

# CalMac winter reliability

Mull & Iona Ferry Committee

Version 3, 05/05/2019

First presented to CalMac MD Robbie Drummond on 18/02/19.

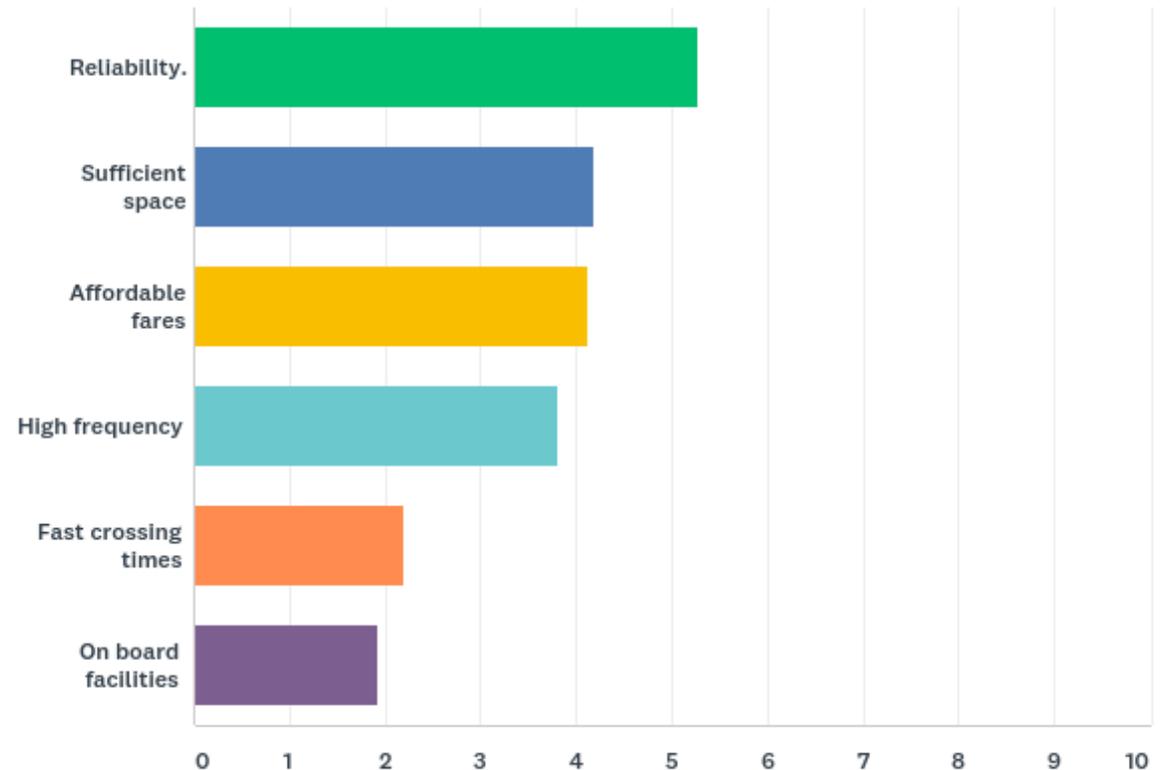
This version contains cancellation and wind data through to the end of the winter 18/19 timetable period.

# What the users think

Mull & Iona Ferry Committee are undertaking an online users' survey, that at the time of writing is still open. These are preliminary results after more than 700 responses. We are including some selected results here that are pertinent to the reliability issue.

Here you can see clearly that the most important attribute of our ferry services is reliability.

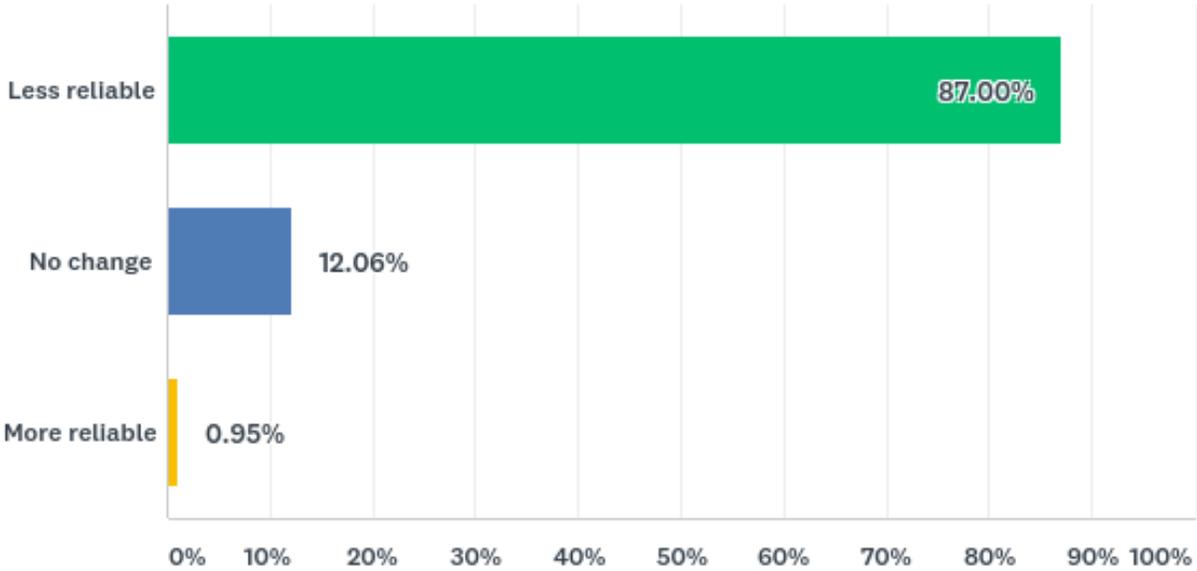
Q8 Rank these core aspects of our ferry services.



# What the users think

Q7 In general, what is your impression of how service reliability (ie cancellations and lateness) has changed in recent years?

Not only is reliability the most important attribute, it is also overwhelmingly perceived to be worsening.

