

Locally Significant Roads: An Investment Strategy

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Executive Summary (ES)

Introduction

1. The HITRANS Regional Transport Strategy sets out a commitment to invest in the improvement of the locally significant roads network in the region.
2. Building on this intention, the purpose of this study is to develop a strategy for investment in the network over the period 2008-11. The strategy aims to enhance the reliability and quality of the local network, particularly for freight and public transport, and to enhance the accessibility of small rural communities.
3. The study was carried out in three stages. Stage One reviewed current conditions and constraints on the locally significant road network in the region and generated a statement of core objectives for the investment strategy. Stage Two assessed each road in the network against these objectives to identify those routes and projects which are eligible for investment. Stage Three considered the social and economic impacts of investment in the network.

Locally Significant Road Network

4. The HITRANS Regional Transport Strategy defines the locally significant road network as one part of the overall hierarchy of roads across the region. Locally significant roads make up that part of the region's road network which connect small, rural communities to local service centres and provide onward transport links to the regional and strategic road network.
5. Taken together the network comprises a total of 69 individual routes covering all parts of the region. These routes cover a total length of 1,939 kilometres reaching into the most remote rural parts of the HITRANS region. Overall, 37 of the routes (more than half) are described as being single track for more than 75% of their total length. Communities served by the locally significant road network include some of the most fragile in the country, with these roads often providing the sole means of access to vital lifeline services. Typically the roads examined in this study serve groups of small, remote communities with a combined population of less 2,000 people.
6. A review of the condition and adequacy of routes included in the network revealed a number of common issues across all areas. While some routes are considered in good condition or adequate for their current use, most roads exhibit one or more of the following types of constraint: poor surface quality, poor geometry and alignment, poor visibility, inadequate numbers of passing places, narrow roads, high traffic volumes, weight and height restrictions and slow average speeds.
7. As previous studies in the region have demonstrated, such factors can have a serious impact on the sustainability of businesses and communities which rely on these routes. Poor conditions and long journey times along the routes can place a significant constraint on the ease and comfort with which residents can access employment and lifeline services such as health, education, retailing and banking. At the same time, the poor condition of the network also acts as a barrier to growth among local businesses by adding to journey times, increasing the cost of transport, increasing vehicle operating costs and restricting labour catchment areas.

Strategy Objectives

8. One of the first outputs from the study was the presentation of a clear statement of the overarching objectives of the proposed investment strategy. In line with other existing strategies developed for the region, it was agreed that the overall aim of the investment should be to *"improve the viability of remote communities"* served by locally significant roads in the HITRANS region. Towards this, the core objectives of the strategy should be to help:

- Maintain population levels, and
 - Support business and encourage growth in remote parts of the region.
9. These are the objectives which have been used to guide the process of identifying routes and interventions which are eligible for inclusion in the final investment plan. The key aim of the sifting process has been to ensure that investment is directed towards:
- Routes which provide lifeline links for the most fragile communities in the region
 - Routes which provide important links for key industries operating in the region
 - Interventions which can resolve or alleviate specific problems on routes
 - Interventions which can be achieved within the timescale and budget of the strategy.

Identifying and ranking eligible projects

10. Stage Two of the study assessed each of the 69 routes in the locally significant road network to identify those roads and interventions which best met the objectives of the investment strategy and to filter out those routes which did not meet the criteria for investment. In order to make these assessments a number of criteria were developed which related to the core strategy objectives. These included assessment of:
- The **fragility** of the communities served by each route: A key requirement of the investment strategy is that it is concentrated upon the most fragile communities in the region. Fragility of communities was assessed against a number of indicators derived from ERDF guidance. Roads in areas of 'low fragility' were not considered as eligible for investment in this programme.
 - The **severity** of constraints currently active on each route and the identification of suitable **interventions** to relieve these constraints: assessment against these criteria was carried out in close consultation with local transport officers in each region. Roads for which suitable interventions could not be identified were not considered as eligible for investment in this programme.
11. Overall, this assessment identified eligible projects on 34 of the 69 locally significant roads in the HITRANS area. These projects were then ranked to assess the degree of their fit with the objectives of the investment strategy. The ranking was carried out using a simple points system which scored each route against the **fragility** of the community it serves, the **severity** of existing constraints on the route and potential **impact** of relieving these constraints.
12. Table 1 presents the results of the ranking process. Of the 34 projects which are eligible for inclusion in the investment strategy, 7 receive an overall score towards the top of the possible range are rated as showing a 'very good' fit with the objectives of the strategy. A further 16 are rated as showing a 'good' fit with the strategy objectives. The remaining 11 routes are rated as showing a 'moderate' fit with the objectives of the strategy.
13. It should be noted that this ranking is based on a quantitative assessment of fragility indicators alongside a qualitative assessment of severity and impact criteria. The ranking is used to demonstrate the fit of projects with the objectives described earlier and may not reflect the investment priorities of individual local authorities. All 34 of the routes included in Table 1 are considered to meet the basic requirements of this strategy and to be eligible for funding support by HITRANS.
14. Overall, the cost estimates provided by local authorities for these interventions suggest that a total investment package of some £41 million would be sufficient to cover all 34 projects

identified here. In practice, since it is unlikely that this level of funds will be available for investment in the network, the purpose of this ranking is to assist in guiding the use of those funds which are available and helping to secure successful ERDF bids for additional investment.

Table 1 Rating of eligible projects				
LA*	Route	Description	Type of Intervention	Fit with objectives
THC	A855	Portree to Uig via Staffin	Upgrade to double track	Very good
THC	A896	Kinlochewe to Strathcarron	Passing places/visibility imp.	Very good
THC	B8007	Salen to Kilchoan	Passing places/visibility imp.	Very good
ABC	B8073	Tobermory to Salen	Widening, realignment, visibility	Very good
OC	A964	Kirkwall to Clouston	Widening and re-alignment	Very good
WI	B8011	Garynahine to Uig	Upgrade sections to dual track	Very good
ABC	B836	Glen Lean	Widening, realignment, visibility	Very good
WI	A858 (2)	Lower Barvas to Carloway	Upgrade sections to dual track	Good
ABC	A846	Feolin Ferry to Keills	Widening, realignment, visibility	Good
WI	A858 (1)	Carloway to Leurboast	Upgrade sections to dual track	Good
ABC	B844	Kilninver to Cuan Ferry	Upgrade sections to dual track	Good
THC	A837	Ledmore to Invershin	Passing places/visibility imp.	Good
THC	Achiltibuie	Achiltibuie	Passing places/visibility imp.	Good
ABC	B8000	Millhouse to Newton	Widening, realignment, visibility	Good
ABC	B8035	Salen/ to Junct w A849	Widening, realignment, visibility	Good
ABC	A880	Ardbeg to Kilmun	New footpaths, widening	Good
THC	A839 (2)	Rosehall to Lairg	Passing places/visibility imp.	Good
WI	A865	Clachan to Trumisgarry	Upgrade sections to dual track	Good
THC	A884	Strontian to Lochaline	Widening	Good
THC	A897	Melvich to Helmsdale	Passing places/visibility imp.	Good
ABC	B8024	Tarbert to Inverneill	Widening, realignment, visibility	Good
ABC	B828/839	Hell's Glen/Rest & be Thankful	Upgrade sections to double track	Good
THC	A836/838	Bettyhill to Rhiconich	Passing places/visibility imp.	Good
THC	A832 (1)	Braemore Junction to Gairloch	Visibility improvements/widening	Moderate
THC	A836 (1)	Tongue to Lairg	Passing places/visibility imp.	Moderate
WI	Benbecula	Benbecula Link Road	Upgrade sections to dual track	Moderate
ABC	B8025	Kilmartin to Tayvallich	Widening, realignment, visibility	Moderate
ABC	B8045	Point Ramsay to Kilcheran	Widening, realignment, visibility	Moderate
WI	A888	Castlebay to Northbay	Upgrade sections to dual track	Moderate
WI	Rodel-A859	Rodel to A859	Widening and realignment	Moderate
ABC	A847	Bridgend to Portnahaven	Widening, realignment, visibility	Moderate
THC	B8004	Acharacle to Ardtoe	Passing places upgrade	Moderate
WI	B8060	Lemreway to Balallan	Upgrade sections to dual track	Moderate
ABC	B840	Cladich to Ford (Loch Awe)	Widening, realignment, visibility	Moderate

*: THC=Highlands, ABC=Argyll and Bute, WI=Western Isles, OC=Orkney Council

Economic Activity and Location Impacts (EALI)

- The final stage of the study involved making an assessment of the socio-economic impact of the package of eligible interventions listed in Table 1. This assessment was to be compliant with a Part One economic assessment and location impact (EALI) as outlined in the Scottish Transport Appraisal Guidance (STAG).

16. Analysis of the transport benefits likely to arise from the initiatives proposed on eligible routes show a common general pattern across all areas. In general, the package of initiatives proposed on each route are made of a combination of: road widening initiatives, visibility improvements, road realignment, construction of new passing places, construction of new footpaths and action to relieve weight or other restrictions.
17. In some cases these investments are expected to result in significant impacts on journey times and costs along the route, but for the most part the impact of the initiatives are expected to:
 - Improve journey quality and comfort – by improving visibility, making it easier to meet oncoming traffic, by improving road surfaces and straightening bends
 - Improve reliability of journey times – by increasing the number of passing places, improving visibility and widening corners the initiatives expect to allow traffic to maintain more steady speeds along the length of routes and to reduce instances of queuing and convoying
 - Improved journey safety – again, better visibility and wider, straighter roads are expected to have an impact on journey safety along the routes.
18. Table 2 provides a summary of the overall economic and location impacts expected to arise across the region as a whole from investment in the eligible routes.

Table 2 Summary of EALI impacts across HITRANS region	
National impacts	<ul style="list-style-type: none"> ■ No net impact is expected to arise at a national level
Local impacts	
Economic	<ul style="list-style-type: none"> ■ Improve efficiency and sustainability of key industries – particularly forestry and fish farming businesses located in remote areas – through improved route reliability and improved journey times ■ Encourage expansion of industry in areas where opportunities have been limited by poor access ■ Promote tourism by improving accessibility to key sites and improving links between remote parts of the region ■ Widen labour catchment areas by improving accessibility of employers in remote areas
Social	<ul style="list-style-type: none"> ■ Improve accessibility of key services such as health, education, retailing and leisure ■ Improve accessibility to employment by making it easier for residents in remote areas to travel to work in regional centres and other towns ■ Help maintain the sustainability of fragile and remote communities

1 Introduction

1.1 Background

1.1.1 The HITRANS Regional Transport Strategy sets out priorities for the development of a multi-modal transport system across the Highlands and Islands. The primary objective of the strategy is to improve the connectivity of the region to strategic services and destinations and to promote the competitiveness and growth aspirations of the region's economy. Alongside this, the strategy aims to improve quality of life for residents of the region, improve safety and security on the transport network, improve health outcomes in the region and manage the environmental impacts of the network.

1.1.2 Towards these objectives the Strategy sets out a hierarchy for the region's transport network which has the following three tiers:

- Strategic links which connect local centres to their regional centre;
- Regional links which connect local centres to their regional centre; and
- Locally significant links which are the key connections between rural communities and their local centre.

1.1.3 Across all three of these tiers the strategy defines the priorities for investment to improve the transport network over the next 15 years. These priorities are grouped into a series of 10 horizontal themes for the strategy, one of which concentrates on the last of the three tiers defined above and includes a commitment to:

“Develop a programme of investment to improve and maintain the locally significant rural road network which has suffered from under-investment in the past.”

1.1.4 Building on this intention, the purpose of this study is to develop a strategy for investment in improving the locally significant road network across the area. This investment is part of the short term delivery plan outlined in the Regional Transport Strategy for the period 2008-2011 and aims to enhance the reliability and quality of the local network, particularly for freight and public transport, and to enhance the accessibility of small rural communities.

1.2 Approach to the Study

1.2.1 The study has been undertaken in three parts. Part 1 was a desk review of previous work undertaken for HITRANS on locally significant and lifeline roads in the region. The main purpose of the review was to understand the key issues, problems and constraints facing rural communities in the region and the role of locally significant roads in relation to these to enable objectives to be set for the investment strategy.

1.2.2 Part 2 of the study identified a range of options and interventions to be included in the investment plan. Each route in the network was assessed against a set of key criteria linked to the objectives of the investment strategy with those routes which showed the best fit with these objectives taken forward as eligible for investment.

1.2.3 This list of eligible interventions was carried forward into Part 3 of the study which comprised an assessment of the social and economic benefits of the options. This assessment was carried out in accordance with the Scottish Transport Appraisal Guidance (STAG) and included a Part 1 economic activity and location impacts (EALI) appraisal.

1.3 Report Structure

1.3.1 The remainder of the report is structured around the three parts of the study:

- Section 2 reviews the studies undertaken on locally significant and lifeline roads and sets out the objectives of the investment strategy;
- Section 3 describes the process of assessing each route against these objectives and identifying those which are eligible for investment; and
- Section 4 provides an assessment of the economic and social benefits of investment in the eligible options.

2 Literature Review and Strategy Objectives

2.1 Introduction

2.1.1 The first phase of the study involved a review of existing work undertaken on the issue of locally significant and lifeline roads in the region and developing an understanding of the strategic context within which the investment package would be made. This part of the study concluded by identifying the key objectives which would be used to direct investment in the locally significant roads network.

2.2 Literature Review

2.2.1 Over recent years a great deal of work has been carried out by HITRANS and its partner organisations in attempting to generate investment to improve the locally significant roads network. In 2000 HITRANS began its campaign for investment in lifeline rural roads, driven by concerns about poor maintenance levels on minor roads across the region. Since then a number of studies have been carried out to investigate the condition of the network and the ways in which constraints on these roads impact upon local businesses and communities. Conclusions drawn from these studies indicated that some 2,100 jobs across the region were at risk due to the potential introduction of weight restrictions on lifeline roads and that investment of some £350 million would be required to raise the whole network up to dual track standard.

2.2.2 The output of these studies was used to inform the development of the HITRANS Regional Transport Strategy in 2007 and the move to include investment in the locally significant roads network as a part of a short term delivery plan for 2008-2011.

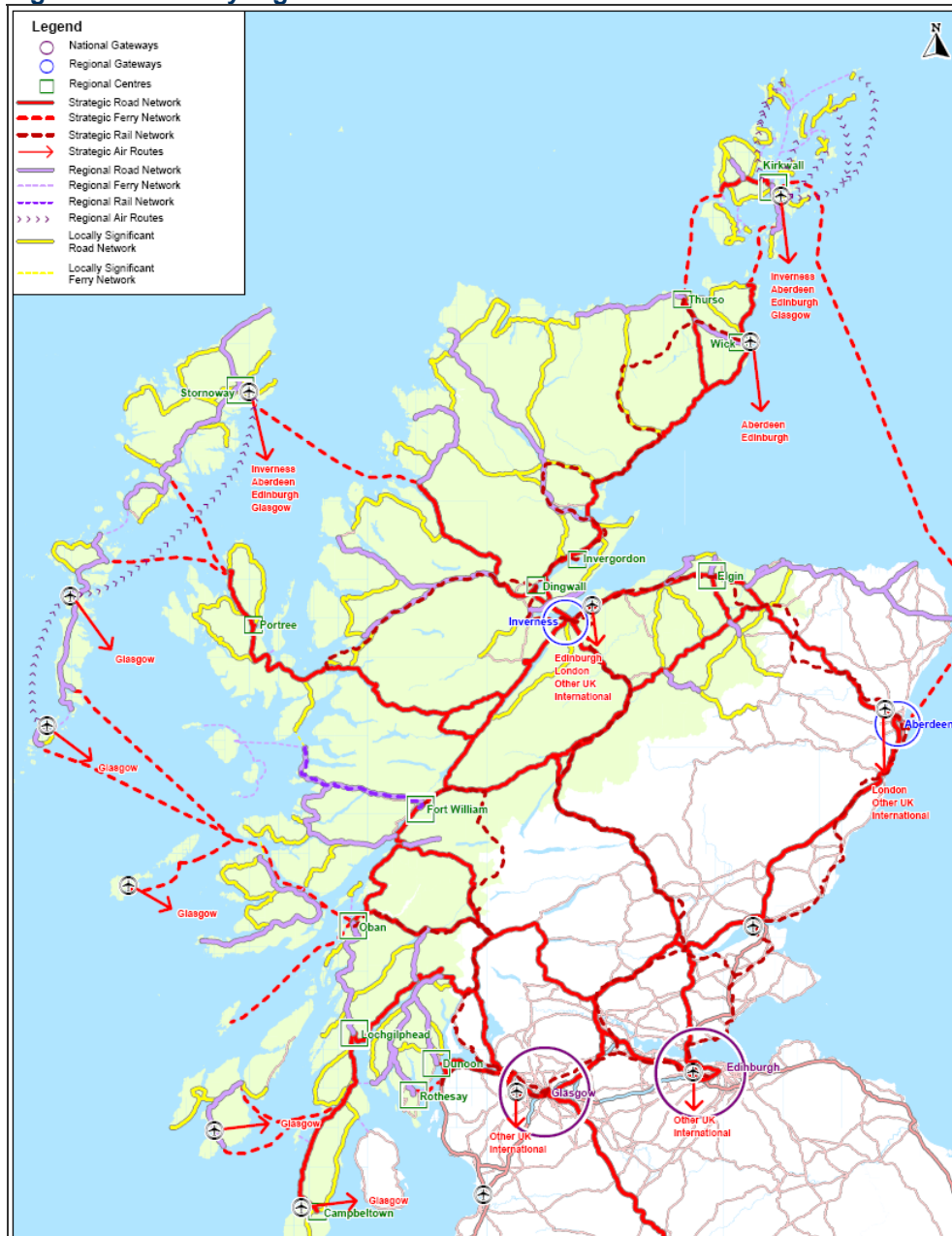
2.2.3 To develop an understanding of the network and the analysis that has been carried out to date, a number of key documents were reviewed. These include:

- “Socio-Economic Impact of Restrictions on Lifeline Roads”, EKOS, 2001
- “Investment in Lifeline Roads: Problems, Issues and Constraints Report”, Halcrow, 2003
- “Investment in Lifeline Roads: Stage Two report”, Halcrow, 2003
- “Developing a Regional Transport Partnership for the Highlands and Islands: Locally Significant Network”, Steer Davies Gleave, 2006
- “Socio Economic Impacts of Road Conditions on Low Volume Roads”, Svante Johansson, Roadex II Project, 2004.

Locally significant roads network

2.2.4 The HITRANS Regional Transport Strategy defines the locally significant road network as one part of the overall hierarchy of roads across the region. Locally significant roads make up that part of the regions road network which connect small, rural communities to local service centres and provide onward transport links to the regional and strategic road network. Figure 2.1 shows the extent of the locally significant road network (marked as yellow) within the context of the rest of the region’s road, ferry and air links. A listing of all the roads, including road numbers and routes, covered by the network is included in Appendix A.

Figure 2.1 : Locally Significant Road Network



2.2.5

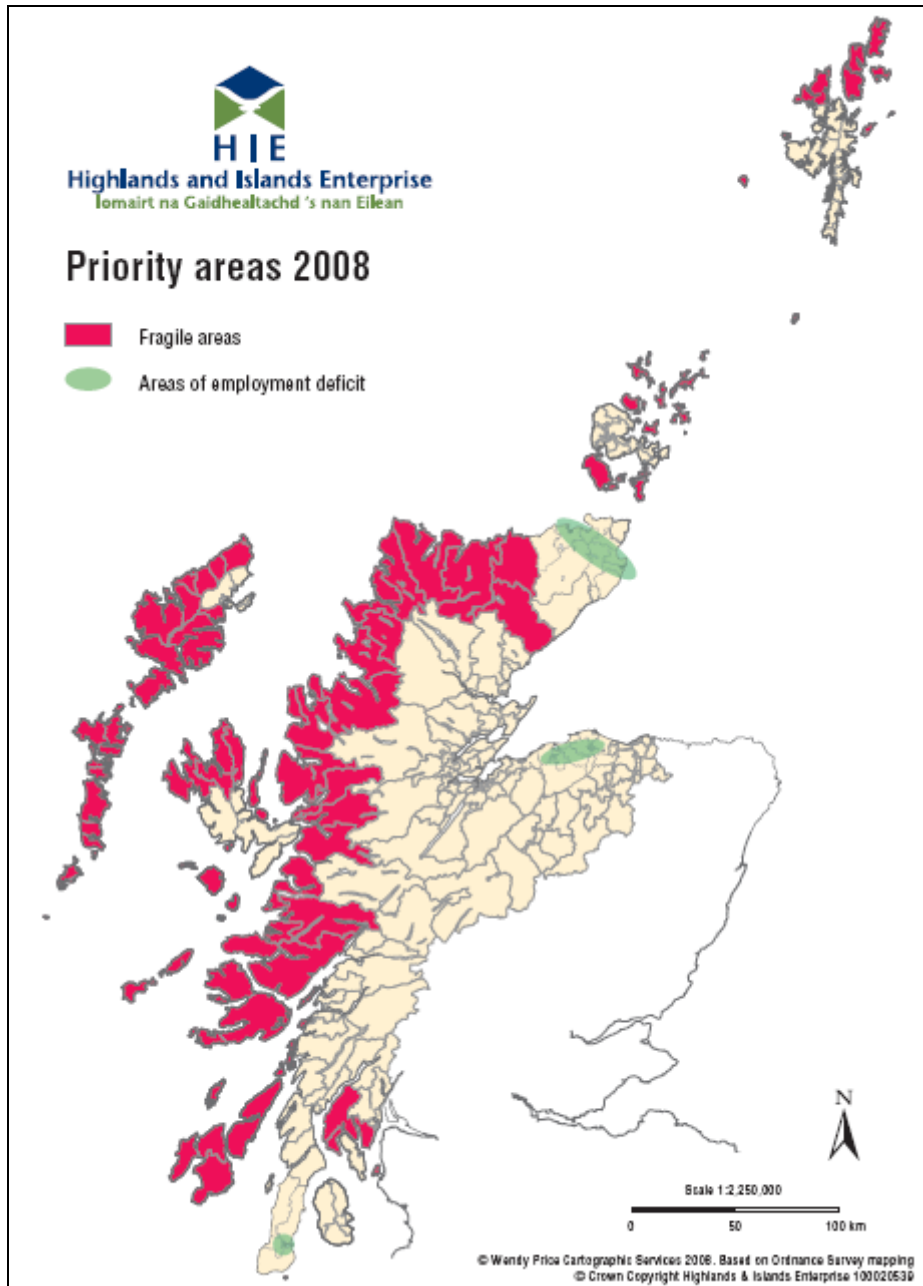
Taken together the network comprises a total of 69 individual routes covering all parts of the region. As Table 2.1 shows, these routes cover a total length of 1,939 kilometres reaching into the most remote rural parts of the HITRANS region. An estimated 66% of the length of the routes are described as single track, with the longest stretches of single track roads being found in Highland and Argyll and Bute. Overall, 37 of the routes (more than half) are described as being single track for more than 75% of their total length.

Table 2.1 Locally Significant Roads Network					
	No. routes	Total Length (Km)	% single track	Population served	% of total pop
Argyll and Bute	15	412	82%	22,364	25%
Moray	6	156	10%	33,490	39%
Orkney	12	227	46%	14,903	76%
Highland	25	894	76%	44,842	21%
Western Isles	11	249	51%	15,967	60%
HITRANS Total	69	1,939	66%	131,566	30%

- 2.2.6 Communities served by the locally significant road network include some of the most fragile in the country, with these roads often providing the sole means of access to vital lifeline services. The total population served by the network in 2005 was estimated at 131,566 people, some 30% of the total population of the region as a whole, although a large proportion of this population is concentrated around a few routes around Moray, Inverness and Nairn where population densities are higher than other parts of the region. Typically locally significant roads examined in this study serve groups of small, remote communities with a combined population of less 2,000 people. On average the population density of areas served by the network is estimated at 4 persons per square kilometre, significantly below the HITRANS average of 11 persons per km².
- 2.2.7 An estimated 40,400 jobs (excluding self employed) are located in areas served by locally significant roads, an average of just less than 600 jobs per road. Employment in these areas is highly dependent on primary activities such as agriculture, aquaculture and forestry – these sectors account for 13% of all jobs, compared against a regional average of 4.6%¹.
- 2.2.8 An estimated 2.4% of working age residents in communities served by the network were unemployed and claiming Job Seekers Allowance (JSA) in July 2007. This compares against an average rate of 1.8% across the HITRANS region as a whole.
- 2.2.9 More than half of the routes in the network serve communities in the Argyll and Bute and Highland Council areas. Twelve routes are situated on islands located off other islands on which they depend for essential services, while 16 routes are located on small islands with populations of fewer than 2,500 people.
- 2.2.10 Overall, the routes included in this study are predominantly located in those areas of the Highlands and Islands which are recognised by Highlands and Islands Enterprise (HIE) and other local bodies as ‘fragile areas’. Figure 2.2 provides an illustration of HIE priority areas for intervention.

¹ Source: Tribal analysis of data from the Annual Business Inquiry adjusted to account for self-employment.

Figure 2.2: HIE Priority areas 2008



Issues and constraints

2.2.11

A review of the condition and adequacy of routes included in the locally significant road network reveals a number of common issues across all areas. While some routes are considered in good condition or adequate for their current use, most roads exhibit one or more of the following types of constraint:

- Poor road condition: including rough road surfaces, rutting, edge deformation, cracking and other issues
- Poor road geometry and alignment: including poor horizontal and vertical alignment
- Poor visibility

- Inadequate numbers of passing places
- Narrow roads: as Table 2.1 shows, a high proportion of roads in the network are single track. Often these routes are relied upon by large heavy goods vehicles and other industrial traffic.
- High traffic volumes: many routes, particularly those serving ferry services or key industrial sites, are often carrying very high volumes of traffic at peak times of the day.
- Restrictions on use: the review identified a number of routes with current or potential weight and width restrictions.
- Slow average speeds: a combination of all of the above factors often result in slow vehicle speeds on these routes and long journey times.

