

#### Outer Hebrides STAG Appraisal

Sound of Barra Exhibition Boards

#### What is the study about?

- A transport appraisal of the long-term options for the ferry routes to, from and within the Outer Hebrides, including the Sounds, was a commitment made in the Vessel Replacement & Deployment Plan (VRDP) annual report for 2015
- Peter Brett Associates LLP, now part of Stantec, has been commissioned by Transport Scotland to carry out this appraisal. The study is being informed and guided by a Reference Group, which is being led by Transport Scotland and includes Comhairle nan Eilean Siar, HITRANS, CMAL and CalMac Ferries Ltd
- The appraisal will identify and evaluate options for the short, medium & long-term development of the Outer Hebrides network



#### **Scottish Transport Appraisal Guidance (STAG)**

- The appraisal is being undertaken using a Transport Scotland process referred to as 'STAG', the approved guidance for the appraisal of potential transport projects
- The principle of STAG is that it is objective-led rather than solution-led, ensuring that the option(s) ultimately taken forward address the identified transport problems and are the most appropriate when judged against a range of criteria



 The study is at the **Detailed Appraisal** stage, and we are now seeking public & stakeholder views on the emerging outputs



#### What are we presenting today?

- For the Sound of Barra route (Eriskay Ardmhor), the following boards set out:
  - the transport problems & opportunities on the Sound of Barra route
  - the study 'Transport Planning Objectives' against which options are assessed
  - the options developed and appraised for the Sound of Barra route
  - how these options feed into a 'Draft Network Plan' for the Outer Hebrides as a whole

#### Please note:

- Equivalent material for all **other routes** operating to, from and within the Outer Hebrides is provided in booklet form on the tables around the room
- The material presented at the **2018 public exhibitions** telling the story so far in terms of timetables, connectivity, capacity and reliability is also presented in booklet form around the room should you wish to (re)read this material
- Please browse the information for the route(s) relevant to you. When you are finished, please:
  - Take the time to give your thoughts to a member of the team if you wish
  - Fill out and hand back the comments form before leaving
  - All of the material presented is available on the Comhairle and HITRANS websites





### Sound of Barra: What did you tell us?

#### What did you tell us?

- An important step in a STAG study is defining and evidencing the transport problems & opportunities that any investment is intended to address
  - Consultation with the public and stakeholders is an essential part of gathering this evidence – the next few boards feed back on the key issues raised by island households & ferry users in relation to the **Sound** of Barra route
- Public exhibitions held in May 2018 allowed us to gather anecdotal views on problems & opportunities. These were supplemented by an island household survey and an onboard survey
  - Island resident survey: 41 household respondents had used the Sound of Barra route in the previous 12-months
  - Onboard survey: responses received from 84 passengers on the Sound of Barra service
- The key findings from the two surveys are presented on the next slides.



#### Travel Behaviour, Booking & Availability - Household Survey (1)

- On average, households reported undertaking 7 return journeys in the last year on this route
- 57% of households stated that these trips were fairly evenly spaced across the year
- 1/3 all or mostly in summer
- Employers business (26%), Travel to / from work (24%), health visit (12%) are the main travel purposes
- Barra is the most popular destination, with some evidence of onward travel to the mainland
- Bookings are mostly made
  - Winter: '3-7 days' (31%) followed by '1 week ahead' (26%)
  - Peak Summer: '2-4 weeks ahead' (36%) followed by '3-7 days ahead' (18%)
- 41% of households state frequent or occasional difficulties in booking a vehicle onto the ferry
  - 38% report no problems in this respect
- These instances are focussed on:
  - July (44%)
  - Thursday (17%) & Friday (17%)
- When bookings are thwarted, trips are:
  - Made using a different sailing on the same day (30%)
  - Made on a different day (35%)
  - Still made on original sailing using stand by (30%)
  - Not made at all (16% of responses)



#### What did you tell us? Household Survey (2)

- People expressed dissatisfaction with these aspects of the service
  - Quality of onboard wi-fi
  - Provision of EV charging points
  - Comfort on board
  - Island transport connections to ferry terminal
  - Onward transport connections from ferry terminal by bus
- 1/4 stated that the current service prevents more frequent travel in this route
  - Mainly affecting seeing friends & family less often (50%), fewer sporting & shopping opportunities (38%), difficulties in accessing business opportunities in the islands (13%), and fewer holidays / short breaks (38%)
- On average, households suggest an additional 6 return journeys per month would be made per annum if their concern with the route was addressed
- 27% felt the *main* ferry's onboard facilities did not fully meet their needs
- 26% felt the *relief* ferry's onboard facilities did not fully meet their needs
- Around 20% felt that facilities at the terminal did not meet their requirements



#### What did you tell us? Onboard Survey

#### Capacity issues and travelling with a vehicle

- Of those travelling with a vehicle onboard:
  - 18% had not booked
  - 75% had secured a place on their preferred route & sailing
  - 8% had booked onto their preferred route but not preferred sailing
- Overall 88% stated that the current timetable time of this sailing met their travel requirements, visitors more so than residents
- All visitors had or were planning to use another ferry route on this trip –
   14% of these had not been able to secure a booking on their preferred option
- 50% were travelling with a vehicle, slightly more so for residents. The need to carry luggage / equipment and the convenience of having your own vehicle were the most commonly cited reasons for this
- 18% stated that improved public transport would or may have made them consider not bringing a car on board