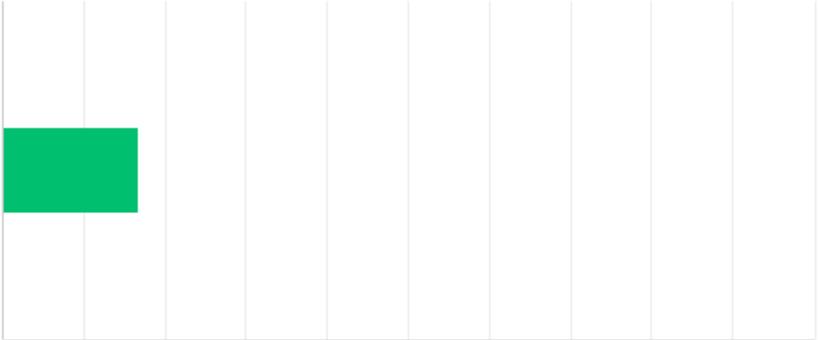


# What the users think

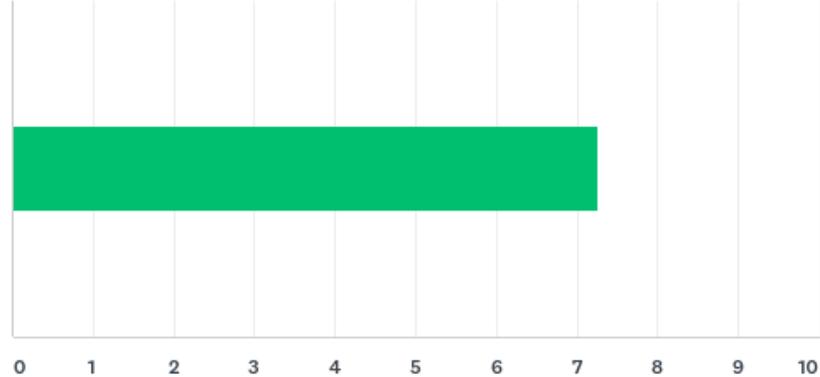
What is your over-all level of satisfaction with the service?

There is huge disparity of satisfaction between Oban – Craignure and Lochaline – Fishnish. Why?

Oban - Craignure



Lochaline - Fishnish



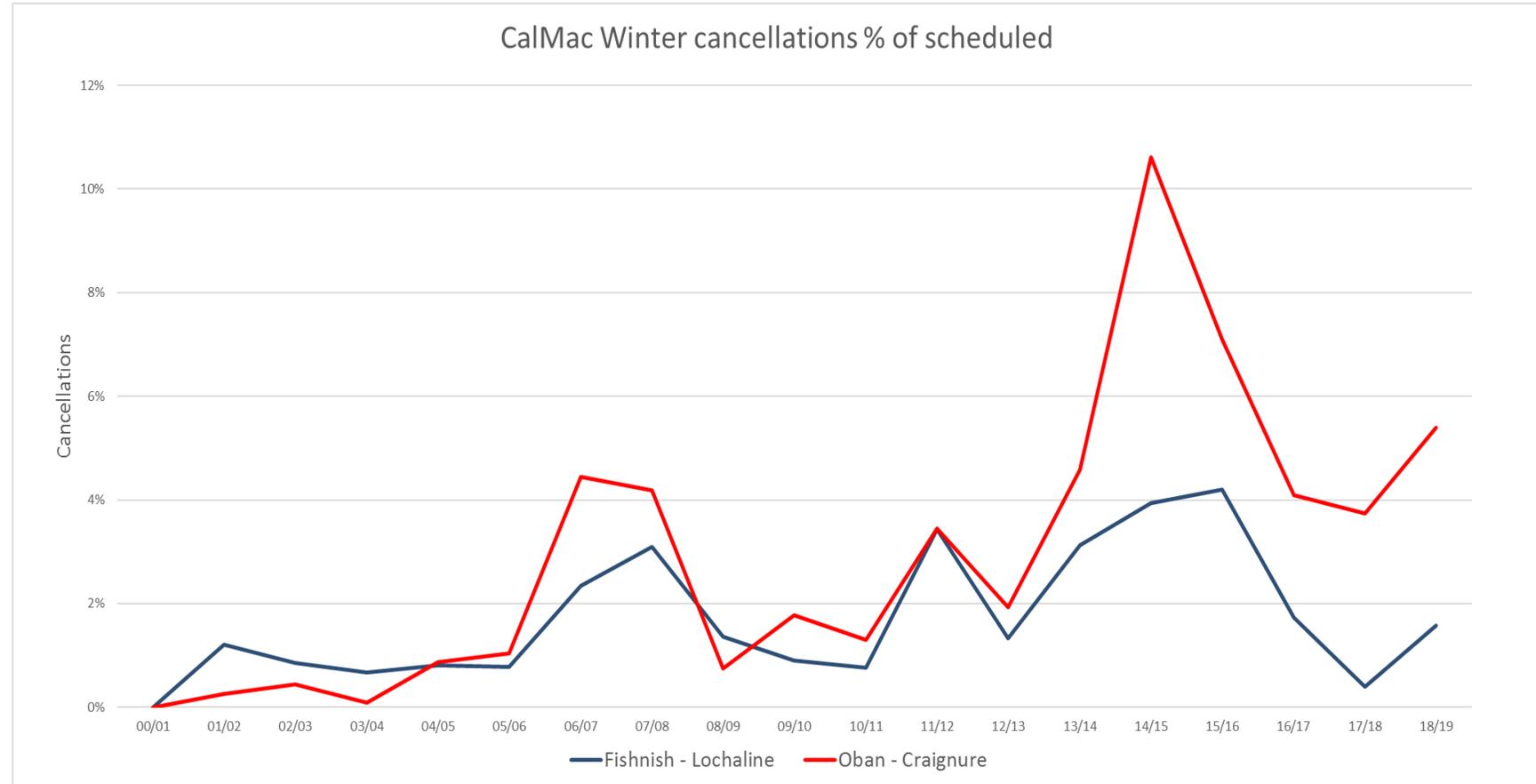
# Reliability

One of the main differences between the two services is reliability.

Here you can see the cancellation rate of the two routes over the last 20 winter timetable periods.

There is a strong upward trend on the Oban – Craignure service, whereas Lochaline – Fishnish does not seem to be showing such a deterioration.

