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



Llywodraeth Cymru Welsh Government

This document is an update to the 'Proof of Evidence – Planning & Sustainable Development' document WG 1.23.1, providing an overview of relevant new material that has emerged during the Inquiry and updating the substance and conclusions of the original proof of evidence where necessary.

Scheme Evidence Update John Davies, MBE, BSc, MRTPI Welsh Government, Planning and Sustainable Development Document Reference: WG 1.23.7

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## 1. AUTHOR

- 1.1 My name is John Davies. I currently work as a self-employed planning consultant under the title 'John Davies Planning' as a sole trader. My professional qualifications are set out in my main proof of evidence.
- 1.2 The evidence provided in this Proof of Evidence has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions.

## 2. SCOPE AND PURPOSE OF THIS SCHEME EVIDENCE UPDATE

- 2.1 During this inquiry, the Welsh Government team responsible for the delivery of the M4 Corridor around Newport Scheme ('the Scheme') has continued working with landowners, tenants and objectors. This has resulted in changes to the published Scheme and publication of a number of draft Supplementary Orders and associated Environmental Statement Supplements. I have produced separate updates to my evidence regarding the eastbound off-slip at Magor and the works to address the impact on Newport Docks<sup>1</sup>.
- 2.2 However, the UK Government's confirmation that the Severn Bridge tolls will be removed by the end of 2018 together with new material that has emerged during the Inquiry, including the publication of the national strategy *Prosperity for All<sup>2</sup>*, WeITAG 2017<sup>3</sup> and the draft Future Generations Framework<sup>4</sup>, necessitates a separate update of my evidence. Furthermore, in response to a question from the Gwent Wildlife Trust I confirmed that I would be prepared to change my views if warranted by the evidence presented to the inquiry. This proof of evidence therefore deals with the new information that has emerged during the inquiry, relates it to the sustainable development principle and the well-being goals in the Well-being of Future Generations (Wales) Act 2015 ('the WFG Act') and updates the conclusions in my original proof.

<sup>&</sup>lt;sup>1</sup> WG 1.23.4 & WG 1.23.5

<sup>&</sup>lt;sup>2</sup> Document 5.2.10

<sup>&</sup>lt;sup>3</sup> Doc 6.1.28

<sup>&</sup>lt;sup>4</sup> Doc 5.2.11

- 2.3 This evidence update deals with the following matters:
  - the implications of removing the tolls on the Severn Bridge;
  - tidal flood risk;
  - the Welsh Government's draft Marine Plan;
  - the objectors' suggested alternative routes;
  - Welsh Government strategic policy for the M4 around Newport;
  - Environmental issues including ecosystem services;
  - WeITAG 2017 and the draft Future Generations Framework for projects;
  - how the published Scheme demonstrates innovation;
  - WebTAG Databook Update
  - conclusions on sustainable development and the requirements of planning and agriculture.

### 3. SCHEME EVIDENCE UPDATE

#### The implications of removing the Severn Bridge Tolls

- 3.1 The impact on traffic flows resulting from the removal of the Severn Bridge Tolls is considered by Mr Bryan Whittaker in his evidence update<sup>5</sup>, which provides new traffic forecasts based on a revised transport model with the tolls removed. He states that the removal of tolls would result in a significant change in the 'generalised cost' of travel across the Severn Bridges, making such journeys more attractive. This effect would diminish as distance from the Severn Crossings increases. There would therefore be an increase in traffic flows on all M4 Motorway sections in both the Do-Minimum and Do-Something scenarios in both the Scheme opening and design years. The greatest increase would occur between Junctions 23 and 23a, with increases diminishing with distance west of Junction 23. Without the Scheme in place the Annual Average Daily Traffic Flow (AADT) in 2022 on the existing M4 between Junction 23A and 23 would increase by 14%, reducing to 3% through the Brynglas Tunnels. With the Scheme in place, the AADT in 2022 between J23A-J23 would increase by 11%; on the new section of motorway west of Magor the increase would be 10%; reducing to 5% on the new motorway west of Newport Docks.
- 3.2 Mr Whittaker's forecasts confirm that the increased traffic on the existing M4 resulting from the removal of tolls would cause additional congestion, slower speed of travel and longer journey times. This can be seen from Tables 6 and 7 of his evidence update, which provide the journey times between Junction 30 and the Toll Plaza for the 'Half Toll' and 'No Toll' scenarios. These tables show greater time savings resulting from the published Scheme when tolls are removed compared with the time savings in the half toll scenario. With the Scheme in place, the additional traffic due to the removal of tolls has only a marginal impact on speed of travel and journey time on the new section of motorway, demonstrating that the published Scheme would have the capacity to deal with the predicted extra traffic. In

<sup>5</sup> WG 1.2.7 & ID/170

my view therefore the removal of the Severn Bridge Tolls strengthens the case for the Scheme, since the new section of motorway would provide the capacity to enable the motorway network to cater for the consequent increase in traffic.

- 3.3 I have dealt with the economic impact of removing the tolls and the mitigation works in Newport Docks in my Scheme Evidence update<sup>6</sup> in respect of the Docks, based in turn on the December 2017 evidence update by Mr Stephen Bussell<sup>7</sup>. The updated Initial and Adjusted Benefit Cost Ratios (BCR) for the Scheme at that time were 1.70 and 2.29, broadly unchanged from the Initial BCR of 1.66 and Adjusted BCR of 2.27 given in the March 2017 Revised Economic Appraisal Report Supplement, which included the Magor Eastbound Off-slip. These updated BCRs take account of the increased capital cost of the Scheme due to the works at Newport Docks; the effect of the increased cost is offset by the increase in predicted benefits that would follow the abolition of the Severn Crossing tolls. Following the publication of a revised WebTAG Databook by the Department for Transport<sup>®</sup>, indicative analysis using updated values for travel time savings show that the Initial and Adjusted BCRs reduce by 0.14 and 0.19. respectively. (I deal in more detail with the implications of changes to the WebTAG Databook in paragraphs 3.102-xxx below.) The Scheme therefore continues to represent good value for money, with its benefits outweighing its costs by a ratio exceeding 2 to 1 when wider economic benefits are included.
- 3.4 Mr Bussell points out that although the removal of the Severn Tolls would have a positive impact on the Welsh economy, in the absence of any intervention it would also have the effect of worsening traffic conditions on the existing M4 around Newport. In his view demand for the new motorway would be higher and the impact that the Scheme would have on journey times and accessibility would be greater when tolls are removed. He sets out several significant potential economic benefits of the Scheme, emphasising

<sup>&</sup>lt;sup>6</sup> WG 1.23.6

<sup>7</sup> WG 1.3.6

<sup>&</sup>lt;sup>8</sup> PD 198

that these depend upon its impact in improving traffic conditions, reducing journey times, improving accessibility and facilitating new trip patterns. I am therefore in no doubt that the decision to remove the Severn Bridge Tolls also strengthens the economic arguments in favour of the published Scheme, since the likely increase in traffic and congestion on the existing M4 if the Scheme does not proceed would partly undermine the potential economic benefits of toll removal.

- 3.5 I turn next to the effect of removing the Severn Bridge Tolls on noise, air quality and carbon. The relevant expert witnesses have produced updated evidence dealing with these issues.
- 3.6 Dealing first with noise, Mr Philip Evans considers the effect of the increased traffic in his evidence update<sup>9</sup>. The new traffic data for the removal of tolls has been used in the revised noise model for the Scheme. The results indicate that noise levels at individual properties would generally change by only a fraction of a dB from the previous Half Tolls scenario. The predicted average change over all 20,708 residential receptors included in the noise model is -0.03dB for the opening year and +0.04dB for the future year.
- 3.7 However, the change in numbers falling within each criteria band (major, moderate, minor, negligible) varies appreciably. In the opening year the number of major or moderate beneficial changes due to the Scheme decreases by around 15%, with an increase in the minor beneficial effects. In the design year the number of Noise Sensitive Receptors experiencing a moderate beneficial change decreases by approximately 50%, with a corresponding increase in the number of minor or negligible benefits. It remains the case that a large number of properties would experience a significant increase in noise. In the opening year 2226 properties would experience a decrease of at least 1dB but 12,479 would experience a decrease of this magnitude. In the design year 1256 properties would experience a noise increase of at least 3dB whereas 1675 properties would experience the same decrease. The number experiencing any increase

<sup>&</sup>lt;sup>9</sup> WG 1.14.3 & WG 1.14.5

would be 3987 in the opening year and 5564 in the design year compared with 15,984 and 14,248 experiencing a decrease.

