a benefit of approximately £6.1m to bus passengers over the 60-year appraisal period. • Assuming a 10% mode shift would result in a journey time benefit of over 2	• The package is anticipated to result in an approximate 13-minute reduction in bus journey time which is estimated to result in a benefit of approximately £10.8m to bus passengers over the 60-year appraisal period. • Assuming a 10% mode shift would result in a journey time benefit of over 2	• There is an anticipated bus journey time saving of approximately 30 seconds in the off peak and up to 2 minutes in the peak, which would have an estimated benefit to bus passengers over the 60-year period of £1-2m. • A high-level assessment of the proposed package anticipates disbenefit	• A full economic assessment has not been undertaken at this stage. However, this package is anticipated to deliver minor benefits in terms of mode shift and journey time savings and is therefore only anticipated to provide minor journey time savings.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	minutes for general traffic, resulting in approximately £5.5m benefit over a 60-year period. • No benefits have been calculated for active travel.	minutes for general traffic, resulting in approximately £5.5m benefit over a 60-year period. • No benefits have been calculated for active travel. • This package has a significantly higher costs than Package 1.	to car users in the order of £3m over a 60-year period.	
Equality and Accessibility	0	0	+	0
	• Bus priority measures should reduce bus journey times, which could encourage operator reinvestment in improved network coverage, however as routes in Fort William operate under subsidy, this would require significant mode shift to be realised.	• Bus priority measures should reduce bus journey times, which could encourage operator reinvestment in improved network coverage, however as routes in Fort William operate under subsidy, this would require significant mode shift to be realised.	• This package could reduce bus journey times, which could encourage operator reinvestment in improved network coverage, however as routes in Fort William operate under subsidy, this would require significant mode shift to be realised. • Relocation of the bus station would make	• Inclusion on mobility hubs could result in additional services, improving comparative access to locations with employment, education, healthcare and leisure activities. • New bike storage and cycle hire facilities would also enable new travel options for more people across a wider area, providing access

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	• The inclusion of mobility hubs would provide new facilities that create opportunities for cycling, increasing accessibility.		multi-leg journeys more attractive. • This package reconfigures the existing car park outside the train station, enhance connectivity and access to the town centre.	to key locations by cheap, accessible means, particularly where there are high quality cycle routes, improving equality. • This package is anticipated to have marginal positive impact on the affordability of travel as bike hire is a relatively low-cost package when compared to travel by either bus or car.
Deliverability				
Feasibility	• Delivery of bus priority measures are largely feasible, however there would be a requirement for additional land.	• Delivery of a new link adjacent to Black Parks Road is largely feasible at this stage, however there would be a requirement for land.	• Delivery of this package appears largely feasible at this stage, with the majority of improvements likely to take place within	• The delivery of mobility hubs is largely feasible at this stage. The package will require additional land take throughout the study area.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	• This package may require widening of some structures.	• Feasibility of a connection between the north end of Black Parks Road and Caol would require a new structure and should be carefully considered.	the existing road boundary. • A new bus station located within the existing Nevis Terrace car park also appears feasible.	
Affordability	• This package is anticipated to be a medium-cost measure with a large proportion of the costs likely to be related to the widening of the trunk road to accommodate bus lanes and the associated land required to do so. • There is also a requirement for funding for the operation, maintenance and	• This package is anticipated to be a high-cost measure, with the majority of cost associated to the delivery of new structures. • There would also be additional costs where land take is required for delivering the package. • There is also a requirement for funding for the operation, maintenance and	• This package is anticipated to be a medium-cost measure with the majority of junction improvement works taking place within the existing road boundary. • The new bus station will be located on land forming part of an existing Highland Council owned car park.	• This package is anticipated to be a low to medium-cost measure, with the majority of cost associated with the delivery of the infrastructure required at each of the mini mobility hubs. • There would also be additional costs associated with land take.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	enforcement of the new bus lanes.	enforcement of the new bus lanes.		
Public Acceptability	• There is likely to be public support for the delivery of a new reliable bus route. This package could deliver a faster and more reliable bus service, likely to be welcomed by bus users.	• There is likely to be public support for the delivery of a new reliable bus route. This package could deliver a faster and more reliable bus service, likely to be welcomed by bus users. • There are risks as this package would require construction close to the Great Glen Way and may require rerouting of the path. • Rerouting buses along residential streets in Inverlochy is likely to be met with some opposition.	• There are risks, particularly amongst non-bus users, as the introduction of signals at this location is likely to result in additional delay to non-bus users. • The loss of parking in the Nevis Terrace car park is likely to be seen as undesirable.	• There is likely to be significant support for the delivery of new mobility hubs aimed at catering for tourist trips. • Any reduction in traffic during the peak season is likely to be seen as positive by the public.

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
EqIA	+	+	+	+
	• This package is anticipated to have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. • Improvements in air quality would be of particular benefit to those who are more vulnerable to air pollution • Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived	• This package is anticipated to have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. • Improvements in air quality would be of particular benefit to those who are more vulnerable to air pollution • Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived security. This is likely	• This package is anticipated to have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys • Improved public transport infrastructure at the bus station would provide accessibility benefits for disabled people. Improved facilities may also benefit those with impaired vision or hearing and those with autism. • Improving the quality of facilities at the bus station would improve perceived security.	• This package is anticipated to have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. • Improvements in air quality would be of particular benefit to those who are more vulnerable to air pollution • Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived security. This is likely to provide some benefit to those for

Appraisal Metric	Package 1-A830/A82 Bus priority and mobility hubs North and South of the town	Package 2-Bus Link between Caol and Inverlochy	Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	Package 4- Mini Mobility Hubs
	security. This is likely to provide some benefit to those for whom security is of particular concern.	to provide some benefit to those for whom security is of particular concern.		whom security is of particular concern.

Table 7-2: Detailed Appraisal Scoring Summary

	TPO's			STAG					
	TPO1 - Journey Time Variability	TPO2 - Service Integration	TPO3 - Mode Shift	Environment	Climate Change	Health, Safety and Wellbeing	Economy	Equality and Accessibility	EqIA
Package 1-A830/A82 Bus Priority and mobility hubs North and South of the town	+++	0	+++	+	+	+	+++	0	+
Package 2-Bus Link between Caol and Inverlochy	+++	0	+++	?	+	+	++	0	+
Package 3-A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades	+	+++	+	+	+	+	--	+	+
Package 4- Mini Mobility Hubs	+	0	+	?	+	+	+	0	+

The following section briefly summarises the outcome of the appraisal for the four packaged.

Full detailed ASTs can be found in Appendix A.

7.1.1 Package 1– A82 and A830 Bus priority and mobility hubs north and south of the town

This package would reconfigure the section of the A830 between the Blar Mhor junction and the A830 \ A82 junction with new bus priority lanes delivered that provide a dedicated lane for buses. Bus priority signals would be introduced at the Lochaber High School \ A830 junction (the west junction), at the B8006 junction (the east junction) and the A82 \ A830 junction if required. Mobility hubs to the north and south of the town also form part of this package.

The inclusion of bus priority measures has the potential to reduce bus journey times by up to 7 and a half minutes, improving bus journey time reliability and encouraging mode shift to more sustainable means of travel, resulting in a major positive benefit to both TPO 1 and TPO 3. The proposed package would also deliver benefits in terms of safety and wellbeing and the economy STAG criteria.

It is anticipated that the attractiveness of bus as a mode of transport would increase as the result of improved bus journey times and bus journey time reliability on services that utilise the A830 eastbound and the A82 southbound. As general traffic would still experience congestion and delays during the peak summer months, it would be expected that improved bus journey times would also support a mode shift from private car to bus, reducing traffic volumes on the A82 by approximately 10%. In addition, the inclusion of mobility hubs, located in the vicinity of the A830 and A82 approaches to the A830 \ A82 junction would further encourage mode shift, with longer distance journeys travelling by car to the mobility hubs, before switching mode for the last leg of their journey.

Any mode shift achieved would result in improved health and safety through a reduction in road traffic, reducing the number of road traffic accidents taking place, and increasing sustainable travel, helping to address the STAG criterion regarding Health Safety and Wellbeing.

7.1.2 Package 2– Bus link between Caol and Inverlochy

This package would seek to deliver a new bus priority link between the B8006 and An Aird to allow buses to travel southbound between the Caol, Lochyside and Inverlochy areas and Fort William Town Centre. This would allow buses to avoid congestion and delays on the A830 and A82, which is particularly prevalent in the peak summer period. General traffic would not be permitted to use the new link and would continue to be required to travel via the A82 in order to reach Fort William. This package would also provide benefits to emergency service vehicles as they would also be permitted to use the new route when responding to an emergency and improve the overall resilience of the network as the route could be opened to general traffic in the event of a road closure on the A830 or A82 between Caol and Fort William.

The route would follow a similar alignment to the existing Black Parks Road, connecting into the local road network in north Inverlochy, utilising the residential streets in order to

travel through Inverlochy and towards the River Nevis. The route would then continue over the River Nevis and connect to the An Aird Roundabout via a new link.

A new bus priority link has the potential to reduce bus journey times by approximately 13 minutes, improving bus journey time reliability and encouraging mode shift to more sustainable modes of travel, resulting in a major positive benefit to TPO 1 and 3. The proposed package would also deliver benefits in terms of safety and wellbeing and the economy STAG criteria. However, construction of an offline bus route has the potential for negative environmental impacts during construction and operation, for example on the local population (e.g. accessibility and construction noise and dust) and the water environment, soil, cultural heritage and landscape and visual amenity.

A dedicated bus route running parallel to the A82 would provide a fast and reliable connection for bus and active travel between locations to the north of Fort William and Fort William Town Centre, providing significant benefits in terms of access to employment and services, particularly during the summer peak period where congestion is at its worst. Any mode shift achieved would result in improved health and safety through a reduction in road traffic (reducing the number road traffic accidents taking place) and an increase in active and sustainable travel, helping to address the STAG based objectives. Whilst this package would particularly benefit those residing in Caol, Lochyside and Inverlochy, it would also provide benefit to services travelling from Torlundy and Spean Bridge, however these services would be required to reroute from the existing A82 onto the new link.

It is also anticipated that the attractiveness of bus as a mode of transport would significantly increase as the result of improved bus journey times and bus journey time reliability on routes that currently use the A82 southbound. It would be expected that improved bus journey times would also support a mode shift from private car to bus by delivering more reliable connections and providing significantly quicker journey times by bus when compared to general traffic during the peak summer months.

This package is therefore anticipated to improve the operational efficiency of bus services travelling between locations to the north of Fort William, such as Spean Bridge, Roy Bridge, Glenfinnan, Arisaig and Mallaig and Fort William itself, with the potential to deliver a mode shift to bus.

7.1.3 Package 3- Bus Station and Junction Reconfiguration

This package would reconfigure the junction between the A82, Nevis Terrace and Middle Street, removing the central reserve to allow buses to turn right from Middle Street to the A82 and from the A82 to Nevis Terrace, providing access to the bus station for southbound A82 traffic. Buses from Middle Street would also be able to travel straight across the junction to Nevis Terrace. The junction would be signalised to provide bus priority for these movements, removing any delay from this right turn movement.

In parallel to this, part of this package would include a new bus station located on the site of the current Nevis Terrace car park, adjacent to the A82. The inclusion of a new bus station at this location would circumvent the need for buses to travel via MacFarlane Way to the existing bus station location, improving access to the bus station to and from the trunk road network, whilst presenting the opportunity to improve the quality of the bus infrastructure within the area.

This package is specifically targeted at delivering faster and more reliable bus journey times for services accessing Fort William Bus Station, whilst also improving the attractiveness of the bus station to local services, increasing integration between local and longer distance services. If this is achieved, it is anticipated that the attractiveness of bus as a mode of transport would increase, encouraging a mode shift from private car, potentially delivering more reliable connections and improving integration between services.

This package is anticipated to improve the operational efficiency of bus services, particularly for services travelling between the A82 southbound and the bus station and between Middle Street and the A82 northbound, where congestion can be experienced during the peak summer periods. This is anticipated to enhance the attractiveness of services and encourage a mode shift from private car, reducing traffic volumes on the A82, positively contributing to the TPOs and STAG criteria. Furthermore, the current bus station is of poor quality and unattractive. A modern bus station would increase the profile of the bus station in the town and improve the attractiveness of bus as a mode of transport. Reducing the access and egress time could also improve the attractiveness of the bus station for local services, increasing integration between local and long-distance services.

This isolated junction improvement has the potential to deliver benefits to buses at this location, however, the provision of a wider package of bus priority measures would help to further improve bus journey times within the Lochaber area.

In terms of non-bus users, the package would increase journey time for general traffic, with the new signalised junction increasing delay. Although the amount of delay per vehicle is anticipated to be marginal, the A82 at Nevis Terrace is particularly busy during the summer months and so the accrued delay by the overall volume of general traffic would contribute to an economic disbenefit large enough to offset some of the benefit accrued as part of the bus journey time savings. Overall, this package is therefore likely to score relatively poorly in terms of economy.

7.1.4 Package 4- Mini Mobility Hubs

This package provides mini mobility hubs that would be served by bus and, where possible, rail. The mini mobility hubs would primarily target visitor trips and would be located at popular tourist attractions, such as Glenfinnan, Corran Ferry, Neptunes Staircase, Nevis Range and Glen Nevis Lower Falls. Each location would be served by bus services and provide active travel facilities, including cycle hire stations, to enable interchange between modes and provide a network of sustainable travel choices for travel between visitor attractions. Where possible, the locations would incorporate direct access to train stations Glenfinnan, Locheilside, Corpach, Banavie, Spean Bridge, Roy Bridge and Fort William.

The introduction of mini mobility hubs at key tourist attractors would include bus shelters, cycle hire, cycle storage and other active travel related facilities, such as information boards or pillars, public bike pumps and tool kits, water bottle filling stations and benches, that would support and encourage an increase the number of trips made by sustainable modes.

