Agenda Item	13
Report No	ECI/34/20

HIGHLAND COUNCIL

Committee: Economy and Infrastructure

Date: 4 Nov 2020

Report Title: Corran Ferry Project (Outline Business Case) update

Report By: Executive Chief Officer Infrastructure and Environment

1. Purpose/Executive Summary

1.1 This report provides Members with an update on the progress of the Corran Ferry Project (Outline Business Case). The project has been established to review the options for securing replacement ferry vessels and for considering the preferred way forward for the future operation and management of the Corran Service.

2. Recommendations

2.1 Members are invited to:

- note that a letter was sent to the Cabinet Minister seeking approval to form a
 working group with officers from Transport Scotland, regarding the possibility of
 transferring over responsibility for the Corran ferry service in accordance with the
 principles set out in the <u>Scottish Ferries Plan</u>. The letter can be found in <u>Appendix</u>
 1;
- ii. **note** that the Scottish government have advised that they will require confirmation regarding the Council's plans to fund the capital replacement of the vessels and slipways prior to the setting up of a formal working group to discuss any potential future transfer of responsibility. The responding letter from the Cabinet Minister can be found in **Appendix 2**;
- iii. **note** that the Corran Ferry Project will be included as part of the Council's Capital Programme Review;
- iv. agree to support the proposal for the new preferred Vessel and Infrastructure option
 2 x 25 car smaller hybrid vessels straight through (Ro-Ro) operation as detailed in Appendix 3;
- v. **note** the Vessel and Infrastructure general arrangements and analysis (including high-level capital costs) **Option A / Option B** as detailed in **Appendix 4**;
- vi. **note** the requirement for the project managers secondment to be extended by 2 years (up to May 2023) to facilitate the ongoing discussions / negotiations with Transport Scotland / CMAL and other key stakeholders, and to ensure that links between the Local Community and Officers are maintained. Methods of delivery will

be established, the necessary investment in the ferry service will be planned and a start date determined. The secondment will continue to be funded through the Corran Ferry trading account;

- vii. **note** that the project will be seeking funding to procure an external source to undertake a detailed report on the critical importance of the ferry to meeting the varied socio-economic needs of the fragile communities served by the Corran Ferry;
- viii. **note** A draft terms of reference for the Corran narrows fixed link working group are with relevant ward members for their consideration; and
- ix. note the information in previous reports -
 - Corran Narrows Update (<u>Item 7</u> in background papers); and
 - Corran Ferry Options Appraisal (<u>Item 20</u> in background papers).

3. Implications

- 3.1 Resource There are potential significant resource implications for the Council depending on the final preferred option, however these will form part of future reports for presentation to the appropriate Council Committee.
- **3.2** Legal Relevant legal aspects will be explored appropriately.
- **3.3** Community (Equality, Poverty and Rural) The Corran Ferry is a lifeline service with the associated socio-economic implications for the local Community.
- **3.4 Climate Change / Carbon Clever -** Clean energy options will be considered in examining future operations.
- **3.5 Risk** Increased service sustainability and resilience will reduce the risk to future service provision.
- 3.6 Gaelic No implications.

4. The Requirement for 2 smaller vessels

- 4.1 As part of the ongoing outline business case, the project has reviewed again the Vessel / Infrastructure options (as below) to fully understand what will generate the largest benefits whilst considering each of the options in terms of their affordability.
- 5. Vessel and Infrastructure Options A / B

5.1 Option A: (Ref 2d - Final STAG Report) Previous Preferred Option

- 1 new larger (50 car) hybrid vessel straight through (Ro-Ro)
- 1 overnight berthing structure (for one vessel)
- 2 new aligning structures / slipways
- Refit / relief / second vessel secured from elsewhere. (CMAL fleet)

Option B: (Ref 2f - Final STAG Report) New Preferred Option

- 2 new smaller (25 car) hybrid vessels straight through (Ro-Ro)
- 1 overnight berthing structure (for two vessels)
- 2 aligning structures / slipways

5.2 This option would introduce a new constraint on the route as there would be no "immediate" back up vessel resulting in ongoing short-term service outages (No Service) at the Narrows over a 30-year period. (it is highly unlikely that a backup vessel would be fully operational at the Narrows within 3 days)

From a political, economic, social and a service requirement point of view, periods of service outage over a 30-year period would be unacceptable and should therefore no longer be in scope for further consideration.

With guaranteed vessel availability all year round this option will provide the required reliability, resilience and sustainability for a lifeline socio-economic dependant service over a 30-year period and should therefore be the preferred option.

Two smaller Ro-Ro vessels will enable faster loading and will result in the service running to the published timetable (instead of shuttling).

The efficiency of new vessels (short/medium term), an anticipated increase in revenue due to the larger capacity of the new vessels and increasing passenger numbers along with a new fares structure will help off-set the costs.

- 5.3 As agreed, (E&I 01 July 20) The new hybrid vessels will be considered for their contribution to reduced carbon emissions by the Council's Climate Change Panel.
- 5.4 The next step in the outline business case will be to undertake cost modelling on the operational costs and income opportunities.
- 5.5 Highland Council does not have a committed capital programme for replacement vessels / slipways and will look to explore sources of funding for the required capital spending. (45m)
- 5.6 The findings of the 2-vessel option will be taken back to the Council's Economy and Infrastructure Committee seeking approval early next year.
- 5.7 The Requirement for 2 smaller vessels is detailed in **Appendix 3**

6. Corran Ferry Project - Engagement and Consultation

6.1 Essential consultation is ongoing with Council Members and Community Groups. Key contacts have been established and several discussions have taken place over the past 2 years between Highland Council and Transport Scotland along with Caledonian Maritime Assets Limited (CMAL) and are set to continue. The Project Manager and Roads Operations Manager have also attended several Argyll, Lochaber, Skye and Small Isles Ferry Stakeholder Group meetings. Internal Stakeholder engagement with the Councils Finance, Legal, Procurement and Corporate Communications teams is also ongoing.

