

## PROOF OF EVIDENCE

### Roger Geffen and Hugh Mackay, Cycling UK

Public Local Inquiry into the M4 Corridor around Newport

7 February 2017

#### 1. Who we are and what Cycling UK is

##### Roger Geffen

Roger Geffen is Policy Director for Cycling UK (formerly the Cyclists' Touring Club, or CTC, the national cycling charity). He has been involved in cycle campaigning since the 1980s. He has a MSc in Transport from the Centre of Transport Studies at London University, and has taught transport policy at South Bank University.

Prior to joining the staff at Cycling UK, he had worked in local government focusing on walking, cycling and Local Transport Plan policies, and later as a transport consultant, specialising in cycling and sustainable transport projects.

His role at Cycling UK involves explaining to politicians, the media and the wider public the need for action to improve cycling conditions, while positively encouraging more people to cycle, whether for day-to-day journeys or for recreation. He played a key role shaping in the All Party Parliamentary Cycling Group's much-heralded 'Get Britain Cycling inquiry, and has given oral evidence to parliamentary select committee inquiries on highway maintenance, walking in towns, road safety, cycle safety and the rural economy. He has recently appeared before the parliamentary committee scrutinising the High Speed Rail Bill and will shortly be giving evidence to the Transport Select Committee's inquiry on urban congestion. He is a frequent speaker at conferences and in the national media.

He has represented Cycling UK in numerous ministerial meetings in all four nations of the UK, as well as on various Government and other public sector advisory boards or committees. He is also supporting Cycling UK's network of local volunteer campaigners and is a trustee of the Cyclists' Defence Fund. He is the Cycling UK representative on the Welsh Government's Active Travel Board.

##### Hugh Mackay

Hugh Mackay is an Honorary Fellow of both The Open University and Humboldt University, Berlin. He has Pt 1 BSc Town Planning, a BSc (Economics) and a PhD in political sociology, which was a study of an area of social policy in Wales. He is the author of 12 refereed journal articles, 6 books and 16 chapters in edited collections, and he has edited 7 books. He has

presented papers at conferences in Australia, Mexico, the USA, Canada, Norway, Finland and Germany as well as the UK. He has been academic Chair of Open University courses on social research methods and on Contemporary Wales. He is a member of Cycling UK and its local campaigner in the Vale of Glamorgan.

## Cycling UK

Founded in 1878 and known for much of its history as the Cyclists' Touring Club (or CTC, the national cycling charity), Cycling UK has about 68,000 members, of whom about 2,400 are in Wales.

Cycling UK's vision is of a healthier, happier and cleaner world, because more people cycle. We want people of all ages, backgrounds and abilities to be able to cycle safely, easily and enjoyably, whether for day-to-day travel or for recreation.

We advocate cycling for many reasons, not least because it is amongst the solutions to many serious challenges now facing the UK, including congestion, physical inactivity and obesity, illegal levels of air pollution, climate change, and maintaining a good quality of life for everyone, whether or not they chose to cycle.

We provide information and legal services to cyclists, organise cycling events, protect the interests of existing and would-be cyclists, and make representations on issues of public policy. We welcome the opportunity to respond to the Welsh Government's M4 proposal.

A large number of our members regularly (in many cases every week) enjoy the peace and tranquillity of the reens to access the Usk Valley, the Forest of Dean and England from south Wales. It is a major artery for cyclists. This loss of peace and tranquillity – for large numbers of horse riders, walkers (including those on the Wales Coast Path), cyclists (including those on the NCN), fishing people and others – is a huge loss, not just to citizens' lives but to their mental and physical health. More than this, the proposed M4 will make cycling throughout south Wales, and especially around Newport, less attractive – because of the growth in traffic which it will involve.

## **2. Summary of Cycling UK's objection**

Cycling UK believes the proposed road scheme contravenes Government policies to tackle congestion, pollution and climate change, to improve public health and reduce physical inactivity and obesity, and to improve equality of opportunity. It can be expected to generate additional road traffic, while fostering future patterns of development and land-use changes that would further perpetuate society's dependence on motor-vehicles. The scheme's promoters claim that it would reduce transport-related pollution and congestion. However any such relief would be at best short-term and

localised purely within the corridor of the road-scheme itself. Across a wider area though, the additional road traffic generated by the scheme would increase motor-vehicle usage and dependency, with its associated pollution, congestion, road danger and greenhouse emissions.

The scheme would also represent a 'double-whammy' for efforts to achieve the laudable aims of the Active Travel (Wales) Act 2013 (hereafter referred to as the Active Travel Act). Not only would the additional motor traffic exacerbate the congestion, pollution and road danger that deters people from cycling (or from allowing their children to do so), but it would also draw heavily on public funds that could alternatively be used to support the creation of high-quality walking and cycling routes (as called for by the Act), and other measures to encourage people of all ages and abilities to cycle.

