# HITRANS

Investment in Lifeline Rural Roads
Individual Scheme Appraisals – Oban to Lochgilphead
September 2004

**Halcrow Group Limited**

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## Investment in Lifeline Rural Roads Individual Scheme Appraisals – Oban to Lochgilphead

## Contents Amendment Record

This report has been issued and amended as follows:

| Issue | Revision | Description | Date | Signed |
|---|---|---|---|---|

# Contents

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# 1 Introduction (Oban to Lochgilphead)

*1.1* ***Background***

*1.1.1* HITRANS, the Highlands and Islands Strategic Transport Partnership, commissioned Halcrow Group Ltd to undertake a study to support the campaign for further investment in lifeline rural roads.

*1.1.2* The study was split into two stages. Stage One undertook an extensive consultation process to evaluate the issues surrounding lifeline roads including key problems and constraints facing rural communities. The aim of the second stage was to carry out an economic appraisal of nine designated routes in order to bolster the findings of the initial research such as to make an economic case for sustainable increases in investment in lifeline roads.

*1.1.3* This report represents part of the second stage of the project. It presents, in full, the economic assessment carried out on the proposed Oban to Lochgilphead road improvement scheme. It does not seek to encompass all the wider issues involved within the study and does not present the methodology. As such it should be read in conjunction with the main 'Investment in Lifeline Rural Roads: Stage 2 Final Report'[1].

*1.2* ***Report Structure***

*1.2.1* **Section 2** presents the contextual background to the scheme. It also assesses the existing road conditions and the proposed scheme enhancements;

*1.2.2* **Section 3** presents an assessment of the likely impacts of the scheme;

*1.2.3* **Section 4** presents the Transport Economic Efficiently (TEE) analysis;

*1.2.4* **Section 5** assess the business survey responses for the Salen to Tobermory route;

*1.2.5* **Section 6** presents the Economic Activity Locational Impact (EALI) analysis; and

*1.2.6* **Section 7** presents the conclusions.

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[1] Halcrow (2004)

# 2 Background (Oban to Lochgilphead)

## 2.1 *Contextual Background*

2.1.1 The A816 formed part of the trunk road network until 1996 linking A83 and A85 trunk roads. It is provides the main transport artery south from Oban to Lochgilphead and Campbeltown. Figure 1 presents a map of the route.

2.1.2 Oban is the principle ferry port in the region serving the Inner Hebrides, Mull and the Western Isles. The town is a key centre for the region and has developed into a popular shopping destination with a catchment stretching as far south as Lochgilphead. Lochgilphead itself is the administrative centre for Argyll & Bute, therefore the A816 is a key strategic 'lifeline' road.

2.1.3 The A816 is also of significant industrial importance as it is the only route from Kintyre heading north that is suitable for timber extraction and vehicles serving the fishing industry.

2.1.4 No major realignment works has been undertaken within the last ten years. Very few sections are of a modern standard, those that are being: Bridgend bypass, Arduaine, Glengallan, Kilninver to Knipoch forming approximately 25% of the route. Other than these sections the route is of a much poorer standard in terms of width and alignment. The section from Ardfern to Craobh Haven consists of steep gradients and a series of tight bends.

2.1.5 During heavy rainfall flooding occurs on the section between Lochgilphead and Cairnbaan and between Kilmartin and the B840 junction causing closures on average twice a year.

## 2.2 *Local Economy*

2.2.1 The Scottish Census Results On-Line (SCROL) data (2003) presented in Section 4.4 indicates that region around the A816 has a population of around 15,400 permanent residents [postcode areas PA31 and PA34]. Whilst a proportion of these will not have direct access to the A816 it will remain an important route in terms of accessibility for most of these residents.

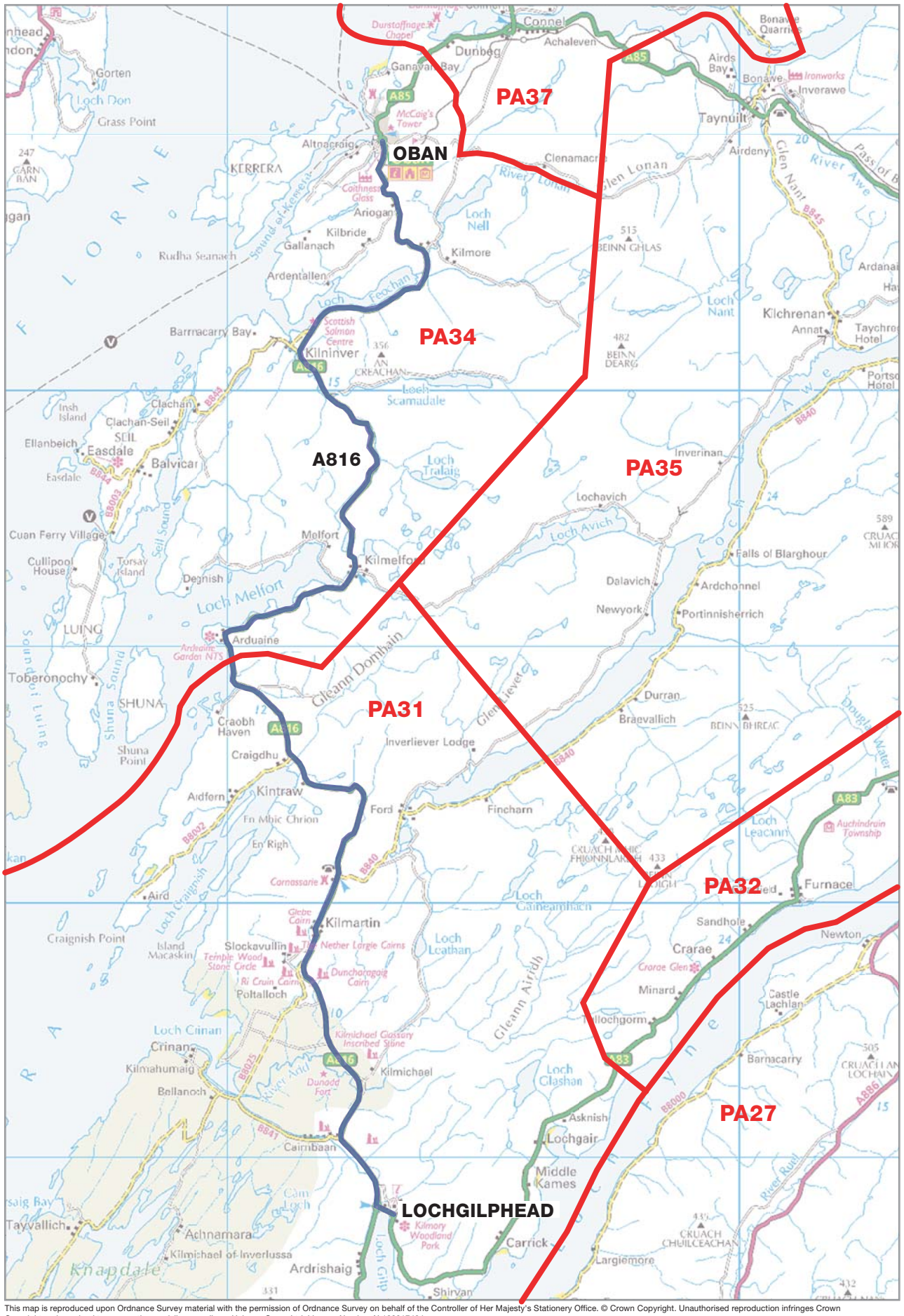




**Figure 1: A816 OBAN TO LOCHGILPHEAD**

*2.2.2* Over 8,100 of the total are estimated to be within Oban, making it the main local centre. Lochgilphead is estimated to have a population of over 2,300.

