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A Public Meeting was organised by the Phillip Island Conservation Society Inc. (PICS) in Cowes on March 10th to discuss the proposal of a Car Ferry Service, with its Terminal on the Cowes Foreshore Beach.

A PICS Working Group was formed from the Meeting. Its task was to prepare a Submission in response to the Business Case for a Car Ferry Service between Stony Point and Cowes.

Attached please find the Working Group's Response to the Business Case.

Yours Sincerely

Anne Davie
PICS President

Submission re Draft Cowes to Stony Point Car Ferry Full Business Case

1 Introduction

Phillip Island Conservation Society [PICS] was formed in 1968 to lobby against a proposal that would have negatively impacted on Rhyll Inlet. Since then, it has continued to be a voice for the preservation and enhancement of Phillip Island's natural assets. This has occurred at the community level, with government agencies, at planning and environment hearings, and through participation in the development and implementation of the *Phillip Island and San Remo Visitor Economy Strategy 2035* (the Visitor Economy Strategy).

PICS acknowledges the Island's first people, the Bunurong and Boon Wurrung, part of the Kulin Nation, who visited Phillip Island for many thousands of years.

2 PICS position

PICS welcomes visitors to Phillip Island and supports the Visitor Economy Strategy's long-term vision of **sustainable growth**. The strategy recognises the interdependence of the community, the natural environment and the economy. The key to its delivery is acknowledging that **the economy is the environment of Phillip Island and that its natural assets must be protected**. One of the strategy's guiding principles is that Phillip Island's natural environment will not only be preserved, but enhanced, through sustainable development and management practices.

Within this context, PICS:

1. Considers that **a car ferry is not appropriate for Phillip Island**.
2. **Supports sustainable alternatives** to a car ferry:
   a. Marketing a Victorian coastal touring route using existing roads.
   b. Enhancing existing transport services and infrastructure.
   c. Supporting local tourism businesses to supply experiences and transport that enable visitors to enjoy the island without bringing their own vehicles.
3. Considers that **the economic, social and environmental assessments in the *draft Cowes to Stony Point Car Ferry Full Business Case* (the Draft Business Case) are flawed**. The benefits are questionable, and the costs and risks are understated.
4. **Opposes** the recommendation that planning approval be obtained by **ministerial intervention**.

3 PICS opposes a car ferry and supports sustainable alternatives

A car ferry is inappropriate anywhere on Phillip Island because the potential impacts on natural assets, including beaches, foreshore, the marine environment and wildlife are simply too great. PICS welcomes visitors and supports sustainable alternatives to a car ferry (see sections 3.1 to 3.3).

3.1 Marketing a Victorian coastal touring route using existing roads

Marketing a touring route using existing roads would **support local towns along the way**, including Tooradin, Grantville, Bass and San Remo. This route is **competitive in travel time and cost** (see sections 4 and 4.1) and offers visitors multiple attractions and spectacular rural and coastal views from the Bass Valley and Anderson Peninsula.

3.2 Enhancing existing transport services and infrastructure

PICS supports the enhancement of existing transport services and infrastructure, including the passenger ferry, other public transport services and the Cowes jetty.

PICS supports the development of an integrated approach to public transport within the Bass Coast Shire. Better coordination of public transport services across the shire would create economies of scale, widen the options for visitors who wish to visit without a vehicle, offer affordable alternatives for residents who need to travel for work and other purposes, and reduce traffic congestion.

The Visitor Economy Strategy contains an immediate priority action (action 5) to actively encourage the passenger ferry to run at an optimal level prior to building a case for a car ferry. Phillip Island residents and visitors would benefit from more frequent, direct passenger ferry services, since the current service does not enable residents to travel for a nine-to-five business day. The service is extremely underused, currently operating at nine percent of capacity, according to usage figures from the Draft Business Case (p. 54), so there is plenty of spare capacity during current operational hours to introduce a more functional timetable.