#### Sound of Barra, Problems & Opportunities

#### Sound of Barra: Problems & Opportunities (1)

- The identification of problems & opportunities at the route level:
  - considered each element of the service / connectivity to ensure that all relevant problems & opportunities had been identified; and
  - undertook a assessment of the relative magnitude of each problem (as evidenced by the operator data and 2018 consultation). The assessment scale is as follows:
    - **O** neutral
    - x minor problem
    - xx moderate problem
    - xxx major problem

#### **Sound of Barra: Assessment of Transport Problems**

Aspect of Service / Connectivity	Relative Magnitude of Problem
Operations	×
Landside Infrastructure	0
Resilience	0
Timetable	x
Capacity	x
Punctuality & Reliability	0
Public Transport Integration	×



#### Sound of Barra: Problems & Opportunities (2)

#### Operations

 The angle between the ramp on the vessels which operate the route and the concrete slips can prevent the loading of long tri-axle coaches, or create the risk of vehicles grounding. This can also affect some HGVs and limits inter-island travel by larger vehicles, impacting on both tourism & the supply-chain.

#### Timetable

The surveys and consultation found that Barra residents use the Lochmaddy—Uig service when travelling to & from Inverness. The timetable of that service means that there are occasions when a same day connection is not possible – e.g. the last arrival into Lochmaddy on a summer Monday, Wednesday, Friday and Sunday is after the last departure of the Sound of Barra service from Eriskay, necessitating an overnight stay in Uist.

#### Capacity

• Use of the route has grown with RET, with the management of vehicle deck capacity becoming more challenging in the summer months.

#### Public Transport Integration

 There is a bus connection which meets every sailing but a number of comments were made by consultees that the timetables as presented are difficult to interpret.



#### **Transport Planning Objectives**

- The setting of Transport Planning Objectives (TPOs) is a key step in the STAG process as they define what the policymaker should be seeking to achieve through investing in a transport scheme
- The TPOs for this study were developed such that they could cover the entire Outer Hebrides network, albeit certain objectives will be more relevant to some routes than others
- Transport Planning Objective 1: The *capacity* of the service should as far as reasonably possible meet the passenger and vehicle demand for the service
- Transport Planning Objective 2: The timetable operated will meet all reasonable connectivity needs of each island
- Transport Planning Objective 3: The *cancellation rate* of the Outer Hebrides to mainland ferry services should not exceed the average for all 'Major Vessel' routes (and for all 'Small Ferry' routes for the Sound services)
- Transport Planning Objective 4: The resilience of individual routes and the Outer Hebrides network as a whole should be improved and / or risks mitigated over the appraisal period





# Sound of Barra: Option Generation, Development & Appraisal

#### Option Generation, Development & Appraisal

- The STAG process requires the generation of a long-list of options for addressing the identified transport problems – these options can originate from:
  - Analysis of operator data, timetables and other secondary sources
  - Public & stakeholder inputs (e.g. public exhibitions, surveys etc)
  - Ideas considered in previous studies
- The long-list of options is developed and appraised against both the TPOs and a set of criteria set out in the STAG Guidance
- In the interests of brevity, the focus of most of the following boards is predominantly on the shortlist of options which progressed to the 'Detailed Appraisal' – i.e. those which had progressed through the initial two sifting exercises (known as Initial & Preliminary Appraisal)
  - The long-list of options (including any which have been sifted out) are listed on the next board and the reason for their exclusion is provided



#### Initial Long-List of Options

Option	Description	Rationale for Selection / Rejection
SOB1	Replace MV Loch Alainn with one larger vessel	<ul> <li>✓ - This option is retained for further consideration.</li> </ul>
SOB2	Extend the length of the operating day	<ul> <li>✓ - This option is retained for further consideration.</li> </ul>
SOB3	Introduce a second summer vessel onto the route	<ul> <li>✓ - This option is retained for further consideration.</li> </ul>
SOB4	Construct a fixed link across the Sound of Barra	From an operational perspective, there is merit in a fixed link across the Sound of Barra. The case for such an investment will be considered both through the Islands Deal submission and the second Strategic Transport Projects Review, which is currently underway and due to report in 2021. It will therefore not be considered further in this appraisal.
SOB5	Upgrade the vessels to accommodate tri-axle vehicles	This option would offer a benefit for the route but is an operational / asset management issue and not an issue for a STAG appraisal of this nature.





