

## **Day Twenty-One**

### **Chris Gillham**

#### **Evidence in Chief**

Dr Gillham read the main points from his proof of evidence.

The scheme is not merely a local scheme and has profound effects elsewhere.

Westbury does not have an especially onerous traffic problem. Westbury's small problem must not be passed on to somewhere else.

A scheme such as this one should never even be contemplated, given the other desperate problems the world faces.

Dr Gillham compared the scheme to the failed East Lane Link Road, which people are now astonished were ever contemplated.

The inquiry process should not be concerned merely with quantitative matters.

WCC does not adduce a single piece of evidence showing the economic benefits of the scheme to the local area.

There is no proof that roads improve the economy generally.

The Eddington report ludicrously says that the relationship between road building and economic growth is a chicken and egg relationship, and that it does not much matter which comes first.

Dr Gillham discussed the graph contained in his letter to Tim Yeo, which illustrated the inverse relationship in the growth of road infrastructure and the rate of GDP, with a time lag between the two. He emphasised that the graph did not prove causality one way or another.

Dr Gillham said the the current Labour government had reversed their initial opposition to road building, but was now beginning to recognise the need to tackle climate change.

The Eddington Report based it's calculations on the premise that the cost of a barrel of oil in 2025 would be a maximum of \$100. The congestion map is based on a \$25 price.

There is a complete lack of alternatives in Wiltshire's consideration of the scheme.

With road building, the solution is stated and then the problem is dreamt up.

Dr Gillham then referred to his rebuttal proof.

There is a great deal of standard software modelling, the question is whether we trust it and accept its assumptions.

The question must be asked of whether Westbury's problem with personal injury accidents justify the allocation of money on a bypass.

Westbury does not have any special features likely to appeal to the market. It would be safer to make a precautionary assumption that the bypass could damage Westbury's economy.

The significance of induced traffic may not seem much, but it can have a vast effect on certain communities. It is the avowed intention of WCC that there be a route to the south coast.

Dr Gillham referred to his supplementary proof on traffic modelling.

Although COBA predicts a reduction in accidents, but the model does not use actual data.

Helps states that modern roads tend to have lower accident rates. However this is suspect as it assumes that the new link would not have an effect on other links. The DfT present no evidence that road building reduces accidents.

Interested in what the model tells us about traffic in communities affected by the scheme. The model assumes that we have a simple bypass function, but we have a small community within the model area, but the much larger community of Trowbridge outside the model.

There needs to be a greater analysis of the effect of the scheme on Trowbridge.

It seems surprising that carbon dioxide levels would rise by such a small amount given the extra distance and speed of travel. Table shows flows of routes through and around the town. Do something scenario shows a 20% increase in fuel under a 60mph limit.

Dr Gillham referred to his supplementary proof on HGVs.

The question needs to be asked of the whether HGVs will in fact use the bypass, rather than to continue to use the existing A350.

## Cross Examination

Are you a member of the White Horse Alliance?

-Member of ACA, which is a constituent member of the WHA.

You are saying that road building is objectionable in its own right?

-Agreed

Are there any circumstances where it is appropriate to build roads?

-Wouldn't say there are never circumstances, but have not come across a proposed road which increases capacity that I think is justified.

-If you build road which distorts the network by encouraging more journeys, those journeys end up in places which are never discussed in the inquiries.

You would not say that there are no circumstances where road building is justified, but in the years that you are attending inquiries, you have never seen one which is justified?

-Agreed

Letter from Road Block in appendix; that organisation shares your views on road building?

-Correct

Paragraph in appendix where 'we are not saying that road building is not necessary to the well being of the economy.' In this letter the link between transport and the economy is acknowledged?

-There is obviously a link between transport and the economy.

-In an area where there is already considerable connectivity, additional capacity may harm the economy.

Highways Agency has not decided to deal with correlation graph?

-Tend to ignore the point

Or don't feel the point is relevant?

-They took that view

Don't present any indication that your views have ever been accepted by inspectors?

-Correct

-Discussions not even mentioned in report.

Graph refers to GDP growth against motorways built, does not take into account any other factor?

-No

Doesn't take into account planning decisions?

-No

Doesn't take into account the different reasons for building a road?

-No

If you decided to build a road to replace a road with a severe accident rate, it may have no GDP benefit?

-If you look at the accident rate on a bypass, it is probably better than the previous accident rate.

-However nobody knows the accident rate for the country as a whole.

With reference to your graph, it would not take into account the construction of a road which was built purely to deal with an accident black spot?

-Can see that that argument can be put, but my view is that road building is probably the least effective way of reducing accidents.