2.2.12 As previous studies in the region have demonstrated, such factors can have a serious impact on those businesses and communities which rely on these routes. In many cases, these routes represent the sole means of access to and from remote regions. As such, poor road conditions can place a significant constraint on the ease and comfort with which residents can access lifeline services such as health, education, retailing and banking, most of which are located in regional service centres some distance away. Long and variable journey times can also place a barrier to accessing employment from these locations, resulting in narrower travel to work areas than would otherwise be the case. Such factors combine to adversely affect the sustainability of small, remote communities across the region and the ability of these areas to retain current population levels.

2.2.13 Surveys of businesses in the region have highlighted the importance of the locally significant road network to the economy of the area. Previous studies² on specific roads on the network have found that:

- 70% of businesses were tied to the location in which they currently operate and unlikely to be able to move in the future.
- More reliable/cheaper transport was the single most important thing businesses would like done to improve their location as a place for business.
- 71% of businesses were restricted to only one potential route to their location for transport of goods and supplies.
- 63% of businesses felt they faced significant transport constraints at their location. Most reported that the removal of constraints would result in increased turnover, lower costs and improved business confidence.

2.2.14 Freight transport organisations report the most negative view of the current condition of the single track road network in the region. These roads are of particular importance to sectors such as:

- Forestry – which relies on the network for access to harvesting sites. The level of timber harvesting is expected to almost double from 4.8 million tonnes per annum in 2002/03 to 8.4 million tonnes by 2013/14, thus adding further pressure to an already poor quality network.

² "Investment in lifeline roads: Stage Two report", Halcrow, 2003

- Aquaculture - the fish farming sector is reliant on the locally significant road network, both in getting raw materials to farms and shipping out finished goods to markets at home and abroad. International competition in the sector is high and Scottish producers depend upon efficient logistics and transport solutions to reach their markets.
- Tourism – the tourism sector is a key employer across the region, trading on the unique environment of the area in general. While the character of single track, winding roads through remote areas plays a role in attracting visitors to the area, tourism bodies also report the negative impacts that poor road quality can have when trying to sell the region. These include difficulties in accessing ferry terminals and popular destinations as well as conflicts between the needs of tourists and those of local users.

2.2.15 Overall, the poor condition of the network acts as a barrier to growth among businesses in the region by adding to journey times, increasing the cost of transport, increasing vehicle operating costs and restricting labour catchment areas. Evidence gathered from business surveys in the region suggests that removal of these constraints could have a positive impact on business growth.

2.3 Strategic Context

2.3.1 In order to understand the strategic context within which the investment in locally significant roads will take place, a review was undertaken of a number of key strategic documents from all the organisations involved in providing the proposed investment package. Documents reviewed included:

- “Regional Transport Strategy for the Highlands and Islands”, HITRANS, March 2007
- “Highlands & Islands Scotland European Regional Development Fund Programme 2007-13”, Highlands and Islands Partnership Programme (HIPP)
- Local Transport Strategies prepared by The Highland Council, Moray Council, Orkney Islands Council, Argyll and Bute Council and the Western Isles Council

2.3.2 Key issues from these documents are outlined below.

Regional Transport Strategy

2.3.3 HITRANS was established as one of the seven Scottish Regional Transport Partnerships in December 2005. In March 2007 the partnership produced a strategy to set priorities for future development of transport infrastructure across the region. The primary objective for the strategy is to improve the interconnectivity of the whole region to strategic services and destinations in order to enable the region to compete and support growth. Supporting objectives are to enable people to participate in everyday life; to improve the safety and security of travel; to improve people’s health; and to manage impacts on the region’s environmental assets.

2.3.4 Within the locally significant road network the strategy aims to maintain access and connectivity between communities and local and regional centres and improve the quality of travel for all travellers. Towards this aim, the strategy includes an element of investment in the locally significant roads network as a part of its short term delivery plan of priorities for spending over the period 2008 to 2011.

Local Transport Strategies

2.3.5 Local transport strategies provide an overview of plans and priorities for the sustainable development of transport policy at a local level across each of the five local authority areas. Review of the strategies reveals a number of key themes which are of relevance to the development of the strategy for investment in the locally significant road network. These themes include:

- The importance of supporting development of sustainable communities
- An aim to improve accessibility across the region
- An aim to improve road quality and road safety
- The importance of improving infrastructure to support key sectors in the region

2.3.6 Each strategy sets out a number of planned actions to be undertaken in the area. With regard to the locally significant road network, these include projects to remove weight restrictions, improve and increase the number of passing places, undertake road widening and bridge improvements and make improvements to roads used by forestry and freight traffic.

European Regional Development Fund (ERDF)

2.3.7 The HITRANS Regional Transport Strategy short term delivery plan highlights the importance of securing ERDF funding to assist in the improvement of the locally significant road network. It is important, therefore, that the aims and requirements of the ERDF programme are considered throughout the development of the current strategy and that any projects put forward for investment are compliant with ERDF guidelines.

2.3.8 The HIPP Operational Programme provides the framework for the spending of the ERDF for the Convergence Objective Programme for Scotland for 2007-13. The Programme aims to provide the strategic structure and priorities considered most appropriate to address the region's continuing development needs. The overall vision for the programme is to create a region of "prosperous, inclusive and self-sustaining communities" which make "a distinctive contribution to Scotland, UK and EU competitiveness through supporting people, places and prosperity."

2.3.9 The programme outlines three key objectives for the period 2007-2013. These include:

- Enhancing business competitiveness, commercialisation and innovation
- Enhancing key drivers of regional and sectoral sustainable growth, and
- Enhancing sustainable growth of peripheral and fragile areas

2.3.10 The third of these, 'enhancing sustainable growth of peripheral and fragile areas', allows for investment in "small-scale strategic transport links in improving access and reducing peripherality".

2.3.11 The funding of this part of the programme will be targeted towards projects from 'fragile' areas within the region. Fragile areas are defined as "economically and socially disadvantaged parts of the area with long term structural problems of economic decline". The programme sets out a number of criteria against which the 'fragility' of an area can be assessed. These relate to geographic characteristics of the area, the demographic composition of the area and the economic performance of the area.

2.4 Objectives

2.4.1 One of the key outputs from this part of the study was the presentation of a clear statement of the overarching objectives of the proposed investment strategy. These objectives were generated following a review of the documents described above and the conditions and constraints currently in place on the network.

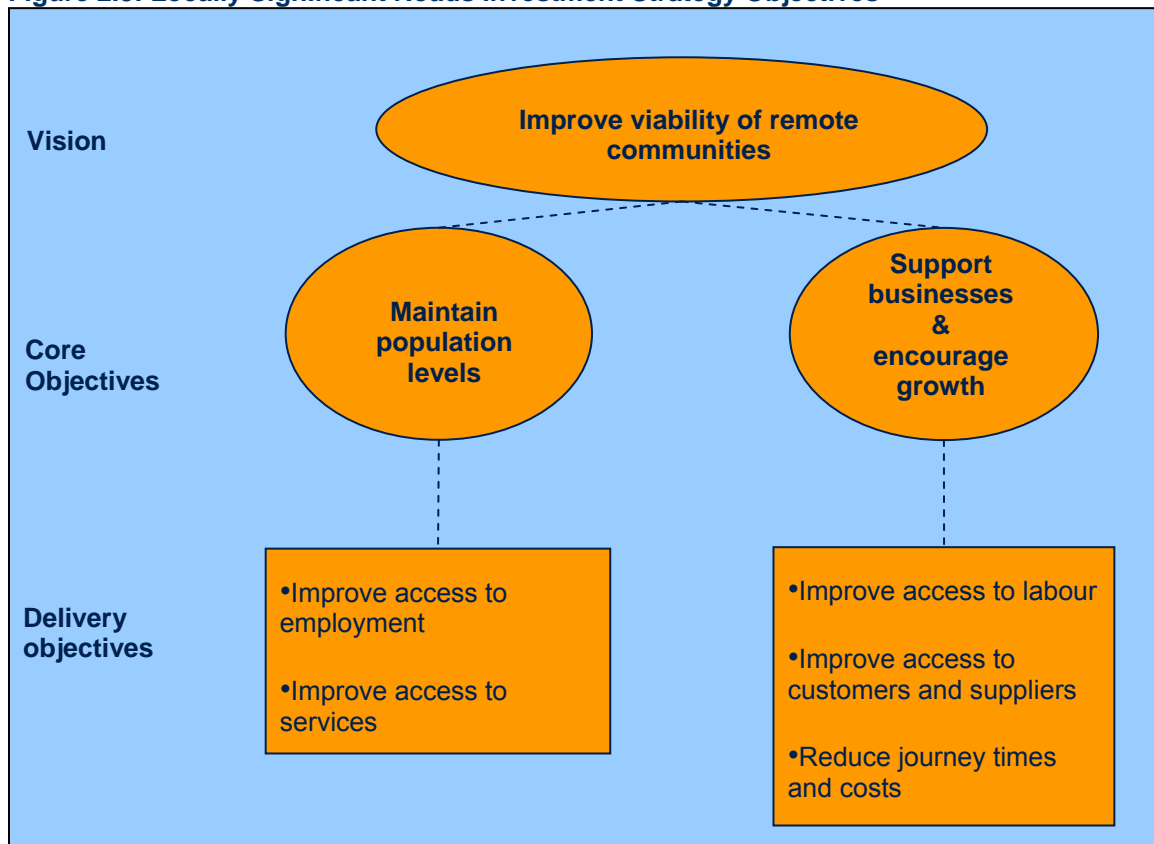
2.4.2 To tie in with the objectives of existing strategies in the region, the review suggested that the overall aim of the investment strategy should be to “improve the viability of remote communities” served by locally significant roads in the HITRANS region. Towards this, the core objectives of the strategy should be to help:

- Maintain population levels, and
- Support business and encourage growth

2.4.3 Delivery objectives arising from these aims include helping to provide a transport system which improves access to employment and services for local residents and users of the routes, improving access to customers, suppliers and labour for local businesses and, overall, helping to reduce journey costs and times and improve journey quality on the locally significant road network.

2.4.4 These objectives are outlined in Figure 2.3.

Figure 2.3: Locally Significant Roads Investment Strategy Objectives



2.4.5 These are the objectives which have been used to guide the process of identifying routes and interventions which are eligible for inclusion in the final investment plan. The key aim of the sifting process has been to ensure that investment is directed towards:

- Routes which provide lifeline links for the most fragile communities in the region
- Routes which provide important links for key industries operating in the region
- Interventions which can resolve or alleviate specific problems on routes
- Interventions which can be achieved within the timescale and budget of the strategy.

2.4.6 Given these aims and objectives, a sifting process has been undertaken to select the locally significant routes and interventions which best meet these criteria. This process and the results arising from it are described in Section 3.

3 Option Generation and Sifting

3.1 Introduction

3.1.1 Stage Two of the study assessed each of the 69 routes in the locally significant road network to identify those roads and interventions which best met the objectives of the investment strategy outlined in Section 2.

3.1.2 In order to make these assessments a number of criteria were developed which related to the core strategy objectives. These criteria included assessment of:

- The **fragility** of the communities served by each route
- The **severity** of constraints currently active on each route and the identification of suitable **interventions** to relieve these constraints, and
- The potential **impact** of these interventions on businesses and communities which rely on the route.

3.1.3 In order to be considered eligible for inclusion in the investment programme, routes were assessed against the first two of these criteria. The process followed aimed to identify routes which served the most fragile parts of the HITRANS region and routes on which interventions to relieve constraints could be made within the timescale of the short term delivery plan. This process filtered out a number of 'ineligible' routes and identified a core set of routes to be taken forward and assessed against the third criteria – impact of intervention. These eligible routes were then ranked against all three criteria together to identify those routes and interventions which most closely met the objectives of the strategy.

3.2 Identifying eligible routes

3.2.1 The first stage in the process involved identifying those routes which were considered eligible for inclusion in the investment programme and filtering out those routes considered 'ineligible'. This involved assessing the fragility of the areas served by each route and identifying potential interventions to upgrade the roads.

Fragility

3.2.2 A key requirement of the investment strategy is that it is concentrated upon the most fragile communities in the region. This is a common theme running through the HITRANS Regional Transport Strategy, local transport strategies of the five local authorities in the region and is a key requirement to be met if the strategy is to secure funding from the ERDF.

3.2.3 In order to assess the fragility of communities served by the network, a number of criteria were developed. These criteria were derived from definitions provided in the Highlands and Islands ERDF Operational Programme for 2007 to 2013. Taken together these criteria define a fragile area as one in which population is low and falling, employment is low, subject to seasonal variations and highly dependent on primary sector activities, which is remote from large settlements and reliant on single track roads for access. The criteria can be separated into three themes, geographic, demographic and economic.

- **Geographic** criteria include:
 - Islands which lie off other Islands to which they are not connected by a causeway link

- Areas which are ranked as remote rural in the Scottish Government's 6-fold urban-rural classification (i.e. areas with a population of less than 3,000 and over 30 minutes drive from a settlement with a population of over 10,000)
- Areas which are served by locally significant roads which are more than 70% single track
- Areas which are served by long stretches of single track locally significant roads
- **Demographic** criteria include:
 - Islands with a population of less than 2,500
 - Areas with a population density of less than 9 persons per square kilometre
 - Areas in which more than 20% of the population is of pensionable age
 - Areas in which population decline has been observed over the period 2001-2005
- **Economic** criteria include:
 - Areas with higher than average levels of unemployment
 - Areas with high seasonal fluctuations in unemployment
 - Areas with long term unemployment rates more than 25% above the regional average, and
 - Areas with a high dependency on employment in primary activities (agriculture, forestry, aquaculture, fisheries) compared to the regional average

3.2.4 In order to gather data on each of these criteria, the areas served by each individual locally significant road were defined in terms of data zones. Data zones are the core geography for dissemination of a wide range of official statistics in Scotland. Data zones are based on 2001 Census results, nesting within Council areas and cover a population between 500 and 1000 people. This geography provides a convenient balance between being small enough to accurately capture the characteristics of individual communities served by the routes yet being large enough for a useful range of current data to be available.

3.2.5 Using these definitions data has been gathered against each of these criteria for all 69 locally significant roads in the HITRANS region. These data has been used to construct a ranking of the routes in terms of the fragility of the communities they serve. The full ranking of all routes listed in the network is presented in Appendix B.

3.2.6 A simple system has been adopted to achieve the ranking with each area receiving a score of 1 point for each criteria they meet. The area with the highest overall score is ranked as the most fragile community, with the area accumulating the fewest points ranked as the least fragile. As such, the method ranks most highly those areas which are considered fragile across the full range of indicators, rather than those with specific issues against any single indicator. An equal weighting has been applied to each criteria.

3.2.7 Table 3.1 provides an overview of the data used in each indicator and the scoring system adopted. Overall, the system scores the most fragile areas in the region up to a maximum of 14 points, while less fragile areas score significantly fewer points.

Table 3.1 Socio-Economic Fragility - Indicators and Scoring System			
Themes	Indicator	Data Source	Scoring System
Geographic	Single track	Data provided by Local Authorities	Score 1 point where at least 70% of route is single track
	Length single track	Data provided by Local Authorities	Score 0-3 points on rising scale to recognise the length of road which is single track. Over 50km of single track road = 3 points; 30-49km = 2 points; 10-29km = 1 point; less than 10km = 0 points.
	Remote Rural	Scottish Executive Urban-Rural Classification 2005-06	Score 1 point where areas served by the route are rated as "Remote Rural" in the Scottish Executive Urban-Rural Classification
	Island, no causeway link	Tribal analysis of routes	Score 1 point for routes serving islands located off other islands but not connected by a causeway
Demographic	Islands with pop<2500	GROS Mid year population estimates, 2005	Score 1 point where route serves islands with a population less than 2,500
	Pop Density <9pskm	GROS Mid year population estimates, 2005	Score 1 point where the area served by the route has a population density of less than 9 people per square kilometre
	Population loss	GROS Mid year population estimates, 2001 & 2005	Score 1 point where the area served by the route has shown population decline in recent years
	>20% of Pens age	GROS Mid year population estimates, 2005	Score 1 point where more than 20% of the population served by the route is of pensionable age
Economic	Unemployment	JSA Claimant Counts, July 2007	Score 1 point where the area served by the route shows above average unemployment rates
	Seasonality factor	JSA Claimant Counts, Jan - July 2007	Score 1 point where the area served by the route shows above average seasonal fluctuations in unemployment
	Long Term Unemployment	JSA Claimant Counts, July 2007	Score 1 point where the area served by the route shows long term unemployment rates of more than 25% above the regional average
	Primary reliance	Annual Business Inquiry, 2005	Score 1 point where the area served by the route shows above average reliance on employment in primary industries
	OVERALL SCORE		Sum of all scores across all indicators
Banding		Band 3 = High fragility areas with a total score of 8 or above	
		Band 2 = Medium fragility areas with a total score of 6-7	
		Band 1 = Low fragility areas with a total score of 5 or less	

- 3.2.8 In order to identify those routes which are eligible for inclusion in the investment package, this scoring system has been used to separate routes into three groups. Those with a fragility index of 8 or above are rated as 'high fragility' areas. Those with a fragility index of 6-8 are rated as 'medium fragility'. Those with a fragility index of less than 6 are rated as 'low fragility'.
- 3.2.9 Only those routes which are rated as 'high' or 'medium' fragility are taken forward as eligible for investment in this package. As such, the process aims to ensure that funding is directed toward the most fragile communities in the region and that the routes identified meet the core targeting criteria for ERDF funding.
- 3.2.10 Of the 69 routes in the network, 28 are identified as serving communities of 'high fragility', 20 as serving 'medium fragility' communities. The remaining 21 routes are assessed as serving 'low fragility' communities against these criteria and are considered not eligible for inclusion in this strategy.

Identifying constraints and interventions

- 3.2.11 The second step taken to select those routes eligible for investment was to assess the constraints currently active on each route and identify interventions which could be made to address these constraints and improve the route. Throughout this assessment the practicalities of interventions were carefully considered both in terms of the size of investment required to address a constraint and the timescale required to undertake a project. Only those projects of a scale for which funding might be secured and which could be completed within the 3 year timescale of the HITRANS short term delivery plan were considered.
- 3.2.12 This process was carried out in close consultation with transport officers in each of the local authority areas. Of the routes which met the fragility criteria discussed above, suitable interventions were identified on 34 routes, with no project identified on the remaining 14 routes. Details of all the routes and brief descriptions of the proposed interventions are listed in Appendix C.

3.3 Ranking eligible routes

- 3.3.1 The sifting process described above identified 34 routes which are considered eligible for investment as part of the current strategy. These are routes which serve fragile communities across the region and for which projects have been identified to address existing constraints on the route.
- 3.3.2 The next stage of the study involved assessing these routes further and considering the impact that potential interventions would have on communities and businesses using the routes. In making this ranking the study aims to identify those routes which best meet all the objectives of the investment strategy.
- 3.3.3 In undertaking the ranking, a simple scoring system has been adopted which scores each route against the fragility of the community it serves, the severity of existing constraints on the route and potential impact of relieving these constraints. The scoring system is constructed with each route receiving a rating of 1-3 against each criteria as follows:
- **Fragility:** routes which were identified as 'high' fragility receive a score of 3. 'medium' fragility routes receive a score of 2.
 - **Severity:** routes are scored on a scale of 1-3 based on the severity of existing constraints on the route. A score of 3 indicates a route with severe constraints which restrict the community's ability to access jobs and services, local firms' ability to carry out their business and which result in unnecessarily long journey times and

high costs. By contrast, a score of 1 indicates a route which is broadly adequate for the needs of the local community and local employers.

- **Impact:** routes are scored on a scale of 1-3 based on the potential impact of the proposed intervention on local businesses and local communities. Separate scores are generated for the economic impact of the intervention and the impact on residents. A score of 3 indicates a route where the proposed intervention is likely to bring significant benefits to existing local businesses in terms of improved access to customers and suppliers, reduced journey times or costs and improved route reliability and which investment is likely to significantly improve the ability of residents to access jobs and services. A score of 1 indicates a route where the proposed intervention is likely to have little such impact.

3.3.4 With regard to severity and impact scoring, these ratings represent a qualitative assessment generated by Tribal in close consultation with local transport officers, local enterprise companies and other representative bodies.

3.3.5 The overall score for each route is the sum of scores across the three criteria. Routes have then been ranked using these scores to identify those which best meet the strategy objectives. Where routes have the same overall score they have been ranked in terms of the impact, with those interventions which have the highest impact ranked first.

3.4 Ranking results

3.4.1 Table 3.2 presents the results of the ranking process. Of the 34 routes which are eligible for inclusion in the investment strategy 7 receive an overall score of more than 10 points from a possible 12 and are rated as showing a 'very good' fit with the objectives of the strategy as outlined in Section 2. A further 16 receive an overall score of 9-10 points and are rated as showing a 'good' fit with the strategy objectives. The remaining 11 routes receive a score of less than 9 points from a possible 12 and are rated as showing a 'moderate' fit with the objectives of the strategy.

3.4.2 A detailed discussion of the route interventions proposed and their expected impact is presented in Appendix D to this report.

3.4.3 It should be noted that this ranking is based on a quantitative assessment of fragility indicators alongside a qualitative assessment of severity and impact criteria. The ranking is used to demonstrate the fit of projects with the objectives described earlier and may not reflect the investment priorities of individual local authorities. All 34 of the routes included in Table 3.2 are considered to meet the basic requirements of this strategy and are eligible for funding support by HITRANS.

3.4.4 Overall, the cost estimates provided by local authorities for these interventions suggest that a total investment package of some £41 million would be sufficient to cover all 34 projects identified here. In practice, since it is unlikely that such funds will be available for investment in the network, the purpose of this ranking is to assist in guiding the use of available funds and helping to secure successful ERDF bids for additional investment.

**Table 3.2
Overall Ranking of Eligible Routes**

Area*	Route	Description	Fragility Score	Severity Score	Impact		TOTAL	Type of Intervention	Time-scale	Cost (£m)
					Economy	Social				
THC	A855	Portree to Uig via Staffin	3	3	3	3	12	Upgrade to double track	3yrs	1
THC	A896	Kinlochewe to Strathcarron	3	3	3	3	12	Passing places/visibility improvements	3yrs 4 phases	1
THC	B8007	Salen to Kilchoan (Ardnamurchan)	3	3	3	3	12	Passing places/visibility improvements	3yrs 4 phases	1
ABC	B8073	Tobermory to Salen via Calgary	3	3	3	3	12	Localised widening, realignment and visibility improvements	25 weeks	1
OC	A964	Kirkwall to Clouston	2	3	3	3	11	Widening and re-alignment	2008-11	2.3
WI	B8011	Garynahine to Uig	3	3	2	3	11	Upgrade sections to dual track	1-3 yrs	4
ABC	B836	Glen Lean	3	3	3	2	11	Localised widening, realignment and visibility improvements	15 weeks	1
WI	A858 (2)	Lower Barvas to Carloway	2	2	3	3	10	Upgrade sections to dual track	1-3 yrs	2
ABC	A846	Feolin Ferry to Ardlussa	2	3	2	3	10	Road upgrading. Localised widening, realignment and visibility improvements	12 weeks	0.3
WI	A858 (1)	Carloway to Leurbost	2	3	3	2	10	Upgrade sections to dual track	1-3 yrs	0.7
ABC	B844	Kilninver to Cuan Ferry	2	3	2	3	10	Upgrade to dual track in sections and other improvements	20 weeks	2
THC	A837	Ledmore Junction to Invershin	3	3	2	2	10	Passing places/visibility improvements	3yrs 2 phases	0.5
THC	Achiltibuie	Achiltibuie	3	3	2	2	10	Passing places/visibility improvements	3yrs 3 phases	0.75

Area*	Route	Description	Fragility Score	Severity Score	Impact		TOTAL	Type of Intervention	Time-scale	Cost (£m)
					Economy	Social				
ABC	B8000	Millhouse to Newton	3	3	3	1	10	Localised widening, realignment and visibility improvements	25 weeks	2
ABC	B8035	Salen/Gruline to Junct w A849	3	3	3	1	10	Localised widening, realignment and visibility improvements	25 weeks	1.5
ABC	A880	Ardbeg to Kilmun	2	2	2	3	9	Provision of new footways, localised widening and other improvements	26 weeks	1.5
THC	A839 (2)	Rosehall to Lairg	3	2	2	2	9	Passing places/visibility improvements	1-2 yrs	0.25
WI	A865	Clachan to Trumisgarry	3	2	2	2	9	Upgrade sections to dual track	1-3 yrs	2
THC	A884	Strontian to Lochaline	2	3	2	2	9	Strip widening	3 yrs 2 phases	0.5
THC	A897	Melvich to Helmsdale	3	2	2	2	9	Upgrade passing places/improve visibility at bends/verge improvements	3yrs over 10 phases	2.5
ABC	B8024	Tarbert to Inverneill, round Knapdale	3	2	2	2	9	Localised widening, realignment and visibility improvements	12 weeks	0.5
ABC	B828/839	Hell's Glen to Rest and be Thankful	2	3	2	2	9	Upgrade to double track in places, upgrade passing places, local realignment.	25 weeks	2
THC	A836/838	Bettyhill to Rhiconich	3	3	1	2	9	Passing places/visibility improvements	3yrs 3 phases	0.75
THC	A832 (1)	Braemore Junction to Gairloch	3	1	2	2	8	Visibility improvements/widening	1-2 yrs	0.25
THC	A836 (1)	Tongue to Lairg	2	2	2	2	8	Passing places/visibility improvements	3yrs 2 phases	0.5

Area*	Route	Description	Fragility Score	Severity Score	Impact		TOTAL	Type of Intervention	Time-scale	Cost (£m)
					Economy	Social				
WI	Benbecula link road	Benbecula Link Road	2	2	2	2	8	Upgrade sections to dual track	1-3 yrs	2
ABC	B8025	Kilmartin to Tayvallich	2	3	2	1	8	Localised widening, realignment and visibility improvements	12 weeks	0.7
ABC	B8045	Point Ramsay to Kilcheran	2	2	2	1	7	Localised widening, realignment and visibility improvements	12 weeks	0.5
WI	A888	Castlebay to Northbay	3	2	1	1	7	Upgrade sections to dual track	1-3 yrs	2
WI	Rodel to A859	Rodel to A859	3	2	1	1	7	Widening and realignment at key points	1-3 yrs	0.25
ABC	A847	Bridgend to Portnahaven	2	1	2	1	6	Localised widening, realignment and visibility improvements	12 weeks	0.5
THC	B8004	Acharacle to Ardtoe	2	2	1	1	6	Passing places upgrade	1-2 yrs	0.1
WI	B8060	Lemreway to Balallan	3	1	1	1	6	Upgrade sections to dual track	1-3 yrs	2
ABC	B840	Cladich to Ford (Loch Awe)	3	1	1	1	6	Localised widening, realignment and visibility improvements	12 weeks	0.8

*: THC=Highlands, ABC=Argyll and Bute, WI=Western Isles, OC=Orkney Council

4 Socio-Economic Impact

4.1 Introduction

4.1.1 The final stage of the study involves making an assessment of the socio-economic impact of the package of eligible interventions listed in Section 3. This assessment is to be compliant with a Part One economic assessment and location impact (EALI) as outlined in the Scottish Transport Appraisal Guidance (STAG).

