

Outer Hebrides STAG Appraisal

Lewis Public Exhibition 20th May 2019, 16:00-19:30 Bridge Community Centre -Stornoway

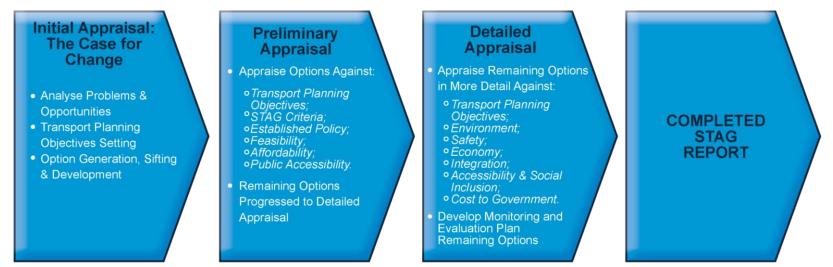
What is the study about?

- 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 your local route (Stornoway Ullapool), the following boards set out:
 - the transport problems & opportunities on the Stornoway Ullapool route
 - the study 'Transport Planning Objectives' against which options are assessed
 - the options developed and appraised for the Stornoway Ullapool 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





Stornoway – Ullapool 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 Stornoway – Ullapool 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: 143 household respondents had used the Stornoway – Ullapool route in the previous 12-months
 - Onboard survey: responses received from 719 passengers on the Stornoway – Ullapool 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 six return journeys in the last year on the Stornoway – Ullapool route
- 3/4 of households stated that these trips were fairly evenly spaced across the year
- Visiting Friends & Relatives (29%) and 4+ nights holidays (15%) are the main travel purposes
- Inverness, Glasgow & West Central Scotland, and Rest of UK are the most popular destinations
- · Bookings are mostly made
 - Winter: '2-4 weeks ahead' (34%) followed by '1-3 months ahead' (28%)
 - Peak Summer: '1-3 months ahead' (34%) followed by 'more than 3 months ahead' (26%)
- 2/3 of households state frequent or occasional difficulties in booking a vehicle onto the ferry
- These instances are focussed on:
 - July (66%) & August (57%)
 - Fridays and Saturdays (both 34%)
- When bookings are thwarted, trips are:
 - Made on a different day (55%)
 - Made on a different route (32%)
 - · Some 12% of responses included 'not made at all'
- 2/3 reported that friends or family visiting the Outer Hebrides had had difficulty booking a vehicle onto the ferry
 - Most of these either travelled on a different day (43%) or did not travel (43%)



What did you tell us? Household Survey (2)

- People expressed dissatisfaction with these aspects of the service:
 - Quality of onboard wi-fi
 - Disruption during scheduled refit
 - Summer service frequency
 - Onward mainland connections by bus
 - · Ability to make a day trip to the mainland
 - Stand by booking arrangements
 - · Island connections to ferry terminal
 - Provision of electric vehicle charging points
 - Availability of suitable seating onboard
- 2/3 stated that the current service prevents more frequent travel to the mainland
 - Mainly affecting seeing friends & family less often, and fewer holidays / short breaks
 - Also reported is constraints on accessing business opportunities on the mainland
- On average, households suggest an additional 5 return journeys would be made per annum if their main concern with the route was addressed
- 40% felt that the *main* ferry's onboard facilities did not fully meet their needs
- 39% felt that the *relief* ferry's onboard facilities did not fully meet their needs



What did you tell us? Onboard Survey Capacity issues and travelling with a vehicle

- Of those travelling with a vehicle onboard:
 - Only 4% had not booked
 - 80% had secured a place on their preferred route & sailing
 - 10% had booked onto their preferred route but not preferred sailing
- Overall 72% stated that the current timetable on this route meets their travel requirements, residents more so than visitors
- 26% of visitors had or were planning to use another ferry route on this trip 13% of these had not been able to secure a booking on their preferred option
- Price and the need to travel with a vehicle were the main reasons for choosing ferry over air. Only 17% had considered flying
- 70% were travelling with a vehicle, more so for visitors. The need to carry luggage / equipment and the convenience of having your own vehicle were the most commonly cited reasons for this
- 22% stated that improved public transport would or may have made them consider not bringing a car on board





Stornoway – Ullapool, Problems & Opportunities

Stornoway – Ullapool: 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 an 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
 - × minor problem
 - **xx** moderate problem
 - **xxx** major problem

Stornoway – Ullapool – Assessment of Transport Problems

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



Stornoway – Ullapool: Problems & Opportunities (2)

