



Report to the Secretary of State for Transport

by Nick Palmer BA (Hons) BPI MRTPI

an Inspector appointed by the Secretary of State for Transport

Date: 28 August 2019

TAMAR BRIDGE ACTS 1957, 1979 & 1998

TRANSPORT CHARGES &c (MISCELLANEOUS PROVISIONS) ACT 1954

PROPOSED REVISION OF TOLLS

TAMAR BRIDGE & TORPOINT FERRY

Inquiry Held on 6 August 2019

Site Inspection 6 August 2019

File Ref: DPI/J1155/19/13

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CASE DETAILS

- The application is made by the Tamar Bridge and Torpoint Ferry Joint Committee, under Section 6 of the Transport Charges &c. (Miscellaneous Provisions) Act 1954 (as amended) and the Tamar Bridge Acts 1957, 1979 and 1998.
- The effect of the application if approved would be to increase toll charges for use of the Tamar Bridge and the Torpoint Ferry by one third.

Summary of Recommendation: I recommend that the Order should be made in accordance with the application.

PREAMBLE

1. On 28 March 2019 Cornwall Council and Plymouth City Council (the Joint Authorities) applied to the Secretary of State for Transport for a revision in toll charges for use of the Tamar Bridge and the Torpoint Ferry. The application is made under the provisions of the Transport Charges &c. (Miscellaneous Provisions) Act 1954 (the 1954 Act) under powers derived from the Tamar Bridge Acts 1957 to 1998.
 2. I held a public local inquiry into the application at The Guildhall, Plymouth on 6 August 2019. The statutory formalities under the 1954 Act have been observed. Some 147 written objections to the application have been received by the Joint Authorities, all of which remain outstanding. Interested parties who attended the Inquiry were given an opportunity to ask questions of the applicant's witnesses, but no statements either in support or in opposition to the application were presented. After the inquiry closed, I visited the Tamar Bridge and Torpoint Ferry and the adjoining areas, including Saltash and Torpoint.
 3. In this report I set out summaries of the cases for and against the application together with my conclusions and recommendation.
 4. Section 6(3) of the 1954 Act states that in reaching a decision on the application, the decision-maker shall have regard to:
...the financial position and future prospects of the undertaking and shall not make any revision of charges which in his opinion would be likely to result in the undertaking receiving an annual revenue either substantially less or substantially more than adequate to meet such expenditure on the working, management and maintenance of the undertaking and such other costs, charges and expenses of the undertaking as are properly chargeable to revenue, including reasonable contributions to any reserve, contingency or other fund...
 5. Section 43(2) of the Tamar Bridge Act 1957 and section 13 of the Tamar Bridge Act 1979 state that, for the purposes of considering an application to revise tolls or charges:
...the bridge and the ferry shall be regarded as one undertaking...
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CASE FOR THE JOINT COMMITTEE

