

NATIONAL ALLIANCE AGAINST TOLLS

Dartford Toll Increase - Consultation 2007

Introduction

1. The National Alliance Against Tolls (NAAT) was formed by groups protesting against existing tolls in England, Scotland and Wales. The NAAT also opposes "road pricing" and "congestion charging".
2. Tolls should have ended on the Dartford Crossing in 2003 but the Government decided to continue tolling using road charging powers in the Transport Act 2000. The Government now proposes to increase tolls by 50%, though tolls would be removed in the middle of the night.
3. The Government say (CD 1.1) that tolls are being increased as *"Without taking action now there is a high risk that serious delays will occur with increasing frequency, which would have a negative impact on safety, the environment and the economy."*
4. Individuals and organisations have been invited to give their views on this toll increase. This document gives our views.
5. As is general with applications for toll increases, even if one were to accept the principle of tolling, the reason given for an increase is rarely the essential maintenance of the crossing. A variety of amazing reasons are advanced to justify them. But however groundless the application is, the Government of the day always grants the increase. Given that the Government is in this case applying to themselves, we wonder what the chances are that they will say no.
6. Our response is based on the Consultation document (CD) dated December 2006, the Brown & Root report (B&R) "Short Term Study of Extension of Dartford Tolls" dated August 2001 and the Jacobs Babbie report (JB) "Getting the most out of the Dartford Crossing" dated December 2004 (this report was marked "Confidential" but was published).

Summary of NAAT views

7. We suggest that there are four reasons for this toll increase, and that they are:-

Firstly, it gives the appearance of doing something while postponing indefinitely any major spending on improving capacity.

Secondly, the Government wants higher tolls as part of a process of leapfrogging toll increases at both privately owned and publicly owned toll crossings.

Thirdly, the Government wants drivers and hauliers to be accustomed to tolls and toll increases as part of its strategy of tolling roads under the guise of "road pricing" or "congestion charging".

Fourthly, a toll increase may increase the tax revenue going into Government coffers.

8. The Government appears to believe that tolls somehow improve the capacity of the Crossing, almost everyone else knows that tolls reduce capacity and cause traffic delays.
9. It is not evident why the government say that they are increasing the capacity of the M25, and instead of matching that capacity at the Crossing want to try and force lower income drivers off the road as they approach the Dartford Crossing.
10. It is evident to most people apart from the Government that these toll increases will have little effect on traffic at Dartford, because of the long detours if another route is used.
11. The Government believes that tolls reduce accidents, most people believe the opposite.

The Crossing and the M25

12. The Government says (CD 3.5) that "*Additional pressure on the Crossing may be expected with the forthcoming M25 widening project To complement this widening, the Highways Agency is also developing plans to lock in the benefits of this additional capacity, notably through better management of traffic flows.*"
13. It is not clear why the Government says it will improve the capacity of the M25 while at the same time doing nothing to improve the capacity of the Dartford Crossing. It seems that the way in which this additional M25 traffic is to be somehow handled is to increase tolls on the crossing. Tolling does not of course improve capacity, quite the reverse. To the extent that traffic can and does divert onto other crossings, there will still be a mismatch, and the approaches will be under used.
14. The logic in all this is difficult to see. The capacity of a crossing should be matched (bearing in mind both number of lanes and speeds) to the approaches to it. There is no point in having say a 5-lane approach with speeds of 70 mph and a 4-lane crossing with speeds of 40 mph. As the traffic on the approach reaches capacity, the crossing will become a bottleneck.
15. The Government consultants seem to agree with us. They say (JB 2.11) "*The review effectively concluded that the design standards and existing capacity constraints of the existing Dartford Crossing operational arrangements were potentially at odds with a general policy to provide and then lock in substantial capacity improvements to the overall M25 Orbital Route.*"

Effect of the tolls on Traffic

16. You don't have to be an expert to know that if there is a practical alternative route, the majority of drivers will avoid a toll, and if there isn't then they can't. In the case of the Dartford Crossing, the

alternatives mean a long detour to instead cross somewhere between the Blackwall Tunnel and the western end of the M25. Only a very small part of the traffic will divert, and such diversions may lead to more congestion on the overall system.