7. Corran Ferry Project - Governance

- 7.1 A steering group has been established in Fort William to ensure links between the Local Community and Officers are maintained. Everyone has been given the opportunity to engage in the project. Members act as a sounding board and provide support and guidance to the Project Team on any issues critical to project success and the development of the Outline Business Case (OBC).
- 7.2 Representatives from the following Community Councils Acharacle, Ardgour, Nether Lochaber, Sunart, West Ardnamurchan and Morvern are invited to attend all Project Steering Group meetings.

7.3 The Head of Roads and Transport Services is Project sponsor and the Project Manager is working closely with the area Roads Operations Manager and the two Ferry Foreman. The Steering Group is part of a larger project governance structure. The Project Manager has reported to Lochaber Committee and Harbours Management Board. The decision-making powers are deferred to the Environment, and Infrastructure Committee.

Designation: Executive Chief Officer Infrastructure and Environment (Community

Services)

Date: 4 Nov 2020

Author: Tracy Urry, Head of Roads and Transport

Background papers:

Report	Item 7 - ECI/9/20	Corran Narrows Update	2020/07/01
Report	Hitrans Board	Corran Narrows Fixed Link: Outline	2020/04/24
	item 9	Feasibility Study	
Report	Item 10 - LA/6/20	Corran Narrows Options Development	2020/02/19
		Study - Interim Update	
Report	Item 7 - LA/31/19	Corran Ferry Service Update	2019/11/06
Report	Item 7 - LA/17/19	Corran Ferry Service Update	2019/08/29
Report	Item 4 - LA/7/19	Corran Ferry Service Update	2019/04/10
Report	Item 20 - EDI/80/18	Corran Ferry Service Options Appraisal	2018/11/08
Report	Item 11 - LA/19/18	Corran Ferry Service Options Appraisal	2018/08/30
Report	Item 8 - LA/23/17	Corran Ferry Update	2017/10/04
Report	Item 4 - LA/14/17	Corran Ferry Update	2017/08/22
Report	Item 12 - COM/47/16	Corran Ferry Update	2016/11/03
Report	Item 11 - COM/8/16	Corran Ferry Update	2016/02/04
Report	Item 14 - COM/11/15	Corran Ferry Update	2015/02/05
Report	Item 9 - COM/35/14	Corran Ferry - Socio Economic Study	2014/11/06
Report	Item 8 - LA/5/14	Corran Ferry - Socio Economic Study	2014/02/27
Report	Item 12 - TEC/72/13	Corran Ferry - Review of Ferry Fares	2013/09/19

Appendix 1



Michael Matheson
Cabinet Secretary for Transport, Infrastructure and Connectivity
Scottish Government

(sent via email: Michael.Matheson.msp@parliament.scot)

8th September 2020 MD/rm

Dear Michael,

1. Purpose Summary

- 1.1 Highland Council are seeking your approval to form a working group with officers from Transport Scotland regarding the possibility of transferring over responsibility for the Corran ferry service in accordance with the principles set out in the Scottish Ferries Plan.
- 1.2 A critical decision will need to be made as a delay in making a strategic decision to invest and retain the service in house or transfer responsibilities to Transport Scotland could result in Service failure.
- 1.3 A timely response would be appreciated by mid-October, so we can report back to our members at our next decision-making committee that a transfer of responsibilities is a viable option to pursue.
- 1.4 Highland Council are responsible for operating the Corran Ferry lifeline service, which is the busiest single vessel route in Scotland carrying over 250,000 cars each year, delivering over 30,000 sailings, early morning to late at night, 365 days of the year.
- 1.5 The service operates on a broadly break-even basis with running costs of £1.5M.
- 1.6 The ferry vessels are at the end of their life and are in need of replacement. Large capital spending will be required to future proof the sustainability and viability of the service.
- 2. You are invited to **Note** the following paper –
- 2.1 Corran Ferry Transfer of Responsibilities (Appendix 1)

I look forward to hearing from you.

Yours sincerely

Margaret Davidson

Councillor Margaret Davidson

Leader of The Highland Council
c.c.

Kate Forbes MSP

lan Blackford MP

1. Corran Ferry - Transfer of Responsibilities (Appendix 1)

- 1.1 Over the past 5 years Highland Council have held several discussions with Transport Scotland regarding the delivery of the Corran Ferry Service. On 1 July 2020 Highland Council members approved a proposal to 'approach' Transport Scotland regarding a transfer of responsibility based on the principles set out in the Scottish Ferries Plan. Officers have confirmed the Councils position with Officers from Transport Scotland and an initial discussion took place on 25 Aug 2020.
- 1.2 Following on from this discussion Highland Council are seeking your approval to form a working group with officers from Transport Scotland regarding the possibility of transferring over responsibility for the Corran ferry service in accordance with the principles set out in the Scottish Ferries Plan. Highland Council are proposing that a working group would align a plan of work that would fully consider the method of future delivery and the principal issues to be addressed which are set out as follows:
- 1.3 o Capital and Revenue requirements
 - Vessel Design (Fuel Type Green Energy)
 - Vessel(s) provider including relief cover
 - Operating the service (Crewing Model)
 - Aligning Structures and Slipway Design
 - Landside Infrastructure Ownership
 - Fares Structure (RET)
- 1.4 A market testing exercise has eliminated the possibility of a private operator running the service therefore the next step is to undertake a cost modelling exercise on the remaining method of delivery options (as below). This will allow Highland Council to consider what a retention or a transfer of responsibilities model could look like over a 30-year period.
- 1.5 **Option 1:** Costs and responsibilities remain in house with Highland Council (2026 2055)
- 1.6 **Option 2:** Transfer costs and responsibilities to Transport Scotland (2026 2055)
- 1.7 Highland Council are now at a point where a critical decision will need to be made as a delay in making a strategic decision to invest and retain the service in house or transfer responsibilities to Transport Scotland could result in Service failure. A timely decision will be necessary to allow the necessary investment in the ferry service to be planned, and a start date determined, because the timescale for completion of a new vessel and slipways is approximately 5 years away.

