

Jacobs Engineering Group Inc.
95 Bothwell Street, Glasgow, Scotland G2 7HX
T [Redacted] www.jacobs.com



4th November 2019

Subject: Strategic Transport Projects Review - Stakeholder Engagement 'Option Generation' Workshop Invitation

Dear Sir / Madam,

As a key stakeholder with an interest in the transport network in Argyll and Bute we would like to invite you to a Stakeholder Engagement Option Generation Workshop, the locations and times of which are as follows:
18th November (1pm-4pm) – Argyll and Bute Council Offices, Kilmory, Lochgilphead 21st
November (1pm-4pm) – Three Villages Main Hall, Arrochar

We have been commissioned by Transport Scotland to undertake the second 'Strategic Transport Projects Review' (STPR2) which will consider future transport investment in Scotland, including the strategic road and rail networks, active travel, bus, ferries and island connectivity. These will be targeted to support the National Transport Strategy as well as provide a fit with Scottish Government Plans, Policies and Strategies and will ultimately inform the next Infrastructure Investment Plan.

Argyll and Bute has been identified as one of the Regional Groupings for study in STPR2. The study will assess accessibility to / from and within Argyll and Bute by all modes on key strategic travel corridors. Workshops were held in May and June to identify, define and understand the relevant problems and opportunities in the study area, complemented by data analysis. We are now aiming to identify interventions to address these problems and opportunities, which will be the focus of this second round of regional stakeholder workshops.

These will be half-day workshops commencing with an update on the work completed to date on STPR2, report on the identified Problems and Opportunities from the workshops held in early Summer, and to get stakeholder views on interventions for consideration to address the Problems and Opportunities in the Argyll & Bute region.

Please confirm whether you, or another representative from your organisation, can attend one of the workshops (stating your preference) by contacting [Redacted] on [Redacted] or by email at [Redacted]

For information, the Jacobs contact for this study is [Redacted] (details as below) and the Transport Scotland Project Manager for this study is [Redacted] who is contactable at [Redacted].

Yours sincerely

[Redacted].

[Redacted].

STPR2 Work Package Manager

[Redacted].

[Redacted].

**Collated list of transport interventions for Argyll & Bute
from STPR2 Consultation and Online Survey**

Bridge options linking Argyll & Bute to North Ayrshire/Inverclyde to permanently fix the A83 unreliability due to closures
Long laybys on A83 (as on A75) to permit courteous HGV / tractor drivers to pull in for overtaking
Consideration given to cycle and NMV pathways on A82 North of Tarbet and West on A83 A narrow railway bridge and roadway between Tarbet & Arrochar to be developed to cope with traffic (incl volume of HGV) increases, esp in summer months.
More control of number of HGVs transiting the A83 & A82
Car Tunnel Dunoon to Inverclyde
Tunnel Portavadie - Tarbert
Creation of a train route to Helensburgh from Dunoon
More passing places on rural roads with long laybys for HGV to pull in.
Similar level of investment in upgrading the primary route network in Argyll as is vested in Central Belt and East Coast
To reduce CO2 emissions through better fuel economy, as well as reducing the severity of accidents, the national speed limit should be reduced to 60mph enforced by average speed cameras on all dual carriageways and on all suitable stretches of single carriageway roads where the present limit is widely ignored.
Car tunnel Ardmaleish (Bute) to Knockdow (near Toward)
Road Safety - use of average speed cameras on both national speed limit and through villages to increase compliance and reduce accidents
Bridge Colintrave - Rhubodach
Speed reducing measures on known accident road sites
More cycle and pedestrian crossings on the trunk roads
Increased charging points / hydrogen infrastructure on A83
Invest in the widening the A82 between Tarbet and Crainlarich
Maintenance and improvement of trunk roads
Improved information systems for road network
Great provision for tourism, better coach parking, camping provision and signage to appropriate parking areas. Tourists are so dangerous but vital to the rural economy.
Bridge from Scotland to Northern Ireland
Provision of toilet facilities on major routes
In Summer large chains of traffic on A82 and A83 lead to frustration for any vehicles & motor bikes wishing to join these roads at junctions, which are becoming dangerous as chances are taken or visitors in hired vehicles, possibly used to driving on Right are involved. Duck Bay, Luss, Inverbeg at Tarbet all see many near misses, as well as unfortunate accidents - which then block these roads for everyone else.