Operations

- The relief vessel, MV *Hebridean Isles,* has a significantly lower capacity and is much less reliable than MV *Loch Seaforth*.
- She is however only on relief for around 10 days in each year
- Landside Infrastructure
 - Vehicle marshalling at Ullapool is space constrained and slows down turnaround times (albeit these are still within acceptable limits)
 - Noise issues at Ullapool associated with the overnight freight service
 - Stornoway traffic blocking back onto Newton Street / Shell Street
- Resilience
 - Dependence on a single vessel, MV Loch Seaforth, to provide the daytime and overnight sailings
 - Dependence on a single berth at Stornoway (although this is common across the network, whilst Lewis can also be accessed through the Uig–Tarbert crossing, albeit not using the MV *Loch Seaforth*)

Timetable

- Weekday peak summer timetable offers fewer connections than prior to the introduction of MV *Loch Seaforth*, set against a background of growing demand and an increase in the number of high utilisation sailings
- Inability to make a meaningful day return trip to Lewis by ferry



Stornoway – Ullapool: Problems & Opportunities (3)

Capacity

- Emerging summer capacity challenges, particularly on summer Saturdays, are the primary problem facing the Stornoway – Ullapool route
- The increasing summer capacity problems are also manifesting themselves in the punctuality and reliability data, with 'Level 1' and 'Level 2' lateness due to 'volume of traffic' and 'knock-on delay from previous sailings' a key cause, particularly in July and August

Public Transport Integration

• Limited public transport integration on both sides of the crossing, together with issues in booking the 'on demand' Citylink coach at Ullapool were cited as an issue through the consultation and surveys

Opportunities

 Stornoway Port Authority (SPA) has published a draft 20-year masterplan for the future of the port. With respect to ferry infrastructure, the key aspiration of SPA is the provision of a second ferry berth at Arnish to allow for the introduction of a second vessel on the route, which is cited as a short-term (0-5 years) aspiration



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





Stornoway – Ullapool 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 those which have been sifted out) are listed on the next board and the reason for their exclusion is provided
 - If you would like more details on any of these earlier options or on the reasons for their exclusion, please do not hesitate to ask a member of the team



Initial Long-List of Options

Option	Description	Rationale for Selection / Rejection
SU1	Operate a Saturday evening return sailing from Stornoway to Ullapool	✓ - This option is retained for further consideration. An additional return sailing on a Saturday evening would address the day of the week when capacity problems are most acute. This option is likely to be most deliverable where a freight sailing is dropped during the week, providing a window for maintenance and slack in the timetable for resilience purposes.
SU2	Run the overnight freight sailing in standard Ro-Pax mode	 ✓ - This option is retained for further consideration. However, it could only practically be delivered on alternative evenings and the carriage of certain categories of dangerous goods would need to be planned around this.
SU3	Operate an asymmetric timetable with five single Ro- Pax crossings per day (plus the overnight freight service)	× - This option is rejected from further consideration as it would be highly detrimental to the freight industry and Lewis supply-chain. It would also be difficult if not impossible to compress turnaround times sufficiently to make the timetable workable.
SU4	Introduce a part-year or year- round freight vessel to run alongside MV Loch Seaforth	\checkmark - This option is retained for further consideration.
SU5	Introduce a part-year second Ro-Pax vessel to run alongside MV Loch Seaforth	\checkmark - This option is retained for further consideration.
SU6a	Provide a second linkspan at Arnish, Stornoway	★ - This option will only be considered as part of Option SU5 (Introduce a part-year second Ro-Pax vessel to run alongside MV <i>Loch Seaforth</i>). It is rejected as a standalone option given that a diversion port at Tarbert is available (albeit, it could not currently accommodate the MV <i>Loch Seaforth</i>).
SU6b	Provide a second linkspan at Berth No. 1 or Berth No. 3, Stornoway	★ - This option will only be considered as part of Option SU5 (Introduce a part-year second Ro-Pax vessel to run alongside MV <i>Loch Seaforth</i>). It is rejected as a standalone option given that a diversion port at Tarbert is available (albeit, it could not currently accommodate the MV <i>Loch Seaforth</i>). It is also rejected as a standalone option as it is not the preferred option in the Stornoway Harbour Masterplan.





