

Public Accounts Committee

Meeting Venue:

Committee Room 3 – Senedd

Meeting date:

Tuesday, 24 March 2015

Meeting time:

08.30

Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales



For further information please contact:

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Committee Clerk

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Agenda

1 Introductions, apologies and substitutions (08:30)

2 Papers to note (08:30–08:35) (Pages 1 – 3)

**3 Inquiry into value for money of Motorway and Trunk Road Investment:
Evidence Session 4 (08:35–09:30)** (Pages 4 – 51)

Richard Jones, Head of Service, South Wales Trunk Road Agent

Dave Cooil, Head of Service, North & Mid Wales Trunk Road Agent

Ian Hughes, Business Manager and Statutory Executive, North & Mid Wales Trunk Road Agent

**4 Governance arrangements at Betsi Cadwaladr University Health Board:
Evidence session 1 (09:30–10:45)** (Pages 52 – 64)

Prof Trevor Purt, Chief Executive, Betsi Cadwaladr University Health Board

Dr Peter Higson OBE, Chair, Betsi Cadwaladr University Health Board

Geoff Lang, Executive Director of Strategy, Betsi Cadwaladr University Health Board

5 Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business: (10:45)

Item 6

6 Inquiry into value for money of Motorway and Trunk Road Investment: Discussion of evidence (10:45–11:00)

Public Accounts Committee

Meeting Venue: **Committee Room 3 – Senedd**

Meeting date: **Tuesday, 17 March 2015**

Meeting time: **08.30 – 10.56**

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This meeting can be viewed on [Senedd TV](http://senedd.tv/en/2609) at:
<http://senedd.tv/en/2609>

Concise Minutes:

Assembly Members:

Darren Millar AM (Chair)
Jocelyn Davies AM
Byron Davies AM (In place of William Graham AM)
Mike Hedges AM
Sandy Mewies AM
Julie Morgan AM
Jenny Rathbone AM
Aled Roberts AM

Witnesses:

Russell Bennett, Chartered Institution of Highways and Transportation (South Wales Branch)
Rhodri-Gwynn Jones, Civil Engineering Contractors Association Wales
David Meller, Chartered Institution of Highways and Transportation (North Wales Branch)
Bob Lark, Cardiff University
Kris Moodley, University of Leeds
Nigel Smith, University of Leeds

Committee Staff:

Michael Kay (Clerk)
Leanne Hatcher (Second Clerk)
Tanwen Summers (Deputy Clerk)

1 Managing Early Departures

1.1 The Committee considered the Welsh Government's response to the Auditor General for Wales report on Managing Early Departures and a letter from the Auditor General for Wales providing further information requested by the Committee.

2 Forward Work Programme

2.1 Members agreed the work programme for the summer term.

2.2 Jocelyn Davies absented herself from the meeting during discussion of an issue relating to a responsibility she previously held as a Minister.

3 Introductions, apologies and substitutions

3.1 The Chair welcomed Members to the meeting.

3.2 Apologies were received from William Graham.

3.2 The Chair welcomed Byron Davies who was substituting for William Graham.

4 Papers to note

4.1 The papers were noted with one small amendment.

4.2 The Committee agreed to write to the Chair of the Finance Committee inviting the Committee the opportunity to take forward further scrutiny on the Invest to Save fund.

5 Inquiry into value for money of Motorway and Trunk Road Investment: Evidence Session 2

5.1 The Committee took evidence from academics from the University of Leeds and Cardiff University on its inquiry into value for money of Motorway and Trunk Road Investment.

6 Inquiry into value for money of Motorway and Trunk Road Investment: Evidence Session 3

6.1 The Committee took evidence from the Civil Engineering Contractors Association Wales and Chartered Institution of Highways and Transportation North and South Wales Branches on its inquiry into value for money of Motorway and Trunk Road Investment.

6.2 Russell Bennett from the Chartered Institution of Highways and Transportation South Wales Branch agreed to provide further information on private investment.

7 Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business:

7.1 The motion was agreed.

8 Inquiry into value for money of Motorway and Trunk Road Investment: Discussion of evidence

8.1 The Committee considered the evidence received.

Agenda Item 3 South Wales Trunk Road Agent

Managing and Improving
Motorways and Trunk Roads
through South Wales



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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

19th 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”.

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- 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.

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South Wales Trunk Road Agent Written Response 19th February 2015

- 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 11th 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
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South Wales Trunk Road Agent

Managing and Improving
Motorways and Trunk Roads
through South Wales



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

South Wales Trunk Road Agent
Supplementary Questions - Written Response

18th March 2015



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

South Wales Trunk Road Agent- Supplementary Questions: Written Response 18th March 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
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 - 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. The staffing levels at the South Wales Trunk Road Agent including local authority staff involved in delivery and any local authority staff seconded for the years 2011 – 2015.

- 2.1 The SWTRA staff structure currently stands at 124 to manage the day to day operations of 178kms of Motorway and 436kms of Trunk Road and its associated budget of approximately £50million to deliver a programme of maintenance and improvements.
- 2.2 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. In terms of the Technical Administration function, it is only specialist asset inspections including drainage and structures, which are brought in from the supply chain and are not delivered directly by the Agent.
- 2.3 SWTRA as an organisation is managed in four divisions; Network Management, Delivery, Asset Management and Business Management. The Staff Structure numbers by division for 2010/11 to 2014/15 are presented in table 1:

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Table 1: SWTRA Staff Structure Numbers

Year	2010/11	2011/12	2012/13	2013/14	2014/15
Network Management	29	51	49	50	50
Delivery	30	30	31	29	29
Asset Management	26	26	27	27	27
Business Management	18	17	16	18	18
Total Post Numbers	103	124	123	124	124

- 2.4 The most significant change in the number of staff posts within the Agency structure relates to the transfer of the control room operations function from the Traffic Wales Contract in 2012 to enable the implementation and development of an integrated Incident response service incorporating the traffic officer service, traffic management, adverse weather and incident response service.
- 2.5 The primary roles and responsibility of the four SWTRA divisions are contained below:
- 2.6 Asset Management. This division is responsible for inspecting, assessing and providing recommendations for maintaining the condition of Welsh Government' Motorway and trunk road assets. These assets include the highway, bridges and structures (including tunnels), street lighting, traffic signals and the soft estate.
- 2.7 Delivery. The Delivery division is responsible for the development and implementation of programmes of both maintenance and asset improvement schemes. The maintenance schemes can range from the delivery of routine and cyclical maintenance to larger asset renewal and improvement schemes. The delivery of projects requires the procurement, commissioning and management of services through the supply chain of public and private sector partners.

