

The State of Roads in Wales

October 2018



The National Assembly for Wales is the democratically elected body that represents the interests of Wales and its people, makes laws for Wales, agrees Welsh taxes and holds the Welsh Government to account.

An electronic copy of this document can be found on the National Assembly website: www.assembly.wales/SeneddEIS

Copies of this document can also be obtained in accessible formats including Braille, large print, audio or hard copy from:

Economy, Infrastructure and Skills Committee
National Assembly for Wales
Cardiff Bay
CF99 1NA

Tel: **0300 200 6565**

Email: **SeneddEIS@assembly.wales**

Twitter: **@SeneddEIS**

© **National Assembly for Wales Commission Copyright 2018**

The text of this document may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not used in a misleading or derogatory context. The material must be acknowledged as copyright of the National Assembly for Wales Commission and the title of the document specified.

The State of Roads in Wales

October 2018



About the Committee

The Committee was established on 28 June 2016 to examine legislation and hold the Welsh Government to account by scrutinising expenditure, administration and policy matters, encompassing (but not restricted to): economic development; transport; infrastructure; employment; skills; and research and development, including technology and science.

Committee Chair:



Russell George AM
Welsh Conservatives
Montgomeryshire

Current Committee membership:



Mohammad Asghar AM
Welsh Conservatives
South Wales East



Hefin David AM
Welsh Labour
Caerphilly



Vikki Howells AM
Welsh Labour
Cynon Valley



Adam Price AM
Plaid Cymru
Carmarthen East and Dinefwr



David J Rowlands AM
UKIP Wales
South Wales East



Lee Waters AM
Welsh Labour
Llanelli



Joyce Watson AM
Welsh Labour
Mid and West Wales

The following Member was also a member of the Committee during this inquiry:



Mark Isherwood AM
Welsh Conservatives
North Wales

Contents

Chair’s foreword	5
Recommendations	7
Conclusions	9
1. Background.....	12
2. Maintenance	14
2.1. Condition of the roads	14
2.2. Funding for maintenance	18
2.3. Multi-year funding	21
2.4. Asset management approach.....	23
2.5. Minimising disruption to road users	24
3. Enhancement.....	27
3.1. Planning and delivery of major projects.....	27
3.2. Early Contractor Involvement	28
3.3. A Pipeline of projects	29
3.4. The Mutual Investment Model	30
4. Sustainability	33
4.1. New legislation	33
4.2. Assessments of sustainability	35
Green corridors	38
Annex A: Terms of reference	40
Annex B: Witnesses.....	41



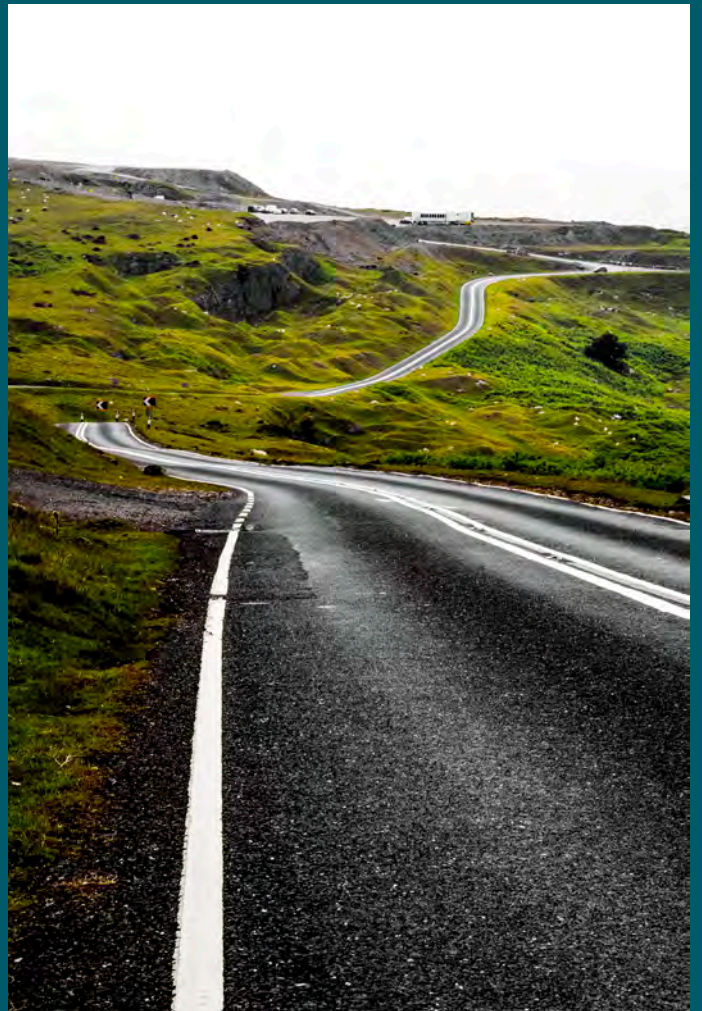
Photo by **Iain McCallum** ▲



Photo by **Gareth Thompson** ▶



Cover photo by **Antony Maybury** ▼



Chair's foreword

The condition of Wales' roads is a matter of great importance to all of us. Whether we drive, cycle or take the bus we are all road users. The everyday things that sustain us, including much of our food, is transported on the roads.

In addition to its importance to all of us as part of our lives, the road network is one of the nation's greatest assets, worth an estimated £13.5bn, and covers over 21,000 miles.¹

Our inquiry has looked in detail at how we maintain our roads; how we improve them; and whether this approach meets the expectations the Welsh Government has set for itself in the new laws it has passed.

One of the sobering aspects of this inquiry has been how many of the issues raised in previous studies remain difficult. There is an overwhelming consensus that long term funding for local government and trunk road agencies would lead to improvements – but we remain stuck in an annual cycle.

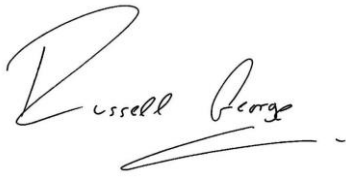
Indeed, the lack of money and priority for repairs stands out. Without sufficient funding, the roads we have will deteriorate. There will be savings and efficiencies to be made by using different techniques and substances – we recommend the creation of a committee of road-building experts to advise the government on these matters.

Committee Members were mindful of how much the public talks about the state of our roads, and we were keen to enable people to contribute to this work.

We held a photographic competition to encourage people from all parts of Wales to submit images that represent the network. We received a cross section of images, some funny, some breathtakingly beautiful, and others highlighting pitifully poor pavements.

¹ Numbers taken from written evidence provided by Professor Nigel Smith, Professor of Project & Transport Infrastructure Management, Institute for Resilient Infrastructure, School of Civil Engineering, University of Leeds.

The winning image can be seen on the front of our report, and some of the runners-up appear in the centre spread. I was pleased to learn that some of these holes have been filled since the pictures were taken.

A handwritten signature in black ink that reads "Russell George". The signature is written in a cursive style with a large initial 'R' and a long horizontal flourish at the end.