It is anticipated that the attractiveness of bus, rail and active travel modes would increase following the delivery of mini mobility hubs leading to a reduction in the reliance on travel by private car, particularly for visitors, by increasing travel choice within the area. This in turn would reduce traffic volumes and congestion on the A82 and the A830, improving bus

journey times and journey time reliability leading to the package performing well against the journey time and mode shift objectives (TPO1 and TPO3 respectively).

This package is therefore anticipated to improve the operational efficiency of bus services travelling between locations to the north of Fort William, such as Spean Bridge, Roy Bridge and Glenfinnan, and Fort William itself, with the potential to deliver a mode shift to bus, rail and active travel.

Additionally, any mode shift from private car to sustainable modes would result in improved health and safety through a reduction in road traffic and therefore a reduction in the number road traffic accidents taking place, reduce vehicle emissions, increase personal health thereby helping to address the STAG criterion regarding Health Safety and Wellbeing.

Although it is recognised that revenue-based services are out of scope for the BPF study, the success of the mobility hubs, and therefore the associated benefits, could be bolstered by the introduction of a highly competitive, integrated ticketing offer covering user costs for parking and multi-modal travel between hubs.

8. Monitoring and Evaluation

8.1 Introduction

Monitoring and Evaluation is often used to assess the performance of projects and their Value for Money. It is specifically a STAG requirement post appraisal. Its primary goal is to improve current and future management of outputs, outcomes and impact.

- Monitoring is a continuous assessment of programmes based on early detailed information on the progress or delay of the ongoing assessed activities
- Evaluation is an examination concerning the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives. These objectives, the transport planning objectives, have been established in Case for Change Report

A monitoring and evaluation plan will be developed following the identification of the preferred option or options, and will include two outputs:

1. Monitoring and Evaluation Plan
2. Baseline Report

The monitoring and evaluation plan will detail how the outcomes of any intervention will be monitored and evaluated, and to what data it will be assessed against. This will be intrinsically linked to the TPOs and the wider objectives of the Bus Partnership Fund as well as if the intervention has provided value for money. The plan will be agreed following engagement with Transport Scotland and The Highland Council and would include a detailed data collection programme to obtain pre and post monitoring data to allow a comprehensive evaluation of the options.

9. Risk and Uncertainty

9.1 Introduction

The risk and uncertainty associated with the delivery of each package and the realisation of the benefits have been identified through the appraisal process.

Given the size of the study area, and the stage of the process, the types of risks and uncertainties that will affect the development of the proposals and their case for investment apply reasonably consistently across each option package.

9.2 Cost Estimates

Cost estimates at this early stage of the process have been developed using benchmarked item costs for each type of intervention, which are then applied to the specific combinations of measures used in each package for each corridor.

Optimism bias has been applied separately to these outturn costs. Given the proposed types of intervention, a value of 44% has been applied (as per the guidance set out within the STAG Technical Database for road based projects, which includes those with a focus on enhancing bus priority). The assumptions underpinning the assessment will require further review and refinement in advance of the project's OBC.

9.3 Risk Management Process

Moving forward, a more detailed risk register will be developed for the preferred option or options. Each risk identified will be allocated an owner (an individual or organisation) who is responsible for the day-to-day management of the risk and making sure that it is mitigated where possible. Risks will be scored on their potential impact as well as their likelihood of occurring to inform prioritisation based on Red-Amber-Green (RAG) ratings.

As the proposals are developed further, separate risk registers for each corridor may be produced and maintained in the interest of efficiency. Programme-level risks will generally apply to many or all of the constituent schemes, whereas option risks will be specific to each option's particular circumstances.

Risk registers are live documents and will be continuously reviewed across the breadth of programme and scheme delivery stages to ensure they are accurate and effective at all times. As a reporting requirement, risks will also be formally reviewed on a monthly basis and any substantial changes (e.g. closing out a risk) will be agreed as necessary.

9.4 Uncertainty Analysis

It is noted that there are several external factors beyond the ability of this project or supporting transport strategy to control directly. As travel behaviour starts to settle into a new normal post COVID-19, and with Government Policy aiming reduce the reliance on private vehicle, there is a great deal of uncertainty in forecast travel moving forward. The available traffic models were developed pre-COVID19 and therefore do not take these factors into account. Given the stage of appraisal, it was decided to utilise the base model only, and develop revised models to consider plausible future scenarios at the next stage of assessment. This provided a comparative assessment of packages that were modelled.

9.5 Summary

Both risk and uncertainty have been considered as part of the appraisal process and will continue to be monitored and mitigated where appropriate as the project is developed further in advance of the OBC stage.

10. Summary

10.1 Introduction

This Detailed Appraisal report has set out the continued development and assessment of alternative options to address the particular problems and opportunities with the Lochaber Study Area.

Four packages of options have been appraised and subject to detailed appraisal against the agreed TPOs, STAG criteria and cost to government, as well as assessing the associated risk and uncertainty of the proposals.

10.2 Outcomes of the Study

The appraisal has demonstrated broadly positive performance of each package against the appraisal criteria, but clear differentiation between the packages for some of these criteria. Some of the key outcomes are:

- Packages 1 and 2 provide a significant journey time savings for buses during the summer peak period and are therefore anticipated to result in significant mode shift. Whilst Package 2 results in the highest journey time saving for buses, it is anticipated to cost significantly more than Package 1. These packages are also anticipated to reduce general traffic journey times as mode shift is anticipated to reduce traffic volumes on the A82 by 10% in the PM Peak, with the provision of bus priority infrastructure anticipated to result in bus journey times that are 40% faster than general traffic in Package 1 and 70% faster in Package 2.
- Package 3 is likely to have a minor positive impact on journey times as the provision of right turn bus priority removes the need for southbound bus services to travel to Belford Roundabout to perform a U-Turn when accessing the bus station. Similarly, services wishing to travel north from Middle Street would no longer need to travel to Belford Roundabout, removing the need to queue at the roundabout in the summer peak. This package also proposes a relocation of the bus station, improving the environment around the bus station and enhancing integration between local and long-distance services. This package could be included with Package 1 or Package 2 to further enhance the benefits of both packages and the overall attractiveness of buses within the area.
- Package 4 is primarily targeted at tourists, providing a viable alternative to private car when travelling to the various tourist sites within the area. It is well known that traffic levels increase significantly within Fort William during the summer months, with Fort William seen as a hub when travelling to other areas within the region. The inclusion of mini mobility hubs would provide tourists with various packages to travel around the area by sustainable modes. This should result in a reduction in the use of the private vehicle. This package is unlikely to result in significant mode shift on its own however, if combined with Package 1 or 2, the inclusion of bus priority to allow buses to bypass the areas of delay and congestion could make the mini mobility hubs extremely attractive to tourists.

Appendix A. Appraisal Summary Tables

Package 1 - A830/A82 Bus Priority and mobility hubs North and South of the town				
Position in Sustainable Investment Hierarchy	1. Reducing the need to travel unsustainably	2. Maintaining and safely operating existing asset	3. Making better use of existing capacity	4. Targeted infrastructure improvements

Summary Rationale

Congestion on the A82 southbound between the A830 junction and Nevis junction has been identified as a significant problem for bus operators during the peak summer months (May to September). There are also sections where delay is commonly experienced during the summer months on the approaches to the A830 \ A82 junction on the A830 eastbound and the A82 southbound approach to the junction. As a result, bus services using the A830 and the A82 to travel southbound toward Nevis junction often experience delay.

This package is therefore specifically targeted at delivering faster and more reliable bus journey times for services utilising the A830 and the A82 approaches to the A830 \ A82 junction as well as the A82 southbound section between the A830 \ A82 junction and Nevis junction.

The inclusion of bus priority measures has the potential to positively impact on bus journey times, improve bus journey time reliability and encourage a mode shift to more sustainable modes of travel, resulting in a major positive benefit to Transport Planning Objective 1 (TPO 1) and TPO 3. The proposed package would also deliver benefits in terms of safety and wellbeing and the economy STAG criteria.

It is anticipated that the attractiveness of bus as a mode of transport would increase as a result of improved bus journey times and bus journey time reliability for services that utilise the A830 eastbound and the A82 southbound. It would be expected that improved bus journey times would also support a mode shift from private car to bus by delivering more reliable connections. In addition, the inclusion of mobility hubs, located in the vicinity of the A830 and A82 approaches to the A830 \ A82 junction would provide the opportunity for longer distance travellers to switch mode for the final leg of their journey further reducing traffic volumes on the aforementioned sections of the network. A third mobility hub located at Corran Ferry would also increase the attractiveness of buses for those travelling either from the south or from Corran and those using the Corran Ferry travelling from the Ardnamurchan peninsula.

Any mode shift achieved would result in improved health and safety through a reduction in road traffic (reducing the number of road traffic accidents taking place) and an increase in sustainable travel, helping to address the STAG criterion regarding Health Safety and Wellbeing.

This package is therefore anticipated to improve the operational efficiency of bus services travelling between locations to the north of Fort William (such as Spean Bridge, Roy Bridge, Glenfinnan, Arisaig and Mallaig for example), locations in the south (such as Corran, Onich and Keppanach) and Fort William itself, with the potential to deliver a mode shift to bus.

Performance		Uncertain	No or negligible relationship	Major negative impacts	Moderate negative impact	Minor negative impact	Neutral	Minor benefit	Moderate benefit	Major benefit
TPOs	Journey Time Variability									
	Service Integration									
	Mode Shift									
STAG	Environment									
	Climate Change									
	Health, Safety and Wellbeing									
	Economy									
	Equality and Accessibility									
EqIA										

Description

Buses travelling on the A830 eastbound toward the A82 are often delayed by traffic congestion over the section of road between the Blar Mhor and A830 \ A82 junction. Buses must queue with general traffic in order to approach the A82 for onward travel, with congestion also delaying buses from entering or leaving the B8006 (a primary access route for buses to Caol and Lochyside) and the Lochaber High School access road (which provides access to both the school and the Lochaber Health Centre).

Additionally, the A82 southbound serves as the key route for travel toward Fort William from the west and north. During the peak summer months, the A82 is heavily congested between the A830 and Nevis junction, leading to slow and unreliable journey times for all traffic, including buses.

This package would reconfigure the section of the A830 between the Blar Mhor junction and the A830 \ A82 junction. Where the existing road is wide enough, new bus priority lanes would be delivered that provide a dedicated lane for buses to avoid congestion and delays over this section. As part of the package, bus priority signals would be introduced at the Lochaber High School \ A830 junction (the west junction), at the B8006 junction (the east junction) and the A82 \ A830 junction if required.

On the A82, the package would consist of a series of bus priority lanes southbound between a point north of the A82 \ A830 junction and Nevis junction that would allow buses to travel southbound via a series of dedicated bus priority lanes. This would remove the need for buses to queue in traffic over large sections of the often-congested A82. Bus priority lanes would require either the re-allocation of existing road space to bus priority lanes (where feasible on the A830), or widening (on the A82) to allow for the inclusion of a dedicated bus priority lane.

However, there are constraints limiting the extents over which bus priority lanes could be included along the A82 between Torlundy and the Nevis junction:

	• The bridges over the Mill Burn, River Lochy, Lochaber Hydroelectric Scheme Tail Race, the West Highland Railway Line and the River Nevis all serve as constraints on potential road widths; • The Nevis Bridge is a listed structure with narrow lanes; • There is limited land available either side of the A82 in the vicinity of Inverlochy; and • Topography in the vicinity of the Nevis Bridge makes it difficult to deliver road widening. It is therefore unlikely that a continuous bus priority lane could be delivered over the full length of the identified A82 corridor. Instead, this package includes four, distinct sections of bus priority lane on the A82 corridor (totalling approximately 2.5km over the 3.3km southbound approach to Nevis junction). General traffic travelling toward Fort William would not be permitted to use the new bus priority lanes and would be required to continue to travel via the general traffic lanes on the A82 and the A830. However, cyclists would be permitted to use the bus priority lanes, increasing the attractiveness of both the A82 and the A830 as active travel routes. Including mobility hubs as part of the package would help to maximise mode shift and make best use of the new bus priority routes. To the north of Fort William, a mobility hub would be located within the vicinity of the roundabout on the A830 (adjacent to Blar Mhor), with a second hub located at Carr's Corner on the A82, south of Torlundy. These would capture people travelling to Fort William from locations north of Fort William (such as Torlundy, Spean Bridge, Banavie or Arisaig for example). A third mobility hub would be located within the vicinity of the Corran Ferry, providing facilities that would capture trips travelling by car from the south, or from Corran itself. Combining mobility hubs with bus priority increases the catchment of bus services, providing a viable alternative for longer distance trips to travel the last leg of their journey to Fort William via fast, efficient public transport.
Alignment with NTS2 Outcomes	The package would contribute to the following National Transport Strategy 2[1] (NTS2) outcomes: • Help deliver our net-zero target; • Promote greener, cleaner choices; • Enable us to make healthy travel choices; and • Help make our communities great places to live Within the Sustainable Investment Hierarchy, this package fits with reducing the need to travel unsustainably as improved bus and active travel choices could also result in a mode shift to sustainable modes of travel.

[1] Transport Scotland, National Transport Strategy: Protecting Our Climate and Improving Our Lives, 2020, https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf

Relevance and Cost

The delivery of dedicated and segregated bus links is vital for helping to address the climate emergency and achieve the Scottish Government's targets to reduce car kilometres by 20% by 2030. They can also help to cut greenhouse gas emissions to net zero by 2045.

This package is particularly relevant to Fort William where significant congestion on the A830 eastbound and A82 southbound can occur during the summer peaks, negatively impacting upon bus journey times and journey time reliability, with a mode shift required to help alleviate congestion.

