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A9 North Kessock to Tore

STAG Part 1 Appraisal

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STAG Part 1 Appraisal

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WSP

7 Lochside View
Edinburgh Park
Edinburgh, Midlothian
EH12 9DH

Phone: +44 131 344 2300

Fax: +44 131 344 2301

WSP.com

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Executive summary

During 2020, Transport Scotland appointed WSP through its Development Management and Road Safety Services (DMRSS) Framework, to undertake a study which assessed and reported on the safety and operation of the A9 between North Kessock and Tore Roundabout. This study sought to identify existing problems or opportunities for improvement. The study considered the safety and operational aspects of the corridor and the junctions, including the impact of future traffic growth in the wider area in the context of the strategic role the A9 plays for connectivity to the north of Scotland. The study has reviewed both current and future operations, taking account of committed developments within the surrounding area and has been undertaken in accordance with Scottish Transport Appraisal Guidance (STAG).

This report represents the Part 1 Appraisal stage of the STAG process, which is a preliminary appraisal of all the options. The aim of this study was to:

- Develop and evidence the rejection or retention of options derived in the STAG Initial Appraisal: Case for Change Report; and
- Undertake additional stakeholder engagement and public consultation that enables appropriate local representation to support or oppose the options established during the preliminary appraisal selection process.

Of the initial 40 options established in the Case for Change, 8 were subsequently sifted out prior to the Part 1 Appraisal. More detail on this is found in Chapter 2. In this Part 1 Appraisal, a qualitative assessment of the remaining 32 options was undertaken. The qualitative appraisal resulted in scoring which accords with that defined within STAG, utilising a seven-point scale covering the following criteria:

- Transport Planning Objectives (TPOs);
- Scheme objectives;
- Policy alignment review;
- STAG criteria;
- Affordability;
- Feasibility; and
- Acceptability.

These criteria provide a framework to ensure all impacts are considered in the context of national, regional and local objectives. The Part 1 Appraisal was underpinned by a stakeholder and public engagement exercise capturing the views of people from a variety of backgrounds as a means of informing acceptability scoring.

A total of 32 options were scored fully against all the STAG criteria. All of the options considered in the Part 1 Appraisal rested within the following categories:

- Speed Reduction;
- Junction Improvements;
- Layout Improvements;
- Prohibition of Turns;
- Public Transport; and
- Non-Motorised Users.

The Part 1 Appraisal recommended 15 of the options are progressed to Detailed Appraisal, with four options discounted from the process as these have been committed for delivery by Transport Scotland. These are detailed in Appendix D. One of these committed options, to provide street lighting at Munlochy Junction, rendered the option for solar road studs superfluous and this has been removed from the appraisal. Ten further options were rejected due to their negative impact against the TPOs and STAG criteria.

The two safety camera options have been neither recommended nor rejected. Across Scotland, safety cameras are deployed through the Scottish Safety Camera Programme (SSCP) primarily where they have the greatest potential to reduce injury collisions and where there is evidence of both collisions and speeding. This is in accordance with criteria contained in the SSCP Handbook. This can be viewed at: https://www.transport.gov.scot/publication/scottish-safety-camera-programme-handbook/

An annual site prioritisation process is undertaken each year to determine new safety camera sites across the road network. This national exercise acts to ensure the right camera technology is in the right place at the right time. It involves a range of partners including the three regional safety camera units, all 33 road authorities and Police Scotland, and acts to identify potential new camera sites which meet the minimum criteria, while at the same time assessing the performance of existing enforcement strategies.

Those options retained for progression (excluding those already committed) include:

- Amend road signage for visitors and tourists;
- Activated warning signs, advising mainline traffic of vehicles waiting to join the A9 from the side roads;
- Prohibit u-turns at intermediate junctions and Munlochy Junction;
- Prohibit all right turns at Munlochy Junction;
- Prohibit right turn from B9161 at Munlochy Junction to A9 Northbound;
- Relocate bus stops on the A9 at Tore Roundabout;
- Improve pedestrian routes to provide better integration with bus stops, particularly at Tore Roundabout;
- Improve footpaths around Tore to encourage use;
- Improve pedestrian routes by providing a controlled crossing at Tore Roundabout;
- Enhanced Signage for cyclists;
- Improve southbound on-slip at Munlochy Junction;

- Install traffic signals at Tore Roundabout;
- Extend the right turn lane from the A9 to the B9161;
- Convert Munlochy Junction into a roundabout; and
- Grade separation at Munlochy Junction incorporating Artafallie Junction.

Following Part 1 Appraisal, if funding is available, a more detailed appraisal may be carried out considering the options that have been evidenced to perform well against the TPOs and STAG criteria.

1

Introduction

1 Introduction

1.1 Study Overview

1.1.1. During 2020, Transport Scotland appointed WSP through its Development Management and Road Safety Services (DMRSS) Framework, to undertake a study which assessed and reported on the safety and operation of the A9 between North Kessock and Tore Roundabout.

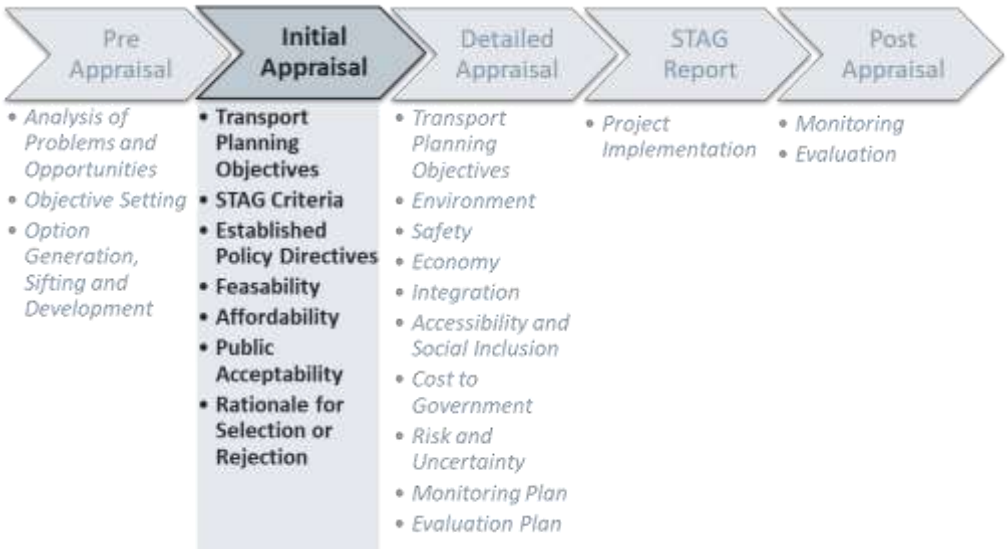
1.1.2. The study sought to identify existing problems or opportunities for improvement. The study has also considered the safety and operational aspects of the corridor and its junctions, the impact of localised and strategic traffic growth, aligned to the strategic role the A9 plays in connecting to the north of Scotland. The study has considered future development within the surrounding area and has been undertaken in line with Scottish Transport Appraisal Guidance (STAG). This report presents the Part 1 Appraisal.

1.2 STAG Progress

1.2.1. This study has been developed in accordance with STAG and this report presents the Part 1 Appraisal. The Part 1 Appraisal follows the Case for Change in the STAG process and is designed to set out proportionate justification for taking the study forward to the subsequent STAG stages (shown in Figure 1-1) and includes consideration of the following aspects:

- An appraisal of the likely impact of options against the Transport Planning Objectives;
- An appraisal of the likely impact of options against the STAG criteria;
- An appraisal of the fit of options with established policy directives; and
- An appraisal of the feasibility, affordability and likely public acceptability of options.

Figure 1-1 - Current Stage of the STAG Process



1.2.2. The aim of this Part 1 Appraisal is to undertake a qualitative appraisal of the options emerging from the Case for Change stage in an effort to focus appropriate resources towards options which merit detailed quantitative appraisal.

1.2.3. This has been undertaken through the rejection of options unlikely to meet the established Transport Planning Objectives and the STAG criteria. The aims of the study are to:

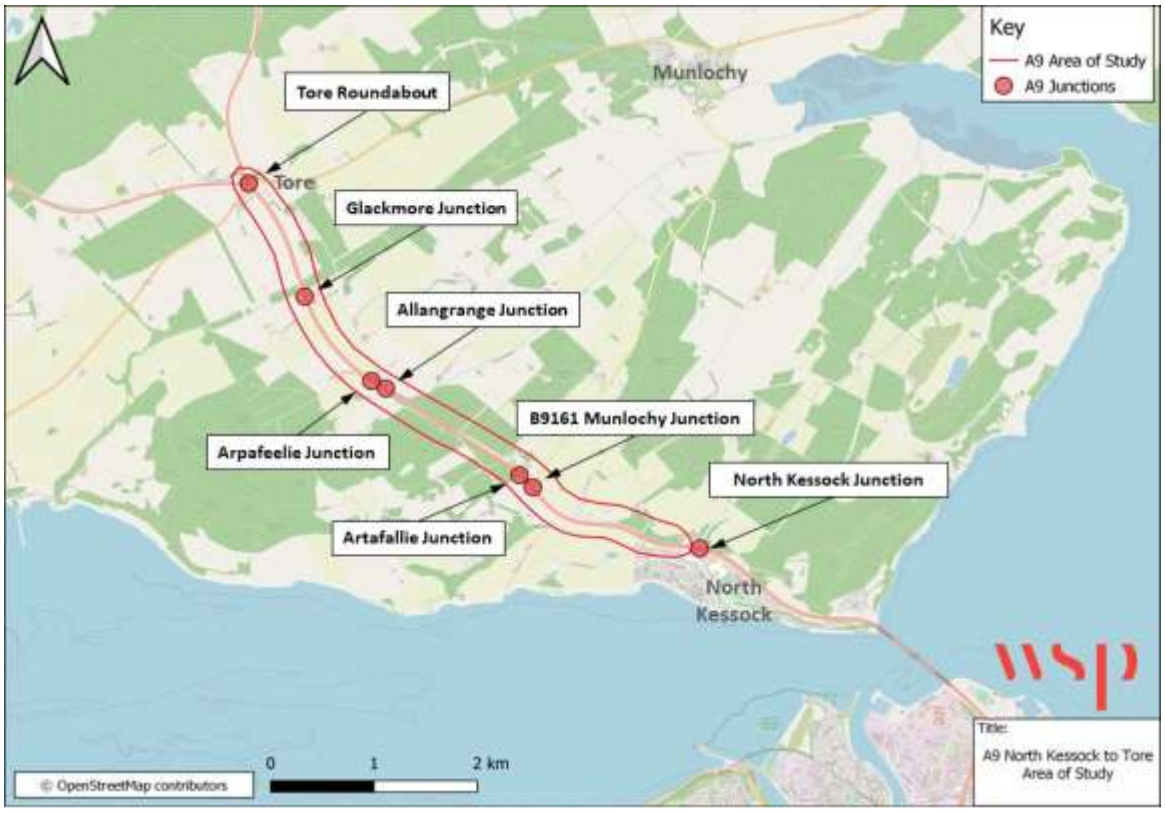
- Develop and evidence the rejection or retention of options derived in the STAG Initial Appraisal: Case for Change; and
- Undertake additional stakeholder engagement that enables appropriate local representation to support or oppose the options established during the preliminary appraisal selection process.

1.2.4. Following completion of the Part 1 Appraisal stage, if Transport Scotland considers it appropriate, the study may continue to the Detailed Appraisal stage. This would offer decision makers further granularity of each options performance against the TPOs and STAG criteria highlighting the best performing options. The Detailed Appraisal stage seeks to provide decision makers with the evidence to support investment decisions.

1.3 Study Area

1.3.1. The study area includes both carriageways of the A9 from the North Kessock Junction to Tore Roundabout and all junctions between as shown in Figure 1-1.

Figure 1-2 - Study Area



1.3.2. The North Kessock Junction is grade-separated, allowing access to North Kessock and Charlestown to the south and Kilmuir and Drumsmittal to the north. Tore Roundabout is an at-grade junction, connecting the A9 to the A835 and A832.

1.3.3. The five junctions between the North Kessock Junction and Tore Roundabout are as follows:

- B9161 Munlochy Junction;
- Artafallie Junction;
- Allangrange Junction;
- Arpafeelie Junction; and
- Glackmore Junction.

1.3.4. The above noted junctions are at-grade priority junctions and share a common layout, allowing movement in all directions including right turns across the main carriageway. All these junctions have turning lanes in the central reserve to allow right turning vehicles to slow down and wait before making the right turn across the opposing carriageway. In addition, some of the junctions have left turn merge and diverge auxiliary lanes into and out of the side roads, as shown in Figure 1-3.

Figure 1-3 - Existing Junction Imagery

1.3.5. The B9161 junction, also known as Munlochy Junction, has been highlighted by residents and elected representatives as being of particular concern. This junction was emerging as an accident cluster site in the 2021 Annual Road Safety Review carried out by BEAR Scotland. This study has been undertaken of the wider section of the A9 from North Kessock to Tore as any changes made to a location could have consequential impacts on other areas.

2

Case for Change – A Summary

2 Case for Change - A Summary

2.1 Summary

2.1.1. The Case for Change is the first stage of the STAG process and is designed to set out proportionate justification for taking the study forward. The following activities formed part of the Case for Change:

- Policy and key document review;
- Analysis of the current and future transport infrastructure and transport demand, including problems and issues;
- Road safety analysis, including a conflicts analysis;
- Stakeholder engagement;
- The development and setting of Transport Planning Objectives; and
- The generation of a longlist of potential options.

2.1.2. The Case for Change identified the transport problems as well as the opportunities alongside the issues and constraints of the study area. This analysis provided the basis for objective setting and the generation of a longlist of potential options.

2.1.3. The report identified problems along the A9 between North Kessock and Tore, with most stakeholder views generally concerning road safety. A longlist of options was developed in collaboration with stakeholders, and subject to an initial sift. Of a total of 40 options, eight were rejected as part of the initial sift. Those options rejected, alongside the rationale for rejection, are summarised within Table 2-1.

Table 2-1 – Options Rejected (Case for Change)

Option Name	Rationale for Rejection
Public Transport Hub	This does not come under the remit of Transport Scotland.
ITS Gantry System	This needs to be part of a wider ITS strategy beyond the scope of this study.
Rumble Strips	Although scoring well on TPOs, these are not recommended for use on dual carriageways.
Vehicle Separation Chevrons	Although these would address two of the TPOs, these chevrons are more suited to long lengths of carriageway without junctions.
Warning Signs for Queuing Traffic	Sifted out as some warning signs are already in place.
Educate Road Users on Double Give Ways	It is difficult to establish a target audience, therefore this was sifted out.

Option Name	Rationale for Rejection
Strategy to Discourage Traffic from the B9161	As the B9161 is not a trunk road, it was outside the scope of the study.
Promote Modal Shift	This was beyond the scope of the study area and was not taken any further.

2.2 Transport Planning Objectives

2.2.1. A series of TPOs were developed during the Case for Change stage, including:

- **TPO 1:** A reduction in conflicts for active modes at the junctions along the A9 between North Kessock and Tore to encourage the use of active travel modes;
- **TPO 2:** To achieve an improvement in vehicular road safety and a reduction in conflicts at the Munlochy Junction (A9/B9161) in the short (3 years), medium (3-10 years) and longer term (beyond 10 years);
- **TPO 3:** To achieve an improvement in vehicular road safety and a reduction in conflicts at Tore Roundabout (A9/A832/A835) in the short (3 years), medium (3-10 years) and longer term (beyond 10 years); and
- **TPO 4:** To achieve an improvement in vehicular road safety and a reduction in conflicts at intermediate junctions along the A9 from north of the North Kessock Junction up to but not including the Tore Roundabout in the short (3 years), medium (3-10 years) and longer term (beyond 10 years).

2.3 Options for Part 1 Appraisal

2.3.1. A range of options were progressed for consideration as part of this Part 1 Appraisal. Four options have already been committed by Transport Scotland and therefore have been removed from this report. Further details can be found in Appendix D. The committed options are:

- Investigate options to improve Tore Roundabout visibility;
- Review of the speed limit on A9 approaches to Tore Roundabout;
- Lighting at Munlochy Junction (powered); and
- Investigate enhanced road markings at Tore Roundabout.

2.3.2. As a result of the commitment to provide street lighting at Munlochy Junction, the option to provide solar powered road studs is now superfluous and has been removed from the appraisal.

2.3.3. The options considered as part of this Part 1 Appraisal are as follows:

- Speed limit reduction to Munlochy;
- Speed limit reduction for a one-mile radius around Tore Roundabout;
- Speed limit reduction along whole study area;
- Install safety camera on the A9 southbound;

- Install average speed cameras;
- Paint the kerbs at Munlochy Junction;
- Amend road signage to Cromarty;
- Amend road signage for visitors and tourists;
- Activated warning signs, advising mainline traffic of vehicles waiting to join the A9 from the side roads;
- Prohibit right turns from side roads;
- Prohibit U-turns at intermediate junctions and Munlochy Junction;
- Prohibit all right turns at Munlochy Junction (closure of central reservation);
- Prohibit right turn from B9161 at Munlochy Junction to A9 Northbound;
- Relocate bus stops on the A9 at Tore Roundabout;
- Improve pedestrian routes - integration with bus stops, particularly at Tore Roundabout;
- Improve pedestrian routes – footpaths at Tore Roundabout;
- Improve pedestrian routes - controlled crossing at Tore Roundabout;
- Enhanced signage for cyclists;
- Improve southbound on-slip at Munlochy Junction;
- Install traffic signals at Tore Roundabout;
- Extend the right turn lane from the A9 to the B9161;
- Widen central reserves;
- Pedestrian bridge or underpass at Tore Roundabout;
- Convert Munlochy Junction into a roundabout;
- Create single improved junction at Munlochy Junction;
- Grade separation at Munlochy Junction incorporating Artafallie Junction; and
- New road connection between Munlochy Junction and North Kessock Junction.

3

Appraisal Methodology

3 Appraisal Methodology

3.1 Introduction

3.1.1. This chapter documents the methodology employed during the delivery of the Part 1 Appraisal.

3.1.2. In accordance with STAG, the Part 1 Appraisal sees options scored on a qualitative basis, (or quantitative where possible), against the TPOs and a range of criteria defined by STAG, alongside the established policy directives.

3.2 Approach to Appraisal

3.2.1. The scoring was based on a seven-point scale ranging between -3 to +3 as follows:

- **Major benefit (+3)** - these are benefits or positive impacts which, depending on the scale of benefit or severity of impact, the practitioner feels should be a principal consideration when assessing an options eligibility for funding;
- **Moderate benefit (+2)** - the option is anticipated to have only a moderate benefit or positive impact. Moderate benefits and impacts are those which taken in isolation may not determine an options eligibility for funding, but taken together with other scores may do so;
- **Minor benefit (+1)** - the option is anticipated to have only a small benefit or positive impact. Small benefits or impacts are those which are worth noting but are not likely to contribute materially to determining whether an option is funded or otherwise.
- **No benefit or impact (0)** - the option is anticipated to have no or negligible benefit or negative impact.
- **Minor negative impact (-1)** - the option is anticipated to have only a minor negative impact. When taken in isolation they may not determine an options ineligibility for funding but taken together with other scores may do so.
- **Moderate negative impact (-2)** - the option is anticipated to have only a moderate negative impact. Moderate negative impacts are those which, when taken in isolation, may not determine an options ineligibility for funding, but taken together with other scores may do so;
- **Major negative impacts (-3)** - these are negative impacts which, depending on the scale of cost or severity of impact, should be taken into consideration when assessing an options ineligibility for funding.

3.2.2. After scoring against the TPOs, all of the options were scored against the STAG criteria and associated sub-criteria outlined in Table 3-1 overleaf. Each sub-criterion has undergone qualitative appraisal using the seven-point scale.

Table 3-1 – STAG Criteria Summary

STAG Criteria	Sub-Criteria
Environment	Noise and Vibration Global Air Quality Local Air Quality Water Quality, Drainage and Flood Defence Geology Biodiversity and Habitats Landscape Visual Amenity Agriculture and Soils Cultural Heritage Physical Fitness
Safety	Accidents Security
Economy	Economic Efficiency of the Transport System (TEE) Wider Economic Benefits (WEBs) Economic Activity and Location Impacts (EALIs)
Integration	Transport Integration Transport and Land Use Integration Policy Integration
Accessibility and Social Inclusion	Community Accessibility Comparative Accessibility

3.2.3. Each of the criteria documented within Table 3-1 is discussed in further detail as follows:

Environment

3.2.4. The environmental appraisal aims to summarise the key attributes and characteristics of the study area by looking at the sub-criteria listed in Table 3-1 and scoring each option based on what impacts are likely to exist.

Safety

3.2.5. This criterion includes two sub-criteria: accidents and security. The impacts considered in the Part 1 Appraisal include:

- Identification of accidents that could be mitigated from an option and identify user groups likely to be affected, and any accidents that could arise from an option being implemented; and
- Consideration of material impact of options on security for the users. Security can be enhanced for pedestrians by the introduction of lighting, increasing footfall and making areas less isolated or ensuring underpasses are designed with a clear view between the entrance and exit.

Economy

3.2.6. There are 3 sub-criteria used to summarise the extent of impacts on the Economy:

- Transport Economic Efficiency (TEE) which covers the benefits ordinarily captured by standard cost-benefit analysis, i.e., the transport impacts of an option;
- Wider Economic Benefits (WEBs) which relate to the notion of potential transport impacts on agglomeration (links between population centres) and the relationship between this and economic productivity; and
- Economic Activity and Location Impacts (EALIs) which allow the impact of an option to be expressed in terms of the net effects of the option on the local and/or national economy.

3.2.7. During the Part 1 Appraisal, in accordance with the STAG guidance, the Wider Economic Benefits (WEBs) were not considered and will instead form part of the Detailed Appraisal. Therefore, this will be excluded from the remainder of this report.

Integration

3.2.8. This criterion includes the following three sub-criteria:

- Transport Integration (TI), which relates to the degree to which a proposal fits with other transport infrastructure and services;
- Transport and Land-Use Integration (TLI), which relates to the fit between the option and established land-use plans and land-use/transport planning guidance; and
- Policy Integration (PI), which relates to the appropriateness of the option in light of wider policies including those of both Central and Local Government.

Accessibility and Social Inclusion

3.2.9. This criterion includes the sub-criteria of Community Accessibility and Comparative Accessibility:

- Community Accessibility
    - Public transport network coverage and the changes in accessibility provided by the public transport system; and

- Access to local services and the changes in accessibility by walking and cycling to local services.

- Comparative Accessibility
  - The distribution of impacts by people group by comparing impacts for different population groups relevant to local policy objectives; and
  - The distribution of impacts by location by comparing impacts for policy sensitive locations such as Community Regeneration Areas and areas of deprivation defined by the Scottish Index of Multiple Deprivation.

3.2.10. Following appraisal against the TPOs and STAG criteria, options were then appraised and scored against established policy directives, feasibility, affordability and acceptability. A summary is as follows:

Established Policy Directives

3.2.11. The policy directives referred to in the appraisal were:

- National Transport Strategy (NTS2) Sustainable Travel Hierarchy;
- Scotland's Road Safety Framework to 2030;
- Strategic Road Safety Plan 2016;
- Highland-Wide Local Development Plan;
- Inner Moray Firth Local Development Plan 2015; and
- ETLLD Circular 1/2006: Setting Local Speed Limits.

3.2.12. Each policy was applied to its relevant application field to see whether criteria were fulfilled in accordance with the strategies. This stage aimed to identify conflicts between options and strategies or policies which could affect the potential for funding, support, approval and implementation.

Feasibility

3.2.13. The next stage of the process incorporated operational and technical aspects of each option under the feasibility category. The Trunk Road Operating Company (BEAR Scotland) were consulted to establish the possible operational and maintenance requirements of each option, with engineers from WSP advising on the constructability.

3.2.14. The appraisal included the feasibility of likely construction methods, operation and implementation of the option as well as the timescale, deliverability and associated risks. Accordance with various design standards was also considered.

Affordability

3.2.15. The affordability criteria sees consideration against the current estimated cost of constructing or installing an option combined with future maintenance costs. Cost bandings were established to allow a relative comparison. The bandings are as follows:

- Major Costs (-3): If the costs are anticipated to be £5,000,000 or more;

- Moderate Costs (-2): If the costs are anticipated to be between £500,000 and £4,999,999;
- Minor Costs (-1): If the costs are anticipated to be between £100,000 and £499,999; and
- Minimal costs (0): If the costs are anticipated to be less than £100,000.

Acceptability

3.2.16. The appraisal of the acceptability of each option was underpinned through stakeholder and public consultation. A Consultation Report is included within Appendix C, providing a detailed summary of the exercise.

3.2.17. Scoring was applied by determining the degree to which the acceptability received a positive or negative response, and was disaggregated for the public consultation responses as follows:

- Major Opposition (-3): If more than 40% of respondents strongly dislike the option;
- Moderate Opposition (-2): If more than 20% but less than 40% of respondents strongly dislike the option;
- Minor Opposition (-1): If more than 15% but less than 20% of respondents strongly dislike the option and more than 20% dislike the option;
- Neutral Support (0): If the split of responses does not fall within the other bandings;
- Minor support (+1): If more than 20% but less than 30% of respondents strongly like the option and more than 30% like the option;
- Moderate support (+2): If more than 30% but less than 50% of respondents strongly like the option; and
- Major support (+3): If more than 50% respondents strongly like the option.

3.2.18. The acceptability from the public consultation and stakeholder engagement session were scored separately, however it was noted that there was a level of commonality between scores. Options that received positive support from stakeholders typically received positive support from the public and similarly with negative scoring. The degree to which an option scored positively or negatively did though differ between stakeholders and the public.

3.2.19. The stakeholder was scored using the website Menti, so that those involved could vote ‘live’ during the presentation.

3.2.20. For most options the scores between the two types of consultation only differed marginally on the seven-point-scale and typically received the same positive or negative score overall. The largest differences found were in the speed reduction options where feedback from stakeholders showed all but positive support whilst the public consultation showed general neutrality or opposition.

3.2.21. Where scores differed, the more negative of the two was chosen as the score featuring within this Part 1 Appraisal.

3.3 Option Sifting

3.3.1. The sifting process considered the scoring across the TPOs and STAG criteria. Options are rejected on the basis of negative contribution towards the TPOs or if feasibility challenges, or perhaps have little or no public support.

3.3.2. The options were scored, with a benchmarking exercise undertaken to review and challenge the scoring. For example, in respect of affordability, a range of indicate cost bandings were applied to support the scoring across all options so that each could be considered comparatively, yet consistently.

4

Part 1 Appraisal

4 Part 1 Appraisal

4.1 Introduction

4.1.1. This chapter documents the options appraisal, considering all options appraised as part of the Part 1 Appraisal. This chapter is structured to provide:

- A summary of the option categorisation;
- An outline of the Do-Minimum Scenario; and
- A descriptive summary of the rationale underpinning the out-turn scoring against TPOs, STAG criteria, established policy directives and feasibility, affordability and acceptability.

4.1.2. The Part 1 Appraisal option scoring matrix is provided within Appendix B of this report.

4.2 Option Categorisation

4.2.1. To support engagement with stakeholders and the public alongside assisting in the potential future packaging of options, each of the options were categorised based on the type of intervention. This categorisation is presented within Table 4-1.

Table 4-1 – Option Categorisation

Categorisation	Options
Speed Regulation	Speed limit reduction to Munlochy Speed limit reduction on approaches to Tore* Speed limit reduction for a one-mile radius around Tore Roundabout Speed limit reduction along whole study area Install safety camera on the A9 southbound Install average speed cameras
Junction Improvements	Paint the kerbs at Munlochy Junction Amend road signage to Cromarty Amend road signage for visitors and tourists Enhanced road markings at Tore Roundabout* Lighting at Munlochy Junction (non-powered)** Lighting at Munlochy Junction (powered)* Activated warning signs* Improve visibility at Tore Roundabout
Layout Improvements	Improve southbound on-slip at Munlochy Junction Extend the right turn lane from the A9 to the B9161

Categorisation	Options
	Widen central reserves Convert Munlochy Junction into a roundabout Create single improved junction at Munlochy Junction Grade separation at Munlochy Junction incorporating Artafallie Junction New road connection between Munlochy and North Kessock Junction
Prohibition of Turns	Prohibit right turns from side roads Prohibit u-turns at intermediate junctions and Munlochy Junction Prohibit all right turns at Munlochy Junction (closure of central reserve) Prohibit right turn from B9161 at Munlochy Junction to A9 Northbound
Public Transport	Relocate bus stops on the A9 at Tore Roundabout Improve pedestrian routes - integration with bus stops, particularly at Tore Roundabout
Non-Motorised Users	Improve pedestrian routes – footpaths at Tore Roundabout Improve pedestrian routes - controlled crossing at Tore Roundabout Enhanced signage for cyclists Install traffic signals at Tore Roundabout Pedestrian bridge or underpass at Tore Roundabout

*Options committed by Transport Scotland
** Superfluous, resulting from commitment to provide street lighting

4.3 Do-Minimum Scenario

4.3.1. All identified options need to be considered against a Do-Minimum scenario. As defined by STAG, the Do-Minimum scenario includes transport improvement commitments that have policy and funding approval and from which it would be difficult to withdraw.

4.3.2. Since the start of the Part 1 Appraisal, 4 of the options taken forward from the Case for Change have been committed.

- Investigate options to improve Tore Roundabout visibility;
- Review of the speed limit on A9 approaches to Tore Roundabout;
- Lighting at Munlochy Junction (powered); and
- Investigate enhanced road markings at Tore Roundabout.

4.3.3. Whilst these options form the Do-Minimum, this position has been reached mid-way through this study. As a consequence, these options have been subject to appraisal and a summary

can be found in Appendix D. The lighting option has removed the need for consideration of solar power road studs at Munlochy Junction, so this option was discounted from the Part 1 appraisal.

4.4 Option Appraisal: Speed Limit Reduction to Munlochy

Option Description

4.4.1. This option is a proposal to extend the existing 50mph speed limit from North Kessock to North of Munlochy, thereby reducing the current 70mph speed limit. A concept plan is presented within Figure 4-1.

Figure 4-1 – Speed Limit Reduction to Munlochy Concept Plan

Appraisal Summary

Transport Planning Objectives

4.4.2. Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of such opportunities at Munlochy, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit can be expected to safety at Munlochy Junction, with reduced mainline traffic speed and a likely reduction in

accident severity, resulting in a score of +1 for TPO2. No impact is expected in reducing conflicts for active travel modes, or significantly improving safety at any of the other junctions, producing a score of 0 for the remaining TPOs.

STAG Criteria Assessment

Environment

4.4.3. A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in the severity and frequency of wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.

Safety (Accidents and Security)

4.4.4. A reduction in speed is anticipated to reduce the severity of road traffic accidents and has potential for a reduced risk of conflict at Munlochy Junction, resulting in a score of +1 for the Accident criterion. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.4.5. A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.

Integration

4.4.6. There are no dedicated pedestrian or cycling facilities at Munlochy Junction, resulting in a score of 0 for TI and the same for TLI as there are no population centres nearby. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as "the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the new posted speed limit". As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. Additionally, this document advises that a lower speed limit on a dual carriageway is only appropriate if there is a history of numerous accidents, which is not the case. On balance, there is some level of alignment with the policies considered and therefore PI has received a +1 score.

Accessibility and Social Inclusion

4.4.7. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there is likely to be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.4.8. Changes to speed limits require a Speed Limit Order (SLO). This is a legal process which may receive public objection. Although the degree of objection is unknown, the resulting unfavourable feedback from the public consultation is a good indicator and it has therefore been scored as -2.

Operational

4.4.9. Operationally, speed limits which are not self-enforcing require enforcement to achieve compliance. Due to these enforcement requirements, this has been scored as -2.

Affordability

4.4.10. There are low costs involved with further assessment, consultations, production of legal documents and installation of speed limit signage, scoring 0.

Acceptability

4.4.11. Moderate opposition was received during the public consultation, resulting in a score of -2, with the stakeholders scoring it +2. The score utilised in the Part 1 Appraisal is therefore -2, as where there is a difference in score between stakeholders and the public, the lower score has been utilised as objection presents a risk to the deliverability.

4.5 Option Appraisal: Speed Limit Reduction for a one-mile radius around Tore Roundabout

Option Description

4.5.1. This option is a proposal to reduce the speed limit within a one-mile radius of Tore Roundabout. This option expands on the do-minimum option of reducing the speed limit on the immediate approaches to Tore Roundabout.

Appraisal Summary

Transport Planning Objectives

4.5.2. Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities to implement appropriate speed management measures up to one mile from Tore Roundabout, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit at Tore Roundabout can be expected, and so TPO3 has been scored as +1. TPO1 has been scored +1 accounting for the minor benefits to active travel. The remaining TPOs have a score of 0 as the proposal does not affect any of the other junctions.

STAG Criteria Assessment

Environment

4.5.3. A reduction in traffic speed could also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.

Safety (Accidents and Security)

4.5.4. A reduction in speed is anticipated to reduce the severity of road traffic accidents and has the potential to reduce the likelihood of conflicts. However, traffic would be slowing on approach to the roundabout regardless so the benefits in this respect are likely to be negligible. It is feasible that northbound drivers on the A9 may still try to overtake slower vehicles on the approach to the roundabout, knowing there is a single carriageway beyond. As a result, Accident impact has been given a score of 0. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.5.5. A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.

Integration

4.5.6. The option has a minor benefit to the users of other transport modes with slower vehicular traffic around Tore making a more inviting environment, resulting in a TI score of +1. This

slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds.

4.5.7. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as "the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the new posted speed limit". As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. On balance, there is some level of alignment with the policies considered and therefore PI has received a +1 score.

Accessibility and Social Inclusion

4.5.8. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.5.9. Changes to speed limit require a Speed Limit Order (SLO). This is a legal process which may receive public objection. As a result of the unknown element of objections, it has been scored as -1.

Operational

4.5.10. Operational requirements necessitate enforcement of the speed limit to ensure compliance. Due to these enforcement requirements, this has been scored as -2.

Affordability

4.5.11. There are minimal costs involved with further assessment, production of legal documents and installation of speed limit signage, scoring 0.

Acceptability

4.5.12. This option was not shown at the public consultation due to its similarities with the option for reducing the speed limit on the approaches to Tore Roundabout. However, the -1 score has been applied on the basis that public opinion is likely to be similar with concerns around compliance. Stakeholders have given it a score of 2. Therefore, the score of -1 has been taken forward, being the lower of the two.

4.6 Option Appraisal: Speed Limit Reduction Along Whole Study Area

Option Description

4.6.1. This option is a proposal to extend the existing 50mph speed limit from North Kessock to Tore, thereby reducing the current 70mph speed limit. A concept plan is presented within Figure 4-2.

Figure 4-2 - Speed Limit Reduction along whole Study Area Concept Plan

Appraisal Summary

Transport Planning Objectives

4.6.2. Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate along the whole study area, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to the TPOs can be expected. All TPOs have been scored as +1.

STAG Criteria Assessment

Environment

4.6.3. A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.

Safety (Accidents and Security)

4.6.4. It is feasible that northbound drivers on the A9 may still try to overtake slower vehicles on the approach to the roundabout, knowing there is a single carriageway beyond. In addition, 'platooning' of groups of vehicles may occur. However, as this option is a reduction in speed along the whole route, and therefore is anticipated to reduce the severity of road traffic accidents and has potential for a reduced risk of conflicts, these positives outweigh the potential negatives, scoring +1 for the Accident criterion. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.6.5. A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.

Integration

4.6.6. The option has a minor benefit to the users of other transport modes with slower vehicular traffic making a more inviting environment, resulting in a TI score of +1. This slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds.

4.6.7. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as "the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the new posted speed limit". As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. Additionally, this document advises that a lower speed limit on a dual carriageway is only appropriate if there is a history of numerous accidents, which is not the case here. On balance, there is some level of alignment with the policies considered and therefore PI has received a +1 score"

Accessibility and Social Inclusion

4.6.8. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.6.9. Changes to speed limit require a Speed Limit Order (SLO). This is a legal process which may receive public objection. As a result of the likely element of objections, given the opposition by the public, and the conflict with established policy, it has been scored as -2.

Operational

4.6.10. Operational requirements include regular maintenance and enforcement of the speed limit, however there are no major operational challenges. Due to the maintenance and enforcement impacts, this has been scored as -2.

Affordability

4.6.11. There are minor costs involved with further assessment, production of legal documents and installation of speed limit signage, scoring -1.

Acceptability

4.6.12. This suggestion of a speed limit reduction along the length of the A9 within the study area received major public opposition, resulting in a score of -3, with increased journey times being cited as a factor. Stakeholders scored it as +1, therefore the score of -3 will be used being the lower of the two.

4.7 Option Appraisal: Paint the kerbs at Munlochy Junction

Option Description

4.7.1. This option proposes the use of fluorescent paint to improve the visibility of kerbs, especially at Munlochy Junction.

Appraisal Summary

Transport Planning Objectives

4.7.2. The option is not expected to significantly improve safety at any of the junctions or safety for active travel, scoring 0 against all the TPOs.

STAG Criteria Assessment

4.7.3. Although it received moderate support from the stakeholders, it was not taken forward to the public consultation given the poor scoring against the TPOs and STAG criteria. It scored a minor negative for feasibility and a neutral score for affordability, based on value for money, with all other criteria scoring 0.

4.8 Option Appraisal: Amend road signage to Cromarty

Option Description

4.8.1. This option proposes to change the signage to direct drivers travelling to Cromarty to go via Tore Roundabout and use the A832 instead of going through Munlochy. This is to encourage tourist traffic and other non-local traffic away from the B9161 junction. Users of satellite navigation may, however, continue to use the Munlochy Junction.

Appraisal Summary

Transport Planning Objectives

4.8.2. A reduction in the number of vehicles using the B9161 to and from Munlochy could reduce the number of conflicts at Munlochy Junction and provide minor benefits for vehicular road safety. As a result, TPO2 has been scored as +1.

4.8.3. The reassignment of traffic from the B9161 through Tore Roundabout would generate minor negative impacts with increased traffic, translating to increased travel times and potentially a greater frequency of conflicts. In addition, the increased traffic volumes may result in longer queues at Tore Roundabout. Therefore, TPO3 has been scored as -1.

4.8.4. There is no impact to active travel or the intermediate junctions, so the TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.8.5. No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option. There may be a slight increase in emissions at Tore, and an

increase in traffic through the village, but the low traffic volumes involved are likely to have a negligible impact when incorporated into the existing, larger, mainline traffic volume. All sub-criteria have been given a score of 0.

Safety (Accidents and Security)

4.8.6. Diverting traffic away from turning right at Munlochy Junction will have a minor benefit to safety, with a reduction in potential conflicts and therefore a reduction in potential collisions. This has resulted in the Accident criterion receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.8.7. The proposed route is marginally longer that the B9161, but the higher quality carriageway eliminates any increase in travel time, therefore TEE has been scored 0, reflecting the absence of any impact. EALI has been scored as 0, given the localised nature of the option.

Integration

4.8.8. Due to the increase in traffic volume through Tore, this option has a minor impact on TI and TLI resulting in a score of -1 for each, as this impacts other transport modes and access to local facilities. On balance, access to Cromarty via the B9161 or Tore has no impact on Policy Integration, resulting in a score of 0.

Accessibility and Social Inclusion

4.8.9. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.8.10. As this measure would be classed as minor works and relatively unintrusive, with no significant challenges anticipated in the planning and implementation of new signage on both local and trunk road networks, this option has been given a score of -1.

Operational

4.8.11. The associated operational requirements are minimal, falling under routine road maintenance by the Operating Company, therefore a score of -1 has been given to reflect this.

Affordability

4.8.12. Only minimal costs are anticipated for these minor works, resulting in a score of 0.

Acceptability

4.8.13. Responses to this option during the public consultation were broadly mixed with no clear positive or negative score. Some positive responses noted that while it was a good idea,

drivers are more likely to adhere to satellite navigation instructions, and therefore this may be of little benefit. The negative responses noted that it was a poor idea for the same reason. The resulting score from the public is 0. Minor support, with a score of +1 was received from stakeholders, and since the lower score is taken forward the overall result is 0.

4.9 Option Appraisal: Amend road signage for visitors and tourists at Tore Roundabout

Option Description

4.9.1. This proposal is to make signage at Tore Roundabout clearer for visitors and those unfamiliar with the area, for example, those with no awareness of the uncontrolled pedestrian crossing. Carrying out a signage review would indicate if the existing signs meet the current requirements.

Appraisal Summary

Transport Planning Objectives

4.9.2. Improved signage is expected to generate a minor benefit by making drivers aware of the presence of active travel users, the location of pedestrian crossings and improvement of directional signage, making it clearer for drivers unfamiliar with the area. As a result, TPO1 and TPO3 have been given a score of +1. There is no perceived benefit to Munlochy Junction or the intermediate junctions.

STAG Criteria Assessment

Environment

4.9.3. No significant impacts on the majority of environmental sub-criteria are anticipated due to the non-invasive nature of the option. Landscape and Visual Amenity have both scored +1 as a result of the minor benefit in removing cluttered signage and street furniture.

Safety (Accidents and Security)

4.9.4. Improving signage at Tore Roundabout could have a minor benefit to safety, with a reduction in potential conflicts and therefore a reduction in potential collisions. This has resulted in Accidents receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.9.5. The amendment to road signage is unlikely to have an impact on both TEE and EALI, and these have both been given scores of 0.

Integration

4.9.6. The option could have a minor benefit to the users of existing facilities, who may benefit from improved driver awareness, resulting in a score of +1 for TLI. This option has no impact on TI or PI, with a score of 0 for each of these.

Accessibility and Social Inclusion

4.9.7. Community Accessibility could be improved, with increased driver awareness providing more favourable access to the public transport network and existing active travel facilities, resulting in a score of +1. Comparative Accessibility has been given a score of 0, as no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.9.8. As this measure would be classed as minor works and relatively unintrusive, this option receives a score of -1.