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- 2.8 Business Management. This division undertakes and delivers the business functions which are key in maintaining operations and supports all aspects of service delivery. The business management is responsible for the business related functions of: Financial Management, Business Planning, Performance Management, 3rd Party Claims administration, Health and Safety, Customer Services, ICT Management and Quality Management.
- 2.9 Network Management. The Network Management division is responsible for the operational management and resilience of the network. The division is based at the South Wales Traffic Management Centre, Cardiff and is responsible for the functions of: Network Contingency Planning, Incident Response, Adverse Weather Service, Road space and Traffic Management, Abnormal Load Routing, Tunnel Management, Major Event Planning and the Traffic Officer Service.

3. Provide information on traffic management arrangements

- 3.1 In the operation and maintenance of highway networks, it is necessary from time to time to put in place temporary traffic management measures to facilitate safe road works, temporary or incident management whilst keeping the traffic flowing as freely as possible. With high traffic flows and speeds on many roads, it is particularly important to plan all works activities and temporary road closures to optimise safety, road space and work efficiently, whilst minimising road user congestion, delay and inconvenience. All reasonable steps should be taken to ensure that the effects of the works are reduced to a minimum whilst ensuring the safety of both the travelling public and the workforce (extract from Chapter 8 of the Traffic Signs Manual).
- 3.2 In order to minimise congestion without compromising safety the Trunk Road Agents in conjunction with Welsh Government have developed a guidance document for planning and coordination purposes outlining restrictions in relation to times that traffic management can be installed on the motorway and trunk road network. The restrictions are based on hourly traffic flows and refer to closures on the main carriageway. In South Wales especially on the M4 corridor between Newport and Cardiff (average traffic flows of 80,000 vehicles per day of which approximately 10,000 are HGVs), traffic flows dictate that a significant volume of work is undertaken at night where flows are lower. In areas where daytime working is permissible work is generally undertaken during off peak with the extent of traffic management and peak time working minimised as far as practicable.
- 3.3 Additional care in the approval of road works is taken during periods of increased flows such as school holiday periods especially on holiday routes and total road works embargoes are applied on public holiday weekends
- 3.4 Applications to undertake road works on the network are closely monitored on a weekly basis by the Agents Route Stewards with each application assessed, with durations and works content agreed in advance. Details of the planned works are then coordinated and communicated to all stakeholders on a Friday to advise of the week ahead (Sunday to Sunday). Details of major or high impact road works are also publicised on the Traffic Wales Website. Work is currently on-going in the development of the Traffic Wales website in order to improve the display of advance works planning information, road closures and events on the motorway and trunk road network.

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3.5 In terms of longer term planning and coordination of works with local authorities, the trunk road agents on behalf of Welsh Government have a statutory duty to attend quarterly coordination meetings with all local authorities and utility companies to plan and coordinate work in order that network conflicts do not occur in relation to the use of diversion routes etc. As part of the coordination and consultation process, stakeholders are advised of these proposals and their feedback welcomed. Occasionally, emergencies do arise and works have to be undertaken to ensure public safety but in these circumstances everything possible is undertaken to mitigate any adverse effects.

4. Provide details of how accidents and major incidents on the trunk road and motorway network are managed.

4.1 The Network Management Team at the Traffic Management Centre has been implemented to ensure that processes and systems are in place to deliver a prompt and effective response to incidents so that the effect can be minimised and any congestion resulting from the event impacting on the travelling public reduced.

4.2 The incidents which the team are required to be capable of responding to are detailed in Welsh Government' Trunk Road Maintenance Manual (TRMM) and include adverse weather events, road traffic collisions, obstructions, damage or sudden deterioration of the highway assets (which are classified as Category 1 defects and represent an immediate or imminent hazard to the road user).

4.3 The incident response times vary across the network from a 1 - 1.5 hour response during the day to a 2 hour during the night. The resources levels established ensure that the current the Performance indicator for Incident response in accordance with the stipulated target for the route is at 99%. The main emergency response resources available for use by SWTRA are:

- South Wales Control Room Operators. (24hr shift basis /365 days a year)
- Wales Traffic Officer Service- daytime hours only, M4 junction 22-35, A48M, A4232 (Culverhouse Cross to Jct 33) and A470 (Jct 32 to Abercynon)

