

March 2015

**Submission to the
Welsh Government**

in response to

Consultation Document

WG23539:

**National Transport Plan 2015 -
Draft**



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

Summary

The draft Plan must be entirely redrafted. The Welsh Government's planning:

- Fails to logically flow from the Wales Transport Strategy
- Is based on road transport models ("evidence"¹) that are proven to be flawed
- Downgrades environmental concerns to less than 6% of the status they have in the overarching Strategy
- Fails to even mention, let alone consider, the outstanding means of reducing road injuries and fatalities (20mph schemes)
- Is not coherent with other important Welsh Government strategies, notably the Sustainable Development Scheme and the Climate Change Strategy, and the commitments that stem from them
- Is made without any indication of funding allocation to different forms of transport (capital or revenue), which makes it almost impossible to weigh up the Welsh Government's priorities
- Fails to demonstrate the slightest understanding of the (in)equality consequences of new road infrastructure

Introduction

1. The Welsh Government's Vision for a sustainable future for Wales is underpinned by an exhortation that *"we must think differently"*².
2. There is no indication that the National Transport Plan has adopted anything other than old, tired thinking.

Principles

3. We note that:

"sustainable development as our core organising principle is embedded in the [Wales Transport] Strategy, The Strategy supports the Welsh Government's commitment to developing a sustainable future for Wales and securing positive changes which ensures the cohesive interaction of social, economic and environmental improvements and which follow shared principles of:

 - *promoting good governance*
 - *using sound science responsibly*
 - *ensuring a strong, healthy and just society*
 - *working to achieve a sustainable economy*
 - *living within environmental limits"*³
4. The National Transport Plan has been informed by Professor Preston's report on approaches to strategic transport planning. The draft National Transport Plan claims to reflect this – including the

¹ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.1.2

² <http://wales.gov.uk/docs/dsjlg/publications/140218-wales-we-want-en.pdf> p1

³ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.1.5

need to coordinate transport planning with environment planning – through the *“range of evidence we have drawn together to inform the Plan”*⁴.

Structure

5. There does not appear to be a time period over which the National Transport Plan should function. This renders it difficult to assess whether the Welsh Government considers the Plan’s lifespan to be measured in years or decades, which makes a response more problematic.
6. The Welsh Government’s stated aim in this process is to develop a National Transport Plan that will demonstrate how the Welsh Government will continue to implement the Wales Transport Strategy and support the delivery of the Programme for Government outcomes.
7. The Wales Transport Strategy is very clear about its role in relation to the National Transport Plan. It sits above the Plan, and:

*“sets the outcomes and strategic priorities for National Transport Plan”*⁵
8. The National Transport Plan is described by the Wales Transport Strategy as one of a series of “detailed plans” that will achieve the 17 outcomes described, via the five priorities⁶.
9. The 17 long-term outcomes that the transport system should contribute to, according to the Wales Transport Strategy, are as follows⁷:
 - improve access to healthcare
 - improve access to education, training and lifelong learning
 - improve access to shopping and leisure facilities
 - encourage healthy lifestyles
 - improve actual and perceived safety of travel
 - improve access to employment opportunities
 - improve connectivity within Wales and internationally
 - improve efficient, reliable and sustainable movement of people
 - improve efficient, reliable and sustainable movement of freight
 - improve access to visitor attractions
 - increase the use of more sustainable materials
 - reduce the contribution of transport to greenhouse gas emissions
 - adapt to the impacts of climate change
 - reduce the contribution of transport to air pollution and other harmful emissions
 - improve the impact of transport on the local environment
 - improve the impact of transport on our heritage
 - improve the impact of transport on biodiversity

⁴ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.1.8

⁵ <http://wales.gov.uk/docs/det/publications/140909-transport-strategy-en.pdf> p1

⁶ <http://wales.gov.uk/docs/det/publications/140909-transport-strategy-en.pdf> piv

⁷ <http://wales.gov.uk/docs/det/publications/140909-transport-strategy-en.pdf> piii

10. The five priorities set out in the Wales Transport Strategy are:
- reducing greenhouse gas emissions and other environmental impacts;
 - integrating local transport;
 - improving access between key settlements and sites;
 - enhancing international connectivity
 - increasing safety and security
11. For the avoidance of doubt, the role of the National Transport Plan is highlighted as being the *“planning and delivery mechanism at national level”*⁸ for the five priorities above. It would be useful to clarify this; Figure 1.3 of the draft Plan does not make this link clear.
12. In fact, Figure 1.3 appears to show very little linkage between the National Transport Plan and the Wales Transport Strategy. This is contrary to internationally recognised good practice, which places a plan as the operational delivery mechanism for a strategy.
13. It is also contrary to the claim in the draft Plan that:
*“The new National Transport Plan has been developed in line with the Welsh Government’s policies and objectives for transport as set out in the Wales Transport Strategy”*⁹.
14. And it is contrary to the work of Professor Preston – on which the draft Plan is ostensibly based:
*“It is important to distinguish initially between the strategic, tactical and operations aspects of transport planning (the STO model championed in transport by van de Velde (1999)). The 4 strategic (or long-term) function answers the question: what do we want to do? This involves outlining the overall vision for the transport plan and its high level objectives. The tactical (or medium-term) function answers the question: how do we do it? This focuses on determining the policy instruments that will deliver the transport plan. It is not unusual for this stage to dominate the plan – in essence the plan becomes about delivering the policy instruments. This is often the case where the plan is focussed on physical improvements such as building new roads, upgrading the rail network or introducing a new urban public transport system”*¹⁰.
15. Professor Preston goes on to describe ‘problem-oriented planning’ as being typically reactive, the risks of which include the emergence of piecemeal or short-term solutions¹¹. The draft Plan presented by the Welsh Government is replete with problem-oriented planning because its road transport section is wholly premised on a 1% year-on-year increase in traffic:
*“One solution to such a situation would be to provide more transport capacity to reduce congestion – the so called predict and provide approach”*¹².
16. The purpose of the Plan is described as providing¹³:
- The evidence base to inform decisions on all transport investment (capital and revenue)

