

## Outer Hebrides STAG Appraisal

Harris Public Exhibition 21<sup>st</sup> May 2019, 16:00-19:30 Tarbert Community Centre – Tarbert

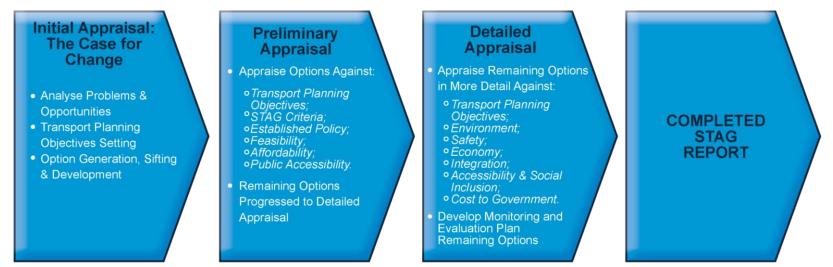
## What is the study about?

- 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 (Uig Tarbert / Lochmaddy), the following boards set out:
  - the transport problems & opportunities on the Uig Tarbert / Lochmaddy route
  - the study 'Transport Planning Objectives' against which options are assessed
  - the options developed and appraised for the Uig Tarbert / Lochmaddy route
  - how these options feed into a 'Draft Network Plan' for the Outer Hebrides as a whole
- Please note:
  - Where appropriate information is presented for the **Tarbert Uig** leg only
  - 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





# Tarbert – Uig: 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 Tarbert – Uig 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: 72 household respondents had used the Tarbert

     Uig route in the previous 12-months
  - Onboard survey: responses received from 224 passengers on the Tarbert – Uig 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 five return journeys in the last year on this route
- Almost 2/3 (63%) of households stated that these trips were fairly evenly spaced across the year
  - 27% all or mostly in summer
- Visiting Friends & Relatives (44%), travel to / from work (19%) and holidays (28%) are the main travel purposes
- Glasgow & West Central Scotland, Inverness, Rest of Highlands and Edinburgh & Lothians are the most popular destinations
- Bookings are mostly made
  - Winter: '2-4 weeks ahead' (33%) followed by '1-3 months ahead' (22%)
  - Peak Summer: '1-3 months ahead' (41%) followed by 'more than 3 months ahead' (24%)
- 53% of households state frequent or occasional difficulties in booking a vehicle onto the ferry
  - 21% report no problems in this respect
- These instances are focussed on:
  - May to July (May 43%; June 41%; and July 52%)
  - Fridays (23%), Saturdays (34%) & Sundays (25%)
- When bookings are thwarted, trips are:
  - Made on a different day (45%)
  - Made on a different sailing on the same day (30%)
  - Made via stand by on the original sailing (25%)
  - Some 12% of responses included 'not made at all'
- 56% 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 (37%) or did not travel (23%)



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

- People expressed dissatisfaction with these aspects of the service:
  - Quality of onboard wi-fi
  - Ability to make a day trip to the mainland
  - Disruption during scheduled refit
  - Summer service frequency
  - Provision of electric vehicle charging points
  - · Level of reliability provided by service
- 47% stated that the current service prevents more frequent travel to the mainland
  - Mainly affecting seeing friends & family less often (65%), and fewer holidays / short breaks (56%)
  - Also reported is constraints on accessing business opportunities on the mainland (19%)
- On average, households suggest an additional 4 return journeys would be made per annum if their concerns with the route was addressed
- Only 14% felt the *main* ferry's onboard facilities did not fully meet their needs
- But 48% felt 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 5% had not booked
  - 78% had secured a place on their preferred route & sailing
  - 10% had booked onto their preferred route but not preferred sailing
- Overall 69% stated that the current timetable met their travel requirements, residents more so than visitors
- 38% of visitors had or were planning to use another ferry route on this trip 15% 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 6% had considered flying
- 83% 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
- 18% stated that improved public transport would or may have made them consider not bringing a car on board.





## Tarbert - Uig, Problems & Opportunities

## Tarbert - Uig: 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

#### Tarbert – Uig: – Assessment of Transport Problems

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



## Tarbert - Uig: Problems & Opportunities (2)

#### Timetable

- Irregular timetable, with the vessel overnighting in alternate ports each evening the consequences of this arrangement are that it:
  - limits overall daily capacity (effectively providing the Tarbert–Uig route with only 0.5 of a vessel);
  - impacts on operational flexibility;
  - prevents a day return between Skye and Harris; and
  - is complicated / confusing for those not familiar with it, an important issue on this route given the high proportion of tourists.

