

## **HUMBER BRIDGE BOARD**

**Report to: the Board  
15 February 2012**

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### **HUMBER BRIDGE REVIEW – FINANCIAL IMPLICATIONS**

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**Report not for publication by virtue of Humber Bridge Board Standing Orders 14 and 15 as the report contains information relating to the finance and business affairs of the Board and others**

#### **Report of the Treasurer**

#### **1. Purpose of the Report, Summary and Recommendations**

- 1.1 This report sets out the background and the likely financial implications for the Board and the Unitary Authorities arising from the outcome of the Humber Bridge Review, as set out in the letter dated 29 November 2011 from the Secretary of State for Transport and the Economic Secretary to the Treasury which was reported to the Board on 2 December 2011 (minute 4161).
- 1.2 The Audit & Finance Committee on 21 December 2011 received a presentation from the Board's consultants, Aecom, and agreed (minute 4168) that it was re-assured and satisfied that the methodology and calculations taken into consideration when submitting the Board's proposals to Ministers and the subsequent offer from the Department for Transport (DfT) and HM Treasury (HMT) had been robust.
- 1.3 The Audit & Finance Committee on 25 January 2012, having considered the Treasurer's report on the financial implications of the Government's offer, agreed (minute 4175) to endorse the general principles of the offer subject to -
  - (i) The Board giving further consideration to the financial implications, and
  - (ii) The Unitary Authorities agreeing to the other conditions to provide a formally agreed proposal for submission by mid February.
- 1.4 The report explains how the Board's (and the DfT's) consultants have constructed a number of sophisticated models to test the various options, one of which formed the basis of the Government's offer. The Humber Estuary Traffic Model (HETM) version provides assurance to the Board and to the Unitary Authorities that the Government's offer is financially viable and the

Downside Risk version confirms that it is still financially viable, albeit over a longer period, even if there were to be a very low demand response to the reduction in tolls.

- 1.5 However, the model is only a model, and relies on a whole range of assumptions some of which will turn out to be wrong. Nevertheless, it is the best information that is available at the present time and should be sufficient for the Board to agree that the financial implications of the Government's offer, as reflected in the HETM version of the model, be accepted (secure in the knowledge that the Downside Risk version would still be viable) subject to the Unitary Authorities agreeing to the other conditions to provide the Government with a formally agreed proposal. As this report demonstrates, there are a number of options that the Board can take should the position deteriorate in the future.

## 1.6 Recommendations

- 1.6.1 That the financial implications of the Government's offer, as reflected in the HETM version of the model, be accepted subject to the Unitary Authorities agreeing to the other conditions to provide a formally agreed proposal for submission by mid February.

- 1.6.2 That provision be made in the draft of the private Bill for the following –

- (a) In the unlikely event of a deficit occurring in a year that could not be met from the Reserve Fund, the Board would be able to take such action as is necessary to recover the deficit in the two years following the year in which it occurred. If at the end of the two years the deficit has not been recovered, the Board shall issue a levy amounting to 25% of the outstanding deficit on each of the Unitary Authorities. (Paragraph 8.2).
- (b) Replace the requirement on the Board to issue a levy in the event of a deficit by the requirement to issue a precept. (8.3)
- (c) A general enabling power to borrow and the deletion of the maximum period for repayment (and any other similar details which are in the current legislation). (8.5)
- (d) Tolls to be increased in line with RPI without the need for a Public Inquiry. (8.6)

## **2. Background**

### **2.1 Governance**

- 2.1.1 The Humber Bridge Board was created by an Act of Parliament (Humber Bridge Act 1959) and must comply with the terms of that Act and subsequent legislation. The Board is a statutory body corporate and comprises 22 councillors – 12 from Hull City Council, 5 from North Lincolnshire Council, 4 from East Riding of Yorkshire Council and 1 from Lincolnshire County Council.