The Bass Coast Shire Council's advocacy strategy, *Representing the Community: Shaping Our Future*, describes the Cowes jetty as "a vital piece of infrastructure to the economy of Phillip Island and the broader region" and includes its replacement as a priority (p. 17). "The jetty has fallen into disrepair, and as a result reduced load limits were recently placed on the jetty by Parks Victoria, impacting on a number of the activities. The Jetty does not meet Disability Discrimination Act (1992) requirements and fails to adequately service boat tour/ferry operators and cruise ship tenders."

3.3 Supporting local tourism businesses to supply experiences and transport that enable visitors to enjoy the island without bringing their own vehicles

A high-level strategy of the Visitor Economy Strategy is to "build connectivity between accommodation and attractions so visitors can leave the car in the car park" (p. 20). This is supported by action 39: "Continue to support the concept of 'Island Explorer' summer season bus loop, with a shift to smaller more frequent buses (as well as exploring the potential of alternative transport options depending on the season) to create a sustainable island transport service in partnership with existing transport providers."

4 Economic flaw: car ferry viability is highly questionable

The proposed Cowes Stony Point car ferry is unique among car ferry services cited in the Draft Business Case and earlier *Cowes to Stony Point Vehicle Ferry Business Case Discussion Paper, November 2017* (the Discussion Paper, pp. 30-38) in that it offers very poor time savings for the fare. Further, the Draft Business Case demand model is underpinned by a survey of respondents who are unlikely to have been aware of these poor time savings. **These deficiencies raise questions about the potential patronage, viability and economic benefits of the proposed car ferry**.

4.1 An internationally uncompetitive product

The travel time savings set out in the Draft Business Case (p. 18) are misleading because they do not account for the proposed two-hourly service frequency. This departure interval (which is a consequence of the single-vessel operation) and geography compound to make it **significantly quicker to drive around Western Port most of the time during ferry operating hours** (see attachment 1, table 1). In contrast, for the Australian and international case study ferries, it is always quicker to wait for the next ferry, even if the previous boat has only just left (see attachment 1,

figure 1). **The Cowes Stony Point car ferry is the only service that will, on average, cost users both time and money** (see attachment 1, figure 2).

When travel time was raised during the community consultation period, EarthCheck acknowledged the lack of time savings and began to suggest that the Cowes Stony Point car ferry would attract patrons because it offered a maritime experience. This is **an extraordinarily fragile foundation for a business case**, particularly when there are superior maritime experiences, such as wildlife cruises, already available on Phillip Island.

4.2 Doubtful demand model

The Draft Business Case is underpinned by a demand model (p. 54) which estimates potential passenger numbers.

The demand model relies on a 2010 survey that "found that 81.8 percent of respondents would consider using the car ferry service at some point in the future". However, the Draft Business Case does not provide details of the advice that survey respondents were given regarding the Cowes Stony Point car ferry travel time and cost relative to driving. PICS questions whether respondents were able to provide informed answers and, therefore, the validity of the survey results.

The Draft Business Case also states: "To account for optimism bias, the potential market has been estimated on the basis of a conversion rate of 35 percent (of the original 81.8 percent) would use the ferry. This conversion rate is based on experience in previous projects." However, there are no similar projects among the car ferry case studies in terms of the lack of travel time benefit for cost (see attachment 1).

On this basis, the **demand model is not credible**.

5 Economic flaw: benefits are overstated

5.1 Building it doesn't mean they'll come

The Draft Business Case argues that the proposed car ferry will bring economic benefits by better linking Phillip Island into a touring route from the Great Ocean Road, which will increase overnight visitation and spending. This argument is flawed.

The Mornington Peninsula is already connected to the Great Ocean Road by car ferry, and this ferry saves considerable time (the drive through Melbourne) for the cost of the fare. Yet, despite this connection, the peninsula's average overnight visitor spend per trip is only 77.7 percent of that for the Great Ocean Road, according to figures from the Draft Business Case (p. 9).

Phillip Island lacks a car ferry connection to the Mornington Peninsula and Great Ocean Road, yet its average overnight visitor spend per trip is 95.3 percent of that for the Great Ocean Road (Draft Business Case, p. 9).