**A83 Task Force – A83 Appraisal Briefing Paper by Jacobs Aecom for STPR2
27 August 2020**

1.0 Purpose of this Paper

The purpose of this paper is to provide a summary of the preliminary appraisal work carried out to date for the A83 route as part of the Second Strategic Transport Projects Review (STPR2) and the next steps.

2.0 Summary of Appraisal

This appraisal is being carried out (in advance of the wider STPR2 appraisal programme) to provide Transport Scotland with early advice on the merit of potential options to improve the resilience of the A83. The appraisal draws on the work carried out as part of the A83 Trunk Road Route Study, as reported in 2013.

2.1 Aim of Appraisal

The key aim of the preliminary appraisal is to assess the merits of different Corridor enhancements that could facilitate a step change in the resilience of the A83 route, taking cognisance of the particular constraints at the Rest and Be Thankful.

An overview of STPR2 and the purpose of the A83 appraisal are presented on Slide 3.

2.2 Approach

The approach follows the wider STPR2 appraisal framework which is in line with the Scottish Transport Appraisal Guidance (STAG), the steps of which are as follows:

- Option Generation
- Option Sifting & Packaging
- Preliminary Appraisal
- Detailed Appraisal

The approach to the STPR2 appraisal of the A83 is shown on Slide 4.

2.3 Options

A review of the options developed as part of the A83 Trunk Road Route Study has been carried out. In addition, a number of options were identified that could also address the wider connectivity issues in the Argyll & Bute region identified through the STPR2 process. These take cognisance of the fixed link road options identified by the Cowal Fixed Link Group.

The options considered as part of the A83 Trunk Road Route Study are outlined in Table 2.1.

Table 2.1: A83 Trunk Road Route Study (2013) Options

OPTION	OPTION DESCRIPTION SUMMARY
Glen Croe: Red	On-line option following the route of the existing A83. Involves substantial hazard reduction measures along the line of the existing road.
Glen Croe: Brown	On-line option following the route of the existing A83. Involves the construction of Debris Flow Shelters to protect traffic and the road in the event of future debris flow events.

Glen Croe: Yellow	Off-line option running parallel to the existing A83. It would generally follow a similar profile to the existing road with the viaduct structure set at a sufficient level to permit debris flow events to pass below the A83.
Glen Croe: Purple	Off-line option generally running parallel to the Old Military Road through Glen Croe, entering a tunnel at the head of the glen to re-join the existing A83 in the vicinity of Loch Restil.
Glen Croe: Blue	Off-line option generally running parallel to the Old Military Road through. This option climbs on the north-east side of the glen, parallel to the Old Military Road – curving around the half-basin (partly on viaduct) to achieve the required level on the south-west side of the glen.
Glen Croe: Green	Off-line option in the area of forestry on the south-west side of the valley, built on viaduct over the high-risk sections to minimise the risk of land slide events on this side of the valley affecting the carriageway.
Glen Croe: Split Dual Carriageway using the Forestry Commission Track and the existing A83	Option involving construction of a new two-lane carriageway on the Forestry Commission Track to the west side of the valley, creating 2 two-lane roads, including the existing A83, running along either side of Glen Croe.
Glen Croe: Two single lane carriageways on the South-West side of Glen Croe	Option involving construction of two single-lane roads on the south-west slope of Glen Croe, with the northbound carriageway following the Forestry Track for the majority of its length and the southbound carriageway running adjacent to this alignment benched further down the slope into the valley.
Glen Croe: Old Military Road	Option following a section of the Old Military Road in the south-east of the valley, climbing the level difference from the valley floor to the level west of the Rest and Be Thankful car park with a double-hairpin arrangement.
Glen Croe: Vegetation	Long term planting strategy on the hillside above the existing A83, to address instability issues.
Glen Croe: Heavy Goods Vehicles only on the Emergency Diversion Route	All car traffic diverting to use the ferry while only Heavy Goods Vehicles allowed to use the Emergency Diversion Route.
Glen Croe: Other Options - Lay-by on the Emergency Diversion Route	Construction of a long lay-by on the Old Military Road, providing potential for two convoys to operate simultaneously, utilising the lay-by as a passing place, thus reducing the delays on the road as a result of a closure.
Glen Kinglas	Off-line option within the Glen Kinglas, following the wider valley floor to the northeast connecting the A83 with the A82 north of Ardlui.
Glen Fyne	Off-line option within Glen Fyne following the wide valley floor to the northeast, connecting the A83 to the existing A82 at Inveranan.
A82/A85/A819 Upgrading	De-trunking of the A83 between Tarbet and Inveraray, allowing central government to focus capital investment on the A82 and A85 trunk roads and to adopt the A819 between Dalmally and Inveraray as a Trunk Road.
Loch Long Crossing	Involves a connection from Whistlefield (near Garelochhead) on the A814 across Loch Long and through Cowal.
Ferry Options	Alternative mode of travel to Argyll & Bute, involving a new ferry route between Campbeltown and North Ayrshire.

