#### THE CLIFTON SUSPENSION BRIDGE

# THE ECONOMIC CASE FOR AN INCREASE IN THE CASH TOLL

#### OCTOBER 2005 (UPDATED FROM JULY 2004)

#### CONTENTS

1	Introduction and summary of key issues
2	Additional Expenditure

- 3 Proposed increase in the cash toll
- 4 Financial projections
- 5 Objectives of the Trust
- 6 Reserves and the purposes for which they are maintained
- 7 Insurances
- 8 Maintenance projects 2004-2008

## Appendices:

- 1. Photographs showing views of the Bridge from Leigh Woods and Clifton.
- 2. Letters in support of proposal to increase tolls from Bristol City Council and North Somerset Council
- 3. Copies of 2004 press release and "flyer" for drivers
- 4. Photographs showing the abutments and voids
- 5. Letter dated 17 June 2005 from consultant engineers Kellogg Brown & Root Limited relating to the costs of investigation works
- 6. Photograph showing the Bridge Illuminations.
- 7. Detailed financial projections different toll levels

#### 1. Introduction and summary of key issues

The Clifton Suspension Bridge (the Bridge) is operated by a Charitable Trust set up under The Clifton Suspension Bridge Act 1952. Responsibility for the Trust rests with 12 Trustees, comprising 10 "Resident Trustees", chosen for their technical and business expertise, and two "Representative Trustees" nominated by Bristol City Council and North Somerset Council.

The 1952 Act sets out the main provisions regarding the operation of the Bridge, the powers and duties of the Trustees and the building up and maintenance of a Reserve Fund. In addition to this the Trustees aim to preserve the structure as a working Bridge for the long term, rather than letting it decline into just being an historical monument. It currently forms a key part of the Bristol transport network, and has between four and five million vehicle crossings per annum. It is also a Grade 1 listed structure, and is looked upon as an icon for the South West of England, currently being under consideration as a regional symbol for EC purposes.

It should also be noted that the site of the Bridge, within the Avon Gorge, is one of the top ten Sites of Special Scientific Interest in the country and is of international importance, being home to many rare plants. Consequently, any maintenance work undertaken on the Bridge needs to take this special situation into account (see photographs at Appendix 1).

This application is in furtherance of decisions taken in Trustees' meetings in 2003 and 2004 to seek to increase the cash toll at the Bridge from 30 pence to 50 pence. Since the toll was only increased to 30 pence from 20 pence in early 2003, this paper explains the changed circumstances and additional expenditures the Trust is currently facing, and why these were not foreseeable in 2002 when the previous application was made.

This document was originally prepared in July 2004, and circulated and discussed with Bristol City Council and North Somerset Council. Both have confirmed in writing that they are supportive of this proposal, and the letters from both are attached at Appendix 2. In addition, a press release was issued and the proposal received supportive coverage, and drivers were given a "flyer" informing them of the proposal (at Appendix 3). Again, virtually every comment received was supportive.

Following this consultation and initial discussions with the Department for Transport Road Strategy Division, additional information has been included in this Economic Case, and the financial estimates updated where indicated.

#### 2. Additional expenditure

The following major increases in expenditure have occurred since mid 2002, when the original decision was taken to apply for a 30 pence toll and as a result of this increase in expenditure the Trust seeks an increase in the toll.

#### 2.1 Insurance Premiums

The Trust's insurance premiums have more than doubled, from £41,000 in 2002 to £95,000 in 2003 and 2004. The end of a 5-year agreement in 2002 resulted in a full remarketing of our insurances. The existing insurer withdrew from the market, and only one firm was willing to cover the risks. This was at a doubled premium. Whilst the 2003 budget included provision for a 20% premium rise, the Trust had no choice other than to accept the doubling of the cost. The Trust does not currently anticipate any further substantial rises.

#### 2.2 Voids – Abutments & Towers

During 2000 voids were discovered on the Clifton side of the Bridge; a depression was noted during repaving work, and upon investigation a void and shaft was discovered. Pressures to complete the repaving work meant that there was insufficient time to carry out a full investigation at that time.

Further investigations in 2002/03 led to the discovery of huge voids in the abutment on the Leigh Woods side of the Bridge. Additional work in providing access into the honeycomb of chambers, in order to assess the maintenance liability and examination of the structural form of the two abutments and towers, is currently ongoing. The Trust envisages major costs in accessing, investigating, monitoring and making safe these hollow structures, which support the Bridge.

Work on the abutments and towers originally took place between 1836 and 1843. There is nothing in any of the plans currently held to indicate that there were voids in the abutments or towers. However, there was a twenty-year gap between the completion of the abutments and towers and the construction of the Bridge and ironwork. Detailed, "as built" drawings of the Bridge and ironwork are held but the original drawings of the abutments and towers were lost during the intervening years

The abutments and towers were thought to be solid for of the following reasons:

- 1. there is no indication of any way of gaining access to the voids, this would have been expected;
- 2. the results of a borehole drilled into the abutments in the 1960's by Sir Alfred Pugsley appeared to show the structures to be solid;
- 3. since the Bridge was completed excellent records have been kept, these have not given any indication or reason to suggest they were hollow.

Detailed surveying of the inside of the "drainage" shaft was started in 2002, this led to the discovery of further shafts and a honeycomb of 12 very large voids ranging up to 6 meters wide and 11.5 meters high (see photographs at Appendix 4). Ironwork had been used to link the voids in the form of a large grid with timber used as packing.

Further work is now required to assess the extent of corrosion to the ironwork, and rotten timber, in addition to any work on the brickwork. In order to do this the following factors need to be considered:

- 1. The need to improve access to allow equipment to be brought into the shafts and voids a door has been put in to access three of the chambers at a cost of £30,000. To allow safe access to the other chambers a further door needs to be put into the lower levels. This is likely to be more expensive due to the position 100 feet down the face of the abutment and therefore access is very difficult. In addition to a door a platform will need to be constructed to provide a stable entry. The wall of the abutment is thicker further down and consideration will need to be taken as it will be more visible;
- 2. Equipment/scaffolding to be used can be no longer than 4 foot long due to the changing direction of the shafts;
- 3. Systems will need to be installed to make the working environment safe e.g.:
  - monitoring air quality,
  - provision of power,
  - ventilation
  - drainage,
  - lighting,
  - communications (hard wiring)
  - security,
  - rescue etc
- 4. Further investigation and monitoring to establish the construction of the internal walls;
- 5. Analysis of the material found in the main chamber;
- 6. Monitoring of the arches under the roadway as vehicles crossing the Bridge drop onto the top of the arch on leaving the Bridge.

Work to date on the Leigh Woods abutment has cost £85,000 and has been paid for from the Trust's own resources. However, further work is now required to establish the condition of the existing structure from within and make good any problems.

Further investigation is also required at the Clifton side of the Bridge where there are now known to be 2 chambers, and it is suspected that there could be a further 2, with ironwork around the abutment and linking the chambers in the same way as it does on the Leigh Woods side. A radar survey of the 2 towers was undertaken early in 2003. This survey suggests that there could be some limited voiding and metal work in the towers; further investigation is required.

As can be seen in the table at paragraph 8, the costs shown there include not only the investigation of the voids/abutments, but the estimated remedial/securing works too.