Russell George AM
Chair, Economy, Infrastructure and Skills Committee

Recommendations

- Recommendation 1.** The Welsh Government should evaluate whether mobile apps like Boston’s Street Bump could be used to improve the quality of real time data available for Wales’ road network..... Page 17
- Recommendation 2.** Highway Asset Management Plans (for local authorities and trunk road agencies) should be published and collected in a single place to ensure that there is transparency and public accountability around the process.
..... Page 18
- Recommendation 3.** Welsh Government should consider how best it could incentivise local authorities to invest in maintenance. If additional funding on the scale of £50m a year is not possible, this could involve a match-funding approach whereby the Welsh Government tops up additional spending by local authorities.
..... Page 21
- Recommendation 4.** If Welsh Government can provide five-year funding to Transport for Wales then it can – and should – do the same for local authorities.
..... Page 22
- Recommendation 5.** The Welsh Government should bring together a stakeholder group similar to the Highways England Pavements Efficiency Group to advice on the most effective materials and processes. Page 23
- Recommendation 6.** Welsh Government and local government should ensure that priority and funding is given to cost-effective long-term planned maintenance in order to reduce more costly short-term fixes..... Page 24
- Recommendation 7.** Where geology or the laws of physics prevent full adherence to the standards laid down for active travel routes, then any decision to amend proposals should be taken in full collaboration with users. Page 29
- Recommendation 8.** Future iterations of the Welsh Government’s National Transport Finance Plan should include clearer indications of priorities and timescales, including details of where timescales have changes and why, the stage of development the project has reached and available funding. The National Infrastructure Commission for Wales should recommend priorities..... Page 30

Recommendation 9. The Mutual Investment Model should be used when no other funding model is viable, and only where projects are of the £200m+ scale. Where it is used, projects should be evaluated using clear criteria, and the lead authority should draw on procurement and delivery expertise developed in previous MIM schemes..... Page 32

Recommendation 10. Welsh Government should ensure that a centre of Mutual Investment Model expertise develops which will provide support and guidance for public authorities to implement complex procurement processes (like MIM) and ensure value for money..... Page 32

Recommendation 11. The Welsh Government should commission an independent review of recent Welsh Post Opening Project Evaluations to assess whether new Welsh roads have delivered against the estimated economic benefits that were projected when the schemes were agreed..... Page 37

Recommendation 12. The forthcoming Wales Transport Strategy should set a clear priority for maintaining the existing road network, mainstreaming and upgrading active travel infrastructure, and prioritising access, in preference to building new roads..... Page 37

Recommendation 13. Welsh Government should ensure that support is available to ensure that the new WelTAG guidance is widely understood, and implemented both by public bodies, and contractors working on their behalf..... Page 38

Recommendation 14. The Committee is keen to ensure that every new road project should be subject to challenge to ensure the Well-being of Future Generations Act has been rigorously applied in the scheme. If the WelTAG guidance is being followed, this should happen at all stages. The Welsh Government should audit a small selection of projects to assess the extent to which is this happening, and report back to the Committee in 12 months' time. Page 38

Conclusions

Conclusion 1. Knowing where and what the problems are is crucial to effective maintenance of roads. The low rate of response (36%) from local authorities in Wales limits the usefulness of the ALARM survey, which is more widely supported in England..... Page 17

Conclusion 2. The evidence suggests Wales's roads are in no worse condition than those in other parts of the UK, however, severe winter weather in 2016/17 and 2017/18, and reduced funding for maintenance, has had a negative impact on the surface of roads. This is leading to more money being spend on short-term fixes, rather than long-term maintenance..... Page 17

Conclusion 3. While the condition of bridges and other structures is recorded in Highway Asset Management Plans these plans are not always easily accessible to the public..... Page 17

Conclusion 4. While local roads, and associated assets like bridges and lighting are the responsibility of local authorities, together they make up an important national asset. Under current funding trends, and rising demand for social services, it seems unlikely that it will be possible for local authorities to find significant additional funding for maintenance without additional support. Page 21

Conclusion 5. The Welsh Government's commitment to a five year programme of transport capital funding through Transport for Wales is welcome. Other highway authorities would benefit from a similar long-term funding commitment... Page 22

Conclusion 6. There is a widespread consensus that a long-term asset management based approach to maintenance is more cost effective and produces better results for road users. Highway authorities in Wales are committed to adopting this approach, but have been hampered by short-term funding allocations and competing local needs. Page 24

Conclusion 7. While the Welsh Government and Local Government are aware of the disruption that can be caused by poor communication of planned and unplanned road maintenance, it is clear that there remains room for improvement. The Committee awaits the relaunch of Traffic Wales website and associated social media this Autumn to see if this can tackle negative perceptions. Page 26

Conclusion 8. While the Welsh Government’s National Transport Finance Plan sets out a pipeline of future projects, there is frustration that it lacks prioritisation and funding certainty..... Page 30

Conclusion 9. While the Mutual Investment Model (MIM) is in its early stages, and the Committee commends efforts to innovate in funding projects, we remain to be convinced that this model will be an effective option for anything other than the most straightforward large scale projects. In particular, the Welsh Government must exercise caution to ensuring that MIM provides value for money and the public sector is not exposed to large scale risk. Page 32

Conclusion 10. MIM schemes will require a level of procurement expertise that is not widely exhibited in the Welsh public sector. Highly skilled and experienced people will need to be engaged and retained. Page 32

Conclusion 11. The Committee believes that the Well-being of Future Generations Act demands a new way of thinking. This means questioning and challenging traditional models used to predict traffic growth and estimate economic growth. Case studies like the M4 Relief Road – and the disputed interpretation of the Act by the Commissioner and the Welsh Government – will go a long way to clarifying how future decision-making should be undertaken..... Page 37

Conclusion 12. The wildly different interpretations of the Wellbeing and Future Generations Act presented to the M4 Public Inquiry by the Commissioner and the Welsh Government are not easily resolved – but resolved they must be if there is to be clarity on how to interpret the legislation. The Committee hopes this clear interpretation can be agreed without expensive legal intervention, but acknowledges that may be the only way to achieve true clarity in a complex and multi-dimensional argument..... Page 37

Conclusion 13. The Committee is persuaded by the CBT’s argument that building new roads should be a last resort, and that maintaining the current road network – including active travel routes – should be the priority for a sustainable transport policy. Page 37

Conclusion 14. The traditional forecasting methods and approach to assessing the benefits of new road schemes are increasingly being challenged both by new economic research, and the Welsh Government’s commitment – and legislation – to deliver sustainable development. The Committee expects the Welsh Government to work with the Future Generations Commissioner to develop its thinking in this area, and develop new tools to assess the holistic impact of road enhancements and maintenance. Page 38

Conclusion 15. The new Welsh Transport Appraisal Guidance (WelTAG 2017) has been drawn up in conjunction with the Future Generations Commissioner to ensure that new transport schemes take full account of the Wellbeing and Future Generations Act, and all it entails. Ensuring the guidance is understood and followed by public bodies, and their contractors, will be key to its success...Page 38

Conclusion 16. The Welsh Government’s new five-year ‘Green Corridors’ initiative is welcome, and in marked contrast with the annual budgets that have been given to highway authorities in recent year. It is unclear whether funding is coming from existing budgets, and the Committee will seek further information on this in its budget scrutiny.....Page 39

1. Background

This chapter sets out why the Committee opted to conduct this inquiry.

1. An inquiry into the State of Roads in Wales was suggested in Committee stakeholder engagement events by a range of stakeholders, including the haulage industry and civil engineering sector.
2. The Committee agreed to focus its inquiry on:
 - The condition and approach to maintenance of the local road, trunk road and motorway network;
 - Delivery of enhancement projects on the local road, trunk road and motorway network; and
 - How far the approaches taken to highway maintenance and improvement are sustainable.
3. The following chapters of this report address each of these issues.
4. This report builds on work undertaken in 2015 by the Fourth Assembly Public Accounts Committee on value for money of motorway and trunk road investment² (reported June 2015). This in turn drew on a 2009 Auditor General for Wales (AGW) report on Major Transport Projects.³
5. The Committee was mindful of the on-going Public Local Inquiry (PLI) into the M4 Corridor around Newport Project, and tried as far as possible, to avoid repeating the specific arguments around this and other controversial schemes or proposals.
6. The Committee held a consultation from Monday, 26 March 2018 to Friday, 27 April 2018 which received 32 submissions. The full text of consultation responses can be seen at:
<http://senedd.assembly.wales/mgConsultationDisplay.aspx?id=297>

² <http://senedd.assembly.wales/mgIssueHistoryHome.aspx?IId=11904>

³ www.audit.wales/publication/major-transport-projects

7. The Committee also held a photographic competition asking the public to capture on camera “the State of the Roads in Wales”. The winning image was taken by Anthony Maybury from Wrexham and depicts a lorry passing by a large pothole on the A525 near Bronington.