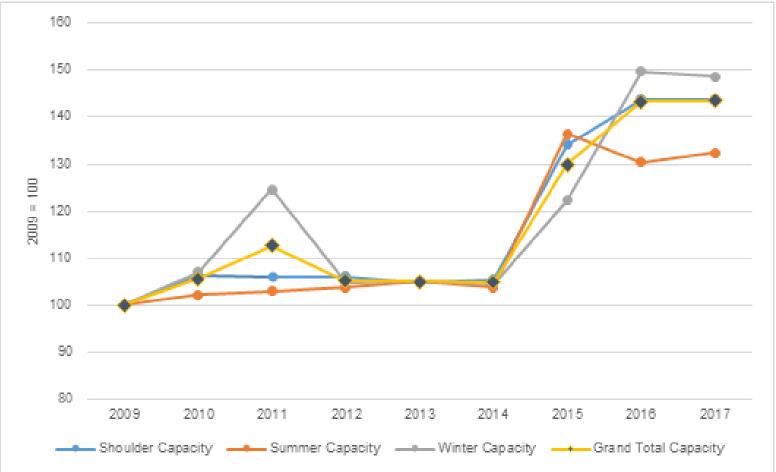
Stornoway – Ullapool, Detailed Appraisal

Options Considered in Detailed Appraisal

- Four options were shortlisted for consideration in the Detailed Appraisal:
 - Option SU1: Operate a Saturday evening return sailing from Stornoway to Ullapool
 - Option SU2: Run the overnight freight sailing in standard Ro-Pax mode
 - Option SU4: Introduce a part-year or year-round freight vessel to run alongside MV Loch Seaforth
 - Option SU5: Introduce a part-year second Ro-Pax vessel to run alongside MV Loch Seaforth
- The following boards:
 - provide some context in terms of current and forecast capacity utilisation on the Stornoway – Ullapool 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



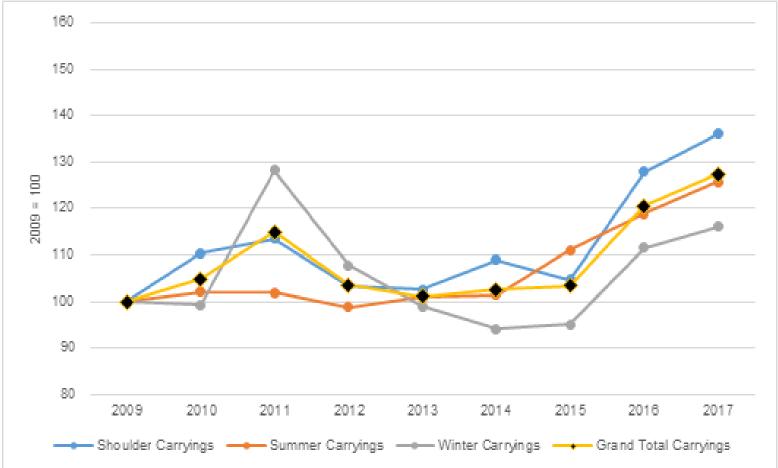
Change in Route Capacity Over Time



- Chart shows total annual ferry vehicle capacity indexed to 2009 (2009=100)
- Introduction of the MV Loch Seaforth in early 2015 can be clearly seen, as can the dual running of the MV Loch Seaforth and the MV Isle of Lewis in the summer of 2015
- Stable supply side in 2016 and 2017



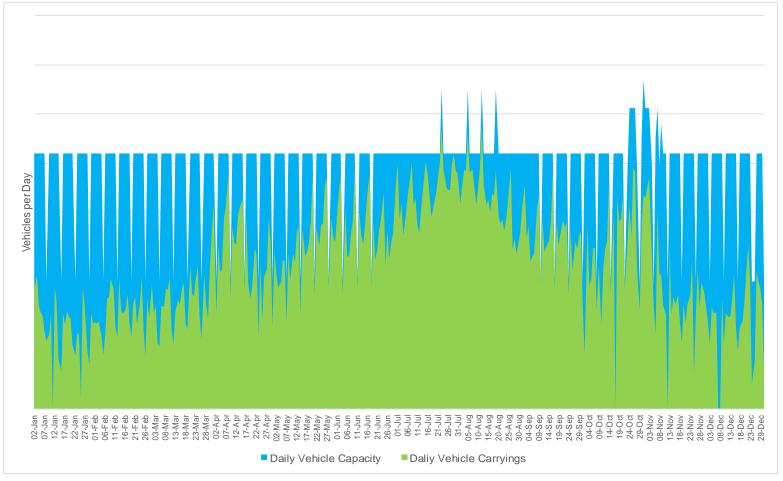
Change in Route Carryings Over Time



- Chart shows total annual ferry vehicle carryings indexed to 2009 (2009=100)
- Carryings between 2009 and 2015 were broadly flat except for a blip in 2011
- Growth of around 20% associated with supply-side changes from 2016



When is capacity a problem?