Work undertaken in the identification of the Problems and Opportunities and the TPOs for the Lochaber Bus Partnership Fund (BPF) Study identified the extent to which peak seasonal traffic congestion is affecting bus journey times and journey time variability on these routes. The provision of a package to improve bus journey times and journey time reliability is therefore critical to support mode shift and reduce the reliance on the private car. Season congestion can also have a serious impact on the emergency services. The provision of bus lanes would provide additional road space for emergency vehicles, allowing them to bypass congestion and delays when attending incidents.

The general locations of the proposed bus priority measures and mobility hubs included within this package are shown on Figure 1.

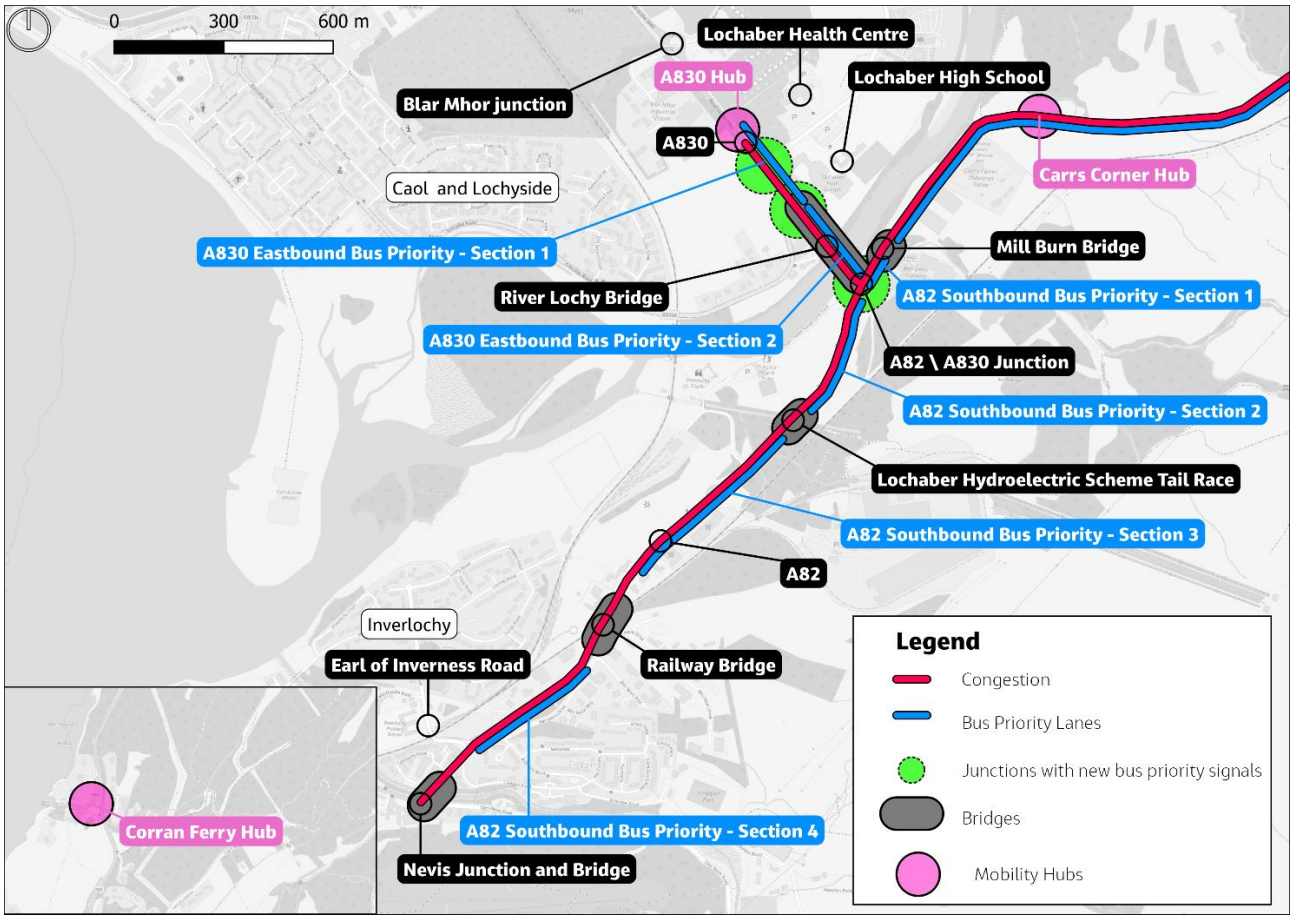

Figure 1 – Bus Priority on the A82 Southbound

	This package is estimated to cost between £10-12m, with the bulk of the cost required to purchase land and widen out the A82 in order to deliver the bus priority lanes, as well as to deliver the mobility hubs. However, there is also likely to be a requirement for funding for the operation and maintenance of the proposed package and to ensure enforcement of the new dedicated bus priority lanes.

Transport Planning Objectives			
TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	Through the provision of dedicated bus priority lanes and signals, this package is anticipated to reduce delay for buses travelling on the A82 southbound between the Torlundy area and Nevis Bridge and on the A830 eastbound between Blar Mhor and the A82 during the six-hour peak period (12pm to 6pm), May to September. The dedicated bus priority measures would deliver journey time savings and improve journey time reliability for buses by allowing buses to bypass sections of congestion which would contribute to reducing the average southbound bus journey times during peak periods. Whilst this package would provide journey time benefits for bus services travelling southbound on the A82, it is recognised that buses would still be subject to some delay where bus priority lanes cannot be provided along the length of the corridor. However, it would be anticipated that journey times would be significantly improved when compared to the existing situation. Assuming that a mode shift of 10% is realised (more details on how this figure is derived is included within the Appraisal Report), traffic modelling of the package in the PM Peak shows that the delivery of the bus priority lanes would reduce bus journey times travelling on routes between either Blar Mhor or Torlundy and Belford junction to approximately 11 minutes, which is within 2 minutes of the 2019 annual average journey time of 10 minutes 20 seconds. This is also a saving of approximately 7 and a half minutes when compared to the 2017 Base Model, which has a journey time of approximately 18 and a half minutes. This journey time saving can be attributed to buses circumventing congestion on the A82 southbound. The inclusion of mobility hubs can also support mode shift by providing interchange points for onward travel by sustainable means. Mobility hubs would offer cycle hire and cycle facilities (such as secure bike storage or public use bike tools for example) that would encourage people to undertake part of their journeys by cycling. Onward walking and cycling links to \ from hubs would also support mode shift by making bus services more accessible by active modes. This package has therefore been scored a major positive against this objective, as it would contribute to an overall journey time reduction for buses on this corridor.	+++

TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.	The provision of bus priority measures on this section of the network is unlikely to change the stopping patterns of services within Fort William itself and would therefore not deliver any improvement in terms of integration between local and longer distance services. This package has therefore been scored as neutral against this objective, as it would not contribute to improving integration between services.	0

TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	Through the provision of bus priority measures on the A830 and A82 this package has the potential to increase the attractiveness of bus, particularly during times of peak congestion where journey times by private car are high, leading to a mode shift away from private car. As the majority of mode shift is anticipated to occur during peak travel times, it is envisaged that this package would encourage a proportion of people making trips between Torlundy, Spean Bridge, Caol or Lochyside and Fort William to transfer from private vehicle to bus during the summer peak period when the A82 southbound suffers the worst levels of congestion. Stakeholder feedback received from the Case for Change report highlights the impact peak summertime congestion has on these movements. As this package would provide a journey time saving for buses, it would provide locals, and tourists, a viable alternative to avoid the congestion, thus resulting in significant mode shift. Strategically located mobility hubs to the north and south of Fort William would also complement the bus priority lanes included as part of the option and attract those travelling longer distances, encouraging them to leave their car at the mobility hub and transfer to bus to travel the final leg of their journey into Fort William. Traffic modelling indicated a 10% mode shift is anticipated to result in PM Peak bus journey times between Blar Mhor and Belford Roundabout approximately 40% faster than general traffic in peak summertime conditions. This is a significant journey time benefit within the context of the study area and the mode shift can therefore be seen as being realistically achieved. Mode shift would also be aided by the introduction of mobility hubs on the A830 within the vicinity of Blar Mhor and on the A82 north of the A830, capturing trips from Torlundy. Analysis of junction turning count data shows that there are approximately 2,700 vehicles on the A830 eastbound that turn right to travel towards the A82 southbound, and approximately 1,900 travelling on the A82 southbound from Torlundy toward Fort William (during the weekday 12pm-6pm period). Results from traffic modelling indicated a 10% mode shift is realistic and achievable (more information on the derivation of this percentage is included within the Appraisal Report) following the implementation of this package and, based on the observed traffic count information presented above, traffic volumes of the A82 between the A830 and Nevis are anticipated to reduce by approximately 460 vehicles over the period 12pm to 6pm.	+++

		Additionally, the bus priority lanes also provide improved provision for cyclists travelling on the A82 and the A830 which could result in mode shift to active modes as the bus lane offers a route for cyclists that would be separate from general traffic lanes, making active travel a more attractive travel choice. It is however recognised that the fact the bus priority lanes are not continuous may have an impact on the attractiveness for those travelling actively. This package has been scored as providing major benefit on the basis that it has significant potential to contribute towards a mode shift away from private car to bus. Additionally, the improved active route, combined with shorter travel distances (<5km) undertaken by a large proportion of the study areas population, means that there is significant potential for a shift to active modes.	

Assessment against STAG Criteria		
Environment	The proposed package is anticipated to result in a positive impact on quality of life, sustainable accessibility and safety by providing a sustainable alternative for users to travel to employment, education, healthcare and leisure activities, which has potential for improved safety on the transport network. The package could also result in a beneficial impact on air quality and noise and vibration during the operational phase; however, this is uncertain at this stage and modelling would be required to determine the impact of this package on local air pollutants and greenhouse gases. The proposed package promotes a more sustainable use and management of the existing transport network. There are no designated sites within the immediate vicinity of the proposed package. The closest site is Ben Nevis Special Area of Conservation and Site of Special Scientific Interest (SSSI) approximately 620m at the closest point, to the southeast. The SSSI is designated for its breeding bird and fly assemblage. Ben Nevis and Glen Coe National Scenic Area is also located approximately 1km to the southeast. Given the distance from these sites, it is unlikely that the proposed package would cause significant adverse effects. There is potential for possible positive impacts on biodiversity as a result of a reduction in diffuse pollution on key receptors; however, the significance of impact is uncertain at this stage as the overall impact would be dependent on the footprint of the construction works required. Nevis Bridge (LB31790) is a Grade B listed structure which is in the footprint of the proposed package. Glenlochy Distillery (LB6869) is approximately 55m west and (Old) Nevis Bridge (LB31791) is approximately 100m east of the proposed package. The proposed package is within the Battle of Inverlochy I and II Battlefields Inventory Boundary. Scheduled Monument Inverlochy Castle (SM90172) is approximately 120m to the west of the proposed package. With the implementation of suitable mitigation measures, it is unlikely that the proposed package would cause significant adverse effects. The proximity to the River Lochy and River Nevis means that parts of the proposed package are vulnerable to flooding. Lochaber High School and Lochaber Health Centre are situated immediately adjacent to the proposed package, along the A830. Depending on the exact location of the bus priority measures, there is potential for negative environmental impacts during construction and operation, for example on the local population (e.g. accessibility and construction noise and dust) and the water environment, soil, cultural heritage and landscape and visual amenity. It is therefore recommended that further environmental assessment is undertaken as the package design is progressed, to identify potentially significant location-specific environmental impacts and mitigation where appropriate. Overall, the cumulative effects of the proposed package on the environment criterion are expected to be minor positive. It is anticipated that mitigation would be able to avoid or reduce any potential negative environmental impacts.	+

Climate Change	This proposed package is likely to result in positive impacts on reducing greenhouse gas emissions and improving air quality in the operational phase. Transport-related emissions are likely to reduce as the package seeks to encourage a modal shift to public transport. The infrastructure would be designed to be resilient to predicted impacts arising from current and future weather events and climatic conditions, and designed in accordance with current planning, design, engineering practice, and codes. A number of mitigation and adaptation measures, including sustainable drainage, would be considered at later design development stages to address potential risks. Positive impacts on all three climate change sub-criteria are therefore anticipated.	+
Health, Safety and Wellbeing	The NTS2[1] highlighted that the transport system can help to improve the sustainability of placemaking if it can discourage people from owning or using cars, which may improve wellbeing by enhancing communities. The inclusion of a new bus and active travel link on the A82 and A830 may result in mode shift from private car as bus journey times become more competitive, particularly during the peak summer months, which may therefore increase bus as a viable mode choice. Additionally, the delivery of new bus and active travel routes could also encourage more people to choose an active travel mode instead of car, with the added benefit that active travel improves health and wellbeing. Furthermore, the provision of mobility hubs to the north and south of Fort William, combined with the bus priority measures could encourage those making longer distance journeys to transfer mode for the final leg of their journey, either transferring to bus or hiring an e-bike to travel into Fort William. The package could also reduce the likelihood of an accident occurring as car use reduces, however as there is not a particular Personal Injury Accident (PIA) or Killed or Seriously Injured (KSI) accident[2] issue within Fort William, any benefits are anticipated to be minor. The package is not expected to have an impact on visual amenity given that the proposed nature of the A82 trunk road would not change from an urban \ semi urban route. Overall this package has been scored a minor positive against this criterion.	+

