

Shetland Inter-Island Transport Study



Bluemull Sound Public Engagement Meeting
Thursday 1st September 2016 – 1600–2000
Mid Yell Hall



Shetland Inter-Island Transport Study

Welcome to the **Bluemull Sound Public Engagement Meeting** for the Shetland Inter-Island Transport Study (SIITS). This meeting considers services on Yell and Bluemull Sounds. Separate boards cover Toft – Ullsta.

The Shetland inter-island transport network, which consists of a combination of ferry and air services, connects nine islands with Shetland mainland. These lifeline connections support the economies of Shetland's island communities as well as providing personal accessibility to employment opportunities and access to key services such as education, health and leisure opportunities.

The inter-island transport network has been supported in both capital and revenue terms by the Council over many years. Whilst this remains the case, ageing assets, escalating costs and a reduction in the funding available to local authorities has led to a need to consider the future of the inter-island transport network at the strategic level. To this end, the Council, in partnership with ZetTrans, Transport Scotland and Highlands & Islands Enterprise, commissioned the Shetland Inter-Island Transport Study (SIITS), with a view to developing and appraising options for the future of the inter-island transport services.

The purpose of this exercise is to determine the **appropriate level of service for each island / island group** and the **funding implications** of this. This will provide the Council and ZetTrans with an evidence base to inform discussions with Scottish Government. To this end, the study team, led by Peter Brett Associates LLP, has developed, appraised & costed a set of capital (e.g. vessels, harbours, fixed links, airfields and aircraft (where appropriate)) and revenue (i.e. additional sailings and / or flights) options. These options are based on identified transport problems within each island, which we have had initial confirmation of from each local Community Council.

Following the submission of the final report in October 2016, a subset of these options will be taken forward for further development and appraisal. **This is your chance to have your say on the options** – please speak to the team, provide your feedback and fill up the brief exit questionnaire which we have provided.



How have we determined what level of service is needed by the community?

There are two elements used to inform this process:

- Transport Scotland's Routes & Services Methodology (RSM)
 - Provides an initial 'model' ferry service depending on a range of inputs
 - The RSM is one of a number of inputs used to inform the appraisal
- An appraisal based on the Scottish Transport Appraisal Guidance (STAG) and Business Case Guidance
 - provides a much more detailed analysis based on the local context and circumstances
- The study is joint-funded by Shetland Islands Council, Transport Scotland, and Highlands & Islands Enterprise
 - All stakeholders have had an input into the development of the study, ensuring consistency with other Scottish ferry-related studies



Routes and Service Methodology

As part of the Scottish Ferries Review, Transport Scotland developed a 'Routes & Services Methodology' (RSM), which is designed to produce a consistent approach to ferry service transport provision across Scotland.

The RSM is a six-step, evidence-based process which:

- Identifies the current level of service to an island
- Establishes a 'model' level of service for an island in terms of the:
 - number of sailing days
 - number of connections per day
 - the length of the operating day
- Develops and appraises options to address any gaps between the 'current' and 'model' service provision

The RSM does not imply an immediate or indeed any commitment to scale-up to the 'model' level of service, but is a tool which is taken into account in the analysis, and potentially an outcome worked towards over time.



Fetlar – RSM Findings

- The RSM findings for Fetlar are as follows:

	Sailing Days	Sailings per Day (to Yell)	Operating Day
Current Service	7 Days	8-10 connections per day Mon-Fri, 5-6 on a Sat & Sun	Approx. 16.5 hours
Model Service	7 Days	20+ connections per day	11 hours, 7am – 6pm
<i>RSM Outcome</i>	<i>Acceptable</i>	<i>Marginal under-provision Mon-Fri, substantial under-provisions Sat & Sun</i>	<i>Substantial over-provision</i>

- Fetlar has 7 day connections year round.
- Whilst Fetlar has a frequent service relative to its population, the number of daily connections is under-provided in terms of the RSM. A number of these connections are also indirect.
- The length of the operating day is over-provided in terms of the RSM, but it is acknowledged that Fetlar is a core component of the Bluemull Sound service and the current length of operating day is deemed appropriate for Unst.



Unst – RSM Findings

- The RSM findings for Unst are as follows:

	Sailing Days	Sailings per Day (to Yell)	Operating Day
Current Service	7 Days	23-28 connections per day Mon-Fri, 21 on a Sat & 17/18 on Sun	Approx. 16.5 hours
Model Service	7 Days	20+ connections per day	More than 14 hours
<i>RSM Outcome</i>	<i>Acceptable</i>	<i>Acceptable Mon-Sat, Marginal under-provision Sun</i>	<i>Acceptable</i>

- Unst has 7 day connections year round.
- A number of connections from Belmont to Gutcher are indirect via Hamars Ness.
- The length of the operating day is deemed to be acceptable and also benefits neighbouring Fetlar.



Current Ferry Service (1)



Vessel Issues: Ageing vessel; peak capacity issues on Belmont – Gutter.

Access for Disabled: Disabled access to the passenger lounge is challenging (passengers remain in their car).

Accommodation Issues: Passenger accommodation below the water line.

Current Vessel:
MV Bigga

Vessel Age:
25 years

Scheduled Replacement Date:
Required in short-term – 2017-2022

Carrying Capacity:
14 cars

Ship-Shore interface:
Linkspan

The vessel overnights at Gutter



Current Ferry Service (2)



Vessel Issues: Ageing vessel; capacity on indirect services can be a problem.

Access for Disabled: Disabled access to the passenger lounge is challenging (passengers remain in their car).