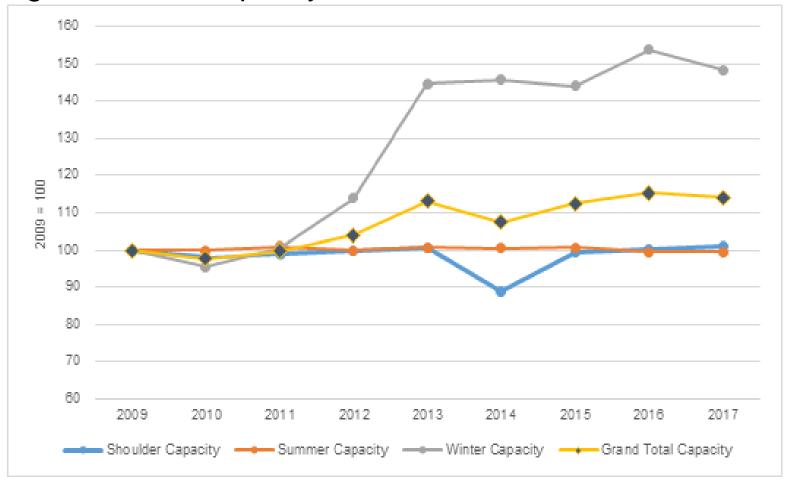
#### Sound of Barra: Detailed Appraisal

#### **Options Considered in Detailed Appraisal**

- Three options were shortlisted for consideration in the Detailed Appraisal:
  - Option SoB1: Replace MV Loch Alainn with one larger vessel
  - Option SoB2: Extend the length of the operating day
  - Option SoB3: Introduce a second summer vessel on the route
- The following boards:
  - provide some context in terms of current and forecast capacity utilisation on the Sound of Barra route
  - provide further details on the specifics of each option
  - set out the appraisal of each option against the TPOs and STAG criteria
  - provide our recommendation as to which options should progress to the 'Draft Network Plan' for this route



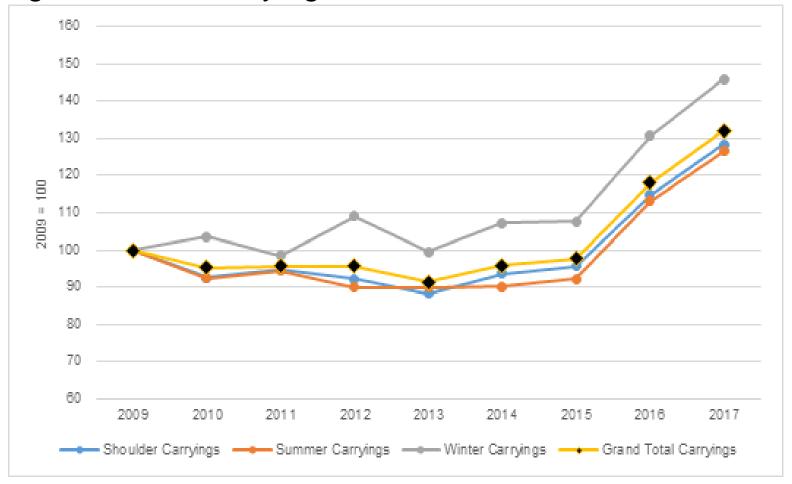
#### Change in Route Capacity Over Time



- Chart shows total annual ferry vehicle capacity indexed to 2009 (2009=100)
- The spike in Winter capacity from 2013 was caused by the MV *Loch Alainn* operating the route more frequently. Prior to this the MV *Loch Bhrusda* operated most of the winter timetable sailings
- No significant change in the supply-side in Summer and Shoulder periods



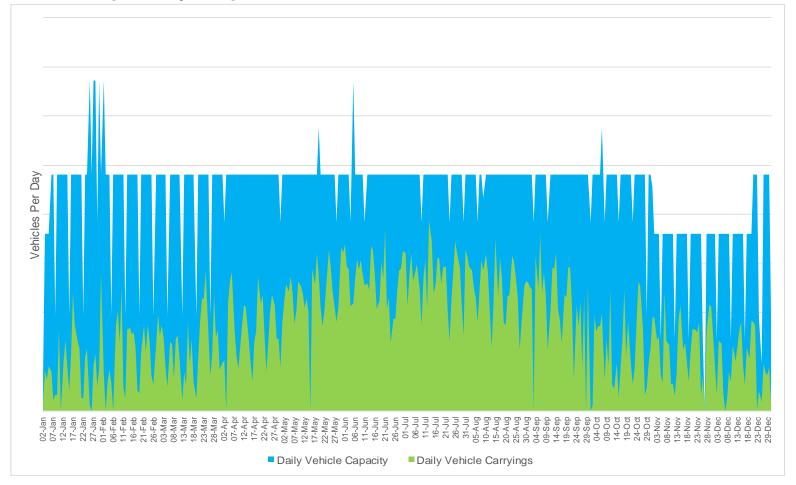
#### Change in Route Carryings Over Time



- Chart shows total annual ferry vehicle carryings indexed to 2009 (2009=100)
- RET was introduced for the calendar year of 2016 with demand responding accordingly.
- Fairly flat picture between 2009 and 2015
- Growth in the Winter period has been substantial
- Growth on the Sound of Barra (+30%) has been far higher than the Sound of Harris (+6%) since 2009



#### When is capacity a problem?



- Chart shows comparison of 2017 daily vehicle carryings (green) versus daily capacity (blue)
- Daily carrying capacity is never a problem on the Sound of Barra, albeit specific sailings will be at capacity



### Capacity Utilisation – Daily Available Vehicle Space, Ardmhor - Eriskay

- Calendar shows total daily remaining (i.e. available) vehicle space between Ardmhor – Eriskay in 2017
  - e.g. on Monday 2<sup>nd</sup> January 2017, 56% of car deck space was available / not used
  - Note days with the red hashing are days where all sailings were cancelled or there are no timetabled sailings
- There is a degree of pressure on the vehicle deck between the peak months of June – August recording a number of days where available capacity is less than 25%.
- However, whilst specific sailings across the day may be full, there is always capacity across the day overall.