2. Background

- 2.1 Highland Council are responsible for operating the Corran Ferry service which is the busiest single vessel route in Scotland carrying over 250,000 cars each year, delivering over 30,000 sailings, early morning to late at night, 365 days of the year.
- 2.2 The ferry is a lifeline socio-economic dependant service of strategic importance linking the fragile communities of Fort William, Ardgour, Sunart, Ardnamurchan, Moidart, Morar, and Morvern. The communities served by the Corran ferry are considered to have a priority need with a dependency in each of the Routes and Services Methodology (RSM) categories as below

2.3	Communities served by the Corran Ferry	Commuting & Business	Personal	Freight	Tourism
		Α	Α	Α	В

2.4 The service is fully aligned to the RSM specification and also connects with the CHFS network via the Lochaline - Fishnish route meeting the island needs on the Isle of Mull. In addition, the Oban – Craignure ferry service is currently operated on a year-round basis by the MV Isle of Mull. She is a closed deck vessel and therefore cannot carry certain categories of dangerous goods, which instead route via the Corran Ferry and Lochaline – Fishnish.

3. Capital / Revenue

- 3.3 The ferry is not a core service and Highland Council does not benefit from the economies of scale that is in line with other Caledonian Maritime Assets Limited (CMAL) Ferries. Operation of the route in isolation means overheads are disproportionately high for one route. The ferry operates on a break-even basis with running costs of £1.5M (This does not factor in management costs or capital reinvestment). The revenue collected by the ferry service is insufficient to ensure its long-term viability without external sources of funding (particularly for capital).
- 3.4 As with any of the options the main challenge is in affording capital expenditure to replace any of the major assets associated with the ferry service. Highland Council does not have a committed capital programme to replace any of the major assets associated with the ferry service (i.e. the vessels or slipway infrastructure Capital cost 40M). The ferry is a socioeconomic dependant lifeline service of national strategic importance. If it costs significantly more to run a safe, reliable and sustainable service then the Council must find a future proof solution and the capital funds from somewhere, rather than try to keep everything within the existing budgeting process or from reserves.

4. Fixed Link Crossing

- 4.1 A Corran Narrows: Fixed Link Outline Feasibility Study has been jointly funded by Highland Council, HITRANS, the regional transport partnership, and Highlands and Islands Enterprise. The report recently concluded that construction of a bridge or tunnel across the Corran Narrows is a viable proposition that deserves more detailed examination.
- 4.2 The Fixed Link Feasibility Study has been submitted to Transport Scotland for consideration within the Strategic Transport Projects Review. It is understood that the review is on hold due to Covid-19 situation.
- 4.3 It is important to stress that this is a separate complimentary piece of work that will have a degree of overlap with the Corran Ferry OBC in ensuring that the respective outcomes are successful. The 2 pieces of work should not be seen to be in competition with each other. It is not a question of choosing between a replacement ferry versus a fixed link; we need a new ferry now, and a fixed link later, whenever that can be built. The timescales are:
- 4.4 We require a new larger replacement ferry in the immediate/short term
 - o Fixed link crossing is a longer-term solution, at earliest medium/long term
- 4.5 The three local partners are planning to undertake further work to understand the business case including an assessment of the wider economic benefits which a fixed link may realise. This will also involve a series of public engagement sessions. Due to the Covid situation no work has started on this activity.

5. The Requirement for a replacement Ferry Vessel

- 5.1 The under capacity of the main Vessel the MV Corran and the Infrastructure design is not built to take the increasing level of demand leading to traffic queuing issues on either side of the Corran Narrows, particularly in high season, which is now approximately 9 months of the year.
- 5.2 The existing ferry vessels are also in need of replacement, due to their age, reliability issues, and associated difficulty in sourcing parts. The vessels are quarter loader which means they are not compatible with other ferry routes and conversely their roll-on/roll-off vessels are not suitable for our slipways which makes it difficult to secure a replacement vessel in the event of breakdown. The recent breakdowns have highlighted the vulnerability of the service, and the possibility of more and longer downtime periods which is at a higher risk than ever before.
- 5.3 For all of the above reasons, the ferry vessels are at the end of their life and are in need of replacement. Large capital spending will be required for a new larger replacement Vessel and the supporting Infrastructure to future proof the sustainability and viability of the service.
- 5.4 Highland Council has therefore for the last 16 months progressed work on developing an Outline Business Case (OBC), to determine future proposals for capital investment in vessels, slipway structures, and service delivery methods. We have taken forward the previous Corran Ferry Services Options (Final STAG Report) appraisal and have shortlisted the service specification options against the TPOs and are looking at the options that will generate the largest benefits whilst considering each of the options in terms of their affordability.
- 5.5 When considering investment for a new vessel, Highland Council will take account of the whole life costs associated with a new vessel operating costs as well as construction costs and disposal costs. Our vision is for the upfront Capital costs of a new vessel to be balanced by savings in operating costs, with improvements in efficiency and fuel consumption that will also contribute to reduced carbon emissions. An anticipated increase in revenue due the larger capacity of the new vessel and increasing passenger numbers will also help off-set the initial cost.