17. Despite this obvious fact, the Government says that traffic will be significantly less if tolls are increased. They refer to research done for them by Brown & Root and published in August 2001.
18. B&R said that they found an "*Observed elasticity of .108*". This means that tolls within normal ranges have little effect. They go on to say that the "*most plausible reason ..(is that).. the alternative routes for many drivers are long*".
19. B&R analysed the effect of previous toll increases on the Dartford, Humber and Severn crossings (2.5.1.). They struggled to find any correlation between toll increases and traffic volumes and even said some of the calculated elasticities were positive, i.e. some increases in tolls were followed by an increase in traffic growth. This is a nonsense effect, but just demonstrates that within normal ranges, toll increases have little effect if the alternative is a long detour.
20. Concentrating on just the Dartford figures, B&R said (2.5.2) that "*The toll price has a comparatively weak influence*". Their analysis by type of vehicle showed that of those vehicles that were influenced, heavy goods vehicles were twice as likely as cars to try and find an alternative route, and medium goods vehicle were 6 times more likely.
21. This diversion on to less suitable roads is worrying, particularly as a very high proportion will be goods vehicles. The main alternative route that will have to cope with any diverted traffic is according to B&R, the Blackwall Tunnels (2.6.2). Though it seems that there are proposals to toll that as well, so traffic may end up driving in circles.
22. The fact that tolling just causes diversions between crossings was confirmed by the B&R report - "*For all tolling regimes, the changes*

in numbers of daily two-way trips using all the River Thames is minimal". (2.6.2) "All tolling regimes" meant anything from no tolls to doubling of tolls.

23. The B&R report also attempted to say how changes in tolls would affect different income groups. Not surprisingly they concluded that - *"low income groups are more responsive to changes in toll level. The elasticity reduces with increasing income level, which is expected - better off income groups are less likely to be affected by toll increases as they are more able to afford them than lower income groups."*
24. The report though it was published in July 2001 dealt with "predicted" effects of toll regimes up to 2003. It concluded (3.6) - *"The greatest change in traffic, economic and environmental indicators result from the growth in demand between 1997 and 2003. The changes attributable to different toll regimes are small in comparison."*
25. The Jacobs Babtie report in December 2004 seems to arrive at similar conclusions to Brown & Root. JB refer to - *"Modulation/improvements to the ability to change the price of the tolls during peak periods to encourage those people sensitive to the price to travel during less congested times."*(Table 1) They say that these are - *"Unlikely to have any impact due to relatively low price elasticity compared to high time elasticity"* (Table 2).
26. The Government says (CD 3.16) that - *"The Highways Agency has modelled the impact of increasing the average charge at the crossing ... This has shown that increasing the average charges to £2.00, compared with a current average of £1.35 would lead to a 3% reduction in traffic flow during the am peak. Current flows would then be re-established around four years after implementation of the new pricing regime."*
27. So it appears that the Highways Agency also agrees that these toll increases will have little impact on demand at the Dartford Crossing.

It is difficult to see what recent evidence the Government relies on when they confidently say that tolling, or increased tolling, would have a significant impact on reducing demand at the Crossing

28. The JB report interestingly also indicates (3.16) what the effect of differential tolling (as now proposed by the Government) is likely to be "*It is worth noting that since April 2003 a 50 % reduction in Tariffs for HGVs has been introduced between 10pm and 6am to try and spread demand. However, this measure has had a negligible impact.*"
29. It is only fair to point out that B&R also carried out a major consultation exercise (Annex 1) and they found that there was "*overwhelming support from amongst the respondents for continuing tolling*". The report does not list who was consulted. It is probably safe to assume that it did not include individual users of the crossing.

Tolling reduces capacity

30. The Government say (CD 3.12) "*It is sometimes argued that queues at the Crossing result from the charging booths.*" They then go on to deny this is so by first of all saying that "*the Crossing is already operating above its design capacity*", and then saying that it would be necessary to delay the traffic anyway because of "*safety reasons*" and "*complex .. junction arrangement*".
31. It is only at tolled crossings that tolls are justified because of a need to slow traffic down. There are thousands of other crossings around Britain - ancient and modern, narrow and wide, some of them bottlenecks. The one thing that they have in common is that any difficulties are dealt with without erecting tollbooths to extract money and delay traffic. Toll booths and lanes inevitably take up space and distort what would otherwise be the optimum road layout.
32. Obviously putting tolls on a crossing does not have a positive effect. But it is even worse than this, as the payment of tolls (even if

automated) introduces a delay. Anyone who believes that this is not the case in general and in particular at the Dartford Crossing will presumably not have got this far in reading our views!