[2] Department for Transport, STATS19 Road Safety Data, 2019

Economy	A full economic assessment to calculate the Transport Economic Efficiency (TEE) of this package has not been undertaken at this stage of appraisal as the exact form of the proposals is not yet known. However, traffic modelling has been undertaken and it is anticipated that there would be journey time benefits to bus users of up to 7-and-a-half minutes in the peak summer period during the PM Peak, which would result in an estimated benefit to bus passengers over a 60-year appraisal of approximately £6.1m. This total does not include any benefits associated with increased levels of active travel. Whilst this package introduces a new bus lane on the A82 that cyclists could utilise, a fully segregated active travel link already exists on Black Parks Road and this would remain as the more attractive link for cycling between Caol and Fort William. As a result, the level of active travel in the area is unlikely to increase significantly. Where this package reallocates road space or introduces bus priority signals, it is likely to have a negative impact on vehicle journey times as it would reduce capacity for general traffic. Whilst the provision of bus priority measures would reduce the capacity for general traffic, it is anticipated that a mode shift of 10% would occur, reducing traffic volumes on the route. The combined impact would result in a journey time benefit of over 2 minutes for general traffic during the PM Peak, resulting in an approximately £5.5m benefit over a 60-year appraisal period. This package has been scored as providing major benefit against this criterion.	+++
Equality and Accessibility	There could be a slightly beneficial impact associated with this package on Equality and Accessibility, with reduced bus journey times that could promote new operator investment in improved public transport network coverage, which in turn may also provide better comparative access to locations with employment, education, healthcare and leisure activities, however, this would require significant mode shift to improve the viability of the routes. As the routes within Fort William operate under subsidy this package is not anticipated to improve the affordability of the public transport network. The inclusion of mobility hubs will provide new facilities that create opportunities for cycling, which in turn will increase the accessibility of employment, education, healthcare and leisure opportunities by cycling. It is therefore not anticipated that this package would have an impact on the accessibility or affordability of the active travel network. This package has therefore been scored a neutral against this criterion.	0

Deliverability	
Feasibility	The delivery of bus priority measures is largely feasible at this stage, with the construction likely to take place along the existing alignment of the A82 and A830. However, widening the carriageway may require additional land take to provide a link wide enough to accommodate buses in the southbound direction and may also result in the need to widen some structures. The delivery of mobility hubs is largely feasible at this stage, with the construction likely to take place along the existing alignment of the A82 and A830 corridors. However, the delivery of the mobility hubs would require additional land take, and this may result in issues depending on ownership. The package could be taken forward by Transport Scotland, in partnership with The Highland Council and HITRANS.
Affordability	This package is anticipated to be a medium-cost measure, with the majority of the cost associated with the delivery of road widening and delivery of mobility hubs. There could be significant costs where land take is required to deliver a wider route along the length of the existing A82 in order to provide a link wide enough to incorporate bus priority lanes. There is also likely to be a requirement for funding for the operation and maintenance of the proposed package and to ensure enforcement of the new dedicated bus lane.
Public Acceptability	There is likely to be public support for the delivery of a new, reliable bus route which would also provide provision for cyclists. A reliable bus route would be seen as popular given that the package could deliver faster and more reliable bus services for access to health, education and leisure opportunities. Bus users are expected to welcome this package and it is anticipated that it would encourage an increase in bus patronage. Furthermore, the provision of mobility hubs to the north and south of the town is likely to be accepted by the public as they can be seen to help reduce the seasonal congestion within the town. There are public acceptability risks, particularly amongst non-bus users, especially if bus use remains low, as the introduction of bus priority measures, particularly if they require road space reallocation, is likely to result in additional delay to non-bus users.

Equalities Impact Assessment (EqIA)		
EqIA	This package would have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. This includes women, children and young people, older people, disabled people, religious groups and people from certain ethnic minority groups. By encouraging modal shift to more sustainable modes, this package could also contribute to improving local air quality. Improved health outcomes as a result of better air quality are of particular benefit to those who are more vulnerable to air pollution, including children, older people, disabled people and pregnant women. The package would reduce the severity of accidents through targeted infrastructure improvements and by encouraging modal shift away from private car, resulting in reduced accident risk due to reduced conflicts. Some protected characteristic groups are more likely to be involved in road accidents, for example, children as pedestrian casualties and young males involved as car drivers and as such would have positive impacts on these groups. Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived security. This is likely to provide some benefit to those for whom security is of particular concern including women, the LGBTQ+ community and those from religious backgrounds who are more subjectable to hate crime. The package would therefore be anticipated to have a minor positive impact on addressing this criterion.	+

Package 2 - Bus link between Caol and Inverlochy				
Position in Sustainable Investment Hierarchy	1. Reducing the need to travel unsustainably	2. Maintaining and safely operating existing assets	3. Making better use of existing capacity	4. Targeted infrastructure improvements

Summary Rationale

A new bus only link between Caol and Fort William Town Centre on a route that is separate but parallel to the A82 southbound between the A830 and the A82 junction would have a positive impact on bus journey times, bus journey time reliability and mode shift, resulting in a major positive benefit to Transport Planning Objective (TPO) 1 and 3. The proposed package would also deliver benefits in terms of safety and wellbeing and the economy STAG criteria.

Congestion on the A82 southbound between the A830 junction and Nevis junction has been identified as a significant problem for bus operators during the peak summer months (May to September). Delays on this section of road lead to bus journey times that are both long and unreliable. A dedicated bus route running parallel to the A82 would provide a fast and reliable connection for bus between locations to the north of Fort William and Fort William Town Centre, providing significant benefits in terms of access to employment and services. Any mode shift achieved would result in improved health and safety through a reduction in road traffic (reducing the number of road traffic accidents taking place) and an increase in active and sustainable travel, helping to address the STAG based objectives. The inclusion of bus priority lanes could also be used by the emergency services, allowing them to avoid congestion and attend incidents quickly and efficiently.

It is also anticipated that the attractiveness of bus as a mode of transport would significantly increase as the result of improved bus journey times and bus journey time reliability on routes that use the A82 southbound, performing well against the journey time and mode shift objectives (TPO1 and TPO3 respectively). It would be expected that improved bus journey times would also support a mode shift from private car to bus by delivering more reliable connections.

This package is therefore anticipated to improve the operational efficiency of bus services travelling between locations to the north of Fort William (such as Spean Bridge, Roy Bridge, Glenfinnan, Arisaig and Mallaig for example) and Fort William itself, with the potential to deliver a mode shift to bus.

Performance		Uncertain	No or negligible relationship	Major negative impacts	Moderate negative impact	Minor negative impact	Neutral	Minor benefit	Moderate benefit	Major benefit
TPOs	Journey Time Variability									
	Service Integration									
	Mode Shift									
STAG	Environment									
	Climate Change									
	Health, Safety and Wellbeing									
	Economy									
	Equality and Accessibility									
EqIA										

Description

This package would seek to deliver a new bus only link between the B8006 and An Aird to allow buses to travel southbound between Caol and Fort William Town Centre, thereby removing the need for buses to travel via the often-congested A82 southbound. General traffic would not be permitted to use the new link and would still be required to travel via the A82 in order to reach Fort William.

The route would follow a similar route to the existing Black Parks Road, connecting into the local road network in Inverlochy, utilising the residential streets in order to travel towards the River Nevis. The route would then continue over the River Nevis and connect to An Aird Roundabout via a new link for onward travel via the A82.

Black Parks Road is currently a popular active travel route connecting Inverlochy to Caol, whilst also serving as an access road to services located along its length. Whilst the existing link is currently suitable for active travel, upgrades would be required to accommodate buses. This package therefore includes the provision of an offline bus route as significant upgrades would be required to the existing route to maintain the high-quality active travel route alongside bus provision.

The proposal includes a new or improved bridge over the River Nevis with a new connecting link from the River Nevis, along the shore to Carmichael Way before connecting into An Aird Roundabout. The bridge over the River Nevis is one of two major structures that are likely to be required, with a new bridge over the River Lochy also required to connect into the B8006.

The residential streets within Inverlochy are generally of good standard, providing local access to private properties, however, on street parking is common. There are multiple options for bus routes within Inverlochy that could be used to connect the south end of Black Parks Road to the bridge over the River Nevis and some form of parking restrictions may be required.

This package would also help the benefits of mobility hubs (Package 4) to be fully realised by providing a dedicated link for buses to bypass the congestion on the A830 and A82.

Alignment with NTS2 Outcomes	
	The package would contribute to the following National Transport Strategy 2[1] (NTS2) outcomes: • Help deliver our net-zero target; • Promote greener, cleaner choices; • Enable us to make healthy travel choices; and • Help make our communities great places to live Within the Sustainable Investment Hierarchy, this package fits with reducing the need to travel unsustainably as improved sustainable travel choices could also result in a mode shift to sustainable modes of travel.

[1] Transport Scotland, National Transport Strategy: Protecting Our Climate and Improving Our Lives, 2020, https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf

Relevance and Cost

The delivery of a bus only link is one mechanism that can help address the climate emergency and achieve the Scottish Government's targets to reduce car kilometres by 20% by 2030. They can also help to cut greenhouse gas emissions to net zero by 2045. As envisaged in NTS2, it is also anticipated that the provision of a bus only link would leverage other bus service improvements, such as reduced fares and increased mileage, with faster bus speeds and punctuality improvements resulting in increased patronage and lower car use, reducing congestion further. This is particularly relevant to Fort William where significant A82 congestion during the summer peaks can negatively impact upon bus journey times and journey time reliability.

Work undertaken in the identification of the problems and opportunities and the TPOs for the Lochaber Bus Partnership Fund (BPF) Study identified the extent to which peak seasonal traffic congestion is affecting bus journey times and journey time variability, particularly southbound on the A82. The provision of a package to improve bus journey times and journey time reliability is therefore critical to support mode shift and reduce the reliance on the private car. Season congestion can also have a serious impact on the emergency services. The provision of bus lanes would provide additional road space for emergency vehicles, allowing them to bypass congestion and delays when attending incidents. The general alignment of the package is shown on Figure 1.

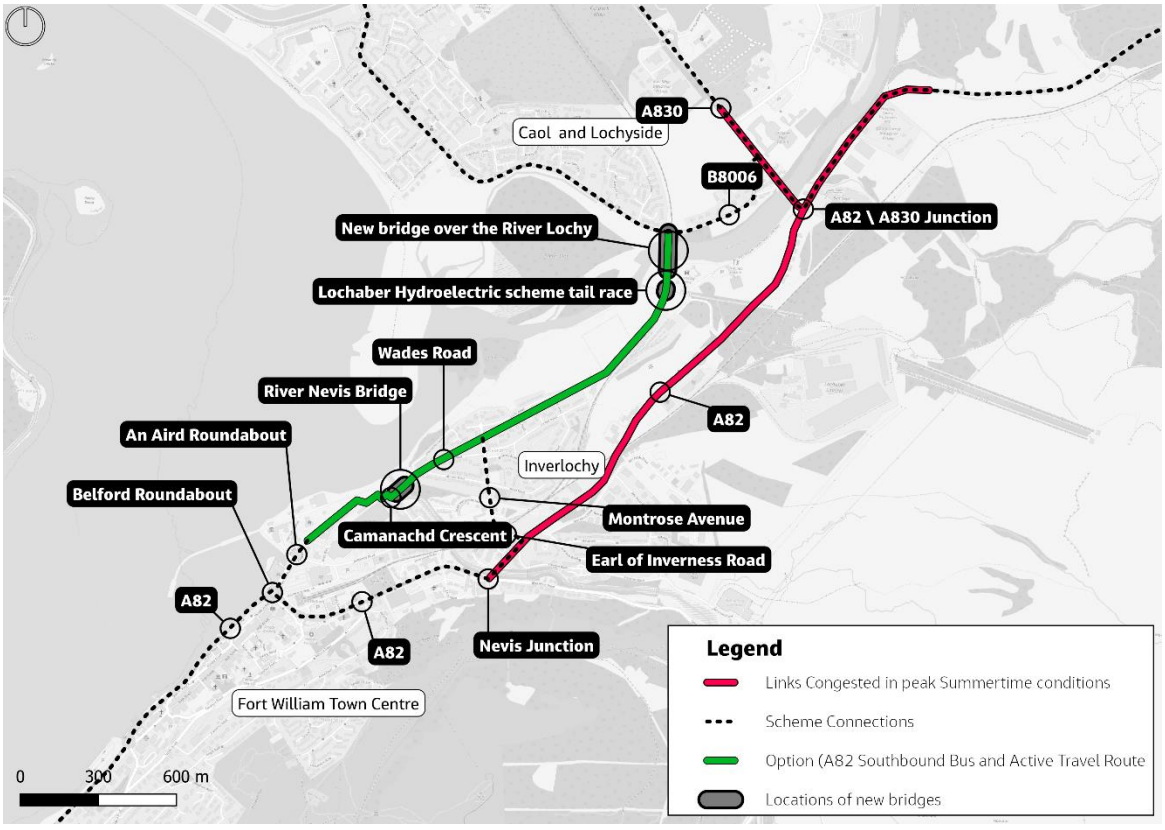

Figure 1 – Bus link between Caol and Inverlochy

Resilience was also highlighted as a significant issue within the area, with the A830 providing the only route west to east and the A82 north to south. In the event of a closure, the lengths of diversionary routes can be significant. General traffic would be permitted to use the new bus priority link in the event of a serious incident that results in a road closure on the A830 and A82

	between Caol and Fort William, resulting in improved resilience. Resilience for emergency vehicles would also be enhanced as they would be permitted to use the new link when attending an incident, providing an alternative route to avoid road closures. This package is estimated to cost approximately £23m to £38m, with the bulk of the cost required to provide the new structures over the River Lochy and River Nevis. The cost estimate assumes favourable ground conditions aiding in the delivery of the structures. The remaining cost is accounted for by the delivery of the route itself. Once constructed there is likely to be a requirement for funding for the operation and maintenance of the proposed package and to ensure enforcement of the new dedicated bus priority lane.	