#### Capacity

- Seasonal variation on this route is particularly significant with a pronounced summer peak with much lighter carryings in the winter months
- Significant summer capacity pressures, particularly on Saturdays where there is very little vehicle deck availability

#### Punctuality & Reliability

 26% of all sailings in 2017 were delayed (compared to 8% in 2007), with the vast majority of delays being caused by 'volume of traffic' and 'knock-on delays from previous sailings'. This is a product of the summer vehicle deck capacity issues leading to extended turnaround times



## Tarbert - Uig: Problems & Opportunities (3)

#### Public Transport Integration

- In the summer timetable period:
  - There are no long-distance / inter-urban bus services connecting with the **first departure** from Uig to Tarbert on a Monday, Tuesday, Thursday or Saturday which do not involve an overnight stay in Skye.
  - There are no connecting onward long-distance bus services with the last arrival at Uig from Tarbert on Monday, Wednesday, Friday, Saturday or Sunday
- In the winter timetable period, there are no long-distance bus services connecting with the first departure from Uig to Tarbert on a Tuesday and Thursday

#### Opportunities

 The introduction of FMEL 802 to the Tarbert–Uig route in 2020 will offer a vehicle deck capacity increase of around 25% (carrying 116 cars compared to 90 on the MV *Hebrides*), alleviating capacity issues to some degree



## **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





Uig – Tarbert / Lochmaddy: 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
UTL1	Operate the peak summer timetable on a year-round basis	✓ - This option is retained for further consideration, as it would address the identified connectivity shortfalls in winter. However, it does have to be acknowledged that sailings would likely operate with a very low vehicle deck utilisation, particularly on Tarbert – Uig.
UTL2	Re-orientate the winter timetable to favour North Uist over Harris	<ul> <li>This option is retained for further consideration.</li> </ul>
UTL3	Provide a dedicated part- year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single core crew	<ul> <li>This option is retained for further consideration. The service would revert to a single vessel operation in winter.</li> </ul>
UTL4	Provide a dedicated part- year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single crew with additional complement	<ul> <li>✓ - This option is retained for further consideration. The service would revert to a single vessel, single core crew operation in winter.</li> <li>This would be a long-term option that would only be progressed if it could be evidenced that UTL3 does not meet the needs of the route.</li> </ul>





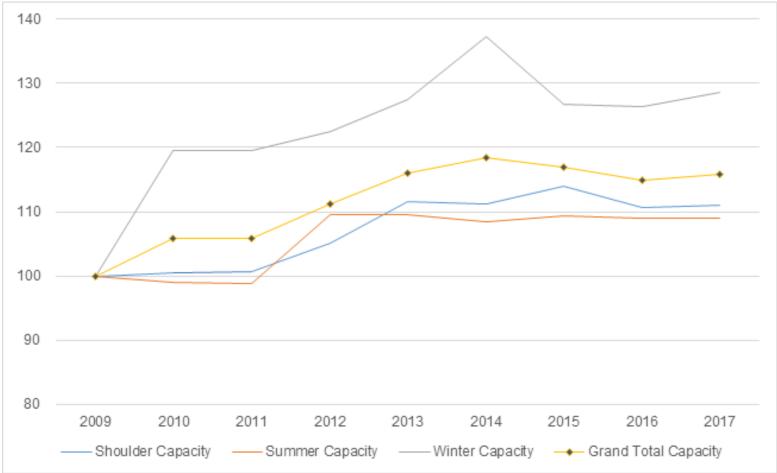
## Uig – Tarbert / Lochmaddy: Detailed Appraisal

## **Options Considered in Detailed Appraisal**

- Four options were shortlisted for consideration in the Detailed Appraisal:
  - Option UTL1: Operate the peak summer timetable on a year-round basis
  - Option UTL2: Re-orientate the winter timetable to favour North Uist over Harris
  - **Option UTL3:** Provide a dedicated part-year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single core crew
  - Option UTL4: Provide a dedicated part-year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single crew with additional complement
- The following boards:
  - provide some context in terms of current and forecast capacity utilisation on the Uig – Tarbert leg of the 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