The A83 Trunk Road Route Study identified a number of potential options within the Glen Croe Corridor. Considering how these could potentially address the resilience issues in relation to this appraisal:

- **Red Option** – focus is on mitigation measures on the existing route.
- **Brown Option** – unlikely to adequately address resilience due to the likely need to close the A83 in order to clear debris from the roof of the structure.
- **Yellow Option** – potential to facilitate a step change in resilience.

- **Purple Option** – potential to facilitate a step change in resilience. Similar benefits can be achieved with the Yellow option at a lower cost and with a lower potential environmental impact.
- **Blue Option** – potential to facilitate a step change in resilience. Similar benefits can be achieved with the Yellow option with a better overall route alignment and with a lower potential environmental impact.
- **Green Option** – potential to facilitate a step change in resilience.
- **Split Dual Carriageway using the Forestry Commission Track and the existing A83** – engineering standards of the existing A83, and the Forestry Commission Track considered to be of a level that they cannot be safely used as a dual carriageway.
- **Two single lane carriageways on the South-West side of Glen Croe** – similar characteristics / follow a similar alignment to the Green option.
- **Old Military Road** – similar characteristics / follow a similar alignment to the Blue option.
- **Vegetation** – involves a medium to long term intervention along the exiting route.
- **Heavy Goods Vehicles only on the Emergency Diversion Route** – focus is on mitigating the impact of closures on the existing A83.
- **Lay-by on the Emergency Diversion Route** – focus is on mitigating the impact of closures on the existing A83.

In terms of the options outwith Glen Croe identified in the A83 Trunk Road Route Study:

- **The Glen Kinglas Corridor** – potential to improve resilience.
- **The Glen Fyne Corridor** – potential to improve resilience.
- **A82/A85/A819 Upgrading** – the route currently acts as the diversion route for strategic A83 traffic during times of emergency closures of the A83 and is unlikely to adequately address issues surrounding resilience.
- **Loch Long Corridor** - potential to facilitate a step change in resilience.
- **Ferry Options** – unlikely to adequately address issues surrounding resilience due to journey times, delays, reliability and/or capacity constraints either at ferry terminals or on-board vessels.

For the purpose of this preliminary appraisal, broad Corridors are being considered. Based on a review of the A83 Trunk Road Route Study options, the Corridors from this study being considered as part of the STPR2 appraisal are:

- The Glen Croe Corridor
- The Glen Kinglas Corridor
- The Glen Fyne Corridor
- A Loch Long Crossing Corridor

Note: The Glen Kinglas, Glen Fyne Corridor and Loch Long Crossing options were not taken forward to the appraisal stage as part of the A83 Trunk Road Route Study. Given the wider remit of STPR2 and the potential for these options to improve resilience, they are being considered as part this preliminary appraisal.

A range of wider Corridors that could potentially address a range of broader issues in the Argyll & Bute region, confirmed through the STPR2 process, are also being considered.