Accommodation Issues: Passenger accommodation below the water line.

Current Vessel:
MV Geira

Vessel Age:
28 years

Scheduled Replacement Date:
Required in short-term – 2017-2022

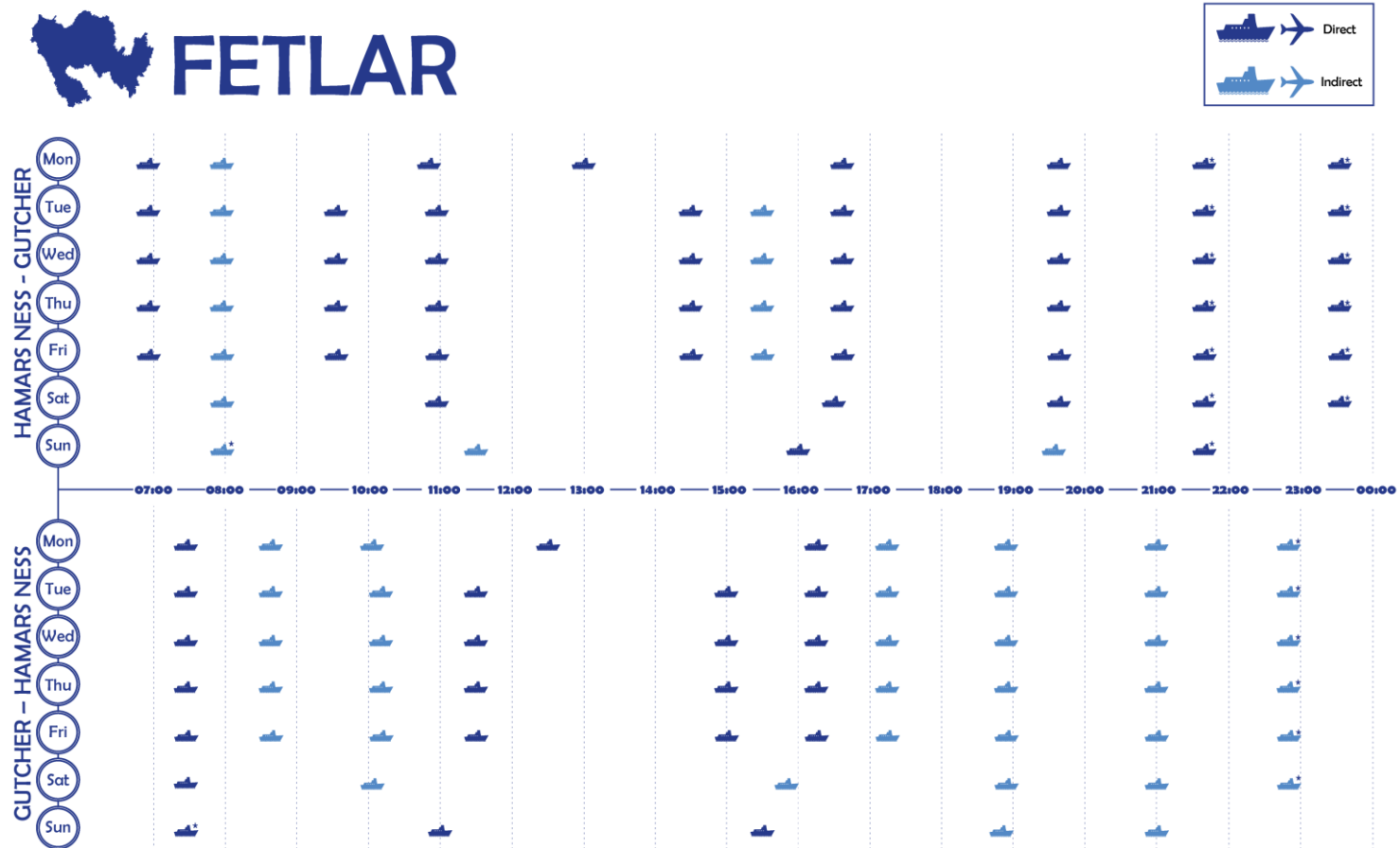
Carrying Capacity:
10 cars

Ship-Shore interface:
Linkspan