Clearly, overnight visitor spend is driven by factors other than car ferry connectivity. Building it does not necessarily mean they will come.

Adding to this, unlike the Queenscliff Sorrento car ferry, the proposed Cowes Stony Point car ferry will not offer useful time savings for the cost of the fare (see attachment 1, figure 2). It represents an **expensive and risky capital outlay for very marginal change relative to the base case**.

5.2 Nor does it mean they'll come in the off-peak season

The Draft Business Case claims that the proposed car ferry will disperse visitation across the off-peak season, but provides no evidence to support this.

The book *Seasonality of Tourism*, edited by Tom Baum (University of Strathclyde, Glasgow, UK) and Svend Lundtorp (Research Centre of Bornholm, Denmark), states that "natural" elements ((i.e. weather) and "institutionalised" elements (such as school and public holidays) are the main factors affecting peaks and troughs in tourism on a global scale. The proposed car ferry will not change these factors.

6 Economic flaw: overstated benefit cost ratio and operating outcome

The Draft Business Case economic and financial analysis understates costs and overstates the benefit cost ratio and operating outcome:

1. There is no allowance for jetty maintenance costs.
2. There is no allowance for contractors' fees that will only become known after a detailed design process (p. 71).
3. There is no allowance for vessel cost or depreciation. The Draft Business Case argues that this is because a private operator would be expected to supply the vessel. In this case, vessel depreciation should be included in the operating costs shown in Appendix F. However, the depreciation shown in Appendix F is not large enough to cover a vessel, so is assumed to cover other property. Either vessel cost should be included in capital costs or depreciation should be included in operating costs. It is misleading to omit both.
4. There is no allowance for the government subsidy necessary to cover the operating shortfall and provide the ferry operator with a reasonable return on capital (i.e. cost of the vessel). The Draft Business Case is unclear on the scale of this operating shortfall. Figure 26 (p. 60) says the ferry will run at an operating loss for nine years, while the adjacent text says three years. Which is correct?
5. There appears to be no allowance for downtime due to adverse conditions, maintenance needs or breakdown, which could significantly reduce the economic benefit and operating outcome of a single-vessel operation. EarthCheck has stated that the Draft Business Case allows for 10 percent of downtime due to weather or other operating issues (source: Mark Olsen, *Phillip Island and San Remo Advertiser*, 21 February 2018, p. 3). However, the total economic benefit and operating outcome calculations appear to be based only on projected passenger demand and ignore operational capacity to meet this demand (p. 57).
6. EarthCheck claims a 90 percent operating model (10 percent downtime) is adequate because weather conditions will allow sailing for 95 percent of the year (source: Mark Olsen, *Phillip Island and San Remo Advertiser*, 21 February 2018, p. 3). However, the Cowes Yacht Club, which has collected weather data at the site for 60 years, argues that the conditions will be too extreme for operation for 25 percent of the year (source: Commodore Daryl Hergt, *Phillip Island and San Remo Advertiser*, 28 February 2018, p. 2). This may make a significant difference to the detailed design, leading to an escalation of capital costs. It would also further increase the operating shortfall and government operating subsidy required.
7. There is no allowance for the removal of the pier and terminal assets at the end of their useful life, or if the ferry business proves unviable due to inaccurate demand modelling or becomes irrelevant as self-driving car technology matures.

8. There is no attempt to place an economic cost on the environmental impacts of the proposed car ferry (see section 9). As the Visitor Economy Strategy emphasises, Phillip Island's natural environment is its most valuable tourism asset (p. 11), so it is not acceptable to ignore environmental costs in the Draft Business Case.
9. In calculating the benefit to cost ratio, the Draft Business Case omits the public costs above, but includes private benefits (vehicle operating costs saved by ferry users), which overstates the ratio.

Attachment 2 recalculates the benefit cost ratio and operating costs, taking into account key points above. The analysis includes the capital cost of the ferry (since vessel depreciation is not included in operating costs), removes private vehicle cost savings, and accounts for downtime due to conditions, maintenance or breakdown. **The bottom line: the benefit cost ratio is too low** to justify the car ferry business case and **the ferry service is likely to run at a loss over 30 years**, requiring a government subsidy to ensure continued operation.