Operational

4.9.9. The associated operational requirements are minimal, with routine maintenance required by the Operating Company, therefore this option has been given a score of -1.

Affordability

4.9.10. Minimal costs are anticipated for these minor works, resulting in a score of 0.

Acceptability

4.9.11. Minor support was received from the public, giving a score of +1, with minor support also received from stakeholders, resulting in an overall score of +1.

4.10 Option Appraisal: Activated warning signs

Option Description

4.10.1. This proposal is to install electronic warning signs on the A9 which activate to warn mainline traffic when there are vehicles waiting to join the carriageway from the side roads. This may be particularly beneficial when the crossing vehicle is large or slow-moving. A concept plan is presented within Figure 4-3.

Figure 4-3 - Activated warning signs Concept Plan

Appraisal Summary

Transport Planning Objectives

4.10.2. The installation of electronic warning signs is expected to generate minor benefits by providing drivers on the A9 with warning of turning traffic ahead. This is likely to be beneficial to all junctions in the study area therefore TPO2 and TPO4 have scored +1, with TPO1 relating to active travel, and TPO3 at Tore Roundabout, scoring 0 with no perceived benefit.

STAG Criteria Assessment

Environment

4.10.3. No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option, with all sub-criteria receiving a score of 0.

Safety (Accidents and Security)

4.10.4. Improving driver awareness is likely to have a minor benefit to safety, with a likely reduction in conflicts and therefore a likely reduction in collisions. This has resulted Accidents receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.10.5. The installation of warning signs will have no impact on both TEE and EALI, and these have both been given scores of 0.

Integration

4.10.6. The option has a minor benefit to the users of other transport modes such as active travel, with increased driver awareness at key areas and potentially slower vehicular traffic, resulting in a TI score of +1.

4.10.7. There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1.

4.10.8. There is no perceived benefit to TLI, with a score of 0 given.

Accessibility and Social Inclusion

4.10.9. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.10.10. Although this measure would require a power source, this is not perceived to be a significant technical issue, resulting in a score of -1.

Operational

4.10.11. Although regular maintenance is required to ensure correct and beneficial operation, the overall operational requirements are not anticipated to be significant, resulting in a score of -1.

Affordability

4.10.12. Minimal costs are anticipated for this option, resulting in a score of 0.

Acceptability

4.10.13. Responses to this option during the public consultation were broadly mixed with no clear positive or negative score, and some comments citing concerns over the effectiveness and cost/benefit. This results in a score of 0 from the public. The stakeholders scored it more positively at +2, but the score of 0 is taken forward, being the lower of the two.

4.11 Option Appraisal: Prohibit right turns from side roads onto the A9

Option Description

4.11.1. This option prohibits right turn movements coming from side roads onto the A9, with left-out only manoeuvres permissible. This would be facilitated by signage including ‘no right turn’ and ‘no entry’ on the central reserve. Renewed road markings in the central reserve may also help to make it clearer to traffic emerging from the side roads, combined with improvements to the layout of the central reserve to prevent emerging traffic inadvertently entering. A concept plan is presented within Figure 4-4.

Figure 4-4 - Prohibit right turns from side roads onto the A9 Concept Plan

Appraisal Summary

Transport Planning Objectives

4.11.2. A minor benefit is expected regarding vehicular safety with the prohibition of right turns from the B9161 at Munlochy Junction and all the intermediate junctions between Munlochy Junction and Tore Roundabout, reducing conflicts with mainline traffic. As a result, TPO2 and TPO4 have been scored as +1. As this would increase traffic at Tore Roundabout,

TPO3 has therefore been scored -1. TPO1 has been scored as 0, with no benefit or impact to active travel.

STAG Criteria Assessment

Environment

4.11.3. No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units. No loss of land would occur, and only a minor adverse impact is predicted.

Safety (Accidents and Security)

4.11.4. Prohibition of some manoeuvres reduces the likelihood of right-turn collisions, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.11.5. The prohibition of manoeuvres is likely to result in a minor increase in travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the A9 from the local network reduced, and this may have an impact on the local economy. This has been given a score of -1.

Integration

4.11.6. There is no anticipated impact to other modes of transport, as the only bus services crossing the A9 are from the northbound carriageway turning right onto the B9161, resulting in a score of 0 for TI. TLI has been given a score of -1, as this impacts access to local facilities. Policy Integration scores +1, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions".

Accessibility and Social Inclusion

4.11.7. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.11.8. Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. Although the degree of objections is unknown until an order is published, this option received overall minor support and the degree of objection is likely to be limited. As a result, it has been scored as -1.

Operational

4.11.9. Associated operational requirements are minimal and not deemed to be a significant factor. Improvements to the layout of the central reserve to prevent emerging traffic inadvertently entering will encourage compliance. This has been scored as 0.

Affordability

4.11.10. Moderate costs are anticipated for this option, resulting in a score of -2.

Acceptability

4.11.11. Moderate support was received from the public, with a score of +2, citing the likely safety improvements. Stakeholders scored this as +1. An overall score of +1 is applied, being the lower of the two.

4.12 Option Appraisal: Prohibit U-turns at intermediate junctions and Munlochy Junction

Option Description

4.12.1. The option would prohibit u-turns at the intermediate junctions between Munlochy Junction and Tore Roundabout, and Munlochy Junction itself, to reduce conflict with mainline traffic. A concept plan is presented within Figure 4-5.

Figure 4-5 - Prohibit U-turns at intermediate junctions and Munlochy Junction

Appraisal Summary

Transport Planning Objectives

4.12.2. Minor benefits are expected along the A9 with the prohibition of u-turns at Munlochy Junction and intermediate junctions by reducing the potential for conflict between mainline traffic and slower manoeuvring traffic. TPOs 2 and 4 have been scored as +1 on this basis, with TPOs 1 and 3 scoring 0 as a result of having no impact on active travel or safety at Tore Roundabout.

STAG Criteria Assessment

Environment

4.12.3. No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option, and all sub-criteria have been given a score of 0.

Safety (Accidents and Security)

4.12.4. Prohibition of some manoeuvres could reduce the likelihood of accidents, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.12.5. Prohibition of a low frequency manoeuvre is not anticipated to have an effect on TEE, having been given a score of 0. Although there is a minor impact on EALI, with some drivers requiring travel to either Tore Roundabout or North Kessock Junction instead, the frequency of this manoeuvre, and the impact on the local economy, is negligible. This results in a score of 0.

Integration

4.12.6. Prohibition of a low frequency manoeuvre is not anticipated to affect TLI or TI, resulting in a score of 0. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.

Accessibility and Social Inclusion

4.12.7. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.12.8. Prohibition of manoeuvres requires a Traffic Regulation Order (TRO) This is a legal process which may receive public objection. Although this is an unknown element, until an order is published, it will affect very few people and it is expected that the risk of objection is low, on the basis of support received during the public consultation. It has been given a score of 0.

Operational

4.12.9. Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.

Affordability

4.12.10. Minimal costs are anticipated for this option, resulting in a score of 0.

Acceptability

4.12.11. Strong support was received from the public, resulting in a score of +3, citing safety as a factor. This is more positive than the stakeholder score at +2, therefore the score of +2 has been taken forward, being the lower of the two.

4.13 Option Appraisal: Prohibit all right turns at Munlochy Junction (closure of central reserve)

Option Description

4.13.1. The proposal is to prohibit right turns from the A9 to the B9161 and to the A9 from the B9161 at Munlochy Junction to minimise conflict between mainline and slower manoeuvring traffic. A concept plan is presented within Figure 4-6.

Figure 4-6 - Prohibit all right turns at Munlochy Junction (closure of central reserve) Concept Plan

Appraisal Summary

Transport Planning Objectives

4.13.2. A moderate benefit is expected in respect of vehicular road safety with the prohibition of right turns at Munlochy Junction to reduce potential conflict and therefore improve road safety. This results in TPO2 scoring +2. However, the prohibition of right turns at Munlochy Junction would result in traffic being reassigned through Tore Roundabout and the intermediate junctions, which may result in a minor negative impact in vehicular road safety. Therefore TPOs 3 and 4 have scored -1. There is no impact to active travel, therefore TPO1 has scored 0.

STAG Criteria Assessment

Environment

4.13.3. No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units. No loss of land would occur, and only a minor adverse impact is predicted.

4.13.4. Traffic which would require to turn left from the junction would have to travel further producing more CO_2 and increasing localised emissions. This results in a score of -1 for Local Air Quality and Global Air Quality, showing a minor impact.

Safety (Accidents and Security)

4.13.5. Prohibition of all turning manoeuvres would reduce the likelihood of accidents, resulting in a moderate benefit and a score of +2. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.13.6. The prohibition of these manoeuvres would result in an increased travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the local network reduced and this may have an impact on the local economy. This has been given a score of -1.

Integration

4.13.7. Due to the impact on the public transport network, this option has a minor impact on TI and TLI resulting in a score of -1 for each, as this impacts other transport modes and access to local facilities. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.

Accessibility and Social Inclusion

4.13.8. As a bus service turns right from the A9 to the B9161, this option has a minor impact on Community Accessibility, as this route manoeuvre can no longer be performed. This results in a score of -1. Comparative Accessibility has been given a score of 0, as no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.13.9. Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. As a result of the expected objections from the large number of drivers who currently turn right on to the A9, and the feedback during the public consultation, it has been scored as -2.

Operational

4.13.10. Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.

Affordability

4.13.11. Moderate costs are anticipated for this option, resulting in a score of -1.

Acceptability

4.13.12. Moderate opposition from the public was received for this option, with concerns about additional travel times raised. This has been scored as -2. Stakeholders had neutral support for this option, there the score of -2 has been taken forward.

4.14 Option Appraisal: Prohibit right turn from B9161 to A9 Northbound at Munlochy Junction

Option Description

4.14.1. This proposal is to prohibit right turns from the B9161 at Munlochy Junction to the A9 Northbound, reducing conflict with mainline traffic. A concept plan is presented within Figure 4-7.

Figure 4-7 - Prohibit right turn from B9161 to A9 Northbound at Munlochy Junction Concept Plan

Appraisal Summary

Transport Planning Objectives

4.14.2. A minor benefit is expected regarding vehicular road safety with the prohibition of right turns from the B9161 onto the A9 northbound. Evidence shows the number of vehicles doing this movement is low; however, conflicts still arise and would be removed with this option. As a result, TPO2 scored +1. The volume of traffic redirected to other junctions as a result of this is not expected to be significant, therefore TPOs 3 and 4 scored 0. There is no impact on active travel so TPO1 also scores 0.

STAG Criteria Assessment

Environment

4.14.3. No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units, although no loss of land would occur.

Safety (Accidents and Security)

4.14.4. Prohibition of some manoeuvres reduces the likelihood of accidents, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.

Economy

4.14.5. Prohibition of turning manoeuvres is likely to result in a minor increase in travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the A9 from the local network reduced and this may have an impact on the local economy. This has been given a score of -1.

Integration

4.14.6. There is no anticipated impact to other modes of transport, as although there are bus services using this junction, they only turn right from the A9 on to the B9161. This option has been given a score of 0 for TI. A score of -1 has been given to TLI resulting from the impact on access to local facilities. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.

Accessibility and Social Inclusion

4.14.7. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there is anticipated to be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.14.8. Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. Given the low volume of traffic carrying out this manoeuvre, the number of objections is likely to be low and it has been scored as -1.

Operational

4.14.9. Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.

Affordability

4.14.10. There are minimal costs involved with further assessment, production of legal documents and installation of signage, resulting in a score of 0.

Acceptability

4.14.11. Moderate support from the public was received, with safety being cited as a factor. This has been given a score of +2. However, stakeholders had minor support for this, therefore the lesser score of +1 has been taken forward.

4.15 Option Appraisal: Relocate bus stops on the A9 at Tore Roundabout

Option Description

4.15.1. This option proposes to revise the location of current bus stops at Tore to better integrate with bus services, walking/cycling routes and to encourage the use of public transport.

Appraisal Summary

Transport Planning Objectives

4.15.2. The revision and updating of existing bus stop locations to better align with active travel will generate minor benefits by creating safer links to the local area and is likely to encourage more of the local community to make use of the public transport network. Additionally, by relocating the bus stops away from the roundabout and therefore reducing the likelihood of conflicts between manoeuvring buses and mainline traffic, road safety would be improved. As a result, TPOs 1 and 3 have scored +1. As this option has no impact on any of the other junctions the remaining TPOs have scored 0.

STAG Criteria Assessment

Environment

4.15.3. Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and on to more efficient public transport, leading to a reduction in harmful emissions. Both of these categories score +1.

4.15.4. This option has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both of these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects.

4.15.5. Increased integration with cycling and walking routes could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor benefit to Physical Fitness, scoring +1.

Safety (Accidents and Security)

4.15.6. By reducing the likelihood of conflicts between manoeuvring buses and mainline traffic so close to the roundabout, there is a benefit to the Accident criterion, resulting in a score of +1. There is no perceived impact on security, resulting in a score of 0.

Economy

4.15.7. The relocation of the bus stops at Tore would provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE and +1 for EALI with an improvement to the local economy expected.

Integration

4.15.8. The relocation of bus stops has a minor benefit to by improving the safety of the transport network for the local community, resulting in a TI score of +1.

4.15.9. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2.

4.15.10. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.

Accessibility and Social Inclusion

4.15.11. Community Accessibility has been scored as +2, with the improvement on the public transport network and safer access to local facilities being a moderate benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.

Feasibility

Technical

4.15.12. As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.

Operational

4.15.13. The associated operational requirements are minimal, although relocation of the bus stops would move them further away from adjacent residential properties resulting in a score of -1.

Affordability

4.15.14. Minor costs are anticipated for this option for the construction of bus lay-bys, resulting in a score of -1.

Acceptability

4.15.15. This option was grouped along with the integration of pedestrian routes at Tore and improved footpaths and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Concerns were raised about the need for bus users to cross the A9 and that a grade-separated crossing point was needed. Concerns about the location of bus stops was also cited. Minor support was received from stakeholders, resulting in a score of +1. As the two scores differ, the lower score of 0 has been used.

4.16 Option Appraisal: Improve pedestrian routes - integration with bus stops at Tore Roundabout

Option Description

4.16.1. This option is to provide better integration between pedestrian routes and bus stops, with particular emphasis around Tore for the benefit of residential properties.

Appraisal Summary

Transport Planning Objectives

4.16.2. Minor benefits are expected to be generated by integrating pedestrian routes with bus stops and thereby encouraging use of the public transport network. This results in TPO1 scoring +1. As this option does not affect any junctions, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.16.3. Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and onto more sustainable forms of transport, leading to a reduction in harmful emissions. Both of these categories score +1.

4.16.4. Integrating the bus stops to the existing footways has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both of these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects.

4.16.5. Increased integration with walking and cycling facilities could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor benefit to Physical Fitness, scoring +1.

Safety (Accidents and Security)

4.16.6. Providing integrated areas for vulnerable users has a minor benefit, reducing the likelihood of accidents by creating a clearer and safer environment. This option scores +1 for both sub-criteria.

Economy

4.16.7. The integration of pedestrian routes would provide a moderate benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +2 for TEE and +1 for EALI with an improvement to the local economy expected.

Integration

4.16.8. The integration of footways has a minor benefit to active travel and public transport users by encouraging use of the existing facilities and the transport network by the local community, resulting in a TI score of +1.

4.16.9. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2.

4.16.10. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.

Accessibility and Social Inclusion

4.16.11. Community Accessibility has been scored as +2, with the improvement on access to the public transport network and access to local facilities being a moderate benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.

Feasibility

Technical

4.16.12. As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.

Operational

4.16.13. The associated operational requirements are negligible, with a score of 0 given to this criterion.

Affordability

4.16.14. Only minor costs are anticipated for this option, resulting in a score of -1.

Acceptability

4.16.15. This option was grouped along with the relocation of bus stops at Tore Roundabout and the integration of footpaths to the bus stops and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Moderate support was received from stakeholders, resulting in a score of +2, however, the lower score of 0 has been taken forward.

4.17 Option Appraisal: Improve pedestrian routes – footpaths at Tore Roundabout

Option Description

4.17.1. This proposal is to improve footpaths at Tore Roundabout, including surfaces, landscaping and signage.

Appraisal Summary

Transport Planning Objectives

4.17.2. The improvement of footpaths would create a safer space for pedestrians at Tore and is likely to encourage increased use. Minor benefits are expected, as the location of pedestrian crossings remain unchanged. TPO1 has been given a score of +1. As this option does not affect any of the other junctions, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.17.3. Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and onto more efficient public transport, leading to a reduction in harmful emissions. Both these categories score +1.

4.17.4. Improving footways has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects.

4.17.5. An improvement in the quality of facilities could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor beneficial impact to Physical Fitness, scoring +1.

Safety (Accidents and Security)

4.17.6. Improved surfaces may reduce the likelihood of pedestrian Accidents occurring, resulting in a score of +1. There is no perceived impact on Security, with a score of 0 given.

Economy

4.17.7. The integration of pedestrian routes could provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.

Integration

4.17.8. The improvement of existing footways has a minor benefit to active travel and public transport users by encouraging use of existing facilities, resulting in a TI score of +1.

4.17.9. There is a moderate benefit (+2) with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport.

4.17.10. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.

Accessibility and Social Inclusion

4.17.11. Community Accessibility has been scored as +1, with the improvement on access to the public transport network and access to local facilities being a minor benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.

Feasibility

Technical

4.17.12. As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.

Operational

4.17.13. The associated operational requirements are minimal once established, with a score of -1 given to this criterion.

Affordability

4.17.14. Minor costs are anticipated for the improvements of footways and has been scored -1 accordingly.

Acceptability

4.17.15. This option was grouped along with the relocation of bus stops at Tore Roundabout and the improvement of footpaths and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Concerns were raised about the need for pedestrians to cross the A9 and that a grade-separated crossing point was needed. Concerns about the location of bus stops was also cited. Moderate support was received from stakeholders, resulting in a score of +2. As the scores from the public and stakeholder differ, the lower of the two is taken, resulting in an overall score of 0.

4.18 Option Appraisal: Improve pedestrian routes - controlled crossing at Tore Roundabout

Option Description

4.18.1. This option proposes the installation of a controlled crossing on the A9 at Tore Roundabout. A concept plan is presented within Figure 4-8.

Figure 4-8 - Improve pedestrian routes - controlled crossing at Tore Roundabout Concept Plan

Appraisal Summary

Transport Planning Objectives

4.18.2. The introduction of a controlled crossing to either the north or the south of Tore Roundabout will provide a safe crossing point for active travel users, generating moderate benefits. The improved safety that this option could deliver has resulted in a score of +2 for TPO1. There is a minor negative impact associated with this option, since having vehicles stop on the roundabout exit may increase queues on the circulatory, resulting in TPO3 scoring -1. As this option does not affect any of the other junctions, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.18.3. Stopping traffic would likely have a minor impact on Local Air Quality due to the increased emissions from idling vehicles at the crossing, resulting in a score of -1.

4.18.4. Installation of a controlled crossing within the road corridor is anticipated to result in minor impacts to Landscape and Visual Amenity on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria.

4.18.5. Additionally, this option would provide a safe crossing point for active travel users, which may result in an uptake in walking and cycling providing minor benefits to Physical Fitness, scoring +1.

Safety (Accidents and Security)

4.18.6. A controlled crossing creates a safer environment, reducing the likelihood of road traffic accidents involving pedestrians. However, consideration has also been given to the risk of having traffic signals on the exit of the roundabout where drivers may not expect them. By installing warning signage for drivers, therefore reducing the risk of erroneously driving through the crossing, on balance this is anticipated to be a minor benefit, with Accidents scoring +1. Signage will also warn drivers of the likelihood of stationary vehicles. There is no impact on Security, with a score of 0 given.

Economy

4.18.7. The improvement of the pedestrian crossing is anticipated to provide a minor benefit, with greater resilience and efficiency of the active travel network in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.

Integration

4.18.8. The improvement of the pedestrian crossing could have a minor benefit to active travel and public transport users by encouraging use of existing facilities by the local community, resulting in a TI score of +1.

4.18.9. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions” resulting in a score of +2

4.18.10. There is no perceived impact to TLI, with no additional land required and a score of 0.

Accessibility and Social Inclusion

4.18.11. Improvement in access to local services by increasing accessibility by active travel is a minor benefit to Community Accessibility, receiving a score of +1. No gaps have been

identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.

Feasibility

Technical

4.18.12. Although this option is relatively unintrusive from a construction perspective, siting a crossing close to a roundabout will require consideration of advanced warning for drivers to mitigate the risk of having traffic signals on the exit of the roundabout where drivers may not expect them. This presents moderate technical challenges, resulting in a score of -2.

Operational

4.18.13. The associated operational requirements are minimal, with routine inspection and maintenance by the Operating Company. A score of -1 has been given to this criterion.

Affordability

4.18.14. Minor costs are anticipated for the provision of a controlled crossing and has been scored -1 accordingly.

Acceptability

4.18.15. This option received mixed reviews from the public, with no clear result. Some respondents cited the increased safety while others highlighted concerns about traffic flow. Overall, this has resulted in a score of 0. Stakeholders were more positive at +2, however, the lower score has been taken forward.

4.19 Option Appraisal: Enhanced signage for cyclists

Option Description

4.19.1. This proposal is to enhance the signage for the existing cycling network to encourage use of existing facilities rather than the A9.

Appraisal Summary

Transport Planning Objectives

4.19.2. Enhanced cycling signage would increase awareness of existing facilities in the study area. Encouraging cyclists off the A9, a potential reduction of conflicts between high speed traffic and active travel users would be a minor benefit, with TPO1 scoring +1. As this option does not affect any of the other junctions, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.19.3. Global Air Quality and Local Air Quality is likely to see a minor benefit with the potential modal shift away from private vehicles and onto active travel modes, leading to a reduction in harmful emissions. The assessment against these criteria has scored both as +1.

4.19.4. Additionally, the enhancements many encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local population, scoring +1.

Safety (Accidents and Security)

4.19.5. Improved signage will likely encourage active travel users off the A9, reducing the likelihood of conflict with vehicular traffic. This results in a score of +1 for the Accident criterion. There is no impact on Security, with a score of 0 given.

Economy

4.19.6. The enhancement of cycling routes would provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.

Integration

4.19.7. The improvement of signage has a minor benefit to cyclists by encouraging use of existing facilities, resulting in a TI score of +1.

4.19.8. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions” resulting in a score of +2

4.19.9. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.

Accessibility and Social Inclusion

4.19.10. Community Accessibility has been scored as +1, with the improvement on access to local facilities by active travel being a minor benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.

Feasibility

Technical

4.19.11. As this option is classed as minor works and relatively unintrusive, the installation of new signage is unlikely to pose significant technical challenges. This results in a score of -1.

Operational

4.19.12. The associated operational requirements are minimal, falling under routine maintenance with a score of 0 given to this criterion.

Affordability

4.19.13. Minimal costs are anticipated for the provision of enhanced signage and has been scored 0 accordingly.

Acceptability

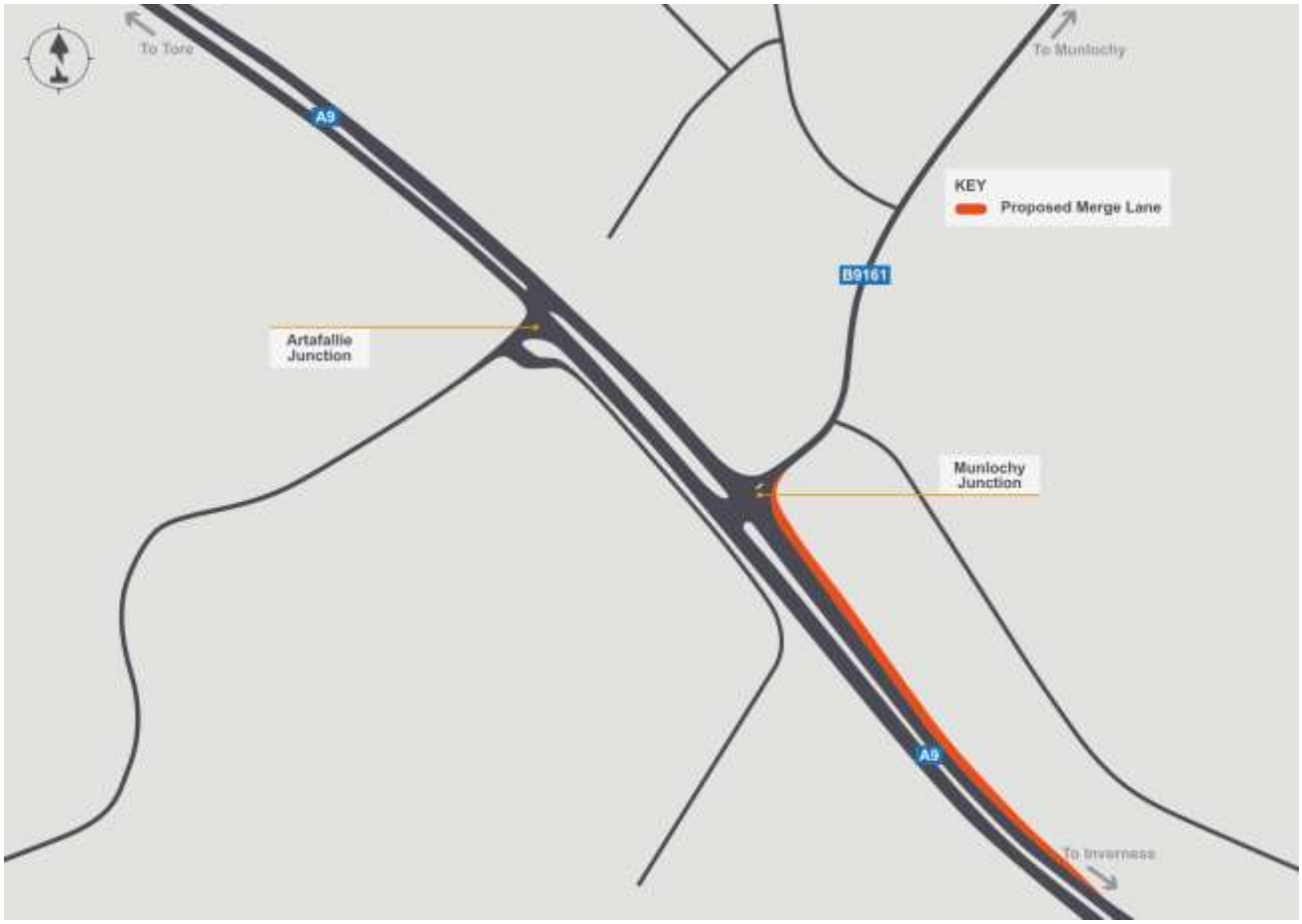
4.19.14. This option received major support (+3) from the public, with respondents keen to encourage cyclists off the dual carriageway. Stakeholders had minor support, at +1, therefore this score will be taken forward.

4.20 Option Appraisal: Improve southbound on-slip at Munlochy Junction

Option Description

4.20.1. This option proposes to extend the on-slip from B9161 onto the southbound A9 to better facilitate the merging of traffic. A concept Plan is presented within Figure 4-9.

Figure 4-9 - Improve on-slip at Munlochy Junction Concept Plan



Appraisal Summary

Transport Planning Objectives

4.20.2. A moderate benefit is expected at Munlochy Junction by improving the on-slip from the B9161 onto the A9 southbound. This will allow merging traffic a longer section to match mainline speeds. Additionally, mainline traffic will have more opportunity to move into the offside lane, to allow merging traffic onto the A9. This results in TPO2 scoring +2. As this option does not affect any of the other junctions or active travel, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.20.3. The potential for improved traffic flow at this location has the potential for a minor improvement to Local Air Quality by improving traffic flow. It would allow a greater distance for merging traffic to match the speed of mainline traffic, therefore reducing the need for braking manoeuvres. This criterion scores +1. It is anticipated that with mitigation measures in place, the extension would result in a minor impact to land drainage, resulting in a score of -1.

4.20.4. The construction work would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1.

4.20.5. The lengthening of the merge is anticipated to result in minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria. The extension has the potential to affect as yet unknown archaeology depending on the final design, resulting in a score of -1 for Cultural Heritage.

Safety (Accidents and Security)

4.20.6. Although the merge length is to current standard, its position near the outside of a large radius bend on the mainline may affect driver perception of approaching vehicles speed and distance. Allowing a greater distance for drivers to manoeuvre should reduce the likelihood of conflicts, resulting in a moderate safety improvement with a score of +2.

Economy

4.20.7. The improvement of the on-slip would provide a minor benefit to road infrastructure, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor is also achieved, allowing easier and safer access to the A9, resulting in a score of +1 for EALI.

Integration

4.20.8. There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This would also benefit delivery of the Local Development Plan by providing increased capacity. PI has been scored +1.

Accessibility and Social Inclusion

4.20.9. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there would be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.20.10. Increasing the footprint of the carriageway may encounter additional technicalities which are currently unknown, such as geotechnical issues, land purchasing issues, and disruption to traffic during construction. Additionally, the proposal would require a Departure from Standard for the merge layout. This results in a score of -2.

Operational

4.20.11. Although the works include construction, the associated operational requirements are minimal, with routine maintenance routine by the Operating Company, resulting in a score of -1.

Affordability

4.20.12. Moderate costs are associated with construction works, due to the increased carriageway footprint and potential land purchase required. This scores -2.

Acceptability

4.20.13. Strong support was received from both the public and stakeholders, with safety and ease of joining the A9 cited as factors. In light of this, a score of +3 has been given.

4.21 Option Appraisal: Install traffic signals at Tore Roundabout

Option Description

4.21.1. This option proposes to install traffic signals at Tore Roundabout, including a controlled pedestrian crossing(s). This would also necessitate queue warning signs on the A9. A concept plan is presented within Figure 4-10.

Figure 4-10 - Install traffic signals Concept Plan

Appraisal Summary

Transport Planning Objectives

4.21.2. The introduction of traffic signals at Tore Roundabout will provide a safe crossing point for active travel users around Tore, resulting in a moderate benefit for TPO1, scoring +2. Additional moderate benefit is also expected at Tore Roundabout for road safety by having a controlled flow on the roundabout, resulting in TPO3 scoring +2. As this option does not affect any of the other junctions, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.21.3. Stopping traffic would likely have a minor impact on Local Air Quality due to the increased emissions from idling vehicles at the crossing, resulting in a score of -1.

4.21.4. The installation of traffic signals is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria.

4.21.5. Additionally, the enhancements may encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local population, scoring +1.

Safety (Accidents and Security)

4.21.6. A controlled crossing with traffic signals creates a safe environment for active travel users crossing the carriageway, reducing the likelihood of collisions. This minor benefit results in a score of +1 for Accidents. There is no perceived impact to security, with a score of 0 given.

Economy

4.21.7. The provision of traffic signals to regulate traffic flow would lead to greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with a controlled pedestrian crossing and controlled traffic flow making for a more welcoming environment for active travel users, resulting in a score of +1 for EALI.

Integration

4.21.8. The provision of traffic signals has a moderate benefit to active travel and public transport users by encouraging use of existing facilities by the local community, resulting in a TI score of +2.

4.21.9. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2.

4.21.10. There is no perceived impact to TLI, with no additional land required and a score of 0.

Accessibility and Social Inclusion

4.21.11. Improvement in access to local services by increasing accessibility by active travel users is a minor benefit to Community Accessibility, receiving a score of +1. There is no perceived impact on Comparative Accessibility, with a score of 0 given.

Feasibility

Technical

4.21.12. The installation of traffic signals and the associated footway works have some moderate technical challenges, resulting in a score of -2.

Operational

4.21.13. Regular maintenance is required and routine monitoring of the area to ensure correct functionality is required. These are estimated to be moderate, with a score of -2.

Affordability

4.21.14. Moderate costs are anticipated for this option, resulting in a score of -2.

Acceptability

4.21.15. Moderate opposition from the public was received for this option, with concerns about additional travel times raised and disruption to traffic flow. This has been scored as -2. However, the stakeholders have minor support for this option with a score of +1. The score of -2 will be taken forward, being the lower of the two.

4.22 Option Appraisal: Extend the right turn lane from the A9 to the B9161

Option Description

4.22.1. This option proposes to extend the existing right-turn lane from the A9 onto the B9161. A concept plan is presented within Figure 4-11.

Figure 4-11 - Extend the right turn lane from the A9 to the B9161 Concept Plan

Appraisal Summary

Transport Planning Objectives

4.22.2. Moderate benefits are expected regarding road safety at Munlochy Junction, as evidence supports that the right-turn lane is close to capacity at certain times of the day, resulting in manoeuvring traffic occupying the offside lane of the A9 while waiting to turn. This results in a score of +2 for TPO2. As this option does not affect any of the other junctions or active travel, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.22.3. The provision of the extended lane would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage.

4.22.4. This option is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria.

4.22.5. The loss of existing roadside habitats to make way for a wider carriageway would have a minor impact on Biodiversity and Habitats, scoring -1.

4.22.6. The extension of the existing right-turn lane from the A9 onto the B9161 has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage.

Safety (Accidents and Security)

4.22.7. Extending the existing right turn lane will accommodate the queues, reducing the risk of accidents resulting from traffic queueing in the offside lane of the A9. However, traffic is still required to cross the A9, therefore a minor benefit, with a score of +1, has given to Accidents. There is no impact to Security, with a score of 0 given.

Economy

4.22.8. The improvement of the junction would provide a minor benefit to road infrastructure by increasing the length of the available lane for right-turning traffic and minimising queuing traffic in the offside lane of the A9, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor would also be achieved, allowing easier and safer exit from the A9, resulting in a score of +1 for EALI.

Integration

4.22.9. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +2.

4.22.10. The extension of the right-turn lane has no perceived benefit to TI or TLI as it does not address these sub-criteria and have been given a score of 0.

Accessibility and Social Inclusion

4.22.11. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.22.12. Widening of the central reserve to accommodate the right turn lane may require realignment of the northbound carriageway within the highway boundary, with unknown technical challenges as this stage. This has been given a score of -1 to account for this risk.

Operational

4.22.13. The associated operational requirements are minimal, with the maintenance requirements part of routine carriageway maintenance, and a score of -1 has been given to this criterion.

Affordability

4.22.14. Minor costs are associated with this due to the design and construction works required. A score of -1 has been given to this criterion.

Acceptability

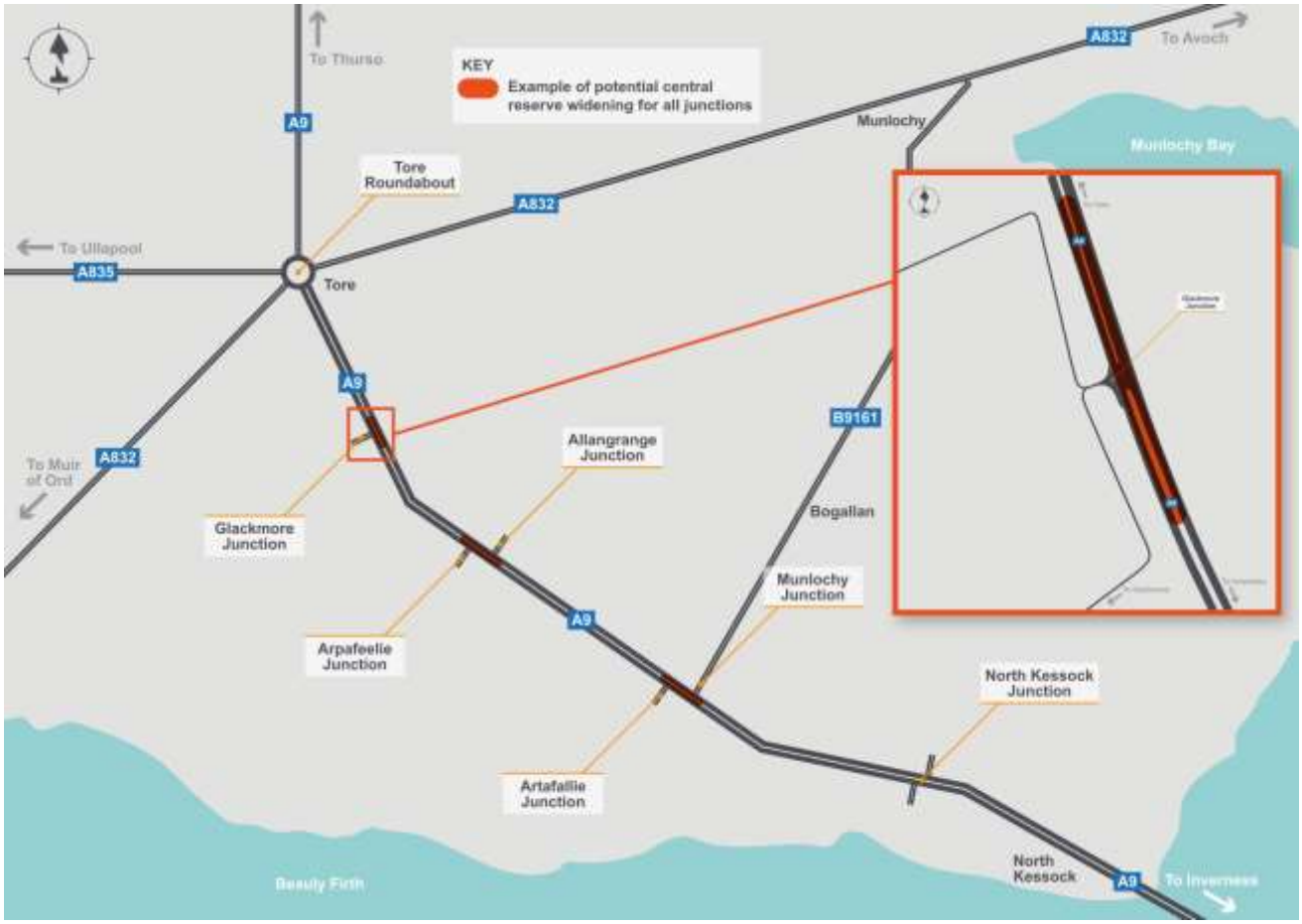
4.22.15. This received mixed scores, with no clear result. There was no particular reason from the public for the scores given, although some respondents were of the opinion that speed on the southbound carriageway for crossing traffic was the predominant issue. This has therefore been given a score of 0. Stakeholders scored it more positively at +2, but the lower of the scores has been taken forward resulting in an overall score of 0.

4.23 Option Appraisal: Widen central reserves

Option Description

4.23.1. The central reserves at Munlochy Junction, and all intermediate junctions between Munlochy Junction and Tore Roundabout, are not wide enough to accommodate long, right-turning, vehicles emerging from the side road and wishing to cross both carriageways. This results in the vehicles needing to carry out the manoeuvre in one go, or waiting in the central reserve. Overhangs by these vehicles onto the main carriageway are a significant hazard to mainline traffic. This option proposes to widen the central reserves to accommodate longer vehicles. A concept plan is presented within Figure 4-12.

Figure 4-12 - Widen central reserves Concept Plan



Appraisal Summary

Transport Planning Objectives

4.23.2. Allowing long vehicles to remain wholly within the central reserve, it is anticipated that road safety would be improved at these junctions due to a reduction in potential conflicts. A minor benefit is expected, resulting in a score of +1 for TPOs 2 and 4. As this option does not affect Tore Junction or active travel users, the remaining TPOs have been given a score of 0.

STAG Criteria Assessment

Environment

4.23.3. The provision of the widened central reserve would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have a minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage.

4.23.4. This option is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria.

Safety (Accidents and Security)

4.23.5. A wider central reserve would allow longer vehicles to wait in the central reserve, eliminating the need to cross both carriageways at once, or to overhang the offside lane of either carriageway. This results in a minor benefit to Accidents, with a score of +1. There is no impact to Security, with a score of 0 given.

Economy

4.23.6. The localised nature of this option results in a score of 0 for all sub-criteria, with no impact expected.

Integration

4.23.7. There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1.

4.23.8. The widening of the central reserve has no perceived benefit to TI or TLI as it does not address these sub-criteria and has therefore been given a score of 0.

Accessibility and Social Inclusion

4.23.9. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.23.10. The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. As a result of this risk, the potential requirement for additional land, and the challenges of construction on a major road, this has been given a score of -2.

Operational

4.23.11. Once complete, the associated operation and maintenance requirements are minimal and considered part of regular carriageway maintenance, resulting in a score of -1.

Affordability

4.23.12. Major costs are associated with the widening of the central reserves to account for land purchase, design and construction fees. A score of -3 has been given for this criterion.

Acceptability

4.23.13. Mixed results were received for this option, with no clear positive or negative score from the public consultation and a score of 0 given. The stakeholders scored it more positively at +2, however the lower score of 0 has been taken forward.

4.24 Option Appraisal: Pedestrian bridge or underpass at Tore Roundabout

Option Description

4.24.1. This option is to provide a pedestrian bridge or underpass on one of the A9 approaches to Tore Roundabout, providing safer connectivity to either side of the carriageway. A concept plan is presented within Figure 4-13.

Figure 4-13 - Pedestrian bridge or underpass at Tore Roundabout Concept Plan

Appraisal Summary

Transport Planning Objectives

4.24.2. The construction of a pedestrian bridge or underpass would generate moderate benefits regarding safety for active travel users by removing the need to cross the dual carriageway via an at-grade, uncontrolled crossing. This results in a score of +2 for TPO1. This option also has a minor benefit to safety at Tore Roundabout, resulting in a score of +1. The remaining TPOs have been given a score of 0, as this does not affect any of the other junctions.

STAG Criteria Assessment

Environment

4.24.3. Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and onto active travel modes, leading to a reduction in harmful emissions. Both of these categories score +1.