We are concerned that the scheme's promoters have not assessed the environmental impacts of the scheme against a realistic alternative scenario based on investing in the promotion of sustainable and especially active travel. We believe such a programme would perform far better in meeting the scheme's stated objectives.

### **3. Sustainability**

This road proposal contradicts the Government's policies on sustainability by making car use more attractive and thus encouraging the growth of car use. The UK Government has international obligations to achieve carbon targets and to tackle illegal levels of pollution, which this scheme fails to take account of. It is remarkable to claim that building 15 miles of 3-lane motorway will *reduce* total carbon emissions – which is one of the three aims of the proposed scheme. Certainly, it will reduce stop and starting, and this might in turn reduce carbon and pollutant emissions within the corridor of the scheme itself. However this assessment takes no account of:

- the additional road traffic generated by the scheme;
- the additional motor-dependent patterns of land-use development that would doubtless follow in its wake; or
- the increased congestion and emissions that would result from the above in the wider area.

### **4. Induced traffic**

The phenomenon of 'induced traffic' – namely the generation of increased road traffic through the creation of additional road network capacity – has been known and recognised for about 80 years. In 1938 the UK transport minister, Leslie Burgin, said: "The experience of my department is that the construction of a new road tends to result in a great increase in traffic". A similar conclusion was reached in the Buchanan Report of 1963, which had been commissioned by the Ministry of Transport. It was documented most authoritatively in the 1994 report of the Standing Advisory Committee on Trunk Road Assessment (SACTRA). SACTRA estimated that cutting travel

times by 10 per cent through new road could increase traffic by 5 to 10 per cent. It also found that induced traffic is most acute where high levels of congestion already exist on the surrounding road network.

Past experience provides clear evidence that traffic inducement is commonly much higher than was forecast.

Road building is thus a false solution to local congestion. Far from tackling the problem, it makes motor-vehicle use more attractive, thereby exacerbating the problems on the wider road network – and at great expense. It is not a solution to the mobility needs and expectations of a modern society and economy.

## **5. The local nature of congestion on the M4**

The problem on the M4 around Newport is not long-distance or trans-European traffic but, much more simply, local Newport traffic. 48% of trips through the Brynglas tunnels are *not* through (i.e. long distance) trips (WG 'Revised traffic forecasting Report', Dec 2016, Para 10.5.1). It is a consequence of the M4 having too many junctions at Newport; and of not providing suitable cycling, walking and public transport in Newport, whilst building a succession of roads, over the past 40 years. The congestion on the M4 can be resolved more cheaply and effectively by a breadth of measures other than the construction of additional roads.

## **6. Road building and economic growth**

There is a considerable body of evidence questioning the widely-held assumption (which clearly drives the proposed M4 scheme) that road-building benefits the economy. There have been studies of road schemes, including some in Wales, which have shown that road building has had the opposite outcome to this intended one.

Having considered 'induced traffic' in 1994 (see section above), SACTRA then considered the relationship between road investment and economic growth in its 1999 report *Transport and the Economy*. The Committee was far from convinced that public investment in road construction had any worthwhile impact on economic performance.

Likewise, findings from a study in 2012 concluded that it was very difficult to find evidence to support the theory that such investment is linked to an improved GDP in any EU country. It was much easier to identify negative outcomes, or those where the disbenefits cancelled out the benefits (e.g. a new road might attract shoppers from a poor region to better shopping opportunities in wealthier areas). (David Scotney. *Does transport investment create jobs and lead to economic growth?* Oct 2012, updated Sept 2015).

In 2013, 32 transport professors from around the UK wrote an open letter to the Rt Hon Patrick McLoughlin, then the UK Secretary of State for Transport. They expressed their considered doubts about the ability of new, major investment in transport projects (e.g. road building) to make a positive contribution to the economy and employment. They suggested that it is more sensible to make the best use of existing infrastructure and pointed out that: “There is substantial recent evidence [...] on the success of travel behaviour change programmes, underscoring demand management potential.” (Published by the Town Planning Society, Jan. 2013).

## **7. Value for money**

Investing in cycling infrastructure has a very different outcome. An assessment commissioned by the Department for Transport found that the average benefit-to-cost ratio (BCR) of investing in cycling & walking schemes was at least 5:1 (Davis A, *Claiming the Health Dividend*, Department for Transport 2014), while a similar report for the Department for Health found an average BCR of 13:1 (Davis A, *Value for Money: An Economic Assessment of Investment in Walking and Cycling*, Department of Health 2010). By contrast, this M4 proposal has an estimated BCR of under 2:1.

