

Adran yr Economi a'r Seilwaith  
Department for Economy and Infrastructure



**File Ref WG/REB/OBJ6901-Wilkins**

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Llywodraeth Cymru  
Welsh Government

**Objection Ref OBJ6901**

**Response to Objector's Evidence: Alan Wilkins (Light Rail Association)**

## **1. GROUNDS FOR OBJECTION**

### **1.1. Details**

- 1.1.1. Alan Wilkins has submitted a Statement of Evidence dated 14 September 2016 in relation to the draft statutory Orders associated with the Welsh Government's proposals for the M4 Corridor around Newport, which has been received via the Programme Officer.
- 1.1.2. The Welsh Government understands the evidence submitted within Alan Wilkins' Statement to be based on the following:
1. Concerned that the natural scenic and environmental assets of the Gwent Levels and wetlands face a substantial threat from the proposed M4 relief road;
  2. Suggested that major enhancements to the South Wales Main Line and other could alleviate motorway congestion to such an extent that it would eliminate the need for the proposed relief road;
  3. Stated that rail transport produces far less harmful emissions than road transport - this not only includes vehicle exhausts, but also includes 'The Oslo' factor for road surface and tyre degradation products;
  4. Stated that young people today are increasingly turning their back on the car as their primary means of transport, which will help alleviate congestion;
  5. Stated that car sharing and self-driving cars are rapidly increasing, which will help alleviate congestion;
  6. The Light Rail Transit Association (LRTA) believes that the proposed Metro is vitally important for mobility in the region to create the requisite connectivity to ensure that proposed investment flourishes;
  7. Stated that the need to accommodate freight traffic on railways, particularly along the South Wales Main Line, must be recognised. Enhancements, such as fly-over junctions may be needed, particularly in the Newport area;
  8. Stated that Metro funds would probably need to be augmented by the re-allocation from a cancelled relief road project to provide necessary capital outlay;

9. Stated that with the metro the economic prosperity of the region could be enhanced, without damaging the environment;
10. Stated that the metro has a vital role to play in reducing sickness (health);  
and
11. Stated that the Welsh Government is currently seeking expressions of interest from prospective tenderers for the next Wales and Borders rail franchise, due to commence in 2018 and suggested that the tender specification must stipulate that tenderers must include methods to alleviate the M4 congestion in their bids, by proposing rail alternatives.

## 2. REBUTTAL

### 2.1. Points Raised

2.1.1. Some of the above points have already been addressed in previous correspondence. Others are dealt with by topic by the relevant witness in the following sections, in addition to their general proofs of evidence, to which readers should also make reference in their entirety for a full understanding of the Welsh Government's case. For ease of reference the places where the above points are addressed in this Rebuttal are listed in the table below:

Objector's point reference	Rebuttal paragraph reference	Objector's point reference	Rebuttal paragraph reference
1	2.1.2	7	2.1.2
2	2.3.1	8	2.1.2
3	2.1.2	9	2.1.2
4	2.3.2	10	2.1.2
5	2.3.3	11	2.2.1
6	2.1.2		

2.1.2. Some of the Objector's points have already been covered in proofs of evidence as follows:

1. **Point 1** (Concerned that the natural scenic and environmental assets of the Gwent Levels and wetlands face a substantial threat from the proposed M4 relief road) / The effect of building and operating the new section of motorway on the environment is set out in the Environmental Statement (Document 2.3.2) and its Supplements (Documents 2.4.4 and 2.4.14) / The Environmental Statement clearly identifies the magnitude and significance of effects on a wide range of environmental features and assets.
2. **Point 3** (Stated that rail transport produces far less harmful emissions than road transport - this not only includes vehicle exhausts, but also includes 'The Oslo' factor for road surface and tyre degradation products) / The air quality matters associated with the Scheme are addressed in the evidence of Michael Bull WG1.12.1. This does not address emissions of other schemes, which is outside of the scope of the Public Local Inquiry for the M4CaN Scheme.