4.2 Economic Activity and Location Impacts

4.2.1 The aim of EALI analysis is to describe the impacts of the transport investment on income and employment in the economy. EALI analysis is intended to identify how and under what circumstances transport projects are likely to have impacts on the economic performance of different areas, and also to capture those economic impacts which other methods may, in certain circumstances, fail to capture.

4.2.2 As STAG states, decision makers are often interested in how a transport proposal might affect economic performance at national, regional or local levels. Decision makers are also interested in how particular groups and/or areas might be affected, again in terms of levels of income and access to new or existing employment. This applies particularly in areas where there are issues of social inclusion, including peripherality and fragility, to be addressed.

4.2.3 EALI assessments are presented in two ways:

- At a net level across Scotland as a whole, and
- In terms of its gross components, distinguishing impacts on particular areas and/or on particular groups in society

4.2.4 In practice net impacts at the Scotland level occur in very few cases, mainly for large proposals. This is because it is rare for individual transport infrastructure or service changes to generate additional economic activity which does not represent displacement from another location elsewhere in the country. In the case of the current investment programme, it is expected that net impacts at the Scotland level would be zero

4.2.5 In most cases, therefore, the principal interest in EALI analysis is on local and distributional impacts, where analysis of gross rather than net changes must be considered. This is because even small proposals have the potential to give rise to changes in economic activity which will benefit some areas or groups.

4.2.6 The purpose of a Part One EALI is to present an initial, qualitative appraisal of the potential impacts of an investment. At this stage, gross impacts should be considered — including the impacts on different sectors of economic activity, on different areas within a region or sub region, and on different groups in society. Where more detailed investigation is required at the proposal development stage, a Part Two assessment can be carried out to make a quantitative assessment of the income and employment impacts of a scheme.

4.2.7 The aim of this section is to provide a part one EALI assessment of the interventions identified in Section 3. The analysis will concentrate on those routes with an overall score of 9 points or more – i.e. those showing a ‘good’ or ‘very good’ fit with the objectives of the investment strategy.

4.2.8 Key questions to be considered in the assessments include:

- what will the initiative achieve in terms of transport benefits and costs; focussing on benefits such as time savings, improved accessibility, improved journey quality and so on;
- who will benefit from these impacts, and who, if anyone, will lose; where are the beneficiaries (and losers) located: the assessment should also consider the economic roles of those affected — businesses, workers, tourists and so on;
- what are the likely responses of the gainers and losers in terms of travel behaviour;
- what are the likely responses in terms of economic behaviour.

4.3 Socio-Economic Benefits – regional summary

4.3.1 Analysis of the transport benefits likely to arise from the initiatives proposed in Section 3 show a common general pattern across all areas. In general, the package of initiatives proposed on each route are made of a combination of:

- Road widening initiatives – sometimes full upgrade from single to dual track, but in most cases involving widening at corners or at other strategic points to allow traffic to pass more comfortably
- Visibility improvements
- Road realignment and straightening – both horizontal and vertical
- Construction of new passing places
- Construction of new footpaths
- Action to relieve weight or other restrictions on the type of traffic able to use the road.

4.3.2 In some cases these investments are expected to result in significant impacts on journey times and costs along the route, but for the most part the impact of the initiatives are expected to:

- Improve journey quality and comfort – by improving visibility, making it easier to meet oncoming traffic, by improving road surfaces and straightening bends
- Improve reliability of journey times – by increasing the number of passing places, improving visibility and widening corners the initiatives expect to allow traffic to maintain more steady speeds along the length of routes and to reduce instances of queuing and convoying
- Improved journey safety – again, better visibility and wider, straighter roads are expected to have an impact on journey safety along the routes.

4.3.3 Such improvements are expected to have significant impacts on businesses operating in key areas across the region. In particular, the initiatives are expected to benefit forestry businesses throughout the region by improving journey reliability and improving road surfaces. Similarly, fish farm businesses are expected to benefit from improved journey reliability and time savings. In most cases these impacts are expected to be valuable, though not to result in large increases in employment or output. As such, the main impact of the intervention will be to improve the sustainability and efficiency of economic activity in these areas. In a few cases, however, these impacts do have the potential to be very significant, particularly where projects aim to remove existing weight restrictions and open

up new, potentially faster routes for businesses or (as observed on the Isle of Mull) to open up new areas of forestry where restrictions currently prevent harvesting from taking place.

4.3.4 Consultees across the region also noted the impact that route improvements will have on the tourism industry. Many of the road projects identified here are expected to improve the accessibility of important tourism attractions in peripheral areas, to improve access routes to ferry terminals and, by increasing the capacity of roads, to help limit the impact that seasonal increases in traffic flows have on local residents.

4.3.5 With regard to social impacts, consultees noted the impact that road improvements would have on maintaining sustainable communities in rural areas. Key benefits for residents include:

- Easier, less problematic access to lifeline services in regional centres
- Easier access to the national strategic trunk network
- Easier access to employment opportunities, opening up wider labour catchment areas across the region
- Easier access to ferry and other transport services

4.3.6 Table 4.1 presents a summary of the overall economic and location impacts expected to arise across the region as a whole from investment in the routes identified in Section 3.

Table 4.1 Summary of EALI impacts across HITRANS region	
National impacts	<ul style="list-style-type: none"> ▪ No net impact is expected to arise at a national level
Local impacts	
Economic	<ul style="list-style-type: none"> ▪ Improve efficiency and sustainability of key industries – particularly forestry and fish farming businesses located in remote areas – through improved route reliability and improved journey times ▪ Encourage expansion of industry in areas where opportunities have been limited by poor access ▪ Promote tourism by improving accessibility to key sites and improving links between remote parts of the region ▪ Widen labour catchment areas by improving accessibility of employers in remote areas
Social	<ul style="list-style-type: none"> ▪ Improve accessibility of key services such as health, education, retailing and leisure ▪ Improve accessibility to employment by making it easier for residents in remote areas to travel to work in regional centres and other towns ▪ Help maintain the sustainability of fragile and remote communities

4.4 Assessment of impacts by road

4.4.1

This section concludes by providing a brief summary of the likely impacts of individual interventions identified in Section 3 of this report. The analysis concentrates on those routes which were rated as showing a 'good' or 'very good' fit with the overall objectives of the investment strategy. More detailed discussions of each route, the characteristics of the area and the potential impacts of the intervention are provided in Appendix D to this report. Maps of each route are provided in Appendix E.

A855 – Portree to Uig via Staffin (Map 2 – Skye)

- Planned intervention: upgrade key sections of the route to double track
- Communities benefitting: Trotternish peninsula, Staffin, Flodigarry, Kilmalaug.
- Expected impacts:
 - Improved journey times, removal bottlenecks at peak times, improved journey quality for all road users and improved road safety
 - Significant benefits expected for tourism businesses through improved access to local hotels and other attractions in the along the route for tourists and coach traffic
 - Increased efficiency and improved ease of access for business serving and operating in the area including construction and freight haulage businesses.
 - Improved access to employment and services in Portree and Staffin for local residents.
 - Improved local access to ferry services in Uig.

A896 – Kinlochewe to Strathcarron (Map 3 – Wester Ross)

- Planned intervention: upgrades to passing places and visibility improvements
- Communities benefitting: Kinlochewe, Torridon, Sheildaig, Applecross, Kishorn, Strathcarron
- Expected impacts:
 - Improved journey quality and journey safety for all users. Minor journey time savings. Prevent damage to road surface and improve adequacy of the route for large vehicles. Allow more comfortable passing for oncoming vehicles.
 - Benefits expected for tourism in the area through improved access to Applecross peninsula and other sites and an enhanced tourism experience in the area in general.
 - Improved access to fish farming sites in the area, more adequate road alignment for large vehicles.
 - Improved access to Kishorn for large vehicles carrying feeds to west coast fish farms expected to bring benefits in terms of safety, time savings and reduced wear and tear on vehicles.
 - Improved access to local services for communities along the route, helping to maintain the sustainability of the local population.

B8007 – Salen to Kilchoan (Ardnamurchan) (Map 2 – Lochaber)

- Planned intervention: Construction of new passing places, visibility improvements
- Communities benefitting: Achosnich, Kilchoan, Glenborrodale, Glenbeg, Ockle and Salen.
- Expected impacts:
 - Improved journey quality and journey safety for all users. Minor journey time savings. Prevent damage to road surface and improve adequacy of the route for large vehicles. Allow more comfortable passing for oncoming vehicles.
 - Improved access and efficiency for local businesses including key employers in the fish farming and forestry sectors.
 - Improved access for construction vehicles, allowing the development of areas such as Kilchoan, Portuairk and Swordle to continue.
 - Significant potential benefits to the tourism industry in the area by improving the adequacy of the road for coach traffic and motor homes and improving access to key sites. Road improvements are expected to improve the general experience of the area for visitors.
 - Improved access to the lifeline Tobermory-Mull ferry service
 - Significant benefits for local residents in improving access to lifeline services and employment, with particular benefits for local schoolchildren accessing education services in the region.

B8073 – Tobermory to Salen via Calgary (Map 1 – Mull)

- Planned intervention: Localised widening, realignment and visibility improvements. Removal of weight restrictions.
- Communities benefitting: Dervaig, Croig, Calgary, Penmore, Torloisk, Ulva, Kilninian, Ballygown, Killechronan, Caliach and Killiemor
- Expected impacts:
 - Widening of bends will improve safety on the route and allow passing, which will help to prevent the stop start nature of driving on the route. This will improve the reliability and make some improvements to the journey time on the route.
 - Improved access and efficiency for local businesses using the route, particularly forestry harvesting and fish farming businesses. Improved adequacy of the route for large vehicles. Removal of weight restrictions will have a significant impact on the ability of businesses to transport goods along the route.
 - Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route.
 - Significant benefits for local residents in improving access to lifeline services and employment in Tobermory and beyond.
 - Improved access to ferry services at Tobermory for local residents and businesses.

A964 – Kirkwall to Clouston (Map 5 – Mainland Orkney)

- Planned intervention: Road widening and realignment at key sections.
- Communities benefitting: Orphir, Houton and dispersed population along the length of the route. Also Hoy and Flotta via sea connection to Houton
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users, relieve bottlenecks at peak times, improved adequacy of route for large vehicles.
 - Assist in the development of strategically important industries for the Orkney Islands, by improving access to energy sector sites and assisting in the development of hub container facilities at Hoy.
 - Enhance the tourism offer of the region by improving access to popular routes to Scapa Flow, Hoy and Flotta. Improve the adequacy of the route for coach traffic.
 - Improved access to employment and services in Kirkwall for communities along the route, particularly those in fragile areas on Hoy. Help maintain the sustainability of fragile communities along the route.

B8011 – Garynahine to Uig (Map 4 – Lewis)

- Planned intervention: Upgrade sections to dual track
- Communities benefitting: Gt Bernera, Gisla, Valtos, Uig, Islavig, Brenish
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users.
 - Improved efficiency and sustainability of local businesses, particularly in fish farming and agriculture sectors
 - Encourage expansion of industry in the area, particularly in primary sectors and food processing sectors.
 - Improved access to the area to tourism businesses and key attractions – including beaches, campsites, local hotels and restaurants and the Lewis Chessmen site. Help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
 - Significant benefits expected for local residents. Improved ease of access to employment and key services in Stornoway, particularly for schoolchildren and local commuters.

B836 – Glen Lean (Map 1 – Cowal)

- Planned intervention: Road upgrades at key sections, including visibility improvements and local widening
- Communities benefitting: Clachaig, Ardtaraig and Auchenbreck

- Expected impacts:
 - Improved route reliability and journey comfort. Will make some impact on journey times and help improve safety along the corridor. Improve the adequacy of the route for large vehicles which currently use it – including forestry vehicles, other HGVs and touring coaches.
 - Improved efficiency for existing businesses who rely on the route for transport of goods, particularly forestry, fish farming and energy sectors.
 - Assist in the expansion of new developments in the area including a proposed biomass facility
 - Improve the tourism offer of the region as a whole by improving links between remote areas. Improved access to key tourism businesses and sites within the area and onward links to ferry services at Colintrave and Dunoon.
 - Improved access to employment and lifeline services for local residents.

A858 – Lower Barvas to Carloway (Map 4 – Lewis)

- Planned intervention: Upgrade sections to dual track
- Communities benefitting: Communities along the north west Lewis coast, including those from Port of Ness to Barvas, Arnol, Shawbost and Granin.
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users. Improved adequacy of the route for the type and volume of traffic relying on it
 - Improved efficiency and sustainability of local businesses, particularly in fish farming, agriculture, textiles and other sectors
 - Encourage expansion of businesses in the area, particularly in primary sectors and higher value added food processing sectors.
 - Improved access to the area to tourism businesses and key attractions – including beaches, local hotels and restaurants, standing stones sites and other attractions. Help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
 - Significant benefits expected for local residents. Improved ease of access to employment and key services in Stornoway, particularly for schoolchildren and local commuters.

A846 – Feolin Ferry to Ardlussa (Map 1 – Jura)

- Planned intervention: Major reconstruction of the road. Localised widening, realignment and visibility improvements at key sections
- Communities benefitting: All communities on the Isle of Jura.
- Expected impacts:
 - Improved journey reliability, comfort and safety for all users along with some improvements to journey time. Improved adequacy of the route for the type and volume of traffic which rely on it.

- Enhanced sustainability and efficiency for local businesses on Jura, particularly distillery businesses, forestry and agriculture.
- Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route
- Significant benefits expected for local residents. Improved ease of access to employment and key lifeline services. Improved access to ferry services from Feolin Ferry.

A858 – Carloway to Leurbost (Map 4 – Lewis)

- Planned intervention: Upgrade sections to dual track
- Communities benefitting: Communities along the north west Lewis coast, including those from Port of Ness to Carloway, Callanish, Achmore and Leurbost.
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users. Improved adequacy of the route for the type and volume of traffic relying on it
 - Improved efficiency and sustainability of local businesses, particularly in fish farming, agriculture, life sciences and other sectors
 - Encourage expansion of businesses in the area, particularly in primary sectors and higher value added food processing sectors.
 - Improved access to the area to tourism businesses and key attractions – including beaches, local hotels and restaurants, standing stones sites and many of the most important tourist attractions on Lewis. Help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
 - Significant benefits expected for local residents. Improved ease of access to employment and lifeline services in Stornoway, particularly for schoolchildren and local commuters. Help to link a large part of the island’s population together, opening up new communities for expansion and maintaining the sustainability of the region as a whole.

B844 – Kilninver to Cuan Ferry (Map 1 – Lorn)

- Planned improvements: Upgrading to two carriageways (widening to 6m) over much of its length. The proposed intervention will complement existing improvement works being carried out on the route by the Council.
- Communities benefitting: Kilninver, Clachan Seil, Balvicar, Ellenabeich, Easdale and Luìng.
- Expected impacts:
 - Improved journey comfort and reliability, improved journey times. Address issues of suppressed demand along the route and relieve pressure on other routes.
 - Improved access and efficiency for local businesses using the route, particularly agriculture and fish farming businesses. Improved adequacy of the route for large vehicles.

- Improved access to tourism businesses and key sites in the area including those at Seil, Easedale and Luing.
- Provide significant benefits to local residents by improving key links to employment and services in Oban. Supports the sustainability of local communities served by the route. Offer potential wider benefits by widening labour catchment areas for businesses located in the growing Oban economy.
- Complement other proposed developments in the area, including the potential construction of a fixed link to Luing.

A837 – Ledmore Junction to Invershin (Map 3 – Sutherland)

- Planned improvements: Construction of new passing places as well as visibility improvements
- Communities benefitting: Ledmore, Invercassley, Altassmore, Inveran.
- Expected impacts:
 - Improved journey comfort, reliability and safety for all road users. Some minor improvements journey times during peak periods.
 - Improved adequacy for the volume and type of traffic using the route, including HGVs tourist coaches, caravans and camper vans. Help relieve conflicts between local users and tourist traffic during peak times.
 - Improved efficiency for local businesses, including forestry activities (the area is expected to see an increase in harvesting in the near future).
 - Improved access to key tourism sites and businesses in and around the area, including Ferrycroft Countryside Visitor Centre, the Tourist Information Centre in Lairg, the River Shin and the Falls of Shin Visitor Centre.
 - Improve access for local residents to services and employment in Lairg.

C1047 – Culnacraig to Drumrunie (Achiltibuie) (Map 3 – Sutherland)

- Planned improvements: Upgrades to passing places and visibility improvements
- Communities benefitting: Culnacraig, Polglass, Achiltibuie
- Expected impacts:
 - Improved route reliability, journey comfort and safety. Will make some impact on journey times and help improve safety along the corridor.
 - Improved access to tourism businesses and key attractions in the area including The Summer Isles Hotel, The Hydroponicom, Small Isles Foods as well as local beaches and other sites. Help improve the tourism offer of the area by making such attractions more easily accessible for tourists and coach parties.
 - Encourage the development of tourism, fish farming and food processing activities in the area by removing current constraints on the road.
 - Maintain the sustainability of local communities by improved accessibility to employment and key lifeline services in regional centres.

B8000 – Millhouse to Newton (Map 1 – Cowal)

- Planned improvements: Localised widening and visibility improvements. Some wall strengthening and road realignment.
- Communities benefitting: Strachur, Leanach, Largiemore, Otter Ferry, Kilfinan, Millhouse, Kames and Tighnabruich
- Expected impacts:
 - Improved journey quality and journey safety for all users. Minor journey time savings. The proposed intervention is likely to overcome the current weight restrictions on the route and address issues of suppressed demand.
 - Improved adequacy for the volume and type of traffic using the route, including forestry traffic, HGVs and tourist traffic.
 - Improved operational efficiency for local business users, particularly fish farming and forestry activities. Timber adjacent to the route is maturing and future harvesting is likely to place additional demands on the route from forestry vehicles. The planned intervention will help ensure the adequacy of the route for these needs.
 - Improved accessibility of the Cowal Peninsula in general, helping to attract new investment and encourage business growth in the area.
 - Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route, including restaurants, chalet parks and caravan parks.
 - Significant benefits for local residents in improving access to lifeline services and employment in Lochgilphead and beyond.
 - Improved access to ferry services for local residents and businesses.

B8035 – Salen/Gruline to Junct w A849 (Map 1 – Mull)

- Planned improvements: Road reconstruction including widening and localised realignment of the route, construction of new passing places.
- Communities benefitting: Communities in the South West of Mull, including Gruline, Gribun, Knock, Dhiseig, Balmeanach, Tioran, Balevulin, Ardvergnish and Glen Seilideir.
- Expected impacts:
 - The proposed intervention will improve safety on the route and allow passing, which will improve journey quality and safety along the road. Improved reliability and some improvements to the journey time on the route.
 - Improved access and efficiency for local businesses using the route, particularly forestry harvesting and fish farming businesses. Improved adequacy of the route for large vehicles.
 - Removal of weight restrictions will have a significant impact on the ability of businesses to transport goods along the route and may allow access to forestry sites where harvesting was stopped due to the condition of the road.
 - Promote tourism in the area through increased accessibility to remote parts of the island.

- Significant benefits for local residents in improving access to lifeline services and employment in Tobermory and beyond.
- Improved access to ferry services at Tobermory for local residents and businesses.

A880 – Ardbeg to Kilmun (Map 1 – Cowal)

- Planned intervention: provision of footways, minor road reconstruction, localised widening and other improvements.
- Communities benefitting: Ardbeg, Kilmun, Strone, Blairmore and Ardentinny.
- Expected impacts:
 - Improved journey quality and journey safety for all users. The provision of footways will also improve safety for pedestrians. Minor journey time savings. Improve the adequacy of the route for large forestry vehicles, buses and other HGVs.
 - Significant benefits expected for tourism in the area through improved access to tourist accommodation and attractions along the route, including forest walks and arboretum, an outdoor centre, all terrain vehicle driving, pony trekking and a golf course.
 - Improved access and efficiency for local businesses including key employers in the forestry and agriculture sectors. Improved access to timber transport facilities.
 - Significant benefits for local residents in improving access to local services and employment.
 - Complement other local initiatives promoting walking tourism in the area.
 - Improved ease of access for public bus services, with particular benefits for local residents and schoolchildren.

A839 – Rosehall to Lairg (Map 3 – Sutherland)

- Planned intervention: construction of new passing places as well as visibility improvements.
- Communities benefitting: Invercassley, Lairg and Altassmore.
- Expected impacts:
 - Improved journey quality, comfort and safety for all users, with some minor improvements to journey time. Prevent damage to road surface and improve adequacy of the route for larger vehicles. Allow more comfortable passing for oncoming vehicles.
 - Increased efficiency and improved access for existing businesses who rely on the route for transportation of goods, particularly forestry and agriculture sectors.
 - Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route including hotels and restaurants in Lairg and Rosehall, forest trails and walks, the Ferrycroft Countryside Visitor Centre the Falls of Shin Visitor Centre. Road improvements are expected to improve the general experience of the area for visitors.

- Improved access to employment and key services for local residents.

A865 – Clachan to Trumisgarry (Map 4 – North Uist)

- Planned intervention: Upgrade sections to dual track
- Communities benefitting: Communities along the west side of North Uist, including Bayhead, Tigharry and Sollas.
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users.
 - Improved efficiency and sustainability of local businesses, particularly in fish farming, agriculture and other sectors
 - Encourage expansion of businesses in the area, particularly in primary sectors and higher value added food processing sectors.
 - Improved access to the area to tourism businesses and key attractions – including RSPB reserve, Claddach Kirkibost Centre, local beaches, walks and fishing lochs. Help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
 - Significant benefits expected for local residents. Improved ease of access to employment and lifeline services, particularly for schoolchildren and local commuters. Help to link a large part of the island’s population together, opening up new communities for expansion and maintaining the sustainability of the region as a whole.

A884 – Strontian to Lochaline (Map 2 – Lochaber)

- Planned intervention: Road widening at key points along the route.
- Communities benefitting: Lochaline, Claggan, Strontian, Drimnin, Rhemore and Fiunary.
- Expected impacts:
 - Improved comfort and reliability for all users. Improved adequacy of the route for the type and volume of traffic relying on it. Some improvements to journey times.
 - Improved efficiency and sustainability for local businesses, particularly in timber extraction, fish farming and silica sand mining.
 - Benefits expected for tourism businesses through improved access to local hotels and other attractions along the route, including RSPB reserve and onward links to Mull.
 - Improved ease of access to local services and employment for communities along the route.
 - Improved local access to ferry services to and from Mull (via Lochaline).

A897 – Melvich to Helmsdale (Map 3 – Sutherland)

- Planned intervention: construction of new passing places as well as visibility improvements and verge improvements.
- Communities benefitting: Melvich, Dalmahaig, Forsinard, Lochside, Kinbrace and Kildonan.
- Expected impacts:
 - Improved journey quality, comfort and safety for all users, with some minor improvements to journey time. Prevent damage to road surface and improve adequacy of the route for larger vehicles. Allow more comfortable passing for oncoming vehicles.
 - Increased efficiency and improved access for existing businesses who rely on the route for transportation of goods, particularly agriculture and forestry activities.
 - Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route including to hotels, self catering accommodation, B&Bs and campsites. The route provides access to the RSPB visitor centre at Forsinard, which is important locally, a visitor centre at Helmsdale (Timespan Heritage Museum), and a guided tour of the gold rush at Strath Kildonan. Road improvements are expected to improve the general experience of the area for visitors.
 - Improved access to local services for communities along the route, helping to maintain the sustainability of the local population.

B8024 – Tarbert to Inverneill, round Knapdale (Map 1 – Kintyre)

- Planned intervention: road upgrades and improvements, including edge strengthening, localised corner widening and road realignment.
- Communities benefitting: Kilberry, Ormsary, Achahoish and Ellary.
- Expected impacts:
 - Widening of bends will improve visibility on the route and allow passing, which will improve the safety and reliability of the route. Improved journey quality and comfort for all users, with minor time savings.
 - Increased efficiency and improved access for existing businesses who rely on the route for transportation of goods, particularly the forestry and distillery sectors.
 - Improved access to the area to tourism businesses and key attractions including forest walks, ancient woodlands, fishing, the golf course, archaeology and the National Cycle Network.
 - Significant benefits for local residents in improving access to key services and employment in Tarbert and Lochgilphead.
 - Improved local access to ferry services at Tarbert.

B828/839 – Hell’s Glen to Rest and be Thankful (Map 1 – Cowal)

- Planned intervention: Upgrading of the route to double track in places, as well as upgrading passing places and localised road realignment.
- Communities benefitting: Lochgoilhead
- Expected impacts:
 - Improved journey time and reliability, improved comfort and reliability for all users. Improved adequacy of the route for the type and volume of traffic relying on it.
 - Increased efficiency and improved access for existing businesses who rely on the route for transportation of goods, particularly the forestry, agriculture and food and drink processing sectors.
 - Significant potential benefits to the tourism industry in the area by improving the adequacy of the road for coach traffic and motor homes and improving access to key sites, including Lochgoilhead National Activity Centre and Lochgoilhead holiday complex. Road improvements are expected to improve the general experience of the area for visitors.
 - Significant benefits for local residents in improving access to local services and employment.

