

Ardrossan Harbour Expansion Impact Study

Internal Appraisal of Economic Impacts

Draft Final Report

September 2018



Focus. Passion. Inspiration.

North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

DRAFT Ardrossan Harbour Expansion Impact Study

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DRAFT ECONOMIC IMPACT OF ARDROSSAN HARBOUR WORKS

INTRODUCTION

A Ministerial Task Force is working to deliver the new Ardrossan Ferry & Transport Interchange to ensure service resilience and future proofing through works to the Port of Ardrossan focussed on the Brodick Berth quay. The works are expected to realign the berth to provide a 110-metre angled berth improving the capacity of the new ferry docking and ensuring services can operate across a wider weather window and sea conditions.

The current programme for civil engineering and marine works anticipates the Brodick Berth being non-operational for up to 10-12 months.

An examination of the potential for both short-term and long-term economic impacts of a construction period closure was undertaken in order to inform decision-making.

Methods

An internal meeting of key council staff from Economy and Communities and the Business Team on 1st August identified the key issues and agreed the approach. Data sources were used as follows:

- Economic and Social Impact of CalMac operations (2015, Fraser of Allander)
- Scottish input output tables
- Business Register and Employment Survey
- Scottish Annual Business Statistics
- Nomis database (various)
- Arran Business Survey 2018
- Business Team information and insights
- Households individual consumption expenditure, ONS
- Department for Transport: Value of Travel Time

SUMMARY OF IMPACTS

Employment impacts and other non-employment impacts have been estimated as follows:

Employment impacts

- The total job redistribution impact of the closure is estimated at **136** fewer jobs in the Ardrossan area and **176** fewer jobs in North Ayrshire as a whole. These jobs would be lost within a year of the works starting and it is doubtful many jobs, other than CalMac operations jobs, would return.
- The jobs redistribution impact will arise through CalMac re-siting their base plus diversion of tourist spend and Arran resident spend, affecting local businesses (some of the businesses likely to be affected are identified later). **101** jobs would be redistributed through diversion of spend and **75** through redistributed CalMac activity.

Non-employment impacts

- Unemployment costs will be ongoing and with low jobs availability in Ardrossan and more widely there would be an expected ongoing cost to the public purse. If the people losing jobs were to remain unemployed the costs could total **£1.38M** per annum.
- No increase in ticket cost is anticipated despite the longer journey
- The value of time lost due to spending 20 minutes longer on the ferry will total **£1.45M** per annum.
- The additional costs above (from VTT and benefits payments) total **£2.83M**
- Longer ferry crossings will result in additional annual emissions of **1,385 tonnes of CO2**.

ANALYSIS OF INDIVIDUAL IMPACTS

Transport-related jobs/CalMac

The total employment impact (including supply chain effects) can be summarised as:

- 52 CalMac-related jobs redistributed away from Ardrossan.
- 75 CalMac-related jobs redistributed at the North Ayrshire level, after supplier and employee spending is considered. We assume *most* of these jobs would return.

Diverted household spend (Arran residents)

Arran residents would likely change their shopping patterns and divert spend from Ardrossan, to Troon (for example Ardrossan ASDA spend would likely divert to Morrisons, which is ½ mile from Troon rail station and harbour, convenient for foot and car passengers making their way to/from Troon harbour).

Many islanders make a trip to the mainland to shop; if half the island's 2,100 households spent £104.40 in Ardrossan (at ASDA in particular) this would imply retail spend of **£5.68m** which supports 58 retail jobs (based on turnover per employee in retail of £98,000). This represents only 9% of the total expenditure of Arran's households. With a supplier multiplier of 1.2 this would total **70 jobs**.

Diverted Tourism Spend

Loss of tourism spend would arise from the loss of 844,000 transient visitor carryings (422,000 individual passengers). If 3 in 10 passengers spent £20 locally in Ardrossan this would total **£2.53M** and, through spending on food and drink and retail, would support **26 jobs**. With a supplier multiplier of 1.2 this would total **31 jobs**.