*2.2.3* Employment levels within the same area are estimated at over 7,900, with again a high proportion of these based in and around Oban [3,800] and Lochgilphead being the second largest employment centre [1,000]. The majority of jobs within the area are in the tertiary sector.

*2.2.4* Unemployment levels within the area surrounding the route are estimated at 3.8%. This compares to the rate for the Scotland as a whole of just under 4% indicating that the area is in line with average employment opportunities for the country.

*2.2.5* The indices of deprivation (presented in Table 4.3 of the main report) imply that the area around Oban and Lochgilphead is relatively affluent in comparison to the rest of Scotland. However, it is generally recognised that these data can be distorted by the relatively high levels of car ownership that typify communities within the Highlands and Islands of Scotland. The remote nature of some of these communities and low levels of public transport services result in private car ownership becoming a necessity. The data for Oban is considered to be less likely to be distorted due to the relative size of the community and the provision of public transport services.

*2.2.6* An alternative approach to assess economically and socially disadvantaged parts of the Highlands and Islands is the Fragile Areas definition. A full description of this can be found in Section 4.4.8 of the main report, but in summary, it uses 12 criteria across three categories: geographic, demographic and economic, to assess whether a region can be considered economically and socially disadvantaged. The areas around Oban and Lochgilphead are not classified as a 'Fragile Area' under this assessment process.

*2.2.7* Within the Argyll & Bute area as a whole the public administration, education and health make up a large proportion of employment (26%). The majority of these public bodies are located within Lochgilphead. Tourism is also a major employer, reflecting the range of visitor attractors within the area.

*2.2.8* The level of primary industries: Forestry, Fisheries and Agriculture are also high in the area in comparison to the Highlands & Islands as a whole. The region to the south of Argyll in particular has significant economic activity within these sectors.

*2.3* ***Existing Road Conditions***

*2.3.1* As described above this section of road provides the main linkages route from South Argyll towards Oban and is critical to the forestry and fishing industries to the south of Argyll. The road is double track along its length from Oban to Lochgilphead. The exception to this is across the three bridges at Kintraw (Category C listed structure), Tibertich and Oude, which are single track and too narrow for large articulated lorries. Kintraw is particularly awkward as it is on a steep gradient. In addition, there are the sections of road from Ardfern to Craobh Haven and from Kilmeford to Oude which are too narrow for HGVs to meet. The average carriageway width along the route is around 5.25 metres. There are no weight restriction orders on the route.

*2.3.2* The section from Ardfern to Craobh Haven is particularly tortuous, suffering from poor geometry and steep gradients. Likewise the section from Kilmelford to Oude Dam requires to be widened to ease the passage of HGVs and reduce damage to edges.

*2.3.3* The traffic count data provided be Argyll & Bute Council indicates that the average two-way 24-hour traffic flow across the year is 1,152 vehicles. This count was taken 1km north of Oude. It is estimated that only a proportion of these trips will travel the entire length of the route, thus taking advantage of the scheme improvements. Some 60% of these trips have therefore been estimated to travel along the section of the scheme upgrade. This generates a two-way, 24-hour trips flow for the route of 691 vehicles.

*2.4* ***Proposed Improvement Scheme***

*2.4.1* The proposed scheme is significant in scale with an estimated scheme cost in the region of £22.0M across a 30km section of the route. This gives an estimated cost per km of £0.73M.

*2.4.2* The proposed scheme works include large-scale structures work on the three bridges at Kintraw, Tibertich and Oude to upgrade them to double-track provision. In addition re-alignment and widening of the sections between Ardfern and Craobh Haven, and Oude and Glengallen will be undertaken. This will remove all the pinch-points along the route from Oban to Lochgilphead, thus providing more reliable journey times.

# 3 Assessment of Scheme Impacts (Oban to Lochgilphead

*3.1* ***Impact on Journey Times and Reliability***

*3.1.1* Data provided by Argyll & Bute Council indicates that average speeds across the route from Oban to Lochgilphead are currently around 50km/hr. This reflects the fact that whilst the majority of the route is double-track, the alignment and width in many sections is poor, resulting in lower speeds.

*3.1.2* The Council believes that the upgrade of the 30km section will allow a much smoother progression of traffic along the route. As well direct benefits from realigning the tortuous sections and widening narrow sections, the improvements should also allow much safer overtaking opportunities. Given that the route is well used by HGVs involved in the timber and fishing trades this should be a valuable improvement.

*3.1.3* The Council estimate that average journey times between Oban and Lochgilphead could be reduced by 15 minutes. This would translate to a journey time of 55 minutes against the current time of 70 minutes. This represents a 21% reduction in average journey time.

*3.1.4* The estimated improvement in journey time would translate to an average speed across the route of just over 65km/hr, a significant enhancement on the current conditions.

*3.1.5* Improvements in journey time reliability are also expected as a result of removing the pinch-points along the route. It is estimated that 'average delay' (as described in Section 3.4.15 of the main report) will be reduced by 5 minutes per trip.

*3.1.6* Vehicle operating costs are anticipated to fall as a result of higher average speeds along the route and improved road surface conditions. Fuel costs would fall as a result of the shorter journey times with less requirement to accelerate and decelerate along the narrow sections of the route. Overall vehicle operating costs (as described in Section 3.4.7 of the main report) have been estimated to fall by around 9 pence per existing trip.

*3.2* ***Diversionary Impacts***

*3.2.1* The A816 from Oban to Lochgilphead is not considered to offer an alternative route to road-based trips between any given origin–destination pairs. As such the proposed upgrades to the route is considered unlikely to have any impact on traffic diverting from other roads to take advantage of the reduced journey times and improved reliability on the A816.

*3.3* ***Generated Traffic***

*3.3.1* Section 3.4 of the main report provides details of the methodology undertaken to assess the likely levels of generated traffic. To summarise, within the TEE analysis a journey time elasticity of -0.2 has been applied i.e. a 10% reduction in journey time will result in a 2% increase in traffic flows through generated trips. This approach has been taken in order to incorporate a measure of generated traffic within the TEE analysis. A wider assessment of the impact of the schemes on economic activity and subsequent traffic generation is undertaken within the EALI analysis.

