

## Public Accounts Committee

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Meeting Venue:

**Committee Room 3 – Senedd**

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Meeting date:

**3 March 2015**

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Meeting time:

**09.00**

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Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



For further information please contact:

**Michael Kay**

Committee Clerk

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### Agenda – Supplementary Documents

#### Consultation Responses for Value for Money of Motorway and Trunk Road Investment

Please note the documents below are in addition to those published in the main Agenda and Reports pack for this Meeting

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#### **6 Inquiry into value for money of Motorway and Trunk Road Investment: Discussion of evidence (10:45–10:55) (Pages 1 – 51)**

# Agenda Item 6

## **Y Pwyllgor Cyfrifon Cyhoeddus**

Buddsoddi mewn Traffyrdd a  
Chefnffyrdd: Gwerth am Arian

## **Ymatebion i'r Ymgynghoriad Chwefror 2015**

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## **Public Accounts Committee**

Value for Money of Motorway and Trunk Road  
Investment

## **Consultation Responses February 2015**

\*Ar gael yn Gymraeg /Available in Welsh

MTRI 01	Cyngor Sir Ynys Môn	Isle of Anglesey County Council
MTRI 02	ICE Cymru	ICE Wales
MTRI 03	Cyngor Sir Penfro	Pembrokeshire County Council
MTRI 04	Ysgol Peirianeg Sifil Prifysgol Leeds	School of Civil Engineering University of Leeds
MTRI 05*	Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru	North and Mid Wales Trunk Road Agent
MTRI 06	Y Gymdeithas Cludo Nwyddau	Road Haulage Association Ltd
MTRI 07	Asiant Cefnffyrdd De Cymru	South Wales Trunk Road Agent
MTRI 08	Sefydliad Siartredig Priffyrdd a Chludiant Gogledd Cymru	North Wales Chartered Institute of Highways and Transportation
MTRI 09	Highways Term Maintenance Association	Highways Term Maintenance Association
MTRI 10	Sefydliad Trafnidiaeth Cludo Nwyddau	Freight Transport Association
MTRI 11	Cyfeillion y Ddaear Cymru	Friends of Earth Cymru

**Y Pwyllgor Cyfrifon Cyhoeddus**  
**Public Accounts Committee**

Cynulliad  
Cenedlaethol  
Cymru  
National  
Assembly for  
Wales



Bae Caerdydd / Cardiff Bay  
Caerdydd / Cardiff  
CF99 1NA

14 January 2015

Dear Colleague

**Inquiry into value for money of Motorway and Trunk Road Investment**

The National Assembly for Wales' [Public Accounts Committee](#) is undertaking an [inquiry](#) into value for money in the maintenance and improvement of the Welsh trunk road and motorway network. To assist with its inquiry, the Committee would welcome your views on the following matters:

- Whether the Welsh Government's approach to delivery of major trunk road projects provides value for money including:
  - The effectiveness of Welsh Government planning and costing of schemes;
  - The approach to project delivery and evaluation of projects; and
  - How the Welsh Government could improve its approach to planning and delivery of schemes.
- The extent to which the current approach to routine maintenance and improvement of the network via Trunk Road Agents has delivered value for money;

Croesewir gohebiaeth yn y Gymraeg a'r Saesneg / We welcome correspondence in both English and Welsh  
Y Pwyllgor Cyfrifon Cyhoeddus / Public Accounts Committee  
Ffôn / Tel : 0300 200 6343  
Ebost / Email : [SeneddPAC@Assembly.Wales](mailto:SeneddPAC@Assembly.Wales)

- How the maintenance and improvement functions delivered by the Trunk Road Agents can be improved, in the context of the on-going Welsh Government review of these agents.

### **Invitation to contribute to the inquiry**

The Committee welcomes responses in English or Welsh and will hold oral evidence sessions in due course.

Submissions should be no longer than five sides of A4, with numbered paragraphs, and should focus on matters set out above. Please see [guidance for those providing evidence for committees](#).

If you wish to submit evidence, please send an electronic copy (preferably **not** in PDF) of your submission to [SeneddPAC@Assembly.Wales](mailto:SeneddPAC@Assembly.Wales)

Alternatively, you can write to:

Committee Clerk  
Public Accounts Committee  
National Assembly for Wales  
Cardiff Bay, CF99 1NA.

Submissions should arrive by **13 February 2015**. It may not be possible to take into account responses received after this date.

### **Disclosure of Information**

You can find details about how we will use your information at [www.assembly.wales/help/privacy/help-inquiry-privacy.htm](http://www.assembly.wales/help/privacy/help-inquiry-privacy.htm). Please ensure that you have considered these details carefully before submitting information to the Committee. Alternatively a hard copy of this policy can be requested by contacting the Clerk (0300 200 6565).

Yours faithfully



**Darren Millar AM**  
Chair

Public Accounts Committee  
Value for Money of Motorway and Trunk Road Investment  
MTRI 01 – Isle of Anglesey County Council

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Ein Cyf - Our Ref. DRW/LTJ/020.07/M020004

Eich Cyf - Your Ref.

29<sup>th</sup> January 2015

Dear Sir

**Inquiry into value for money of Motorway and Trunk Road Investment.**

I respond to your consultation document on behalf of Ynys Môn County Council. As you will know the only Trunk Road on the island forms part of the A55 DBFO contract, hence the authority does not operate a Trunk Road Agency. Bearing this in mind, the authority regularly attends the NMWTRA Trunk Road Joint Committee and has always been supportive of the Trunk Road Agencies remaining with local authorities, as it is essential to retaining high quality jobs within the local area.

As the authority does not have a Trunk Road Agency I will not have detailed costs of project procurement, but will hopefully be able to provide an independent and fair view on the operation of NMWTRA.

My response to the matters referred to as part of the consultation process is as follows:-

1. **The effectiveness of Welsh Government's planning and costing of schemes.**
  - 1.1 Am not able to comment on the value for money aspect as the information to do so is not available to me.
  - 1.2 Generally speaking major trunk road projects provide a considerable cost benefit in the long run and recent major improvements to the A470/A487 North to South Wales route have been very beneficial in terms of safety, time saving and cost benefit.
  - 1.3 The provision of a third crossing of the Menai Straits would provide huge benefits to the area in terms of attracting industry and improving the resilience of the current crossings, which will be essential for developing Wylfa Newydd. The opportunity to work with National Grid for a third crossing capable of carrying the proposed additional

electrical cabling should not be missed, especially while European Ten-T funding is available.

Contd....

2. *Routine Maintenance and improvement of the network via the Trunk Road Agencies and how they can be improved.*
- 2.1 The current arrangements provide considerable local employment within the design consultancies and direct labour organisations of these authorities, as well as within the agencies themselves.
- 2.2 There are definite advantages in using the expertise of local government consultancies, in particular their local knowledge, for the design of major improvements.
- 2.3 Economies of scale are considerable for those local authorities who have Trunk Road functions, in particular with the sharing of gritting fleets and salt storage sheds. Additionally combined gritting routes between Trunk and County Roads can be better planned to avoid free travel and hence will provide a more efficient service. Most Council's have behaved as honest brokers in this matter and the recent amalgamation of NWTRA and MWTRA would have helped with this issue.
- 2.4 The stringent financial cuts that have hit local authorities' County Roads does not appear to be implemented within the Trunk Road Agencies, with the number of staff having increased considerably over the past few years.
- 2.5 The example of Trunk Road Agency and Welsh Government not getting value for money that most strikes me is the employment of circa 20 no. Trunk Road Stewards to patrol the A55 in 4 by 4 vehicles, which are often if not always double manned. I have queried this matter previously at NMWTRA Joint Committee meetings and was told that these Stewards respond to circa 3,500 incidents per annum. This equates to less than one call/steward/shift, which for an annual cost of circa £2 million seems very costly. Additionally, to these Stewards the road is still patrolled by highway inspectors and North Wales Police (whose presence has now been reduced).

I trust these comments are accepted in the totally unbiased manner that they are submitted.

Yours faithfully

**DEWI R. WILLIAMS**  
**HEAD OF SERVICE (ENVIRONMENT AND TECHNICAL)**

Copies to: Richard Parry Jones – Chief Executive  
Colin John Edwards – Chief Engineer (Operational)

## The National Assembly for Wales' Public Accounts Committee

### 1 Background

The National Assembly for Wales' Public Accounts Committee is undertaking an inquiry into value for money in the maintenance and improvement of the Welsh trunk road and motorway network.

### 2 Purpose:

To inform Committee of ICE Wales Cymru's position in respect of the Inquiry into value for money of Motorway and Trunk Road Investment.

### 3 Whether the Welsh Government's approach to delivery of major trunk road projects provides value for money:

3.1 ICE Wales Cymru considers that the Welsh Government's approach to the delivery of major trunk road projects does offer value for money. The approach adopted by the Welsh Government taps into the very best supply chain expertise, using Professional consultancy organisations with proven world wide experience and expertise in a competitively tendered arena. Many of these organisations have indigenous bases and workforce in Wales.

3.2 Furthermore, ICE Wales Cymru considers that the delivery of major trunk road projects is essential and represents clear value for money in its own right. There is a tested and proven link between the condition of a country's infrastructure and the economy of a country.

3.3 A multiplier effect of the investment can vary between 1.83 and up to as much as 14. According to the (UK) Department for Transport, schemes returning BCR multipliers greater than 2 are deemed to offer "high value for money". As an example, the M4 Corridor Around Newport has been assessed to offer a BCR of between 2.29 and 3.1 (central growth, range subject to selection of 'wider benefits').

### 4 The effectiveness of Welsh Government planning and costing of schemes:

4.1 ICE Wales Cymru considers that the Welsh Government has a proven methodology for planning and costing of these schemes. The Government utilises the very best expertise of the private sector supply chains.

### 5 The approach to project delivery and evaluation of projects:

5.1 ICE Wales Cymru considers that the Welsh Government approach to project delivery and evaluation of projects is robust in its use of WelTAG and the TUBA economic analysis as set out in the UK Design Manual for Roads and Bridges..



**6 How the Welsh Government could improve its approach to planning and delivery of schemes:**

6.1 It is considered that because of the link between the condition of infrastructure and economy (or economic growth), funds for infrastructure should be prioritised and consideration made for these funds to be ring-fenced with long term financial budgetary systems – beyond single year.

**7 The extent to which the current approach to routine maintenance and improvement of the network via Trunk Road Agents has delivered value for money:**

7.1 ICE Wales Cymru considers that continued maintenance of the Trunk road and Motorway network is essential; a regulated asset management regime is required with planned investment and intervention criteria.

7.2 Continued recognition of the value of the national highway transport infrastructure is required with clarity of not just the short term but with medium and long term budgets. Single year financial programmes are not considered to be the most efficient; long term financial planning is needed.

**8 How the maintenance and improvement functions delivered by the Trunk Road Agents can be improved, in the context of the on-going Welsh Government review of these agents:**

8.1 ICE Wales Cymru considers that it is essential that the expertise to deliver these essential functions is available to the Welsh Government. The format of these agents is not an issue that I wish to comment upon.

**9 Conclusion**

It is vital that continued investment into the arteries of Wales transport network continues. However, investment in these routes must not be at the detriment of the remainder of the highway network – the ‘county roads’ as these represent some ninety per cent of the overall highway network.

