The ForthRight Alliance
campaigning against a second Forth road bridge

FORTH CROSSING BILL

Objection from The ForthRight Alliance

Monday 25th January 2010

1. INTRODUCTION

The ForthRight Alliance (FRA) is a coalition of groups opposed to the construction of an additional road crossing of the Forth at Queensferry. We believe that a new road bridge is *both unwelcome and unnecessary*, as a series of reports have indicated that the problems of the existing Forth Road Bridge can be addressed *without* building a second bridge. The FRA takes the view that Scottish Ministers should concentrate on resolving the problems of the existing bridge rather than spending up to £2,340 million on a new crossing - a project which we believe is wrong on engineering, transport, environmental, economic and social justice grounds.

The member groups of The ForthRight Alliance collectively have several hundred thousand members across Scotland. We object to the Forth Crossing Bill in that it will authorise an additional bridge which, as taxpayers, this membership will be required to help fund. Such a new crossing will not only be directly damaging to many of the interests of the members of The ForthRight Alliance, most specifically the over-arching goal of sustainable development, but will also be indirectly damaging to our interests in that resources devoted to a new bridge are resources which will not then be able to be applied to meeting sustainable development objectives.

2. THE FORTHRIGHT ALLIANCE: BACKGROUND

The ForthRight Alliance was formed in the early 1990s, successfully resisting plans at that time for a Second Forth Road Bridge. Following the discovery in 2004/5 of a significant degree of corrosion in the main cables of the existing bridge, the run-up to the 2007 Scottish elections saw pressure for a second road crossing increase, with the arguably panicked support of business groups, sections of the media and many politicians.

3. THE SCOTTISH GOVERNMENT'S CURRENT POSITION - AND THE CURRENT ENGINEERING POSITION

On 15th January 2008, the Cabinet Secretary for Finance and Sustainable Growth, John Swinney MSP, told the Parliament's transport committee that the primary reason for deciding to build a new bridge was the risk that the Forth Road Bridge might have to close to HGVs (heavy goods vehicles) by 2013 if cable-drying was unsuccessful.[1]

Confirming the decision to build a new bridge when announcing the result of the Strategic Transport Projects Review to Parliament on 10th December 2008, the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson MSP, stated that "it is clearly not certain that [the existing bridge] will provide a reliable and resilient crossing for the current weight of traffic".[2]

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1 Scottish Parliament Transport, Infrastructure and Climate Change Committee Official Report, 15/01/08, Col 363 - <www.scottish.parliament.uk/s3/committees/ticc/or-08/tr08-0102.htm#Col356>.

2 Scottish Parliament Official Report, 10/12/08, Cols 13205 - <http://www.scottish.parliament.uk/business/officialReports/meetingsParliament/or-08/sor1210-02.htm#Col13201>.

However, evidence from official reports suggests that even if drying — which has been successfully installed on sixteen similar suspension bridges worldwide — fails to arrest corrosion then cable augmentation or replacement can be carried out over 7-8 years without weekday closure of the bridge. The cost range for this is £91-122 million,[3] compared with an initial estimate of £3,200 - 4,200 million for a new bridge and now £1,720 - 2,340 million for a bridge of "narrower design".[4]

Moreover, as the Minister himself acknowledged, following a further internal inspection of the main cables in February and March 2008, the Forth Estuary Transport Authority (FETA) have concluded that "the rate of deterioration is following the more optimistic line" and that "any consideration of a restriction in traffic loading is now more likely to occur between 2017 and 2021".[5]

They have further indicated that initial results from cable-drying are "encouraging" and that "the trial is showing that initial lengths of the west cable are drying out".[6] Indeed, FETA have a "high degree of confidence" that the corrosion can be halted.[7]

The FRA therefore believes that the existing bridge can provide a reliable road crossing for its design life of 120 years.

We acknowledge that there are, as with any bridge, ongoing maintenance issues. The disruption associated with tackling these is, however, as with the possible augmentation or replacement of the main suspension cables, not sufficient in our opinion to justify a new crossing - which itself will present a number of significant challenges in many areas.

In particular, measures to decrease the wear and tear from HGVs on the existing bridge can be implemented. For instance, only 12% of freight tonnage lifted by UK HGVs in Fife with a UK destination has its journey's end in Lothian and the Borders. Indeed, 53% of all such freight actually stays in Fife.[8]

Whilst we would not be in favour of the proposed "Rosyth Bypass",[9] the FRA has historically supported a West Fife Distributor Road from Dunfermline to Kincardine to divert HGVs heading to the west of Scotland and the South away from the crossing at Queensferry. These comprise the majority of HGV traffic across the estuary.