To deal with the correlation approach, that sort of factor may have a negative effect on the graph for the very reason that the road is built?

-We seem to be looking at a few atoms in a mass of material

-This graph is about what is going on in the nation as a whole

If you are seeking to correlate road construction against GDP, the road may be solely justified for removing an accident black spot, but the graph does not take that into account.

-The only statistical evidence produced by the DfT suggests that there isn't the relationship between road building and reduction in accidents.

-The graph is nothing to do with the reasons for roads, but is a national aggregate.

Road Block and yourself are accepting that road transport is necessary for the well being of the economy?

-Of course

-If you took away all the roads, then the economy would suffer

-Road building in the complex network that we have, where one mode of transport is artificially subsidised, has not been proven to be economically beneficial.

TSTS, CD13.1. Accept what Eddington is saying with regards the relationship between transport and the economy?

-Of course I accept that there is a relationship between transport and the economy.

Earlier you said that you accepted the Eddington view of relationship between transport and the economy.

-I do not accept the relationship entirely as Eddington puts it.

Pg5, Forward. This is a discussion document responding to Eddington and Stern. Begins a process of debate. Start, not end, of discussion.

-Agreed

Does set out certain views and ideas. Pg25, Productivity and Competitiveness. Summary of Eddington's views. 2.6. Clear evidence that transport key enabler of prosperity. Agree?

-In that it hasn't defined what kind of transport it is referring to.

If Eddington was referring to the entirety of the transport system, would you agree with the inclusion of roads?

-To carry on with the economic system that we have, we would have to maintain a significant part of the existing road system. That presupposes that sustained prosperity is plausible in a world where resources are running out, and we need to change our behaviour. Sustainable economic growth is an oxymoron.

Section 2.8. Eddington study reaffirms importance of transport to economic success. Sets out seven matters. By increasing business efficiency. Accept that relationship?

-I accept that if you increase efficiency, then business efficiency might increase. Begs the question who is externalising what costs.

By increasing business innovation through supporting economies of scale. Accept?

-Less transport dependent ways of working.

Improve labour market catchments. Accept?

-Very complicated issue, clearly we know that expansion of market catchment can have some strange effects. Right that urban areas need good access.

Improve flexibility. Accept?

-I think if you do the wrong thing in transport, you can get the exact opposite of that. Issues such as milk in Winchester coming from Glasgow. Transport not presenting true costs.

WWTE a substantial employment area within Westbury. Do you know how it ranks in terms of its overall size in relation to the Wiltshire area?

-Not aware

Aware of ambitions expressed in development plan?

-Have heard of

If I was to ask what the development plan said in terms of WWTE or the Westbury bypass, would you be able to help me?

-No

-People can have development plans for all sorts of things, like business park in Amesbury, which has few users.

-Developers often lack knowledge of what will really happen.

The development plan refers to other documents, such as local plan and district plan.

-Have not read these documents.

Have played no part in development plan process for Westbury area?

-No

Back to factors raised in TSTS 2.8. Increasing competitiveness. Accept?

-Can do, but can also do the opposite. Journeys get longer to essentially carry out the same function.

Aware of the situation in Westbury in terms of out-commuting?

-Aware of what is said in Nick Helps' proof.

Have you looked at LTP1 or LTP2 in the context of out-commuting?

-Cannot recall what was in plans.

Are you aware of the ambitions of the local authorities in terms of addressing out commuting?

-To the extent that if you look at the Nick Helps proof there seems to be a suggestion that the bypass helps to reduce out-commuting, but there seems to be no evidence of how the bypass will tackle out-commuting.

Can you confirm that in relation to the search of evidence for out-commuting, you have not examined LTP1 or LTP2 or other documents?

-No

Have you looked at the evidence of Mr Turner?

-No

Back to TSTS 2.8. By increasing domestic and international trade. Accept?

-In terms of international trade, there is the same problem as with local transport, which is that one cannot get anywhere in international trade without fundamentally moving objectives - in that sense sustainable growth is impossible. Ought to adopt principles of contract and convert. May well be enough international transport infrastructure already. Don't agree that increasing infrastructure means that the world gets any better.

Would appear that you are of the view that it is unrealistic to have a sustainable transport system?

-Government hasn't even begun to deal with problem.

Final point from TSTS 2.8. Providing attractive business environment in UK. Accept?

-With caveats, can accept that better environment increases activity, but questionable whether that is beneficial to the world.

The application of DMRB to a road scheme. Is it your view that you challenge the desirability of applying it, but that it has to be applied; or some other basis of objection?