The vessel overnights at Hamars Ness. Crew is Fetlar based



Fetlar - Current Summer Service – departures by day of week

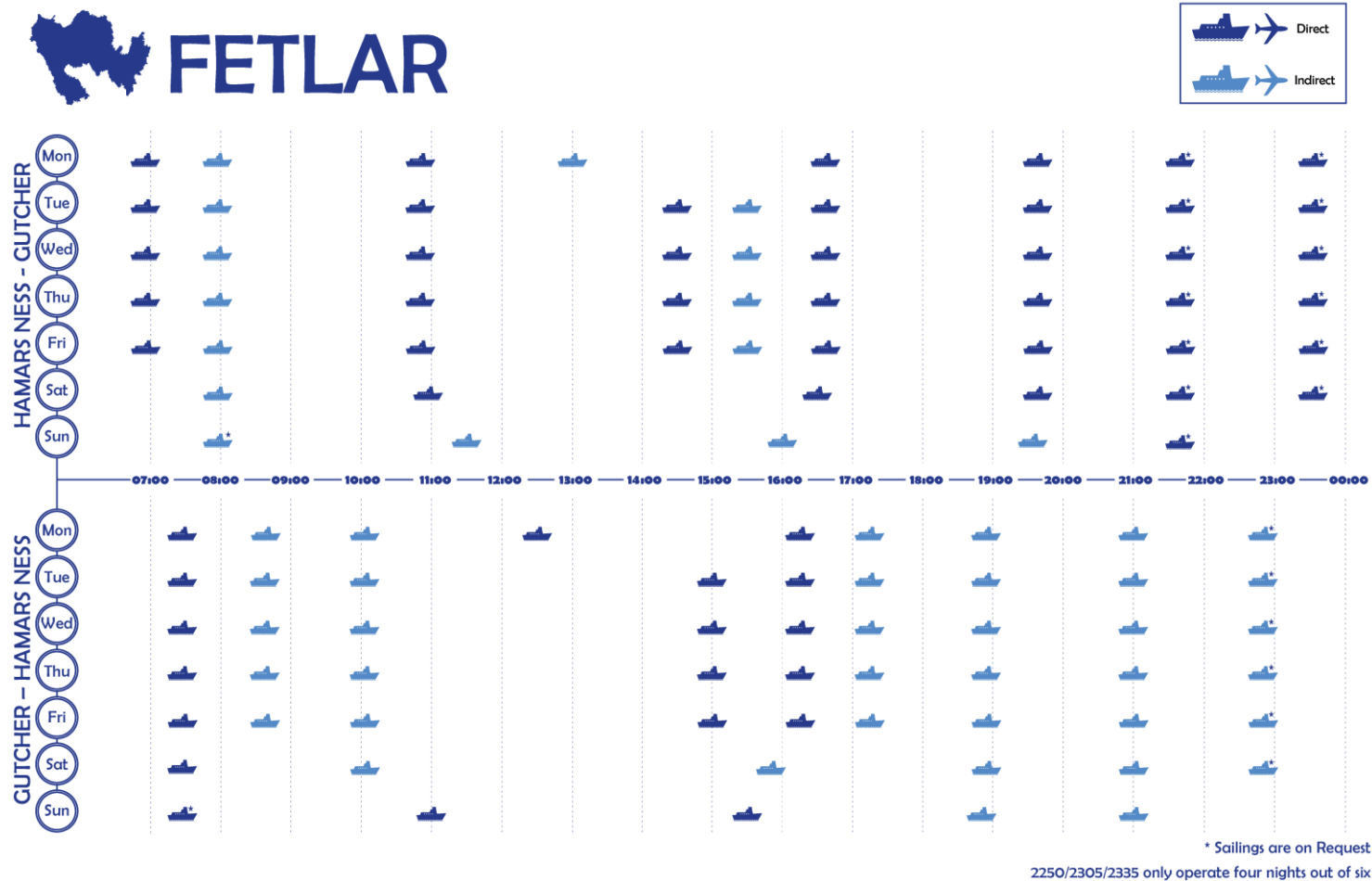


* Sailings are on Request

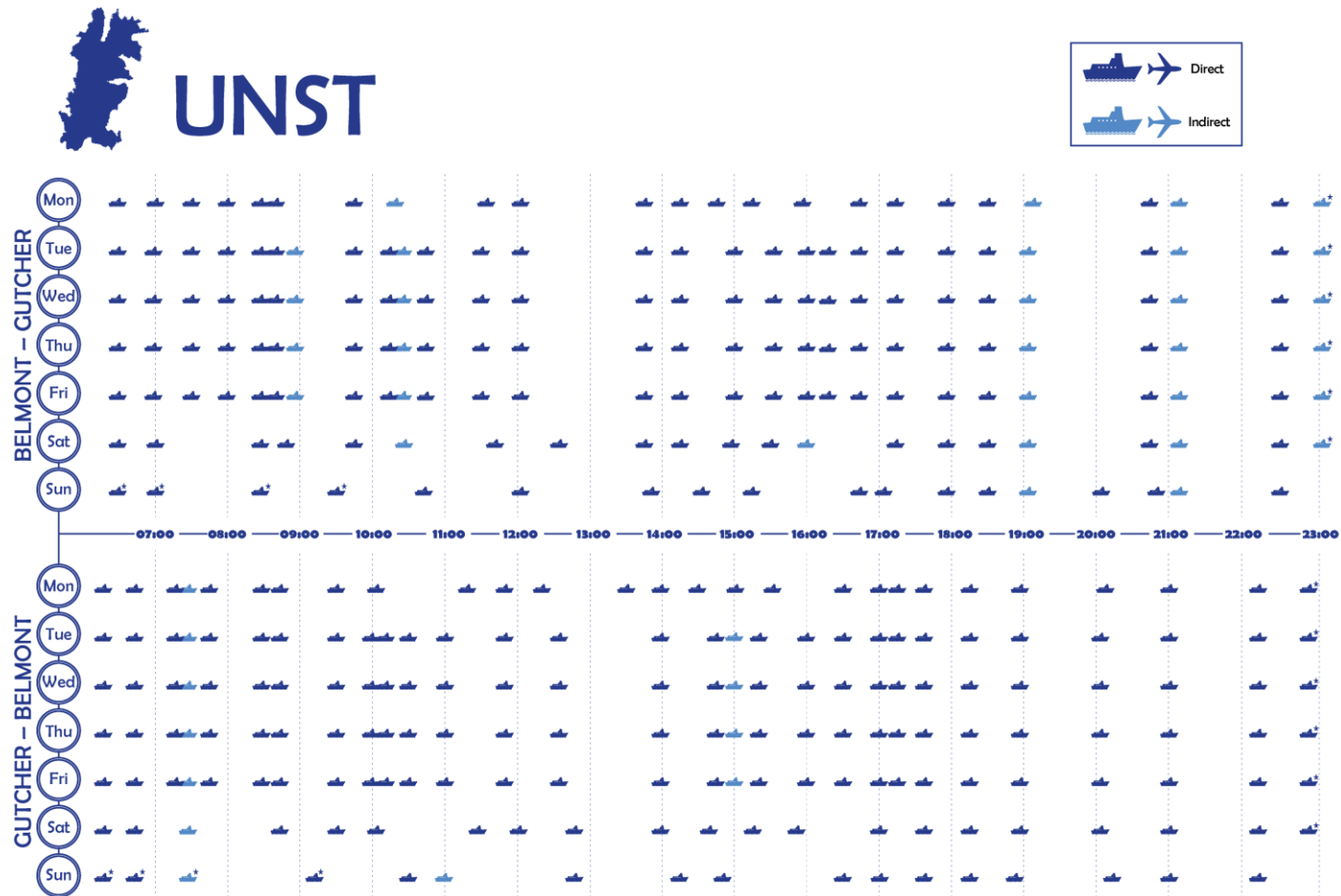
2250/2305/2335 only operate four nights out of six