Transport Planning Objectives			
TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	Through the provision of a dedicated bus priority link, this package is anticipated to reduce delay for buses travelling between Corpach and Belford roundabout during the six-hour peak period (12pm to 6pm), May to September. The dedicated link would deliver journey time savings and improve journey time reliability for buses by providing a new, dedicated traffic free route for buses between Caol and Fort William Town Centre. Traffic modelling of the package shows that it would reduce PM Peak bus journey times southbound between Blar Mhor and the Belford roundabout by approximately 13 minutes, reducing journey times from approximately 18 minutes to 5 minutes, resulting in a journey time significantly quicker than the 2019 annual average journey time (10 minutes and 20 seconds). Whilst this package would also reduce journey times for services travelling from Torlundy to Belford Roundabout, delays could still be encountered on approach to the A82/A830 junction. This package has been scored a major positive against this objective, as it is anticipated to exceed the targeted journey time savings for buses on this corridor, whilst also improving journey time reliability.	+++

TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.	A new bus link is unlikely to change the stopping patterns of bus services within Fort William itself and would therefore not deliver any improvement in terms of integration between local and longer distance services. This package has therefore been scored as neutral against this objective, as it would not contribute to improving integration between services.	0
TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	The provision of a new dedicated bus link has the potential to increase the attractiveness of bus, particularly during times of peak congestion where journey times by private car are high, potentially leading to a modal shift. As the majority of mode shift is anticipated to occur during peak travel times, this package should result in a reduction in traffic volumes on the A82 southbound between May and September. It is envisaged that this package could encourage a significant proportion of people making trips between Caol and Fort William to transfer from private vehicle to bus during the busiest times in the summer peak period when the A82 southbound suffers the worst levels of congestion. Analysis of junction turning count data shows that there are approximately 2,700 vehicles on the A830 eastbound that turn right to travel towards the A82 southbound, and approximately 1,900 travelling on the A82 southbound from Torlundy toward Fort William (during the weekday 12pm-6pm period). Results from traffic modelling indicated a 10% mode shift is realistic and achievable (more information on the derivation of this percentage is included within the Appraisal Report) following the implementation of this package. Based on the observed traffic count information presented above, traffic volumes of the A82 between the A830 and Nevis Junction are anticipated to reduce by approximately 460 vehicles over the period 12pm to 6pm. From the modelling, achieving a 10% mode shift of trips from this area is anticipated to result in PM Peak bus journey time between Blar Mhor and Belford Roundabout approximately 70% faster than general traffic in peak summertime conditions. This is a significant journey time benefit within the context of the study area and the mode shift can therefore be seen as being realistically achieved. This package has been scored as a major positive benefit on this objective.	+++

Assessment against STAG Criteria		
Environment	This proposed package is likely to have a positive impact on quality of life, sustainable accessibility and safety by providing a sustainable alternative for users to travel to employment, education, healthcare and leisure activities, which has potential for improved safety on the transport network. It could also result in a beneficial impact on air quality and noise and vibration during the operational phase; however, this is uncertain at this early stage and modelling would be required for local air pollutants and greenhouse gases. The proposed package promotes a more sustainable use and management of the existing transport network. There are no designated sites within the immediate vicinity of the proposed package. The closest site is the Ben Nevis Special Area of Conservation and Site of Special Scientific Interest (SSSI) approximately 1.5km to the east. The SSSI is designated for its breeding bird and fly assemblage. Ben Nevis and Glen Coe National Scenic Area is also located approximately 1km to the east. There is potential for possible positive impacts on biodiversity as a result of a reduction in diffuse pollution on key receptors; however, the significance of impact is uncertain at this stage as the overall impact would depend on the footprint of the construction works required. There are two Scheduled Monuments within the vicinity of the proposed package, Inverlochy Castle (SM90172), immediately north-east of Lochy Railway Bridge and Fort William Fort (SM2174) to the south-west of An Aird roundabout. The proposed package is within the Battle of Inverlochy I and II Battlefields Inventory Boundaries. Consultation with Historic Environment Scotland would therefore be required. The proximity to the River Lochy and River Nevis means that parts of the proposed package is vulnerable to flooding. There is a sewage pumping station immediately southwest of the River Lochy Railway Bridge which is likely to be within the footprint of the proposed package. There is also a cemetery south of Inverlochy Castle, between Black Parks Road and the A82. Construction of an offline bus route has the potential for negative environmental impacts during construction and operation, for example on the local population (e.g. accessibility and construction noise and dust) and the water environment, soil, cultural heritage and landscape and visual amenity. It is therefore recommended that further environmental assessment is undertaken as the package design is progressed, to identify potentially significant location-specific environmental impacts and mitigation where appropriate. Overall, the cumulative effects of the proposed package on this criterion are uncertain at this stage, due to the potential negative effects described above. It is anticipated that mitigation would be able to avoid or reduce any potential negative environmental impacts.	?

Climate Change	This proposed package is likely to result in positive impacts on reducing greenhouse gas emissions and improving air quality in the operational phase. This is due to reduced transport-related emissions as it seeks to encourage a modal shift to more sustainable public transport forms. The infrastructure would be designed to be resilient to predicted impacts arising from current and future weather events and climatic conditions, and designed in accordance with current planning, design, engineering practice, and codes. A number of mitigation and adaptation measures, including sustainable drainage, would be considered at later design development stages to address potential risks. Positive impacts on all three climate change sub-criteria are therefore anticipated.	+
Health, Safety and Wellbeing	The NTS2[1] highlights that the transport system can help to improve the sustainability of placemaking if it can discourage people from owning or using cars. This would result in improvements to wellbeing by enhancing communities. The inclusion of a new bus link would result in mode shift from private car as bus journey times become more competitive, particularly during the peak summer months, increasing bus as a viable mode choice. Furthermore, encouraging a mode shift to public transport inherently results in more active journeys as users generally walk to the bus stops, which should improve health. The package could reduce the likelihood of an accident occurring as car use reduces, however, as there is not a particular Personal Injury Accident (PIA) or Killed or Seriously Injured (KSI) accident[2] issue within Fort William, any benefits are anticipated to be minor. However, the package has the potential to affect visual amenity given that the proposed route passes through green space close to the Great Glen Way. The proposal also includes two new river crossings which would have an associated negative impact on visual amenity. Due to the nature of the package, no impact is anticipated on access to health and wellbeing infrastructure. Given that the positive impacts on health, safety and wellbeing associated with this package outweigh the negative impacts on visual amenity, this package has been scored a minor positive against this criterion.	+

[2] Department for Transport, STATS19 Road Safety Data, 2019

Economy	A full economic assessment to calculate the Transport Economic Efficiency (TEE) of this package has not been undertaken at this stage of appraisal as the exact form of the proposals is not yet known. However, traffic modelling has been undertaken and it is anticipated that there would be journey time benefits to bus users of approximately 13 minutes in the peak summer period, which would result in an estimated benefit to bus passengers over a 60-year appraisal of approximately £10.8m. Whilst the provision of bus priority measures would reduce the capacity for general traffic, it is anticipated that a mode shift of 10% would occur, reducing traffic volumes on the route. The combined impact would result in a journey time benefit of 2.2 minutes for general traffic, equivalent to approximately £5.5m over a 60-year appraisal period. Despite the high costs associated with the construction of this package, there are significant benefits in terms of bus journey times and journey time reliability. Whilst these are unlikely to fully offset the cost of the proposed scheme, they would provide a viable alternative for locals and visitors to avoid the peak seasonal congestion within the area. On this basis, this package has been scored a moderate positive against this criterion.	++
Equality and Accessibility	There could be a slight beneficial impact associated with this package on Equality and Accessibility, with reduced bus journey times that could promote new operator investment in improved public transport network coverage, which in turn may also provide better comparative access to locations with employment, education, healthcare and leisure activities, however, this would require significant mode shift to improve the viability of the routes. As the routes within Fort William operate under subsidy this package is not anticipated to improve the affordability of the public transport network. It is therefore not anticipated that this package would have an impact on the accessibility or affordability of the active travel network. This package has therefore been scored a neutral against this criterion.	0

Deliverability	
Feasibility	The delivery of the new link adjacent to Black Parks Road is largely feasible at this stage, with the majority of the construction likely to take place parallel to the existing route. The feasibility of a connection between the north end of Black Parks Road to Caol as this would require a new structure over the River Lochy with associated earthworks and accommodation works. There is also a significant level change between the north and south side of the river and the tie in to the B8006 would need to be carefully considered, however, it is likely to be feasible. Similarly, the new structure at River Nevis is seen as feasible as the span is over a short distance and there is an existing structure in close proximity. The package could be taken forward by Highland Council.

Affordability	This package is anticipated to be a high-cost measure, with the majority of the cost associated with the delivery of new structures over the River Lochy and River Nevis. However, there may also be significant additional costs where land take is required to deliver a new link along the length of the existing Black Parks Road. There is also likely to be a requirement for funding for the operation and maintenance of the proposed package and to ensure enforcement of the new dedicated bus link. The affordability of the package would largely be dependent on the extent of land take and the size, number and nature of structures required.
Public Acceptability	There are public acceptability risks as this package would require construction within close proximity to the Great Glen Way and may require the re-routing of the Great Glen Way at the southern extent of the proposal. Additionally, re-routing buses along the residential streets within Inverlochy is likely to be met with some opposition from the public. However, there is also likely to be public support for the delivery of a new, reliable bus link. A reliable bus link would be seen as popular given that the package could deliver a faster and more reliable bus service for access to health, education and leisure opportunities. Bus users are expected to welcome this package and it is anticipated that it would encourage an increase in bus patronage.

Equalities Impact Assessment (EqIA)		
EqIA	This package would have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. This includes women, children and young people, older people, disabled people, religious groups and people from certain ethnic minority groups. By encouraging modal shift to more sustainable modes, this package could also contribute to improving local air quality. Improved health outcomes as a result of better air quality are of particular benefit to those who are more vulnerable to air pollution, including children, older people, disabled people and pregnant women. The package would reduce the severity of accidents through targeted infrastructure improvements and by encouraging modal shift away from private car, resulting in reduced accident risk due to reduced conflicts. Some protected characteristic groups are more likely to be involved in road accidents, for example, children as pedestrian casualties and young males involved as car drivers and as such would have positive impacts on these groups. Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived security. This is likely to provide some benefit to those for whom security is of particular concern including women, the LGBTQ+ community and those from religious backgrounds who are more subjectable to hate crime. The package would therefore be anticipated to have a minor positive impact on addressing this criterion.	+

Package 3 - A82 \ Nevis Terrace \ Middle Street Junction Bus Priority and Bus Station Upgrades				
Position in Sustainable Investment Hierarchy	1. Reducing the need to travel unsustainably	2. Maintaining and safely operating existing assets	3. Making better use of existing capacity	4. Targeted infrastructure improvements
Summary Rationale	Bus priority Infrastructure has the potential to have a positive impact on bus journey times, bus journey time reliability and mode shift as well as delivering benefits in terms of the environment, safety and accessibility. Elements of this package are specifically targeted at delivering faster and more reliable bus journey times for services accessing Fort William Bus Station, via Nevis Terrace, from the A82 and accessing the A82 from Middle Street. If this is achieved, it is anticipated that the attractiveness of bus as a mode of transport would increase, encouraging a mode shift from private car to bus, potentially delivering more reliable connections and improving integration between services. This package is also anticipated to improve the integration of local and longer distance services through relocation of the bus station. This should improve the attractiveness of public transport, particularly for multi-leg trips where integration is critical. This package is anticipated to improve the operational efficiency of bus services, particularly for services travelling between the A82 southbound and the bus station and between Middle Street and the A82 northbound, where congestion can be experienced during the peak summer periods. This package would also enhance the operational efficiency of all services that use the bus station as it would provide more direct access to and from the trunk road. These operational benefits are anticipated to enhance the attractiveness of services and encourage a mode shift from private car, reducing traffic volumes on the A82, positively contributing to the Transport Planning Objectives (TPOs) and STAG Criteria. The junction improvement element has the potential to deliver benefits to buses at this location, however, the provision of a wider package of bus priority measures would help to further improve bus journey times within the Lochaber area.			

Performance		Uncertain	No or negligible relationship	Major negative impacts	Moderate negative impact	Minor negative impact	Neutral	Minor benefit	Moderate benefit	Major benefit
TPOs	Journey Time Variability									
	Service Integration									
	Mode Shift									
STAG	Environment									
	Climate Change									
	Health, Safety and Wellbeing									
	Economy									
	Equality and Accessibility									
EqIA										

Description

This package would reconfigure the junction between the A82, Nevis Terrace and Middle Street, removing the central reserve to allow buses to turn right from Middle Street to the A82 and from the A82 to Nevis Terrace, providing access to the bus station for southbound A82 traffic. Buses from Middle Street would also be able to travel straight across the junction to Nevis Terrace and onto the bus station. The junction would be signalised to provide bus priority for these movements, removing any delay from this right turn movement.

Currently, buses on the A82 southbound travelling to the bus station must first travel south on the A82 to Belford Roundabout, complete a U-turn before travelling north on the A82 to access Nevis Terrace, and onto the bus station. Similarly, local services wishing to travel north on the A82 from Middle Street are currently required to turn left from Middle Street onto the A82 southbound, travel to Belford Roundabout before performing a U-turn to travel northbound on the A82. This package would remove the need for this U-turn in both instances.

In parallel to this, part of this package would include a new bus station located on the site of the current Nevis Terrace car park, adjacent to the A82. The inclusion of a new bus station at this location would circumvent the need for buses to travel via MacFarlane Way to the existing bus station location, improving access to the bus station to and from the trunk road network, whilst presenting the opportunity to improve the quality of the bus infrastructure.

Alignment with NTS2 Outcomes	The package would contribute to the following National Transport Strategy 2[1] (NTS2) outcomes: • Help deliver our net-zero target; • Promote greener, cleaner choices; • Enable us to make healthy travel choices; and • Help make our communities great places to live Within the Sustainable Investment Hierarchy, this package fits with reducing the need to travel unsustainably as increased bus priority may also result in a mode shift to sustainable modes of travel.

[1] Transport Scotland, National Transport Strategy: Protecting Our Climate and Improving Our Lives, 2020, https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf

Relevance and Cost

The delivery of bus priority measures is one mechanism that can help address the climate emergency and achieve the Scottish Government's targets to reduce car kilometres by 20% by 2030. They can also help to cut greenhouse gas emissions to net zero by 2045.