**Keith Jones Director, Institution of Civil Engineers Wales Cymru**

**11<sup>th</sup> February 2015**

**Notes:**

- The Institution of Civil Engineers (ICE) was founded in 1818 to ensure professionalism in civil engineering. It represents over 86,000 civil engineers in the UK and across the globe and has over 3500 members in Wales.
- ICE has long worked with the government of the day to help it to achieve its objectives, and has worked with industry to ensure that construction and civil engineering remain major contributors to the UK economy and UK exports.
- For further information visit: [www.ice.org.uk](http://www.ice.org.uk) and [www.ice.org.uk/wales](http://www.ice.org.uk/wales)

Dear Sirs

### **Inquiry into value for money of Motorway and Trunk Road Investment**

Thank you for the opportunity to provide views to the above Inquiry.

I am writing on behalf of Pembrokeshire County Council. We recognise that for Pembrokeshire to have a competitive, productive and sustainable economy, that an important factor is access and connectivity. The strategic trunk roads are therefore regarded by ourselves as vital arteries to support this key outcome.

In providing views for this Inquiry it is stressed that comments are provided in a constructive fashion. We have good working relations with officers representing Welsh Government.

I would also note that we are a service provider to Welsh Government for trunk road maintenance. We are partnered with Carmarthenshire in the Western Area Partnership, providing operational services to the Government's Agent, South Wales Trunk Road Agency, on aspects such as: routine highway maintenance, emergency response (accidents, etc), lighting, and winter maintenance.

In response to the specific matters, I provide comments as follows:

1) Whether the Welsh Government's approach to delivery of major trunk road projects provides value for money:

a. *The effectiveness of Welsh Government planning and costing of schemes.*

There is scope to increase dialogue in terms of, say, a briefing, or other form of information, to provide regular update on the progress of schemes or programmes. In addition, there is scope to increase structured opportunities to have discussion between WG and ourselves on matters such as: network issues, forward planning or community/user concerns. Examples of some recent issues in our specific locality:

- Improvement of A40 Llanddewi Velfrey – clarity on delivery programme would be valuable.
- A477 Fingerpost Junction – despite recent improvement we continue to receive observations which might be useful to raise with WG through meeting
- Merlins Bridge Roundabout – capacity issues: an update on any studies / proposals would be useful.
- Potential for dualling A40 – Ministerial announcement in November 2014: it would be useful to have a briefing on the review work being commissioned.

Such an approach could help in a number of ways, such as: exchange of information about developments/events that impact on highway, review of traffic "hot spots", and better understanding of project plans. There is also the situation that network issues on the trunk road can often overspill and

affect county roads (and vice-versa), and effective and dynamic working relationships could greatly assist in helping to clarify issues, address concerns and provide information.

The means by which aspirations for Trunk Road improvements are considered and developed could be examined. As noted early it is vital to ensure that all economic priorities in South West Wales are maximized and that the Enterprise Zone / City Region is well connected. A joint Local Transport Plan is in the process of being finalised, but there was specific guidance that trunk aspirations should not be included. It is therefore felt there is scope for much closer planning between local and national transport strategy. The local/regional priorities arising from, say, Enterprise Zone or City Region approaches, have impacts on both strategic and local networks and integrated planning would seem worth considering in greater detail.

*b. The approach to project delivery and evaluation of projects.*

There is considered to be potential for more “outcome” focussed evaluation on some major projects. For example, the A40 Penblewin to Slebech Park improvement was opened in 2011; it would be useful to have evaluation information as to whether the scheme objectives have been met. Not only would this be good practice from a project delivery perspective, but it would help provide useful information for planning future projects, especially in our locality, where potential for dualling of A40 is being reviewed.

*c. How the Welsh Government could improve its approach to planning and delivery of schemes.*

Some key points, already referenced in detail earlier are:

- Integration between local and National plans, particularly in terms of links with economic regeneration proposals
- Regular exchange of briefings/information on programme development
- Dialogue between key parties to identify network constraints and key emerging issues.

2) The extent to which the current approach to routine maintenance and improvement of the network via Trunk Road Agents has delivered value for money.

The comments in this section are given in the context of our involvement of a service provider under the Western Area Partnership.

We believe the current arrangements demonstrate a clear and collaborative approach to operational delivery. One of our cross cutting principles is customer focus. Recognising that the trunk road network is vital to the people and economy of Pembrokeshire means that having an active role in maintenance

gives us a vested interest in providing high quality infrastructure. Another key principle of the Council is Value for Money. Some specific examples of “added value” in this approach are: services are delivered by local people who understand local issues, including factors that might affect the wider local network (for example road closures); access to local resource pool to respond efficiently to service demands (for example: traffic accidents); flexibility in resource demand (for example: able to direct the County’s winter maintenance resources at trunk road as a first priority).

The ability to manage resources as part of wider local highway maintenance team means that efficiencies are achieved. For example: we have locally available resources that can be deployed to manage situations such as: traffic accidents, flooding, winter maintenance. We are concerned that such financial efficiencies would be jeopardised by a move away from the current collaborative model.

As well as financial efficiency, we consider that there are substantial benefits in terms of resilience. The availability of local resources means access to a local resource pool that can be quickly deployed. A particular concern at present is the proposal to have dedicated trunk road winter maintenance routes. From a financial perspective, the current routes are co-ordinated with our own which minimises “dead runs”. Under the new proposals, there is potential for significantly more “dead run”, which we believe may equate to inefficiency. In addition, we are concerned about the wider issue of network resilience. We can currently deploy our wider resources to keep the vital trunk road network open and reduce vulnerability.

The current arrangements also ensure that the works undertaken are being carried out by directly employed locally employees, local resources, or by local contractors. This ensures that the local economy is supported in terms of jobs.

It is considered that there might be potential to review the procurement approach for certain specialist activities, such as re-surfacing. An approach that adopted a “lotting strategy”, perhaps with lower aggregated values, or geographical lots, might allow more local or regionally based suppliers to win work. Not only would this support indigenous businesses and local SME’s, there is considered to be potential for significant cost savings by procuring work “locally”.

3) How the maintenance and improvements functions delivered by Trunk Road Agents can be improved, in the context of the ongoing Welsh Government review of these agents.

Some suggested improvements are:

- Notwithstanding what, we believe, are substantial economic and efficiency benefits in a collaborative approach between ourselves and the Trunk Road Agency, there are clearly opportunities, in the context of budget cuts, to review existing arrangements and costing structures to identify whether there

are ways of doing things differently and achieving savings. This work has already started.

- Develop collaborative working to secure efficiencies – take advantage of the efficiencies available by having a local resource where the strategic objective of the organisations all focus on the customers in the locality.
- Develop procurement approaches that give maximum opportunities for local suppliers, for example: through the lotting or geographical strategy.

I hope this feedback is of assistance to your Inquiry.

Yours faithfully,

**DARREN THOMAS**  
**HEAD OF HIGHWAY & CONSTRUCTION**  
**PEMBROKESHIRE COUNTY COUNCIL**  
**01437 775892**

**Welsh Assembly: Public Accounts Committee**

**Evidence for the Inquiry into value for money in motorway and trunk road investment : 13.02.15**

**Mr K Moodley**

**Professor N J Smith**

Institute for Resilient Infrastructure  
School of Civil Engineering  
University of Leeds  
LEEDS, LS2 9JT.

**Nigel J. Smith BSc, MSc, PhD, CEng, FICE, FCIHT, MAPM** is Professor of Project & Transport Infrastructure Management, Institute for Resilient Infrastructure, School of Civil Engineering, University of Leeds. After working with contractors and the Department of Transport, he returned to academia he has researched and published widely in the field of transport infrastructure. He is author or co-author of key reports on transport infrastructure for the Organisation for European Co-operation and Development, for the European Parliament and for the UK National Audit Office.

This written evidence is given in the context of our recent work in England for the National Audit Office on infrastructure management. In-depth research in Wales has not been conducted. This evidence relates specifically to the second and third bullet points in the Terms of Reference, namely:

- The extent to which the current approach to routine maintenance and improvement of the network via Trunk Road Agents has delivered value for money
- How maintenance and improvement functions delivered by the Trunk Road Agents can be improved, in the context of the on-going Welsh Government review of these agents.

## **Background in England**

In England the Highways Agency, HA; soon to be corporatised as Highways England, is performing well by world standards, (1). The Strategic Road Network, SRN is managed on Whole Life Asset Management, WLAM, principles. The corporatisation of the HA will provide access to additional sources of funding from both public and private sectors, provide a known level of continuous investment for contractors, minimise the effect of working in single financial years and support a pipeline of priority maintenance interventions.

The HA utilise Local Authorities as agents. However for non-SRN roads the road maintenance funding is fragmented and non-hypothecated which results in a wide spectrum of good to poor maintenance in terms of cost effectiveness and a lack of data and of staff with the correct skills and competencies to use HMEP/WLAM approaches. Consequently many minor roads are in poor condition.

The HA system or policy regarding funding is not clear on the balance between capital and operational maintenance funding. However it is too early to tell if the recent budget cuts are sustainable without adverse consequences. Expensive, emergency "pothole" repairs are not cost effective and a sustainable and resilient maintenance strategy including energy audit/ decarbonisation/ green behaviour as integral parts needs to be adopted.

## **Welsh Trunk Road Network**

The trunk road network in Wales comprises 1,576km of trunk road and 133km of motorway with an asset value of around £13.5bn. The total road network which includes all Class A, B and C roads is 34,489km. Highway maintenance is influenced by the traffic, the weather and the maintenance regime. Recent figures show that traffic increased from 10.08bn vehicle kilometres in 2008 to 10.14bn vehicle kilometres in 2013 (2). Road condition is reported through SCANNER surveys of the road surface and Deflectograph assessment of the carriageway condition. The frequency of the Deflectograph surveys has changed from a 3 year cycle to a 5 year cycle. In 2013 only 69 percent of the motorway network and 68 percent of the trunk road network were surveyed, (2). The winters over the last few years have been relatively mild. The maintenance requirement is that "no more than 8 percent of the trunk road and motorway network to require maintenance at any one time" (3).

Since April 2012 routine maintenance has been undertaken by two public sector agents: North and Mid Wales Trunk Road Agent (NMWTRA) and South

Wales Trunk Road Agent (SWTRA). In turn these agents operate on a partnership basis with local authorities, to a varying extent, to deliver the service. The management and maintenance are mainly funded through the motorway and trunk road Spending Programme Area (SPA), of the Welsh Government budget. Budget figures for 2014/15 indicate £71m in capital expenditure and in £61m revenue expenditure. Typically capital activities include planned renewals/refurbishment and structural renewals, improvements and replacements. Revenue activities concerns routine maintenance and reactive maintenance and severe weather work. Set in global terms most of the large industrialised economies typically spend about 0.4 percent of GDP on road maintenance (4). Under the continued pressures for improved infrastructure service levels and from the need to make public sector budget savings the maintenance of the highways has to make its contribution. The Minister for Economy, Science and Transport published a statement in June 2014 focusing on improvements and savings.

The EU's transport policy has been reviewed several times since its establishment in 2001 and it identified a number of roads that form part of Trans-European Networks- Transport (TEN-T). In 2012 this has been superseded by the revised comprehensive network. In Wales the roads in this network include the M4/A48/A40/A477 corridor to the ports of Pembroke Dock and Fishguard in South Wales and the A55 to Holyhead in North Wales, (5). In 2015 there is one EU Priority Corridor in the UK (partially in Wales); the Felixstowe to Holyhead link. (6)

### **The Cycle of Routine Maintenance**

Routine maintenance is intended to keep highway infrastructure safe, serviceable and reliable. The key to providing value for money is performing timely and appropriate maintenance interventions will:

- limit the adverse effects on road users;
- prevent further deterioration; and
- minimise whole-life costs.

