Floating bridge history and context

Timeline of the floating bridge (1720 to 1901)

1720 The **Robertson family** begins operating a **rowing boat** service across the River Medina between Cowes and East Cowes.

1842 A **pontoon ferry** powered by horse-drawn winch begins transporting carriages and animals across the river.

1859 The **Floating Bridge Company** is formed and purchases the ferry rights. In November 1859, the first steamboat begins service. It was built on the River Itchen.

1868 The ferry is acquired by the **Southampton and Isle of Wight Steam Packet Company** (now trading as **Red Funnel**).

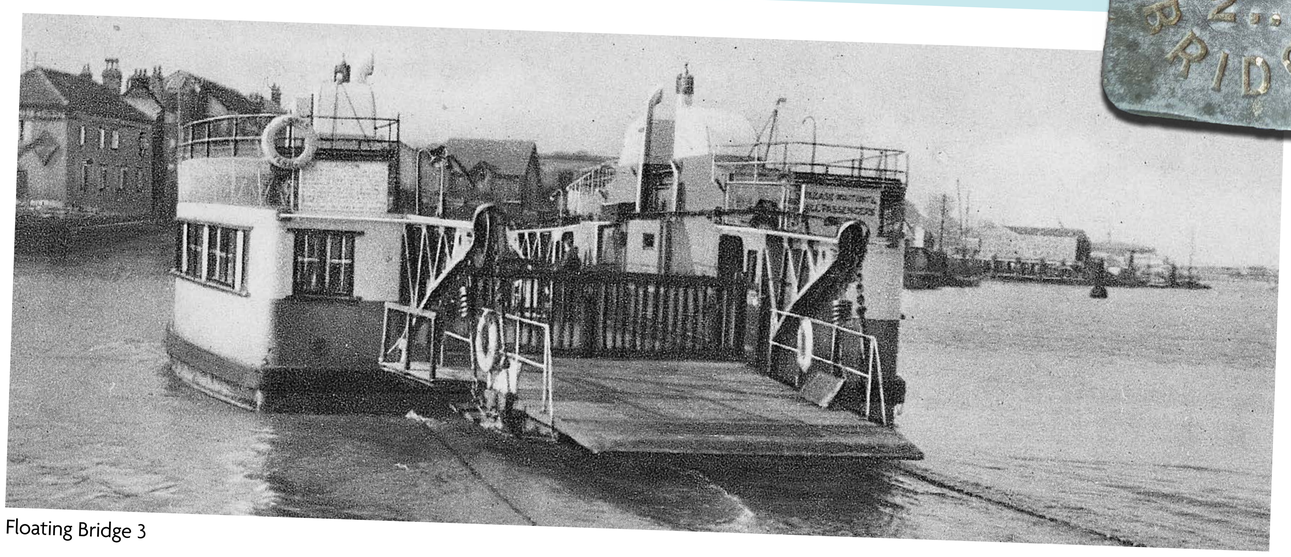
1882 A new ferry is introduced by the company, operating regularly until 1896, then kept as a spare vessel.

1896 The company commissions the **third floating bridge**, an iron vessel built by **Messrs William White and Co**.
With two ferries now available, continuous service is possible, even during maintenance periods.

1901 Operation of the service is taken over by the **Isle of Wight Council** (or its predecessor authorities), who continue to run it to this day.


Floating Bridge 1


Floating Bridge 2


Floating Bridge 3

Did you know?

The earliest literary reference to a ferry crossing was in Uffa Fox' s book 'Joys of Life'. He recalled an old tale that the Governor of the Island had bet that he could ride around the Island while on horseback without dismounting.
He was assisted in his wager by Mr John Robertson of West Cowes who lashed together two boats stern to stern. The Governor's horse was persuaded to put its forefeet in one of the boats and his hind legs in the other. The boats were then rowed across the river with the rider still in the saddle. Mr Robertson was rewarded with the first known ferry rights.

Source: Making of the Wight by John Medland

The floating bridge in more modern times

Floating Bridge 1 (the winter bridge), used as a home and workshop by Uffa Fox

Did you know?

It is recorded that Queen Victoria, having been kept waiting, requested the local councils to acquire the rights to the ferry. This was confirmed by a 1901 Act of Parliament. In 1901, foot passengers were charged 1/2d during the day and 1d after 9pm. A weekly ticket cost 6d (two and a half new pence) – the same as a fare for a motor car or horse-drawn trap. That year the two chain steam bridges transported 1,674,355 passengers and 23,702 vehicles.