⁸ <http://wales.gov.uk/docs/det/publications/140909-transport-strategy-en.pdf> p54

⁹ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.1.4

¹⁰ <http://ppiwi.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> pp3-4

¹¹ <http://ppiwi.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p4

¹² <http://ppiwi.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p5

¹³ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.1.10

- A suite of transport interventions to be prioritised
- A delivery plan for these priorities, in the short term (<5 years), medium term (up to 10 years) and beyond.

17. The five “key priorities” for the draft Plan¹⁴ therefore have no root in the Wales Transport Strategy, have not been subject to consultation, and appear to bear little or no resemblance to the 17 long-term outcomes outlined in both the Strategy and the Plan. As a result, we consider them to be invalid. The key priorities should be as those set out in the Wales Transport Strategy.

18. It is particularly noteworthy that the 7 of the 17 long-term outcomes of the Strategy that are classified as relating the environment have been side-lined into one-ninth¹⁵ of one of the five ‘key priorities’ of the draft plan.

19. Environmental factors have therefore reduced in importance by 18.5-fold¹⁶. Or, to put it another way, environmental concerns have just 5.4% of the stature they enjoyed in the Wales Transport Strategy.

20. The Strategic Environmental Assessment of the draft Plan lists 11 environmental assessment objectives. It would be instructive for the draft Plan to revisit these and consider whether or not greater prominence should be placed on environmental factors¹⁷.

21. Additionally, by lumping environment in with safety, 21 of 31 road infrastructure interventions¹⁸ are classified by the Welsh Government as contributing to this priority. It is abhorrent to suggest that infrastructure interventions such as the proposed new M4 in the Gwent Levels contribute to environmental improvement and sustainability.

Policy coherence

22. Planning Policy Wales states that:

*“The Welsh Government aims to extend choice in transport and secure accessibility in a way which supports sustainable development and helps to tackle the causes of climate change by: encouraging a more effective and efficient transport system, with greater use of the more sustainable and healthy forms of travel, and minimising the need to travel”.*¹⁹

23. The focus of the National Transport Plan appears to be mainly on the (road) transport system, and not on “more sustainable and healthy forms of travel, and minimising the need to travel”. The list of projects includes:

- 31 road interventions
- 2 freight interventions

¹⁴ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.3.4

¹⁵ “Sustainable travel and safety” – encourage safer, healthier and sustainable travel, where sustainable travel will likely be defined as travel that contributes to environmental, social and economic outcomes.

¹⁶ From 7/17 to 1/45

¹⁷ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> Table 7

¹⁸ R6, R13, R18, R23, R24, R25, R27, R28, R29, R31

¹⁹ <http://wales.gov.uk/docs/desh/publications/140731chapter-8-en.pdf> 8.1.1

- 3 active travel interventions
- 14 rail interventions (12 rail infrastructure and 2 rail service)
- 14 bus and community transport interventions
- 1 young people’s intervention
- 2 information and transport choice interventions
- 1 port intervention
- 1 air intervention
- 1 blue badge scheme intervention
- 14 metro interventions
- 7 integrated transport interventions
- 2 innovation interventions

24. Interventions on “healthy forms of travel” (other than those arising from statutory duties under legislation) number just one: making improvements to the National Cycle Network. There is no commitment to actually delivering personalised travel planning (ITC1 and 2) at any point in the next 10+ years.

25. There is not one intervention of the 93 listed that works towards “minimising the need to travel”.

26. The Sustainable Development Scheme for Wales tells us that:

“wherever we look... the amount we travel – we know we are living beyond the environment’s means to sustain us”²⁰.

27. It notes that in order to achieve our vision of a sustainable Wales, we must:

“organise the way we live and work so we can travel less by car wherever possible”²¹.

28. There is nothing in the draft National Transport Plan that refers to demand management: pursuing ways of reducing car travel.

29. The only conclusion to draw is that the National Transport Plan has no intention of minimising the need to travel or traveling less by car, and very little intention of promoting healthy forms of travel.

30. This is particularly frustrating in view of Professor Preston’s review, which highlights the ‘holy grail’ of integrated and sustainable transport²². This ‘ladder of interventions’ puts “making healthier choices the default option for people” at a relatively low level of intervention.

31. Additionally, in the absence of any indication of levels of funding for these different schemes – even with ball-park figures – the relative level of importance placed on them by the Welsh Government cannot be accurately assessed.