Fetlar - Current Winter Service – departures by day of week



Unst- Current Summer Service – departures by day of week

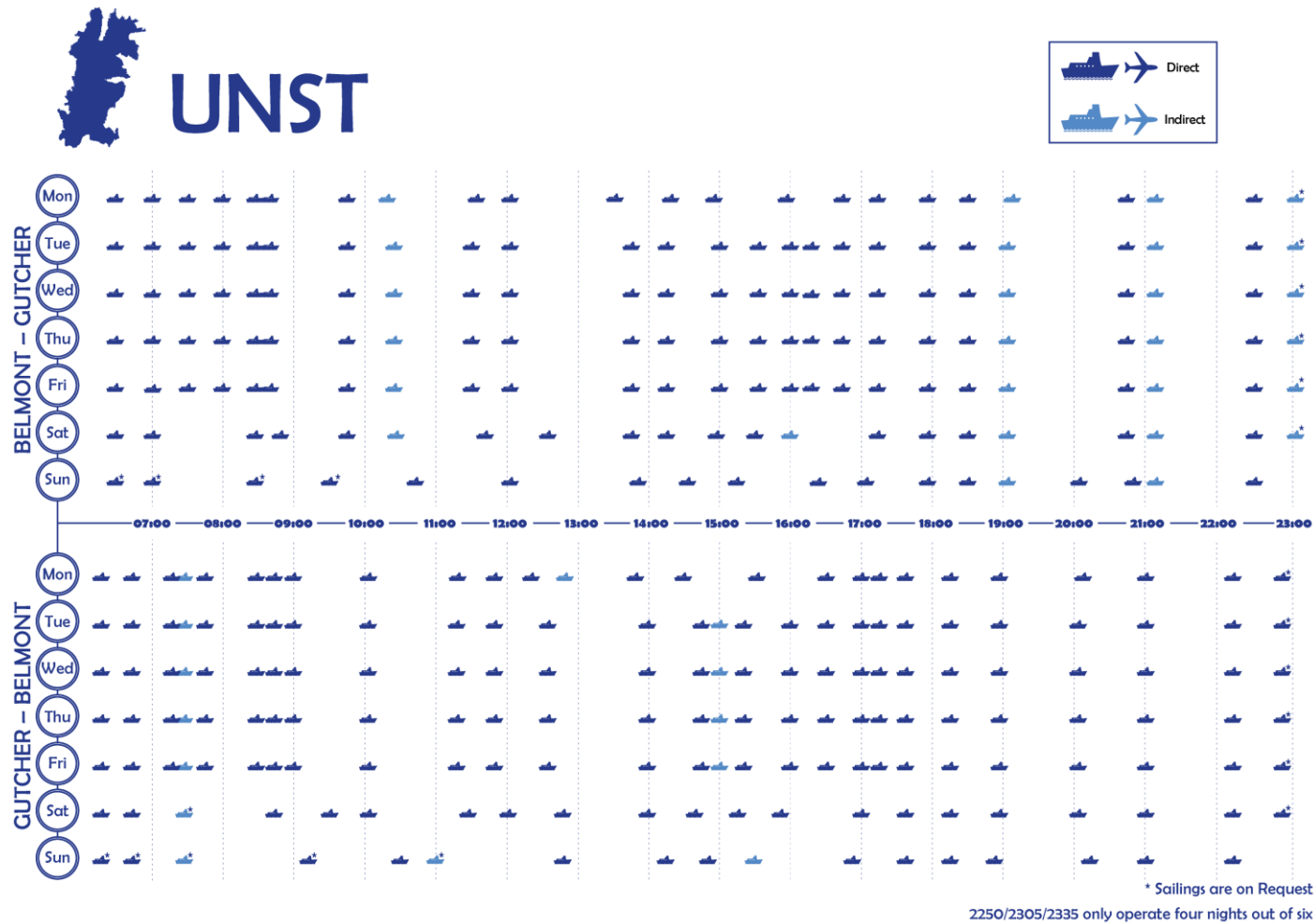


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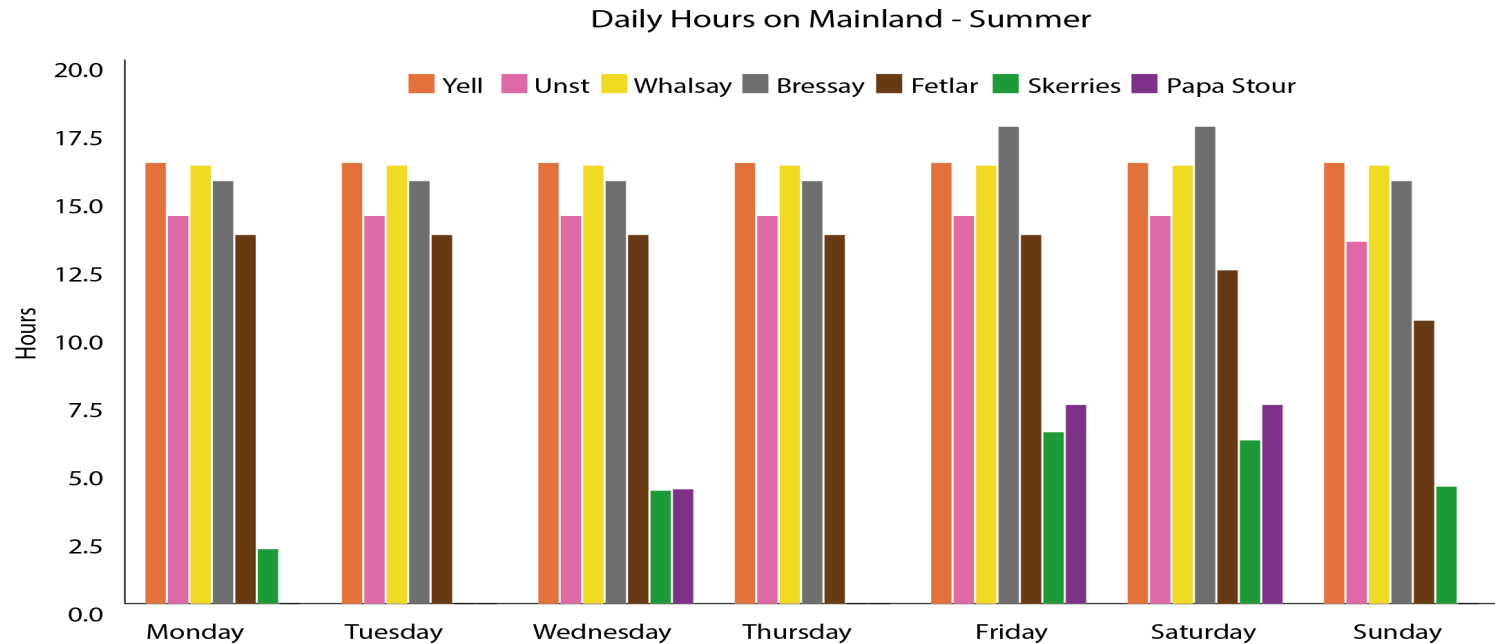