6. Next Steps

- As part of the OBC we need to explore all of the method of delivery options. A working group with officers from Highland Council and Transport Scotland would allow us to explore the option of a transfer of responsibilities (based on the principles set out in the Scottish Ferries Plan) in more detail to understand if this is a viable option and if so what this could look like over a 30-year period.
- 6.2 Highland Council are seeking your approval to form a working group with officers from Transport Scotland regarding the possibility of transferring over responsibility for the Corran ferry service in accordance with the principles set out in the Scottish Ferries Plan.

Appendix 2

Minister for Energy, Connectivity and the Islands Paul Wheelhouse MSP



T: 0300 244 4000 E: scottish.ministers@gov.scot

Councillor Margaret Davidson
Council Leader
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX
By email: margaret.davidson.cllr@highland.gov

Our ref: 2020/0003499 14 October 2020

Dear Cllr Davidson,

Thank you for your letter of 10 September to Michael Matheson MSP, Cabinet Secretary for Transport, Infrastructure and Connectivity, regarding the Corran Ferry service. I am replying as ferries form part of my Ministerial portfolio.

As you are aware, at present The Highland Council is wholly responsible for the funding and delivery of its internal ferry services, including Corran Ferry. This includes operational issues such as fares, timetables and crewing, as well as maintenance and replacement of vessel and harbour infrastructure. It is clear from the patronage numbers that this is a successful ferry service, popular with a large number of passengers and businesses.

You will also be aware that the Scottish Government provides the Council with revenue funding through the annual Local Government Finance settlement to support their internal ferries. Although this support is not separately identifiable it is included in the Council's overall 2020-21 pre COVID-19 revenue allocation of £493 million. The Highland Council has also received a General Capital Grant of just under £25m in 2020-21, some of which could be used to fund ferry infrastructure. This is the factual position.

However, the Ferries Plan (2013-22) stated that Scottish Ministers are willing to consider assuming responsibility for lifeline ferry services, subject to a set of principles. I have copied these principles at Annex A for ease of reference, although they will I am sure be familiar to you. I am aware that Transport Scotland officials have been in informal discussion with Council officials to discuss the principles in detail. Two of the key principles are that there must be a full transfer of revenue funding to cover the true cost of the service, and that agreement must be reached on the level of capital funding to transfer based on the current age and condition of vessel and harbour (or slipway) infrastructure.

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I note your position that, in revenue terms, the Corran Ferry currently operates on a broadly cost neutral basis. However, more significantly, I also note your statement that the ferry is in urgent need of renewal, with associated slipway works, which are anticipated to cost in the region of £40m.

The option to transfer this ferry service to the Scottish Government without meeting these immediate capital costs is not therefore in line with the key principles for a transfer set out in the Ferries Plan. It would therefore be premature to engage formally on a working group to consider a transfer as set out in your letter. However, I am keen to keep the dialogue moving on this.

Further clarification of the Council's plans to fund capital replacement of the vessel and slipways as part of meeting the criteria in Annex A would be required prior to the potential engagement in any formal working group set up to discuss any potential future transfer of responsibility, so this would be a very helpful next step to take forward.

I realise that our position on capital funding, which is consistent with discussions with other local authorities, will be seen as disappointing response for the Council, but I wanted to be clear upfront on the challenges faced by these proposals. This has been the challenge in previous approaches from other authorities on transfers in line with the Ferries Plan. Transport Scotland officials will of course be available to continue engagement on the principles that would need to be addressed and I will ask to be kept informed on progress.



PAUL WHEELHOUSE

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1. The Requirement for 2 smaller Vessels – Summary (Appendix 3)

- 1.1 Logic at the time concluded that a new larger straight through (Roll-on/roll-off) vessel, with refit / relief / second vessel secured from elsewhere should be the preferred option (Option A).
- 1.2 As indicated in the Options appraisal (Aug 2018) the operation of a year-round two vessel service **(Option B)** was at the time considered to be disproportionate and possibly unaffordable.
- 1.3 The project has progressed significantly since the above findings were concluded and has revisited the Vessel and Infrastructure Options **A** / **B** (as below) and has considered both options again, to fully understand what will generate the largest benefits whilst considering each of the options in terms of their affordability.

2. Vessel and Infrastructure Option A / B

2.1 Option A: (Ref 2d - Final STAG Report) Previously Preferred Option

- 1 new larger (50 car) hybrid vessel straight through (Ro-Ro)
- 1 overnight berthing structure (for one vessel)
- 2 new aligning structures / slipways
- Refit / relief / second vessel secured from elsewhere. (CMAL fleet)

Option B: (Ref 2f - Final STAG Report) New Preferred Option

- 2 new smaller (25 car) hybrid vessels straight through (Ro-Ro)
- 1 overnight berthing structure (for two vessels)
- 2 aligning structures / slipways
- 2.2 Further analysis can be found in <u>Appendix 4</u> on the Strengths Weakness, Opportunities and Threats (SWOT) of each option. Option A has raised concerns that this option will introduce a new "unacceptable" constraint on the route as there would be no "immediate" back up vessel resulting in periods of service outage. (No Service)
- 2.3 **Option A** would mean at least a short-term service outage (No Service) in the event of a breakdown or when the main vessel is away during the 6-week refit period. CMAL have advised that it would be a case of "get what we are given" and depending on vessel availability and mobilising a crew it would be highly unlikely that a backup vessel would be fully operational at the Narrows within 3 days.
- 2.4 In other areas of Scotland, breakdowns will generally lead to several days of service outage whilst vessel cascades occur, or spare vessels are mobilised (as has been seen on the CHFS network).
- 2.5 There is also a risk that any relief vessel could be capacity constrained with an inability to carry large CVs.
- 2.6 In addition, given current vessel availability within the CMAL and other Scottish fleets, securing a relief vessel will be challenging, particularly during unscheduled breakdowns. Added to the above, it is possible that resistance could be encountered from other islands if 'their vessel' or 'their relief vessel' was redeployed to Corran.
- 2.7 **Option A** with refit / relief / second vessel secured from elsewhere) would require a clear plan and indeed a contract would have to be developed for ensuring cover during refit and breakdowns.