²⁰ <http://wales.gov.uk/docs/desh/publications/090521susdev1wales1planeten.pdf> p5

²¹ <http://wales.gov.uk/docs/desh/publications/090521susdev1wales1planeten.pdf> p18

²² <http://ppi.w.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p6

32. WelTAG: the Welsh Government's flagship traffic assessment tool²³, is described by Professor Preston as:

*"light on quantification and does not provide value for money assessments. It seems to lack both a sound scientific basis and an underlying evidence base"*²⁴.

33. We are therefore heartened that one of the interventions in the draft Plan is to revise WelTAG. However, it raises important issues around the validity of decisions made thus far using WelTAG.

Equality

34. We have serious concerns over the Equality Impact Assessment. It is very well known, for example, that new road infrastructure provides a disproportionate benefit to employed rich white men:

- Men drive nearly twice as many miles per year as women²⁵.
- Poorer people drive much less than richer people²⁶ (see Table). The bottom 60% of earners drive less than 55% as much as the richest quintile, with the poorest quintile driving less than a quarter of the distance of the richest.
- White people drive more than people from non-white backgrounds. 18% of people in the 'white' ethnic grouping do not have access to a car; this increases through 'non-white' ethnic groups to 44% of the 'black' ethnic grouping²⁷.
- People who have never worked, and people who are long-term unemployed, drive an average of 903 miles per year. This is 16.3%²⁸ the distance driven by the richest quintile²⁹.

| Income quintile | Distance driven per person per year (miles) | Distance driven as proportion of highest income quintile (%) |
|-----------------|---------------------------------------------|--------------------------------------------------------------|
| Poorest | 1,296 | 23.5 |
| Second level | 2,220 | 40.2 |
| Third level | 3,028 | 54.8 |
| Fourth level | 4,355 | 78.8 |
| Richest | 5,526 | 100.0 |

35. Yet the tick-box exercise undertaken by the Welsh Government claims that equality is maintained by investing heavily in new road infrastructure³⁰.

²³ <http://wales.gov.uk/topics/transport/planning-strategies/weltag/?lang=en>

²⁴ <http://ppi.w.org.uk/files/2014/11/Approaches-to-strategic-transport-planning.pdf> p13

²⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/243957/nts2012-01.pdf p13

²⁶ <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access> Table NTS0705, Travel by household income quintile and main mode/mode: England 2013 (no such information is available for Wales)

²⁷ <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access> Table NTS0707, Adult personal car access and trip rates by ethnic group: England (no such information is available for Wales)

²⁸ <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access> Table NTS0708, Travel by National Statistics socio-economic classification and main mode or mode: England (no such information is available for Wales)

²⁹ Acknowledging a small proportion of double-counting because these terms are not mutually exclusive

³⁰ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-eia-1-2-en.pdf> p8

36. Nor does the Equality Impact Assessment put the different interventions into context. As explained earlier, a Plan is a means of achieving a Strategy. That means that some indication of capital and revenue allocation should be included in the document. It is totally fatuous to claim that because walking, cycling and bus transport are supported in the Plan, the Plan thereby passes equality tests. **The critical element here is the level of investment in the different strands of the Plan**, and without some indication of relative levels of investment, the Equality Impact Assessment cannot achieve its goals.
37. In fact, taking aside middle-class white men, just about every section of society benefits more from investment in public transport and provision for walking and cycling. That means that any plan that disproportionately focuses on road infrastructure is *de facto* promoting an increase in inequality.
38. No analysis has been made to identify the parts of society most likely to benefit from new road infrastructure, even though a large section of the report (2.6) provides the opportunity to do so. The Welsh Government would benefit from reproducing that part of the Friends of the Earth Cymru response that relates specifically to the benefits of new road infrastructure enjoyed most by employed white richer men.
39. The Welsh Government has even included statistics on ethnic minorities and on income in different sections of the report, but has failed to link them to the significance of road transport and inequality.
40. These multiple failings are all the more puzzling given the Welsh Government's stated intention of establishing
*"stronger Welsh accountability for equality and human rights legislation"*³¹
41. The Welsh Government would benefit from taking on board guidance developed for Scotland³².
42. The Equality Impact Assessment is not fit for purpose.

Health

43. The Health Impact Assessment³³, like the Equality Impact Assessment, appears to be a tick-box exercise to go through the motions.
44. There is no recognition that road interventions aimed at accommodating a 1% increase in traffic every year until 2040 will exacerbate air pollution.
45. There are just two negative elements highlighted in the Health Impact Assessment. The first is the 39 Air Quality Management Areas. While the Welsh Government acknowledges that most of these

³¹ http://www.equalityhumanrights.com/sites/default/files/documents/Wales/wg_advice_final.pdf p5

³²

http://www.equalityhumanrights.com/sites/default/files/publication_pdf/Assessing%20impact%20and%20the%20public%20sector%20equality%20duty%20Scotland.pdf

³³ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-hia-en.pdf>

arise as a result of road transport there is nothing in the National Transport Plan or the Health Impact Assessment that outlines Welsh Government plans to tackle the problems.

46. The second negative is a bizarre statement that:

“Some highway schemes in particular may impact negatively or positively on biological diversity and transport emissions”³⁴.