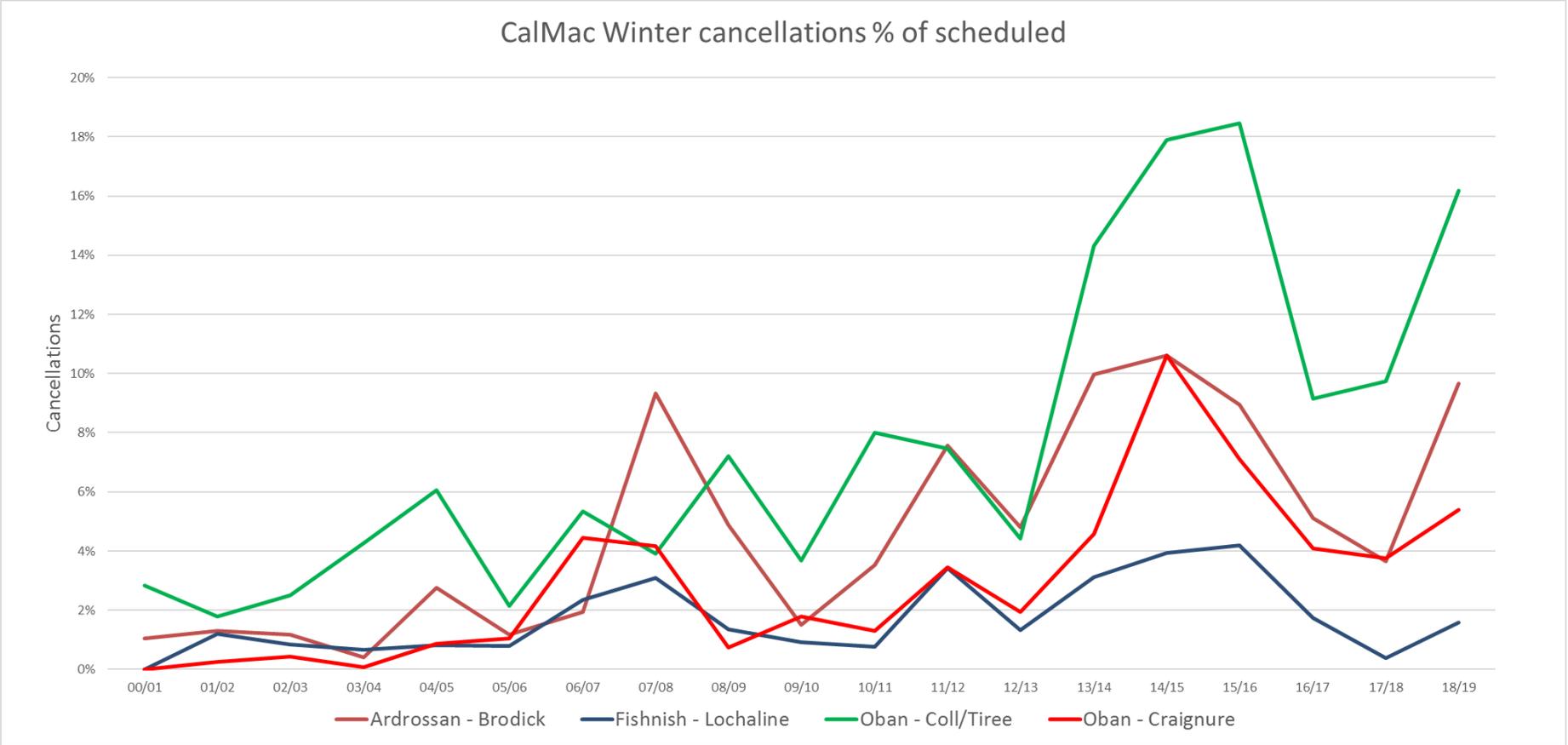
Throughout this long period, the main winter Oban – Craignure vessel has not changed.



# Reliability

The problem does not seem to be restricted to Oban – Craignure.

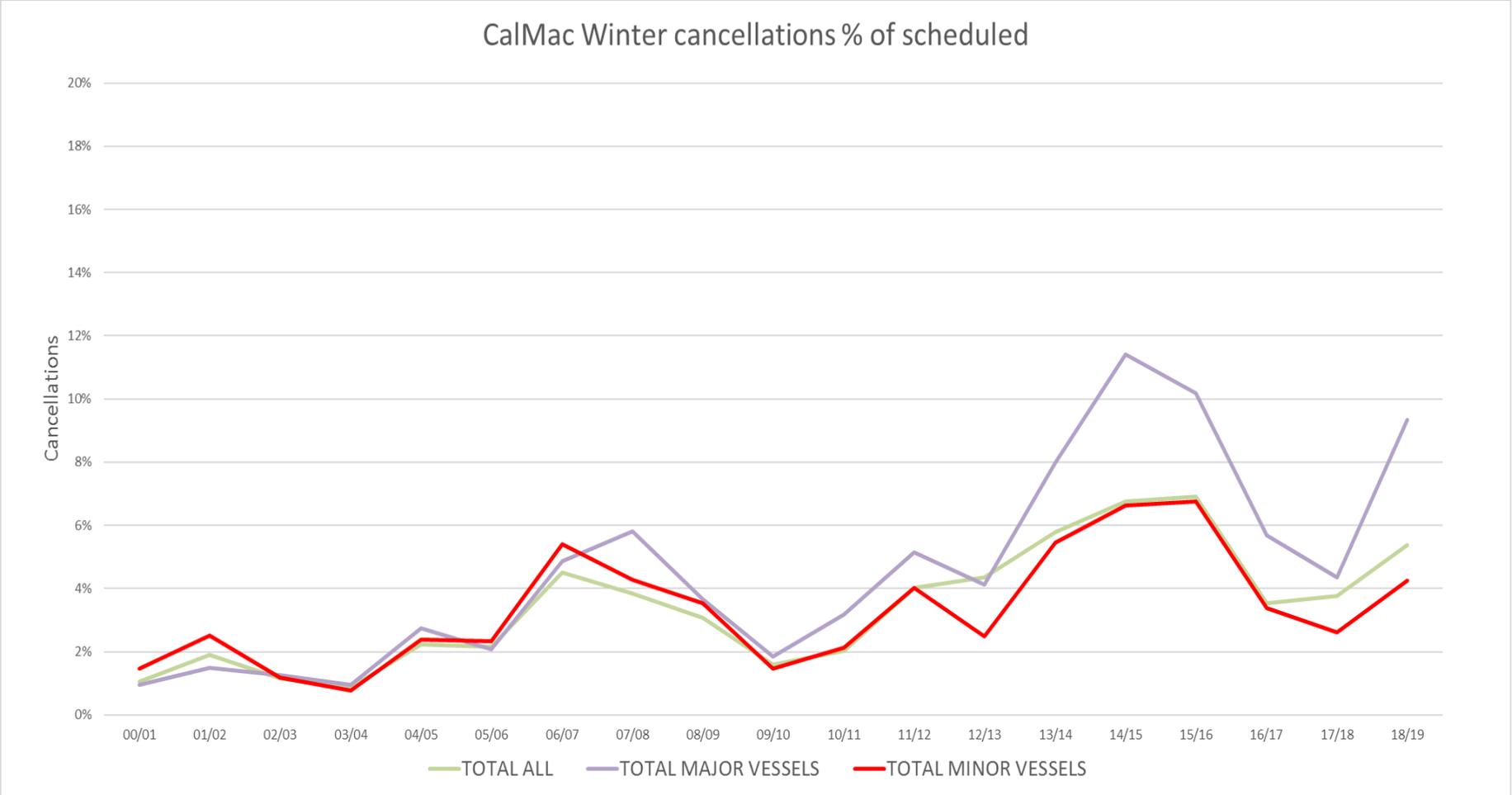
Here you can see how it compares with some other major-vessel routes.