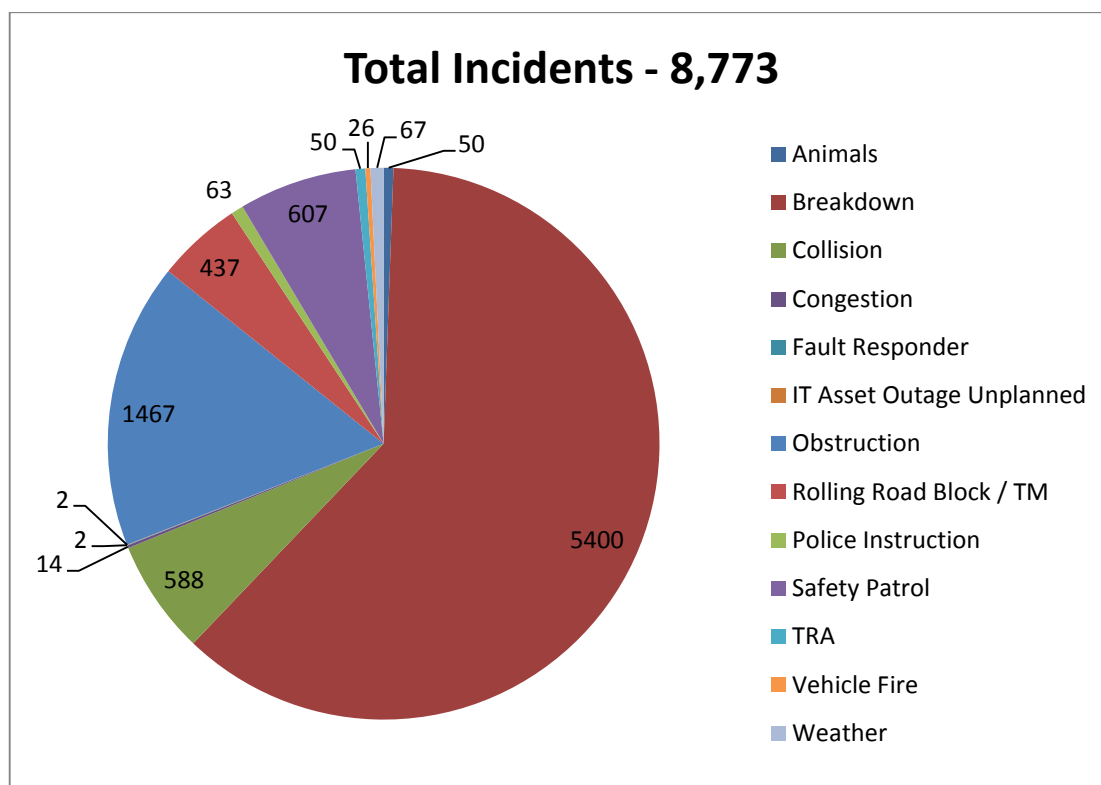
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- Emergency response teams (24hrs a day) provided by the Regional Maintenance Partnerships. These teams undertake the initial response to remove debris and make the site safe.
 - Dedicated Route Steward to coordinate response and facilitate repair where required.
- 4.4 South Wales Traffic Management Centre. The role of the control room is to monitor network activity via CCTV cameras in order to ensure that free flow of the network is maintained and provides a single point of contact for Police in the management of incidents on the network.
- 4.5 The South Wales Traffic Management Centre deal with excess of 24,000 calls each year in relation to incidents on the network ranging from vehicle breakdowns to road traffic collisions. In the event of an incident the operators set appropriate signs to advise the road user of the risk and to set advisory speed limits or implement diversion routes. The operators also dispatch the traffic officers (where operational) to incidents as well as the Emergency response teams to clear up and repair damage, monitoring their response and maintaining detailed incident logs for record purposes.
- 4.6 The Traffic Officer Service was introduced in South Wales in February 2010 originally patrolling the M4 and A470. The service was officially extended in September 2013 to include the A4232 and the A48M. The Traffic Officer Service in South Wales consists of 24 on road Traffic Officers and 3 Incident Managers. The Purpose of the Traffic Officer Service is to undertake general and road traffic management task thus enabling the Police to focus on tackling crime. The role of the traffic officer is to deal with routine incidents including non-injury road traffic collisions and to assist the emergency services through implementing emergency traffic management at more serious incidents.
- 4.7 The introduction of such a service assists to minimise disruption to road user by providing a safe and timely response to incidents in order to manage traffic, assess on site requirements in terms of debris clearance and infrastructure damage/repairs, liaise with emergency services where necessary and relieve congestion as soon as possible. In 2013/14 Traffic Officers attended a total of 8773 incidents and the below table provides an illustration of the incident types and activities undertaken by the service.

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4.8 Network Resilience and Contingency Planning

4.8.1 The resilience of a road network is based on a number of factors including the capacity of the route, the availability of a suitable alternative routes and clear lines of communication across incident responders to ensure that there is a coordinated approach which minimises the time taken to restore the network to its normal operating state.

4.8.2 SWTRA have developed a Network Contingency Plan which documents the structured approach that major and critical incidents are to be managed on the network. It provides a clear escalation and management strategy to an incident in the style of that of a Category 2 Responder under the Civil Contingencies Act 2004 detailing the roles and responsibilities at Operational (Bronze) to Tactical (Silver) and Strategic (Gold) levels. This document is a key reference point for the provision of a SWTRA 24hr response to incidents through daytime tactical managers based at the South Wales Traffic Management Centre and on call Duty Managers out of hours.

4.8.3 SWTRA liaise closely with Welsh Government, Emergency Services, Local Authorities, Supply chain partners and other key stakeholders in the development of these plans which are also

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used to reference agreed strategic and tactical and diversion routes with supporting signs to divert traffic in the event of a closure on the Motorway. SWTRA are currently in the process of developing and agreeing appropriate diversion routes for the trunk road network.

- 4.8.4 The multi-agency response is recognised through SWTRA' engagement with three Local Resilience Forums in the South Wales Area which are used to review operating plans, share best practice and test communication protocols and procedures through regular Emergency exercises.
- 4.8.5 The close working with the key stakeholders listed is also extended to the planning for major events where SWTRA were active partners in the successful planning and coordination of traffic management for the Ryder Cup in 2010, Olympic Torch Relay 2012, and the NATO Wales Summit in 2014. Through this multi-agency planning for such events disruption to the road user was kept to a minimum by way of ensuring that measures were in place to both inform and assist those using the network who may be attending events or commuting.
- 4.8.6 During these events the South Wales Traffic Management Centre has been used as an important communication hub for providing notifications to Welsh Government, key stakeholders and the travelling public.
- 4.8.7 The SWTRA provide details of incidents or congestion to the WG Traffic Wales Information service which is provided by the Welsh Transport Technology Consultant (WTTC) on behalf of Welsh Government, which enables traffic alerts to be issued to the public. Traffic bulletin details are also provided by the INRIX service from the SWTMC

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5. Provide statistics on the volume of roadworks and number of accidents and associated downtime on the network.

5.1 Accidents (Road Traffic Collisions) and the associated downtime (disruption to the network). The below statistics indicate the number of road traffic collisions which have been recorded and collated for all South Wales trunk roads in accordance with Welsh Government' reporting requirements for the financial year 2013/14. The numbers of Road Traffic Collisions are grouped to illustrate the associated disruption which occurs as a result. These figures indicate that the largest proportion of collisions are attended / managed without disruption being caused to the travelling public. Table 2 indicates the numbers of Fatal and Serious Injury Road Traffic Collisions which result in disruption in excess of 4 hours in order to facilitate scene recovery and accident investigation.