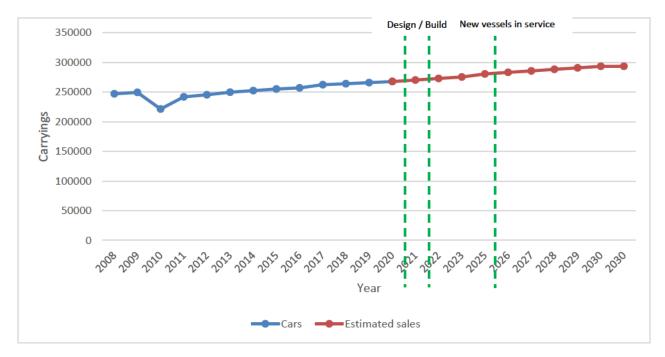
2.8 For refits, this would likely require negotiation with CMAL to charter one of their vessels for a defined period each year, although this would clearly come at a cost.

3. Alternatives to the Corran Ferry

- 3.1 The Corran Ferry provides a 'shortcut' from the peninsula to Fort William and indeed the rest of Scotland. From the ferry terminal at Ardgour, the alternative road route to Fort William is 35 miles, on single track road. The A861, which connects Ardgour to the A830 at Kinlocheil (and onwards to Fort William) also has a 12 feet height restriction immediately south of the junction (where the West Highland Line crosses the road) restricting access for many CVs. Service outages significantly extend journey times to all destinations, particularly for commercial vehicles, which need to route via Lochailort.
- 3.2 The ferry is a lifeline socio-economic dependant service of strategic importance linking the fragile communities of Fort William, Ardgour, Sunart, Ardnamurchan, Moidart, Morar, and Morvern. The communities served by the Corran ferry are considered to have a priority need with a dependency in each of the Routes and Services Methodology (RSM) categories as below –

Commuting & Business	Personal	Freight	Tourism
Α	Α	Α	Α

4. Projected car carryings for the next 10 years



- 4.1 Overall carryings have been broadly stable and increasing over the past ten years. There was a significant drop-off in 2010, likely due to the economic downturn (this reduction occurred across a wide range of Scottish routes in that same year).
- 4.2 The green dashed lines in the above table show the Design / Build / Implementation stages. The timescale for completion of a new vessel and slipways is approximately 5 years away.

4.3 Operating with one Vessel on the busiest single vessel route in Scotland (265,800 cars / 11,000 Commercial Vehicles and Buses - 2019), would prove to be false economy with future transport increases forecasted (as indicated in the table above) a one vessel operation would not provide the required reliability and resilience for a lifeline socioeconomic dependant service over a 30-year period.

5. Busiest ferry routes within Scotland in terms of cars carried

	Route	Operator	Year	Cars	Commercial Vehicles / Buses
1	(Dunoon) and McInroy's Point (Gourock)	Western Ferries	2019	634,300	36,300
2	Corran Ferry (Ardgour - Nether Lochaber)	Highland Council	2019	265,849	11,007
3	Ardrossan - Brodick	CalMac	2019	207,738	9390
4	Wemyss Bay - Rothesay	CalMac	2019	198,167	9241
5	Largs - Cumbrae Slip	CalMac	2019	178,927	4122
6	Oban - Craignure	CalMac	2019	169,724	8936
7	Ullapool - Stornoway	CalMac	2019	100,965	13,836
8	Colintraive - Rhubodach	CalMac	2019	86,650	8577
9	Kennacraig - Islay	CalMac	2019	81,630	13,015
10	Uig - Tarbert/Lochmaddy	CalMac	2019	80,476	5982

5.1 The table above demonstrates that despite working in isolation with no economies of scale benefits as is associated with Western Ferries and CalMac (CMAL fleet). The Corran Ferry service is the busiest single vessel vehicle carrying route in Scotland. It also scores highly in commercial vehicles and buses and is second only to the Dunoon - Gourock route in terms of overall vehicle carryings.

6. Western Ferries

6.1 The project manager has been in touch with Western Ferries to establish how they manage carrying capacity with 4 vessels and the general infrastructure arrangements for berthing / maintenance.

Western Ferries model is for smaller boats providing capacity through frequency which provides reliability and resilience as below –

- 4 smaller (4 x 40 car) boats means they can deal with foreseen and unforeseen events, e.g breakdowns, road closures or changing weather conditions.
- 4 identical vessels in service 8 months of the year (rotating). Core of 3 boats 1 boat doing ongoing drills, training and with a regular maintenance period. etc).
- Jan / Feb / Mar -Refits and MCA inspections.
- Running crew of 4 per vessel with a dedicated back office support ferry team.

Depending on the Covid situation we are hopeful that we can make a visit to Western Ferries operation to discuss the above in more detail as part of a fact finding exercise.