Intervening with planned routine maintenance at a suitable point during an asset's life can often restore it to its specified condition and hence extend the period of use between routine maintenance interventions. The importance of intervening at the right time for road repairs is paramount, in particular carrying out preventative maintenance to stop water penetrating the surface saves significant costs in later years." The Audit Commission reported that carrying out preventative maintenance during an asset's life costs less than a third of the price to reconstruct a road if it were allowed to fail", National Audit Office, (7).

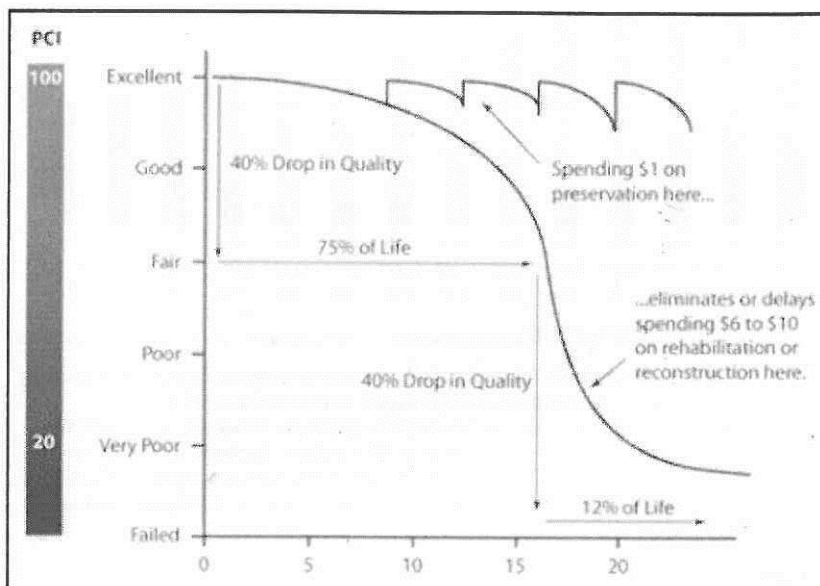
Once constructed highways normally remain in service and require routine maintenance. If the regular cycle of routine maintenance is not adhered to



and the period between interventions increases then the operational effectiveness of the asset decreases and the cost of maintenance intervention increases putting additional pressures on future budgets.

Recently constructed road pavements are appropriately designed and constructed with high quality materials and begin life in excellent condition. Typical UK winter weather will not cause problems for a pavement in excellent condition and prevention is the best cure for serious deterioration. Nevertheless over time the condition of the pavement starts to deteriorate and its condition will fall from excellent to good. Timely routine maintenance interventions are very cost effective and return the pavement to its excellent condition. This is shown in Figure 1 below (reproduced from the US Federal Highway Administrations Office of Asset Management, Pavements and Construction, (8)).

Figure 1: Deterioration Curves for highway pavements, Reproduced from FHAO, US (8)



If intervention is delayed the deterioration curve becomes increasingly steep and the cost and scale of maintenance required in increased in a non-linear manner. Under investment causing the delay of interventions leads to rapid and non-linear deterioration. Routine maintenance is replaced with carriageway reinstatement or even in extreme cases reconstruction of most or all of the layers which make up the carriageway. Extended delays in

intervention will lead to a maintenance deficit being established with more roads offering lower operating standards and incurring higher maintenance costs in future. The asset value of the highway will also fall significantly.

Road pavements in poor condition can develop “potholes”. This is usually dealt with quickly and effectively should it occur on the motorway and trunk road network but on minor roads is a significant and sensitive issue for all road users. Patching these pot holes offers a short term fix but it does not improve the overall pavement condition, the repairs often deteriorate very quickly and the cost is estimated to be around 20 times the cost of routine maintenance, (9). This type of “worst first” strategy is very inefficient (10).

### **Highway Maintenance compared with Pavement Maintenance**

Highways also contain bridges, tunnels, culverts, retaining walls and other structures as well as drainage, earthworks and signage that all requires routine maintenance – typically with very different design lives and very different operational periods. All elements of the highway require routine maintenance and most of the basic principles are common to but this evidence concentrates on the road pavement maintenance.

To be effective routine maintenance has to take place in a particular time frame, as shown by the deterioration curves discussed above. This requires an asset management plan.

### **The need for the Highways Maintenance Efficiency Programme Approach**

The Highways Maintenance Efficiency Programme, HMEP, is a £6 million initiative, funded by the Department of Transport, to improve the efficiency of highways maintenance in England, using asset management principles, (11). The programme is concerned with facilitating the change to highways services, so that greater savings and efficiencies can be achieved and the demand for improved highway services can be met. HMEP seeks to connect the networks across the highways sector and provides tools and resources to help managers transform delivery of highways through greater efficiencies. The programme has ambitious goals to deliver 15% savings by 2015 and 30% by 2020 based on transforming the sector. The Asphalt Industries Alliance ALARM survey, (12), indicated that 80% of all local Authorities that responded to their recent survey were participating in HMEP.

HMEP is relevant in the context of Wales because there is recognition of the importance of well-maintained roads for economic prosperity. Roads that are fit for the future are the concern of government, business and communities. The HMEP programme is operating with a view to deliver improved roads in an environment of tighter budgets, rising costs and greater demands from consumers. HMEP seeks to enable and embed change at both a strategic and

operational level. At the strategic level HMEP is seeking to engage with the leaders of local authorities including elected members, senior officers and practitioners to recognise the opportunities arising from change across the sector.

HMEP's strategic approach encourages new ways of organising and approaching delivery of services and include shared service models, scale economies and building capacity from within the sector network by sharing practice.

Asset management takes a long term, whole life approach to the management of new and existing highways assets. It allows for planned decision making rather than short term reactive decisions that inevitably cost more. HMEP has developed a number of guidance documents to support the development of asset management practices including a Lifecycle planning toolkit, (13). Where HMEP asset management has been adopted savings of 5 percent have been reported and in cases with more developed asset systems savings of 15 percent were reported. Asset management led decision making embeds a value and benefits achievement approach.

Collaboration is central to the change envisaged within HMEP. The approach is about creating the correct culture for opportunities for efficiency and improvement to flourish. HMEP encourages client/client as well as client/provider collaborations. It recognises that collaboration already exist and deliver improved performance but seeks to embed this culture. In support of collaboration it has developed a number of support guides and standards. These include; Maximising Client Provider collaboration toolkit for highways,(14), Local Authorities Collaborative Alliance Toolkit, (15), Shared Services Toolkit, (16), and Lean Toolkit, (17). One of the most significant outcomes is the reduction of disruption when highways and utilities collaborate on renewal and maintenance projects.

HMEP has developed guidance on procurement and contracts for highways. They seek to rationalise and consolidate documents that support delivery. These documents include the Form of Contract for Highways Maintenance Services, (18), procurement route choices toolkit for highways maintenance services, (19) and a supply chain collaborations toolkit, (20). Standardisation promotes greater certainty and consistency for clients and providers.

The ability to deliver improved efficiency is also dependent on the capability, competency and capacity of the participants. The new "Improving infrastructure delivery: project initiation routemap", supported by

Infrastructure UK, (21), places a great deal of emphasis on the project management capability and competence of officials to deliver projects. It would therefore be relevant to consider a capability and competence audit within Transport Wales. Part of the work associated with HMEP also addressed competence and capability within organisations. It identified a lack of understanding of key decision making roles, an absence of whole life management skills as well as project and collaborative management skills. To deliver efficient projects competent people are needed.

### **Maintenance trends in Wales**

As in the rest of the UK the motorway network in Wales appears to be maintained to a high standard. There is no published evidence of increasing deterioration in the state of the motorway and trunk road network. However there is evidence that in recent years there have been fluctuations in the pavement condition with an improvement in the state of the asset from 2002 to 2010 but a significant downward trend in 2011 and 2012 back to 2002 levels. This is partially due to adverse weather conditions but other factors are likely to have been involved, including the recovery in vehicle kilometres, mentioned above, (11).

Spending on pot hole repairs continues. If all minor roads are included then last year some 156,00 potholes were filled, costing £7.4m but over £1.8m was paid out in compensation for damage and injuries caused by potholes (12).

### **How can delivery & performance be improved?**

There is no evidence to indicate that there is a problem with the maintenance and management of the motorway and trunk road network in Wales. However like most aspects of the public sector budget there are pressures to delivery savings whilst not adversely affecting the levels of service. The “Do nothing” option, delaying intervention until a later time, can appear as a “free or cheap” option and without problems but this is not the true position. Further the strategy of “worst first”, usually applied to potholes is not cost or operationally effective.

Budget cuts must be considered in future and consideration given to how this can be achieved without detrimental effect of the network. From work with the HA and NAO in England, the following criteria have been identified to facilitate the improvement of the cost effective delivery of road network maintenance:

- Strategy must be based on HMEP asset management principles to make appropriate and timely maintenance interventions, (22)

- Staff must be trained appropriately
- Prioritisation criteria in line with the National Infrastructure Plan, (23)
- Up to date and accurate data on the condition of the network must be available
- Secure sustainable long term funding must be in place
- Development of a set of key performance indicators

It is likely that some initial investment is needed to ensure all these conditions exist before the savings in road pavement maintenance can be delivered. This will take time and it is likely that “savings” made by reducing funding before these conditions are satisfied will be detrimental and non-sustainable.

To provide a single strategic highways vision for Wales consideration should be given to the creation of a single entity that takes responsibility for the trunk and motorway network. This would facilitate a closer strategic delivery link between national infrastructure plan and a “new strategic roads agency”. The mechanisms for service delivery that follow can then be flexible.

In the longer term there are a number of maintenance options that deserve further consideration. One approach adopted in several countries around the world is the Toll-Operate Toll, TOT, system of road maintenance. Realistically this option is only viable where the motorway and trunk road network is wholly or partially tolled. Although unpopular, the option for variable, full-time, 24 hours for 7 days a week, tolling of the highway asset is likely to be introduced at some point in the future. TOT consists of transferring a length of road to the private sector, allowing tolls to be charged and using the dedicated income to upgrade, improve and maintain the road to a high standard for the duration of the PPP concession at which time it is either transferred back to the public sector as a toll road or re-contracted to a private operator.

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## 1. Introduction

- 1.1 Gwynedd Council was appointed as North and Mid Wales Trunk Road Agent (NMWTRA) by Welsh Government (WG) in April 2012. NMWTRA are responsible for delivering the requirements of the Welsh Government Managing Agent Agreement (WGMA) and the requirements of the Highways Act including the statutory 'duty to maintain' under delegated authority from WG.
- 1.2 The role of the Agent includes the following functions:
- Inspection of highway assets to determine asset condition and identify safety hazards;
  - Identify maintenance renewal and improvement requirements for all highway assets and submit appropriate bids to WG to assist with funding decisions;
  - Determine feasibility and undertake detailed design for major maintenance renewal, upgrade and minor improvement schemes;
  - Undertake routine and reactive maintenance on the Trunk Road network including correcting safety defects and responding to emergency incidents within defined timescales;
  - Provision of advice to WG on operational matters, requests for service from the public and elected members;
  - Operate the WG Traffic Officer Service and network Control Room functions;
  - Statutory Tunnels Manager;
  - Departmental Representative for A55 Design Build Finance Operate Contract
  - To manage a budget allocation from WG of approximately £50m.