2. Maintenance

This chapter looks at the condition of the local road, trunk road and motorway network. It also looks at the approach to maintenance, and how it is funded.

2.1. Condition of the roads

8. Data about the condition of the roads, published annually by the Welsh Government,⁴ shows an improving trend over recent years on both the trunk road / motorway network and local roads. Overall, the condition of the local road network is significantly worse than trunk roads / motorways (10.7% of the local network in poor condition in 2016-17, compared to 4.9% of the motorway and 1.8% of the trunk road requiring close monitoring “now” in 2017-18). There is significant variation between local authorities.

9. Evidence from consultation respondents often suggests the network is deteriorating. This may reflect the perception of condition, or witnesses may be drawing on the widely reported Asphalt Industry Alliance (AIA) ALARM survey⁵ which showed an increase in the percentage of local roads classed as “poor”, based on a 36% (just 8 of the 22 Welsh local authorities) response rate. Establishing a firm evidence base for road condition is difficult. There are significant variations in condition within the overall Welsh Government data, and the condition of the trunk road / motorway network and local roads are reported differently.

10. In oral evidence from road users the Freight Transport Association (FTA) described Welsh roads as “deteriorating” and “a real patchwork quilt”. Leeds University academics pointed out that the impact of the recent harsh winter is not yet reflected in published data. The Road Haulage Association (RHA) suggested “the roads are getting worse, particularly where there have been previous patches”. Cardiff Bus agreed that there are “further problems when...repairs have been done hastily and those problems can reappear”. The Confederation of Passenger Transport emphasised the impact that road condition can have on the punctuality of bus services.

⁴ <https://gov.wales/statistics-and-research/road-lengths-conditions/?lang=en>

⁵ www.asphaltuk.org/alarm-survey-page/

11. In oral evidence the Federation of Small Businesses (FSB) stressed the impact of condition on members, and that there is a perception that local roads are in a worse condition. It said members expect to be able to move freely between the trunk road / motorway network and the local network and don't recognise administrative distinctions in their management.

12. However, there is little evidence to suggest that the network in Wales is much worse than in other parts of the UK. Academics from Leeds University told the Committee that there hasn't been a significant change in condition in Wales, and found no evidence that Wales isn't getting value for money.

13. The Campaign for Better Transport (CBT) refer to a "crisis" in road condition. It also suggested an increased Welsh response rate to the ALARM survey would be useful. CBT's Brigit Fox told the Committee that, "underinvestment in maintenance over the years, exacerbated by a combination of larger, heavier vehicles on the road and adverse weather conditions, which continue to make the problem worse".⁶

14. Broadening the issue to consider congestion as well as condition, the Confederation of British Industry (CBI) emphasised the cost of delay with freight operators working to timed delivery slots. The CBI's Leighton Jenkins also said that in a recent infrastructure survey:

"Welsh firms said they are the most dissatisfied of any part of the UK with our road network, and they had the least confidence of any part of the UK that the road network will improve in the short-to-medium term."⁷

15. Richard Jones, Head of Service, South Wales Trunk Road Agent, said:

"I think evidence shows that there has been a slight deterioration in the overall condition over the last five years. The evidence base we look at in making that viewpoint is the number of category 1 defects that we note on the network. So, the three elements we look at in terms of the evidence are the surfacing type and environmental factors. What we can show is that, whilst the increase has been slight—about 20 per cent increase over the last three years—what we are seeing is that the effect of environmental factors such as last year's winter, and the previous

⁶ Economy, Infrastructure and Skills Committee, 21 June 2018, para 8

⁷ Economy, Infrastructure and Skills Committee, 21 June 2018, para 217

winter, has shown a rapid increase over the months of January, February and March.”⁸

16. In terms of the trunk road / motorway network, the Welsh Government’s evidence paper says data suggests maintenance strategies have been effective:

“While the percentage of motorway with skidding resistance below investigatory level (indicative of the need for maintenance) remains low, the figure for all purpose trunk roads is on an upward trend; the overall value of the backlog of carriageway maintenance is approximately £83M: the value of the backlog of structures maintenance is currently up around £39M and the number of category 1 defects (i.e. those with immediate or imminent danger to the travelling public) in the carriageway requiring unplanned maintenance, often at peak periods to address, causing congestion and negatively impacting the economy are on a upward trend.”⁹

17. Councillor Andrew Morgan, Leader of Rhondda Cynon Taf Council, and the WLGA’s lead spokesperson for transport said:

“Generally, if I'm honest and blunt, I think that local authorities are doing the best job they possibly can, but, overall, there is significant room for improvement in terms of the condition of the asset. That is largely down to the funding that's available, certainly after the recent bad winters we've had, in terms of the condition of the actual carriageways. I think there's a significant backlog, as I think every member of the public is aware, out there, and it is a difficult choice for local authorities in terms of what we maintain.”¹⁰

18. Cllr Morgan explained that in addition to road surfaces, local authorities also had to consider the condition and maintenance of highway structures such as bridges, and street lights. He said:

“We know, for example, that there are hundreds of bridges in Wales with monitoring on. Some, if they're not replaced in the coming years, will either be closed—because they simply are under risk assessment, which means that they can't continue to be used, there are weight

⁸ Economy, Infrastructure and Skills Committee, 5 July 2018, para 8.

⁹ Written evidence

¹⁰ Economy, Infrastructure and Skills Committee, 5 July 2018, para 200

limits, et cetera—or there will be risk of catastrophic failure at some point if a lorry went over a bridge that is structurally unsound.”¹¹

19. On 14 August, 43 people died following the collapse of the Morandi Bridge in Genoa, Italy, starkly highlighting the potential risk posed by aging infrastructure and the importance of effective and timely maintenance.

Case study: How Boston is using tech to keep its roads smooth

Street Bump is a crowd-sourcing project that helps residents improve their neighborhood streets. Volunteers use the Street Bump mobile app to collect road condition data while they drive. The data provides governments with real-time information to fix problems and plan long term investments.

Boston's Mayor's Office of New Urban Mechanics,¹² in partnership with Connected Bits, developed the app and intends to open source the code so that it can be available to other towns and cities.

Conclusion 1. Knowing where and what the problems are is crucial to effective maintenance of roads. The low rate of response (36%) from local authorities in Wales limits the usefulness of the ALARM survey, which is more widely supported in England.

Conclusion 2. The evidence suggests Wales's roads are in no worse condition than those in other parts of the UK, however, severe winter weather in 2016/17 and 2017/18, and reduced funding for maintenance, has had a negative impact on the surface of roads. This is leading to more money being spend on short-term fixes, rather than long-term maintenance.

Conclusion 3. While the condition of bridges and other structures is recorded in Highway Asset Management Plans these plans are not always easily accessible to the public.

Recommendation 1. The Welsh Government should evaluate whether mobile apps like Boston's Street Bump could be used to improve the quality of real time data available for Wales' road network.

¹¹ Economy, Infrastructure and Skills Committee, 5 July 2018, para 218

¹² www.newurbanmechanics.org/

Recommendation 2. Highway Asset Management Plans (for local authorities and trunk road agencies) should be published and collected in a single place to ensure that there is transparency and public accountability around the process.

2. 2. Funding for maintenance

20. Written evidence suggests the improving trend in the local road network was the result of the Local Government Borrowing Initiative (LGBI) for highways. Under the LGBI the Welsh Government provided funding from 2012-13 to 2014-15 to support about £170m of investment.