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Feb	5	6	7	8	9	10	11
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	19	20	21	22	23	24	25
	26	27	28	1	2	3	4
Mar	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
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May	7	8	9	10	11	12	13
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Jul	2	3	4	5	6	7	8
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	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31	1	2	3	4	5
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	22	23	24	25	26	27	28
	29	30	31	1	2	3	4
Nov	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	1	2
Dec	3	4	5	6	7	8	9
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	31	1	2	3	4	5	6
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Sun	Mon	Tue	Wed	Thu	Fri	Sat
0%	56%	80%	80%	73%	86%	96%
69%	92%	63%	0%	80%	73%	82%
63%	74%	52%	64%	69%	77%	93%
90%	73%	79%	88%	0%	72%	88%
82%	82%	40%	72%		81%	80%
71%		67%	55%	70%	49%	89%
79%	61%	68%	70%	63%	73%	93%
75%	70%	49%	64%	65%	67%	86%
63%	73%	63%	74%	60%	75%	78%
69%	68%	69%	85%	68%	72%	77%
81%	83%	83%	61%	73%	74%	87%
85%	75%	66%	49%	58%	38%	62%
49%	75%	47%	68%	72%	81%	78%
67%	0%	50%	49%	39%	66%	75%
78%	77%	60%	51%	52%	74%	83%
88%	69%	52%	48%	55%	55%	66%
80%	76%	53%	49%	51%	68%	66%
77%	58%	49%	35%	43%	42%	45%
49%	54%	37%	44%	42%	50%	46%
48%		25%	42%	28%	48%	48%
59%	45%	41%	29%	46%	51%	48%
53%	43%	25%	29%	29%	38%	36%
43%	64%	33%	33%	39%	27%	38%
18%	39%	38%	23%	29%	46%	50%
41%	37%	43%	11%	55%	47%	65%
63%	63%	47%	36%	42%	41%	34%
39%	43%	21%	39%	39%	35%	53%
52%	41%	24%	19%	15%	35%	42%
45%	8%	33%	36%	39%	33%	58%
63%	56%	36%	23%	17%	19%	54%
59%	20%	28%	37%	39%	45%	48%
54%	46%	38%	29%	23%	44%	61%
63%	47%	24%	29%	27%	43%	76%
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56%	58%	49%	75%	36%		47%
	79%	51%	68%	64%	64%	61%
81%	67%	74%	52%	74%	79%	87%
83%	50%	58%	47%	73%	67%	78%
82%	80%	62%	55%	48%	67%	93%
79%	80%	60%	55%	45%	71%	62%
28%	71%	28%	57%	61%	78%	82%
75%	77%	46%	38%	68%	66%	68%
69%	63%	55%	58%	54%	52%	92%
58%		64%	34%	39%	55%	81%
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#### Capacity Utilisation – Daily Available Vehicle Space, Eriskay - Ardmhor

- Calendar shows total daily remaining (i.e. available) vehicle space between Eriskay – Ardmhor in 2017
  - e.g. on Tuesday 3<sup>rd</sup> January 2017, 74% of car deck space was available / not used
  - Note days with the red hashing are days where all sailings were cancelled or there are no timetabled sailings
- The pattern of vehicle deck utilisation in the southbound direction is broadly similar to the northbound.
- However, the number of days when there is less than 25% capacity remaining is fewer.
  - This suggests that there is greater demand for northbound trips than southbound trips, a consistent theme across the Outer Hebrides associated with island-hopping holidays often commencing in Barra