They are shown as follows:

- 1) Investigation £180k
- 2) Leigh Balustrade £40k
- 3) Clifton balustrade £36k

- 4) Clifton tower £103k
- 5) Clifton abutment £35k
- 6) Leigh Woods abutment £192k
- 7) Leigh tower £105k

The figures given are only estimates however, until the investigations are complete, on such an old and complex structure, it is simply not possible to obtain more accurate costings. In addition, most of the work originally scheduled for 2004 and noted in paragraph 8 has been delayed until 2005-06, as it has taken longer than was originally envisaged to obtain the necessary planning permissions for lower level abutment access.

At Appendix 5 is a letter dated 17 June 2005 from our specialist consulting engineers regarding the costs of the investigation work (item 1 above), which broadly relates to the budget above. It is not possible to estimate more accurately the remedial/maintenance costs until secure and safe access has been established. However, if simply securing access costs £180,000, it is obvious that "real maintenance" costs are likely to be very substantial.

Unfortunately, wear and tear type costs are not insurable.

#### 2.3 Lights

The Bridge was first illuminated when it opened in 1864. Since then it has been "lit" on special occasions, for example in 1935 for the Jubilee, in 1951 for the Festival of Britain, in 1953 for the Coronation, in 1959 to mark 100 years since Brunel's death, in 1964 to mark the Bridge's one hundredth birthday, and in 1977 to mark the Queens' Jubilee, since when it has been permanently illuminated.

The Bridge is a well-known symbol of Bristol both by day and night when it is illuminated (see photograph at Appendix 6).

The current purpose built lighting system was installed in 1992 and at that time had a design life of 20 years. The exposed position of the Bridge and harshness of its environment caused premature failure of the lighting units resulting in expensive maintenance. The manufacturer of the equipment continued to provide replacements for ten years under a term contract. The Bridge is now the only customer for these units and replacements are now almost impossible to obtain. As a result it was inevitable that the existing system would deteriorate to a state where it is no longer feasible to maintain it. This has now occurred, with the north facing lights now turned off to provide replacement units for the south side and the south side itself soon needing to be switched off.

A new system is required to comply with Construction Design & Management (CDM) Regulations and must be easy and safe to install and maintain. Realistic costs for the replacement of the current system have been obtained after extensive trails and an estimated cost of £750,000 has been quoted for a three-chain illumination. Together with other expenditure, for example, the removal of the old system, alterations to electricity supply etc., the total cost could now amount to more than £900,000. This is significantly higher than the £270,000 estimated in previous budgets, which were based on replacing like with like, which is no longer possible.

Whilst it would be possible to argue that light replacement, unlike insurances and the voids, is not essential work, the Trustees have always taken the view, and continue to do so, that the Bridge's place as a South West symbol, an international tourist attraction, a major part of the Bristol highway network, and as a structure having a unique place in the life of Bristol's citizens, means that replacement lights are essential. In particular, the Trustees wish to have new lights in place for the bi-centenary of Brunel's birth, in April 2006. —Other income sources are being explored, such as Brunel funds or lottery money, but it is inevitable that the majority of the costs will fall upon the Trust's unrestricted funds.

### 3 Proposed increases in the cash toll

#### 3.1 History

A 20 pence toll was first introduced on 1 January 1982 when an increase from 10 pence was authorised.

On 1 January 1987, the Trustees reduced the cash toll to 15 pence per crossing; it being felt that the reserves at that time were sufficient to meet any potential needs. On 1 January 1995, when reserves dropped, tolls were increased back to 20 pence per crossing. This toll reversal is significant when considering the current application; the Trustees have always sought to run the Bridge efficiently and have been willing to reduce the toll if reserves grew beyond what was necessary. Accordingly, in the event that in future reserves are considered sufficient to meet any future needs the Trust would consider reducing the level of tolls recovered.

The 20 pence toll stood for over 20 years, including occasions when significant inflation has occurred, (increases in the RPI since 1982 total just over 100%). In March 2003 the toll was increased to 30p with reductions offered to regular users.

### 3.2 Current position and proposed increase

There are currently two methods of payment when crossing the Bridge, cash and Pay as You Cross ("PAYC") cards. The latter are prepayment systems for regular users. The following summarises the position:

- 1) The cash toll is currently 30 pence per crossing. The proposal is to increase this to 50 pence in 2005.
- PAYC cards are charged at rates varying from £27 for 100 crossings (27p per crossing), to £120 for 1000 crossings (12p per crossing). It is proposed to increase these in the same proportion as the cash toll. This will bring the 1000-crossing card to only 20p per crossing, which is the price of the original cash toll. Regular users will therefore continue to receive a high level of discount, and will still be able to cross at the "old" cash toll price. The Trust is keen to promote the use of such cards to regular Bridge users because, although the income is less, the costs of collection are lower than with cash.

It is not considered practicable to increase the toll in steps of less than 10 pence, as the use of any intermediate toll level would necessitate three or more coins. The pressures on traffic flows, particularly in the morning and evening rush hours, have shown that the fewer coins used the better. Smaller coins are often dropped and the coin machine takes longer to count the coins, both of which cause considerable delays.

A 40 pence toll was considered by the Trust. However, as can be seen in the financial projections at Paragraph 4, this would only serve to bring the Trust back to breakeven, and then immediately return to deficits. A 50 pence toll is therefore necessary to allow the Trust to meet its medium term expenditures.

Pedestrians and bicycles are not charged though the 2003 Toll Revision Order provided that pedestrians and cyclists may be charged at 5p per crossing. It is felt that the cost to the Trust in terms of collection and banking would make the collection of any charge impracticable.

The number of crossings reached between 4 million and 5 million at its peak a year or two ago. This included a number of one-off factors and in particular the very major motorway works on the M5 Avonmouth Bridge, and the closure of the main A4 "Portway" following a road collapse. The number of crossings in 2004 was 3.82 million, split 2.19 million cash and 1.6million PAYC card.

This reconciles to the Trust's income in 2004 as follows:

- 1) Cash 2.19m x 30 pence = £658k income, plus £13k where 50 pence or more coins were used (no change) = 2004 cash income of £671k
- 2) PAYC 1.6million at average of 15pence per crossing = 2004 PAYC income of £250k
- 3) Total 2004 income £921k per audited accounts

# 4. Financial projections

The Trust has just about managed to breakeven on revenue account over the last three years, however the Trust's reserves have declined significantly during this time because of poor stock market performance. The results to 2003 and the projections at a 30 pence toll level are shown below. Detailed projections for 30, 40 and 50 pence tolls are provided in Appendix 7.

	Toll income	Surplus/(deficit)	Investment profits/ (losses)
2001	£731,000	£9,000	(£1,156,000)
2002	£732,000	(£62,000)	(£1,427,000)
2003	£878,000	£45,000	£588,000
2004	£922,000	£111,000	£293,000
Net 2001-2004		£102,000	(£1,702,000)
2005	950,000	(736,000)	-
2006	950,000	(272,000)	
2007	950,000	(338,000)	
2008	950,000	(368,000)	
Net 2005-2008		(1,714,000)	

It is important to note that the 2003 result was achieved only after the 30 pence toll increase for most of the year. The level of toll income is currently estimated to settle at approximately £950,000.

