

Intervention 18 – Access to Argyll and Bute (A83)

1 Description of Package

Argyll and Bute is the second largest Local Authority by area in Scotland, with a very low population density, which presents a number of infrastructure, economic and connectivity challenges. The A83 is one of only two strategic trunk roads connecting the Argyll and Bute region with the central belt (via the A82). The route is a vital artery running through Argyll, linking Mid-Argyll, Cowal and Kintyre with neighbouring regions. Accidents or incidents (e.g. roadworks, landslides, flooding) occurring on any part of the A83 in Argyll and Bute means that for periods of time there is no continuous strategic road in the region, connecting it to the rest of the country. With a daily traffic flow of approximately 4,500, at the Rest & Be Thankful, of which approximately 10% are Heavy Goods Vehicles, the lack of suitable alternative travel options and / or competitive routes when there is disruption on the transport network, can have a significant impact on residents, businesses and visitors when it occurs.

The proposed improvements to the network are to improve resilience for strategic traffic currently using the A83 and would consist of new or improved road infrastructure providing more resilient connection to the Kintyre/Cowal peninsulas. A Preliminary Assessment of 11 corridor options (shown in Figure 1 overleaf) is being undertaken, following the announcement by the Cabinet Secretary at the A83 Taskforce meeting in August 2020, that a long term solution to the problems of landslides at the A83 Rest & Be Thankful.