*3.3.2* Applying a –0.2 elasticity to the forecast journey time saving of over 21%, along with a base flow of 691 vehicles, gives a forecast traffic generation of 30 vehicle trips per day.

*3.4* ***Accident Reduction Impacts***

*3.4.1* The reported numbers of accidents along the A816 are significant. Four fatal, 40 serious and 75 slight accidents have been reported within the last five years (see Table 4.6 of the main report).

*3.4.2* Historical evidence tends to indicate that a large proportion of 'damage only' accidents are often not reported. Furthermore, data suggests that 'damage only' accidents make up a high proportion of accidents on single-track roads[2]. It is therefore feasible that an even larger number of slight accidents may have occurred during the period than reported.

*3.4.3* The level of accidents, reported and unreported, is therefore likely to be significant and hence there is potential for scheme benefits from accident reduction.

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[2] J.C. Tomlinson & A.M. Ross, "Accidents on Single Track Roads" 1988

*3.4.4* The scheme itself should help to reduce the potential for accidents, in particular serious injury ones between on-coming traffic. Upgrading the narrower sections of the route should reduce the likelihood of vehicle collisions. Generally the improved alignment and re-surfacing should also ensure a much higher quality carriageway, thus, providing safety benefits.

**Table 3.1: Summary of Scheme and Estimated Impacts (Oban - Lochgilphead)**

| | | |
|---|---|---|
| *Description of Scheme Upgrade* | Large-scale structures work on bridges, re-alignment and widening of narrow sections<br><br>Estimated scheme costs = £22.0m<br><br>Scheme cost per km = £0.73M | |
| *Impact on Journey Times* | It is estimated that journey times along the route could improve by an average of 15 minutes<br><br>Estimated existing JT = 70 min<br><br>Estimated post-scheme JT = 55 min | |
| *Diversionary Impacts* | **Competing routes**<br><br>None | **Estimated diversion**<br><br>Zero |
| *Generated Traffic* | Assumed journey time elasticity of –0.2<br><br>21% reduction in JT = 4.2% increase in traffic | |
| *Accident Reduction Impact* | Significant levels of reported accidents<br>Scheme should improve safety levels | |

# 4 Transport Economic Efficiency Analysis (Oban to Lochgilphead)

*4.1* ***TEE Analysis***

*4.1.1* As described above, the pre- and post-scheme average journey time data indicates that significant journey time savings may result from this scheme. The estimated 15-minute journey time saving, along with the 5-minute reduction in 'average delay', translates to an existing user benefit of just over 9 pence per vehicle trip plus 206 pence per person trip. With a base volume of vehicle trips of 691 and vehicle occupancy of 1.41, this gives a central forecast for existing user benefits of £758k per annum.

*4.1.2* Section 3.2 above describes the assessment of potential 'diversionary benefits' deriving from the scheme. It concluded that there was unlikely to be any diversion to the A816 after the scheme upgrade.

*4.1.3* Section 3.3 above describes the assessment of potential 'generated trip' benefits deriving from the scheme. The central forecast of 30 trips per day translates into a generated user benefit of £17k per annum.

**Table 4.1: TEE Results (Oban - Lochgilphead)**

| Base Trip Matrix (vehicle trips/day) | Average Journey Time Savings | Existing User Benefits (£k/yr) | Diversionary Impact (trips/day) | Diversionary User Benefits (£k/yr) | Generated Trips (trips/day) | Generated User Benefits (£k/yr) | Total Users Benefits (£k/yr) |
|---|---|---|---|---|---|---|---|
| 691 | 15 | 758 | 0 | 0 | 30 | 17 | **775** |

*4.1.4* Overall total user benefits are therefore estimated to be in the region of £775k per year.

*4.2* ***TEE Sensitivity Testing***

*4.2.1* Sensitivity tests have been carried out on the TEE results in order to illustrate the potential variation in scheme benefits. The central forecasts are based on the data inputs as described above.

*4.2.2* The low forecasts assume that only half the estimated journey time-savings are actually achieved by the scheme. So rather than journey times along the A848 falling from 70 to 55 minutes the low forecast assumes a journey time of 63 minutes. In addition the base trips/day are assumed to be 25% lower. This impacts upon 'existing-user' benefits, 'diversionary-user' benefits and 'generated-user' benefits. Furthermore, the journey time elasticity applied to estimate generated traffic is assumed to be only –0.1.

*4.2.3* The high forecast assumes an additional 20% reduction in journey times is achievable over-and-above that within the central forecast. So the journey time along the A848 is assumed to fall to just under 52 minutes. In addition the base trips/day are assumed to be 10% higher. Furthermore, the journey time elasticity applied to estimate generated traffic is assumed to be –0.3.

**Table 4.2: TEE Benefits (£k/yr) – Central, Low, High Forecasts (Oban to Lochgilphead)**

| Central Forecast | Low Forecast | High Forecast |
|---|---|---|
| **775** | **287** | **1,038** |

*4.3* ***Present Value of TEE Benefits***

*4.3.1* Table 4.3 indicates the present value of the TEE benefits over 30 years for the central, low and high forecasts.

**Table 4.3: Present Value of Benefits (£M) - Central, Low, High Forecasts (Oban to Lochgilphead)**

| Central Forecast | Low Forecast | High Forecast |
|---|---|---|
| **15.2** | **6.0** | **21.6** |

* assumes 3.5% discount rate

# 5 Business Survey (Oban to Lochgilphead)

*5.1* ***Business Survey Data***

*5.1.1* Section 5 of the main report describes the objectives and methodology for undertaking the business survey. It discusses the sample obtained and its representation of local industry. In addition, in order to evaluate general trends, it presents the results at an aggregate level, across all schemes.

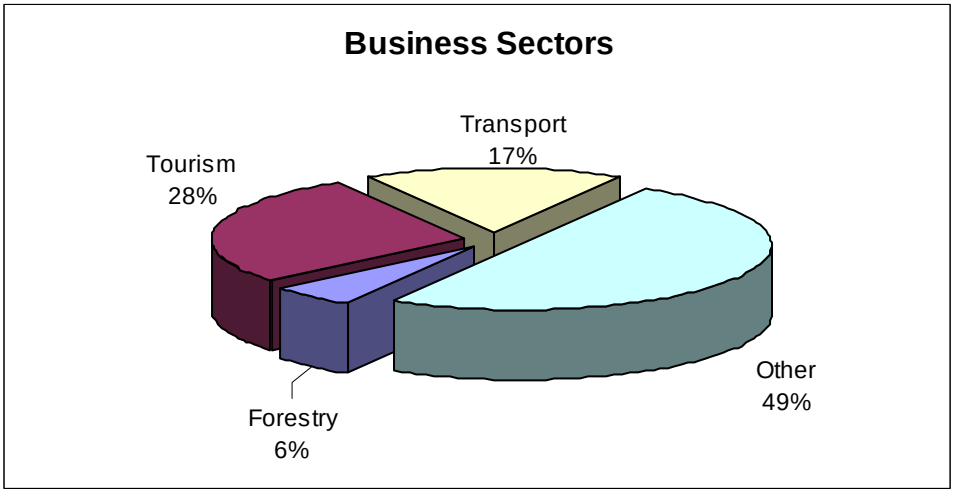
*5.1.2* The section below presents the results for businesses that will be directly affected by the proposed Oban to Lochgilphead scheme. Whilst the overall sample size achieved (18 firms) does not allow for statistically significant analysis to be undertaken, it does provide an insight into how the scheme may affect local firms.