- 3.8 In the light of these predicted marginal changes in noise levels and the comparative figures for properties experiencing noise increases and decreases, whilst the overall noise benefits would decrease I do not consider that the removal of the Severn Bridge Tolls alters my original conclusion that the published Scheme would bring significant benefits in terms of net noise reduction to properties and people. This would contribute to the Welsh Government's 2017 well-being objectives 5 and 6: *'promote good health and well-being for everyone'* and *'build healthier communities and better environments'*.
- 3.9 Turning to air quality, in his evidence update<sup>10</sup> Dr Michael Bull concludes that the magnitude of change in predicted NO<sub>2</sub> and PM<sub>10</sub> concentrations would remain similar to that predicted in previous Environmental Statements. Increases in traffic flows on the proposed new section of motorway would result in minor changes to the impact at some receptors, but the conclusion that overall there would be benefits to air quality remains unchanged. In view of the marginal changes in air quality levels, I do not consider that the removal of the Severn Bridge Tolls alters my original conclusion that the published Scheme would bring significant benefits across the majority of areas where air quality is affected by the existing M4. This would also contribute to the Welsh Government's 2017 well-being objectives 5 and 6: *'promote good health and well-being for everyone'* and *'build healthier communities and better environments'*.
- 3.10 In terms of ecological receptors, the beneficial impact of the Scheme on the Langstone-Llanmartin Meadows SSSI would be greater with the removal of Tolls because it would result in a substantial reduction in traffic flows. At the Severn Estuary SAC/SSSI/SPA/Ramsar Site, NO<sub>x</sub> concentrations would be above the limit value of 30µg/m<sup>3</sup>, but this location is not sensitive to nitrogen deposition.

<sup>&</sup>lt;sup>10</sup> WG 1.12.4

- 3.11 The changes in traffic flows due to the removal of tolls would result in predicted NOx concentrations being above 30µg/m<sup>3</sup> at the two receptors located closest to the new section of motorway in the St Brides SSSI, creating a small increase in the exceedance of the precautionary standard for protection of vegetation over a very small proportion of the designated site. However, to determine the ecological impact it is important to determine whether the critical loads for Nitrogen deposition are exceeded. Dr Bull confirms that re-run air quality modelling demonstrates that the critical loads would not be exceeded at any receptor within the St Brides SSSI.
- 3.12 Mr Jonathan Davies has considered the ecological impact of the predicted changes in air quality due to the removal of tolls<sup>11</sup>. He notes that the locations where NOx concentrations are predicted to exceed 30µg/m<sup>3</sup> in the St Brides SSSI are less than 20 metres from the centreline of the new section of motorway; beyond that the critical level would not be exceeded. Because the existing habitat is already nutrient-rich this would not affect the nature conservation status of the SSSI or be significant. He confirms that, due to the fact that the critical load for nitrogen deposition within the SSSI would not be exceeded with the tolls removed there would be no significant effects upon the qualifying features of the SSSI.
- 3.13 In his view the NOx increase would have little effect other than to slightly change the vegetation composition immediately adjacent to the road. In answer to a question from the Inspector Mr Davies confirmed at the inquiry that the level of nitrogen deposition would be too low to affect the creation of low nutrient grassland on the embankments of the new section of motorway. The important factor would be the material used to construct the embankments, which would be under the control of the Welsh Government. I conclude that the removal of the Severn Bridge Tolls does not alter my original conclusion that the Scheme would not have any significant impact on designated habitat sites through changes in air quality.

<sup>&</sup>lt;sup>11</sup> WG 1.18.3

- 3.14 With regard to carbon, Mr Tim Chapman in his Scheme evidence update<sup>12</sup> points out that in the Do-Minimum scenario, the increased traffic due to the removal of tolls would be likely to cause the existing M4 to be more congested, with less reliable journeys and potentially more incidents. Conversely, on the new section of motorway with the extra traffic there would still be free-flowing traffic conditions, with reduced likelihood of incidents and shorter journeys compared with the existing M4. In his view, the greater volume of traffic with no tolls would therefore be likely to result in a greater beneficial difference in User Carbon between the Do-Minimum and Do-Something scenarios compared with the half toll situation. He concludes that, with tolls removed, the Scheme should be more beneficial in carbon reduction terms compared to the previous assessment based on half tolls. Mr Chapman's evidence confirms that, while the journey length saving stays the same, all the other features which explain the user carbon benefits of the Scheme are likely to be more pronounced in a no toll scenario than a half toll.
- 3.15 Mr Chapman also assesses the impact of the UK Government's recent policy decision to ban the sale of petrol and diesel cars from 2040, concluding that this would increase the uptake of electric vehicles that is assumed in the current version of WebTAG. Whilst acceleration of the uptake of EVs would put back the date when the Scheme would achieve carbon neutrality, this would be positive in terms of climate change given that the carbon footprint of road transport on the wider network would have declined generally. Nonetheless, given the impact of removing Tolls the calculated carbon neutrality date originally given remains conservative and Mr Chapman reiterates that the Scheme would contribute positively to meeting Welsh carbon targets up to 2050. I am therefore satisfied that the removal of the Severn Bridge Tolls does not alter my previous conclusion that the Scheme accords with Welsh Government policies for greenhouse gas emissions. The reduction in emissions would contribute to the Welsh

<sup>&</sup>lt;sup>12</sup> WG 1.13.5

Government's 2017 well-being objective 3: '*drive sustainable growth and combat climate change'.* 

### **Tidal Flood Risk**

- 3.16 Further modelling work has been carried out by Dr Paul Canning to assess flood risk based on the most recent study by NRW in 2016. The results of that modelling<sup>13</sup> confirm that with the identified tidal defence works being constructed by 2025, the new section of motorway would not increase the numbers of properties that would already flood in 2019 or 2025 without the Scheme in place.
- 3.17 In addition, the Welsh Government's commitment to the Hold the Line policy was confirmed in the Welsh Government's draft 2018-19 Budget announced in October 2017. This allocates £7.5m for flood protection measures, including work in Newport and some £140m in total for flood and coastal erosion risk management. The £7.5m includes funding for detailed design and construction of the Stephenson Street scheme referenced in my evidence and that of Dr Canning<sup>14</sup>. Mr Matthew Jones has confirmed that, if the Scheme proceeds, the Welsh Government will engage with NRW and other stakeholders to co-ordinate the Stephenson Street programme with the M4 Project programme<sup>15</sup>. NRW now plan to carry out the work in 3 phases, with Phases 1-2 to be constructed in March-September 2019. Further design work is required for Phase 3 as NRW consider improvements are possible to the original outline design. There is therefore every likelihood that this crucial flood risk management scheme will be completed by 2020, shortly after the 2019 initially estimated by Dr Canning. The conclusions in my original proof remain valid and the Scheme would meet the Welsh Government's 2017 well-being objective 3: 'drive sustainable growth and combat climate change'.
- <sup>13</sup> ID 060
- <sup>14</sup> WG 1.16.1 <sup>15</sup> ID 156

#### The Welsh Government's draft Marine Plan

3.18 In my original proof, I drew attention to the importance of Shoreline Management Plans (SMP) and particularly that for the Severn Estuary (SESMP2)<sup>16</sup>, which established the policy of 'Hold the Line' for the Wentlooge and Caldicot Levels. Further reference to SMPs is contained in the Welsh Government's first Marine Plan<sup>17</sup>, published in draft form in December 2017, with the objective of guiding the sustainable development of the marine area of Wales. The document deals with cross-cutting policies and refers to coastal change, flooding and climate change. Paragraphs 174-5 deals with the risk of coastal flooding from rivers and the sea to properties, infrastructure and ecosystem services. Paragraph 178 emphasises the aim of SMPs to secure a more sustainable, longer-term shoreline management approach, which is more resilient to climate change, particularly sea-level rise. It states that they provide important context for decision making on the coast by setting out preferred policies for how the coast should be managed (Hold the Line, No Active Intervention, Managed Realignment, Advance the Line). Figure 11(a) – Coastal Erosion: Shoreline Management Plan (page 80) shows the 'Hold the Line' policy for the Wentlooge and Caldicot Levels. Paragraph 201 states

"Shoreline Management Plans consider, over the short, medium and long term, how best to manage the coast, including coastal adaptation, in light of predicted sea-level rise and other constraints."

3.19 Whilst NRW continues to maintain its objection based on the claimed lack of guaranteed funding for the 'Hold the Line' policy, the draft Marine Plan is emerging Welsh Government policy that reiterates the importance of SMPs. It states clearly that they are to be used as the basis for decisions on the management of coastal areas over the long term. In my original proof I explained (paragraph 149) why I considered the SESMP2 should be given considerable weight as a material consideration in this inquiry. The draft Marine Plan in my view confirms that opinion, since it identifies SMPs as the

<sup>&</sup>lt;sup>16</sup> WG 1.23.1: paras 147-149, 155-158

<sup>&</sup>lt;sup>17</sup> Doc 5.1.15

policy drivers for decisions on coastal management over the long term. The Welsh Government's policy for the Wentlooge and Caldicot Levels is to 'Hold the Line' and matters related to policy are beyond the scope of this inquiry.