2250/2305/2335 only operate four nights out of six



Unst - Current Winter Service – departures by day of week



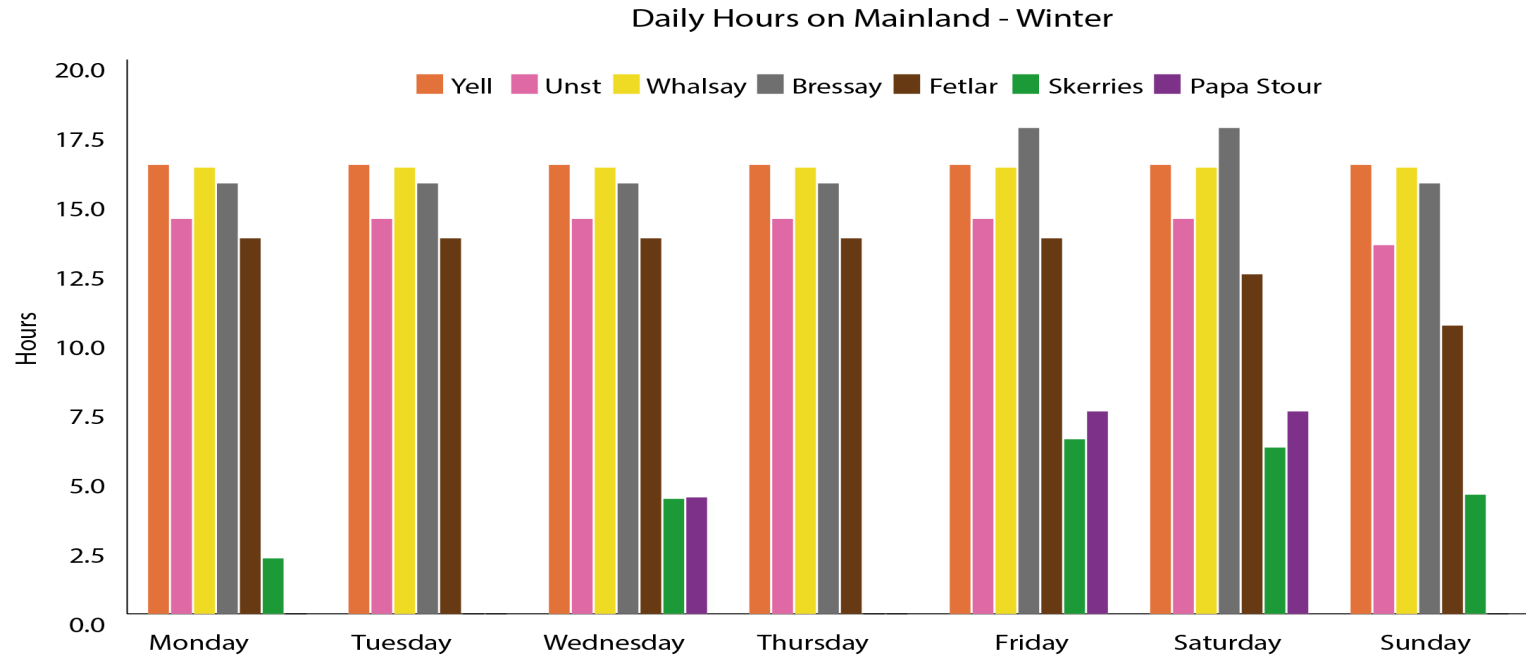
Daily Time in Shetland Mainland – Ferry - Summer