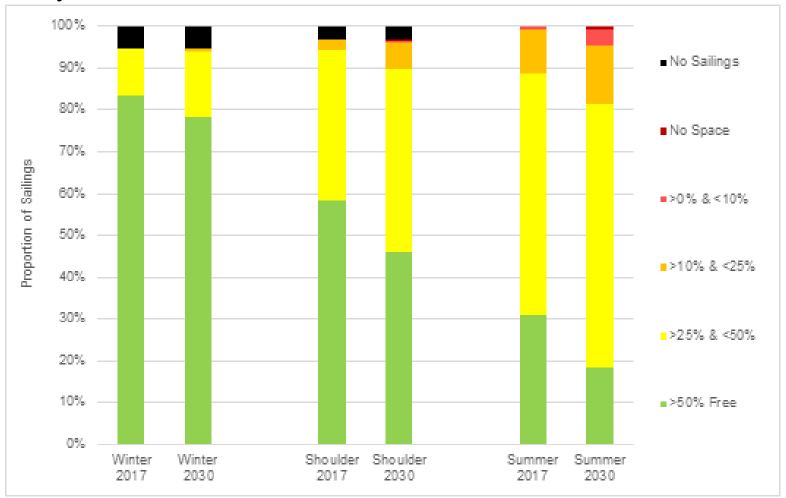
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Sun	Mon	Tue	Wed	Thu	Fri	Sat
0%	100%	74%	84%	77%	81%	95%
98%	86%	67%	096	77%	52%	81%
94%	76%	48%	63%	72%	71%	95%
83%	82%	68%	88%	0%	79%	78%
92%	83%	42%	74%	0%	78%	85%
69%		60%	59%	58%	47%	91%
94%	70%	63%	65%	71%	73%	90%
88%	67%	60%	73%	61%	59%	76%
81%	71%	55%	63%	68%	63%	84%
81%	74%	75%	88%	71%	64%	78%
96%	85%	79%	64%	76%	66%	88%
88%	68%	59%	56%	46%	43%	73%
77%	77%	54%	69%	59%	85%	81%
80%		58%	41%	43%	65%	78%
86%	68%	66%	58%	61%	65%	75%
88%	73%	64%	38%	54%	47%	70%
87%	65%	62%	53%	60%	72%	72%
77%	67%	59%	58%	56%	44%	54%
77%	62%	54%	51%	59%	62%	58%
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70%	71%	42%	34%	34%	50%	65%
53%	69%	36%	38%	30%	40%	44%
46%	71%	54%	39%	41%	45%	46%
48%	53%	59%	38%	35%	38%	64%
65%	36%	44%	35%	58%	57%	78%
59%	59%	51%	45%	38%	24%	32%
73%	42%	45%	51%	44%	40%	44%
57%	47%	48%	36%	23%	22%	58%
47%	63%	38%	56%	40%	44%	57%
62%	49%	46%	33%	16%	29%	55%
61%	43%	41%	41%	42%	51%	56%
51%	53%	34%	39%	43%	38%	53%
83%	61%	30%	50%	44%	44%	49%
72%	53%	57%	28%	40%	47%	49%
79%	70%	51%	48%	48%	43%	56%
0%	47%	51%	30%	57%	31%	54%
72%	57%	43%	50%	38%	52%	62%
80%	53%	52%	50%	41%	55%	73%
54%	70%	58%	72%	41%	1111000	45%
0%	96%	67%	65%	64%	46%	71%
85%	73%	78%	45%	89%	75%	73%
88%	57%	66%	49%	81%	56%	81%
90%	84%	65%	36%	46%	64%	93%
73%	79%	73%	63%	48%	49%	54%
69%	76%	36%	65%	65%	85%	87%
81%	79%	51%	43%	63%	57%	77%
47%	68%	52%	50%	57%	48%	86%
43%	11110000	48%	46%	44%	59%	68%
89%	62%	58%	85%	(1)(0)(6)	83%	74%
64%	67%	69%	65%	42%	53%	69%
69%	63%	70%	46%	65%	59%	98%
70%	094	83%	79%	83%	84%	78%
94%	111096	100%	84%	76%	81%	95%





#### Capacity Utilisation – Forecasts



- Chart compares 2017 and illustrative forecasts for 2030 vehicle deck space / availability by season
- Based on the projections used here, few capacity issues are expected with the next 10-15 years, albeit there may specific sailings across summer days which are challenging to secure a booking on



#### Option SoB1: Replace MV Loch Alainn with one larger vessel

#### Vessel & Harbour Implications

- A new 36-car ferry would be required
- Operational Feasibility
  - The new vessel would have to be Euro B certified

#### Timetable

The timetable would be as at present.

#### Capacity

- The largest capacity *Loch* Class vessel carries 36-cars and it is assumed that any new vessel would be of this size.
- This being the case, this option would represent a 50% increase on the capacity of the current vessel (24 cars to 36 cars).



#### Option SoB2: Extend the length of the operating day

#### Vessel & Harbour Implications

None

#### Operational Feasibility

- The current crewing arrangements would need to be amended and an additional Barra-based crew recruited
- CFL has been asked to comment on the deliverability of this option

#### Timetable

- Assuming the current Sound of Barra sailings are maintained (it is understood that these provide specifically timed connections for certain user groups), two additional evening return sailings could be provided.
- Any Uist residents travelling from Oban could route through Barra, arriving into Castlebay at 18:15 and catching 19:20 departure from Ardmhor.

#### Capacity

• This option would represent a 40% increase in capacity across the day, moving from five sailings to seven.