*5.1.3* The results have been used to inform the analysis in Section 6 evaluating the economic activity and locational impacts of the scheme.

*Type of Business*

*5.1.4* The majority of businesses surveyed along the Oban to Lochgilphead route reported to be operating in a sector other than those listed in the survey form (49%). Of these businesses there was a high representation among IT, finance and professional services sectors. A significant proportion (28%) of businesses were in the 'tourism' sector and none of the respondents were in the 'fishing' or 'agriculture' sectors.

*5.1.5* With the exception of 'agriculture' sector representation, the sample can be considered roughly in line with the actual sectoral breakdown within the Oban to Lochgilphead catchment, with a particularly large representation from the professional services, finance and tourism sectors. The responses by sector are presented graphically below.

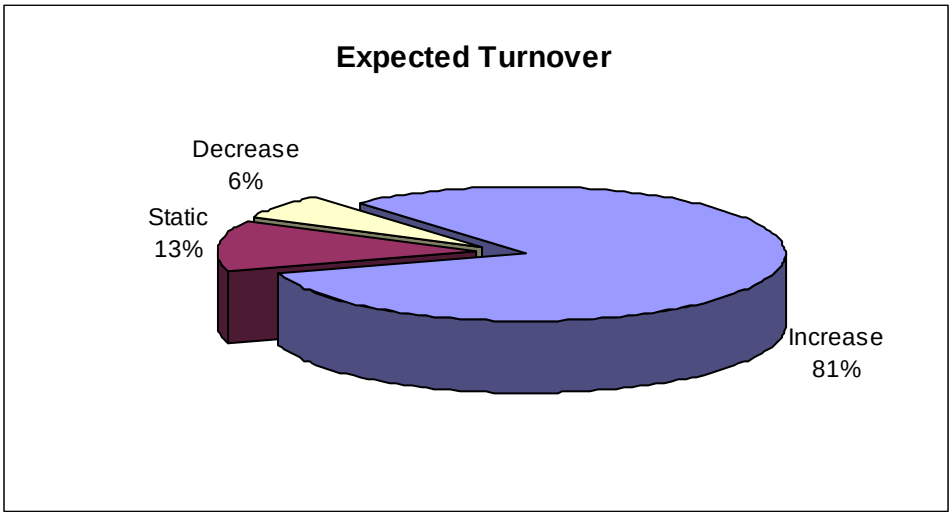



*Turnover (Oban – Lochgilphead)*

*5.1.6* The table below summarises the annual turnover of firms surveyed in each of the business sectors. The majority of respondents quoted a turnover of less than £500k a year. Two firms, one from the 'transport sector and one from the 'other' sector reported an annual turnover of between £1m and £5m, whilst a single firm within the 'forestry' sector reported a turnover in excess of £5m.

| **Turnover** | **Sector** | | | | |
|---|---|---|---|---|---|
| | **Forestry** | **Tourism** | **Transport** | **Other** | **Total** |
| 0 - 50k | 0 | 2 | 0 | 3 | **5** |
| 50k - 250k | 0 | 2 | 0 | 3 | **5** |
| 250k - 500k | 0 | 0 | 1 | 1 | **2** |
| 500k - 1m | 0 | 1 | 0 | 0 | **1** |
| 1 - 5m | 0 | 0 | 1 | 1 | **2** |
| > 5m | 1 | 0 | 0 | 0 | **1** |
| No Response | 0 | 0 | 1 | 1 | **2** |
| **Total** | **1** | **5** | **3** | **9** | **18** |

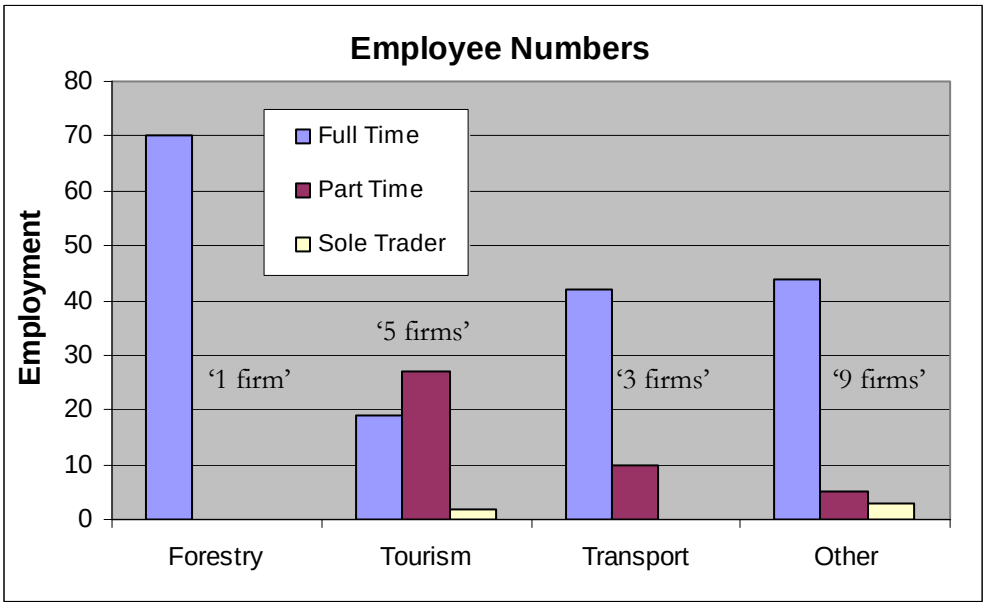
*5.1.7* The following diagram indicates expectations amongst firms along the Oban to Lochgilphead route regarding future turnover. The results demonstrate that the majority of businesses are optimistic with regards to future turnover, with 81% expecting turnover to increase over the next three years. Some 13% expect turnover to remain at its current levels and only 6% expect to witness a decrease.