A83 Rest and Be Thankful

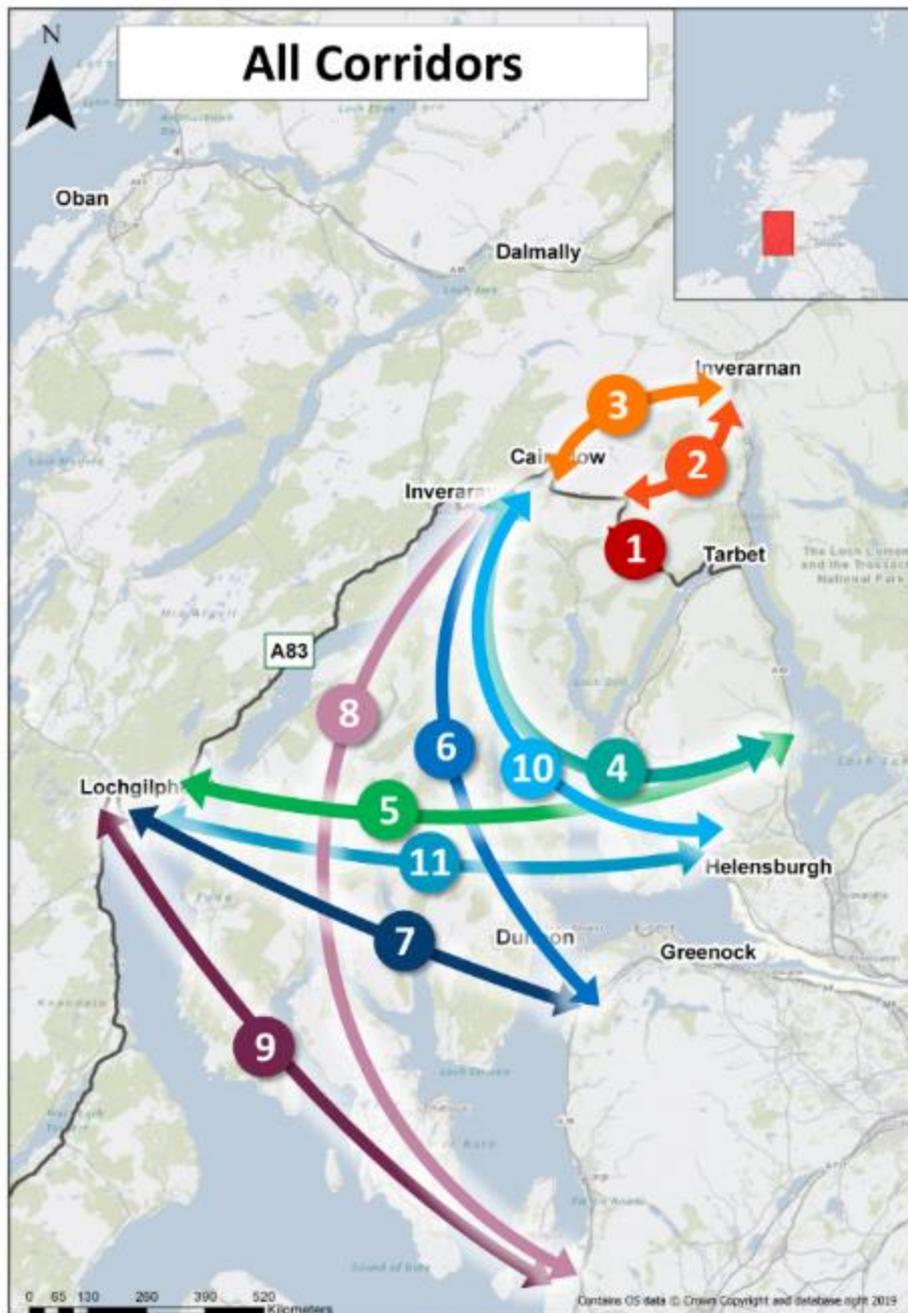


Figure 1: A83 Access to Argyll – Corridor Options

2 What we have heard?

Through engagement with the Regional Transport Working Group (RTWG), the need for improvements in resilience has been stressed. The A83 is a vital artery running through Argyll, and it is subject to closure, therefore the need for an enhancement in provision has been reinforced through ongoing engagement with the group.

As part of the Option Development stage of STPR2 a number of workshops, both regionally and nationally were held and a number of stakeholders highlighted issues regarding resilience of rural trunk roads, the widespread disruption caused by blockages and the need for interventions to improve the impacts of closures at the A83 Rest & Be Thankful.

The STPR2 online Public Survey, undertaken to provide members of the public with an opportunity to highlight the key issues within the Argyll and Bute region, outlined the need for improvements to the road infrastructure in the region. Top ranking problems for the Argyll and Bute region (as a whole) included:

- Roads – Quality of roads infrastructure, with 35 respondents ranking this within their top 3 and 17 ranked as their top priority;
- Roads – Network resilience (availability of suitable diversionary routes), with 16 respondents ranking this within their top 3 and 7 ranked as their top priority.

In addition, when comparing feedback for Argyll and Bute, the highest proportion of people either dissatisfied or very dissatisfied with resilience, climate resilience and connectivity with the rest of Scotland were from Argyll and Bute. The survey results are shown in Figures 2 and 3.