A836/838 – Bettyhill to Rhiconich (Map 3 – Sutherland)

- Planned intervention: construction of new passing places as well as visibility improvements.
- Communities benefitting: Bettyhill, Coldbackie, Tongue, Achuldolvrach, Heilam, Eriboll, Polla, Durness, Portnancon and Richonich.
- Expected impacts:
 - Improved journey quality, comfort and safety for all users, with some minor improvements to journey time. Prevent damage to road surface and improve adequacy of the route for larger vehicles. Allow more comfortable passing for oncoming vehicles.
 - Increased efficiency and improved access for existing businesses who rely on the route for transportation of goods, particularly crofting, forestry (Bettyhill and Tongue plantations), salmon farming, mussels and oysters at Loch Eriboll.
 - Promote tourism in the area by improving accessibility to tourist attractions and businesses along the route including to hotels, self catering accommodation, B&Bs and campsites in Bettyhill, Tongue and Durness. The route is also part of the North West Highland Tourist Route. Road improvements are expected to improve the general experience of the area for visitors.
 - Improved ease of access to local services and employment for communities along the route.

Appendix A – Locally Significant Roads Network

**Table A1
Locally Significant Roads Network**

Area	Road Number	Route Description
Barra	A888	Castlebay to Northbay
Benbecula	B892	Benbecula link road
Caithness	A836 (2)	Thurso to John O' Groats
Caithness	B876	Wick to Castletown
Cowal	B8000	Millhouse to Newton
Cowal	B836	Glen Lean
Cowal	A880	Ardbeg to Kilmun
Cowal	B828/839	Hell's Glen to Rest and be Thankful
Easter Ross	B9176	Struie Hill (Alness to Ardgay)
Easter Ross	Tain to Portmahomack	Tain to Portmahomack
Easter Ross	A832 (2)	Fortrose to Cromarty
Easter Ross	B9175	A9 to Nigg
Eday	B9063	Backaland to Calfsound
Harris	B887	Bunavoneader to Hushinish
Harris	Rodel to Grosebay	Rodel to Grosebay
Hoy	B9047	Linkness to Hackness (South Walls)
Inverness	B861/851/862	Inverness to Fort Augustus
Inverness	A831	Beauly to Glen Affric
Islay	A847	Bridgend to Portnahaven
Jura	A846	Feolin Ferry to Ardlussa
Kintyre	B8024	Tarbert to Inverneill, round Knapdale
Kintyre	B842 (1)	Campbeltown to Kennacraig
Kintyre	B842 (2)	Southend to Campbeltown
Lewis	B8011	Garynahine to Uig
Lewis	B8060	Lemreway to Balallan
Lewis	A858 (1)	Carloway to Leurbost
Lewis	A858 (2)	Lower Barvas to Carloway
Lewis	A866	Stornoway to Portvoller
Lewis	B895	Newmarket to North Tolst (Ness)
Lochaber	B8007	Salen to Kilchoan (Ardnamurchan)
Lochaber	A884	Strontian to Lochaline
Lochaber	B8004	Acharacle to Ardtoe
Lorn	B8045	Port Ramsay to Kilcheran
Lorn	B844	Kilninver to Cuan Ferry
Mainland Orkney	A966	Finstown to Dounby via Tingwall
Mainland Orkney	A960	Kirkwall to Skail
Mainland Orkney	A961	St Margaret's Hope to Burwick
Mainland Orkney	A964	Kirkwall to Clouston
Mainland Orkney	A967	Cairston to Twatt
Mid Argyll	B840	Cladich to Ford (Loch Awe)
Mid Argyll	B8025	Kilmartin to Tayvallich
Moray	B9010/9102	Forres to Marypark
Moray	A939	Tomintoul to Cockbridge
Moray	A940	Forres to Grantown on Spey
Moray	A941	Dufftown to Rhynie

**Table A1
Locally Significant Roads Network**

Area	Road Number	Route Description
Moray	B9008/9/14	Tomintoul to Keith
Moray	B9040	Losssiemouth to Burghead
Mull	B8073	Tobermory to Salen via Calgary
Mull	B8035	Salen/Gruline to Junct w A849
North Uist	A865	Clachan to Trumisgarry
Rousay	B9064	Westness to Wasbister
Sanday	B9069/70	Stove to Northwall and Scar
Shapinsay	B9058/59	Edmonstone to Newlot
Skye	A855	Portree to Uig via Staffin
Skye	A851	Broadford to Armadale
Skye	A850	Skeabost to Sligachan via Dunvegan
Stronsay	B9062	Odie to Millgrip
Sutherland	A836/838	Bettyhill to Rhiconich
Sutherland	A897	Melvich to Helmsdale
Sutherland	A837	Ledmore Junction to Invershin
Sutherland	A836 (1)	Tongue to Lairg
Sutherland	C1047	Culnacraig to Drumrunie (Achiltibuie)
Sutherland	A839 (2)	Rosehall to Lairg
Sutherland	A839 (1)	Lairg to the mound
Sutherland	A894	Laxford Bridge to Inchnadamph
Wester Ross	A832 (1)	Braemore Junction to Gairloch
Wester Ross	A896	Kinlochewe to Strathcarron
Wester Ross	A890	Strathcarron to Auchtertyre
Westray	B9066	Rapness to Broughton and Langskail

Appendix B – Fragility Ranking

Table B1 Socio-Economic Fragility - Indicators and Scoring System			
Themes	Indicator	Data Source	Scoring System
Geographic	Single track	Data provided by Local Authorities	Score 1 point where at least 70% of route is single track
	Length single track	Data provided by Local Authorities	Score 0-3 points on rising scale to recognise the length of road which is single track. Over 50km of single track road = 3 points; 30-49km = 2 points; 10-29km = 1 point; less than 10km = 0 points.
	Remote Rural	Scottish Executive Urban-Rural Classification 2005-06	Score 1 point where areas served by the route are rated as "Remote Rural" in the Scottish Executive Urban-Rural Classification
	Island, no causeway link	Tribal analysis of routes	Score 1 point for routes serving islands located off other islands but not connected by a causeway
Demographic	Islands with pop<2500	GROS Mid year population estimates, 2005	Score 1 point where route serves islands with a population less than 2,500
	Pop Density <9pskm	GROS Mid year population estimates, 2005	Score 1 point where the area served by the route has a population density of less than 9 people per square kilometre
	Population loss	GROS Mid year population estimates, 2001 & 2005	Score 1 point where the area served by the route has shown population decline in recent years
	>20% of Pens age	GROS Mid year population estimates, 2005	Score 1 point where more than 20% of the population served by the route is of pensionable age
Economic	Unemployment	JSA Claimant Counts, July 2007	Score 1 point where the area served by the route shows above average unemployment rates
	Seasonality factor	JSA Claimant Counts, Jan - July 2007	Score 1 point where the area served by the route shows above average seasonal fluctuations in unemployment
	Long Term Unemployment	JSA Claimant Counts, July 2007	Score 1 point where the area served by the route shows long term unemployment rates of more than 25% above the regional average
	Primary reliance	Annual Business Inquiry, 2005	Score 1 point where the area served by the route shows above average reliance on employment in primary industries
	OVERALL SCORE		Sum of all scores across all indicators
	Banding		Band 3 = High fragility areas with a total score of 8 or above
			Band 2 = Medium fragility areas with a total score of 6-7
			Band 1 = Low fragility areas with a total score of 5 or less

Table B2 Fragility Ratings														
Road Number	Geographic				Demographic				Economic				Overall	
	Single track	Length single track	Remote Rural	Island, no cause. link	Islands with pop<2500	Pop Density	Popn loss	>20% of Pens age	Unempl oymnt	Seasona lity factor	Long Term Unemp	Primary reliance	TOTAL	Rating
A836/838	1	3	1	0	0	1	1	1	1	1	1	1	12	High
A837	1	2	1	0	0	1	1	1	1	1	1	1	11	High
A888	1	0	1	1	1	1	1	1	1	1	1	1	11	High
A865	1	1	1	1	1	1	1	1	1	0	1	1	11	High
A897	1	3	1	0	0	1	1	1	1	0	1	1	11	High
B887	1	1	1	0	0	1	1	1	1	1	1	1	10	High
B9047	1	2	1	1	1	1	0	1	0	1	0	1	10	High
B840	1	2	1	0	0	1	1	1	1	0	1	1	10	High
B8024	1	2	1	0	0	1	1	1	0	0	1	1	9	High
B8035	1	2	1	0	1	1	0	1	0	1	0	1	9	High
B8073	1	2	1	0	1	1	0	1	0	1	0	1	9	High
B9069/70	0	1	1	1	1	1	0	1	1	0	1	1	9	High
B9062	1	1	1	1	1	1	0	1	0	1	0	1	9	High
A839 (2)	1	1	1	0	0	1	0	1	1	1	1	1	9	High
C1047	1	1	1	0	0	1	1	1	0	1	1	1	9	High
A832 (1)	1	3	1	0	0	1	0	1	0	0	1	1	9	High
B8000	1	2	1	0	0	1	0	1	1	0	0	1	8	High
B836	1	1	1	0	0	1	0	1	1	0	1	1	8	High
B9176	1	1	0	0	0	1	1	1	1	1	0	1	8	High
B9063	1	0	1	1	1	1	0	1	0	1	0	1	8	High
Rodel to Grosebay	1	1	1	0	0	1	0	1	1	0	1	1	8	High
B8011	0	2	1	0	0	1	1	1	0	1	0	1	8	High
B8060	0	0	1	0	0	1	1	1	1	1	1	1	8	High
B8007	1	2	1	0	0	1	0	1	0	1	0	1	8	High
B9064	1	1	1	1	1	1	1	1	0	0	0	0	8	High
B9058/59	1	1	1	1	1	1	1	1	0	0	0	0	8	High
A855	0	2	1	0	0	1	0	1	1	1	1	0	8	High
A896	1	3	1	0	0	1	0	1	0	0	0	1	8	High

**Table B2
Fragility Ratings**

Road Number	Geographic				Demographic				Economic				Overall	
	Single track	Length single track	Remote Rural	Island, no cause. link	Islands with pop<2500	Pop Density	Popn loss	>20% of Pens age	Unempl oymnt	Seasona lity factor	Long Term Unemp	Primary reliance	TOTAL	Rating
A846	1	1	1	0	1	1	0	0	0	1	0	1	7	Medium
A836 (2)	1	2	1	0	0	1	0	1	1	0	0	0	7	Medium
B828/839	1	1	1	0	0	1	0	1	0	0	1	1	7	Medium
A884	1	1	1	0	0	1	0	1	0	1	0	1	7	Medium
B8045	1	1	1	0	1	1	0	1	0	0	0	1	7	Medium
B844	1	1	1	0	0	1	0	1	1	0	0	1	7	Medium
A836 (1)	1	2	1	0	0	1	0	1	1	0	0	0	7	Medium
A894	0	0	1	0	0	1	0	1	1	1	1	1	7	Medium
B9066	0	0	1	1	1	1	0	1	0	1	0	1	7	Medium
Benbecula link	0	0	1	1	1	1	1	0	1	0	0	1	7	Medium
A967	0	0	1	1	1	1	0	1	0	1	0	1	7	Medium
A858 (1)	0	0	1	0	0	1	0	1	1	1	1	1	7	Medium
A880	0	1	1	0	0	1	0	1	1	0	1	0	6	Medium
Tain to Portmahomack	1	1	1	0	0	1	0	1	0	1	0	0	6	Medium
A847	0	1	1	0	0	1	0	1	0	1	0	1	6	Medium
B8004	1	0	1	0	0	1	0	1	0	1	0	1	6	Medium
B8025	1	1	1	0	0	1	0	1	0	0	0	1	6	Medium
B9010/9102	0	1	0	0	0	1	0	1	0	1	1	1	6	Medium
A839 (1)	0	0	1	0	0	1	0	1	0	1	1	1	6	Medium
A858 (2)	0	0	1	0	0	1	0	1	1	0	1	1	6	Medium
A964	0	0	1	1	1	1	0	0	0	1	0	1	6	Medium
B9175	1	1	0	0	0	1	0	0	1	1	0	0	5	Low
A831	1	1	0	0	0	1	0	1	0	0	0	1	5	Low
B861/851/862	0	2	0	0	0	1	0	0	0	1	0	1	5	Low
B842 (1)	0	1	0	0	0	1	1	1	0	0	0	1	5	Low
B895	0	0	1	0	0	1	0	0	0	1	1	1	5	Low
A961	0	0	1	0	0	1	0	1	0	1	0	1	5	Low
A940	0	0	0	0	0	1	0	1	1	0	1	1	5	Low

**Table B2
Fragility Ratings**

Road Number	Geographic				Demographic				Economic				Overall	
	Single track	Length single track	Remote Rural	Island, no cause. link	Islands with pop<2500	Pop Density	Popn loss	>20% of Pens age	Unempl oymnt	Seasonality factor	Long Term Unemp	Primary reliance	TOTAL	Rating
A850	0	0	1	0	0	1	0	1	0	1	0	1	5	Low
A851	0	1	1	0	0	1	0	0	0	0	1	1	5	Low
B876	0	0	1	0	0	1	1	0	1	0	0	0	4	Low
B842 (2)	0	0	0	0	0	1	0	1	1	0	0	1	4	Low
A960	0	0	1	0	0	1	0	0	0	1	0	1	4	Low
A939	0	0	1	0	0	1	0	1	0	1	0	0	4	Low
A941	0	0	0	0	0	1	1	1	0	0	0	1	4	Low
A890	0	0	1	0	0	1	0	0	0	1	0	1	4	Low
A832 (2)	1	1	0	0	0	0	0	1	0	0	0	0	3	Low
A866	0	0	0	0	0	0	1	1	1	0	0	0	3	Low
A966	0	0	1	0	0	1	0	1	0	0	0	0	3	Low
B9008/9/14	0	0	0	0	0	1	0	1	0	0	0	1	3	Low
B9040	0	0	0	0	0	0	0	0	0	0	0	0	0	Low

Appendix C – Eligibility Status

Table C1 Eligibility Status					
Authority	Route	Type of Intervention	Timescale	Estimated Cost (£m)	Eligibility
Eligible Routes					
THC	A855	Upgrade to double track	3yrs	1	Eligible
THC	A896	Passing places/visibility improvements	3yrs 4 phases	1	Eligible
THC	B8007	Passing places/visibility improvements	3yrs 4 phases	1	Eligible
ABC	B8073	Localised widening, realignment and visibility improvements	25 weeks	1	Eligible
OC	A964	Widening and re-alignment	2008/09-2010/11	2.3	Eligible
WI	B8011	Upgrade sections to dual track	1-3 yrs	4	Eligible
ABC	B836	Localised widening, realignment and visibility improvements	15 weeks	1	Eligible
WI	A858 (2)	Upgrade sections to dual track	1-3 yrs	2	Eligible
ABC	A846	Road upgrading. Localised widening, realignment and visibility improvements	12 weeks	0.3	Eligible
WI	A858 (1)	Upgrade sections to dual track	1-3 yrs	0.7	Eligible
ABC	B844	Upgrade to dual track in sections and other improvements	20 weeks	2	Eligible
THC	A837	Passing places/visibility improvements	3yrs 2 phases	0.5	Eligible
THC	C1047	Passing places/visibility improvements	3yrs 3 phases	0.75	Eligible
ABC	B8000	Localised widening, realignment and visibility improvements	25 weeks	2	Eligible
ABC	B8035	Localised widening, realignment and visibility improvements	25 weeks	1.5	Eligible
ABC	A880	Provision of new footways, localised widening and other improvements	26 weeks	1.5	Eligible
THC	A839 (2)	Passing places/visibility improvements	1-2 yrs	0.25	Eligible
WI	A865	Upgrade sections to dual track	1-3 yrs	2	Eligible
THC	A884	Strip widening	3 yrs 2 phases	0.5	Eligible
THC	A897	Upgrade passing places/improve visibility at bends/verge improvements	3yrs over 10 phases	2.5	Eligible
ABC	B8024	Localised widening, realignment and visibility improvements	12 weeks	0.5	Eligible
ABC	B828/839	Upgrade to double track in places, upgrade passing places, local realignment.	25 weeks	2	Eligible
THC	A836/838	Passing places/visibility improvements	3yrs 3 phases	0.75	Eligible
THC	A832 (1)	Visibility improvements/widening	1-2 yrs	0.25	Eligible
THC	A836 (1)	Passing places/visibility improvements	3yrs 2 phases	0.5	Eligible
WI	Benbecula link	Upgrade sections to dual track	1-3 yrs	2	Eligible

Authority	Route	Type of Intervention	Timescale	Estimated Cost (£m)	Eligibility
ABC	B8025	Localised widening, realignment and visibility improvements	12 weeks	0.7	Eligible
ABC	B8045	Localised widening, realignment and visibility improvements	12 weeks	0.5	Eligible
WI	A888	Upgrade sections to dual track	1-3 yrs	2	Eligible
WI	Rodel to Grosebay	Widening and realignment at key points	1-3 yrs	0.25	Eligible
ABC	A847	Localised widening, realignment and visibility improvements	12 weeks	0.5	Eligible
THC	B8004	Passing places upgrade	1-2 yrs	0.1	Eligible
WI	B8060	Upgrade sections to dual track	1-3 yrs	2	Eligible
ABC	B840	Localised widening, realignment and visibility improvements	12 weeks	0.8	Eligible
Routes with no suitable project identified					
WI	B887				No project
OC	B9047				No project
OC	B9058/59				No project
OC	B9062				No project
OC	B9063				No project
OC	B9064				No project
OC	B9069/70				No project
THC	B9176				No project
OC	A967				No project
OC	B9066				No project
THC	A836 (2)				No project
THC	A839 (1)				No project
THC	A894				No project
MC	B9010/9102				No project
Routes serving areas rated as 'Low Fragility'					
WI	A866				Low fragility
WI	B895				Low fragility
OC	A960				Low fragility
OC	A961				Low fragility
THC	B876				Low fragility

Authority	Route	Type of Intervention	Timescale	Estimated Cost (£m)	Eligibility
THC	A832 (2)				Low fragility
THC	B9175				Low fragility
THC	A850				Low fragility
THC	A851				Low fragility
THC	Tain to Portmah.				Low fragility
OC	A966				Low fragility
MC	B9008/9/14				Low fragility
ABC	B842 (1)				Low fragility
MC	A939				Low fragility
MC	A940				Low fragility
MC	A941				Low fragility
MC	B9040				Low fragility
THC	B861/851/862				Low fragility
THC	A890				Low fragility
THC	A831				Low fragility
ABC	B842 (2)				Low fragility

Appendix D – Route Summaries

Appendix D: Route by Route Summaries

HITRANS

04 April 2008

Services for life

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1 Introduction

1.1.1 As section 3 of the main report discusses, the analysis of roads carried out for this study has identified a total of 23 potential route interventions on the network which offer a “good” or “very good” fit with the stated objectives of the locally significant roads strategy. For each of these interventions, this appendix provides a summary of the characteristics of the area served by the route to be upgraded and the potential impacts of the intervention. Each summary is structured to provide an overview of:

- Route characteristics: including length, location, traffic volumes, type of traffic and the adequacy of the route for current users.
- Socio economic characteristics: discussion of the characteristics of communities which rely on the route, including population, employment structure, unemployment, population density, local services and employers.
- Proposed intervention: details of the road upgrades proposed for the route, including an assessment of the potential cost and timescale of the project
- Impact: an assessment of the potential impact of the upgrade on businesses and residents in the area.

1.1.2 Within this appendix routes are grouped together by local authority area. The analysis begins with routes located in Argyll and Bute before going on to provide summaries for routes located in the Highland council, Orkney and Western Isles areas.

2 Argyll and Bute Council

2.1 B8073: Tobermory to Salen via Calgary (Map 1 – Mull)

Route Characteristics

- 2.1.1 The B8073 is located on the Isle of Mull and runs from Tobermory to Salen via Calgaray. The route is 49.1 kilometres long and is a single track road throughout its length with passing places. The route provides the sole means of access to and from the main settlement of Tobermory for most communities in the area.
- 2.1.2 The route is used by daily commuters, provides access to the local school and is also used seasonally by tourists. No detailed traffic data exists for the route, but the range of vehicles using the road includes private cars, goods vehicles (serving agriculture, aquaculture and forestry businesses), service vehicles and PSVs.
- 2.1.3 The B8073 provides local access to ferry links at Tobermory and there is a public bus service (494) which operates along the route from Tobermory to Calgary. The bus service is available three times a day, Monday to Friday and twice a day on Saturdays.
- 2.1.4 Consultees noted a number of problems with the B8073. The route is characterised by poor vertical geometry, with inadequate verge widths, poor drainage and poor visibility between bends. The alignment of the road is also poor, making journeys uncomfortable. Some sections of the route are constructed on peat and have a very weak foundation. This causes further problems, as these sections are subject to settlement and cracking, and require maintenance. A weight restriction for the B8073 is currently being implemented by the council, which will have a severe impact on businesses transporting goods on this route.
- 2.1.5 This route is rated by the council as the locally significant road in most need for improvement in Argyll and Bute. For the purposes of this study the severity of constraints currently in place on the road were rated as “High”.

Socio Economic Characteristics

- 2.1.6 Communities served by the B8073 include: Dervaig, Croig, Calgary, Penmore, Torloisk, Ulva, Kilninian, Ballygown, Killiechronan, Caliach and Killiemor. In 2005 the total population of the defined area was estimated at some 634 people, 21% of whom are of pensionable age. This proportion is relatively low compared to the other defined areas in Argyll and Bute. Over the period 2001 to 2005, mid year estimates show the population of the area rising by some 60 people against a background of little net change across the rest of Argyll and Bute.
- 2.1.7 The area has a population density of 0.3 persons per sq km, one of the lowest out of all the areas in Argyll and Bute. All of the datazones in this defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 2.1.8 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.
- 2.1.9 As at July 2007, there were no Job Seekers Allowance claimants recorded for the area. However, the area shows above average seasonal fluctuations in unemployment with an

estimated 1.4% of the working age population registered as unemployment during the winter months.

2.1.10 The B8073 provides links to local services in Dervaig, including a shop, post office, sports pitch, Dervaig Village Hall and Dervaig Primary School. The route also provides links to Ulvah Primary School. In addition, the route provides access to a number of tourist activities and services, including walks, wildlife trips, Calgary beach and ferry links to Ulvah.

2.1.11 In 2005 there were a total of 258 employee jobs in the area. The area shows an above average reliance on employment in primary industries, with sectors such as agriculture, forestry and fish farming accounting for 17% of all employment. The importance of tourism to the area's economy is reflected in the high proportion of employment concentrated in hotels and catering activities (18%). Overall, key sectors in the area include forestry, aquaculture, agriculture, tourism and the distilling (at the Tobermory Distillery). There are also a number of local craft businesses in the area.

Proposed Intervention

2.1.12 The proposed intervention for the B8073 involves road upgrades and geometrical improvements. The road upgrades will include widening, localised realignment, and the digging out of foundations and re-surfacing of sections of the road. The improvements will be focused on the pinch points of the road, such as the sections of the road built on peat; the Dervaig area, where the alignment of the road is very poor; and the section which links to the forestry areas.

2.1.13 The start date for the proposed intervention is spring/summer 2008, with a duration of 25 weeks. The estimated costing of the proposed intervention is £1 million.

Impacts

2.1.14 Specific communities expected to benefit from the intervention include those located in settlements such as: Dervaig, Croig, Calgary, Penmore, Torloisk, Ulva, Kilninian, Ballygown, Killiechronan, Caliach and Killiemor.

2.1.15 Widening of bends is expected to improve safety on the route and allow passing, which will help to prevent the stop start nature of driving on the route. This will improve the reliability and make some improvements to the journey time on the route.

2.1.16 The proposed route upgrades are expected to improve access and efficiency for local businesses using the route, particularly forestry harvesting and fish farming businesses. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and some journey time improvements. The removal of weight restrictions will have a significant impact on the ability of businesses to transport goods along the route.

2.1.17 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route. Key attractions along the route include the villages of Dervaig and Kimnian, beaches at Calgary. The route also provides onward links to attractions in the South of Mull and Iona, as well as links to and from attractions in Tobermory.

2.1.18 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Tobermory and beyond. As noted above, the route is used daily by commuters accessing employment in Tobermory and elsewhere via ferry route to Kilchoan. Removal of route constraints will also assist

local service providers' access settlements along the route, so helping to maintain the viability of local communities.

- 2.1.19 Consultees approached for this study described the proposed intervention as likely to provide significant benefits for both businesses and residents in the area.

2.2 B836: Glen Lean (Map 1 – Cowal)

Route Characteristics

- 2.2.1 The B836 is located on the Cowal peninsula and runs from Auchenbreck to Clachaig via Glen Lean. The road is 17.4 kilometres long and is a single track road of variable width, with passing places.
- 2.2.2 The estimated average August flow of traffic is 834 vehicles per day and there is considerable movement in both directions along the route. Significant detours would be required, if it was not possible for traffic to use this route.
- 2.2.3 The type of vehicles using the road includes private cars, goods vehicles (heavy forestry vehicles and distillery vehicles), service vehicles and PSVs. A new biomass plant is planned in the area, which is likely to place additional demands on the road from construction vehicles and timber vehicles.
- 2.2.4 The route provides access to ferry links at Dunoon and Colintrave to Bute and Kintyre and onward. Two public bus services (478 and 479) operate along the route, making one to four journeys per day. The road is also used by touring coaches.
- 2.2.5 The B836 is characterised by long steep gradients, poor horizontal geometry and poor drainage. In addition, some parts of the route, along the steep hills, are exposed. The current road provision is inadequate for the volume and type of traffic using the route, such as forestry vehicles and touring coaches.
- 2.2.6 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as "High".