### **2.2 Loan Debt**

- 2.2.1 The Act and subsequent legislation gave the Board power to borrow moneys to finance the construction of the Bridge, to be repaid over 60 years.
- 2.2.2 The Bridge opened in 1981 with a loan debt of £151m comprising £97m capital cost and £54m for additional borrowing to meet interest charges incurred during the construction period.
- 2.2.3 Due to further borrowing to meet most of the subsequent interest charges the debt continued to rise until it reached £439m in 1992. From then until 1998 the Government grant aided the Board £258m which covered the interest charges that could not be met out of the operating surplus and also enabled PWLB loans of £9m to be repaid.
- 2.2.4 The Humber Bridge (Debts) Act 1996 gave the Government the power to write off or suspend debt owed by the Board. In 1997 the debt was £425m of which £359m was owed to the Secretary of State and £66m to the PWLB. The Government agreed to write off the latter debt and to suspend £240m of the remaining debt at 0% interest to allow repayment over a maximum period of 40 years expiring in 2038, subject to review every five years.
- 2.2.5 Since 1997 the operating surplus has been sufficient to pay the interest in full plus £27m debt. A sum of £332m currently remains outstanding. In 2007 the DfT agreed that interest equivalent to 4.25% applied to the full outstanding debt would be charged from 2006 to 2010. In 2011 the DfT agreed that the same rate of interest would be charged for 2011 to 2016.

### **2.3 Revenues**

- 2.3.1 The legislation sets how the Board must apply the revenues it receives and ten purposes are listed. The first is that the revenues must be used to pay the working and establishment expenses and costs of the maintenance of the Bridge. The second is that the revenues must be used to pay interest. The third is that, once all interest has been paid, the revenues must be used to repay debt. Only after the first nine purposes have been satisfied can the revenues be used to reduce tolls as the tenth purpose.
- 2.3.2 If there is a deficiency in the revenues it must be made good by levies on Hull City Council, East Riding of Yorkshire Council (but only on the former Haltemprice UDC area) and North Lincolnshire (on the former Barton upon

- 2.3.3 The vast majority of Board's revenues come from tolls which have been increased from time to time in line with the Retail Price Index, usually following a public inquiry. The toll for cars was increased from £2.70 to £3.00 on 1 October 2011 with comparable increases for other vehicles.
- 2.3.4 Projections provided by the Board to the 2011 Public Inquiry - based on low maintenance costs, optimistic traffic growth and two yearly increases in tolls in line with the compounded Retail Prices Index – showed that the debt would be finally repaid in 2033, five years earlier than the 1998 and 2007 agreements, giving a margin if the assumptions proved optimistic.

### **3     The Humber Bridge Review**

#### **3.1    The Review**

- 3.1.1 In 2009 the Secretary of State for Transport instituted a Review into the impact that the Bridge tolls have on the region's economy. In 2010 the Treasury extended the Review and on 29 November 2011 the Chancellor of the Exchequer announced the outcome in his Autumn Statement, the details of which were set out in the letter of the same date to the Chair of the Board.
- 3.1.2 The Review included modelling the economic impact of the tolls. This work suggested that reducing the tolls has a positive impact for both the Humber area and the UK more widely, and has an acceptable benefit to cost ratio. As a consequence the Government considered that a substantial write down of the current level of debt was justified, with the aim of working towards a new settlement which ensures that the future finances of the Bridge are sustainable for both local communities and national government.
- 3.1.3 The Board submitted its own proposals for reform to the Review, most of which appear to have been accepted by the Government.

#### **3.2    The Offer**

- 3.2.1 The offer to the Bridge Board and the Humber area local authorities is that the Government will write down £150m of the debt, which currently stands at £332m, to allow the toll for cars to be reduced from £3.00 to £1.50 as soon as possible. This offer is conditional upon the Board and the local authorities agreeing to –

- (1) Radical reform of the Bridge Board to bring in new expertise and give it a sharper commercial focus, so that costs are controlled and opportunities to bring in new revenue are seized.

- (2) The Humber area local authorities taking on full responsibility for the remaining lower level of debt, and sharing it out much more broadly and realistically between them.