33. Some delay due to toll collection will be there all the time. But during peak periods the delays snowball. This causes congestion both on the approach to the tolls AND after traffic gets through the tolls. The delay after is because vehicles that would have cleared the system at the start of the peak are still in it. Increasing the number of tollbooths can reduce this delay but it will still be there, and more toll booths means more lanes. The number of lanes increasing on the approach to the tolls and then merging again after, both slows traffic and causes accidents.
34. There is also a question of capacity. The Government says (CD 3.1) that there are an average of 150,000 vehicles a day using the Crossing and that on a few occasions it has exceeded 180,000 (CD 3.4). The hourly "practical operating capacity" is given (CD fig 3.1) as 5,000 vehicles each way, though the same figure shows the average weekday peak traffic as about 5,400 (equivalent of 1,350 per lane).
35. Three years ago we obtained traffic figures for some tolled and untolled crossings. The throughput for the Dartford Crossing compared quite favourably with other tolled crossings, but it did not match untolled crossings. The Blackwall Tunnels with half the number of lanes was achieving 2,900 vehicles each way, and the bridge at Runcorn on the Mersey, also with half the number of lanes, was achieving 3,800 vehicles each way (equivalent of 1,900 per lane). This greater throughput is achieved despite one of the Blackwall tunnels being over 100 years old, and the Runcorn bridge having slightly narrower than average lanes.
36. The Government would presumably dispute our views, but it is interesting to see what the Government's own consultants said.

37. The B&R report assessed the capacity of the crossing and it confirmed what everyone but the Government knows - *"As the demand at the crossing increases, the queues build up at the toll booths"* (2.4)
38. The JB report said (2.15) the same - *"Whilst the theoretical capacity of an inter-urban road is generally taken as around 1600 vehicles per hour per lane (i.e. total theoretical 4 lane capacity of c. 6400 vehicles/hour), the review has concluded that the Practical Operating Capacity of the toll plazas is 5000 – 5750 vehicles per hour, with little difference displayed between the north and southbound directions, due to the many site specific factors detailed in 2.13 and 2.14 previously. In addition, site observations suggest that queues begin to extend back from the toll plazas once demand flows exceed a 5000 vehicles per hour threshold."*

Safety

39. The Government says that one reason for keeping a tolls system is that it reduces accidents.
40. On the 20 April 2006, Adam Holloway, MP for Gravesham, asked the Minister *"what assessment he has made of (a) the number of accidents and (b) the congestion caused by vehicles queuing to pass through the toll booths at the Dartford Crossing."*
41. The reply that he got from Dr Ladyman on accidents did not give the number - *"The agents managing the day-to-day operations of the crossing review injury accident data obtained from the police, every six months and submit a report to the Highways Agency. From this report accident cluster sites are identified and studies commissioned to identify possible mitigating actions. The layout of the toll plaza is not designed for free flow conditions, and the toll plazas perform an important safety role in controlling the volume of traffic and speed of vehicles both through the tunnels and away from the bridge..."*

42. On the 5 Feb this year, Lord Hanningfield asked the Government - *"How many accidents have occurred on the approach to the bridge and tunnel sections of the Dartford Crossing since their respective openings."* The reply from Lord Bassam of Brighton was - *"The information is not held in the form requested."*

43. It appears that though the Government say that the tolls are there for safety reasons, either they don't know or won't say what the number of accidents is.

44. The fact is that tolling will be the cause of accidents. There are various obvious reasons for this:-

Firstly, tolling often means that there has to be a large increase in the number of lanes leading to the booths and a reduction after them. This results in a considerable amount of lane manoeuvring.

Secondly, this general lane confusion is increased when there are lanes which are dedicated to a particular purpose such as change / no change lanes, lanes for vehicles of a particular toll category, high occupancy lanes, Dart tag lanes and so on.

Thirdly, there may already be various notices at a crossing, but the number of notices is multiplied at tolls, as drivers have to be notified that there is a toll, the different rates of toll, and instructions as to any particular lane that they should be in to get change or use tags etc. These may not affect regular drivers, but strangers, particularly those whose first language is not English, will not be able to assimilate all these notices and will be confused and distracted.

Fourthly, some drivers as they approach the booths will be searching for money or for the exact amount of money.

Lastly, some drivers will cause accidents as they change lane to get into a shorter tolls queue or brake too late.

All of this is of course happening on a motorway!

45. The most well known case of an accident caused by tolls is possibly the horrific one in Connecticut in 1995. The result of that accident was that all tolls were removed throughout the state.

46. We can not find any British research on accidents due to tolls. But a search of America's National Transportation Safety Board site shows 20 reports on toll "plazas". Here is an extract from the last one issued on 8 May 2006 -

"Backups at toll plazas present a safety hazard; in particular, they tend to increase the incidence of rear-end collisions.

For example, in 2002, rear-end collisions represented 49.6 percent of all collisions on the Illinois State Toll Highway Authority (ISTHA) system, the highest rate for all types of collisions, exceeding the next highest category, sideswipes, which accounted for 21.4 percent of all collisions. Further, from 1998–2002, rear-end accidents within a 5-mile radius of the Hampshire–Marengo toll plaza ranged from 34.0 to 41.4 percent of total collisions.