Table: 1

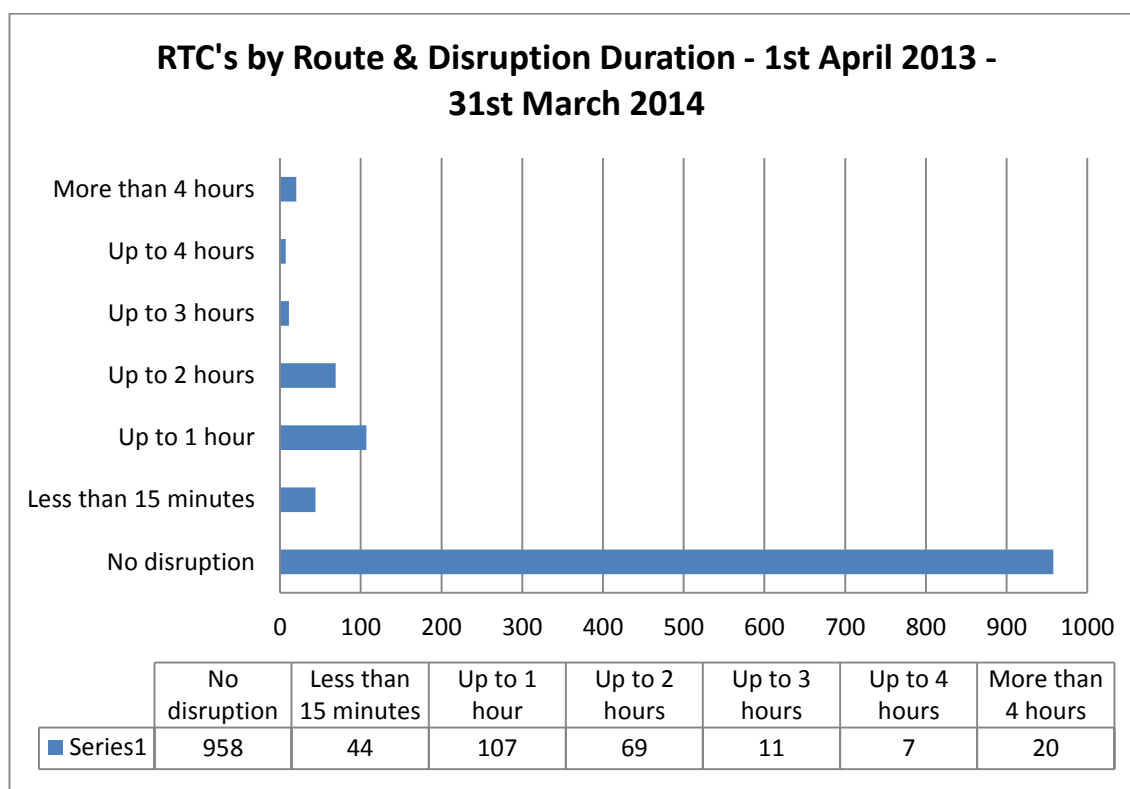


Table 2

Financial Year	Fatal Road Traffic Collisions	No. of Incidents >4hrs	Average (hrs)	Serious Injury, Road Traffic Collisions	No. of Incidents >4hrs	Average (hrs)
2011/12	14	10	7.1	23	7	4.3
2012/13	18	17	6.1	36	14	5
2013/14	14	14	6.6	23	6	4.3

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5.2 Volume of road works

Please note that within the timescales available for this information request and in order to provide detailed information for the most critical route in the SWTRA area, statistics are restricted to the M4 Motorway between the Second Severn Crossing and J49 Pont Abraham for the financial year 2013/14.

5.3 Traffic Management (TM) implemented between the 1st April 2013 and 31st March 2014 on the M4 SSC to J49 was required for the following planned and reactive works and projects in accordance with Welsh Government requirements:

- Cyclic Maintenance
- Planned Maintenance
- Category 1 Defects
- Surveys and Inspections
- Tunnel Closures
- Major Maintenance Schemes
- Statutory Undertakers

For clarity:

- Daytime period is considered to be between 09.30- 15.30
- Peak Time are considered as 06.00 to 09.30 and 15.30 to 20.00 including weekends
- Overnight period is considered to be between 20.00 and 06.00

5.4 A summary of the volume of road works / traffic management associated with the above operations and contracts can be quantified as follows:

- Total number of overnight (20.00 -06.00) work sites = 2082 over 275 nights,
- Total number of daytime (off peak 09.30-15.30) work sites= 1551 sites over 200 days (meaning 165 days where no TM was implented during this period)
- Number of days with no TM in place at all within 24 hour period = 31days

6. Compensation claims from Road Users resulting from the condition of the network.

6.1 Information relating to the settlement of claims is held by Welsh Government and is subject to a separate response.

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

South Wales Trunk Road Agent- Supplementary Questions: Written Response 18th March 2015

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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 11th 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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Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru
North & Mid Wales Trunk Road Agent

Public Accounts Committee
(PAC Audit)

Inquiry into value for money of
Motorway and Trunk Road
Investment

17 March 2015



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1. *Figures on staffing levels at the North Wales Trunk Road Agent, including local authority staff involved in delivery and any local authority staff seconded. Information for each year from 2011-12 to the current financial year;*

1.1 The NMWTRA staff currently stands at 102 with 64 staff undertaking the technical and administration functions of the Agency associated with inspecting, operating and maintaining approximately 1200 km of Trunk Road Network and an associated budget of approximately £50m. 38 staff comprise the Operations unit including the Traffic Officer Service (27 staff) and Control Room Functions (10 staff) falling within the responsibility of the Operations Unit Manager (1No. staff).

1.2 The Agency directly employed staff numbers have increased since 2005 when, for the former North Wales Trunk Road Agency (NWTRA), staffing levels stood at 26 and 12 for the former Mid Wales Trunk Road Agency (MWTRA) giving 36 in total. This reflected the model stipulated by Welsh Government at this time with a requirement to 'buy in' the majority of services from Local Authorities. Whilst the number of directly employed staff stood at 36 the number of Full Time Equivalent (FTE) staff involved in Trunk Road management when those staff embedded in Local Authorities was taken into account was estimated at 90FTE's delivering core services.