Socio Economic Characteristics

- 2.2.7 Communities served by the B836 include: Clachaig, Ardtaraig and Auchenbreck. In 2005, the total population of the defined area was estimated at 2,136 people, 29% of whom are of pensionable age. This proportion is among the highest of the defined areas in Argyll and Bute. In common with the majority of the areas in Argyll and Bute examined in this study, mid year estimates show the area as experiencing modest population growth over the period 2001 to 2005 (net growth of 3%).
- 2.2.8 The area has a population density of 1.0 persons per sq km, relatively low compared to the other defined areas in Argyll and Bute. Further, all of the datazones in this area are rated as "remote rural" in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 2.2.9 In July 2007, 2.5% of the working age population were in receipt of Job Seekers Allowance, well above the HITRANS average of 1.8% for the same period. Further, the area shows relatively high long term unemployment rates compared to the regional average – 17% of all claimants in July 2007 had been unemployed for more than 6 months.

- 2.2.10 The route provides access to ferry links to Bute and Kintyre and onward. The B836 also provides access to community services in Dunoon, which is the main service centre for the communities served by the route. In addition, the road provides access to tourist routes (including a touring coach route) and tourist activities, such as Holy Loch Marina at Sandbank, near Dunoon, which has pontoons for recreational and visiting boats.
- 2.2.11 In 2005 there were a total of 758 employee jobs in the area, with the area having an above average reliance on primary sectors. Employment in primary sectors (including forestry, agriculture and fish farming) accounted for 9% of all employment. The importance of the tourism sector to the area is indicated by the high proportion of employment concentrated in hotels and catering activities (27% of all employment). The key sectors in the area include: forestry, tourism, agriculture and fish farming. The Hydroelectric scheme is also a key employer.
- 2.2.12 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 2.2.13 The proposed intervention for the B836 involves minor road upgrades, including visibility improvements and local widening. The drainage system of the route will also be reconstructed, which will be important for the reliability of the route. The proposed intervention will complement existing improvement works being carried out on the route by the Council. The upgrades will focus on the pinch points of the route, which include Craigendive Hill; the section to the east of Clachaig village; and the section round Loch Striven, which has steep hills.
- 2.2.14 The start date for the proposed intervention is 2008/09, with a duration of 15 weeks. The estimated costing of the proposed road upgrades is £1 million.

Impacts

- 2.2.15 Specific communities expected to benefit from the intervention include those located in settlements such as: Clachaig, Ardtaraig and Auchenbreck
- 2.2.16 The main impacts from the proposed road upgrades are expected to be improved route reliability and journey comfort. The upgrades will also result in some journey time improvements and help improve safety along the corridor.
- 2.2.17 The proposed route upgrades are expected to improve access and efficiency for local businesses which rely on the route for transport of goods, particularly forestry harvesting and fish farming businesses. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and minor journey time improvements. The upgrade will also assist in the expansion of new developments in the area including a proposed Biomass facility
- 2.2.18 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route and improving links between remote areas. In general route upgrades such as this are expected to assist the promotion of tourism in Argyll and Bute as a whole by improving the ability of tourists and coach tours to move between remote parts of the region and access onward links to ferry services at Colintrave and Dunoon.
- 2.2.19 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Dunoon and beyond. As noted

above, the route is used daily by commuters accessing employment in Dunoon and elsewhere via ferry route to Greenock. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.

- 2.2.20 Consultees approached for this study described the proposed intervention as likely to have a 'high' level of benefits for business users in the area and 'medium' benefits for local residents.

2.3 A846: Feolin Ferry to Ardlussa (Map 1 – Jura)

Route Characteristics

- 2.3.1 The A846 is located on the Isle of Jura and provides a connection between Feolin Ferry and Ardlussa. The route runs along the south of the Islands via Cabrach and Craighouse and is 13 kilometres long. It is a single track of variable width from 3 – 3.5m.
- 2.3.2 There are no detailed traffic data for this route; however, the road is used by private cars, goods vehicles, service vehicles and PSVs. The route provides access to ferry links to Port Askaig to connect with ferry services from Islay to the mainland. A public bus service (456) serves the island from Feolin to Inverlussa and makes one to four journeys per day.
- 2.3.3 The A846 has a weak foundation and the retaining walls are in poor condition. The current road provision is also characterised by very poor geometry, poor visibility, excessive gradients and poor drainage. Overall, for the purposes of this study the severity of constraints on the route were rated as "high".

Socio Economic Characteristics

- 2.3.4 The Isle of Jura is served by this route. In 2005 the total population of the area was estimated at 818 people, 19% of whom are of pensionable age. This area has the lowest proportion of people of pensionable age out of all the defined areas in Argyll and Bute. In common with the majority of other areas in Argyll and Bute, this area showed little net population change over the period 2001 to 2005 (net growth of 2%).
- 2.3.5 The area has a population density of 0.3 persons per sq km, one of the lowest out of all the areas in Argyll and Bute. Further, all of the datazones in this defined area are rated as "remote rural" in the Scottish Government Urban-Rural Classification.
- 2.3.6 In July 2007, 1.0% of the working age population were in receipt of Job Seekers Allowance, slightly below the average for HITRANS area as a whole. The area shows above average seasonal fluctuations in unemployment, with the number of claimants rising by 50% over the period January to July.
- 2.3.7 The route provides links to community services at Craighouse, including the Small Isles Primary School, the Council's Service Point and the Pier. The route also provides links to tourist accommodation, such as local hotels and B&Bs; and tourist activities, including walking, sailing, yacht facilities, shooting and the distillery.
- 2.3.8 In 2005 there were a total of 327 people employed in the area and the area has an above average reliance on employment in primary industries. Employment in primary sectors and food and drink processing is relatively high, accounting for 32% and 15% respectively of total employment in the area. Employment in hotels and catering is also important, accounting for 8% of all employment. Indeed, the key sectors in the area are forestry, tourism, distilling (Isle of Jura Distillery), agriculture and estate management. The island also has a small engineering service.

- 2.3.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "medium fragility".

Proposed Intervention

- 2.3.10 The proposed intervention for the A846 involves major reconstruction of the road, as well as minor realignment of the route. The start date of the proposed intervention is summer 2008, with a duration of 12 weeks. The estimated costing of the road improvements is £300,000.

Impacts

- 2.3.11 All communities on the Isle of Jura are expected to benefit from the intervention proposed for this route.
- 2.3.12 The route upgrades planned for this area are expected to result in improved journey reliability, comfort and safety for all users along with some improvements to journey time. Overall, the upgrades are expected to help provide the area with a road infrastructure more adequate for the type and volume of traffic which rely on it.
- 2.3.13 With regard to existing businesses, the proposed upgrades are expected to improve access and efficiency for local businesses which rely on the route for transport of goods, particularly distillery businesses, forestry harvesting and agriculture. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local employers.
- 2.3.14 The route upgrades are also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route. Key businesses and attractions served by the route include Jura Distillery, Keills conservation village, the Jura Hotel, Small Isles Bay as well as the Paps of Jura and numerous beaches along the coastline.
- 2.3.15 Significant benefits expected for local residents as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services on Jura and beyond, through improved access to ferry services from Feolin Ferry. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas.
- 2.3.16 Consultations carried out for this study suggested that the proposed intervention would result in "medium" benefits for local businesses and "high" benefits for local residents and communities.

2.4 B844: Kilninver to Cuan Ferry (Map 1 – Lorn)

Route Characteristics

- 2.4.1 Located in Lorn, the B844 provides a connection from Kilninver to Cuan Ferry via Clachan, Seil and Balvicar. The B844 is 14.7 kilometres of single track road with passing places – some sections of the road are widened to between 4.8m and 5.5m.
- 2.4.2 The estimated average August flow of traffic is 1,912 vehicles per day and the road is used by private cars, goods vehicles (agriculture and forestry), service vehicles and

PSVs. The road is a key link for residents commuting for employment in Oban and for businesses serving the Oban area.

- 2.4.3 The route provides local access to ferry links to Luing and a public bus service (418) operates along the route between Kilninver and North Cuan, making between one and four journeys per day.
- 2.4.4 Consultees approached for this study described the B844 as having problems with poor geometry, poor drainage, mud slips and inadequate verge widths. The current road provision is inadequate for the type of traffic which uses it and this leads to suppressed demand for the route. For the purposes of this study the severity of constraints on the route was rated as “high”.

Socio Economic Characteristics

- 2.4.5 Communities served by the B844 include: Kilninver, Clachan Seil, Balvicar, Ellenabeich, Easdale and Luing. In 2005 the total population of the area was estimated at 864 people, 27% of whom are of pensionable age. Mid year population estimates show the area experiencing modest population growth over the period 2001 to 2005 (net growth of 3%).
- 2.4.6 The area has a population density of 4.6 persons per sq km, the highest population density out of all the defined areas in Argyll and Bute. All of the datazones in this defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification. As such, all settlements in the area are located more than 30 minutes drivetime from a settlement of more than 10,000 people.
- 2.4.7 In July 2007, 2.0% of the working age population were in receipt of Job Seekers Allowance, an unemployment rate slightly above the HITRANS average of 1.8% for the same period.
- 2.4.8 The route provides links to the local primary schools at Kilninver and Easdale. The route also provides access to a range of tourist services and activities, including hotels, B&Bs, restaurants, the local yachting centre, wildlife boat trips, and the conservation village of Ellenabeich (a popular tourist destination).
- 2.4.9 In 2005 there were a total of 160 employee jobs in the area. The area has an above average reliance on employment in primary industries, with employment in agriculture and forestry activities accounting for 10% of all employment. Employment in the hotels and catering sector accounted for only 4% of total employment. The key sectors in the area are agriculture (there are extensive farm businesses in the area) and forestry as well as a boatyard at Balvicar.
- 2.4.10 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

- 2.4.11 The B844 requires upgrading to two carriageways (widening to 6m) over much of its length. The proposed intervention will complement existing improvement works being carried out on the route by the Council. The start date for the proposed road improvements is summer 2009, with a duration of 20 weeks. The estimated costing of the proposed intervention is £2 million.

Impacts

- 2.4.12 Communities likely to benefit from the proposed intervention include Kilninver, Clachan Seil, Balvicar, Ellenabeich, Easdale and Luing.
- 2.4.13 The proposed route upgrades are expected to result in improved journey comfort and reliability for all road users as well as some improvements to journey times. Overall, the upgrade will help address issues of suppressed demand along the route and relieve pressure on other routes.
- 2.4.14 With regard to existing businesses, the proposed upgrades are expected to improve access and efficiency for local businesses which rely on the route for transport of goods, particularly forestry harvesting and agriculture. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local employers.
- 2.4.15 In addition to the primary sectors, the road upgrade is also expected to help promote tourism in the area by providing improved access to tourism businesses and key sites including those at Seil, Easedale and Luing.
- 2.4.16 Significant benefits expected for local residents as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Oban and beyond, through improved access to the strategic road network. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas.
- 2.4.17 Consultees approached for this study also noted the potential wider benefits of the upgrade, particularly with regard to widening labour catchment areas for businesses located in the growing Oban economy.
- 2.4.18 In addition to these benefits, the route upgrade would also complement other proposed developments in the area, including the potential construction of a fixed link to Luing.
- 2.4.19 Overall, consultees suggested that the proposed intervention would result in “medium” benefits for local businesses and “high” benefits for local residents and communities.

2.5 B8000: Millhouse to Newton (Map 1 – Cowal)

Route Characteristics

- 2.5.1 The B8000 runs down the west side of the Cowal peninsula from Newton to Millhouse via Largiemore, Otter Ferry and Kilfinan. The route is 40 kilometres long and is described as a “tortuous” single track road with variable width. The route also has an inadequate number of passing places.
- 2.5.2 The estimated average August traffic flow is 202 vehicles per day and the road is used by private cars, goods vehicles (forestry vehicles), service vehicles and PSVs. There are two public bus services operating along the route: service 476 serves Leanach, and makes between one and four journeys per day; and service 473 serves the route from Millhouse to Largiemore, however it does not operate on a daily basis.
- 2.5.3 The road geometry of the B8000 is poor and there are problems with poor drainage. There are also weight restrictions on the section of road from Otter Ferry north. The current road provision is inadequate and this leads to suppressed demand for the route.

Timber adjacent to the route is mature and future harvesting is likely to place additional demands on the road from forestry vehicles.

Socio Economic Characteristics

- 2.5.4 Communities served by the B8000 include: Strachur, Leanach, Largiemore, Otter Ferry, Kilfinan, Millhouse, Kames and Tighnabruich. In 2005 the total population of the area was estimated at 1,340, 32% of whom are of pensionable age. Indeed, the area has the highest proportion of people of pensionable age out of all the defined areas in Argyll and Bute. Over the period 2001 to 2005, the area showed almost no change in population (net growth of 1%).
- 2.5.5 The area has a population density of 4.1 persons per sq km, the second highest population density of all of the defined areas in Argyll and Bute. All of the datazones in this defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification.
- 2.5.6 In July 2007, 2.1% of the working age population were in receipt of Job Seekers Allowance, an unemployment rate higher than the HITRANS average of 1.8% for the same period.
- 2.5.7 The route provides access to the main service centres for these communities, which are Inveraray and Dunoon. The route also provides links to local services at Otter Ferry, including the post office, pub and pontoons. In terms of tourist services, the road provides links to various chalets locations, a caravan park, restaurants and boat moorings.
- 2.5.8 In 2005 there were a total of 236 employee jobs in the area and the area showed an above average reliance on primary industries. Employment in primary sectors accounted for 16% of all employment in the area, while the hotels and catering sector was also important (employment in this sector accounted for 10% of total employment). The key sectors in the area are forestry, agriculture, fish farming, tourism and restaurants.
- 2.5.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

- 2.5.10 The proposed intervention of the B8000 involves wall strengthening and road realignment, and is expected to result in the removal of weight restrictions on the route. The start date for the proposed improvement works is 2008/09, with a duration of 25 weeks. The estimated costing of the proposed intervention is £2 million.

Impacts

- 2.5.11 Communities expected to benefit directly from the road upgrade include Strachur, Leanach, Largiemore, Otter Ferry, Kilfinan, Millhouse, Kames and Tighnabruich
- 2.5.12 The proposed road upgrade is expected to result in improved journey quality and journey safety for all users alongside some minor journey time savings. The proposed intervention is likely to overcome the current weight restrictions on the route and address issues of suppressed demand.
- 2.5.13 With regard to existing businesses, the proposed upgrades are expected to improve access and efficiency for local businesses which rely on the route for transport of goods, particularly forestry harvesting and fish farming. These impacts will arise through

improved adequacy of the route for large vehicles (including forestry traffic, HGVs and tourist traffic) reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local employers.

- 2.5.14 Timber adjacent to the route is maturing and future harvesting is likely to place additional demands on the route from forestry vehicles. The planned intervention will help ensure the adequacy of the route for these needs.
- 2.5.15 Overall, the upgrades are expected to improve the accessibility of the Cowal Peninsula in general, helping to attract new investment and encourage business growth in the area. Consultees noted that, compared to other routes in Argyll and Bute, this intervention offered most potential for helping to attract new businesses.
- 2.5.16 The intervention is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route, including restaurants, chalet parks and caravan parks.
- 2.5.17 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Lochgilphead and beyond, through improved access to ferry services and the strategic road network. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas.
- 2.5.18 Overall, consultees approached for this study rated the potential economic impacts of the intervention as “high”, although the benefits to local residents were not expected to be as significant as those seen in other areas.

2.6 B8035: Salen/Gruline to Junction with A849 (Map 1 – Mull)

Route Characteristics

- 2.6.1 The B8035 runs from Salen to Gruline then round the west side of the Isle of Mull to the junction with the A849 (near Uluvait). The route is 32.6 kilometres of single track road with passing places.
- 2.6.2 The route is used daily by commuters and provides access to the local school. The road is also used seasonally by tourists. While no detailed traffic exists for the route, the type of vehicles using the road includes private cars, goods vehicles (agriculture, aquaculture and forestry), service vehicles and PSVs (including touring coaches). There are no public transport services operating along this route; only school contract services.
- 2.6.3 The B8035 is characterised by having poor road geometry, inadequate widths and poor drainage. A weight restriction for the route is currently being implemented by the council, which will have a severe impact on businesses transporting goods on this road.
- 2.6.4 Overall, for the purposes of this study the severity of constraints on the route were rated as “High”.

Socio Economic Characteristics

- 2.6.5 Communities served by the B8035 include: Gruline, Gribun, Knock, Dhiseig, Balmeanach, Tioran, Balevulin, Ardvergnish and Glen Seilisdeir. In 2005 the total population of the area was estimated at 634, 21% of whom are of pensionable age. The area has a relatively low proportion of people of pensionable age compared to the other defined areas in Argyll and Bute. Over the period 2001 to 2005, the area showed net population

growth of around 60 residents, against a background of little change across the rest Argyll and Bute.

- 2.6.6 The area has a population density of 0.3 persons per sq km, one of the lowest population densities out of all the defined areas in Argyll and Bute. Further, all of the datazones in this defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification.
- 2.6.7 As at July 2007, there were no Job Seekers Allowance claimants recorded for the area. However, the area shows above average seasonal fluctuations in unemployment with an estimated 1.4% of the working age population registered as unemployment during the winter months.
- 2.6.8 The route provides links to a range of community services, including: the local primary school, post office, hospital and a residential care home for older people in Salen. The route also provides links to tourist accommodation, including a youth hostel, a hotel at Tiroran and B&Bs; and tourist activities, such as walks, Ben More and Macquarie Mausoleum.
- 2.6.9 In 2005 there were a total of 258 employee jobs in the area and the area showed an above average reliance on primary industries. Employment in primary sectors accounted for 17% of all employment, while employment in hotels and catering was also over represented (accounting for 18% of total employment). Key sectors in the area include: forestry, aquaculture, agriculture and tourism.
- 2.6.10 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.
- 2.6.11 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

- 2.6.12 The proposed intervention for the B8035 involves road reconstruction, including widening and localised realignment of the route. The start date for the proposed works is spring/summer 2009, with a duration of 25 weeks. The estimated costing for the proposed intervention is £4 million.

Impacts

- 2.6.13 Communities expected to benefit from the intervention include those settlements located in the South West of Mull, including Gruline, Gribun, Knock, Dhiseig, Balmeanach, Tiroran, Balevulin, Ardvergnish and Glen Seilisdeir.
- 2.6.14 The proposed intervention is expected to improve safety on the route and allow passing, which will improve journey quality and safety along the road. In addition to these, the upgrade will result in improved reliability and some improvements to the journey time on the route.
- 2.6.15 The proposed route upgrades are expected to improve access and efficiency for local businesses using the route, particularly forestry harvesting and fish farming businesses. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and some journey time improvements. Removal of

weight restrictions will have a significant impact on the ability of businesses to transport goods along the route and may allow access to forestry sites where harvesting was stopped due to the condition of the road.

- 2.6.16 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route. Key attractions along the route include the Macquarrie mausoleum, St Columba's Church and Ben More. As well as these, the route provides onward links to attractions at Iona and Fionnport, including the Columba Centre and Iona Abbey (which attracted almost 70,000 visitors to the area in 2006).
- 2.6.17 Route improvements are expected to yield benefits for local residents through improving access to lifeline services and employment in Tobermory and beyond. As noted above, the route is used daily by commuters accessing employment in Tobermory and elsewhere via ferry route to Kilchoan. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 2.6.18 Consultees approached for this study described the benefits likely to arise from the proposed intervention as "high" for local businesses, although the benefits for local residents were not expected to be as significant as those in other areas.

2.7 A880: Ardbeg to Kilmun (Map 1 – Cowal)

Route Characteristics

- 2.7.1 The A880 is located on the Cowal peninsula and runs from Ardbeg to Loch Eck via Kilmun, Ardentinny and Glen Finart. The road is 20 kilometres in length, of which 15 kilometres are single track. The area adjacent to the A880 is heavily afforested.
- 2.7.2 The estimated average August flow of traffic is 2,021 vehicles per day, making it one of the most heavily used locally significant roads in Argyll and Bute, and the road is used by private cars, goods vehicles (heavy forestry vehicles), service vehicles and PSVs. The route, as far as Sligrachan, is served by two public bus services (475 and 485), with an hourly (or more frequent) service. Consultees note that local buses have experienced difficulties in using parts of the route.
- 2.7.3 The A880 has problems with poor junctions, variable road widths, poor verges and drainage issues due to excessive gradients. The route also has inadequate footways in built up areas and no footways in other places. Overall, for the purposes of this study the severity of constraints on the route were rated as "medium".

Socio Economic Characteristics

- 2.7.4 Communities served by the A880 include: Ardbeg, Kilmun, Strone, Blairmore and Ardentinny. In 2005 the total population of the area was estimated at 1,818 people, 28% of whom are of pensionable age. The area has one of the highest proportions of people of pensionable age out of all the defined areas in Argyll and Bute. Over the period 2001 to 2005, the area showed almost no change in population (net growth of 1%).
- 2.7.5 The area has a population density of 1.9 persons per sq km and all of the datazones in the area are rated as "remote rural" in the Scottish Government Urban-Rural Classification.
- 2.7.6 In July 2007, 1.9% of the working age population were in receipt of Job Seekers Allowance, slightly above the average rate observed across the HITRANS area as a whole. Further, the area shows relatively high long term unemployment rates compared

to the regional average with 25% of claimants in July 2007 having been unemployed for over 6 months.

- 2.7.7 The route provides links to a range of local community services including: shops, post offices, local schools, churches and the police station. The route also provides links to tourist accommodation, such as local hotels, the chalet development and a caravan park; and tourist activities, including forest walks and arboretum, an outdoor centre, ATV driving, pony trekking and the golf course.
- 2.7.8 In 2005 there were a total of 484 employee jobs in the area. Employment in hotels and catering is significantly over represented in the area, accounting for 37% of all employment, emphasising the importance of tourism to the local economy. The route is described as a key strategic tourism area within the region, providing a gateway to and from Dunoon and Loch Lomond. Other key sectors in the area are forestry and agriculture.
- 2.7.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 2.7.10 The proposed intervention for the A880 includes the provision of footways, localised widening and other improvements. The start date for the proposed improvement works is 2009/10, with a duration of 26 weeks. The estimated costing for the proposed intervention is £1.5 million.

Impacts

- 2.7.11 Communities expected to benefit directly from the intervention include Ardbeg, Kilmun, Strone, Blairmore and Ardentinny.
- 2.7.12 The key impacts of the proposed road upgrade are expected to be improved journey quality and journey safety for all users. The provision of footways will also improve safety for pedestrians in communities along the route as well as visitors moving between popular forestry walk sites. Road users are likely to benefit from minor journey time savings.
- 2.7.13 For existing businesses, the proposed upgrades are expected to improve access and efficiency for local employers which rely on the route for transport of goods, particularly forestry harvesting and agriculture. These impacts will arise through improved adequacy of the route for large vehicles (including forestry traffic, HGVs and tourist traffic) reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 2.7.14 The intervention is expected to help promote tourism in the area by improving accessibility to tourist accommodation and attractions along the route, including forest walks and arboretum, an outdoor centre, ATV driving, pony trekking and a golf course. The upgrade will also help complement other local initiatives promoting walking tourism in the area by improving the ability of users to move between key walking sites.
- 2.7.15 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Dunoon and beyond, through improved access to ferry services and the strategic road network. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas.

2.7.16 The road upgrade will provide improved ease of access for public bus services, with particular benefits for local residents and schoolchildren.

2.7.17 Overall, consultees approached for this study rated the potential benefits for local residents arising from the intervention as “high”, with the benefits to local businesses rated as “medium”.

2.8 B8024: Tarbert to Inverneil, round Knapdale (Map 1 – Kintyre)

Route Characteristics

2.8.1 The B8024 runs round Knapdale from Tarbet to Inverneil via Kilberry. The road is 48 kilometres long and is one carriageway with an average width of 3.3m. While there are no detailed traffic data for the route, the road is used by private cars, goods vehicles (heavy forestry vehicles and distillery vehicles), service vehicles and PSVs.

2.8.2 The route provides access to ferry links at Tarbert and two public bus services operate along the route. Services 421 and 447 provide between one and four journeys per day; however, the area between Tarbert and Kilberry is only served during the school term.

2.8.3 The road has a weak foundation and the road geometry is very poor, with poor visibility, steep gradients and inadequate verge widths. For the purposes of this study the severity of constraints currently in place on the route were rated as “medium”.

Socio Economic Characteristics

2.8.4 Communities served by the B8024 include: Kilberry, Ormsary, Achahoish and Ellary. In 2005 the total population was estimated at 2,163 people, 24% of whom are of pensionable age. The area showed a net decline in population over the period 2001 to 2005 (net decline of 1%).

2.8.5 The area has a population density of 2.1 persons per sq km, the third highest population density of all of the defined areas in Argyll and Bute. All of the datazones in this area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, indicating areas with settlements of fewer than 3,000 people located more than 30 minutes drivetime of a settlement with a population of more than 10,000 people.

2.8.6 In July 2007, 1.6% of the working age population were in receipt of Job Seekers Allowance, slightly below the average for the HITRANS area as a whole. The area shows relatively high long term unemployment rates compared to the regional average, with more than 25% of claimants in July 2007 having been unemployed for more than 6 months.

2.8.7 The route provides links to a range of local community services including: the school and village hall at Ormsary and the post office at Kilberry. The route also provides access to the main service centres for these communities, which are Tarbert and Lochgilphead. In terms of tourist services, the route provides links to local B&Bs, a caravan park and Kilberry Inn. The road also provides links to tourist activities, such as forest walks, ancient woodlands, fishing, the golf course, archaeology and the National Cycle Network.

2.8.8 In 2005, there were a total of 605 employee jobs in the area. The area showed an above average reliance on employment in primary industries, with primary sector employment accounting for 14% of all employment. Meanwhile, employment in hotels and catering accounted for 10% of all employment, indicating the importance of tourism to the local economy. Overall, the key sectors in the area are forestry, tourism, agriculture and estate management. There is also a major fish farming interest in the area.

- 2.8.9 The analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

- 2.8.10 The proposed intervention for the B8024 involves road upgrades and improvements, including edge strengthening, localised corner widening and road realignment. The start date for the proposed road improvements is summer 2008, with a duration of 12 weeks. The estimated costing for the proposed intervention is £500,000.