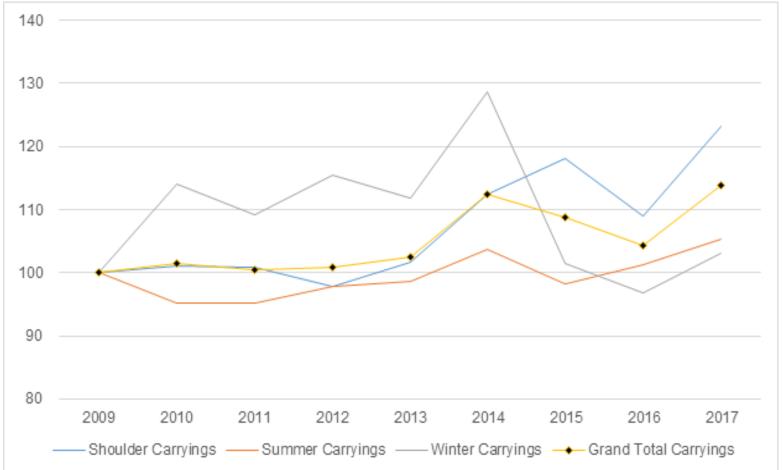
## Change in Route Capacity Over Time



- Chart shows total annual ferry vehicle capacity indexed to 2009 (2009=100) Tarbert-Uig only
- No radical supply side changes but the balance between Uig-Tarbert and Uig-Lochmaddy has changed slightly over the years with Uig-Tarbert seeing more growth in capacity
- In both cases, Summer has grown around 10%
- The biggest increase has been in Winter capacity



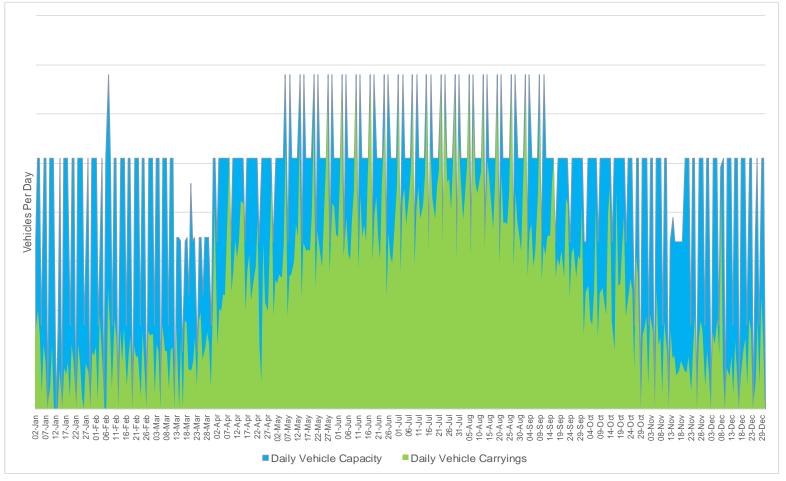
## Change in Route Carryings Over Time



- Chart shows total annual ferry vehicle carryings indexed to 2009 (2009=100) Tarbert-Uig only
- Tarbert Uig witnessed significant growth in the shoulder period with growth overall of around 15% since 2009.
- Growth in summer carryings very low which may indicate a capacity constraint.



## When is capacity a problem?



- Chart shows comparison of daily vehicle carryings (green) versus daily capacity (blue) Tarbert-Uig only
- The capacity here reflects the irregular nature of the timetable across the week
- Very large difference between the Summer and the Winter periods on this route, with a pronounced increase in carryings between the Easter period and October.



Capacity Utilisation – Daily Available Vehicle Space, Tarbert - Uig

- Calendar shows total daily remaining (i.e. available) vehicle space between Tarbert – Uig in 2017
  - e.g. on Monday 2<sup>nd</sup> January 2017, 47% 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 winter Sunday sailings are via Lochmaddy and are shown in red hashing here
- Fridays and Saturdays are peak days throughout the summer timetable period, with many having less than 10% vehicle space remaining across the day
- Whilst available space on other summer days is limited, there is generally still availability