Background

6. The Tamar Bridge and Torpoint Ferry are operated as a self-financing joint undertaking in accordance with the Tamar Bridge Acts. The bridge and ferry are managed by the Tamar Bridge and Torpoint Ferry Joint Committee (TBTFJC) which comprises elected members from both Joint Authorities and meets quarterly. The TBTFJC's mission is to provide the travelling public with safe, reliable and efficient crossings of the Tamar through the operation, maintenance and improvement of the Tamar Bridge and Torpoint Ferry.
7. Tolls are charged on both the bridge and ferry in one direction only, when travelling from Cornwall to Devon. There is no charge for pedestrians, cyclists and motorcycles using the bridge, but there is a small charge of 30p for motorcycles using the ferry. Buses providing staged public transport services are not charged.¹ Charges for abnormal loads apply in both directions. The ferry services operate 24 hours per day on 365 days per year.
8. A discount scheme is offered for regular users which provides 50% discount subject to payment of a small administrative charge of 80p per month. This is known as the Tamar Tag scheme. The current toll for a car travelling from Cornwall to Devon is £1.50 and this would increase to £2.00. Using the Tamar Tag scheme, the relevant increase would be from 75p to £1.00.
9. The Tamar Bridge is a conventional suspension bridge and was constructed in 1961, at the time being the longest suspension bridge in the UK. Major improvements to the bridge were undertaken between 1998 and 2001 which included widening the bridge to accommodate two additional lanes, one of which is used for local traffic travelling from Cornwall to Devon and the other as a pedestrian and cycle route.
10. Ferry services between Plymouth and Torpoint have been in operation over a long period. The ferry has been owned by Cornwall Council since 1922 and became part of the organisation to build the Tamar Bridge in 1957.
11. In order to finance major improvement works such as the bridge improvements, the TBTFJC borrows from the Joint Authorities. Interest is currently set at the Public Works Loan Board 50-year rate, calculated on a reducing balance basis.² The interest rate for new borrowing is 3.38%. Historical borrowing before April 2019 was at Cornwall Council's rate of 4.647%.³
12. The TBTFJC uses a financial model to predict income from tolls and necessary expenditure up to 15 years into the future. A reserve of £2 million is maintained which is necessary to provide for any contingencies that may arise. For example, works may be necessary which cannot be foreseen and immediate access to finance is necessary to undertake such works.
13. Bridge traffic increased following the improvements in 2001 but since then has remained quite constant with a dip between 2009 and 2014 which coincided

¹ David List evidence to Inquiry

² Proof of Evidence of Geraldine Baker

³ Application letter

with the recession.⁴ The tolls were last increased in 2010. Over the last 9 years the level of traffic has remained steady while the cost of maintenance continues to increase. The most significant factors affecting expenditure are the increasing costs of capital expenditure required for bridge maintenance and improvement, increasing ferry maintenance costs and staff and contractors' costs. Because expenditure is now exceeding income, the reserve will be exhausted by the end of the current financial year. The proposed toll increase would ensure financial sustainability until 2022/23.⁵

14. The budgetary provision is transparent as budgets are scrutinised by full Council meetings of the Joint Authorities and TBTFJC meetings are held in public. Without the proposed toll revision, expenditure is expected to continue to exceed income by £2m in 2018 and up to £3.6m in 2022/23.⁶

The Bridge

15. A rolling programme of structural inspections of the bridge is undertaken, based on a 6-year cycle. This includes specialist inspections that may be required from time to time. A budget of £250,000 per annum is allowed for inspections, including electrical, drainage and dehumidification systems for the cable anchors. It is expected that this annual budget will need to be increased over time to allow for the increasing age of the structure.
16. Bridge maintenance is undertaken on the basis of a planned and risk-based system. The budget for routine maintenance is £650,000 per annum. There is an expectation that this budget will increase over time with the increasing age of the structure.
17. In addition to routine maintenance a number of specific maintenance schemes are either underway or planned. Over the period up to 2023 these schemes include bridge protective coating (£1.4m pa with a contingency of £1.5m), environmental monitoring systems (£100,000 over 2 years), bridge deck kerbs, waterproofing and drainage (£3.85m) and suspension system remedial works (remaining provision of approximately £500,000). Carriageway waterproofing and resurfacing will cost £6m and main cable remedial works £2m. The figure of £3.85m for bridge deck kerbs, waterproofing and drainage is partly derived from figures tested by competitive tender.
18. There are in addition provisionally planned works which include parapet works (£6m) and rocker pendle and articulation works (£10m). Further minor items will cost up to £500,000 in total. The figures for capital expenditure demonstrate the significant amounts that are required.
19. The works are necessary to ensure bridge maintenance is in accordance with recommendations in the Design Manual for Roads and Bridges⁷. The necessity for the works is also based on the experience of the TBTFJC's engineer who has considerable experience of working on similar structures around the world, knowledge of previous maintenance carried out on the Tamar Bridge and of

⁴ Document 13B page B127

⁵ Document 13B pages B126 and B129

⁶ Document 13B pages B125, B126

⁷ Design Manual for Roads and Bridges BD63/17

systems used in other comparable bridges. The budgetary provision is also based on the engineer's experience.⁸