### **3.3 Reforming the Board**

- 3.3.1 This is seen as a two stage process - the first to be initiated straight away using existing powers; the second to be implemented as soon as possible after new legislation is obtained.
- 3.3.2 In the first stage, the Government expects to see an application to the Secretary of State for Transport under S97 of the 1959 Act to reduce the number of councillors on the Board significantly, and representatives of the LEP and local businesses added to the Board (initially non-voting).
- 3.3.3 In the second stage, The Government expects more radical reform options, including as a minimum a single representative from each Council bearing a share of the responsibility for the debt, and full Board membership and voting rights for the private sector representatives.

### **3.4 Responsibility for the Debt**

- 3.4.1 The Government wishes to see a more equitable arrangement between all relevant local authorities, with each standing behind, for example, a quarter share each of the any deficit not met from the Reserve Fund.

### **3.5 Timing**

- 3.5.1 The Government's aim is to formalise the write down of the debt before 31 March 2012 and requires the Board and the Unitary Authorities to work together to provide the Government with a formally agreed proposal by mid February.

## **4. Modelling**

- 4.1 As instructed by the Board, Aecom produced a Cost and Revenue model of the Humber Bridge as an operating business, and how this might be affected by different levels of tolls. This was originally used to test options for the proposed vehicle classification in conjunction with the replacement of the tollbooth equipment and computer system.
- 4.2 An amended version of the model with additional functionality to meet the needs of the Humber Bridge Review was produced by the Board's consultants for the DfT/HMT who used this model to test options for reducing tolls and writing down the debt. Three options were put forward, one of which was the 50% reduction in car tolls/£150m write down which formed the basis for the Government's offer.
- 4.3 The original version of the model generated a forecast of the future growth of

toll revenue (and hence the level of traffic crossing the Bridge) based on the extrapolation of observed growth in the period 2000-2010. Subsequently, a different version of the model was produced populated with the traffic forecasts produced by the Humber Estuary Traffic Model, developed by the DfT to consider the regional traffic and economic effects of different toll levels at the Humber Bridge. A key element of the model is the assumptions made on the demand response to a reduction in the tolls (“the demand elasticity”). Tests in the model have included a central forecast of what the demand response will be, and a “downside risk” forecast of a very low demand response to the reduction in tolls.

- 4.4 The original version of the model assumed that the full demand response would be seen in the year in which the tolls are reduced. This may have been appropriate for testing small changes in tolls, but is not appropriate for major changes with regional scale effects on commuting and business behaviour. Therefore a “ramp up” factor has been applied over the first 4 years to assume that only a percentage of the overall predicted growth will take place in the first year with further increases in the following years.
- 4.5 The reduction in tolls is likely to affect the Bridge’s customers in different ways. For example –
  - *Private Cars - leisure and shopping trips across the Bridge will become more attractive immediately. In the longer term some people will change jobs and where they live but this will take many months or years to materialise. It is unlikely that the reduction will attract many people to move into the region so the increases will only be from people who already live nearby. This means there will be a steady increase in private cars, initially from leisure users, then from people changing jobs and finally from people re-locating.*
  - *Cars Used for Business - depending on the extent to which people can reclaim tolls as expenses, they are likely to react very quickly to the reduced travel costs. This will be a combination of changing route and also visiting their customers more often.*
  - *Freight - if the reduction makes the overall cost of existing routes cheaper the Bridge will be used immediately, if it does not it will not be. However, customers will also investigate potential business from places which become cheaper to get to or could be added to existing routes. In the longer term not only will the lower tolls allow existing haulage companies to use the Bridge more often, but also open the option for new business to develop knowing that the cost of transport will not be disproportionate to their location. This means there is likely to be a strong immediate growth in freight customers using the Bridge which will be maintained in the long term by new freight destinations and growth to existing destinations. For the small business customer lower tolls will allow a combination of the above considerations depending on their size and type of business*

- *Other* - it is unlikely that the toll reduction will actually make any difference in respect of number of journeys for public service vehicles or domestic, non-voluntary, users (ie hospital patients/visitors) but the reduction will, of course benefit those users financially.