*<u>Employment</u> (Oban – Lochgilphead)*

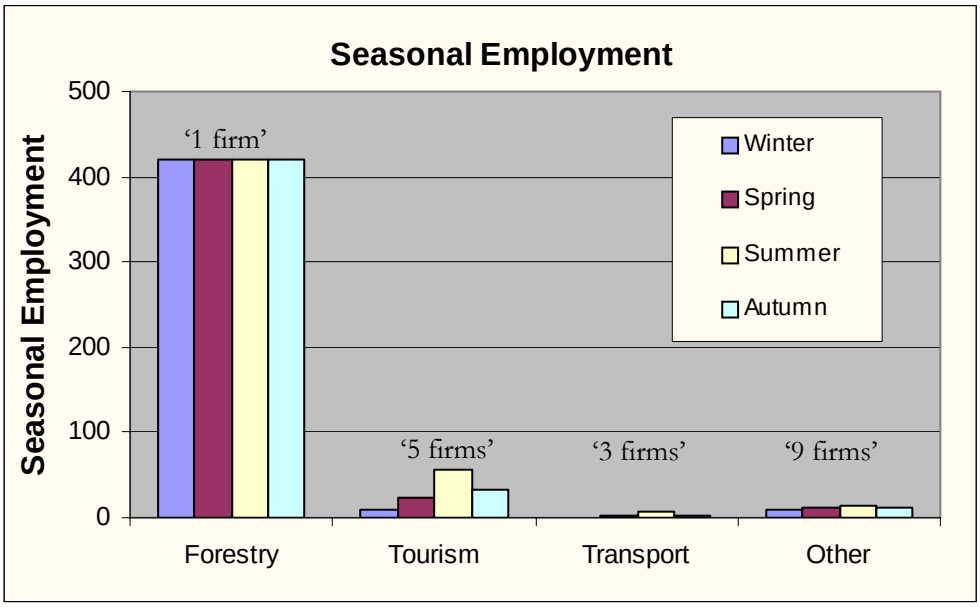
*5.1.8* In line with the data on turnover the majority of businesses who responded employ a relatively small workforce. Two of the respondents along the Oban to Lochgilphead route run relatively large businesses, one employing 70 staff and the other employing 25 staff. However, the majority of businesses surveyed have less than 10 employees.

*5.1.9* In total around 143 full-time and 34 part-time employees are represented. The histogram below presents the employment data by sector including the number of sole traders. The majority of full time employment was within the 'forestry' sector (70), followed by the 'other' sector (44).

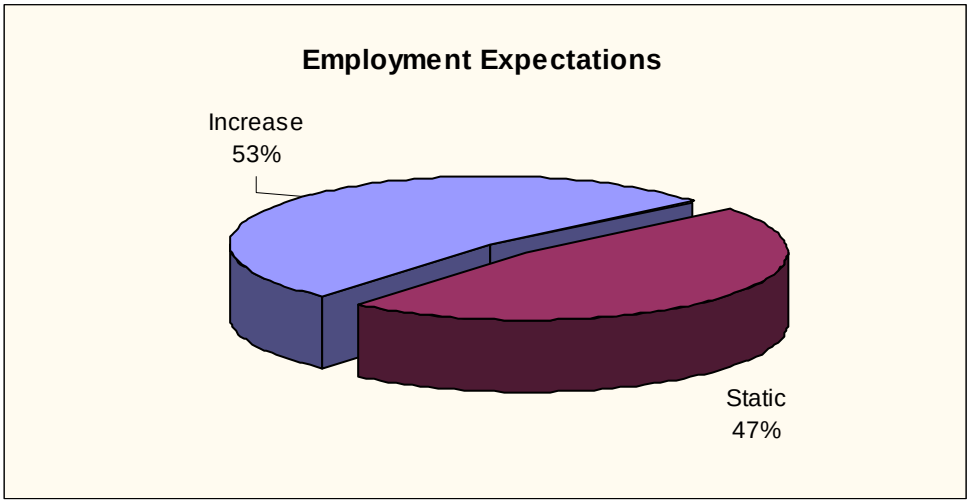



*5.1.10* The split of seasonal employment across sectors is shown in the following diagram. The results highlight the seasonal variations inherent within the 'tourism' sector.

*5.1.11* The 'seasonal' employment indicated within the 'forestry' sector is, in fact, contract staff. At present the single forestry firm employs a constant rate of contract staff throughout the year.




*5.1.12* The employment expectations of firms over the next three years are highlighted in the diagram below. Most firms (53%) expect employment levels to increase, whilst 47% expect no change in employment levels. None of the businesses consulted predicted a decrease in employee numbers.

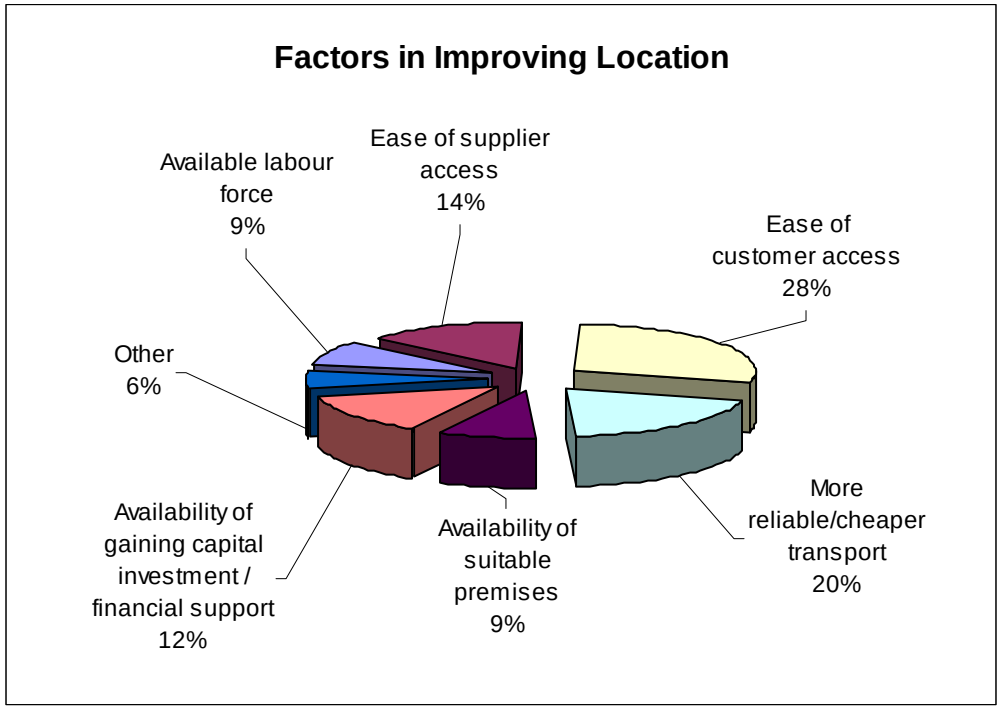



*5.1.13* In comparison to expectations of turnover, firms generally predict a lower rate of growth in employment inputs than output. This indicates that firms expect to be able to obtain better utilisation of their current input capital.

*Geographic Flexibility (Oban – Lochgilphead)*

*5.1.14* Businesses were asked about the feasibility of relocating as a measure of the geographical flexibility of their operation. The overwhelming majority (82%) of businesses reported the probability of relocating to be low and only one respondent claimed that there was a high possibility of moving from their current location. This indicates the low proportion of geographically mobile firms consulted along the Oban to Lochgilphead route.