3.20 I turn next to the draft Marine Plan's policies for ports and shipping. The draft Plan sets out a series of objectives, which are supported by general crosscutting policies and sector-specific objectives and policies; one of these sectors is ports and shipping. Because of the sector's significant potential, paragraphs 764 and 778 identify ports and shipping as a strategic priority for sustainable growth in terms of marine planning. The sector objective set out at the end of paragraph 801 is:

To safeguard established shipping routes and support sustainable growth in the shipping and ports sector.

- 3.21 Policies P&S\_01 and P&S\_02 support proposals for ports, harbour and shipping. Policy P&S\_03 is a safeguarding policy that (as explained in paragraph 824) seeks to manage the potential adverse impacts of other proposals on existing, planned and future potential activities of the sector. The policy framework set out by the draft Marine Plan thus makes the protection and expansion of the port and shipping sector a strategic priority for marine planning.
- 3.22 Separate evidence updates have been produced by me and several other witnesses describing the proposals to address the impact of the Scheme on Newport Docks<sup>18</sup> and the effect of those proposals. In my evidence update I explain why the Welsh Government's mitigation proposals are necessary to overcome the impact of the new section of motorway on Newport Docks. I also explain that overall they are in line with the economic objectives of ABP's Masterplan and the policies of the Newport LDP, and accord with the policy objectives of both the UK and Welsh Governments, to encourage the movement of goods and freight by sea and the expansion of port facilities.

<sup>&</sup>lt;sup>18</sup> WG 1.23.6 – Planning and Sustainable Development

3.23 The Welsh Government's emerging marine planning policies update and add emphasis to the importance of ports, making their sustainable growth a strategic priority. The proposals for Newport Docks set out in the Welsh Government's evidence updates are entirely in line with the marine planning framework set out in the draft Marine Plan, as they overcome the impact of the Scheme and safeguard the Docks as required by Policy P&S\_03. Furthermore, the mitigation proposals demonstrate once more how the Welsh Government is seeking to apply the sustainable development principle and the ethos of the WFG Act to all its activities by working across policy boundaries, in this case bringing marine and highway policy objectives together in seeking a solution to the problems associated with the M4 around Newport.

### The Objectors' suggested Alternative Routes

- 3.24 Twenty-two alternatives to the published Scheme were initially suggested by objectors; these were the subject of a Report<sup>19</sup> published in March 2017. Six further alternatives were put forward during the Inquiry, giving 28 in total. A summary of the key benefits and disbenefits of Alternatives 1-24 is included in PIQ/121b. Separate responses to Alternatives 25 and 26 are given in PIQ/112 and ID/103 respectively. Alternative 27 is a combination of measures put forward by Mr Waller and the response is found in the rebuttal (WG-REB-OBJ0707). Alternative 28 was put forward by Mr Alastair McDougall and the response is in ID/165 and the attached rebuttal (WG-REB-OBJ6927). An updated economic appraisal of the alternatives setting out their revised Benefit Cost Ratios (BCR) taking account of the mitigation measures in Newport Docks and the impending removal of the Severn Bridge Tolls was published in February 2018<sup>20</sup>.
- 3.25 A number of the alternatives were dealt with in inquiry sessions, including Alternatives 1 and 2 (the 'Blue Route'); Alternative 3 (the 'Green Route'); and Alternatives 8-11 put forward by Roadchef. Roadchef withdrew Alternatives 8-10 during the inquiry leaving only Alternative 11, the

<sup>&</sup>lt;sup>19</sup> Doc 4.7.2 <sup>20</sup> PIQ/152

westbound on-slip, to be considered; this is the subject of a separate rebuttal<sup>21</sup>. Associated British Ports withdrew Alternative Routes 15 and 16 by e-mail on 2 November 2017. They subsequently withdrew Alternatives 13, 14 and 17 at the same time as they withdrew their objection to the Scheme in February 2018.

- 3.26 The Blue Route was the subject of an earlier report<sup>22</sup> by the Welsh Government in December 2016. Whilst it has many supporters, Prof Cole confirmed at the inquiry that it is an M4 relief road and not a new section of motorway. In that sense it is not comparable with the Welsh Government's Scheme that is the subject of the inquiry. As confirmed in the Alternatives Report and the revised calculations based on the UK Government's decision to remove tolls by the end of 2018, the Blue Route is poor value for money since its costs exceed its benefits, the Benefit Cost Ratio (BCR) being 1.00. Phase I of the Blue Route offers a BCR of 1.13, but this still compares poorly with the proposed Scheme. Importantly, the Blue Route would not meet 9 of the specific objectives set for the Scheme. Alternatives 23 and 24 put forward during the inquiry, which are variations on the Blue Route, offer even worse value for money with a BCR of 0.45 and 0.37, respectively.
- 3.27 The Blue Route would cause local severance and serious disruption during construction because it involves work along the existing A48 and A4810. Its completion would be delayed well beyond the opening year of the Scheme because of the need for fresh design work and the statutory procedures involved in obtaining the necessary approvals. The difficulties of constructing on the existing road network would be likely to exacerbate the delay, with an estimated construction period of 8 years.
- 3.28 I also note that Professor Cole accepted that when he originally advocated the Blue Route in 2013 he anticipated lower levels of traffic growth than that which has actually occurred since 2012, for which data is now available.
   Bearing in mind the unavoidable delay in its commencement and the lengthy construction period, it is likely that the carrying capacity of the Blue Route

#### <sup>22</sup> Doc 6.2.35

<sup>&</sup>lt;sup>21</sup> WG/REB/OBJ0026+OBJ0292-JD

would be exceeded before it could be opened. It is therefore clear that this Alternative and its variations would not provide a long term solution to the problems associated with the M4 around Newport and would offer little relief to traffic in its opening year<sup>23</sup> or in the future. It therefore fails the test of thinking long term set by the WFG Act.

- 3.29 Furthermore, whilst it would have less of an effect on the Gwent Levels SSSIs and on the landscape, it would not have the same noise and air guality benefits as the proposed Scheme and would, by contrast, have an adverse impact given its urban nature, particularly on air quality. Due to the limited relief of congestion on the existing M4 there would be negligible benefits to air quality in Newport. However, some 2000 properties within 200 metres of the Blue Route would experience an increase in noise and deterioration in air quality, during construction and in operation, because of the increase in traffic. In view of the existing elevated concentrations of NO2 along the A48 Southern Distributor Road, around 575 properties within 100 metres of the Blue Route would be at risk of exceeding the annual mean NO<sub>2</sub> objective. Such deterioration in air quality would be contrary to the third well-being goal of the WFG Act, which seeks to achieve a healthier Wales, and to the Welsh Government's updated well-being objectives 5 and 6<sup>24</sup> that are intended to contribute to achieving this goal.
- 3.30 Finally, as I pointed out in my rebuttal<sup>25</sup> of the case for Cycling UK, the disruption that would result from the construction of the Blue Route along the A48/A4810 represents a serious risk to delivery of the Glan Llyn housing area, which is accessed from the A4810. This housing area is a major component of the Eastern Expansion Area (EEA) and integral to the Spatial Strategy of the Newport Local Development Plan (LDP). A shortfall in the rate of housing delivery could lead to pressure for the identification of new greenfield housing sites, contrary to the LDP strategy which is based on the development of the previously developed land at the former Llanwern

<sup>&</sup>lt;sup>23</sup> Note that this would be the opening year of the Blue Route; the opening year of the Scheme has now been revised to December 2023 – see evidence update by Mr Matthew Jones, WG 1.1.8, para 3.2.51
<sup>24</sup> Doc 5.2.9; see also PIQ/146 – WG 1.23.5

<sup>&</sup>lt;sup>25</sup> WG/REB/OBJ0247-JD

Steelworks Regeneration site, known as Glan Llyn. The LDP Strategy was endorsed by the Inspector in his report in 2014 and is in line with Welsh Government policy in Planning Policy Wales, which emphasises the use of previously developed land in preference to greenfield sites.

- 3.31 For these reasons the Blue Route is not a sustainable solution to the difficulties associated with the existing M4, since it does not provide a long term answer to the current traffic problems associated with the M4 and, compared with the published Scheme, it offers poor value for money. It fails to address air quality and noise issues along the route of the existing M4 and would cause a noise increase and deterioration in air quality to properties within 200 metres of the route. It would not be in line with Welsh Government policies for the reduction of carbon emissions. It poses a threat to successful implementation of the Newport LDP Spatial Strategy and so performs poorly in terms of its integration with the objectives of another public body, an important part of the sustainable development principle. Overall the Blue Route and its variations hence compare poorly with the proposed Scheme, do not adhere to the principle of sustainable development, would hinder achievement of the well-being goals, and have no advantages that would justify the delay that would result from pursuing any one of them.
- 3.32 The other alternatives also, for the most part, compare unfavourably with the proposed Scheme in terms of extra capital cost and/or lower BCR and hence poorer value for money, meeting fewer of the Scheme Objectives or meeting them less well. This is the case with the Green Route, which would cost more, have a lower BCR and would meet five objectives less well than the Scheme. The confirmed removal of the Severn Bridge Tolls has, furthermore, rendered it less attractive than it was when appraised under the half toll scenario. The original appraisal noted that "*By 2037 the section of M4 between J23A and J23 would start to experience congestion as traffic from the existing and new M4 converge onto the 3 lane section of motorway*"<sup>26</sup>. The additional traffic, especially at the eastern end of the M4,

<sup>&</sup>lt;sup>26</sup> Doc 4.7.2: Objectors' Suggested Alternatives Report, page 19 – Transport Economic Efficiency

due to the removal of the tolls would aggravate and accelerate this disadvantage of the Green Route.