4.6 The HETM version of the model referred to in paragraph 4.3 above has been updated (17d) to reflect actual and latest forecasts of income and expenditure, the Board's policy on reserves and maintenance, and other factors, the results of which are set out in –

- Appendix 1A - HETM Summary **(TO FOLLOW)**
- Appendix 1B - HETM Detailed Analysis **(TO FOLLOW)**

4.7 The Downside Risk version has also been updated (17c) and the results are set out at Appendices 2A and 2B **(TO FOLLOW)**.

4.8 The difference between the two versions is largely due to the different assumptions about background traffic growth and the demand response to the reduction in tolls. The actual outcome is likely to be somewhere between the two versions.

## 5 **HETM Version**

5.1 The model sets out the financial impact on the Board of the Government's proposals over the next 26 years using a range of assumptions, the key ones of which are as follows –

- **Tolls:** Reduced by approximately 50% on 1 April 2012 with three categories – cars, vans and trucks. First increase in 2016/17 as per inflation (assumed as 2% per annum), then increased every year thereafter at 2% per annum.
- **Traffic Growth:** Background traffic growth of 64% from 2012/13 to 2038/39 (1.9% compound growth per annum) based on increase in population, household income, GVA and inflation.
- **Demand Response:** 28% increase in traffic volume following the 50% reduction in tolls. Full effects are not applied instantly – **ramp up** of demand response assumed as follows:

Classification	2	3	4	5	6
	%	%	%	%	%
2012/13	0.5	0.5	0.6	0.75	0.9
2013/14	0.8	0.8	0.85	0.9	0.9
2014/15	0.95	0.95	0.95	1.0	1.0
2015/16	1.0	1.0	1.0	1.0	1.0

*The net effect over the 26 years is an increase of 32% over background growth.*

- **Sales, Fees and Charges:** As per Board budget for 2011/12 and 2012/13, then from 2013/14 onwards based on average of several years up to 2010/11 and increased by RPI.

- **Interest Income:** As per Board budget until 2012/13, then based on same proportion of toll income as 2011/12 which is 0.6%.
- **Operating Expenditure:** Costs increase from 2012/13 budget values by RPI (2%) plus additional 1% over RPI.
- **Maintenance Fund:** Transfers in and expenditure as per Board programme to 2019/20 when balance will be £2.024m. Thereafter transfers in of £2.0m, expenditure of £2.0m and balance in hand increased by RPI each year.
- **Other:** “Transfer to Pension Reserve etc” and “DfT Grant re Maintenance Fund” only relate to 2010/11.
- **Loan Interest:** interest rate 4.25% per annum.
- **Loan Repayment:** Annual net operating surplus minus transfer to Maintenance Fund minus loan interest plus/minus change in Reserve Fund balance. Zero repayment if insufficient funds.
- **Reserve Fund:** Minimum level of 10% of toll income at the yearend as per Board policy.

5.2 Appendix 1A summarises the results of the HETM version of the model and confirms that the Government’s offer is financially viable. It can be seen that –

- at no time is there a deficit which cannot be met from the Reserve Fund, which demonstrates that there is never a need for a levy on the Unitary Authorities,
- the Reserve Fund balance does not fall below 10% of toll income in any year, in line with the Board’s policy,
- the Maintenance Fund balance is £2.024m at 31 March 2020 and increases in line with inflation each year thereafter, and
- the DfT loan is paid off in 2029/30, seven years earlier than the current agreement requires.