## 2. Background

- 2.1 Trunk Road management arrangements in Wales were reviewed by WG between 2002 and 2005 and the number of Agents rationalised from eight to what was considered to be an optimum of three in 2005/6 with the formation of the North, Mid and South Wales Trunk Road Agencies.
- 2.2 Between 2007 and 2013 a number of successful external audits commissioned by WG have been undertaken by Halcrow 2007, EC Harris 2008, Performance Audit Group 2011 and 2012 and EC Harris in 2013. The EC Harris Audit in 2008 included a benchmarking exercise across Wales and with similar services provided by the private sector in Scotland. The successful review confirmed that the public sector model operating in Wales in the context of the Welsh economy was providing Value for Money and the Agency arrangements were renewed in 2012. The WG letter of appointment commented as follows: *"This is a very positive result for the unique public sector delivery model that we have in Wales, which will now continue after its cost effectiveness was established in comparison with alternative private models as part of the review"*
- 2.3 NMWTRA have continued with a comprehensive process of continuous improvements since 2012 and this has included further enhancement to governance measures for the operation of the Agent's supply chains. NMWTRA also operates within an accredited Quality Management System (QMS).



2.4 NMWTRA was audited by WG external auditors EC Harris in December 2013 and the principal findings of the audit were that:

- *“There was a general agreement within the WG officials interviewed that the Agent was undertaking their work in a professional manner and that there were no issues with performance.”*
- *“... the audit team considered that the current service provided by the Agent was conducted in a very professional and open manner”.*

There were a number of recommendations for improvement within the audit report and NMWTRA have implemented measures that address those recommendations including:

- Major revision to its Schedule of Rates (SOR) to provide full transparency of costs.
- Changes to the consultancy commissioning model including use of fixed fee and market testing with the private sector.

**3. *The extent to which the current approach to routine maintenance of the network via Trunk Road Agents provides value for money.***

3.1 The NMWTRA operating model agreed with WG in 2005 and reaffirmed in 2012 is based on a sound public sector ethos with provision of services utilising local resources sourced from both public and private sector suppliers. NMWTRA operates as an ‘arms-length’ autonomous unit ensuring probity and governance in managing WG interests whilst ensuring effective management of the partnership arrangements on an impartial basis. The cost of the Trunk Road Management Unit (TRMU) is recharged at cost to WG with no surplus or profit generated by the Lead Authority. A significant aspect of delegation through the WGMA to a Lead Authority and the formal partnership arrangements with the LA Service Providers is that it allows WG to benefit from VAT recovery equating to 20% of the value of works and services undertaken.

3.2 NMWTRA’s overall procurement strategy ensures that opportunity for local, Welsh based Small and Medium Enterprise (SME) suppliers is maximised. NMWTRA is continuously improving levels of transparency and benchmarking, combined with competition, to ensure that services are provided at market rates.

3.3 The NMWTRA model operates on the basis of integrated services procured through its Partner Authorities (PA) ensuring the benefits of significantly improved economies of scale and cost sharing opportunities are maximised and shared between PA’s and WG. Transparency ensures costs are apportioned on an appropriate basis. The model enables WG to make use of a significant number of highway depots and major plant items distributed across North and Mid-Wales enabling optimal operations to be achieved particularly for winter maintenance and emergency response. The Trunk Road element alone would not be sufficient to support this arrangement. This is an exemplar model of the collaboration between Local and Central Government.

3.4 Within the integrated service a significant level of plant and labour resources are available through formal mutual aid arrangements to deal with exceptional events resulting from severe adverse weather or major road traffic collisions. WG benefit from these significant resources on a shared cost basis but during major events have access to resources significantly over and above those covered by its level of contribution.

- 3.5 Core services including routine and reactive maintenance are procured through Partner Local Authorities utilising a combination of in-house resources and PA sourced SME private sector suppliers. Approximately 50 to 60% of this core service expenditure is procured from private sector suppliers through competitive processes. Performance of the supply chain is monitored and assessed in accordance with WGMA requirements. Major Maintenance and other “capital” works are undertaken by the Agency’s private sector Contractor and Surfacing Framework supply chain. Design and other consultancy work are undertaken by a combination of public sector and private sector supply chains.
- 3.6 The above model ensures that the labour resources associated with an integrated winter maintenance service can be retained on a cost effective basis by deploying those resources, supplemented by SME private sector resources on non-winter maintenance related maintenance functions. The overall efficiencies of this model are shared between WG and PA’s.
- 3.7 Managing within budget is a key aspect of the NMWTRA model and variance between final approved allocation and out-turn expenditure is consistently achieved to within +/- 1% on overall budget allocation.
- 3.8 NMWTRA operates in partnership with WG adopting common public sector values and a collaborative culture which avoids costly non-productive aspects found in many more contractual arrangements.
- 3.9 NMWTRA has proved to be highly adaptive to WG changing requirements regarding the scope of services required and have successfully added the following services to their Agent role:
- Statutory Tunnel Manager role 2006;
  - Tunnel Incident Support Service in 2008;
  - Traffic Officer Service in 2009;
  - North Wales Traffic Management Centre Control Room 2010;
  - Merge with Mid Wales Trunk Road Agency (MWTRA) in 2012;
  - Development control advice 2012;
  - Move to IRIS in 2012.
- 3.10 Had the above changes been implemented through a private sector / risk transfer model, there would have been significant contractual, cost and delivery implications.

**4. *How can the maintenance and improvement Functions delivered by the Trunk Road Agent be improved, in the context of the on-going Welsh Government review of those Agents.***

- 4.1 In response to the Ministers Statement of the 11<sup>th</sup> November 2013 the Trunk Road Agents are currently preparing submissions to WG to demonstrate proposals for meeting the following Ministerial objectives:
- Drive and deliver substantial cost savings in Management, Maintenance and Inspection functions;
  - Improve agility to meet changing WG needs;
  - Harmonisation in approach across Wales.

- 4.2 NMWTRA have identified changes to the Agent delivery model that will achieve savings to WG based on internalising most core functions within the Agent including revisions to how works are commissioned and changing the inspection function delivery to a more regionalised basis. This will require restructuring of the Agency in conjunction with the restructuring required following transfer of the Agent planning function into WG in April 2014.
- 4.3 Challenges facing NMWTRA and constraints on delivery include:
- Fluctuation in budget allocations with funding opportunities regularly arising in quarter four that can place significant pressure on NMWTRA's supply chain and road space availability;
  - Working within Trunk Road embargo periods creates challenging programming arrangements;
  - Urgent scheme implementation requirements caused for example by asset failure.
  - WG are currently implementing significant change by internalisation of the Planning function and integration of their IT systems.
- 4.4 In order to meet these challenges NMWTRA has established a highly agile supply chain enabling the above delivery requirements to be met consistently by being able to scale up or down to meet in year and annual budget priorities. The benefits of a public sector core capability with vested knowledge in the network avoids a 'cold start' and delay to project delivery and the extended resources available within its private sector frameworks enables a rapid response to changing WG requirements to be met in a cost effective manner.
- 4.5 NMWTRA is now adopting a delivery strategy that enables it to address the above challenges by focussing on scheme preparation during quarters 1 and 2 with construction phases programmed for autumn/ winter delivery. Earlier notification of late funding opportunities would assist Trunk Road Agents in maximising value for money in delivery of network improvements.
- 4.6 Currently a range of disparate asset management tools are utilised to assess and prioritise funding decisions. A more formal asset management approach would assist in improving long term asset management and associated whole life costs. This is being progressed in part using the Integrated Roads Information System (IRIS) being developed by consultants WDM on behalf of WG. Once fully implemented this system should assist WG in improved funding decisions across all asset types. Both Trunk Road Agents are working closely with WG and their contractor to ensure successful delivery of this important initiative. Early delivery of IRIS would improve the effectiveness of both WG and Agent delivery.
- 4.7 Reduced investment in programmed maintenance increases the extent of reactive maintenance necessary to maintain operational safety of the network. The balance between programmed and reactive maintenance must be optimised within available funding due to the high costs and disruption associated with a reactive approach. There is also scope for improving levels of preventative maintenance treatments to increase the operational life of assets.
- 4.8 The nature of the Trunk Road network in Wales varies significantly between motorway/dual carriageways and rural single carriageways. Single carriageways also vary from heavily wooded sections to high mountain passes and coastal sections. Much of the

network has been developed from historical routes with long sections that have never been designed or engineered to current standards. This presents a range of operational and maintenance challenges.

- 4.9 The Welsh Government Trunk Road Maintenance Manual (WGTRMM) determines standards for maintenance across Wales but does not take into account specific sections of network type. There is potential for a more cost effective approach to maintaining the network by adopting an operational intelligence and risk based approach as opposed to a blanket, potentially inefficient approach. NMWTRA's operational experience and knowledge of the network would enable it to develop appropriate local variations to WGTRMM across a number of asset types to achieve a more cost effective maintenance regime whilst managing WG risk to an acceptable level.
- 4.10 Through benchmarking NMWTRA are identifying areas of best practice within its supply chain with opportunities to transfer these practices across its suppliers generating associated cost efficiencies. NMWTRA is also undertaking a LEAN management assessment of its delivery in order to drive further cost efficiencies.
- 4.11 Both Trunk Road Agents have historically worked together collaboratively and will build on this platform to further improve levels of harmonisation across Wales. Initiatives being developed include preparation of a common Service Level Agreement and Schedule of Rates methodology.

## **5.0 Concluding comments**

- 5.1 The current Trunk Road Agent model has proven, through repeated review processes that it is providing good levels of value for money through its public and private sector supply chains operating within robust governance and performance management regimes. The operation of an integrated service model provides significant economies of scale and an ability to optimise service delivery to the benefit of WG and Local Authorities. The established supply chain creates significant opportunities for Welsh based SME's to undertake Trunk Road works engaged directly by the Agent through frameworks or as part of the extended supply chain provided by Local Authorities. This significantly benefits both the local and national Welsh economies and assists in creating and maintaining quality local employment opportunities.
- 5.2 There is however, always scope for further improvements to the model and both Agents are working hard to achieve this in order to meet the challenges presented by the Minister and ensure value for money continues to be provided.

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## **RHA general comments ahead of the Public Accounts Committee inquiry into the effectiveness of the Welsh Government's approach to the maintenance and enhancement of the trunk road network**

As the leading trade association for the road haulage industry the RHA is keen to contribute to the Public Account Committee's consideration of effectiveness of the Welsh Government's approach to the maintenance and enhancement of the trunk road network.

The road haulage and logistics sector provides much employment in Wales and through its collections and deliveries of essential goods supports the wider business community, as well as the public sector and the general public.

Now is a crucial time for the haulage and logistics sector, with the economy recovering, but the forthcoming General Election meaning that there is uncertainty in the business community about which economic policies will be pursued, but also what policies will be adopted at a UK level concerning infrastructure development and the funding of roads.

The RHA well works with the Highways Agency, soon to be Highways England. We keep abreast of the Agency's strategy and plans for improving and maintaining the road network it oversees, through roads building, dualling of some roads, as well as its programme of introducing smart motorways, and related technology that helps smooth the flow of traffic an alleviate congestion as well as improving road safety. We welcome much of what the Highways Agency has done, while reserving the right to challenge the Agency on certain issues. In the same spirit, we are pleased that a strategic review of the management of the trunk road network in Wales is now underway and look forward to constructive engagement with as the Public Accounts Committee considers maintenance and enhancement of the trunk road network.

We are not commenting in terms of any formal analysis of the costs and benefits of spending particular sums of money, but have taken a more general approach of pinpointing which schemes we think are worth pursuing in terms of value for money, as well as the best use of resources to support the economy in Wales.

The RHA has been involved with the work of the Freight Task and Finish Group and we are delighted that many of the issues we have raised in this work has been taken on board.