The Ferries

20. There are three chain ferries which are operated according to traffic volume, so at slack times only one or two may be in use. The ferries were introduced in 2004/05, replacing ferries that were then over 40 years old. The vessels are maintained in accordance with Lloyds Classification requirements and are certified by the Maritime and Coastguard Agency. The ferry crossing is the busiest estuarial ferry crossing in the UK. It enables 2.4 million vehicle crossings and 1 million pedestrian crossings per annum.
21. The engineering support model for the ferry service is typical of that utilised throughout the marine industry. Routine maintenance is undertaken using a planned maintenance system. Servicing and repair of equipment and systems are undertaken by their manufacturers. The vessels are dry-docked and re-fitted every 5 years when they are surveyed by Lloyds Register and the Maritime and Coastguard Agency. Other surveys are undertaken when the vessels are afloat. The surveys cover the vessels, machinery, engine emissions, fire-fighting systems, and life-saving equipment. This ensures that the ferries are materially sound and are being operated safely.
22. There are three locations on the south coast of England which have dry-docking facilities large enough to accommodate the Torpoint ferries. Of these, only one tendered for the contract for refits but the tender was closely scrutinised by the TBTFJC before being found acceptable. The refit specification is based upon experience of previous refits. This includes replacement of older equipment and systems which cannot be completed at Torpoint, such as power generation and sewage treatment systems. The current cycle of refits is at the mid-life of the vessels and these involve more extensive work than is usually carried out. This includes complete overhaul of the vessel prows which is necessary because of the high volume of traffic in comparison to other chain ferry services. Other necessary work includes replacing paint coatings and deck coverings and upgrading CCTV and IT systems.
23. The TBTFJC's Naval Architect considers that the ferry fleet is being maintained to the standard necessary to maintain the vessels in a sound and safe state while enabling resilience of the service.⁹ He further considers that the level of technical expertise and experience is appropriate, and that management of the support provided is effective. Overall the engineering support conforms to industry good practice. Expenditure to date and forecast expenditure are considered fair and reasonable.
24. The three ferries provide an efficient service at times of peak demand. The level of maintenance carried out is to a suitably high level to ensure reliability. This helps to ensure that the life of the vessels is maximised and that the risk of failure of the ferries is minimised.

⁸ Proof of Evidence of Stephen Baron

⁹ Proof of Evidence of Tim Hope

The Office and Control Centre

25. The office and control centre houses IT systems necessary for toll collection and to control lane usage over the bridge. In addition, the TBTFJC controls lane usage through the Saltash tunnel on the A38 on behalf of Highways England. The central lane on the bridge is managed to allow for tidal flows of traffic at peak times. The office/control centre also provides a customer services facility and a visitor and learning centre.
26. The original control building dated from the time of the bridge construction and was outdated and not fit for purpose, particularly in terms of housing modern IT systems. A new control centre building has recently been constructed, replacing the previous building, and a visitor/learning centre has been added above part of the original building. The latter was 75% funded from Heritage Lottery funding. The TBTFJC's expenditure on these facilities was about £5.2m. Construction was secured by competitive tender in accordance with Cornwall Council's standard rules. Involvement of the private sector in providing the centre was investigated but there was insufficient interest. A major reason for this is that capacity for traffic entering the A38 roundabout from the centre is limited due to traffic volumes along the A38 using the bridge.¹⁰