Impacts

- 2.8.11 Communities expected to benefit directly from the proposed upgrade include Kilberry, Ormsary, Achahoish and Ellary.
- 2.8.12 Widening of bends is expected to improve visibility on the route and allow passing, which will improve the safety and reliability of the route. In addition to these, the upgrades are expected to help improve journey quality and comfort for all users, with minor time savings.
- 2.8.13 The proposed upgrades are expected to improve access and efficiency for existing local employers which rely on the route for transport of goods, particularly forestry harvesting and agriculture. These impacts will arise through improved adequacy of the route for large vehicles (including forestry traffic, HGVs and tourist traffic) reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 2.8.14 Tourism interests in the area are expected to benefit from improved accessibility to tourist accommodation and attractions along the route, including forest walks, ancient woodlands, fishing, the golf course, archaeology and the National Cycle Network.
- 2.8.15 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Lochgilphead and Tarbert and beyond, through improved access to ferry services and the strategic road network. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas.
- 2.8.16 The road upgrade will provide improved ease of access for public bus services, with particular benefits for local residents and schoolchildren.
- 2.8.17 Overall, consultees approached for this study rated the potential benefits for local residents and businesses arising from the intervention as “medium”

2.9 B828/839: Hell’s Glen to Rest and be Thankful (Map 1 – Cowal)

Route Characteristics

- 2.9.1 The B828/839 is located to the north of Lochgoilhead on the Cowal peninsula and runs from Hells Glen to Rest and be Thankful. The route is 15 kilometres of single track road.
- 2.9.2 The estimated average August flow of traffic is 263 vehicles per day and the route is used by private cars, goods vehicles (a large proportion of which are heavy forestry vehicles), service vehicles and PSVs. Public bus services 484 and 302 serve the route, with between one and four journeys per day.

2.9.3 The route is described as having poor vertical and horizontal geometry and steep gradients. The road also has problems of poor drainage and a poor quality surface with the area adjacent to the B828/839 being overgrown by vegetation. The current road provision is considered to be inadequate for the types of vehicles using the route, such as forestry vehicles and holiday traffic.

2.9.4 For the purposes of this study, the severity of current constraints on the route were rated as “high”.

Socio Economic Characteristics

2.9.5 Lochgoilhead is served by this route. In 2005 the total population of the defined area was estimated at 1,873 people, 29% of whom are of pensionable age. The area has one of the highest proportions of people of pensionable age out of all the defined areas in Argyll and Bute. In common with the majority of defined areas in Argyll and Bute, the area showed modest population growth over the period 2001 to 2005 (net growth of 2%).

2.9.6 The area has a population density of 1.2 persons per sq km and all of the datazones in the defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification.

2.9.7 In July 2007, 1.8% of the working age population were in receipt of Job Seekers Allowance, a rate similar to that recorded across the HITRANS area as a whole. Further, the area shows relatively high long term unemployment rates compared to the regional average, with 25% of claimants in July 2007 having been unemployed for more than 6 months.

2.9.8 The route provides access to a range of local community services, including: shops, post office, school, pubs, hotels and restaurants. The route also provides access to tourist services, such as the holiday complex at Lochgoilhead, which has chalets and caravans. In terms of popular tourist destinations and activities, the road serves the Lochgoilhead National Activity Centre (National Scout Centre), Carrick Castle, swimming pool, ice rink and curling, golf course, sailing and boat hire.

2.9.9 In 2005 there were a total of 909 employee jobs in the area. The area has an above average reliance on employment in primary industries, with employment in primary sector accounting for 36% of all employment. Employment in the hotels and catering and food and drink processing sectors accounted for 21% and 10% respectively, of total employment. The key sectors in the area are forestry, tourism and agriculture. Key businesses served by the route include the major holiday complex at Lochgoilhead and Admiralty pier.

2.9.10 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “medium fragility”.

Proposed Intervention

2.9.11 The proposed intervention for the B828/839 involves upgrading of the route to double track in places, as well as the upgrading of passing places and localised road realignment. The start date of the proposed improvement works is 2008/09, with a duration of 25 weeks. The estimated costing of the proposed intervention is £2 million.

Impacts

- 2.9.12 The proposed intervention is expected to result in improved journey time and reliability, improved comfort and reliability for all users of the route. The upgrade will improve the adequacy of the route for the type and volume of traffic relying on it.
- 2.9.13 The proposed route upgrades are expected to improve access and efficiency for local businesses rely on the route for transport of goods, particularly forestry harvesting, agriculture and food and drink processing businesses. These impacts will arise through improved adequacy of the route for large vehicles, reduced wear and tear on vehicles and minor journey time improvements.
- 2.9.14 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving the adequacy of the road for coach traffic and motor homes and improving access to key sites, including Lochgoilhead National Activity Centre and Lochgoilhead holiday complex. Road improvements are expected to improve the general experience of the area for visitors and assist the promotion of tourism in Argyll and Bute as a whole by improving the ability of tourists and coach tours to move between remote parts of the region.
- 2.9.15 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Lochgilphead, Dunoon and beyond. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 2.9.16 Consultees approached for this study described the likely benefits for businesses and residents of the proposed upgrades as “medium”.

3 Highland Council

3.1 A855: Portree to Uig via Staffin (Map 2 – Skye)

Route Characteristics

- 3.1.1 The A855 is located on Skye and runs from Portree to Uig via Staffin and Flodigarry along the West and North Coasts of the island. The route is 53 kilometres in length. The estimated average August flow of traffic is 1,065 vehicles per day, 10.5% of which are ordinary goods vehicles. A significant number of commuters travel from Staffin to Portree along the route on a daily basis.
- 3.1.2 The route provides local access to ferry services at Uig and local bus services operate regularly along the route from Portree to Uig via Staffin and Flodigarry.
- 3.1.3 The first four miles of the route heading north from Portree are described as poor single track road requiring strip widening. From four to seventeen miles the route becomes a 2-way 6m wide road which is generally in good condition. The final 15 miles of the route is poor single track road, with problems of vertical and horizontal alignment. In addition, the section immediately north of Uig has several hair pin bends due to the acute alignment of the road. The route is rated by the council as one of the three locally significant roads in the Highlands area which are in most need for improvement.
- 3.1.4 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “high”.

Socio Economic Characteristics

- 3.1.5 Communities served by the A855 include Flodigarry, Kilmalug and Staffin. In 2005 the total population of the defined area was estimated at 2,232 people, 22% of whom are of pensionable age. Over the period 2001 to 2005, mid year estimates show no net change in the population of the area.
- 3.1.6 The area has a population density of 1.5 persons per sq km, the highest population density out of all the defined areas in the Highlands. All of the datazones are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.1.7 In July 2007, 2.2% of the working age population were in receipt of Job Seekers Allowance, an unemployment rate significantly above the HITRANS average of 1.8% for the same period. Further, the area shows above average seasonal fluctuations in unemployment and relatively high long term unemployment rates (compared to the regional averages).
- 3.1.8 The A855 provides links to local services in Portree, including the local secondary school, Portree Hospital and GP services, the local supermarket and a Highland Council Service Point. The road also provides access to local primary schools in Staffin and Uig. Other community services in Staffin include the community hall and community shop.
- 3.1.9 The A855 north from Portree is a popular route with tourists, with many dramatic landscape features including the Storr (719m summit) and Old Man of Storr, Lealt Falls, Kilt Rock (200ft cliffs) and the Quiraing (via the narrow connecting road west from Brogaig to Uig). The area is also very popular with walkers, including the 20-mile Trotternish Ridge.

- 3.1.10 The route provides access to a range of tourist accommodation including Flodigarry Country Hotel, Glen View Hotel, Duntulm Castel Hotel, self catering accommodation, B&Bs, Staffin campsite and Dun Flodigarry Hostel. The route also provides access to a number of tourist activities and attractions including Duntulm Castle, Staffin Museum, the Skye Museum of Island Life at Kilmuir, Flora McDonald's grave at Kilmuir, a gallery at Duntulm, Whitewave (Skye's outdoor activity centre at Kilmuir) and numerous natural and archaeological attractions.
- 3.1.11 In 2005 there were a total of 1,798 employee jobs in the area. Tourism is a key sector in the area, with employment in hotels and catering accounting for 19% of total employment. Other key sectors in the area include: agriculture, transport services, via ferry operations at Uig; retailing; and public services.
- 3.1.12 Columba 1400 is a significant local employer in Staffin. It is a charitable organisational offering residential leadership training and development courses, primarily for young people and adults from challenging backgrounds. The centre is currently expanding with two extensions being built, one a stand-alone lodge to accommodate another 10 residents each week, the other to the main building. The increased capacity at the centre is anticipated to increase the volume of traffic travelling on the route.
- 3.1.13 Staffin Community Trust is an important local organisation and is very active in the local community. The aim of the Trust is to '*work on community projects to help to stimulate economic and social activities in the community, improve services and strengthen the people's sense of place*'. Staffin Community Trust is proactive in attracting people to the area and has a development plan for the local organisations in the Community, called the Staffin Framework for Action Plan.
- 3.1.14 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rates as serving areas of "high fragility".

Proposed Intervention

- 3.1.15 The proposed intervention for the A855 involves upgrading the route to double track. The timescale for the proposed improvement works is three years and the estimated costing of the works is £1 million.

Impacts

- 3.1.16 Specific communities expected to benefit from the intervention include those located in settlements on the Trotternish peninsula, such as Staffin, Flodigarry and Kilmalauug.
- 3.1.17 The main impacts from the proposed road upgrades are expected to be improved journey times and the removal of bottlenecks at peak times. The upgrades will also result in improved journey quality for all road users and help improve safety along the road.
- 3.1.18 The route upgrades are expected to help promote tourism in the area by improving access to local hotels and other attractions along the route and improving the adequacy of the route for touring coaches. In general, route upgrades such as this are expected to assist the promotion of tourism across the Highlands as a whole by improving the ability of tourists to move between remote parts of the region and access onward links to ferry services at Uig.
- 3.1.19 In addition to tourism, the proposed route upgrades are expected to improve access and increase efficiency for local businesses serving and operating in the area, particularly construction and freight haulage businesses. These impacts will arise through improved

adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements.

3.1.20 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Staffin and Portree and beyond. In addition, improved access to ferry services in Uig will benefit local residents. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.

3.1.21 Consultees approached for this study described the proposed intervention as likely to provide 'significant' benefits for both businesses and residents in the area.

3.2 A896: Kinlochewe to Strathcarron (Map 3 – Wester Ross)

Route Characteristics

3.2.1 Located in Wester Ross, the A896 provides a connection from Kinlochewe to Strathcarron via Torridon, Sheildaig and Kishorn. The route is 57 kilometre in length and is predominantly single track, with two short sections of double track road between Sheildaig and Torridon and near the Strathcarron Junction.

3.2.2 The estimated average August flow of traffic is 965 vehicles per day, 23% of which are ordinary goods vehicles. The route provides access to rail links at Strathcarron and for regular bus services through the region.

3.2.3 The road geometry of the A896 is generally poor with sharp bends and road widening required in several places to improve passing places. Large sections of the road are founded on peat and subject to settlement and cracking. Further, many of the structures on the route are in poor condition and would benefit from replacement. The route is rated by the council as one of the three locally significant roads in the Highland area which are in most need for improvement.

3.2.4 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as "high".

Socio Economic Characteristics

3.2.5 Communities served by the A896 include: Kinlochewe, Torridon, Shildaig, Applecross, Kishorn and Strathcarron. In 2005 the total population of the area was estimated at 1,326 people, 25% of whom are of pensionable age. This proportion is among the highest of the defined areas in the Highlands. Over the period 2001 to 2005, the area showed almost no net change in population (net growth of 1%).

3.2.6 The area has a population density of 0.2 persons per sq km, one of the lowest population densities out of all the areas in the Highlands. Further, all of the datazones in the defined area are rated as "remote rural" in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.

3.2.7 In July 2007, 1.8% of the working age population were in receipt of Job Seekers Allowance.

3.2.8 The route provides links to local services in Torridon and Kinlochewe, including GP services and the post office. The route also serves local primary schools at Kinlochewe, Sheildaig and Torridon; and provides onward links to the local secondary schools at Gairloch to the north and Plocton to the south. Other local services include the Highland Council Service Point and GP services at Lochcarron. In terms of tourism, the route

provides access to local hotels in Torridon, Shieldaig and Applecross and caravan facilities at Kinlochewe, Shieldaig and Lochcarron. Tourist activities in the area include walking, fishing, stalking, shooting, Applecross Mountains, Torridon's mountains (such as Beinn Alligin, Liathach and Benn Eighe) and a golf course at Lochcarron.

- 3.2.9 In 2005 there were an estimated 500 employee jobs in the area and the area showed an above average reliance on employment in primary industries. Employment in primary sectors accounted for 24% of total employment. Tourism and aquaculture are key sectors in the area, accounting for around two thirds of all jobs in the area directly served by the route. In particular, there are shellfish businesses in Applecross and Shieldaig and fish farming at the mouth of Lochcarron. There is also mature forestry east of Lochcarron and future felling may place additional demands on the route from forestry vehicles.
- 3.2.10 The route provides access to a former fabrication yard for deep-water oil platforms and a port at Loch Kishorn. The deep water landing at Kishorn is currently used by large barges making deliveries and a haulage business which operates from the site. This business has heavy vehicles using the route for the onward transport of deliveries including a fish food delivery service to fish farms located off the west coast of Scotland. The port eases the distribution and warehousing of stock; however, consultees noted that there are constraints placed on the location in terms of road links. Lying on the western edge of the former oil platform fabrication yard is a brownfield quarry site which consultees noted has significant potential for development.
- 3.2.11 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 3.2.12 The proposed intervention for the A896 involves upgrades to passing places and visibility improvements. There are four phases for the proposed improvement works, over a period of three years. The estimated costing of the proposed intervention is £1 million over the four phases.

Impacts

- 3.2.13 Specific communities expected to benefit from the intervention include those located in settlements such as: Kinlochewe, Torridon, Sheildaig, Applecross, Kishorn and Strathcarron.
- 3.2.14 The main impacts from the proposed road upgrades are expected to be improved journey quality and journey safety for all users, as well as minor journey time savings. The upgrades will also prevent damage to the road surface and improve the adequacy of the route for large vehicles. Further, the upgrades to passing places will allow more comfortable passing for oncoming vehicles.
- 3.2.15 The proposed route upgrades are expected to improve access and efficiency for local businesses that rely on the route for the transportation of goods, particularly fish farming businesses. In particular, improved access to Kishorn will benefit large vehicles carrying feed to west coast fish farms. These impacts will arise through improved adequacy of the road alignment for larger vehicles, reduced wear and tear on vehicles, improved safety and minor journey time improvements. Improved accessibility is also likely to help make the area more attractive to inward investors, particularly at key sites around Kishorn.
- 3.2.16 In addition to primary sectors, the route upgrades are expected to help promote tourism in the area by improving accessibility to the Applecross peninsula and other tourist sites and

businesses along the route. In general, route upgrades such as this are expected to enhance the tourism experience in the Highlands as a whole by improving the ability of tourists and coach tours to move between remote parts of the region.

- 3.2.17 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Kinlochewe, Torridon, Shieldaig, Strathcarron and beyond. Removal of route constraints will also help local service providers access settlements along the route more easily, so helping to maintain the viability of local communities.
- 3.2.18 Consultees approached for this study described the level of benefits likely to accrue from the proposed upgrades as “high” for both businesses and residents.

3.3 B8007: Salen to Kilchoan (Ardnamurchan) (Map 2 – Lochaber)

Route Characteristics

- 3.3.1 The B8007 is located in Lochaber on the Ardnamurchan peninsula and the route runs from Achosnich to Salen. The route is 30.4 kilometres in length and is a poorly aligned single track road throughout its length.
- 3.3.2 The estimated average August flow of traffic is 600 vehicles per day, 10% of which are goods vehicles. The route provides access to ferry links from Kilchoan to Tobermory. Public transport operations have become increasingly important in recent times due to, in particular, an increased demand for school transportation within the region. The condition of the current road provision is not of a sufficient standard to allow efficient operation of PSVs.
- 3.3.3 There are 11 bridges and culverts and 51 retaining walls on this route. Most of the structures are in reasonable condition, but Glenmore Bridge is weak and in poor condition. Further, two of the retaining walls are in poor condition. Consultees noted that the route is characterised by poor vertical and horizontal alignment, with a lack of passing places. The B8007 is rated by the council as one of the three locally significant roads in the Highlands area which are in most need for improvement.
- 3.3.4 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “high”.

Socio Economic Characteristics

- 3.3.5 Communities served by the B8007 include: Achosnich, Kilchoan, Glenborrodale, Glenbeg, Ockle and Salen. In 2005 the total population of the area was estimated at 561 people, 24% of whom are of pensionable age. Over the period 2001 to 2005, the area showed steady population growth (net growth of 6% against a Highland Council average of 2% growth for the same period).
- 3.3.6 The area has a population density of 0.4 persons per sq km, the second highest population density out of all of the defined areas in the Highlands. All of the datazones in the defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.3.7 As at July 2007 unemployment rates in the area were well below the regional average. The area does, however, show significant seasonal fluctuations in unemployment with claimant rates in the winter months recorded at a level well above those observed during the summer period.

- 3.3.8 The route provides links to Kilchoan Primary School and onward links to the local secondary school at Strontain. Other local community services nearby include the Highland Council Service Point, GP services and other health services at Acharacle. In addition, the route provides access to a number of tourist attractions in the area including Ardnamurchan Natural History Centre and Ardnamurchan Lighthouse (the most westerly point of the British mainland).
- 3.3.9 In 2005 there were a total of 189 employee jobs in the area. The area showed an above average reliance on employment in primary industries, with primary sectors accounting for 9% of all employment. The area also shows a significantly high proportion of employment in the hotels and catering sector (19%).
- 3.3.10 The key sectors in the area are fish farming, agriculture, forestry and tourism. Aquaculture activities generate an estimated 5,000 tonnes of haulage along the route each year. In addition, the Forestry Enterprise has significant harvesting operations planned that will impact upon the haulage rates for the route.
- 3.3.11 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 3.3.12 The proposed intervention for the B8007 involves the construction of new passing places, as well as visibility improvements. There are four phases for the proposed improvement works, over a period of three years. The estimated costing of the proposed intervention is £250,000 per phase, £1 million in total.

Impacts

- 3.3.13 Specific communities expected to benefit from the intervention include those located in settlements such as: Achosnich, Kilchoan, Glenborrodale, Glenbeg, Ockle and Salen.
- 3.3.14 The main impacts from the proposed road upgrades are expected to be improved journey quality and journey safety for all users, as well as minor journey time savings. The upgrades will also prevent damage to the road surface and improve the adequacy of the route for large vehicles while upgrades to passing places will allow vehicles to meet oncoming traffic more comfortably.
- 3.3.15 The proposed route upgrades are expected to improve access and efficiency for local businesses that rely on the route for the transportation of goods, particularly within the key sectors of fish farming and forestry. These impacts will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements. The upgrades will also improve access for construction vehicles, allowing the development of areas such as Kilchoan, Portuairk and Swordle to continue.
- 3.3.16 The route upgrades are also expected to bring significant benefits to the tourism industry in the area by improving accessibility to tourist attractions and businesses along the route and improving the adequacy of the route for touring coaches and motor homes. In general, route upgrades such as this are expected to enhance the general experience for visitors to the Highlands as a whole by improving the ability to move between remote parts of the region and access onward links to ferry services at Tobermory.
- 3.3.17 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Achosnich, Salen and beyond. In particular, route upgrades would bring benefits for local schoolchildren accessing

education services in the region. Further, the road upgrades would yield significant benefits for local residents through improving access to the lifeline ferry service from Tobermory to Mull. Removal of route constraints will also help local service providers access settlements along the route more effectively, so helping to maintain the viability of local communities.

- 3.3.18 Consultees approached for this study described the level of benefits likely to accrue from the proposed upgrades as “high” for both businesses and residents.

3.4 A837: Ledmore Junction to Invershin (Map 3 – Sutherland)

Route Characteristics

- 3.4.1 The A837 runs from Ledmore Junction (north of Ullapool) to Invershin (just to the south of Lairg). The route is 43 kilometres in length and is predominantly single track. The estimated average August flow of traffic is 800 vehicles per day, 20% of which are ordinary goods vehicles. The range of vehicles using the road includes private cars, goods vehicles, service vehicles, PSVs, touring coaches, caravans and camper vans. Consultees noted that the tourist traffic can often slow down the local traffic, which is frustrating for the local road users. An infrequent bus service operates along the route and the road also provides access for local communities to rail services from Lairg.
- 3.4.2 The route is poorly aligned with poor forward visibility and the bridges reflect this, with several of them on poor horizontal or vertical alignment. One small concrete structure has a low assessment but is not presently restricted. The foundation of the route is fairly sound apart from two sections at the West end, which are founded on peat and subject to settlement and cracking.
- 3.4.3 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “high”.

Socio Economic Characteristics

- 3.4.4 Communities directly served by the A837 include: Ledmore, Invercassley, Altassmore, Inveran. In 2005, the total population of the defined area was estimated at 1,237 people, 23% of whom are of pensionable age. The defined area was one of four areas in the Highlands to show a decline in population over the period 2001 to 2005 (net decline of 1%).
- 3.4.5 The area has a population density of 0.2 persons per sq km, one of the lowest population densities out of all the areas in the Highlands. Further, all of the datazones in the defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.4.6 In July 2007, 2% of the working age population were in receipt of Job Seekers Allowance, slightly above the HTRANS regional average unemployment rate of 1.8% for the same period. The area also shows above average seasonal fluctuations in unemployment and relatively high long term unemployment rates compared to the regional averages.
- 3.4.7 The route provides access to retail and other services along the route. In Inverclassy there is a community hall, primary school and youth club. In addition, the route provides onward links to services at Lairg including GP services, shops, a community hall and the local Highland Council Service Point. In terms of tourist attractions, the route provides onward links to the Ferrycroft Countryside Visitor Centre and Tourist Information Centre in Lairg. The route also provides onward links to the River Shin (a well known salmon leap)

and the Falls of Shin Visitor Centre, just south of Lairg. The visitor centre has a restaurant, shop, picnic area and forest walks.

3.4.8 In 2005 there were a total of 406 employee jobs in the area. The area showed an above average reliance on employment in primary industries, with primary sectors accounting for 8% of all employment. The area also showed a significantly high proportion of employment in hotels and catering (17%). The key sectors in the area are tourism, forestry activities, retailing and public services.

3.4.9 Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

3.4.10 The proposed intervention for the A837 involves the construction of new passing places, as well as visibility improvements. The proposed improvement works will be carried out in two phases, over a period of three years. The estimated costing for the works is £0.5 million over the two phases.

Impacts

3.4.11 Specific communities expected to benefit from the intervention include those located in settlements such as: Ledmore, Invercassley, Altassmore and Inveran.

3.4.12 The main impacts from the proposed road upgrades are expected to be improved journey comfort, reliability and safety for all road users. The upgrades will also result in some minor improvements to journey times during peak periods.

3.4.13 The proposed route improvements are expected to improve the adequacy of the route for the volume and type of traffic using the route, including HGVs, touring coaches, caravans and camper vans. The road upgrades will also help to relieve conflicts between local users of the route and tourist traffic during peak times.

3.4.14 Indeed, the route upgrades are expected to help promote tourism in the area by improving accessibility to key tourism sites and businesses in and around the area including Ferrycroft Countryside Visitor Centre, the Tourist Information Centre in Lairg, the River Shin and the Falls of Shin Visitor Centre. In general, route upgrades such as this are expected to assist the promotion of tourism across the Highlands as a whole by improving the ability of tourists and coach tours to move between remote parts of the region.

3.4.15 In addition to the tourism sector, the route upgrade is also expected to improve access and efficiency for local businesses using the route for the transport of goods, particularly forestry harvesting business. With the area expected to see an increase in harvesting in the near future, the route is likely to become increasingly important for forestry activities. Benefits to these businesses will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles, improved safety and minor journey time improvements.

3.4.16 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Lairg and beyond. Removal of route constraints will also help local service providers access settlements along the route more effectively, so helping to maintain the viability of local communities.

3.4.17 Consultees approached for this study described the level of benefits likely to accrue from the proposed upgrades as “medium” for both businesses and residents.

3.5 C1047: Culnacraig to Drumrunie (Achiltibuie) (Map 3 – Sutherland)

Route Characteristics

- 3.5.1 The C1047 is an old single track road serving the Coigach area and runs from Culnacraig to Drumrunie. The route is 23 kilometres long, with poor road geometry. The estimated average August flow of traffic is 460 vehicles per day, 10.5% of which are ordinary goods vehicles.
- 3.5.2 Public bus services operate along the route to Achiltibuie, from Ullapool, twice daily. The route also provides onward links for the local community to transport and other local services from Ullapool, including ferry links to the western isles.
- 3.5.3 Consultees noted that the route is of poor quality, with blind corners and very slow travel times. The road, as well as many culverts and bridges, are rated as being in need of improvement by Highland Council.
- 3.5.4 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “high”.

Socio Economic Characteristics

- 3.5.5 Communities served by the Achiltibuie route include: Culnacraig, Polglass and Achiltibuie. The route also provides onward links for communities located in settlements such as Polbain, Achnahaird and Reiff. In 2005 the total resident population of the area was estimated at 499 people, 21% of whom are of pensionable age. Over the period 2001 to 2005, the area was one of four areas in the Highlands to show a decline in population (net decline of 7%).
- 3.5.6 The area has a population density of 0.3 persons per sq km. All of the datazones in the area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.5.7 In July 2007, 1.7% of the working age population were in receipt of Job Seekers Allowance. The area also shows above average seasonal fluctuations in unemployment and relatively high long term unemployment rates (compared to the regional averages).
- 3.5.8 The route provides links to local community services including: Coigach Community Hall (includes Library and GP services), post office, fire station and local shopping facilities at Achiltibuie. The route also provides onward links for the local community to key local services at Ullapool (including the high school, ferry services and other public transport links), GP services, retail services and the local Highland Council Service Point.
- 3.5.9 In terms of tourist activities in Achiltibuie, the route provides access to a number of local hotels, self catering accommodation, a youth hostel, the Hydroponicum and Small Isles Foods (a smokehouse in Achiltibuie which produces award winning salmon, smoked fish, smoked meats, organic foods and cheeses). The route also provides access to outdoor activities such as Summer Isles Cruises, loch and river fishing, walking and climbing.
- 3.5.10 In 2005 there were a total of 210 employee jobs in the area. The area has an above average reliance on employment in primary industries, with employment in primary sectors accounting for 34% of all employment. Employment in the hotels and catering and food and drink processing sectors accounted for 13% and 8% respectively, of total employment. Indeed, the key sectors in the area are agriculture, aquaculture, tourism and food processing.