-Considerations of this sort have to be applied. I think things like economic appraisal of a scheme such as COBA is perfectly respectable for comparing investments of a like kind. Still don't have proper assessment of investment in different modes.

-Not saying the atomistic work has no value, but must look at the scheme as a whole and ask whether this gives the nation and planet a benefit.

Do you accept that WCC has properly applied the guidance it needs to follow through DMRB and COBA?

-Don't see any particular details of where they have done the wrong thing. Have not gone to the trouble of looking at every detail

-Have looked at what COBA tells us about traffic modelling. Benefits that arise from COBA come from very peculiar sources, such as streets in Trowbridge.

-Something may happen in surprising places.

You are not raising criticism of the way it has been applied, but it is your view that we should ask whether we should be doing these things?

-Correct

-Have fundamental problem, but not saying we should disregard COBA

Main proof, Section 9, Alternatives. 9.2 and 9.3. Nowhere do you indicate your knowledge of period 1996-2002, where there were various conferences and route assessments?

-Understand that there was no significant consideration of alternatives modes or processes.

Indicating in Section 9 any alternative highway solutions?

-No

Are you aware that in 1998 planning conference, public transport measures were considered?

-Vaguely aware

-Not aware of anything substantial on alternative transport modes.

Planning conference offered opportunity to consider role of public transport. Were you aware of that?

-I think I was aware that such things were under consideration.

Main proof, Section 5, Policy. Are you saying that there was a policy switch which led to a belief that something would happen, but the fuel protests led to a reversal?

-Governments obviously notorious for contradictory views.

-Always stated that the environment is essential.

-Fuel protests changed government behaviour, but not what they were saying.

Saying the application of the policy has changed, not the policy itself?

-Agreed

If at this inquiry, we apply the policy as drafted, then we are applying the correct policy?

-Can always quote policy to advantage.

-Must ask what is the general burden of government policy. Government constantly refers to importance of environment.

Not taking issue with the policy itself, but government not applying policy correctly?

-Important thing is the burden of the policy.

TSTS. Pg11, Para 22. Urban, Regional and Local Networks. Intend to support Local Authorities' investment in transport. Policy would suggest that government is conscious of the fact that there may be a need for local schemes to deal with problems?

-Interesting that immediately following that sentence, they only give non-road building matters.

Local measures to increase traffic flows.

-But do not give example of road building.

-You can improve traffic flow by deterring people from using the corridor.

Can also do so by removing bottlenecks?

-Can also use road building, higher parking charges.

Are you saying that paragraph does not contemplate road building?

-Road building is not a necessary thing to deduce from what is written. The government may imply that they are contemplating some road building.

-The burden of the document as a whole is that we should be talking about sustainable transport.

Para 29, National Networks. Refers to improving reliability. We do need targeted increases in road capacity.

-Agreed

No doubt that government recognises possibility of road building?

-Agreed

If road building not mentioned in reference to local building, then government policy is that national road building permitted, local road building is not?

-All sorts of interests, namely road building interests, being served in documents of this kind. Agree that Eddington has given leeway to government

-May be able to quote selective paragraphs which allow road building, but weight of the document is in favour of sustainable transport.

Fig1.1, Pg19-20. Transport demand still growing, but rate of growth decelerating. In the context of the document, it is recognising that some success has been achieved in relation to transport demand?

-Agreed

Roads market share peaked in 1996. Government is putting road construction in context of degree of success in relation to such matters in the recent past?

-When I was combating motorway programme, we eventually stopped the building of new roads. We now have this back door method, where local authorities are still trying to promote super-highway corridors.

-May be promoted as a local scheme, but has ambition to be something bigger.

Provision of a single carriageway road, you see it as being part and parcel of a superhighway.

-A34 built as a small road, then expanded, until now carries more than M3.

A34 has always been a trunk road. A350 is not a trunk road?

-Agreed

What status does it have?

-National primary route, regarded as a strategic road.

Essential difference from A34?

-No difference between A34 and a motorway

-Quite clear that WCC has always advocated roads along this corridor

-Further south, DCC has exactly the same ambition.

LTP1 and LTP2 describe status of road. Are you aware of the evidence given by Mr Kansarai?

-Have seen document.

Are you aware of the way he described structure of roads in Wiltshire?

-Have seen it.

Rebuttal evidence. Are you aware of the status given to the A350 in RPG10?

-Aware that the A350 is seen as a route to take traffic from the M4 at least to the A36.

Point raised that if scheme is built, there will be an effect on communities in Hampshire. How far a journey is it to Hampshire from Westbury?