These are as follows:

- Loch Long Crossing, linking to Kintyre (via Cowal)
- Helensburgh Crossing, linking to Cowal
- Helensburgh Crossing, linking to Kintyre (via Cowal)
- Inverclyde Crossing, linking to Cowal
- Inverclyde Crossing, linking to Kintyre (via Cowal)
- North Ayrshire Crossing, linking to Cowal

- North Ayrshire Crossing, linking to Kintyre (via Cowal)
The option definition approach is outlined on Slide 5.
The Corridors considered as part of the STPR2 appraisal for the A83 are presented on Slides 6 to 11.

2.4 Preliminary Appraisal

A largely qualitative appraisal of the corridor options is being undertaken. This involves assessing each corridor against:

- The sub-objectives for the Argyll & Bute Region (see Table 2.2)
- The five STAG Criteria (Environment, Safety, Economy, Integration and Accessibility & Social Inclusion)
- Implementability Criteria (Feasibility, Affordability and Public Acceptability)

Table 2.2: STPR2 Objectives and Regional Sub-objectives

STPR2 OBJECTIVES	SUB-OBJECTIVES
<p>A sustainable strategic transport system that contributes significantly to the Scottish Government's net zero emissions target</p>	<ul style="list-style-type: none"> • Reduce the consumption of fossil fuels from the strategic transport system in Argyll & Bute and support a shift to more sustainable modes of transport, including shared transport • Increase the share of active travel to, within and through the main settlements in the region for shorter, everyday journeys • Increase the share of public transport to, within and through the main settlements in the region by providing viable alternatives to single occupancy private car use • Reduce emissions generated by the strategic transport system
<p>An inclusive strategic transport system that improves the affordability and accessibility of public transport</p>	<ul style="list-style-type: none"> • Increase public transport share by improving the connections at transport interchanges, and recognising needs of remote communities • Improve mobility and inclusion, recognising the needs of remote communities in Argyll & Bute, and disadvantaged and vulnerable users • Reduce transport poverty in Argyll & Bute with a focus on increasing travel choice in the top 15% most access deprived zones in Scotland • Reduce the reliance on private car for access to key centres for healthcare, employment and education, with a focus on shared transport in targeted areas
<p>A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing</p>	<ul style="list-style-type: none"> • Reduce the adverse impacts of the strategic transport system, on communities by embedding place-making principles in the strategic transport system • Increase the share of active travel to, within and through the main settlements in the region for shorter, everyday journeys to key attractors • Reduce demand for unsustainable travel arising from nationally significant growth areas, taking cognisance of Local Development Plans and the emerging NPF4
<p>An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland</p>	<ul style="list-style-type: none"> • Increase sustainable access to labour markets and key centres for employment, education and training • Increase competitive transport access between Argyll & Bute and key markets, by reducing costs and improving journey time reliability for commercial transport between Argyll and the central belt • Increase resilience of accesses to key domestic and international markets to encourage people to live, study, visit and invest in Argyll & Bute • Make better use of existing transport infrastructure in Argyll & Bute through the adoption of beneficial innovations, particularly those contributing to sustainable public/shared transport • Increase the mode share of freight by sustainable modes, by improving the sustainable intra and inter region movement of goods on, and between, the mainland and islands
<p>A reliable and resilient strategic transport system that is safe and secure for users</p>	<ul style="list-style-type: none"> • Improve travel times and reliability on the transport system in Argyll & Bute, taking cognisance of the potential for future growth in key sectors, including marine sciences, forestry, tourism, aquaculture, and the wider food and drink sector • Improve resilience from disruption on the strategic transport system in Argyll & Bute to strengthen connectivity within, and to/from, the region • Reduce transport related casualties in line with reduction targets, with a particularly focus on the A82, A83 and A85 • Improve resilience through climate change adaptation within the management and maintenance of Argyll & Bute's strategic road, rail, ferry and aviation infrastructure • Improve actual and perceived personal security on the transport system, particularly on parts of the transport network with poor mobile coverage

High-level Environmental and Engineering assessments will inform the preliminary appraisal. For the purposes of this appraisal, outline route alignments with appropriate structural forms have been considered.