We note also that there is currently unrestricted access for HGVs to the bridge. This is arguably far too generous a level of service for the level of demand. Maintaining a bridge capable of carrying, say, one hundred HGVs in each direction at a time when half a dozen is a reasonable estimate of current usage is, we would surmise, wasteful of resources. The number of HGV movements permitted across the bridge need not, therefore, be an all or nothing affair.

Finally, FETA have concluded that the erection of localised wind barriers around the bridge towers to help prevent lorries being blown over in high winds "could provide significant localised shielding". FETA hopes to start work on this in 2011.[10]

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3 Forth Estuary Transport Authority (2008a): *Feasibility Study for the Replacement or Augmentation of the Main Cables – Update and Interim Stage 2 Report*. Report to FETA, 22/02/08: Table 1, Section 3.3 - <http://www.forthroadbridge.org/sites/default/files/documents/Item%2011%20Feasibility%20Study%20for%20the%20Replacement%20or%20Augmentation.pdf>.

4 Scottish Parliament Official Report, 10/12/08, Cols 13205/6 - <http://www.scottish.parliament.uk/business/officialReports/meetingsParliament/or-08/sor1210-02.htm#Col13201>.

5 Forth Estuary Transport Authority (2008b): *Second Internal Inspection of Main Cable - Update Report*. Report to FETA, 20/06/08: Section 3.5.

6 Forth Estuary Transport Authority (2008c): *Dehumidification of Main Cable - Update Report*. Report to FETA, 10/10/08: Sections 3.3 and 4.1.

7 Email from Chris Waite, FETA Communications Manager, to Bruce Whitehead, then chair of FRA, 30 July 2008.

8 Scottish Government (2009): *Scottish Transport Statistics 2009*. Percentages derived from Table 3.8.

9 Plans for a "Rosyth Bypass" have generally been for a dual carriageway extending from the end of the A823(M) motorway spur. This would pass through the area of great landscape value west of Dunfermline in a mini Twyford Down style cutting before joining the A985. In the absence of an additional road bridge, the FRA would have no objection to a sensitively sited single carriageway road from the Dunfermline area to the roundabout where the A994 and A985 join. From there to Kincardine the existing A985 is adequate.

10 See <http://www.forthroadbridge.org/capital-projects-localised-wind-barriers>. Accessed on 25/01/10.

4. AN ADDITIONAL - NOT A REPLACEMENT - BRIDGE IS PLANNED

That it has now been confirmed that the existing bridge will be retained comes as no surprise to the FRA. It was always our contention that it could be saved. Moreover, to demolish it – unlikely since it is a category A listed structure – would cost more (at an estimated £129m[11]) than cable replacement or augmentation (£91-122m).

5. AN UNDER-USED EXISTING BRIDGE WILL NOT STAY UNDER-USED

We acknowledge that it is now intended that the existing bridge be reserved for public transport, taxis, cyclists and pedestrians only. However, we believe that it is not credible that this intention could be sustained in the long term.

The bridge carried 11,840,338 vehicles northbound in 2006 - of which only some 87,085 comprised buses.[12] That's less than 0.75%.

Work carried out for the South East of Scotland Transport Partnership (SEStran) in 2003 indicated that all the additional road capacity provided by an additional bridge completed in 2016 would be used up by 2031[13] - and this assumed that the existing bridge was still carrying general traffic and that both bridges were tolled with charges increasing yearly in real terms. Tolls have now been removed on all road bridges, and a study presented to Parliament shows that this will increase Forth Road Bridge traffic by a further 10%.[14]

Indeed, Transport Scotland now estimate that the new crossing will carry 92,000 vehicles per day in 2017[15] – a 40% increase on current traffic levels – whilst at the same time only 300 vehicles (yes, only 300) will cross the 'old' bridge.[16]

It really does strain belief, therefore, that, while the new crossing becomes increasingly congested, users of that bridge will be content to look sideways at the existing bridge carrying a bus at most every few minutes. The end result will be two bridges carrying general road traffic with only heavy goods vehicles perhaps being excluded from the existing structure.

We will have spent a fortune to be in a worse position than before as regards traffic congestion over the Forth at Queensferry.

6. AN ADDITIONAL BRIDGE WILL DAMAGE THE ENVIRONMENT

The inevitable re-use by general traffic of the existing bridge will just as inevitably lead to a huge increase in greenhouse gas emissions. As the City of Edinburgh Council has stated, "the impact of an additional crossing is likely to include 'large increases in cross Forth traffic with the associated environmental and congestion impacts, regardless of whether a new crossing is 'multi modal' or not.' "[17]

We note that Transport Scotland's modelling for the additional road bridge shows that it will result in an increase in greenhouse gas emissions.[18] At a time when the Scottish Government faces difficulty in meeting its legislative commitment to reduce greenhouse gas emissions by 80% by 2050, and where the transport sector provides perhaps its most difficult challenge, we

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11 Letter from Transport Scotland to Friends of the Earth Scotland, 13/09/07.