*5.1.15* The diagram below highlights the relative importance of key factors in improving the location as a place to do business. Ease of customer access is considered to be the most important factor followed by reliable/cheap transport and ease of supplier access.

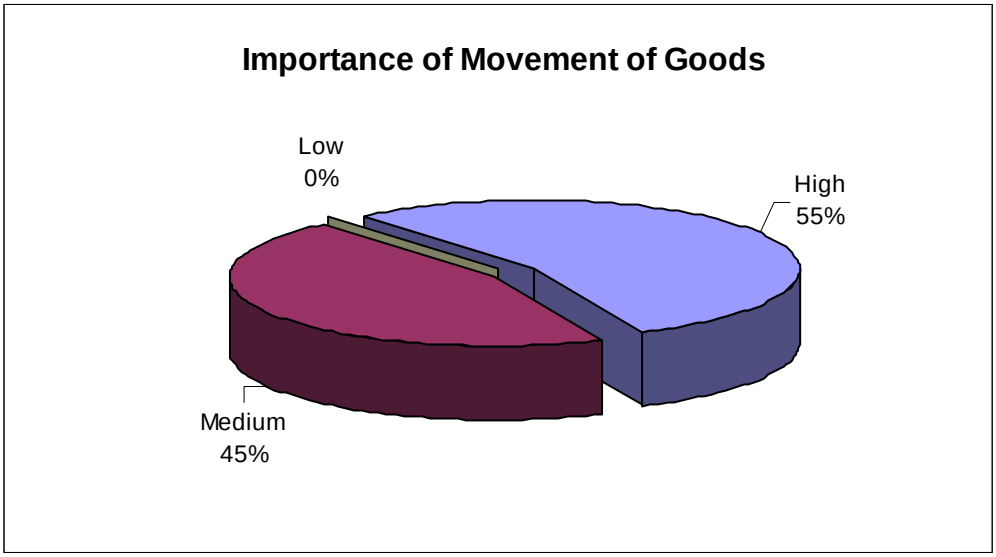



*Transport (Oban – Lochgilphead)*

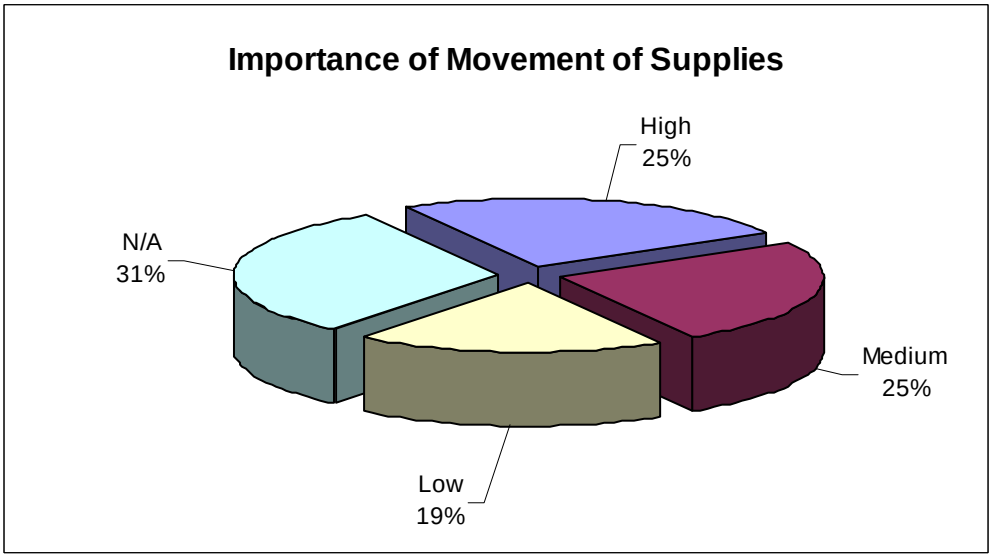
*5.1.16* In order to gauge the significance of transportation within a firms operation, respondents were asked to rate the importance of the movement of goods and supplies to their business.

*5.1.17* The diagram below indicates the importance of the movement of goods. Some 55% of businesses responded that the movement of goods was of high importance. Furthermore, 90% of those who transport goods were unable to

identify an alternative route for the transport of their finished products, be it the A816 or otherwise.

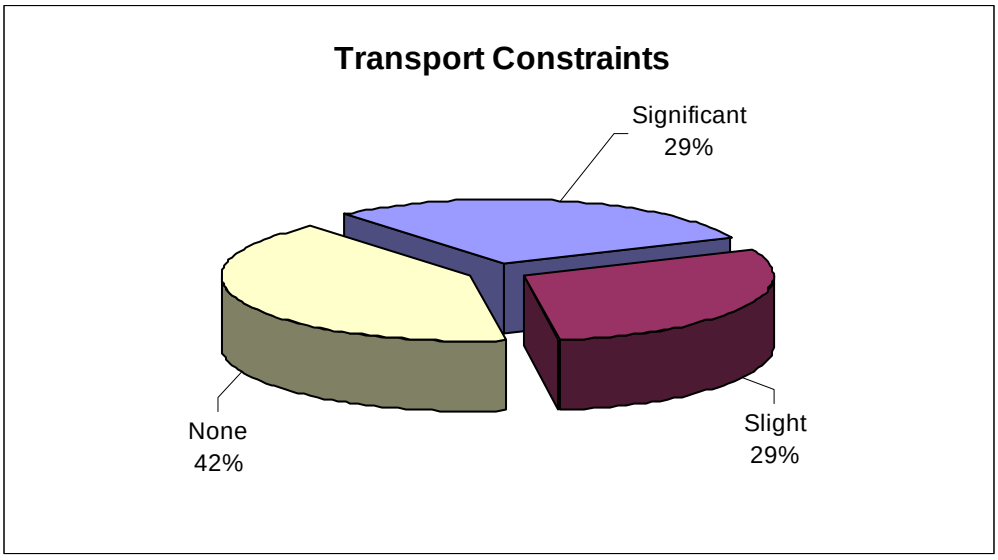



*5.1.18* The diagram below indicates the importance of the movement of suppliers. Some 50% of businesses felt that the movement of supplies was of either medium or high importance and 55% considered that there was no alternative route for them to import supplies.



*5.1.19* Businesses were asked to estimate the percentage of their total costs that are associated with the transportation of goods and/or supplies. Of the eleven respondents, nine indicated that transport costs were between 0% and 20% of total costs. One firm stated transport costs to be between 20% and 40% of total costs, with the other firm indicating that transport made up between 60% and 80% of their costs.

*5.1.20* Respondents were asked whether their business currently faced any transport constraints. Around 58% of respondents stated that this was the case, with 29% considering these constraints to be significant.