21. The County Surveyors Society said:

“The Local Government Borrowing Initiative (2012/13 to 2014/15) ... had a clear impact on road condition, both in terms of visual condition as well as the road condition data, as it bucked the trend of deterioration.”¹³

22. Cllr Andrew Morgan suggested that those improvements were now being undone:

“Back a couple of years ago, the Local Government Borrowing Initiative, that saw a significant improvement and we were going in the right direction, but since we've reverted back now to our core budget, in effect, we've levelled off and probably deterioration is starting to set in again.”¹⁴

23. The Welsh Government announced a further £30m¹⁵ for local road improvements in February 2018. Cabinet Secretary for the Economy and Transport Ken Skates told the Committee that the money was to support local authorities dealing with “The Beast from the East”¹⁶ and Storm Emma. Cllr Morgan acknowledged this money was welcome, but noted the backlog of repairs was “really significant”.¹⁷

24. For context, Swansea Council estimated in January 2018¹⁸ that it has a backlog of £54m worth of repairs.

¹³ Written evidence

¹⁴ Economy, Infrastructure and Skills Committee, 5 July 2018, para 201

¹⁵ <https://gov.wales/newsroom/localgovernment/2018/180302-local-road-improvements/?lang=en>

¹⁶ Economy, Infrastructure and Skills Committee, 5 July 2018, para 336

¹⁷ Economy, Infrastructure and Skills Committee, 5 July 2018, para 201

¹⁸ www.bbc.co.uk/news/uk-wales-south-west-wales-42858575

25. Responses to the Committee’s consultation are clear that if funding levels are not maintained local roads will deteriorate. The ALARM survey suggests that Welsh Local Authorities spent 40% less on maintenance than English counterparts in 2018.¹⁹

26. It seems annual funding for maintenance is an issue for both local roads and the trunk road / motorway network. The need for long term funding is raised by local authorities and Trunk Road Agents (TRAs). TRAs indicate that their budgets are confirmed late, with additional funding becoming available in quarter 4 as it is released from wider budgets so that the profile of investment is not smooth.

27. Agents were asked directly whether this funding pattern was a problem, and while they were keen to have long-term funding, they acknowledged the benefits of receiving extra money, even if it was received late in the funding year. Richard Jones said:

“I think it's difficult, because in our report we have said we would welcome a five-year plan, but, to be honest, we've benefited as trunk road agents over the last three years from getting additional funding due to departmental underspends elsewhere. If you move to a five-year programme, maybe that wouldn't be as available as it is. We welcome the funding; we welcome any funding that we have, even the late funding. I think we would benefit if we had our initial allocation earlier.”²⁰

28. The Civil Engineering Contractors Association (CECA) describes a “mad March”²¹ phenomenon where a glut of projects reduces value for money from contractors and causes increased disruption to road users. In oral evidence, the freight and bus industry did not recognise this phenomenon. However the FSB and South Wales Chamber of Commerce did consider the end of the financial year to be particularly problematic.

29. There is a perception that investment in major enhancements on the trunk road / motorway is prioritised over local roads following the withdrawal of the Welsh Government’s Transport Grant. The WLGA points to £119m provided for local schemes in 2008-09 compared to £31.4m in 2017-18. Very few major local enhancement projects are now delivered. In oral evidence the County Surveyors’ Society (CSS) emphasised that most journeys start and finish on the trunk road.

¹⁹ The Welsh response rate to the ALARM Survey was 36% compared to 61% for England and Wales.

²⁰ Economy, Infrastructure and Skills Committee, 5 July 2018, para 30

²¹ Economy, Infrastructure and Skills Committee, 13 June 2018, para 84

30. Sustrans suggests that focus on maintenance of larger roads disadvantaged cyclists who prefer minor roads which are in poorer condition – in oral evidence Sustrans highlighted the impact of condition on safety pointing out that this is a significant barrier to uptake of cycling. Steve Brooks told the Committee:

“... for cyclists, you're almost in a perfect storm, because you're on one hand trying to act in a safe way by avoiding busy roads, but that's pushing you onto roads that are less well maintained, and then all those issues around potholes and everything kicks in.”²²

31. In oral evidence, engineering witnesses explained that variation in condition between local authorities is likely to be a consequence of varying political priorities in driving investment, but also of the size of the and nature of the network (ie lots of little roads) – particularly in Powys which Welsh Government data shows has the longest local authority network and also the highest portion in “poor condition”. The CSS highlighted that the Local Government Settlement takes account of population and concluded the variation was:

“partly due to funding settlements...partly due to maintenance practices and approaches, and I would also say, there's got to be some impact of different tensions and priorities within the local authorities themselves as to where the channel their limited funding for what they prioritise.”²³

32. The annual Local Government Settlement is based on a notional calculation of what a local authority might spend if all local authorities responded in a similar way to the demand for services in an area. This is known as the Standard Spending Assessment (SSA). Road maintenance is one of 53 services covered in the SSA and is included under the broader “Transport” sector. Allocations for road maintenance are based on three weighted elements – enhanced population (projected) (weighting 41%); weighted road length (38%) and traffic flow (21%). However, these allocations are only notional, and local authorities are able to spend their funding in a manner they decide.

33. In oral evidence Leeds University suggested the TRAs Whole-Life Asset Management Approach and dedicated budgets may partly explain the variation in condition between the trunk and local road network. The witnesses pointed to similar variation between strategic and local roads in England. The academics

²² Economy, Infrastructure and Skills Committee, 21 June 2018, para 16

²³ Economy, Infrastructure and Skills Committee, 13 June 2018, para 77

pointed to the importance of funding levels and certainty to avoid a “vicious circle”.²⁴

34. The engineering bodies argued that funding is insufficient – CECA’s Ed Evans pointed to the “huge” value of the highway asset but added that, “the amount we spend on maintenance is minimal compared to that”.²⁵

35. While there will always be a need for post-winter maintenance in March and April, all evidence suggests that better value for money can be achieved if authorities in charge of road maintenance have multi-year indications their budgets.

36. Cabinet Secretary Ken Skates reiterated this message in oral evidence. The Welsh Government also points to the LGBI and the additional £30m announced in February. It describes this as “a one-off investment” in order to “help address problem areas and prevent deterioration of the local network”. It highlights Welsh Government investment in major local road enhancements – including Five Mile Lane connecting Cardiff Airport to the M4 and investment in Cardiff’s Eastern Bay Link Road – as well as £26m in the current year through transport grant schemes.

Conclusion 4. While local roads, and associated assets like bridges and lighting are the responsibility of local authorities, together they make up an important national asset. Under current funding trends, and rising demand for social services, it seems unlikely that it will be possible for local authorities to find significant additional funding for maintenance without additional support.

Recommendation 3. Welsh Government should consider how best it could incentivise local authorities to invest in maintenance. If additional funding on the scale of £50m a year is not possible, this could involve a match-funding approach whereby the Welsh Government tops up additional spending by local authorities.

2.3. Multi-year funding

37. The Welsh Government’s Economic Action Plan²⁶ commits to “a five-year programme of transport capital funding through Transport for Wales, for both transport maintenance and new projects”. It suggests this approach will contribute to “15-20% efficiencies across the five-year investment portfolio for new

²⁴ Economy, Infrastructure and Skills Committee, 13 June 2018, para 30

²⁵ Economy, Infrastructure and Skills Committee, 6 June 2018, para 84

²⁶ <https://gov.wales/topics/businessandconomy/economic-action-plan/?lang=en>

projects”. However, it is not clear that local roads, administered by local authorities would be included in this commitment.