- 3.5.11 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 3.5.12 The proposed intervention for this route involves upgrades to the passing places and visibility improvements. The proposed improvement works will be carried out in three phases, over a period of three years. The estimated costing for the works is £0.75 million over the three phases.

Impacts

- 3.5.13 Specific communities expected to benefit from the intervention include those located in settlements such as: Culnagraig, Polglass and Achiltibuie.
- 3.5.14 The main impacts from the proposed road upgrades are expected to be improved journey reliability and comfort for all road users. The upgrades will also result in some minor improvements to journey times and help improve safety along the corridor. Further, the upgrades to the passing places will allow more comfortable passing for oncoming vehicles.
- 3.5.15 The proposed route improvements are expected to improve access and efficiency for local businesses using the route for the transport of goods, particularly fish farming and food processing businesses. Removing the current constraints on the road would also encourage expansion of these industries in the area. Benefits to these businesses are expected to arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles, improved safety and minor journey time improvements.
- 3.5.16 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to key tourism sites and businesses in and around the area including the Summer Isles Hotel, the Hydroponicum, Small Isles Foods, as well as local beaches and other sites. In general, route upgrades such as this are expected to assist the promotion of tourism across the Highlands as a whole by improving the ability of tourists and coach parties to move between remote parts of the region.
- 3.5.17 The upgrade would also assist in proposals for further development near the Hydroponicum site, where a local business is looking to promote and showcase renewable energies and develop energy efficient holiday housing. This is likely to be a popular attraction for visitors to the area.
- 3.5.18 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Ullapool and beyond. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 3.5.19 Consultees approached for this study described the proposed intervention as likely to provide 'moderate' benefits for both businesses and local residents in the area.

3.6 A839: Rosehall to Lairg (Map 3 – Sutherland)

Route Characteristics

- 3.6.1 Located in Sutherland, the route covers the section of the A839 running from Rosehall to Lairg. The road is 13 kilometres long and is predominantly single track, with only two

short sections of two lane carriageway. The estimated average August flow of traffic is 500 vehicles per day, 10.5% of which are ordinary goods vehicles.

- 3.6.2 The road geometry of the route is generally poor, with blind summits and blind bends. While some improvements have taken place in recent years to allow for the timber extraction traffic, two lengths of the road have been identified at Lairg which require further work on road widening.
- 3.6.3 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “moderate”.

Socio Economic Characteristics

- 3.6.4 Communities directly served by the route include: Invercassley, Lairg and Altasmore. In 2005 the total population of the area was estimated at 1,706, 27% of whom are of pensionable age. This proportion is among the highest of the defined areas in the Highlands. Over the period 2001 to 2005, the area showed fairly steady population growth (net growth of 3%).
- 3.6.5 The area has a population density of 0.3 persons per sq km. All of the datazones in the area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.6.6 In July 2007, 2% of the working age population were in receipt of Job Seekers Allowance, an unemployment rate slightly above the HTRANS average of 1.8% for the same period. The area also shows above average seasonal fluctuations in unemployment and relatively high long term unemployment rates (compared to the regional averages).
- 3.6.7 The route provides access to local tourist attractions and businesses including hotels in Rosehall and Lairg and outdoor activities in both Rosehall and Lairg, such as forest trails and walks. Other visitor attractions in and around Lairg include the Ferrycroft Countryside Visitor Centre, the Tourist Information Centre and the Falls of Shin Visitor Centre.
- 3.6.8 In 2005 there were a total of 440 employee jobs in the area. The area has an above average reliance on employment in primary industries, with employment in primary sectors accounting for 12% (including self employment) of all employment. The area also showed a significantly high proportion of employment in hotels and catering (13%).
- 3.6.9 Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “high fragility”.

Proposed Intervention

- 3.6.10 The proposed intervention for this route involves the construction of new passing places, as well as visibility improvements. The proposed improvement works will be carried out in one to two years and the estimated costing for the works is £0.25 million.

Impacts

- 3.6.11 Specific communities expected to benefit from the intervention include those located in settlements such as: Invercassley, Lairg and Altasmore.
- 3.6.12 The main impacts from the proposed road upgrades are expected to be improved journey quality, comfort and safety for all users, with some minor improvements to journey time. The upgrades will also prevent damage to the road surface and improve adequacy of the

route for larger vehicles. Further, the construction of new passing places will allow more comfortable passing for oncoming vehicles.

- 3.6.13 The proposed route improvements are expected to improve access and efficiency for local businesses that rely on the route for the transportation of goods, particularly forestry and agriculture businesses. These impacts will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements.
- 3.6.14 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to key tourism sites and businesses along the route including hotels and restaurants in Lairg and Rosehall, forest trails and walks, the Ferrycroft Visitor Centre and the Falls of Shin Visitor Centre. In general, route upgrades such as this are expected to improve the visitor experience for tourists to the area and assist the promotion of tourism across the Highlands as a whole, by improving the ability of tourists and coach parties to move between remote parts of the region.
- 3.6.15 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Lairg and beyond. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 3.6.16 Consultees approached for this study described the proposed intervention as likely to provide 'moderate' benefits for both businesses and residents in the area.

3.7 **A884: Strontain to Lochaline (Map 2 – Lochaber)**

Route Characteristics

- 3.7.1 Located between Ardnamurchan and Loch Linnhe in the Lochaber area, the A884 runs from Strontian at its most northern point to Lochaline at the south. The route is 29 kilometres in length. The estimated average August flow of traffic is 650 vehicles per day, 18% of which are ordinary goods vehicles. The route provides access to ferry services at Lochaline.
- 3.7.2 The A884 is a mix of old and new road and contains single and double track sections. The road is taking increasing traffic volumes in recent years, as a result of timber extraction activities and ferry traffic to and from Mull (via Lochaline). Overall, visibility and alignment on the route are described as generally good. With regard to bridges and culverts, most are of single track width and reflect the width and alignment of the route in general. Most of the bridges are in fair condition with the exception of those at Creiche, Cloiche, Easgadill and Achleek – all of which are weak and in poor condition.
- 3.7.3 Overall, the single track sections of the route were described as being inadequate for the type and volume of traffic which rely on the road. As a result of this, consultees rated the severity of constraints currently in place on the road as "high".

Socio Economic Characteristics

- 3.7.4 Communities directly served by the route include: Lochaline, Claggan, Strontian, Drimnin, Rhemore and Fiunary. In 2005 the total population of the area was estimated at 1,056 people, 22% of whom are of pensionable age. Over the period 2001 to 2005, the area showed significant growth in population (net growth of 14%). Indeed, this area experienced the highest rate of population growth out of all the defined areas in the Highlands.

- 3.7.5 Despite such recent growth, the area has a population density of 0.3 persons per sq km. All of the datazones in the defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.7.6 In July 2007, 1.6% of the working age population were in receipt of Job Seekers Allowance, slightly below the average for the HITRANS area as a whole. The area does, however, show above average seasonal fluctuations in unemployment, with claimant rates during winter months recorded at levels well above those observed in the summer.
- 3.7.7 The route provides links to local services at Lochaline including shops, a hotel, restaurant, the village hall, primary school and a diving centre. Consultees noted that there are aspirations to develop Lochaline, such as Lochaline pontoon marina, a golf course and leisure facilities, to make it more attractive as a tourist destination, rather than a stopping off point for ferry services to Mull. The route also provides links to local services in Strontain including shops, hotels, self catering accommodation, the high school and a number of tourist attractions such as ancient woodlands, lochs and sandy beaches.
- 3.7.8 In 2005 there were a total of 374 employee jobs in the area. The area has an above average reliance on employment in primary sectors, with employment in primary sectors accounting for 16% of total employment. The area also shows a significantly high proportion of employment in hotels and catering (19%). Indeed, forestry and tourism are key sectors in the area. There are also a number of craft businesses located along the route.
- 3.7.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a ‘fragile area’ within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of “medium fragility”.

Proposed Intervention

- 3.7.10 The proposed intervention for the A884 involves strip widening of the route. The proposed improvement works will be carried out in two phases, over a period of three years. The estimated costing for the works is £0.5 million over the two phases.

Impacts

- 3.7.11 Specific communities expected to benefit from the intervention include those located in settlements such as: Lochaline, Claggan, Strontian, Drimnin, Rhemore and Fiunary.
- 3.7.12 The main impacts from the proposed road upgrades are expected to be improved journey comfort and reliability for all users. The upgrades will also result in improved adequacy of the route for the type and volume of traffic relying on it, with some minor improvements to journey times.
- 3.7.13 The proposed route improvements are expected to improve access and efficiency for local businesses using the route for transport of goods, particularly in timber extraction, fish farming and silica sand mining. These impacts will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements.
- 3.7.14 In addition to primary sectors, the route upgrades are also expected to bring significant benefits to the tourism industry in the area by improving accessibility to tourist attractions and businesses along the route including local hotels, the RSPB reserve and onward ferry links to Mull. Improved accessibility is also likely to help attract investment for planned developments in the tourism offer at Lochaline. In general, route upgrades such as this

are expected to assist the promotion of tourism across the Highlands as a whole, by improving the ability of tourists and coach parties to move between remote parts of the region.

- 3.7.15 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Strontain and beyond. Further, the road upgrades would yield significant benefits for local residents through improving access to lifeline ferry services to and from Mull (via Lochaline). Removal of route constraints will also help local service providers access settlements along the route more efficiently, so helping to maintain the viability of local communities.
- 3.7.16 Consultees approached for this study described the likely benefits arising from the proposed road upgrade as of “medium” scale for both businesses and residents in the area.

3.8 A897: Melvich to Helmsdale (Map 3 – Sutherland)

Route Characteristics

- 3.8.1 The A897 runs from Melvich on the far north coast to the north east coast at Helmsdale. At 62 kilometres, the route is one of the longest locally significant roads in the Highlands. The estimated average August flow of traffic is 290 vehicles per day, 18% of which are ordinary goods vehicles. There is a subsidised taxi service operating from Melvich to Forsinard and there are also plans to set up a community bus service between Helmsdale and Kinbrace.
- 3.8.2 The route is an old single track road, with one 200m two track section, and is considered of generally poor condition. Road bridges and culverts along the route are all in need of improvement. Further, the road is coming under pressure to be used as a timber extraction route in the future.
- 3.8.3 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as “moderate”.

Socio Economic Characteristics

- 3.8.4 Communities directly served by the route include: Melvich, Dalmahaig, Forsinard, Lochside, Kinbrace and Kildonan. In 2005 the total population of the area was estimated at 1,383 people, 27% of whom are of pensionable age. This proportion is among the highest of the defined areas in the Highlands. The defined area was one of four areas in the Highlands to show a decline in population over the period 2001 to 2005 (net decline of 3%).
- 3.8.5 The area has a population density of 0.3 persons per sq km. All of the datazones in the defined area are rated as “remote rural” in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.8.6 In July 2007, 3.1% of the working age population were in receipt of Job Seekers Allowance, well above the average for the HITRANS region as a whole (1.8% during the same period). In addition, the area shows relatively high long term unemployment rates compared to the regional average.
- 3.8.7 The road provides access to a range of local community services including shops at Melvich and Helmsdale, primary schools in Melvich, Kinbrace and Helmsdale and community halls in Kildonan and Kinbrace. The route also provides onward links to

secondary schools located in Golspie in the south and Bettyhill and Thurso on the north coast.

- 3.8.8 In terms of tourism, the route provides access to a range of tourist attractions and businesses including the RSPB visitor centre at Forsinard, the Timespan Heritage Museum at Helmsdale, the gold rush at Strath Kildonan, hotels, self catering properties and B&Bs. Consultees noted that the self catering properties and B&Bs in Helmsdale are important for fishing visitors.
- 3.8.9 In 2005 there were a total of 231 employee jobs in the area and the area showed an above average reliance on employment in primary industries. Employment in primary sectors (including self employed), such as agriculture and forestry activities, accounted for 17% of all employment in the area. Consultees noted the importance of the route for the transportation of livestock and commented that the A897 is an important alternative route for travelling south when the A9 from Thurso has closed snow gates in bad weather. The hotels and catering sector is also important, with employment in this sector accounting for 15% of total employment.
- 3.8.10 The key sectors in the area are crofting, agriculture and forestry, with salmon fishing and fly fishing particularly important to Helmsdale. Consultees noted that north of Forsinard is 'estates country', with important activities including stalking, fishing and holiday lodges.
- 3.8.11 The corridor from north to south was classed as a Rural Service Priority Area by the Scottish Government, indicating that the corridor is in need of support in terms of access to services. Similarly, the area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 3.8.12 The proposed intervention for the A897 involves the construction of new passing places, as well as visibility improvements and verge improvements. The proposed improvement works will be carried out in ten phases, over a period of three years. The estimated costing for the works is £2.5 million over the ten phases.

Impacts

- 3.8.13 Specific communities expected to benefit from the intervention include those located in settlements such as: Melvich, Dalmahaig, Forsinard, Lochside, Kinbrace and Kildonan.
- 3.8.14 The main impacts from the proposed road upgrades are expected to be improved journey quality, comfort and safety for all users, with some minor improvements to journey time. The upgrades will also prevent damage to the road surface and improve the adequacy of the route for larger vehicles. In addition, the construction of new passing places will allow more comfortable passing for oncoming vehicles.
- 3.8.15 The proposed route improvements are expected to improve access and efficiency for local businesses that rely on the route for the transportation of goods, particularly agriculture and forestry activities. These impacts will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements.
- 3.8.16 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route including hotels, self catering accommodation, B&Bs and campsites. The route also provides access to the RSPB visitor centre at Forsinard, Timespan Heritage Museum at

Helmsdale and a guided tour of the gold rush at Strath Kildonan. In general, route upgrades such as this are expected to enhance the visitor experience for tourists to the area and assist the promotion of tourism across the Highlands as a whole, by improving the ability of tourists and coach parties to move between remote parts of the region.

- 3.8.17 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment in Melvich and Helmsdale. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 3.8.18 Consultees approached for this study described the proposed intervention as likely to provide 'moderate' benefits for both businesses and residents in the area.

3.9 **A836/838: Bettyhill to Rhiconich (Map 3 – Sutherland)**

Route Characteristics

- 3.9.1 Located in Sutherland, the A836/838 route provides a link along the North coast from Bettyhill to Riconich. At a total length of 92 kilometres, the route is the longest locally significant road in the Hitrans network. The estimated average August flow of traffic is 800 vehicles per day, 5.2% of which are ordinary goods vehicles.
- 3.9.2 The A838 between Rhiconich and Tongue is predominantly single track with two lane sections at each end. There are several small culverts along the route which are in poor condition and/or weak, which should be considered for replacement. The most conspicuous structural problem is Naver Bridge, which is narrow single track with poor alignment on both approaches. It is in poor condition and has a marginal assessed capacity. Overall the route is considered to be in poor condition with poor geometry.
- 3.9.3 For the purposes of this study, consultees rated the severity of constraints currently in place on the road as "high".

Socio Economic Characteristics

- 3.9.4 Communities served by the A836/838 include: Bettyhill, Coldbackie, Tongue, Achuldolvrach, Heilam, Eriboll, Polla, Durness, Portnancon and Rhiconich. In 2005 the total population of the area was estimated at 1,009 people, 22% of whom are of pensionable age. The defined area was one of four areas in the Highlands to show a decline in population over the period 2001 to 2005 (net decline of 4%).
- 3.9.5 The area has a population density of 0.2 persons per sq km, one of the lowest population densities out of all the defined areas in the Highlands. Further, all of the datazones in this defined area are rated as "remote rural" in the Scottish Government Urban-Rural Classification, comprising settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more.
- 3.9.6 In July 2007, 2.5% of the working age population were in receipt of Job Seekers Allowance. The area also shows above average seasonal fluctuations in unemployment and relatively high long term unemployment rates (compared to the regional averages).
- 3.9.7 The route provides access to local community services including GP services in Bettyhill and Armadale, a Carehome in Melness (north west of Tongue) and the local police in Bettyhill and Riconich. Bettyhill also has a primary and secondary school, while Tongue, Durness and Riconich all have primary schools. The route also provides onward links to the secondary school in Kinlochbervie (west of Rhiconich). In terms of local tourism services, the route provides access to local hotels, self catering accommodation, B&Bs

and campsites in Bettyhill, Tongue and Durness. The route is also part of the North West Highland Tourist Route.

- 3.9.8 In 2005 there were a total of 425 employees in the area. The area has an above average reliance on primary industries, with employment in primary sectors (including self employment) accounting for 15% of total employment. The key sectors in the area include crofting, forestry (Bettyhill and Tongue plantations), and salmon farming, mussels and oysters at Loch Eriboll. The route also provides onward links to the fishing port at Kinlochbervie.
- 3.9.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 3.9.10 The proposed intervention for the A836/838 involves the construction of new passing places, as well as visibility improvements. The proposed improvement works will be carried out in three phases, over a period of three years. The estimated costing for the works is £0.75 million over the three phases.

Impacts

- 3.9.11 Specific communities expected to benefit from the intervention include those located in settlements such as: Bettyhill, Coldbackie, Tongue, Achuldolvrach, Heilam, Eriboll, Polla, Durness, Portnancon and Richonich.
- 3.9.12 The main impacts from the proposed road upgrades are expected to be improved journey quality, comfort and safety for all users, with some minor improvements to journey time. The upgrades will also prevent damage to the road surface and improve the adequacy of the route for larger vehicles. In addition, the construction of new passing places will allow more comfortable passing for oncoming vehicles.
- 3.9.13 The proposed route improvements are expected to improve access and efficiency for local businesses that rely on the route for the transportation of goods, particularly crofting, forestry (Bettyhill and Tongue plantations), salmon farming, and mussels and oysters at Loch Eriboll. These impacts will arise through improved adequacy of the route for larger vehicles, reduced wear and tear on vehicles and minor journey time improvements.
- 3.9.14 In addition to primary sectors, the route upgrade is also expected to help promote tourism in the area by improving accessibility to tourist attractions and businesses along the route including hotels, self catering accommodation, B&Bs and campsites in Bettyhill, Tongue and Durness. The route is also part of the North West Highland Tourist Route. In general, route upgrades such as this are expected to improve the experience of the area for visitors and assist the promotion of tourism across the Highlands as a whole, by improving the ability of tourists and coach parties to move between remote parts of the region.
- 3.9.15 Route improvements are expected to yield significant benefits for local residents through improving access to lifeline services and employment along the route and beyond. Removal of route constraints will also assist local service providers access settlements along the route, so helping to maintain the viability of local communities.
- 3.9.16 Consultees approached for this study described the level of benefits likely to arise from the proposed upgrade as "moderate" for local residents. The economic benefits likely to arise from the upgrade were described as "minor".

4 Orkney Council

4.1 A964: Kirkwall to Clouston (Map 5 – Mainland Orkney)

Route Characteristics

- 4.1.1 The A964 provides a link to Kirkwall from Stenness via Orphil and provides access to Hoy and Flotta via sea connections at Houton. The road is an A class road of some 24 kilometres in length with narrow sections and represents one of only four routes into the key regional centre of Kirkwall.
- 4.1.2 The estimated average flow of traffic as at June 2005 is 1,200 vehicles per day. The road is used by a mix of commercial, private, agricultural and tourist traffic and is considered of inadequate width for the volume and type of vehicles using it at present. In particular, the route is popular with large tour coaches visiting Scapa Flow and is relied upon by heavy goods vehicles moving from oil industry facilities at Hoy and Flotta.
- 4.1.3 There are regular bus services operating along the route, five days a week and the route also provides a vital link to ferry services from Houton to Flotta and Hoy. These ferry services are severely oversubscribed and users can have to book more than two weeks for availability in the summer months.
- 4.1.4 Overall, the route connects a dispersed population along its length. It is the only link for transport from Orphir, Hatston and Hoy to the Regional Centre of Kirkwall; and for onward travel via external ferry services at Stromness, Hatson and St Margaret's Hope.
- 4.1.5 For the purposes of this study the severity of constraints along the route have been rated as "high".

Socio Economic Characteristics

- 4.1.6 Communities at Orphir and Houton are served by the A964, as well as the dispersed population along the length of the route. Communities at Hoy and Flotta are also served by the route via a sea connection to Houton. As such, the road serves communities on the Orkney mainland, providing access to and from Kirkwall, as well as small fragile islands via ferry connections.
- 4.1.7 In 2005 the total population of the defined area was estimated at 3,183 people, 21% of whom are of pensionable age. Over the period 2001 to 2005, the area showed fairly modest population growth (net growth of 2%).
- 4.1.8 The area has a population density of 1.8 persons per sq km and all of the datazones in the defined area are rated as "remote rural" in the Scottish Government Urban-Rural Classification.
- 4.1.9 In July 2007, 0.5% of the working age population of the area were in receipt of Job Seekers Allowance, an unemployment rate well below the HITRANS average of 1.8% for the same period. Significant seasonal fluctuations are apparent in unemployment in the area, with rates in the winter months rising to almost three times those recorded in the summer period.
- 4.1.10 The route provides links to a community services at Orphir, including Orphir Community School and Orphir Church. The route provides a key link to Kirkwall for all main services and facilities, for all communities along the route and on Hoy and Flotta, and to Stromness for services and connections to the Mainland via NorthLink service.

- 4.1.11 In 2005 there were a total of 1,718 employee jobs in the area and the area showed an above average reliance on employment in primary industries. Primary sectors (including energy and agriculture) accounted for 35% of all employment in the area, while the food and drink processing sector was also important (accounting for 11% of total employment). The tourism industry is also important in the area, with a range of attractions surrounding Scapa Flow and Hoy.
- 4.1.12 Overall, the key sectors in the area are tourism, energy and food processing. The route also provides links for key strategic businesses on Hoy and Flotta, including Flotta oil terminal and the site of the proposed container hub at Hoy.
- 4.1.13 The island of Hoy is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. The analysis of secondary data carried out for this study resulted in the whole route being rated as serving areas of "medium fragility".

Proposed Intervention

- 4.1.14 The proposed intervention for the A964 involves road widening and realignment. The timescale for the proposed improvement works is within three years. The estimated costing for the proposed intervention is £2.3 million.

Impacts

- 4.1.15 Communities expected to benefit from the proposed upgrade include Orphir, Houton and dispersed settlements along the length of the route. Also communities on Hoy and Flotta via sea connection to Houton
- 4.1.16 The proposed upgrades are expected to result in improved journey time and reliability, improved comfort and reliability for all users, to relieve bottlenecks at peak times and to help improve adequacy of route for large vehicles which rely on it.
- 4.1.17 For existing businesses, the proposed upgrades are expected to improve access and efficiency for local employers which rely on the route for transport of goods, particularly agriculture and the energy sector. These impacts will arise through improved adequacy of the route for large vehicles reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 4.1.18 The upgrades are also expected to assist in the development of strategically important industries for the Orkney region, by improving access to energy sector sites and assisting in the development of hub container facilities at Hoy.
- 4.1.19 The intervention is expected to help promote tourism in the area by improving accessibility to tourist businesses and attractions along the route including the Scapa Flow Visitor Centre (which attracted over 12,000 visitors in 2006), the Lyness Naval Cemetery, the Old Man of Hoy and the Longhope Lifeboat Museum.
- 4.1.20 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Kirkwall, through improved access to ferry services and the local road network. The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas against a trend of increasing population drift towards Kirkwall.

- 4.1.21 Road improvements are expected to help complement other initiatives in the area, including on-going projects to improve capacity on the ferry link to Hoy as well as community based activity arising out of the 'Initiative at the edge' project.
- 4.1.22 Overall, consultees approached for this study expected that the proposed upgrades would have a 'high impact' on businesses and residents in the affected areas.

5 Western Isles Council

5.1 B8011: Garynahine to Uig (Map 4 – Lewis)

Route Characteristics

- 5.1.1 The B8011 runs from Garynahine to Uig on the west coast of Lewis and provides links to settlements along Loch Roag as well as to Bernera and Linshader via minor roads. The route is described as a local access road for the Uig communities. Although some sections have been upgraded to dual track in recent years, much of the route remains a poor quality single track with substandard vertical and horizontal alignment. Consultees describe the road as not adequate for the type of traffic which relies on it, resulting in very lengthy journey times. The maximum journey time for school children travelling by bus to Stornoway can exceed one and a half hours each way for a journey of only 34 miles, implying an average speed of less than 25 mph.
- 5.1.2 The total length of the Garynahine to Uig stretch is estimated at 50 kilometres. Traffic volumes along the route are described as 'low', with a HGV traffic accounting for a low proportion of vehicle movements. Key users of the route include commuters and school children travelling to Stornoway, tourist traffic and business traffic accessing fishing and aquaculture sites.
- 5.1.3 For the purposes of this study, consultees described the severity of current constraints on the route as 'high'.

Socio Economic Characteristics

- 5.1.4 The route serves communities along the B8011 to Uig and beyond as well as communities at Gisla and Bernara. The total population of the area served was estimated at 607 people in 2005. Over the period 2001 to 2005 the area showed a net population decline of 6% against a background of little change across the Western Isles as a whole.
- 5.1.5 Some 30% of the population were aged over 65 in 2005. As such, the concentration of older people in the area is higher than that recorded in other parts of Lewis, where residents of pensionable age account for 20-24% of the population.
- 5.1.6 The population density of the area served by the route is estimated at 0.4 persons per square kilometre, a ratio significantly lower than any other of the routes in the Western Isles which have been examined as a part of this study. All parts of the area are designated as 'remote rural' in the Scottish Executive's Urban-Rural Classification system.
- 5.1.7 The route provides links to a local shop, satellite doctors surgery, a community hall and two schools along its length. As well as these, there are a number of fish related businesses (fish farming, fishing and mussels) operating in the area as well as some companies offering boat related tourism trips. Other businesses in the area include a restaurant in Uig with linked accommodation, some local craft workshops/houses and shops/post office premises.
- 5.1.8 A total of 160 employee jobs were located in the area in 2005, the vast majority of which were concentrated in primary activities such as fishing, fish farming and agriculture. Other activities include food processing (accounting for 10% of all jobs), while the importance of the tourism sector is indicated by the proportion of jobs which are concentrated in hotels and catering activities (10%). Key tourism sites in the area include Uig beach (where the Lewis chessmen were found) as well as numerous other beaches, camping and caravan sites.