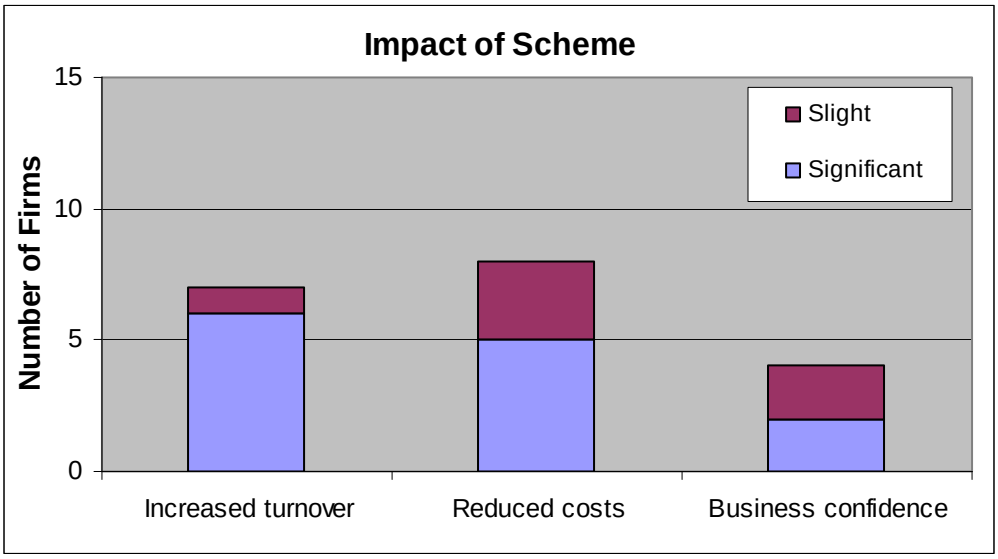



*Scheme Impact (Oban – Lochgilphead)*

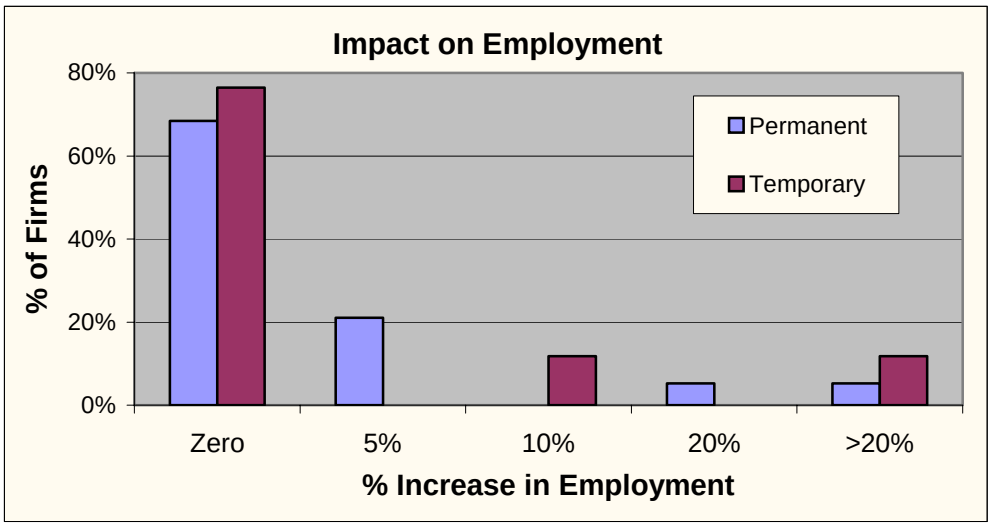
*5.1.21* All firms were given a broad description of the type of scheme upgrade proposed along the Oban to Lochgilphead route. Respondents were then asked to consider the likely impact of a road improvement upgrade upon their business.

*5.1.22* The figure below presents firms perceptions of the likely impact of a road improvement on business confidence, turnover and costs. A total of 8 firms (44%) expected road improvements to decrease costs, 7 firms (39%) expected road improvements to increase turnover and 4 firms (22%) expected a significant boost in business confidence as a result of road improvements.

*5.1.23* Three companies did not expect any impact to their business as a result of a road improvement scheme.




*5.1.24* Firms were further asked to quantify impacts of a road improvement scheme upon the level of employment in their business. Some 68% of firms considered that an improvement would have little or no impact upon the number of staff that they employed. However, 40% of respondents perceived a road improvement would increase their employment levels by up to 20%. The following chart summarises the employment effects of the route improvements.



*Additional Comments (Oban – Lochgilphead)*

*5.1.25* Several respondents noted that, in its current state, the Oban to Lochgilphead road is particularly dangerous for heavy goods vehicles, coaches and buses to negotiate safely. It was felt that improvements to the road would significantly improve safety as well as reducing journey times along the route.

# 6 Economic Activity Locational Impact Analysis (Oban to Lochgilphead)

*6.1* ***EALI Analysis***

*6.1.1* The direct benefits to transport users have been estimated as part of the TEE analysis. However, the enhancements to the Oban to Lochgilphead route may also generate additional benefits in terms of stimulating economic activity at locations served by the route.

*6.1.2* The assessment process for determining any potential EALI benefits is not straightforward in the absence of modelling tools. The business survey provides insights into how firms may react to improvements in accessibility. However the relatively small sample sizes make the translation of this data into quantifiable forecasts unreliable. This section therefore seeks to highlight the likely areas where EALI benefits may be derived from the scheme and provide an indication of their magnitude. A detailed description of the EALI methodology is presented in Section 3.6 of the main report.

*Importance of Lifeline Roads to Key Sectors*

*6.1.3* As part of the Stage One and Workshop phases of this study a key aspect was to identify the main problems, issues and constraints facing firms and organisations within remote communities. More specifically the process involved analysing the importance of 'lifeline' roads to the various industry sectors. One output from this process was the extent to which forestry, fish farming and tourism rely upon the quality of the local and regional road network.

*6.1.4* The timber industry is a particular heavy user of lifeline rural roads. The main representative body, the Timber Transport Forum, has an on-going campaign to improve key timber routes. The success of this campaign is reflected in the recent commitment in the Partnerships document (Scottish Executive, 2003) to provide support for roads affected by timber production. The timber industry as a whole in the Highlands and Islands is expected to almost double over the next 10 years, adding considerable pressure to an already unsuitable transport network. Upgrades to lifeline routes serving existing and potential forestry sites are therefore likely to help stimulate economic activity in this sector.

*6.1.5* The fish farming sector also stressed the importance of lifeline roads, both in bringing raw materials to the fish farms as well as shipping out produce to domestic and international markets. A high proportion of fish farms are located along lifeline routes and thus the condition and upkeep of these routes is essential. Fish farming within the Highlands and Islands is facing considerable competition from abroad, which has driven down prices. As a result, quick and efficient deliveries are becoming increasingly essential in order for these firms to compete.

*6.1.6* The tourism industry within the Highlands and Islands is a key employer within the region. Whilst tourist boards generally cite major exogenous variables as drivers for tourism performance the level of accessibility to the regions is an important factor. The condition of lifeline routes, in particular in providing access to ferry ports, is essential in encouraging visitors to access remote areas and thus stimulate economic activity.