# Reliability

Infact, the entire CalMac network is showing a decline in reliability.

Note that these figures are all showing weather-related cancellations only, and have been calculated as a percentage of scheduled services. The increase in the number of services is therefore not a significant factor.



# Is it the weather?

The biggest influence on the cancellation rate is of course the weather. In stormier winters, there are more cancellations.

There are 2 critical questions:

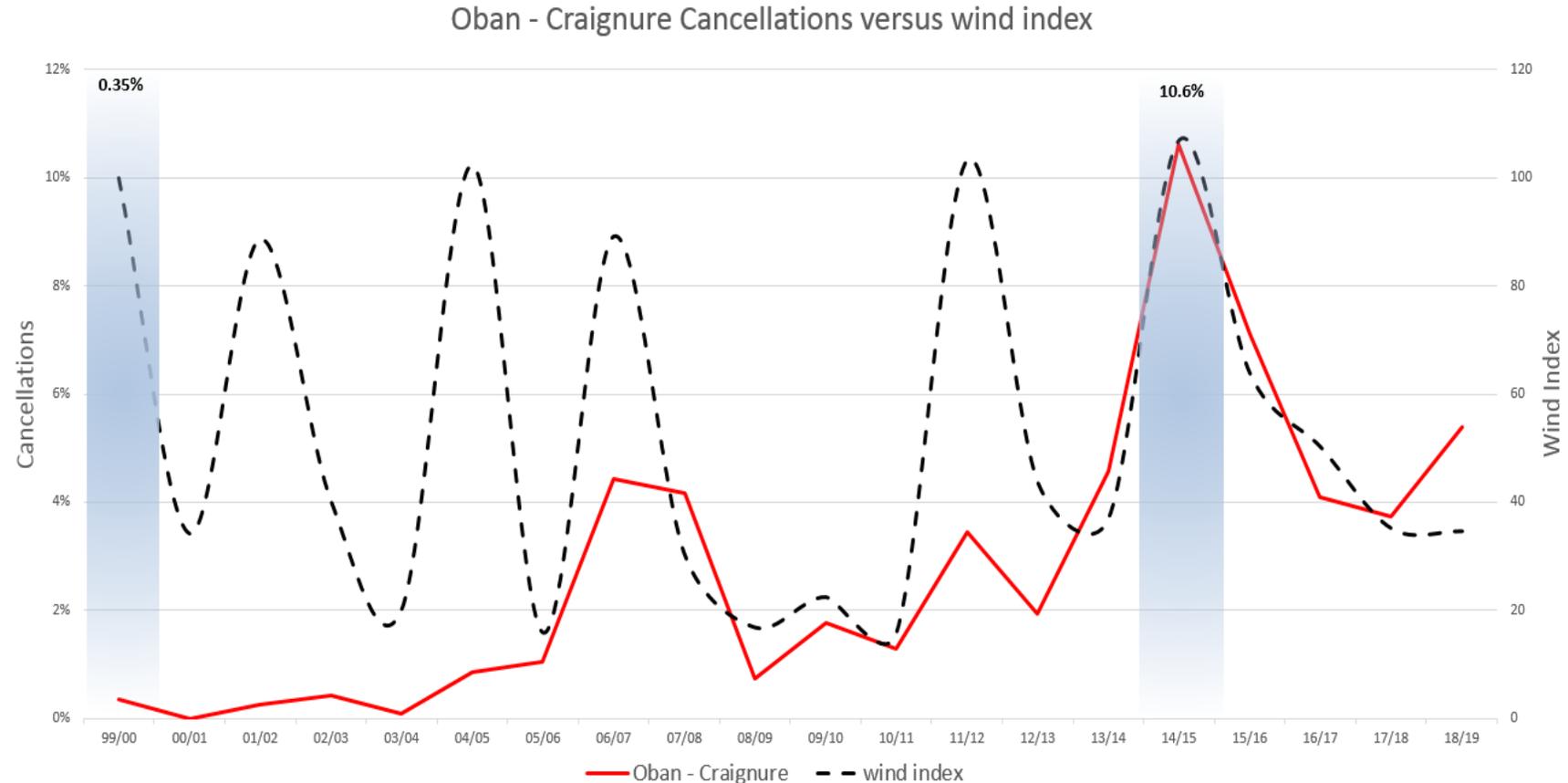
1. Is the weather getting worse?
2. Is the service becoming more vulnerable to poor weather?

This graph can answer both of those questions. The MIFC have purchased wind frequency data for the nearest Met Office station at Dunstaffnage. This data tells us how many hours of wind (and at what speed) there have been in each winter period. We have used this data to create a wind index that reflects the cumulative length and depth of disruptive wind periods in each winter.

From this, it is clear that whilst winters vary greatly in their severity, there is no discernible increase in 'windiness' over the period.

We can also see that the cancellation response to each windy winter has been getting larger over time. This is most starkly shown by comparing 1999/2000 with 2014/15. These were both equally windy, but the cancellation response is THIRTY TIMES greater in 14/15 as it is in 99/00.

We can therefore answer with confidence that the weather is not getting worse, and the service is becoming more vulnerable to poor weather.