Source: John Medland and TC Hudson

Floating Bridge 5

Timeline of the floating bridge (1901 to 2017)

1901 The service is taken over by **West and East Cowes district councils**.

1909 A new steel ferry is built by **J. Samuel White** and introduced as **Floating Bridge 1** (ignoring the three earlier vessels in naming).

- Featured powered ramps and electric lighting.
- The 1896 iron bridge becomes known as '**The Winter Bridge**', used only two weeks a year.

1925 **The Winter Bridge** is retired and becomes a home and workshop for eccentric marine architect **Uffa Fox**.
Floating Bridge 2, also built by **J. Samuel White**, enters service.

- Over 100 feet long and could carry up to eight cars.
- Last steam-powered ferry.

1935 **Floating Bridge 3** is launched, built again by **J. Samuel White**.

- First diesel-electric powered ferry.
- First to have all machinery located below deck, creating more space for passengers.

1952 **Floating Bridge 4**, built by **J. Bolson of Poole**, enters service.

- Capacity for 12 cars.
- By 1974, carried 366,228 vehicles annually.

1972 Creation of the **Isle of Wight County Council**.
Responsibility for the floating bridge transferred from **Cowes and East Cowes urban district councils**.

1976 **Floating Bridge 5** enters service, built by **Fairey Marine** in East Cowes.

- 110 feet long, 65 tonnes, diesel-electric powered.
- Carried 15 vehicles per crossing in 1975, reducing to 12 vehicles per crossing due to modern safety improvements and the increasing the size of vehicles.

1982 **Floating Bridge 4** is withdrawn.
Floating Bridge 5 becomes the sole vessel in operation.

2010s Increased wear and tear on **Floating Bridge 5** requires extensive annual maintenance to meet Marine and Coastguard Agency inspection standards.
This means more service disruptions and maintenance costs rise significantly.

2017 **Floating Bridge 6** introduced.

Floating Bridge 6

Floating Bridge 6 entered service in May 2017, replacing Floating Bridge 5 after nearly 40 years of use. The new vessel was introduced to increase capacity and meet modern operational standards.

A more powerful vessel

Floating Bridge 6 is larger and heavier than its predecessor:

- **Length**: 29.7 metres (FB6) versus. 26.6 metres (FB5).
- **Weight**: 262 tonnes (FB6) versus. 234 tonnes (FB5).

It can carry more vehicles per crossing:

- 20 vehicles (FB6) vs. 15 vehicles – reduced to 12 by 2016 due to increases in the size of vehicles (FB5).

Early challenges and major improvements

While the new bridge offered greater capacity, it initially faced mechanical and electrical issues affecting reliability.

Since then, the council and operational team have made significant improvements:

- All 24 guidewheels replaced with durable steel units.
- Complete hydraulics overhaul, including prow modification and oil filtration system.
- New IT and electrical systems installed for improved performance.

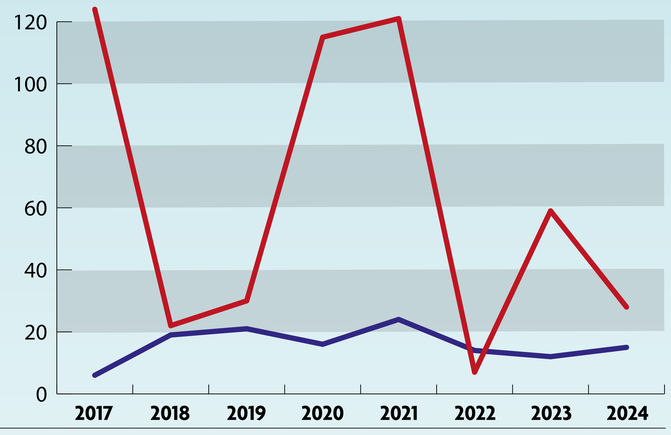
Reliable, resilient and busy!

Thanks to these upgrades, **Floating Bridge 6** is now much more reliable than the early version introduced in 2017.

- Vehicle and foot passenger numbers are now at their highest levels since before the COVID-19 pandemic.
- Fewer crossings are being lost due to technical issues.
- Revenue has steadily increased year-on-year since 2020.