1.3 Since 2006 staffing levels for directly employed staff within the Agent have increased by agreement with Welsh Government, predominantly through staff transferring from Local Authorities, the private sector, the merger with the MWTRA and from creation of the Traffic Officer (TO) Service and Control Room to form an Operations Unit. It is important to note that excluding the Operations Unit, overall FTE levels have increased by 7, with a residual 33 FTE's currently embedded in Local Authorities giving an overall FTE of approximately 97 compared to 90 in 2005. This modest increase in FTE levels needs to be considered in the context of the additional services that are being delivered at Welsh Government request. Three posts are directly linked to new service areas including:

- Statutory Tunnel Manager;
- Deputy Tunnel Manager;
- Statutory Tunnel Safety Officer & Risk Manager;

The remaining four posts are linked to improved governance requirements (3 posts) associated with the NMWTRA Schedule of Rates system and additional administrative support (1 post).

The current internalisation of the planning function into WG will reduce NMWTRA staffing by 11No. in April 2015. The time line and changes to NMWTRA staffing arrangements are indicated below.

Timeline	Staff requirement	Staff numbers	Cumulative staff	Increase in FTE
Oct 2005	NWTRA conception based on WG requirement for a lean management unit structure and bought in services from Local Authorities. Model and structure agreed with WG based on two years of discussion and negotiation.	26	26	N/A
Feb 2006	NWTRA requested to take on Statutory Tunnel Manager function	+2	28	2
March 2011	Third Party Claims and Rechargeable works internalised from LA's to achieve efficiency savings	+1	29	0
April 2011	TUPE transfer from Flintshire CC of the 100% TR dedicated inspection team (TIU) for NE Wales to enable improved management control, restructuring in the Agency team. Agreed with WG at Agency Board December 2010.	+8	37	0
July 2011	Request from WG to establish a developed Traffic Officer (TO) service for A55.(non-resilient service)	+22	59	22
July 2011	Request from WG to transfer Control Room operational function to NMWTRA to enable integrated operations unit comprising control room and TO service to be created. TUPE staff transfer from private sector (Atkins)	+10	69	10
January 2012	Statutory Tunnel Safety Officer under regulation 10 RTSR.	+1	70	1
January 2012	WG requirement for NMWTRA to move to functional asset / network operation split rather than area based split at senior level. Internalisation of functions from LA's plus additional admin support post	+5	75	1
April 2012	WG request to merge MWTRA and NWTRA to form NMWTRA. TUPE staff transfer from Powys CC to Gwynedd CC and restructure of North Wales Network Operations team	+12	87	0
April 2012	Agreed internalisation of 100% dedicated Geotechnical Asset manager by TUPE transfer from Wrexham CBC. Agreed by WG at Agency Board to improve management control and accountability and cost saving.	+1	88	0
April 2012	Additional post created to address anticipated SOR workload from Mid Wales. (Appointed Dec 2013 to reflect Mid Wales Area SOR implementation programme). Improved governance.	+1	89	1
April 2012	Appointment of 2 additional A55 Assistant Route Managers to replace temporary posts following an evaluation period and to meet operational requirements.	+2	91	0
Nov 2012	Expansion of Traffic Officer staff resources to provide 3 unit resilient service at the request of WG.	+6	97	6
July 2013	Appointment of 2 Rechargeable Recovery Officers based on internalisation of recovery and Development Control functions from LA's at WG request.	+2	99	0
Dec 2013	As part of NMWTRA phase 2 restructuring an additional 2 new post and internalisation of 1 post to provide improved management and control and cost savings. Also to provide an improved level of governance for the bought in inspection service.	+3	102	2
Net Increase in NMWTRA Full Time Equivalent staff since 2005 excluding the Operations Unit				7 FTE's
Net Increase in NMWTRA Full Time Equivalent staff since 2005 including Operations Unit				45 FTE's

2. Further information on traffic management and resilience arrangements;

2.1 Traffic Management.

- 2.1.1 Traffic management is required to meet the various statutory duties of Welsh Government as the Highway Authority. In the operation and maintenance of highway networks, it is necessary from time to time to put in place temporary traffic management measures to facilitate safe road works, temporary closures or incident management, whilst keeping the traffic flowing as freely as possible. With high traffic flows and speeds on many roads, it is particularly important to plan all works activities and temporary closures to optimise safety, road space and work efficiency, whilst minimising road user congestion, delay and inconvenience. All reasonable steps are taken to ensure that the effects of the works are reduced to a minimum whilst ensuring the safety of both the travelling public and the workforce.
- 2.1.2 For the A55 / A494 corridor, the majority of planned maintenance activities are undertaken at night. Where health and safety requirements require day time working, this is undertaken during off peak periods and the extent of traffic management and particularly peak time traffic management is minimised as far as practicable. For capital delivery projects it is often necessary to maintain 24 hour traffic management arrangements to facilitate the continuity of working operations and efficiently install, operate and remove complex TM installations associated with contraflow. In order to minimise as far as possible the associated disruption, NMWTRA contract specifications require enhanced contractor resources and extended working days / weeks to ensure overall programme for completion is minimised, as far as possible within contract constraints, which may include noise limits when adjacent to residential areas.
- 2.1.3 Welsh Government as Highway Authority can and does significantly influence the timing and scope of road works. For example, summer embargo periods are implemented to minimise works on tourist routes at peak times of the year and by accepting the additional costs associated with night time only or 24hr working to mitigate the levels of disruption.
- 2.1.4 Day to day co-ordination of traffic management is provided by Agents and their partner local authorities as a function under the *New Roads & Street Works Act 1994*. This includes the co-ordination of traffic management and the regulatory management of utilities where appropriate. The close liaison between NMWTRA route managers and the adjacent County Road Highway Authorities is currently promoted by the integrated approach to network co-ordination with trunk road activities.