4.24.4. This option is anticipated to result in moderate impacts to Landscape and Visual Amenity, scoring -2 for both sub-criteria. An underpass would have marginally less visual impact than an overbridge, but a sensitive design and location could mitigate the effects of both options.

4.24.5. The provision of a structure or an underpass would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable surfacing. This has resulted in a score of -1 for Drainage.

4.24.6. A footbridge would result in a very small loss of limited productivity land (i.e. Class 4.1) and direct impacts on up to two farm holdings, producing a score of -1 for Agriculture and Soils.

4.24.7. The provision of a structure or an underpass has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage.

4.24.8. Additionally, the enhancements may encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local populate, scoring +1.

Safety (Accidents and Security)

4.24.9. Segregation of vulnerable users reduces the likelihood of Accidents, resulting in a score of +2. The addition of proper lighting could also address any security concerns of an underpass, so there is no anticipated impact to this criterion resulting in a score of 0.

Economy

4.24.10. Although safer, this option would likely increase travel times for vulnerable users, having a minor impact and scoring -1 for TEE. Similarly, the increased distance some users will be required to take may discourage the use of local facilities, resulting in a score of -1 for EALI.

Integration

4.24.11. This option supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions" It is aligned with the Sustainable Travel Hierarchy and therefore has a moderate benefit on PI, with a score of +2. Although this does provide safer crossing for vulnerable users, it can have an impact on active travel from a Transport Integration perspective as a result of the increased distance required to cross the road, and the accessibility issues with approach gradients. Therefore, this results in a score of -1.

Accessibility and Social Inclusion

4.24.12. The option provides improved access to local services by increasing accessibility, resulting in a Community Accessibility score of +1. However, a bridge or underpass creates a physical barrier for different population groups, such as people with reduced mobility, disabilities and the elderly, resulting in a Comparative Accessibility score of -2.

Feasibility

Technical

4.24.13. The additional land required for this option has a moderate impact on the technical feasibility. As a bridge and an underpass require different technical feasibility studies, the full technicalities have not been determined at this stage. Additionally, an underpass would require significant and complex traffic management on the A9 for several months. As a result of this risk, this has been given a score of -2.

Operational

4.24.14. Operational requirements include regular maintenance to ensure safe use, resulting in a score of -1.

Affordability

4.24.15. Both a bridge and an underpass have moderate design and construction costs associated. They have significant cost implications, resulting in a score of -2.

Acceptability

4.24.16. Major support was received for this from the public, citing safety as a factor. Stakeholders gave this minor support with a score of +1, therefore this score will be taken forward.

4.25 Option Appraisal: Convert Munlochy Junction into a roundabout

Option Description

4.25.1. This option proposes to convert Munlochy Junction into a roundabout, incorporating Artafallie junction. A concept plan is presented within Figure 4-14.

Figure 4-14 - Convert Munlochy Junction into a roundabout Concept Plan

Appraisal Summary

Transport Planning Objectives

4.25.2. A minor benefit is expected if Munlochy Junction is converted into a roundabout, providing easier negotiation for active travel users as it removes the need for those emerging from the B9161 to cross the fast-moving traffic on A9. This results in a score of +1 for TPO1.

4.25.3. A roundabout at Munlochy Junction is expected to have a moderate benefit in improving road safety at the junction, by making it easier for traffic to enter and exit the A9 from the local network. Although A9 traffic volumes are relatively high, which has the potential to impact traffic emerging from the B9161, appropriate deflection angles on entering the roundabout will slow A9 southbound traffic sufficiently to allow traffic to join the roundabout

from the B9161. TPO2 has been given a score of +2. This will also improve safety at Artafallie Junction, resulting in a score of +1 for TPO4.

4.25.4. As this option does not affect active travel, the TPO1 has been given a score of 0.

STAG Criteria Assessment

Environment

4.25.5. Local Air Quality is likely to see a minor benefit with an improvement in traffic flows to and from the B9161, but this is outweighed by the impacts on mainline traffic slowing for the roundabout. This results in a score of 0.

4.25.6. This option would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage.

4.25.7. The provision of a roundabout is anticipated to result in moderate impacts to Landscape and Visual Amenity, scoring -2 for both sub-criteria. The landscape character would be affected by the increase in the footprint of the road, however a sensitive design and location could mitigate the effects on the landscape and for nearby receptors.

4.25.8. The works would result in a loss of good quality land (i.e. Class 3.1) and would directly impact fields on either side, resulting in a score of -2 for Agriculture and Soils. Additionally, the provision of a roundabout has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage.

Safety (Accidents and Security)

4.25.9. A roundabout would significantly reduce the severity of Accidents, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0.

Economy

4.25.10. Despite a minor impact on travel times, with TEE scoring -1, thus option has the potential to provide an overall improvement to the strategic corridor resulting in a score of +1 for EALI.

Integration

4.25.11. Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland’s Road Safety Framework to 2030 by reducing “the likelihood, number and severity of collisions”, it is not aligned to the Sustainable Investment Hierarchy and is a minor impact with a score of -1 for PI. There is no impact to TI, with a score of 0.

Accessibility and Social Inclusion

4.25.12. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or

existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.25.13. The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, and the complexity of construction on a live carriageway results in a score of -2.

Operational

4.25.14. Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.

Affordability

4.25.15. A junction has moderate design and construction costs associated, including the realignment of the existing local road at Artafallie. This cost implication results in a score of -2.

Acceptability

4.25.16. Mixed results were received from the public, with no clear positive or negative score. Minor support (+1) was received from stakeholders, citing improved safety and usability. As the two scores differ, the lower of the two is used, resulting in an overall score of 0.

4.26 Option Appraisal: Rationalisation of intermediate junctions and Munlochy Junction (excluding Artafallie)

Option Description

4.26.1. This option proposes to rationalise Munlochy Junction and the intermediate junctions between Munlochy Junction and Tore Roundabout, by and creating a single improved junction with a new connector road linking Allangrange Junctions into the A9 at Munlochy, with the Glackmore and Arpafeelie junctions connecting to the A832 at Tore. Artafallie is not accommodated in this option due to the challenges of linking to Arpafeelie. A concept plan is presented within Figure 4-15.

Figure 4-15 – Rationalisation of intermediate junctions and Munlochy Junction

Appraisal Summary

Transport Planning Objectives

4.26.2. A rationalised junction is expected to provide major benefits regarding road safety along parts of the A9 by reducing conflict between active travel users and fast-moving traffic by encouraging use of improved local roads, giving a score of +1 for TPO1. There would be increased traffic at Munlochy Junction as a result of the closures of nearby junctions,

resulting in a score of -1 for TPO2. Tore Roundabout would also have increased traffic flows with the closure of Arpafeelie and Glackmore Junctions, resulting in a score of -1 for TPO3.

4.26.3. Safety would be improved at the majority of the intermediate junctions by removing turning manoeuvres, giving a score of +2 for TPO4.

STAG Criteria Assessment

Environment

4.26.4. As a result of junction closures, traffic may have to travel further to reach a destination, increasing CO_2 emissions and having a minor impact on Global Air Quality, scoring -1.

4.26.5. It is anticipated that with mitigation measures in place, the creation of a single improved junction would have only minor impacts on drainage. The construction could result in minor impacts to local private water supplies and at watercourse crossings, with particular attention to be given to the crossing of the Allanglach Burn, between the Allangrange Junction and Artafallie Junction. Consideration of the potential for improvements to existing drainage might present an opportunity for minor benefits to be achieved, but this is currently unknown. Water Quality and Drainage, therefore, scores -1.

4.26.6. This option is likely to have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Biodiversity and Habitats would also have a minor impact, scoring -1 as result of the loss of habitat necessary for the proposed layout.

4.26.7. This option is anticipated to have a minor impact on the Landscape, scoring -1. Visual Amenity, however, could be improved by rationalisation of the junctions removing clutter. This scores +1.

4.26.8. The option would result in a loss of good quality land (i.e. Class 3.1) and directly impacts fields on either side of the junction, and on the proposed link roads, producing a moderate impact and scoring -2 for Agriculture and Soils.

4.26.9. Permanent development of a junction has the potential to affect as yet unknown archaeology depending on the final form of the junction. No significant effects on cultural heritage are predicted, assuming that the design integrates well with its surroundings. Cultural Heritage has therefore been scored -1.

4.26.10. There are possible minor benefits to Physical Fitness, scoring +1, if pedestrian and cycle routes were re-routed through the junction and at-grade crossings of the A9 were closed, making it a safer and more welcoming environment for active travel users.

Safety (Accidents and Security)

4.26.11. Closing the majority of the intermediate junctions would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +2. There is no impact to security, receiving a score of 0.

Economy

4.26.12. Despite a minor impact on travel times, with TEE scoring -1, this option has the potential to provide an overall improvement to the strategic corridor resulting in a score of +1 for EALI.

Integration

4.26.13. Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions", it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.

Accessibility and Social Inclusion

4.26.14. Community Accessibility and Comparative Accessibility have both been assessed as having minor impacts, as the closures would disrupt access to local services and the local community by necessitating a diversion. These have both been scored -1.

Feasibility

Technical

4.26.15. The additional land required for this option has a major impact on the technical feasibility, with further assessment required. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, combined with the complexity of construction of a new junction at Munlochy on a live carriageway, results in a score of -2.

Operational

4.26.16. Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.

Affordability

4.26.17. A junction has significant design and construction costs associated. These significant cost implications result in a score of -3.

Acceptability

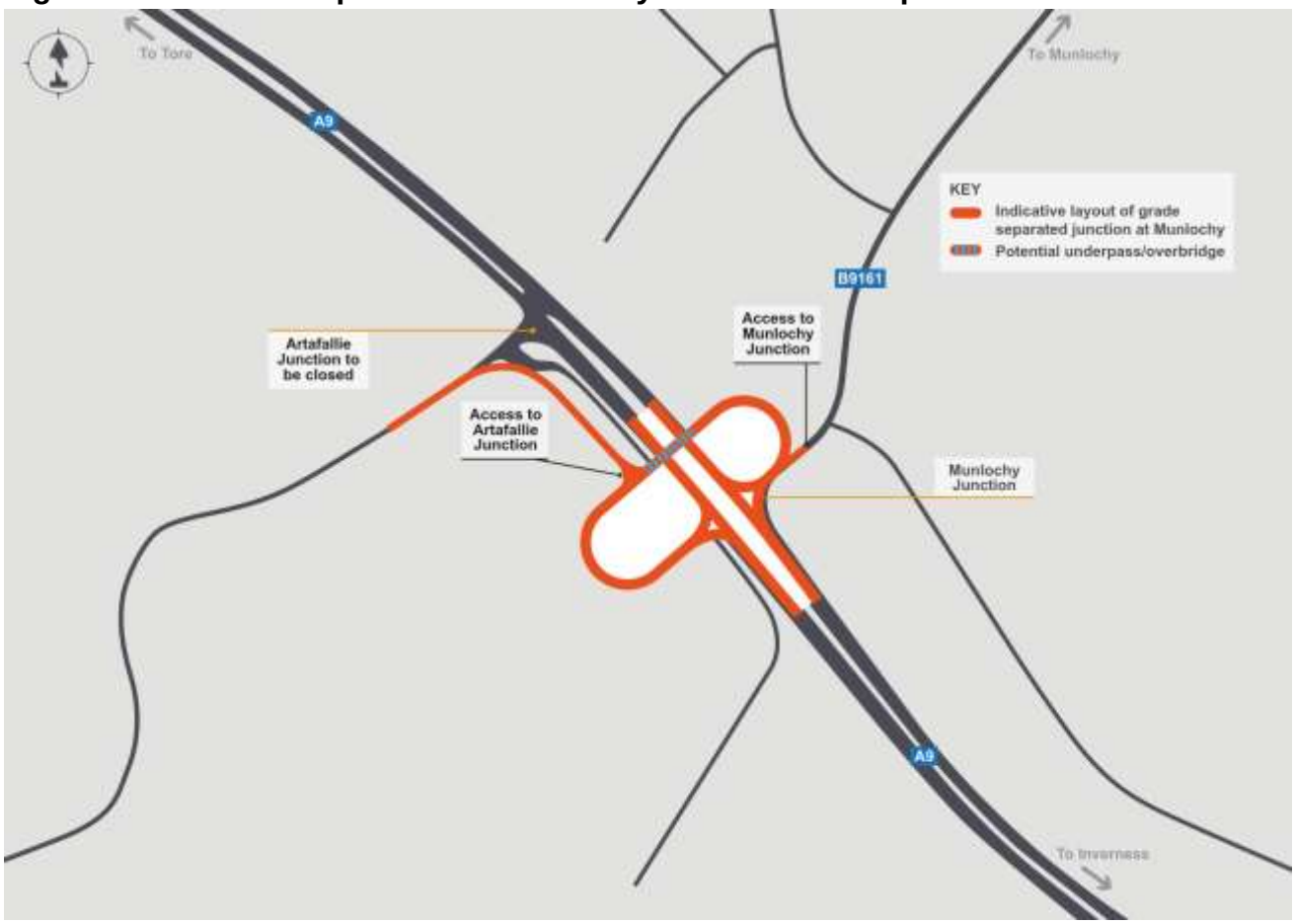
4.26.18. Mixed scores were received from the public, citing improved safety and usability, however, concerns of the impact of junction closures were raised. There was no clear result so a score of 0 has been given by the public. Minor support from stakeholders was received, with a score of +1, but since the two scores differ the lower score of 0 is used.

4.27 Option Appraisal: Grade separation at Munlochy Junction

Option Description

4.27.1. This proposal, outlined in Figure 4-16, is to convert Munlochy Junction to a grade-separated junction, in a similar manner to North Kessock Junction.

Figure 4-16 - Grade separation at Munlochy Junction Concept Plan



Appraisal Summary

Transport Planning Objectives

4.27.2. A grade-separated junction would provide a safer crossing for active travel users and provides major benefits regarding road safety at Munlochy Junction and Artafallie Junction by removing right turns across the carriageway, therefore reducing conflict points. This results in a score of +3 for TPO2 and +1 for TPOs 1 and 4.

STAG Criteria Assessment

Environment

4.27.3. It is anticipated that with mitigation measures in place, the creation of a grade-separated junction would have only minor impacts on drainage due to the loss of naturally draining soils. Consideration of the potential for improvements to existing drainage might present an

opportunity for minor benefits to be achieved, but this is currently unknown. Water Quality and Drainage, therefore, scores -1.

4.27.4. This option would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Biodiversity and Habitats would also have a minor impact, scoring -1 as result of the loss of habitat necessary for the proposed layout.

4.27.5. This option is anticipated to have major impacts on the Landscape and on Visual Amenity. Creation of a grade separation would require substantial construction works and additional land surrounding the existing junction and would have localised significant adverse effect on landscape character. A score of -3 has been given to both sub-criteria. Sensitive earthworks and landscape design including replacement planting would help mitigate effects.

4.27.6. The option would result in a loss of prime quality land (Class 3.1) and directly impacts fields on either side of the existing A9. A moderate impact is predicted to Agriculture and Soils, scoring -2.

4.27.7. Development of a grade separated junction has the potential to affect as yet unknown archaeology depending on the final form of the junction. No significant effects on cultural heritage are predicted from development taking account of assumed design and mitigation and assuming that design integrates well with its surroundings. Cultural Heritage has been scored as -1.

4.27.8. There are possible minor benefits to Physical Fitness, scoring +1, if pedestrian and cycle routes were re-routed through the grade-separated junction, making it a safer and more welcoming environment for active travel users.

Safety (Accidents and Security)

4.27.9. A grade separated junction would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0.

Economy

4.27.10. The improvement of the junction would provide a minor benefit to highway infrastructure, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor is also achieved, allowing easier and safer access to and from the A9, resulting in a score of +1 for EALI.

Integration

4.27.11. Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland’s Road Safety Framework to 2030 by reducing “the likelihood, number and severity of collisions”, it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.

Accessibility and Social Inclusion

4.27.12. Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Feasibility

Technical

4.27.13. The additional land required for this option has a moderate impact on the technical feasibility, with further investigation required, along with the complexity of constructing a significant structure over the live carriageway. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, and the complexity of construction over a live carriageway results in a score of -3.

Operational

4.27.14. Regular maintenance is required to ensure safe and effective operation, but these are minor with a score of -1.

Affordability

4.27.15. A grade-separated junction has significant design and construction costs associated. These significant cost implication result in a score of -3.

Acceptability

4.27.16. Moderate support was received from the public and stakeholders, citing improved safety and usability. Therefore, a score of +2 was given to this criterion.

4.28 Option Appraisal: New road connection between Munlochy and North Kessock Junction

Option Description

4.28.1. This option provides a new road connection to North Kessock Junction from Munlochy Junction, combined with either full or partial closure of Munlochy Junction. A concept plan is presented within Figure 4-17.

Figure 4-17 - New road connection between Munlochy and North Kessock Junction Concept Plan

Appraisal Summary

Transport Planning Objectives

4.28.2. The full or partial closure of Munlochy Junction could significantly improve vehicular road safety, generating a major benefit by reducing conflict points and resulting in a score of +3 for TPO2. Tore Roundabout would benefit with the reduction of traffic using Tore to travel to and from Munlochy towards North Kessock, resulting in a score of +1 for TPO3. Active travel users would have the benefit of access to an existing grade-separated junction on the

A9, resulting in a score of +1 for TPO1. As there is no perceived impact on the intermediate junctions, TPO4 scores 0.

STAG Criteria Assessment

Environment

4.28.3. There is potential for moderate noise impacts during operation at nearby sensitive receptors due to the increase in traffic at some locations. This results in a score of -2 for Noise and Vibration.

4.28.4. Global Air Quality could be affected by the change in travel distances, resulting from the additional road, and has been scored as a minor impact at -1.

4.28.5. It is anticipated that with mitigation measures in place, construction of the new road connection would not have significant effects on Geology or Water Quality, scoring -1 for both. However, it could result in impacts to potential local private water supplies and at watercourse crossings. Consideration of the potential for improvements to existing drainage might present an opportunity for minor benefits to be achieved.

4.28.6. Loss of habitats and potential for direct/indirect effects on protected/notable fauna and the Moray Firth SAC/SPA are also expected, resulting in a score of -2 for Biodiversity and Habitats.

4.28.7. Creation of a new road link would require substantial construction works and additional land and would have a major impact on Landscape and Visual Amenity. A score of -3 has been given to both sub-criteria. Sensitive earthworks and landscape design including replacement planting would help mitigate effects.

4.28.8. The option would also result in a loss of good quality land (i.e. Class 3.1) and directly impact fields to the east of the existing A9. Impact to farm holding viability and severance would be dependent upon the final alignment developed. This has resulted in a score of -2 for Agriculture and Soils.

4.28.9. Permanent development of new and upgrades of existing infrastructure has the potential to affect as yet unknown archaeology depending on the final form of the link road. There may be minor effects on cultural heritage from development, however, they can be mitigated through design. This scores -1.

Safety (Accidents and Security)

4.28.10. Full or partial closure of the Munlochy Junction would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0.

Economy

4.28.11. Although an improvement of the junction would provide a minor benefit to road infrastructure, the additional journey resulting from a full or partial closure and the provision of a new link road results in a score of -2 for TEE, where traffic which would normally turn

north from the B9161 would then travel south to the North Kessock Junction before joining the A9 northbound towards Tore. An improvement to the strategic transport corridor is achieved, allowing easier and safer access to and from the A9, resulting in a score of +1 for EALI.

Integration

4.28.12. Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions", it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.

Accessibility and Social Inclusion

4.28.13. This option is likely to facilitate an improvement on the public transport network coverage for the communities along the new road. This is a minor benefit to both Community Accessibility and Comparative Accessibility, resulting in a score of +1 for both.

Feasibility

Technical

4.28.14. The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections, and compulsory purchase of property and land may be required. This significant risk results in a score of -3.

Operational

4.28.15. Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.

Affordability

4.28.16. Construction of a new link road has significant design and construction costs associated. These significant cost implications result in a score of -3.

Acceptability

4.28.17. Mixed results were received from both the public and stakeholders, with no clear positive or negative score. Overall, this therefore received a neutral score of 0.

5

Appraisal Summary and Conclusions

5 Appraisal Summary and Conclusions

5.1 Introduction

5.1.1. This chapter summarises the findings from this Part 1 Appraisal and highlights the options which on the basis of the findings of the appraisal are recommended for rejection and those which are retained for progression to detailed appraisal, should Transport Scotland wish to proceed to this stage.

5.2 Rejected Options

5.2.1. The following options are recommended for rejection at this stage.

Speed limit reduction to Munlochy

5.2.2. This option has a minor positive score against TPO2 as the challenge of speed limit compliance would mean only a limited reduction to vehicle speed and resulting safety benefit at Munlochy Junction. It does not address safety concerns for junctions other than Munlochy or improvements for active travel so does not contribute to TPO1 or TPO3. Additionally, amendment of a speed limit requires a Speed Limit Order. This must follow a legal process, and consultation with public sector organisations, key stakeholders and the public is required. This requirement means implementation is not fully within the control of Transport Scotland. Although this option has minimal associated costs, the low acceptability, moderately negative feasibility and minor economic impact scores combined with the level of uncertainty around safety benefits all contribute to the recommendation for rejection at this stage.

Speed limit reduction for a one-mile radius around Tore Roundabout

5.2.3. This option has a minor positive score for TPO1 and TPO3 especially given the Do-minimum commitment of a reduction in speeds on the approach to Tore Roundabout. It does not address TPO2. It has minimal costs as well as positive scores for environment, safety and integration but has minor negative scores for economic efficiency and technical feasibility, and a moderately negative score for operational feasibility based on enforcement challenges. As with the previous option, there is likely to be little change in vehicle speed which would ultimately limit any benefits to the TPOs. Amendment of a speed limit requires a Speed Limit Order which must follow a legal process. A consultation with public sector organisations, key stakeholders and the public is required, and implementation is not fully within the control of Transport Scotland. Additionally, it did not receive a positive score in acceptability. On balance, therefore, it is not recommended for rejection at this stage.

Speed limit reduction along the whole study area

5.2.4. Although scoring positively for all TPOs, this option received moderate opposition from the public and stakeholders. Despite appearing to address the TPOs, the points described in the previous two options regarding compliance along the study area are likely to result in a

limited change to vehicle speed and would limit any benefits to the TPOs. In addition, the legal process to establish a Speed Limit Order means implementation is not fully within the control of Transport Scotland and public opinion has shown major opposition. It is therefore recommended that this option is not taken forward.

Paint the kerbs at Munlochy Junction

5.2.5. This option addresses none of the TPOs and has no positive scores in the STAG criteria. Although this option has minimal associated costs, it is deemed unfeasible to take forward, since it provides little benefit.

Amend road signage to Cromarty

5.2.6. Although this option has a minor benefit to TPO2, with a score of +1, the resulting increase in traffic through Tore Roundabout and the village results in a score of -1 for TPO3. There was a mixed response from the public, and the neutral economic scores and lack of integration with policy, do not make this a feasible option, particularly as the cost to benefit is not anticipated to be high.

Prohibit right turns from side roads

5.2.7. Although having a minor benefit to TPO2 and TPO4, this option is not expected to provide benefits to environment, safety, economy or transport and land use policies. Prohibiting right turns from side roads will greatly affect the access and travel distances of users of the road network, although a minor improvement in the accident rate is expected. It would increase traffic at Tore Roundabout, resulting in a score of -1 for TPO3. Despite having minor public support, these factors, along with the associated moderate costs, are not sufficient to justify progression of this option to detailed appraisal.

Widen central reserves

5.2.8. This option produces a minor benefit to TPO2 and TPO4 and scored positively against Accidents and Policy Integration, but these benefits are not perceived to outweigh the negative scores against the environment criteria, the moderately low feasibility and the major costs. The low feasibility scores represent the challenges in construction on a busy carriageway and potential land purchase, and the affordability does not represent sound value for money given the lack of benefit anticipated. There is no benefit to Economy or Accessibility. This option is therefore recommended for rejection.

Pedestrian bridge or underpass at Tore Roundabout

5.2.9. This option is likely to have moderate benefits to TPO1 and minor benefits to TPO3. It received overall minor support from the public and would produce an improvement in air quality and safety. Most of the other criteria in the assessment, however, scored negatively, with the remaining environmental impacts scoring minor to moderately negative, including landscape (visual intrusion in the case of a bridge), agriculture (resulting in the loss of agricultural land on either side of the A9 to facilitate access), and water and geology.

Provision of such an arrangement would impact on pedestrian 'desire lines' by redirecting some users across other arms of Tore Roundabout, although it does integrate well with the Sustainable Travel Hierarchy and Scotland's Road Safety Framework to 2030. The associated costs result in a moderately negative score for affordability and moderately negative score for technical feasibility, and it is recommended that this option in rejected.

Rationalisation of intermediate junctions and Munlochy Junction

5.2.10. This option addresses TPO1 and TPO4 by improving safety at the majority of the intermediate junctions, and for active travel by reducing conflict. However, TPO2 and TPO3 score negatively as a result of the increased traffic through Munlochy Junction and Tore Roundabout. There are major costs, feasibility challenges, and some moderate environmental impacts associated with the provision of new link roads between the existing junctions. This option has been recommended for rejection at this stage as a standalone option, but could be suitable for inclusion as part of a package of major improvements such as the conversion of Munlochy Junction to a roundabout or the provision of a grade separated junction and should be considered in the detailed appraisal in this regard.

New road connection between Munlochy and North Kessock Junction

5.2.11. Despite addressing TPO1, TPO2 and TPO3, the high expected costs in combination with mixed public support, significant technical difficulties, impacts on the environment and the lack of policy integration, mean this option has limited benefits. Substantial construction works may result in severance of farm holdings, and compulsory purchase of residential dwellings may be necessary. Additional journey times would result from a full or partial closure of Munlochy Junction and Side Road and Trunk Road Orders are required. In addition, the provision of the new link road does not align with the Sustainable Investment Hierarchy policy. It is recommended that this option is not taken forward.

5.3 Retained Options

Amend road signage for visitors and tourists

5.3.1. This option addresses TPO1 and TPO3 and could provide environmental benefits for the landscape and visual amenity. It has minor public support and benefits multiple road users. The only negative scoring is minor against feasibility, with the remaining criteria generally receiving neutral or positive scores. The minimal costs associated with the provision of new road signs make this option viable for further assessment in the Part 2 Appraisal.

Activated warning signs

5.3.2. This option addresses TPO2 and TPO4, improves safety and integrates with Scotland's Road Safety Framework to 2030. Costs, and operational and technical concerns are minor, with public support being mixed. There are no discernible environmental concerns. The real-time data about the traffic conditions can help prepare approaching traffic of potential queuing or dangerous road conditions. The safety benefits, combined with the absence of

negative scores across the criteria, make this option viable for progression to the Part 2 Appraisal.

Prohibit U-turns at intermediate junctions and Munlochy Junction

5.3.3. This option has a very minor positive benefit to TPO2 and TPO4, has moderate public acceptability and no impact to the local economy. It was noted during the public consultation the widespread belief that the manoeuvre was already prohibited which aligns with observations at the junctions that U-turns were rare and therefore any benefits would be minimal. Given the limited benefits but minimal cost, it is considered that this option, whilst not merited as standalone, could be considered as part of a package of measures within the Part 2 Appraisal.

Prohibit all right turns at Munlochy Junction

5.3.4. For this option, TPO2 has a moderate score, but results in impacts on TPO3 and TPO4 as it may increase traffic at Tore Roundabout. There is a moderate benefit to safety at the junction by the elimination of turning manoeuvres which cross oncoming traffic, and this integrates with Scotland's Road Safety Framework to 2030. Although there is an absence of economic or environmental benefit, and public opinion shows minor opposition, this is a measure which could be implemented within a short time. The moderate benefit to safety, combined with the associated minor costs, suggest this option merits further assessment during the Part 2 Appraisal.

Prohibit right turn from B9161 at Munlochy Junction to A9 Northbound

5.3.5. This option addresses TPO2 and provides minor benefits to safety at Munlochy Junction. Minor support was received from the public. Prohibiting the right turn onto the A9 northbound would alleviate the crossing from the A9 onto the B9161. The majority of the criteria received neutral scores, with minimal costs associated. It is recommended to be taken forward.

Relocate bus stops on the A9 at Tore Roundabout

5.3.6. As well as addressing TPO1 and TPO3, this option addresses policy in terms of promoting active travel and supporting the transport hierarchy. Public support is neutral, and the costs are anticipated to be relatively minor. The option also fulfils the accessibility and inclusion criteria, although the relocation of bus stops would move them further away from nearby dwellings. Air quality and physical fitness would also benefit, and this outweighs the minor negative scores for landscape, visual amenity and feasibility.

Improve pedestrian routes - integration with bus stops, particularly at Tore Roundabout

5.3.7. This option addresses only TPO1 but has generally positive scores on the majority of the criteria. Potential economic benefits in addition with improved security and safety make this option desirable to take forward to detailed appraisal. It also follows the transport hierarchy

well and provides greater accessibility on a community wide level. Costs are expected to be low and public support is neutral.

Improve pedestrian routes – footpaths

5.3.8. This option addresses only TPO1 but has generally positive scores on the majority of the criteria, with moderate stakeholder support. Improved security and safety, and positive benefits to the local economy make this option desirable to take forward to detailed appraisal. It also follows the transport hierarchy well and provides greater accessibility on a community wide level. Costs are expected to be low.

Improve pedestrian routes – controlled crossing at Tore Roundabout

5.3.9. This option includes for the provision of a signalised pedestrian crossing facility across the A9. Although having a minor impact to TPO4, with concerns about traffic queuing on the exit of the roundabout, this option has a moderate impact on TPO1, by improving active travel facilities at Tore Roundabout. This option scored positively for safety, the economy and integration, and although there are feasibility challenges, and minor environmental impacts, the associated costs are low, and the negative impacts are not perceived to outweigh the benefits to safety. Public acceptability was neutral, suggesting no strong support.

Enhanced Signage for cyclists

5.3.10. Although addressing only TPO1, benefits are expected from an environmental, economy and integration perspective. The option also integrates well with the transport hierarchy. Operational feasibility and affordability scored 0 and the potential benefits outweigh the negatives. This option is recommended for detailed appraisal.

Improve southbound on-slip at Munlochy Junction

5.3.11. The option addresses TPO 2 and public support is strong as it appears that this solution has been raised by the public previously. The technical and costing aspects are significant however, it would benefit from going through further assessment to further clarify the degree of benefit to safety and the economy. This option is therefore recommended to be retained for detailed appraisal.

Install traffic signals at Tore Roundabout

5.3.12. The option strongly addresses TPO1 and TPO3, as well as integration with policy, safety and economy. Public support is moderately negative often justified by concerns that signals will impede traffic flows. This option, with signals on multiple approaches, allows for controlled flows or adaptive timings based on traffic flow and direction. Feasibility has moderate negative scores, but the benefits are considered to outweigh the negatives, including those environmental impacts associated with construction works.

Extend the right turn lane from the A9 to the B9161

5.3.13. This option has potential to reduce accidents or conflicts on approach to Munlochy Junction, addressing TPO2. Feasibility has moderate negative scores, but the benefits are considered to outweigh the negatives, including those environmental impacts associated with construction works. Public support is neutral, but the safety benefits along with economic and integration benefits, deems this option retained for detailed appraisal.

Convert Munlochy Junction into a roundabout

5.3.14. This option is recommended to be retained, as it addresses TPO1, TPO2 and TPO4. Although it has moderate associated costs and feasibility challenges, the anticipated major benefits to safety merit further investigation of this option, alongside mitigating the environmental impact.

Grade separation at Munlochy Junction

5.3.15. The option addresses TPO1, TPO2 and TPO4. It is recommended to be retained due to the potential safety benefits of grade separation, alongside having moderate public support as it could also incorporate the Artafallie Junction. The environmental impacts are not to be discounted but there is opportunity to incorporate environmental remediation and enhancements. The option is expected to be of significant cost however, and a further assessment could better inform if the option is feasible.

Appendix A

Appraisal Summary Tables

Speed limit reduction to Munlochy

Proposal Details			
Proposal Name:	Speed limit reduction to Munlochy	Name of Planner:	*WSP*
Proposal Description:	This option is a proposal to extend the existing 50mph speed limit from North Kessock to North of Munlochy, thereby reducing the current 70mph speed limit.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the A9 between Munlochy Junction and North Kessock. The speed limit is applied to the strategic corridor which links the north and north-west of Scotland. Roads to local communities are reliant on this corridor.		
Social Context:	As the A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option does not exclude or deprive any specific communities.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit is expected in reducing conflicts for active travel modes at Munlochy Junction.		
TPO 2	A minor benefit is expected to safety at Munlochy Junction, with reduced mainline traffic speed and a likely reduction in accident severity, resulting in a score of +1.		
TPO 3	No benefit is expected for improving road safety at Tore Roundabout.		
TPO 4	No benefit is expected in respect of road safety at the intermediate junctions along the A9.		
Rationale for Rejection of Proposal:	This option has a minor positive score against TPO2 as the challenge of speed limit compliance would mean only a limited reduction to vehicle speed and resulting safety benefit at Munlochy Junction. It does not address safety concerns for junctions other than Munlochy or improvements for active travel so does not contribute to TPO1 or TPO3. Additionally, amendment of a speed limit requires a Speed Limit Order. This must follow a legal process, and consultation with public sector organisations, key stakeholders and the public is required. This requirement means implementation is not fully within the control of Transport Scotland. Although this option has minimal associated costs, the low acceptability, moderately negative feasibility and minor economic impact scores combined with the level of uncertainty around safety benefits all contribute to the recommendation for rejection at this stage.		
Implementability Appraisal			
Technical:	Changes to speed limits require a Speed Limit Order (SLO). This is a legal process which may receive public objection. Although the degree of objection is unknown, the resulting unfavourable feedback from the public consultation is a good indicator and it has been scored as -2.		
Operational:	Operational requirements require enforcement of the speed limit to ensure compliance. Due to these enforcement requirements, this has been scored as -2.		
Affordability:	There are low costs involved with further assessment, consultations, production of legal documents and installation of speed limit signage, scoring 0.		
Acceptability:	Moderate opposition was received during the public consultation, resulting in a score of -2, with the stakeholders scoring it +2. The score utilised in the Part 1 Appraisal is therefore -2, as where there is a difference in score between stakeholders and the public, the lower score has been utilised as objection presents a risk to the deliverability.		
STAG Criteria			
Criterion	**Assessment Summary**		
Environment:	A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in the severity and frequency of wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.		
Safety:	A reduction in speed is anticipated to reduce the severity of road traffic accidents and has potential for a reduced risk of conflict at Munlochy Junction, resulting in a score of +1 for the Accident criterion. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.		
Integration:	There are no dedicated pedestrian or cyclist facilities at Munlochy Junction, resulting in a score of 0 for TI and the same for TLI as there are no population centres nearby. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as "the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the new posted speed limit". As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. Additionally, this document advises that a lower speed limit on a dual carriageway is only appropriate if there is a history of numerous accidents, which is not the case here. On balance, there is some level of alignment with the policies considered and therefore PI has received a +1 score.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have been given scores of 0, as there is likely to be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups.		

Speed limit reduction for a one-mile radius around Tore Roundabout

Proposal Details			
Proposal Name:	Speed limit reduction for a one-mile radius around Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	This option is a proposal to reduce the speed limit within a one-mile radius of Tore Roundabout. This option expands on the do-minimum option of reducing the speed limit on the immediate approaches to Tore Roundabout.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option is relative to the A9, A835 and A832. The speed limit is applied to all approaches. It will generate calmer traffic for Tore village and decreased noise.		
Social Context:	The roundabout is surrounded by Tore village. Pedestrian links between parts of the village are found at the roundabout.		
Economic Context:	The roundabout is an important economic connector between the north and North-West of Scotland. Both local and national businesses are reliant on this junction for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate up to one mile from Tore Roundabout, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to active travel can be expected		
TPO 2	No benefit is expected in respect of vehicular road safety at Munlochy Junction.		
TPO 3	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate up to one mile from Tore Roundabout, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit at Tore Roundabout can be expected		
TPO 4	No benefit is expected in respect of road safety in the intermediate junctions along the A9.		
Rationale for Rejection of Proposal:	This option has a minor positive score for TPO1 and TPO3 especially given the Do-minimum commitment of a reduction in speeds on the approach to Tore Roundabout. It does not address TPO2. It has minimal costs as well as positive scores for environment, safety and integration but has minor negative scores for economic efficiency and technical feasibility, and a moderately negative score for operational feasibility based on enforcement challenges. As with the previous option, there is likely to be little change in vehicle speed which would ultimately limit any benefits to the TPOs. Amendment of a speed limit requires a Speed Limit Order which must follow a legal process. A consultation with public sector organisations, key stakeholders and the public is required, and implementation is not fully within the control of Transport Scotland. Additionally, it did not receive a positive score in acceptability. On balance, therefore, it is not recommended for rejection at this stage.		
Implementability Appraisal			
Technical:	Changes to speed limit require a Speed Limit Order (SLO). This is a legal process which may receive public objection. As a result of the unknown element of objections, it has been scored as -1.		
Operational:	Operational requirements necessitate enforcement of the speed limit to ensure compliance. Due to these enforcement requirements, this has been scored as -2.		
Affordability:	There are minimal costs involved with further assessment, production of legal documents and installation of speed limit signage, scoring 0.		
Acceptability:	This option was not shown at the public consultation due to its similarities with the option for reducing the speed limit on the approaches to Tore Roundabout. However, the -1 score has been applied on the basis that public opinion is likely to be similar with concerns around compliance. Stakeholders have given it a score of 2. Therefore, the score of -1 has been taken forward, being the lower of the two.		
STAG Criteria			
Criterion	**Assessment Summary**		
Environment:	A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.		
Safety:	A reduction in speed is anticipated to reduce the severity of road traffic accidents and has potential to reduce the likelihood of conflicts. However, traffic would be slowing on approach to the roundabout regardless so the benefits in this respect are negligible. It is feasible that northbound drivers on the A9 may still try to overtake slower vehicles on the approach to the roundabout, knowing there is a single carriageway beyond. As a result, Accident impact has been given a score of 0. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.		
Integration:	The option has a minor benefit to the users of other transport modes with slower vehicular traffic around Tore making a more inviting environment, resulting in a TI score of +1. This slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as "the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the		

	new posted speed limit". As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. On balance, there is some level of alignment with the policies considered and therefore PI has received a +2 score.
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Speed limit reduction along whole study area

Proposal Details			
Proposal Name:	Speed limit reduction along whole study area.	Name of Planner:	*WSP*
Proposal Description:	This option is a proposal to extend the existing 50mph speed limit from North Kessock to Tore, thereby reducing the current 70mph speed limit.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the A9 along the entire study area. The speed limit is applied to the strategic corridor which links the north and north-west of Scotland. Roads to local communities are reliant on this corridor.		
Social Context:	As the A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option does not exclude or deprive any specific communities.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate along the whole study area, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to active travel can be expected, scoring +1.		
TPO 2	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate along the whole study area, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to Munlochy Junction can be expected, scoring +1.		
TPO 3	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate along the whole study area, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to Tore Roundabout can be expected, scoring +1.		
TPO 4	Experience elsewhere indicates that for a speed limit reduction to be effective, ongoing enforcement or the development of a design that self-enforces is required. In the absence of opportunities which are appropriate along the whole study area, only a minor reduction in average mainline speed could be expected with a reduced speed limit. Accordingly, only a minor benefit to Tore Roundabout can be expected, scoring +1.		
Rationale for Rejection of Proposal:	Although scoring positively for all TPOs, this option received moderate opposition from the public and stakeholders. Despite appearing to address the TPOs, the points described in the previous two options regarding compliance along the study area are likely to result in a limited change to vehicle speed and would limit any benefits to the TPOs. In addition, the legal process to establish a Speed Limit Order means implementation is not fully within the control of Transport Scotland and public opinion has shown major opposition. It is therefore recommended that this option is not taken forward.		
Implementability Appraisal			
Technical:	Changes to speed limit require a Speed Limit Order (SLO). This is a legal process which may receive public objection. As a result of the likely element of objections, given the opposition by the public, and the conflict with established policy, it has been scored as -2.		
Operational:	Operational requirements include regular maintenance and enforcement of the speed limit, however there are no major operational challenges. Due to the maintenance and enforcement impacts, this has been scored as -2.		
Affordability:	There are minor costs involved with further assessment, production of legal documents and installation of speed limit signage, scoring -1.		
Acceptability:	This suggestion of a speed limit reduction along the length of the A9 within the study area received major public opposition, resulting in a score of -3, with increased journey times being cited as a factor. Stakeholders scored it as +1, therefore the score of -3 will be used being the lower of the two.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.		
Safety:	It is feasible that northbound drivers on the A9 may still try to overtake slower vehicles on the approach to the roundabout, knowing there is a single carriageway beyond. In addition, ‘platooning’ of groups of vehicles may occur. However, as this option is a reduction in speed along the whole route, and therefore is anticipated to reduce the severity of road traffic accidents and has potential for a reduced risk of conflicts, these positives outweigh the potential negatives, scoring +1 for Accident impact based on the assumption that drivers comply. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as 0, given the localised nature of the option.		
Integration:	The option has a minor benefit to the users of other transport modes with slower vehicular traffic making a more inviting environment, resulting in a TI score of +1. This slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds. There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions”. This proposed reduction in speed conflicts with ETLLD Circular 1/2006: Setting Local Speed Limits, as “the aim should be to align the speed limit so that the original mean speed driven on the road is at or below the new posted speed limit”. As the mean speed here is close to 70mph a reduction to 50mph does not align with policy. Additionally, this document advises that a lower speed limit on a dual carriageway is only appropriate if there is a history of numerous accidents, which is not the case here. On balance, there is some level of alignment with the policies considered and therefore PI has received a +1 score.		

Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

Paint the kerbs at Munlochy Junction

Proposal Details			
Proposal Name:	Paint the kerbs at Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	This option proposes the use of fluorescent paint to improve the visibility of kerbs at Munlochy Junction.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	This option is to improve visibility of Munlochy Junction. Munlochy Junction is the main access from the A9 to Munlochy and local dwellings at Bogallan and Croftnacreich north of the A9.		
Social Context:	As the A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option does not exclude or deprive any specific communities.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	There is no benefit to active travel, as they would not benefit from the painted kerbs. This TPO scores 0.		
TPO 2	There is no benefit expected in respect of vehicular road safety at Munlochy Junction, with the kerbs likely to have negligible impact This TPO scores 0.		
TPO 3	There is no benefit to Tore Roundabout from painting the kerbs at Munlochy Junction. This TPO scores 0.		
TPO 4	There is no benefit to the intermediate junctions from painting the kerbs at Munlochy Junction. This TPO scores 0.		
Rationale for Rejection of Proposal:	This option addresses none of the TPOs and has no positive scores in the STAG criteria. Although this option has minimal associated costs, it is deemed unfeasible to take forward, since it provides little benefit.		
Implementability Appraisal			
Technical:	Minor technical input is required for planning and design, resulting in a score of -1.		
Operational:	There are negligible operational impacts other than minor maintenance. This scores 0.		
Affordability:	There are negligible costs involved with this option, scoring 0.		
Acceptability:	There was moderate support from stakeholders during the workshops, scoring +2.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No impacts or benefits are expected, resulting in a score of 0.		
Safety:	No impacts or benefits are expected, resulting in a score of 0.		
Economy:	No impacts or benefits are expected, resulting in a score of 0.		
Integration:	No impacts or benefits are expected, resulting in a score of 0.		
Accessibility and Social Inclusion:	No impacts or benefits are expected, resulting in a score of 0.		

Amend road signage to Cromarty

Proposal Details			
Proposal Name:	Amend road signage to Cromarty	Name of Planner:	*WSP*
Proposal Description:	This option proposes to change the signage to direct drivers travelling to Cromarty to go via Tore Roundabout and use the A832 instead of going through Munlochy. This is to encourage tourist traffic and other non-local traffic away from the B9161 junction. Users of satellite navigation may, however, continue to use the Munlochy Junction.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Munlochy Junction is the main access from the A9 to Munlochy and local dwellings at Bogallan and Croftnacreich north of the A9.		
Social Context:	Removing the Cromarty signage at Munlochy Junction would redirect tourists to Tore Roundabout, reducing traffic along the B9161.		
Economic Context:	This would redirect traffic to use more of the A9, increasing traffic along the economic corridor.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected in reducing conflicts for active travel modes at the junctions, resulting in a score of 0.		
TPO 2	A reduction in the number of vehicles using the B9161 to and from Munlochy could reduce the number of conflicts at Munlochy Junction and provide minor benefits for vehicular road safety. As a result, TPO2 has been scored as +1.		
TPO 3	The reassignment of traffic from the B9161 through Tore Roundabout would generate minor negative impacts with increased traffic, translating to increased travel times and potentially a greater frequency of conflicts. In addition, the increased traffic volumes may result in longer queues at Tore Roundabout. Therefore, TPO3 has been scored as -1.		
TPO 4	No impact is expected in respect of road safety at the intermediate junctions, scoring 0.		
Rationale for Rejection of Proposal:	Although this option has a minor benefit to TPO2, with a score of +1, the resulting increase in traffic through Tore Roundabout and the village results in a score of -1 for TPO3. There was a mixed response from the public, and the neutral economic scores and lack of integration with policy do not make this a feasible option, particularly as the cost to benefit is not anticipated to be high.		
Implementability Appraisal			
Technical:	As this measure would be classed as minor works and relatively unintrusive, with no significant challenges anticipated in the planning and implementation of new signage on both local and trunk road networks, this option has been given a score of -1.		
Operational:	The associated operational requirements are minimal, falling under routine road maintenance by the Operating Company, therefore a score of -1 has been given to reflect this.		
Affordability:	Only minimal costs are anticipated for these minor works, resulting in a score of 0.		
Acceptability:	Responses to this option during the public consultation were broadly mixed with no clear positive or negative score. Some positive responses noted that while it was a good idea, drivers are more likely to adhere to satellite navigation instructions, and therefore this may be of little benefit. The negative responses noted that it was a poor idea for the same reason. The resulting score from the public is 0. Minor support, with a score of +1 was received from stakeholders, and since the lower score is taken forward the overall result is 0.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option. There may be a slight increase in emissions at Tore, and an increase in traffic through the village, but the low traffic volumes involved are likely to have a negligible impact when incorporated into the existing, larger, mainline traffic volume. All sub-criteria have been given a score of 0.		
Safety:	Diverting traffic away from turning right at Munlochy Junction will have a minor benefit to safety, with a reduction in potential conflicts and therefore a reduction in potential collisions. This has resulted in the Accident criterion receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	The proposed route is marginally longer that the B9161, but the higher quality carriageway eliminates any increase in travel time, therefore TEE has been scored 0, reflecting the absence of any impact. EALI has been scored as 0, given the localised nature of the option.		
Integration:	Due to the increase in traffic volume through Tore, this option has a minor impact on TI and TLI resulting in a score of -1 for each, as this impacts other transport modes and access to local facilities. On balance, access to Cromarty via the B9161 or Tore has no impact on Policy Integration, resulting in a score of 0.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Amend road signage for visitors and tourists at Tore Roundabout

Proposal Details			
Proposal Name:	Amend road signage for visitors and tourists	Name of Planner:	*WSP*
Proposal Description:	This proposal is to make signage at Tore Roundabout clearer for visitors and those unfamiliar with the area, for example, those with no awareness of the uncontrolled pedestrian crossing. Carrying out a signage review would indicate if the existing signs meet the current requirements.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Tore Roundabout acts as an important connection point between the A832, A835 and the A9. Improved signage could generate better traffic flows.		
Social Context:	The roundabout divides Tore village and connectivity between the village is important. Better signage would benefit the pedestrian links and increase safety between parts of the village.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objective		
TPO 1	Improved signage is expected to generate a minor benefit by making drivers aware of the presence of active travel users, including pedestrians, cyclists and the location of crossings. This results in a score of +1.		
TPO 2	No impact or benefit is expected in respect of vehicular road safety at Munlochy Junction.		
TPO 3	Improved signage at Tore Roundabout may generate minor benefits for vehicular road safety, making it clearer for drivers unfamiliar with the area. This results in a score of +1.		
TPO 4	No impact expected in respect of road safety in the intermediate junctions along the A9.		
Rationale for Selection of Proposal:	This option addresses TPO1 and TPO3 and could provide environmental benefits for the landscape and visual amenity. It has minor public support and benefits multiple road users. The only negative scoring is minor against feasibility, with the remaining criteria generally receiving neutral or positive scores. The minimal costs associated with the provision of new road signs make this option viable for further assessment in the Part 2 Appraisal.		
Implementability Appraisal			
Technical:	As this measure would be classed as minor works and relatively unintrusive, only a minor impact is perceived, with a score of -1.		
Operational:	The associated operational requirements are minimal, with routine maintenance required by the Operating Company, therefore this option has been given a score of -1.		
Affordability:	Minimal costs are anticipated for these minor works, resulting in a score of 0.		
Acceptability:	Minor support was received from the public, giving a score of +1, with minor support also received from stakeholders, resulting in an overall score of +1.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on the majority of environmental sub-criteria are anticipated due to the non-invasive nature of the option. Landscape and Visual Amenity have both scored +1 as a result of the minor benefit in removing cluttered signage and street furniture.		
Safety:	Improving signage at Tore Roundabout could have a minor benefit to safety, with a reduction in potential conflicts and therefore a reduction in potential collisions. This has resulted in Accidents receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	The amendment to road signage is unlikely to have an impact on both TEE and EALI, and these have both been given scores of 0.		
Integration:	The option could have a minor benefit to the users of existing facilities, who may benefit from improved driver awareness, resulting in a score of +1 for TLI. This option has no impact on TI or PI, with a score of 0 for each of these.		
Accessibility and Social Inclusion:	Community Accessibility could be improved, with increased driver awareness providing more favourable access to the public transport network and existing active travel facilities, resulting in a score of +1. Comparative Accessibility has been given a score of 0, as no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Activated warning signs

Proposal Details			
Proposal Name:	Activated warning signs	Name of Planner:	*WSP*
Proposal Description:	This proposal is to install electronic warning signs on the A9 which activate to warn mainline traffic when there are vehicles waiting to join the carriageway from the side roads. This may be particularly beneficial when the crossing vehicle is large or slow-moving.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Activated warning signs on the A9 applied in advance of junctions. Residential dwellings, farming and businesses are located along the full study area.		
Social Context:	As the A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option does not exclude or deprive any specific communities.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	The is no benefit expected in reducing conflicts for active travel modes at the junctions, as these signs are relative to vehicular traffic.		
TPO 2	The installation of electronic warning signs is expected to generate minor benefits by providing drivers approaching Munlochy Junction with warning of turning traffic ahead. This scores +1.		
TPO 3	The installation of electronic warning signs is not expected to provide benefits to traffic at Tore Roundabout, scoring 0.		
TPO 4	The installation of electronic warning signs is expected to generate minor benefits by providing drivers approaching the intermediate junctions with warnings of turning traffic ahead. This scores +1.		
Rationale for Selection of Proposal:	This option addresses TPO2 and TPO4, improves safety and integrates with Scotland's Road Safety Framework to 2030. Costs, and operational and technical concerns, are minor with public support being mixed. There are no discernible environmental concerns. The real-time data about the traffic conditions can help prepare approaching traffic of potential queuing or dangerous road conditions. The safety benefits, combined with the absence of negative scores across the criteria, make this option viable for progression to the Part 2 Appraisal.		
Implementability Appraisal			
Technical:	Although this measure would require a power source, this is not perceived to be a significant technical issue, with only a minor impact perceived, and a score of -1.		
Operational:	Although regular maintenance is required to ensure correct and beneficial operation, the overall operational requirements are not anticipated to be significant, resulting in a score of -1.		
Affordability:	Minimal costs are anticipated for this option, resulting in a score of 0.		
Acceptability:	Responses to this option during the public consultation were broadly mixed with no clear positive or negative score, and some comments citing concerns over the effectiveness and cost/benefit. This results in a score of 0 from the public. The stakeholders scored it more positively at +2, the score of 0 is taken forward, being the lower of the two.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option, with all sub-criteria receiving a score of 0.		
Safety:	Improving driver awareness is likely to have a minor benefit to safety, with a likely reduction in conflicts and therefore a likely reduction in collisions. This has resulted Accidents receiving a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	The installation of warning signs will have no impact on both TEE and EALI, and these have both been given scores of 0.		
Integration:	The option has a minor benefit to the users of other transport modes with increased driver awareness at key areas and potentially slower vehicular traffic, resulting in a TI score of +1. There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1. There is no perceived benefit to TLI, with a score of 0 given.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Prohibit right turns from side roads onto the A9

Proposal Details			
Proposal Name:	Prohibit right turns from side roads	Name of Planner:	*WSP*
Proposal Description:	This option prohibits right turn movements coming from side roads onto the A9, with left-out only manoeuvres permissible. This would be facilitated by signage including ‘no right turn’ and ‘no entry’ on the central reserve. Renewed road markings in the central reserve may also help to make it clearer to traffic emerging from the side roads, combined with improvements to the layout of the central reserve to prevent emerging traffic inadvertently entering	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the A9 along the entire study area. The prohibition is applied to the strategic corridor which links the north and north-west of Scotland. Local community access to the wider network will be affected.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No impact is expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	A minor benefit is expected in respect of vehicular road safety with the prohibition of right turns from the B9161 at Munlochy Junction, reducing conflict. This has scored +1.		
TPO 3	A minor negative impact expected in respect of vehicular road safety at Tore Roundabout as a result of the likely increase in traffic, scoring -1.		
TPO 4	A minor benefit is expected in respect of vehicular road safety with the prohibition of right turns from the side roads at intermediate junctions along the A9 which reduces conflict. This has scored +1.		
Rationale for Rejection of Proposal:	Although having a minor benefit to TPO2 and TPO4, this option is not expected to provide benefits to environment, safety, economy or transport and land use policies. Prohibiting right turns from side roads will greatly affect the access and travel distances of users of the road network, although a minor improvement in the accident rate is expected. It would increase traffic at Tore Roundabout, resulting in a score of -1 for TPO3. Despite having minor public support, these factors, along with the associated moderate costs, are not sufficient to justify progression of this option to detailed appraisal.		
Implementability Appraisal			
Technical:	Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. Although the degree of objections is unknown, this option received overall minor support and the degree of objection is likely to be limited. As a result, it has been scored as -1.		
Operational:	Associated operational requirements are minimal and not deemed to be a significant factor. Improvements to the layout of the central reserve to prevent emerging traffic inadvertently entering will encourage compliance. This has been scored as 0.		
Affordability:	Moderate costs are anticipated for this option, resulting in and a score of -2.		
Acceptability:	Moderate support was received from the public, with a score of +2, citing the likely safety improvements. Stakeholders scored this as+1. An overall score of +1 is applied, being the lower of the two.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units. No loss of land would occur, and only a minor adverse impact is predicted.		
Safety:	Prohibition of some manoeuvres reduces the likelihood of right-turn collisions, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	The prohibition of manoeuvres is likely to result in a minor increase in travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the A9 from the local network reduced, and this may have an impact on the local economy. This has been given a score of -1.		
Integration:	There is no anticipated impact to other modes of transport, as the only bus services crossing the A9 are from the northbound carriageway onto the B9161, resulting in a score of 0 for TI. TLI has been given a score of -1, as this impacts access to local facilities . Policy Integration scores +1, as the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions”.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Prohibit u-turns at intermediate junctions and Munlochy Junction

Proposal Details			
Proposal Name:	Prohibit u-turns at intermediate junctions and Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	The option would prohibit u-turns at the intermediate junctions and Munlochy Junction to reduce conflict with mainline traffic.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the A9 along the entire study area. The speed limit is applied to the strategic corridor which links the north and north-west of Scotland. Roads to local communities are reliant on this corridor.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Option does not affect economic activity or accessibility.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No impact expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	Minor benefits are expected at Munlochy Junction by reducing the potential for conflict between mainline traffic and slower manoeuvring traffic, scoring +1.		
TPO 3	No benefit or impact is expected in respect of vehicular road safety at Tore Roundabout.		
TPO 4	Minor benefits are expected at the intermediate junctions by reducing the potential for conflict between mainline traffic and slower manoeuvring traffic, scoring +1.		
Rationale for Selection of Proposal:	This option has a very minor positive benefit to TPO2 and TPO4, has moderate public acceptability and no impact to the local economy. It was noted during the public consultation the widespread belief that the manoeuvre was already prohibited which aligns with observations at the junctions which highlighted that U-turns were rare and therefore any benefits would be minimal. Given the limited benefits but considering the minimal costs, it is considered that this option, whilst not a standalone option, could be considered as part of a package of measures or as part of future maintenance.		
Implementability Appraisal			
Technical:	Prohibition of manoeuvres requires a Traffic Regulation Order (TRO) This is a legal process which may receive public objection. Although this is an unknown element, it will affect very few people and it is expected that the risk of objection is low, on the basis of support received during the public consultation. It has been given a score of 0.		
Operational:	Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.		
Affordability:	Minimal costs are anticipated for this option, resulting in a score of 0.		
Acceptability:	Strong support was received from the public, resulting in a score of +3, citing safety as a factor. This is more positive than the stakeholder score at +2, therefore the score of +2 has been taken forward, being the lower of the two.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of the option, and all sub-criteria have been given a score of 0		
Safety:	Prohibition of some manoeuvres could reduce the likelihood of accidents, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	Prohibition of a low frequency manoeuvre is not anticipated to have an effect on TEE, having been given a score of 0. Although there is a minor impact on EALI, with some drivers requiring travel to either Tore Roundabout or North Kessock Junction instead, the frequency of this manoeuvre, and the impact on the local economy, is negligible. This results in a score of 0.		
Integration:	Prohibition of a low frequency manoeuvre is not anticipated to affect TLI or TI, resulting in a score of 0. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Prohibit all right turns at Munlochy Junction

Proposal Details			
Proposal Name:	Prohibit all right turns at Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	The proposal is to prohibit right turns from the A9 to the B9161 and to the A9 from the B9161 at Munlochy Junction to minimise conflict between mainline and slower manoeuvring traffic.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option is at Munlochy Junction, for access to the B9161. The prohibition is applied to the strategic corridor which links the north and north-west of Scotland. Local community access to the wider network will be affected.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	A moderate benefit is expected in respect of vehicular road safety with the prohibition of right turns at Munlochy Junction to reduce potential conflict and therefore improve road safety. This results in TPO2 scoring +2.		
TPO 3	With the prohibition of right turns at Munlochy Junction, traffic may be redistributed through Tore Roundabout. Increased traffic at Tore Roundabout may result in a minor negative impact in vehicular road safety.		
TPO 4	With the prohibition of right turns at Munlochy Junction, traffic may be redistributed through the intermediate junctions. Increased traffic along the A9 may result in a minor negative impact in vehicular road safety at intermediate junctions.		
Rationale for Selection of Proposal:	For this option, TPO2 has a moderate score, but results in impacts on TPO3 and TPO4 as it may increase traffic at Tore Roundabout. There is a moderate benefit to safety at the junction by the elimination of turning manoeuvres which cross oncoming traffic, and this integrates with Scotland's Road Safety Framework to 2030. Although there is an absence of economic or environmental benefit, and public opinion shows minor opposition, this is a measure which could be implemented within a short time. The moderate benefit to safety, combined with the associated minor costs, suggest this option merits further assessment during the Part 2 Appraisal.		
Implementability Appraisal			
Technical:	Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. As a result of the expected objections from the large number of drivers who currently turn right on to the A9, and the feedback during the public consultation, it has been scored as -2.		
Operational:	Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.		
Affordability:	Moderate costs are anticipated for this option, resulting in a score of -1.		
Acceptability:	Moderate opposition from the public was received for this option, with concerns about additional travel times raised. This has been scored as -2. Stakeholders had neutral support for this option, so the score of -2 has been taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units. No loss of land would occur, and only a minor adverse impact is predicted. Traffic which would require to turn left from the junction would have to travel further producing more CO_2 and increasing localised emissions. This results in a score of -1 for Local Air Quality and Global Air Quality, showing a minor impact.		
Safety:	Prohibition of all turning manoeuvres would reduce the likelihood of accidents, resulting in a moderate benefit and a score of +2. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	The prohibition of these manoeuvres would result in an increased travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the local network reduced and this may have an impact on the local economy. This has been given a score of -1.		
Integration:	Due to the impact on the public transport network, this option has a minor impact on TI and TLI resulting in a score of -1 for each, as this impacts other transport modes and access to local facilities. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.		
Accessibility and Social Inclusion:	As a bus service turns right from the A9 to the B9161, this option has a minor impact on Community Accessibility, as this route manoeuvre can no longer be performed. This results in a score of –1. Comparative Accessibility has been given a score of 0, as no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Prohibit right turn from B9161 to A9 Northbound at Munlochy Junction

Proposal Details			
Proposal Name:	Prohibit right turns from B9161 to A9 Northbound at Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	This proposal is to prohibit right turns from the B9161 at Munlochy Junction to the A9 Northbound, reducing conflict with mainline traffic.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the B9161 access. The prohibition is applied to the strategic corridor which links the north and north-west of Scotland. Local community access to the wider network will be affected.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	A minor benefit is expected in respect of vehicular road safety with the prohibition of right turns from the B9161 onto the A9 northbound. Evidence shows the number of vehicles doing this movement is low; however, conflicts still arise and would be removed with this option. As a result, TPO2 scored +1.		
TPO 3	As the volume of traffic affected is low, there is no impact expected in respect of vehicular road safety at Tore Roundabout.		
TPO 4	As the volume of traffic affected is low, there is no impact expected in respect of vehicular road safety at the intermediate junctions.		
Rationale for Selection of Proposal:	This option addresses TPO2 and provides minor benefits to safety at Munlochy Junction. Minor support was received from the public. Prohibiting right turn onto the A9 northbound would alleviate the crossing from the A9 onto the B9161. The majority of the criteria received neutral scores, with minimal costs associated. It is recommended to be taken forward.		
Implementability Appraisal			
Technical:	Prohibition of manoeuvres requires a Traffic Regulation Order (TRO). This is a legal process which may receive public objection. Given the low volume of traffic carrying out this manoeuvre, the number of objections is likely to be low and it has been scored as -1.		
Operational:	Associated operational requirements are minimal and not deemed to be a significant factor. This has been scored as 0.		
Affordability:	There are minimal costs involved with further assessment, production of legal documents and installation of signage, scoring 0.		
Acceptability:	Moderate support from the public was received, with safety being cited as a factor. This has been given a score of +2. However, stakeholders had minor support for this, therefore the lesser score of +1 has been taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	No significant impacts on the majority of the environmental sub-criteria are anticipated due to the non-invasive nature of the option. Agriculture and Soils scored -1 as a result of longer journey times for individual farm units, although no loss of land would occur.		
Safety:	Prohibition of some manoeuvres reduces the likelihood of accidents, resulting in a minor benefit and a score of +1. Security has been given a score of 0 as there is no perceived impact on personal safety.		
Economy:	Prohibition of turning manoeuvres is likely to result in a minor increase in travel time, therefore TEE has been scored -1. There is also a minor impact on EALI, with connectivity to the A9 from the local network reduced and this may have an impact on the local economy. This has been given a score of -1.		
Integration:	There is no anticipated impact to other modes of transport, as although there are bus services using this junction, they only turn right from the A9 on to the B9161. This option has been given a score of 0 for TI. A score of -1 has been given to TLI resulting from the impact on access to local facilities. Policy Integration is improved as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +1.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there is anticipated to be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Relocate bus stops on the A9 at Tore Roundabout

Proposal Details			
Proposal Name:	Relocate bus stops on the A9 at Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	This option proposes to revise the location of current bus stops at Tore to better integrate with bus services, walking/cycling routes and to encourage the use of public transport.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects the A9 at Tore. Better bus provisions could induce calmer traffic for Tore village and decreased noise. Local pedestrian movements in this area.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Local businesses would benefit from the option and promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access. Would increase economic activity at Tore.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	The revision and updating of existing bus stop locations to better align with active travel will generate minor benefits by creating safer links to the local area and is likely to encourage more of the local community to make use of the public transport network, TPO1 scores +1.		
TPO 2	No benefit or impact is expected in respect of vehicular road safety at Munlochy Junction, scoring 0.		
TPO 3	By relocating the bus stops away from the roundabout and therefore reducing the likelihood of conflicts between manoeuvring buses and mainline traffic, road safety would be improved. TPO3 scores +1.		
TPO 4	No benefit or impact is expected in respect of vehicular road safety at the intermediate junctions, scoring 0.		
Rationale for Selection of Proposal:	As well as addressing TPO1 and TPO3, this option addresses policy in terms of promoting active travel and supporting the transport hierarchy. Public support is neutral, and the costs are anticipated to be relatively minor. The option also fulfils the accessibility and inclusion criteria and would benefit all modes of travel. Air quality and physical fitness would also benefit, and this outweighs the minor negative scores for landscape, visual amenity and feasibility.		
Implementability Appraisal			
Technical:	As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.		
Operational:	The associated operational requirements are minimal, although relocation of the bus stops would move them further away from adjacent residential properties resulting in a score of -1.		
Affordability:	Minor costs are anticipated for this option for the construction of bus lay-bys, resulting in a score of -1.		
Acceptability:	This option was grouped along with the integration of pedestrian routes at Tore and improved footpaths and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Concerns were raised about the need for bus users to cross the A9 and that a grade-separated crossing point was needed. Concerns were raised about the need for pedestrians to cross the A9 and that a grade-separated crossing point was needed. Concerns about the location of bus stops was also cited. Minor support was received from stakeholders, resulting in a score of +1. As the two scores differ, the lower score of 0 has been used.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and on to more efficient public transport, leading to a reduction in harmful emissions. Both of these categories score +1. This option has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both of these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects. Increased integration with cycling and walking routes could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor benefit to Physical Fitness, scoring +1.		
Safety:	By reducing the likelihood of conflicts between manoeuvring buses and mainline traffic so close to the roundabout, there is a benefit to the Accident criterion, resulting in a score of +1. There is no perceived impact on security, resulting in a score of 0.		
Economy:	The relocation of the bus stops at Tore would provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE and +1 for EALI with an improvement to the local economy expected.		
Integration:	The relocation of bus stops has a minor benefit to by improving the safety of the transport network for the local community, resulting in a TI score of +1. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions” resulting in a score of +2. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.		
Accessibility and Social Inclusion:	Community Accessibility has been scored as +2, with the improvement on the public transport network and safer access to local facilities being a moderate benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.		

Improve pedestrian routes - integration with bus stops, particularly at Tore Roundabout

Proposal Details			
Proposal Name:	Improve pedestrian routes to provide better integration with bus stops, particularly at Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	This option is to provide better integration between pedestrian routes and bus stops, with particular emphasis around Tore for the benefit of residential properties.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Better bus provisions could induce calmer traffic for Tore village and decreased noise. It would also benefit local pedestrian movements in this area.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Local businesses would benefit from the option and promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access. Would increase economic activity at Tore.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	Minor benefits are expected to be generated by integrating pedestrian routes with bus stops and thereby encouraging use of the public transport network. This results in TPO1 scoring +1.		
TPO 2	No benefit or impact is expected for vehicular road safety at Munlochy Junction		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	No benefit or impact is expected for road safety at the intermediate junctions along the A9.		
Rationale for Selection of Proposal:	This option addresses only TPO1 but has generally positive scores on the majority of the criteria. Potential economic benefits in addition with improved security and safety make this option desirable to take forward to detailed appraisal. It also follows the transport hierarchy well and provides greater accessibility on a community wide level. Costs are expected to be low and public support is neutral.		
Implementability Appraisal			
Technical:	As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.		
Operational:	The associated operational requirements are negligible, with a score of 0 given to this criterion.		
Affordability:	Only minor costs are anticipated for this option, resulting in a score of -1.		
Acceptability:	This option was grouped along with the relocation of bus stops at Tore Roundabout and the integration of footpaths to the bus stops and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Moderate support was received from stakeholders, resulting in a score of +2, however, the lower score of 0 has been taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and onto more sustainable forms of transport, leading to a reduction in harmful emissions. Both of these categories score +1. Integrating the bus stops to the existing footways has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both of these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects. Increased integration with walking and cycling facilities could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor benefit to Physical Fitness, scoring +1.		
Safety:	Providing integrated areas for vulnerable users has a minor benefit, reducing the likelihood of accidents by creating a clearer and safer environment. This option scores +1 for both sub-criteria.		
Economy:	The integration of pedestrian routes would provide a moderate benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +2 for TEE and +1 for EALI with an improvement to the local economy expected.		
Integration:	The integration of footways has a minor benefit to active travel and public transport users by encouraging use of the existing facilities, resulting in a TI score of +1. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.		
Accessibility and Social Inclusion:	Community Accessibility has been scored as +2, with the improvement on access to the public transport network and access to local facilities being a moderate benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.		

Improve pedestrian routes – footpaths

Proposal Details			
Proposal Name:	Improve pedestrian routes - footpaths	Name of Planner:	*WSP*
Proposal Description:	Improve footpaths at Tore Roundabout, including surfaces, landscaping and signage.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Local pedestrian movements within Tore would benefit. Increased accessibility for all Non-Motorised Users.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Local businesses would benefit from the option and promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access. Would increase economic activity at Tore.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	The improvement of footpaths would create a safer space for pedestrians at Tore and is likely to encourage increased use. Minor benefits are expected, as the location of pedestrian crossings remain unchanged. TPO1 has been given a score of +1.		
TPO 2	No benefit or impact is expected for vehicular road safety at Munlochy Junction		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	No benefit or impact is expected for road safety at the intermediate junctions.		
Rationale for Selection of Proposal:	This option addresses only TPO1 but has generally positive scores on the majority of the criteria, with moderate stakeholder support. Improved security and safety, and positive benefits to the local economy make this option desirable to take forward to detailed appraisal. It also follows the transport hierarchy well and provides greater accessibility on a community wide level. Costs are expected to be low.		
Implementability Appraisal			
Technical:	As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.		
Operational:	The associated operational requirements are minimal once established, with a score of -1 given to this criterion.		
Affordability:	Minor costs are anticipated for the improvements of footways, and has been scored -1 accordingly.		
Acceptability:	This option was grouped along with the relocation of bus stops at Tore Roundabout and the improvement of footpaths, and received a broadly similar degree of positive and negative scores with no clear result. This has resulted in a score of 0 from the public. Concerns were raised about the need for pedestrians to cross the A9 and that a grade-separated crossing point was needed. Concerns were raised about the need for pedestrians to cross the A9 and that a grade-separated crossing point was needed. Concerns about the location of bus stops was also cited. Moderate support was received from stakeholders, resulting in a score of +2. As the scores from the public and stakeholder differ, the lower of the two is taken, resulting in an overall score of 0.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and on to more efficient public transport, leading to a reduction in harmful emissions. Both of these categories score +1. Improving footways has the potential for minor adverse effects on Landscape and Visual Amenity, scoring -1 for both of these criteria. A sensitive design to appropriately integrate into the existing landscape including any necessary screening would help mitigate the effects. An improvement in the quality of facilities could result in an uptake in walking / cycling to access public transport services thereby resulting in a minor beneficial impact to Physical Fitness, scoring +1.		
Safety:	Improved surfaces may reduce the likelihood of Accidents occurring, resulting in a score of +1. There is no perceived impact on Security, with a score of 0 given.		
Economy:	The integration of pedestrian routes could provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.		
Integration:	The improvement of existing footways has a minor benefit to active travel and public transport users by encouraging use of existing facilities and the transport network by the local community, resulting in a TI score of +1. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport. PI scores +2. There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.		
Accessibility and Social Inclusion:	Community Accessibility has been scored as +1, with the improvement on access to the public transport network and access to local facilities being a minor benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.		

Improve pedestrian routes - controlled crossing at Tore Roundabout.

Proposal Details			
Proposal Name:	Improve pedestrian routes - controlled crossing at Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	This option proposed the installation of a controlled crossing on the A9 at Tore Roundabout.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage.	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Local pedestrian movements within Tore would benefit. Increased accessibility for all Non-Motorised Users.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Safety benefits for local residents would promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objective		
TPO 1	This option addresses only TPO1 but has generally positive scores on the majority of the criteria, with moderate stakeholder support. Improved security and safety, and positive benefits to the local economy make this option desirable to take forward to detailed appraisal. It also follows the transport hierarchy well and provides greater accessibility on a community wide level. Costs are expected to be low.		
TPO 2	No benefit or impact is expected for vehicular road safety at Munlochy Junction.		
TPO 3	There is a minor negative impact associated with this option, since having vehicles stop on the roundabout exit may increase queues on the circulatory, resulting in TPO3 scoring -1.		
TPO 4	No benefit or impact is expected for vehicular road safety in the intermediate junctions along the A9.		
Rationale for Selection of Proposal:	This option includes for the provision of a signalised pedestrian crossing facility across the A9. Although having a minor impact to TPO4, with concerns about traffic queuing on the exit of the roundabout, this option has a moderate impact on TPO1, by improving active travel facilities at Tore Roundabout. This option scored positively for safety, the economy and integration, and although there are feasibility challenges, and minor environmental impacts, the associated costs are low, and the negative impacts are not perceived to outweigh the benefits to safety. Public acceptability was neutral, suggesting no strong support.		
Implementability Appraisal			
Technical:	Although this option is relatively unintrusive from a construction perspective, siting a crossing close to a roundabout will require consideration of advanced warning for drivers to mitigate the risk of having traffic signals on the exit of the roundabout where drivers may not expect them. This presents moderate technical challenges, resulting in a score of -2.		
Operational:	The associated operational requirements are minimal, with routine inspection and maintenance by the Operating Company. A score of –1 has been given to this criterion.		
Affordability:	Minor costs are anticipated for the provision of a controlled crossing and has been scored -1 accordingly.		
Acceptability:	This option received mixed reviews from the public, with no clear result. Some respondents cited the increased safety while others highlighted concerns about traffic flow. Overall, this has resulted in a score of 0. Stakeholders were more positive at +2, however, the lower score has been taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Stopping traffic would likely have a minor impact on Local Air Quality due to the increased emissions from idling vehicles at the crossing, resulting in a score of -1. Installation of a controlled crossing within the road corridor is anticipated to result in minor impacts to Landscape and Visual Amenity on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria. Additionally, this option would provide a safe crossing point for active travel users, which may result in an uptake in walking and cycling providing minor benefits to Physical Fitness, scoring +1.		
Safety:	A controlled crossing creates a safer environment, reducing the likelihood of road traffic accidents involving pedestrians. However, consideration has also been given to the risk of having traffic signals on the exit of the roundabout where drivers may not expect them. By installing warning signage for drivers, therefore reducing the risk of erroneously driving through the crossing, on balance this is anticipated to be a minor benefit, with Accidents scoring +1. Signage will also warn drivers of the likelihood of stationary vehicles. There is no impact on Security, with a score of 0 given.		
Economy:	The improvement of the pedestrian crossing is anticipated to provide a minor benefit, with greater resilience and efficiency of the active travel network in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.		
Integration:	The improvement of the pedestrian crossing could have a minor benefit to active travel and public transport users by encouraging use of existing facilities by the local community, resulting in a TI score of +1. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2 There is no perceived impact to TLI, with no additional land required and a score of 0.		
Accessibility and Social Inclusion:	Improvement in access to local services by increasing accessibility by active travel is a minor benefit to Community Accessibility, receiving a score of +1. No gaps have been identified in the accessibility requirements of different population groups, therefore Comparative Accessibility has been scored 0.		

Enhanced signage for cyclists

Proposal Details			
Proposal Name:	Enhanced signage for cyclists	Name of Planner:	*WSP*
Proposal Description:	This proposal is to enhance the signage for the existing cycle network to encourage use of existing facilities rather than the A9.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The existing cycling route in the study area runs along the A9 and fort parts of the corridor and along separate smaller roads parallel to the A9. Routes are mostly separated from A9 junctions.		
Social Context:	The routes are well connected with the surrounding communities along the corridor.		
Economic Context:	Would promote the use of the existing cycling routes along the corridor without affecting the wider road network.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	Enhanced cycling signage would increase awareness of existing facilities in the study area. Encouraging cyclists off the A9, a potential reduction of conflicts between high speed traffic and active travel users would be a minor benefit, with TPO1 scoring +1.		
TPO 2	No benefit or impact is expected for vehicular road safety at Munlochy Junction.		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	No benefit or impact is expected for road safety at the intermediate junctions.		
Rationale for Selection or Rejection of Proposal:	Although addressing only TPO1, benefits are expected from an environmental, economy and integration perspective. The option also integrates well with the transport hierarchy. Operational feasibility and affordability have a score of 0 and the benefits outweigh the negatives. This option is recommended for detailed appraisal.		
Implementability Appraisal			
Technical:	As this option is classed as minor works and relatively unintrusive, the installation of new signage is unlikely to pose significant technical challenges. This results in a score of -1.		
Operational:	The associated operational requirements are minimal, falling under routine maintenance with a score of 0 given to this criterion.		
Affordability:	Negligible costs are anticipated for the provision of enhanced signage, and has been scored 0 accordingly.		
Acceptability:	This option received major support (+3) from the public, with respondents keen to encourage cyclists off the dual carriageway. Stakeholders had minor support, at +1, therefore this score will be taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Global Air Quality and Local Air Quality is likely to see a minor benefit with the potential modal shift away from private vehicles and onto active travel modes, leading to a reduction in harmful emissions. The assessment against these criteria has scored both as +1. Both of these categories score +1. Additionally, the enhancements many encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local populate, scoring +1.		
Safety:	Improved signage will likely encourage active travel users off the A9, reducing the likelihood of conflict with vehicular traffic. This results in a score of +1 for the Accident criterion. There is no impact on Security, with a score of 0 given.		
Economy:	The enhancement of cycling routes would provide a minor benefit, with greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with more users walking and cycling, resulting in a score of +1 for EALI.		
Integration:	The improvement of signage has a minor benefit to cyclists by encouraging use of existing facilities, resulting in a TI score of +1. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions” resulting in a score of +2 There is a minor benefit to TLI, with the option providing upgraded facilities for the local community, with a score of +1 given.		
Accessibility and Social Inclusion:	Community Accessibility has been scored as +1, with the improvement on access to local facilities by active travel being a minor benefit. No gaps have been identified in the accessibility requirements of different population groups at various locations, therefore Comparative Accessibility has been scored 0.		

Improve southbound on-slip at Munlochy Junction

Proposal Details			
Proposal Name:	Improve southbound on-slip at Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	This option proposes to extend the on-slip from B9161 onto the southbound A9 to better facilitate the merging of traffic	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects A9 access from the B9161. Local community access to the wider network will be made safer. Some residential dwellings in close proximity to the site.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected for reducing conflicts for active travel modes at the junctions.		
TPO 2	A moderate benefit is expected at Munlochy Junction by improving the on-slip from the B9161 onto the A9 southbound. This will allow merging traffic a longer section to match mainline speeds, as well as improving their visibility. Likewise, mainline traffic will have more opportunity to move into the offside lane, to allow merging traffic on to the A9. This results in TPO2 scoring +2.		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	No benefit or impact is expected for vehicular road safety at the intermediate junctions along the A9.		
Rationale for Selection of Proposal:	This option is recommended to be retained for detailed appraisal. The public support is strong as it appears that this solution has been raised by the public previously. The option also addresses TPO 2. The technical and costing aspects are significant however, it would benefit from going through further assessment to further clarify the degree of benefit to safety and the economy.		
Implementability Appraisal			
Technical:	Increasing the footprint of the carriageway may encounter additional technicalities which are currently unknown, such as geotechnical issues, land purchasing issues, and disruption to traffic during construction. Additionally, the proposal would require a Departure from Standard for the merge layout. This results in a score of -2.		
Operational:	Although the works include construction, the associated operational requirements are minimal, with routine maintenance routine by the Operating Company, resulting in a score of -1.		
Affordability:	Moderate costs are associated with construction works, due to the increased carriageway footprint. This scores -2.		
Acceptability:	Strong support was received from both the public and stakeholders, with safety and ease of joining the A9 cited as factors. In light of this, a score of +3 has been given.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	The potential for improved traffic flow at this location has the potential for a minor improvement to Local Air Quality by improving traffic flow. It would allow a greater distance for merging traffic to match the speed of mainline traffic, therefore reducing the need for braking manoeuvres. This criterion scores +1. It is anticipated that with mitigation measures in place, the extension would result in a minor impact to land drainage, resulting in a score of -1. The construction work would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. The lengthening of the merge is anticipated to result in minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria. The extension has the potential to affect as yet unknown archaeology depending on the final design, resulting in a score of -1 for Cultural Heritage.		
Safety:	Although the merge length is to current standard, its position near the outside of a large radius bend on the mainline may affect driver perception of approaching vehicles speed and distance. Allowing a greater distance for drivers to manoeuvre should reduce the likelihood of conflicts, resulting in a moderate safety improvement with a score of +2.		
Economy:	The improvement of the on-slip would provide a minor benefit to road infrastructure, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor is also achieved, allowing easier and safer access to the A9, resulting in a score of +1 for EALI.		
Integration:	There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland’s Road Safety Framework to 2030, to “reduce the likelihood, number and severity of collisions”. This would also benefit delivery of the Local Development Plan by providing increased capacity. PI has been scored +1.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there would be no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Install traffic signals at Tore Roundabout

Proposal Details			
Proposal Name:	Install traffic signals at Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	Install traffic signals at Tore Roundabout which includes a controlled pedestrian crossing(s)	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Tore Roundabout acts as an important connection point between the A832, A835 and the A9. Signalising would affect the flows at the junction. Local pedestrian movements within Tore would benefit. Increased accessibility for all Non-Motorised Users.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Safety benefits for residents would promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this junction for transportation and access. Slight impact on traffic flows.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	The introduction of traffic signals at Tore Roundabout will provide a safe crossing point for active travel users around Tore, resulting in a moderate benefit for TPO1, scoring +2.		
TPO 2	No benefit or impact is expected for vehicular road safety at Munlochy Junction.		
TPO 3	Moderate benefit is also expected at Tore Roundabout for road safety by having a controlled flow on the roundabout, resulting in TPO3 scoring +2		
TPO 4	No benefit or impact is expected for vehicular road safety at the intermediate junctions.		
Rationale for Selection of Proposal:	The option strongly addresses TPO1 and TPO3, as well as integration with policy, safety and economy. Public support is moderately negative often justified by concerns that signals will impede traffic flows. This option, with signals on multiple approaches, allows for controlled flows or adaptive timings based on traffic flow and direction. Feasibility has moderate negative scores, but the benefits are considered to outweigh the negatives, including those environmental impacts associated with construction works.		
Implementability Appraisal			
Technical:	The installation of traffic signals and the associated footway works have some moderate technical challenges, resulting in a score of -2.		
Operational:	Regular maintenance is required and routine monitoring of the area to ensure correct functionality is required. These are estimated to be moderate, with a score of -2.		
Affordability:	Moderate costs are anticipated for this option, resulting in a score of -2.		
Acceptability:	Moderate opposition from the public was received for this option, with concerns about additional travel times raised and disruption to traffic flow. This has been scored as -2. However, the stakeholders have minor support for this option with a score of +1. The score of -2 will be taken forward, being the lower of the two.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Stopping traffic would likely have a minor impact on Local Air Quality due to the increased emissions from idling vehicles at the crossing, resulting in a score of -1. The installation of traffic lights is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria. Additionally, the enhancements may encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local populate, scoring +1.		
Safety:	A controlled crossing with traffic lights creates a safe environment for active travel users traffic crossing the carriageway, reducing the likelihood of collisions. This minor benefit results in a score of +1 for Accidents. There is no perceived impact to security, with a score of 0 given.		
Economy:	The provision of traffic signals to regulate traffic flow would lead to greater resilience and efficiency of the transport system in the local area. This results in a score of +1 for TEE. An improvement to the local economy could be expected, with a controlled pedestrian crossing and controlled traffic flow making for more a welcoming environment for active travel users, resulting in a score of +1 for EALI.		
Integration:	The provision of traffic lights has a moderate benefit to active travel and public transport users by encouraging use of existing facilities by the local community, resulting in a TI score of +2. There is a moderate benefit with regards to Policy Integration, as the option supports the NTS2's Sustainable Travel Hierarchy by prioritising walking and wheeling, followed by cycling and public transport, and the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions" resulting in a score of +2. There is no perceived impact to TLI, with no additional land required and a score of 0.		
Accessibility and Social Inclusion:	Improvement in access to local services by increasing accessibility by active travel is a minor benefit to Community Accessibility, receiving a score of +1. There is no perceived impact on Comparative Accessibility, with a score of 0 given.		