In our view the National Transport Plan does demonstrate a good level of understanding of the issues faced by the road haulage industry in Wales, although there are some issues of detail that we would like to be taken on board. We will address these below.

However first we would like to turn to the content of the National Transport Plan and say that, we welcome the recognition in the National Transport Plan that transport is at the heart of life in Wales, with all other services dependent on it in one way or another, and we agree with the statement at 3.4.1 that "Freight transport is an essential part of a thriving economy and of people's everyday life. It is dominated by the private sector – businesses moving goods and materials for other businesses, but it relies on infrastructure that is often provided, managed and maintained by the public sector, be it at national or local level."

We also note and agree with the passages from 3.2.17 to 3.2.19 of the consultation document that, “The nature of the trunk road network in Wales is such that it provides critical connectivity for many communities, including in rural areas and deprived communities.....An efficient, effective trunk and motorway network has an important role to play in supporting the Welsh economy enabling access across Wales and cross-border for people and freight. It helps businesses to be competitive, reducing transport costs, allowing speedy and reliable movement of goods and products and access to a labour force. Delays on the network and unreliability in journey times, affects productivity and reduces access to markets. Congestion can increase emissions from transport and schemes that reduce congestion can reduce this and improve local air quality. Similarly the network has an important role to play in enabling people to access services.

A key driver for investing in new major enhancements to the trunk and motorway network is to stimulate the economy.”

Given all of these assertions we trust that the views of the RHA as the leading trade association for the hire-and-reward sector of the haulage industry will be given due weight.

Below are set out a list of issues that, in the view of the RHA, should be factored into the National Transport Plan, and which affect whether the spending priorities of the Welsh government to the trunk road network will prove to be efficient and cost effective, and in the long term will boost the economy in Wales.

### **Congestion and road capacity**

Members of the RHA have expressed concern about congestion and lack of capacity on certain routes, given that hauliers make many of the longer journeys on the trunk road network in Wales and so have a keen interest in any efforts to that seeks to improve routes and increase capacity. Commercial vehicles also make many local deliveries moving goods over shorter distances on the “last mile” or “last leg” deliveries.”

Our members report unreliable journey times and traffic congestion, particularly during rush hour, as being common on the existing M4, and so we have already supported plans to redevelop the M4 Corridor around Newport by building a new section of 3-lane motorway to the south of Newport. It is our view that the road cannot cope well with current traffic levels, and so future growth in traffic will present serious capacity problems if no action is taken.

The RHA has supported the introduction of a variable speed limit system in 2011 of the M4 between Junctions 24 and 28 to improve traffic flow in the short term. We note that the system has resulted in a reduction in accidents and welcome this trend. However in the view of the RHA the building of a new road would address capacity and safety concerns more fully.

We would hope that as part of the review of the operation of the trunk route network, efforts are made to identify congestion hot-spots as well as the rat-run routes that are used by trucks when

main roads are too busy, so that any new infrastructure development can act to relieve existing problems.

Dealing with and minimising congestion can help reduce carbon emissions and air pollution.

### **Consolidation centres and freight parks**

Planners need to think about whether and where it is appropriate to create freight consolidation centres close to urban areas that allow large trucks coming off the motorway system to deliver goods, which are then taken on to their ultimate destination by smaller commercial vehicles. If properly planned, such centres can work well.

However we would not like to see significant numbers of local depots close to accommodate one exclusive freight consolidation centre as this might negatively affect the diversity and flexibility of provision within the area.

### **Lorry parking and loading**

We would also like to see planners take more seriously the need for provision of secure lorry parking sites, particularly near interchanges and major retail or industrial sites. At present, there is a shortage of sites, creating issues in terms of security of load and driver and road safety.

It is essential that drivers should have easy access on long journeys to refreshments and bathroom facilities. If such facilities are not available, then drivers may stop at inappropriate locations that cause inconvenience to local residents and other road users.

The tachograph rules require drivers to take regular rest breaks and so the development of comprehensive facilities can only be of benefit to the haulage industry and local residents alike.

The lack of secure facilities also means that drivers and their loads are at greater risk of crime, as high value loads have to be parked at the roadside. With the planned closure of facilities such as public toilets across the country, due to local authority spending cuts, the situation is likely to get worse.

We urge you to insist that such parking areas have bathroom facilities incorporated which visiting truck drivers are allowed to use. Unfortunately it is the case that even after long journeys some customers refuse to allow HGV drivers to use staff toilets. Such an attitude leads to discomfort and inconvenience for drivers who may then use lay-bys or other inappropriate sites to relieve themselves.

We would also like to emphasise that as well as parking facilities, trucks need loading and unloading provision at high street shopping centres for example, and any lack of adequate provision can also cause difficulties for other traffic, pedestrians and for the shop owners being served by hauliers.

### **Delivery Restrictions/Quiet deliveries**

We would ask that consideration is given to the lifting of any night-time delivery restrictions that force truck operators to use the roads at the most congested times. If vehicles can deliver to

retail premises and depots in off-peak hours then trucks will not be on the roads at the busiest periods and so there should be air pollution reduction and carbon saving, as well as road safety benefits. The Noise Abatement Society ran a number of quiet delivery trials in 2009/11, which demonstrated that such initiatives could work very well. Details of the scheme can be found by clicking on the link.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/4007/quiet-deliveries-demo-scheme-final-project-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4007/quiet-deliveries-demo-scheme-final-project-report.pdf)

The Department for Transport has produced quiet deliveries good practice guidance for local authorities, as well as hauliers, which you can find by going to the link below.

<https://www.gov.uk/government/publications/quiet-deliveries-demonstration-scheme>

### **Freight Priority Lanes**

We would ask that a study is made of introducing priority freight lanes in the area. Freight priority lanes also called “no car”, “high-occupancy vehicle” or “essential-user” lanes permit trucks to use bus lanes at certain times of day, which increases capacity for other road users in normal traffic, at the same time as ensuring that lorries carrying essentials do not become snarled-up in heavy traffic. Where congestion is an issue, particularly in the proximity of retail and commercial premises, some councils have agreed to include goods vehicles amongst priority road-users. We would like to emphasise that priority lanes help to ease congestion, reduce emissions, and make freight delivery more efficient.

### **Segregated cycling infrastructure**

We acknowledge that the existing roads infrastructure in Wales has not been designed to accommodate cycling as an integral and significant part of the transport system. We would welcome moves to make standard the consideration of the needs of cyclists as a part of the roads design process.

We understand that in countries where more people cycle routinely, it is common to have cycle routes completely segregated from other road traffic. The RHA would support the allocation of resources to the development of viable networks of cycle routes that are separated from motorised traffic.

### **Traffic management, Signage and Intelligent Transport Systems**

We hope that new road development in Wales will make use of the most up-to-date technology for traffic management.

We know that that inappropriate routing of traffic, including HGVs, through some areas is a problem. We suggest that technology now offers many ways in which all traffic can be successfully managed. However investment in intelligent transport systems, proper signage, traffic light sequencing technology, as well as major investment in town centre by-pass routes is needed before these benefits can be realised.

We would like to see proposals included to upgrade IT systems in order to provide improved real time travel information. Hauliers have themselves already embraced the use of intelligent transport technologies which help in the efficient running of their businesses.



We would also like to say that the positioning of road signs is important. Good signage helps drivers to find correct places to park and load, but also to avoid the risk of trucks, for example, hitting low bridges because signs are in the wrong place or because the bridge sign gives insufficient notice for the driver to divert before approaching the bridge. Bridge strikes can result in massive disruption whilst the driver tries to turn the vehicle round or gets stuck.

### **Multi-modal goods transport**

We would ask any new transport authority to bear in mind that regardless of which transport mode is used, road will remain an essential component of any future road haulage strategy, since trucks usually undertake “last mile” or as the National Transport Plan says “last-leg” deliveries once goods are unloaded from rail, air or water freight terminuses.

South Wales  
Trunk Road  
Agent

Managing and Improving  
Motorways and Trunk Roads  
through South Wales



Asiant  
Cefnffyrdd  
De Cymru

Rheoli a Gwella'r Traffyrdd  
a'r Cefnffyrdd yn Ne  
Cymru

# National Assembly for Wales Public Account Committee Inquiry into Value for Money of Motorway and Trunk Road Investment

South Wales Trunk Road Agent Written Response

19<sup>th</sup> February 2015



# National Assembly for Wales Public Accounts Committee: Inquiry into Value for Money of Motorway and Trunk Road Investment

*South Wales Trunk Road Agent Written Response 19th February 2015*

## **1. Introduction**

- 1.1 Neath Port Talbot County Borough Council are appointed as Agents to the Welsh Government (WG) to act on their behalf in managing, improving and maintaining the strategic road network in South Wales on a day to day basis.
- 1.2 Neath Port Talbot operate under delegated authority from WG under the Highways Act 1980 and the required scope and service levels are as defined in the Welsh Government Management Agent Agreement (WGMA).
- 1.3 The role of Agent includes the following:-
  - Provision of technical advice
  - Operational management of the network including incident management and adverse weather planning
  - Inspection of all highway assets to determine asset condition and the identification of defects
  - Delivery of routine, cyclical and reactive maintenance
  - Design and deliver planned major maintenance renewal, upgrade and improvement works

## **2. Background**

- 2.1 As a result of a review by WG in 2003, the decision was taken to rationalise the number of public sector Trunk Road Agents from 8 to 3 creating new Agents in North, Mid and South Wales. WG, through these new arrangements, placed greater emphasis on continuous service improvement, improved business management focus, increased competition and transparency in terms of service delivery whilst ensuring business continuity.
- 2.2 In 2010 a further external review of the service was undertaken; this included a benchmarking exercise to compare the total service costs across Wales with that of the private sector model in Scotland. The review findings confirmed that the public sector model operating in Wales were providing Value for Money in the context of the Welsh Economy, leading to the renewal of the Welsh Model. The decision was taken at that time to further rationalise the number of Trunk Road Agents across Wales from 3 to 2.
- 2.3 An extract from the renewal letter is as follows:-

*“This is a very positive result for the unique public sector model that we have in Wales, which will now continue after its cost effectiveness was established in comparison with alternative private models as part of the review”.*

# National Assembly for Wales Public Accounts Committee: Inquiry into Value for Money of Motorway and Trunk Road Investment

*South Wales Trunk Road Agent Written Response 19th February 2015*

## **3. The extent to which the current approach to routine maintenance of the network via Trunk Road Agents provides value for money.**

3.1 The South Wales Trunk Road Agent operating model agreed with WG in 2005 has been of an enabling organisation but with all delegated function delivered directly by the management unit in order to deliver improved control and consistency.

3.2 At the start of the Agreement with WG in 2006, SWTRA was tasked with ensuring surety of service to the Welsh Government for a two year period. At the end of this period, SWTRA was empowered to make changes to its procurement of works and supply chain in an effort to improve consistency and compliance across the South Wales region. Thereafter, with the Agreement of the WG, a period of driven improvement has been in place through which SWTRA has strived to provide continuous improvement and value for money to the WG.

3.3 Examples of this continuous improvement and value for money process include:-

3.4 Implementation of a robust and transparent Management Unit Structure for SWTRA. The cost of this Unit is recharged to the Welsh Government on a Direct Cost basis, with no surplus or profit generated. Annual returns to the WG give full details of the staff structure including salaries. New appointments to the structure can only take place with Welsh Government approval. Full details are provided in terms of Premises cost along with Operational Vehicle costs and Supplies and Services.

3.5 The nature of the agreement between the WG and the Agent is one that provides flexibility and agility and is such that the Welsh Government cannot be subjected to compensation events as a result of changes to the services or budgets that it requests of or provides to SWTRA. Due to the Agreement being with a Local Authority all charges to Welsh Government are net of VAT, which gives a 20% benefit on all works carried out.