7 Social flaw: community and emergency benefits are overstated

The community and emergency access benefits outlined in the Draft Business Case are not credible.

7.1 Flawed "benefit 2: a more inclusive and productive community"

A car ferry will not open access to additional employment, recreational and other opportunities for residents. The proposed car ferry would be prohibitive to use for a regular commute, especially for the socially disadvantaged. To illustrate, the cost of a return trip from Cowes to Frankston via the car ferry and alternative modes of travel is compared below, based on distances from Google Maps and estimated vehicle costs of $0.276 per kilometre (from *Principles and Guidelines for Economic Appraisal of Transport Investment*, March 2016, Transport for NSW):

1. Via the proposed car ferry, $137.88 ($120 for the ferry fare plus $17.88 for the drive between Stony Point and Frankston; parking at Frankston would cost extra)
2. Via road, $56.30 (parking at Frankston would cost extra)
3. Via passenger ferry and train, $31.88 ($26 for the ferry fare and $5.88 for the train fare)

7.2 Flawed "benefit 3: a safer community"

A car ferry will not enhance safety on Phillip Island because it is so limited in the number of vehicles that it can move per hour, and it can only move them from one point. It will never be a credible substitute for appropriate road planning and maintenance or aerial evacuation of critically ill or injured patients.

The Draft Business Case states that the Emergency Management Commissioner Craig Lapsley sees the car ferry link as a critical alternative form of access during emergencies (p. 12). This is overstating the truth. It has since been revealed that the Emergency Management Commissioner merely provided "in principle support for the development of a business case" for the ferry to allow the emergency management "benefits or otherwise of the proposal to be explored" in a letter dated 20 December 2017. In a letter dated 8 March 2018, he stated that he was awaiting further information on the proposal. Source: letters from Emergency Management Commissioner Craig Lapsley published at http://watchpi.org/static/files/emergency-management-commissioner.pdf.

8 Social flaw: social impacts are understated

The Draft Business Case states that the proposed car ferry will have no significant social impacts on recreational facilities or community amenity (p. 49). To the contrary, the removal of indigenous foreshore vegetation and construction of a car ferry terminal and jetty is an inappropriate industrialisation of an important north-facing beach 300 metres from the centre of Cowes. This is an important beach for safe swimming and sailing, and the only place on the island offering sailing training. The surrounding area is a residential zone.

The Draft Business Case contradicts its own social impact assessment when it states that Mussel Rocks, only 100 metres east, was rejected as a potential car ferry site due to difficult topography and social and economic importance (p. 41): "The topography of Mussel Rocks, with a 5-6 metre drop from road level to sea level, means that development of the facility at this site is challenging and costly. Additionally, the high level of community use, close to town, was seen as having too great an impact on social and tourist amenity."

This same challenge exists at the currently proposed site, where a steep, narrow, well vegetated dune will be required to house pier and terminal infrastructure, including bus parking. This is likely to require a large retaining wall and a pier metres above the beach.

9 Environmental flaw: desktop analysis understates the risks

The Draft Business Case assessment of environmental impacts is inadequate, simply listing the approval processes that are likely to be required, and concluding that the environmental impact is minimal and there is no reason why these approvals would not be granted (p. 51). It states that an environmental effects statement (EES) referral is unlikely to be required (p. 49).

This simplistic desktop analysis understates potential environmental impacts and risks, including:

1. Erosion and sand movement that may occur when a new marine structure is constructed, potentially leading to coastal damage and a requirement for maintenance dredging.
2. Impacts on water quality and increased turbidity, leading to adverse impacts on seagrass.
3. Impacts on marine life, including endangered Southern Right Whales, which are protected under federal environment laws.
4. Impacts on the threatened Hooded Plover at the proposed terminal site. This beach-nesting species is noted as occurring at the Anderson boat ramp site (p. 50), but local monitoring has shown that it sometimes establishes nests on new beaches.
5. Implications of climate change, such as sea level rise and extreme weather events, particularly since the terminal site is affected by a Land Subject to Inundation Overlay.