Extend the right turn lane from the A9 to the B9161

Proposal Details			
Proposal Name:	Extend the right turn lane from the A9 to the B9161	Name of Planner:	*WSP*
Proposal Description:	This option proposes to extend the existing right-turn lane from the A9 onto the B9161.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects B9161 access from the A9. Local community access to the wider network will be improved and made safer. Some residential dwellings near site.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	Moderate benefits are expected in respect of road safety at Munlochy Junction, as evidence supports that the right-turn lane is close to capacity at certain times of the day, resulting in manoeuvring traffic occupying the offside lane of the A9 while waiting to turn. This results in a score of +2 for TPO2.		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	No benefit or impact is expected for vehicular road safety at the intermediate junctions.		
Rationale for Selection of Proposal:	This option has potential to reduce accidents or conflicts on approach to Munlochy Junction, addressing TPO2. Feasibility has moderate negative scores, but the benefits are considered to outweigh the negatives, including those environmental impacts associated with construction works. Public support is neutral, but the safety benefits along with economic and integration benefits, deems this option retained for detailed appraisal.		
Implementability Appraisal			
Technical:	Widening of the central reserve to accommodate the right turn lane may require realignment of the northbound carriageway within the highway boundary, with unknown technical challenges as this stage. This has been given a score of -1 to account for this risk.		
Operational:	The associated operational requirements are minimal, with the maintenance requirements part of routine carriageway maintenance, and a score of -1 has been given to this criterion.		
Affordability:	Minor costs are associated with this due to the design and construction works required. A score of -1 has been given to this criterion.		
Acceptability:	This received mixed scores, with no clear result. There was no particular reason from the public for the scores given, although some respondents were of the opinion that speed on the southbound carriageway for crossing traffic was the predominant issue. This has therefore been given a score of 0. Stakeholders scored it more positively at +2, but the lower of the scores has been taken forward resulting in an overall score of 0.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	The provision of the extended lane would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage. This option is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria. The loss of existing roadside habitats to make way for a wider carriageway would have a minor impact on Biodiversity and Habitats, scoring -1. The extension of the existing right-turn lane from the A9 onto the B9161 has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage.		
Safety:	Extending the existing right turn lane will accommodate the queues, reducing the risk of accidents resulting from traffic queueing in the offside lane of the A9. However, traffic is still required to cross the A9, therefore a minor benefit, with a score of +2, has given to Accidents. There is no impact to Security, with a score of 0 given.		
Economy:	The improvement of the junction would provide a minor benefit to road infrastructure by increasing the length of the available lane for right-turning traffic and minimising queuing traffic in the offside lane of the A9, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor would also be achieved, allowing easier and safer exit from the A9, resulting in a score of +1 for EALI.		
Integration:	There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +2. The extension of the right-turn lane has no perceived benefit to TI or TLI as it does not address these sub-criteria and have been given a score of 0.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Widen central reserves

Proposal Details			
Proposal Name:	Widen central reserves	Name of Planner:	*WSP*
Proposal Description:	The central reserves at Munlochy Junction and all intermediate junctions are not wide enough to accommodate long, right-turning, vehicles emerging from the side road and wishing to cross both carriageways. This results in the vehicles needing to carry out the manoeuvre in one go, or waiting in the central reserve. Overhangs by these vehicles onto the main carriageway are a significant hazard to mainline traffic. This option proposes to widen the central reserves to accommodate longer vehicles.	Estimated Total Public Sector Funding Requirements	TBC
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	N/A
Background Information			
Geographical Context:	The option affects A9 access from the local roads. Local community access to the wider network will be made safer. Some residential dwellings in close proximity to junctions but mostly agriculture and woodland land.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	No benefit or impact is expected in reducing conflicts for active travel modes at the junctions.		
TPO 2	Allowing long vehicles to remain wholly within the central reserve, it is anticipated that road safety would be improved at Munlochy Junction due to a reduction in potential conflicts. A minor benefit is expected, resulting in a score of +1.		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	By allowing long vehicles to remain wholly within the central reserve, it is anticipated that road safety would be improved at the intermediate junctions due to a reduction in potential conflicts. A minor benefit is expected, resulting in a score of +1.		
Rationale for Rejection of Proposal:	This option produces a minor benefit to TPO2 and TPO4 and scored positively against Accidents and Policy Integration but these benefits are not perceived to outweigh the negative scores against the environment criteria, the moderately low feasibility and the major costs. The low feasibility scores represent the challenges in construction on a busy carriageway and potential land purchase, and the affordability does not represent sound value for money given the lack of benefit anticipated. There is no benefit to Economy or Accessibility. This option is therefore recommended for rejection.		
Implementability Appraisal			
Technical:	The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. As a result of this risk, the potential requirement for additional land, and the challenges of construction on a major road, this has been given a score of -2.		
Operational:	Once complete, the associated operation and maintenance requirements are minimal and considered part of regular carriageway maintenance, resulting in a score of -1.		
Affordability:	Major costs are associated with the widening of the central reserves to account for land purchase, design and construction fees. A score of -3 has been assessed for this criterion.		
Acceptability:	Mixed results were received for this option, with no clear positive or negative score. The stakeholders scored it more positively at +2, however the lower scale of 0 has been taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	The provision of the widened central reserve would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have a minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage. This option is anticipated to result in only minor impacts to Landscape and Visual Amenity, based on the assumption that no substantial landscape features would be removed, scoring -1 for both sub-criteria.		
Safety:	A wider central reserve would allow longer vehicles to wait in the central reserve, eliminating the need to cross both carriageways at once, or to overhang the offside lane of either carriageway. This results in a minor benefit to Accidents, with a score of +1. There is no impact to Security, with a score of 0 given.		
Economy:	The localised nature of this option results in a score of 0 for all sub-criteria, with no impact expected.		
Integration:	There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1. The widening of the central reserve has no perceived benefit to TI or TLI as it does not address these sub-criteria and has therefore been given a score of 0.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Pedestrian bridge or underpass at Tore Roundabout

Proposal Details			
Proposal Name:	Pedestrian bridge or underpass at Tore Roundabout	Name of Planner:	*WSP*
Proposal Description:	This option is to provide a pedestrian bridge or underpass on one of the A9 approaches to Tore Roundabout, providing safer connectivity to either side of the carriageway.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Local pedestrian movements within Tore would change. There are residential dwellings and forested areas in and around the roundabout.		
Social Context:	Pedestrian links between parts of the village are found at the roundabout. Safety benefits for local residents would promote active travel.		
Economic Context:	The roundabout is an important economic connector between the north and north-west of Scotland. Both local and national businesses who are reliant on this junction for transportation and access would not be affected by options.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	The construction of a pedestrian bridge or underpass would generate moderate benefits in respect of safety for active travel users by removing the need to cross the dual carriageway via an at-grade, uncontrolled crossing. This results in a score of +2 for TPO1.		
TPO 2	No benefit or impact is expected in respect of vehicular road safety at Munlochy Junction.		
TPO 3	By removing potential conflict between traffic and pedestrians at Tore, a minor benefit is expected. TPO3 scores +1.		
TPO 4	No benefit or impact is expected in respect of vehicular road safety at the intermediate junctions.		
Rationale for Rejection of Proposal:	This option is likely to have moderate benefits to TPO1 and minor benefits to TPO3. It received overall minor support from the public and would produce an improvement in air quality and safety. Most of the other criteria in the assessment, however, scored negatively, with the remaining environmental impacts scoring minor to moderately negative, including landscape (visual intrusion in the case of a bridge), agriculture (resulting in the loss of agricultural land on either side of the A9 to facilitate access), and water and geology. Provision of such an arrangement would impact on pedestrian 'desire lines' by redirecting some users across other arms of Tore Roundabout, although it does integrate well with the Sustainable Travel Hierarchy and Scotland's Road Safety Framework to 2030. The associated costs result in a moderately negative score for affordability and moderately negative score for technical feasibility, and it is recommended that this option in rejected.		
Implementability Appraisal			
Technical:	The additional land required for this option has a moderate impact on the technical feasibility. As a bridge and an underpass require different technical feasibility studies, the full technicalities have not been determined at this stage. Additionally, an underpass would require significant and complex traffic management on the A9 for several months. As a result of this risk, this has been given a score of -2.		
Operational:	Operational requirements include regular maintenance to ensure safe use, resulting in a score of -1.		
Affordability:	Both a bridge and an underpass have moderate design and construction costs associated. This results in a score of -2.		
Acceptability:	Major support was received for this from the public, citing safety as a factor. Stakeholders gave this minor support with a score of +1, therefore this score will be taken forward.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Global Air Quality and Local Air Quality is likely to see a minor benefit with the change in modal shift away from private vehicles and on to active travel modes, leading to a reduction in harmful emissions. Both of these categories score +1. This option is anticipated to result in moderate impacts to Landscape and Visual Amenity, scoring -2 for both sub-criteria. An underpass would have marginally less visual impact than an overbridge, but a sensitive design and location could mitigate the effects of both options. The provision of a structure or an underpass would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable surfacing. This has resulted in a score of -1 for Drainage. A footbridge would result in a very small loss of limited productivity land (Class 4.1) and direct impacts on up to two farm holdings, producing a score of -1 for Agriculture and Soils. The provision of a structure or an underpass has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage. Additionally, the enhancements may encourage more use of active travel, resulting in a minor benefit to Physical Fitness of the local populate, scoring +1.		
Safety:	Segregation of vulnerable users reduces the likelihood of Accidents, resulting in a score of +2. The addition of proper lighting could also address any security concerns of an underpass, so there is no anticipated impact to this criterion resulting in a score of 0.		
Economy:	Although safer, this option would likely increase travel times for vulnerable users, having a minor impact and scoring -1 for TEE. Similarly, it can act as a barrier across the A9 for those who have to walk a considerable distance to it, resulting in a score of -1 for EALI.		
Integration:	This option supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions" It is aligned with the Sustainable Travel Hierarchy and therefore has a moderate benefit on PI, with a score of +2. Although this does provide safer crossing for vulnerable users, it can have an impact on active travel from a Transport Integration perspective as a result of the increased distance required to cross the road, and the accessibility issues with approach gradients. This results in a score of -1.		

Accessibility and Social Inclusion:	The option provides improved access to local services by increasing accessibility, resulting in a Community Accessibility score of +1. However, a bridge or underpass creates a physical barrier for different population groups, such as people with reduced mobility, disabilities and the elderly, resulting in a Comparative Accessibility score of -2.

Convert Munlochy Junction into a roundabout

Proposal Details			
Proposal Name:	Convert Munlochy Junction into a roundabout.	Name of Planner:	*WSP*
Proposal Description:	This option proposes to convert Munlochy Junction into a roundabout, incorporating Artafallie junction.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage.	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects A9 access from B9161. Local community access to the wider network will be improved and made safer. Some residential dwellings in close proximity to site. Agricultural land may be affected.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option. One of the major junctions within the study area.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	A minor benefit is expected if Munlochy Junction is converted into a roundabout, providing easier negotiation for active travel users as it removes the need for those emerging from the B9161 to cross the fast-moving traffic on A9. This results in a score of +1 for TPO1.		
TPO 2	A roundabout at Munlochy Junction is expected to have a moderate benefit in improving road safety at the junction, by making it easier for traffic to enter and exit the A9 from the local network. Although A9 traffic volumes are relatively high, which has the potential to impact traffic emerging from the B9161, appropriate deflection angles on entering the roundabout will slow A9 southbound traffic sufficiently to allow traffic to join the roundabout from the B9161. TPO2 has been given a score of +2.		
TPO 3	No benefit or impact is expected in respect of vehicular road safety at Tore Roundabout.		
TPO 4	This option will improve safety at Artafallie Junction, resulting in a score of +1 for TPO4.		
Rationale for Selection of Proposal:	This option is recommended to be retained, as it addresses TPO1, TPO2 and TPO4. Although it has moderate associated costs and feasibility challenges, the anticipated major benefits to safety merit further investigation of this option, alongside mitigating the environmental impact.		
Implementability Appraisal			
Technical:	The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, and the complexity of construction on a live carriageway results in a score of -2.		
Operational:	Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.		
Affordability:	A junction has moderate design and construction costs associated, including the realignment of the existing local road at Artafallie. This cost implication results in a score of -2.		
Acceptability:	Mixed results were received from the public, with no clear positive or negative score. Minor support (+1) was received from stakeholders, citing improved safety and usability. As the two scores differ, the lower of the two is used, resulting in an overall score of 0.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	Local Air Quality is likely to see a minor benefit with an improvement in traffic flows to and from the B9161, but this is outweighed by the impacts on mainline traffic slowing for the roundabout. This results in a score of 0. This option would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Drainage may also have minor impact as the naturally draining soils are replaced with impermeable road surfacing. This has resulted in a score of -1 for Drainage. The provision of a roundabout is anticipated to result in moderate impacts to Landscape and Visual Amenity, scoring -2 for both sub-criteria. The landscape character would be affected by the increase in the footprint of the road, but a sensitive design and location could mitigate the effects on the landscape and for nearby receptors. The works would result in a loss of good quality land (i.e. Class 3.1) and would directly impact fields on either side, resulting in a score of -2 for Agriculture and Soils. Additionally, the provision of a roundabout has the potential to affect as yet unknown archaeology depending on the final design. This results in a score of -1 for Cultural Heritage.		
Safety:	A roundabout would significantly reduce the severity of Accidents, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0..		
Economy:	Despite a minor impact on travel times, with TEE scoring -1, thus option has the potential to provide an overall improvement to the strategic corridor resulting in a score of +1 for EALI.		
Integration:	Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland’s Road Safety Framework to 2030 by reducing “the likelihood, number and severity of collisions”, it is not aligned to the Sustainable Investment Hierarchy and is a minor impact with a score of -1 for PI. There is no impact to TI, with a score of 0.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.		

Rationalisation of intermediate junctions and Munlochy Junction (excluding Artafallie)

Proposal Details			
Proposal Name:	Rationalisation of intermediate junctions and Munlochy Junction.	Name of Planner:	*WSP*
Proposal Description:	This option proposes to rationalise Munlochy Junction and the intermediate junctions between Munlochy Junction and Tore Roundabout, by and creating a single improved junction with a new connector road linking Allangrange Junctions into the A9 at Munlochy, with the Glackmore and Arpafeelie junctions connecting to the A832 at Tore. Artafallie is not accommodated in this option due to the challenges of linking to Arpafeelie.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects A9 access from B9161. Local community access to the wider network will be made safer. Some residential dwellings in close proximity to site.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option. One of the major junctions within the study area.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	A rationalised junction is expected to provide major benefits in respect of road safety along parts of the A9 by reducing conflict between active travel users and fast-moving traffic by encouraging use of improved local roads, giving a score of +1 for TPO1.		
TPO 2	There would be increased traffic at Munlochy Junction as a result of the closures of nearby junctions, resulting in a score of -1 for TPO2.		
TPO 3	There would be increased traffic at Tore Roundabout as a result of the closures of nearby junctions, resulting in a score of -1 for TPO3.		
TPO 4	Safety would be improved at majority of the intermediate junctions by removing turning manoeuvres, giving a score of +2 for TPO4.		
Rationale for Rejection of Proposal:	This option addresses TPO1 and TPO4 by improving safety at the intermediate junctions, and for active travel by reducing conflict. However, TPO2 scores negatively as a result of the increased traffic through Munlochy Junction. There are, however, major costs, feasibility challenges, and some moderate environmental impacts associated with the provision of new link roads between the existing junctions, and any upgrades to Munlochy Junction based on the current layout may not sufficiently facilitate the increase traffic. This option has been recommended for rejection at this stage as a standalone option, but could be suitable for inclusion as part of a package of major improvements such as the conversion of Munlochy Junction to a roundabout or the provision of a grade separated junction and should be considered in the detailed appraisal in this regard.		
Implementability Appraisal			
Technical:	The additional land required for this option has a major impact on the technical feasibility, with further assessment required. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, combined with the complexity of construction of a new junction at Munlochy on a live carriageway, results in a score of -2.		
Operational:	Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.		
Affordability:	A junction has significant design and construction costs associated. These significant cost implication result in a score of -3.		
Acceptability:	Mixed scores were received from the public, citing improved safety and usability, but concerns of the impact of junction closures were raised. There was no clear result so a score of 0 has been given by the public. Minor support from stakeholders was received, with a score of +1, but since the two scores differ the lower score of 0 is used.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	As a result of junction closures, traffic may have to travel further to reach a destination, increasing CO_2 emissions and having a minor impact on Global Air Quality, scoring -1. It is anticipated that with mitigation measures in place, the creation of a single improved junction would have only minor impacts on drainage. The construction could result in minor impacts to local private water supplies and at watercourse crossings, with particular attention to be given to the crossing of the Allanglach Burn, between the Allangrange Junction and Artafallie Junction. Consideration of the potential for improvements to existing drainage might present an opportunity for minor benefits to be achieved, but this is currently unknown. Water Quality and Drainage, therefore, scores -1. This option is likely to have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Biodiversity and Habitats would also have a minor impact, scoring -1 as result of the loss of habitat necessary for the proposed layout. This option is anticipated to have a minor impact on the Landscape, scoring -1. Visual Amenity, however, could be improved by rationalisation of the junctions removing clutter. This scores +1. The option would result in a loss of good quality land (i.e. Class 3.1) and directly impacts fields on either side of the junction, and on the proposed link roads, producing a moderate impact and scoring -2 for Agriculture and Soils. Permanent development of a junction has the potential to affect as yet unknown archaeology depending on the final form of the junction. No significant effects on cultural heritage are predicted, assuming that the design integrates well with its surroundings. Cultural Heritage has therefore been scored -1. There are possible minor benefits to Physical Fitness, scoring +1, if pedestrian and cycle routes were re-routed through the junction and at-grade crossings of the A9 were closed, making it a safer and more welcoming environment for active travel users.		

Safety:	Closing the majority of the intermediate junctions would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +2. There is no impact to security, receiving a score of 0.
Economy:	Despite a minor impact on travel times, with TEE scoring -1, thus option has the potential to provide an overall improvement to the strategic corridor resulting in a score of +1 for EALI.
Integration:	Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions", it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both assessed as having minor impacts, as the closure may sever local services to elements of the local community. These have both been scored -1.

Grade separation at Munlochy Junction

Proposal Details			
Proposal Name:	Grade separation at Munlochy Junction	Name of Planner:	*WSP*
Proposal Description:	Convert Munlochy Junction to a grade-separated junction, in a similar manner to North Kessock Junction.	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	The option affects A9 access from B9161. Local community access to the wider network will be improved and made safer. Some residential dwellings in close proximity to site.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road for transportation and access. Local accessibility for businesses and residents to the wider network will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	A grade-separated junction would provide a safer crossing for active travel users by segregating them from the carriageway, therefore reducing conflict. This results in a score of +1 for TPO1.		
TPO 2	A grade-separated junction provides major benefits in respect of road safety at Munlochy Junction by removing right turns across the carriageway, therefore reducing conflict points. This results in a score of +3 for TPO2.		
TPO 3	No benefit or impact is expected for vehicular road safety at Tore Roundabout.		
TPO 4	A grade-separated junction provides safety benefits at Artafallie Junction by removing right turns across the carriageway, therefore reducing conflict points. This results in a score of +1 for TPO4.		
Rationale for Selection of Proposal:	This option is recommended to be retained due to the potential safety benefits of grade separation, alongside having moderate public support as it could also incorporate the Artafallie Junction. The environmental impacts are not to be discounted but there is opportunity to incorporate environmental remediation and enhancements. The option is expected to be of significant cost however, and a further assessment could better inform if the option is feasible. The option also addresses TPO1, TPO2 and TPO4.		
Implementability Appraisal			
Technical:	The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage, along with the complexity of constructing a significant structure over the live carriageway. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections. This risk, and the complexity of construction over a live carriageway results in a score of-3.		
Operational:	Regular maintenance is required to ensure safe and effective operation, but these are minor with a score of -1.		
Affordability:	A grade-separated junction has significant design and construction costs associated. These significant cost implication result in a score of -3.		
Acceptability:	Moderate support was received from the public, citing improves safety and usability. A score of +2 was given to this criterion.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	It is anticipated that with mitigation measures in place, the creation of a grade-separated junction would have only minor impacts on drainage due to the loss of naturally draining soils. Consideration of the potential for improvements to existing drainage might present an opportunity for minor benefits to be achieved, but this is currently unknown. Water Quality and Drainage scores -1. This option would have a minor impact to the Geology in the area as a result of excavation works, producing a score of -1. Biodiversity and Habitats would also have a minor impact, scoring -1 as result of the loss of habitat necessary for the proposed layout. This option is anticipated to have major impacts on the Landscape and on Visual Amenity. Creation of a grade separation would require substantial construction works and additional land surrounding the existing junction and would have localised significant adverse effect on landscape character. A score of -3 has been given to both sub-criteria. Sensitive earthworks and landscape design including replacement planting would help mitigate effects. The option would result in a loss of prime quality land (Class 3.1) and directly impacts fields on either side of the existing A9. A moderate impact is predicted to Agriculture and Soils, scoring -2. Development of a grade separated junction has the potential to affect as yet unknown archaeology depending on the final form of the junction. No significant effects on cultural heritage are predicted from development taking account of assumed design and mitigation and assuming that design integrates well with its surroundings. Cultural Heritage has been scored as -1. There are possible minor benefits to Physical Fitness, scoring +1, if pedestrian and cycle routes were re-routed through the grade-separated junction, making it a safer and more welcoming environment for active travel users.		
Safety:	A grade separated junction would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0.		
Economy:	The improvement of the junction would provide a minor benefit to highway infrastructure, resulting in a score of +1 for TEE. An improvement to the strategic transport corridor is also achieved, allowing easier and safer access to and from the A9, resulting in a score of +1 for EALI.		
Integration:	Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland’s Road Safety Framework to 2030 by reducing “the likelihood, number and severity of collisions”, it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.		
Accessibility and Social Inclusion:	Community Accessibility and Comparative Accessibility have both been given scores of 0, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups		

New road connection between Munlochy Junction and North Kessock Junction

Proposal Details			
Proposal Name:	New road connection between Munlochy Junction and North Kessock Junction	Name of Planner:	*WSP*
Proposal Description:	This option provides a new road connection to North Kessock Junction from Munlochy Junction, combined with either full or partial closure of Munlochy Junction	Estimated Total Public Sector Funding Requirements	*TBC*
Funding Sought From: (if applicable)	Funding is not sought for this proposal at this stage	Amount of Application:	*N/A*
Background Information			
Geographical Context:	Croftnacreich residential dwellings and agricultural land in close proximity of proposed option. A large section of the study area is affected as well as water courses and local roads.		
Social Context:	The A9 runs through the Inner Moray Firth area, the most densely populated area of the Highlands, various communities of different sizes are located here. The option will affect access to local communities and businesses.		
Economic Context:	The strategic A9 corridor is an important economic connector between the north and north-west of Scotland. Both local and national businesses are reliant on this road section for transportation and access. Local accessibility and travel times for businesses and residents to the wider network will be affected by this option.		
Transport Planning Objectives			
Objective	Performance against Transport Planning Objectives		
TPO 1	Active travel users would have the benefit of access to an existing grade-separated junction on the A9, resulting in a score of +1 for TPO1.		
TPO 2	The full or partial closure of Munlochy Junction could significantly improve vehicular road safety, generating a major benefit by reducing conflict points and resulting in a score of +3 for TPO2.		
TPO 3	Tore Roundabout would benefit with the reduction of traffic using Tore to travel to and from Munlochy towards North Kessock, resulting in a score of +1 for TPO3.		
TPO 4	No benefit or impact is expected for vehicular road safety at the intermediate junctions along the A9.		
Rationale for Rejection of Proposal:	Despite addressing TPO1, TPO2 and TPO3, the high expected costs in combination with mixed public support, significant technical difficulties, impacts on the environment and the lack of policy integration, mean this option has limited benefits. Substantial construction works may result in severance of farm holdings, and compulsory purchase of residential dwellings may be necessary. Additional journey times would result from a full or partial closure of Munlochy Junction and Side Road and Trunk Road Orders are required. In addition, the provision of the new link road does not align with the Sustainable Investment Hierarchy policy. It is recommended that this option is not taken forward.		
Implementability Appraisal			
Technical:	The additional land required for this option has a moderate impact on the technical feasibility, with issues not fully known at this stage. Additionally, Side Road and Trunk Road Orders are required which require a legal process open to objections, and compulsory purchase of property and land may be required. This significant risk results in a score of -3.		
Operational:	Regular maintenance and monitoring to ensure correct operation add additional costs, however these are minor with a score of -1.		
Affordability:	Construction of a new link road has significant design and construction costs associated. These significant cost implications result in a score of -3.		
Acceptability:	Mixed results were received from both the public and stakeholders, with no clear positive of negative score. Overall, this therefore received a neutral score of 0.		
STAG Criteria			
Criterion	Assessment Summary		
Environment:	There is potential for moderate noise impacts during operation at nearby sensitive receptors due to the increase in traffic at some locations. This results in a score of -2 for Noise and Vibration. Global Air Quality could be affected by the change in travel distances, resulting from the additional road, and has been scored as a minor impact at -1. It is anticipated that with mitigation measures in place, construction of the new road connection would not have significant effects on Geology or Water Quality, scoring -1 for both. However, it could result in impacts to potential local private water supplies and at watercourse crossings. Consideration of the potential for improvements to existing drainage might present an opportunity for minor benefits to be achieved. Loss of habitats and potential for direct/indirect effects on protected/notable fauna and the Moray Firth SAC/SPA are also expected, resulting in a score of -2 for Biodiversity and Habitats. Creation of a new road link would require substantial construction works and additional land and would have a major impact on Landscape and Visual Amenity. A score of -3 has been given to both sub-criteria. Sensitive earthworks and landscape design including replacement planting would help mitigate effects. The option would also result in a loss of prime quality land (Class 3.1) and directly impact fields to the east of the existing A9. Impact to farm holding viability and severance would be dependent upon the final alignment developed. This has resulted in a score of -2 for Agriculture and Soils. Permanent development of new and upgrades of existing infrastructure has the potential to affect as yet unknown archaeology depending on the final form of the link road. There may be minor effects on cultural heritage from development, but can be mitigated through design. This scores -1.		
Safety:	Full or partial closure of the junction would significantly reduce the risk of Accidents from vehicles crossing the carriageway, providing a major benefit with a score of +3. There is no impact to security, receiving a score of 0.		
Economy:	Although an improvement of the junction would provide a minor benefit to road infrastructure, the additional journey resulting from a full or partial closure and the provision of a new link road results in a score of -2 for TEE, where traffic which would normally turn north from the B9161 would then		

	travel south to North Kessock Junction before joining the A9 northbound towards Tore. An improvement to the strategic transport corridor is achieved, allowing easier and safer access to and from the A9, resulting in a score of +1 for EALI.
Integration:	Additional land is required for larger infrastructure, and this has a minor impact on TLI, scoring -1. Although it supports NTS2's vision for a "safe and secure for all" transport network, and Scotland's Road Safety Framework to 2030 by reducing "the likelihood, number and severity of collisions", it is not aligned to the Sustainable Investment Hierarchy and is a moderate impact with a score of -2 for PI. There is no impact to TI, with a score of 0.
Accessibility and Social Inclusion:	This option is likely to facilitate and improvement on the public transport network coverage for the communities along the new road. This is a minor benefit to both Community Accessibility and Comparative Accessibility, resulting in a score of +1 for both.

Appendix B

Scoring Matrix

Option Name	Option Description	TPOs				Environment											Safety		Economy			Integration			Accessibility and Social Inclusion		Feasibility		Affordability	Acceptability		Status
		TPO 1	TPO 2	TPO 3	TPO 4	Noise and Vibration	Global Air Quality (CO2)	Local Air Quality (PM10 and NO2)	Water Quality, Drainage and Flood Defence	Geology	Biodiversity and Habitats	Landscape	Visual Amenity	Agriculture and Soils	Cultural Heritage	Physical Fitness	Accidents	Security	Economic Efficiency of the Transport System (TEE)	Wider Economic Benefits (WEBs)	Economic Activity and Location Impacts (EALIs)	Transport Intergration	Transport and Land Use Integration	Policy Integration	Community Accessibility	Comparative Accessibility	Technical	Operational				
Speed reduction limit reduction to Munlochy	Reduce the Speed reduction limit to 50 mph and extend from North Kessock to North of Munlochy	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	-1		0	0	0	1	0	0	-2	-2	0	-2		Rejected
Speed limit reduction around Tore Rbt	Reduce the Speed reduction limit within a one-mile radius of Tore roundabout	1	0	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	-1		0	1	1	2	0	0	-1	-2	0	-1		Rejected
Speed reduction limit reduction along whole study area	Reduce the Speed reduction limit to 50 mph and extend from North Kessock to Tore	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	0	-1		0	1	1	1	0	0	-2	-2	-1	-3		Rejected
Paint the kerbs	Use fluorescent paint to improve the visibility of kerbs, especially at Munlochy junction [as part of package of interventions to improve the visibility of junctions]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	-1	0	0	2		Rejected
Amend road signage to Cromarty	Change signs to instruct drivers travelling to Cromarty to go via Tore roundabout instead of going through Munlochy	0	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		0	-1	-1	0	0	0	-1	-1	0	0		Rejected
Amend road signage for visitors and tourists	Make signage at Tore Roundabout clearer for visitors and those unfamiliar with the area, e.g. no awareness of uncontrolled pedestrian crossing. Carry out a signing review to see if the current signs meet the current requirements.	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0		0	0	1	0	1	0	-1	-1	0	1		Retained
Activated warning signs	Install electronic warning signs that activate when there is traffic ahead or vehicles joining or crossing the A9 carriageway, especially buses and agricultural vehicles	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0		0	1	0	1	0	0	-1	-1	0	0		Retained
Prohibit right turns from side roads	Prohibit right turn movements coming from side roads onto the A9, with left-out only from side roads	0	1	-1	1	0	0	0	0	0	0	0	0	-1	0	0	1	0	-1		0	-1	-1	1	0	0	-1	0	-2	1		Rejected
Prohibit u-turns at intermediate junctions (including Munlochy Junction)	Prohibit u-turns at intermediate junctions (including Munlochy Junction)	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0		0	0	0	1	0	0	0	0	0	2		Rejected
Prohibit all right turns at Munlochy junction (closure of central reservation)	Prohibit right turns out of and into the A9 at Munlochy junction	0	2	-1	-1	0	-1	-1	0	0	0	0	0	-1	0	0	2	0	-1		-1	-1	-1	1	-1	0	-2	0	-1	-2		Retained
Prohibit right turn from B9161 to Munlochy junction to A9 Northbound	Prohibit right turn from B9161 at Munlochy junction to A9 Northbound	0	1	0	0	0	0	0	0	0	0	0	0	-1	0	0	1	0	-1		-1	0	-1	1	0	0	-1	0	0	1		Retained
Relocate bus stops	Consider revising the location of current bus stops at Tore to better integrate with bus services, walking/cycling routes and encourage bus use	1	0	1	0	0	1	1	0	0	0	-1	-1	0	0	1	1	0	1		1	1	1	2	2	0	-1	-1	-1	0		Retained
Improve pedestrian routes - integration with bus stops	Integrate pedestrian routes with bus stops, especially at Tore for residential properties	1	0	0	0	0	1	1	0	0	0	-1	-1	0	0	1	1	1	2		1	1	1	2	2	0	-1	0	-1	0		Retained
Improve pedestrian routes - footpaths	Improve footpaths at Tore roundabout	1	0	0	0	0	1	1	0	0	0	-1	-1	0	0	1	1	0	1		1	1	1	2	1	0	-1	-1	-1	0		Retained
Improve pedestrian routes - controlled crossing at Tore Roundabout	Install a controlled crossing on the A9 at Tore roundabout	2	0	-1	0	0	0	-1	0	0	0	-1	-1	0	0	1	1	0	1		1	1	0	2	1	0	-2	-1	-1	0		Retained
Enhanced signage for cyclists	Enhance the signage for the cycling route – add one on the southbound carriageway at Tore	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	1		1	1	1	2	1	0	-1	0	0	1		Retained
Improve on-slip at Munlochy junction	The on-slip from B9161 onto the A9 should be improved/extended to better facilitate the merging of traffic with the A9 southbound	0	2	0	0	0	0	1	-1	-1	0	-1	-1	0	-1	0	2	0	1		1	0	0	1	0	0	-2	-1	-2	3		Retained
Install traffic lights	Install traffic lights at Tore roundabout which includes a controlled pedestrian crossing	2	0	2	0	0	0	-1	0	0	0	-1	-1	0	0	1	1	0	1		1	2	0	2	1	0	-2	-2	-2	-2		Retained
Extend the right turn lane from the A9 to the B9161	Extend the existing right-turn lane from the A9 into the B9161	0	2	0	0	0	0	0	-1	-1	-1	-1	-1	0	-1	0	1	0	1		1	0	0	2	0	0	-1	-1	-1	0		Retained
Widen central reserves	All junctions need wider central reserves as the current ones are too narrow for larger vehicles	0	1	0	1	0	0	0	-1	-1	0	-1	-1	0	0	0	1	0	0		0	0	0	1	0	0	-2	-1	-3	0		Rejected
Pedestrian bridge or underpass at Tore Roundabout	Build a pedestrian bridge or add underpass at Tore Roundabout	2	0	1	0	0	1	1	-1	-1	0	-2	-2	-1	-1	1	2	0	-1		-1	-1	0	2	1	-2	-2	-1	-2	1		Rejected
Convert Munlochy junction into a roundabout	Convert Munlochy junction into a roundabout which incorporates Artafallie junction	1	2	0	1	0	0	0	-1	-1	-1	-2	-2	-2	-1	0	3	0	-1		1	0	-1	-1	0	0	-2	-1	-2	0		Retained
Junction rationalisation of intermediate junctions and Munlochy Junction	Close the intermediate junctions and create a single new junction for local connector roads to link into the A9	1	-1	-1	2	0	-1	0	-1	-1	-1	-1	1	-2	-1	1	2	0	-1		1	0	-1	-2	-1	-1	-2	-1	-3	0		Rejected
Grade separation at Munlochy junction	Change Munlochy junction to a grade-separated junction, e.g. by adding in an underpass at Munlochy junction similar to the one at North Kessock	1	3	0	1	0	0	0	-1	-1	-1	-3	-3	-2	-1	1	3	0	1		1	0	-1	-2	0	0	-3	-1	-3	2		Retained
New road connection between Munlochy and North Kessock juction	Add a new road connection into North Kessock junction from Munlochy road, combined with either full or partial closure of Munlochy junction.	1	3	1	0	-2	-1	0	-1	-1	-2	-3	-3	-2	-1	0	3	0	-2		1	0	-1	-2	1	1	-3	-1	-3	0		Rejected

Appendix C

Public Consultation Report

Transport Scotland

A9 North Kessock to Tore

Public Consultation Report

October 2021

Confidential

Transport Scotland

A9 North Kessock to Tore

Public Consultation Report

Type of document (version) Confidential

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WSP

110 Queen Street
Glasgow
G1 3BX

Phone: +44 141 429 3555

Fax: +44 141 429 3666

WSP.com

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1 Introduction

1.1.1. The first phase of the A9 North Kessock to Tore study, the Initial Appraisal (Case for Change), in accordance with Transport Scotland's Scottish Transport Appraisal Guidance (STAG) was published in March 2021 and concluded that there was evidence for a 'Case for Change' within the study area. The study is now progressing through the Preliminary Appraisal stage of this process which involves reviewing the four Transport Planning Objectives agreed with stakeholders against a number of potential short, medium and long-term interventions and consulting with the public to understand wider views on each of these options.

1.1.2. As part of an appraisal, it is important that the wider views of the people who use the route regularly are understood. In addition to working alongside stakeholder groups in the development of this study, a public consultation was facilitated on the options so far identified. These options were developed in conjunction with stakeholders, taking account of their feedback, and input from road safety engineers.

1.1.3. The feedback received from the public consultation process will be assessed in line with the previously established Transport Planning Objectives. This report details the findings of the consultation and informs the Preliminary Appraisal report which will be finalised in due course.

2 Background

2.1.1. Transport Scotland appointed WSP as Engineering Consultants to undertake a study to assess and report on the safety and operation of the A9 between North Kessock and Tore. This study sought to identify existing issues or opportunities for improvement.

2.1.2. The study has considered the safety and operational aspects of the corridor and the junctions, looking into the impact of existing and proposed traffic growth in the wider area as well as considering the strategic role the A9 plays for connectivity to the North and North-West of Scotland.

2.1.3. The study has reviewed both current and future operations, taking account of potential and future developments within the surrounding area, and has been undertaken in line with Scottish Transport Appraisal Guidance (STAG). The study represents the preliminary appraisal stage of the STAG process.

2.1.4. This consultation was to gather the public's view on the options established during the Initial Appraisal, and the responses received will inform the study. The Preliminary Appraisal, as established in line with the STAG process, will examine the options generated in this report against a number of criteria which includes environment, safety, economy, integration, and accessibility and social inclusion and public acceptability. This consultation addresses the public acceptability of the options.

2.2 Study Area

2.2.1. This chapter provides background information on the study and the outcomes from the Case for Change stage. Further details are provided in the Case for Change report available on the Transport Scotland website.

2.2.2. The study area includes both carriageways of the A9 between North Kessock Junction and Tore Roundabout, and all junctions in between as shown in Figure 2-1

Figure 2-1 - Map highlighting the Study Area

2.2.3. The North Kessock junction is grade-separated allowing all movements and Tore Roundabout is at-grade and connects the A9 with the A835 and the A832.

2.2.4. The five junctions between the North Kessock junction and Tore Roundabout are at-grade priority junctions sharing a similar layout, allowing movement in all directions including right turns across the main carriageway. All the junctions have turning lanes in the central reserve to allow turning vehicles to slow down and wait before making the right turn across the opposing carriageway. In addition, some junctions have left turn auxiliary lanes into and out of the side roads.

2.2.5. Of these junctions, the B9161 junction, also known as Munlochy Junction, has been highlighted by residents and elected representatives as being of concern due to road safety issues. The stakeholder concerns about this junction have been reiterated throughout the engagement process.

2.3 Key Findings from the Case for Change

Traffic and Road Safety Analysis

2.3.1. The analysis of the traffic and road safety evidence identified the following:

- The traffic growth projected for the A9 between 2020 and 2035 is 9.79% between North Kessock and Tore Roundabout based on modelling informed by the adopted Inner Moray Firth Local Development Plan (2015). The emerging LDP, currently being prepared by The Highland Council, is being reviewed as part of the study.
- The collisions statistics show that collisions are spread out over the extent of the study area and do not exhibit any common contributory factors.
- The conflict study at Munlochy Junction shows that some drivers from the B9161 merging with the A9 southbound are not giving way to vehicles on the southbound carriageway and expect them to change lanes or slow down. A large number of conflicts were observed for this movement.
- The right turn into the B9161 presented a low number of observed conflicts.

Stakeholder Engagement

2.3.2. At the Case for Change stage, the process did not include a broader public consultation as the engagement sought to identify the problems and issues (as opposed to consultation on presented options). As the study progressed to the Preliminary Appraisal stage, public consultation was undertaken to gather views on the options presented.

2.4 Problems and Opportunities Identified

2.4.1. The following problems and opportunities were identified:

Problems:

- North Kessock to Tore
  - Perceived safety risks due to right turn movements from side roads across the A9
  - Perceived safety risk for general traffic and buses merging onto the A9 at intermediate junctions
- Munlochy Junction
  - Conflicts arising from vehicles merging from the B9161 onto the A9 southbound
  - Perceived safety risks for right turning movements from A9 onto B9161
  - Safety risks due to queues forming on northbound right turn lane and extending onto the main northbound carriageway
- Tore Roundabout
  - Perceived safety risks to pedestrians and cyclists at Tore Roundabout
  - Conflicts arising from vehicles movements at Tore Roundabout

Opportunities:

- Improve road safety and support the Scottish Road Safety Framework
- Encourage walking and cycling by local residents.

2.5 Transport Planning Objectives

2.5.1. From the analysis of the problems and issues identified through the consideration of analytical evidence and stakeholder inputs, the following Transport Planning Objectives (TPOs) were developed and agreed with stakeholders:

- **TPO 1**: A reduction in conflicts for active modes at the junctions along the A9 between North Kessock and Tore to encourage the use of active travel modes.
- **TPO 2:** To achieve an improvement in vehicular road safety and a reduction in conflicts at the Munlochy Junction (A9/B9161) in the short (3 years), medium (3-10 years) and longer term (beyond 10 years).
- **TPO 3:** To achieve an improvement in vehicular road safety and a reduction in conflicts at Tore Roundabout (A9/A832/A835) in the short (3 years), medium (3-10 years) and longer term (beyond 10 years).
- **TPO 4:** To achieve an improvement in vehicular road safety and a reduction in conflicts at intermediate junctions along the A9 from north of the North Kessock junction up to but not including the Tore Roundabout in the short (3 years), medium (3-10 years) and longer term (beyond 10 years).