This package is particularly relevant to Fort William where significant A82 congestion during the summer peaks can negatively impact upon bus journey times and journey time reliability, and a mode shift is required to help alleviate the congestion.

Work undertaken in the identification of the Problems and Opportunities and the TPOs for the Lochaber Bus Partnership Fund (BPF) Study identified the extent to which peak seasonal traffic congestion is affecting bus journey times and journey time variability, particularly southbound on the A82. The provision of a package to improve bus journey times and journey time reliability is therefore critical to support mode shift and reduce the reliance on the private car.

The initial stages of the Lochaber BPF identified the lengthiest delays for traffic (including buses) was at the following locations:

- A82 southbound between the A830 and Nevis Junction;
- The A830 eastbound between Corpach and the A830 \ A82 Junction; and
- Between the A82 Belford roundabout and the A82 Belford Roundabout.

The southbound approach on the A82 to Belford Roundabout is an area identified as representing a point of delay during the summer peak, with queuing and congestion on approach delaying buses. Furthermore, the requirement for these services to undertake the U-turn and travel north toward Nevis Terrace adds to the journey time. This point of delay is highlighted in red in Figure 1overleaf.

Additionally, stakeholder and public feedback has noted that the existing bus station is of low quality. It is currently formed of a series of lean-to shelters and bus cages located on MacFarlane Way adjacent to Morrisons supermarket. The current configuration limits the quality of the facilities for passengers as there is limited space for movement within the shelters, limited seating and a limit on the amount of transport service information presented. Given the stations location, it can also attract anti-social behaviour. All of these elements combine to limit the attractiveness of the bus station.

As part of this package, a new bus station has been included, proposed to be built on the location of the existing Nevis Terrace car park. As part of the new bus station, it is proposed that it would include digital public transport information boards, bike lockers, formalised seating areas, toilets, a ticket office (or ticketing machines) and other passenger facilities (potentially including a café or showers for example). The inclusion of a new bus station, combined with the reconfiguration of the existing car park, would provide the opportunity to employ placemaking principles. Reconfiguring the area as a formal civic space would make the area more usable and visually attractive whilst helping to improve the visibility of the bus station within the town.

A modern bus station, combined with the application of placemaking, would increase the profile of the bus station in the town and improve the attractiveness of bus as a mode of transport. It

would also circumvent the need for buses to travel on a circuitous route between the A82 and the bus station. Instead, the bus station would be directly accessible from the A82 at the A82 \ Nevis Terrace \ Middle Street junction. This is also shown on Figure 1.

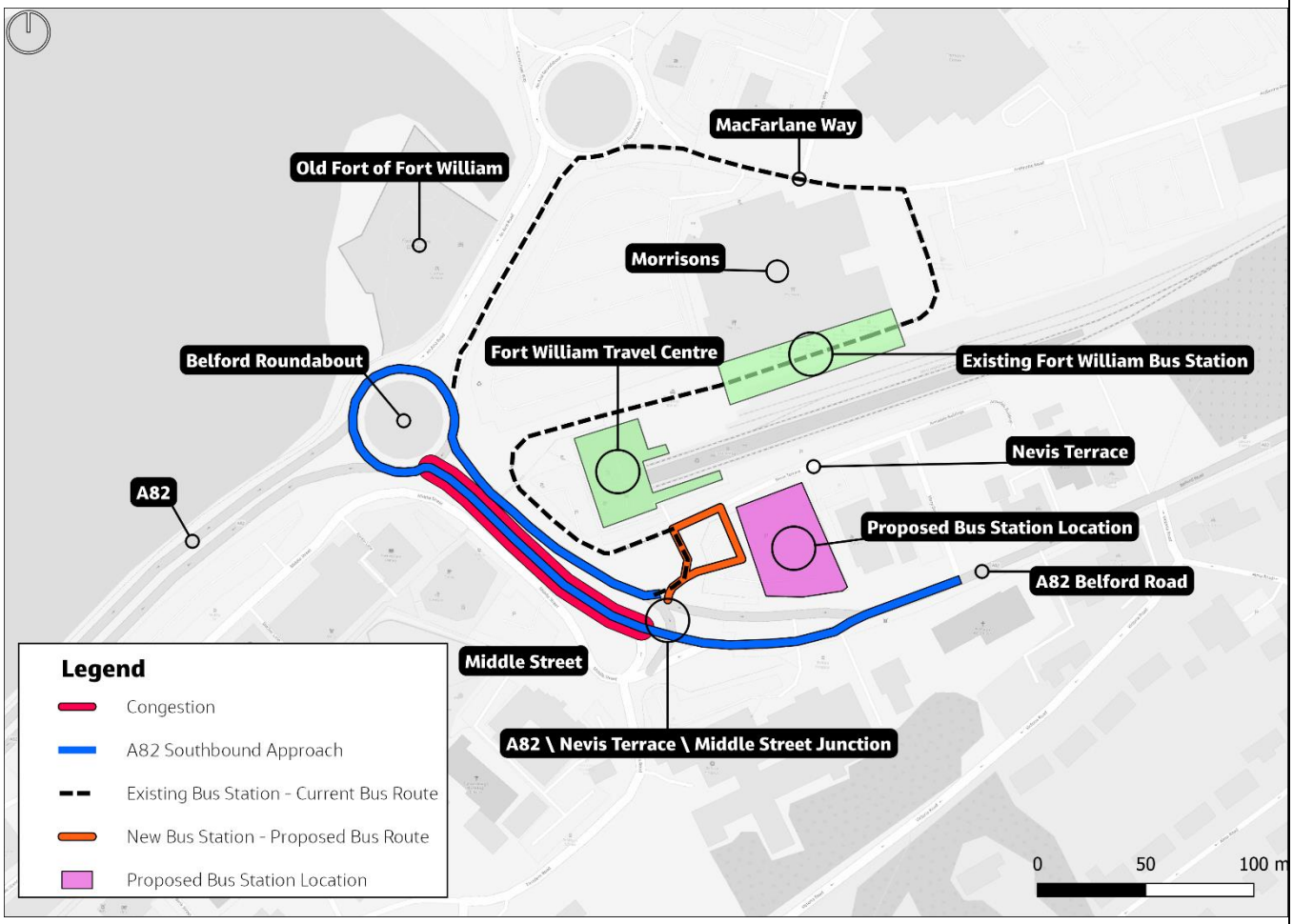

Figure 1 – Bus access to Fort William train station from the A82 southbound

This package is estimated to cost approximately £8-10m, however, there is also likely to be a requirement for funding for the operation and maintenance of the proposed package and to ensure enforcement of the bus priority movements.

Transport Planning Objectives			
TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	Through the provision of bus priority signals, this package is anticipated to reduce conflicts between buses and general traffic, reducing delay, delivering journey time savings and improving journey time reliability for buses at the A82 / Nevis Terrace / Middle Street Junction, mainly during peak periods. This package would improve journey times for buses accessing Nevis Terrace and the bus station from the A82 southbound and services exiting Middle Street to the A82 northbound. Whilst this package would provide journey time benefits for the majority of services within Fort William, it wouldn't have a direct impact on journey times between the A830 at Corpach and Belford Roundabout. It does however remove the need for services to travel through Belford Roundabout to access the bus station, where queuing can occur on approach. It would also improve bus journey times by providing more direct access to the bus station from the A82. The package would reduce journey times for southbound services accessing Fort William Bus Station, by up to two minutes during peak periods, whilst also providing journey time savings for local services routing from Middle Street to the A82 northbound of between one and two minutes. This package has therefore been scored a minor positive against this objective, as it would contribute to an overall journey time reduction for buses on this corridor.	+

TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.	The provision of bus priority at the A82 / Nevis Terrace / Middle Street Junction, combined with a new bus station, would encourage more local services to use the bus station, helping to reduce barriers between local and long-distance services and improve integration between services. A new bus station would provide a convenient and easy to access location for both local and long-distance services immediately adjacent to the A82. Given that all bus services operating in Fort William currently make use of the A82 in the vicinity of the proposed location, combined with the introduction of bus priority measures to access the new bus station, there is significant potential for an increase in the number of local services stopping within 100m of longer distance service stopping points to take place. This package is therefore scored as a major positive against this objective.	+++
TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	Through the provision of bus priority signals, this package is anticipated to reduce conflicts between buses and general traffic, allowing buses to avoid the congestion on approach to Belford Roundabout. The package is therefore anticipated to reduce delay for bus services, delivering journey time savings and improving journey time reliability at the A82 / Nevis Terrace / Middle Street Junction, mainly during peak periods. Reducing journey times and improving journey time reliability for buses entering the bus station and exiting Middle Street should encourage a degree of mode shift to public transport leading to a reduction in traffic volumes on the A82 southbound, particularly during peak periods when congestion is most severe. Whilst this package on its own would not achieve the desired traffic volume reduction of 10%, it is anticipated to contribute towards it and has therefore been scored a minor positive against this objective.	+

Assessment against STAG Criteria		
Environment	There are likely to be minor positive effects on the environment resulting from this package. There are few environmental receptors in the vicinity of the proposed works and the environmental effects are not expected to be significant. However, any construction works associated with this package would need to avoid any negative effects (such as construction dust, noise and vibration, impacts on accessibility or safety) on St Mary's Church Category A Listed Building on the A82 and the Ewen Maclachlan Obelisk and Gateway Category B Listed Building in the Craigs Burial Ground next to the A82. The introduction of bus priority may encourage mode shift which could reduce congestion once this package is operational. This may contribute to a decrease in associated greenhouse gas emissions during the operation of the proposed measures, thus contributing to the Scottish Government's net zero emissions target. It also has the potential to improve access to the Fort William Fort Scheduled Monument immediately north of the Belford Roundabout. Other environmental benefits are likely to comprise minor reductions in local air pollution and greenhouse gases due to reduced congestion as people transfer mode from private car to public transport. Overall, the cumulative effects of the proposed package on the environment criterion are expected to be minor positive. It is anticipated that mitigation would be able to avoid or reduce any potential negative environmental impacts.	+
Climate Change	In the short-term, greenhouse gas emissions would increase due to construction activities undertaken to deliver the package, including indirect emissions from the manufacture and transportation of materials as well as from emissions from fuel combusted by construction plant and vehicles. In the long-term, bus priority measures have the potential to improve the flow of traffic and increase the attractiveness of buses as a mode of transport and could encourage a modal shift away from private car use. The infrastructure would be designed to be resilient to predicted impacts arising from current and future weather events and climatic conditions, and designed in accordance with current planning, design, engineering practice, and codes. A number of mitigation and adaptation measures, including sustainable drainage, would be considered at later design development stages to address potential risks. Positive impacts on all three climate change sub-criteria are therefore anticipated.	+

Health, Safety and Wellbeing	The NTS2[1] highlighted that the transport system can help to improve the sustainability of placemaking if it can discourage people from owning or using cars, which may improve wellbeing by enhancing communities. The provision of a new bus station and the reconfiguration of the existing car park would provide the opportunity to enhance the sense of place within the town, which could encourage more walking and cycling and therefore improve health. Furthermore, the inclusion of bus priority measures may result in a degree of mode shift from private car as bus journey times become more competitive, which may therefore enhance placemaking. Furthermore, encouraging a mode shift to public transport inherently results in more active journeys as users are required to walk to the bus stops, which should improve health. The package could reduce the likelihood of an accident occurring as car use reduces, however as there is not a particularly Personal Injury Accident (PIA) or Killed or Seriously Injured (KSI) accident[2] issue within Fort William, any benefits are anticipated to be minor. Furthermore, if mode shift to public transport is achieved following the introduction of bus priority measures, there could be benefits in terms of perceived security concerns, such as for vulnerable people travelling alone. The package is unlikely to affect visual amenity. Due to the nature of the package, no impact is anticipated on access to health and wellbeing infrastructure. This package has therefore been scored a minor positive against this criterion.	+
Economy	A full economic assessment to calculate the Transport Economic Efficiency (TEE) of this package has not been undertaken at this stage of appraisal as the exact form of the junction is not yet known, however, a high-level assessment has been undertaken and it is anticipated that there would be delay to general traffic, leading to disbenefits in the order of £3m over a 60-year period. There are anticipated to be benefits to bus users, with journey time savings of approximately 30 seconds in the off peak and up to 2 minutes in the peak, which would result in an estimated benefit to bus passengers over a 60-year appraisal of between £1m and £2m. Due to the scale of this package, it is not anticipated to result in wider economic impacts. This package has therefore been scored a moderate negative against this criterion.	--

[2] Department for Transport, STATS19 Road Safety Data, 2019

Equality and Accessibility	There could be a slightly beneficial impact associated with this package, with an improved bus station and bus priority measures resulting in reduced bus journey times that may support operator reinvestment in improved public transport network coverage, which may also provide better comparative access to locations with employment, education, healthcare and leisure activities, however, this would require significant mode shift to improve the viability of the routes. The relocation of the bus station should also improve integration between local and longer-distance services, which may encourage muti-leg public transport journeys. However, as the routes within Fort William operate under subsidy this package is not anticipated to improve the affordability of the public transport network and it is unlikely to result in additional services being provided. As part of the package, the existing car park could be reconfigured as an attractive public space with direct routes helping to better connect the town centre and the bus station. In creating the routes, modern design standards would be employed that would cater for the visually or mobility impaired, helping to improve the general accessibility of the bus station. It is not anticipated that this package would have an impact on the accessibility or affordability of the active travel network. Overall, this package has been scored a minor positive against this criterion.	+

Deliverability	
Feasibility	This package appears to be largely feasible at this stage, with the majority of the junction improvements likely to take place within the existing road boundary. The targeting of bus priority measures, evaluation of the business case and subsequent construction are in common practice and therefore raise no concerns regarding feasibility. A new bus station located within the existing Nevis Terrace car park also appears feasible, with the car park providing an ample amount of space to provide a new bus facility. The junction improvements could be taken forward by Transport Scotland, in partnership with the Highland Council where the package affects the local roads of Nevis Terrace, MacFarlane Way and Middle Street. The Highland Council could deliver the new bus station.
Affordability	This package is anticipated to be a medium-cost measure. The Scottish Government has committed over £500m to the BPF and so the delivery of a standalone bus priority junction and new bus station within the initial 5-year period of funding is deemed to be affordable.