As discussed earlier, the Draft Business Case assumes that the car ferry will be unable to operate due to weather conditions for 10 percent of the year, while the Cowes Yacht Club estimates that the conditions will be too extreme for car ferry operation for 25 percent of the year. Such conditions may require a different design, such as a breakwater, which would have unanticipated environmental impacts.

It should be noted that the Visitor Economy Strategy emphasises that the highest environmental standards should be applied to any car ferry development (p. 35), and states that an EES should be undertaken at any site identified for this purpose (action 46).

Regardless of regulatory requirements or triggers, a full environmental assessment must be undertaken to the highest standards.

10 Investment logic mapping and response definition process flawed

The investment logic mapping and response definition process that forms the rationale for developing the Draft Business Case appears to have been done quickly over only one day on 31 August 2017, without current information about the capital costs, travel time or fare cost of a Cowes Stony Point car ferry (p. 8, pp. 27-31). For example, capital costs at the time were estimated to be $40-60 million (p. 30), while they are now estimated at over $80 million, excluding the cost of the vessel. The process concluded that it was a better use of public funds to implement a car ferry than to enhance marketing of a touring route using existing roads, improve public transport options or locate a range of services in the local area (pp. 27-31). If this process were to be repeated, as it should, with current information about increased capital costs and poor time savings relative to the fare, very different conclusions might be drawn about the best use of public funds in this region.

11 Ministerial intervention

The Draft Business Case recommends ministerial intervention for the purposes of obtaining planning approvals for the proposed car ferry. **It cites overcoming a lack of local planning authority support as a key benefit** (Appendix C, p. C-3). PICS opposes this recommendation.

12 Conclusion

In conclusion, a car ferry is inappropriate for Phillip Island. The economic, social and environmental assessments in the Draft Business Case are seriously flawed. The proposed car ferry is unlikely to be viable or offer significant benefits, and the potential environmental impacts are unacceptable. The proposed car ferry amounts to an expensive and risky use of public funds—funds that could be better spent on alternatives that embody the Visitor Economy Strategy vision of sustainable growth, genuinely tackle social disadvantage, and preserve our most valuable tourism asset, our natural environment. **PICS urges Bass Coast Shire Councillors to reject any final Cowes to Stony Point Car Ferry Business Case that recommends the development of a car ferry on Phillip Island.**

Attachment 1: Cowes Stony Point car ferry travel time analysis

The proposed Cowes Stony Point car ferry is unique among car ferry services cited in the Draft Business Case and Discussion Paper (pp. 30-38) in that it offers users very poor time savings for the fare.

The travel time savings set out in the Draft Business Case (p. 18) are misleading because they do not account for the two-hourly service frequency. The proposed two-hourly departure interval (which is a consequence of the single-vessel operation) and geography compound to make it significantly quicker to drive around Western Port most of the time during ferry operating hours (see table 1).