- Chart shows comparison of daily vehicle carryings (green) versus daily capacity (blue)
- Until the 2018 summer timetable, there was only one Sunday sailing for most of the year (hence the gaps between the blue lines)
- This profile suggest that total daily capacity becomes a problem in July and August with pressures around Easter and October. Outwith these periods, capacity is not generally a problem except on occasional sailings



Capacity Utilisation – Daily Available Vehicle Space, Stornoway -Ullapool

- Calendar shows total daily remaining (i.e. available) vehicle space between Stornoway & Ullapool in 2017
 - e.g. on Monday 2nd January 2017, 44% 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
- A number of days across July & August have very little vehicle space remaining (less than 10% across the day)
- Fridays and Saturdays are peak ٠ days throughout the summer timetable period, with many having less than 10% vehicle space remaining across the day. There were a number of Saturdays in July and August with no free space

	Su M Tu W Th F Sa	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 2 3 4 5 6 7		44%	45%	61%	62%	61%	64%
Jan	8 9 10 11 12 13 14	49%	78%	69%		47%	59%	81%
	15 16 17 18 19 20 21	74%	74%	72%	66%	54%	54%	77%
	22 23 24 25 26 27 28	70%	79%	79%	81%	26%	53%	81%
	29 30 31 1 2 3 4	73%	78%	73%	60%	69%	65%	73%
Feb	5 6 7 8 9 10 11	56%	66%	70%	55%	39%	47%	79%
	12 13 14 15 16 17 18	74%	77%	70%	61%	57%	50%	67%
	19 20 21 22 23 24 25	51%	74%	52%	67%	56%	36%	71%
	26 27 28 1 2 3 4	69%	74%	69%	58%	63%	58%	79%
Mar	5 6 7 8 9 10 11	63%	72%	61%	48%	50%	39%	69%
	12 13 14 15 16 17 18	61%	76%	64%	57%	48%	45%	71%
	19 20 21 22 23 24 25	58%	60%	66%	63%	55%	30%	83%
	26 27 28 29 30 31 1	50%	60%	65%	65%	40%	31%	36%
Apr	2 3 4 5 6 7 8	40%	59%	57%	54%	26%	23%	11%
	9 10 11 12 13 14 15	23%	51%	44%	37%	27%	22%	7%
	16 17 18 19 20 21 22	-2%	14%	52%	60%	49%	27%	38%
	23 24 25 26 27 28 29	46%	59%	48%	47%	45%	15%	33%
	30 1 2 3 4 5 6	41%	55%	58%	60%	47%	32%	39%
Мау	7 8 9 10 11 12 13	27%	58%	62%	37%	36%	21%	20%
	14 15 16 17 18 19 20	24%	47%	52%	39%	33%	20%	12%
	21 22 23 24 25 26 27	7%	44%	42%	39%	28%	10%	15%
	28 29 30 31 1 2 3	8%	39%	40%	42%	27%	5%	4%
Jun	4 5 6 7 8 9 10	0%	38%	44%	33%	33%	14%	5%
	11 12 13 14 15 16 17	11%	36%	41%	42%	23%	12%	7%
	18 19 20 21 22 23 24	6%	35%	45%	38%	30%	12%	7%
	25 26 27 28 29 30 1	37%	46%	51%	38%	30%	8%	3%
Jul	2 3 4 5 6 7 8	30%	32%	43%	28%	16%	11%	0%
	9 10 11 12 13 14 15	15%	29%	46%	39%	15%	8%	2%
	16 17 18 19 20 21 22	12%	25%	45%	34%	21%	11%	1%
	23 24 25 26 27 28 29	12%	3%	14%	4%	5%	0%	-1%
	30 31 1 2 3 4 5	6%	8%	30%	16%	3%	8%	35%
Aug	6 7 8 9 10 11 12	9%	8%	17%	20%	6%	3%	-3%
	13 14 15 16 17 18 19	8%	31%	30%	25%	20%	9%	6%
	20 21 22 23 24 25 26	15%	40%	38%	37%	7%	10%	1%
C	27 28 29 30 31 1 2 3 4 5 6 7 8 9	37%	51%	36%	39%	22%	5%	4%
Sep	3 4 5 6 7 8 9 10 11 12 13 14 15 16	42%	45%	51%	47%	39%	11%	10%
	17 18 19 20 21 22 23	2%	43%	52%	36%	19%	14%	3%
	24 25 26 27 28 29 30	6% 15%	38% 38%	41%	32% 32%	24% 29%	20% 17%	21% 28%
	1 2 3 4 5 6 7	13%	75%	56% 44%	62%	47%	36%	53%
Oct	8 9 10 11 12 13 14	18%	59%	58%	48%	21%	21%	3%
001	15 16 17 18 19 20 21	14%	32%		21%	25%	11%	10%
	22 23 24 25 26 27 28	1%	56%	57%	33%	32%	32%	15%
	29 30 31 1 2 3 4	21%	51%	56%	41%	28%	25%	47%
Nov	5 6 7 8 9 10 11	11%	52%	49%	54%	48%	52%	63%
	12 13 14 15 16 17 18	1000	55%	71%	62%	52%	51%	67%
	19 20 21 22 23 24 25	55%	76%	67%	61%	47%	24%	70%
	26 27 28 29 30 1 2	53%		67%	45%	58%	56%	66%
Dec	3 4 5 6 7 8 9	70%	75%	68%	52%			58%
	10 11 12 13 14 15 16	53%	77%	68%	68%	56%	44%	72%
	17 18 19 20 21 22 23	63%	73%	71%	61%	44%	52%	71%
	24 25 26 27 28 29 30	85%		59%	49%	55%	56%	56%
	31 1 2 3 4 5 6	71%		43%	61%	62%	61%	64%