- 3.33 Alternative 5 would cost more, has a marginally lower BCR and would meet one objective less well, but it meets two objectives better. However, it raises other issues including impact on agricultural land between Rogiet and Caldicot; landscape impact and severance; and the need to cross the main railway line and carry out construction beneath high voltage overhead cables. Alternatives 6 and 7, although meeting two objectives better, are beyond the scope of the Scheme and a matter for the local authority.
- 3.34 Alternative 11 (Roadchef) would involve extra capital cost without being better value for money, having the same BCR as the published Scheme. Alternative 12 would have a similar cost and BCR to the proposed Scheme and would meet objectives 1-14 as well, but would fail to meet objective 15, which is also not met by the published Scheme. However, it would require moving an electricity pylon carrying a 132kV power line that supplies the Severn Tunnel Pumping Station, with consequent disruption of mainline railway services during diversion works. Whilst Alternatives 11 and 12 are comparable with the published Scheme in terms of capital cost, BCR and objectives, they offer no significant advantages in comparison with the Scheme and raise other difficulties, not least of which would be the inevitable delay to the completion of a new section of motorway.
- 3.35 This delay is a significant disadvantage shared by the Blue Route, the Roadchef and ABP Alternatives, and all the other Alternative routes put forward. None of them offer advantages sufficient to justify the delay that would result from pursuing them. All the Alternatives would require additional survey, design and environmental assessment work, although I recognise that the amount of extra work varies. All would need to go through similar statutory procedures to the published Scheme, which would inevitably delay the identification and implementation of a solution to the problems on the M4 around Newport. The additional work and delay would increase the final cost of any future new Scheme over and above that set out in the Report on Alternatives.

- 3.36 A delay to the Scheme would impose wider costs in other ways. First, by extending the adverse impact of congestion on the current M4, with its attendant environmental, economic and social problems. Second, by hindering realisation of the benefits to the wider economy of addressing this problem; the scale of the problem is such that it demands urgent action. The delay inherent in pursuing any one of them would be contrary to the basic sustainable development principle of taking action to meet the needs of today's society.
- 3.37 The published Scheme satisfies the Welsh Government's duties under the WFG Act. It is in line with the *United and Connected* theme of the national strategy *Prosperity for All* and would deliver the significant improvement to the M4 around Newport required to meet Welsh Government's 2017 well-being Objective 11: '*deliver* modern *and connected infrastructure'*. In my view none of the Alternative Routes offer sufficient advantages in comparison with the published Scheme. I am therefore in no doubt that the public interest is best served by implementing the published Scheme at the earliest opportunity.

#### Welsh Government Strategic Policy for the M4 around Newport

- 3.38 I have previously provided an update of my evidence<sup>27</sup> dealing with the Welsh Government's national strategy<sup>28</sup> 'Prosperity for All' and its updated well-being objectives set out in the Well-being Statement 2017<sup>29</sup>, both published in September 2017.
- 3.39 The 2017 national strategy now states under the *United and Connected* theme and well-being Objective 11 –

"deliver **a significant improvement to the M4 around Newport**, as well as enhancements to the A55, the A40 in West Wales and other trunk roads".

3.40 The emphasis on improvement of the M4 around Newport demonstrates the importance the Welsh Government attaches to this project. Table 1 on page 14 of the *Well-being Statement 2017* confirms that well-being Objective 11:

<sup>&</sup>lt;sup>27</sup> PIQ146/WG 1.23.5

<sup>&</sup>lt;sup>28</sup> ID 125

<sup>&</sup>lt;sup>29</sup> ID 125

*deliver modern and connected infrastructure* makes a primary contribution to the following well-being goals of the WFG Act:

- Goal 1: A Prosperous Wales
- Goal 2: A Resilient Wales
- Goal 5: A Wales of Cohesive Communities and
- Goal 7: A Globally Responsible Wales.
- 3.41 In my original proof of evidence I explained that the Scheme would contribute to the Welsh Government's 2016 well-being objectives 3, 4, 6, 7, 10 and 12. My evidence update explains that the Scheme would contribute to objectives 1, 2, 3, 5, 6, 11 and 12 of the 2017 update. The existing M4 motorway is a key strategic route connecting South Wales with the rest of Europe. It is one of the most heavily used roads in Wales, critical to the Welsh economy and acting as the main gateway into South Wales. By addressing congestion on the existing M4 and hence improving perceptions of South Wales as a place to visit and do business, the Scheme would contribute significantly to well-being Objective 12: *Promote and protect Wales' place in the world*.
- 3.42 *Prosperity for All* is the overarching policy document that establishes the long term strategic framework for the Welsh Government's actions over this Assembly term and beyond. It sets out key commitments, including taking action to deliver a "*significant improvement to the M4 around Newport*". It does not state what form that action should take or how "*significant improvement*" should be assessed; its purpose is to establish the strategic framework for action. It is not disputed that the current problems on the M4 around Newport could be improved in a number of ways and objectors have put suggestions forward. The issue is whether they would bring about the significant improvement required to meet the objectives of *Prosperity for All*.
- 3.43 The Welsh Government's evidence demonstrates that the Scheme would deliver the "*significant improvement to the M4 around Newport*" intended by the national strategy and is in my view the only option before the inquiry that would do so. It is the only satisfactory solution to have emerged from the

exhaustive exercise conducted by the Welsh Government to appraise the various options to address the problems on the M4 around Newport. I do not consider that any satisfactory alternatives have emerged from the inquiry process (see discussion of Objectors' Alternatives above). It is, in my view, the only option before the inquiry that would satisfy Welsh Government policy in the 2017 national strategy *'Prosperity for All'.* It would make a significant contribution to at least half of the Welsh Government's updated 2017 well-being objectives.

3.44 I conclude that the Scheme is integral both to delivery of the Welsh Government's 2017 national strategy '*Prosperity for All*' and its well-being objectives and, consequently, is essential to ensure the Welsh Government maximizes its contributions to the well-being goals under the Act, in accordance with its well-being duty.

#### **Environmental Matters**

- 3.45 The Welsh Government has continued working closely with Natural Resources Wales (NRW) since the start of the inquiry to explore and agree ways to respond to their outstanding concerns. Agreement has been reached with NRW on many areas as set out in the Statements of Common Ground (SoCG) dealing with Flood Risk, Water Quality, Nationally Designated Sites, Bats, Protected Species, Dormouse, and Cultural Heritage and Landscape and Visual Effects<sup>30</sup>. Mitigation strategies have been agreed regarding Sites of Special Scientific Interest, Bats and Dormice<sup>31</sup>. NRW withdrew their objection in respect of dormouse on 20 June 2017<sup>32</sup>.
- 3.46 With regard to bats, NRW maintain their objection on grounds of severance and fragmentation, and mortality associated with the operation of the road (SoCG para 2.1.25). However, paras 2.1.10 and 2.1.11 of the SOCG confirm that a European Protected Species Licence would be required in respect of bat roosts only and that NRW does not hold the view that a grant of such a licence would be unlikely.