-Around 40 miles

Is there not a rather significant deterrent in the place of Salisbury along that route?

-WCC keeps trying to resurrect elements of a Salisbury Bypass.

Your concern is one of induced traffic. If you build a bypass around Westbury, there will be increased traffic in Hampshire, despite the obstacle of Salisbury.

-The A36 is already a substantial road in Hampshire, going through areas where there is no possibility of a bypass. Anything that increases their traffic, even by a small amount, will have an effect on these communities.

Have you seen evidence on induced traffic?

-Yes

Do not comment on in evidence?

-Have section in rebuttal on traffic induction.

Assessment by Nick Helps not referred to?

-Have seen it

-Seems to assert that induced traffic would not be significant.

Aware of the level of induced traffic levels his assessment predicted is 1.8%.

Arguing that have to translate that effect to Hampshire villages?

-Induced traffic may be 1.8%, which may or not be a plausible result.

-Purpose of test to analyse release of suppressed traffic.

-Each small reduction in the resistance of a corridor, means that some communities suffer an increase, which you may refer to as marginal.

-The next scheme promoted by Wiltshire, wherever it may be, will reduce the resistance even further. Resistance reduced in stages.

If there is an 1.8% increase, and we assume that all of that traffic reaches Salisbury, then that will be assessed in relation to any Salisbury Bypass?

-When keep building little bits, then the case for building in the most difficult bit increases further.

Accident information. Raise specific questions. The scheme is not brought forward purely on the basis on one factor, but is a conglomeration of a number of different factors. Aware?

-All sorts of reasons for building bypass, all sorts of reasons for opposing them.

You are saying that we need to be aware of accident rates everywhere?

-This scheme is seeking money from the country, so it is pertinent to ask whether it is important to spend the money on this particular location.

You are asking whether accident rates are sufficient to put them at the top of the list.

-Agreed

That is only one aspect of the case for the bypass.

-Clearly accident figures are part of your case, so therefore it is reasonable to look at the problem in relation to other areas.

Argument fallacious.

-Have number of criteria, one of which is accidents. Therefore it is not a low priority.

Misreading point about it being a comparative exercise?

-If government is handing out money, a certain amount is dedicated to preventing accidents. For that particular criteria, we do not have a good concern.

Rebuttal proof, Para 3.3. This criteria is of your creation, not set down in policy.

-One of the criteria is accidents

-As accident reduction claimed as benefit, somewhere in policy there must be a requirement for reducing accidents.

Not set down as a requirement in policy?

-Do not see difference

-Of all the road schemes across the county, it seems that a portion of the investment is going towards accident reduction.

Para 3.3. Third bullet. Ask whether road building does reduce accidents. Also discussed in SP1, 1.3. Cannot find answer within your evidence to the question you have asked. Will a new road built to modern specification with a junction at either end, be safer than the existing road?

-It is quite likely

Visibility will be better?

-Agreed

Interaction between junctions will be reduced?

-Agreed

Other factors?

-Sure there are other factors, don't dispute that a new road is safer.

Cannot in your find specific criticism of scheme in relation to accidents.

-The assumed accidents that go into COBA are based on COBA averages.

-Since COBA is assuming higher accident rate, then COBA is overestimating the true accident benefit.

-Cannot suppose that new link will not have an effect of behaviour on other links.

-Overall, road building increases accidents.

You make clear in Para 2.5 that the scheme is a straightforward bypass of an urban area. Area to the N and S will remain unchanged.

-Saying that there is no reason from statistics to suppose that it is beneficial.

If it were to be a problem of any significance, we would need to analyse effects at Westbury Town Centre. Are you aware of measures proposed in MSBC?

-Yes

-Have to also analyse effect on other communities such as Yarnbrook.

Supplementary proof, Pg4, Para 2.9. Traffic modelling. Say that model does not 'do Trowbridge'. Mr Helps made it clear that the model does cover Trowbridge in considerable detail.

-Making point that model validation report measured success of validation based on main corridors. Traffic model trying to minimise errors of fit. Any sort of optimisation process will always favour the bulk of the data.

Are you of the view that Trowbridge is neglected?

-Model validation is looking at big corridor movements, but COBA is looking at delays on junctions which are not part of the validated flows.

Are you saying that Trowbridge is within the model area?

-Yes

Trowbridge has been covered in detail in the model.

-Point is that junctions in Trowbridge are having huge effect. This signifies that the model is suggesting things will happen in Trowbridge that have not been discussed at this inquiry.

Saying elsewhere that the model does not model Trowbridge. You are making a baseless claim.

-Mr Helps has not shown that the model does Trowbridge well.