	Su M Tu W Th F Sa	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 2 3 4 5 6 7		47%	21%	74%		69%	73%
Jan	8 9 10 11 12 13 14	0%	90%	70%	0%	0%	0%	77%
	15 16 17 18 19 20 21	0%	86%	79%	81%		76%	76%
	22 23 24 25 26 27 28	0%	76%	80%	87%		77%	77%
	29 30 31 1 2 3 4	0%	85%	72%	77%		75%	78%
Feb	5 6 7 8 9 10 11	0%	0%	63%	62%		64%	78%
	12 13 14 15 16 17 18	0%	82%	79%	75%		79%	67%
	19 20 21 22 23 24 25	0%	83%	79%	83%		69%	77%
	26 27 28 1 2 3 4	0%	83%	56%	72%		77%	73%
Mar	5 6 7 8 9 10 11		80%	78%	77%		78%	73%
	12 13 14 15 16 17 18	0%	56%	0%	66%		61%	31%
	19 20 21 22 23 24 25	61%	81%	71%	64%		51%	18%
	26 27 28 29 30 31 1	44%	78%	54%	63%		62%	41%
Apr	2 3 4 5 6 7 8	78%	81%	76%	69%	48%	49%	
	9 10 11 12 13 14 15	47%	66%	21%	54%	10%	25%	7%
	16 17 18 19 20 21 22	33%	57%	16%	63%	22%	42%	9%
	23 24 25 26 27 28 29	66%	70%	19%	64%	50%	42%	4%
	30 1 2 3 4 5 6	57%	68%	59%	67%	41%	43%	38%
Мау	7 8 9 10 11 12 13	55%	73%	50%	61%	11%	40%	36%
	14 15 16 17 18 19 20	46%	57%	47%	51%	16%	29%	30%
	21 22 23 24 25 26 27	40%	57%	37%	54%	13%	9%	24%
	28 29 30 31 1 2 3	32%	49%	23%	43%	10%	14%	10%
Jun	4 5 6 7 8 9 10	16%	52%	44%	55%	14%	20%	11%
	11 12 13 14 15 16 17	28%	49%	38%	40%	17%	11%	11%
	18 19 20 21 22 23 24	17%	49%	12%	48%	16%	18%	28%
	25 26 27 28 29 30 1	45%	54%	30%	54%	13%	19%	16%
Jul	2 3 4 5 6 7 8	37%	56%	19%	40%	12%	10%	20%
	9 10 11 12 13 14 15	19%	57%	14%	33%	12%	16%	16%
	16 17 18 19 20 21 22	12%	40%	30%	40%	20%	13%	12%
	23 24 25 26 27 28 29	4%	10%	17%	15%	12%	9%	16%
	30 31 1 2 3 4 5	14%	30%	24%	36%	10%	10%	13%
Aug	6 7 8 9 10 11 12	17%	18%	17%	20%	13%	12%	13%
	13 14 15 16 17 18 19	5%	27%	11%	29%	6%	15%	18%
	20 21 22 23 24 25 26	18%	33%	14%	39%	13%	22%	12%
-	27 28 29 30 31 1 2	17%	47%	19%	36%	19%	15%	18%
Sep	3 4 5 6 7 8 9	23%	58%	34%	50%	15%	16%	22%
	10 11 12 13 14 15 16	32%	66%	23%	43%	10%	21%	9%
	17 18 19 20 21 22 23	24%	58%	30%	45%	19%	23%	4%
	24 25 26 27 28 29 30	35%	58%	23%	58%	10%	38%	0%
Oct	1 2 3 4 5 6 7 8 9 10 11 12 13 14	59%	28%	50%	70%	54%	55%	4%
Oct		70%	68%	52%	61%	46%	14%	6%
	15 16 17 18 19 20 21	58%	34%	34%	61%	38%	34%	7%
	22 23 24 25 26 27 28 29 30 31 1 2 3 4	52%	79%	76%	68%		39%	1%
Nov	5 6 7 8 9 10 11	0%	78%	71%	75%	0%	59%	61%
NOV	12 13 14 15 16 17 18	0%	71%	86%	77%		66%	73%
	12 13 14 15 16 17 18	779/	67%	81%	74%	87%	71%	73%
	26 27 28 29 30 1 2	77%	90%	86% 60%	82% 69%	-	72%	61% 78%
Dec	3 4 5 6 7 8 9		750/				81%	
Dec	10 11 12 13 14 15 16		75% 90%	61% 83%	63% 81%		15% 73%	72% 87%
	17 18 19 20 21 22 23			72%			73%	87% 81%
	24 25 26 27 28 29 30		91%		72% 76%		65%	81% 77%
	31 1 2 3 4 5 6		0000	87% 46%	76%		69%	73%
	0.120700			40%	7470		0970	1370