These assessments echo the findings of a 2006 report by Sir Rod Eddington (also commissioned by the Department for Transport), which again concluded that the case for major road investment was unsound, and that smaller schemes (e.g. investing in walking and cycling) were likely to provide much better value for money.

## **8. Road building, equality and social exclusion**

The Equality Impact Assessment is weak and incorrect in places. It quotes without comment or criticism the FIA report which states that ‘Access to a car, particularly outside of major cities, seems to be essential to full participation in economic and social life in modern industrialised societies’. One has only to look at Berlin, Amsterdam, or nearer to home at Oxford, to see that this is incorrect. Similarly, it states that: ‘Lack of access to a car is the main transport factor in the social exclusion of low-income households and other marginalised groups’. This statement assumes an implausible cause and effect: lack of car ownership can be seen as a result of poverty, rather than (or as well as) a cause of poverty. The proposed roads will make Newport more car-based so will enhance social exclusion – by marginalising further those who do not enjoy access to a car. The Equality Assessment quotes the same report stating ‘Improving public transport in isolation is no longer an adequate solution to the poor accessibility experienced by low-income and marginalised groups’ – which neither transport experts nor the Welsh Government accept at all. Such statements reveal underlying assumptions that frame the Assessment.

If anything, promoting increased dependence on private motor vehicles disproportionately disadvantages groups without access to private cars. This includes protected groups under the Equality Act 2010, such as children and young people, older people, women and people with disabilities. The Equality Assessment fails to address the negative impact of road-building on these groups.

It also fails to mention that people, especially children, from economically disadvantaged backgrounds, suffer most acutely from the pollution and road danger posed by motor vehicles.

By contrast, promoting walking and cycling would help create cleaner air and safer streets, enabling them to enjoy better health and greater access to employment, education and training, social and other opportunities to enhance their health and wellbeing.

## **9. WeITAG and modelling assumptions**

Many of the assumptions in WeITAG are of doubtful reliability - for example regarding fuel prices and GDP. (Does anyone think that there will be no recessions between now and 2070?). Public transport fares are assumed to rise in line with RPI over the forecast period, so are treated as constant in real terms. Recent history is that they have risen much more than this (and, with massive cuts to local authority funding) are delivering a reduced service too. These should be key components of any modelling.

There are also growing doubts about the UK Government's National Transport Model (NTM), with its inbuilt hypothesis that economic growth correlates closely with increased car use, together with the implicit assumption that more roads need to be built to accommodate it.

Moreover, electric and driverless cars (which are now safer than cars driven by humans) offer to challenge urban transport fundamentally. With young people less wedded to car ownership and use than in the past, there is strong evidence that the cultural significance of the car is changing. With Uber-style systems, levels of ownership and use of cars are likely to change, and road and other space used for car parking will be freed-up. Forecasts and modelling this proposal take no account of these fundamental and far-reaching changes.

It is wrong to allocate such a significant amount of public funding on the basis of modelling which is so limited.

## **10. Inadequate assessment of alternatives**

The forecasts of traffic growth that are being used to rationalise this outdated proposal are simplistic and misleading. They take no account of the electrification of the rail network; Welsh Government and SEWTA plans for a South Wales Metro system; the decline since 2006 of levels of car use; the

phenomenal localised growth of cycling in places where it has recently received some long-overdue investment; and the further increases in walking and cycling envisaged by the provisions of the Active Travel Act.

It makes no sense to ignore the South Wales Metro on the grounds that its development is uncertain because the finance is not in place, as the same applies equally to the M4 relief road itself. Indeed the opposite argument can as validly be made: if the M4 scheme were to be dropped, this would instead allow the Government's borrowing powers to be used to support an alternative package of sustainable and active travel measures.

A railway station at Magor, for example, would allow anyone travelling from (say) Cardiff to the Monmouthshire County Council office to avoid the traffic around Newport. This one railway station could have a very significant impact on traffic on the M4. Rail electrification is underway and more is planned. Bus lanes, simplified and co-ordinated public transport ticketing, and car sharing could all be used and, together, could easily address the problem of capacity on the M4. Closing particular junctions, or parts of them, would also reduce local use of the motorway. Implementation of the Active Travel Act itself can also be expected to make a contribution (see Section 11, below).

More seriously, these and other possible demand-reduction and sustainable travel measures have not been developed into a reasonable alternative scenario to the M4 road scheme, and subjected to a comparative environmental impact assessment. We believe such an assessment should have been carried out in accordance with EU environmental law.

Congestion on the M4 around Newport is primarily a local transport problem, due to over-reliance on the car created by the historic development of the city's road and transport networks. Only about 15% of traffic would need to be transferred to other modes of travel to eliminate the congestion on the M4, for around 3.5 hours of the day.