2.2 Resilience Arrangements

The resilience of the trunk road network is dependent on a number of factors, including:

- 2.2.1 **The capacity of a route.** A dual carriageway with a hard shoulder will have greater capacity and thus resilience to cope with incidents such as road traffic collisions, breakdowns and maintenance / construction activities than a single carriageway.
- 2.2.2 **The nature of the network.** This can for example be simply expressed in terms of the number of safe alternative strategic and/or tactical diversion routes that provide sufficient capacity to temporarily replace the main trunk road route closed by an incident. The alternative diversion route options available in the NMWTRA area are limited in terms of topography, capacity, design standards and are often lengthy in distance and duration.

- 2.2.3 The design standards.** Much of the network has been developed from historical routes with long sections that have never been designed or engineered to current standards. This reduces the resilience of the network from an operational perspective. Most of the sections of the network that have been developed or upgraded have been by online improvements which means that there are no significant lengths of parallel routes available for use as traffic diversion. This can reduce resilience during major incidents.
- 2.2.4 Achieving appropriate maintenance standards.** This significantly helps to provide resilience by ensuring a safe condition of the network and reliable operation with the minimum of reactive maintenance activities.
- 2.2.5 Asset management planning** provides a context for the level of maintenance required.
- 2.2.6 Emergency Response capability** – see section 3 below.

3. Details of how accidents and major incidents on the trunk road and motorway network are managed; and

3.1 Responding to an incident - Welsh Government requirements

Incidents requiring an Emergency Response (ER) by the Agent include a wide range and severity of events including for example road traffic collisions, errant vehicles, vehicle breakdowns, vehicle fires, flooding, rock falls and landslips, debris, dead animals, fallen trees on the highway, security issues, potential suicide events and pollution incidents. Similarly, highway infrastructure condition defects (Category 1 defects) are those which ‘*require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short term structural deterioration*’. The requirements for ER are defined by the Welsh Government (WG) Trunk Road Maintenance Manual (WGTRMM).

3.2 WGTRMM response requirements are detailed in the table below and require the following attendance responses from a reactive maintenance / inspection / emergency response perspective. Traffic Officer response requirements are defined in the WG Traffic Officer Manual. NWTMC Control Room implements the WG Control Room Emergency Procedures.

Location	Day Time	Response Time	Night Time	Response Time
A55 and A494 Deeside Corridor	07:00 to 19:00	1hr	19:00 to 07:00	1.5hrs
Other Routes		1.5hr		2hrs

3.3 NMWTRA emergency response capability and resource levels have been established to ensure the above performance requirements are met consistently. The NMWTRA Area Performance Indicator for incident response is consistently in the order of 99%. Traffic Officer response times similarly achieve greater than 99% of target time. The main resources available to NMWTRA for incident response comprise:

- Traffic Officer Service (daytime hours 06:00hrs to 20:00 hrs and A55/A494 dual only, 3 double manned units);
- North Wales Traffic Management Centre Control Room (24/7/365);
- Partner Authority Emergency Response Units(24/7/365) ;
- Partner Authority Mutual Aid arrangements (24/7/365);
- Contractor Framework plant and labour resources.

3.4 Initiating & Managing an Emergency Response (ER)

ER will be initiated in a number of ways for example:

- Calls from the public e.g. via local authority call centres;
- Emergency Services reports e.g. via 999;
- CCTV Cameras at North Wales Traffic Management Centre (NWTMC) in Conwy;
- The Agent may call the appropriate Emergency Services control centres;
- WG Emergency phones located on the network;
- Agent Safety Patrols (daily) on the A55/A494 dual carriageways identifies immediate hazards e.g. debris;
- Agent Safety Inspections (every 14 days on the A55 and 28 days elsewhere) identifies Category 1 defects;
- A55 Traffic Officer Service;
- North Wales Police;

- Adverse weather events e.g. high winds requiring a closure at A55 Britannia Bridge, or floods.
- 3.4.1 Following on from initiating an emergency response, typically the timeline of an incident will include:
- Emergency Services or Traffic Officers attending the scene and implementing Emergency Traffic Management (ETM) to protect the site;
 - For larger scale incidents a secondary response by Emergency Response Unit (ERU) support services may be required to establish Temporary Traffic Management (TTM) to support the Emergency Services and enable necessary repairs to be undertaken and the network returned to normal operation.
- 3.4.2 Traffic Officers will implement WG agreed procedures for vehicle breakdown recovery via a North Wales Police recovery contract, vehicle dragging to lay by, hard verge or other safe place, implement diversions, ETM and when appropriate the new Emergency Crossing Points. The Traffic Officer Service has demonstrably improved network resilience and the ability for NMWTRA to respond to incidents. In 2014 (calendar year) Traffic Officers responded to:
- 9,262 events (an average of 25.3 events per day),
 - Comprising:
 - 5,493 Breakdowns;
 - 2,512 Obstructions;
 - 485 Road Traffic Collisions.
 - 7 minutes average response time (KPI of 20 minutes);
 - 22 minutes average total attendance time’;
 - There were a total of 10,341 events recorded (TO & Control Room) for the same period.
- 3.4.3 At the A55 Tunnels some responses are immediate, in so far as is practicable, by the Control Room staff at NWTMC. For example, setting lane closures signs and Variable Message Signs following a vehicle breakdown. This will be implemented under the WG Control Room Emergency Procedures.
- 3.4.4 NMWTRA will often attend an incident in support, or under the direction of, the Emergency Services and will operate as a Category 2 responder under the Civil Contingencies Act 2004. There is a NMWTRA Contingency Plan which covers Critical Incidents and Major Incidents. There are also specific tactical contingency plans at some locations e.g. A55 Tunnels. NMWTRA is also an active participant in the Local Resilience Forums working closely with the Emergency Services and local authority emergency planning staff. During an incident NMWTRA will provide Bronze (Operational), Silver (Tactical), Gold (Strategic) command representation as required through on-call rotas. Traffic Officers provide the daytime Bronze function on the A55 and Assistant Route Manager’s rota, out of hours.
- 3.4.5 Strategic Diversion (trunk-to-trunk road) and a Tactical Diversion Routes (trunk road-county road-trunk road) have been identified and agreed with the local authorities in Wales. In some locations these have supporting temporary signs or cone bins in place to enable Traffic Officers and the Police to react rapidly.
- 3.4.6 To meet WGTRMM requirements, NMWTRA has implemented Emergency Response Unit (ERU) support through its local authority partners. This provides a proportionate out-of-hour’s response by a Duty Officer and maintenance operatives to provide appropriate ER

such as basic temporary traffic management and initiate any necessary repairs or larger debris removal. The ERU resource levels are matched to meet the specified response times defined in WGTRMM. To further support the ERU during Major Incidents there are formal Mutual Aid arrangements between the local authority partners which provides additional resource resilience. There are also Urgent Works arrangements in place under our private sector contractor framework e.g. for managing a collapsed culvert at short notice.