<sup>31</sup> ID 49, 56, 87

<sup>&</sup>lt;sup>30</sup> ID 48, 53, 61, 104, 105, 154 & 155

<sup>&</sup>lt;sup>32</sup> ID 154 – para 1.1.16

- 3.47 A surface water monitoring protocol<sup>33</sup> has been prepared in order to define the scope of performance monitoring of the water treatment areas forming part of the Scheme and address regulatory concern regarding water quality and hence ecological effects within the Gwent Levels SSSIs.
- 3.48 NRW agree with the Welsh Government's assessment that for each of the five Internationally Designated Sites<sup>34</sup> no adverse effect on site integrity is predicted as a result of the Scheme, either alone or in-combination with other plans and projects, taking account of either relevant embedded mitigation or that set out in the Register of Environmental Commitments<sup>35</sup>. At the time of writing a further Statement of Common Ground regarding Internationally Designated Sites is being prepared to reflect this position. The majority of NRW's outstanding concerns have been overcome by additions or modifications to the commitments in the Register of Environmental Commitments<sup>36</sup>.
- 3.49 The position in terms of key unresolved issues is set out in the letter from NRW to the Welsh Government dated 4 December 2017<sup>37</sup>. This expresses concern regarding the wording of three commitments in the Register relating to funding; reiterates the objection based on funding set out in the SoCG on flood risk; and maintains an objection in relation to the replacement of reens on the Caldicot Levels. They also maintain objections regarding the extent of land loss in the SSSIs; the likelihood of reen and ditch mitigation supporting the SSSI features; and adherence to best practice in respect of reen and ditch replacement.
- 3.50 The Welsh Government's response dated 5 December 2017<sup>38</sup> confirms its agreement to the wording of two of the commitments that concerned NRW. However, the Welsh Government does not accept NRW's wording of the third commitment relating to their statutory responsibilities. The form contained in the Register is considered appropriate given the method by

<sup>&</sup>lt;sup>33</sup> ID 54

<sup>&</sup>lt;sup>34</sup> River Usk SAC, Severn Estuary SAC, Severn Estuary SPA, Severn Estuary Ramsar site, Wye Valley and Forest of Dean Bat Sites SAC

<sup>&</sup>lt;sup>35</sup> ID 157

<sup>&</sup>lt;sup>36</sup> ID 009c

<sup>&</sup>lt;sup>37</sup> ID 163

<sup>&</sup>lt;sup>38</sup> ID 163

which Welsh Government funds NRW and the need to maintain the ability to audit all funding commitments.

- 3.51 On the issue of flood risk, in the 5 December 2017 letter the Welsh Government reiterated its view set out in section 6.2 of the Flood Risk SoCG that there would be no conflict with national planning policies in the longer term on the basis that future funding occurs to comply with the Welsh Government's 'Hold the Line' policy for the Wentlooge and Caldicot Levels. The importance of Shoreline Management Plans and the 'Hold the Line' policy are emphasised in the draft Marine Plan published in December 2017, which I refer to in more detail in paragraphs 3.18-23 above. The 5 December letter also confirms the allocation of funds to the Stephenson Street flood risk management scheme in the Welsh Government's draft 2018-19 budget.
- 3.52 With regard to the Gwent Levels SSSIs, the Welsh Government's letter sets out Commitment 199, stating that opportunities to increase the length of replacement reen will be explored with NRW. The letter confirms that opportunities have been found and that the Welsh Government continues to work with NRW's experts to take this forward. The Welsh Government's position on NRW's outstanding objections regarding the SSSI remains as set out in the SoCG.
- 3.53 In my main proof of evidence I balanced conservation objectives against the benefits of the Scheme and concluded that an exception to the national planning policies on natural heritage was justified. Subsequent Environmental Statement Supplements have dealt with many of NRW's concerns, providing results of additional ecological surveys and updating/clarifying information. Extensive discussions have been carried out resulting in substantive agreement on many areas, the addition/modification of commitments to the Register and the withdrawal of objections relating to Dormouse.
- 3.54 The extent of agreement now reached with NRW, the Welsh Government's principal adviser on issues relating to the environment and its natural resources, reinforces the conclusions in my original proof of evidence that, when the extensive mitigation proposals are taken into account, the benefits

of the Scheme outweigh its impact on the Gwent Levels SSSIs and natural heritage, justifying an exception to planning policies in this case.

#### **Ecosystem Services**

- 3.55 The Gwent Wildlife Trust and the Campaign for the Protection of Rural Wales have stated that the Welsh Government's assessment of the Scheme fails to take account of its impact on ecosystem services. They argue that this assessment is required to comply with the Environment (Wales) Act 2016, Section 6 of which places a duty on public bodies including the Welsh Government to seek to maintain and enhance biodiversity and promote the resilience of ecosystems so far as consistent with the exercise of its functions. In their view by failing to assess the impact on ecosystem services the Welsh Government's evidence gives a misleading view of the Scheme's value for money and underestimates the value of its environmental impact.
- 3.56 The first point to make is that the objectors' interpretation of the requirements of the Environment (Wales) Act is incorrect. I have explained in my original proof and in the response to the Gwent Wildlife Trust<sup>39</sup> how the Welsh Government has complied with its duty under this Act. The economic appraisal of the Scheme has been undertaken in accordance with WeITAG and WebTAG guidance; methodologies for monetising ecosystem services do not form part of either document and are hence excluded from the economic appraisal. Nonetheless, in order to assist the Inspectors the Welsh Government commissioned a report *Ecosystem Services Assessment for the M4 Corridor around Newport*, published in February 2018<sup>40</sup>.
- 3.57 This Report sets out Welsh and UK Government guidance on the economic appraisal of transport schemes and explains the principles and definitions underlying ecosystems services and their assessment. The Report provides an assessment of the impact of the Scheme on ecosystem services carried out using the most up to date (albeit limited) guidance on this subject. It identifies and describes the services provided by the four ecosystem habitat types that would be affected by the Scheme the Gwent Levels SSSIs,

<sup>&</sup>lt;sup>39</sup> WG/REB/OBJ0270.16 – GWT/Byrne, Section 2.4, page 23

<sup>40</sup> ID/186

Farmland and Woodland outside the SSSIs, and Brownfield land within Newport Docks and Tata Steelworks. It assesses the change in provision of ecosystem services were the Scheme to proceed, pointing out that the majority of the change can only be assessed qualitatively because in many cases the data to enable a quantitative assessment is not available.

- 3.58 Within the Gwent Levels SSSI habitat the Report points out that some ecosystem functions, including the food production services provided by arable land and pasture, the carbon storage service provided by peat, and the cultural benefits provided by the historic and tranquil landscape, would be adversely affected. Other services would either be unaffected or would benefit due to the extensive mitigation. From Table 17 of the Report the total area of land within the SSSIs affected by the Scheme would be 212.31 ha; this includes 76.4 ha at Tatton and Maerdy Farms, two of the three SSSI Mitigation Areas, plus a further 30.21 ha for mitigation planting. The actual permanent loss would be the 85.66 within the footprint of the new section of motorway. The total area provided in mitigation, including land reinstated, enhanced and provided as SSSI mitigation, would amount to 169.6 ha. There would hence be a net increase of 41.87 ha of land performing SSSI functions.
- 3.59 The most significant benefits of mitigation within the Gwent Levels SSSIs would be:
  - improved water quality as a result of the reduction in fertiliser and pesticide inputs at Maerdy Farm and Caldicot Moor;
  - reduction in the long-term risk to human health through the remediation of contaminated land;
  - improved access to educational resources at Tatton Farm and through the creation of the more natural land management at the three SSSI Mitigation Areas; and
  - enhancement of biodiversity, especially through the creation of wetland habitats within the water treatment areas and SSSI Mitigation Areas and the creation of species-rich grassland both within the scheme landscaping and in the SSSI Mitigation Areas.

- 3.60 In the Farmland habitat outside the SSSIs, Table 17 indicates that 257.16 ha would be affected, which includes 55.24 ha at Caldicot Moor, the third SSSI Mitigation Area. Whilst all the land temporarily affected would be restored to its previous use, 139.6 ha of arable and other farmland would be lost due to the land take for the Scheme (82.74 ha) and mitigation planting (56.86 ha); those areas of arable and improved grassland due to be 'de-intensified' (such as Caldicot Moor) would remain as farmland. The Report points out (para 5.2.3) that should the Scheme proceed there would be a net loss in ecosystem services associated with food production. However, there would be benefits to biodiversity from the species-rich grassland and woodland provided in the landscaped areas and the Caldicot Moor SSSI Mitigation Area; 26.1 ha of additional species-rich grassland would be created. Other benefits would include food for insects on the species-rich grassland; improved water quality through reduction in pesticides and fertiliser; and benefits to human health and well-being through increased access to woodland areas (see para 6.4 of Report).
- 3.61 In the Woodland habitat outside the SSSIs, Table 17 indicates that 56.99 ha would be affected. The main adverse impacts would be the loss of a relatively small area of 1.04 ha of ancient woodland at Berryhill Farm (Table 15) and the time lag to recreate woodland habitat (para 6.5). There would also be an impact on soil and some decrease in carbon sequestration. However, this would be offset in the longer term by the replacement of woodland at a rate of 2:1; the actual loss would be 49.35 ha with 119.73 ha provided, including shelter belts, scrub and replanted woodland. Replacement woodland would provide greater opportunities for outdoor recreation and education. Clearly ancient woodland cannot be replaced but the amount lost would be small and the amount of replacement woodland and the management proposals at Coed Mawr would in the longer term benefit biodiversity (para 6.5).
- 3.62 With regard to the fourth habitat type, Brownfield land, Table 17 shows168.52 ha to be affected. The main adverse impact would be loss ofbiodiversity since these areas are of nature conservation value due to the

presence of invertebrates, reptiles and birds; there would be a net loss of 63.17 ha. There would also be a minor loss of heritage value due to the demolition of industrial buildings at Newport Docks. These impacts would be balanced to an extent by the provision of species-rich grassland, which would exceed the loss of flower-rich habitat, and by the slight improvement in human health following the remediation of contaminated land, especially at Tata Steel (para 6.6).