#### Option SoB3: Introduce a second summer vessel on the route

#### Vessel & Harbour Implications

 This option would be delivered by one of the current spare Loch Class vessels (assuming an appropriate vessel can be made available)

#### Operational Feasibility

- The key issue would be securing an additional vessel from within the fleet during the summer months. There is also a risk that it could be withdrawn in the event that a breakdown elsewhere in the fleet needs to be covered
- It is likely that any second vessel would need to have 'grandfather rights' to operate the route
- The second vessel would have a shorter day as it would need to be on the berth after MV Loch Alainn departs in the morning and back off the berth by the conclusion of MV Loch Alainn's operating day

#### Timetable

 There would be an additional four return connections per day, with the operating day of the second vessel running from 08:00-17:45

#### Capacity

 The capacity increase would be dependent on the size of the second vessel, but would offer an 80% increase in connections across the day



#### **Appraisal of Options against TPOs**

Option	TPO1 - Capacity		TPO2 – Connectivity		TPO3 - Reliability		TPO 4- Resilience	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Option SoB1: Replace MV  Loch Alainn with one larger vessel	<b>/</b> /	✓	0	0	0	0	0	O
Option SoB2: Extend the length of the operating day	✓	✓	<b>//</b>	<b>//</b>	0	0	0	0
Option SoB3: Introduce a second summer vessel on the route	<b>///</b>	0	<b>///</b>	0	0	0	✓	O

- Option SoB1 would have a moderate capacity benefit in summer and a minor benefit in winter
- Option SoB2 would offer a minor capacity benefit and moderate connectivity benefit, particularly in peak summer. A longer operating day would support greater interaction between Barra and Uist, and would also allow residents of each island to more readily access different mainland services / ports (i.e. Uig, Mallaig and Oban)
- The introduction of a second summer vessel onto the route (Option SoB3) would address any current capacity issues and would provide a major connectivity benefit

#### **Assessment Scale**

✓✓✓ - major positive

✓ - moderate positive

- minor positive

O - Neutral

× - minor negative

×x - moderate negative

××× - major negative



#### **Appraisal of Options against STAG Criteria**

Option	Environment	Safety	Economy	Integration	Accessibility & Social Inclusion	Cost to Gov.
Option SoB1: Replace MV Loch Alainn with one larger vessel	✓	0	✓	0	✓	Moderate
Option SoB2: Extend the length of the operating day	×	0	✓	✓	✓	Low
Option SoB3: Introduce a second summer vessel on the route	××	0	<b>√</b> √	✓	<b>√</b> √	to Moderate

- Option SoB1 would provide a minor Economy benefit through ensuring that there
  is no capacity-related constraint to the growth of the island
- Option SoB2 would provide a minor benefit with respect to the Economy criterion, particularly if it increased supply-chain and other interactions between Barra and Uist. There would also be a minor Accessibility & Social Inclusion benefit for Barra residents, who could more readily access services in Uist and the mainland routes to Mallaig and Uig
- Doubling the summer frequency on the Sound of Barra route (Option SoB3)
  would foster closer interaction between Barra and Uist, particularly from a supplychain and public sector delivery perspective. A second vessel would also
  strengthen the favoured south to north tourism route through the Outer Hebrides



#### Options Shortlisted for 'Network Plan'

Option	Description	Rationale for Selection / Rejection
SoB1	Replace MV Loch Alainn with one larger vessel	✓ - This option is retained for further consideration. Its implementation would be dependent on whether capacity utilisation on the Sound of Barra route exceeds the capacity offered by a vessel of the current size, otherwise the vessel would be replaced at life expiry.
SoB2	Extend the length of the operating day	✓ - This option is retained for further consideration as it would better connect Barra to Uist and also support improved access to other mainland services, and in particular via Lochmaddy for connections to Inverness.
SoB3	Introduce a second summer vessel onto the route	✓ - This option is retained for further consideration, although it is acknowledged that there may be a deliverability challenge in terms of the availability of a suitable vessel for the route.





## Outer Hebrides Wide Options, Detailed Appraisal

#### Outer Hebrides-wide Options

- In addition to the route specific options which are being presented at these exhibitions, a series of Outer Hebrides-wide options were developed and appraised
  - These options are defined as impacting on more than one landmass within the Outer Hebrides, so for example a freighter shared between Lewis and Uist
  - In the interests of brevity, only brief details on the options considered and the rationale for selection / rejection are presented here, but please speak to the team if you would like more details on any specific options considered
- In summary, only the Outer Hebrides-wide option OH8 (Introduce Demand Management Measures) is being retained for further consideration within the Network Plan



