Forth Crossing Bill Committee

Wednesday 24 February 2010

Briefing Paper

Why do we need another bridge?

Work began on the existing Forth Road Bridge in 1958 and it was opened in 1964. In its first year of operation, it carried some 2.5 million vehicles, but by 2008, this had reached a total of over 21.4 million – over double its design capacity. A new bridge across the Forth is required in order to cope with existing and projected future traffic demand.

According to the Forth Estuary Transport Authority, the main suspension cables have lost around 10% of their strength due to corrosion and this will only get worse over time. With the current rate of deterioration, engineers FaberMaunsell have estimated that weight restrictions may have to be introduced on the bridge between 2017 and 2021. Although dehumidification may improve the situation, the results of this will not be known until a further inspection is carried out in 2011/12. In addition, it will be between 2011 and 2014 before we know the outcome of precautionary checks on the bridge's anchorages. The new bridge is therefore necessary if we are to guarantee road traffic across the Forth at Queensferry.

The Forth Road Bridge is a key link in Scotland's transport infrastructure, linking with Edinburgh, Fife, the Lothians and further afield via the M8, M9, M90 and numerous other routes. It is core to the transportation of goods across Scotland and provides a commuting route, expanding the travel to work area for businesses on both banks of the Forth. The existence of the bridge and the M90/A90 artery through Fife acts as a catalyst for enterprise in Fife as well as connecting markets as far apart as Inverness and Newcastle. A new bridge is essential if we are to ensure ease of travel for goods and the workforce across the east coast of Scotland and to facilitate the success of existing businesses and attract new businesses to the region. The bridge is vital to the local economies in the east of Scotland but is also of great importance to Scotland as a whole.

The new bridge would also help to make cross-Forth travel more reliable, as its wind shielding would allow the route to be kept open during periods of more extreme weather and the plans contain a hard shoulder on both carriageways. The existing bridge has no

wind shielding and no hard shoulder provision, meaning that severe weather, accidents and breakdowns regularly cause full or partial closure of the crossing.

The maintenance programme for the existing bridge will mean significant disruption to traffic over the next 5-10 years. The construction of a new bridge would alleviate much of this and provide a viable alternative route.

The costs of the closure of the existing bridge for a period of one year could exceed £1 billion.

What kind of bridge do we need?

The bridge must be able to cope with both present and future transport demands. Ideally a new bridge would take traffic load from the existing bridge, allowing for the lifespan of that bridge to be extended and for both bridges to be utilised for cross-Forth transport.

It is vital that the new bridge is fully connected to the surrounding road transport infrastructure from the outset. It took 40 years to connect the M8/M9 to the existing Forth Road Bridge via the M9 Spur, and this cannot be allowed to happen again. Consideration must be given to links into Edinburgh through the A8000 and westwards to the M9. At present, the A904 South Queensferry to Bo'ness road is frequently used by HGV traffic as a rat run to access the M9 at Philipstoun. The design of the road network to the south of the new bridge must take account of this traffic volume and provide access to and from the bridge for eastern and central Scotland and northern England.

How can we pay for it?

The estimated cost of the new Forth Road Bridge is between £1.7 - £2.3 billion, making it the most significant single transport project currently being pursued in Scotland. Its fundamental importance to the Scottish road network means that it is vital that funding for this project is identified, scheduled and guaranteed in order that the bridge is completed prior to the potential introduction of weight restrictions on the existing bridge in 2017. In order to provide certainty, the project must be fully committed and funded before we reach the next Scottish Parliamentary Elections in 2011.

The construction costs of the new Forth Bridge would, if funded from future Scottish Government budgets, represent a very large portion of the capital spend, with very little already committed. In the light of the likely impact of public spending cuts on future budgets, consideration should be given to the exploration of alternative funding models to secure this essential project. Private sector input should be sought via the Scottish Futures Trust or PPP/PFI.

As a last resort, businesses would consider a tolled bridge option if no alternative funding mechanism could be found. Businesses would be prepared to pay an appropriate toll if their vehicles were not held up unnecessarily in congested traffic and provided that the tolls were imposed for a limited period in order to cover the capital construction costs of the bridge.