47. It should be noted that through the land footprint, water quality problems and air pollution, all highway schemes impact negatively on biological diversity. (The draft Plan fails to note the link between road transport and water pollution). Or, as the Strategic Environmental Assessment puts it: *“Transport has the potential to damage biodiversity as a result of land-take, biodiversity severance, habitat fragmentation, loss of habitat function, introduction of alien species, noise and lighting disturbance and wildlife casualties”³⁵.*

48. The draft National Transport Plan states that:

“transport can also have a negative impact on health due to road traffic casualties and severance, noise and air pollution from traffic. The National Transport Plan sets out plans to address these issues”³⁶.

49. Yet air pollution is only mentioned four times in the draft Plan, and there is categorically no plan to address it other than a simple statement that there are 39 Air Quality Management Areas in Wales. This is presumably a consequence of the severe downgrading of environment as a factor in the draft Plan.

50. Both the Health Impact Assessment and the draft Plan are somewhat coy on this. The Strategic Environmental Assessment is much clearer:

“Emissions from transport can have major environmental and health effects. Ambient air quality is a problem in some urban areas of Wales... The vast majority of Welsh AQMAs are focused on emissions of NO₂ (primarily from road transport sources). The NTP therefore has an opportunity to promote reductions in these pollutants and potentially the revocation of these AQMAs”³⁷.

51. Further:

“Air pollution can have a range of effects on human health, from eye irritation and coughs to breathing problems. People with asthma, lung diseases or heart conditions are at greater risk. Daily changes in air pollution can result in higher admissions to hospitals and even premature deaths for those seriously ill, particularly elderly (DEFRA et al, 2002)... With transport (road transport in particular) being one of the major sources of air pollution (as the subsequent information shows), it can have serious effect on the health of the country’s population”³⁸.

³⁴ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-hia-en.pdf> p13

³⁵ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> p72

³⁶ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.4.9

³⁷ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> 2.6.2.4

³⁸ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> 2.11.2.1

52. It is a shame that the draft Plan has not seized on the opportunity to reduce NO₂; quite the reverse. With its focus on road schemes, the draft Plan appears to be aiming to *increase* NO₂ emissions.
53. The Health Impact Assessment has not either considered the role of private (car) transport in obesity. Indeed, neither obesity nor “overweight” are mentioned in the HIA.
54. The Health Impact Assessment is not fit for purpose.

Climate

55. The Climate Change Strategy commits every sector, including transport, to reduce emissions by 3% year-on-year. The Strategy also explicitly states that the target should be exceeded: *“we have decided to set target ranges for the minimum level of emission reduction we would expect to see from each sector and which we would hope to see exceeded over the period”*³⁹.
56. The draft Plan makes no mention of the emissions reduction being the minimum level expected, nor of exceeding the target. Unless the Welsh Government has ambition greater than the target, it is unlikely to even meet the target.
57. The Climate Change Strategy states that the Welsh Government’s focus for transport sector emission reduction will be on⁴⁰:
- *“Development of the Sustainable Travel Centres*
 - *Supporting behaviour change and placing greater emphasis on Smarter Choices. This includes better transport planning, the provision of personalised travel information and the development of strategic modal interchanges.*
 - *Promotion of eco-driving.*
 - *Promotion and support for walking and cycling.*
 - *Investment in bus and rail services.*
 - *Improved traffic management on the strategic road network, including average speed cameras and variable speed limits.*
 - *Active promotion of infrastructure for electric and hydrogen vehicles.*
 - *Supporting the freight industry to reduce emissions.*
 - *Ensuring that land use planning decisions are informed by the need to reduce travel”.*
58. It is not clear the extent to which the Climate Change Strategy has influenced the draft Plan (it appears to have had marginal influence); only three interventions are specifically mentioned⁴¹:
- *“Promoting healthier and more active travel journeys*
 - *Supporting public transport through significant investment in bus, rail and the Metro*
 - *Enhancing network resilience”.*

³⁹ <http://wales.gov.uk/docs/desh/publications/101006ccstratfinalen.pdf> p38

⁴⁰ <http://wales.gov.uk/docs/desh/publications/101006ccstratfinalen.pdf> p54

⁴¹ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 1.4.27

59. The Climate Change Commission adopted a position paper on transport and climate change in Wales in June 2012⁴². The first principle that the Climate Change Commission recommended be adopted by Welsh Government in planning to reduce emissions from transport was to:
*“Apply[.] the sustainable transport hierarchy: avoid, shift, improve, in all developments and projects”*⁴³
60. This principle has apparently been ignored by the draft National Transport Plan.
61. The paper also recommended 10 ‘priority actions’ to accelerate progress on transport emissions. Several of these deserve special mention because the draft Plan appears not to have made use of the guidance:
- Reduce travel demand by exploiting ICT and next generation broadband (broadband is not mentioned in the draft Plan)
 - Encourage and enable behaviour change in both urban and rural contexts (modal shift – which is what this refers to – is barely mentioned in the draft Plan)
 - Show leadership and reward best practice (little evidence that the Welsh Government is demonstrating its commitment to low-carbon, sustainable transport)
 - Achieve resilient, low-carbon freight (no mention of low-carbon in relation to freight in the draft Plan)
62. Thus far, transport has achieved its reduction target, with emissions falling in 2012 by 8.2% from the 2006-2010 baseline⁴⁴.
63. The 2014 Climate Change Annual Report acknowledges that the reasons for this reduction are:
- Increasing efficiency of the car fleet (and therefore fewer emissions per distance travelled)
 - A decrease in road traffic of 3% over the baseline period
64. No other factor can reasonably be foreseen to contribute substantially to reductions between now and 2020. Of these two factors, only one is materially within the sphere of influence of the Welsh Government, that is, continuing to encourage modal shift such that road traffic continues to decrease.
65. The Climate Change Committee considers measures that will *“reduce car trips through encouraging modal shift, car sharing, remote working etc.”* as important in assisting with the emissions reduction over the next few decades⁴⁵. The Committee considers that distance driven would reduce by 5% as a result of a comprehensive Smarter Choices programme, for example⁴⁶.
66. However, the Welsh Government has downplayed this important contributory factor⁴⁷:

⁴² http://archive.cynnalcyrmru.com/sites/default/files/CCCW%20Transport%20Position%20Paper%2006%20June_0.pdf

⁴³ http://archive.cynnalcyrmru.com/sites/default/files/CCCW%20Transport%20Position%20Paper%2006%20June_0.pdf p3

⁴⁴ <http://wales.gov.uk/docs/desh/publications/141222-climate-change-annual-report-2014-en.pdf> p26

⁴⁵ http://www.theccc.org.uk/wp-content/uploads/2013/12/1785b-CCC_TechRep_Singles_Chap5_1.pdf p97

⁴⁶ http://www.theccc.org.uk/wp-content/uploads/2013/12/1785b-CCC_TechRep_Singles_Chap5_1.pdf p108

⁴⁷ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 2.8.9

“the Committee on Climate Change is clear that technology will be the key factor in emission reduction for transport and its abatement scenario assumes the bulk of reductions to 2030 will come from: electric vehicles and hydrogen, engine efficiency improvements and biofuels”

67. This is in contradiction to a later statement:

“There is scope to increase the share of all journeys for public transport and to dramatically increase the level of active travel given that, across Wales, 35 per cent of people travelling to their workplace are within 5km or less”⁴⁸.

68. We would be grateful for clarification of the Welsh Government’s ambition on active travel, modal shift and demand management/demand reduction as part of the National Transport Plan.

69. One factor that is known to *increase* road transport is major new road infrastructure. It is therefore impossible to reconcile the National Transport Plan’s support for a new stretch of M4 to the south of Newport with reducing car traffic. Unless the investment in ways to achieve modal shift *far outweighs* that in new road infrastructure, the induced traffic increase by new roads will very likely create problems for attainment of the transport climate targets.

70. The Draft Plan notes that effort will be focused on reducing transport emissions to between 5.21 and 5.78 MtCO₂e by 2020. We would be grateful for an explanation of the variation in the scope of this target – which is equivalent to taking around 180,000 cars off the road – for Wales, a very significant difference⁴⁹.

71. The Welsh Government uses TEMPro forecasting as the basis for its policy decisions. If we assume the TEMPro modelling to be correct (it isn’t – see below), we would expect a roughly 1% increase in traffic across Wales per year until 2040⁵⁰.

72. Fuel efficiency has apparently improved by 2% per year over the past 15 years or so⁵¹.

73. However, fuel consumption for cars in real-world driving in 2011 was 21% greater than that assumed from testing⁵². (Some studies put this discrepancy at 35%⁵³). This gap had increased from 8% in 2001⁵⁴. So a minimum of 13% of the efficiency gains over this period are fictitious. These flaws in testing vis a vis real life have major implications for assumptions being made by governments on forecast improvements in fuel efficiency by the vehicle fleet in general.

74. In fact, the assumptions used by the Welsh Government in calculating future improvements in fuel efficiency are so flawed that the European Commission is replacing the current 20-year-old testing procedure with a new one in 2014 which it is hoped:

⁴⁸ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 2.9.3

⁴⁹ Assuming an average of 3.1 tonnes CO₂e per car per year http://www.carbonindependent.org/sources_car.htm

⁵⁰ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> Table 2 (p21)

⁵¹ <https://www.gov.uk/government/statistical-data-sets/env01-fuel-consumption> Table ENV0103

⁵² <http://www.theicct.org/fuel-consumption-discrepancies>

⁵³ <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2013-000307+0+DOC+XML+V0//EN>

⁵⁴ <http://www.theicct.org/fuel-consumption-discrepancies>

“will enable the gap between declared and actual fuel consumption to be reduced thus providing more reliable information to the consumers and legislators”⁵⁵.

75. This means that *actual* improvements in efficiency are in the order of 1% per year. So the greenhouse gas emissions reduction as a result of improved fleet efficiency (1% annually) will offset the modelled increase in traffic (1% annually).
76. What then of the remaining challenge of reducing greenhouse gas emissions by 3% per year until 2020? The Welsh Government has no credible means of achieving it other than through reducing traffic, which would infer demand management and modal shift.
77. Nowhere in the National Transport Plan – other than in relation to shifting freight from road to rail – is modal shift mentioned.
78. And there is just one mention of demand reduction, which itself shows the pitiful contribution such action is expected to make to transport emissions reduction between 2010 and 2030 in Figure 2.45.
79. This is despite “reducing the need for travel” being one of the eleven climate change mitigation factors highlighted in the Strategic Environmental Assessment accompanying the draft Plan (and theoretically informing it)⁵⁶.
80. The Strategic Environmental Assessment also states that transport is the joint third highest CO₂-emitting sector in Wales and the impact of transport *“is likely to continue to grow”⁵⁷.*
81. It can only be concluded that the Welsh Government has, through design or neglect, wholly ignored the climate impacts of its ‘predict and provide’ method of road transport planning, and has also paid scant attention to the Strategic Environmental Assessment it commissioned for the draft Plan.