	Description	Rationale for Selection / Rejection
OH1	Rationalise the service to two routes with two Outer Hebrides access points (one for Lewis & Harris and one for Uist & Barra) and a single mainland port (Uig)	<ul> <li>This option is rejected from further consideration for the following reasons:</li> <li>There would be significant public acceptability issues, particularly in Barra</li> <li>Journey times would be extended for residents of Lewis, Harris, South Uist, Eriskay and Barra.</li> <li>Significant investment has recently been made at Ullapool, with investment planned at Tarbert. The benefits of this investment would be lost and could lead to financial difficulties for trust ports</li> <li>There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.</li> </ul>
OH2	Rationalise the service to two routes with two Outer Hebrides access points (one for Lewis & Harris and one for Uist & Barra) and two mainland ports (Ullapool & Uig)	<ul> <li>This option is rejected from further consideration for the following reasons:</li> <li>There would be significant public acceptability issues, particularly in Barra, where a ferry crossing would be required to connect with any mainland ferry service.</li> <li>Journey times would be extended for residents of Harris, South Uist, Eriskay and Barra.</li> <li>There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.</li> </ul>
ОНЗ	Rationalise the service to one route by routeing all island – mainland services via Stornoway–Ullapool	<ul> <li>This option is rejected from further consideration for the following reasons:</li> <li>There would be significant public acceptability issues, particularly in Barra, where two ferry crossings would be required and in Uist where one ferry crossing would be required to connect with any mainland ferry service.</li> <li>There would be significant costs of upgrading Stornoway Harbour, the Spinal Route and potentially a fixed link across the Sound of Harris.</li> <li>Without a fixed link across the Sound of Harris, a service would need to be maintained between Lochmaddy and Tarbert, meaning that the cost savings associated with discontinuing the ferry service at these ports would not be realised.</li> <li>Journey times would be extended for residents of Harris, Uist and Barra.</li> <li>There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.</li> </ul>
OH4	Rationalise the service to four routes by routing all Uist services through a single new port at Lochcarnan, using the short-sea crossing to Dunvegan or Milovaig on Skye	<ul> <li>This option is rejected from further consideration for the following reasons:</li> <li>The costs of building the new harbours and enhanced road infrastructure would be significant and up-front.</li> <li>There would be significant public acceptability issues in certain communities within Uist (particularly Lochmaddy and Lochboisdale), although this option may be attractive to some. There would likely be public acceptability issues in north-west Skye</li> <li>There are likely to be planning and environmental impediments to developing new harbours in Uist where two already exist, as well as in Skye.</li> <li>There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.</li> </ul>



		Description	Rationale for Selection / Rejection
0	H5	Rationalise the service to four routes by routeing all Uist services through Lochmaddy	× - Whilst there would be transport and financial benefits to hubbing Uist services through Lochmaddy, the closure of Lochboisdale and the discontinuation of the Mallaig / Oban route would have a highly negative impact on South Uist & Eriskay in terms of economic confidence and the accessibility of residents. Moreover, this option would lead to an overall loss in flexibility for Uist residents in terms of timetable, destinations and resilience.
			× - This option is rejected from further consideration in this study for the following reasons:
0	H6	Rationalise the service to two (or zero) routes by constructing a fixed link between North Uist and north-west Skye	<ul> <li>A fixed link of this distance (around 25km) plus connecting infrastructure would be hugely expensive, with the cost also up-front.</li> <li>The notion of a fixed link is entirely conceptual at this stage, in terms of the form it would take and the likely alignment.</li> <li>Lead in times would mean that even if a decision was taken to proceed, the link would not be in place until well into the appraisal period being considered here.</li> <li>There would be major planning and environmental issues.</li> <li>There would likely be split opinions within the community on whether a fixed link is desirable.</li> </ul>
			Whilst conceptually, this option would provide a wide range of benefits, the scale of investment required means that it is unaffordable. It should also be noted that Comhairle nan Eilean Siar chose not to include a fixed link between North Uist and Skye in their Islands Deal submission.
0	Н7а	Develop a new freight route serving Stornoway and Lochmaddy	× - This option has significant merits when considered in a stand-alone form, including the provision of additional freight capacity on the two volume routes to the Outer Hebrides and releasing the MV <i>Loch Seaforth</i> to operate a third return Ro-Pax sailing four days per week. However, the legs between Stornoway & Lochmaddy are likely to be only lightly used and it can be argued that a more efficient and cost effective option would be to add a second vessel (freighter or Ro-Pax) to Stornoway – Ullapool and / or Lochmaddy – Uig.
0	H7b	Develop a new Ro-Pax route serving Stornoway and Lochmaddy	× - This option is rejected from further consideration on the same basis as Option OH7a.
0	H8	Introduce demand management measures on routes across the Outer Hebrides	✓ - This option is retained for further consideration as it would assist in maximising the use of available capacity. It is not however specifically considered as an option in the appraisal, rather it is integrated within the development of the wider Draft Outer Hebrides Network Plan.





### **Emerging Network Plan**

#### The Draft Network Plan

- Having appraised options for all routes to, from & within the Outer Hebrides, a draft Network Plan has been developed which brings together the outputs of the route specific considerations
  - A reminder that analysis and conclusions for all other routes are available in booklets around the room
- The Draft Network Plan considers:
  - Short-term measures (to 2023)
  - Medium-term measures (to 2032, which covers the period of the next Ferries Plan)
  - Long-term considerations beyond 2032 which will need to be planned for between now and then
- A few points to note...
  - The options presented in the Draft Network Plan remain conceptual at this stage the purpose of this engagement exercise is to seek feedback on the proposals developed
  - The Plan <u>does not imply a commitment from Transport Scotland</u> if the Draft Network Plan is approved, it would remain subject to available funding
  - In parallel to this engagement process, CalMac is reviewing the deliverability of the options being presented
  - The Draft Network Plan is also in the process of being more fully costed



#### Short-Term Measures (to 2023)

- The lead time for developing a business case for a new vessel, securing funding, placing an order, building the vessel and adapting / developing infrastructure is in the region of 5 years
- Short-term measures are therefore focused on identifying:
  - What more can be done with current vessels & harbours to plug evidenced connectivity gaps and capacity problems; and
  - Preparatory work for necessary capital infrastructure investment.
- It is not anticipated that new vessels will be in service during this period except where there is a possibility to procure them via the charter / second-hand market or a cascade from within the existing fleet



#### Short-Term Measures (to 2023) – Outer-Hebrides Wide & Capital Options

#### Outer Hebrides-wide Options

- Transport Scotland and the operator to explore the extent to which existing capacity could be better used through the implementation of *demand management* measures
- Develop a medium-term **Vessels Plan**, thus ensuring the capital options progressed as part of this appraisal are nested within a wider delivery plan.