Cycling UK does not have the resources to draw up such an alternative scenario and to carry out a WelTAG appraisal of it. However we strongly suspect that such an appraisal would find that the local congestion problem could be addressed more cost-effectively by a sustainable transport solution involving the promotion of active travel. We also believe that such an alternative would contribute far better to the Welsh Government's wider health, environmental and social inclusion objectives.

## **11. Active Travel and its contribution to health, sustainability and wellbeing goals**

In essence, the Active Travel Act requires Welsh local authorities:

- To consult on, obtain ministerial approval for and publish a map showing the existing networks of walking and cycling routes in their area which meet the design standards created under the Act (the Existing Networks Map);

- To consult on, obtain ministerial approval for and publish a map of the active travel networks they intend to create in the future (the Integrated Networks Map);
- To make continuous year-on-year improvement in conditions for active travel;
- To have regard to the Act's design standards when carrying out relevant functions in their roles as highway and planning authorities.

This process has huge potential to ensure that walking and cycling become the normal travel choices for short journeys (up to 2 miles for walking, and up to 10 miles for cycling), or for longer journeys in conjunction with public transport.

It is also worth quoting the Government's Active Travel Action Plan (2016), a document not referenced in the M4 scheme proposals. This Plan states the Government's aims, namely:

“For people in Wales, we want walking and cycling to become the preferred ways of getting around over shorter distances.

“To realise our vision, we must achieve a culture shift in Wales at a policy and at the population level. At present, too many people in Wales rarely or never make active travel journeys, and too often active travel is not a mainstream consideration when new services or facilities are delivered.”

The Plan also references the seven goals of the Wellbeing of Future Generations Act 2015. Investment in active travel would make a highly cost-effective contribution to 6 of these goals, namely to make Wales:

- more prosperous
- more resilient
- more healthy
- more equal
- more cohesive and
- more globally responsible.

We also strongly suspect it would tackle local road congestion far more cost-effectively than through creating additional road-network capacity.

Yet the capacity of local authorities to implement the Act's provisions is being seriously undermined by lack of funding. As things stand, plans for the M4 road scheme risk tying up a substantial proportion of the Welsh Government's borrowing powers for years to come. That would make it very difficult to achieve the Act's admirable aims.

One of the goals of the M4 proposal is 'to achieve a cultural shift in travel behaviour towards more sustainable choices' ('Revised traffic forecasting Report' Dec 2016, para 1.3.3 TPO 12). Yet the scheme promoters' engagement so far with the Active Travel agenda consists of little more than

considering how to make provision for active travel at identified crossing points on the road and rights of way networks. The “culture shift” called for in the Active Travel Action Plan is palpably absent. The Active Travel Act requires cycling to be considered at the outset of any transport scheme. In the case of this M4 proposal, this has not been the case.

A 2009 report by the UK Government’s Cabinet Office Strategy Unit found that the failings of transport in England’s urban areas were giving rise to economic costs of between £38-£49bn annually. Moreover these costs were split roughly evenly between congestion, injuries, pollution and physical inactivity (which each imposed economic costs in the order of around £10bn per annum). (Cabinet Office Strategy Unit *An Analysis of Urban Transport* 2009).

One would expect the Government to know how Newport Council is developing its active travel routes, since these, by definition, will accommodate journeys in Newport. Local authorities are required to link their Active Travel plans with their LDPs, a process which is taking place across Wales. Thus LDPs address the modal split as active travel is developing. It is inevitable that these will attract users from other modes of transport, including cars, so should have been modelled. The M4 documentation, however, does not account at all for the impact of this Government policy on travel patterns. It deals in only a very limited way with the active travel legislation and policy.

More than this, the proposal is antithetical to active travel. An overview of evidence on the promotion of active travel, commissioned by the Department for Transport, concluded that “In order to increase levels of physical activity, it is necessary to reduce use of the car.” (Mackett RL and Brown B *Transport, Physical Activity and Health: Present knowledge and the way ahead*. 2011). The M4 proposal does exactly the opposite.

Cycling UK therefore urges that the Welsh Government should be required to draw up a realistic alternative scenario to tackle congestion in the vicinity of Newport through measures that include promoting active and sustainable travel, and to carry out a comparative environmental assessment of the M4 scheme against this alternative.

We strongly believe this alternative would prove far more cost-effective at tackling congestion, while performing better in terms of reducing road danger, pollution and greenhouse gas emissions, physical inactivity and obesity, while tackling the disproportionate burden of these social and environmental ills on society’s most disadvantaged groups. We would be pleased to contribute to the development of this alternative scenario.