Modelling and road use

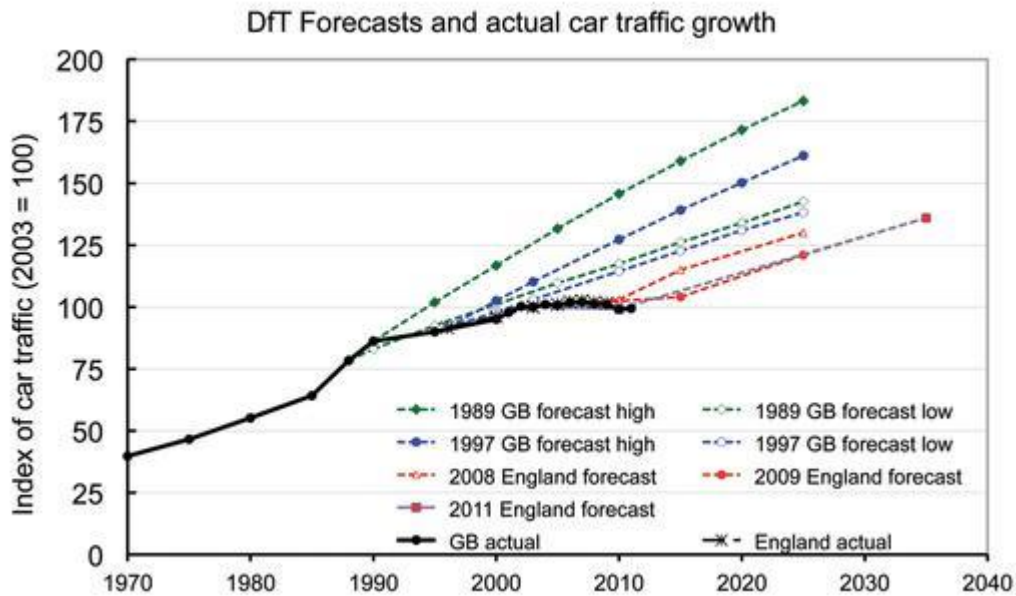
82. A large part of the National Transport Plan appears to be based on the TEMPro modelling. It should by now be obvious that this modelling is not fit for purpose.
83. Firstly, traffic forecasting by the Department for Transport – which uses exactly the same modelling as the Welsh Government – has been risible⁵⁸:

⁵⁵ <http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2013-000307&language=EN>

⁵⁶ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> p33

⁵⁷ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> p71

⁵⁸ <http://www.bettertransport.org.uk/campaigns/roads-to-nowhere/ltt-130412>



84. Professor of Transport Policy Phil Goodwin comments:

“The figure you see above is the result so far, for car traffic, showing successive downwards revision of the forecasts as for 25 years car traffic stubbornly refused to behave according to expectations. The revisions were of the form ‘growth later’, not ‘less growth... anybody, just anybody, looking at this graph is going to think that there is a downside risk of the long term traffic flows being substantially less than the forecasts, as they have continually been for at least the last quarter of a century”⁵⁹.

85. The Department for Transport made a traffic projection for Wales in 2011⁶⁰. The projection of growth in traffic is shown in the table below.

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

86. Over the period 1993-2013 the average annual growth rate was 1.11%⁶¹.

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

88. Meanwhile, the same TEMPro model that was used during the Welsh Government’s M4 consultation has already proven wildly inaccurate. In 2005, total traffic in the south-east Wales authorities was

⁵⁹ <http://www.bettertransport.org.uk/campaigns/roads-to-nowhere/ltt-130412>

⁶⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4244/road-transport-forecasts-2011-annex-miles.xls

⁶¹ <https://www.gov.uk/government/publications/road-traffic-estimates-in-great-britain-2012> TRA8901.xls

7,928 million vehicle miles⁶². In 2013, total traffic had declined to 7,869 million vehicle miles, a decrease of 0.7%, or **3.7% lower than the Welsh Government's forecast in the first year for which data has become available**. It is difficult to conceive of a more stunning failure to correctly forecast traffic patterns.

89. The whole analytical basis for the National Transport Plan is thus fundamentally and fatally flawed, and this modelling and all sections of the Plan that are based on it should be excised from the draft Plan.
90. The Welsh Government has taken freight figures from 1954 to 2010 and erroneously inferred that road freight represents an ever-increasing portion of the total (Figures 2.10 and 2.11).
91. Figures specific to Wales are absolutely clear: even assuming that all light goods vehicles are carrying freight at all times, there has been no discernible increase in freight on roads in Wales (see Table) from 2006 to 2013⁶³.

| Type | Billion miles travelled | | | | | | | |
|-------|-------------------------|------|------|------|------|------|------|------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| LGV | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 |
| HGV | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Total | 3.1 | 3.2 | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.2 |

92. The Welsh Government claims that “areas of congestion” on the road network in south Wales include “the M4 around Newport”⁶⁴. However, the map that accompanies the text (Figure 2.24) appears to show journey speeds on the M4 around Newport of 50-60mph or greater. Given that for much of the time there are speed restrictions of 50mph in this area, the conclusion must logically be reached that journey speeds are on average greater than the speed limit. We would be grateful for confirmation of this conclusion.
93. The repeated mentions of ‘congestion’ are not supported by any evidence; the Welsh Government has no means of measuring congestion.
94. The evidence provided above strongly suggests that the Welsh Government is being disingenuous through claiming to follow
*“an evidence based approach for understanding the performance of the transport system, assessing the need for intervention and considering the social, environmental and economic impacts of our plans”*⁶⁵.