3.6 The agile nature of SWTRA' procurement/delivery strategy means that its supply chain provides both resilience and flexibility which has enabled it to scale up and scale down, sometimes several times in the course of a financial year, in order to assist the Welsh Government with budget pressures or additional funding.

3.7 This flexibility and agility has enabled the Agent to balance the cost of individual schemes across budget programmes, thus ensuring that the Agent provides a service that is within the approved Budget Expenditure Lines provided by WG.

## National Assembly for Wales Public Accounts Committee: Inquiry into Value for Money of Motorway and Trunk Road Investment

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- 3.8 SWTRA has met the requirements of the WG in engendering the Wales PLC agenda with a supply chain that consists of a Public Sector and Private Sector split, utilising for the optimum solution, the specialist skills and resources that both sectors provide.
- 3.9 Routine and Cyclical Maintenance is undertaken by the Public Sector providing the Welsh Government with the benefits of a shared basic infrastructure including Depots and Plant. This is especially of benefit in rural areas and allows for a timely response to emergencies on the Network and Winter Maintenance activities.
- 3.10 SWTRA has continued to drive continuous improvement through its Public Sector Supply Chain. In 2009 rationalisation was achieved by encouraging the Local Authorities to form three Regional Maintenance Partnerships, with the benefits of cross border working, improved consistency and a lower level of administration yielding both improved compliance and efficiency savings. In 2012 further efficiencies were achieved by another phase of rationalisation with the Partnership Agreements.
- 3.11 Capital Maintenance and Improvement Programmes are delivered via competitively procured Framework Construction contracts and Consultancy contracts with the Private Sector. Rationalisation of these contracts in 2010 led to a reduction in procurement costs and efficiencies of scale by merging the Structure and Highway contracts into one.
- 3.12 SWTRA has repeatedly proven its ability to be highly adaptive and respond to emerging WG initiatives throughout its Agreement period and has successfully delivered the following additional services to its portfolio of services:-
- Statutory Tunnel Manager Role 2006
  - New Roads and Streetworks Policy Advisor 2010
  - Traffic Officer Service 2010
  - South Wales Traffic Management Control Centre 2010
  - SWTRA area expansion to incorporate whole of Carmarthenshire CC and Pembrokeshire CC 2012
  - IRIS Implementation Project Management Support 2013
- 3.13 The implementation of the new Welsh Government Traffic Officer Service in 2010 involved the delivery of a new service including the recruitment and training of staff, the procurement of vehicles and equipment and the operational implementation of complex guidelines. SWTRA achieved this within agreed timescales and provides a service that is recharged at cost to the WG and that has been praised by a number of Stakeholders.

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- 3.14 A further example of delivering Value for Money was the transfer of the operation of the South Wales Traffic Management Control Room to the Agent. This provided SWTRA the opportunity on behalf of WG to integrate two operational services and to harmonise staffing, management systems and procedures. These changes enabled the improved service delivery of the emergency response and traffic management function and also yielded significant efficiency savings to the WG.
- 3.15 The drive for continuous improvement and value for money for the Welsh Government has led to several reorganisations of the Agent structure and the delivery of services to the Welsh Government throughout the Agreement period.
- 3.16 A number of service areas, including the Highway Inspection Service and Streetworks Management functions, were removed from the supply chain in order to be delivered in house by the Agent. This has led to a greater level of compliance and consistency as well as yielding efficiency savings in the cost of the service.
- 3.17 Throughout the Agreement period the Agent has been subject to scrutiny by external audit. This has included annual audits of its Financial claims to Welsh Government by the Wales Audit Office as well as compliance and performance audits by Welsh Government procured auditors, these being; Halcrow 2007, E C Harris 2008, Performance Audit Group 2011 and EC Harris 2013. In addition the Agent is subject to external audit of its Integrated Quality, Health & Safety and Environmental Management Systems. Throughout this process no financial qualifications or major non conformities have been raised by the audit teams.
- 3.18 The 2013 Audit raised some recommendations and these are currently being addressed in conjunction with the development of proposals for the on-going Ministerial Review.

## **4 How can the maintenance and improvement Functions delivered by the trunk road agent be improved, in the context of the on-going Welsh Government review of these Agents.**

- 4.1 On the 11<sup>th</sup> November 2014 the Minister for Economy, Science and Transport announced a review into the management of Trunk Road maintenance in Wales. The Trunk Road Agents are currently in the process of preparing a submission to Welsh Government to indicate proposals for achieving the following ministerial objectives:-
- Drive and Capture Efficiency to deliver substantial savings
  - Agility – ability to scale up and down
  - Harmonisation in approach across Wales
  - Primacy for decision and expenditure with WG
  - Improvements in service delivery and value for money

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- 4.2 Neath Port Talbot CBC, as SWTRA, has and continues to be committed to the identification and delivery of service improvement proposals and are currently working in conjunction with its supply chain and WG to evaluate and submit proposals which can address the above stated objectives.
- 4.3 Examples currently under consideration and review include;
- 4.4 A full review of the Management Unit and the wider supply chain to identify potential efficiencies from delivering further functions in-house. Areas under consideration include the delivery of Inspections in relation to the WG assets of Structures, Lighting and Soft Estate.
- 4.5 Working with the Public Sector supply chain to identify improved methods of working in order to deliver efficiency savings in the areas of routine and cyclical maintenance.
- 4.6 Enhanced transparency is a key objective of the Ministerial Review and work is underway to provide a greater level of transparency in relation to Routine Maintenance costs. This work includes elements of bench marking costs both within our Public Sector supply chain and against available cross border data.
- 4.7 Proposals have been identified to pilot service level changes to the current WG maintenance standard in order to reduce costs whilst minimising risk to the Welsh Ministers. These pilots will be proposed in order to enable intelligence to be developed that will allow the WG to make a considered decision on its future maintenance standard with a full risk and reward analysis available.
- 4.8 In order to better harmonise the approach to Trunk Road maintenance across Wales, consideration is being given to develop All Wales contracts for service delivery. This approach could reduce procurement costs, improve benchmarking opportunities and identify national best practice for All Wales adoption.

## **5. Constraints/Opportunities**

- 5.1 SWTRA prides itself on its ability to scale up if and when additional funds become available towards the latter part of the financial year within WG. The model has enabled significant investment to be made in the Trunk Road network during the latter part of recent financial years. Whilst SWTRA welcomes the opportunities to undertake additional works as finance becomes available other benefits could be achieved by supplementing this with early notification of an initial budget each year. The ability to progress works during the early part of the year and then to supplement with additional budget would assist with programming of works. This would

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smooth out the delivery profile and impact positively on congestion management and road space interventions.

- 5.2 WG is currently in the process of upgrading its Highway IT management systems. The Agent welcomes the opportunity that it has had to assist the WG with the development of these systems, and looks forward to the continuing process of implementation.
- 5.3 During the past six years, the level of Capital investment in Major Maintenance of the Trunk Road Asset has fallen. This is manifest in the increased level of Network requiring intervention (up from 8% to 13%). The impact of this is an increase in the number of unplanned repairs which can lead to inefficient use of resources, increase costs and the number of network interventions. Increased capital investment would allow for major planned maintenance to take place to arrest the decline in the overall asset condition enabling a more cost effective approach to maintenance. Consideration could also be given to utilising more durable materials in certain locations to increase the lifespan of the carriageway.

## 6 Conclusion

- 6.1 SWTRA believe that the current trunk road Agent model has proven through rigorous and robust audits that it is providing a good level of service delivery through its public and private supply chains.
- 6.2 Whilst acknowledging there is a need to continue to review the service provision, especially in times of challenging financial climate, SWTRA is committed to working closely with its supply chain and in the delivery of its own services, to strive to provide continuous improvement.
- 6.3 SWTRA would like to thank the Committee for the opportunity to provide this statement and welcomes any questions that the Committee may have in relation to it.

**Richard Jones**, Head of Service – South Wales Trunk Road Agent, Unit 12  
Llandarcy House, The Courtyard, Llandarcy, Neath SA10 6EJ



The Welsh Government's approach to delivery of major trunk road projects is generally satisfactory. As regards the planning and costing of schemes, our main comment would be to avoid 'stop-start' delivery of projects, as this leads to significant waste. As an example, there is one trunk road scheme in the recently published National Transport Plan which had previously advanced to publication of the statutory orders some years ago before being 'shelved' and the orders withdrawn. Quite apart from the fact that a number of incidents have occurred on that part of the network in the meantime, which would probably not have occurred had the scheme proceeded, the need to carry out renewed environmental surveys, and address revised design standards and procedures that have been introduced since the previous scheme was prepared, means that some £500,000 of work has been abortive, representing perhaps 5% of the total project cost. A similar situation may well apply to schemes such as the M4 at Newport and others.

There have been problems in recent years with cost escalation during the construction phase of schemes, but this has largely been due to the fact that, during the recession, contractors were submitting unrealistically low tenders for work, purely in order to maintain their cash flows, and then attempting to cover the losses they would otherwise incur through contract claims. In the improving market such tactics are unlikely to be employed, but it might be worth Welsh Government considering greater emphasis on quality over price in assessment of tenders, as there is clear evidence from previous projects that too great a focus on tender prices leads to both higher out-turn capital costs and higher whole-life costs. Recent tender processes have tended to suggest that Welsh Government is already making progress in this direction.

As regards the forward programme of trunk road schemes, we would emphasise the importance of a clear pipeline of work, which allows the industry (both contractors and consultants) to maximise efficiency in delivery of schemes. We would also like to see a focus on 'medium sized' projects, perhaps in the £5M to £10M range, which would allow Welsh SMEs to take a lead role, and develop experience both for the business and individual employees. At present, with the focus on rather larger projects, these businesses can only find a role in road projects as second or third tier in the supply chain, which stifles their ability to develop.

We believe the Trunk Road Agents, through the collaboration with local authorities, have delivered value for money in the routine maintenance and improvement of the network. However, there is a risk that the significant financial pressures now being placed on local authorities will starve them of the resources to develop. We are seeing evidence of training budgets being cut to the bone, so that staff development is minimal, and this comes at a time when many greatly experienced staff are being lost through voluntary redundancies and yet the need for training is even greater, with the need to develop capability in the application of BIM (Building Information Modelling). The same financial pressures are stifling investment in technology (both hardware and software) so that the delivery processes are failing to keep pace with developments in current best practice.

There is a lack of publicly available information on the routine maintenance and management of the network in terms of costs and performance. We are aware that audits are carried out for Welsh Government, but do not believe the reports of such audits are in the public domain and consequently it is difficult to comment. We presume there is some benchmarking of typical costs against alternative delivery models such as the Highways Agency's MAC or ASC contracts.

On the basis of the limited information available, we would tend to suggest that, while there may be advantages in retaining the management and maintenance functions within the public sector, the current model of delivery of both white and blue collar services by departments of local authorities does not seem to be sustainable in view of the wider pressures on those authorities.

**Part response to Inquiry into value for money of Motorway and Trunk Road Investment  
Assembly for Wales PAC**

The Highways Term Maintenance Association (HTMA) is the trade organisation which represents service providers who currently maintain around 90% of the highway network within the United Kingdom. The Association aims to deliver high quality maintenance and asset management services, whilst seeking to drive positive change within the industry, for the communities within which we work.

The following views are in response to the questions in bullet points 2 and 3 of your letter of 14<sup>th</sup> January 2015 on the above topic.