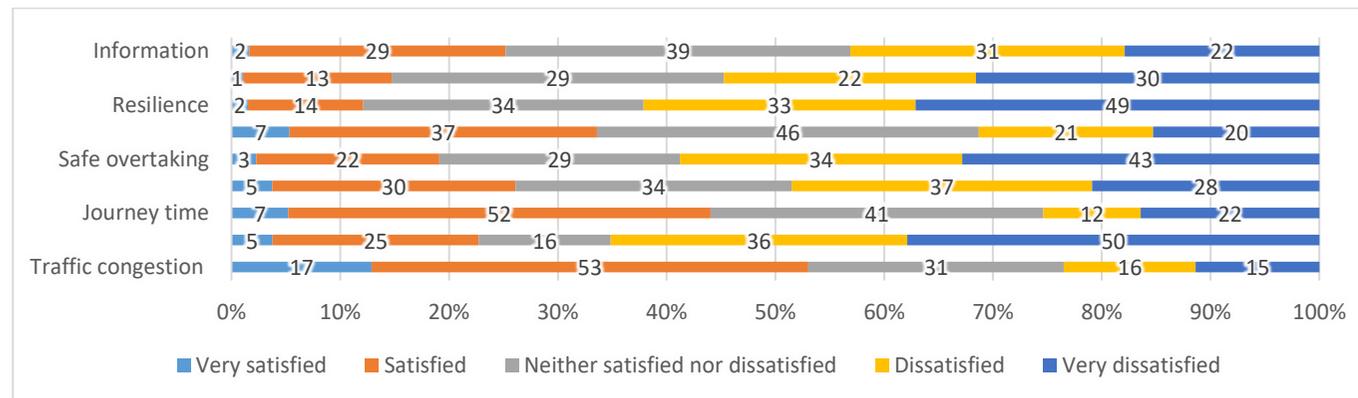


Figure 2: Argyll and Bute - Satisfaction Road

Enhancing safety and resilience on the strategic transport network

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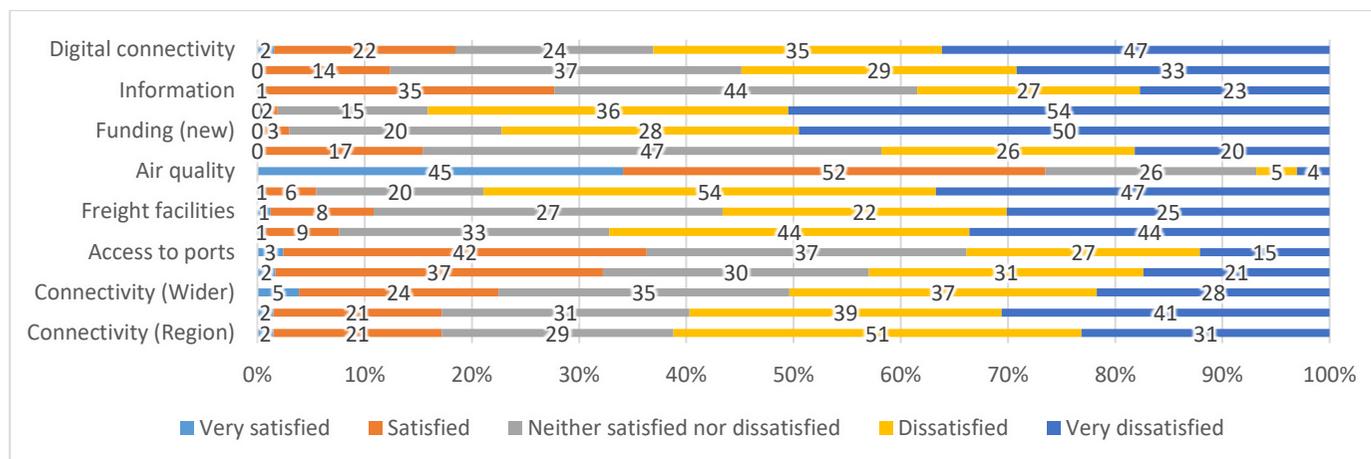


Figure 3: Argyll and Bute - Satisfaction Non Mode Specific

Within Argyll and Bute there is strong support for additional measures to be undertaken to mitigate the issues leading to road closures at the A83 Rest & Be Thankful, which are felt to contribute towards a number of the socio-economic problems within the region.

The Argyll and Bute Economic Forum was set up in 2015 to look at the problem of continuing population decline in Argyll and Bute; and to look at it specifically from a business perspective. Within its 2018 publication it commented that *‘the A83 problem needed solving: Argyll must be accessible at all times. With several closures since our report, more work and expenditure has taken place at the A83 Rest & Be Thankful, and we must hope that the “pits” solution will solve the problem.’*

In 2016 the Argyll and Bute Transport Connectivity and Economy Study was undertaken on behalf of the Highlands and Islands Enterprise (HIE), which was designed to identify the key transport challenges for businesses and major organisations/employers in the Argyll and Bute area and the impact it has on their business activity and/or service provision.

The study highlighted that the concerns of businesses and organisations that depend on access via the A83 Rest & Be Thankful are significant, with a permanent solution to the A83 Rest & Be Thankful the transport improvement that is most requested by organisations and the business community.

While it is recognised that a permanent solution to the A83 Rest & Be Thankful would have negligible impact on journey time/reliability under normal conditions – it is a resilience measure that would reduce the impact of future landslide events at this location, and improve wider perceptions of access to Argyll and Bute.