12 Forth Estuary Transport Authority (2007): *Analysis of Bridge Traffic & Revenue.* Report to FETA, 31/08/07.

13 MVA (2005): *SESTRAN Integrated Transport Corridors Study Final Report*. §4.17.3.

14 Steer Davies Gleave (2007) *Toll Impact Study* - <http://www.scotland.gov.uk/Topics/Transport/Road/toll-bridges/TollImpactStudy/Q/ViewArchived/On>.

15 See Table 6.1 at <http://www.transportscotland.gov.uk/reports/road/j11352-09.htm>. Accessed on 25/01/10.

16 See p.38 of <http://www.transportscotland.gov.uk/files/documents/projects/forth-replacement/FRC_exhibition_panels_-_November_2009_0.pdf>.

17 City of Edinburgh Council (2007) *New Forth Crossing Options - Proposed Council Response.* Report to CEC Transport, Infrastructure and Environment Committee, 25/09/07: Section 2.10(e) - <http://cpol.edinburgh.gov.uk/getdoc_ext.asp?DocId=101929>. Amongst other things, the report *"[e]xpress[ed] concern at the fact that an additional road-based crossing, whether or not it gives priority to public transport and high occupancy vehicles, is likely to significantly increase cross Forth traffic and therefore increase congestion, bus and car journey times and noxious pollution in Edinburgh, as well as increase traffic and Carbon Dioxide emissions overall."*

18 We note that the 'Do-Minimum' scenario presented in Table 15.40 at <http://www.transportscotland.gov.uk/files/documents/reports/j11223/j11223-15.pdf> assumes underlying growth from the current average daily traffic level of 65,000 to 83,000 in 2017; hence, the percentage change reported underestimates the increase from the current situation.

consider it deeply inconsistent for the largest expenditure in its transport programme to be on a project which will increase climate change emissions.

7. THE ECONOMIC ARGUMENT

The ForthRight Alliance believes that, given: (i) the confidence expressed by FETA that "the deterioration of the cables can be arrested (by cable-drying) prior to the strength loss reducing to a level where intervention is required",[19] and (ii) that, even were this not to be the case, cable replacement or augmentation, while presenting "significant engineering challenges" is "achievable"[20] at a capital cost of between £91-122 million, it would be folly at this stage to commit to thousands of millions of pounds of public expenditure on a project which is simply unlikely to be needed.

8. THE SOCIAL JUSTICE ARGUMENT

There are many more deserving and pressing demands on the public purse. Building an additional bridge will inevitably come at the opportunity cost of delayed and cancelled school, hospital and other transport infrastructure projects throughout the land. Far better, then, in our view that the Scottish Government should work to resolve the problems of the existing bridge within easily available budgets as its top priority.

9. SUMMARY AND CONCLUSION

The issue of corrosion of the main cables of the existing bridge is being actively addressed - with "encouraging" initial results.

Even were this to fail to hold the degree of corrosion at a level where traffic restrictions would not be necessary, a programme of cable augmentation or replacement to enable the existing bridge to last for its design life of 120 years would still be possible on a timescale similar to that of building an additional crossing - and at a small fraction of the cost.

Further internal inspection of the main cables has also led FETA to conclude that the period within which traffic restrictions would need to be considered has now slipped from 2013/2019 to 2017/2021.

The ForthRight Alliance therefore objects to the Forth Crossing Bill. Any decision to contractually commit to an additional bridge costing the public purse up to £2,340 million would be, to say the least, premature at this point in time.

Working to resolve the problems of the existing bridge should instead be the top priority of the Scottish Government.

Lawrence Marshall
Chair
ForthRight Alliance
5 Rose Street
Edinburgh EH2 2RD
Tel.: (0131) 669 1336
www.forthrightalliance.org

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[19] Forth Estuary Transport Authority (2008b) *Op cit*. See section 3.6.

[20] Forth Estuary Transport Authority (2007) *Feasibility Study for the Replacement (or Augmentation) of the Main Cables of the Forth Road Bridge - Preliminary Findings*, Report to FETA, 01/06/07, Section 6.1, Conclusion - <http://www.forthroadbridge.org/sites/default/files/documents/Augmentation-Replacement%20of%20Main%20Cable%20May07Vers%206.pdf>.