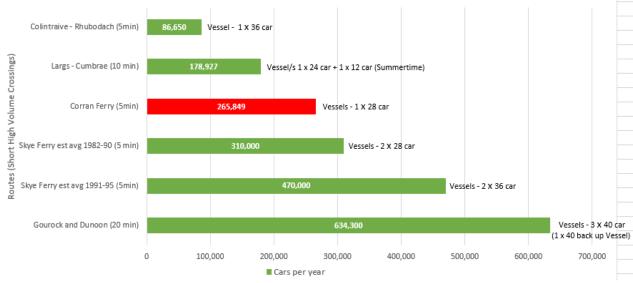
7. Caledonian Maritime Assets Ltd (CMAL)

7.1 We have been in touch with CMAL regarding the opportunity for Highland Council to align our Vessels and Slipways replacement work with their commitment to explore new technologies for ferries along with their drive for a zero-emission ferry fleet.

CMAL met us on site at Narrows (Oct 21st) Points to note from this discussion -

- CMAL could see the merit for a two-vessel Hybrid straight through Ro-Ro operation (2 x 25 car) and have agreed with our high-level costings.
- Within their fleet there are three hybrid ferries that use a low carbon hybrid system that combines traditional diesel power with electric battery energy which can reduce fuel consumption by up to 30% compared to a conventionally powered vessel.
- CMAL are looking to build 8 new hybrid ferries in the next 5 years and have advised that there is a potential opportunity for Highland Council to align our replacement vessels project with their low emission Hybrid Ferries Programme.
- Shore side electricity for Hybrid vessels will need to be given consideration. CMAL will speak with their contacts at SSE to establish the power capacity at both sides of the Corran Narrows
- It should be noted that CMAL have undertaken this work for free and are happy to
 provide further assistance. CMAL are a single-purpose-company delivering multiple
 west-coast passenger ferry services. We very much appreciate their input and
 expertise.

8. Short High-Volume Crossings - Routes / Times



Source:

*Ferry companies Statistics

8.1 The table above shows other comparative short high traffic volume crossings and the vessel capacity for these services. With the exception of Colintraive – Rhubodach all of the above routes have run 2 or more ferries on these short crossings. The Skye Ferry is another example of a 2-vessel operation and it is worth noting the Corran Ferry is currently carrying a similar volume of cars as the Skye ferry was carrying in the early / mid 1980s.

^{**} Evaluation of the Economic and Social Impacts of the Skye Bridge HIE / HITRANS report (2007)

9. Reliability / Resilience

9.1 A smaller (2 x 25 car) vessel operation would provide 2 vessels in service for 9 months of the year. This model would provide reliability and resilience with guaranteed vessel availability all year round and would remove the uncertainty of service outage over a 30-year period (Future proof). Planned maintenance work could get done before evening shutdown. With 2 identical vessels, refits would be undertaken in the quieter months Nov to Jan, always leaving one vessel on the route.

10. Compliance (Shuttling)

- 10.1 With 2 smaller vessels there would be enough capacity at Ardgour and Nether Lochaber to stop shuttling meaning the service would be compliant and run to the published timetable (instead of shuttling). 2 smaller ro-ro vessels would also mean faster loading and an improved customer experience for all ferry users (less waiting time). This option would also address the marshalling overspill safety issue with traffic backing up onto the main road (A82) at peak periods. The marshalling area at the Nether Lochaber slipway being the main issue with a combined capacity for approximately 15 cars.
- 10.2 Due to the nature of the service a new larger replacement vessel would likely continue to shuttle during peak periods.

11. Fuel Costs

11.1 Less shuttling (currently averaging 12 per day to provide capacity), lower fuel costs for of the 2 smaller vessels (28 to 25 car) and a 30% green energy fuel saving means fuel costs would remain as they are now.

12. Crewing costs (Additional £750K - 2 x 16 crew)

- 12.1 Crewing costs when viewed in isolation will be greater for the future service and will be offset by maintaining the reliability, reduced fuel costs, increased takings from fares, and lower operating costs for the two new vessels for the first 5 to 10 years. If the Council was to transfer responsibilities resource taken from a larger scale operation e.g. CalMac could address crewing sustainability and reduce employee costs further. (Economies of Scale).
- 12.2 The current crewing model is at breaking point operating at a relentless high intensity which has a significant impact on the health and wellbeing off the crew. This model is not sustainable (crew for 100% capacity is operating at 120% capacity; the additional purser/deckhand, 1/7 to give 8 per team, is an addition of 14% crew, but only keeps us at the 100% mark, i.e. maxed out even with 8 when shuttling). The future service will require investment in crewing and back office support. Overtime which is currently £62K per year would be a 7% saving. A new crewing model could create jobs in an economically fragile area.

13. New Vessels - Revenue

13.1 An anticipated increase in revenue (1.45m) due the larger capacity of the new vessels running to timetable and increasing passenger numbers will also help off-set the initial cost. 2 new smaller (25 car) vessels will give us 180% capacity (Currently operating at

120% capacity) with scope for 60% extra to future proof the service, meet the increasing demand and cover increasing costs as the new vessels will inevitably age.

14. Offset Costs

- 14.1 A two-vessel operation would aim to run on a broadly break-even basis and will look to offset additional crewing costs by considering the scenarios/opportunities as below
 - Operational costs (Efficiency of new hybrid vessels short/medium term)
 - Increased capacity of new vessels / projected carryings revenue opportunity (Anecdotal evidence suggests tourists are turning away due to the lengthy queues)
 - Increase in revenue with new Smart card ticketing (as below)
 - New fares structure
 - Address anomaly's in fares structure e.g. -
 - Camper van fares
 - Commercial vehicles (Currently heavy goods vehicles are charged on the basis of the number of axles, rather than length which is the more common measure

15. Smart Ticketing

15.1 Despite accounting for 63% of all tickets used, the discounted books only provide 34% of annual revenue on average. The new Smart card ticketing – will address the loss of revenue (black market - discounted books) A conservative estimate is that 10% of discounted books are the tourism element which would mean an additional income of 100k per year if they are paying the current full fare.