38. In oral evidence the CSS contrasted this to the impact of the one year settlement approach:

“The settlement comes through, the announcement will be early in the financial year, you go through the design and procurement process, and then it gets bunched up at the tail of the year, which serves no-one well, because you get huge, peak workloads along the way.”²⁷

39. The CSS said that the £30m for local government roads announced by the Welsh Government is “very welcome” but not enough. It suggested £30-50m per year would “probably be right to see a real, visible difference”.²⁸

40. The Welsh Government’s paper points to investment of £155m in maintenance and minor improvement of the motorway and trunk road network, and provides details of investment in major trunk road / motorway enhancements. In relation to local roads, however, it comments:

“It is for each local authority to take decisions as to how to allocate the totality of their resources in line with local priorities. Alongside the unhypothecated funding provided by the Welsh Government through the Revenue Support Grant, authorities also raise funding through council taxes and non-domestic rate income. The Welsh Government also provides some specific funding to local authorities through the Road Safety Grant, Safe Routes in Communities Grant, and Local Transport Fund.”²⁹

Conclusion 5. The Welsh Government’s commitment to a five year programme of transport capital funding through Transport for Wales is welcome. Other highway authorities would benefit from a similar long-term funding commitment.

Recommendation 4. If Welsh Government can provide five-year funding to Transport for Wales then it can – and should – do the same for local authorities.

²⁷ Economy, Infrastructure and Skills Committee, 13 June 2018, para 87

²⁸ Economy, Infrastructure and Skills Committee, 13 June 2018, para 108

²⁹ Written evidence

2. 4. Asset management approach

41. The evidence the Committee has received strongly highlights the benefits of a planned, long-term, risk-based asset management approach to highway maintenance suggesting this provides significantly better value for money. Road users and businesses also strongly preferred this approach in minimising impacts on them. It also allows works to be scheduled in a way that avoids peaks and troughs of activity and demand for resources.

42. However, while there is evidence that there are moves to adopt this approach – for example through Highway Asset Management Plans (HAMPs) prepared by local authorities – it seems issues such as annual budgets and funding constraints make implementation difficult.

43. In their written evidence the WLGA note that, “the production of HAMPs involves considerable work which can be justified only if there is sufficient funding available to follow up on recommendations emerging from the process”.³⁰

44. The Asphalt Industry Alliance (AIA) suggested that inefficiencies can also arise through over-specification of materials. They recommended that the Welsh Government should establish a “Pavements Efficiency Group”, as has been done by Highways England, bringing together government and industry to review the approach taken.

Recommendation 5. The Welsh Government should bring together a stakeholder group similar to the Highways England Pavements Efficiency Group to advice on the most effective materials and processes.

45. Evidence from Arup suggested that the approach to maintenance is too regionalised. Oral evidence from Leeds University suggested a common approach is more important than delivery through a single body. They held up the English Highways Maintenance Efficiency Programme (HMEP) and practice in Scotland as examples of good practice.

46. However, the CSS and ICE did not agree that Welsh practice was too regionalised and, pointing to HAMPs. Keith Jones, Director of ICE, told the Committee that in fact Wales had been the first part of the UK to “come together to develop a common framework for asset management”.³¹

³⁰ Written evidence

³¹ Economy, Infrastructure and Skills Committee, 13 June 2018, para 125

47. In oral evidence Leeds University indicated that “it ends up costing...between 17 and 19 times more to do odd fixes rather than doing planned asset management upgrading”.³² They also highlighted the importance of “a single set of key performance indicators and data”³³ which might include customer satisfaction.

48. When asked about the Leeds figures, the Cabinet Secretary expressed doubt the savings were of that scale, but said he would contact Leeds University to find out more. While the scale of savings can be argued, there is universal agreement that effective asset management offers better value for money.

49. In oral evidence, the FTA supported written evidence from the Welsh police forces suggesting patching and minor short term repairs cause greater disruption to road users.

50. Leeds University and others have suggested a need to consider the impact of climate change. For example, Leeds academics discussed surface water run-off, stressing a need to consider drainage and the need to make space for water not just considering the condition of the pavement. They said 1000km of Welsh roads are at risk of flooding and surface water run-off, and that as a rule of thumb a 1% increase in precipitation should lead to a 1% budget increase.³⁴

Conclusion 6. There is a widespread consensus that a long-term asset management based approach to maintenance is more cost effective and produces better results for road users. Highway authorities in Wales are committed to adopting this approach, but have been hampered by short-term funding allocations and competing local needs.

Recommendation 6. Welsh Government and local government should ensure that priority and funding is given to cost-effective long-term planned maintenance in order to reduce more costly short-term fixes.

2. 5. Minimising disruption to road users

51. Written evidence highlights how road works affect road users – with the Welsh police forces in particular expressing concern about the patching / reactive approach adding to delays, while longer term fixes would reduce overall

³² Economy, Infrastructure and Skills Committee, 13 June 2018, para 30

³³ Economy, Infrastructure and Skills Committee, 13 June 2018, para 39

³⁴ Economy, Infrastructure and Skills Committee, 13 June 2018, para 19

disruption. CECA also highlights the link between funding patterns (the quarter 4 “spike” or “mad March”) and disruption.

52. The FSB’s paper points to the importance of road travel to its members. It indicates that more than 60% of members “said that roadworks, congestion and the state of repair of roads was having a negative impact on their business”. Rural small business said potholes and frequent road works cause issues for businesses. Road works were viewed as necessary but poor advertising was an issue, and “frustration was driven by their perception that the quality of road repairs was often poor” leading to reworking and further disruption. It suggests “the state of local roads, as opposed to the strategic / trunk road network” was a greater concern. FSB says “poor roads are costing Welsh business, and hence the Welsh economy, money”.

53. The CBT cited reports from the AA that insurance claims for vehicle damage from poorly maintained roads are increasing – with claims in the first four months of 2018 equal to all of 2017. It also highlighted work by the RAC suggesting road users are interested in maintenance of street lighting, barriers etc. as well as road surface.

54. In oral evidence road users from the freight and bus sectors suggested communication on road works and projects was a problem, as was co-ordination of works. They emphasised the economic impact on their companies and their customers. The FTA called for “an easy online portal” to access planned works. The FSB also described poor advertising and communication.

55. The witness from Owens Group who appeared on the CBI panel suggested that information sharing in England is much better – with the RHA and FTA receiving regular updates which the company can access, and regional briefings on planned works provided giving detailed timing and other information for works. In contrast in Wales there is “very very little communication” from either the Welsh Government or local authorities and a lack of co-ordination of works.

56. The Cabinet Secretary said he had prioritised improving communication and that improvements that had been implemented for the A55 in north Wales were now being rolled-out across the rest of the trunk road network. He also highlighted “a re-launch of the Traffic Wales website and social media communications this autumn”.³⁵

³⁵ Economy, Infrastructure and Skills Committee, 5 July 2018, para 489

57. CECA suggested in oral evidence there was a need to get better at co-ordinating works and informing the public. The engineering bodies discussed the impact of co-ordinating with utilities companies, and the CSS said consideration was being given to permitting schemes, and charging utilities companies for access to the road.

58. In oral evidence Sustrans elaborated on its written evidence highlighting the impact of road works on active travellers. It said that pedestrians and cyclists are poorly catered for in planning road works – where traffic management is designed with motor vehicles in mind. It stressed that shifting routes and poor signage are a particular risk for active travellers must react quickly and can quickly find themselves in dangerous situations in conflict with cars. It emphasised that perceptions of safety are a major barrier to active travel. An example given of good practice in Edinburgh suggests better practice is possible.

59. Both Sustrans and CBT argued in oral evidence that reactive maintenance by definition is less well planned and so has greater impact – Sustrans suggested that a long-term programme could cater better for active travellers, for example constructing temporary cycle paths.

Conclusion 7. While the Welsh Government and Local Government are aware of the disruption that can be caused by poor communication of planned and unplanned road maintenance, it is clear that there remains room for improvement. The Committee awaits the relaunch of Traffic Wales website and associated social media this Autumn to see if this can tackle negative perceptions.