Meanwhile, the Trust's operating costs continue to grow and, even without the additional "exceptional" expenditure that is now required, are approaching £1million per annum. The major work that has taken place in 2002 and 2003 has been the initial voids investigations, access to chain shafts and new CCTV. As detailed in the Appendices, work over the five year period to 2008 will include the lighting replacement (£900,000), abutment/void investigation (£180,000), and subsequent stonework investigation (£511,000), resurface Bridge deck (£250,000), and chain safety system (£150,000). Together with other smaller works, the cost of these special projects is projected to exceed £2.9 million over the 5- year period to 2008. Paragraph 8 sets out new projects and estimated costs.

In addition to the increased level of operating costs, the value of the Trust's investments declined significantly, from £7.1million in the 2000 accounts to £5.4 million in the 2003 accounts. Since these investments are used both to provide income to keep tolls at their current low level, and to finance major new project spend, this is a very significant development, particularly as the Trustees have no current expectation of investment values returning to 2000 levels.

It will be noted that the Trustees have designated a "Major Repair Fund", currently standing at £5.09million, in which its investments are placed. The question arises as to whether this fund should be used to pay for the current exceptional projects. The Trustees believe that this is inappropriate for a number of reasons:

- 1) The fund has already been drawn on to a limited extent to pay for exceptional costs such as the initial voids investigation;
- 2) The stated policy of the Trust is to seek to build the fund to 25% of the insured value of the Bridge of £35 million. The current fund has now fallen to 14.5% of the insured value, from 23% in 2000. The Trustees believe it would be dangerous to deplete the funds further, particularly at a time of uncertain investment market outlook;
- 3) There is no certainty of long term traffic (and thus income) volumes- arising from possible congestion charging or CPZ's in Bristol;

- 4) In principle the Trustees believe it is wrong for capital funds to pay for revenue deficits without a further change to toll levels, growing revenue deficits are projected indefinitely; and
- 5) Drawing down the fund reduces the investment income and both increases the need for future toll increases and the dependence of the Trust solely on the cash toll.

The view of the Trustees is therefore that, as soon as permanent revenue deficits are anticipated, not to deplete reserves without any certainty as to the outcome or timing of future toll rises, but to seek to remedy the position when identified, in line with good business practice.

#### 4.1 Update to 2005

The Trust prepares its budgets in the winter of each year, and at that time prepares an update of its 5 year maintenance plan. The maintenance costs budget shown at paragraph 8 as originally contained in the July 2004 Economic Case has therefore not yet been updated and the projects and costs shown there still hold apply.

It is important to note that changes in projects tend to be timing only – moving back and forward depending on the speed or otherwise of securing the necessary planning and other permissions for the Grade 1 Listed Structure, and on revisions to priorities. The Trust still anticipates new project costs in the order of £2.9m over the 5 year period.

However, in the absence of a formal update, the Trust would make the following comments in connection with 2004 and 2005. Compared with the original 5 year forecast:

- 1) The illuminations replacement programme incurred higher costs (of an additional £32,000) in 2004 than budgeted, but the overall project cost may now be £100,000 lower due to a decision to change from fibre optic to LED lighting
- 2) The chain safety systems project has moved from 2004 to 2005
- 3) There were additional public enquiry costs of £50,000 in 2004 relating to the new visitor centre
- 4) The abutment investigation is still ongoing, in particular the Clifton rock-face enquiries and boreholes. Because of the access and safety issues involved, and the need for planning consents and care regarding the SSSI site, this has taken some time and the major abutment and balustrade works are now in 2005/06.
- 5) New investigation of Bridge sway costs of £25,000 were incurred in 2004, but the tower ladders work of £20,000 was deferred

# 5. Objectives of the Trust

In defining a toll policy for the Bridge it may be appropriate to clarify the financial objectives of the Trust as follows:

- Overall revenue should not fall below essential budget expenditure for the indefinite preservation of the Bridge;
- The Major Repair Fund should be built to 25% of the insured value of the Bridge;
- The service provided to motorists, pedestrians and visitors should be maintained or improved; and
- Disruption arising from major repairs/renewals should be kept to a minimum i.e. maintenance should seek to be preventative not remedial. The alternative of letting the Bridge gradually fall into disrepair would at some point be likely to lead to the Bridge requiring to be permanently closed to vehicle traffic with severe consequences for Bristol's transport network.

These broad objectives may be translated into specific financial requirements:

#### Overall Revenue

- a) The income from tolls should not fall below a level which results in a long-term reduction to the reserve funds.
- b) The tolling policy should seek to recover operational costs.
- c) The tolling policy should fund ongoing or special maintenance work.

"Service" provided might be considered in various way:

- a) The number of crossings per annum.
- b) The toll system should be easy to use, both for coin and card transactions.
- c) The toll system should be reliable.
- d) The system should be perceived to provide value for money.
- e) Customer relations should be maintained or improved.
- f) People in receipt of disability allowances should receive concessions.
- g) The safety of the public and staff should be maintained or improved.
- h) Assistance given by staff to members of the public.

## 6. Reserves and the purposes for which they are maintained

The bulk of the provisions regarding the powers and the duties of the Trustees and the maintenance of the reserve fund are in the Clifton Suspension Bridge Act 1952. The preamble to the Act, under which the existing Trustee arrangements were established, refers to the "necessity of making provision for the contingency that the Bridge may ultimately have to be replaced, making it expedient to provide for continuing the powers to charge tolls for an unlimited period."

Under the 1861 Act, which was one of the former Acts mentioned in the 1952 Act, it is stated that an accumulation fund was formed for the purpose, ultimately, of freeing the Bridge from tolls. A further recital in the later 1952 Act states, however, that there remains the necessity of making provision for the contingency that the Bridge may need to be replaced and that because of this it is expedient to continue to charge tolls.

Section 40(1) of the 1952 Act provides that it "shall be the duty of the Trustees to maintain the Bridge in proper repair...."

Section 40(2) provides that "the Trustees may improve, renew, extend or replace the Bridge or contribute towards its cost...."

Section 40(3) provides that nothing in Section 40 is to impose on the Trustees a greater obligation than can be discharged out of the funds of the Trust.

Section 45 governs the revision of tolls, provides in sub-section (6) that the Minister of Transport who authorises revisions of tolls is not allowed to accept a revision either upwards or downwards if this would lead to the annual revenue of the Trust being insufficient to enable management of the Trust and the making of adequate provision for all expenses which include provision of a reserve fund for authorised purposes.

Section 53 governing the application of monies provides that after paying establishment costs and maintenance and various other expenses revenue is to be used towards providing a reserve fund the purposes of which are set out in Section 53(3).

Section 53(3) provides that the reserve fund is to cover any extraordinary claims or happenings or the cost of renewing or improving the Bridge or providing a new structure in substitution.

#### 7. Insurances

The Bridge is currently insured via Aon for £35,000,000 with an extension clause allowing for a 50% inflationary increase during reconstruction. The total replacement cost insured is therefore £50,000,000.