3 Consultation Methodology

3.1 Respondents and the Responses

3.1.1. This report explores the responses obtained during the public consultation carried out between 30 June 2021 and 27 August 2021 in support of the Preliminary Appraisal outlined within the STAG.

3.1.2. The consultation attracted responses from 753 individuals and organisations from various backgrounds. A total of 27 options were presented to the respondents which were to be rated on a 5-point scale. The available responses were:

- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

3.1.3. For each rating, comments on the proposed options could be made in order to clarify or analyse the responses given by the respondents. It should be noted that some of the respondents offered alternative suggestions or alterations to the options in their justifications instead of just simply agreeing or disagreeing.

3.1.4. The comments mentioned in the analysis of this report have been used to indicate commonly occurring responses or concerns in relation to each of the options, as well as the wider public acceptability.

3.1.5. The public consultation was carried out on the Scottish Government's Citizen Space portal, with the option to engage offline via email or telephone call. An advertising campaign was carried out in advance of the launch using local media, stakeholders, Facebook and Instagram, and other social media platforms.

4 Consultation Questions and Analysis

4.1.1. The options were grouped into delivery timescales, with 3 short-term packages (A to C), 1 medium-term package (D) and 1 longer-term package (E).

4.2 Package A – Short-term

4.2.1. These options could be delivered within a period of between 6 and 18 months.

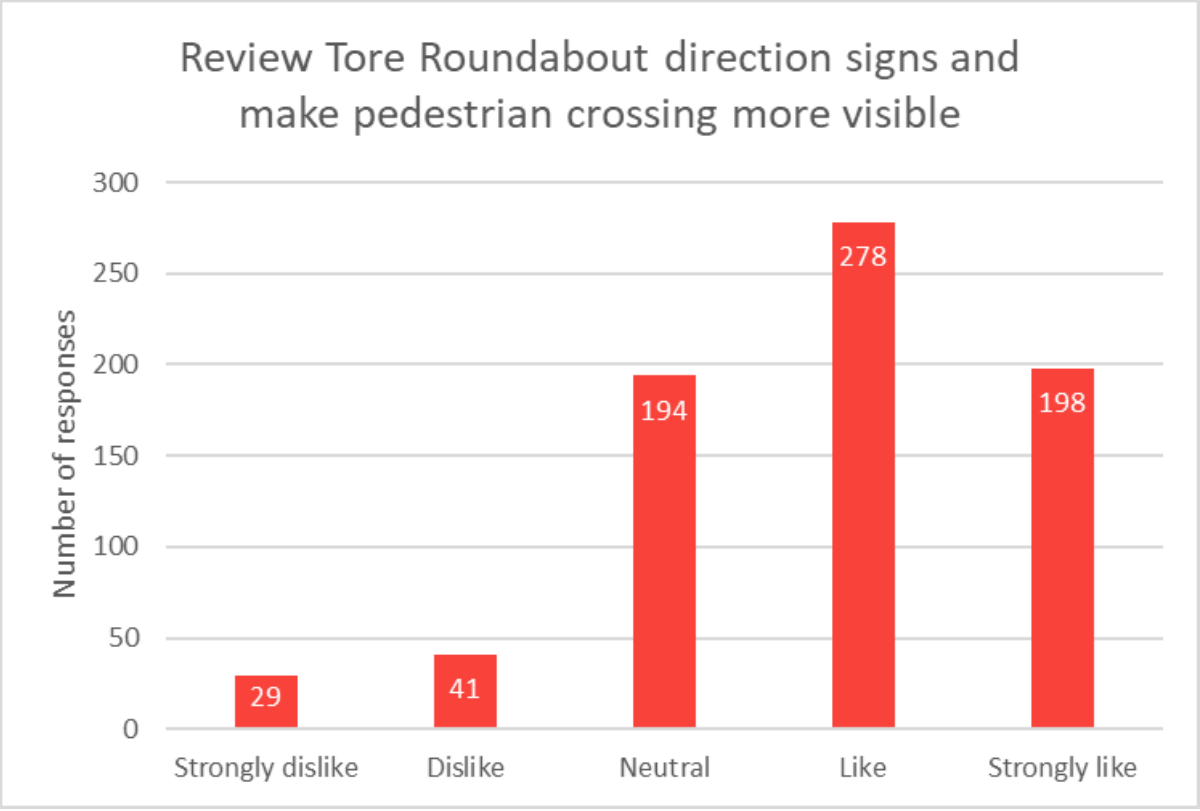
Option A1 - Review Tore Roundabout direction signs and make crossing point more visible

A review of signing and pedestrian crossing points at Tore Roundabout to make both the roundabout and crossing points clearer for drivers.

Table 4-1 – Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
29	41	194	278	198
3.9%	5.4%	25.8%	36.9%	26.3%

Figure 4-1 - Graphical Response Results



4.2.2. Additional comments were made in 24% of the responses.

4.2.3. Although the response was generally positive with 63.2% of responses scoring ‘like’ or ‘strongly like’, concerns regarding the effectiveness of the measure were raised in the majority of comments. The large amount and cluttering of existing signage were also mentioned as an issue. Considering the speed at which drivers approach the roundabout, it was felt more signage would increase distractions.

4.2.4. One respondent commented that they “didn't realise there are currently crossing points at this roundabout” and another “wasn't aware of a pedestrian crossing”.

4.2.5. Several respondents commented that traffic has been seen to use the incorrect lane of the roundabout for the appropriate exit.

4.2.6. A quarter of respondents scored this option as neutral.

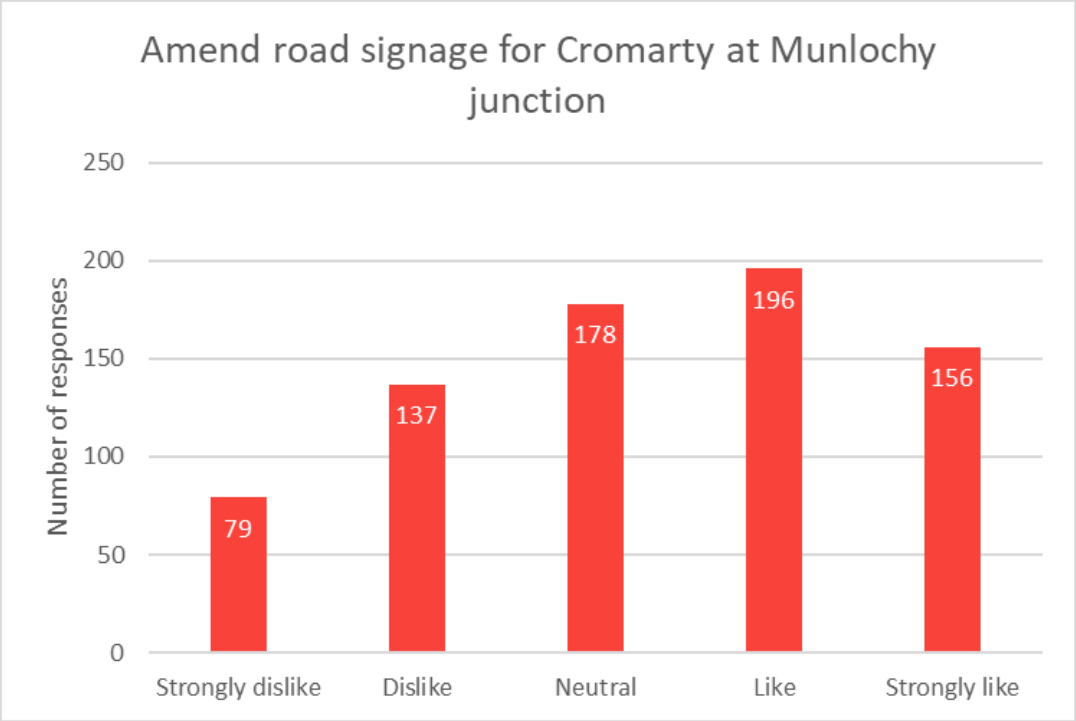
Option A2 - Amend road signage for Cromarty at Munlochy Junction

The replacement of the signs around the B9161 Munlochy junction with new ones that will direct traffic heading towards Cromarty to take the A832 from Tore roundabout.

Table 4-2 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
79	137	178	196	156
10.5%	18.2%	23.6%	26.0%	20.7%

Figure 4-2 - Graphical Response Results



4.2.7. Additional comments were made in 34% of the responses.

4.2.8. This option received mixed response but overall had a broadly positive response with 46.7% of respondents scoring it positive and a further 23.6% scoring it negative. Several respondents stated that the signage was not an issue since “sat nav” would direct drivers into the B9161, especially in the case of tourists going to Cromarty.

4.2.9. Overall the respondents who disliked the options deemed it not enough to address the issues.

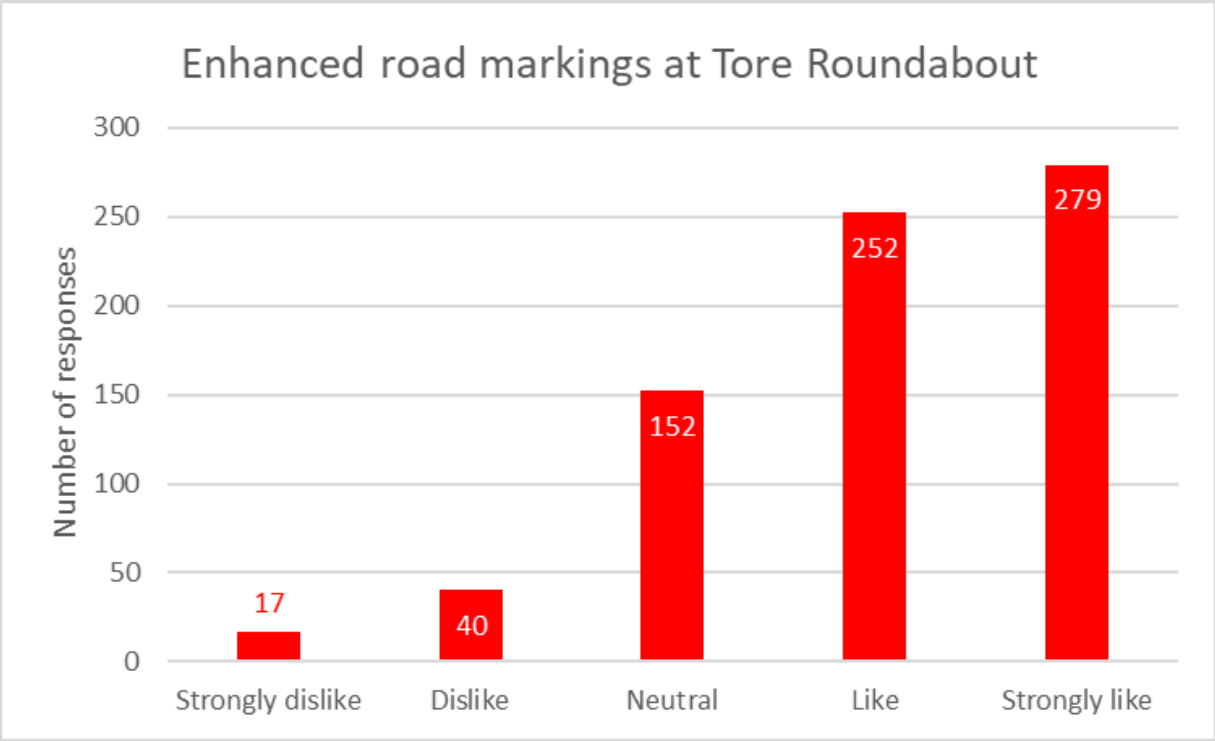
Option A3 - Enhanced road markings at Tore Roundabout

New lane markings on the Tore roundabout with destinations marked on the lanes on approach.

Table 4-3 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
17	40	152	252	279
2.3%	5.3%	20.2%	33.5%	37.1%

Figure 4-3 - Graphical Response Results



4.2.10. Additional comments were made in 20% of the responses.

4.2.11. This option received an overall positive response with 70.6% of respondents scoring it positive, stating that it is cost-efficient and a needed measure that would address the issue. Only 7.6% of respondents scoring this option negatively. Eight of the negative responses stated that speed was an issue and not road markings, and that a change to the markings may make it more confusing, referring to the Inshes roundabout as an example.

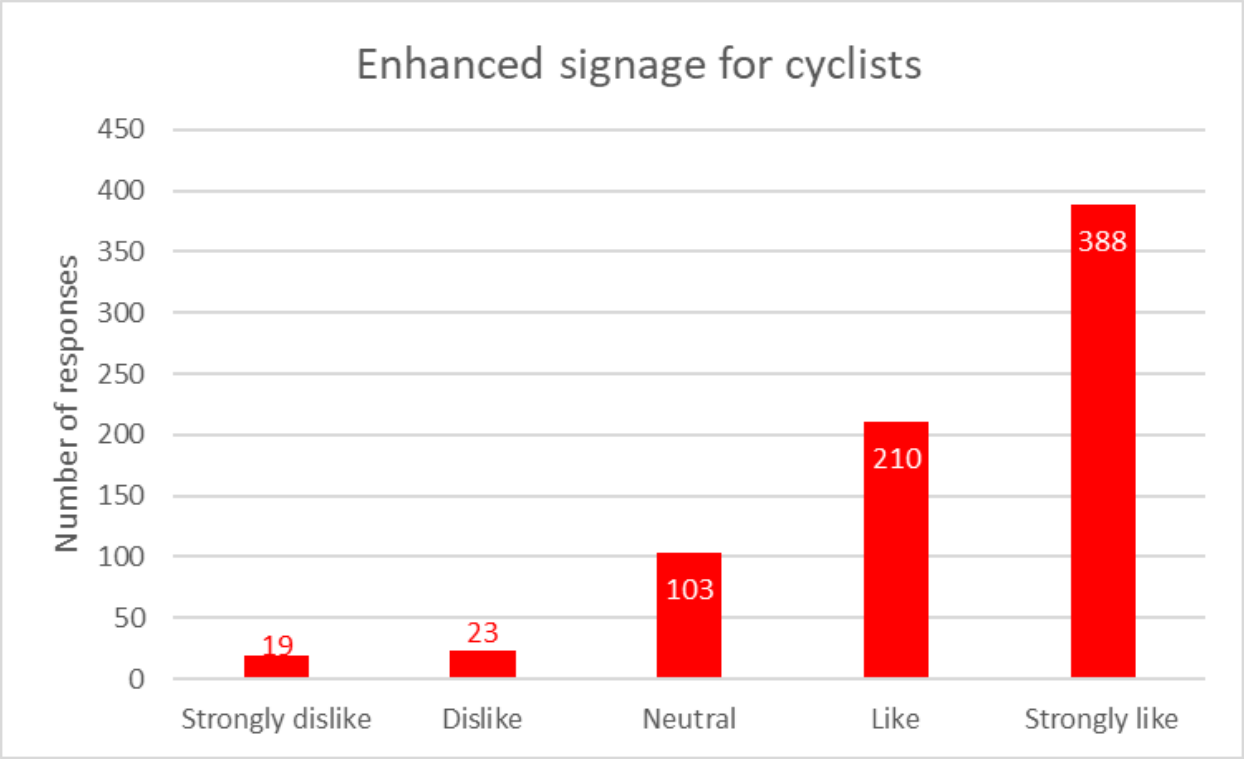
Option A4 - Enhanced signage for cyclists

Improved signage for cyclists to encourage use of the national cycle route that runs parallel to the A9.

Table 4-4 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
19	23	103	210	388
2.5%	3.1%	13.7%	27.9%	51.5%

Figure 4-4 - Graphical Response Results



4.2.12. Additional comments were made in 22% of the responses.

4.2.13. This option received an overall positive response with 79.4% of respondents scoring it positively. Justifications included minimising the number of cyclists on the carriageway, encouraging the use of current cycle paths along the A9 and currently inadequate cycling signage.

4.2.14. One respondent noted “the safety of the route towards Dingwall for cyclists is seriously compromised by lack of vegetation maintenance, hampering visibility northwards on A9”. Another commented “there have been cycling tourists on the A9 [carriageway] despite [existing] cycle lanes”.

4.2.15. Three of the negative comments were based on the perception was that there was no problem for cyclists, but the overwhelming majority were of the opinion that cyclists should not use the A9, and that enhanced signage could encourage cyclists to use alternative routes.

4.3 Package B – Short-term

4.3.1. These three options can be delivered between 6 months and 4 years, and are more complex in technical terms or they may require prioritisation with other projects within Transport Scotland's road safety budget.

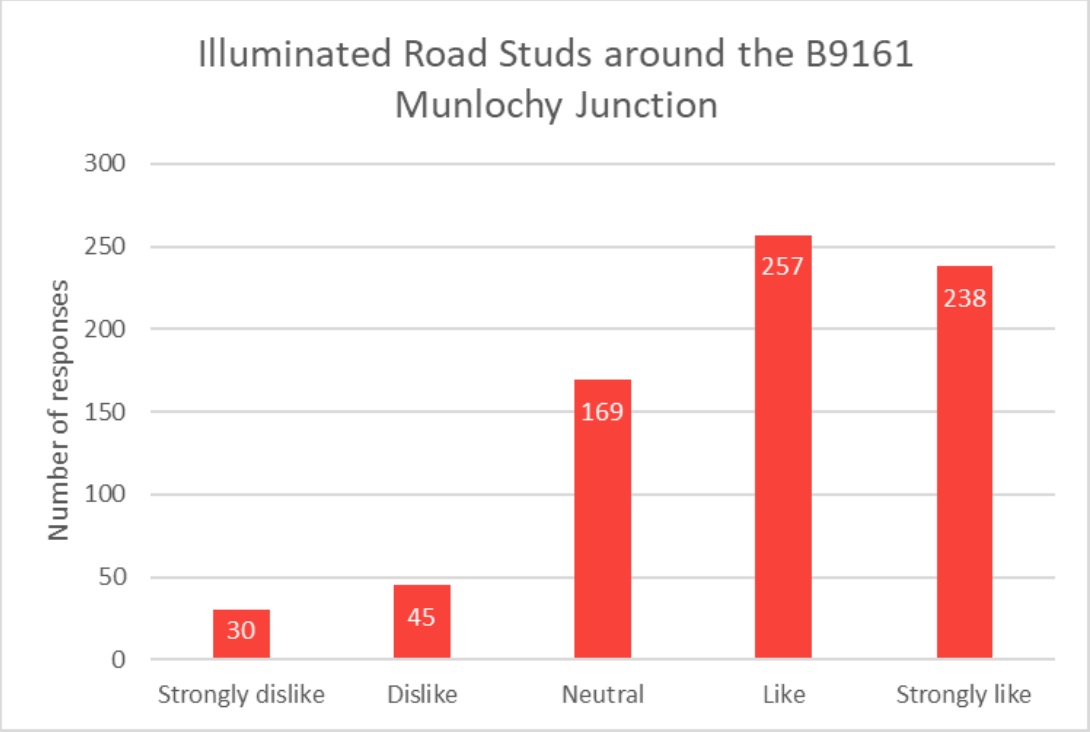
Option B1 - Illuminated Road Studs around the B9161 Munlochy Junction

The replacement of the current road studs around the junction with more prominent illuminated versions.

Table 4-5 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
30	45	169	257	238
4.0%	6.0%	22.4%	34.1%	31.6%

Figure 4-5 - Graphical Response Results



4.3.2. Additional comments were made in 18% of the responses.

The responses for this option varied although it scored overall positively with 65.7% of respondents scoring it positively. Several respondents stated it could not hurt to implement but that it was not enough on its own. This is reflected in the neutral response rate of 22.4% and comments about the junction being quieter at night anyway.

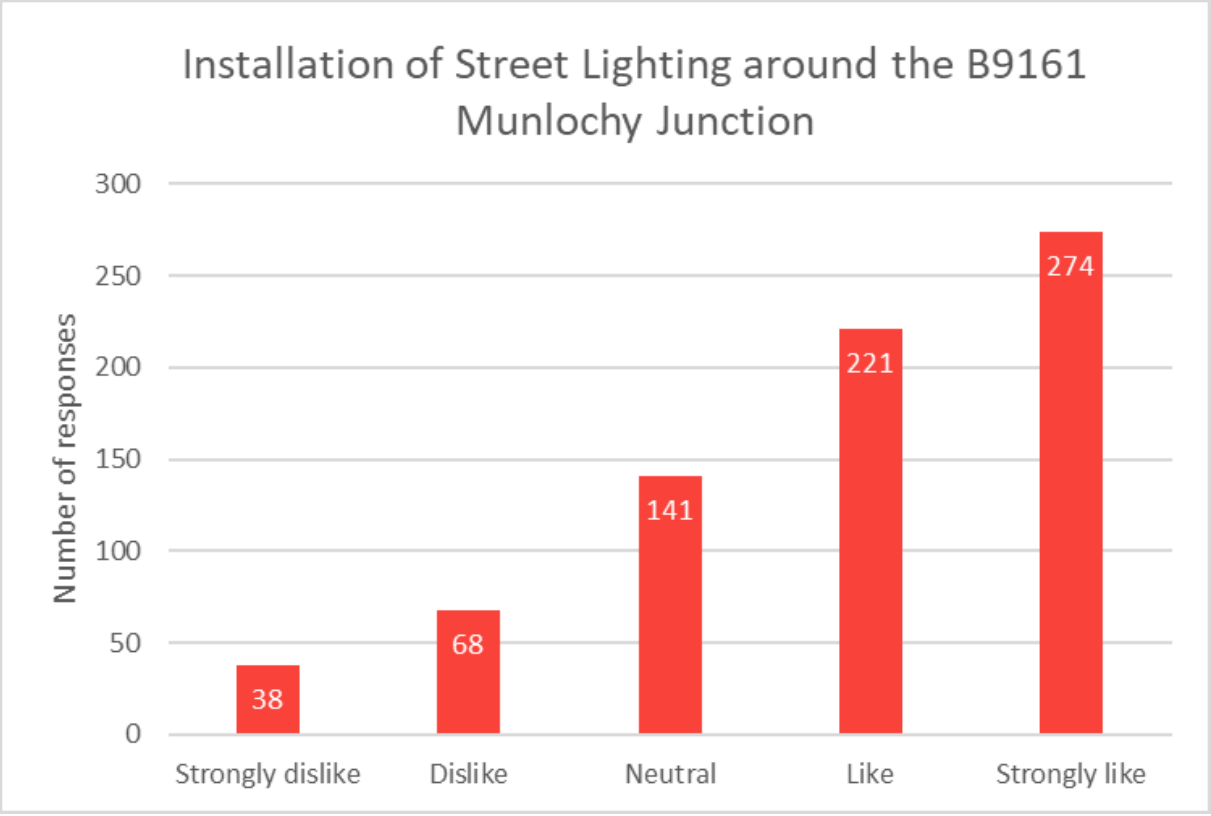
Option B2 - Installation of Street Lighting around the B9161 Munlochy Junction

The installation of street lighting on the approaches to the Munlochy junction. The street lighting columns would also help to emphasise the presence of the junction during daytime

Table 4-6 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
38	68	141	221	274
5.0%	9.0%	18.7%	29.3%	36.4%

Figure 4-6 - Graphical Response Results



4.3.3. Additional comments were made in 22% of the responses.

4.3.4. The positive score of 65.7% indicates broad approval, with additional comments describing it as “an absolute necessity” and it “should have happened years ago”. Some of the criticisms remain, including questioning the effectiveness of the option and the increase in light pollution. Five respondents highlighted that this does not address the issues regarding daylight incidents.

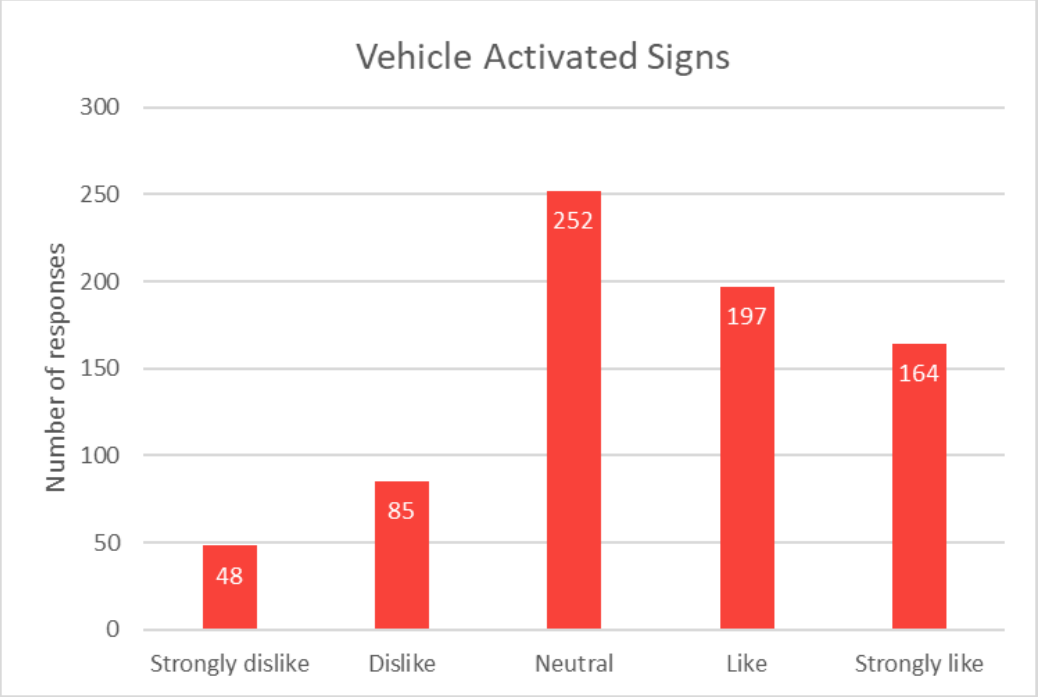
Option B3 - Vehicle Activated Signs

This option considers all five junctions between North Kessock and Tore roundabout with the provision of electronic vehicle activated signs to detect a vehicle approaching the A9 from the side road and illuminate to warn drivers on the A9 that a vehicle could emerge.

Table 4-7 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
48	85	252	197	164
6.4%	11.3%	33.5%	26.2%	21.8%

Figure 4-7 - Graphical Response Results



4.3.5. Additional comments were made in 21% of the responses.

4.3.6. Almost half of respondents scored this option positively (48.0%), but a third of respondents scored it as neutral. Comments from 12 respondents stated that the measure would make little to no difference to the safety and that drivers would ignore the signs anyway. One positive comment suggested “anything that highlights the junction will help”

4.3.7. The comments associated with the ‘like’ and ‘strongly like’ ratings are generally very similar to the neutral comments, noting that vehicle activated signs are a good idea but that there are existing ones at Munlochy that appear to rarely function properly.

4.3.8. The single most common negative response cited that it would increase driver distraction, with 10 respondents believing this to be the case.

4.4 Package C – Short-term

4.4.1. These are short-term options that are relatively straightforward to construct but require a Legal Order to take effect. Making a Legal Order involves a public consultation, and anyone adversely affected by the proposed order can object, and this can add a considerable delay to the process.

4.4.2. Across Scotland, safety cameras are deployed through the Scottish Safety Camera Programme primarily where they have the greatest potential to reduce injury collisions and where there is evidence of both collisions and speeding. This is in accordance with criteria contained in the Scottish Safety Camera Programme Handbook.

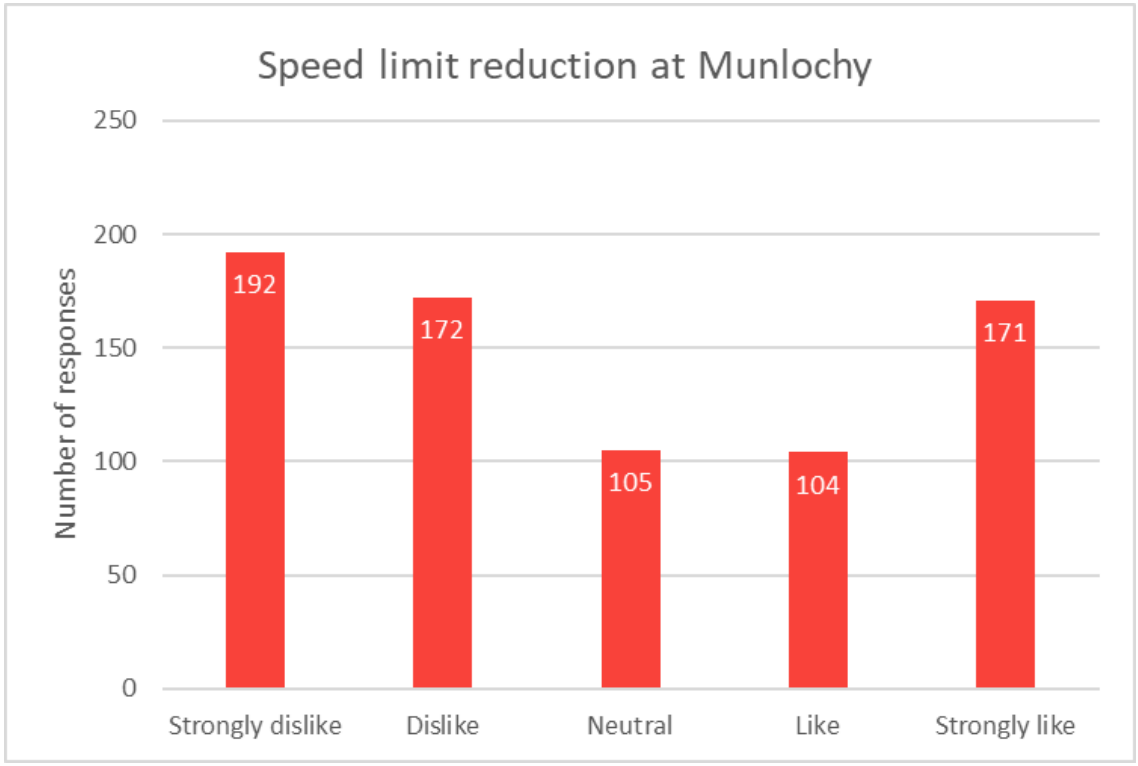
Option C1 - Speed limit reduction at Munlochy

A speed limit reduction around the B9161 Munlochy junction, effectively extending the existing 50mph speed limit at North Kessock to the north side of Munlochy junction.

Table 4-8 – Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
192	172	105	104	171
25.5%	22.8%	13.9%	13.8%	22.7%

Figure 4-8 - Graphical Response Results



4.4.3. Additional comments were made in 34% of the responses.

4.4.4. This option received an overall negative response, with almost half (48.3%) of respondents scoring it negatively. Just over a third scored it positively. A majority of the comments from the negative responses stated that lowering the speed would not be effective as drivers would ignore it, along with increased journey times and driver frustration. Two respondents commented that the proposed 50mph speed limit should be extended to Tore, with one scoring it negatively and one not providing any score.

The positive responses stated that it was needed to make the junction safer and avoid further accidents, with a general view that a reduction in speed can only be a good thing.

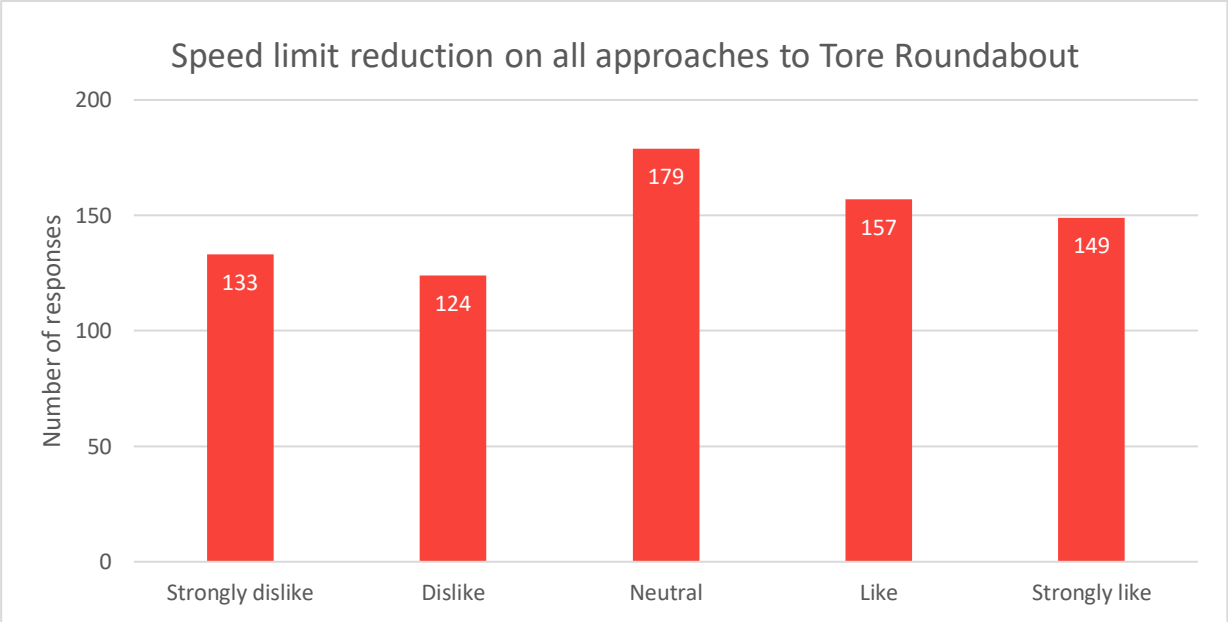
Option C2 - Speed limit reduction on all approaches to Tore Roundabout

A reduction on the approaches to the Tore Roundabout – either the immediate approaches or for one mile on the approach, possibly taking in the Tore Primary School junction.

Table 4-9 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
133	124	179	157	149
17.7%	16.5%	23.8%	20.8%	19.8%

Figure 4-9 - Graphical Response Results



4.4.5. Additional comments were made in 20% of the responses.

4.4.6. This option received a mixed response with 40.6% of respondents rated this option positively and 34.2% rating it negatively. A further 23.8% have a neutral opinion. Similar comments were raised as for the speed limit reduction at Munlochy, namely that speed limits would not be followed or cause increases to journey times and driver frustration.

4.4.7. Only three of the neutral responses highlighted that speed cameras would be necessary to make the measure effective with the majority stating that it would have no effect on road safety.

4.4.8. Some positive responses stated that it would help to make crossing pedestrians and cyclists safer with one respondent commenting that they “regularly walk across the roads at Tore and traffic is much too fast on all approaching/leaving roads”.

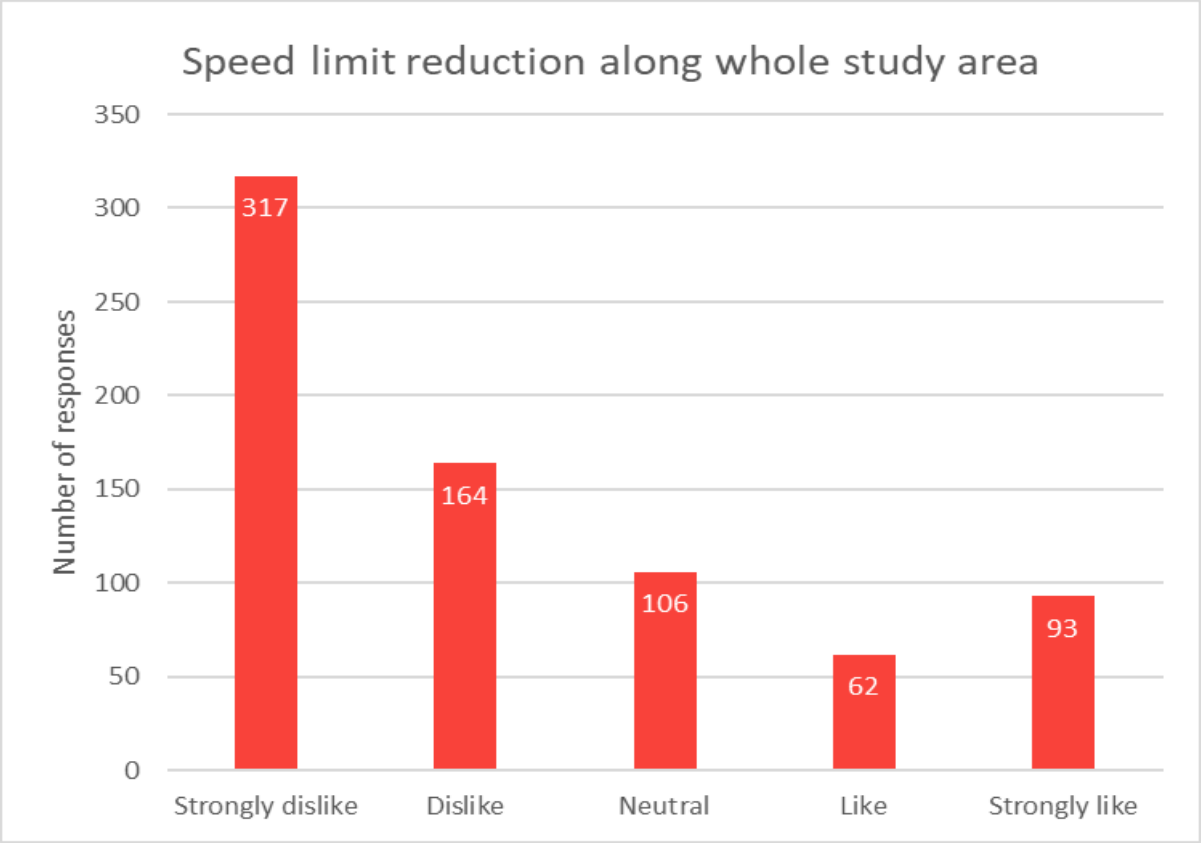
Option C3 - Speed limit reduction along whole study area

Introduce a lower speed limit of 50mph north from the existing 50mph speed limit at North Kessock junction all the way to the Tore roundabout.

Table 4-10 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
317	164	106	62	93
42.1%	21.8%	14.1%	8.2%	12.4%

Figure 4-10 - Graphical Response Results



4.4.9. Additional comments were made in 26% of the responses.

4.4.10. This option had an overall negative response with 63.9% of respondents scoring it as such. Justifications were similar to the reduction of speed limits at Munlochy and the approaches to Tore Roundabout, and many respondents felt that it was too extreme of a measure and would defeat the purpose of having a dual carriageway.

4.4.11. The positive comments commonly suggested that it would only be effective if the speed limits were enforced by additional means.

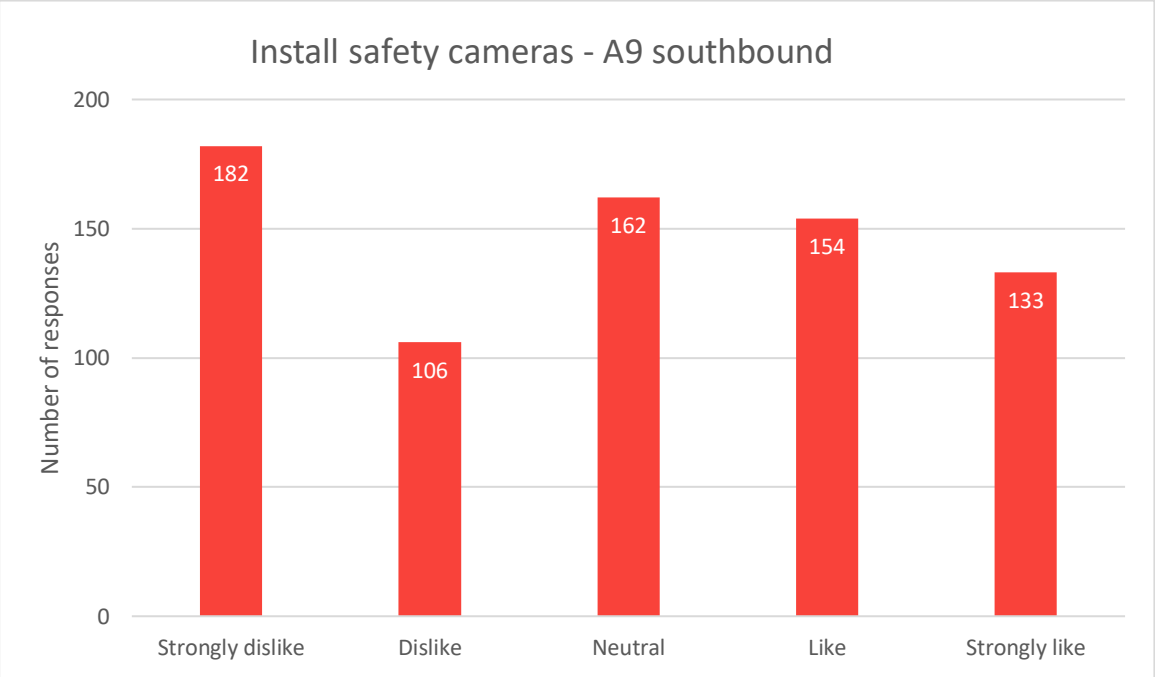
Option C4 - Install safety cameras, A9 southbound

The installation of a fixed safety camera near the B9161 junction on the southbound A9.

Table 4-11 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
182	106	162	154	133
24.2%	14.1%	21.5%	20.5%	17.7%

Figure 4-11 - Graphical Response Results



4.4.12. Additional comments were made in 21% of the responses.

4.4.13. This option got an even positive and negative score, at 38.2% and 38.3% respectively,, despite ” strongly dislike” being the single most popular rating. Positive responses stated that implementation of safety cameras would positively impact driver behaviour, issues like right turn lane queuing and inconsiderate drivers would remain. It was also suggested by three respondents that a camera should also be installed on the northbound carriageway.

4.4.14. The negative responses predominantly centred around the public perception of the negative connotations of safety cameras such as cash generation for the government and further penalisation of drivers. Other comments noted that this solution does not address the issues around junction layouts. Further to this, 12 respondents voiced concerns that this measure would lead to unsafe braking manoeuvres from speeding vehicles in advance of the cameras.