3. Enhancement

This chapter considers the delivery of enhancement projects on the local road, trunk road and motorway network and how they should be managed and paid for.

3.1. Planning and delivery of major projects

60. The Civil Engineering Contractors Association (CECA) provided written evidence which suggested that the procurement process and speed of decision making are key factors limiting value for money in major projects. It described procurement practice across Welsh highway authorities as “highly variable”. Issues include: “lowest price” tendering; a desire to transfer all risk to the contractor leading suppliers to add a premium to bids; bureaucratic processes; and reducing levels of engagement between suppliers and procurers.

61. In terms of speed of decision making, while CECA recognised a need to consider the merits and impacts of projects it said, “the political process continues to stifle and hinder progress”. The impacts of delay identified include increased project risk and cost; impact on continuity of employment, skills and training for contractors; and impact on local supply chains.

62. In oral evidence, CECA said:

“I think the key is to make the best use of the time that you have for those statutory processes—to do as much as you can within that time, as opposed to almost doing things in series. I think that's where things slow down. We do need to spend time in terms of engaging with communities, but do it within that statutory period. And there is a political element to this, as you well know, that if things start to get batted around for political reasons, we lose the momentum, we lose all those skills that were geared up for a particular project. And there is a huge cost with this.”³⁶

63. Similarly, in oral evidence Capital Law said the need to engage with stakeholders was important, and this will take time. However, in a similar approach to CECA it suggested early engagement to deal with objections could smooth the process.

³⁶ Economy, Infrastructure and Skills Committee, 6 June 2018, para 208

3. 2. Early Contractor Involvement

64. Respondents were generally supportive of the Early Contractor Involvement (ECI)³⁷ approach – where contractors are involved early to improve buildability and value for money. The WLGA points to better cost estimation, risk management, ease of construction and post-construction maintenance. However, it also suggests it can lead to disputes with pressure on cost reduction at the expense of innovation.

65. Sustrans suggests ECI should allow effective engagement to take place to influence design, to improve consideration of active travel elements. However, it concludes that cost will remain the key driver. Sustrans said that the A465 saw engagement on active travel, but the final build differs significantly and is “below current active travel guidance standards”.³⁸

66. In their evidence Welsh Government denied there was any rejection of active travel elements based on cost. Ken Skates said accusations that active travel elements were dropped due to cost were “simply not true”.³⁹ Although his officials noted there might be a couple of places where pragmatic decisions meant the full standard was not quite reached.

67. In oral evidence engineers explained the benefits of ECI. However, experience of the process and importance of systems was emphasised. CECA’s Ed Evans warned:

“...we have competency issues across the whole procurement sector. You do need to know what you're doing with this. Otherwise, from a public sector point of view and value for public money, you could come unstuck quite seriously.”⁴⁰

68. Capital Law advocated a dialogue / ECI approach focusing on best value, not lowest cost. However, while supportive of ECI witnesses emphasised the importance of competition. Stuart Pearson of Capital Law said:

“...you have a contractor involved at an early stage who basically puts themselves in pole position for delivering the main project. That, for me, is the main risk. The benefits do tend to outweigh that because you have collaborative working and you can iron out the issues along the

³⁷ www.designingbuildings.co.uk/wiki/Early_contractor_involvement

³⁸ Written evidence

³⁹ Economy, Infrastructure and Skills Committee, 5 July 2018, para 418

⁴⁰ Economy, Infrastructure and Skills Committee, 6 June 2018, para 206

way. But the main risk is that one contractor who understands the project is going to be in pole position to deliver the main project.”⁴¹

Recommendation 7. Where geology or the laws of physics prevent full adherence to the standards laid down for active travel routes, then any decision to amend proposals should be taken in full collaboration with users.

3.3. A Pipeline of projects

69. The importance of a clear pipeline of major projects has been emphasised in written and oral evidence. The National Transport Finance Plan (NTFP) 2015 includes a delivery schedule of projects, and the Wales Infrastructure Investment Plan also lists planned investments. However, evidence suggests that while there has been an improvement, more needs to be done.

70. Written evidence from the Association of Consultancy and Engineering (ACE) noted there is a lack of visibility for contractors on planned schemes, with local and national transport plans “largely a wish list because political priorities change, and funding is unrealistic”. In oral evidence, CECA said:

“...from a supplier's point of view, it's the lifeblood. Without that continuity—and we don't have it at the moment in this sector at all. Without that we can't plan (...) if we don't get that we can't actually deliver back to Welsh Government many of the things that you are looking for in terms of sustainable jobs, in terms of new entrants into the industry, the links to education, NEETs and all those different agendas, the community benefits agendas.”⁴²

71. South Wales Chamber of Commerce said the main difficulty with the current pipeline is lack of funding. Linking this to the delay in construction it referred to a “lack of confidence in the business community that projects will eventually be delivered”.⁴³

72. The FSB noted the delivery schedule in the NTFP, but highlighted that it did not include a budget or feasibility assessment, and suggested that maintenance is not considered. The CBI described the NTFP as “a step in the right direction”, but “if they could prioritise [schemes within] it, that would be much more productive

⁴¹ Economy, Infrastructure and Skills Committee, 21 June 2018, para 440

⁴² Economy, Infrastructure and Skills Committee, 6 June 2018, para 175

⁴³ Economy, Infrastructure and Skills Committee, 21 June 2018, para 142

in terms of procurement”.⁴⁴ They also indicated that clear timelines would be helpful to businesses in making decisions about where to locate and invest.

73. Capital Law told the Committee that an effective long-term pipeline might reduce uncertainty in delivery, and address some concerns raised (above) on process and timescales, by ensuring the debate and objections etc. are addressed early.

74. The Welsh Government’s paper describes the NTFP as “an ambitious five-year rolling programme of transport interventions”. There is “an intention to review the plan on an annual basis to reflect developments over time and the changing profile of need across Wales”. The Government also highlights the on-going review of the Wales Transport Strategy which “provides an opportunity to adopt a new approach that places an integrated public transport system at the heart of our strategy”.

Conclusion 8. While the Welsh Government’s National Transport Finance Plan sets out a pipeline of future projects, there is frustration that it lacks prioritisation and funding certainty.

Recommendation 8. Future iterations of the Welsh Government’s National Transport Finance Plan should include clearer indications of priorities and timescales, including details of where timescales have changes and why, the stage of development the project has reached and available funding. The National Infrastructure Commission for Wales should recommend priorities.

3. 4. The Mutual Investment Model

75. The Welsh Government’s Mutual Investment Model (MIM)⁴⁵ is a new mechanism, similar to the Public Private Partnerships/Public Finance Initiative PPP/PFI, where private sector partners will build and maintain public infrastructure, keeping capital investment off the public sector balance sheet. At the end of the contract the asset is transferred to public ownership. In January 2018, the Cabinet Secretary for Economy and Transport wrote to the Chair outlining the key points of MIM,⁴⁶ and illustrating how it differs from PFI.

⁴⁴ Economy, Infrastructure and Skills Committee, 21 June 2018, para 287-288

⁴⁵ <https://gov.wales/funding/wales-infrastructure-investment-plan/mutual-investment-model/?lang=en>

⁴⁶ <http://senedd.assembly.wales/documents/s72133/EIS5-05-18p1%20Correspondence%20from%20the%20Cabinet%20Secretary%20for%20Economy%20and%20Transport%20following%20the%20C.pdf>

76. MIM is in the early stages of application, and consequently there is not yet a great deal of experience to evaluate, or assess whether it provides value for money. The Welsh Government has identified three projects which will use MIM in 2018. This includes one road project – sections 5 and 6 of the A465 dualling project (between Dowlais and Hirwaun).