## 6. **Downside Risk Version**

6.1 The assumptions used in the Downside Risk version of the Model are largely the same as those used in the HETM version except for the following –

- **Traffic Growth:** Background traffic growth of 17% from 2012/13 to 2038/39 (1.0% compound growth per annum) based on increase in population, household income, GVA and inflation.
- **Demand Response:** 19 % increase in traffic volume following the 50% reduction in tolls. Full effects are not applied instantly – **ramp up** of demand response assumed as follows:



Classification	2	3	4	5	6
	%	%	%	%	%
2012/13	0.2	0.2	0.2	0.2	0.2
2013/14	0.5	0.5	0.5	0.5	0.5
2014/15	0.85	0.85	0.85	0.85	0.85
2015/16	1.0	1.0	1.0	1.0	1.0

*The net effect over the 26 years is an increase of % over background growth.*

6.2 Appendix 2A provides the assurance to the Board and to the Unitary Authorities that the Government's offer is still financially viable even if there were to be a very low demand response to the reduction in tolls, it shows that-

- at no time is there a deficit which cannot be met from the Reserve Fund,
- the Reserve Fund balance does not fall below 10% of toll income,
- the Maintenance Fund balance is £1.024m at 31 March 2020 and increases in line with inflation each year thereafter, but
- the DfT loan is not paid off until 2037/38, although that is just within the current loan period.

## **7. Consultation**

7.1 The Unitary Authorities were given copies of the report considered by the Audit & Finance Committee on 25 January (which was based on an earlier version of the Downside Risk model). They were also given complete access to the various versions of the model to enable them to carry out due diligence and to provide them with the assurance that they seek. In addition, the Board's Treasurer met the Section 151 Officers on 20 December 2011 and on 26 January 2012, together with representatives from Aecom and the DfT to examine the model and the assumptions that lie behind it. Inevitably a number of questions were raised which have been taken into account in the latest versions of the model.

7.2 The local Members of Parliament were invited to a briefing on 27 January but it was cancelled as only one MP indicated that he could attend. However, all the MP's were sent a copy of the Audit and Finance Committee report with an invitation to contact the Treasurer or Clerk if they wanted any further information but none of them did.

7.3 Copies of the same report were also sent to the Humber Local Enterprise Partnership (LEP) and the Chamber of Commerce with invitations to a briefing

with the Board's Chair, Clerk and Treasurer on 2 February. Only the LEP Chair and Manager attended but it was a useful discussion which enabled a number of issues and misconceptions to be clarified.

- 7.4 The Chair, Clerk and Treasurer attended by invitation a meeting on 20 January of the Unitary Leaders (who had also been sent copies of the report referred to above) and discussed certain aspects of the Government's offer. The Chair and Treasurer also attended a follow up meeting on 2 February when, following a full briefing on the financial implications, the Unitary Leaders concluded that all four Unitary Authorities were –
- (a) in broad agreement with the DfT Model being used and agreed that they would all need to work together over the next two weeks to finalise the Agreement Letter that was to be submitted to Government, and
  - (b) in general agreement in principle to engage equally on a 25% basis.

## **8. Concerns and Risks**

- 8.1 The Unitary Authorities have expressed concern about the wording in the 29 November letter which states *"local authorities taking on full responsibility for the remaining lower level of debt"*. The DfT have confirmed that what is meant is *"responsibility for a deficit occurring in a year that could not be met from the Reserve Fund"*. Their main concern is that in this unlikely event, the Board would have no option but to issue a levy of 25% of that deficit on each of the four Authorities.
- 8.2 However, it is proposed that the current legislation should be amended in the forthcoming private Act so that should such a situation arise in any one year the Board would be able to take such action as is necessary to recover the deficit in the two years following the year in which it occurred. If at the end of the two years the deficit has not been recovered, the Board shall issue a levy amounting to 25% of the outstanding deficit on each of the Unitary Authorities. *(What this would do is avoid having to issue a levy if something totally unforeseen happened one year which resulted in a deficit that could not be met from the Reserve Fund that year but could be recovered in the following two years.)*.
- 8.3 The S151 Officers have requested that the legislation be also amended to replace the requirement on the Board to issue a levy in the event of a deficit, which would count as the Authority's spending, by the requirement to issue a precept, which would be passed on to the council tax payer.
- 8.4 There is also a concern that the current interest rate of 4.25% is due to be reviewed in 2016 and that the loan is required to be repaid by 2038. The DfT have said that as part of the new loan agreement the interest rate would be fixed at 4.25% for the life of the loan but that an extension in the repayment period beyond 2038 will require legislation.