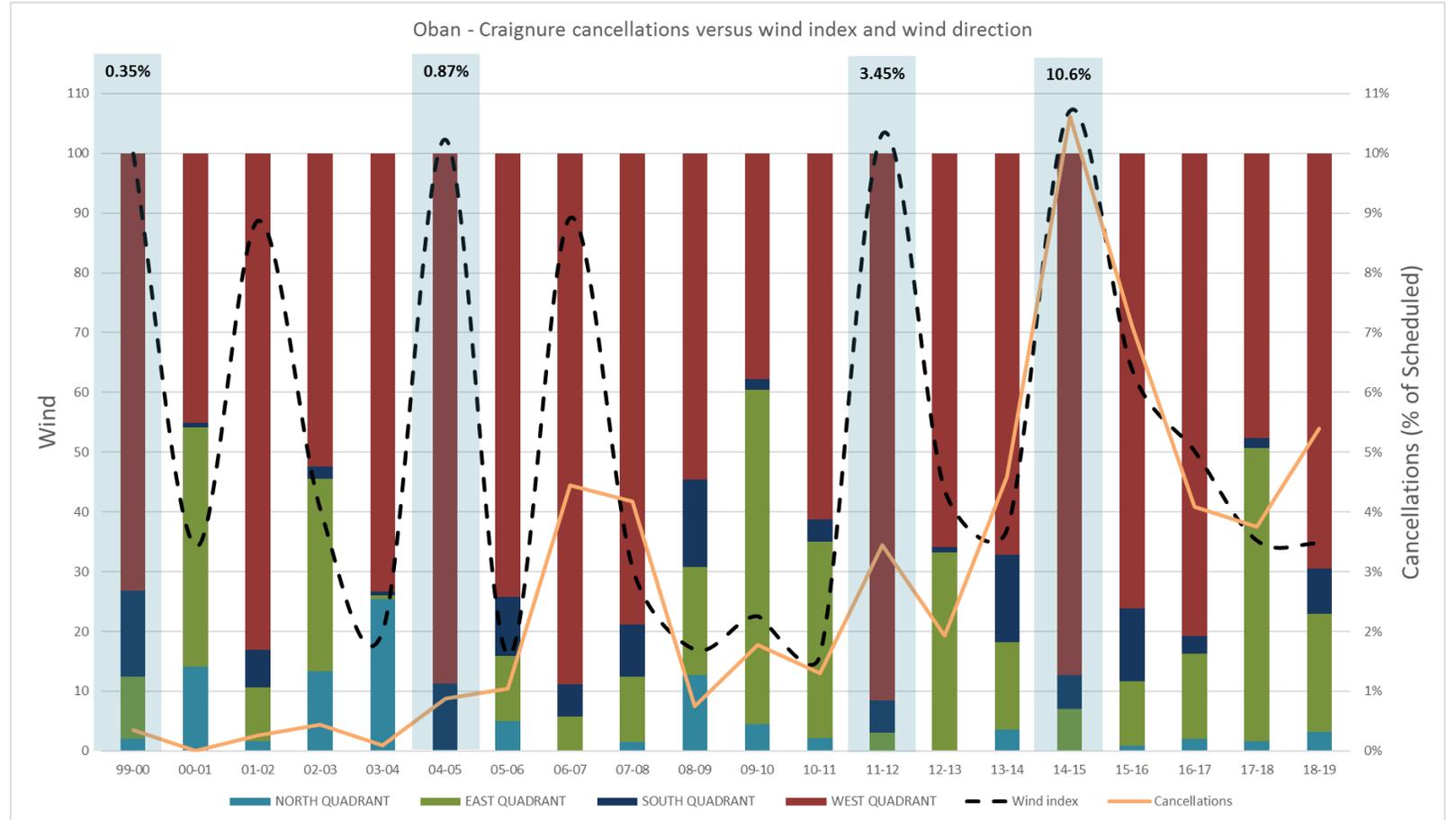


# Is it the weather?

It has been suggested that there have been changes in the prevailing winds, and that this is a cause of increased cancellations. In particular, that there is an increased incidence of Easterlies (which the ports are particularly vulnerable to). This chart adds wind direction (as a % of the total) to the wind index, for all winds in excess of 17knts.

It is clear from this that whilst there is variation year-to-year, there is no clear trend in prevailing high winds.

Again, it helps to compare 99/00 to 14/15, where the cancellation response is so different in similar wind conditions. This is shown both by the wind index and the wind direction. Infact, 14/15 could be considered a more benign winter by this measure, since a greater proportion of the high winds come from the West, the direction from which both Oban and Craignure are well sheltered.



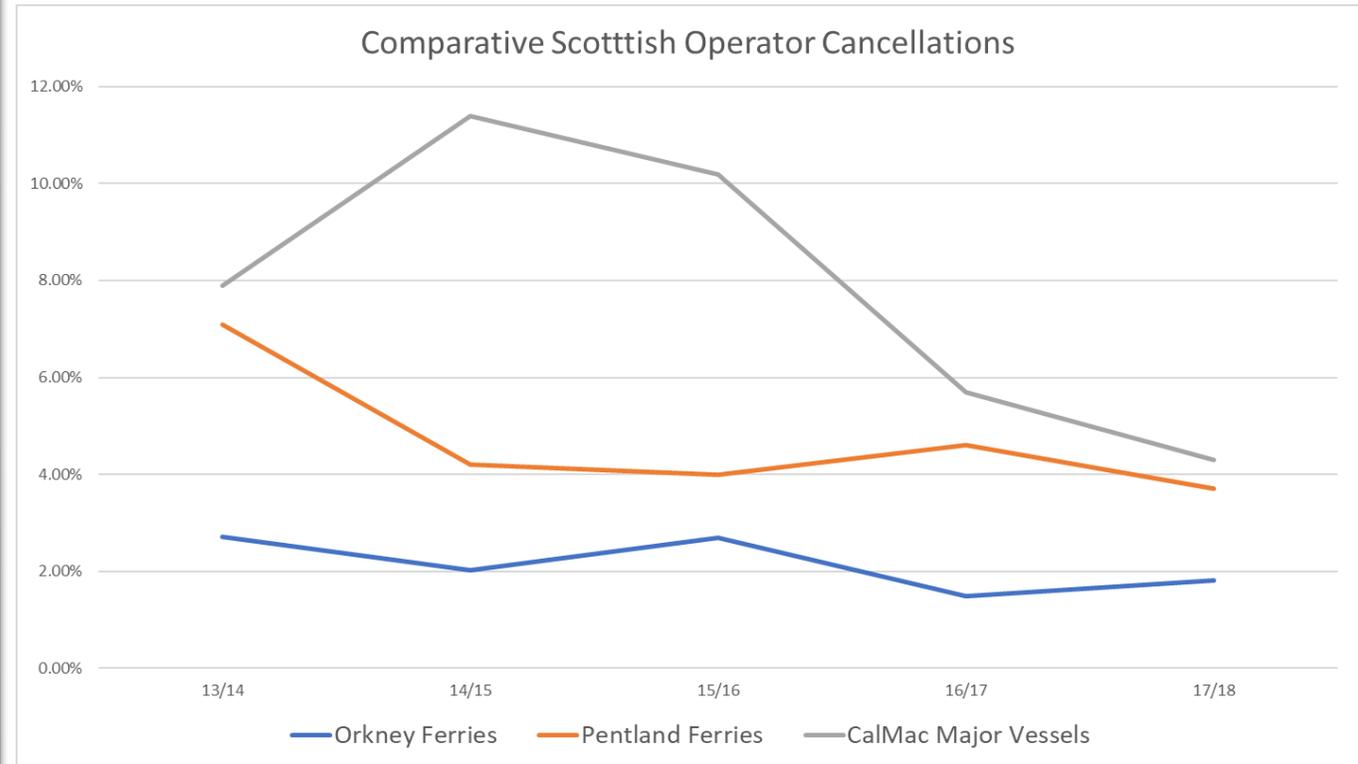
# How do other networks compare?