Maintenance

⁶² <https://www.gov.uk/government/publications/road-traffic-estimates-in-great-britain-2013> TRA8901.xls

⁶³ <https://www.gov.uk/government/statistical-data-sets/tra01-traffic-by-road-class-and-region-miles> TRA0106.xls, Road traffic (vehicle miles) by vehicle type and region in Great Britain, annual from 2006

⁶⁴ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 2.7.4

⁶⁵ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 5.1.1

95. Given that the proportion of the trunk and motorway network requiring maintenance is more than 50% greater than the target level⁶⁶, resources that the Welsh Government had thought to allocate to road-building would be more profitably allocated to road maintenance. After all, if the Welsh Government is struggling to maintain the roads that exist at this point in time, allocating expenditure to the construction of new roads will worsen the state of existing roads.
96. The same holds true for the condition of footways. Given that the Welsh Government wishes to increase active travel (and, indeed, has legislated to that effect), it is disturbing to discover: *“The condition of footways on non-trunk roads is deteriorating throughout Wales. In 2006 25.7% were subject to a loss in quality. There was a trend of steady deterioration between 1995 and 2004 (Data Unit Wales, 2007)”*⁶⁷.
97. The Welsh Government is also aware of the *“deterioration of the local highway asset”*⁶⁸; the same principle holds true – while existing roads are in poor condition it makes little sense to invest in new road infrastructure that will itself increase the maintenance burden.

Road safety

98. Friends of the Earth Cymru has previously proposed a number of interventions that should be included in transport planning in order to decrease casualties. They are:
- A default 20mph speed limit in urban areas and rural towns and villages
 - Mandatory cycle proficiency test as part of the driving test
 - Pedestrian priority at non-signalised junctions
 - Introduce a ‘presumption of liability’
 - Daytime running lights
99. Further information can be found in our response to the Welsh Government’s 2012 Road Safety Strategy: <https://www.foe.co.uk/sites/default/files/downloads/road-safety-strategy-75463.pdf>
100. Given the figures provided in 2.6.16 to 2.6.22 of the National Transport Plan, it is extremely disappointing to see that no mention is made of the single intervention that would have the biggest reductive effect on collisions, injuries and deaths for vulnerable road users: 20mph zones in urban areas and rural villages.
101. This is all the more peculiar given that “increasing safety and security” is one of the five priorities of the Wales Transport Strategy and that “sustainable travel and safety” is one of the five ‘key priorities of the Draft National Transport Plan.
102. There are many reasons to favour a default 20mph speed limit in urban areas and rural towns and villages, including major improvements to road safety and cutting greenhouse gas

⁶⁶ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 2.6.7

⁶⁷ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-env-rep-en.pdf> p21

⁶⁸ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.2.27

emissions. The Welsh Government has previously noted that *“there is overwhelming evidence that the frequency and severity of collisions rises with speed”*⁶⁹.

103. All of the KSI casualties contributory factors relating to drivers shown in the draft Road Safety Delivery Plan’s Figure 3 are exacerbated by speed. Reducing default speed limits in urban areas and rural towns and villages to 20mph would by its nature therefore reduce the propensity for KSI casualties.
104. Speed reduction is the outstanding means to reduce fatalities. A 10% reduction in the average speed of traffic has been estimated to reduce the number of road accident fatalities by 38%. By way of contrast, a 10% overall reduction in drink-driving would give a reduction in fatalities of 1%, while the same reduction in non-wearing of seat belts would lead to 0.8% fewer fatalities⁷⁰.
105. The Welsh Government’s previous Road Safety Strategy notes:
*“Vehicle speed is not just a problem on non-built up roads. In built-up areas, where there are much larger concentrations of pedestrians and cyclists, the speed of vehicles is a major factor in collisions and casualties. Even at the normal 30mph limit, 4 out of 10 pedestrians who are hit by a motor vehicle (travelling at a legal speed) will die”*⁷¹.
106. The Strategy draws on research that shows that 20mph zones reduce average motor vehicle speed by 9mph and collisions by 60% (67% of collisions involving children and 29% involving cyclists).
107. In the years since the Strategy’s publication, new research has been published that supports further action on 20mph limits. The Transport Research Laboratory conducted both road-based and driver-based studies that provided “clear evidence” that each 1mph reduction in average speed leads to a 5% reduction in collision frequency⁷². Greatest potential for collision reductions were found to be in urban areas with low average speeds.