Impact on specific businesses

There will be many specific businesses affected and some of the key ones are identified by the Business Team are introduced below. (Account-managed businesses are in the appendix)

- **ASDA.** By far the largest employer in Ardrossan and one of the most significant employers in the Three Towns. A large number of jobs would undoubtedly be under threat if ferry was to be moved for a period up to a year. The employment impact estimates suggest up to 70 jobs would be lost due to diverted spend from Arran residents.
- **Cecchini's Ardrossan** - The business is experiencing tough trading conditions due to rising raw material costs and shrinking consumer spend. They recently closed one of their three restaurants (Prestwick) to consolidate their remaining two going concerns. Ardrossan - Arran ferry traffic can account for between 20% - 25% of turnover during the spring/summer months, with a slightly lessened impact during the winter months when tourism spend is lower. Any significant reduction in turnover would drastically alter their consolidation/growth plans.
- **Clyde Marina Ltd** accommodates around 300 vessels and berth occupancy is currently at around 90%. Clyde Marina are concerned that the proposed harbour/marina regeneration plans will come under threat if ferry is moved to Troon, even temporarily.
- **Invincible Fire & Security Ltd.** The Managing Director was extremely vocal during the 'Save the Ferry' campaign and intended to cancel planned expansion of the business and subsequent creation of new jobs if the ferry was moved to Troon. After the ferry being secured in Ardrossan, the MD pressed on with expansion plans and is now nearing completion of a new DIY retail outlet adjacent to Asda. Estimated build cost is [REDACTED] with a further [REDACTED] estimated to stock the business and employ 4 people full-time and 4 people part-time. This was all funded privately and any loss of custom would have a huge impact on the new venture and the main business.
- **Robertson's Fine Foods** have around 60 staff in Ardrossan (with a further 38 in Irvine) and they supply produce to several Arran butchers and hotels. They would face additional transport costs both for delivery to Troon and the increase in ferry price may result in Robertson's pulling the service or the clients choosing another meat supplier. The impact on costs would definitely be negative for the business.

91 volume businesses are based in Ardrossan and those with the most to lose would be hotel/food & drink and related. For example:

<ul style="list-style-type: none">• Albert's Fish & Chip Shop• Cafe Palazzo• Curry King• Garfield's Tapas & Wine Bar	<ul style="list-style-type: none">• Jaipur Indian Restaurant• Lynne's• The Lauriston Hotel Ltd
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Arran businesses and services

The impact on Arran businesses of the route switch would likely mean problems with supply chains and increased costs but it is impossible to speculate accurately on the scale and nature of the impact. Further consultation would be needed to quantify such an effect.

The supply of labour from the mainland to Arran would be disrupted by the route switch and again it is impossible to say, without more data, how this would manifest. There would, undoubtedly, be an economic and service delivery impact, on public sector staffing and business recruitment/staffing.

Business Resilience

Business resilience in small spatially-defined and service-dependent economies are typically low. The economic profile of Ardrossan and Arran based on evidence from Business Team assessment highlights negligible to low levels of business resilience and capacity of local businesses to address major disruption to economic activity. The business base in North Ayrshire - Ardrossan and Arran includes a high level of:

- Spatially connected service companies whose location is based on Arran/Ardrossan B-2-B and B-2-C connections (customer base/supply chain/customer needs)
- Independent SME's, micro businesses and sole traders well established but with low capacity to generate additional customer activity or attract business loan support
- Businesses with long-established staffing/in-house skills with high concerns over redundancy/staff lay-offs and ability to re-hire/replace lost staff following an extended down-turn
- Businesses with ferry reliant supply chains and logistics (deliveries/contract servicing/maintenance contracts etc.) with links to North Ayrshire and Ardrossan.

Small business funding is acknowledged as constrained and in the absence of a comprehensive compensation scheme business could be anticipated to develop and implement mitigation strategies based on relocation, limited opening, winter closure, and reduced staffing. Otherwise they would run the risk of business failure. Any extended period of disruption (longer than 4 weeks) would raise significant alarm and trigger a strong and adverse business response.