From the evidence of the preceding pages, it can be concluded that the problem of declining winter reliability is not related to changes in weather patterns. It is also clear that the problem is network-wide, and therefore cannot be entirely attributed to route-specific factors (such as the ageing of particular piers or vessels).

Perhaps therefore, the causes might be 'institutional'. Among the potential causes that we believe should be investigated are:

1. Crew training, in particular Masters. Are they being given appropriate training, is performance being adequately monitored and improved, and is best practice being followed?
2. Do Masters have the necessary management support to enable them to make the best decisions? For example – do they balance risks correctly, and is delivering a scheduled service prioritised over (say) the risk of minor cosmetic damage to the vessel?
3. Are there any perverse incentives (either real or perceived) at play? At crew level that might be the risk to one's career if service delivery is prioritised over cosmetic damage to a vessel. At company level that might be that cancellation results in no direct financial penalty. Rather, it results in saved fuel and pier dues.

None of these three points should be inferred as criticism of individual Masters or CalMac staff. We know that all staff sincerely regret cancellations, and the front-line staff in particular have to deal with the difficult customer consequences. However, these are difficult questions that CalMac has to ask of itself, and to identify whether, despite the best intentions of individual members of staff, there is an un-intended institutional failing at the heart of this issue. The graph to the right demonstrates that CalMac does not fare as well as comparable operators for whom we have been able to gather some data, albeit partial.



# And in Norway ...

## Måløy-Oldeidet

2018 Scheduled: 14,098

EU Class D (More sheltered than Oban – Craignure, which is EU Class C)

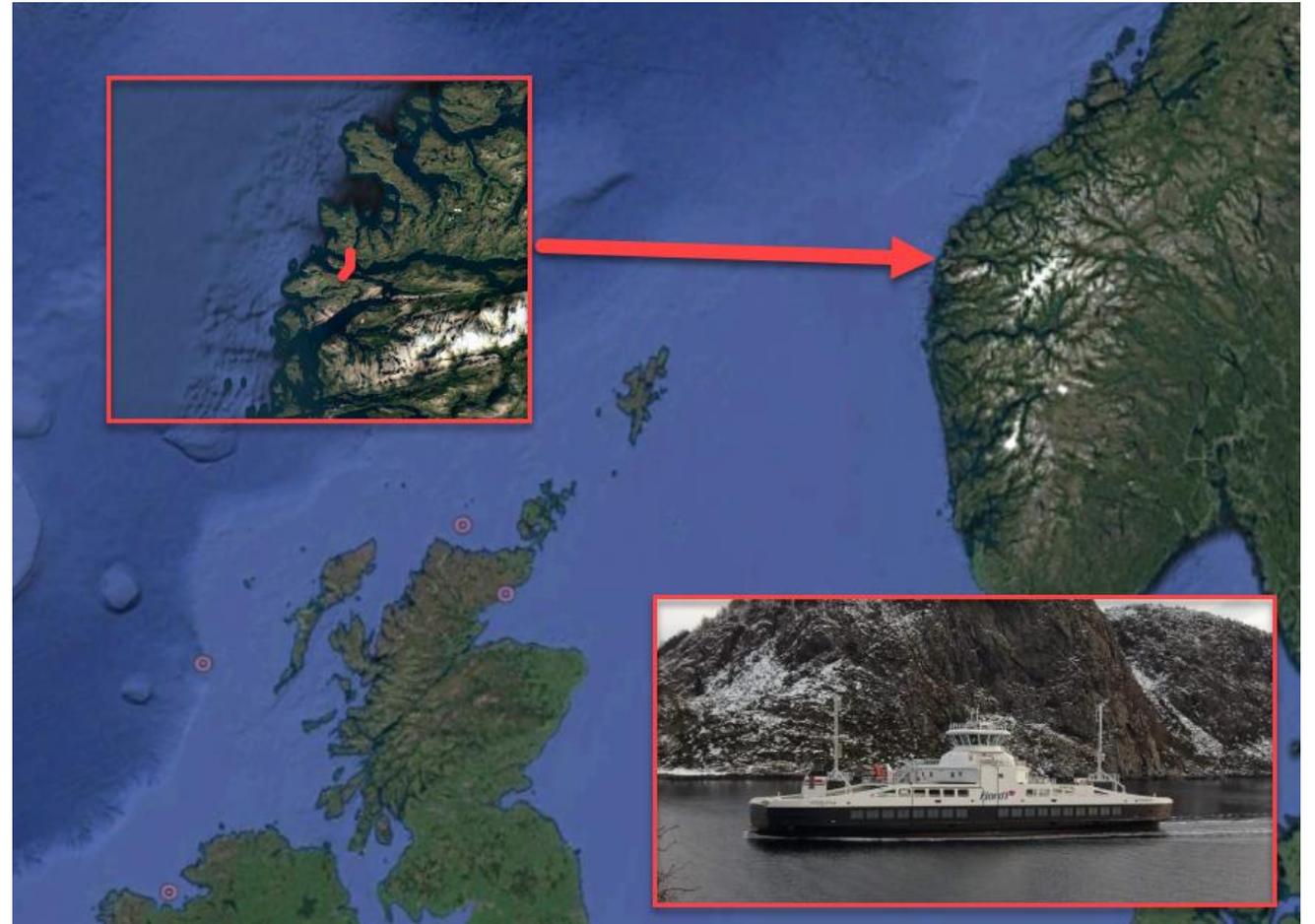
Cancelled due to bad weather: 8

**Weather cancellation rate: 0.057%**

Cancellation rates in Norway are dramatically lower than on the West coast of Scotland. We are continuing research into the Norwegian experience, but here we can show how three Norwegian routes, chosen because they are among the most exposed to poor weather, fare in comparison. There are significant differences in the vessel design, infrastructure and sea conditions, but learning from these examples could be valuable.

For example, contrary to the arrangement in Scotland where 'weather' can be unilaterally attributed to a cancellation without contractual penalty, in Norway all cancellations result in a fine to the operator, except when a named storm is active.