Reasons for the application

27. The income and expenditure figures show increases in spending on the bridge and the ferries of about one third over the last 3 years.¹¹ This level of expenditure is projected to remain constant or to increase slightly over the next few years. As the number of vehicle trips is predicted to remain constant, the increased expenditure will mean that the operation will soon fall into deficit. The TBTFJC cannot borrow in its own right but the Joint Authorities can borrow on its behalf. This is how the majority of the capital programme is financed.
28. The proposed toll increase of 33% would be in line with inflation since tolls were last increased in 2010 as reflected in the retail price index. The Tamar Tag discount scheme is one of the highest pre-payment discounts offered by any tolled crossing in the UK. Regular commuters from Cornwall into Plymouth using the crossing five times per week under the Tamar Tag scheme would incur an increase of £1.25 per week which is not an excessive amount.
29. A consultation exercise was carried out by the TBTFJC before making the application. Users of the bridge and ferry and other stakeholders were asked to complete a questionnaire and provide their views on alternative tolling structures. Some 30,000 users and stakeholders received a questionnaire and 12% responded. The results were considered by the TBTFJC and the Joint Authorities at workshops. The exercise did not reveal any clear preference for any alternative tolling structure including in terms of differential tolls for the bridge and ferry. The Joint Authorities consider that the tolls for the two crossings should be set at the same level.
30. The TBTFJC has considered options for a tolling structure that would benefit low emission vehicles. However, it was considered that the necessary technology and staff requirements to operate an emissions-based scheme would be too

¹⁰ David List evidence to Inquiry

¹¹ Document 13B pages B125 and B126

complex and costly. Such a system would not be viable at the present time, but this will remain an option for future consideration. No clear preference for such a scheme was expressed in the consultation exercise.

31. Both the bridge and ferry tolls compare favourably with other similar tolled crossings in the UK, taking into account that other tolls are charged in both directions. The proposed toll of £2.00 for private cars using the bridge and ferry in one direction would be less than the cost of return journeys on the Mersey Tunnel and Gateway, the Dartford Crossing, the M6 Toll, the Humber Bridge and the Tyne Tunnels. It would be the same cost as Clifton Suspension Bridge. The toll for private cars using the ferry crossing would be cheaper than all the other examples provided¹².
32. In December 2018 a Peer Review was carried out by the Local Government Association. This concluded that there is great confidence in the operational stewardship of the bridge, the standard, clarity and presentation of financial information and reporting is high, and the forecasting and accounting are up to the standards expected in a local public body.
33. The original Severn Bridge was tolled but following construction of the second Severn Crossing by the private sector, the crossings are controlled by the Government which has decided not to charge tolls. However, the financing of those crossings is different from that at Tamar Bridge and Torpoint Ferry which is controlled by legislation and self-financing.

CASES OF THE OBJECTORS

34. No evidence either for or against the application was presented at the Inquiry by any interested party. I set out below a summary of the written objections and comments raised. 147 objections were received, over half of which are pro-forma letters, some with comments added. The TBTFJC has responded to specific points raised by objectors. The main points of objection, in summary, are as follows.

Management of the crossings

35. Concern is expressed that both the bridge and the ferry are managed inefficiently, and that expenditure is excessive. The extent of the maintenance carried out on the bridge is not necessary. The need for the recently constructed office and control centre is questioned. It is an extravagance in that its standard of design exceeds that which would be necessary.
36. There have been delays in ferry services due to ferries being out of service. This demonstrates inefficient and unreliable operation. Ferries are unnecessarily taken to Falmouth for servicing instead of the much nearer facility at Devonport.
37. Saltash is a sizeable town and many of its residents need to travel into Plymouth regularly to access employment, medical, shopping and leisure facilities. They are therefore highly dependent on the bridge and would be financially affected by any toll increase. Bus and rail services are available as alternatives, but these are more expensive than the toll. Because Saltash is some distance from Torpoint by road, its residents do not tend to use the ferry. They consider that

¹² Document 13B pages B136 and B137

the toll structure should be altered whereby ferry tolls are increased to a greater extent and bridge tolls kept at a lower level. The ferry service is one of the cheapest in the country and is subsidised from income from the bridge.

Effect on the local economy

38. The area has lower incomes than the national average. South-east Cornwall is a financially deprived area and businesses struggle to survive. The proposed toll increases of 33% would have a significant effect on the living costs of residents commuting daily into Plymouth. There has been a recent increase in council tax in Saltash adding to living costs. The transport costs for businesses would increase and customers from Devon may be deterred from visiting them. The proposed increase could also deter people living in south-east Cornwall from working in Plymouth and could affect businesses located there.