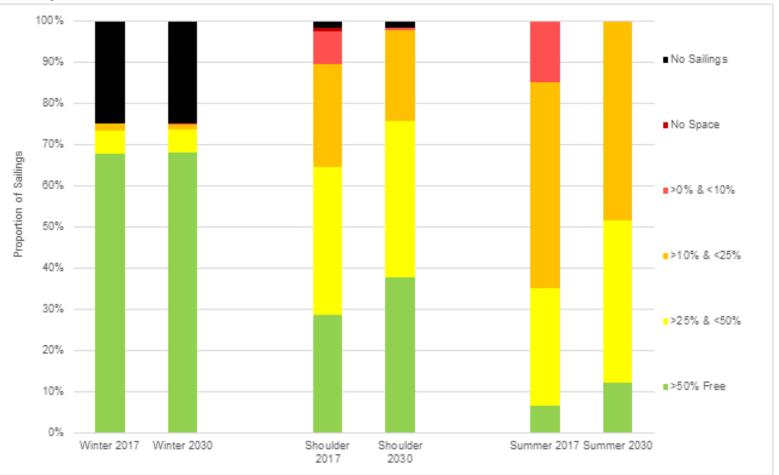
Capacity Utilisation – Daily Available Vehicle Space, Uig - Tarbert

- Calendar shows total daily remaining (i.e. available) vehicle space between Uig – Tarbert in 2017
  - e.g. on Monday 2<sup>nd</sup> January 2017, 69% 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 winter Sunday sailings are via Lochmaddy and are shown in red hashing here
- There is little to no availability on Saturdays between May and September
- Whilst available space on other summer days is limited, there is generally still availability

	Su M Tu W Th F Sa	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 2 3 4 5 6 7		69%	84%	71%	82%	88%	87%
Jan	8 9 10 11 12 13 14	0%	86%	79%				89%
	15 16 17 18 19 20 21	0%	80%	91%	86%	87%	79%	86%
	22 23 24 25 26 27 28	0%	79%	85%			72%	91%
	29 30 31 1 2 3 4	0%	67%	85%	78%	91%	12%	86%
Feb	5 6 7 8 9 10 11	098		55%	87%	78%	76%	72%
	12 13 14 15 16 17 18	0%	49%	84%	63%	74%	83%	76%
	19 20 21 22 23 24 25	0%	66%	82%	76%	86%	78%	89%
	26 27 28 1 2 3 4	0%	53%	83%	76%	82%	75%	81%
Mar	5 6 7 8 9 10 11	098	50%	79%	83%	77%	78%	78%
	12 13 14 15 16 17 18	0%	40%	0%	60%		45%	59%
	19 20 21 22 23 24 25	70%	70%	64%	44%	62%	46%	56%
	26 27 28 29 30 31 1	71%	36%	56%	60%	76%	64%	14%
Apr	2 3 4 5 6 7 8	51%	27%	57%	34%	62%	11%	6%
•	9 10 11 12 13 14 15	22%	14%	46%	26%	52%	16%	31%
	16 17 18 19 20 21 22	58%	31%	57%	55%	71%	58%	39%
	23 24 25 26 27 28 29	64%		48%	58%	71%	32%	20%
	30 1 2 3 4 5 6	39%	18%	49%	17%	56%	30%	13%
May	7 8 9 10 11 12 13	41%	52%	50%	17%	43%	29%	9%
-	14 15 16 17 18 19 20	29%	49%	39%	22%	54%	22%	7%
	21 22 23 24 25 26 27	23%	44%	45%	34%	35%	9%	5%
	28 29 30 31 1 2 3	14%	35%	25%	19%	49%	16%	7%
Jun	4 5 6 7 8 9 10	13%	42%	41%	21%	36%	18%	8%
	11 12 13 14 15 16 17	16%	31%	35%	16%	48%	14%	8%
	18 19 20 21 22 23 24	20%	42%	26%	13%	58%	12%	11%
	25 26 27 28 29 30 1	31%	46%	50%	31%	47%	12%	8%
Jul	2 3 4 5 6 7 8	12%	27%	18%	16%	25%	14%	6%
	9 10 11 12 13 14 15	18%	29%	18%	20%	30%	8%	9%
	16 17 18 19 20 21 22	9%	14%	16%	8%	14%	7%	4%
	23 24 25 26 27 28 29	14%	20%	15%	14%	33%	6%	4%
	30 31 1 2 3 4 5	17%	16%	15%	15%	23%	10%	6%
Aug	6 7 8 9 10 11 12	11%	17%	15%	20%	17%	10%	10%
	13 14 15 16 17 18 19	14%	33%	17%	13%	47%	18%	7%
	20 21 22 23 24 25 26	19%	36%	38%	12%	41%	17%	8%
	27 28 29 30 31 1 2	24%	32%	36%	33%	53%	21%	4%
Sep	3 4 5 6 7 8 9	28%	43%	29%	39%	54%	26%	10%
	10 11 12 13 14 15 16	23%	42%	52%	23%	48%	6%	6%
	17 18 19 20 21 22 23	28%	15%	55%	34%	67%	19%	32%
	24 25 26 27 28 29 30	42%	10%	49%	37%	58%	56%	36%
	1 2 3 4 5 6 7	58%	42%	58%	59%	76%	57%	31%
Oct	8 9 10 11 12 13 14	50%	33%	57%	60%	74%	50%	22%
	15 16 17 18 19 20 21	44%		12%	40%	61%	52%	37%
	22 23 24 25 26 27 28	44%	13%	40%	35%	57%	53%	74%
	29 30 31 1 2 3 4	0%	61%	70%	49%	74%	80%	76%
Nov	5 6 7 8 9 10 11	0%	26%	73%	71%	82%	72%	80%
	12 13 14 15 16 17 18		46%	60%	66%	76%	86%	74%
	19 20 21 22 23 24 25	77%	78%	87%	80%	80%	88%	66%
_	26 27 28 29 30 1 2	0%		72%	76%	74%	72%	91%
Dec	3 4 5 6 7 8 9		68%	84%	77%	34%	16%	91%
	10 11 12 13 14 15 16		73%	90%	80%	83%	80%	87%
	17 18 19 20 21 22 23		82%	82%	79%	74%	45%	65%
	24 25 26 27 28 29 30	0%	0%	81%	47%	72%	43%	72%
	31 1 2 3 4 5 6			69%	70%	82%	88%	87%