Perhaps therefore, Scottish contracts should include a similar mechanism – each vessel / route could have an independently defined safe operating envelope (ie limits of wind speed / wind direction / sea state), inside of which 'weather' would not be a valid reason for cancellation.



# And in Norway ...

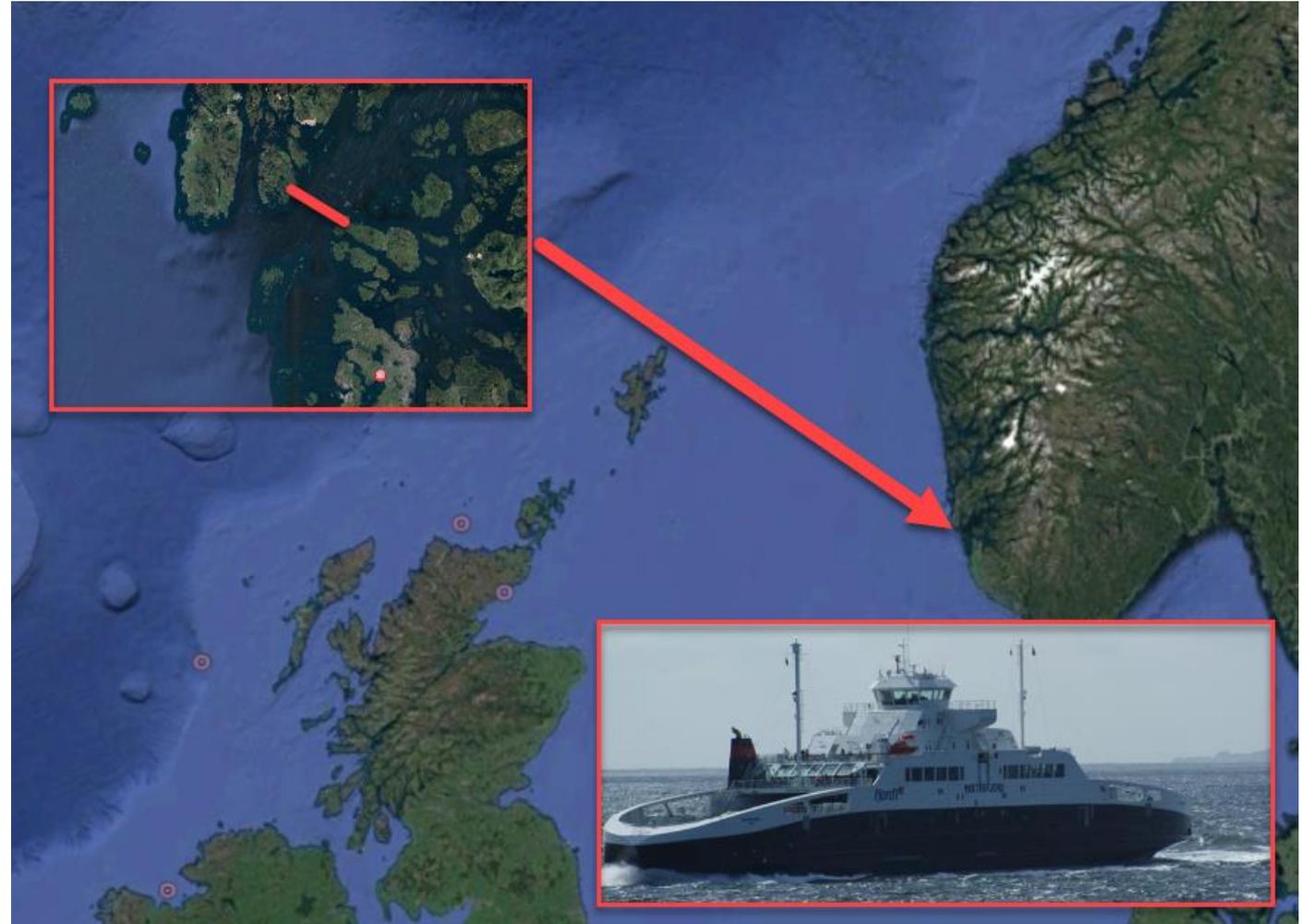
## Mortavika-Arsvågen

2018 Scheduled: 30,268

EU Class C route (the same as Oban – Craignure)