Toll authorities nationwide experience rear-end collision rates that exceed other types of collisions, in part because toll plazas interrupt the flow of high-speed traffic to intermittently collect tolls. In 2002, rear-end accidents within a 1-mile radius of mainline plazas on the Pennsylvania Turnpike and the New Jersey Turnpike accounted for 30.2 percent and 37.8 percent, percent, respectively, of all accidents.

47. It is not just experts who are aware of the dangers of toll plazas. Here is part of an interview on NBC in July 2005 -

"Carlson: What about collecting coins for toll booths? I mean, there's proof that thousands of people every year are involved in accidents that are the result of fishing for coins in the ashtray or their pocket?

Assemblyman: Yes.

Carlson: All so state governments can steal money from them as they drive through a tollbooth. Why not eliminate tolls?

Assemblyman: I don't know about stealing money. You know that money goes to maintain the highways.

Carlson: Well, I don't know. It takes people's lives. Are you saying it's worth it? Are you saying the people who are killed, their lives are worth the revenue that New Jersey, say, gets from their..."

One way charging

48. Many crossings, in Britain and abroad operate one way tolls, with the driver in effect paying double in the other direction. This reduces toll collection costs, reduces accidents, and saves drivers a considerable amount of time.
49. The JB report (Table 1) assessed that the effect of removing the tolls in the southbound direction would have a similar affect to having an additional lane on the bridge.
50. The NAAT obviously believe that if the Government was concerned with the interests of drivers and of the economy it would remove the tolls. Assuming that the tolls remain, then they should be made one way only. The Government says (CD 3.41) that they will not do this for safety reasons. In fact, tolling increases the risks of accidents.
51. Obviously if tolling is removed one way then there will be a need for lane and other engineering changes. But that is minor compared with the major gains from vehicles not being delayed by tolls and reduced accidents, even if it is only in one direction.

Discounts for Dart tag users

52. The Government say (CD 1.11) that to encourage use of Dart tags, drivers "*would pay a significantly discounted rate of £1.00*" (33 per cent off the proposed cash charge). There is already a small discount (7 percent), so the price for a car using Dart Tag would increase from 93 pence to 100 pence.

53. There are two problems. The first is that the use of two toll systems increases the risk of accidents due to driver confusion and due to vehicles with tags possibly approaching the booths at different and higher speeds than those paying cash.
54. The second problem is that it is and will continue to be at the Secretary of State's discretion what, if any, discount is given. Experience in America and elsewhere is that drivers are suckered into use of electronic tags by large discounts, and then when the desired uptake has been achieved, the discount is substantially reduced or withdrawn, thus generating even more profit for the toll operator.
55. The Government also says (CD 1.11) that "*With more people using the Dart-Tag, traffic flow through the charging booths will be smoother*". This would be true if everyone was on a tag system, but with a dual system, the overall effect could be worse than now. The most effective way to smooth flow is of course to remove the tolls. It is also strange that at this point the Government appears to accept that the tolls cause delays, when at 3.12 they appeared to dismiss this.

What should be done instead of raising tolls?

56. The first and most obvious step is to remove the tolls. This will give a major improvement in throughput at the Crossing.
57. The second step is to explore what traffic management and engineering can achieve within the constraints of the existing crossing. I understand that other people and organisations have made various suggestions to the DfT. This improvement process is of course hampered at the moment by the tolls. A fact which is mentioned in the JB report (2.13) "*Traffic demand and capacity .. complicated by ..including .. The presence and layout of toll plazas in both directions*".
58. The Government says (CD 1.15) that "*In the longer term the Government expects demand for use of the Crossing to continue to*

grow. Various options for new capacity across the Thames have been considered in the past, but the Government believes the issue now needs to be moved forward, particularly in the light of development plans for the Thames Gateway. The Government will therefore be commissioning a study to look at the options for addressing traffic issues in the longer term, including the possibility of a new Crossing. Work will start immediately on specifying the scope of the study, and carrying out the preliminary work, with a view to letting the study as early as possible in 2007. The Government would also welcome initial views on this as part of this consultation."

59. Our view is that this is an issue that should have already been investigated and more river crossing capacity should already be in place, both at Dartford and upriver. The required capacity at the crossing can not of course be considered in isolation from the capacity of the approaches to it, both for carrying long distance M25 traffic and relatively "local" traffic. Whatever is required should be built and should be toll free and properly integrated with the rest of the road system.

60. Roads users pay about £30 billion a year in taxes on fuel (fuel duty and VAT) and another £20 billion a year on other taxes on roads use (VAT on new cars, vehicle excise duty, company car tax etc). Car drivers, van drivers and hauliers are in effect voting with their taxes for roads, but the Government keeps the money and fails to provide adequate roads, thus creating congestion. This is bad for drivers, bad for the economy, and bad for the environment. Britain needs an adequate road system now; not more excuses, not more "studies" and certainly not more tolls.

End