- 8.5 It is proposed that the new Act will contain a general enabling power to borrow and the deletion of the maximum period for repayment (and any other similar details which are in the current legislation). The revision of the existing loan agreement would then a matter for determination between the DfT and the Board and would include such matters as -
- the life of the loan (*with the ability to extend it should circumstances warrant it*),
  - the interest rate (*no more than 4.25% or such lesser percentage as may be agreed*),
  - a discounted interest rate in the early years (*if agreed*), and
  - a schedule of **indicative** repayments based on the Downside Risk version of the model with the ability to pay more or less in any one year without penalty. (*Therefore the Board would always pay the interest but may wish to accelerate or delay repayment of the loan should circumstances warrant it in any one year.*)
- 8.6 At present if the Board wishes to increase the tolls and there is an objection, there has to a Public Inquiry, even if the increase is in line with inflation, at considerable cost to the public purse. It is suggested that provision be made in the new Act for tolls to be increased in line with RPI without the need for an Inquiry.
- 8.7 The main risk is that actual traffic growth, and therefore toll income, is less than that assumed in the model. In that event there are a number of options that the Board can take to mitigate the position, including –
- Increasing tolls before 2016/17.
  - Increasing tolls by more than the rate of inflation. (*Note that a public inquiry would not be needed until tolls exceed the current level - and not then if in line with RPI but subject to legislation*),
  - Re-phasing major maintenance works and transferring less money into the Maintenance Fund,
  - Financing some major maintenance works by borrowing. (*Subject to legislation*),
  - Deferring loan repayments and/or extending the repayment period. (*Subject to legislation*),
  - Re-financing the loan at a lower rate of interest. (*Subject to legislation*),

- Using surplus cash currently invested in the money market at interest rates of under 1% to make advance loan repayments.

as well as continuing to examine all costs, both operational and maintenance to find further economies (*e.g. the introduction of the new toll equipment should result in some employee savings*).

- 8.8 Another concern of the S151 Officers was what would happen if there was a catastrophic event which affected the Bridge. The DfT are very clear that catastrophes would remain a risk borne at national level but are not sure whether this has ever been defined and will discuss it further.

## **9. Conclusions**

- 9.1 The HETM version of the model provides assurance to the Board and to the Unitary Authorities that the Government's offer is financially viable and the Downside Risk version confirms that it is still financially viable even if there were to be a very low demand response to the reduction in tolls.
- 9.2 However, the model is only a model, and relies on a whole range of assumptions some of which will turn out to be wrong. Nevertheless, it is the best information that is available at the present time and should be sufficient for the Board to agree that the financial implications of the Government's offer, as reflected in the HETM version of the model, be accepted (secure in the knowledge that the Downside Risk version would still be viable) subject to the Unitary Authorities agreeing to the other conditions to provide the Government with a formally agreed proposal. As this report has demonstrated, there are a number of options that the Board can take should the position deteriorate in the future.

## **10. Recommendations**

- 10.1 That the financial implications of the Government's offer, as reflected in the HETM version of the model, be accepted subject to the Unitary Authorities agreeing to the other conditions to provide a formally agreed proposal for submission by mid February.
- 10.2 That provision be made in the draft of the private Bill for the following –
- (a) In the unlikely event of a deficit occurring in a year that could not be met from the Reserve Fund, the Board would be able to take such action as is necessary to recover the deficit in the two years following the year in which it occurred. If at the end of the two years the deficit has not been recovered, the Board shall issue a levy amounting to 25%

of the outstanding deficit on each of the Unitary Authorities. (Paragraph 8.2).

- (b) Replace the requirement on the Board to issue a levy in the event of a deficit by the requirement to issue a precept. (8.3)
- (c) A general enabling power to borrow and the deletion of the maximum period for repayment (and any other similar details which are in the current legislation). (8.5)
- (d) Tolls to be increased in line with RPI without the need for a Public Inquiry. (8.6)

**John Butler**  
**Treasurer to the Board**

9/JB  
14 February 2012