- Unst residents generally have around 14.5 hours on Shetland mainland per weekday, the equivalent figure for Fetlar being around 13 hours
- Unst residents also have around 14.5 hours ashore on a Saturday, reducing to 13.5 on a Sunday.
- Weekend time ashore for Fetlar is reduced but remains substantial – over 11 hours on a Saturday and over 10 hours on a Sunday



Daily Time in Shetland Mainland – Ferry - Winter



- The hours available on Shetland mainland from Fetlar and Unst are the same in winter as in summer.



Problems, Objectives & Options



Fetlar Transport Problems			
	Service Characteristics	Rating	Why is this a problem or not?
1	Overall journey time to Lerwick	✖✖	Of the nine islands included in this study, Fetlar has the second longest travel time to Lerwick of islands without an air connection (after Skerries, where the air service is currently suspended). The journey involves two ferry connections and takes around two and a quarter hours by car and two hours and 25 minutes by public transport, assuming all connections are made. The long journey times limit daily interaction with the services and employment opportunities in Lerwick and indeed mainland generally, and this could be one of the causes of the economic challenges which the island has been facing of late.
2	First sailing / flight	✓	The first sailing from Hamars Ness is early in the morning at 0655 Monday to Friday.
3	Last sailing / flight	✖	The consultation suggested that the timetable is not seen to be conducive to undertaking social activities in Lerwick. However, even in winter, the first departure from Fetlar is 0655 on weekdays and last departure from Yell is 2250 (or Shetland mainland is 2200) Monday to Saturday, which suggests that the inability to undertake social activities on the mainland is purely a function of distance. Indeed, the Route and Service Methodology (RSM) found that Fetlar is over-provided in terms of its length of operating day. <i>The community consultation response noted that late sailings on Bluemull Sound are only available four days per week & are shared with Unst. It was noted that the reduction in late hires has impacted greatly on residents being able to undertake social activities either in Lerwick or more commonly in neighbouring isles.</i>
4	Time on mainland	✓	The current timetable allows for a significant amount of time on the mainland daily.
5	Time in Lerwick	✓	The current timetable allows for a significant amount of time in Lerwick daily, although the long journey time from Fetlar eats into this.
6	Time on island	✓	The current timetable allows for a significant amount of time on the island daily.
7	Frequency / Sailings per Day / Timetable gaps	✖✖	In comparison to neighbouring Unst, Fetlar has a relatively low service frequency, although their service is much better overall than that of other islands of a similar size, both within Shetland and further afield. Nonetheless, frequency is less than the RSM specified level. There is a specific gap in the Monday timetable, with no departures from Hamars Ness between 1300 and 1640 due to lunch break and maintenance and on other weekdays from 1050 to 1430 due to split shifts. The gaps in the timetable in particular can lead to extended periods off-island when undertaking employer or personal business on Yell, Unst or the mainland. <i>The community consultation response noted that the timetable gaps have resulted in extended periods on-island by visitors & commercial traffic - contractors, deliveries, livestock shipping etc with costs associated with this 'dead' time.</i>
8	Capacity	✖✖	There is not a notable capacity issue on direct sailings between Hamars Ness and Gutcher, but sailings to and from the island via Belmont can have car capacity issues. This problem combined with the frequency / timetable gaps can impact on the ability to make unplanned trips off-island.
9	Reliability (weather / mechanical)	✓	There are no major reliability issues on this route.
10	Comfort	✖	The accommodation is below the car deck and there is no disabled access / facilities
11	Physical access	✖	The MV <i>Bigga</i> and <i>Geira</i> are both ageing vessels and both have the only passenger accommodation below the waterline. Physical access can therefore be challenging for the elderly and disabled, again an important issue given the ageing demographic of Fetlar.
12	Integration with PT (local bus)	✖✖	There is very limited bus integration at Gutcher for Fetlar residents. Variants of the 24 & 28 services call at Gutcher, with a single service through to Lerwick and four services per day to Ulsta. These services are not timed well for the Fetlar ferry and, with the exception of one service, require a change of bus. This makes public transport an unattractive option overall. The dependence on the private car has a negative environmental impact and increases the cost of travel for islanders, leading to further comparative disadvantage.
13	Integration with PT (strategic)	✖✖	Fetlar has a timetable which allows islanders to easily access NorthLink services from Lerwick. However, residents cannot catch the first morning Edinburgh, Inverness, Aberdeen or Kirkwall flights, although the first flight to Glasgow and the second to Aberdeen are accessible. The inability to catch the first morning flights to various locations means that Fetlar residents cannot carry out a day return visit for meetings, appointments etc, leading to potentially costly overnight stays.
14	Crossing / flight times	✖	The 25 minute crossing time to Gutcher is not unreasonable. However, on indirect sailings via Belmont, the crossing time is extended by 10 minutes plus the time required for marshalling at Belmont. Fetlar generally has two indirect sailings per day, adding significantly to journey times. The increased overall journey times on such sailings increase the already lengthy journeys for accessing a range of business and personal services.
15	Onboard facilities	✓	The facilities on the vessel are appropriate for the length of crossing.
16	Weekday / weekend service variation	✖✖✖	Fetlar has a much reduced service at the weekend. Saturday and Sunday provision is slightly over half of the weekday provision. This limits weekend accessibility to the mainland and the attractiveness of the island for weekend tourists.
17	Landside infrastructure issues	✓	The facilities are appropriate for the route.
18	Landside human resources	✓	There are not currently any landside human resource issues, although the ferry is crewed with island-based staff, which could give rise to future crewing issues.