Cancelled due to bad weather: 64

**Weather cancellation rate: 0.21%**



## And in Norway ...

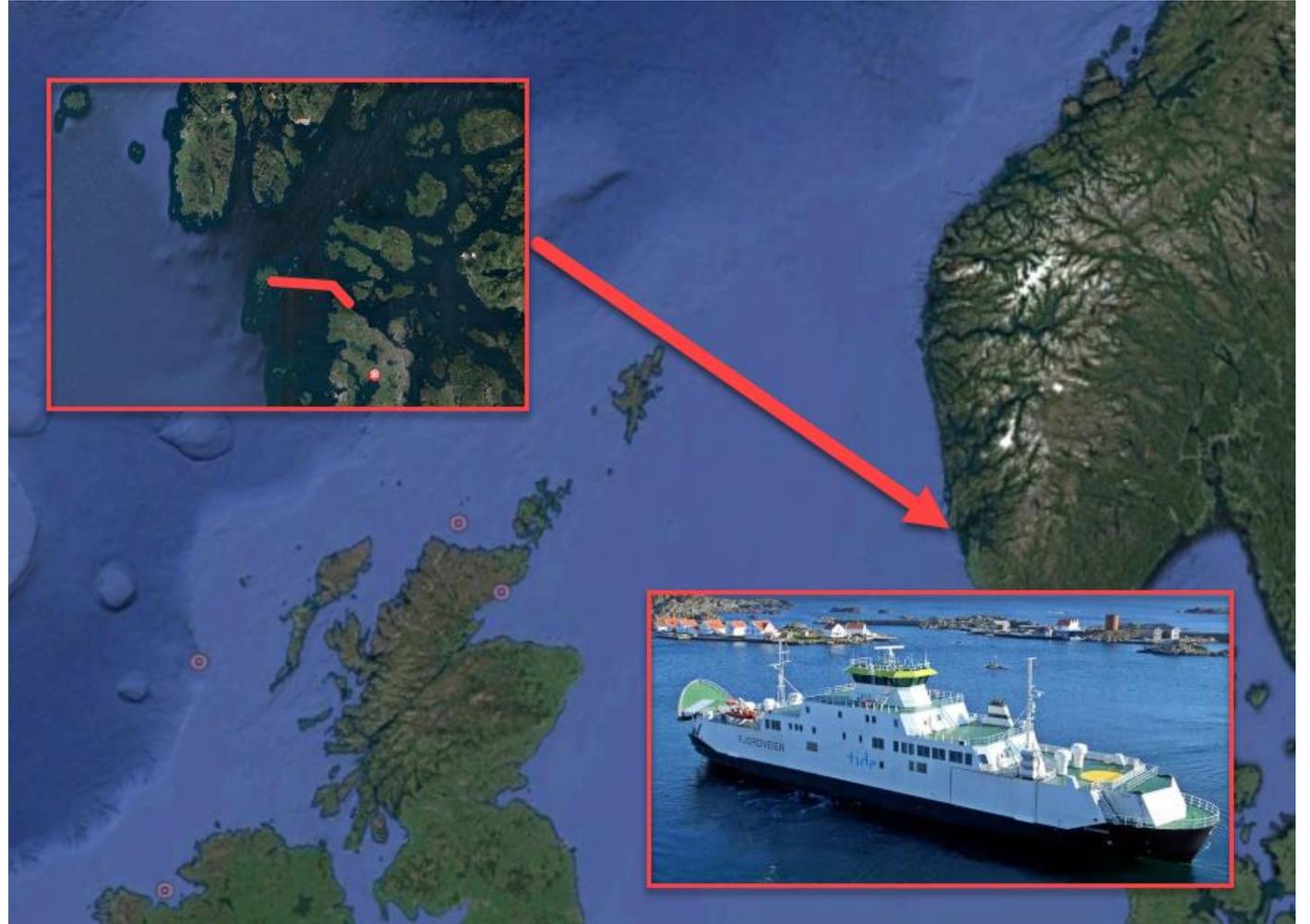
### Mekjarvik-Kvitsøy

2018 Scheduled: 6,832

EU Class C route (the same as Oban – Craignure)

Cancelled due to bad weather: 8

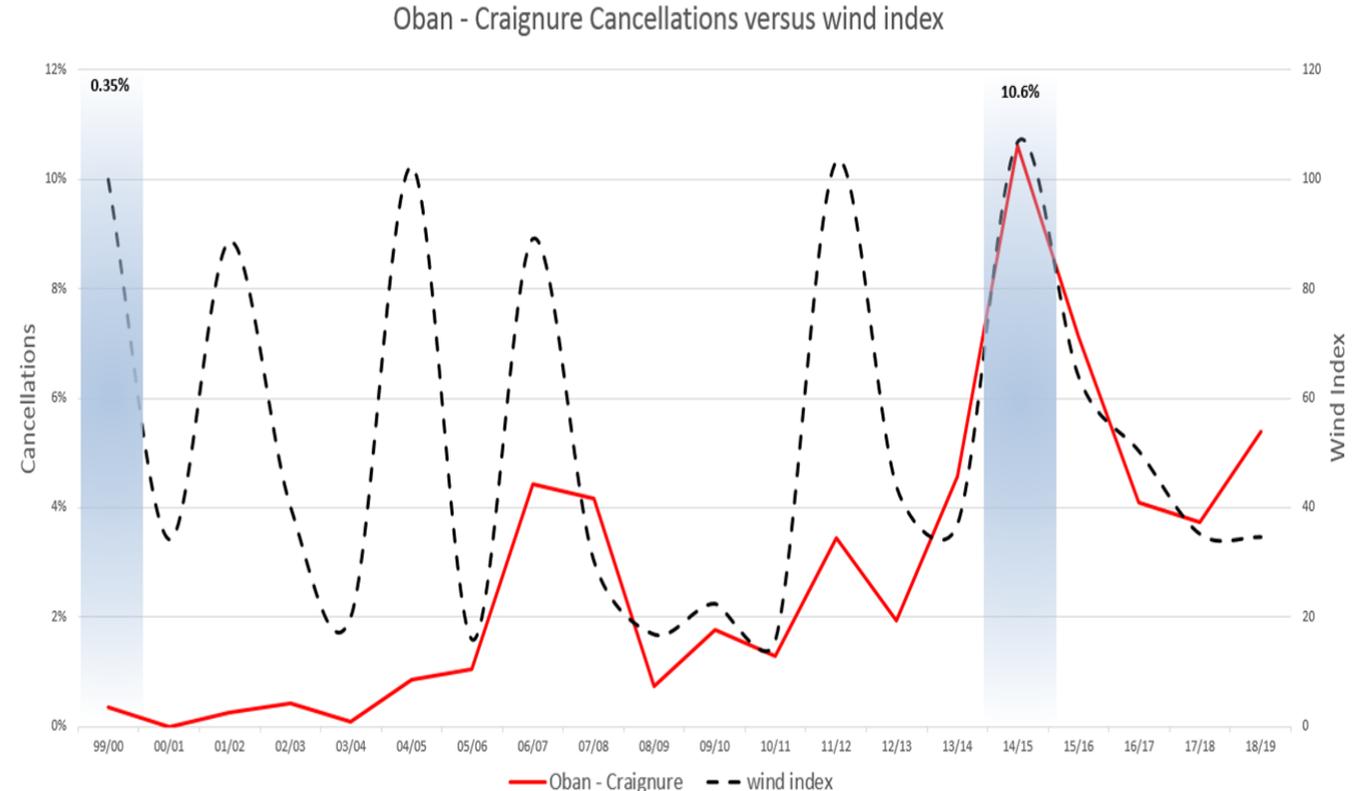
**Weather cancellation rate: 0.12%**



# How can we reverse the trend?

Winter ferry reliability is an increasing problem that is fundamental to quality of life in the Hebrides. Anecdotally, we are aware of individuals who have left Mull as a direct result of poor confidence in the ferry service. RET has been a great benefit to the islands, but the investment in lower fares is severely compromised by the practical problems poor reliability causes. It adds uncertainty to travel plans, as well as extra expense and time. On Mull we are lucky to have a reliable second service to the Mainland at Lochaline, but other islands suffering the same problem are not so lucky (and unless you're in a car it's of little help anyway). Winters since 2014/15 have been relatively benign, but cancellation rates remain stubbornly high. A stormy winter is likely to occur again soon. When it does, if this issue has not been addressed, the outcome is likely to be dramatic and severe.

We hope that CalMac will acknowledge the problem, and ask itself the necessary and difficult questions raised. Some of the causes may not be in their control – for example vessels and ports – but all causes, whether in CalMac's control or not, need to be identified and urgently remedied.



For any queries relating to this presentation, please contact Joe Reade of the Mull & Iona Ferry Committee. [joe@islandbakery.co.uk](mailto:joe@islandbakery.co.uk)