The study highlighted a number of concerns and issues for businesses in the region:

- largely accept there will be working days lost
- avoidance of the route (particularly in some weather conditions or later at night, when the alternative (i.e. the ferry crossing to Dunoon) is not available)
- services also cite “*severe impacts*” when the A83 Rest & Be Thankful is closed
- evidence that businesses have moved some or the majority of their activity outwith Argyll and Bute to the Central Belt as a result
- required to make contingency plans in case the route is affected

One of the key messages raised through engagement with businesses was the strong preference for a “once and for all” solution, that would signal that Argyll and Bute is “open for business”, and perceptions of improved access could encourage future business investment in the A83 corridor.

The Argyll Rural Growth Deal (published in 2018) includes proposals which would develop key routes to market and business, highlighting the importance of a resilient network to key industries such as aquaculture, whisky and tourism. Improved connectivity within the Argyll and Bute region, and better connections with the Scottish Central Belt and key markets, would achieve:

- improves/consistent access to markets;
- improved visitor access; and
- benefits to movement of citizens as a whole.

3 The evidence base to support a case for change

The A83 Rest & Be Thankful is widely known to suffer from the effects of weather-related events, such as flooding and landslides. The road was closed for several days in 2014 following a landslide, then again in 2016 for safety reasons. The road was closed for nine days in late 2018, and closed again on a number of occasions throughout 2020, due to landslides. The ‘Old Military Road’ (OMR) was upgraded in 2013 for use as an alternative route to the A83 in the event of closures due to incidents and landslides, although it is not always feasible to open this road due to safety concerns. In such instances, closure of the A83 Rest & Be Thankful can add up to approximately 50 miles for road users (as shown in Figure 4 below). Closures can have a more severe impact on residents who want to make shorter journeys from one side of the A83 Rest & Be Thankful to the other (such as Inveraray residents wanting to access services in Dumbarton or Helensburgh).