3.4.7 NMWTRA will provide details of incidents and roadworks to relevant WG databases and provides information to the WG Traffic Wales information service provided by the Welsh Transport Technology Consultant (WTTC) on behalf of WG. Details are also conveyed to and from the INRIX service in the South Wales Traffic Management Centre in Coryton. NWTMC Control Room operators are able to upload information to the WG Traffic Wales website and provide 'Clickatell' text messages to a defined WG list of recipients. Traffic alerts will also be tweeted automatically on the Traffic Wales twitter page. Website scrolling banners are provided by WTTC. For operational events:

- **Incident events** – a traffic alert is created once an incident has been identified;
- **Incident road closures** – on the single carriageway network the information will come from the INRIX or the Police;
- **For incident related congestion** – a traffic alert will be created.

3.5 Recovering from an incident

3.5.1 The recovery phase of an incident will include for example 'making safe', clean-up operations, temporary repair or permanent repairs, for example damaged safety barrier in a central reserve of a dual carriageway may require an interim make safe repair to re-open the road pending a permanent repair. The ERU will normally enable the road to be re-opened fully or at least partially in a limited way depending on the size and severity of the incident. In some cases the recovery phase becomes a works project in its own right and requires appropriate levels of resource and technical expertise / design / technical approval to resolve. This will normally require Temporary Traffic Management for the safety of the workforce or to protect the public whilst damaged barriers are unable to provide adequate containment until repairs are completed. The emphasis and focus from the Agent and the Emergency Services is always on rapid recovery to re-open a road safely and as soon as possible.

3.5.2 The Agent is responsible for the safe re-opening of the road once the Emergency Services have completed their work and it is safe to do so.

3.6 Emergency Response exercises

NMWTRA routinely arranges and participates in exercises in collaboration with the Emergency Services and Highways Agency in England. These are a statutory requirement at the A55 Tunnels. This ensures the effectiveness of multi-agency responses to incidents.

3.7 Summary comments

- Emergency Response requirements are specified in WGTRMM, WG Traffic Officer Manual and WG Control Room Emergency Procedures;
- NMWTRA resource levels are matched to meet WG response requirements;
- Performance levels are consistently achieved within Agency Agreement Performance Indicators.

4. Statistics on the volume of road works and number of accidents and associated downtime on the network, as well as compensation claims from road users resulting from the condition of the network.

4.0 Volume of road works

4.1 Please note that within the timescales associated with this information request and in order to provide detailed information for the most critical route in the NMWTRA Area statistics are restricted to the A55/A494 Dual Carriageway corridor and the financial year 2013/14. NMWTRA's approach to managing traffic management and disruption is shown in section 3 above.

4.2 Traffic Management (TM) implemented between 1st April 2013 and 31st March 2014 on the A55 / A494 corridor (excluding the DBFO section) was required for the following planned and reactive works and projects in accordance with Welsh Government requirements:

- Routine cyclic maintenance work programme;
- Routine planned maintenance work;
- Routine planned tunnel & headland maintenance work;
- Reactive Category 1 defect repair work;
- Welsh Government survey work;
- Capital Schemes;
- Other Third Parties' works.

4.3 A summary of the volume of road works / traffic management associated with the above operations and contracts can be quantified as follows:

- Total number of overnight (18:00 – 07:00) work sites = 243 sites over 51 nights;
- Total number of daytime (off peak 09:00 – 16:00) work sites = 63 sites over 126 days;
- Number of days with no TM in place at all within 24 hour period = 84 days;
- Total number of days with TM present = 281 days.

For clarity:

- Daytime period is considered to be between 07:00 and 18:00;
- Peak times are considered as 07:00 – 09:00 and 16:00 to 18:00 weekdays;
- Overnight period is considered to be between 18:00 and 07:00.

Therefore for 2013/14 there were a minimum of 210 days with no peak time Traffic Management in place. Peak time traffic management will normally increase when capital works are being undertaken. This will fluctuate from year to year dependant on funding.

4.4 Breakdown of work type and traffic management arrangements is as follows:

4.4.1 Routine cyclic maintenance programme (e.g. gully emptying, grass cutting):

- Total number of cyclic maintenance TM sites = 84 no;
- Cyclic maintenance works undertaken overnight = 80 no. sites;
- Cyclic maintenance works undertaken during daytime off peak time = 2no. sites;
- Cyclic maintenance works undertaken during daytime peak time = 2no. sites.

4.4.2 Routine planned maintenance work (e.g. Carriageway patching, soft estate work)

- Total number of planned maintenance TM sites = 95 no.
- Planned maintenance works undertaken overnight = 47 no. sites;
- Planned maintenance works undertaken during daytime off peak time = 46 no. sites;
- Planned maintenance works undertaken during daytime peak time = 2no. sites.

4.4.3 Routine planned tunnel & headland maintenance work (Conwy, Penyclip, Penmaenbach)

- Total number of planned tunnel & headland maintenance TM sites = 28 no;
- Planned tunnel & headland maintenance works undertaken overnight = 17 no;
- Planned tunnel & headland maintenance works undertaken during daytime off peak time = 4 no. sites;
- Planned tunnel & headland maintenance works undertaken during daytime peak time = 7 no. sites.

4.4.4 Reactive Category 1 defect repairs (e.g. safety fence repair work)

- Total number of reactive Category 1 defect repair TM sites = 71 no;
- Reactive Category 1 defect repair work undertaken overnight = 64 no. sites;
- Reactive Category 1 defect repair work undertaken during daytime off peak time = 5 no. sites;
- Reactive Category 1 defect repair work undertaken during daytime peak time = 2no. sites.