- 3.63 The Report attaches monetary values to the ecosystem services provided by the area affected by the Scheme to assess the potential loss, using accepted methodology on which the economic assessment presented in the 2011 UK National Ecosystem Assessment was based and information from other sources such as the Office of National Statistics. The total areas of permanent and temporary land loss, and land used for mitigation, by habitat type, is summarised in Table A3.26, Appendix 3 of the Report. Table A3.27 provides monetary values per hectare per year for the habitat loss and mitigation land.
- 3.64 Using the available data the Report estimates the value of ecosystem services lost, without any allowance for mitigation, as just over £6.02m discounted and capitalised over a 100 year period (para 7.6). This includes temporary loss, allowing for the time taken for the replacement habitats in the reinstated areas to become fully functional; the Report assumes delays of 5 years for farmland and grassland; 8 years for wetland; and 35 years for woodland.
- 3.65 The benefits that would be provided by the mitigation areas have also been deferred by the same amounts, so that the calculations allow for the delay before the new habitat contributes to the replacement of the loss of ecosystem services. The Report estimates total benefits of £7.73m from the mitigation when discounted and capitalised over 100 years. Consequently, the Report estimates that there would be an overall ecosystem services benefit of £1.71m, of which £1.5 million derives from the additional mitigation for the Gwent Levels (para 7.8). Full calculations and capitalisation figures are presented in Appendix 3.

- 3.66 In its conclusions the Report points out that the techniques used in the quantitative assessment are largely outside UK and Welsh Government guidance on the economic appraisal of transport schemes, which provide specific guidance on the types of environmental impact that should be monetised and those that should be assessed qualitatively. Section 7 of the Report describes the challenges of ecosystem services valuation and the limitations of existing techniques. The Report's conclusions hence advise that the monetisation figures should be interpreted with care, taking into account these limitations.
- 3.67 Nonetheless, I note that whilst guidance is limited, the Report uses recognised methodology on which the 2011 UK National Ecosystem Assessment was based and well-known data sources such as the Office of National Statistics. I am aware of the figure of £67m stated by Mr James Byrne in his evidence to the inquiry, which I understand refers to the ecosystem services value of the Gwent Levels as a whole, but this figure has never been explained or substantiated. By contrast, the figures used in the Welsh Government's Ecosystems Services Report are derived from acknowledged sources and the calculations properly explained and justified. No better information has to my knowledge been presented to the inquiry.
- 3.68 The net benefit of £1.71m over 100 years calculated in the Ecosystem Services Report has to be seen in the context of the December 2017 Revised Economic Appraisal Report Supplement No 2. This reports the total economic benefits of the Scheme over a 60 year period as £1.83bn or £2.458bn when the wider economic benefits are included. As the Ecosystem Services Report points out in its conclusions, including the ecosystem services impacts would have no material impact on the Benefit Cost Ratio (BCR) of the published Scheme.
- 3.69 The Ecosystem Services Report is in my view a valuable and even-handed evaluation of the environmental impacts of the Scheme. The Report acknowledges the significant adverse impact that the construction of a motorway across the northern edge of the Gwent Levels would have on the landscape, sense of place, history and tranquillity. It also explains clearly the

various adverse impacts on farmland, woodland, brownfield land and biodiversity, acknowledging the loss of farmland and consequent reduction in ecosystem services associated with food production. The Report critically evaluates the effect of the comprehensive mitigation proposals that would be carried out to offset the loss of ecosystem services that would occur in the short to medium term from the construction of the Scheme.

3.70 The Report's focus on ecosystems and explanation of their services and the qualitative and quantitative evaluation of those services is new. However, whilst the quantitative assessment of the impact on ecosystem services demonstrates a net benefit over 100 years, the scale of such benefit does not materially affect the BCR of the Scheme, which continues to represent good value for money. The assessment of the impact on ecosystem services provided in this Report reaffirms the conclusion reached in my original evidence to the inquiry, that when the extensive mitigation is taken into account the Scheme's benefits outweigh its adverse impacts.

#### Welsh Transport Appraisal Guidance (WelTAG) 2017

- 3.71 The M4 Corridor around Newport Scheme is the consequence of a comprehensive transport planning appraisal process that began in the early 1990s. This culminated in the selection of the Scheme when the Welsh Ministers adopted the Plan for the M4 Corridor around Newport in July 2014. Welsh Transport Planning and Appraisal Guidance (WeITAG) was published in 2008, and the M4 development work responded to that guidance with a suite of WeITAG appraisals published up to July 2014, taking into account WebTAG best practice for transport appraisal<sup>41</sup>. A Business Case for the Scheme<sup>42</sup> was prepared in accordance with best practice at that time, adopting the advice in HM Treasury's Green Book using the five case model approach.
- 3.72 The new WeITAG 2017<sup>43</sup> was published in December 2017. It combines the principles of the HM Treasury Green Book and the Five Case Model for Better Business Cases with WebTAG best practice for transport appraisal. In

<sup>&</sup>lt;sup>41</sup> Docs 4.2.9; 4.2.10; 4.2.11; 4.2.13; 4.2.14; 4.2.15; 4.2.16; 4.2.17; 4.4.12; 4.5.5

<sup>&</sup>lt;sup>42</sup> Doc 4.5.17

<sup>&</sup>lt;sup>43</sup> Doc 6.1.28

particular, WeITAG 2017 embeds the Well-being of Future Generations (Wales) Act 2015 (WFG Act) and is endorsed by the Future Generations Commissioner for Wales. It is accompanied by supplementary guidance on the WFG Act 2015<sup>44</sup> and on the transitional arrangements<sup>45</sup> for projects already being taken forward through WeITAG 2008.

3.73 Dealing first with the transitional arrangements, the supplementary guidance explains that schemes being taken forward under WeITAG 2008 should move to WeITAG 2017 at an appropriate stage in their development. It contains a table showing how the stages in WeITAG 2008 correspond to the 5 stages of WeITAG 2017. I reproduce this table below.

	WeITAG 2008	WeITAG 2017
Identifying problems, setting objectives, generating and testing a long list of options	Planning Stage	Stage One
Assessing a short list of options to identify the preferred option/ package of measures	Stage One	Stage Two
Detailed appraisal of preferred option/ package of measures	Stage Two	Stage Three
Implementation of preferred solution/ package of measures	Post-Appraisal	Stage Four
Monitoring and Evaluation	Post- Appraisal	Stage Five

<sup>44</sup> Doc 6.1.29

<sup>&</sup>lt;sup>45</sup> Doc 6.1.30

- 3.74 There is no stage in either WeITAG 2008 or 2017 equivalent to the public inquiry into published draft Orders, which is the stage the published Scheme for the M4 Corridor around Newport has reached. The published Scheme has completed WeITAG 2008 Stage 2 and the equivalent WeITAG 2017 Stage 3, having progressed beyond the detailed appraisal of the preferred option with the publication of draft statutory Orders. WeITAG 2017 Stage 3 is described as the Full Business Case and its purpose is to "*make a full and detailed assessment of the preferred option to inform a decision as to whether or not to proceed to implementation*". Stage 3 has thus been completed, a Full Business Case has been prepared, and a decision has been made by the Welsh Ministers to proceed through the statutory procedures necessary to implement the published Scheme.
- 3.75 The Scheme would therefore, if confirmed by the Welsh Ministers, progress under WelTAG 2008 to the Post-Appraisal Stage, the implementation of the preferred solution, which is Stage 4 in WelTAG 2017. Stage 4 is summarised on page 17 of WelTAG 2017 as delivery of the preferred option; record the details of the context of delivery; monitor the process of delivery and its impacts. If the Orders are approved and the Scheme is implemented it will therefore move to WelTAG 2017 Stage 4 and then progress to Stage Five, monitoring impacts and applying lessons learnt.
- 3.76 I turn then to consider the sustainable development principle and the wellbeing goals set out in the WFG Act 2015 in the context of WeITAG 2008 and 2017. Whilst the WFG Act did not exist when WeITAG 2008 was published, as I have pointed out in my original proof<sup>46</sup> sustainable development has been embedded in the actions of successive Welsh Governments since devolution. The working practices of the Welsh Government had evolved to reflect its commitment to carrying out sustainable development. Paragraph 2.4.4 of WeITAG 2008 emphasised that the Welsh Assembly Government had a statutory duty under the Government of Wales Act 2006 to promote

<sup>&</sup>lt;sup>46</sup> WG 1.23.1, paras 26-28

sustainable development and that it was committed to making decisions consistent with this aim.