### **Capacity Utilisation – Forecasts**



- Chart compares 2017 and illustrative forecasts 2030 vehicle deck space / availability by season
- Based on the forecasts developed, the current shoulder and summer period problems should be largely resolved with the introduction of FMEL 802 (although this will have to be monitored to assess the extent to which latent & induced demand are released)
- However, the evidence from elsewhere would suggest that 'peak of the peak' problems may remain (i.e. summer Saturdays)

now part of **Stantec** 

## Option UTL1: Operate the peak summer timetable on a year-round basis

- Vessel & Harbour Implications
  - None

#### Operational Feasibility

- The delivery of the peak summer timetable on a year-round basis would require the vessel to operate with its summer crew of 37 rather than its core crew of 31. Recruitment would be required to provide the additional crew
- At present, the winter manning level of MV *Hebrides* gives rise to a handful of vacant crew cabins. These are used to support crew inductions and training. The flexibility to do this when operating summer manning levels year-round would therefore be reduced.
- Timetable
  - The year round timetable would be as per the current peak summer timetable
- Capacity
  - The adoption of the current summer timetable year-round would provide for an additional two sailings per week on each leg of the Uig Tarbert / Lochmaddy route. This would equate to a total of 420 additional lane metres per leg per week.



## Option UTL2: Reorientate the winter timetable to favour North Uist over Harris

- Vessel & Harbour Implications
  - None
- Operational Feasibility
  - It is possible and indeed likely that this option could not be delivered within a single crew operating day
- Timetable (example)
  - Depart Lochmaddy 07:00 / Arrive Uig 08:45 / Depart Uig 9:15 / Arrive Tarbert 11:00
  - Depart Tarbert 11:30 / Arrive Uig 13:15 / Depart Uig 13:45 / Arrive Lochmaddy 15:30
  - Depart Lochmaddy 16:00 / Arrive Uig 17:45 / Depart Uig 18:15 / Arrive Lochmaddy 20:00
- Capacity
  - This option would provide 420 additional lane metres per week by direction on the Lochmaddy – Uig route, but there would be a corresponding 630 LM weekly reduction in each direction on the Tarbert – Uig route.