Emissions

39. There is an opportunity to favour low-emission vehicles in the proposed toll structure, but this has not been taken. Consequently, there is no incentive to reduce travel emissions.

Consultation

40. Some objectors say that as regular users of the crossings they were not consulted by TBTFJC when it undertook its consultation exercise. They question whether this exercise was effective.

INSPECTOR'S CONCLUSIONS

41. Having regard to all of the foregoing considerations I have reached the following conclusions, the numbers in brackets being references to earlier paragraphs in the report from which the information is derived.
42. The main consideration upon which the decision should be based is whether or not the toll increases would be proportionate and necessary, having regard to past and projected expenditure and income.
43. I am satisfied that the bridge and ferry are effectively managed and that the crossings are safe and reliable in accordance with the TBTFJC's stated mission. While I note the concerns that have been expressed regarding the cost of and necessity for the recently constructed control building, the TBTFJC has explained that this was necessary in order to accommodate up-to-date IT and control systems and that the original building was not fit for purpose in this respect. The systems control the tidal flow of traffic on the bridge as well as the tunnel in Saltash by arrangement with Highways England. [25, 26] These systems enable the efficient operation of the bridge and minimise congestion and delay. It was not feasible for this to be carried out by the private sector. The building is of a suitable design and not extravagant or excessive. Part of it was funded from the lottery and provides an educational facility of benefit to the public. [26] In my opinion the past expenditure on the building was necessary and reasonable.
44. It has been demonstrated by expert evidence that the current and proposed maintenance works to the bridge are necessary to ensure its safety. [15 - 19] It has also been demonstrated by expert evidence that the ferries are effectively maintained to provide a safe and reliable service and to maximise their longevity. [20 - 24] This evidence together with the financial evidence [14]

- justifies the proposed revision to tolls. Conversely if tolls were not increased, the crossings would not be sustainable.
45. It is a requirement of the Tamar Bridge Acts that the bridge and ferry are considered as one undertaking for the purpose of setting tolls. Although different tolls could be charged for each crossing, the legislation does not provide for either of the crossings to be individually self-financing. The arrangement allows for optimal use of resources whereby income and expenditure are considered in total rather than being disaggregated.
 46. The consultation exercise did not reveal any preference for differential tolls [29] and no alternative tolling structure has been put forward. I consider that the existing and proposed standardised tolls for the two crossings are necessary to ensure full accessibility across the River Tamar.
 47. The proposed toll increases would be in line with inflationary price rises since the last increase 9 years ago. [28] In this context the increases would not be excessive. The Tamar Tag scheme offers a substantial discount of 50% subject to payment of a small administrative charge. This is one of the most heavily discounted tolled crossings in the country. For a resident of south-eastern Cornwall commuting daily to Plymouth the proposed increase would cost £1.25 a week. [28] While wages in the area are lower than the national average, the proposed increase would nonetheless be modest. In my view this increase in tolls would be reasonable and would not unduly affect the ability of residents to access employment and services in Plymouth. Because the increase would be modest it would not have the effect of deterring traffic using the crossings in my view.
 48. Similarly, it is unlikely that businesses would be significantly affected by the ability of customers or employees to travel. The raising of tolls by about one third for larger vehicles would reflect levels of inflation since the last increase and would not prejudice businesses in terms of their transport requirements.
 49. While alternative tolls for low-emission vehicles have been considered by the TBTFJC, the control systems necessary for such an approach are technically much more complex and expensive. The introduction of control systems would not be financially viable at the present time. [30]
 50. I note the concerns of objectors that not all users of the crossings were consulted on the proposed toll revision. However, a substantial number of users and stakeholders were asked for their views and the views that were expressed were considered by the Joint Authorities at workshops. [29] This process was thorough and demonstrates a good level of engagement with users and stakeholders.
 51. The bridge and ferry crossings are self-financing, and it has been demonstrated that toll increases are necessary to prevent these soon falling into deficit. [13, 14] The crossings are suitably maintained in accordance with recognised standards to provide safe, reliable and efficient crossings of the River Tamar.
 52. The Tamar Bridge and Torpoint Ferry are well managed and provide a safe, reliable and efficient service. The financial management is robust and it has been clearly demonstrated that the operations will soon fall into deficit. Without a toll increase the services would not be sustainable. The proposed increases

are necessary to ensure the continued operation of the crossings. They would be proportionate having regard to past and projected expenditure and income.