16. Fares

- 16.1 As evidenced through benchmarking in the Strategic Business case fares on the Corran Ferry service are on the whole lower than elsewhere, particularly in terms of the multijourney books. Non-Discount £8.80 Discount £2.56 (71 % cheaper than drive up fare) The current arrangements work relatively well for local residents & businesses.
- 16.2 It should be noted that the current fares system plays a key role in supporting the economically fragile communities which the ferry serves, particularly in terms of encouraging population retention. Affordable fares are a major Community concern and a fares solution must be found for the new service.
- 16.3 Despite the above, the multi-journey book fares are low when judged against any comparable benchmark. The obvious consequence of this is that, while fares income covers operating costs, it makes no provision for capital replacement.
- **17. Transport Planning Objectives.** The following Transport Planning Objectives were set as a basis for the appraisal in recognition of the evidenced problems & opportunities:
 - **Transport Planning Objective 1:** The infrastructure and operational practices of the Corran Ferry should be aligned with comparable routes elsewhere in Scotland.
 - Transport Planning Objective 2: The Corran Ferry should facilitate year-round access to Ardgour and beyond for all vehicle types.
 - Transport Planning Objective 3: The available vehicular capacity of the ferry service should as far as possible facilitate compliance with the published timetable.

17.1 Transport Planning Objectives

The table below provides a summary of the appraisal of each option against the Transport Planning Objectives. As indicated below **Option B** scores significantly higher against the TPO's.

Transport Planning Objectives					
Option	Description	Relief / 2 nd Vessel	TPO 1: infrastructure	TPO 2: Year-round access for all vehicles	TPO 3: Capacity
A	1 new larger (50 car) hybrid vessel straight through (Ro-Ro)	From Fleet (CMAL)	44	✓	√
В	2 new smaller (25 car) hybrid vessels straight through (Ro-Ro)	Vessel availability all year round	11	11	111

17.2 STAG involves the appraisal of all options on a seven-point scale, as below:

- ✓✓✓ Major Positive
- ✓✓ Moderate Positive
- ✓ Minor Positive
- O Neutral
- x Minor Negative
- xx Moderate Negative
- xxx Major Negative
- 17.3 The higher additional crew costs of **Option B** should therefore be seen in the context of the TPO's above and the longer-term benefits (e.g. reliability, resilience and sustainability)

Vessel and Infrastructure Option A / B Conclusion 18. 18.1 Option A: (Ref 2d - Final STAG Option B: (Ref 2f - Final STAG Report) **New Preferred Option** Report) **Previously Preferred Option** 2 new smaller (25 car) hybrid vessels straight 1 new larger (50 car) hybrid vessel through (Ro-Ro) straight through (Ro-Ro) 1 overnight berthing structure (for two vessels) • 1 overnight berthing structure (for 2 aligning structures / slipways one vessel) 2 new aligning structures / slipways Refit / relief / second vessel secured from elsewhere. (CMAL fleet)

18.2 **Option A**

Whilst there are benefits to this option, it is not considered to address the key issues of reliability, resilience and sustainability for a lifeline socioeconomic dependant service over a 30-year period and should therefore no longer be in scope for further consideration.

This option would introduce a new constraint on the route as there would be no "immediate" back up vessel resulting in ongoing short-term service outages (No Service) at the Narrows over a 30-year period. (it is highly unlikely that a backup vessel would be fully operational at the Narrows within 3 days)

From a political, economic, social and a service requirement point of view, periods of service outage over a 30-year period would be unacceptable.

Option B New Preferred Option

With guaranteed vessel availability all year round this option will provide the required reliability, resilience and sustainability for a lifeline socioeconomic dependant service over a 30-year period and should therefore be the preferred option.

Two smaller Ro-Ro vessels will enable faster loading and will result in the service running to the published timetable (instead of shuttling).

The efficiency of new vessels (short/medium term), an anticipated increase in revenue due to the larger capacity of the new vessels and increasing passenger numbers along with a new fares structure will help off-set the costs.

18.3 As detailed above Members are asked to **Support** the proposal for the new preferred Vessel and Infrastructure option - 2 x 25 car smaller hybrid vessels straight through (Ro-Ro) operation.

Next Steps –

Cost Modelling (30-year period - 2026 – 2055)

- Capital Costs for 2 new smaller (25 car) hybrid Ro-Ro vessels / slipways
- Operational costs
- Revenue costs
- Increased capacity and carryings of new vessels revenue opportunity
- Other income opportunity's
- New Fares structure (scenarios/possibilities)
- Hold further discussions with CMAL on potential opportunity for Highland Council to align our replacement vessels project with their low emission Hybrid Ferries Programme.
- Seek funding (£1.6m) to procure Naval Architect to establish a statement of requirement specification and design for new 2 new vessels.
- Seek funding to procure an external source to undertake a detailed report on the critical importance of the ferry to meeting the varied socio-economic needs of the fragile communities served by the Corran Ferry.