## Option UTL3: Provide a dedicated part-year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single core crew

#### 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

#### 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
- Two additional crews would need to be recruited and trained in the operation of the new vessel
- One vessel would lie overnight at Tarbert and the other at Lochmaddy. The timetables would need to be developed to avoid any linkspan conflicts at Uig
- The marshalling area at Uig would need to be configured to accept traffic for each route, accommodating delayed sailings and passengers arriving early for a sailing

#### Timetable

 Given crewing hours legislation, it is likely that this option would provide alternate days of three return sailings & two return sailings (i.e. 3 \* return sailings Monday, 2 \* return sailings Tuesday, 3 \* return sailings Wednesday etc)

#### Capacity

• This option would roughly double the summer capacity on the Tarbert – Uig route



## **Appraisal of Options against TPOs**

Option	TPO1 - Capacity		TPO2 – Connectivity		TPO3 - Reliability		TPO 4- Resilience	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
<b>Option UTL1: O</b> perate the peak summer timetable on a year-round basis	Ο	$\checkmark$	Ο	$\checkmark$	0	ο	ο	0
<b>Option UTL2:</b> Reorientate the winter timetable to favour North Uist over Harris	Ο	√ / ×	ο	√ / ×	0	ο	0	0
<b>Option UTL3:</b> Provide a dedicated part-year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single core crew	$\checkmark \checkmark \checkmark$	0	$\checkmark \checkmark \checkmark$	0	$\checkmark\checkmark$	ο	√ √	$\checkmark\checkmark\checkmark$

- The impacts of Options UTL1 & UTL2 in terms of the TPOs are limited.
  - **Option UTL1** marginally increases capacity & improves connectivity in the winter, but these issues have not been identified as problems
  - Option UTL2 would be beneficial for Uist & disadvantageous for Harris
- The provision of a second part-year Ro-Pax (Option UTL3) would offer transformative capacity & connectivity benefits in the summer months, whilst improving the resilience of the network as a whole

#### **Assessment Scale**

- moderate positive
- minor positive
- O Neutral
- × minor negative
- ×× moderate negative
- **xxx** major negative



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

Option	Environment	Safety	Economy	Integration	Accessibility & Social Inclusion	Cost to Gov.
<b>Option UTL1: O</b> perate the peak summer timetable on a year-round basis	×	ο	✓	ο	$\checkmark\checkmark$	Low
<b>Option UTL2:</b> Reorientate the winter timetable to favour North Uist over Harris	ο	ο	$\checkmark$	ο	✓	Low
<b>Option UTL3:</b> Provide a dedicated part-year Ro-Pax for each of Tarbert– Uig and Lochmaddy–Uig, single core crew	××	ο	$\checkmark\checkmark$	✓	$\checkmark\checkmark$	Very High

- In the context of the STAG criteria, Option UTL3 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 UTL1 & UTL2 are more limited, but they can be delivered more quickly and for a low cost. The benefits realised by these options would however be marginal at best



## Options Shortlisted for 'Network Plan'

Option	Description	Rationale for Selection / Rejection			
UTL1	Operate the peak summer timetable on a year-round basis	<ul> <li>This option is rejected from further consideration. Whilst it would improve the connectivity of both the Harris and Uist communities, loadings on the Tarbert – Uig route are very low in winter and this would therefore represent a poor value for money option.</li> </ul>			
UTL2	Re-orientate the winter timetable to favour North Uist over Harris	➤ - This option is rejected from further consideration. The deliverability of this option with a single crew is questionable and migrating to a peak summer crewing arrangement may be required, which is considered to be disproportionate.			
UTL3	Provide a dedicated part- year Ro-Pax for each of Tarbert–Uig and Lochmaddy–Uig, single core crew	<ul> <li>✓ - This option is retained for consideration in the Network Plan.</li> </ul>			





## 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
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	<ul> <li>× - This option is rejected from further consideration in this study for the following reasons:</li> <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
OH7a	Develop a new freight route serving Stornoway and Lochmaddy	<ul> <li>Uist and Skye in their Islands Deal submission.</li> <li><b>x</b> - 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 &amp; 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.</li> </ul>
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

