

FORTHREPLACEMENTCROSSING

www.forthreplacementcrossing.info

The Forth Replacement Crossing is a major infrastructure project for Scotland designed to safeguard a vital connection in the country's transport network and protect and enhance the Scottish economy.

In December 2008, the Scottish Government outlined the key decisions that have been reached about the Forth Replacement Crossing project as a result of the extensive work undertaken by Transport Scotland over the last year. These include new details on:

- The function of the Forth Replacement Crossing and the use of the Forth Road Bridge
- The proposed design of the new bridge

Update

- The road connections to and from the bridge
- Funding, procurement and legislation

This third issue of the Forth Replacement Crossing newsletter has been produced to provide an update on these recent developments.

Forth Replacement Crossing Strategy

In December 2007, the Scottish Government confirmed it intended to build a cable-stayed bridge to the west of the existing Forth Road Bridge, which, despite significant investment and maintenance over its lifetime, is now showing signs of deterioration.

Since that time an extensive amount of work has been carried out by Transport Scotland and its consultants Jacobs Arup to take the plans to the next stage. Over the last year new information has also become available about the condition of the existing Forth Road Bridge.

Considering all of this information Transport Scotland has developed a managed crossing strategy for the Forth Replacement Crossing which takes into account the existing bridge.

The more positive prognosis for the existing Forth Road Bridge allows it to be used as a dedicated public transport corridor alongside the new bridge. While the existing bridge is not capable of carrying the main burden of all traffic on its own in the future, this approach allows the iconic Forth Road Bridge to continue to play a critical role as a public transport corridor. With this in mind, a refined, sleeker replacement bridge is possible to complement the existing bridges and this world-famous vista. This bridge will carry general road traffic and, importantly, all heavy goods vehicles.

The refined strategy for the connecting road network combines the use of state-of-the-art traffic management technology, with significant junction improvements and new high-quality dual carriageways.

Using the existing bridge and refining the strategy means that it is now estimated that the project will cost between $\pounds 1.7$ and $\pounds 2.3$ billion – a cost saving of around $\pounds 1.7$ billion on the original budget estimate of $\pounds 3.2$ to $\pounds 4.2$ billion.

The strategy meets all of the needs with more flexibility and improved value for money, making sensible use of existing infrastructure and reducing environmental impact. The project remains on schedule to start construction in 2011 and open in 2016.

Artists impression showing the new cable-stayed Forth Replacement Crossing in the Firth of Forth.



Indicative alignment of Forth Replacement Crossing connecting roads and junctions.

Connecting Road Network

Around 4km of connecting roads will be built to tie the bridge into the main trunk road network.

This will include providing a high-quality dual carriageway to link the A90 and M9 in the south, making use of the recently completed M9 spur. North of the Forth, a new dual carriageway will connect the bridge to the A90/M90, incorporating junction enhancements at Admiralty and Ferrytoll and road widening between those junctions.

State-of-the-art Intelligent Transport System technology will be used along the full length of the scheme from the M90 Halbeath Junction over the bridge to the M9. This will improve traffic flow, reduce congestion and improve road safety.

The project also offers the potential for the development of strategic park and ride sites at locations such as Halbeath, Rosyth, Ferrytoll and South Queensferry in partnership with local authorities.

By maximising the use of the existing road network the road improvements proposed will result in less impact on the environment, properties and communities.

Junctions on the route are indicative at this stage and will be developed further as part of the next phase of work. Similarly the details of the road design and mitigation within the preferred corridor will be developed through engagement with stakeholders and local communities in the coming months.



The Bridges

The proposed bridge will be an elegant, unique and instantly recognisable cable-stayed bridge that complements the existing road and rail crossings and will be counted among the world's leading bridges when it is built.

The result of a rigorous design process by an international team of architects and engineers, the bridge has been developed in consultation with Architecture and Design Scotland, who have endorsed the design.

The proposed new cable-stayed bridge will have three slender single column towers and including the approach viaducts will have an overall length of 2.7km. The deck will carry two general lanes of traffic and hard shoulders in each direction.

The hard shoulders on the new bridge will ensure that breakdowns, incidents and any maintenance works do not cause the severe congestion which is currently experienced on the Forth Road Bridge, which has no hard shoulder. They also provide the flexibility to carry public transport should it be required in the future.

Windshielding on the new bridge will protect the crossing from the effects of wind and provide a more reliable corridor for heavy goods vehicles.

The selected design is cost-effective in both construction and maintenance, and can be built within the timescales required.

The existing bridge will be used to carry public transport, pedestrians and cyclists. This public transport corridor will be dedicated to buses and taxis initially but has the potential to be adapted to carry a Light Rapid Transit system, such as a tram, should it be required in the future. Hard shoulders on the new bridge would carry buses in the event of high winds or closures on the existing Forth Road Bridge.