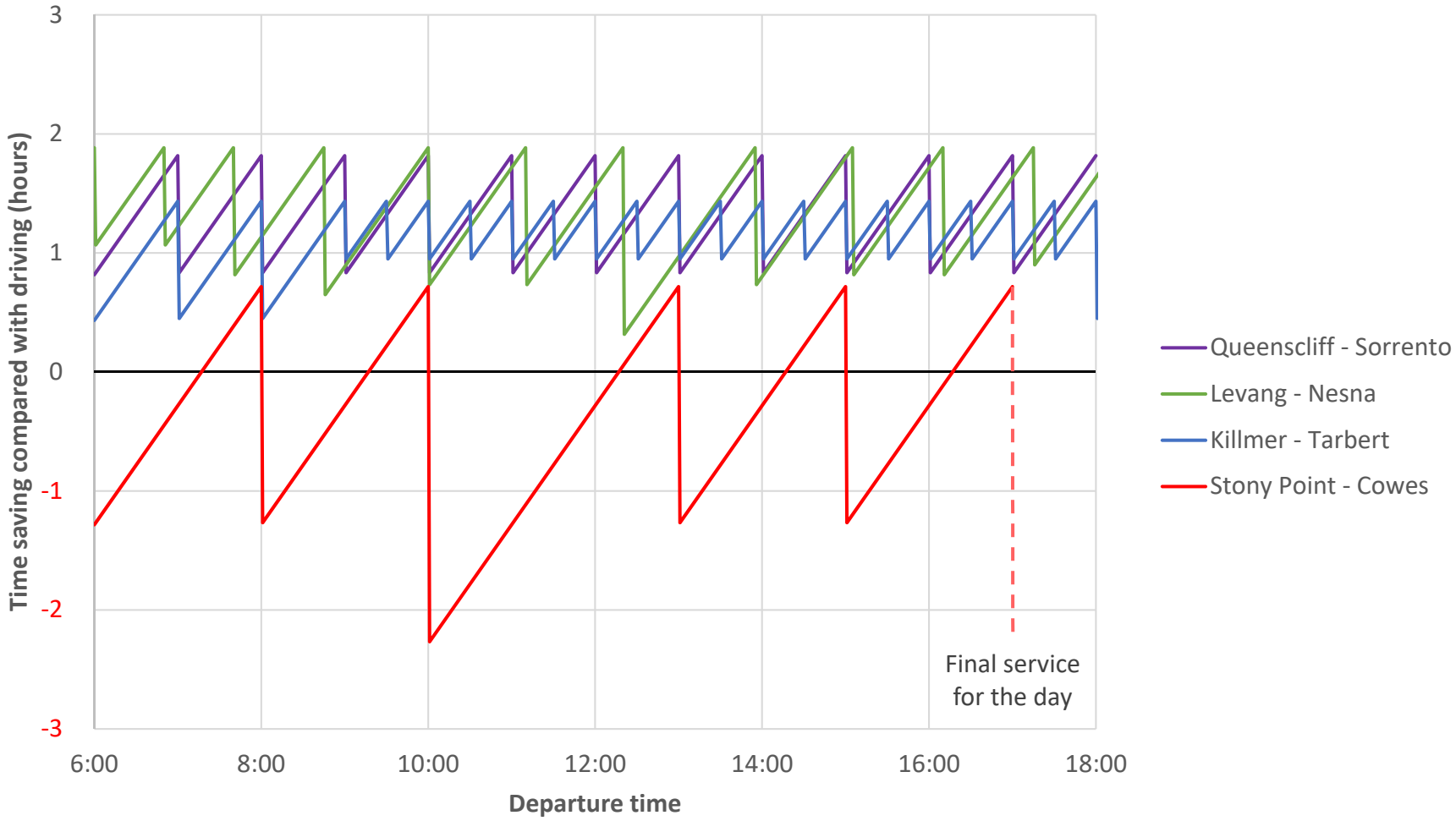
Table 1: Cowes Stony Point car ferry travel times based on proposed two-hourly service frequency

	Travel times (minutes)		Time saving (minutes)			**% of departure times the car ferry arrives at destination later than driving[3]**
Route	Road	Car ferry	Best case[1]	**Average**	Worst case[2]	
Frankston - Cowes	80	77	3	**-64**	-132	**98%**
Hastings - Cowes	79	59	20	**-47**	-115	**85%**
Rosebud - Cowes	95	76	19	**-48**	-116	**86%**
Sorrento - Cowes	114	95	19	**-48**	-116	**86%**

1. Best case is arriving at the ferry terminal at the exact moment before the ferry boom gate goes down
2. Worst case is arriving at the ferry terminal at the exact moment after the ferry boom gate goes down
3. During ferry operating hours, with departure times as per the Discussion Paper