Capacity Utilisation – Daily Available Vehicle Space, Ullapool -Stornoway

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

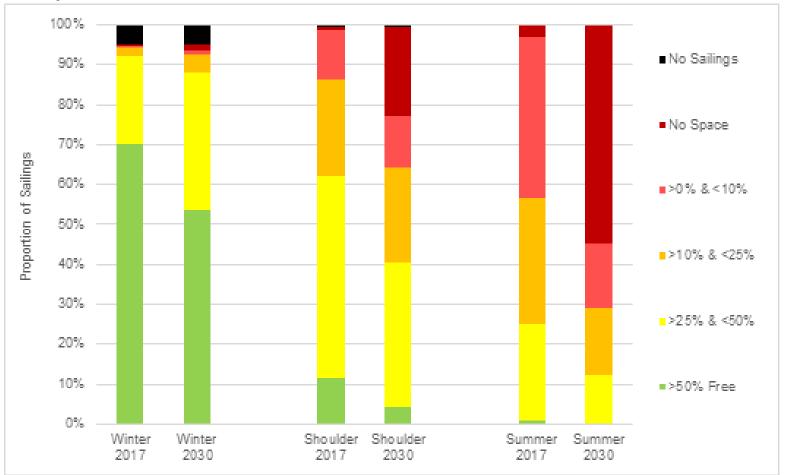
Dec

- Calendar shows total daily remaining (i.e. available) vehicle space between Ullapool – Stornoway in 2017
 - e.g. on Monday 2nd January 2017, 63% 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 majority of days in July have very little spare vehicle space
- Saturdays are peak days throughout the summer timetable period, with many having less than 10% vehicle space remaining across the day