Intelligent Transport Systems

Current road connections to the existing bridge operate satisfactorily for the majority of the day but suffer from congestion and significant queuing at peak periods. The implementation of an Intelligent Transport System is proposed from Halbeath Junction to the M9 to actively manage and improve the flow. This could include a broad spectrum of measures such as:



Use of Active Traffic Management on the M42. Picture courtesy of the Highways Agency

- Speed control and variable speed limits to reduce the rate at which traffic reaches a point of congestion and increase the time available for drivers to anticipate and carry out a junction manoeuvre
- On-journey travel advice also includes journey time information which supports use of Park and Ride or Park and Choose sites
- Ramp metering prevents the volume of traffic forcing its way from a slip road onto the main road from disrupting flow conditions on the main road

These measures either on their own or in combination have the potential to support a number of benefits:

- Improve traffic flows and road safety by reducing 'traffic shocks' and stop-start behaviour in congested conditions
- Reduce environmental impact by reducing stop-start traffic
- Increase lane efficiency
- Encourage public transport use and reduce car demand.

Funding, Procurement & Legislation

The Forth Replacement Crossing scheme will be promoted via a Parliamentary Bill which will be introduced to Parliament towards the end of 2009. Public consultation will be an essential part of the process and the details and timescales for this will be developed and announced in the coming months.

The project will be funded by the Scottish Government and discussions will be held with the industry over the next few months so that they are ready to respond efficiently to a tender competition later in 2009.

Summary

The strategy provides all the benefits announced to the Scottish Parliament in December 2007 – public transport corridor, more reliable journeys, improved connections to the trunk road network and future-proofed Light Rapid Transit (LRT) opportunities - for significantly less cost and less environmental impact.

The Forth Replacement Crossing is the largest civil engineering project in Scotland for a generation and remains vital to the economies of Fife, Edinburgh and the whole of Scotland. The proposed scheme is an economically sound solution, maximising value for money and existing assets, without compromising on quality, aesthetics or effectiveness.

Public Information Exhibitions

A series of public information exhibitions will take place in January 2009 to provide information to the public and gain feedback on the proposals to inform the next stages of the design. Exhibitions will take place at the following locations:

Dunfermline

Carnegie Conference Centre, Halbeath Dunfermline, KY11 8DY Friday 23 January, 10.30am – 8.30pm

Edinburgh - Central

Caledonian Hilton, Princes Street Edinburgh, EH I 2AB Friday 30 January, 10.30am – 8.30pm Saturday 31 January, 10.00am – 5.00pm

Edinburgh - Gyle

Edinburgh Marriott, 111 Glasgow Road Edinburgh, EH12 8NF Monday 26 January, 10.30am – 8.30pm

Inverkeithing

Inverkeithing Civic Centre 10 Queen Street, Inverkeithing KY11 IPA Thursday 29 January, 10.30am – 8.30pm

Kirkcaldy

Adam Smith Theatre, Bennochy Road Kirkcaldy, KY1 IET Thursday 22 January, 10.30am – 8.30pm

Kirkliston

Kirkliston Community Centre 16-18 Queensferry Road, Kirkliston EH29 9AQ Thursday 29 January, 10.30am – 8.30pm

Linlithgow

Craigmailen Halls, St Ninians Church Linlithgow, EH49 7BQ Friday 30 January, 10.30am – 8.30pm

Livingston

Ramada Jarvis Hotel, Almondview Livingston, West Lothian, EH54 6QB Wednesday 28 January, 10.30am – 8.30pm

North Queensferry

Queensferry Hotel, St Margarets Head North Queensferry, KY11 1HP Saturday 24 January, 10.00am – 5.00pm Monday 26 January, 10.30am – 8.30pm Tuesday 27 January, 10.30am – 8.30pm Wednesday 28 January, 10.30am – 8.30pm

Rosyth

Civil Service Club, Castle Road, Rosyth Fife, KY11 2HU Tuesday 20 January, 10.30am – 8.30pm Wednesday 21 January, 10.30am – 8.30pm

South Queensferry

Orocco Pier, 17 High Street, South Queensferry West Lothian, EH30 9PP Tuesday 20 January, 10.30am – 8.30pm Wednesday 21 January, 5.30pm – 8.30pm Thursday 22 January, 10.30am – 8.30pm Friday 23 January, 10.00am – 3.00pm

Winchburgh

Winchburgh Community Education Centre Craigton Place, Winchburgh, Broxburn, EH52 6RW Tuesday 27 January, 10.30am – 8.30pm

Contacts

For more information about the Forth Replacement Crossing please contact the Transport Scotland team on:

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You can also sign up to our regular e-newsletter on the website or pick up information from selected public libraries in the vicinity of the crossing. See the website or phone for more details.