

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
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
 - 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. 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:

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

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.

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

- 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.

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

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.

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

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)

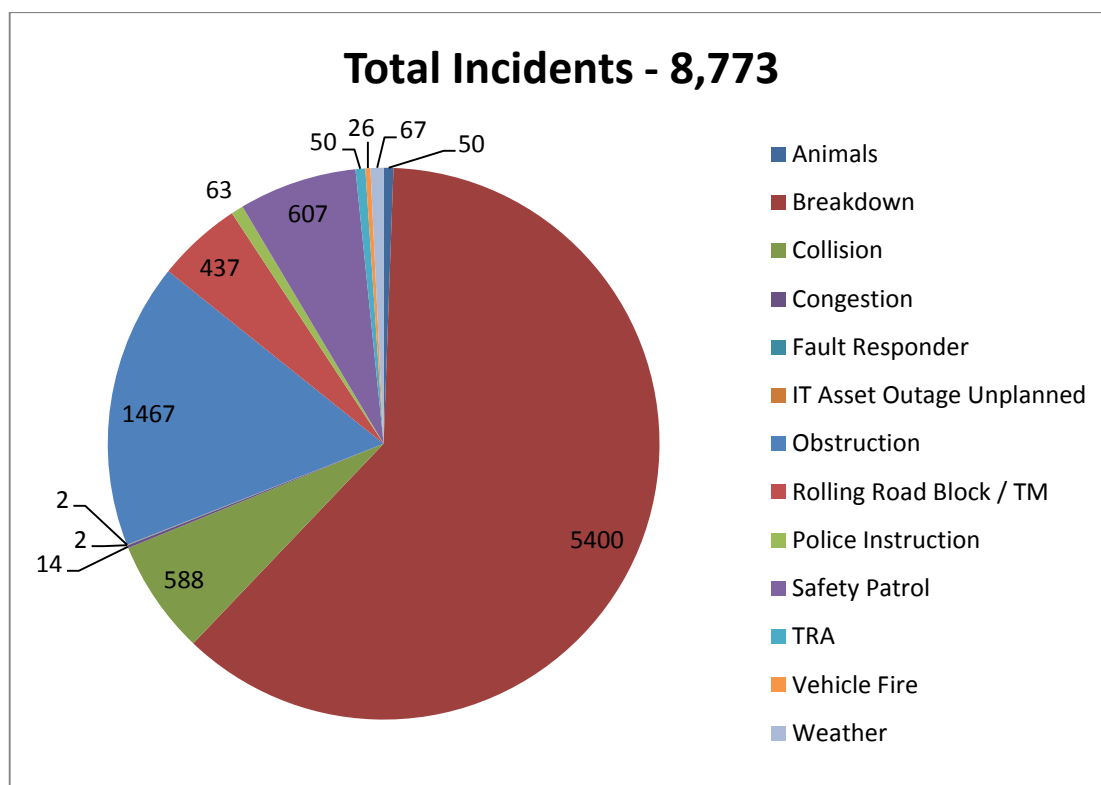
National Assembly for Wales Public Accounts Committee: Inquiry into Value for Money of Motorway and Trunk Road Investment

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

- 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.

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



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

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

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

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

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

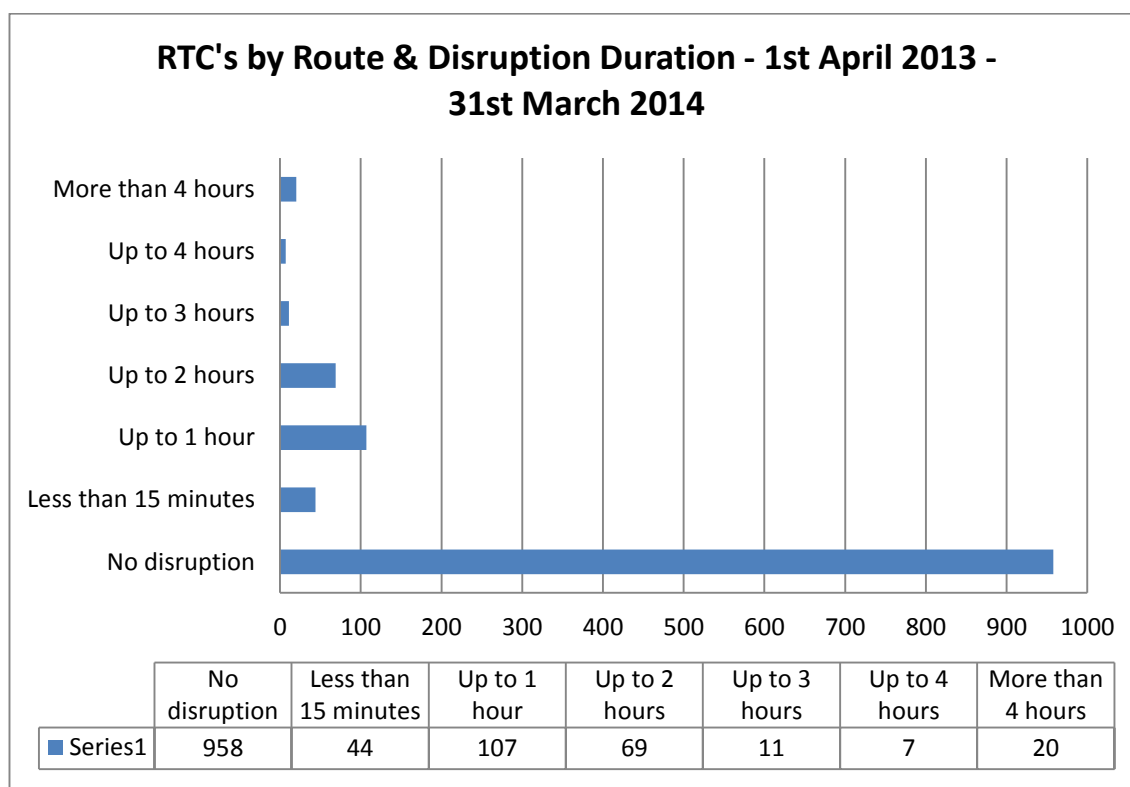


Table 2

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

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

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 implemented during this period)
- Number of days with no TM in place at all within 24 hour period = 31 days

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

Richard Jones BSc(Hons) C.Eng C Mgr C.Env FICE FCIHT FCMI,

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