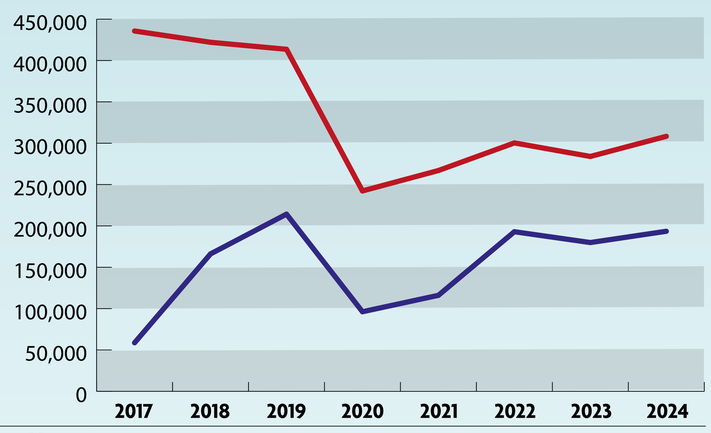
Floating Bridge 6 is now delivering a stronger, more resilient service – helping to connect Cowes and East Cowes every day.

Service reliability, 2017 to 2024



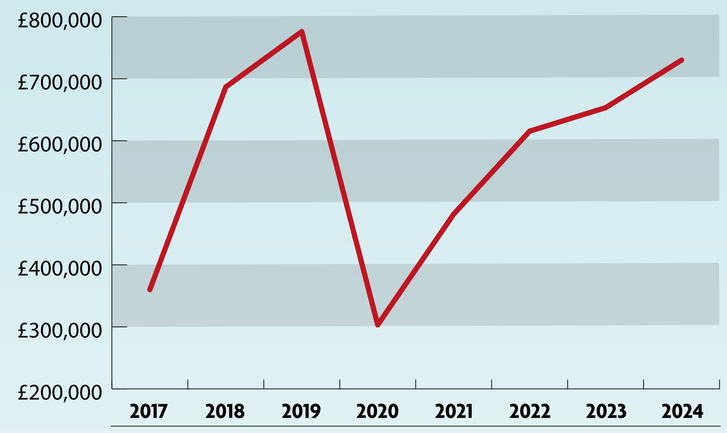
	2017	2018	2019	2020	2021	2022	2023	2024
Full days equivalent out of service	124	22	30	115	121	7	59	28
Percentage of scheduled days of operation out of service	47.23%	6.03%	8.22%	31.42%	32.88%	1.92%	16.16%	7.65%
Number of service suspensions	6	19	21	16	24	14	12	15

Foot passenger and vehicle usage, 2017 to 2024



	2017	2018	2019	2020	2021	2022	2023	2024
Number of foot passengers	435,664	422,026	413,562	242,310	266,973	300,989	283,989	308,442
Number of vehicles	58,702	166,660	214,240	96,245	116,088	197,973	179,903	193,522

Income, 2017 to 2024



2017	2018	2019	2020	2021	2022	2023	2024
£359,954	£686,726	£775,967	£303,198	£481,713	615,481	£653,349	£730,017

Floating bridge statistics, January to June 2025

	January	February	March	April	May	June
Number of foot passengers	18,459	19,090	25,290	29,654	36,899	36,279
Number of vehicles	12,349	14,313	12,189	17,308	24,858	27,746
Hours scheduled	596.5	540	422.5	540	598.5	581.5
Hours operated	502	540	442.5	540	598.5	581.5
Percentage of hours operated	84.2%	100%	100%	100%	100%	100%
Number of days operating a full service	24	28	23	28	31	30
Hours of planned maintenance	0	0	192	48	0	0

Floating Bridge 6

A changing operational environment

Over time, new regulations and natural conditions have impacted how the floating bridge operates. These changes have affected Floating Bridge 6, and many were starting to impact Floating Bridge 5 in her later years too. They would also affect any future floating bridge.

Floating Bridge 6

Why does the crossing take longer?