Unst Transport Problems			
	Service Characteristics	Rating	Why is this a problem or not?
1	Overall journey time to Lerwick	✖✖	Of the nine islands considered in this study, Unst has the third longest journey time to Lerwick without an air connection (after Skerries and Fetlar). The journey involves two ferry connections and takes around two hours by car and two and a half hours by public transport (depending on where on Unst the journey begins), assuming all connections are made. The long journey times limit daily interaction with the services and employment opportunities in Lerwick and indeed mainland generally.
2	First sailing / flight	✓	The first sailing from Belmont is early in the morning at 0630.
3	Last sailing / flight	✖	The consultation suggested that the timetable is not seen to be conducive to undertaking social activities in Lerwick. However, even in winter, the first departure from Unst is 0630 and last departure on Monday to Saturday from the mainland 2200 or from Yell 2250, which suggests that the inability to undertake social activities on mainland is purely a function of distance.
4	Time on mainland	✓	The current timetable allows for a significant amount of time on the mainland daily.
5	Time in Lerwick	✓	The current timetable allows for a significant amount of time in Lerwick daily, although the long journey time from Unst eats into this.
6	Time on island	✓	The current timetable allows for a significant amount of time on the island daily.
7	Frequency / Sailings per Day / Timetable gaps	✓	Unst has a relatively frequent service with a high number of sailings per day, for example during the summer timetable period there are 23 sailings per day Tuesday – Friday direct to Gutcher, plus a further five sailings (plus one request sailing) via Hamars Ness.
8	Capacity	✖✖	The consultation and carryings data suggest that peak vehicle capacity can be an issue on the Gutcher – Belmont route. From a passenger perspective, the majority of the capacity issues are on departures from Belmont, with the 0630 and 1740 departures in the summer particularly busy (although this may have changed since the end of the movements of Petrofac workers working at the Sullom Voe gas terminal). With regards to vehicles, the 0825 departure from Belmont is a particularly busy sailing – in summer 2014, this sailing departed with its vehicle-deck utilised at more than 80% on 60 separate days, with the corresponding figure for the winter being 52 days. The shortage of capacity on key sailings means that a passenger may have to delay desirable journey (with the potential for missed onward connections) or cancel it altogether, particularly where the journey is short notice or discretionary.
9	Reliability (weather / mechanical)	✓	There are not believed to be any major reliability issues on this route.
10	Comfort	✖	The accommodation is below the car deck and there is no disabled access / facilities
11	Physical access	✖	The MV Bigga and MV Geira are both ageing vessels and both have passenger accommodation below the waterline. Physical access can therefore be challenging for the elderly and disabled, again an important issue given the ageing demographic of Unst.
12	Integration with PT (local bus)	✖✖	There is very limited bus integration at Gutcher for Unst residents. Variants of the 24 and 28 services call at Gutcher, with a single service through to Lerwick and four services per day to Ulsta. These services are not in keeping with the much higher frequency ferry service. This makes public transport an unattractive option overall. The dependence on the private car has a negative environmental impact and increases the cost of travel for islanders, leading to further comparative disadvantage.
13	Integration with PT (strategic)	✖✖	Unst has a timetable which allows islanders to easily access NorthLink services from Lerwick. However, residents cannot catch the first Aberdeen, Edinburgh, Inverness or Kirkwall flights, although the first flight to Glasgow is accessible. The inability to catch the first morning flights to various locations means that Unst residents cannot carry out a day return visit for meetings, appointments etc, leading to potentially costly overnight stays.
14	Crossing / flight times	✓	Sailings via Hamars Ness add to journey times but these are relatively infrequent when considered in the context of Unst's total number of sailings.
15	Onboard facilities	✓	The facilities on the vessel are appropriate for the length of crossing.
16	Weekday / weekend service variation	✖	Unst has a reduced service at the weekend. Saturday provision is around two thirds of the weekday provision, whilst there are relatively few connections on a Sunday compared to a typical weekday (although the Sunday service frequency is still very high when compared to other Scottish islands). The consultation suggested this presents something of a problem for Unst residents, although it is clear from the timetable and data that Sunday travel is possible, albeit less frequent.
17	Landside infrastructure issues	✓	The facilities are appropriate for the route.
18	Landside human resources	✓	There are not currently any problems with landside human resources.

Study Objectives

In the light of the problems identified across the Shetland Islands, the following objectives have been defined as the basis for the options appraisal:

- **Transport Planning Objective 1:** The capacity of the services should not act as a constraint to regular and essential personal, vehicular and freight travel between the island(s) and Shetland mainland.
- **Transport Planning Objective 2a:** Where an island has a 'commutable' combined ferry or air & drive / public transport / walk time to a main employment centre (e.g. 80 minutes), the connections provided should reliably facilitate commuting.
- **Transport Planning Objective 2b:** Where an island does not have a 'commutable' combined ferry or air & drive / public transport / walk time to a main employment centre (e.g. 80 minutes), the connections provided should reliably permit a half day (e.g. 4 hours) in Lerwick, 7 days a week, all year round.
- **Transport Planning Objective 3:** The scheduled time between connections should be minimised to increase flexibility for passengers and freight by maximising the number of island connections across the operating day.
- **Transport Planning Objective 4:** The level of connectivity provided should minimise the variation within and between weekdays, evenings, Saturdays and Sundays.
- **Transport Planning Objective 5:** Where practicable and realistic, islanders should be provided with links to strategic onward connections without the need for an overnight stay on Shetland mainland.