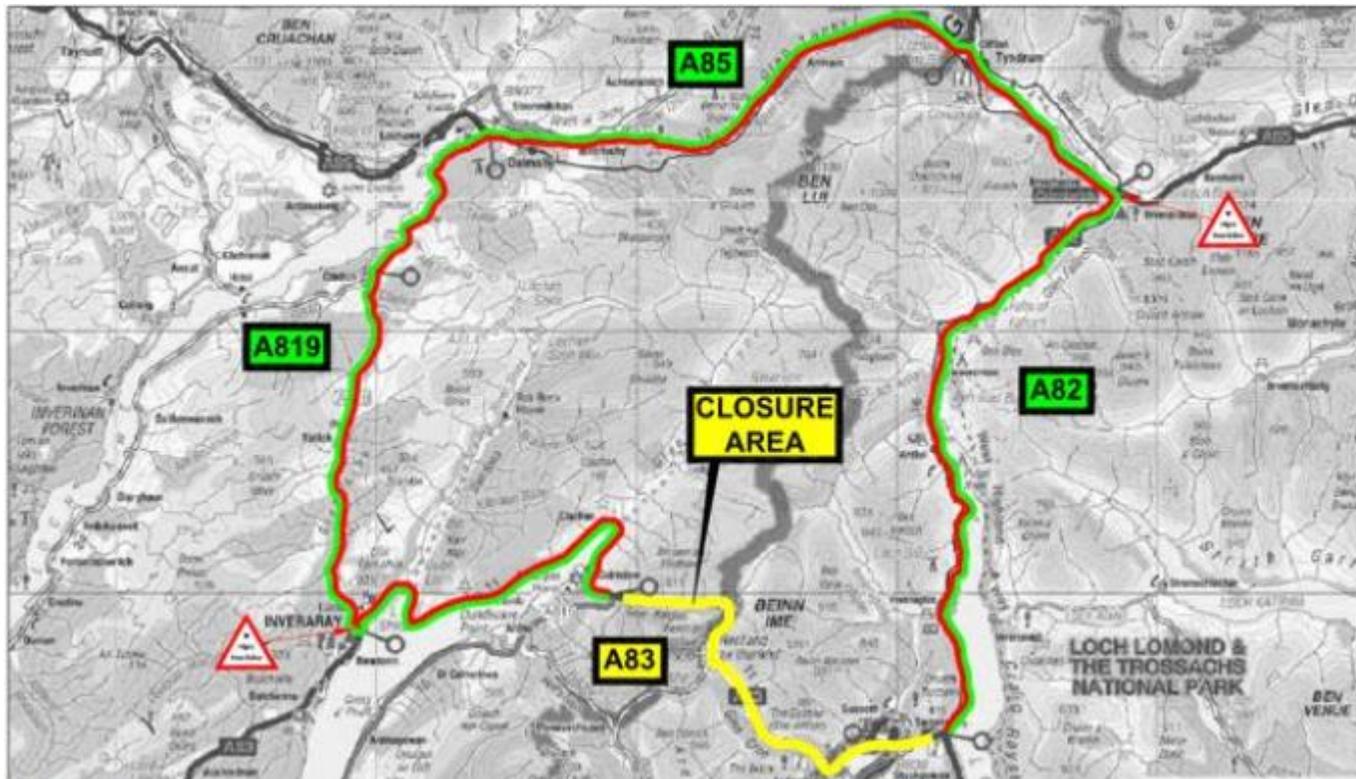


Figure 4: A83 Rest & Be Thankful road closure area and extents of associated diversionary route

The landslide which occurred on 4 August 2020 created a large new significant channel on the hillside above the A83 Rest & Be Thankful. This was further widened in a secondary landslide on 13 September 2020. These events mobilised around 20,000 tonnes of material, well in excess of previous landslides in the vicinity due to the considerable depth of the soil in this area of the hillside. This also means the channel has a tendency to deepen and widen during subsequent heavy rain events particularly when the hillside is already saturated. This has led to a continuous monitoring regime of both hillside conditions and weather. Whilst there is currently limited mitigation at this location, by way of debris fences or pits, pro-active closure of the A83 Rest & Be Thankful and/or the OMR has been necessary during heavy rain events. There are no fixed criteria for these pro-active closures, each situation is judged on the basis of expert advice from geotechnical engineers and weather forecasters. A debris fence is currently being constructed and a debris pit is being designed, which will add resilience to the situation at this location. Further works include the installation of a 6 metre high temporary bund in January 2021, along a 175 metre section of the OMR, to improve the resilience of the local diversion route.

Cost of Unplanned Closures

In 2013 a study into improvements to resilience for strategic traffic impacted by closures at the A83 Rest & Be Thankful, was undertaken which looked at a number of route options. As part of that work, Optimal Economics undertook an additional task to consider the socio-economic impacts of closures and in particular quantify the additional costs to the transport and tourism sectors of the A83 study area from closure of the A83 Rest & Be Thankful due to landslides and the use of the diversion route.

Based on a scenario that used the average number of closures per year since 2007, the additional annual cost to the local economy, within Argyll and Bute, from landslides at the A83 Rest & Be Thankful is estimated to be £286,300 (in 2010 prices). If these additional costs are assumed to be a direct loss of income to the local area, the number of jobs which would be supported by this “lost” income is calculated using GVA per employee, which under the assessed scenario would result in 12 jobs lost in the A83 study area. GVA impact is likely to be higher in the more labour-intensive tourism sector, which is a key sector within the region. Since this study in 2013, there has been further closures, and this number could therefore now be higher.

The A83 route is known to carry goods of significant value to both the regional and national economy and is a key transport corridor for the region. Anecdotal evidence suggests closures and restrictions costs the local economy £50,000-£60,000 per day and impacts on business investment within the region and, subsequently, the region’s job market.

Regional / National Impacts of Closures

Transport and digital connectivity for the movement of goods, people and transfer of information is vital in Argyll and Bute and is a key contributor to developing a thriving economic climate for its communities. The lack of a good standard of transport infrastructure is considered by stakeholders to be constraining growth in the region. When rail, ferry or road connections are severed, the impact on residents, visitor and businesses tend to be more severe due to the lack of alternative transport options.

The Argyll and Bute region plays a key role in contributing towards a number of key sectors within Scotland. In order to maintain and increase that contribution, a resilient transport network is required to attract further investment and to ensure it is a place where people choose to live and work to support these industries.