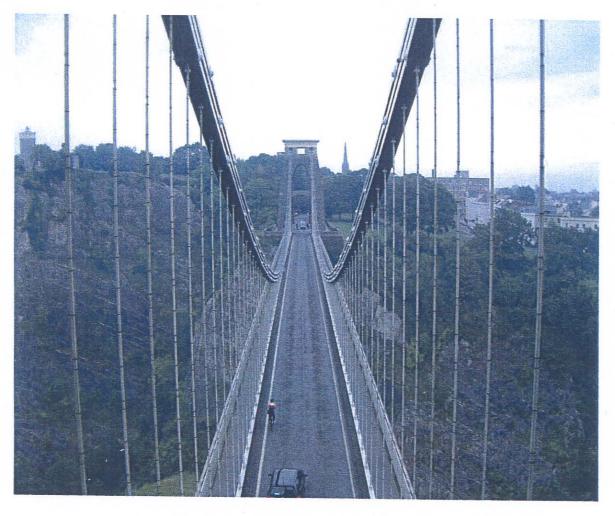
The Bridge is covered for all "external" risks but not for "internal" risks arising from wear and tear or corrosion of the structure itself; these matters are dealt with by regular maintenance and inspection programmes. It is also important to note that the Bridge is not covered for major damage or catastrophe emanating from within the structure. It is to cover such exceptional repair or eventual replacement that the Major Repair Fund exists.

There are parts of the Bridge that may deteriorate over time causing very significant damage to the Bridge e.g. cracking of the Leigh Woods abutment. Stabilising this massive structure could cost several million pounds. Similar damage could occur in the towers and the anchorages. The rocks on which the abutments stand could also become unstable as a result of weathering or foliage. This again may require very considerable works. None of these scenarios would necessarily be covered by insurance, leaving the Trust with the liability.

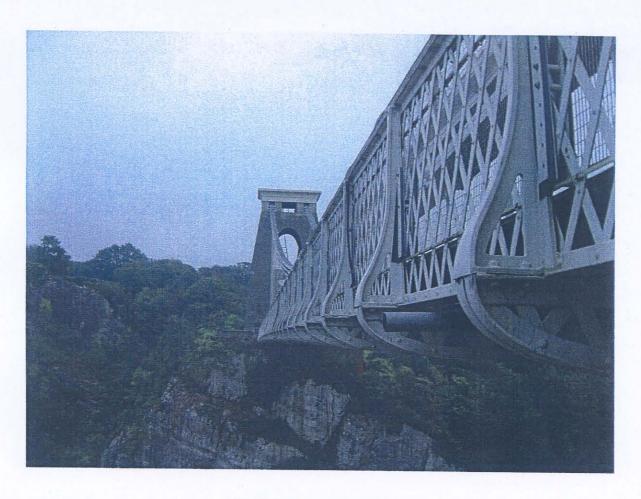
### 8. Maintenance projects 2004-2008

SCHEME	COST	2004	2005	2006	2007	2008
Painting system repairs	25,000	5,000	5,000	5,000	5,000	5,000
Access to chain shafts	2,000	2,000	2,504 Provide 35	, , , , , ,		2,000
Saddle monitoring	4,000	1,000	1,000	1,000	1,000	
Tower ladders	20,000	20,000		7	2,000	
Renew Toll Collection Computers	14,000			14,000		
Illuminations Replacement	900,000	100,000	760,000	40,000		
Maintenance Yard Landscaping	25,000			25,000		
Mess room Facilities Revamp	10,000	10,000				
Stone conservation				1 10		
Leigh balustrade	40,000	40,000				
Clifton balustrade	36,000	36,000				
Clifton tower	103,000				103,000	
Clifton abutment	35,000				35,000	
Leigh woods abutment 2009	192,000				192,000	
Leigh tower	105,000					105,000
Leigh woods abutment repairs	100,000			100,000		100,000
CCTV	1,000	1,000				
Leigh Woods toll house	50,000			5,000	45,000	
Cracked stanchions	25,000	5,000	5,000	5,000	5,000	5,000
Investigation of abutments	180,000	80,000	50,000	50,000		2,000
Resurface articulated span	10,000			10,000		
Resurface movement joints	20,000			20,000		
Resurface Bridge deck	250,000			125,000	125,000	
Rebuild Clifton tollhouses	200,000			120,000	10,000	190,000
Ancillary Bridge Centre Works	25,000	25,000			10,000	170,000
Clifton Rocks Inspection	20,000	10,000		-		
Chain Safety System	150,000	150,000				
Consulting engineers	125,000	25,000	25,000	25,000	25,000	25,000
Contingency	350,000	50,000	60,000	70,000	80,000	90,000
Total	2,917,000	560,000	906,000	395,000	434,000	420,000

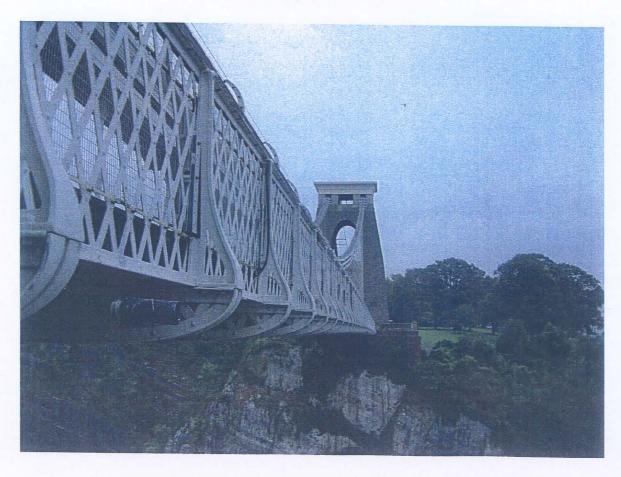
# Appendix 1

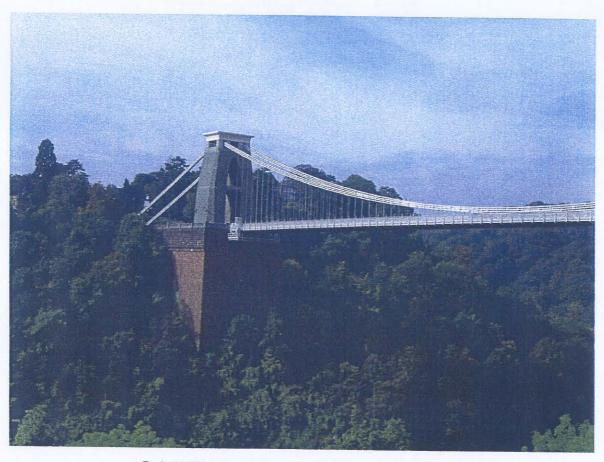


The Clifton Suspension Bridge looking towards Clifton

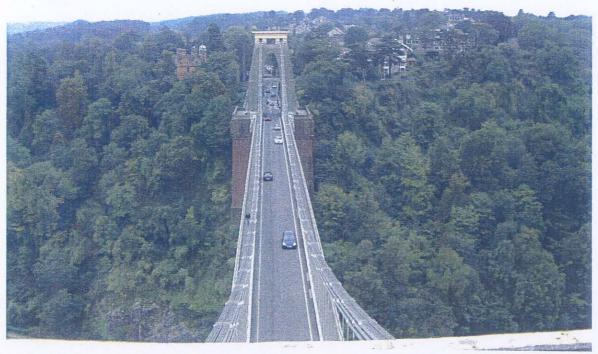


Looking towards Clifton.





Leigh Woods end on the Bridge looking from Clifton.