Note: The Yellow and Green options as defined in the A83 Trunk Road Route Study have the potential to facilitate a step change in resilience at a lower cost and with a lower potential environmental impact than other options within the Glen Croe Corridor. As such, for the purpose of this appraisal, the route alignments associated with these options have been used in assessing the costs and impacts attributable to the Glen Croe Corridor.

The route alignments used as the basis of the assessment are shown in the accompanying Route Alignment Figures.

Route alignments will be subject to refinement at a later stage should they taken forward for further assessment.

Engineering Assessment

A preliminary high-level engineering review is being undertaken to assess the potential constraints and issues relating to the engineering works for each route option alignment. This will form the basis of the engineering assessment for the Corridors.

The review has assumed the provision of a 7.3m wide, 2-lane single carriageway with hard strips, based on a design speed of 100kph. As part of this review, the existing road infrastructure is being assessed to identify where the existing infrastructure can be utilised and where possible improvements may be required for each route alignment option.

The Corridor options that run south of the Rest and Be Thankful all have at least one fixed crossing over a loch or large body of water. For each fixed crossing, an assessment is being undertaken to identify an appropriate location/arrangement and the type of crossing that could be possible, i.e. tunnel and/or bridge.

Note: Initial indications are that bridge crossings are more favourable at each location. For each of the route alignment options considered within the Corridors, high-level scheme cost estimates are being developed to provide a range of costs for each Corridor. These are being prepared by splitting each of the routes into “similar” sections where a cost per km (derived based on a benchmarking exercise) can be applied to estimate the scheme cost.

Environmental Assessment

The environmental assessment involves an assessment of the issues and constraints for each Corridor based on the outline alignments and structural forms considered.

A preliminary environmental assessment summary has been developed using the framework of objectives developed for the STPR2 Statutory Environmental Assessment (SEA). At the preliminary appraisal stage, the overarching (high-level) STPR2 SEA Objectives have been used to assess the corridor options. The SEA objectives used are presented in Table 2.3.

Table 2.3: STPR2 SEA Objectives

SEA TOPIC	SEA OBJECTIVE
Climatic Factors	Reduce emissions from Scotland's transport sector by reducing the need to travel and encouraging modal shift and help meet Scotland's wider targets to reduce greenhouse gas emissions
	Adapt the transport network to the predicted effects of climate change
Air Quality	Reduce all forms of transport-related air pollution and improve air quality throughout Scotland
Population and Human Health	Improve quality of life and human health and increase sustainable access to essential services, employment and the natural environment
	Reduce noise and vibration associated with the transport network
	Promote, invest in, build and maintain infrastructure to support the development of high-quality places
	Improve safety on the transport network
Material Assets	Promote and improve the sustainable use of the transport network
	Reduce use of natural resources
Water Environment	Protect, maintain and improve the quality of water bodies and wetlands that could be directly or indirectly affected by transport infrastructure (with respect to Water Framework Directive targets) and protect against the risk of flooding.
Biodiversity	Protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife or geological sites.
Soil	Safeguard and improve soil quality in Scotland, particularly high value agricultural land and carbon-rich soil
Cultural Heritage	Protect and enhance (where appropriate) historic and archaeological sites and other culturally and historically important features, landscapes and their settings.
Landscape and Visual Amenity	Safeguard and enhance the character and diversity of the Scottish landscape and areas of valuable landscape.

2.5 Detailed Appraisal

A detailed appraisal will be undertaken to quantify the potential impacts of the corridor options selected for further assessment. This will look to include any wider socio-economic impacts afforded by the options being considered.

3.0 Next Steps

We intend now to take a phased approach to STPR2. Phase 1 will report along the original planned timescales, focusing on recommendations which "lock in", in transport terms, the positive benefits and travel behaviours of individuals and provide a step change in investment which supports the priorities and outcomes of the National Transport Strategy.

The output from this appraisal will be contained within the Phase 1 report. The current programme is based on this report being published in draft by the end of 2020.

We currently envisage that Phase 2, which will complete the review, will report later in 2021.