

Tamar Crossings Study Brief

Introduction

This study is designed to determine the long term package of measures designed to manage the demand for the Tamar Crossings. Through the consultation for Plymouth's Third Local Transport Plan the issue of the ability of the existing infrastructure to cope with the demands that will be placed upon it in the long term was questioned.

The Tamar Crossings are defined as any method of crossing the river in Plymouth sub-region and the study is not limited to the Tamar Bridge and Torpoint Ferries

Background

The River Tamar forms a major barrier between Plymouth and South East Cornwall. Plymouth is a main attractor in the sub-region, at the 2001 census 8.6% of Plymouth's workforce crossed the Tamar every day, three quarters of whom drove their car either via the Tamar Bridge or the Torpoint Ferry.

The Tamar Bridge first opened to the public in 1961. Since that time the Tamar Bridge and Torpoint Ferry Joint Committee (TB&TFJC) has continued to operate and maintain the Tamar Bridge. Between 1998 and 2001 the Bridge underwent a major rejuvenation when it was both strengthened and widened. The work was undertaken while the crossing was open to live traffic, ensured adequate load carrying capacity for the future, and also adding an additional traffic lane and a dedicated pedestrian/cycle lane at a cost of £35 million.

More recently, during 2006, the tolling function has been upgraded with a major refurbishment of the toll plaza, including a new canopy, and the introduction of electronic toll collection, together costing approximately £4.5 million. The tolling function upgrade was undertaken primarily to increase tolling capacity by around 40% to match that of the structure. 60% of crossings at both bridge and ferry paid for electronically, this is the highest percentage in UK and is critical to bridge tolling capacity. The tolling function on the Bridge and the Ferries is the first interoperable system in the UK.

In 1957, the ferry crossing became part of the new statutory organisation which was established to build the Tamar Bridge and subsequently operate the two crossings. The ferry crossing is the busiest such crossing in the UK, enabling the transit of 2.4 million vehicle crossings of the Tamar a year and one million pedestrian crossings annually. The craft operate 24 hours a day, 365 days a year, providing the vital link between Torpoint and the Rame Peninsula with the City of Plymouth. In 2004/05, the current generation of craft replaced craft that were over 40 years old. The new vessels have 50% more vehicular capacity than the previous generation and meet modern safety and build standards. The next generation of ferries is currently scheduled for 2025 however their life is likely to be extended through the good maintenance procedures that are in place.

In 2009 the TB&TFJC applied to the Secretary of State for Transport for authority to increase the toll charges to their present values (enacted March 2010). At the public inquiry for the toll increases the potential benefits of tolls which vary by time of day was presented as a possible means of demand management, toll systems that are in place would be able to deliver this.

The Cremyll Ferry has been in operation for more than 1000 years. The ferry links Devon and Cornwall and today it crosses the River Tamar in about 8 minutes. The ferry, which accommodates foot passengers and bicycles, is an important commuter and leisure link to the Rame Peninsular. The current service is subsidised by Plymouth City Council, Cornwall Council and the Mount Edgcumbe Joint Committee to keep prices low and ensure regular timetabled services. Buses on both sides of the water are timetabled to link with the ferry

The Royal Albert Bridge forms the main railway line between Devon and Cornwall and was opened to trains for the first time in 1859. The Bowstring Suspension Bridge carries a single rail track which is currently used by 21,000 trains per annum including freight and passenger trains. Patronage on the community rail branchlines has been increasing across Devon and Cornwall however the footfall at a number of more rural stations has been declining.

More background information can be found in the Tamar River Transportation Review.

Project Aims

To provide a long term strategy for management of demand for the Tamar Crossings such that strategic improvements can be programmed, developed, costed and funding sought.

Local Transport Plan Aspirations

The following are a list of aspirations set out in the Local Transport Plans for Cornwall and Plymouth:

- Park and Ride service to serve Plymouth's Western Corridor
- Smart ticketing on ferry services
- Saltash Cycle Network
- Saltash Station Enhancements
- Multi-use trail between Bodmin and Torpoint
- A38 Carkeel Rbt improvements
- New rolling stock on branchlines
- 'Metro' style rail services between Liskeard and Newton Abbot

Scope of Works

1. Evaluate the existing Tamar Crossings to determine residual capacity
2. Evaluate the impacts of development in Saltash and Plymouth will have on the residual capacity of the crossings on the basis of the existing travel patterns / mode split
3. Provide options for potential measures to increase the residual life of the existing crossings, these should be wide ranging and inventive and could include any of the following -
 - Greater use of buses including a park and ride in Cornwall to serve the city centre and Derriford
 - Connecting cycling and walking routes where necessary
 - More efficient use of the local rail network
 - Different toll levels at different times of the day or under different traffic conditions
 - More efficient use of the existing local bus network

- 'Smarter choices' programmes
 - Improved integration of ferries with other transport services, including smart ticketing
 - Introduction of new water transport services and the associated infrastructure
 - A fixed crossing between Torpoint and Devonport
4. Determine and test a preferred package of measures to get the greatest life from the existing infrastructure. The package of measures should include -
 - Infrastructure requirements
 - Revenue implications (including impact on existing services)
 5. Evaluate the potential to construct a new bridge and compare in economic and transport terms this option to the preferred package of measures

Milestones

PBA to propose suitable milestones.

Information Sources

- Plymouth's Third Local Transport Plan, April 2011, PCC, www.plymouth.gov.uk/ltp
- Response to Consultation on Plymouth City Council's LTP3, Travel Watch South West, attached
- [Plymouth park and ride strategy](http://www.plymouth.gov.uk/park_and_ride_strategy.pdf), Sept 2008, ITP, http://www.plymouth.gov.uk/park_and_ride_strategy.pdf
- [Western Corridor park and ride study](http://www.plymouth.gov.uk/western_corridor_park_and_ride_study.pdf), Sept 2009, ITP, http://www.plymouth.gov.uk/western_corridor_park_and_ride_study.pdf
- Tamar River Transportation Review, Cornwall Council for Tamar Estuaries Consultative Forum, 2010
- Planning Future Cornwall, Core Strategy Options Paper, Cornwall County Council, Feb 2011, <http://www.cornwall.gov.uk/default.aspx?page=22887>
- Planning Future Cornwall Cornwall – Local Development Framework - Community Network Areas - Core Strategy Area Based Discussion Paper, Cornwall County Council, Feb 2011, <http://www.cornwall.gov.uk/default.aspx?page=22887>
- Tamar Bridge and Torpoint Ferry Business Plan 2011 – 2015, <http://www.tamarcrossings.org.uk/CHttpHandler.ashx?id=46616&p=0>
- Plymouth Sound and Estuaries Water Transport Study, Scott Wilson, March 2004, http://www.plymouth.gov.uk/plymouth_water_transportation_study.pdf

Interested Parties

- Plymouth City Council
- Cornwall Council
- Tamar Bridge and Torpoint Ferries Joint Committee
- Highways Agency
- Tamar Estuaries Consultative Forum
- Mount Edgcumbe Joint Committee
- Network Rail / TOCs