The Plan

108. Given the above, the Plan itself (‘Delivering Improvements’) must be entirely redrafted. After all, the Welsh Government’s planning:
- Fails to logically flow from the Wales Transport Strategy
 - Is based on road transport models (“evidence”⁷³) that are proven to be flawed
 - Downgrades environmental concerns to less than 6% of the status they have in the overarching Strategy

⁶⁹ <http://wales.gov.uk/docs/det/consultation/120919roadsafetydelplanen.pdf> 95

⁷⁰ http://lib.ugent.be/fulltxt/RUG01/001/813/795/RUG01-001813795_2012_0001_AC.pdf p89

⁷¹ <http://www.roadsafetywales.co.uk/strategies/info/rss.pdf> 5.21

⁷²

http://www.trl.co.uk/online_store/reports_publications/trl_reports/cat_traffic_and_transport_planning/report_the_effects_of_drivers_speed_on_the_frequency_of_road_accidents.htm

⁷³ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.1.2

- Fails to even mention, let alone consider, the outstanding means of reducing road injuries and fatalities (20mph schemes)
- Is not coherent with other important Welsh Government strategies, notably the Sustainable Development Scheme and the Climate Change Strategy, and the commitments that stem from them
- Is made without any indication of funding allocation to different forms of transport (capital or revenue)
- Fails to demonstrate the slightest understanding of the (in)equality consequences of new road infrastructure

109. Notwithstanding these multiple serious flaws, we have comments on the detail of the Plan that may assist when redrafting.

110. The apparent major rationale for investing in major enhancements to the road network is to “*stimulate the economy*”⁷⁴. It is not clear whether the Welsh Government is referring to the economic activity that results from public funding of infrastructure (any large construction project), or purported wider economic activity that results from increasing road coverage in Wales.

111. If the former, then it is a nonsensical argument. The Welsh Government may as well divert funding into any construction activity – or indeed, into activity that provides genuine societal benefit, such as improving healthcare.

112. If the latter, then no evidence has been provided that supports this contention. Certainly, there is much dispute as to whether large road schemes provide benefits to a particular area.

113. It is worth quoting part of the conclusions of the SACTRA report:
*“Some authors have claimed that national programmes of public investment, including road construction, lead to high rates of social return measured in terms of economic growth and productivity improvement. Other authors suggest that such effects do occur but on a smaller scale than has been claimed, and that, in general, any contribution to the sustainable rate of economic growth of a mature economy, with well-developed transport systems, is likely to be modest. **Our investigations support the latter assessment**... Our studies underline the conclusion that generalisations about the effects of transport on the economy are subject to strong dependence on specific local circumstances and conditions”*⁷⁵.

114. Clearly then, any individual road construction project must be supported by a thorough Cost-Benefit Analysis (as outlined in 4.2.2). The problem with current practise in this area is that such analyses are distorted by Treasury guidance that states that, for example, more fuel being used is a benefit to society (because of the taxes raised). The Welsh Government should commission a new methodology for Cost-Benefit Analysis for Wales that recognises some of the failings in the current approach.

⁷⁴ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 3.2.19

⁷⁵ http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft_econappr/documents/pdf/dft_econappr_pdf_022512.pdf p7

115. We reiterate the point made earlier that:
 “some indication of capital and revenue allocation should be included in the document... **The critical element here is the level of investment in the different strands of the Plan**”
116. This is particularly relevant given the statement that:
“The Welsh Government’s transport capital funding will be concentrated on fulfilling our role as a highways authority; investment in integrated transport improvements including the Metro; road safety and support for local authorities where a project contributes to Welsh Government priorities. The Welsh Government’s transport revenue will be concentrated on fulfilling our role as a highways authority and funding rail and bus services, including concessionary fares; funding innovative finance instruments and using smaller amounts to promote road safety and active travel”⁷⁶.
117. This indicates that active travel is a very minor part of the overall funding package.

Strategic Environmental Assessment

118. We note that WelTAG – a tool that lacks “*both a sound scientific basis and an underlying evidence base*” has been used to assess most of the interventions.
119. Due to the length of the SEA tables, we have only had the opportunity to skim them. Nonetheless, some surprising aspects have arisen.
120. The supposition that a new M4 to the south of Newport will have a “moderate beneficial” effect on air quality⁷⁷ is unsupported by the evidence, and we assume that the direction of the effect has been unwittingly reversed from “moderate negative”. The text states:
“In the longer term, an increase in overall traffic is forecast, leading to increasing emissions and decreasing air quality”⁷⁸.
121. The same is true for other road schemes, such as the Bontnewydd bypass.
122. Also for the M4 scheme, the Welsh Government’s contention that “*the net benefit for biodiversity is considered to be positive in the long-term*”⁷⁹ is unsupported by evidence and should be removed.
123. Also for the M4 scheme, it is very difficult to see how a scheme that will generate additional car trips will have a minor positive effect on people’s health and physical fitness⁸⁰. The same applies to the Bontnewydd bypass, which is accorded a moderate beneficial impact⁸¹.

⁷⁶ <http://wales.gov.uk/docs/det/consultation/ntp/150116-ntp-consultation-document-en.pdf> 4.2.5

⁷⁷ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC4

⁷⁸ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC4

⁷⁹ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC67

⁸⁰ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC102

⁸¹ <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC104

124. For the A55 Abergwyngregyn improvements, we fail to see how improving traffic flow will herald a major improvement in water quality⁸².

⁸² <http://wales.gov.uk/docs/det/consultation/ntp/141210-ntp-seaer-non-tech-sum-c-en.pdf> pC142