DRAFT APPRAISAL OF RESILIENCE

The disruption of trade, business and commercial activity highlights both direct and indirect economic impacts. The losses as noted vary from macro level (business closure, relocation of jobs, service standards, changes to supply chains, land use changes etc.) to micro level (loss of individual business turnover, changes in opening hours, cashflow management, changes in production, sales and prices, inability to service contracts) all with the potential to directly impact on the regional/sub-regional (island and mainland) economy.

Business resilience within the local Ardrossan, and indeed Arran economy is not high with many businesses trading on small margins with low capitalisation and high vulnerability to economic disruption. Effectively the local business base is characterised by businesses that have been built up over 10-20 years creating good local businesses but with low resilience and capacity to accommodate even low-level economic disruption. Business confidence and concern around the ferry activity, services disruption and programme and its impacts (sustaining cashflow, business turnover and programme) and is already high.

The duration of disruption is critical. One month programmed disruption with advance notice is potentially a 'disruption' with adverse but manageable impact. A 9-12 month 'disruption' is a change in the business environment which introduces the inevitable need to consider business relocation, business closure and address funding/employment and the capacity to avoid business liquidation/administration.

Ardrossan and Arran have with varying degrees of success worked very hard to re-establish growth following the recession of 2012. Business resilience is low and capacity to address, mitigate and sustain business activity in any significant period of non-ferry operation very low. Sustaining the local business base would require a compensation scheme.

DRAFT CONCLUSION

North Ayrshire Council interim assessment is that some **176 jobs** are at risk/could be redistributed through the temporary closure. A significant proportion could be anticipated to be permanent and unlikely to be replaced following the re-establishment of the service.

It is considered likely the losses would not be replaced within Ayrshire and regional job losses would be a permanent feature of the construction disruption. The loss of employment can be regarded as conservative as we have not yet been able to quantify supply chain and labour supply effects on Arran.

Ongoing additional costs of **£2.83M** per annum would arise through non-employment related impacts and CO2 emissions would rise by 1,385 tonnes annually.

A detailed Economic Impact Assessment including a review with business owners, Chamber of Commerce, Arran Economic Group and Arran Ferries Group would be recommended to validate assumptions and confirm business sensitivities. Consultation and open dialogue at this time, across the business community would undoubtedly raise a breadth of issues around understandings and need for information on risk, blight and associated compensation and has not been advanced at this time.

We conclude that Ardrossan and Arran have very limited capacity or resilience to address economic shocks and of the 176 jobs redistributed out of the area it is likely that most of the employment and business impact (excluding CalMac direct jobs) could become permanent. We advise, therefore, that there is a strong case for investment in a solution to avoid the need to, even temporarily, relocate the Ardrossan-Brodick and Ardrossan-Kintyre ferry service.

DRAFT Appendix – Detailed assumptions and calculations

Adrossan employment profile and account managed businesses impact summary

Employment totals

Industry	Ardrossan Central	Ardrossan North East	Ardrossan West	Nth	Total
1 : Agriculture, forestry & fishing (A)	0	0	0		0
2 : Mining, quarrying & utilities (B,D and E)	0	0	0		0
3 : Manufacturing (C)	110	10	5		125
4 : Construction (F)	60	25	15		100
5 : Motor trades (Part G)	80	0	0		80
6 : Wholesale (Part G)	30	5	10		45
7 : Retail (Part G)	200	80	10		290
8 : Transport & storage (inc postal) (H)	200	0	30		230
9 : Accommodation & food services (I)	150	15	15		180
10 : Information & communication (J)	50	0	0		50
11 : Financial & insurance (K)	10	5	0		15
12 : Property (L)	75	0	0		75
13 : Professional, scientific & technical (M)	45	15	15		75
14 : Business administration & support (N)	15	10	5		30
15 : Public administration & defence (O)	50	0	0		50
16 : Education (P)	50	100	0		150
17 : Health (Q)	325	60	75		460
18 : Arts, entertainment, recreation	70	5	0		75
Column Total	1,500	325	180		2,005