Su M Tu W Th F Sa	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 2 3 4 5 6 7	0%	63%	51%	58%	62%	66%	75%
8 9 10 11 12 13 14	44%	64%	56%	0%	57%	57%	81%
15 16 17 18 19 20 21	66%	51%	63%	57%	74%	75%	73%
22 23 24 25 26 27 28	47%	62%	64%	0%	42%	66%	74%
29 30 31 1 2 3 4	59%	47%	60%	72%	64%	66%	70%
5 6 7 8 9 10 11	59%	52%	44%	58%	59%	59%	58%
12 13 14 15 16 17 18	14%	21%	53%	64%	65%	60%	65%
19 20 21 22 23 24 25	35%	43%	60%	66%	63%	60%	66%
26 27 28 1 2 3 4	48%	41%	60%	44%	62%	62%	70%
5 6 7 8 9 10 11	39%	47%	59%	58%	57%	57%	69%
12 13 14 15 16 17 18	37%	48%	50%	61%	58%	57%	62%
19 20 21 22 23 24 25	18%	28%	44%	49%	42%	58%	45%
26 27 28 29 30 31 1	42%	34%	53%	64%	50%	31%	4%
2 3 4 5 6 7 8	10%	13%	37%	37%	25%	19%	4%
9 10 11 12 13 14 15	2%	7%	26%	35%	22%	20%	29%
16 17 18 19 20 21 22	16%	36%	49%	53%	58%	48%	43%
23 24 25 26 27 28 29	42%	26%	12%	50%	45%	36%	36%
30 1 2 3 4 5 6	30%	21%	35%	45%	54%	51%	46%
7 8 9 10 11 12 13	36%	21%	37%	42%	49%	41%	37%
14 15 16 17 18 19 20	27%	12%	28%	38%	37%	33%	4%
21 22 23 24 25 26 27	14%	14%	31%	17%	27%	15%	4%
28 29 30 31 1 2 3	2%	12%	26%	27%	23%	26%	13%
4 5 6 7 8 9 10	21%	6%	38%	47%	30%	38%	6%
11 12 13 14 15 16 17	0%	9%	24%	29%	34%	24%	9%
18 19 20 21 22 23 24	2%	19%	38%	38%	30%	40%	24%
25 26 27 28 29 30 1	51%	14%	31%	32%	33%	15%	5%
2 3 4 5 6 7 8	21%	7%	21%	25%	15%	10%	7%
9 10 11 12 13 14 15	26%	6%	9%	24%	20%	13%	5%
16 17 18 19 20 21 22	4%	8%	5%	5%	11%	9%	7%
23 24 25 26 27 28 29	13%	9%	12%	24%	24%	8%	2%
30 31 1 2 3 4 5	7%	7%	10%	9%	10%	6%	1%
6 7 8 9 10 11 12	6%	5%	10%	20%	20%	8%	8%
13 14 15 16 17 18 19	17%	10%	6%	21%	12%	24%	19%
20 21 22 23 24 25 26	34%	15%	14%	23%	45%	27%	11%
27 28 29 30 31 1 2	38%	16%	42%	33%	40%	39%	21%
3 4 5 6 7 8 9	24%	12%	33%	34%	40%	33%	23%
10 11 12 13 14 15 16	4%	8%	25%	37%	50%	39%	11%
17 18 19 20 21 22 23	7%	14%	32%	32%	28%	38%	33%
24 25 26 27 28 29 30	7%	20%	36%	36%	46%	48%	33%
1 2 3 4 5 6 7	25%	41%	12%	42%	52%	38%	21%
8 9 10 11 12 13 14	28%	29%	52%	41%	54%	48%	20%
15 16 17 18 19 20 21	6%	13%		13%	28%	40%	25%
22 23 24 25 26 27 28	10%	32%	43%	38%	46%	46%	36%
29 30 31 1 2 3 4	11%	43%	53%	53%	53%	52%	47%
5 6 7 8 9 10 11	10%	25%	54%	52%	57%	67%	64%
12 13 14 15 16 17 18	0%	19%	55%	50%	67%	60%	65%
19 20 21 22 23 24 25	40%	42%	65%	58%	64%	60%	73%
26 27 28 29 30 1 2	-1%		54%	56%	52%	64%	66%
3 4 5 6 7 8 9	28%	46%	57%	46%			53%
10 11 12 13 14 15 16	45%	48%	60%	59%	57%	50%	65%
17 18 19 20 21 22 23	47%	63%	60%	56%	48%	20%	27%
24 25 26 27 28 29 30	76%		66%	43%	45%	51%	63%
31 1 2 3 4 5 6	67%	11114601111	62%	58%	62%	66%	75%
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Capacity Utilisation – Forecasts



- · Chart compares 2017 and illustrative forecasts for 2030 vehicle deck space / availability by season
- On this projection, over half of summer sailings would be filled to capacity by 2030
- There would also be significant capacity constraints in the Shoulder season, but Winter capacity would still be sufficient in the main
- This would suggest that there is a strong case for additional capacity on this route within the next decade



Option SU1: Operate a Saturday evening return sailing from Stornoway to Ullapool

- Vessel & Harbour Implications
 - None

Operational Feasibility

- Overnight sailing would need to be dropped on another night of the week (Sunday into Monday has the lowest loadings) to protect maintenance time and offer resilience to catch-up the timetable in the event of disruption
- For the Saturday evening sailing to be in any way desirable, the current Saturday timetable would need to be brought forward to an 06:00 start, with no breaks beyond standard turnaround time during the operating day

• Timetable

- Service would operate e.g. 1st June to mid-September only
- Various timetable options but simplest is to operate a 20:00 departure from Stornoway, arriving back at 02:00