3. **Points 6, 7, 8 and 9** (The Light Rail Transit Association (LRTA) believes that the proposed Metro is vitally important for mobility in the region to create the requisite connectivity to ensure that proposed investment flourishes), (Stated that the need to accommodate freight traffic on railways, particularly along the South Wales Main Line, must be recognised. Enhancements, such as fly-over junctions may be needed, particularly in the Newport area), (Stated that Metro funds would probably need to be augmented by the re-allocation from a cancelled relief road project to provide necessary capital outlay), (Stated that with the metro the economic prosperity of the region could be enhanced, without damaging the environment) / Proof of Evidence of Matthew Jones WG1.1.1 section 9.
4. **Point 10** (Stated that the metro has a vital role to play in reducing sickness (health) / Proof of Evidence of Matthew Jones WG1.1.1 section 9 and 16.6.

2.1.3. The other points are responded to by specialist topic in turn in the sections following.

## **2.2. Matthew Jones (Chief Witness)**

2.2.1. Response to **Point 11** (Stated that the Welsh Government is currently seeking expressions of interest from prospective tenderers for the next Wales and Borders rail franchise, due to commence in 2018 and suggested that the tender specification must stipulate that tenderers must include methods to alleviate the M4 congestion in their bids, by proposing rail alternatives):

1. From early 2017, the Welsh Government will become a franchising authority with responsibility for awarding the next Welsh rail franchise, due to start in October 2018. As franchising authority the Welsh Government has to decide on the service expectations and specifications that a potential franchisee will need to meet in order to win the contract. The Wales and Borders rail franchise inquiry Report was published on 20

January 2017<sup>1</sup>. The Department for Transport are currently seeking views regarding procurement of the new Wales and Borders rail franchise<sup>2</sup>.

2.2.2. I confirm that the statement of truth and professional obligations to the inquiry from my main proof still applies.

### **2.3. Bryan Whittaker (Traffic)**

2.3.1. Response to **Point 2** (Suggested that major enhancements to the South Wales Main Line and other could alleviate motorway congestion to such an extent that it would eliminate the need for the proposed relief road);

1. Multi-modal modelling has been undertaken, quantifying the journey times by each mode, including the time to get to the station or bus stop or tram stop, the time spent waiting, the time changing between services, the time to get from the station or stop that is the end of the public transport journey to the final destination. And comparing that time and the cost of the fare with the time by car and the perceived cost of petrol.
2. The results of that comparison show that for many journeys, the private car offers a much higher level of service than public transport.
3. The Updated Public Transport Overview (Document 2.4.19) sets out the public transport schemes that have been included in the M4Can Transport Model. In summary the public transport schemes included in the model comprise of Great Western Route Modernisation + Metro Phase 1 related to stations and facilities + Metro Phase 2 comprising of the Valley Lines Modernisation (the final specification will be established through the award of the Wales and Borders Franchise, but for the purpose of the M4CaN model, it is represented as a light rail network to the north of Cardiff Central with heavy rail services retained on the City Line, Vale of Glamorgan. Maesteg, Ebbw Vale and Penarth Lines + Metro Phase 3 including improvements to the Welsh Marches Line but excluding new stations + Great Western Main Line Relief Lines Services which incorporate proposed solutions to line speed and the provision of new stations to enable greater use to be made of these routes in the future.