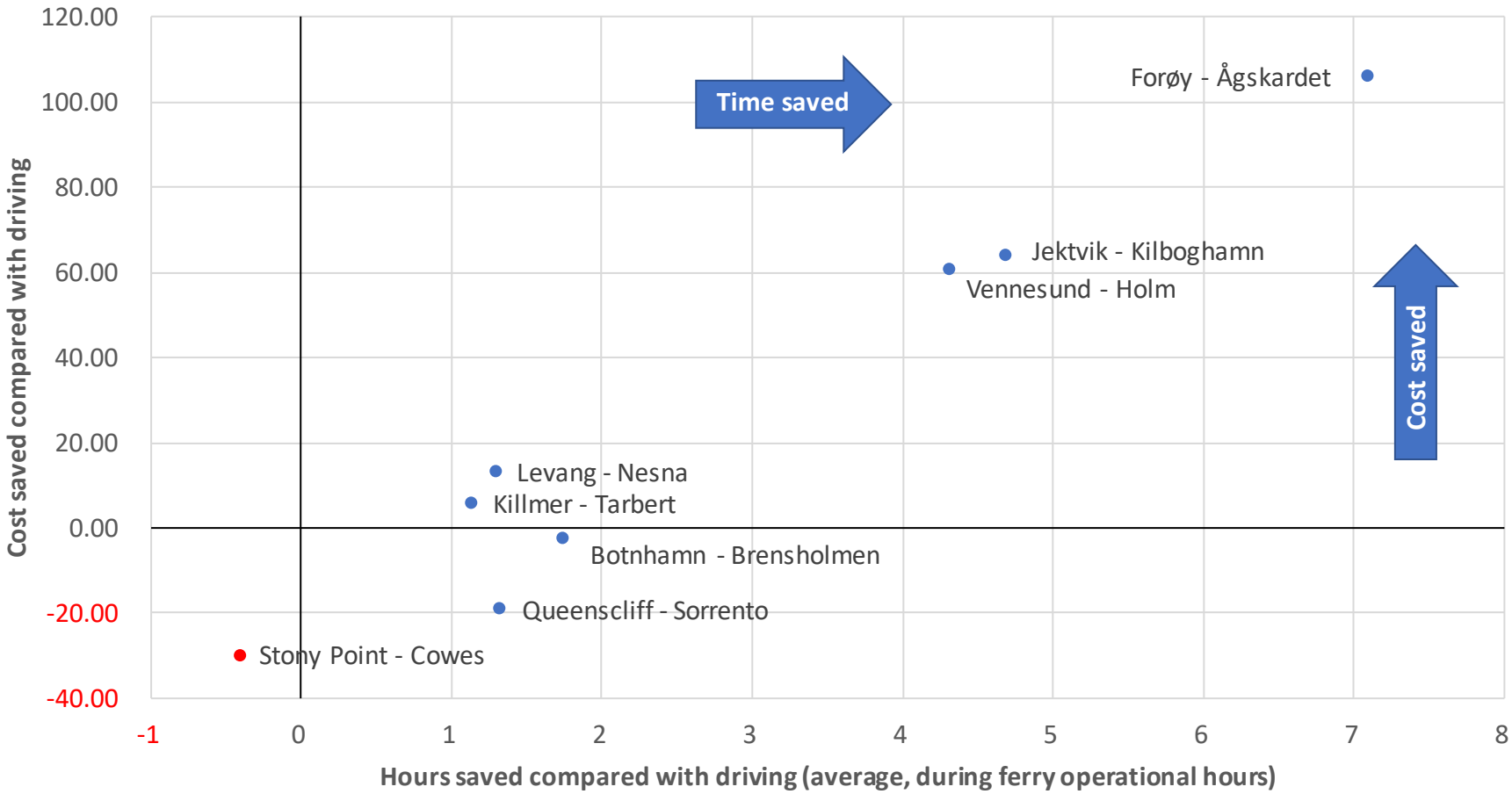
In contrast, for the Australian and international case study ferries, it is always quicker to wait for the next ferry, even if the previous boat has only just left (see figure 1). The Cowes Stony Point car ferry is the only service that will, on average, cost users both time and money (see figure 2).

Figure 1: Travel time savings relative to driving for Cowes Stony Point and case study car ferries



Of the 14 case study car ferries, seven have no alternative land route (i.e. no bridge), and four have average alternative driving times of four to six hours. The remaining three with shorter land routes are compared with the Cowes Stony Point car ferry above.