Public Acceptability	There are public acceptability risks, particularly amongst non-bus users, especially if bus use remains low, as the introduction of bus priority signals at this location is likely to result in additional delay to non-bus users. Bus users are expected to welcome this package and it is anticipated that it would encourage an increase in bus patronage. The loss of parking spaces in the Nevis Terrace car park is likely to be seen as undesirable by the public. However, the loss of car parking could be offset through the provision of new parking spaces in the vicinity of the existing bus station and could help to incentive mode shift to public transport.

Equalities Impact Assessment (EqIA)		
EqIA	Many protected characteristic groups such as children, younger people, women, ethnic minority groups, disabled people, religious groups and older people are less likely to own a car and more likely to depend on public transport to make their journeys and access important services such as education, employment, healthcare and shopping. Improving public transport accessibility is particularly important for boosting access to services for women and disabled groups, who are less likely to take trips by private car, and often have to "chain" trips together to meet the demands of their everyday lives. Improved public transport infrastructure at the bus station would provide accessibility benefits for disabled people, with new facilities being designed to inclusive design standards. All travellers with protected characteristics would benefit from improved passenger facilities, but there would be a minor positive impact from fewer barriers to travel for those with reduced mobility. Improved interchange facilities could decrease the distance between public transport services. Improved facilities may also benefit those with impaired vision or hearing and those with autism. Improving the quality of facilities at the bus station would improve perceived security. This is likely to provide some benefit to those for whom security is of particular concern including women, the LGBTQ+ community and those from religious backgrounds who are more subjectable to hate crime. The package would therefore be anticipated to have a minor positive impact on addressing this criterion.	+

Package 4 - Mini Mobility Hubs				
Position in Sustainable Investment Hierarchy	1. Reducing the need to travel unsustainably	2. Maintaining and safely operating existing asset	3. Making better use of existing capacity	4. Targeted infrastructure improvements

Summary Rationale

Tourism contributes to a large part of the study area's economy with over 15% of its industry made up of the 'Accommodation and Catering' sector, over double the national average.

Seasonal congestion, associated with an increase in visitors to the area during the summer months, has long been recognised as an issue in Fort William. During the period June to August of 2018/19, there was on average a 24 % increase in average daily traffic (ADT) on the A82 when compared with the other months of the year.

To sustainably cater for the increased number of visitors to the area, there is an opportunity to accommodate these tourist movements by sustainable and active means. The introduction of mini mobility hubs at key tourist attractors that include bus shelters, cycle hire, cycle storage and other active travel related facilities, such as information boards or pillars, public bike pumps and tool kits, water bottle filling stations and benches, would support and encourage an increase in the number of trips made by sustainable modes. Key to the success of these hubs would be ensuring integration with frequent bus services and rail stations, where possible.

It is anticipated that the attractiveness of bus, rail and active travel modes would increase following the delivery of mini mobility hubs, increasing travel choice within the area, particularly for tourists, leading to a reduction in the reliance on travel by private car. This in turn would reduce traffic volumes and congestion on the A82 and the A830. This reduction would improve bus journey times and journey time reliability leading to a positive contribution against the journey time and mode shift objectives (TPO1 and TPO3 respectively).

This package is therefore anticipated to improve the operational efficiency of bus services travelling between locations to the north and west of Fort William, such as Spean Bridge, Roy Bridge and Glenfinnan for example, and Fort William itself, with the potential to deliver a mode shift to bus, rail and active travel.

Additionally, any mode shift from private car to sustainable modes would result in improved health and safety through a reduction in road traffic which should reduce the number of road traffic accidents taking place. Mode shift would also reduce vehicle emissions and increase personal health thereby helping to address the STAG criterion regarding Health Safety and Wellbeing.

Although it is recognised that revenue-based services are out of scope for the BPF study, the success of the mobility hubs, and therefore the associated benefits, could be bolstered by the introduction of a highly competitive, integrated ticketing offer covering user costs for parking and multi-modal travel between hubs. The benefits of this package would also be enhanced if delivered in conjunction with the package related to bus priority on the A830 and the A82.

Performance		Uncertain	No or negligible relationship	Major negative impacts	Moderate negative impact	Minor negative impact	Neutral	Minor benefit	Moderate benefit	Major benefit
TPOs	Journey Time Variability									
	Service Integration									
	Mode Shift									
STAG	Environment									
	Climate Change									
	Health, Safety and Wellbeing									
	Economy									
	Equality and Accessibility									
EqIA										

Description

This package provides mini mobility hubs that would be served by bus (and rail where possible) primarily targeting visitors to the area.

Currently, visitors often travel to the many popular tourist attractions within the study area by private car, with a reliance on the A82 and the A830 for travel between locations. The A82 southbound in particular serves as the key route for travel toward Fort William from the west and north. During the peak summer months, the route is heavily congested, leading to unreliable journey times for all traffic, including buses.

Mini mobility hubs would be located at popular tourist attractions, such as Glenfinnan, Corran Ferry, Neptunes Staircase, Nevis Range and Glen Nevis Lower Falls targeting tourist trips. Each location would be served by bus services and have active travel facilities, including cycle hire stations, to enable interchange between modes, providing a network of sustainable travel choices for travel between visitor attractions. Where possible, the locations would incorporate direct access to the train stations at Glenfinnan, Locheilside, Corpach, Banavie, Spean Bridge, Roy Bridge and Fort William.

This package could be implemented in conjunction with either Package 1 or Package 2, which provide bus priority between Caol and Fort William, increasing the attractiveness of travelling by public transport. Furthermore, the mini mobility hubs would not provide parking for private vehicles and would focus on providing sustainable modes of travel. These hubs could include the following:

- Bus stopping location built to a modern standard;
- Secure Cycle Shelter(s);
- Bus Shelter(s);
- Parking / loading restrictions;

- Public Use Bike Tools and Pumps;
- Delivery Lockers;
- Public Information Pillars;
- Water Fountain or Bottle Station; and
- Bins

The locations of mini mobility hubs ar shown in Figure 1 and Figure 2.

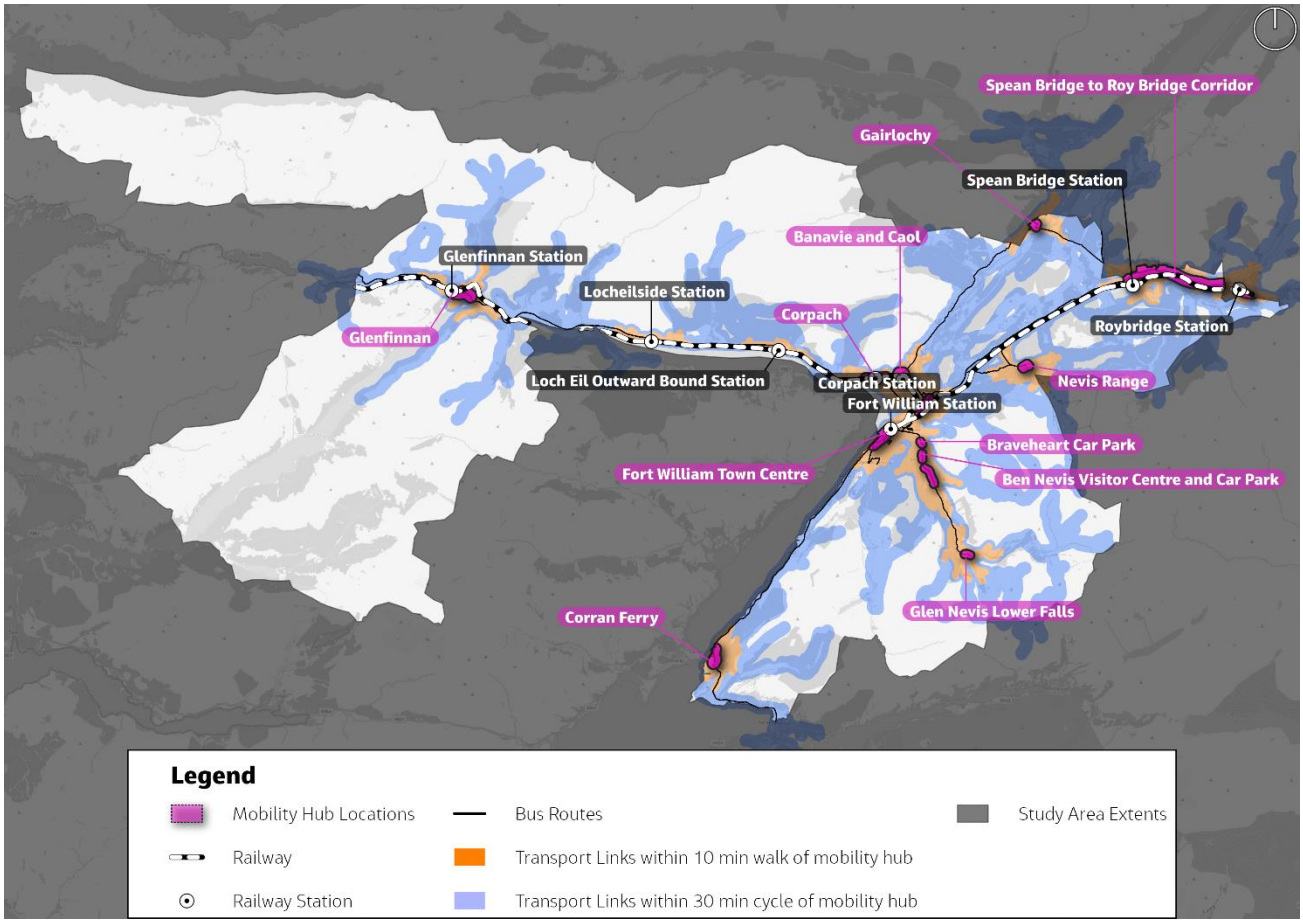

Figure 1 Proposed Mobility Hub Locations within the study area

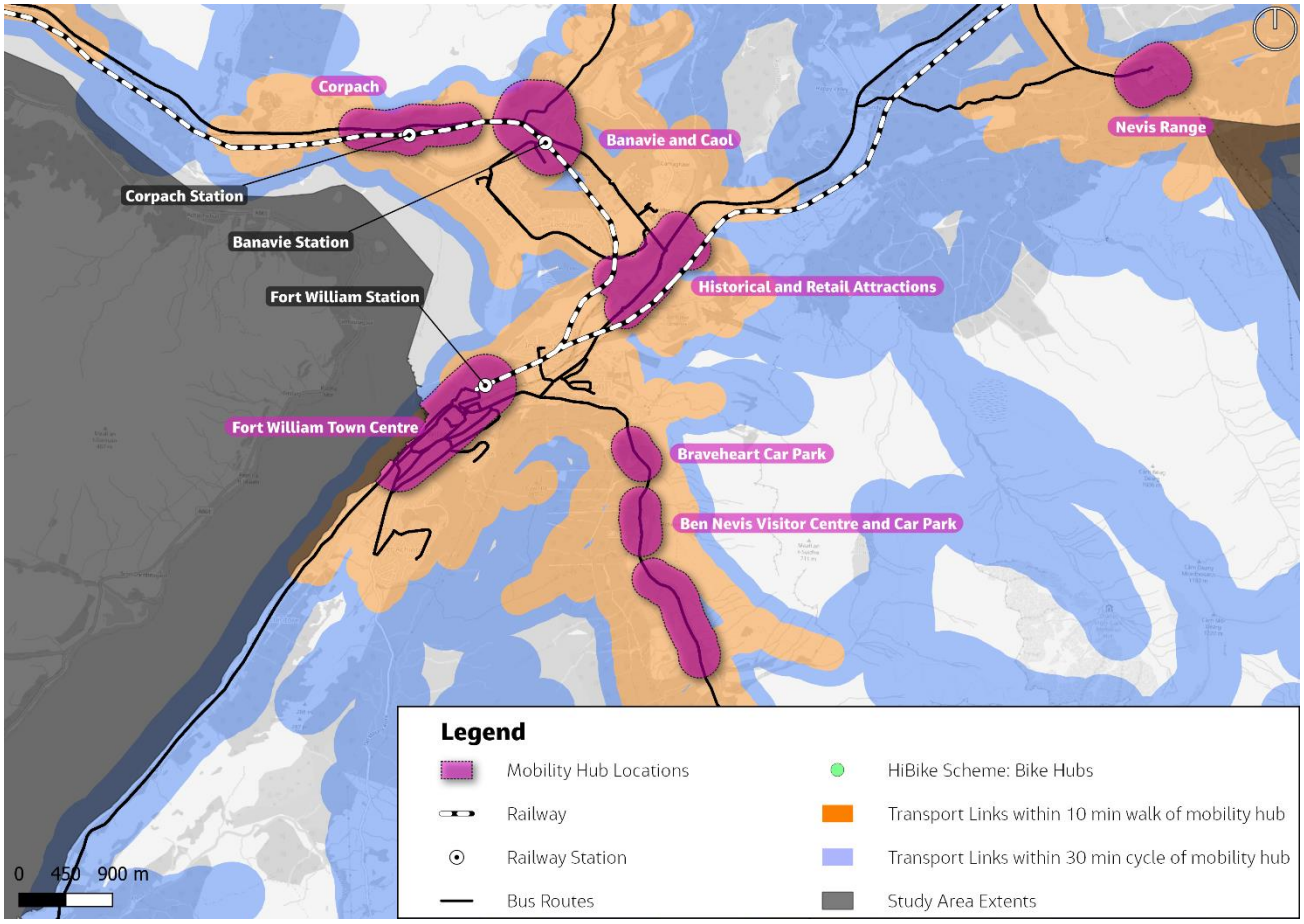

Figure 2 Proposed Mobility Hub Locations within the Fort William Area

Alignment with NTS2 Outcomes

The package would contribute to the following National Transport Strategy 2[1] (NTS2) outcomes:

- Help deliver our net-zero target;
- Promote greener, cleaner choices;
- Enable us to make healthy travel choices; and
- Help make our communities great places to live

Within the Sustainable Investment Hierarchy, this package fits with reducing the need to travel unsustainably as improved bus and active travel choices could also result in a mode shift to sustainable modes of travel.