Given its abundant natural resources and strategic position on the west coast of Scotland, Argyll and Bute has the potential to be the national hub for aquaculture in Scotland, the UK and Europe. Salmon makes up more than 40% of total food exports from Scotland, with exports of whole fresh salmon representing £494 million. The Argyll and Bute region contributes 21% of Scotland's salmon production. The region is also one of the UK's major vegan food producers, which is another growth market.

The Scotch Whisky Association statistics estimate that the whisky industry provides more than £5 billion of value to the UK economy. With 15 distilleries and a growing gin and craft beer market in the region, this is another area where Argyll and Bute is contributing towards the national economy.

Other industries in the region that are reliant on a resilient transport network include timber; one-sixth of the Scottish timber production is in Argyll; marine economy where Argyll is a leading player in one of the UK's fastest growing industries and renewables, where the region has been at the forefront in manufacturing key onshore/offshore wind infrastructure.

The Compelling Argyll and Bute Economic Development Action Plan undertaken in 2015 identified the tourism, food and drink and aquaculture sectors as those forecast to have the strongest growth. All three of these sectors rely heavily on the transport network to allow movement of goods and people. The Argyll and Bute Connectivity and Economy Research Report produced by HIE in 2016, suggested that some of the growth opportunities were considerable.

The tourism sector is reliant on the transport network in order for tourists to access the area. Key activity providers attract large volumes of visitors, including golf (e.g. Machrihanish Dunes, Campbeltown at 30,000 visitors per year), and golf tourism in Scotland is expected to rise significantly. Tour operators are also transport dependent, e.g. Lochs & Glens Holidays cater for around 55,000 tourists per year in Argyll and Bute.

For food and drink (including aquaculture), there is an increasing brand identity linked to food from Argyll and Bute and specific locations within the region (e.g. Mull, Islay, Bute, Kintyre, Loch Fyne), and there is the potential to move goods more quickly to tourism/restaurant businesses within the area, and more importantly for exports outside Argyll and Bute. Examples include Loch Fyne Oysters and new/re-opened distilleries including Glengoyne distillery in Campbeltown and Kilchoman on Islay.

The region's population has been in decline for over a decade, against a backdrop of a population increase at the national level. With the exception of Rothesay, the towns with the largest percentage decline in population between 2012 and 2016 are located to the west of the A83 Rest & Be Thankful, thus supporting the claim that growth may be, at least in part, impacted by the lack of a resilient transport network, particularly at this location.

Access to Healthcare

Data from NHS Highland estimates that there are 26,000 referrals for Argyll and Bute patients each year, of which 44% are to hospitals within the region and 56% are to hospitals in the NHS Greater Glasgow and Clyde area. Disruption on the transport network can lead to missed appointments and have an adverse impact on patients' health and wellbeing. This highlights the need for particular consideration in the planning and delivery of transport services to access healthcare within, and to/from, the region.

Climate Change

Climate change directly affects the transport sector through the increasing number of more severe and frequent extreme weather events and the disruption they cause to the transport system. Disruption often disproportionately impacts on vulnerable communities with fewer and less resilient transport options. In recent years, there have been several weather events which have led to significant disruption, resulting in a substantial economic impact.

A review of recent rainfall, and comparison with typical monthly rainfall levels (using Met Office data) indicates that there have been fluctuations in overall monthly rainfall levels, with instances both significantly above average but also below average. There have however been short periods of persistent, intense rain, such as in August 2020, when a third of the overall monthly total fell over just a 3-day period, which may have led to more pressure on areas susceptible to flooding and erosion. Closure of both the A83 and the OMR local diversion route occurred on the 5th August 2020, due to a landslide which followed extreme rainfall on 4th and 5th August 2020. Should the occurrence of 'extreme' rainfall events increase (due to climate change impacts) it is likely that this could influence landslide events on the hillside.

4 The strategic rationale for this improvement

In developing the evidence base for problems and opportunities linked to the strategic transport network across the Argyll and Bute region, it is clear that the road network within the region plays a vital role in supporting the local economy, facilitating the movement of goods and services throughout the area and connecting people with economic and education opportunities and vital healthcare services.