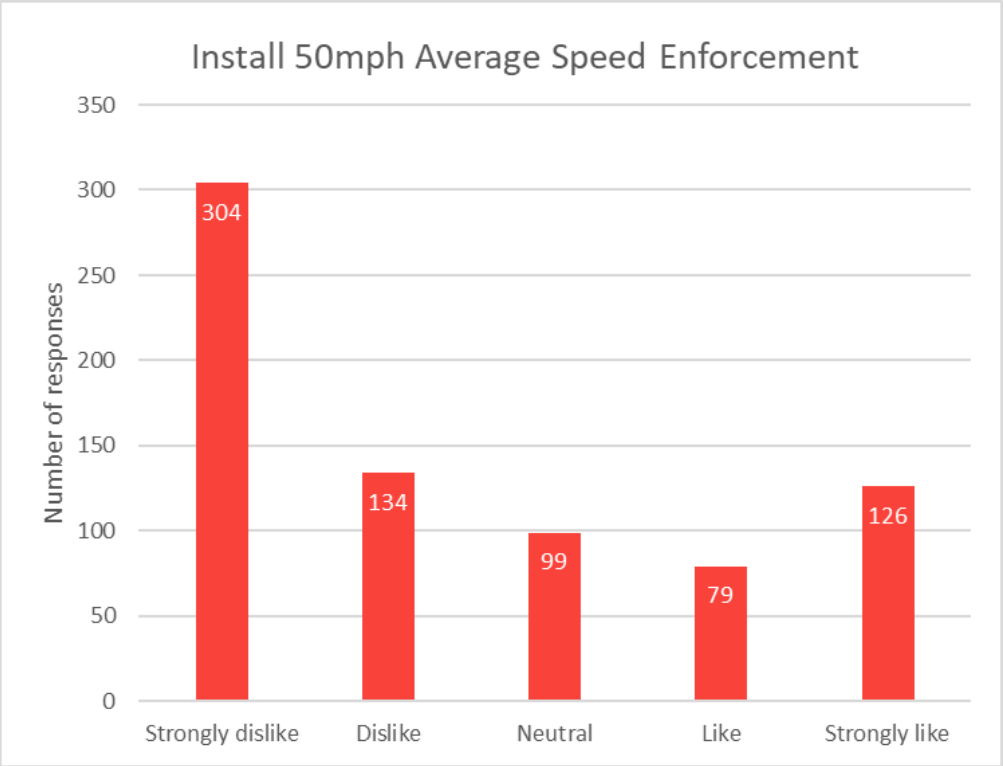
Option C5 - Install 50mph Average Speed Enforcement

The installation of an average speed enforcement system between North Kessock and Tore.

Table 4-12 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
304	134	99	79	126
40.4%	17.8%	13.1%	10.5%	16.7%

Figure 4-12 - Graphical Response Results



4.4.15. Additional comments were made in 23% of the responses.

4.4.16. This option received a negative response with 58.2% of respondents scoring it as ‘dislike’ or ‘strongly dislike’. As observed previously, measures enforcing speed limits were unpopular, with the perception that it defeats the purpose of having a dual carriageway to begin with, alongside other negative connotations of a safety camera as a cash generator. A majority of respondents did not believe this was a viable option as it does not address the issue of junction layouts.

4.4.17. Positive responses overall stated that implementation of safety cameras would positively impact driver behaviour and improve safety.

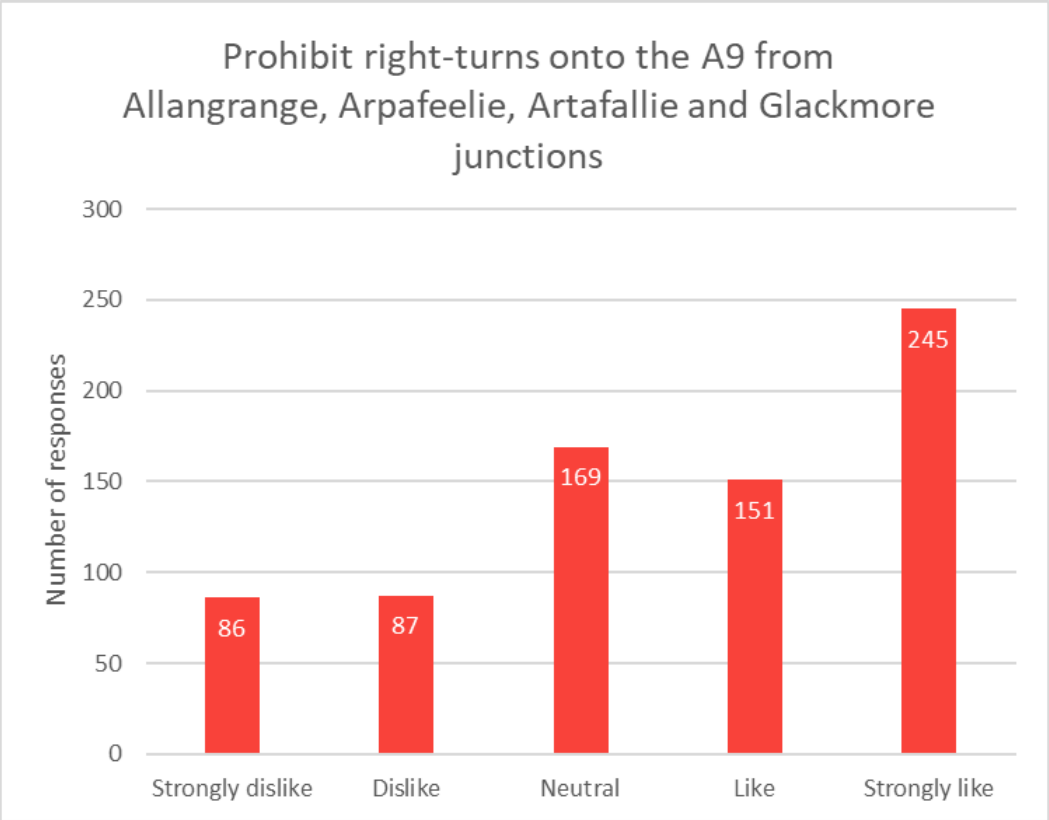
Option C6 - Prohibit right-turns onto the A9 from Allangrange, Arpafeelie, Artafallie and Glackmore Junctions

Prohibit right turns from side roads onto the A9 to prevent potential conflicts.

Table 4-13 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
86	87	169	151	245
11.4%	11.6%	22.4%	20.1%	32.5%

Figure 4-13 - Graphical Response Results



4.4.18. Additional comments were made in 25% of the responses.

4.4.19. This option received an overall positive response with 52.6% of respondents scoring it positively, with the most frequent response being “strongly like”. Neutral responses contributed to 22.4% of the scores.

4.4.20. The positive feedback was mostly attributed to the fact that a redesign has been one of the most suggested measures to address the issues at hand and this appeared to be a step in the right direction. One respondent noted that “the disadvantage would be channelling more traffic through the Tore Roundabout” although they scored it as “strongly like”, seemingly

acknowledging that their consideration of advantages outweighs the disadvantages. Another respondent commented “as a regular user of the junctions, [they] would not mind having to travel the longer distance”. A common theme of the positive comments is the acknowledgment of the inconvenience, but that safety is a priority.

The negative feedback often raised issues around increased journey time and increased traffic at Tore roundabout. It was the general opinion that these effects would affect locals more than passing traffic, with one respondent commenting that it would be “very unfair on locals in these areas”. Access for farmers to land across the A9 was also raised as a concern.

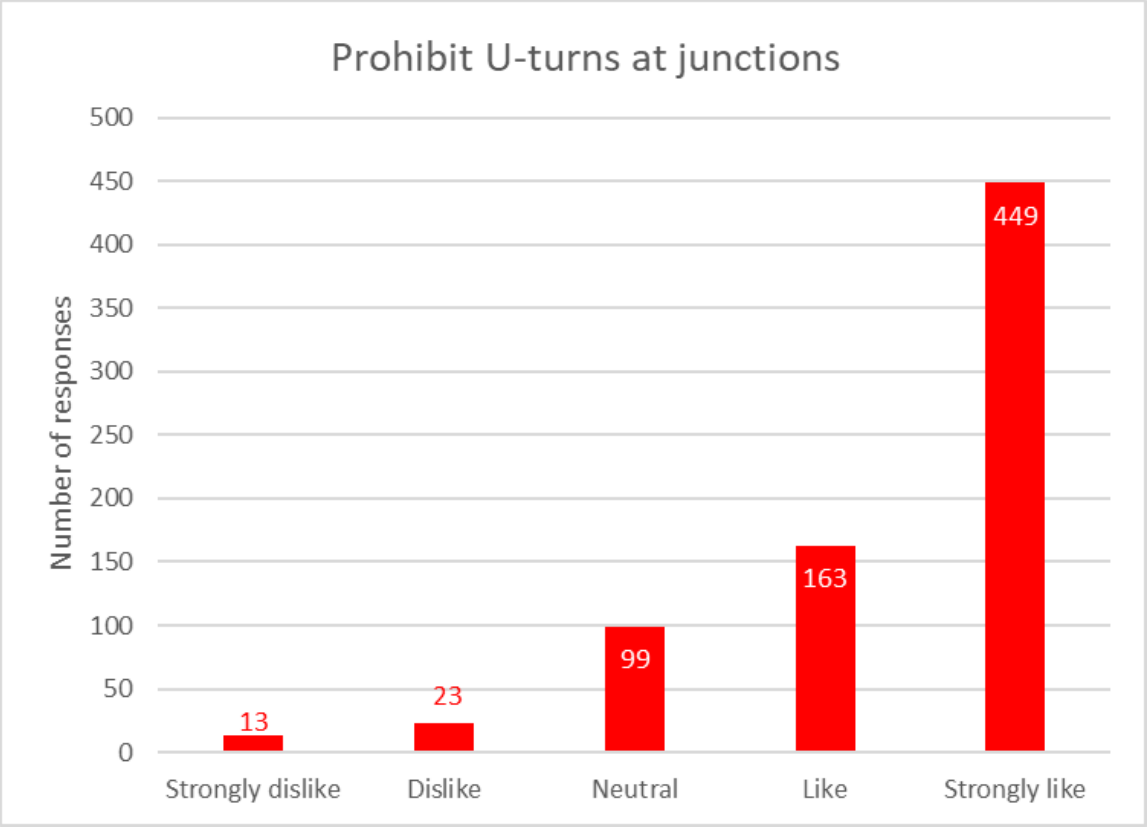
Option C7 - Prohibit U-turns at junctions

The prohibition of U-turns at intermediate junctions to reduce conflict.

Table 4-14 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
13	23	99	163	449
1.7%	3.1%	13.1%	21.6%	59.6%

Figure 4-14 - Graphical Response Results



4.4.21. Additional comments were made in 14% of the responses.

4.4.22. This option received clear positive feedback with 81.2% of respondents scoring it positively, with most of the responses scoring “strongly like”. Additional comments suggested that this was an obvious measure and seemingly many respondents were unaware of drivers doing U-turns at the junctions, with one describing them as “madmen”.

4.4.23. Of those respondents who gave a negative score, only 9 provided additional comments, with most considering that this will make little or no difference given the volume of traffic carrying out these manoeuvres, or that it makes life “unnecessarily difficult” for drivers.

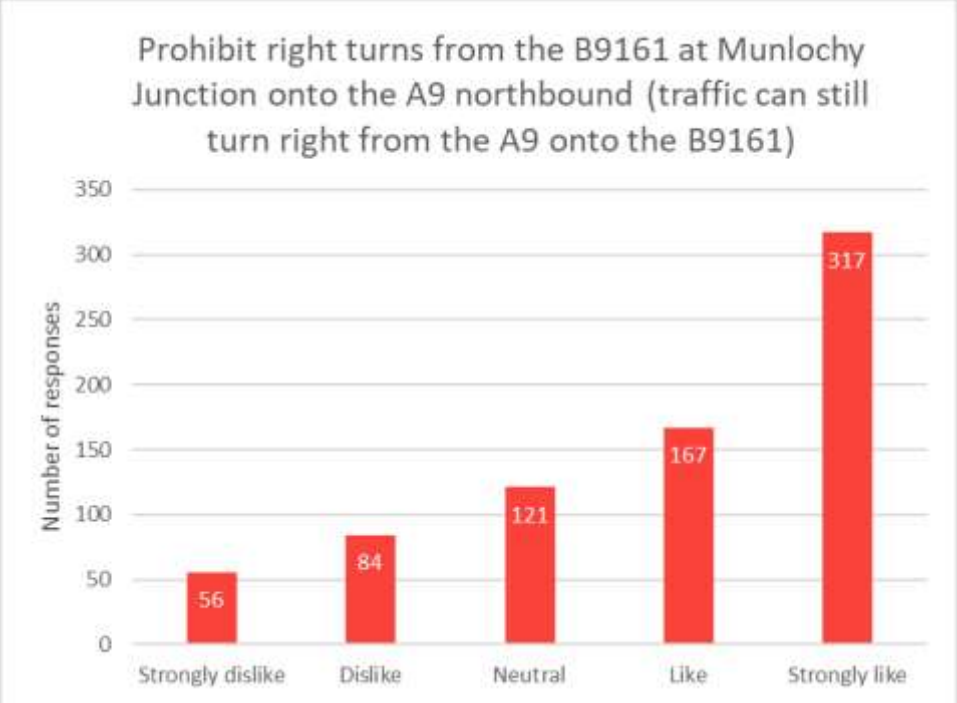
Option C8 - Prohibit right turns from the B9161 at Munlochy Junction onto the A9 northbound (traffic can still turn right from the A9 onto the B9161)

Prohibiting right turns from the B9161 at Munlochy Junction onto the A9 northbound, but traffic can still turn right from the A9 onto the B9161.

Table 4-15 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
56	84	121	167	317
7.4%	11.2%	16.1%	22.2%	42.1%

Figure 4-15 - Graphical Response Results



4.4.24. Additional comments were made in 26% of the responses.

4.4.25. The feedback towards prohibiting right turns were positively received with 64.3% of respondents scoring it positively, with the majority of comments noting that this could resolve confusion and remove vehicle movements which present a risk of serious injury.

4.4.26. Of the additional comments to support the negative scores, 17 respondents highlighted the inconvenience for local traffic, citing the additional journey times, and concerns of increased traffic through North Kessock, as well as the local road network becoming busier with traffic diverted from the northbound A9.

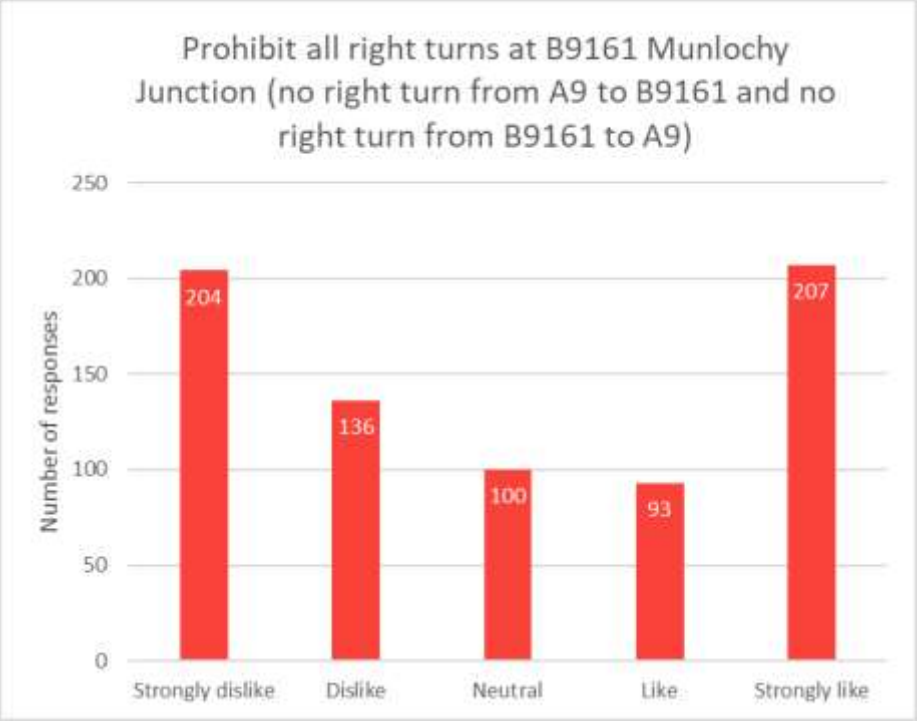
Option C9 - Prohibit all right turns at B9161 Munlochy Junction (no right turn from A9 to B9161 and no right turn from B9161 to A9)

Prohibit vehicles turning right from the A9 to the B9161 and from the B9161 to the A9. The right turn lane would be removed, and the central reservation would be closed.

Table 4-16 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
204	136	100	93	207
27.1%	18.1%	13.3%	12.4%	27.5%

Figure 4-16 - Graphical Response Results



4.4.27. Additional comments were made in 25% of the responses.

4.4.28. The overall responses were mixed with 45.2% of respondents scoring it negatively and 39.9% positively.

4.4.29. The positive responses generally highlight the increase in safety, although eight respondents highlighted their concerns for the impact of increased traffic at Tore Roundabout, North Kessock Junction and the local road network.

4.4.30. The negative feedback on this option generally concerned the increased journey times for right-turning traffic, and the increased traffic on the nearby junctions and local road network.

4.5 Package D – Medium-term

4.5.1. This package includes five options which could be delivered within a period of between 3 and 7 years. These take longer than some of the previous options described, taking account of the time required for the acquisition of additional land or the complexity of the design and construction process.

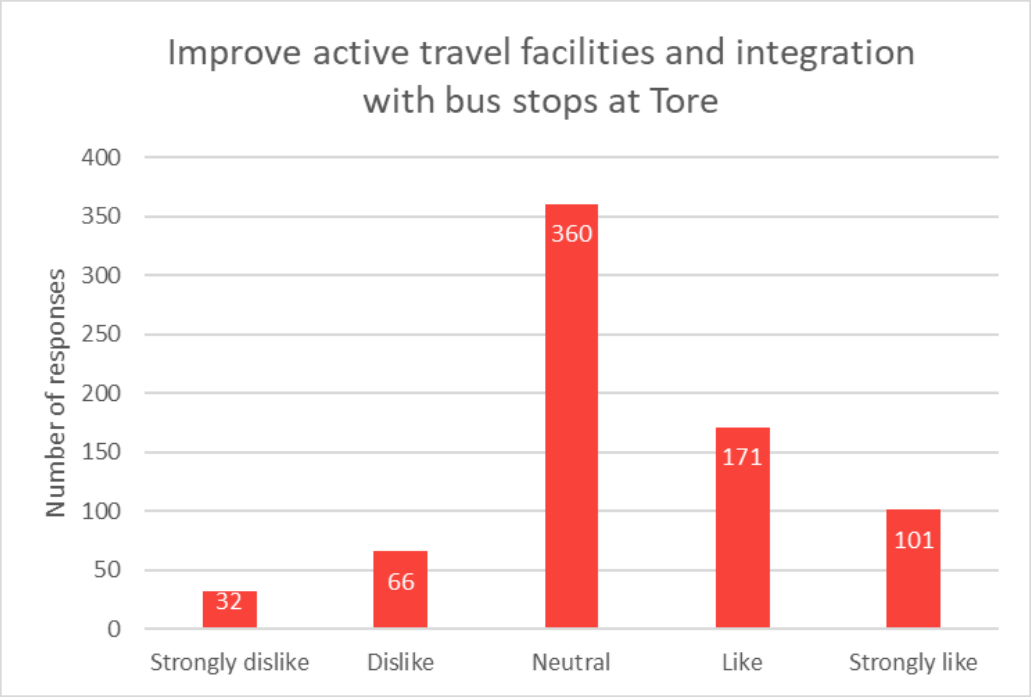
Option D1 - Improve active travel facilities and integration with bus stops at Tore

A review current footway provision around the Tore roundabout to encourage walking, cycling and wheeling, with consideration given to relocation of the bus stops.

Table 4-17 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
32	66	360	171	101
4.2%	8.8%	47.8%	22.7%	13.4%

Figure 4-17 - Graphical Response Results



4.5.2. Additional comments were made in 12% of the responses.

4.5.3. This option received a broadly neutral response, with almost half (47.8%) of respondents scoring it as such. The positive scores outweigh the negative scores at 36.1% and 13.0% respectively. The neutral responses were generally not followed up by any additional

comments, although seven respondents highlighted the undesirable locations of the existing bus stops.

4.5.4. The negative scoring was followed with comments regarding safety and suitability of having pedestrian crossings on the A9, with a third citing the need for a grade-separated pedestrian crossing, which is included as option D3.

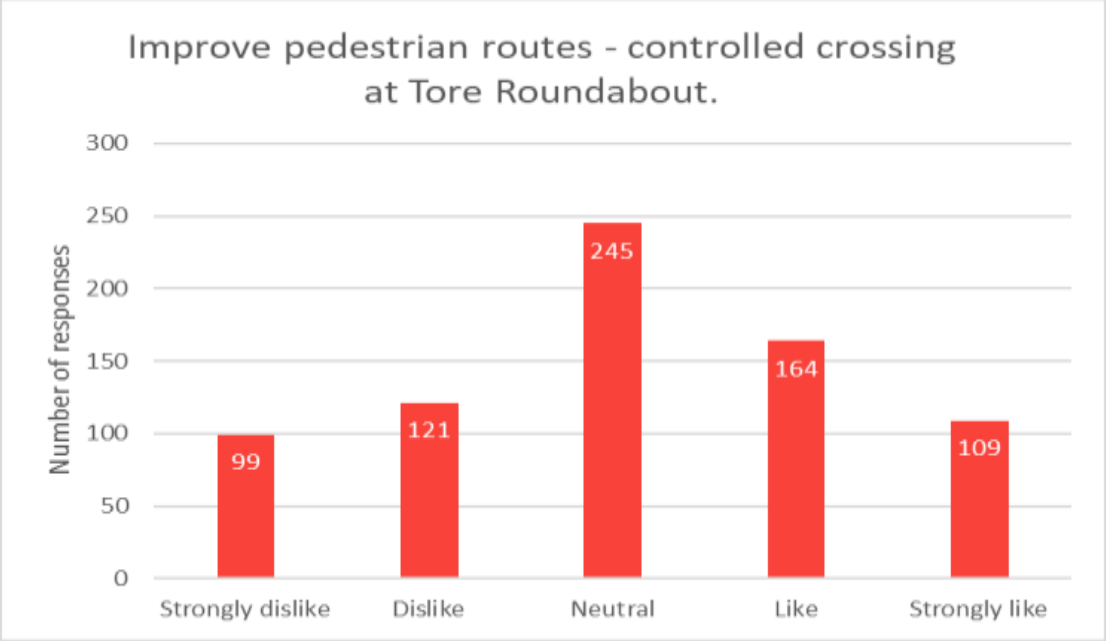
Option D2 - Improve pedestrian routes - controlled crossing at Tore Roundabout

The installation of a pedestrian crossing on the A9 either to the north or to the south side of Tore roundabout, wherever demand is greater.

Table 4-18 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
99	121	245	164	109
13.1%	16.1%	32.5%	21.8%	14.5%

Figure 4-18 - Graphical Response Results



4.5.5. Additional comments were made in 15% of the responses.

4.5.6. The scores were fairly even between positive (36.3%), neutral (32.5%) and negative (29.2%).

4.5.7. A majority of positive responses noted that an improvement would add to pedestrian safety and may encourage further use. A few comments however, stated that dedicated underpass/overpass would be preferred.

4.5.8. The negative responses predominantly highlighted the likelihood of increased traffic queues waiting for pedestrians to cross, with one respondent noting that “many drivers already fail to stop in reasonable time at the roundabout” but “traffic lights at the roundabout might be more helpful”.

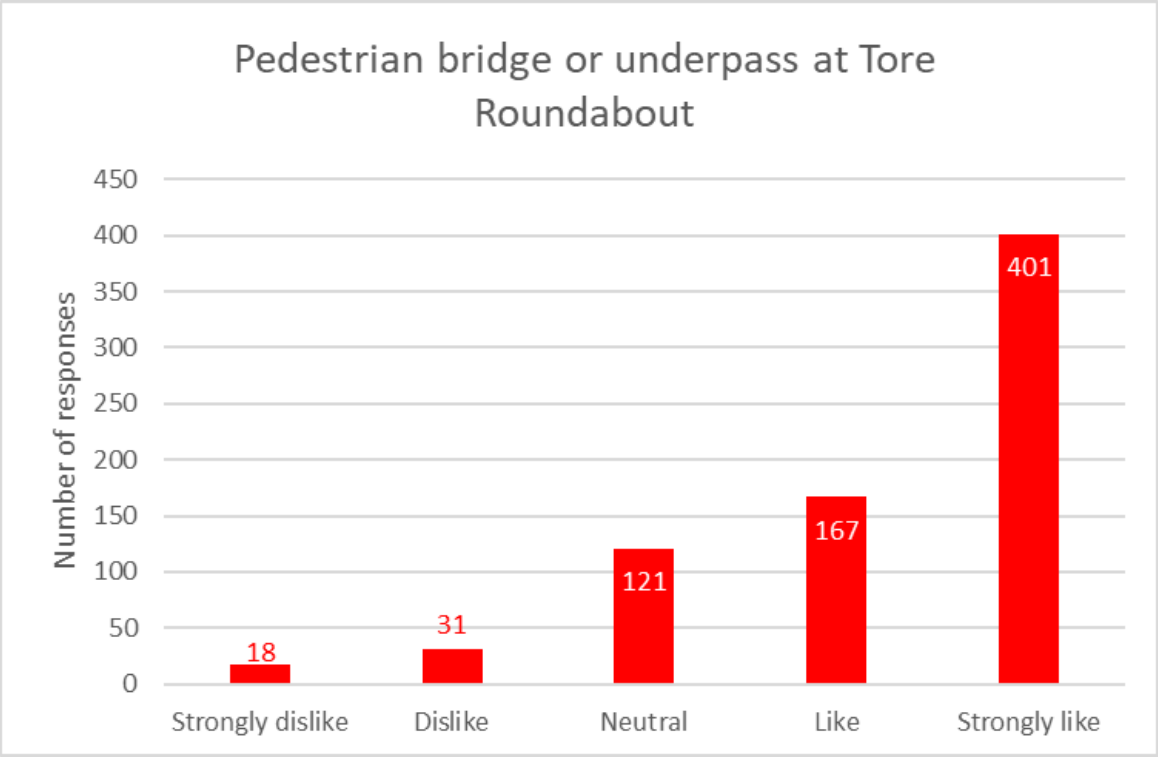
Option D3 - Pedestrian bridge or underpass at Tore Roundabout

A pedestrian bridge over or an underpass below the A9 at Tore Roundabout. This could either be to the north or to the south of Tore roundabout, wherever demand is greater.

Table 4-19 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
18	31	121	167	401
2.4%	4.1%	16.1%	22.2%	53.3%

Figure 4-19 - Graphical Response Results



4.5.9. Additional comments were made in 19% of the responses.

4.5.10. This option received a positive response with 75.5% of respondents scoring it positively, as it addressed some of the concerns on the pedestrian crossing options.

4.5.11. The positive feedback focused on the improved safety, although the cost/benefit of such a measure were questioned in a few of the responses, with one respondent stating “Like idea but doubt value for money for this…“.

4.5.12. The majority of negative feedback concerned cost/benefit, questioning if the pedestrian flows would justify the financial investment.

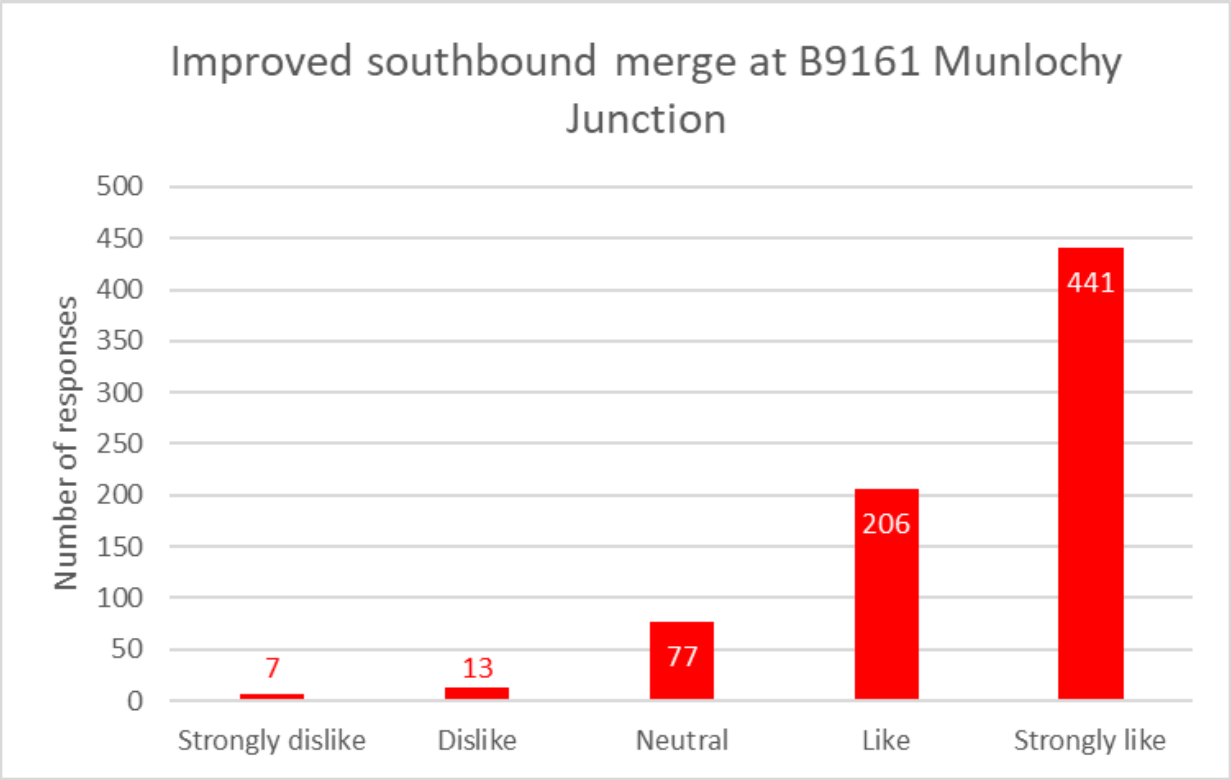
Option D4 - Improved southbound merge at B9161 Munlochy Junction

Increasing the length of the southbound merge slip at the B9161 Munlochy Junction to assist vehicles joining the southbound carriageway by giving more time to join the mainline.

Table 4-20 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
7	13	77	206	441
0.9%	1.7%	10.2%	27.4%	58.6%

Figure 4-20 - Graphical Response Results



4.5.13. Additional comments were made in 20% of the responses.

4.5.14. This option received overall positive feedback with 86.0% of respondents scoring it positively, with a majority strongly liking the measure. The majority of comments considered that the existing merge was much too short and that an improvement was overdue.

4.5.15. Four of the 11 negative comments noted that this was not enough to improve the junction and would therefore not offer sufficient value for money.

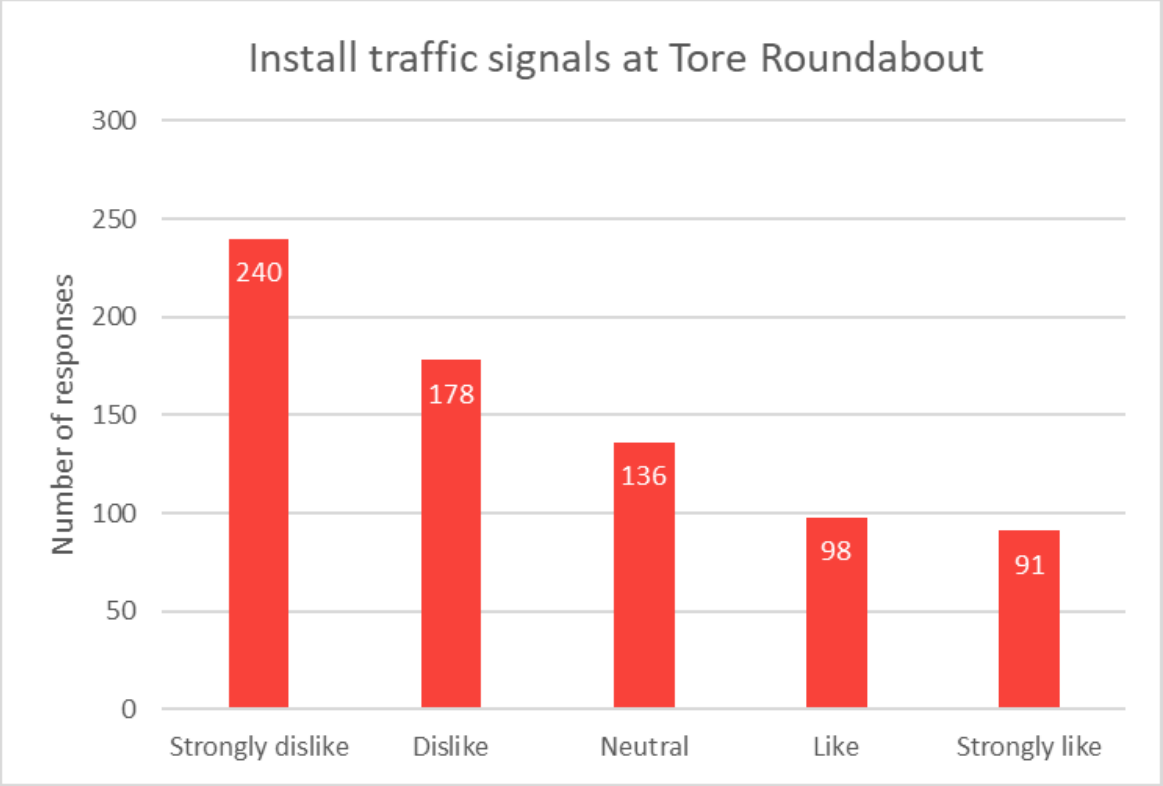
Option D5 - Install traffic signals at Tore Roundabout

The installation of traffic signals at Tore Roundabout, including controlled pedestrian crossings, to enhance facilities for walking, cycling and wheeling.

Table 4-21 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
240	178	136	98	91
31.9%	23.6%	18.1%	13.0%	12.1%

Figure 4-21 - Graphical Response Results



4.5.16. Additional comments were made in 23% of the responses.

4.5.17. This option received negative feedback with 55.5% of respondents scoring it negatively. The negative feedback was generally motivated by it being perceived as unnecessary, and the increase in air pollution from idling vehicles is undesirable. Of the additional comments to support the negative scores, 41 respondents cited the perceived inefficiency of Longman Roundabout as reasons this option is not viable.

4.5.18. The positive responses were generally motivated by the increase to pedestrian and traffic safety, particularly at peak times.

4.6 Package E – Long-term

This package contains six longer term options which could be delivered within a period of between 5 and 10 years. The timing would be dependent on the planning, design, procurement and construction involved, as well as available funding. Some of these options would need a formal legal process, including public consultation, and some could be combined, whilst others are different options for the same location.

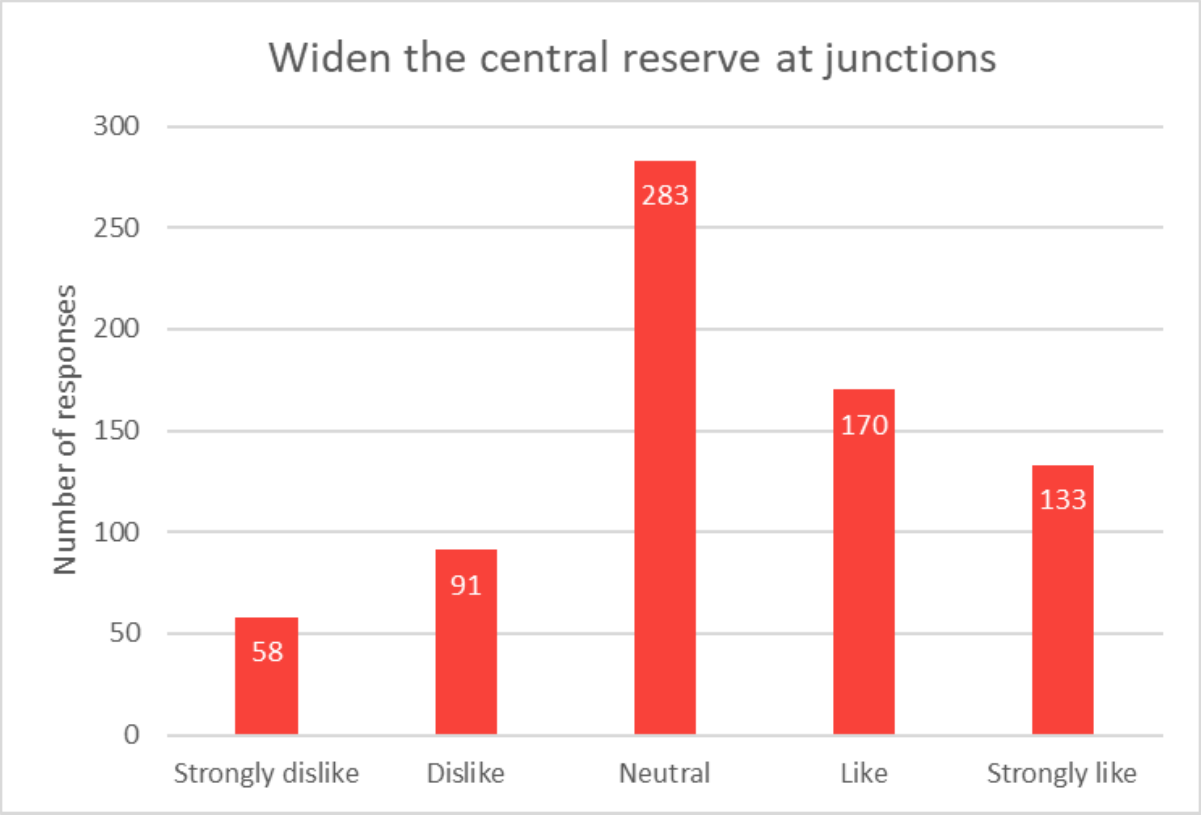
Option E1 - Widen the central reserve at junctions

Widening of the central reserve at the B9161 Munlochy, Artafallie, Allangrange, Arpafeelie and Glackmore junctions to allow for longer vehicles waiting to join the A9.

Table 4-22 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
58	91	283	170	133
7.7%	12.1%	37.6%	22.6%	17.7%

Figure 4-22 - Graphical Response Results



4.6.1. Additional comments were made in 15% of the responses.

4.6.2. This option received an overall positive response with 40.3% of respondents scoring it positively. Eight respondents who scored it neutral or negatively considered it poor value for money, with little benefit, and comments including “pointless” and “does not justify the cost” encountered.

Generally, the positive responses welcomed any redesign of the junctions although few supporting comments were made for the responses in favour of the option. Negative scores made up 19.8% of the responses.

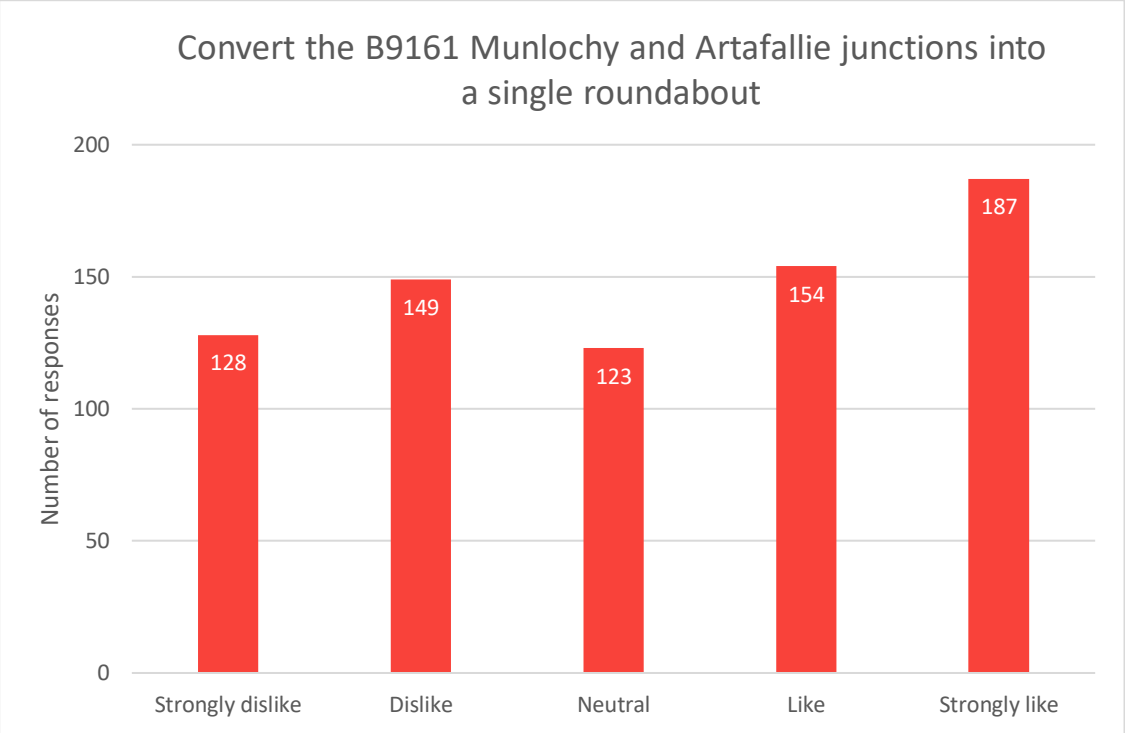
Option E2 - Convert the B9161 Munlochy and Artafallie Junctions into a single roundabout

Redesign the B9161 Munlochy and Artafallie junctions into one single roundabout, which would remove the need to turn right into side roads off the A9

Table 4-23 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
128	149	123	154	187
17.0%	19.8%	16.3%	20.5%	24.8%

Figure 4-23 - Graphical Response Results



4.6.3. Additional comments were made in 21% of the responses.

4.6.4. The overall response for the option was mixed with 45.3% of respondents scoring it positively, with some respondents stating that this would be a preferred way to improve safety and access to the community.