3689823. Doc



Mr J Mitchell Bridge Master Clifton Suspension Bridge Leigh Woods Bristol BS8 3PA

Reply to Telephone Minicom

R.Rawlinson 0117 9222940 0117 922 3854

Fax E-mail

Richard rawlinson@bristolcity.gov.uk

Our ref Your ref

Date

9 September 2004

Dear Mr Mitchell

#### Tolls on Clifton Suspension Bridge

Thank you for your letter of the 4 August to The Chief Executive, advising Bristol City Council of The Trust's intention of raising the current toll level on the Clifton Suspension Bridge. We have reviewed the case for expenditure, and have the following comments.

The proposed rise from 30 pence to 50 pence is a significant jump in the current toll rate, although the benefits of pre-paying (PAYC) are recognised, the increase may incur adverse reaction from the public.

However, it is clear from the supporting documentation that there are significant costs to be met by the trust to maintain (and insure) the structure. The Council recognises that these costs are unavoidable and the reasoning is well argued in the supporting documentation. We would support the need for proper lighting of the bridge, as it is part of the Bristol identity and a major attraction for tourists. The Council would see its replacement as justified as it is essential to the character of the structure.

Based on the documentation supplied Bristol City Council currently has no objection to the proposals put forward by The Clifton Suspension Bridge Trust.

Yours sincerely,

Richard Rawlinson

Head of Traffic and Transport

U:\mary\Mary\letters\Sept 04\Clifton sus bridge.doc

Environment, Transport and Leisure

Coiston House Colston Street Bristoi BS1 5AO

Stephen Wray Director of Environment. Transport and Leisure

Website www. bristol-city.gov.uk Date:

7 October 2004

My Ref:

gt/sm/clifsusbridge071004

Your Ref:

Contact:

Graham Turner Direct dial: 01934 634972

TJ Baines Clerk to the Trustees Horwath Clark Whitehill Clifton Suspension Bridge Leigh Woods Bristol BS8 3PA



CHIEF EXECUTIVE OFFICER

Graham Turner

PO Box 137 Town Hall Weston-super-Mare Somerset BS23 1DY

DX: 8411 Weston-super-Mare

Tel: 01934 888 888 Fax: 01934 888 822 www.n-somerset.gov.uk

email:graham.turner@n-somerset.gov.uk

Dear Mr Baines

## Tolls on Clifton Suspension Bridge

Thank you for your letter dated 4 August 2004 and I apologise for the delay in replying.

I confirm that North Somerset Council does not object to an increase in the toll from 30p to 50p. We would, however, encourage the Trust to ensure that the "Pay as You Cross" option is well publicised, particularly to local residents who use the bridge regularly.

Thank you for consulting North Somerset Council on this issue.

Yours sincerely

sured person

**Graham Turner** Chief Executive Officer Released to bad & egg

Strictly confidential

# TIM STANLEY Public Relations

# Draft of Press statement approved by Tim Baines on July 27, 2004

# RISING COSTS PROMPT HIGHER TOLL ON BRISTOL'S CLIFTON SUSPENSION BRIDGE

The toll paid by motorists to cross Bristol's historic Clifton Suspension Bridge are set to rise in 2005 - but it will still be one of the lowest of its type in Britain.

This month the trustees of Brunel's 140-year-old bridge are seeking the support of Bristol City. Council and North Somerset Council before submitting proposals to the Department of Transport which has to approve increases in tolls.

Since June, 2002, when the decision was taken to raise the toll by 10 pence in March last year - the first increase in more than 20 years - the trustees have been faced with unforeseen higher running costs.

These dictate that motorists must, from 2005, pay 50 pence for the convenience of crossing the River Avon between Clifton and Leigh Woods, rather than driving to the bridges at Cumberland Basin or Avonmouth, say the trustees.

However, for drivers who opt for a toll card, enabling them to buy 1,000 crossings in advance at a discounted rate, the cost per crossing will be only 20 pence.

The toll increase has been prompted by a huge rise in overheads resulting from:

The vaults: It was discovered in 2002 that a honeycomb of 12 huge vaulted chambers linked by narrow shafts and tunnels exists within the stone structure supporting one of the towers of the bridge. Previously it was believed that the 33 metre (110 ft) high abutment on the Leigh Woods side of the Avon Gorge was solid.

/more . . .

Now additional funds are needed to monitor and maintain this hitherto unknown aspect of the historic structure.

- Insurance: A huge increase in the cost of insuring the bridge means that the premium doubled last year and further increases are predicted.
- The illuminations: The lights on the bridge, which have been a feature enjoyed by Bristol residents and visitors from around the world since the first illuminations appeared in 1864, are due for replacement. A six-figure sum must be found if the new lights are to be in place for Bristol's celebration in 2006 of the bi-centenary of Brunel's birth.

These new costs come in the wake of a big drop in the investment income on which the trust relies to fund essential maintenance, repairs and safety work on the bridge.

Low investment returns in recent years mean that the trust's income from its stock market investments have plummeted, making it difficult for the trustees to carry out their responsibility of keeping the bridge in good order and preserving its heritage.

Says Dayrell McArthur, chairman of the trustees: "It would be irresponsible to plan to run the bridge at a loss, and spend our reserve funds; they must be conserved so that, together with our insurance cover, they can be used to repair the bridge in the event of a major structural failure.

"The bridge is run by a charitable trust. We receive no outside help towards our costs, either from central or local government, or from lottery funds. Therefore the bridge has to be paid for through tolls alone."

At 50 pence, the world-famous Clifton Suspension Bridge will still be charging one of the lowest tolls in the country, compared with other bridges on major routes, a study has shown.

The tolls charged for cars on other well-known crossings around Britain are:

	£
Dartford River Crossing	1.00
Forth Bridge	0.80
Humber Bridge	2.50
Severn Bridge	4.60
Tamar Bridge	1.00
Tay Bridge	0.80

Locally, even the small Batheaston Bridge near Bath charges a toll of 50 pence.

Mr McArthur made it clear that the proposed toll increase on Clifton Suspension Bridge is not needed to finance the new Visitor Centre, part of the Bridge Centre to be built on the site of the public lavatories in Suspension Bridge Road.

"Construction of the Bridge Centre is part of our longer term improvement programme which will help the Bridge Master and his staff supervise and manage the bridge, its users and visitors more effectively," he said. "Planning and budgeting for the Bridge Centre was undertaken a long time ago. It has not been a consideration in calculating the new tolls."

#### **ENDS**

<u>For more information</u> please contact Tim Baines, Clerk to the Trustees of The Clifton Suspension Bridge Trust, telephone: (office hours) 01242 234421 or (mobile) 07771 547229.

Issued by Tim Stanley Public Relations on behalf of The Clifton Suspension Bridge Trust.

Dishibach dies

Strictly confidential

# TIM STANLEY Public Relations

Draft of flyer for distribution to drivers and residents, for comment / approval (Draft dated April 28, 2004)

### ROAD TOLL ON CLIFTON SUSPENSION BRIDGE

The trustees of Clifton Suspension Bridge wish to advise you of proposals to increase the road toll on the bridge to 50 pence. However, for drivers who opt for a toll card, enabling them to buy 1,000 crossings in advance at a discounted rate, the cost per crossing will be only 20 pence.