Due to new safety rules and environmental factors, each crossing can now take around 5½ minutes longer than 12 years ago. Here's why:

Pedestrian safety first

- Passengers must now board and disembark before vehicles, following an instruction from the Maritime and Coastguard Agency.
- This separation increases turnaround time.
- **Floating Bridge 6** makes fewer crossings per hour (3.15) than FB5 (3.91), but thanks to its size, it still moves more vehicles per hour (126 vs. 94)

General harbour rules

Under Cowes Harbour General Directions (2014):

- Though the floating bridge has right of way over most other vessels, other river traffic may still request unimpeded passage. The floating bridge must allow these requests and this can cause delays.
- A 10-second warning beacon must be displayed before every crossing – a vital safety measure in place since 2013.

More scrutiny, more expectations

Public awareness of how the bridge works is higher than ever. The delays outlined above may seem unnecessary to some, but they're essential to ensure safety and compliance.

Another important factor – chain clearance and tidal flow

- To protect boats in the river, Cowes Harbour Commission requires 1.5m clearance between the bridge's chains and the water level.
- At times of strong tidal flow, this clearance can't be maintained – especially two hours before low tide, when the ebb tide is at its strongest.
- A 'push boat' is used to counter the tide and ensure safe operation.

Note: Tidal strength may be increasing, possibly due to silting or other natural changes – a challenge any new bridge would also face.

Planning for the future

All of these challenges – tides, traffic, and safety rules – are ongoing considerations. **Any new floating bridge will need to be designed with these factors in mind.**

Floating Bridge 6 with push-boat

The future

In March 2024, the Isle of Wight Council's Cabinet made an important decision about the future of the Cowes floating bridge.

The decision was made to replace the current floating bridge and create a new Medina Crossing Strategy

The council agreed to build on all the work and research done in recent years to ensure the project was comprehensive and moves forward quickly and efficiently.

Exploring the options

Before commissioning a new bridge, the council must ensure:

- the process follows HM Treasury guidance and procurement rules;
- the best value option is chosen;
- a strong, up-to-date business case is in place – especially if future funding is required for things like infrastructure changes.

This means all viable options for a new crossing will be carefully assessed against the current operations for floating bridge 6.

We want to hear from you

Your views matter. As part of this process, the Council is inviting public feedback to help shape the future of the crossing.

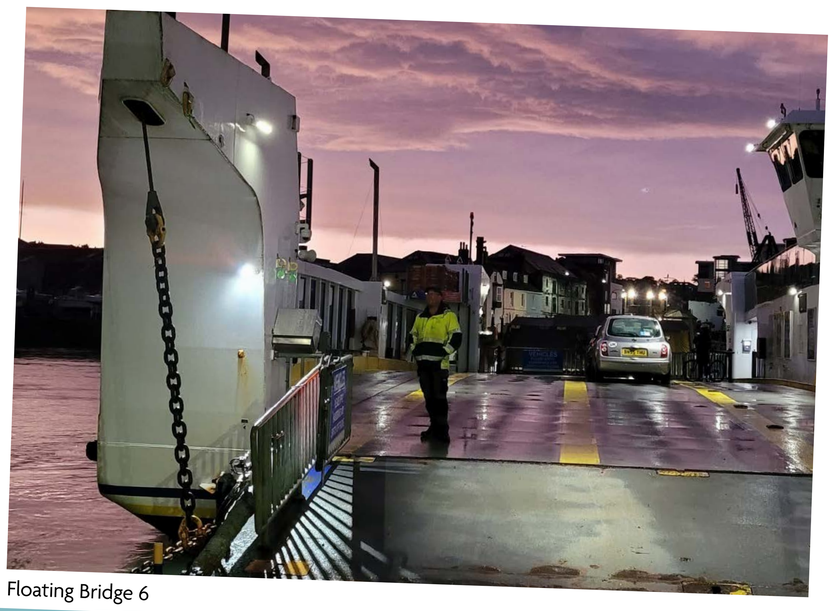
What's important to you?

Have your say – help us decide the best way forward.