[1] Transport Scotland, National Transport Strategy: Protecting Our Climate and Improving Our Lives, 2020, https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf

Relevance and Cost	The delivery of mini mobility hubs would help to address the climate emergency and achieve the Scottish Government's targets to reduce car kilometres by 20% by 2030. They can also help to cut greenhouse gas emissions to net zero by 2045. The provision of sustainable travel alternatives within Fort William and the surrounding area may encourage those travelling to Fort William for leisure purposes to leave their cars at home, as they have a viable alternative to private car when they arrive in Fort William. This package is therefore not only relevant to short distance trips within the Lochaber area but could also contribute to a reduction in long distance trips as visitors may choose to travel to the region by public transport. This package is particularly relevant to Fort William where significant congestion on the A830 eastbound and A82 southbound can occur during the summer peaks, negatively impacting upon bus journey times and journey time reliability, with a mode shift required to help alleviate congestion. Work undertaken in the identification of the Problems and Opportunities and the TPOs for the Lochaber Bus Partnership Fund (BPF) Study identified the extent to which peak seasonal traffic congestion is affecting general traffic journey times and journey time variability on these routes. This impacts directly affect buses where congestion can lead to unreliable services, with buses arriving later than the advertised timetabled time, and can result in long journey times. The provision of mini mobility hubs to encourage mode shift to more sustainable means would primarily contribute to reduced congestion and improved journey time and journey time reliability. This package is estimated to cost approximately £4m to £5m.

Transport Planning Objectives			
TPO1	To reduce average southbound bus journey times within the six-hour peak period (12pm to 6pm), May to September, between the A830 at Corpach and Belford Roundabout to within 2 minutes (20%) of the 2019 annual average journey time by 2026.	Tourist traffic is known to be a key issue within the area, with parking a significant problem at the key tourist attractions. The provision of mini mobility hubs at key locations is anticipated to encourage visitors to travel around the region's tourist attractions by sustainable means. Mobility hubs would provide a viable alternative for visitors to travel to, from and between attractions without having to rely on their private car. This should therefore encourage a mode shift, reducing traffic volumes on the A82 and A830, improving journey times for buses, and general traffic, during the summertime peak period between May and September. Furthermore, the provision of a viable alternative to private car to travel around the Lochaber area may encourage visitors to leave their cars at home and travel to the area by public transport as they would no longer need their car to visit the various tourist attractions in the area. This would further reduce the number of vehicles on the A82 and A830, improving journey times. Whilst this package would provide journey time benefits for bus services on the A82 if mode shift were to be achieved, it is recognised that the delivery of mini mobility hubs would not fully rectify the issue around congestion. The level of mode shift anticipated to be delivered by this package could therefore be significantly impacted by the congestion experienced on the A830 and A82 as bus services would continue to be unreliable. It is therefore proposed that this package would be delivered in conjunction with the package that provides bus priority on the A830 eastbound and A82 southbound. In doing so, bus journey times would be more reliable, which should make this package more attractive to tourists, encouraging a mode shift. If mode shift is achieved, this package should positively contribute to this objective through reducing the number of vehicles using the trunk road network. This package has therefore been scored a minor positive against this objective as it would contribute to an overall journey time reduction for buses on this corridor, however, significant benefits could be achieved when combined with the bus priority package.	+

TPO2	Improve integration between local and long bus services, with 80% of local services stopping points being within 100m of longer distance stopping points by 2026, compared to a 2019 service baseline.	The provision of mini mobility hubs has the potential to improve integration between local and long-distance bus services as mini mobility hubs represent new stopping points for buses. Introducing new stops would improve the likelihood of local services stopping within 100m of longer distance stopping points. This would improve for integration between local and long-distance bus services. However, it is unlikely that longer distance services would utilise the hubs as stopping points, as they primarily target visitors already based in the area, helping to support and enable shorter distance trips between local destinations. This package has therefore been scored as neutral against this objective.	0
TPO3	Reduce traffic volumes within the six-hour peak period (12pm to 6pm) between May and September by 480 vehicles (10%) by 2030 when compared with the 2019 August baseline traffic volumes, on the A82 southbound between the A830 and Nevis Junction by encouraging mode shift to sustainable modes.	Tourist traffic is known to be a key issue within the area, with parking a significant problem at the key tourist attractions. Through the provision of mini mobility hubs, this package has the potential to increase the attractiveness of bus by integrating different modes of travel, enabling new sustainable connections for onward travel. The introduction of cycle hire stations would further encourage integration of different modes, facilitating onward travel by bike, whilst providing an option to connect with other mobility hubs, bus or train services. By better connecting and integrating bus, bike and rail routes, and promoting the mobility hubs with tourists, there should be a mode shift away from private car with a corresponding reduction in traffic particularly during times of peak congestion where journey times by private car are high. Furthermore, the provision of a viable alternative to private car to travel around the Lochaber area may encourage visitors to leave their cars at home and travel to the area by public transport as they would no longer need their car to visit the various tourist attractions in the area. This would further reduce the number of vehicles on the A82 and A830, improving journey times. As this package is targeting tourist traffic, the majority of mode shift would occur during the peak tourist season. This package is therefore anticipated to reduce traffic volumes and congestion during the summer peak period, May to September. It is recognised that this package on its own would not make a significant impact on mode shift, however when combined with bus priority measures, a larger percentage of tourists may consider switching mode as buses can bypass the remaining congestion. This package has therefore been scored as minor positive against this objective as a standalone package.	+

	Assessment against STAG Criteria	
Environment	This proposed package is likely to have a positive impact on quality of life, sustainable accessibility and safety by providing a sustainable alternative for visitors accessing key tourist destinations, which has potential for improved safety on the transport network. It could also result in a beneficial impact on air quality and noise and vibration during the operational phase; however, this is uncertain at this stage and modelling would be required to determine the impact of this package on local air pollutants and greenhouse gases. The proposed package promotes a more sustainable use and management of the existing transport network. Gairlochy, Spean Bridge and Roybridge Stations and the Spean Bridge to Roy Bridge Corridor are within Parallel Roads of Lochaber Site of Special Scientific Interest (SSSI). The bus routes to Corran Ferry, Glen Nevis Falls and Glenfinnan Station are immediately adjacent to Ach an Todhair, Ben Nevis and Loch Shiel SSSIs, respectively. There are two Special Areas of Conservation (SAC) within close proximity to the study area: Ardgour Pinewoods and Ben Nevis. Loch Shiel and Moidart and Ardgour Special Protection Areas (SPA) are in close proximity to Glenfinnan Station. The study area is within Loch Shiel National Scenic Area (NSA), south of Glenfinnan Station. The study area is also within Ben Nevis and Glen Coe NSA including the bus route and mobility hubs from Braveheart Car Park to Glen Nevis Lower Falls. It is likely there would be adverse impacts on biodiversity and landscape during construction. However, these are unlikely to result in significant adverse effects if suitable mitigation measures are implemented. There is potential for possible positive impacts on biodiversity as a result of a reduction in diffuse pollution on key receptors; however, the significance of impact is uncertain at this stage as the overall impact would depend on the footprint of the construction works required. There are numerous listed buildings (grade A, B and C) within the study area. There are also four Scheduled Monuments: Inverlochy Castle (SM90172), Fort William Fort (SM2174), Caledonian Canal, Corpach to Banavie (SM6491) and Old House of Keppoch, motte 250m SE of Keppoch (SM6323). The study area is within the Battle of Inverlochy I and II and Battle of Mulroy Battlefields Inventory Boundaries. With the implementation of suitable mitigation measures, it is unlikely that the proposed package would cause significant adverse effects. Depending on the exact location of the mini mobility hubs, there is potential for negative environmental impacts during construction and operation, for example on the local population (e.g. accessibility and construction noise and dust) and the water environment, soil, cultural heritage and landscape and visual amenity. It is therefore recommended that further environmental assessment is undertaken as the package design is progressed, to identify potentially significant location-specific environmental impacts and mitigation where appropriate. It is anticipated that mitigation would be able to avoid or reduce any potential negative environmental impacts.	?

	Overall, the cumulative effects of the proposed package on the environment criterion are uncertain at this stage, due to the potential negative effects described above. It is anticipated that mitigation would be able to avoid or reduce any potential negative environmental impacts. 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 location.	
Climate Change	This proposed package is likely to result in positive impacts on reducing greenhouse gas emissions and improving air quality in the operational phase. This is due to reduced transport-related emissions, as it seeks to encourage a modal shift to more sustainable public transport forms. The delivery of mini mobility hubs would help to address the climate emergency and achieve the Scottish Government's targets to reduce car kilometres by 20% by 2030. They could also help to cut greenhouse gas emissions to net zero by 2045. The infrastructure would be designed to be resilient to predicted impacts arising from current and future weather events and climatic conditions, and designed in accordance with current planning, design, engineering practice, and codes. A number of mitigation and adaptation measures, including sustainable drainage, would be considered at later design development stages to address potential risks. Positive impacts on all three climate change sub-criteria are therefore anticipated.	+
Health, Safety and Wellbeing	The NTS2[1] highlighted that the transport system can help to improve the sustainability of placemaking if it can discourage people from owning or using cars, which may improve wellbeing by enhancing communities. The delivery of new mobility hubs may result in mode shift from private car as bus journey times become more attractive, which may therefore increase bus as a viable mode choice. Including cycle hire and bike storage at the mobility hubs, could lead to an increase in the uptake of cycling as a mode of travel to or from the hubs, reducing the number of private vehicles on the road with additional benefits associated with improved air quality, health and wellbeing. The package could also reduce the likelihood of an accident occurring if car use reduces, however as there is not a particularly Personal Injury Accident (PIA) or Killed or Seriously Injured (KSI) accident issue within Fort William, any benefits are anticipated to be minor. Overall this package has been scored a minor positive against this criterion.	+

Economy	A full economic assessment to calculate the Transport Economic Efficiency (TEE) of this package has not been undertaken at this stage of appraisal as the exact form of the proposals is not yet known and the impact on mode shift would need to be further explored. Given the nature of the package, this package is anticipated to deliver minor benefits in terms of both mode shift and journey time savings and is therefore only anticipated to provide minor journey time savings. This package has therefore been scored a minor positive against this criterion.	+
Equality and Accessibility	There could be a slight beneficial impact associated with this package on Equality and Accessibility, as public transport network coverage could improve as additional services stop at the mobility hubs, which in turn may also provide better comparative access to locations with employment, education, healthcare and leisure activities. As the routes within Fort William operate under subsidy this package is not anticipated to improve the affordability of the public transport network. New bike storage and cycle hire facilities would also enable new travel options for more people across a wider area. This in turn would create new opportunities for people to access key locations by cheap, accessible means, particularly where there are high quality cycle routes, improving equality. It is anticipated that this package would have a marginal positive impact on the affordability of travel as bike hire is a relatively low-cost package when compared to travel by either bus or car. Overall however, this package has been scored as neutral against this criterion.	0

Deliverability	
Feasibility	The delivery of mini mobility hubs is largely feasible at this stage, with the construction likely to take place along the existing alignment of the A82, A830, Glen Nevis Road and within Fort William. However, the delivery of the mobility hubs would require additional land take throughout the study area, and this may result in issues depending on ownership. The package could be taken forward by Transport Scotland, in partnership with The Highland Council and HITRANS.
Affordability	This package is anticipated to be a low to medium cost measure, with costs expected to be higher at those locations where more extensive land take is required to deliver a hub. There is also likely to be a requirement for funding for the operation and maintenance of the proposed package.

Public Acceptability	There is likely to be significant public support for the delivery of new mobility hubs aimed at catering for tourist trips and reducing the volume of traffic on roads within the study area during the peak summer period, with the facilities providing sustainable travel facilities for local residents also. The mobility hubs would also provide additional opportunities for cyclists, allowing part of their journeys to be made by bike through the provision of safe cycle storage at key locations. Integration with bus and rail services would also encourage more trips to be made by public transport. Overall, any reduction in traffic during the peak season is likely to be seen as positive by the general public.

Equalities Impact Assessment (EqIA)		
EqIA	This package would have a positive impact on those who are less likely to have access to a car and are more likely to depend on public transport to make their journeys. This includes women, children and young people, older people, disabled people, religious groups and people from certain ethnic minority groups. By encouraging modal shift to more sustainable modes, this package could also contribute to improving local air quality. Improved health outcomes as a result of better air quality are of particular benefit to those who are more vulnerable to air pollution, including children, older people, disabled people and pregnant women. The package could reduce the severity of accidents through targeted infrastructure improvements and by encouraging modal shift away from private car, resulting in reduced accident risk due to reduced conflicts. Some protected characteristic groups are more likely to be involved in road accidents, for example, children as pedestrian casualties and young males involved as car drivers and as such would have positive impacts on these groups. Mode shift to sustainable modes would make paths, stops, stations and services less isolated and this, accompanied by improved quality of facilities would improve perceived security. This is likely to provide some benefit to those for whom security is of particular concern including women, the LGBTQ+ community and those from religious backgrounds who are more subjectable to hate crime. The package would therefore be anticipated to have a minor positive impact on addressing this criterion.	+