Currently the trustees are seeking the support of Bristol City Council and North Somerset Council before submitting proposals to the Department of Transport which has to approve increases in tolls.

The need for the increase results from unforeseen higher running costs which have arisen since June, 2002, when the decision was taken to raise the toll by 10 pence in March last year.

The trustees are faced with a huge increase in overheads resulting from:

- The vaults: It has been discovered that a honeycomb of 12 huge vaulted chambers linked by narrow shafts and tunnels exists within the stone structure supporting one of the towers of the bridge. Previously it was believed that the abutment on the Leigh Woods side of the Avon Gorge was solid. Now additional funds are needed to monitor and maintain this hitherto unknown aspect of the historic structure.
- Insurance: A huge increase in the cost of insuring the bridge means that the premium doubled last year and further increases are predicted.
- The illuminations: The lights on the bridge, which have been a feature enjoyed by Bristol residents and visitors from around the world since the first illuminations appeared in 1864, are due for replacement. A six-figure sum must be found if the new lights are to be in place for Bristol's celebration in 2006 of the bi-centenary of Brunel's birth.

These new costs come in the wake of a big drop in the investment income on which the trust relies to fund essential maintenance, repairs and safety work on the bridge. Low investment returns in recent years mean that the trust's income from its stock market investments have plummeted, making it difficult for the trustees to carry out their responsibility of keeping the bridge in good order and preserving its heritage.

The trustees say that it would be irresponsible to plan to run the bridge at a loss, and spend the trust's reserve funds. They must be conserved so that they can be used to reconstruct the bridge in the event of a major structural failure.

At 50 pence, Clifton Suspension Bridge will continue to be charging one of the lowest tolls in the country, compared with other bridges on major routes.

John Mitchell Bridge Master Clifton Suspension Bristol Leigh Woods Bristol BS8 3PA Tel: 0117 9731579



Inside one of the chambers on the Leigh Woods side.

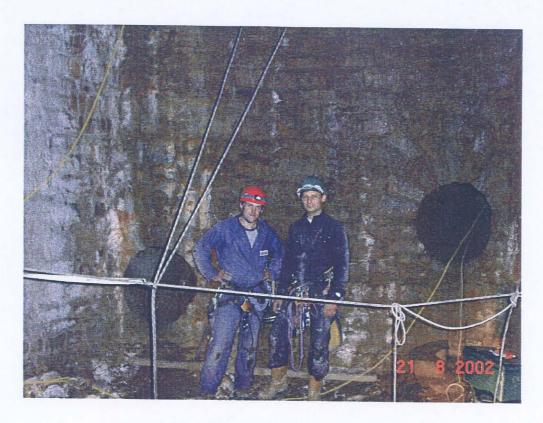


Examples of the internal ironwork.





An example of the leaching within one of the chambers.



Two shafts at the bottom of a chamber-& below near the top.





The proposed site for a second door on the Leigh Woods side.



HILL PARK COURT \* SPRINGFIELD DRIVE \* LEATHERHEAD \* SURREY KT22 7NL TELEPHONE: +44 (0)1372 865000 \* Fax: +44 (0)1372 864400

Our ref.: BF0010/020570/989/1112

17 June 2005

The Bridgemaster Clifton Suspension Bridge Leigh Woods BRISTOL BS8 3PA

For the attention of: Mr John Mitchell

Dear Sirs

Clifton Suspension Bridge Budget costs - Access and Maintenance of Vaults

We are pleased to provide budget costs associated with this work, as discussed.

£8,812 (inc vat)
£85,000
£10,000
£20,000
£10,000
£15,000
£140,000
£ 24,500
£ 8,812
£173,312

You may wish to include a further allowance for ancillary work such as providing permanent protection around the existing hatchways in the floors of the upper level Vaults, etc.

Should you have any queries please do not hesitate to contact the undersigned.

Yours faithfully

for Howard Humphreys & Partners Ltd

Kaith Jones

Project Manager

Direct Tel: 01372 38 80 44 Direct Fax: 01372 86 32 86

KELLOGG BROWN & ROOT LIMITED

REGISTERED IN ENGLAND & WALES NO. 645125
REGISTERED OFFICE: HILL PARK COURT SPRINGFIELD DRIVE LEATHERHEAD SURREY KT22 7NL
A HALLIBURTON COMMANY

# Appendix 6



The current illuminations are attached to the chains of the Bridge, the proposed new system will illuminate the Bridge from units placed along the base of the roadway.

Appendix 4
CLIFTON SUSPENSION BRIDGE TRUST

5 Year toll projection - 30 pence version

	2003 £k	2004 £k	2005 £k	2006 £k	2007 £k	2008 £1
Income						
Cash toll	701	780	780	780	780	780
PAYC tolls	177	170	170	170	170	170
Total tolls	878	950	950	950	950	950
Investment income	197	140	140	120	110	105
Total income	1075	1090	1090	1070	1060	1055
	1010	1000	1030	1070	1000	1000
Expenditure						
Wages/staff costs	374	389	405	421	438	455
Mgt/admin	246	258	271	285	285	299
Bridge running	170	177	184	191	191	199
Bridge Centre (net)	49	50	30	20	20	20
Depreciation	4	30	30	30	30	30
Total recurring	843	904	920	947	964	1003
New Projects	187	560	906	395	434	420
Total expenditure	1030	1464	1826	1342	1398	1423
Net inflow/outflow	45	-374	-736	-272	-338	-368
Funds						
Funds b/f	6068	6113	5739	4403	4403	3631
Bridge Centre	0	0	-600	-500	0	0
Net inflow/outflow	45	-374	-736	-272	-338	-368
Funds c/f	6113	5739	4403	3631	4065	3263

5 Year toll projection

Cash toll income						
						3.7
E 100 E 100 June	2003 £	2004 £	2005 £	2006 £	2007 £	200 £
Base forecast	701,000	780,000	780,000	780,000	780,000	780,00
Revised toll	0	0	0	0	0	
Full dropout	0	0	0	0	0	
Switch to card	0	0	0	0	0	
Revised forecast	701,000	780,000	780,000	780,000	780,000	780,00
PAYC toll income						
	2003	2004	2005	2006	2007	200
	£	£	£	£	£ 2007	£
Card 1	20000	18900	18900	18900	18900	1890
Card 2	30000	31500	31500	31500	31500	3150
Card 3	50000	45000	45000	45000	45000	4500
Card 4	77000	74400	74400	74400	74400	7440
Total	177000	169800	169800	169800	169800	16980