#### Capital investment preparation

- Progress a dedicated like-for-like new vessel for the Lochboisdale Mallaig route, together with a new Lochboisdale harbour
  - The new vessel would be designed to fit within the current Mallaig Harbour, although redevelopment of Mallaig retained as a longer-term ambition
  - New vessel would operate two return sailings per day
- Second vessel for Stornoway Ullapool route: further work is required to determine whether this is a part-year or year-round freighter or part-year Ro-Pax vessel
  - Capacity analysis suggests that a second Stornoway Ullapool vessel would provide greater benefits than a second vessel on the Uig Triangle, particularly given the forthcoming introduction of FMEL 802 – although the impact of this vessel should be closely monitored



#### Short-Term Measures (to 2023): Service Enhancements

- Operate a Saturday evening return Ro-Pax sailing from Stornoway to Ullapool between June and September, with the Sunday overnight freight sailing suspended during this period
- Operate the overnight freight service in Ro-Pax mode on a Monday and Friday between June and September
  - An agreed amount of deck-space should be allocated for freight on these sailings
- The availability of a charter freighter for the Stornoway Ullapool route should be considered ahead of the proposed capital option being delivered. This would permit up to three MV Loch Seaforth Ro-Pax services per day
  - The Saturday evening Ro-Pax sailing and opening the overnight freight service to vehicle bookings on certain days of the week would **not** be required if this option was delivered
- Extend the length of the operating day on the Sound of Barra
- There are two further service enhancements which could be delivered in the short-term should the respective communities be receptive to them:
  - Operate the Lochboisdale Mallaig / Oban service 7-days per week year-round
  - Operate the Castlebay Oban service 7-days per week year-round
- The following opportunities could be pursued should an appropriate vessel become spare:
  - Introduce a second-year round vessel onto the Sound of Harris route
  - Introduce a second summer vessel onto the Sound of Barra route



#### Medium-Term Measures (to 2023-2032)

- Introduce new Lochboisdale Mallaig & Stornoway Ullapool vessels early in the period
- The MV Isle of Lewis will need to be replaced during this period
  - The capacity utilisation forecasts suggest that a vessel of this size is not required to operate the Castlebay Oban route and thus the option of procuring an open-deck vessel of a proportionate capacity could be pursued (i.e. MV *Clansman* size).
- At the outset of the 'medium-term' period, there should be a degree of certainty on the future development of Mallaig Harbour. If the decision is taken to upgrade that port to accommodate the wider 'Major Vessel' fleet, a review could be undertaken as to whether a larger vessel should be deployed on the Lochboisdale – Mallaig route.
  - The smaller Lochboisdale Mallaig vessel could be redeployed elsewhere on the network
- There would also be a degree of certainty as to whether a full or partial fixed link for the Sound of Harris emerges from either the Islands Deal or Strategic Transport Projects Review 2. This would determine whether a ferry service is still required on that route. If so, a 'Euro B' compliant main & relief vessel for that route would be required by the mid-2030s, so planning would have to commence.
- In relation to the Sound of Barra, an ongoing review of capacity utilisation would determine the appropriate vessel solution for that route when MV Loch Alainn is retired from service in the late 2020s / early 2030s



#### Long-Term Considerations (beyond 2032)

- 2031-2036 Replacement of MV Hebrides.
- 2033-2038: Replacement of MV Loch Portain with a 'Euro B' vessel unless a fixed link for the Sound of Harris is progressed through the Islands Deal or STPR.
- 2045-2050: Replacement of MV Loch Seaforth
- Ongoing monitoring of capacity utilisation to inform future fleet deployment and investment decisions





### **Completing the Study**

#### **Completing the Study**

- The feedback from this event and wider engagement with stakeholders, the Reference Group and Transport Scotland will be used to refine the appraisal of the options
  - This will include a more detailed review of deliverability and cost to government
- The STAG Report will be finalised and published in Autumn 2019
- Transport Scotland will discuss the published report with stakeholders
- Transport Scotland will feed the outputs of the study into future versions of the Vessel Replacement & Deployment Plan and the next Ferries Plan



#### What to do next

- Please take this opportunity to provide your thoughts on the options presented to the team and ask any questions you may have
- The boards you have just read provide some areas you may wish to discuss but we would be happy to hear any views that you have
- Please also take the time to fill out the exit questionnaire before you leave. It can also be found here:

https://www.surveymonkey.com/r/OuterHebridesExhibitionQuestionnaire

#### Thank you for coming