77. In oral evidence, the Institution of Civil Engineers (ICE) warns to “be wary”⁴⁷ – considering issues such as the revenue implications in the long-term of paying for private capital investment. CECA also considered MIM a “step forward” from the old PFI approach but “if you could directly fund [a project], you would do that”.⁴⁸

78. In oral evidence the CBI supported transfer of risk to the private sector, recognising that it is early days for MIM. However, it argued “if you don't have the capacity and the money within the budget to actually roll out the MIMs on a broad range of schemes, then it's still a niche solution to a more complicated problem”.

79. The paper from Capital Law provides a detailed assessment of both the risks and opportunities and criteria for suitable highway schemes. Some key points also emerged in oral evidence.

80. Chris Nott of Capital Law said that MIM should apply to schemes costing £200-300m “to get the scale of funding that you need at the low price that you need to make this really cost-effective”.⁴⁹

81. Witnesses argued that MIM requires a sophisticated procurement process (Mr Nott referred to a need to procure “brilliantly”⁵⁰) – the better the procurement process, the better the risk management and that drives better value for money.

82. “MIMable projects” were described as projects with greater cost certainty, so that early engagement and discussion with stakeholders is key. They also suggested that the public authority could take responsibility for unplanned maintenance, while the funding parties undertake planned maintenance;

83. Skills were seen to be important in managing MIM projects – the witnesses felt this may be a particular issue in local government and access to centralised

⁴⁷ Economy, Infrastructure and Skills Committee, 13 June 2018, para 225

⁴⁸ Economy, Infrastructure and Skills Committee, 13 June 2018, paras 179 and 232

⁴⁹ Economy, Infrastructure and Skills Committee, 21 June 2018, para 407

⁵⁰ Economy, Infrastructure and Skills Committee, 21 June 2018, para 409

“MIM” expertise was suggested, alongside the development of a pipeline of “MIMable” projects, and a “MIM culture.”

Conclusion 9. While the Mutual Investment Model (MIM) is in its early stages, and the Committee commends efforts to innovate in funding projects, we remain to be convinced that this model will be an effective option for anything other than the most straightforward large scale projects. In particular, the Welsh Government must exercise caution to ensuring that MIM provides value for money and the public sector is not exposed to large scale risk.

Conclusion 10. MIM schemes will require a level of procurement expertise that is not widely exhibited in the Welsh public sector. Highly skilled and experienced people will need to be engaged and retained.

Recommendation 9. The Mutual Investment Model should be used when no other funding model is viable, and only where projects are of the £200m+ scale. Where it is used, projects should be evaluated using clear criteria, and the lead authority should draw on procurement and delivery expertise developed in previous MIM schemes.

Recommendation 10. Welsh Government should ensure that a centre of Mutual Investment Model expertise develops which will provide support and guidance for public authorities to implement complex procurement processes (like MIM) and ensure value for money.

4. Sustainability

This chapter asks whether the approaches taken to highway maintenance and improvement are sustainable – particularly in light of legislation passed in the previous Assembly term.

4. 1. New legislation

85. The Committee’s inquiry considered whether Wales is adopting a sustainable approach to the maintenance and enhancement of its road network in the context of key legislation such as the Well-being of Future Generations (Wales) Act 2015 and the Active Travel (Wales) Act 2013.

86. The Future Generations Act commits public sector organisations in Wales – including Welsh Government and local government – to consider seven goals in all its endeavours, and to adopt new ways of working and thinking.

87. It is clear from written evidence that there is a widespread view that there is more to do to embed both the Well-being of Future Generations (Wales) Act 2015 (WFG Act) and the Active Travel (Wales) Act 2013 (ATA) in highways policy.

88. In terms of the WFG Act, responses to the Committee’s consultation interpreted sustainability principles in a range of ways. These included:

- financial sustainability;
- sustainability of the materials used;
- impact on the environment and consideration of the impacts of climate change;
- the asset management approach as a preventative approach; and
- public engagement and involvement in planning works and projects.

89. The sustainability of major highway investment projects is a significant point of contention, and the M4 relief road provides a particularly contentious example. In oral evidence, business and freight bodies in particular highlighted the impact of congestion on their business, and on the wider economy. Witnesses from freight companies also highlighted emissions and air quality issues arising from congestion.

90. The M4 public inquiry has heard wildly differing interpretations of the WFG Act presented by the Future Generations Commissioner and the Welsh Government’s Counsel. The Committee heard support for The Future Generations Commissioner’s interpretation from CBT and Sustrans, and strong support for the Welsh Government’s position from the CBI. However, the CBI also called for clarity on the interpretation of the Act.

91. The Cabinet Secretary told the Committee:

“I think what's important is to recognise that, with the Act, it should still be possible to construct a road. If the interpretation is that you cannot have a trade-off, that you have to balance, that there has to be equal merit, equal benefit across all of the points of the Act, I can't envisage any road being built, and therefore I believe that our interpretation of the Act is the correct one. But I'd agree that it would be desirable for agreement to be reached between us and the commissioner over the interpretation.”⁵¹

92. Sustrans’ Steve Brooks acknowledged that while the Act obliges the Welsh Government and other public services in Wales to think a certain way, it doesn’t force the Welsh Government to behave in a particular way.⁵² He argued compliance with the WFG Act is less of an issue than political priorities.

93. The CBI pointed to the differing interpretations of the Act’s provisions, suggesting the Future Generations Commissioner and Welsh Government need to agree an interpretation to bring clarity.

94. The CBT pointed to the fact that new roads are built to better environmental standards, and stressed the importance of ring-fenced “green retrofit” allocations to address issues on existing roads. It argued that a sustainable highways policy should:

- fix it first;
- integrate across modes and plan in corridors;
- include environmental leadership addressing carbon, air quality and biodiversity; and
- commit funding to deliver “greener roads”.

⁵¹ Economy, Infrastructure and Skills Committee, 5 July 2018, para 535

⁵² Economy, Infrastructure and Skills Committee, 21 June 2018, para 104

95. It argued road building should be a last resort, except connecting new settlements, since new roads generate traffic (“like digging a ditch in a swamp”⁵³). Sustrans suggested the new Wales Transport Strategy, currently being developed by the Welsh Government, should set out when new roads are required. Unsurprisingly, the CBI disagreed with this approach arguing that maintenance and new capacity are both required.

96. In terms of the ATA, the WLGA’s paper says that, as the vast majority of active travel takes place on local roads, this should influence the balance of spend between the strategic and local road networks over time. Written evidence from Sustrans also points to the importance of the local road network and the management of maintenance programmes for cyclists and pedestrians.

97. CECA’s written evidence, referring to both the ATA and WFG Act, concludes that “a significant cultural shift will be needed” from both delivery bodies, and those public bodies investing in road schemes. The Committee’s report on the Active Travel Act⁵⁴ called for greater leadership to deliver the cultural change envisaged in that law.

98. In oral evidence, the CSS’s Stuart Davies suggested that there is a growing expectation there will be greater prominence for active travel modes in schemes, where before they were “almost being deprioritised”. However, regarding both Acts, Mr Davies said:

“I think it’s really understanding it more. I think that we as a nation are grappling with what it actually means. So I think it’s just embedding it more into our thinking.”⁵⁵

4. 2. Assessments of sustainability

99. The Committee heard a range of opinions on the assessment of economic impact of schemes, and also the effectiveness of traffic modelling approaches which underpin the assessment of road schemes.

100. The ICE suggested traffic models were “very robust”, and the CBI similarly defended the approach saying it has “complete confidence” on forecasting. However, both ICE and CECA suggested there may be a need to review models in

⁵³ Economy, Infrastructure and Skills Committee, 21 June 2018, para 58

⁵⁴ [Economy, Infrastructure and Skills Committee. Post Legislative Scrutiny of the Active Travel \(Wales\) Act 2013](#)

⁵⁵ Economy, Infrastructure and Skills Committee, 13 June 2018, para 236

the light of focus on more sustainable modes of transport. The CSS suggested the performance of the economy has undermined the effectiveness of models.