- 5.1.9 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 5.1.10 The proposed intervention for the B8011 involves upgrading sections of the route to dual track. The timescale for the proposed improvement works is within three years. The estimated costing for the proposed intervention is £4 million.

Impacts

- 5.1.11 Communities expected to benefit from the proposed road upgrade include Gt Bernera, Gisla, Valtos, Uig, Islavig, Brenish.
- 5.1.12 The proposed intervention is expected to complement other recent upgrades on the road to improved journey time and reliability, improved comfort and reliability for all users of the route. This will be achieved by improving the adequacy of the route for the type and volume of traffic relying on it, relieving bottlenecks, allowing vehicles to meet oncoming traffic more comfortably and to maintain a higher, steadier speed.
- 5.1.13 The proposed upgrades are expected to improve access and efficiency for existing local employers which rely on the route for transport of goods, particularly those in the fish farming, agriculture and food processing sectors. These impacts will arise through improved adequacy of the route for large vehicles reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 5.1.14 The upgrades are also expected to assist in the development of strategically important industries for the Western Isles, by improving access to and encouraging expansion of businesses in remote areas – particularly in the fish farming and higher value added food processing sectors.
- 5.1.15 The intervention is expected to help promote tourism in the area by improving accessibility to tourist businesses and attractions along the route including beaches, local hotels and restaurants, beaches and other attractions. Overall, the initiative will help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
- 5.1.16 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Stornoway and beyond, through improved access to ferry services and the local road network (with particularly benefits are expected to be gained by commuters and school children). The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas against a trend of increasing population drift towards Stornoway.

5.2 A858: Lower Barvas to Carloway (Map 4 – Lewis)

Route Characteristics

- 5.2.1 This section of the A858 runs from Lowe Barvas to Carloway on the north west coast of Lewis and provides links to settlements such as Arnol, Brue, Bragar, and Shawbost as well as those further north. The route is described as a local access road for communities to the west of Lewis. Although some sections have been upgraded to dual track in recent

years, the route retains sections of poor quality single track with substandard vertical and horizontal alignment, particularly in the areas between townships. Consultees describe the road as not adequate for the type and volume of traffic which relies on it.

- 5.2.2 The total length of the Lower Barvas to Carloway stretch is estimated at 20 kilometres. Traffic volumes along the route are described as high with very high AM and PM peak flows. The route is one of the most heavily trafficked roads in the Western Isles outside of Stornoway. Key users of the route include commuters and school children travelling to Stornoway, tourist traffic and business traffic accessing fish farming and other business sites. The A858 is used as the main link for bus services connecting the west coast of Lewis.
- 5.2.3 For the purposes of this study, consultees described the severity of current constraints on the route as 'medium'.

Socio Economic Characteristics

- 5.2.4 The route serves communities along the A585 from Carloway to Lower Barvas and beyond as well as communities along the route to Port of Ness. The total population of the area served was estimated at 1,350 people in 2005. Over the period 2001 to 2005 the area showed virtually no net change in population, a pattern similar to that observed across the Western Isles as a whole.
- 5.2.5 Some 23% of the population were aged over 65 in 2005, a similar proportion to that recorded in other parts of Lewis. The population density of the area served by the route is estimated at 1.2 persons per square kilometre. All parts of the area are designated as 'remote rural' in the Scottish Executive's Urban-Rural Classification system.
- 5.2.6 The route provides links to a local leisure centre, museum and two local schools with link out to Secondary schools in Stornoway along its length. As well as these, other businesses and services in the area include the Harris tweed mill, a national call centre, a local heritage centre, photographic premises, a fish farming hatchery and local shops and post offices.
- 5.2.7 A total of 300 employee jobs were located in the area in 2005, around a quarter of which were concentrated in primary activities such as fish farming and agriculture. Other activities include manufacture of textiles and tourism related activities. Key tourism sites in the area include including beaches, local hotels and restaurants, standing stones sites and other attractions.
- 5.2.8 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 5.2.9 The proposed intervention for this section of the A858 involves upgrading sections of the route to dual track. The timescale for the proposed improvement works is within three years. The estimated costing for the proposed intervention is £2 million.

Impacts

- 5.2.10 Communities expected to benefit from the proposed road upgrade include those located along the north west Lewis coast, including the area from Port of Ness to Barvas, Arnol, Shawbost and Granin.

- 5.2.11 The proposed intervention is expected to complement other recent upgrades on the road to improved journey time and reliability, improved comfort and reliability for all users of the route. This will be achieved by improving the adequacy of the route for the type and volume of traffic relying on it, relieving bottlenecks, allowing vehicles to meet oncoming traffic more comfortably and to maintain a more steady speed.
- 5.2.12 The proposed upgrades are expected to improve access and efficiency for existing local employers which rely on the route for transport of goods, particularly those in the fish farming, agriculture, textiles and other sectors. These impacts will arise through improved adequacy of the route for large vehicles reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 5.2.13 The upgrades are also expected to assist in the development of strategically important industries for the Western Isles, by improving access to and encouraging expansion of businesses in remote areas – particularly in the fish farming and higher value added food processing sectors.
- 5.2.14 The intervention is expected to help promote tourism in the area by improving accessibility to tourist businesses and attractions along the route including beaches, local hotels and restaurants, standing stones sites and other attractions. Overall, the initiative will help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
- 5.2.15 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Stornoway and beyond, through improved access to ferry services and the local road network (with particularly benefits are expected to be gained by commuters and school children). The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas against a trend of increasing population drift towards Stornoway.

5.3 A858: Carloway to Leurbost (Map 4 – Lewis)

Route Characteristics

- 5.3.1 This section of the A858 runs from Carloway to Leurbost and provides a key link for communities into Stornoway and the strategic Western Isles spinal route. The route is described as a main access road for communities to the west of Lewis. Although some sections have been upgraded to dual track in recent years, the route retains sections of poor quality single track with substandard vertical and horizontal alignment, particularly in the areas between townships. Consultees describe the road as not adequate for the type and volume of traffic which relies on it.
- 5.3.2 The total length of the Carloway to Leurbost stretch is estimated at 26 kilometres. Traffic volumes along the route are described as high with very high AM and PM peak flows. The route is one the most heavily trafficked roads in the Western Isles outside of Stornoway, with a significant proportion of HGV traffic. Key users of the route include commuters and school children travelling to Stornoway, tourist traffic and business traffic accessing fish farming and other business sites. The A858 is used as the main link for bus services connecting the west coast of Lewis.
- 5.3.3 For the purposes of this study, consultees described the severity of current constraints on the route as 'high'.

Socio Economic Characteristics

- 5.3.4 The route serves communities along the A858 from Carloway to Leurbost and beyond as well as communities along the route to Port of Ness to the North. As such, the road is an important link for a large proportion of the population of Lewis outside Stornoway. The total population of the area served was estimated at almost 3,000 people in 2005. Over the period 2001 to 2005 the area showed virtually no net change in population, a pattern similar to that observed across the Western Isles as a whole.
- 5.3.5 Some 24% of the population were aged over 65 in 2005, a similar proportion to that recorded in other parts of Lewis. The population density of the area served by the route is estimated at 0.9 persons per square kilometre. All parts of the area are designated as 'remote rural' in the Scottish Executive's Urban-Rural Classification system.
- 5.3.6 The route provides links to local surgeries as well as a small residential/care unit in Carloway. Two local schools rely on the route as well as a small council office in Achmore. As well as these, other businesses and services in the area include significant fish farming activity in the Loch Roag area, a pharmaceuticals factory, hotel & restaurants, Breasclate and Carloway piers and a number of local shops and post offices.
- 5.3.7 A total of 400 employee jobs were located in the area in 2005, around half of which were concentrated in primary activities such as fish farming and agriculture. Other activities include life sciences and tourism related activities. The route provides access to many of the most important tourism sites in the Western Isles, including beaches, local hotels and restaurants, Callanish Stones, Carloway Broch and other attractions.
- 5.3.8 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

- 5.3.9 The proposed intervention for this section of the A858 involves upgrading sections of the route to dual track. The timescale for the proposed improvement works is within three years. The estimated costing for the proposed intervention is £0.7 million.

Impacts

- 5.3.10 Communities expected to benefit from the proposed road upgrade include those located along the north-west Lewis coast, including those from Port of Ness to Carloway, Callanish, Achmore and Leurbost.
- 5.3.11 The proposed intervention is expected to complement other recent upgrades on the road to improved journey time and reliability, improved comfort and reliability for all users of the route. This will be achieved by improving the adequacy of the route for the type and volume of traffic relying on it, relieving bottlenecks, allowing vehicles to meet oncoming traffic more comfortably and to maintain a more steady speed.
- 5.3.12 The proposed upgrades are expected to improve access and efficiency for existing local employers which rely on the route for transport of goods, particularly those in the fish farming, agriculture, textiles, life sciences and other sectors. These impacts will arise through improved adequacy of the route for large vehicles reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.

- 5.3.13 The upgrades are also expected to assist in the development of strategically important industries for the Western Isles, by improving access to and encouraging expansion of businesses in remote areas – particularly in the fish farming and higher value added food processing sectors.
- 5.3.14 The intervention is expected to help promote tourism in the area by improving accessibility to tourist businesses and attractions along the route including beaches, local hotels and restaurants, standing stones sites and many of the most important tourist attractions on Lewis. Overall, the initiative will help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
- 5.3.15 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Stornoway and beyond, through improved access to ferry services and the local road network (with particularly benefits are expected to be gained by commuters and school children). The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so maintaining the sustainability of population in these areas against a trend of increasing population drift towards Stornoway.

5.4 A865: Clachan to Trumisgarry (Map 4 – North Uist)

Route Characteristics

- 5.4.1 This section of the A865 runs from Clachan to Trumisgarry and provides a key link for communities on the west side of North Uist into Lochmaddy and the strategic Western Isles spinal route. The route is described as single track carriageway along its entire length with passing places. Sections of the route suffer from poor horizontal and vertical alignment with some areas poorly founded, resulting in subsidence and cracking. Consultees describe the road as not adequate for the type and volume of traffic which relies on it.
- 5.4.2 The total length of the route is estimated at 27 kilometres. Traffic volumes along the route are described as low with a low proportion of HGV users. Key users of the route include commuters and school children travelling to Lochmaddy, tourist traffic and business traffic accessing fish farming and other business sites. Public bus services use the route to access local communities.
- 5.4.3 For the purposes of this study, consultees described the severity of current constraints on the route as 'medium'.

Socio Economic Characteristics

- 5.4.4 The route serves communities along the A865 from Clachan to Trumisgarry. As such, the road is an important link for a large proportion of the population of North Uist outside Lochmaddy and serves as the sole means of access for communities to the Western Isles spinal route as well as ferry services to areas. The total population of the area served was estimated at 675 people in 2005. Over the period 2001 to 2005 the area showed a net drop in population of 9%, against a background of little change across the Western Isles as a whole.
- 5.4.5 Some 28% of the population were aged over 65 in 2005. The population density of the area served by the route is estimated at 1.3 persons per square kilometre. All parts of the area are designated as 'remote rural' in the Scottish Executive's Urban-Rural Classification system.

- 5.4.6 The route provides links to one school, a nursery school, an auxiliary coastguard station and a part time doctor's surgery. As well as these, other businesses and services in the area include fishing businesses, building contractors, a garage, the Hebridean Smokehouse as well as local shops and post offices(one with filling station).
- 5.4.7 A total of 160 jobs were located in the area in 2005, around 20% of which were concentrated in primary activities such as fish farming and agriculture. Other activities include food processing and tourism related activities. The route provides access to the Claddach Kirkibost Centre, RSPB Balranald Reserve, various beaches, walks, fishing lochs, B&B's and Guest houses.
- 5.4.8 The area is recognised by Highlands and Islands Enterprise as priority for development due to its designation as a 'fragile area' within the region. Overall, the analysis of secondary data carried out for this study resulted in the route being rated as serving areas of "high fragility".

Proposed Intervention

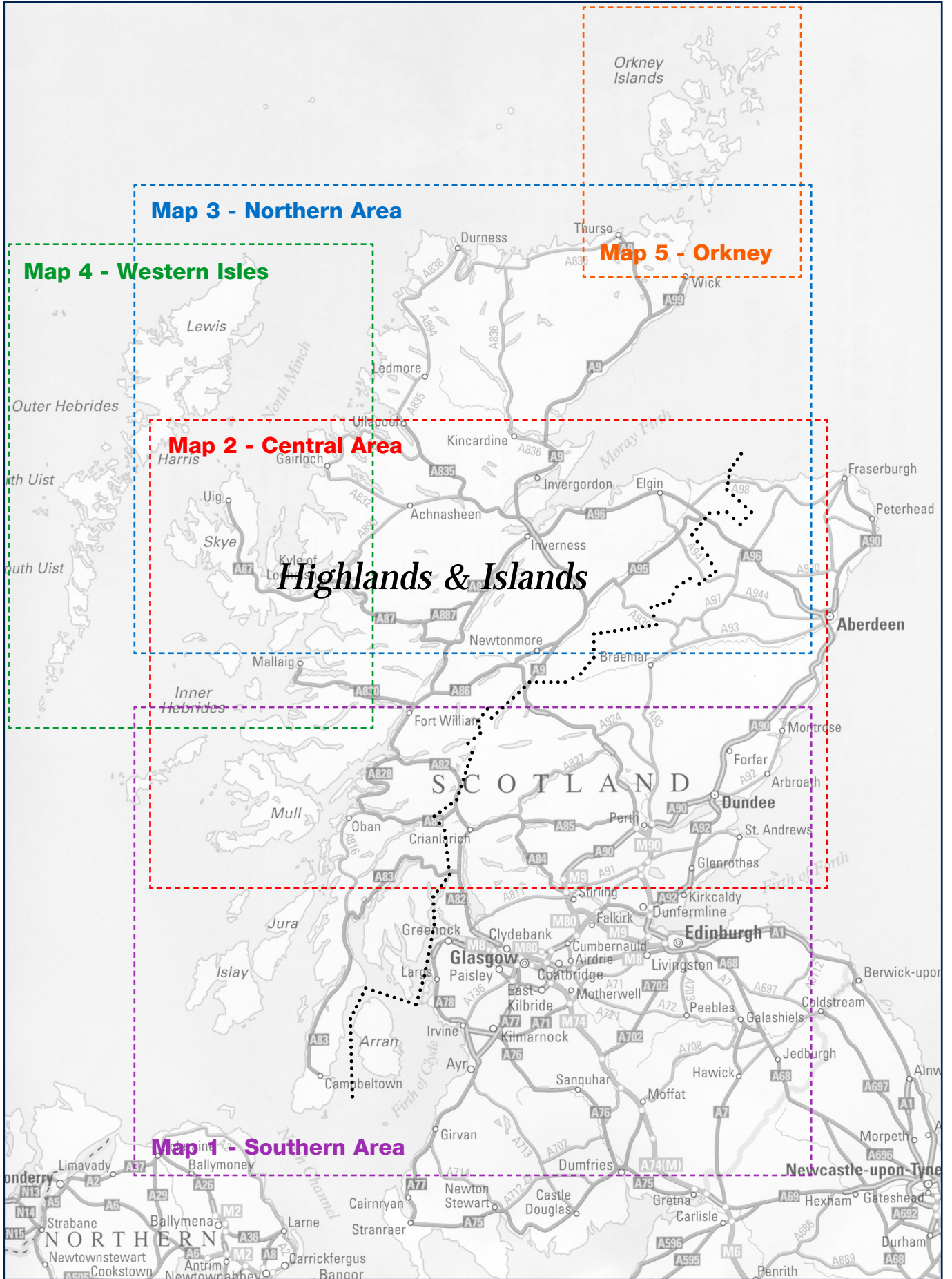
- 5.4.9 The proposed intervention for this section of the A858 involves upgrading sections of the route to dual track. The timescale for the proposed improvement works is within three years. The estimated costing for the proposed intervention is £2 million.

Impacts

- 5.4.10 Communities expected to benefit from the proposed road upgrade include those located along the west side of North Uist, including Bayhead, Tigharry and Sollas
- 5.4.11 The proposed intervention is expected to complement other recent upgrades on the road to improved journey time and reliability, improved comfort and reliability for all users of the route. This will be achieved by improving the adequacy of the route for the type and volume of traffic relying on it, relieving bottlenecks, allowing vehicles to meet oncoming traffic more comfortably and to maintain a more steady speed.
- 5.4.12 The upgrades are expected to improve access and efficiency for existing local employers which rely on the route for transport of goods, particularly those in the fish farming, agriculture and other sectors. These impacts will arise through improved adequacy of the route for large vehicles reduced wear and tear on vehicles and minor journey time improvements. Such improvements are expected to help maintain the sustainability of local businesses.
- 5.4.13 The upgrades are also expected to assist in the development of strategically important industries for the Western Isles, by improving access to and encouraging expansion of businesses in remote areas – particularly in the fish farming and higher value added food processing sectors.
- 5.4.14 The intervention is expected to help promote tourism in the area by improving accessibility to tourist businesses and attractions along the route including RSPB reserve, Claddach Kirkibost Centre, local beaches, walks and fishing lochs. Overall, the initiative will help improve the visitor experience for tourists coming to the Western Isles by making peripheral areas more easily and comfortably accessible.
- 5.4.15 Local residents are expected to benefit as a result of the proposed intervention. These are expected to arise from improved ease of access to employment and key lifeline services in Lochmaddy and beyond, through improved access to ferry services and the local road network (with particularly benefits are expected to be gained by commuters and school children). The upgrades are also expected to improve the ability of local service providers to access remote communities on the island, so protecting the viability of these

settlements. Overall, the intervention offers an opportunity to link a large part of the island's population together more easily, opening up new communities for development and maintaining the sustainability of population in these areas against a trend of increasing population drift towards Lochmaddy.

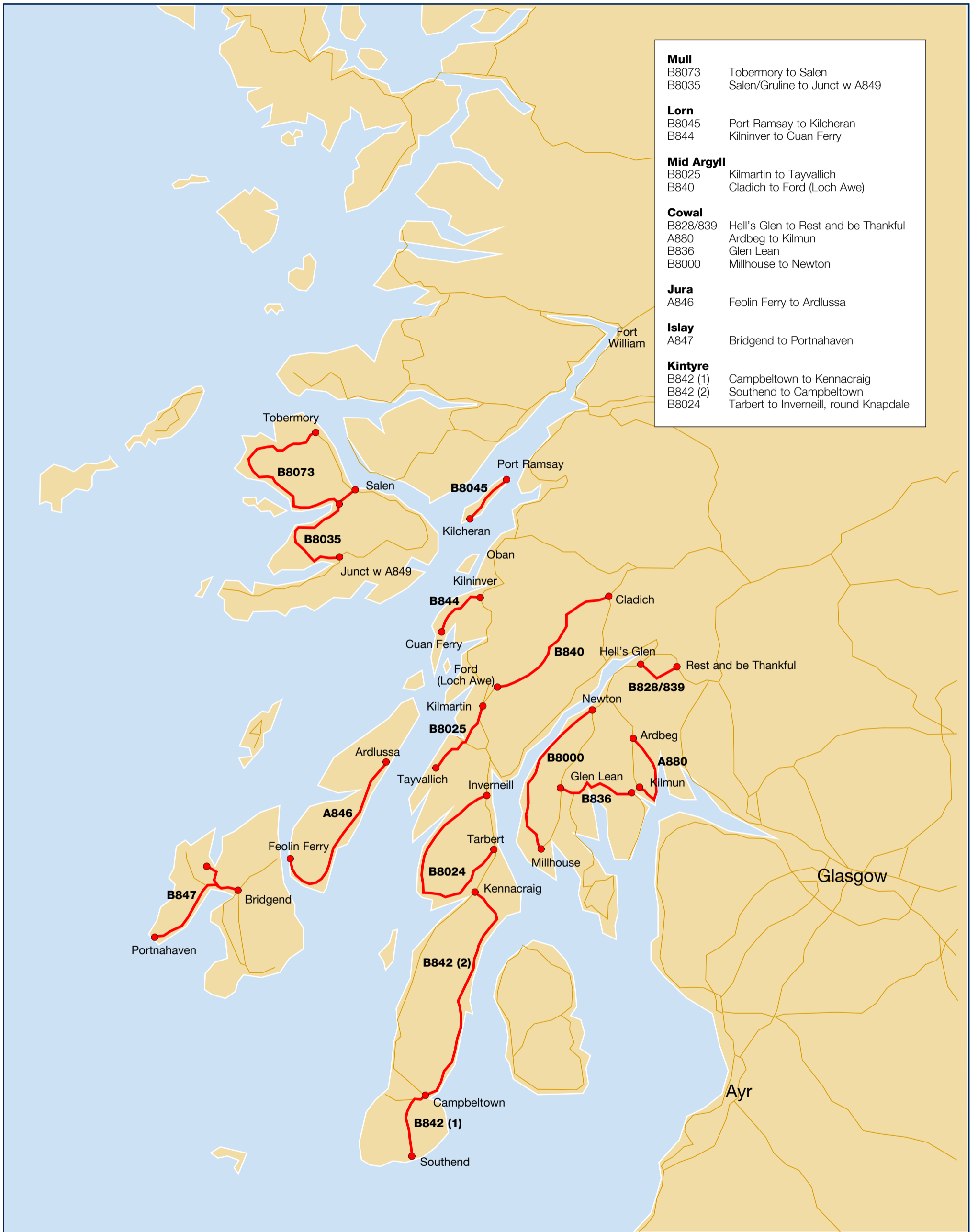
Appendix E – Route Maps



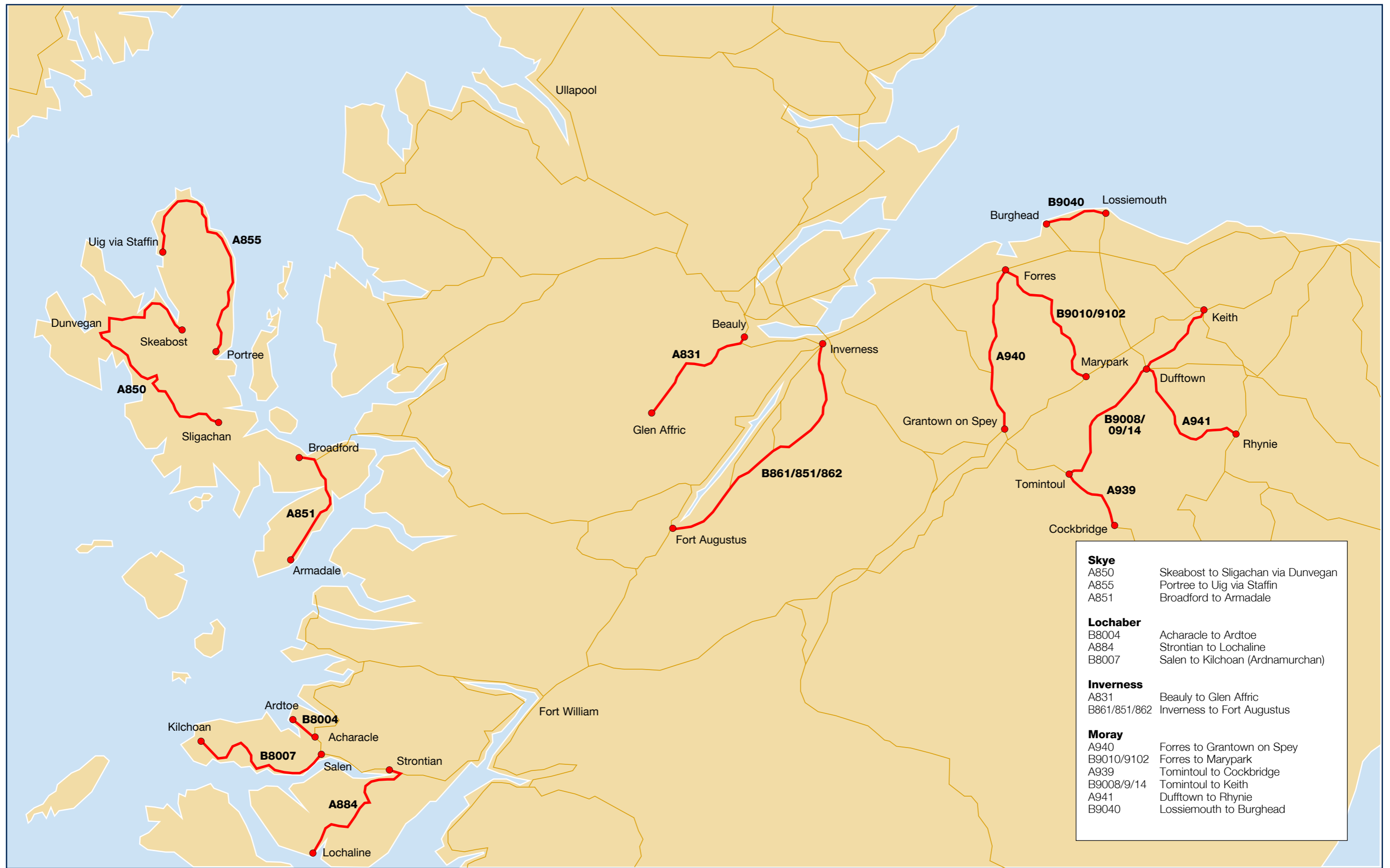
Locally Significant Road Network

Map Areas

TRIBAL



Locally Significant Road Network
Map 1 - Southern Area







Locally Significant Road Network

Map 4 - Western Isles



Locally Significant Road Network

Map 5 - Orkney Islands