Figure 2: Cost saved and average travel time saved compared with driving for Cowes Stony Point and case study car ferries



Cost saved (vehicle operating costs saved less ferry fare) and average travel time saved by users of the proposed Cowes Stony Point car ferry compared with the seven case study ferries with alternative land routes. For explanatory calculations and notes, see table 2.

Table 2: Explanatory calculations and notes for figures 1 and 2

	Forøy - Ågskardet	**Jektvik - Kilboghamn**	**Vennesund - Holm**	**Botnhamn - Brensholmen**	**Queenscliff - Sorrento**	**Levang - Nesna**	**Killmer - Tarbert**	**Stony Point - Cowes**
No of services (per day)	18	5	15	6	12	14	24	5
First service	5:40	6:25	6:00	8:00	7:00	6:00	7:00	8:00
Last service	0:20	20:20	22:15	20:00	18:00	21:20	21:00	17:00
Average departure interval (min)	66	209	70	144	60	71	37	135
Average wait time (min)	33	104	35	72	30	35	18	68
Ferry travel time (min)	30	64	20	35	60	30	20	45
Alternative driving time (min)	488	449	313	211	169	143	106	88
Average time saving (hours)	**7.1**	**4.7**	**4.3**	**1.7**	**1.3**	**1.3**	**1.1**	**-0.4**
Fare (car + 2 pax)	29.58	67.49	37.40	61.88	77.00	31.45	30.59	60.00
Alternative driving distance (km)	492	476	356	215	210	162	132	110
Alternative driving cost	135.79	131.38	98.26	59.34	57.96	44.71	36.43	30.36
Cost saving	**106.21**	**63.89**	**60.86**	**-2.54**	**-19.04**	**13.26**	**5.84**	**-29.64**

1. Schedule information and fares from ferry operator web sites
2. Alterative driving distances and times from Google Maps
3. Driving cost based on $0.276 per km from Principles and Guidelines for Economic Appraisal of Transport Investment, March 2016 (Transport for NSW)

Attachment 2: Cowes Stony Point car ferry economic analysis

The economic analysis below recalculates the benefit cost ratio and operating costs, taking into account key points raised earlier (section 6). For the purposes of illustration, the Draft Business Case demand and economic benefit projections have been taken at face value, although as discussed, PICS considers them to be unreasonably optimistic.

The analysis:

1. Includes the capital cost of the ferry, which is estimated at $35 million based on an estimate from the Visitor Economy Strategy (p. 34).
2. Removes private vehicle cost savings.
3. Accounts for 10 and 25 percent downtime due to conditions, maintenance or breakdown.

The bottom line: the benefit cost ratio is too low to justify the car ferry business case and **the ferry service is likely to run at a loss over 30 years**, requiring a government subsidy to ensure continued operation.

Table 1: Cost benefit assessment

Cost benefit assessment	**Draft Business Case**	**90% uptime**	**75% uptime**
NPV economic benefits	$93.3m	$84.0m	$70.0m
NPV vehicle cost savings	$12.3m		
Total NPV benefits	$105.6m	$84.0m	$70.0m
NPV infrastructure costs	$63.4m	$63.4m	$63.4m
Cost of ferry		$35.0m	$35.0m
Total NPV costs	$63.4m	$98.4m	$98.4m
Net benefits	$42.3m	-$14.4m	-$28.4m
Benefit cost ratio*	**1.67**	**0.85**	**0.71**

** Treasury guidelines specify a ratio above 1.2 is required. Source: Phillip Island and San Remo Advertiser, 21 February 2018, p. 1.*

Table 2: 30-year operating outcome

30-year financial outcomes for the private ferry operator	**Draft Business Case**	**90% uptime**	**75 % uptime**
NPV revenues	$59.5m	$53.6m	$44.6m
NPV costs	$45.5m	$45.5m	$45.5m
NPV financial outcome	**$14.0m**	**$8.1m**	**-$0.9m**