Capacity

- Offers an additional Ro-Pax sailing on the busiest day of the week, albeit at less sociable hours
- Provides an additional 372 lane metres of capacity in either direction



Option SU2: Run the overnight freight sailing in passenger mode

- Vessel & Harbour Implications
 - None
- Operational Feasibility
 - Could have implications for:
 - the carriage of certain categories of dangerous goods
 - the ability to efficiently operate a drop trailer service
 - Provision of a certain amount of vehicle deck space for commercial vehicles would need to be guaranteed to protect the supply-chain needs of the island

Timetable

- Would operate on peak days, e.g. Mondays & Fridays, June to August only.
- This option could be combined with Option SU1 to provide additional connections across summer weekends.

Capacity

 This option would not increase the overall capacity on the Stornoway – Ullapool route. However, it would allow any unused vehicle deck space on the overnight sailing to be filled by non-commercial traffic



Option SU4: Introduce a part-year or year-round freight vessel to run alongside MV *Loch Seaforth*

Vessel & Harbour Implications

• A new freighter would need to be built, purchased or chartered

Operational Feasibility

- An overnight / layby berth for the freighter would need to be established. There may be a requirement for a morning repositioning, with the freighter and MV *Loch Seaforth* swapping places on the linkspan and layby berth respectively
- This would allow the MV *Loch Seaforth* to operate three return Ro-Pax sailings per day. Whilst the MV *Loch Seaforth* is crewed for 24-hour running, the nightshift crew complement is much smaller than the dayshift (14 plays 27). A view from the operator is being sought on whether the current crew complement could operate a third Ro-Pax sailing, even if this was with only limited catering facilities

Timetable

- This could be a seasonal only or year-round option (and is scalable depending on demand)
- The freighter would operate the overnight sailing currently provided by the MV Loch Seaforth
- The MV Loch Seaforth would have flexibility to operate three return sailings per day

Capacity

Capacity uplift by day, by direction - 700 passengers and 130 cars / 372 lane metres (50% increase on days with three Ro-Pax sailings)



Option SU5: Introduce a part-year second Ro-Pax to run alongside MV *Loch Seaforth*

• Vessel & Harbour Implications

- A new Ro-Pax vessel of circa 90m-100m would need to be built, purchased, cascaded or chartered
- Vessel would provide relief cover around the network in winter and additional resilience across the network

Operational Feasibility

- There would be a relatively long lead time for this option given the need to develop the business case for a new ferry, secure funding and then procure and build a new vessel
- 2+ additional crews would need to be recruited and trained in the operation of the new vessel.
- A decision would need to be taken as to the feasibility and practicality of:
 - berthing the vessel overnight in Stornoway, which could require repositioning movements to / from the layby berth at the start and end of the day (assuming such a berth is available); or
 - berthing the vessel overnight in Ullapool, which could require the vessel to move off of the berth during the night to allow the overnight freight service in

Timetable

- The provision of a second Ro-Pax vessel would permit:
 - A minimum of four return Ro-Pax crossings per day, providing an early evening return sailing from Stornoway and a dedicated overnight freight sailing. This would allow a meaningful day return trip to be made to Lewis seven days per week
 - A maximum of six return sailings per day (where demand merited it, peak summer for example)
 - Capacity analysis suggests service could be scaled back to MV Loch Seaforth only in winter with second vessel providing relief around the network
- Capacity
 - Substantial uplift in seasonal capacity, although actual level of uplift depends on second vessel deployed



Appraisal of Options against TPOs

Option	TPO1 - Capacity		TPO2 – Connectivity		TPO3 - Reliability		TPO 4- Resilience	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
SU1: Operate a Saturday evening return sailing from Stornoway to Ullapool	✓	ο	✓	ο	×	ο	×	ο
SU2: Run the overnight freight sailing in standard Ro-Pax mode	✓	0	✓	0	0	0	0	0
SU4: Introduce a part-year or year-round freight vessel to run alongside MV <i>Loch Seaforth</i>	$\checkmark\checkmark$	✓	~ ~	\checkmark	×	××	✓	~
SU5: Introduce a part-year second Ro-Pax vessel to run alongside MV <i>Loch Seaforth</i>	~ ~ ~	ο	~~~~~	ο	ο	ο	~~~~	$\checkmark\checkmark\checkmark$

- There would be marginal capacity gains with Option SU1 & SU2 associated with adding extra sailings on the busiest days of the week. Significant capacity benefits can only be obtained by adding another vessel (Options SU4 & SU5)
- The operation of the overnight service by a freighter may worsen reliability, as the two previous freight vessels on the route have proven to be much less reliable than MV *Loch Seaforth*
- A two Ro-Pax solution (**Option SU5**) provides significant capacity, reliability & resilience benefits.