5 Year toll projection

		Assum	ptions	1001			
		- "					
	Cash toll		Switch		Inflation		
0004	in pence	Dropout	to card		Wages	Admin	Running
2004		1	1	200			
2005		1	1	200			
2006	-	1	1	200			
2007		1	1	200	7 1.04	1.05	1.0
2008	30	1	1	200	1.04	1.05	1.0
lotes							
	ut is custome all 1 Jan toll		longer use bridg	ge			
	Card calcu	ulations 00 crossin	•		Card 2 = 2	00 crossin	gs
	Card calcu Card 1 = 1	ulations 00 crossin Price	Number		Card 2 = 2	00 crossin Price	gs Number
2004	Card calcu Card 1 = 1	ulations 00 crossin Price 27	Number 700	2004			Number
2004 2005	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27	Number	200 <u>4</u> 2008		Price	Number 70
2004 2005 2006	Card calcu Card 1 = 1	ulations 00 crossin Price 27	Number 700		1 5	Price 45	Number 70 70
2004 2005 2006 2007	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27	Number 700 700	2005	1 5	Price 45 45	Number 70 70 70
2004 2005 2006	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27 27	Number 700 700 700	2008	5	Price 45 45 45	Number 70 70 70 70
2004 2005 2006 2007	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27 27 27	Number 700 700 700 700 700 700	2008 2008 2007	5 5 7 3	Price 45 45 45 45 45	Number 70 70 70 70 70
2004 2005 2006 2007	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27 27 27	Number 700 700 700 700 700 700	2008 2008 2007	6 6 7 8 Card 4 = 1	Price 45 45 45 45	Number 70 70 70 70 70 70
2004 2005 2006 2007	Card calcu Card 1 = 1	ulations 00 crossing Price 27 27 27 27 20 crossing	Number 700 700 700 700 700 700	2008 2008 2007	6 6 7 8 Card 4 = 1	Price 45 45 45 45 45 45 75 45 Price	Number 70 70 70 70 70 70 Number Number
2004 2005 2006 2007 2008	Card calcu Card 1 = 1	ulations 00 crossing Price 27 27 27 27 27 00 crossing	Number 700 700 700 700 700 700 9s Number	2008 2006 2008	6 6 7 8 Card 4 = 1	Price 45 45 45 45 45 45 000 crossin Price 120	Number 70 70 70 70 70 70 ngs Number 62
2004 2005 2006 2007 2008	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27 27 27 27 Price 00 crossine	Number 700 700 700 700 700 700 8s Number 600	2008 2008 2008 2008	Card 4 = 1	Price 45 45 45 45 45 45 000 crossin Price 120 120	Number 70 70 70 70 70 70 <b>ngs</b> Number 62 62
2004 2005 2006 2007 2008	Card calcu Card 1 = 1	ulations 00 crossin Price 27 27 27 27 27 Price 75 75	Number 700 700 700 700 700 700 8s Number 600 600	2008 2008 2008 2008 2008	Card 4 = 1	Price 45 45 45 45 45 45 000 crossin Price 120	Number 70 70 70 70 70 70 ngs Number 62

5 Year toll projection - 40 pence version

2003	2004	2005	2006	2007	200
£k	£k	£k	£k	£k	£
701	780	982	982	982	982
177	170	241	241	241	24
878	950	1222	1222	1222	122
197	140	140	120	110	10
1075	1090	1362	1342	1332	1327
374	390	405	424	420	-
					459 299
	1757		22/200	The second second	19
49					2
4	30	30	30	30	30
843	904	920	947	964	1003
187	560	906	395	434	420
1030	1464	1826	1342	1398	1423
45	-374	-463	1	-65	-96
6068	6113	5739	4675	4675	4176
0	0	-600	-500	0	
45	-374	-463	1	-65	-96
6113	5739	4675	4176	4610	4080
	197 1075 374 246 170 49 4 843 187 1030 45	£k         £k           701         780           177         170           878         950           197         140           1075         1090           374         389           246         258           170         177           49         50           4         30           843         904           187         560           1030         1464           45         -374           6068         6113           0         0           45         -374	£k         £k         £k           701         780         982           177         170         241           878         950         1222           197         140         140           1075         1090         1362           374         389         405           246         258         271           170         177         184           49         50         30           4         30         30           843         904         920           187         560         906           1030         1464         1826           45         -374         -463           6068         6113         5739           0         0         -600           45         -374         -463	£k         £k         £k         £k         £k           701         780         982         982         177         170         241         241           878         950         1222         1222         1222           197         140         140         120         120           1075         1090         1362         1342           374         389         405         421           246         258         271         285           170         177         184         191           49         50         30         20           4         30         30         30           843         904         920         947           187         560         906         395           1030         1464         1826         1342           45         -374         -463         1           6068         6113         5739         4675           0         0         -600         -500           45         -374         -463         1	£k         £k<

## 5 Year toll projection

Cash toll income						
	2003 £	2004 £	2005 €	2006 £	2007 £	200 £
Base forecast	701,000	780,000	780,000	981,500	981,500	981,50
Revised toll	. 0	0	260,000	0	0	
Full dropout	0	0	-39,000	0	0	
Switch to card	0	0	-19,500	0	. 0	
Revised forecast	701,000	780,000	981,500	981,500	981,500	981,50
PAYC toll income						
	Revised					
	2003	2004	2005	2006	2007	200
	£	£	£	£	£	£
Card 1	20000	18900	39600	39600	39600	3960
	30000	31500	42000	42000	42000	4200
Card 2						
Card 2	50000	45000	60000	60000	60000	buda
2	50000 77000	45000 74400	99200	99200	60000 99200	6000 9920

### 5 Year toll projection

	Ass	sump	otions					
	ash toll Full		Switch		In	flation		
	pence Drop	out	to card		W	ages	Admin	Running
2004	30	1	1		2004	1.04	1.05	1.0
2005	40	0.95	0.975		2005	1.04	1.05	1.0
2006	40	1	1		2006	1.04	1.05	1.0
2007	40	1	1		2007	1.04	1.05	1.0
2008	40	1	1		2008	1.04	1.05	1.0
lotes								
CONTRACTOR OF THE PARTY OF THE								
ull dropout is	s customers w	ho no le	onger use brid	lge				
ssumed all	I Jan toll chan	ges						
							***************************************	***************************************
	ard calculation	ossing			Ca	ard 2 = 20	00 crossing	gs
Ca		ossing	Number					gs Number
2004	ard 1 = 100 cr	ossing 27	Number 700		Ca 2004			Number
2004 2005	ard 1 = 100 cr	ossing 27 36	Number 700 1100				Price	Number 70
2004 2005 2006	ard 1 = 100 cr	27 36 36	Number 700		2004		Price 45	Number 700 700
2004 2005 2006 2007	ard 1 = 100 cr	ossing 27 36 36 36	Number 700 1100		2004 2005		Price 45 60	Number 70 70 70
2004 2005 2006	ard 1 = 100 cr	27 36 36	Number 700 1100 1100		2004 2005 2006		Price 45 60 60	Number 700 700 700 700
2004 2005 2006 2007 2008	ard 1 = 100 cr	27 36 36 36 36 36	Number 700 1100 1100 1100 1100		2004 2005 2006 2007 2008		Price 45 60 60 60 60	Number 700 700 700 700 700
2004 2005 2006 2007 2008	ard 1 = 100 cr Price	27 36 36 36 36 36	Number 700 1100 1100 1100 1100		2004 2005 2006 2007 2008	rd 4 = 10	Price 45 60 60 60 60 60	Number 700 700 700 700 700
2004 2005 2006 2007 2008	ard 1 = 100 cr Price	27 36 36 36 36 36	Number 700 1100 1100 1100 1100		2004 2005 2006 2007 2008	rd 4 = 10	Price 45 60 60 60 60 60 crossir	Number 700 700 700 700
2004 2005 2006 2007 2008	ard 1 = 100 cr Price	ossing 27 36 36 36 36 36	Number 700 1100 1100 1100 1100 s		2004 2005 2006 2007 2008 Ca	rd 4 = 10	Price 45 60 60 60 60 00 crossir	Number 700 700 700 700
2004 2005 2006 2007 2008	ard 1 = 100 cr Price	ossing 27 36 36 36 36 36 36	Number 700 1100 1100 1100 1100 s Number 600		2004 2005 2006 2007 2008 Ca 2004 2005	rd 4 = 10	Price 45 60 60 60 60 00 crossir Price 120 160	Number 700 700 700 700
2004 2005 2006 2007 2008 Ca 2004 2005	ard 1 = 100 cr Price	ossing 27 36 36 36 36 36 36 75	Number 700 1100 1100 1100 1100 5 Number 600 600		2004 2005 2006 2007 2008 Ca 2004 2005 2006	rd 4 = 10	Price 45 60 60 60 60 00 crossir Price 120 160 160	Number 700 700 700 700
2004 2005 2006 2007 2008 Ca 2004 2005 2006	ard 1 = 100 cr Price	27 36 36 36 36 36 36 100	Number 700 1100 1100 1100 1100 5 Number 600 600		2004 2005 2006 2007 2008 Ca 2004 2005	rd 4 = 10	Price 45 60 60 60 60 00 crossir Price 120 160	Number 700 700 700 700 700