-Model has not been validated at those points.

Para 2.10. Refer to local council having to deal with effects at Trowbridge. Who would that local council be?

-Whoever is responsible for managing flows in Trowbridge, possibly WCC.

Climate change. Also covered in rebuttal evidence. Raise question about difference between two tables of figures. Have not seen Mr Smyth's evidence where he identified error in ES figure? In WCC SP8. 1.1. Reviewed Professor Whitelegg's evidence, found error in link information in Table 13.8, which was corrected. Were you aware of that?

-No

Supplementary proof, SP1. 3.1 has 7 links. Used as indication of do minimum situation. In the do something situation you add 3 more links. What Mr Smyth made clear, was that in terms of carbon emissions, you base the assessment on estimating vehicle flows, also take into account speed, distance travelled, and proportion of HGVs.

-Have not looked at HGVs.

-Test of plausibility, as aggregate of HGV seems reasonable to use same approach as COBA

Mr Smyth used over 60 links for each scenario in his assessment.

-Accept that, the difference must be to compare the flows within town and with bypass.

Supplementary proof, SP2. Raise point that when a lorry goes south, why won't it go through town centre. Your exercise assumes a consistent speed of 48kmph

-Agreed, uses same speed as Mr Smyth.

You have not taken into account the possibility of hold-ups?

-By using same average as Mr Smyth, assumed that was a reasonable proxy.

-Preferred lorry route dependent on pump price.

Have not taken into account as town centre measures?

-Assumed the same factors as Mr Smyth.

One of town centre measures is a 20mph speed limit. 48Kmph is around 30mph. Makes no allowance for roundabouts in town centre.

-Agreed

There are three tables; you draw information into a fourth table. What makes the difference is the fuel costs. Bypass route fuel costs of 185. Vehicles likely to be most efficient at 30mph.

-Agreed

We know that due to the various interruptions, that figure is wholly unrealistic.

-If you are saying that the curve does not apply, then COBA is doing some very wrong things.

-Once bypass has removed traffic from centre, then it becomes easier to travel through centre. Common for HGVs to travel along relatively minor roads, which Sat Nav systems instruct them to use.

-As fuel prices rise, there is a point at which it become advantageous for lorries to go through town.

If this turned out to be a problem, it could be remedied?

-Agreed

A traffic regulation order could be used?

-Putting a ban on Station Rd could be simple, but it becomes much harder to impose a ban throughout whole town.

Traffic regulation order wouldn't need to be a in the form of an outright ban.

-Unless a ban is policed efficiently, then there remains an incentive for lorries to use town centre.

Town centre measures would provide a disincentive for travelling through town.

-There becomes a point when the price of petrol makes it beneficial to travel through town centre.

### Inspector's Questions

What unit used in coal / gas consumption graph, in letter in appendix?

-Would have to check.

-Trying to show trends rather than absolute values.

-Gas refers to natural gas.

Units on Kyoto graph?

-Would have to check.

Correlation graph. In terms of one used for accidents in SP1, why only KSI (Killed and Seriously Injured), and not all categories referred to?

-These correlations taken over fifty year period, possible that did not record all injuries back in 1957.

-Cannot give definite answer.

Length of motorway network very small compared to length of entire road network. Fair comparison?

-Motorway building is the only method of analysing road statistics.

GDP correlation graph. England and Wales or whole of UK?

-Believe it is whole of UK.

Essentially saying that if one took a country with no infrastructure, then the construction of first road would bring economic benefits. At the other extreme, if the last hectare of land was surfaced over, there would be no economy left. Saying that somewhere there must be a crossover point.

-Agreed

Part of your argument is that we are at, or already past the crossover point?

-That could be the situation; we don't have the evidence to disprove this.

Have you looked at comparisons between the UK and comparable countries?

-Haven't done that, that would be a good academic test.

-All sorts of factors would influence, e.g. Population density.

If this correlation was causal, would there be a conclusion that closing motorways might cause rise in GDP?

-May be element of truth in that.

Elasticity of induced traffic. Suggested that the exercise that has gone through feeds into COBA, one also has to look at qualitative effect on the ground, and saw greater significance in that.

-Agreed.

-COBA conclusions are irrelevant to socio-economic consequences of induced traffic.

Been involved in road campaigning since 1975. Did you actively oppose Newbury Bypass?

-Was too involved in Twyford Downs to become involved in Newbury Bypass.

Rebuttal proof, Para 3.3. Allocation of funding based on accident reduction. Is this how public decision making works?

-Accidents one of a number of criteria, has a high weight in assessment.