We understand that Welsh Government budgets are released on an annual basis and this causes difficulties for the Agents in programming the work packages leading to peaks and troughs of work. This has a knock on effect on contractors who have to respond by supplementing the local workforce to cope with the peaks and downsize the workforce to cope with times of lower demand. In addition, this approach creates pressures on local plant, quarries and coating plants. This approach is inefficient.

The HTMA is also concerned that budget allocations may not be confirmed until after the start of the financial year which makes it difficult to programme works effectively and can lead to short term inefficient works being prioritised.

The HTMA supports the adoption of longer-term budgets and workload forecasting. Provided that this is delivered it will give companies and their supply chain the confidence to invest in their people, plant and equipment and build better relationships with suppliers, leading to a reduction in costs. We recommend that a funding plan, based on asset management principles, for a minimum 5 year rolling period should be developed and implemented. This would allow the current framework contracts to deliver improved value on a consistent and coordinated manner. It will also provide longer term job security for the Welsh workforce and increase the effective spending of each Welsh pound.

The HTMA also recommends an industry wide collaborative approach to service delivery. There are many benefits to be gained, in both efficiency and effectiveness, from the Welsh government, local authorities and framework delivery partners meeting regularly to optimise programmes and resources.

I hope you find these comments helpful.

Geoff Allister  
HTMA Executive Director

23<sup>rd</sup> February 2015  
[geoff.allister@htma.info](mailto:geoff.allister@htma.info)



1. Sefydliad Siartredig Priffyrdd a Chludiant Gogledd Cymru
2. The Freight Transport Association is one of Britain's largest trade associations, and uniquely provides a voice for the entirety of the UK's logistics sector. Its role, on behalf of nearly 14,000 members, is to enhance the safety, efficiency and sustainability of freight movements across the supply chain, regardless of transport mode. FTA members operate over 200,000 goods vehicles - almost half the UK fleet - and some 1,000,000 liveried vans. In addition, they consign over 90 per cent of the freight moved by rail and over 70 per cent of sea and air freight. FTA works with its members to influence transport policy and decisions taken at local, national and European level to ensure they recognise the needs of industry's supply chains. FTA remains available to discuss any aspect of this submission.
3. The Association is grateful for the opportunity to respond to the National Assembly for Wales, Public Accounts Committee Inquiry into the Value for Money of Motorway and Trunk Road Investment.
4. The Freight Transport Association is not in a position to comment on the effectiveness of the Welsh Governments planning and costing of individual schemes or Trunk Road Agents, however over the course of the past year FTA members have reported (via a quarterly survey) that they believe the performance of the road network in Great Britain has deteriorated with a reduction in reliability of 55 per cent on the motorway network and 45 per cent on urban roads reported in Q4 2014.
5. The freight industry is heavily reliant on the transport infrastructure that it uses, performing to a consistently high standard. Distribution networks, delivery routes and schedules have been designed to achieve availability of sufficient goods at the point of consumption by business or consumers without the need for extensive and expensive stock holding. Operators build resilience into their operational planning to accommodate regularly encountered journey time unreliability and seasonal changes in network performance.
6. Efficient and effective road networks are crucial for the logistics industry to be able to support the needs of UK businesses. More than 80 per cent of goods go by road and as the economy recovers, the demands placed on the road network will only increase.
7. FTA members have been critical regarding the failure to communicate planned road works, It is essential that development / repairs to the route network which results in significant closures and diversions are communicated to users. Communication is key to ensuring a smooth transition ahead of and during works. Information needs to be accurate and concise. Failure to meet this requirement could result in congestion, with increased vehicles emissions, additional mileage, missed deliveries, refused loads or a failure to meet guaranteed delivery times.
8. It is essential therefore that when road works are planned or new roads built, road users know where to access this information or have already been informed. The Traffic Wales website currently highlight works but it should also inform users of future planned works so that alternatives can be sort and where necessary provide further information on alternative arrangements for large vehicles. We believe the two Trunk Road Agents in Wales should provide more information on planned closures or provide clear links to sites like Traffic Wales where this information can be found.
9. The Freight Transport Association receive and are notified of planned developments on the Trunk Road network and respond accordingly after consultation with our members, this provides the Association with the opportunity to input into this process and works well. Delivery of projects and evaluation are then subject to a robust analysis using the WelTaG process which also provides further opportunity for stakeholder input.
10. The Welsh Government website provides stakeholders with an opportunity to find some information on the progress of trunk road schemes however this does need to be regularly updated.
11. FTA believes that a smarter approach to road financing should be adopted with the development of a funding strategy that covers short, medium and long term aims. This money must be secure from other pressures. Long term planning is essential.

12. In England the FTA work very closely with the Highways Agency and Government. The newly formed Strategic Highways Company (Highways England) will go live this year taking over responsibility for operating, managing, maintaining and improving the strategic roads from the Highways Agency. And for the first time England and the new company will benefit from a 'Road Investment Strategy' which sets out a stable, long term investment plan for strategic roads, providing a clear vision , performance standards and delivery expectations to be met by the by the new company. It is too early to say that this approach has worked however FTA believe that the Welsh Government must adopt best practice and potentially this modal for Wales.

Ian Gallagher  
Head of Policy for Wales  
Freight Transport Association

March 2015

# **Submission to the National Assembly for Wales**

in response to the

## **Public Accounts Committee inquiry into the value for money of motorway and trunk road investment**



**cyfeillion  
y ddaear  
cymru  
friends of  
the earth  
cymru**

## Introduction

1. The Public Accounts Committee asks whether or not the Welsh Government's approach to major road projects delivers value for money through scrutinising:
  - the effectiveness of Welsh Government planning and costing of schemes
  - the approach to project delivery and evaluation of projects; and
  - how the Welsh Government could improve its approach to planning and delivery of schemes.
  
2. Friends of the Earth Cymru has extensive experience of dealing with the Welsh Government in the context of such schemes. Our take-home message from these interactions is that Welsh Ministers have a predilection for seeking a particular transport outcome before determining whether or not a problem exists and conducting a thorough investigation of the various ways of solving any such problem. In the case of the M4 relief road, for example, Transport Ministers (with rare notable exceptions) have repeatedly pursued a motorway across the Gwent Levels without recognising that alternative means might be used to achieve the desired ends. It is difficult to avoid the conclusion that some Ministers appear to crave expensive vanity projects in the almost total absence of evidence justifying those projects.
  
3. The Committee may wish to scrutinise our response to the consultation on the draft National Transport Plan as it relates to Welsh Government transport planning<sup>1</sup>. The draft Plan is not fit for purpose, for at least the following reasons:
  - It fails to logically flow from the Wales Transport Strategy
  - It is based on road transport models ("evidence"<sup>2</sup>) that are proven to be flawed
  - It is based on degrading environmental concerns to less than 6% of the status they have in the overarching Strategy
  - It fails to even mention, let alone consider, the outstanding means of reducing road injuries and fatalities (20mph schemes)
  - It is not coherent with other important Welsh Government strategies, notably the Sustainable Development Scheme and the Climate Change Strategy, and the commitments that stem from them
  - It is made without any indication of funding allocation to different forms of transport (capital or revenue), which makes it almost impossible to weigh up the Welsh Government's priorities
  - It fails to demonstrate the slightest understanding of the (in)equality consequences of new road infrastructure

## Transport planning and the draft National Transport Plan

4. The Transport Minister commissioned Professor Preston to conduct a review of strategic transport planning in Wales<sup>3</sup>. Professor Preston describes 'problem-oriented planning' as being typically reactive, the risks of which include the emergence of piecemeal or short-term solutions<sup>4</sup>. The draft

<sup>1</sup> We shall publish our consultation response shortly

<sup>2</sup> <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.1.2

<sup>3</sup> <http://ppi.w.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf>

<sup>4</sup> <http://ppi.w.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p4

National Transport Plan presented by the Welsh Government is replete with problem-oriented planning because its road transport section is wholly premised on a 1% year-on-year increase in traffic:

*“One solution to such a situation would be to provide more transport capacity to reduce congestion – the so called predict and provide approach”<sup>5</sup>.*

5. It is particularly noteworthy that the 7 of the 17 long-term outcomes of the Welsh Transport Strategy that are classified as relating the environment have been side-lined into one-ninth<sup>6</sup> of one of the five ‘key priorities’ of the draft plan.
6. Environmental factors have therefore reduced in importance by 18.5-fold<sup>7</sup>. Or, to put it another way, environmental concerns have just 5.4% of the stature they enjoyed in the Wales Transport Strategy.
7. Planning Policy Wales states that:  
*“The Welsh Government aims to extend choice in transport and secure accessibility in a way which supports sustainable development and helps to tackle the causes of climate change by: encouraging a more effective and efficient transport system, with greater use of the more sustainable and healthy forms of travel, and minimising the need to travel”<sup>8</sup>.*
8. The focus of the National Transport Plan appears to be mainly on the (road) transport system, and not on “more sustainable and healthy forms of travel, and minimising the need to travel”.
9. Interventions on “healthy forms of travel” (other than those arising from statutory duties under legislation) number just one: making improvements to the National Cycle Network. There is no commitment to actually delivering personalised travel planning (ITC1 and 2) at any point in the next 10+ years.
10. There is not one intervention of the 93 listed that works towards “minimising the need to travel”.
11. The Sustainable Development Scheme for Wales tells us that:  
*“wherever we look... the amount we travel – we know we are living beyond the environment’s means to sustain us”<sup>9</sup>.*
12. It notes that in order to achieve our vision of a sustainable Wales, we must:  
*“organise the way we live and work so we can travel less by car wherever possible”<sup>10</sup>.*
13. There is nothing in the draft National Transport Plan that refers to demand management: pursuing ways of reducing car travel.

<sup>5</sup> <http://ppi.w.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p5

<sup>6</sup> “Sustainable travel and safety” – encourage safer, healthier and sustainable travel, where sustainable travel will likely be defined as travel that contributes to environmental, social and economic outcomes.

<sup>7</sup> From 7/17 to 1/45

<sup>8</sup> <http://wales.gov.uk/docs/desh/publications/140731chapter-8-en.pdf> 8.1.1

<sup>9</sup> <http://wales.gov.uk/docs/desh/publications/090521susdev1wales1planeten.pdf> p5

<sup>10</sup> <http://wales.gov.uk/docs/desh/publications/090521susdev1wales1planeten.pdf> p18

14. The only conclusion to draw is that the Welsh Government has no intention of minimising the need to travel or traveling less by car, and very little intention of promoting healthy forms of travel.
15. This is particularly frustrating in view of Professor Preston’s review, which highlights the ‘holy grail’ of integrated and sustainable transport<sup>11</sup>. This ‘ladder of interventions’ puts “making healthier choices the default option for people” at a relatively low level of intervention.
16. WeITAG: the Welsh Government’s flagship traffic assessment tool<sup>12</sup>, is described by Professor Preston as:  
*“light on quantification and does not provide value for money assessments. It seems to lack both a sound scientific basis and an underlying evidence base”<sup>13</sup>.*
17. WeITAG has been used by the Welsh Government for years as the basis for all road transport planning. And yet it is light on quantification, does not provide value for money assessments, lacks an evidence base and has no sound scientific basis.
18. Well-documented problems with this type of road planning include the infamous problem of tax receipts (particularly VAT and fuel duty receipts) that result from increasing traffic generated by new road schemes contributing to a positive rating for road planning.
19. This problem is described in detail by the Campaign for Better Transport in their 2010 submission to the Westminster Transport Committee<sup>14</sup>. Although some improvements have been made since 2010, the fundamental issue of increased tax revenue counting as societal benefit remains.
20. This is completely contrary to what we might expect if there were a rational dovetailing of policy relating to planning, sustainable development, climate and transport.
21. It is also particularly detrimental to transport in Wales because the purported benefit of increased tax receipts accrue solely to the UK Treasury. So only a very small proportion of that increased tax revenue as a result of new road infrastructure in Wales will end up coming to Wales – yet the purported benefit skews the results of transport planning very much in favour of road schemes and against sustainable and low-carbon transport which provide a host of societal and environmental benefits that are ordinarily absent from road schemes.
22. One factor that is known to *increase* road transport is major new road infrastructure. It is therefore impossible to reconcile the Welsh Government’s support for a new stretch of M4 to the south of Newport with reducing car traffic. Unless investment in ways to achieve modal shift *far outweighs*

<sup>11</sup> <http://ppiw.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p6

<sup>12</sup> <http://wales.gov.uk/topics/transport/planning-strategies/weltag/?lang=en>

<sup>13</sup> <http://ppiw.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p13

<sup>14</sup> See “Without reform, NATA will continue to reward schemes with poor policy fit”  
<http://www.publications.parliament.uk/pa/cm201011/cmselect/cmtran/473/473we31.htm>



that in new road infrastructure, the induced traffic increase by new roads will very likely create problems for attainment of the transport climate targets.