53. The proposed increases would also be reasonable having regard to the period of time since the last increase, inflationary pressures over that period and the level of discount offered for regular users. For these reasons the proposed toll revision would be necessary having regard to the financial position and future prospects of the undertaking in accordance with the 1954 Act. The proposed revision would not result in the undertaking receiving an annual revenue either substantially less or substantially more than adequate to meet the necessary costs of working, management and maintenance of the crossings, including costs that are properly chargeable to revenue and reasonable contributions to the reserve.

54. I conclude that the application should succeed and that the proposed increase in tolls should result.

RECOMMENDATION

55. I recommend that the Order should be made as proposed.

Nick Palmer

INSPECTOR

APPENDIX A – APPEARANCES

The Applicant

Ben Curnow, Solicitor

Instructed by Cornwall Council

He called

David List BSc, MBA, FICE

General Manager, Tamar Bridge and Torpoint Ferry

Geraldine Baker ACA, LLB (Hons)

Strategic Finance Manager, Cornwall Council

Stephen Baron MICE

Technical Director, AECOM

Tim Hope

Principal Consultant Naval Architect, Burness Corlett Three Quays

Interested Parties who questioned the applicant

Charles Francis

Local resident

James Slater

Local resident

Vince Goodyear

CBL, Saltash

APPENDIX B – LIST OF DOCUMENTS

- 1a The application
- 1b Income, Expenditure and Reserve balances
- 2 Annual Financial reports
- 3 Class 2 (cars/light goods) toll levels 1982 – present
- 4 Tamar Bridge and Torpoint Ferry Strategic Plan 2018-2022
- 5 Annual Business Plan 2019-2020
- 6 Income Expenditure Forecasts and Annual Traffic figures
- 7 Consultation details
- 8 Draft Tamar Bridge and Torpoint Ferry Order
- 9 Comparison of tolls at Tamar Bridge and Torpoint Ferry with other fixed crossings
- 10 Notices of application to revise tolls
- 11 Objections and TBTFJC’s responses
- 12 Notification and Notice of Public Inquiry
- 13A Statement of Case of TBTFJC and Rebuttal Statement
- 13B Proofs of Evidence of David List, Stephen Baron, Time Hope and Geraldine Baker
- 14 Opening Statement

Pack B: Legislation

- A Transport Charges &c. (Miscellaneous Provisions) Act 1954
- B Tamar Bridge Act 1957
- C Tamar Bridge Act 1979
- D Tamar Bridge Act 1998

APPENDIX C – SCHEDULE OF CURRENT AND PROPOSED TOLLS**Tamar Bridge Toll Classification**

Classification		Current Toll	Proposed Toll
1	Solo motorcycles	No charge	No charge
2	Motor cars and vehicles not covered by other classes	£1.50	£2.00
3	2 axle vehicles having a maximum gross vehicle weight exceeding 3.5 tonnes	£3.70	£4.90
4	3 axle vehicles	£6.00	£8.00
5	Vehicles with 4 or more axles	£8.20	£11.00

Torpoint Ferry Toll Classification

Classification		Current Toll	Proposed Toll
1	Solo motorcycles	£0.30	£0.40
2	Motor cars and vehicles not covered by other classes	£1.50	£2.00
3	2 axle vehicles having a maximum gross vehicle weight exceeding 3.5 tonnes	£3.70	£4.90
4	3 axle vehicles (not currently carried)	£6.00	£8.00
5	Vehicles with 4 or more axles (not currently carried)	£8.20	£11.00