*6.1.7* Lifeline roads are therefore clearly an important aspect to the successful operation of these three key sectors within remote areas of the Highlands and Islands. Improved levels of accessibility along routes servicing existing or potential new sites for these industries can therefore be seen as likely to have a positive impact upon economic activity.

*Oban to Lochgilphead Scheme Impacts*

*6.1.8* As demonstrated above, the proposed scheme is anticipated to provide considerable improvements in the accessibility of the region to the south of Oban. The reduced journey times should enhance the attractiveness of using the A816 and subsequently encourage economic activity in regions served by the route, including the communities of Kintyre.

*6.1.9* The improvement in reliability of journey times should also enable firms to operate with greater efficiency. Deliveries of goods and supplies can be managed more effectively with a reduced requirement for contingency planning as a result of late deliveries.

*6.1.10* The business survey responses indicated the following key results:

- The majority of firms are geographically immobile and thus are heavily reliant on the local infrastructure and service provision, rather than being in a position to look for alternative locations to undertake their business;

- A significant proportion of firms are reliant upon the A816 for supplies and delivery of goods and that the current levels of transport provision create constraints for over half the businesses operating within the region. Furthermore, a 'more reliable/cheaper transport network' would be a key factor in improving the desirability of the area for businesses;

- Just over 40% of the respondents consider that a road scheme improvement would significantly reduce their transport costs and allow them to expand turnover. In many cases this would also lead to a requirement for an expansion in the workforce by up to 20%.

*6.1.11* Whilst the statistics for the region indicate that it is relatively economically stable, with low unemployment, much of this is a result of the prosperity of the major centres of Oban and Lochgilphead. For the primary industries located outside these centres there remains a significant dependency upon efficient transportation in order to allow them to operate effectively.

*6.1.12* The improvements should provide stimulus to a large proportion of firms operating not only along the A816, but also within the region to the south, by releasing the constraints to travel currently experienced along the A816. This will be encompassed in the form of reduced transportation costs through improved journey times and journey time reliability. These factors are of particular importance due to the geographical immobility of most of the firms in the region;

*6.1.13* Accessibility to the local centres of Oban and Lochgilphead will also be improved providing knock-on benefits to the service industries in these localities. General increases in the frequency with which people visit these localities will have positive impacts for service providers.

*6.1.14* The operating efficiency of the primary industries should be enhanced, in particular forestry and fishing, through faster and more reliable transportation of goods (timber and fish products) mainly from South Argyll. The road is an important route for both the timber and fishing trades. The removal of the current restrictions along the route in terms of narrow sections of road and single-track bridges will ensure that the status of this route is maintained and that forestry and fishing industries to the south of Argyll will be encouraged to continue or expand their current activities. This in turn could lead to the potential expansion of these industries given the improved operating conditions.

*6.1.15* The scheme improvements should encourage tourism to the south of Argyll. Better accessibility along the A816 will encourage more visitors to the areas within Kintyre. In particular short stay trips to the region will become more appealing as a result of reduced journey times. Tourism is a major employer within the region and the A816 provides access to popular areas to the south of Oban extending down into Kintyre. If coupled with a campaign to promote the region then this could have a noticeable impact upon the regional economy.

*6.1.16* Travel to work patterns may also be affected. Employees will be encouraged to commute longer distances in order to reach a place of work. This could have a positive impact upon unemployment in remote areas, although this may also result in greater migration towards employment within the main centres of Oban and Lochgilphead.

*6.2* ***EALI Conclusions***

*6.2.1* The scale of the proposed road improvements would suggest that there could be considerable economic benefits derived from the scheme. Part of these will be reflected in terms of maintaining the viability of existing operations within the region. However, if journey times savings of up to 15 minutes can be realised then this, along with improved reliability, should help stimulate additional economic activity.

*6.2.2* The EALI analysis indicates that the following key benefits could be derived:

- Provide stimulus to a large proportion of firms operating not only along the A816, but also within the region to the south, by releasing the constraints to travel currently experienced along the A816;

- Improve accessibility to the local centres of Oban and Lochgilphead providing benefits to the service industries in these localities;

- Enhance the operating efficiency of the primary industries, in particular forestry and fishing, through faster and more reliable transportation of goods (timber and fish products) mainly from South Argyll;

- Encourage tourism to the south of Argyll. Better accessibility along the A816 will encourage more visitors to the areas within Kintyre.

*6.2.3* Limitations within the data set make it is difficult to accurately assess GDP or employment impacts. The business survey responses suggested that just under half of the firms considered that the improvements would reduce their transport costs and that furthermore this would lead to an increase in turnover. Just over a fifth of the firms also felt that the improvement would provide a boost to their business confidence.

*6.2.4* In terms of employment impacts the business survey responses suggested that the majority of firms considered that the improvements were unlikely to have sufficient impact to allow them to expand their workforce. Firms indicated that they would absorb any reductions in the cost of transportation as increased profitability. This may be a reflection of the poor rates of return that some of these firms currently make from their operations. In such an instance the scheme enhancements could be considered to be ensuring the long-term security of these firms.

*6.2.5* A small proportion of firms considered that the improvement could significantly enhance their operating efficiency thus allowing them to expand.

*6.2.6* In general therefore it would appear that the main economic benefits scheme will be in terms of maintaining the viability of existing communities. The primary industries will benefit from reduced transportation costs and greater reliability. The regional centres of Oban and Lochgilphead will likely prosper as service providers as a result of the improved accessibility.

# 7 Conclusions (Oban to Lochgilphead)

*7.1* ***Overall Scheme Evaluation Conclusions***

*7.1.1* The aim of the Oban to Lochgilphead scheme is to improve the levels of accessibility to the south of Oban. The analysis has demonstrated that sections of the route currently act as a constraint to both the primary industries, reliant on the route as a means of transporting goods, as well as the tourism industry, that require good accessibility to encourage visitors.

*7.1.2* Direct transport benefits deriving from the journey time savings are estimated to be significant, although are unlikely to justify the capital costs (£22.0M) by themselves. The present value of benefits over 30 years is estimated to be in the region of £15.2M, although there is significant variation within the low and high forecasts (£6.0M - £21.6M).

*7.1.3* Some indirect impacts upon the local and regional economy are also anticipated. It is estimated that primary industries, in particular forestry and fisheries, will benefit from the reduced transportation costs associated with enhanced road provision. The improved accessibility to Kintyre is likely to stimulate further interest in the development of these markets.

*7.1.4* The service industries within Oban and Lochgilphead are also likely to derive some benefits from the increased accessibility to these regional centres. The tourism sector should also be able to capitalise upon the improved accessibility as a promotional tool to encourage greater visitor numbers to the region to the south of Oban.

*7.1.5* Accident rates along the A848 are substantial in comparison to other routes indicating potential for accident reduction benefits in this area. The proposed scheme should have positive safety benefits through the widening of narrow sections of double-track road and the upgrading of single-track bridges.