### Greenhouse gases and modal shift/demand reduction

23. The Welsh Government uses TEMPro forecasting as the basis for its policy decisions. If we assume the TEMPro modelling to be correct (it isn't – see below), we would expect a roughly 1% increase in traffic across Wales per year until 2040<sup>15</sup>.
24. Fuel efficiency has apparently improved by 2% per year over the past 15 years or so<sup>16</sup>.
25. However, fuel consumption for cars in real-world driving in 2011 was 21% greater than that assumed from testing<sup>17</sup>. (Some studies put this discrepancy at 35%<sup>18</sup>). This gap had increased from 8% in 2001<sup>19</sup>. So a minimum of 13 percentage points of the efficiency gains over this period are fictitious. These flaws in testing vis a vis real life have major implications for assumptions being made by governments on forecast improvements in fuel efficiency by the vehicle fleet in general.
26. In fact, the assumptions used by the Welsh Government in calculating future improvements in fuel efficiency are so flawed that the European Commission is replacing the current 20-year-old testing procedure with a new one in 2014 which it is hoped:  
*“will enable the gap between declared and actual fuel consumption to be reduced thus providing more reliable information to the consumers and legislators”<sup>20</sup>.*
27. This means that *actual* improvements in efficiency are in the order of 1% per year. So the greenhouse gas emissions reduction as a result of improved fleet efficiency (1% annually) will offset the modelled increase in traffic (1% annually).
28. What then of the remaining challenge of reducing greenhouse gas emissions by 3% per year until 2020? The Welsh Government has no credible means of achieving it other than through reducing traffic, which would infer demand management and modal shift.
29. Nowhere in the National Transport Plan – other than in relation to shifting freight from road to rail – is modal shift mentioned.

### Modelling

30. A large part of the National Transport Plan appears to be based on the TEMPro modelling. It should be now be obvious that this modelling is not fit for purpose.

<sup>15</sup> <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> Table 2 (p21)

<sup>16</sup> <https://www.gov.uk/government/statistical-data-sets/env01-fuel-consumption> Table ENV0103

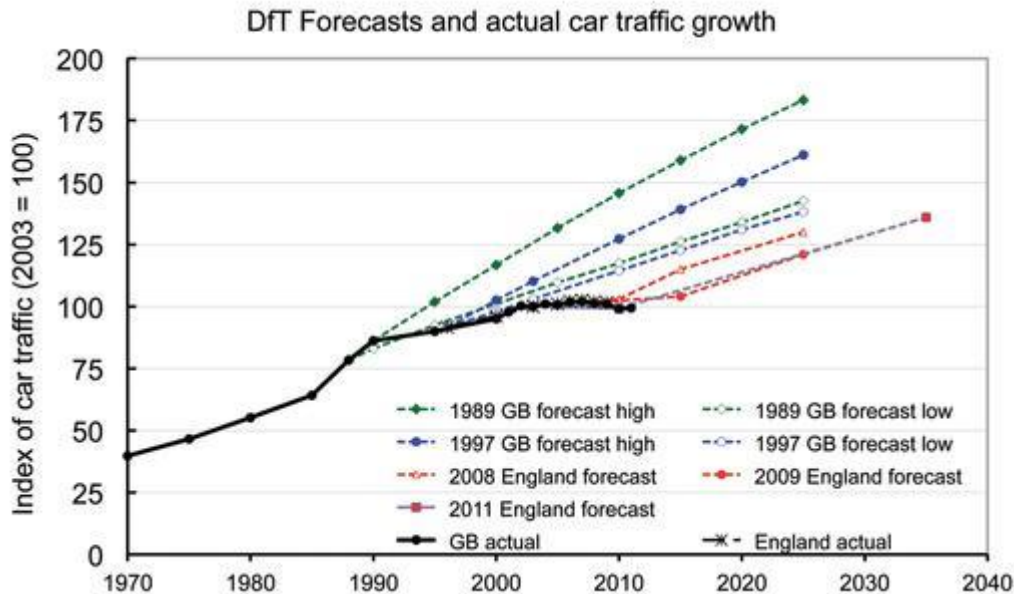
<sup>17</sup> <http://www.theicct.org/fuel-consumption-discrepancies>

<sup>18</sup> <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2013-000307+0+DOC+XML+V0//EN>

<sup>19</sup> <http://www.theicct.org/fuel-consumption-discrepancies>

<sup>20</sup> <http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2013-000307&language=EN>

31. Firstly, traffic forecasting by the Department for Transport – which uses exactly the same modelling as the Welsh Government – has been risible<sup>21</sup>:



32. Professor of Transport Policy Phil Goodwin comments:

*“The figure you see above is the result so far, for car traffic, showing successive downwards revision of the forecasts as for 25 years car traffic stubbornly refused to behave according to expectations. The revisions were of the form ‘growth later’, not ‘less growth... anybody, just anybody, looking at this graph is going to think that there is a downside risk of the long term traffic flows being substantially less than the forecasts, as they have continually been for at least the last quarter of a century’<sup>22</sup>.*

33. The Department for Transport made a traffic projection for Wales in 2011<sup>23</sup>. The projection of growth in traffic is shown in the table below.

	2003	2010	2015	2020	2025	2030	2035
2011 Forecast (billion miles)	16.3	16.5	17.3	19.1	20.5	21.9	23.2
% increase on base year (2011 forecast)		1.2	6.1	17.2	25.8	34.4	42.3
Annual increase needed to meet forecast			1.35	1.86	1.79	1.76	1.72

34. Over the period 1993-2013 the average annual growth rate was 1.11%<sup>24</sup>.

35. The Department for Transport forecasts – which the Welsh Government also uses as the basis for its forecasting – appear to be out of kilter with reality.

<sup>21</sup> <http://www.bettertransport.org.uk/campaigns/roads-to-nowhere/ltt-130412>

<sup>22</sup> <http://www.bettertransport.org.uk/campaigns/roads-to-nowhere/ltt-130412>

<sup>23</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/4244/road-transport-forecasts-2011-annex-miles.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4244/road-transport-forecasts-2011-annex-miles.xls)

<sup>24</sup> <https://www.gov.uk/government/publications/road-traffic-estimates-in-great-britain-2012> TRA8901.xls

36. Meanwhile, the same TEMPro model that was used during the Welsh Government's M4 consultation has already proven wildly inaccurate. In 2005, total traffic in the south-east Wales authorities was 7,928 million vehicle miles<sup>25</sup>. In 2013, total traffic had declined to 7,869 million vehicle miles, a decrease of 0.7%, or **3.7% lower than the Welsh Government's forecast in the first year for which data has become available**. It is difficult to conceive of a more stunning failure to correctly forecast traffic patterns.
37. The whole analytical basis for the National Transport Plan is thus fundamentally and fatally flawed, and this modelling and all sections of the Plan that are based on it should be excised from the draft Plan.
38. The Welsh Government repeats almost like a mantra the problem of 'congestion'. But if this is a problem it is unquantifiable: the Welsh Government has no means of measuring congestion.
39. The evidence provided above strongly suggests that the Welsh Government is being disingenuous through claiming to follow  
*"an evidence based approach for understanding the performance of the transport system, assessing the need for intervention and considering the social, environmental and economic impacts of our plans"*<sup>26</sup>.

## Maintenance

40. Given that the proportion of the trunk and motorway network requiring maintenance is more than 50% greater than the target level<sup>27</sup>, resources that the Welsh Government had thought to allocate to road-building would be more profitably allocated to road maintenance. After all, if the Welsh Government is struggling to maintain the roads that exist at this point in time, allocating expenditure to the construction of new roads will worsen the state of existing roads.
41. The same holds true for the condition of footways. Given that the Welsh Government wishes to increase active travel (and, indeed, has legislated to that effect), it is disturbing to discover:  
*"The condition of footways on non-trunk roads is deteriorating throughout Wales. In 2006 25.7% were subject to a loss in quality. There was a trend of steady deterioration between 1995 and 2004 (Data Unit Wales, 2007)"*<sup>28</sup>.
42. The Welsh Government is also aware of the *"deterioration of the local highway asset"*<sup>29</sup>; the same principle holds true – while existing roads are in poor condition it makes little sense to invest in new road infrastructure that will itself increase the maintenance burden.

## Economy

<sup>25</sup> <https://www.gov.uk/government/publications/road-traffic-estimates-in-great-britain-2013> TRA8901.xls

<sup>26</sup> <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 5.1.1

<sup>27</sup> <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 2.6.7

<sup>28</sup> <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> p21

<sup>29</sup> <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.2.27

43. The apparent major rationale for investing in major enhancements to the road network is to “*stimulate the economy*”<sup>30</sup>. It is not clear whether the Welsh Government is referring to the economic activity that results from public funding of infrastructure (any large construction project), or purported wider economic activity that results from increasing road coverage in Wales.
44. If the former, then it is a nonsensical argument. The Welsh Government may as well divert funding into any construction activity – or indeed, into activity that provides genuine societal benefit, such as improving healthcare.
45. If the latter, then no evidence has been provided that supports this contention. Certainly, there is much dispute as to whether large road schemes provide benefits to a particular area.
46. It is worth quoting part of the conclusions of the SACTRA report:  
*“Some authors have claimed that national programmes of public investment, including road construction, lead to high rates of social return measured in terms of economic growth and productivity improvement. Other authors suggest that such effects do occur but on a smaller scale than has been claimed, and that, in general, any contribution to the sustainable rate of economic growth of a mature economy, with well-developed transport systems, is likely to be modest. **Our investigations support the latter assessment.**... Our studies underline the conclusion that generalisations about the effects of transport on the economy are subject to strong dependence on specific local circumstances and conditions”*<sup>31</sup>.
47. Clearly then, any individual road construction project must be supported by a thorough Cost-Benefit Analysis (as outlined in 4.2.2). The problem with current practise in this area is that such analyses are distorted by Treasury guidance that states that, for example, more fuel being used is a benefit to society (because of the taxes raised). The Welsh Government should commission a new methodology for Cost-Benefit Analysis for Wales that recognises some of the failings in the current approach.

<sup>30</sup> <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.2.19

<sup>31</sup>

[http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft\\_econappr/documents/pdf/dft\\_econappr\\_pdf\\_022512.pdf](http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft_econappr/documents/pdf/dft_econappr_pdf_022512.pdf) p7