Argyll and Bute has a decreasing and ageing population. Outward migration is being driven by a combination of older individuals leaving to be nearer their families, health facilities or into care; and younger people moving out of the region to pursue higher education and employment opportunities. A policy review highlighted a strong emphasis on attracting additional skills, training & learning opportunities, new residents, visitors & businesses; along with aspirations to grow the economy by making more of its natural and built resources and in connecting high value business sectors with national and international markets.

Given the focus on economic recovery post-COVID-19, enhanced connectivity for the Argyll and Bute region could contribute towards increasing inward investment and job opportunities for local communities.

Why now?

- Despite fencing and catch-pits being installed, substantially reducing the numbers of days closed, closures continue, occurring in 2019 and more in 2020, at a location where there had not previously (in recent times) occurred and where no mitigation is in place. This has led to 'pro-active' closure and activation of the OMR route during periods of substantial rainfall in the latter part of 2020;
- The likelihood of landslides is generally thought to increase in frequency as a result changing weather patterns, with increasing uncertainty over locations, therefore a longer term solution to remove the threat of potential serious injury or loss of life to road users due to landslides should be considered a priority.
- The region has a number of key industries that rely on reliable and resilient transport infrastructure, including tourism and hospitality, therefore improving connectivity by avoiding closures will not only assist in transfer of goods for these services but will present the region as 'open for business' for visitors.
- Reliable and resilient transport links to the central belt play an important role in the achievement of wider objectives for the region, in terms of repopulation, health and wellbeing.
- The A83 between Rest & Be Thankful and Inveraray has been identified as a section with higher than expected Killed/Serious Injury accidents, therefore improvements to this section (dependant on the corridor option taken forward), would be expected to result in an improved standard of road.

5 Meeting the STPR2 Transport Planning Objectives

TRANSPORT PLANNING OBJECTIVE	CONTRIBUTION	SCALE OF IMPACT (-3 to +3)
 A sustainable strategic transport system that contributes significantly to the Scottish Government’s net zero emissions target.	<p>Any improvement that would reduce the need for lengthy diversions would help to reduce emissions through reductions in vehicle-kilometres travelled during closures. However, this may be countered by a potential increase in traffic resulting from the provision of more resilient road infrastructure, which could give rise to fossil fuel consumption and potentially lead to an increase in emissions.</p>	0 / ✓
 An inclusive strategic transport system that improves the affordability and accessibility of public transport.	<p>Addressing resilience on the road network would improve the reliability of bus services, albeit benefits could be limited due to low levels of bus usage in the area. Improved connections to more remote areas in the region could help to reduce transport poverty and provide increased access to public transport.</p>	0 / ✓
 A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing.	<p>Improvements to address resilience at the A83 Rest & Be Thankful may have limited impact on active travel and local communities. Improving connections between the main settlements in the region could help to encourage active travel for shorter, everyday journeys. The improvement could be developed to provide infrastructure that contributes positively to Argyll and Bute’s unique ‘sense of place’.</p> <p>In addition, due to the large proportion of NHS referrals from Argyll and Bute to hospitals in the NHS Greater Glasgow and Clyde area, improved resilience and reliability at the A83 Rest & Be Thankful would improve access to healthcare.</p>	0 / ✓
 An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland.	<p>Reducing the impact of landslides at the A83 Rest & Be Thankful would improve access between Argyll and Bute and key domestic and international markets. This would remove a potential barrier to inward investment in Argyll and Bute, helping to stimulate business activity and encourage more people to live, study and visit the region.</p>	✓
 A reliable and resilient strategic	<p>This package is founded upon the need for a more reliable and resilient trunk road connection between Argyll and Bute and the central belt. Enhancing connectivity</p>	✓✓✓

transport system that is safe and secure for users.	may result in improved actual and perceived security for road users.
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6 Addressing the Post COVID-19 Priorities