Bluemull Sound – Capital Options

In light of the analysis of transport problems and objectives, the following **capital options** have been identified for Bluemull Sound

- Option CO1 (Do Minimum): Replace the MV *Bigga* & MV *Geira* on a like-for-like basis
 - Vessels would carry approximately 15 cars each
- Option CO2: Replace the MV *Bigga* & MV *Geira* with two larger vessels
 - Vessels would carry approximately 22 cars each
- Option CO3: Replace the MV *Bigga* & MV *Geira* with three new vessels
 - Vessels would carry approximately 15 cars each
- Option CO4: Develop a new harbour at Mid Yell for the Fetlar service
 - Unst service would continue to operate to Gutcher
- Option CO5a: Commence an air service from Unst to Tingwall
- Option CO5b: Commence an air service from Fetlar to Tingwall
- Option CO6: Construct a fixed link between Unst and Yell
 - Fetlar would have a dedicated vessel which would operate to Gutcher or Mid Yell (Option CO4)



Bluemull Sound – Revenue Options

The current timetable is determined by the level of crewing resource and working hours legislation.

The funds generated through ticket sales do not cover the costs of running air and ferry services, and this deficit is funded through the Council's annual *revenue* budget.

The following **revenue options** have been identified for Bluemull Sound:

- Option RO1: Offer an on-request early departure from both Fetlar (0345) and Unst (0415) Monday – Friday which would allow connection with the first flights from Sumburgh
- Option RO2: Offer additional request sailings on Friday & Saturday evenings through to 0200
- Option RO3: Operate standard weekday timetable seven days a week

Note that in our exit questionnaire, we will ask you what your priorities for the service would be, were more operating hours to be available.



Rationale for Selection / Rejection

Option	Take Forward (✓) or Reject (✗)	Rationale for Selection / Rejection
Option CO1 - Replace the MV <i>Bigga</i> & MV <i>Geira</i> on a like-for-like basis	✓	Delivers current level of service – detailed demand & cost analysis required in next stage
Option CO2: Replace the MV <i>Bigga</i> & MV <i>Geira</i> with two larger vessels	✓	Alleviates current capacity issues - detailed demand & cost analysis required in next stage
Option CO3: Replace the MV <i>Bigga</i> & MV <i>Geira</i> with three new vessels	✓	Alleviates current capacity issues & provides step-change in service potential - detailed demand & cost analysis required in next stage
Option CO4: Develop a new harbour at Mid Yell for the Fetlar service	✗	Splits Yell landfall and reduces capacity on busier Gutcher – Belmont route
Option CO5a: Commence an air service from Unst to Tingwall	✓	Potential transformation in journey times & infrastructure exists – community feedback required
Option CO5b: Commence an air service from Fetlar to Tingwall	✗	Significant infrastructure work required. Small population would make maintaining service challenging
Option CO6: Construct a fixed link between Unst and Yell	✗	<p>This option is rejected from further consideration given the very high up-front capital costs. In addition, there are very high levels of technical and funding uncertainty, whilst the elapsed time before this option could be realised means that it will not be considered further in the appraisal.</p> <p>This elapsed time would also mean that if taken forward, this option would not be in place until the tail end of the strategy period, meaning that an interim ferry-based solution would be required, adding further to the cost.</p> <p>Should a nationally funded programme of fixed links emerge in future, the proposal could be revisited at this stage.</p>
Option RO1: On-request early departure from both Fetlar (0345) and Unst (0415) which would allow connection with the first flights from Sumburgh	✗	Would need to leave both islands in middle of night and likely to be very low demand – community feedback required
Option RO2: Offer additional request sailings on Friday & Saturday evenings through to 0200	✓	Low cost option – merits further consideration
Option RO3: Operate standard weekday timetable seven days a week	✓	Major increase in weekend service – merits further consideration

Fixed Link

- Detailed review of options for a fixed link between Unst & Yell considered
- Priced by a UK and Norwegian contractor – this has resulted in a cost estimate of £60-£76 million. For appraisal purposes, contingency and optimism bias increases this cost to £111-£141 million.
- It is not feasible that SIC / ZetTrans could fund a project of this scale in the foreseeable future, which is why this question has to be taken to government
- A fixed link is rejected in the appraisal for the following reasons:
 - The cost of a fixed link across the Bluemull Sound significantly exceeds the costs associated with ongoing ferry services, even when considered over two ferry replacement cycles
 - A project of this nature would represent a nationally significant infrastructure scheme and would be competing for funding against other committed and planned national infrastructure schemes
 - There would also be competition with other fixed links proposals within Shetland and across Scotland for any available funding
 - Prior to construction, there would be a costly and extended period of technical development and preparation, which is not included in the above costs
- However, whilst fixed links are rejected in terms of the appraisal, there remains a wider question as to whether there should be a policy commitment to island fixed links. This is a question SIC / ZetTrans will raise with Scottish Government



What to do Next?

- Thank you for taking the time to read through the above material – we would be grateful if you could now complete a short questionnaire in relation to the options presented
- Please follow this link to access the questionnaire:

<https://www.surveymonkey.co.uk/r/Bluemull-Bressay-Whalsay-Yell-Aug2016>