BUSINESS	SECTOR	EMPLOYEES	TURNOVER	IMPACTED BY FERRY MOVE
Abbotsford Nursing Home	Health & Social Care	60		NO
BPO Collections	Business & Professional Services	65		UNLIKELY
Breen Roofing & Building	Civil Engineering & Construction	6		UNLIKELY
Cecchini's Ardrossan	Restaurant	25		YES
Clyde Marina Ltd	Tourism & Leisure	7		YES
Cunninghame Housing Association	Business Services	90		UNLIKELY
Home Hardware Ltd	Retail Services	30		UNLIKELY
Invincible Fire & Security	Industrial Services	28		YES
Robertson's Fine Foods	Food and Drink	98		YES
Sunbird International Yacht Sales	Tourism & Leisure	6		UNLIKELY
Saltire Healthcare	Retail & Consumer Services	6		NO

DRAFT CalMac related employment

From 'Economic and Social Impact of CalMac operations' (2015, Fraser of Allander) it is known that CalMac employs 165 people in Ayrshire. On Arran, CalMac directly employs 17 people from the island. Of the remaining 148, 20% (or 30 jobs) are estimated to be taken up by people residing in the Ardrossan area with the remainder spread throughout the rest of North Ayrshire.

The additional indirect or 'knock-on' employment created by employees' wage-spending and Calmac's supply chain impacts supports a further three jobs for every direct one, throughout Scotland. One quarter of the supply chain impact could be expected to benefit Ardrossan, one quarter in the rest of North Ayrshire and the remaining impact would be felt in the rest of Scotland.

The Arran-based employee numbers are assumed to be unaffected while the Ardrossan resident staff (30 jobs) could be assumed, over the longer term, to relocate elsewhere. The other 80% of Calmac employees living in North Ayrshire are assumed to remain within the local authority area.

Calmac-related employment, overall, will remain the same but the move to an alternative port implies North Ayrshire's share of the employment effects would reduce. Locally this could mean up to:

- 30 fewer direct jobs in Ardrossan
- 22 fewer indirect/knock-on jobs in Ardrossan
- 23 fewer indirect jobs in the rest of North Ayrshire

The total potential redistribution effect can be summarised as:

- 52 fewer jobs in the Ardrossan area
- 75 fewer jobs at the North Ayrshire level

DRAFT Diverted household spend

The average UK household weekly spend is £554.20 and 38% of this spend is very mobile as follows:

Food and non-alcoholic drink	£ 58.00
Clothing and footwear	£ 25.10
Alcohol/tobacco	£ 11.90
Miscellaneous	£ 41.80
Other	£ 72.00
Total	£208.80

Unemployment costs

A typical lone parent family with one child is assumed to draw down £9,000 per annum in benefits.

Value of travel time

The (crow-flies) distance between the Ardrossan ferry terminal and Brodick is approximately 21.2km which is significantly shorter than the distance between the Troon site and Brodick of approximately 29.6km. The expected journey time increase is 20 minutes.

The value of travel time (VTT) is an important concept in policy making and investment decisions for the transport sector, since savings in travel time typically account for a large proportion of the benefits of major transport infrastructure. Values of travel time reflect the amount of money a traveller is willing to pay to save time. They are measured in pounds per hour. Over the last five years the Department for Transport has undertaken a programme of work to ensure that the values continue to reflect changes in society and people's travel behaviour. Up-to-date national average values for in-vehicle (car and public transport) travel time were produced (Department for Transport: Value of Travel Time savings (2015)) and suggest ferry travellers value time at a rate of £5.12 per hour spent travelling.

The VTT is the estimated value of time lost due to people losing utility because they spend 20 minutes longer on the ferry. The total VTT is estimated at **£1.45M** per annum based on the calculation below.

VTT per hour for non-work reasons	£5.12
Hours extra journey time	20mins
Value of travel time per passenger	£1.71
Ferry passengers per annum	844,198
Total VTT per annum	£1.45M

Emissions

The emissions increase can be estimated by apportioning part of Calmac's total emissions to the Ardrossan-Brodick route, which is one out of 26 routes.

Calmac's annual emissions for all routes total 90,000 tonnes of CO2 equivalent to 214 million car miles. 1 typical route would therefore account for 1/26 of the total, or 3642 tonnes of CO2. A 40% longer crossing would therefore entail additional annual emissions of 1,385 tonnes of CO2 (equivalent to 3.3 million car miles)