101. However, the CBT's written evidence pointed to changing trends in car travel. The paper points to a consistent long-term decline in time spent travelling and distance. It also suggests that there has been a decline in commuting trips despite increased employment, and highlights the fact that take-up of driving licences among young adults is declining. The FSB, while welcoming the recent Welsh Government review of Welsh Transport Appraisal Guidance (WelTAG), also believes "guidance still appears to rely too heavily on predictive traffic forecasts, evidence suggests that this has led to some poor investment choices in recent decades".

102. In oral evidence, CBT pointed to a review of 80 English Post Opening Project Evaluations (POPEs)⁵⁶ of road schemes commissioned from Transport for Quality of Life by the Campaign to Protect Rural England. Bridget Fox told the Committee:

"...they found that, across the board, traffic levels had increased not been reduced, that environmental impacts were generally worse than had been predicted and that economic benefits were generally less, and that, where there were increases in economic activity, it was impossible to attribute these solely to the road rather than the fact that there had been a major regeneration scheme or a new business park opened or something, which was not necessarily dependent on the road solely."⁵⁷

103. The Welsh Government conducts POPEs as a matter of routine.

104. The CBI's Leighton Jenkins referred to a World Bank Study which linked road investment with economic growth⁵⁸ which he subsequently shared with the Committee. This research assesses "the impact of transport policies on growth, inclusion, and sustainability in a developing country context", although in sharing this report the CBI witnesses did suggest "there are many more reports that say similar".

105. It is worth noting, however, that the objective of the specific study shared by the CBI was to "review the broader direct and indirect benefits and costs of

⁵⁶ Campaign to Protect Rural England, *The Impact of Road Projects in England*

⁵⁷ Economy, Infrastructure and Skills Committee, 13 June 2018, para 66

⁵⁸ World Bank Group, *Transport*

transport investments and policies in *developing countries*" (page 2). It is not clear that the return on transport infrastructure investment achieved in developing countries can be assumed in Wales and the UK. This illustrates the complexity of the issues involved in considering this question and the need to proceed with care on the basis of evidence.

Recommendation 11. The Welsh Government should commission an independent review of recent Welsh Post Opening Project Evaluations to assess whether new Welsh roads have delivered against the estimated economic benefits that were projected when the schemes were agreed.

106. While the committee's evidence contained many references to the Well-being of Future Generations Act, it is clear that there remains work to be done in embedding the new ways of thinking and acting it requires in the day-to-day work of highways authorities and (especially) their contractors.

Conclusion 11. The Committee believes that the Well-being of Future Generations Act demands a new way of thinking. This means questioning and challenging traditional models used to predict traffic growth and estimate economic growth. Case studies like the M4 Relief Road - and the disputed interpretation of the Act by the Commissioner and the Welsh Government - will go a long way to clarifying how future decision-making should be undertaken.

Conclusion 12. The wildly different interpretations of the Wellbeing and Future Generations Act presented to the M4 Public Inquiry by the Commissioner and the Welsh Government are not easily resolved - but resolved they must be if there is to be clarity on how to interpret the legislation. The Committee hopes this clear interpretation can be agreed without expensive legal intervention, but acknowledges that may be the only way to achieve true clarity in a complex and multi-dimensional argument.

Conclusion 13. The Committee is persuaded by the CBT's argument that building new roads should be a last resort, and that maintaining the current road network - including active travel routes - should be the priority for a sustainable transport policy.

Recommendation 12. The forthcoming Wales Transport Strategy should set a clear priority for maintaining the existing road network, mainstreaming and upgrading active travel infrastructure, and prioritising access, in preference to building new roads.

Conclusion 14. The traditional forecasting methods and approach to assessing the benefits of new road schemes are increasingly being challenged both by new economic research, and the Welsh Government's commitment - and legislation - to deliver sustainable development. The Committee expects the Welsh Government to work with the Future Generations Commissioner to develop its thinking in this area, and develop new tools to assess the holistic impact of road enhancements and maintenance.

Conclusion 15. The new Welsh Transport Appraisal Guidance (WelTAG 2017) has been drawn up in conjunction with the Future Generations Commissioner to ensure that new transport schemes take full account of the Wellbeing and Future Generations Act, and all it entails. Ensuring the guidance is understood and followed by public bodies, and their contractors, will be key to its success.

Recommendation 13. Welsh Government should ensure that support is available to ensure that the new WelTAG guidance is widely understood, and implemented both by public bodies, and contractors working on their behalf.

Recommendation 14. The Committee is keen to ensure that every new road project should be subject to challenge to ensure the Well-being of Future Generations Act has been rigorously applied in the scheme. If the WelTAG guidance is being followed, this should happen at all stages. The Welsh Government should audit a small selection of projects to assess the extent to which is this happening, and report back to the Committee in 12 months' time.

Green corridors

107. On 24 July 2018, the Cabinet Secretary wrote to Assembly Members "to announce my decision to approve a "Green Corridors on the Welsh Government Trunk Road and Motorway Network" initiative".⁵⁹ The five year initiative will,

"Deliver a programme of work and activities designed to improve the landscape and environmental quality of the urban and rural transport network, aiming to enhance a sense of place and providing attractive 'gateways' into Wales for our visitors."

108. No additional funding was announced as part of this initiative.

⁵⁹ [Letter to AMs from Ken Skates on 24 July 2018](#)

Conclusion 16. The Welsh Government's new five-year 'Green Corridors' initiative is welcome, and in marked contrast with the annual budgets that have been given to highway authorities in recent year. It is unclear whether funding is coming from existing budgets, and the Committee will seek further information on this in its budget scrutiny.

Annex A: Terms of reference

- The current condition of roads in Wales and whether the approach to funding and delivery of maintenance programmes for the local road, trunk road and motorway network in Wales is effective, managed so as to minimise disruption to road users, and provides value for money;
- Whether major enhancement projects on the local road, trunk road and motorway network are prioritised, funded, planned and delivered effectively, and provide value for money. Relevant issues include the implementation of the Early Contractor Involvement approach and the opportunities offered by the Welsh Government's Mutual Investment Model; and
- Whether Wales is adopting a sustainable approach to the maintenance and enhancement of its road network in the context of key legislation such as the Well-being of Future Generations (Wales) Act 2015 and the Active Travel (Wales) Act 2013.

Annex B: Witnesses.

State of Roads - Witnesses

Name	Organisation
Professor Nigel Smith	Leeds University
Ed Evans	Civil Engineering Contractors Association Wales
Keith Jones	Institution of Civil Engineers Wales
Stuart Davies	County Surveyors Society
John Pockett	Confederation of Passenger Transport Cymru
Gareth Mole	Cardiff Bus
Sally Gilson	Freight Transport Association
Duncan Buchanan	Road Haulage Association
Bridget Fox	Campaign for Better Transport
Steve Brooks	Sustrans Cymru
Matthew Williams	Federation Small Businesses
Elgan Morgan	Chambers of Commerce
Mike Plaut	Confederation British Industry Wales
Leighton Jenkins	Confederation British Industry Wales
Ian Price	Confederation British Industry Wales
Mike Colborne	Owens Group
Chris Nott	Capital Law
Stuart Pearson	Capital Law
David Evans	North and Mid Wales Trunk Road Agent
Ian Kenrick Hughes	North and Mid Wales Trunk Road Agent
Richard Jones	South Wales Trunk Road Agent
David Bois	South Wales Trunk Road Agent
Tim Peppin	Welsh Local Government Association
Cllr Andrew Morgan	Welsh Local Government Association
Ken Skates	Cabinet Secretary Economy and Transport
Sheena Hague	Welsh Government
Judith Cole	Welsh Government
Andy Falley	Welsh Government