4.6.5. The negative feedback generally raised concerns about increased congestion and disruption to traffic flow and journey times, as well as the value for money when considered against traffic volumes using these junctions. Negative scores made up 36.8% of responses.

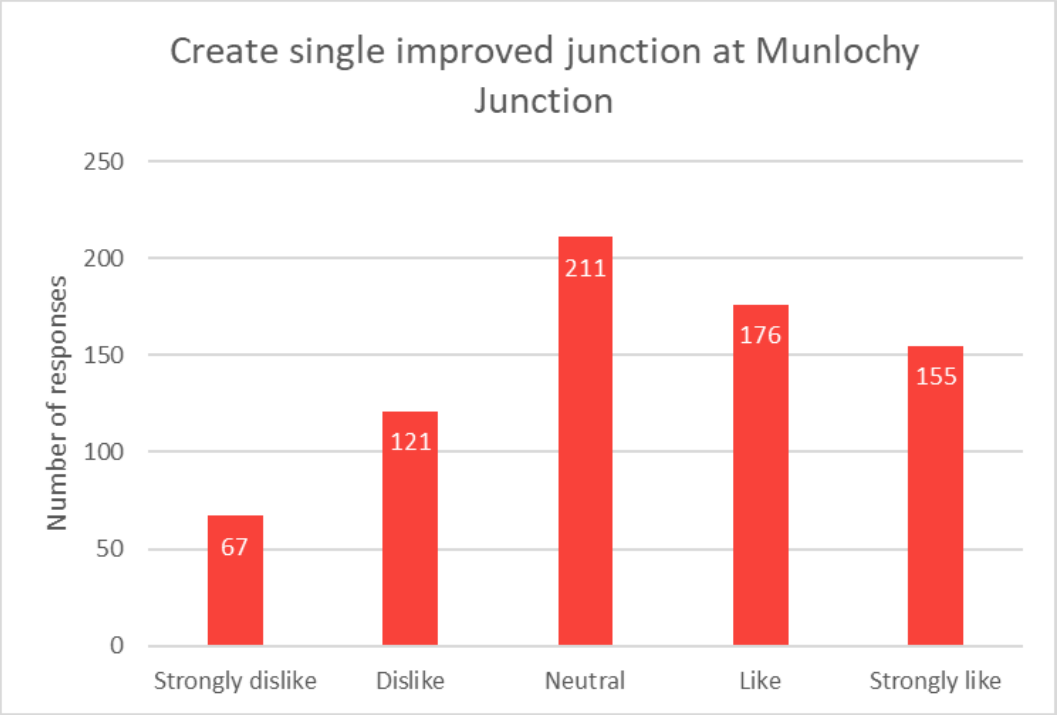
Option E3 - Create single improved junction at Munlochy Junction

A single improved junction at Munlochy through the closure Arpafeelie and Glackmore junctions. Traffic currently using these junctions would be diverted to the Tore Roundabout on a new route linking existing local roads together to join the A9.

Table 4-24 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
67	121	211	176	155
8.9%	16.1%	28.0%	23.4%	20.6%

Figure 4-24 - Graphical Response Results



4.6.6. Additional comments were made in 14% of the responses.

4.6.7. This option received an overall positive response with 44.0% of respondents scoring it positively and 25.0% scoring it negatively. Nine respondents acknowledged the benefits of this option, but only in the absence of a major junction improvement at the Munlochy Junction.

4.6.8. Generally, the negative feedback raised concerns that the impact on locals would be too great with the closure of other junctions along the corridor. These comments also noted that improvements on minor roads would be required to handle the increase in traffic volume.

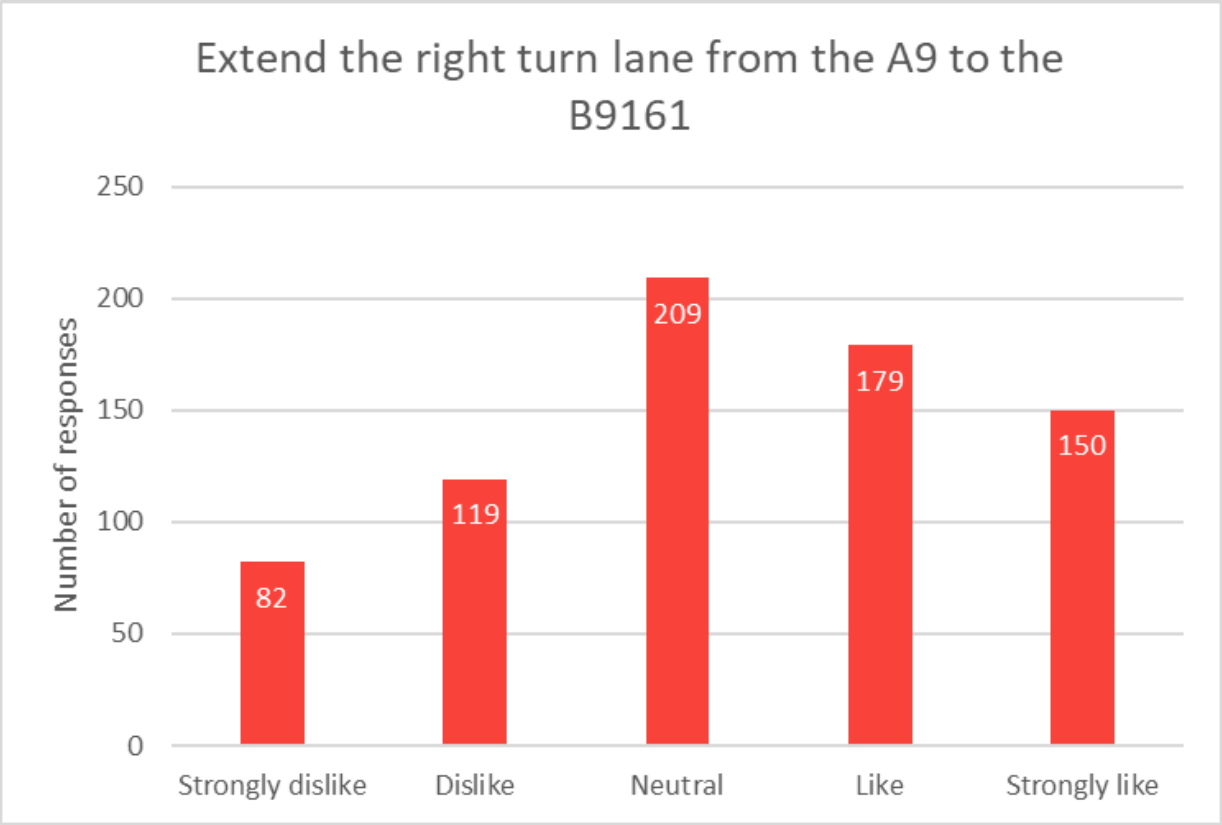
Option E4 - Extend the right turn lane from the A9 to the B9161

An extension of the right turn lane for traffic turning from the A9 to the B9161 would allow more vehicles to queue without impacting traffic in the fast lane.

Table 4-25 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
82	119	209	179	150
10.9%	15.8%	27.8%	23.8%	19.9%

Figure 4-25 - Graphical Response Results



4.6.9. Additional comments were made in 20% of the responses.

4.6.10. This option received an overall positive response with 43.7% of respondents scoring it positively and 26.7% scoring it negatively. Five respondents stated that although beneficial, this did not address the issue of the speed of southbound traffic at right turns onto the B9161 and that crossing the southbound carriageway was the predominant safety concern.

4.6.11. The positive feedback was motivated by comments such as “this lane is too short for rush hour traffic” and “definitely needed as it is too short in peak times”.

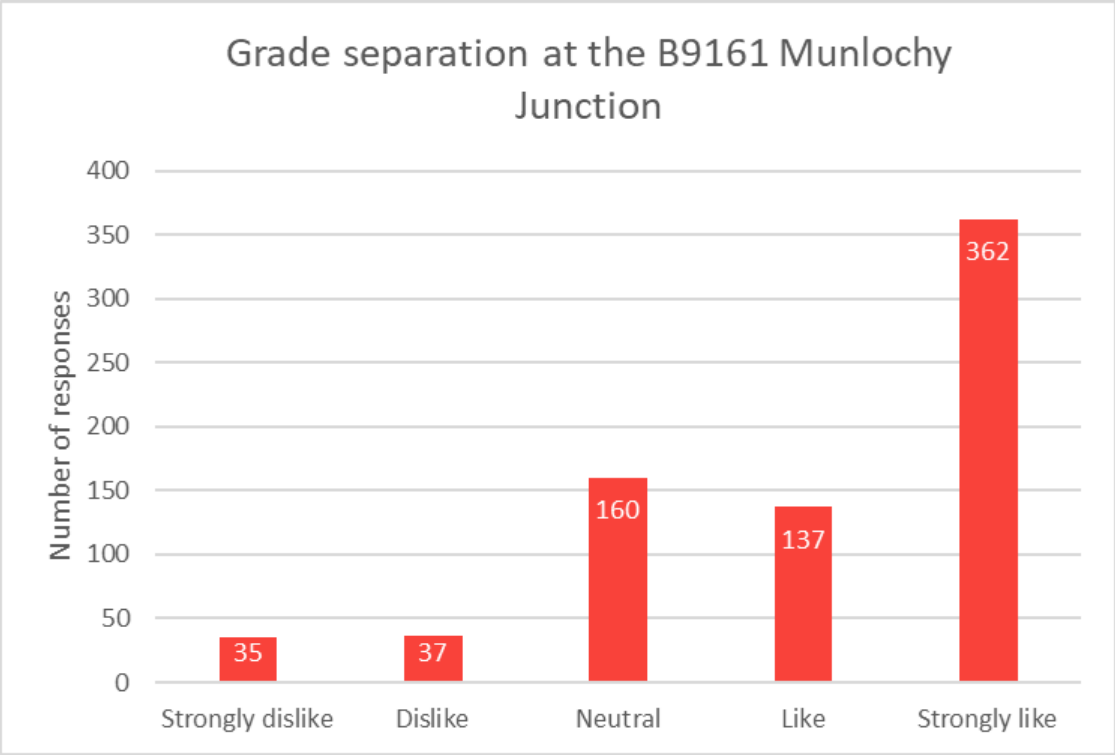
Option E5 - Grade-separation at the B9161 Munlochy Junction

A grade-separated junction at the Munlochy Junction would combine the B9161 Munlochy and Artafallie junctions.

Table 4-26 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
35	37	160	137	362
4.6%	4.9%	21.2%	18.2%	48.1%

Figure 4-26 - Graphical Response Results



4.6.12. Additional comments were made in 22% of the responses.

4.6.13. This option received an overall positive response with 66.3% of respondents scoring it positively. Grade separation was raised in the feedback to previous options on multiple occasions which complements the high number of strongly liked responses. The comment “this has been the locally preferred option for years” is representative of the general opinion.

4.6.14. The negative comments are predominantly based on the cost of providing a grade separated junction, particularly considering the traffic volumes which would utilise it. Concerns regarding the environmental impact and the need to purchase land were raised in majority for “strongly dislike“ responses.

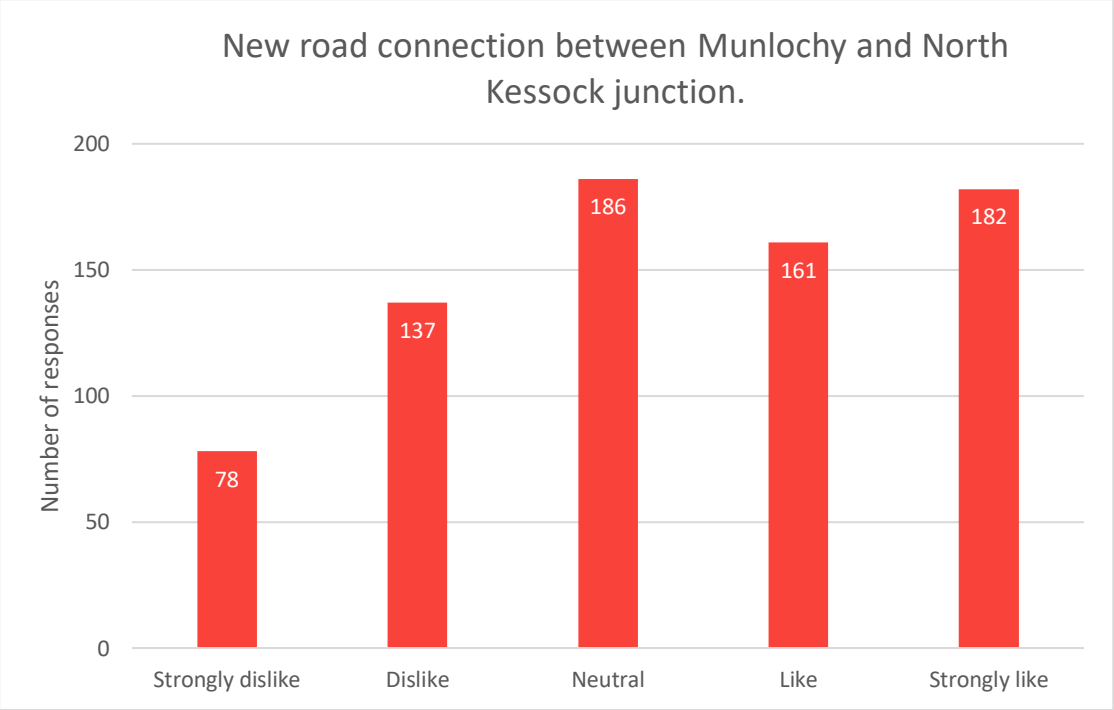
Option E6 - New road connection between Munlochy Junction and North Kessock Junction

A new road connection between the B9161 Munlochy and North Kessock junctions would allow Munlochy Junction to be rationalised, with the gap in the central reserve closed.

Table 4-27 - Option Response Results

Strongly dislike	Dislike	Neutral	Like	Strongly like
78	137	186	161	182
10.4%	18.2%	24.7%	21.4%	24.2%

Figure 4-27 - Graphical Response Results



4.6.15. Additional comments were made in 21% of the responses.

4.6.16. This option received an overall positive response with 45.6% of respondents scoring it positively and 28.6% scoring it negatively. Supporting comments noted the positive aspect of enhancing the local road network at the same time, while the neutral comments suggested that although it may have a positive impact, other options would provide a better cost/benefit value.

4.6.17. Concerns about cost and increased congestion at the North Kessock Junction merging lane were raised in both positive and negative comments. Comments included “North Kessock

Junction inadequate” and “will affect residents and business adversely” were made as criticism against the option in a majority of the negative comments.

5 Analysis of Responses

5.1.1. The overall rate of respondents who scored neutral or positive was 51.3% across all options with the highest score being 86.0% for the option “Improved southbound merge at B9161 Munlochy Junction” and the lowest being 20.6% for the option “Speed limit reduction along whole study area”.

5.1.2. This aligns with general observations where options which were commonly perceived to be creating additional restrictions to those currently in place, such as speed limit reductions and safety cameras, attracted predominantly negative responses while options commonly perceived to benefit motorists attracting positive responses.

5.1.3. Additional comments were made by an average of 21% respondents for each option. The options generating most comments were “Amend Road Signage for Cromarty at Munlochy Junction” and “Speed Limit Reduction at Munlochy” both of which received comments from 34% of respondents. The least commented upon option was “Improve active travel facilities and integration with bus stops at Tore” with 12% of respondents providing additional comments. Responses were not mandatory for each option, and where a respondent has not given a score this is recorded as ‘not answered’.

6 Summary of Responses

6.1.1. Overall, the consultation generated a significant number of responses, most of which were positive to the proposed safety improvements North Kessock and Tore. Summaries of the responses can be found in Table 6-1 and Figure 6-1.

6.1.2. The responses that received positive feedback were generally regarding signage and visibility. Enhanced cyclist signage, road markings and installation of street lighting received overwhelmingly good responses as well as prohibiting certain vehicle movements such as U-turns and right-turns.

6.1.3. Options which addressed vehicle speeds or speed cameras were not preferred and received negative responses. Additionally, the option to install traffic signals at the Tore Roundabout was seen as a negative impact.

6.1.4. Responses applying to active travel and NMU provision measures were mixed. Options concerning active travel integration and improvement of pedestrian routes had neutral responses whilst more material options such as construction of pedestrian crossing facilities received positive feedback.

6.1.5. The feedback we have received from the public consultation will be assessed in relation to public acceptability and further assessment will be undertaken in line with the previously established Transport Planning Objectives within the Preliminary Appraisal.

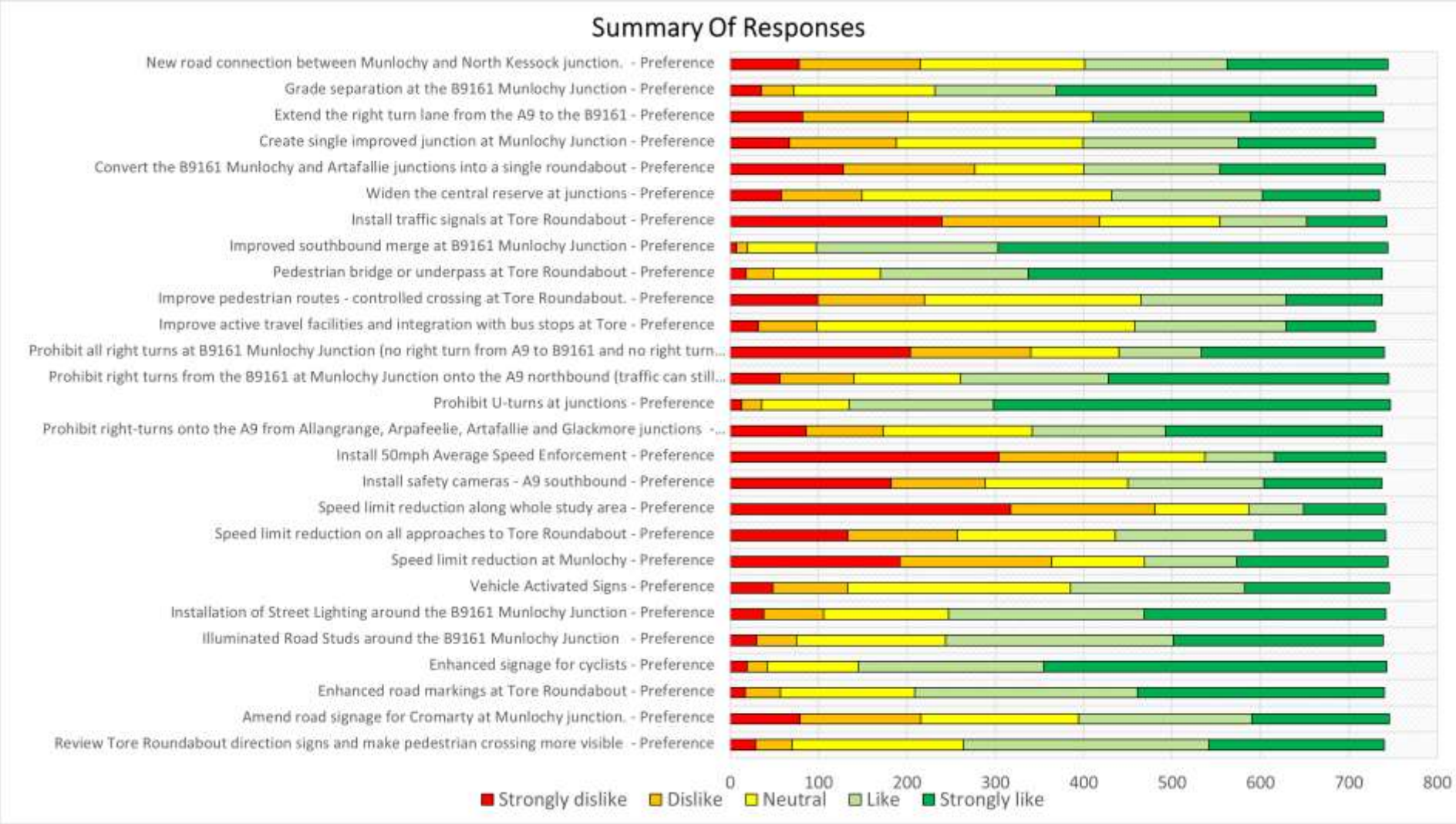
Table 6-1 – Table Summary of Responses

Option	No. of responses	Strongly dislike	Dislike	Neutral	Like	Strongly like
Review Tore Roundabout direction signs and make pedestrian crossing more visible	740	29	41	194	278	198
Amend road signage for Cromarty at Munlochy Junction	746	79	137	178	196	156
Enhanced road markings at Tore Roundabout	740	17	40	152	252	279
Enhanced signage for cyclists	743	19	23	103	210	388
Illuminated Road Studs around the B9161 Munlochy Junction	739	30	45	169	257	238

Option	No. of responses	Strongly dislike	Dislike	Neutral	Like	Strongly like
Installation of Street Lighting around the B9161 Munlochy Junction	742	38	68	141	221	274
Vehicle Activated Signs	746	48	85	252	197	164
Speed limit reduction at Munlochy	744	192	172	105	104	171
Speed limit reduction on all approaches to Tore Roundabout	742	133	124	179	157	149
Speed limit reduction along whole study area	742	317	164	106	62	93
Install safety cameras - A9 southbound	737	182	106	162	154	133
Install 50mph Average Speed Enforcement	742	304	134	99	79	126
Prohibit right-turns onto the A9 from Allangrange, Arpafeelie, Artafallie and Glackmore Junctions	738	86	87	169	151	245
Prohibit U-turns at junctions	747	13	23	99	163	449
Prohibit right turns from the B9161 at Munlochy Junction onto the A9 northbound (traffic can still turn right from the A9 onto the B9161)	745	56	84	121	167	317
Prohibit all right turns at B9161 Munlochy Junction (no right turn from A9 to B9161 and no right turn from B9161 to A9)	740	204	136	100	93	207
Improve active travel facilities and integration with bus stops at Tore	730	32	66	360	171	101

Option	No. of responses	Strongly dislike	Dislike	Neutral	Like	Strongly like
Improve pedestrian routes - controlled crossing at Tore Roundabout	738	99	121	245	164	109
Pedestrian bridge or underpass at Tore Roundabout	738	18	31	121	167	401
Improved southbound merge at B9161 Munlochy Junction	744	7	13	77	206	441
Install traffic signals at Tore Roundabout	743	240	178	136	98	91
Widen the central reserve at junctions	735	58	91	283	170	133
Convert the B9161 Munlochy and Artafallie Junctions into a single roundabout	741	128	149	123	154	187
Create single improved junction at Munlochy Junction	730	67	121	211	176	155
Extend the right turn lane from the A9 to the B9161	739	82	119	209	179	150
Grade separation at the B9161 Munlochy Junction	731	35	37	160	137	362
New road connection between Munlochy and North Kessock Junction	744	78	137	186	161	182

Figure 6-1 - Graphical Representation of Responses



110 Queen Street
Glasgow
G1 3BX

wsp.com

Appendix D

Do-Minimum Options

APPENDIX D

DATE:	08 December 2021	**CONFIDENTIALITY:**	Public
SUBJECT:	Do-Minimum Options Summary		
PROJECT:	70075948-001	**AUTHOR:**	[redacted]

DO-MINIMUM OPTIONS SUMMARY

Introduction

Since the start of the Part 1 Appraisal, four of the options taken forward from the Case for Change have been committed.

- Improve Tore Roundabout visibility;
- Speed Limit Reduction on approaches to Tore Roundabout
- Lighting at Munlochy Junction (powered); and
- Enhanced road markings at Tore Roundabout.

Whilst these options form the Do-Minimum, this position has been reached mid-way through this study. As a consequence, these options have been subject to appraisal and included in this technical note.

OPTION APPRAISAL: IMPROVE TORE ROUNDABOUT VISIBILITY

OPTION DESCRIPTION

This option proposes measures to improve the visibility at Tore roundabout, which could include additional signage, the relocation of signage, re-lining, or a general review of street furniture.

APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

Improved visibility may generate minor benefits for vehicular road safety at Tore roundabout by providing a clearer and safer environment for drivers, therefore TPO3 has a score of +1. There is no perceived safety benefit for active travel or road safety at the other junctions, so the remaining TPOs have scored zero.

STAG CRITERIA ASSESSMENT

Environment

No significant impacts on the majority of environmental sub-criteria are anticipated due to the non-invasive nature of the option. Landscape and Visual Amenity have both scored +1 as a result of the minor benefit in removing cluttered signage and street furniture. All other environmental criteria have scored zero.

Safety (Accidents and Security)

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Improved visibility reduces the likelihood of accidents at the roundabout, resulting in a minor benefit and a score of +1. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

The improvement of visibility will have no impact on both TEE and EALI, and these have both been given zero scores.

Integration

The option has a minor benefit to the users of other transport modes with all users taking advantage of increased visibility at Tore Roundabout, making it more attractive for active travel, resulting in a TI score of +1. This increased attractiveness produces a score of +1 for TLI with existing facilities benefitting from increased usage.

There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1.

Accessibility and Social Inclusion

Community Accessibility is improved, with increased driver awareness providing more favourable access to the public transport network and existing facilities, resulting in a score of +1. Comparative Accessibility has been given a zero score, as no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

The works associated with this option, such as the rationalisation and relocation of signage, the review of street clutter and the review of road markings, are classed as minor works and relatively unintrusive. As a result, this option receives a score of -1.

Operational

The associated operational requirements of signing and lining are minimal, and become port of routine maintenance by the Operating Company. A score of -1 has been given on this basis.

AFFORDABILITY

The minor works involved in the visibility improvements have minimal costs associated with them. This results in a score of zero for affordability.

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ACCEPTABILITY

Moderate support was received from both the public and stakeholders, resulting in a score of +2.

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Option Appraisal: Speed Limit Reduction on the A9 approaches to Tore Roundabout

OPTION DESCRIPTION

The option proposes to reduce the speed limit on the A9 approaches to Tore Roundabout.

APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

A reduction in speed on the approaches to Tore Roundabout could increase safety for active travel modes in this location. Road safety at Tore Roundabout would also be expected to improve, with a reduction in accident severity and a potential for the reduction of vehicle conflicts. Speed management measures can be established to ensure self-enforcement without the need for safety cameras or police presence. As a result, TPO1 and TPO3 have been scored as +1. The remaining TPOs have a zero score as the proposal does not affect any of the other junctions in the study area.

STAG CRITERIA ASSESSMENT

Environment

A reduction in traffic speed would reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat.

Safety (Accidents and Security)

A reduction in speed is anticipated to reduce the severity of road traffic accidents, and has potential for a reduced risk of conflict, with lane discipline being noted as an issue at the roundabout. This results in a score of +1 for Accident impact. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

Although traffic approaching the roundabout will have a reduced speed regardless, a formal speed limit reduction is anticipated to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as zero, given the localised nature of the option.

Integration

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The option has a minor benefit to the users of other transport modes with slower vehicular traffic around Tore making a more inviting environment, resulting in a TI score of +1. This slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds.

There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030 to "reduce the likelihood, number and severity of collisions" and aligns with Circular 1/2006: Setting Local Speed Limits, which suggests the speed limit entering the roundabout should match that of the majority of arms coming into it. PI has been scored +2.

Accessibility and Social Inclusion

Community Accessibility and Comparative Accessibility have both been given zero scores, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

Changes to the speed limit require a Speed Limit Order (SLO), which is a legal process involving consultation with public sector organisations, key stakeholders and the wider public. Although the degree of objection is unknown, the resulting unfavourable feedback from the public consultation is a good indicator and as a result it has been scored as -1.

Operational

Operational requirements require enforcement of the speed limit to ensure compliance. It is anticipated that speed management measures can be implemented on the approaches to the roundabout, resulting in self-enforcement of the speed limit. As there are no perceived enforcement challenges and this has been scored zero..

AFFORDABILITY

There are minimal costs associated with further assessment, production of legal documents and installation of speed limit signage, scoring zero for this criterion.

ACCEPTABILITY

This option received minor opposition during the public consultation with a score of -1, and a neutral response from stakeholders. In this case the lower result is carried forward, resulting in a score of -1.

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Option Appraisal: Lighting at Munlochy Junction (powered)

OPTION DESCRIPTION

The option proposes to add street lighting to Munlochy Junction, providing improved visibility within the locale. A concept plan is presented within Figure D-2.

Figure D-2 - Lighting at Munlochy Junction (powered) Concept Plan

APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

Lighting at Munlochy junction may generate moderate benefits by increasing visibility, particularly during hours of darkness and with poor weather conditions, resulting in a score of +2. This option has no effect on active travel or the other junctions within the study area, therefore the remaining TPOs have been given a zero score.

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STAG CRITERIA ASSESSMENT

Environment

No significant impacts on the majority of environmental sub-criteria are anticipated due to the non-invasive nature of the option, resulting in a zero score. However, Landscape and Visual Amenity have both scored -3, highlighting a major impact of the addition of lighting to an otherwise dark area. This would have major adverse effects on landscape character and visual amenity for local residents and other sensitive visual receptors at night

A small increase in CO_2 is expected with the additional power generation required for the lighting resulting in a score of -1 for Global Air Quality.

Safety (Accidents and Security)

Improved visibility reduces the likelihood of accidents at the junction, resulting in a minor benefit and a score of +1. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

The installation of street lighting will have no impact on both TEE and EALI, and these have both been given zero scores.

Integration

The option has a minor benefit to the users of other transport modes with all users taking advantage of increased visibility, resulting in increased driver awareness and a TI score of +1. The provision of lighting has no impact on TLI or PI, both receiving a zero score.

Accessibility and Social Inclusion

Community Accessibility and Comparative Accessibility have both been given zero scores, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

Although this measure would require a power source, this is not perceived to be a significant technical issue, resulting in and a score of -1.

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Operational

Although regular maintenance is required to ensure correct and beneficial operation, the overall operational costs are not anticipated to be significant, and only a minor impact is perceived, with a score of -1.

AFFORDABILITY

Only minor costs are anticipated for this option, resulting in a score of -1.

ACCEPTABILITY

Moderate support was received during the public consultation, resulting in a score of +2. Safety was cited as a factor. The stakeholders have given major support, with a score of +3. In this case, the score of +2 has been taken forward, being the lower of the two.

Option Appraisal: Enhanced road markings at Tore Roundabout

OPTION DESCRIPTION

This option proposes to improve lane discipline at Tore roundabout by adding enhanced road markings.

APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

Enhanced road markings at Tore Roundabout may generate minor benefits regarding vehicular road safety by improving lane discipline for traffic on the approaches and navigating the circulatory, resulting in a score of +1 for TPO3. This option does not affect any of the other junctions or active travel, therefore the remaining TPOs have been scored as zero.

STAG CRITERIA ASSESSMENT

Environment

No significant impacts on any of the environmental sub-criteria is anticipated due to the non-invasive nature of this option, and all sub-criteria have been given a zero score.

Safety (Accidents and Security)

Improved visibility reduces the likelihood of accidents at the roundabout, resulting in a minor benefit and a score of +1. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

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The enhancement of road markings will have no impact on both TEE and EALI, and these have both been given zero scores.

Integration

There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +1.

Enhanced road markings have no perceived benefit to TI or TLI as it does not address these sub-criteria and have been given a zero score.

Accessibility and Social Inclusion

Community Accessibility and Comparative Accessibility have both been given zero scores, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

As this option is classed as minor works and unintrusive, there are no significant technical issues, resulting in a score of -1.

Operational

The associated operational requirements are negligible, with a score of zero given to this criteria.

AFFORDABILITY

The costs of the provision of road markings is minimal, therefore, this has been given a score of zero.

ACCEPTABILITY

This option received strong support from both the public and stakeholders, with a score of +2.

Appendix E

Safety Camera Options

APPENDIX E

DATE:	08 December 2021	**CONFIDENTIALITY:**	Public
SUBJECT:	Safety Camera Options Summary		
PROJECT:	70075948-001	**AUTHOR:**	[redacted]

SAFETY CAMERA OPTIONS SUMMARY

Introduction

Across Scotland, safety cameras are deployed through the Scottish Safety Camera Programme (SSCP) primarily where they have the greatest potential to reduce injury collisions and where there is evidence of both collisions and speeding. This is in accordance with criteria contained in the SSCP Handbook. This can be viewed at: https://www.transport.gov.scot/publication/scottish-safety-camera-programme-handbook/

An annual site prioritisation process is undertaken each year to determine new safety camera sites across the road network. This national exercise acts to ensure the right camera technology is in the right place at the right time. It involves a range of partners including the three regional safety camera units, all 33 road authorities and Police Scotland, and acts to identify potential new camera sites which meet the minimum criteria, while at the same time assessing the performance of existing enforcement strategies. Although these options have been appraised, they are neither rejected nor retained at this stage, and the details in this appendix are for information only.

OPTION APPRAISAL: INSTALL SAFETY CAMERAS

OPTION DESCRIPTION

This option proposes the installation of a safety camera on the A9 southbound north of Munlochy Junction. This option was raised during stakeholder engagement workshops and has been included accordingly. A concept plan is presented within Figure E-1.

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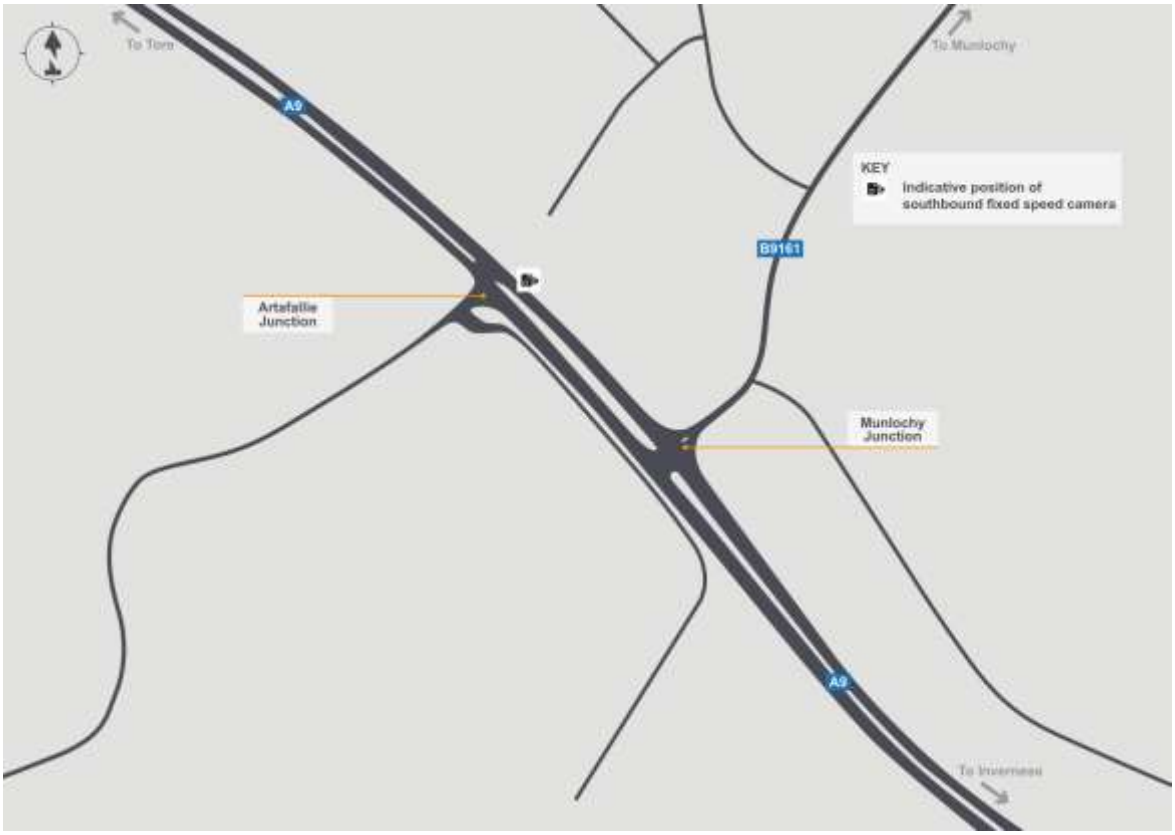
Figure E-1 - Install safety camera Concept Plan



APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

No impact is expected in reducing conflicts for active travel modes, or significantly improving safety at any of the junctions, given that there is no proposed reduction to the current speed limit and traffic will travel at its current speed. All TPOs have scored zero.

STAG CRITERIA ASSESSMENT

Environment

As there is unlikely to be a significant reduction in traffic speed, there is no anticipated benefit to the environment, particularly with respect to noise and air quality. There would be a minor impact to Landscape and Visual Amenity with the installation of a camera, resulting in a score of -1 for both these criteria.

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Safety (Accidents and Security)

Safety cameras enforce the current speed limit and improve compliance, so the benefit to safety to likely to be negligible, resulting in a score of zero for Accident impact. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

Although this option would enforce the speed limit, there is no evidence to suggest it would have any benefit or impact on the economy. TEE and EALI have both been scored as zero.

Integration

There are no dedicated pedestrian or cyclist facilities at Munlochy, resulting in a zero score for TI and the same for TLI as there are no population centres nearby. There is a minor benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". Although the average speed on this section of the A9 has been established as approximately 70mph, this option will ensure traffic cannot travel at unsafe speeds beyond the current speed limit. PI has been scored +1.

Accessibility and Social Inclusion

Community Accessibility and Comparative Accessibility have both been given zero scores, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

As per the introduction of this appendix, consultation is required with a range of partners including the three regional safety camera units, all thirty-three road authorities and Police Scotland to identify potential new camera sites which meet the minimum criteria. As this option is not fully within the remit of Transport Scotland, this has been scored as -1 at this stage.

Operational

Operational requirements include regular maintenance and calibration of equipment, but there are no major operational challenges, and this has been scored as -2.

AFFORDABILITY

There are minor costs associated with the installation of safety cameras, receiving a score of -1.

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ACCEPTABILITY

Safety cameras on the approach to Munlochy Junction received a mixed response during the public consultation, resulting in an overall scoring of zero. The stakeholders scored it as +1, showing minor support, but the zero score has been applied being the lower of the two.

OPTION APPRAISAL: INSTALL 50MPH AVERAGE SPEED CAMERA

OPTION DESCRIPTION

This option proposes to reduce the speed limit to 50mph between North Kessock and Tore and install average speed cameras for enforcement. A concept plan is presented within Figure E-2.

Figure E-2 - Install 50mph average speed camera Concept Plan

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APPRAISAL SUMMARY

TRANSPORT PLANNING OBJECTIVES

The installation of average speed cameras will ensure compliance with a reduced speed limit. There is a minor benefit of increased safety for the active travel crossings along the A9, therefore TPO1 has scored +1.

Installation of speed cameras enforcing a reduced speed limit of 50 mph may generate a minor benefit regarding vehicular safety at Munlochy Junction, Tore Roundabout and intermediate junctions along the A9, therefore TPO2, TPO3 and TPO4 have scored +1.

STAG CRITERIA ASSESSMENT

Environment

A reduction in traffic speed would also reduce Noise and Vibration to local receptors, improve Global Air Quality, and improve Local Air Quality resulting in a score of +1 for each of these criteria. The slower traffic speeds may also result in a reduction in wildlife collisions, resulting in a score of +1 for Biodiversity and Habitat. The installation of cameras would have a minor negative impact on Landscape and Visual Amenity, resulting in a score of -1 for each of these criteria.

Safety (Accidents and Security)

A reduction in speed is anticipated to reduce the severity of road traffic accidents, and has potential for a reduced risk of conflict. A score of +1 for Accident impact has been given, based on the fact that drivers are more likely to comply where active enforcement is in place. Security has been given a zero score as there is no perceived impact on personal safety.

Economy

A reduction in speed is likely to result in a minor increase in travel time, therefore TEE has been scored -1. EALI has been scored as zero, given the localised nature of the option.

Integration

The option has a minor benefit to active travel users with slower vehicular traffic making for a safer and more inviting environment., resulting in a TI score of +1. This slower traffic produces a score of +1 for TLI with existing facilities benefitting from lower speeds.

There is a moderate benefit with regards to Policy Integration, as the option aligns with Scotland's Road Safety Framework to 2030, to "reduce the likelihood, number and severity of collisions". PI has been scored +2.

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Accessibility and Social Inclusion

Community Accessibility and Comparative Accessibility have both been given zero scores, as there has been no impact on the coverage of the public transport network or existing facilities, and no gaps have been identified in the accessibility requirements of different population groups at various locations.

FEASIBILITY

Technical

As per the introduction of this appendix, consultation is required with a range of partners including the three regional safety camera units, all thirty-three road authorities and Police Scotland to identify potential new camera sites which meet the minimum criteria. As this option is not fully within the remit of Transport Scotland, and objection is likely to be high, this has been scored as -2 at this stage.

Operational

Operational requirements include regular maintenance and calibration, but there are no major operational challenges. Due to the maintenance impacts to ensure the cameras work effectively, this has been scored as -2.

AFFORDABILITY

There are moderate costs associated with the installation of average speed cameras, receiving a score of -2.

ACCEPTABILITY

This option received major opposition from the public, resulting in a score of -3. Increased journey times was a factor, as well as it being perceived as an unnecessary measure. The stakeholders scored it neutrally, therefore the score of -3 will be taken forward, being the lower of the two.

7 Lochside View
Edinburgh Park
Edinburgh, Midlothian
EH12 9DH

wsp.com