Assessment Scale

- $\checkmark \checkmark \checkmark$ major positive
- moderate positive
- minor positive
- O Neutral
- × minor negative
- **xx** moderate negative
- **xxx** major negative



Appraisal of Options against STAG Criteria

Option	Environment	Safety	Economy	Integration	Accessibility & Social Inclusion	Cost to Gov.
SU1: Operate a Saturday evening return sailing from Stornoway to Ullapool	×	ο	√	Ο	✓	Low
SU2: Run the overnight freight sailing in standard Ro-Pax mode	ο	×	×	Ο	\checkmark	Low
SU4: Introduce a part-year or year- round freight vessel to run alongside MV <i>Loch Seaforth</i>	××	ο	$\checkmark\checkmark$	✓	$\checkmark\checkmark$	High
SU5: Introduce a part-year second Ro-Pax vessel to run alongside MV <i>Loch Seaforth</i>	××	ο	$\checkmark\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark\checkmark$	Very High

- In the context of the STAG criteria, **Option SU5** provides the most significant benefit in terms of economy and accessibility, but it is at the same time the most expensive
- The benefits of Options SU1 & SU2 are more limited, but they can be delivered more quickly, for a low cost and would target capacity on the days & periods which most need it



Options Shortlisted for 'Network Plan'

Option	Description	Rationale for Selection / Rejection
SU1	Operate a Saturday evening return sailing from Stornoway to Ullapool	 ✓ - This option is progressed to the Network Plan as a potential short-term measure for relieving summer capacity issues on the Stornoway – Ullapool route. It could be introduced independently or combined with Option SU2.
SU2	Run the overnight freight sailing in standard Ro-Pax mode	 ✓ - This option is retained for further consideration as a potential short-term measure for relieving summer capacity issues on the Stornoway – Ullapool route. It could be introduced independently or combined with Option SU1.
SU4	Introduce a part-year or year-round freight vessel to run alongside MV Loch Seaforth	 This option is retained for consideration in the Network Plan.
SU5	Introduce a part-year second Ro-Pax vessel to run alongside MV Loch Seaforth	\checkmark - This option is retained for consideration in the Network Plan.





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)	 This option is rejected from further consideration for the following reasons: There would be significant public acceptability issues, particularly in Barra Journey times would be extended for residents of Lewis, Harris, South Uist, Eriskay and Barra. 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 There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.
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)	 This option is rejected from further consideration for the following reasons: There would be significant public acceptability issues, particularly in Barra, where a ferry crossing would be required to connect with any mainland ferry service. Journey times would be extended for residents of Harris, South Uist, Eriskay and Barra. There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.
ОНЗ	Rationalise the service to one route by routeing all island – mainland services via Stornoway–Ullapool	 This option is rejected from further consideration for the following reasons: 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. There would be significant costs of upgrading Stornoway Harbour, the Spinal Route and potentially a fixed link across the Sound of Harris. 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. Journey times would be extended for residents of Harris, Uist and Barra. There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.
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	 This option is rejected from further consideration for the following reasons: The costs of building the new harbours and enhanced road infrastructure would be significant and up-front. 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 There are likely to be planning and environmental impediments to developing new harbours in Uist where two already exist, as well as in Skye. There would be negative socio-economic impacts on all communities from which the ferry service is withdrawn.



	Description	Rationale for Selection / Rejection
OH5	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.
OH6	Rationalise the service to two (or zero) routes by constructing a fixed link between North Uist and north-west Skye	 × - This option is rejected from further consideration in this study for the following reasons: A fixed link of this distance (around 25km) plus connecting infrastructure would be hugely expensive, with the cost also up-front. The notion of a fixed link is entirely conceptual at this stage, in terms of the form it would take and the likely alignment. 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. There would be major planning and environmental issues. There would likely be split opinions within the community on whether a fixed link is desirable. 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
OH7a	Develop a new freight route serving Stornoway and Lochmaddy	 Uist and Skye in their Islands Deal submission. x - 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.
OH7b	Develop a new Ro-Pax route serving Stornoway and Lochmaddy	imes - This option is rejected from further consideration on the same basis as Option OH7a.
OH8	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