5 Year toll projection - 50 pence version

	2003 £k	2004 £k	2005 £k	2006 £k	2007 £k	200 £
Income						~
Cash toll	701	780	1105	1105	1105	110
PAYC tolls	177	170	343	. 343	343	343
Total tolls	878	950	1448	1448	1448	144
Investment income	197	140	140	130	130	13
Total income	1075	1090	1588	1578	1578	158
Expenditure			å			
Wages/staff costs	374	389	405	421	438	45
Mgt/admin	246	258	271	285	285	29
Bridge running	170	177	184	191	191	19
Bridge Centre (net) Depreciation	49	50	30	20	20	20
Depreciation	4	30	30	30	30	3
Total recurring	843	904	920	947	964	1003
New Projects	187	560	906	395	434	420
Total expenditure	1030	1464	1826	1342	1398	1423
Net inflow/outflow	45	-374	-238	236	180	160
Funds			•••••••••••••••••••••••••••••••••••••••			
Funds b/f	6068	6113	5739	4901	4901	4636
Bridge Centre	0	0	-600	-500	0	C
Net inflow/outflow	45	-374	-238	236	180	160
Funds c/f	6113	5739	4901	4636	5081	4796

# 5 Year toll projection

Cash toll income						
	2003 £	2004 £	2005 £	2006 £	2007 £	200 £
Base forecast	701,000	780,000	780,000	1,105,000	1,105,000	1,105,00
Revised toll	0	0	520,000	0	0	
Full dropout	0	0	-78,000	0	0	
Switch to card	0	0	-117,000	0	0	
Revised forecast	701,000	780,000	1,105,000	1,105,000	1,105,000	1,105,00
PAYC toll income				•••••••••••••••••••••••••••••••••••••••		
	Revised					
	2003	2004	2005	2006	2007	200
	£	£	£	£	£	£
Card 1	20000	18900	81000	81000	81000	8100
Card 2	30000	31500	56250	56250	56250	5625
Card 3	50000	45000	81250	81250	81250	8125
Card 4	77000	74400	124000	124000	124000	12400
Total	177000	169800	342500	342500	342500	34250

5 Year toll projection

	Ass	ump	tions					
/ 7 / 7 / 7	sh toll Full	_	witch		Int	flation		
in p	ence Drope	out to	card		W	ages Ad	dmin R	unning
2004	30	1	1		2004	1.04	1.05	1.0
2005	50	0.9	0.85		2005	1.04	1.05	1.0
2006	50	1	1		2006	1.04	1.05	1.0
2007	50	1	1		2007	1.04	1.05	1.0
2008	50	1	1		2008	1.04	1.05	1.0
2								
otes								
ull dropout is	customers wh	o no lo	nger use b	ridge				
ssumed all 1.	Jan toll chang	es						
	d calculation			***************************************	•			••••••••••••
	d 1 = 100 cro	ssings			Ca	rd 2 = 200	to to the contract of the cont	
Car		ssings N	umber			rd 2 = 200 Pri	ice Nu	ımber
	d 1 = 100 cro	ssings N 27	umber 700		2004		ice Nu 45	70
2004 2005	d 1 = 100 cro	ssings N 27 45	700 1800		2004 2005		ice Nu 45 75	70 75
2004 2005 2006	d 1 = 100 cro	27 45 45	700 1800 1800		2004 2005 2006		ice Nu 45 75 75	7( 75 75
2004 2005	d 1 = 100 cro	ssings N 27 45 45 45	700 1800 1800 1800		2004 2005 2006 2007		ice Nu 45 75 75 75	70 75 75 75
2004 2005 2006 2007	d 1 = 100 cro	27 45 45	700 1800 1800		2004 2005 2006		ice Nu 45 75 75	70 75 75 75
2004 2005 2006 2007 2008	d 1 = 100 cro	27 45 45 45 45 45	700 1800 1800 1800 1800		2004 2005 2006 2007 2008	Pri	75 75 75 75 75	76 75 75 75
2004 2005 2006 2007 2008	d 1 = 100 cro Price	ssings N 27 45 45 45 45 45 ssings	700 1800 1800 1800 1800		2004 2005 2006 2007 2008		75 75 75 75 75 75 75	76 75 75 75 75
2004 2005 2006 2007 2008	d 1 = 100 cro	ssings N 27 45 45 45 45 45 ssings	1800 1800 1800 1800 1800		2004 2005 2006 2007 2008	Pri rd 4 = 1000	75 75 75 75 75 75 75 75 Nerossings	70 75 75 75 75
2004 2005 2006 2007 2008	d 1 = 100 cro Price d 3 = 500 cro Price	27 45 45 45 45 45 85	1800 1800 1800 1800 1800 1800		2004 2005 2006 2007 2008	Pri rd 4 = 1000	ce Nu 45 75 75 75 75 75 0 crossings ce Nu	70 75 75 75 75 75 mber 62
2004 2005 2006 2007 2008 Care	d 1 = 100 cro Price d 3 = 500 cro Price	27 45 45 45 45 45 75	umber 700 1800 1800 1800 1800 1800		2004 2005 2006 2007 2008 Ca	Pri rd 4 = 1000	ce Nu 45 75 75 75 75 75 0 crossings ce Nu 120 200	70 75 75 75 75 mber 62 62
2004 2005 2006 2007 2008 Care 2004 2005	d 1 = 100 cro Price d 3 = 500 cro Price	ssings	umber 700 1800 1800 1800 1800 1800		2004 2005 2006 2007 2008 Ca 2004 2005	Pri rd 4 = 1000	ce Nu 45 75 75 75 75 0 crossings ce Nu 120 200 200	70 75 75 75 75 mber 62 62 62
2004 2005 2006 2007 2008 Care 2004 2005 2006	d 1 = 100 cro Price d 3 = 500 cro Price	ssings	umber 700 1800 1800 1800 1800 1800		2004 2005 2006 2007 2008 Ca 2004 2005 2006	Pri rd 4 = 1000	ce Nu 45 75 75 75 75 75 0 crossings ce Nu 120 200	70 75 75 75 75