- 3.77 The Plan for the M4 around Newport was therefore selected using, amongst other things, the WeITAG methodology to appraise alternatives against sustainability objectives and criteria. The Plan was assessed as providing the best fit with the Welsh Impact Areas corresponding to the three elements of sustainable development policy at that time (the economy, society and the environment) and the transport planning objectives.
- 3.78 The various aspects that make up the new WeITAG 2017 appraisal methodology in my view were also the basis of the assessment process that resulted in the selection of the Plan for the M4 around Newport and the published Scheme. Whilst the sustainable development principle and the well-being goals of the WFG Act were not (and could not have been because of the timing) explicitly part of the process, the assessment was based upon the impacts on each aspect of sustainable development policy at that time. Further, the WeITAG 2008 appraisals followed WebTAG best practice and the Business Case followed HM Treasury guidance and the Five Case Model, on which WeITAG 2017 is now based.
- 3.79 The 2016 Sustainable Development (SD) Report<sup>47</sup> explained how the published Scheme would contribute towards the well-being goals of the WFG Act. Whilst this is part of the assessment of options in Stage 2 of WeITAG 2017, it remains the case that in selecting the Plan and published Scheme the Welsh Government appraised the various options in accordance with the sustainable development policy, Welsh Impact Areas and best practice for transport appraisals at that time.
- 3.80 Although the 2016 SD Report was produced after the Welsh Ministers had selected their preferred option, this was an inevitable consequence of the timing of the process of appraisal and the passing of the WFG Act. It does not mean that the overall process of developing and adopting the published

<sup>47</sup> Doc 2.3.11

Scheme was in any way flawed as it followed the applicable policies, best practice guidance and legal requirements at that time.

- 3.81 I emphasise that WeITAG 2017 is "a framework for thinking about proposed changes to the transport system"<sup>48</sup>. It is a process for evaluating options for making interventions to deliver a more sustainable transport system for Wales. It is "the mechanism for providing decision-makers with all the information they require to make a reasoned and auditable decision on all funding decisions"<sup>49</sup>. It is not a substitute for decision making but a process of gathering information and assessing the impact of options. I am satisfied that the appraisal process based on WeITAG 2008 that led to the adoption of the Plan for the M4 corridor around Newport in July 2014 followed these same principles.
- 3.82 The process of assessing the impact of options of necessity involves judgement. The WeITAG Impact Assessment Report, which is integral to the WeITAG 2017 process, sets out the analysis underlying each stage and should contain "*details of the judgements made and assumptions behind the assessments provided in the Stage Report*"<sup>50</sup>. The WeITAG 2017 guidance explicitly recognises that such judgements involve an assessment of the positive and negative impacts on well-being; that potential impacts may be beneficial for some but adverse for others; and that the WeITAG Stage 1, 2 and 3 reports should present a summary of the impacts and the potential to realise benefits and mitigate adverse effects<sup>51</sup>.
- 3.83 This recognition of the need to exercise judgement and evaluate positive and negative impacts is relevant bearing in mind that WeITAG 2017 is endorsed by the Future Generations Commissioner. I would refer to her letter to the Inspectors dated 13 September 2017<sup>52</sup> in which she argues that the WFG Act requires public bodies to cease taking actions that would harm elements of well-being and disagrees with the manner in which I have

<sup>50</sup> Ibid page 29

<sup>&</sup>lt;sup>48</sup> Doc 6.1.28 – Introduction, page 1

<sup>49</sup> Ibid page 2

<sup>&</sup>lt;sup>51</sup> *Ibid* page 10; page 22; page 30

<sup>52</sup> ID/109a

balanced the impacts of the Scheme. In my response<sup>53</sup> I point out that it would be impractical to rule out any development that were to cause harm to one aspect of well-being without assessing that harm against any improvements to other aspects of well-being. I use as an example the benefits of providing new housing to meet the needs of population growth balanced against the visual, landscape and other impacts of building on a greenfield site. To decide whether such development should proceed would require a balanced decision that weighs the likely impact against the benefits to well-being.

3.84 This approach is endorsed by WeITAG 2017, which requires the positive and negative impacts of options to be assessed together with the potential to mitigate adverse effects. At no point does it suggest that options likely to result in negative impacts on one aspect of well-being should be ruled out; this is a matter for the judgement of the decision maker. In my opinion the approach in my original proof and explained further in my responses to the Commissioner, of weighing the impacts against the benefits of the Scheme to arrive at a balanced judgement, is that explicitly set out in WeITAG 2017.

#### **Future Generations Framework**

- 3.85 In her letter of 13 September 2017 the Commissioner referred to the 'Future Generations Framework' and recommended its use to consider infrastructure projects. This Framework⁵⁴ is referred to by the Commissioner in her statement in the WeITAG 2017 guidance. The Supplementary Guidance⁵⁵ accompanying WeITAG 2017 states that the Framework is to be used when developing and designing infrastructure projects.
- 3.86 The draft '*Future Generations Framework for projects*' has been developed by the Office of the Commissioner "*to help Public Bodies to use the Wellbeing of Future Generations (Wales) Act as a 'framework for thinking' when developing and designing projects*"<sup>56</sup>. My comments<sup>57</sup> in response to the Commissioner's letter of 13 September 2017 pre-dated publication of

<sup>&</sup>lt;sup>53</sup> Doc WG/REB/ISU0024-2 – Howe, Section 2.3

<sup>54</sup> Doc 5.2.11

<sup>55</sup> Doc 6.1.29

<sup>&</sup>lt;sup>56</sup> Doc 5.2.12 – Guidance on using the Future Generations Framework for projects

<sup>&</sup>lt;sup>57</sup> Doc WG/REB/ISU0024-2 – Howe, para 2.2.7

WeITAG 2017 and of this Framework. Its status and use have now been clarified by WeITAG 2017.

- 3.87 Nonetheless, the Commissioner's guidance describes it as a 'framework for thinking' and states that it expresses the ways of working and the well-being goals as "*statutory prompts for consideration to inform thinking and shape the development of major projects*". There is no suggestion in the guidance that the Framework should be used retrospectively on projects such as the Scheme subject of this inquiry, which have reached an advanced stage. In fact it would be wrong and a misuse of the Framework to use it to assess a project that has gone through full appraisal and selection of a preferred option, since it is intended for use at the early stages to inform thinking and shape the development of projects.
- 3.88 More importantly, the fact that the Framework was not used in the development of the Plan for the M4 around Newport does not imply that the process leading to the selection of the published Scheme was flawed. As explained above, the appraisal process was based on best practice in transport planning and sustainable development policy at that time. The WeITAG 2017 guidance now supports a similar approach to that previously taken for the Scheme, which also set objectives and appraised options taking into account economic, social and environmental impact areas.
- 3.89 In addition, the five ways of working set out in Part 2 of the Framework were followed, albeit they were not identified in the manner in which they are set out in the WFG Act. The 2016 SD Report identifies the Scheme's contributions to the well-being goals. Most of the questions posed in Part 3 of the Framework related to the well-being goals can be clearly linked to the economic, social, environmental and cultural benefits of the Scheme identified in that SD Report.
- 3.90 Some of the questions in the Framework cannot be answered positively if the Scheme is considered in isolation, indicating those well-being goals where it would, of itself, make a more limited contribution. However, as I

have explained in other responses<sup>58</sup> the duty to carry out sustainable development under Section 3 of the WFG Act does not mean that every Welsh Government project or policy must contribute equally to each of the 7 well-being goals defined in the Act. The duty is to maximise "*its*" contribution to achieving those goals, which means the impact of the Welsh Government's actions as a public body, not the impact of individual actions. The Welsh Government's 2018-19 Budget demonstrates the actions it is taking over its many areas of responsibility to meet its duties under the WFG Act.

- 3.91 Nor is it correct to assess the Scheme in isolation from the other components of the package of measures identified in 2013 as a result of the M4 Corridor Enhancement Measures (CEM) Programme<sup>59</sup>. The results of that programme were published in a WeITAG Stage 1 (Strategy Level) report in 2013<sup>60</sup>, which identified the following as worthy of more detailed appraisal:
  - an additional high quality road to the south of Newport;
  - public transport enhancement, which would contribute to the goals of the M4 CEM Programme; and
  - common measures, comprising a mix of network improvements and the provision of cycle and walking infrastructure.
- 3.92 A second WeITAG Stage 1 (Strategy Level) report<sup>€1</sup>, published the same year, recommended consideration of a new 3-lane motorway south of Newport together with complementary measures, including reclassification of the existing M4. The report confirmed that public transport enhancement would contribute to some transport planning objectives for the M4 corridor around Newport and so recommended that these be taken forward separately by the delivery team set up for this purpose by the Welsh Government.