4.5.5 WG Contracted Survey Work (e.g. Deflectograph surveys)

- Total number of Deflectograph Survey TM sites = 5no;
- Deflectograph Survey work undertaken overnight = 5 no. sites;
- Deflectograph Survey work undertaken during daytime off peak time = nil;
- Deflectograph Survey work undertaken during daytime peak time = nil.

4.5.6 Capital Schemes (e.g. Major Maintenance, Tunnel Upgrade)

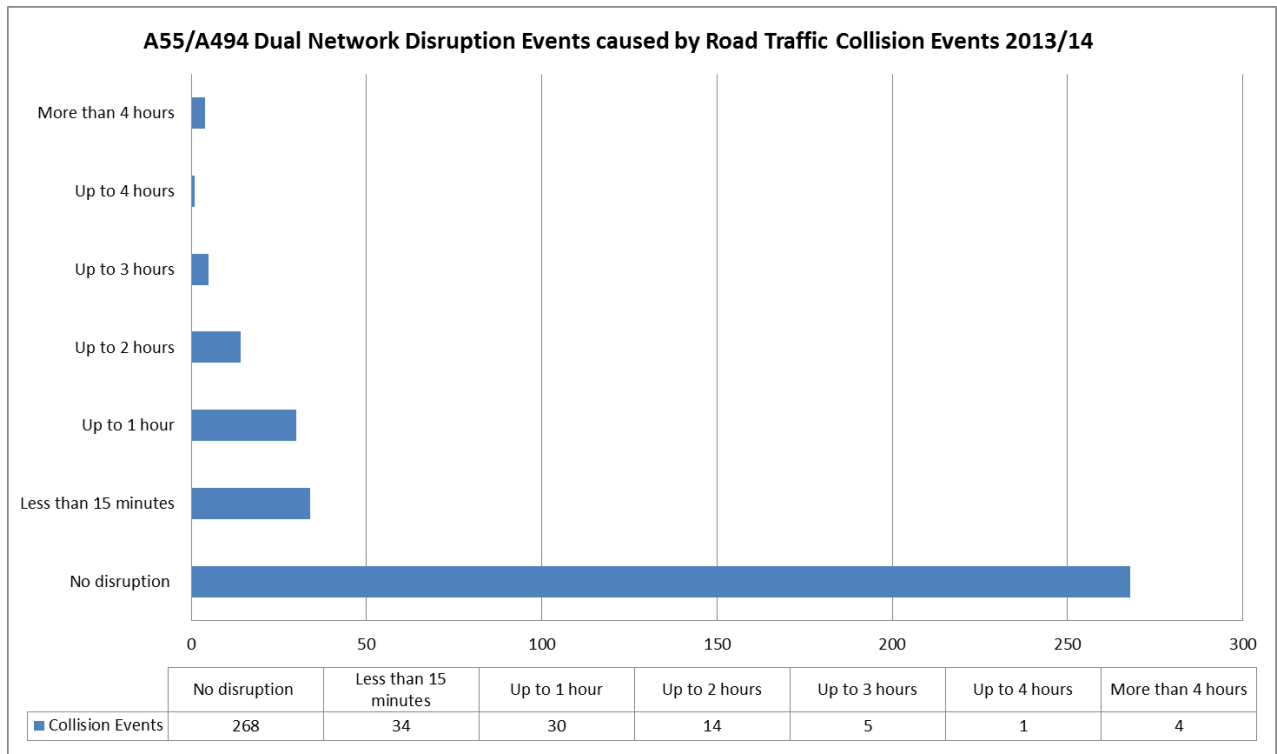
- Total number of Capital Scheme Project sites = 23 no;
- Capital Scheme Project work undertaken overnight = 3 no. sites;
- Capital Scheme Project work undertaken during daytime off peak time = 6 no. sites;
- Capital Scheme Project undertaken during daytime peak time = 14 no. sites.

4.5.7 Other Parties Works (e.g. Welsh Water, British Telecom)

- Total number of other parties work TM sites = 26 no;
- Number of other parties work undertaken overnight = 26 no. sites;
- Number of other parties work undertaken during daytime off peak time = nil.

4.6. Accidents and associated downtime

‘Accidents’ have been interpreted as road traffic collisions in accordance with current Welsh Government reporting requirements. The number of road traffic collisions and associated downtime for the A55/494 Dual Carriageway for 2013/14 is illustrated below:



The following table provides summary detail of the longest duration incidents:

Event Duration	Event Summary
Up to 3 hours	<ol style="list-style-type: none"> 04/05/2013 @ 15:32hrs, A55 J35 – J34 west bound 3 vehicle RTC Incident dealt by Traffic Officers + NWP 15/05/2013 @ 15:44hrs, A55 J32 – J33 west bound 5 vehicle RTC Incident dealt by Traffic Officers + NWP 26/07/2013 @ 10:57hrs, A55 J32 – J33 east bound 5 vehicle RTC Incident dealt by Traffic Officers + NWP 06/11/2013 @ 20:53hrs, A55 J23 / J23A east bound 1 vehicle RTC Incident dealt by NWP 07/02/2014 @ 09:01hrs, A55 J33 – J34 east bound 1 vehicle RTC Incident dealt by Traffic Officers + NWP
Up to 4 hours	<ol style="list-style-type: none"> 19/02/2014 @ 12:39hrs, A55 J12 – J13 eastbound 4 vehicle RTC Incident dealt by Traffic Officers + NWP
More than 4 hours	<ol style="list-style-type: none"> 10/10/2013 @ 21:09hrs, A55 J16 – J15 west bound 1 vehicle RTC Incident dealt by NWP

	<ol style="list-style-type: none">2. 27/11/2013 @ 08:21hrs, A55 J25 roundabout 1 vehicle knocked over a child, Incident dealt by Traffic Officers + NWP3. 10/01/2014 @ 01:55hrs, A55 J11 – J12 eastbound 2 vehicle RTC Incident dealt by NWP4. 04/02/2014 @ 05:56hrs, A55 J8A Overturned LGV on Britannia, Incident dealt by NWP
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4.7 Compensation claims from road users resulting from the condition of the network

Information relating to claims from road users is held by Welsh Government and is therefore not included in this submission.

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Agenda Item 4

By virtue of paragraph(s) vi of Standing Order 17.42

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