Appendix 4

Vessel and Infrastructure Options - 30-year appraisal horizon (2026 – 2055)

Option A: (Ref 2d - Final STAG Report) Previous Preferred Option

- 1 new larger (50 car) hybrid vessel straight through (Ro-Ro)
- 1 overnight berthing structure (for one vessel)
- 2 new aligning structures / slipways
- Refit / relief / second vessel secured from elsewhere. (CMAL fleet)

Strengths / Opportunities

- Overnight berthing (No swing mooring)
- Greater capacity New vessel/s will meet current / future demand
- Remove Quarter Loader constraints once and for all
- New Ro Ro Vessel Compatible with other slipways
- New Slipways Interchangeability with other Ro/Ro vessels
- No longer working in isolation. Economies of scale benefits (CMAL)
- Better ramp alignment for large commercial vehicles (HGV)
- Resale value / redeployment potential of new vessel
- Resale value of MV Corran
- More efficient vessel Reduce fuel (green energy) costs over 30%
- Environmental benefits of Green energy Vessel
- Short-medium term reduction in 'engine repairs & maintenance

High-level Capital costs £40m

1 x 50 car hybrid vessel £17m Supporting infrastructure (Berthing / Slipways) £23 m

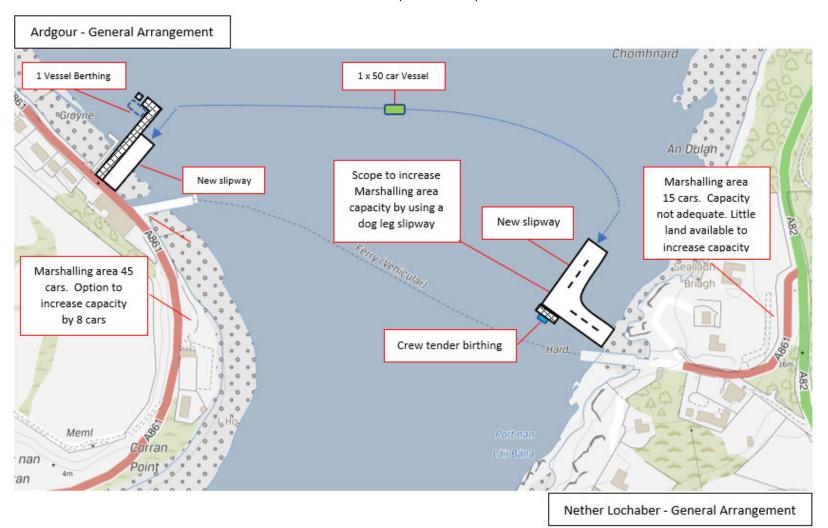
Weaknesses / Threats

- New Constraint on the route No immediate Back up vessel
- Service outage awaiting backup vessel in the event of a breakdown or during the 6-week refit period.
- Regular service outages over a 30-year period for a lifeline service would be politically unacceptable
- Not future proof / Resilient.
- · Annual cost associated with securing a relief Vessel
- A contract for a second vessel would have to be developed for cover during refit and breakdowns
- Relief vessel could be capacity constrained (inability to carry HGV's)
- Securing a relief vessel could prove challenging, particularly during unscheduled breakdowns within the CMAL fleet
- Slower loading of one new larger vessel
- Shuttling (queuing) would likely continue during peak periods
- Shuttling places added time and workload pressure on the crew.
- Traffic backing up onto main road would still be an issue
- Resistance could be encountered from other islands if 'their vessel' or 'their relief vessel' was redeployed to Corran
- Uncertainty each year when securing a backup Vessel
- Current crewing model is not sustainable over a 30-year period
- Highland Council does not have a committed capital programme to replace the vessels or supporting infrastructure

Vessel and Infrastructure - General Arrangement

Option A:

- 1 new larger (50 car) hybrid vessel straight through (Ro-Ro)
- 1 overnight berthing structure (for one vessel)
- 2 new aligning structures / slipways
- Refit / relief / second vessel secured from elsewhere. (CMAL fleet)



Vessel and Infrastructure Options - 30-year appraisal horizon (2026 – 2055)				
Option B: (Ref 2f - Final STAG Report) NEW PREFERRED OPTION	High-level Capital costs – £45m			
 2 new smaller (25 car) hybrid vessels straight through (Ro-Ro) 1 overnight berthing structure (for two vessels) 2 aligning structures / slipways 	 2 x 25 car hybrid vessels £22m Supporting infrastructure (Berthing / Slipways) £23m 			
Strengths / Opportunities Overnight berthing (No swing mooring) Greater capacity New vessel/s will meet current / future demand Remove Quarter Loader constraints once and for all New Ro Ro Vessels - Compatible with other slipways New Slipways - Interchangeability with other Ro/Ro vessels No longer working in isolation. Economies of scale benefits (CMAL fleet) Better ramp alignment for large commercial vehicles (HGV) Resale value / redeployment potential of 2 new vessels Resale value of MV Corran More efficient green energy vessels will reduce fuel costs by 30% Environmental benefits of 2 Green energy Vessels Short-medium term reduction in 'engine repairs & maintenance Future proof - Guaranteed vessel availability all year round (resilience) Sustainable crewing model over a 30-year period Faster loading of 2 smaller Ro Ro vessels Enough capacity with 2 Vessels to stop shuttling Compliance. Would run to the published timetable (instead of shuttling) Improved customer experience for all ferry users (less queuing) Increased capacity and running to timetable will generate extra revenue Would address the marshalling overspill safety issue Annual Refits could be better planned and undertaken Planned and reactive maintenance work done before evening shutdown 2 Vessels in operation at the same time for 9 months of the year Quieter 3 months Nov to Jan - Always leaving one vessel on the route Vessel 1 (6 weeks away - Refit) Vessel 2 (6 weeks away - Refit) New crewing model will create jobs in an economically fragile area.	Weaknesses / Threats Full second crew roster (Recruitment under the current crewing model has been challenging) Full second crew employee costs (750k) Highland Council does not have a committed capital programme to replace the vessels or supporting infrastructure			

Vessel and Infrastructure - General Arrangement

Option B:

- 2 new smaller (25 car) hybrid vessels straight through (Ro-Ro)
- 1 overnight berthing structure (for two vessels)
- 2 aligning structures / slipways