POST-C19 PRIORITIES	CONTRIBUTION
Employment	Major strategic road infrastructure improvements would provide significant immediate employment during design phase and longer-term employment opportunities during construction phase. Improved connectivity between Argyll and Bute and the central belt would boost key industries in the region, resulting in enhanced job opportunities.
Environment	An improvement, reducing the need for lengthy diversions, would help to reduce emissions through reductions in vehicle-kilometres travelled during closures, however it should be noted that the potential boost to economy by improving connectivity may also lead to increased overall car trips to the region. Some improvement options could build in opportunities for the provision of alternatives to the private car, encouraging sustainable travel choices for shorter, everyday journeys. There is potential for significant environmental disruption, depending on which corridor option is taken forward, however this will be considered during the scheme development stage to attempt to mitigate some of the negative impacts.
Education	Depending on the location of the improvements, an option that provides a step-change in connectivity between the region’s population centres and the central belt could provide a significant benefit in terms of access to Higher/Further Education centres.
Equalities	Access to Argyll and Bute from the central belt is significantly impacted by closures to the A83. Addressing the A83 Rest & Be Thankful resilience issues will help to provide a trunk road connection to the central belt, that is comparative in provision to other parts of the country. With over half of the 26,000 NHS Highland referrals for Argyll and Bute patients to hospitals outwith the region, instances of missed appointments, due to disruption at the A83 Rest & Be Thankful, would reduce with a subsequent knock-on benefit on patients’ health and wellbeing.

7 SEA, EqIA and Other Impact Assessments¹

ASSESSMENT	COMMENTARY
SEA (Strategic Environmental Assessment)	Impacts on the environment would vary significantly depending on the nature of improvements. Although the preferred corridor option has not yet been selected, works within the existing corridor or on the wider corridor options, are likely to result in significant environmental impacts. Environmental impacts will be a key consideration during the preliminary assessment phase. In addition to the STPR2 SEA, a separate SEA for the Access to Argyll and Bute (A83) is being prepared. This aims to minimise any negative environmental effects and maximise enhancement and natural capital opportunities.
EqIA (Equality Impact Assessment)	Improvements to the route could benefit people with the Protected Characteristics of, for example, disability and pregnancy and maternity through improved access to healthcare.
ICIA (Island Communities Impact Assessment)	Trunk road improvements to address the A83 Rest & Be Thankful network resilience issues would improve connections to islands such as Islay and Jura. This is likely to be beneficial to these island communities and their local economies.
CRWIA (Children’s Rights and Wellbeing Impact Assessment)	Improved connectivity to the region will benefit residents, with increased employment and investment likely. With one in five children in Argyll and Bute living in poverty, and approximately 16% of children in families with limited resources, improved transport connections would be expected to boost the economy of the region.
FSDA (Fairer Scotland Duty Assessment)	Providing a more resilient network has the potential to bring economic benefits through improving connectivity to parts of Argyll currently experiencing economic challenges. A more reliable trunk road network would help to remove some barriers to investment and help to arrest population decline.

¹ All of these impact assessments are currently underway but no formal assessments have yet been undertaken. Please note SEA and EqIA scoping reports have been produced and consulted upon.

8 Implementability and Interdependencies

IMPLEMENTABILITY CRITERIA	COMMENTARY
Feasibility	Given the history of landslides within the vicinity of the A83 Rest & Be Thankful and the topographical, climate and geographic challenges in the region, it is necessary to consider uncertainties surrounding ground conditions (and future landslide risks) of all options.
Affordability	Given the potentially wide-ranging options which could be considered, the associated costs of improvements would vary considerably, with options within Glen Croe (within which the existing A83 is located) likely to be considerably less expensive than wider corridor options.
Public Acceptability	Landslides and resulting road closures at the A83 Rest & Be Thankful have significantly impacted residents and businesses within Argyll and Bute for years. Investment resulting in increased resilience is therefore likely to be met with strong public support within the region.

Key Interdependencies

The scheme is dependent on the risks identified as the scheme moves through the design development process. This will be explored further as part of the preliminary engineering services work currently being progressed.

The A83 is one of only two strategic trunk roads connecting the Argyll and Bute region to the central belt (via the A82) and is critical for the movement of goods and people through Argyll. The route plays a vital role in supporting local economy and connecting residents to education/employment opportunities and healthcare outwith the region. Closures to the A83 (due to landslides, for example) have a significant impact on the region and it is generally considered that the frequency of closures will likely increase as a result of changing weather patterns. Whilst works to date, including at the Rest & Be Thankful, have helped mitigate impacts, measures beyond this are required to offer greater resilience and improve safety for road users.