The options

The Isle of Wight Council has been working with experts to look at a range of options for the future of the Cowes to East Cowes crossing.
These include:

- **replacing the existing floating bridge;**
- **making changes to the current vessel or its operational infrastructure and environment;**
- **more ambitious ideas like building a tunnel or transporter bridge; or**
- **even removing the crossing entirely.**



Floating Bridge 6

How we've assessed the options

Each option has been assessed by a team of marine, transport, and legal experts based on five criteria – strategic, economic, financial, commercial and managerial – to achieve the following objectives:

1. **Connectivity – Maintaining direct access between Cowes and East Cowes for vehicles and pedestrians.**
2. **Reliability – Ensuring consistent, dependable service.**
3. **Cost-effectiveness – Reducing ongoing operational costs.**
4. **Congestion – Minimising traffic problems in town centres and on routes to Newport.**
5. **Affordability – Ensuring affordable fares for all users.**
6. **Support development – Enabling future housing and business development.**
7. **Sustainability – Enhnace environmental sustainability, through shortening vehicle journeys, providing a pedestrian crossing, operational energy requirements and carbon emissions.**

They also considered findings from previous reviews of the floating bridge, both before and after the current vessel entered service.

What did we find?

After assessing all ideas, a number of options have been shortlisted for further development.
These were all assessed against the 'do minimum' option of maintaining and operating the existing floating bridge with continued use of the push boat.

Option 1 – Replacement vessel

- High confidence option would address existing challenges including chain clearance issue. This assumes modification in design, e.g. additional thrusters and changes to vessel profile to reduce drag forces.
- Affordable cost (£5m to £10m).
- Shorter implementation timescales (two to five years).
- Minimal disruption to floating bridge operation and no land take required.

Shortlisted core option

Option 2, 3a and 4 – Phased package option

Option 2 – Adding flush thrusters to existing vessel (FB6)
Option 3a – Adding additional control chains or more mechanical processes
Option 4 – Tidal flow reduction

- Affordable cost (£1m to £5m).
- Shorter implementation timescales (one to two years).
- High confidence combination of additional control chians, tidal flow reduction, and flush thrusters would be effective at resolving chain clearance issue.
- Minimal disruption to floating bridge operation and no land take required.

Phased package option

Option 3b – Installation of lead-in piles or dolphins

- Vessel deflection unlikely to be resolved through installation of lead-in piles therefore would not be sufficient to fully address the chain clearance issue.
- Option could be considered in combination with one of the core shortlisted options.

Not shortlisted

Option 5a – Replacement of FB6 with a non-guided vehicle ferry

- Unaffordable cost (£10m to £20m).
- Longer implementation timescales (five to 10 years).
- May have many of the same issues as a new chain ferry (option 1) despite additional cost.

Not shortlisted

Option 5b – Replacement of FB6 with a pedestrian and cycle only ferry (no vehicle provision)

- Unaffordable cost (over £20m).
- Longer implementation timescales (over 10 years).
- Statutory instrument would be required to authorise the interference with the public right of navigation.
- Land take and compulsory purchase may be required.
- May create additional local congestion.

Not shortlisted

Option 6c – Swinging floating bridge

- Unaffordable cost (over £20m).
- Longer implementation timescales (more than 10 years).
- Statutory instrument would be required to authorise the interference with the public right of navigation.
- Land take and compulsory purchase may be required.
- May create additional local congestion.

Not shortlisted

Option 6d – Transporter bridge

- Unaffordable cost (over £20m)
- Longer implementation timescales (more than 10 years).
- Statutory instrument would be required to authorise the interference with the public right of navigation.
- Land take and compulsory purchase may be required.
- May create additional local congestion.

Not shortlisted

Option 7 – No crossing

- Loss of connectivity between Cowes and East Cowes
- Limit local economic growth and future development
- Additional highway congestion through Cowes and Newport
- Legal consideration of reasonableness of removing crossing provision

Not shortlisted

Have your say

The Isle of Wight Council wants to hear from you – have your say on the future of the floating bridge.

Your views will help shape the next steps for the floating bridge and ensure the solution reflects the needs of local people, businesses and visitors.

Take part in the survey

You can share your thoughts by completing a short online survey:
Visit
www.iow.gov.uk/floatingbridgeconsultation
or scan the QR code.

Prefer paper? Paper copies of the survey are available on request, please email **procurement@iow.gov.uk** – please put '**floating bridge consultation**' in the subject line so we can direct your email.

Deadline: Midnight on the 22 August 2025.

What happens next?

This consultation will close at midnight on the 22 August 2025. Make sure to share your views before this date so your feedback can be included.

What we will do with your feedback

All comments and survey responses will be carefully recorded and analysed

The findings will be presented in a formal report to the Isle of Wight Council's economy, regeneration, transport and infrastructure committee in October 2025

Thank you for your interest in the future of the Cowes Floating Bridge.