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<sup>1</sup> <https://www.parliament.uk/business/committees/committees-a-z/commons-select/welsh-affairs-committee/inquiries/parliament-2015/wales-rail-franchise-16-17/publications/> and a Government response is pending

<sup>2</sup> <https://www.gov.uk/government/consultations/wales-and-borders-rail-service>

4. Outside of the transport model, an alternative approach has been developed which assumes further and enhanced rail elements of a South Wales Metro and a strategic Park and Ride site at Llanwern, together with Newport Bus Rapid Transit in order to assess the potential effect on traffic flows on the existing M4 corridor.
  5. The combined effect of all the public transport measures results in a mode transfer which represents a significant increase in public transport patronage and it is also recognised that the South Wales Metro will impact a wide range of movements in the region, many of which will be north-south rather than east-west.
  6. However, the results show that the combined effect of the public transport measures is to reduce M4 traffic by a maximum of 6% which does not resolve the problems on the M4 and is consistent with the Welsh Governments position that the M4 proposal and the Metro schemes should be viewed as complimentary.
- 2.3.2. Response to **Point 4** (Stated that young people today are increasingly turning their back on the car as their primary means of transport, which will help alleviate congestion);
1. There is evidence to suggest that especially in London car driver licence holding rates have decreased amongst the youngest age cross section of Londoners. This could be due to a number of effects which include good access to public transport (both underground and bus), cordon charging, high parking costs, availability of private parking and planning controls.
  2. The National Travel Survey (NTS) data has shown that the average numbers of trips have been falling and that there has been a general downward trend in trip rates. The two most common journey purposes (shopping and commuting), exhibit statistically significant downward trends with reductions of 6% and 10% respectively between 2003 and 2010. The trends in this data are not uniform and vary according to purpose and segmentation (e.g. gender, area and household type). For example, the personal and employers' business purposes are stable while the holiday trip rate is increasing, and the trips that are reducing tend to be shorter trips. The reduction in trip rates may in part be reflective of the decrease in driving licence holding rates in the younger generations.

3. These downward trends are included in Temprow 7.2 and therefore in the traffic model. Despite taking account of these trends the traffic model suggests that congestion will get worse under the Do-Minimum scenario.

2.3.3. Response to **Point 5** (Stated that car sharing and self-driving cars are rapidly increasing, which will help alleviate congestion;

1. Car occupancy varies by journey purpose. The Department for Transport's (DfT) WebTAG data book which provides all the parameter values to be used in scheme appraisal states that car occupancies that were observed in 2010 will be constant to 2036.
2. The DfT commissioned research into the impacts of connected and Autonomous Vehicles (AVs) on traffic flow which was published in May 2016. One of the key conclusions from that research was that there was great potential for substantial improvements in network performance, particularly in high speed, high flow situations. However, there was strong evidence that at low penetrations, any assertive AV's are limited by the behaviour of others, so that vehicles are not able to make use of their enhanced capability. This leads to suggestion of a tipping point – the proportion of enhanced vehicles required before benefits are seen. The research suggests that that this may be between 50% and 75% penetration of AV's. Results for the Strategic Road Network (SRN) peak period indicate improvements in delay of only 7% for a 50% penetration of AV's, increasing to as high as 40% for a fully automated vehicle fleet.
3. A paper was presented at the 2016 European Transport Conference which summarised the outcome of a 'Delphi' survey conducted amongst the leading professionals in the area of autonomous vehicles. The Delphi method is a structured communication technique developed as a systematic, interactive forecasting method which relies on a panel of experts. Delphi is based on the principles that forecasts from a structured group of individuals are more accurate than those from unstructured groups.
4. A total of 45 modelling experts took part. Ten of them were well known academics, 9 worked in Government Agencies and the rest worked in the private sector in different roles, mostly as consultants. They were grouped

into 5 regions, the USA and Canada, Western Europe, Australasia, Latin America and the Rest of the World.

5. On the question of when AV's will be available, the mean for all regions was 2023. In response to the question of when AV's would be 10% of the fleet, the mean response was 2032 and 2040 when the percentage of AV's increase to 20%. The mean view arrived at in terms of improvement in capacity, was that a 10% improvement in capacity could be achieved when AV's are 20% of the fleet.
6. The conclusion that I would draw from the above is that any effect on the M4 is so far in the future, it does not change the need for the scheme.

2.3.4. I confirm that the statement of truth and professional obligations to the inquiry from my main proof still applies.