<sup>58</sup> See for example Doc WG/REB/ISU0024-2 - Howe, Section 2.3

<sup>&</sup>lt;sup>59</sup> WG 1.1.1, para 3.6

<sup>60</sup> Doc 4.3.15

<sup>&</sup>lt;sup>61</sup> Doc 4.3.17

After further consultation and appraisal the Welsh Ministers adopted the Plan for the M4 Corridor around Newport in July 2014<sup>62</sup>. The Plan comprised a new section of motorway south of Newport together with complementary measures and states:

"In parallel with the Plan, Welsh Government is taking forward a Cardiff Capital Region Metro. The Metro is seeking to improve accessibility to local employment sites, educational facilities and services within the Region and is complementary to the Plan for the M4 Corridor around Newport."

- 3.93 It is therefore evident that since 2013 the Welsh Government's intention has always been to take forward a comprehensive package that included public transport improvements, corridor enhancement and complementary measures, together with a new section of motorway. The Metro is being taken forward separately in view of its scale but the Scheme, the Metro and the complementary measures should be seen as a comprehensive package designed to address the problems associated with the M4 around Newport. Therefore I reiterate that any assessment of the Scheme in terms of its contribution to the well-being goals and the Welsh Government's well-being objectives should include the impact of the other elements of this comprehensive package to the solution of the problems of the existing M4.
- 3.94 To summarise, the Commissioner's Framework should not be used to retrospectively assess the Scheme as it is designed to be used at the development and appraisal of options stage of a project. Nonetheless, as outlined in my original proof and in rebuttal evidence, the Welsh Government applied the five ways of working that form Stage 2 of the Framework and the SD Report identifies the contributions to the well-being goals that form Stage 3. Any evaluation of the Scheme in terms of the well-being goals and Welsh Government's well-being objectives must take account of the other elements of the package of which it forms a part. Nothing in the Framework leads me to alter my view that the process of selecting the Plan for the M4 around Newport adhered to the sustainable development principle.

<sup>62</sup> Doc 4.5.7

### Innovation and the Published Scheme

3.95 The Future Generations Commissioner for Wales in her submission to the inquiry on 13 September 2017<sup>63</sup> stresses "the importance of transitioning from a traditional approach to sustainable development to the innovative concepts introduced in the Act". I have referred to various innovations that are integral to the Scheme in my original proof and in response to objectors. In addition, PIQ/145 lists a number of existing or intended innovations under four headings – Public Engagement, Design and Construction, Implementation, and Legacy. I would make the following additional points in relation to the sustainable development principle set out in the WFG Act.

## Public Engagement during Scheme Development

3.96 Public engagement exercises are an essential part of the development of any major infrastructure project such as the published Scheme. However, the efforts made and steps taken by the Welsh Government to involve the public in the identification of measures to address the problems associated with the M4 around Newport deserve to be recognised as innovative. The Climate Change Commission for Wales in June 2012<sup>e4</sup> cited the M4 Corridor Enhancement Measures Programme 2010-2012 as a good example of stakeholder engagement. PIQ/145 outlines the extensive use of new technology and techniques to make the published Scheme more understandable and accessible, and help the public formulate comments, demonstrating the Welsh Government's innovative approach to the 'collaboration' and 'involvement' aspects of the sustainable development principle.

## Design and Construction

3.97 The design of any major project should minimise its environmental impact, particularly where it passes through such an environmentally sensitive area as the Gwent Levels. However, the manner in which design decisions on the Scheme have departed from what I understand to be normal highway

<sup>63</sup> ID/109

<sup>&</sup>lt;sup>64</sup> PIQ-78 - Position Paper on Transport & Climate Change in Wales, Climate Change Commission for Wales

engineering practice indicates a desire to adopt a different approach. The design of the highway drainage to avoid polluted run-off from entering the Gwent Levels is a notable example. The junction strategy and design of the embankments to reduce their height, footprint and volume of materials is another. The prevention of waste, re-use of contaminated materials and consequent reduction in construction vehicle movements on the local road network demonstrates how the attention to environmental impact has extended to all aspects of the Scheme, in accordance with the 'prevention way of working'. The Scheme has been subject to detailed analysis of its carbon impact in recognition of the importance of this aspect in deciding whether the Scheme should proceed. Mr Tim Chapman stated<sup>65</sup> that the use of micro-simulation VISSIM traffic modelling in 2008 to explore the long term user carbon impact of the proposed new section of motorway (in conjunction with the PHEM emissions model) was, to the best of his knowledge, one of the first examples of its use on a large scale highway project; thus demonstrating 'long term thinking' as required by the sustainable development principle.

#### Implementation and Legacy

- 3.98 PIQ/145 contains a range of examples of the use of modern technology to improve the efficiency of the construction phase and streamline project delivery, including the use of drones to monitor key areas. It also summarises the steps to maximise the involvement of local people and businesses in the construction phase and beyond, to ensure that the Scheme leaves a positive legacy in terms of education, skills and business opportunities.
- 3.99 In addition, the extensive mitigation proposals that are an essential part of the Scheme, as summarised in the Ecosystems Services Report referred to above, would be of long term benefit, particularly to biodiversity. The SSSI Mitigation Strategy<sup>66</sup> includes a considerable amount of mitigation work that would benefit biodiversity in the longer term. The replacement reens and

<sup>&</sup>lt;sup>65</sup> WG 1.13.1, para 4.3.6 <sup>66</sup> ID 49

new ditches would provide better conditions for the growth of aquatic macrophytes compared to some of the reens they would replace. The extensive creation of woodland, species-rich grassland, reed beds, hedgerows and saltmarsh habitat would enhance biodiversity within the Levels. The conversion of arable and improved pasture land to species-rich grassland would benefit water quality in the reens, by removing some of the fertiliser and pesticide currently entering the reens and hence reducing both eutrophication and pollution. It is also intended that one of the 3 SSSI mitigation areas would be used for education and recreation. These are examples of the beneficial legacy of the Scheme and a clear demonstration of long-term thinking.

3.100 On the same themes of legacy and long-term thinking, the Welsh Government has been actively pursuing the possibility of relocating the Grade II listed Woodland House and its coach house, the demolition of which is necessary for the Scheme to proceed. In line with its well-being objectives and the well-being goals of the WFG Act, the Welsh Government recognises the importance of this building to Welsh culture and heritage and so is making every effort to secure its relocation. Quotes for the relocation of the building have been obtained and extensive discussions held with Monmouthshire County Council to identify a suitable site. This collaboration with the County Council has led to the identification of a preferred relocation site at The Old Court, Llanfihangel. A Statement of Common Ground dealing with Relocation Sites has been signed with the County Council<sup>67</sup>. The Welsh Government now intends to prepare an application for planning permission to relocate Woodland House to The Old Court site. This will be submitted as soon as possible and will seek planning permission conditional upon the Scheme proceeding to construction. This demonstrates the Welsh Government's commitment to carry out sustainable development by taking all reasonable steps to achieve its well-being objectives, balancing the need to address the economic, environmental and social problems associated

<sup>67</sup> ID/204

with the existing motorway with the need to protect Welsh culture and heritage.

3.101 Whilst innovation is not a requirement of the Act, there is an expectation that public bodies in Wales will begin to do things differently. The design of the Scheme and the way the Welsh Government has analysed and reported its impacts is in my view an exemplar, and a demonstration of a different way of doing things, entirely in accordance with the letter and spirit of the Wellbeing of Future Generations (Wales) Act 2015. In my view, the team involved in the development and design of the Scheme has adopted the underlying ethos of the Act at all stages by seeking new and innovative solutions to issues that go beyond simply addressing short term impacts, but seek to bring about long term benefits. By so doing, they and the Welsh Government have acted in accordance with the sustainable development principle and produced a Scheme that will contribute to the Act's well-being goals.

#### WebTAG Databook Update

- 3.102 On 21<sup>st</sup> December 2017 the Department for Transport published an updated version of the WebTAG Databook (version 1.9.1), which updates a range of parameters, including the values of travel time savings and fuel prices. These provide a monetary value for the improvements in journey time due to the Scheme. The values in the updated Databook are lower than those used in the modelling and economic appraisal of the Scheme, reflecting weaker GDP growth and UK productivity.
- 3.103 Mr Bussell and Mr Whittaker have produced an inquiry document<sup>68</sup> that documents the potential implications of the December 2017 WebTAG Databook for the traffic forecasting and economic appraisal of the Scheme. The effect of the new values of time in the updated Databook on the economic appraisal of the Scheme have been analysed. However, this is only a partial indicative analysis of the effect of the changes since the M4CaN Transport Model, which produces the underlying output for the economic appraisal, has not been similarly updated.

<sup>68</sup> ID/198

- 3.104 The inquiry document points out that values of time and fuel costs also determine the travel time and costs calculations in the Transport Model. The Model's response to changes in the value of time and fuel prices is highly complex, not only because these changes affect users' response to congestion in the 'do minimum' scenario and to the impact of the Scheme in the 'do something' scenario, but also due to the Severn Bridge Tolls.
- 3.105 In the December 2017 WebTAG Databook, by the Scheme design year values of time and fuel costs are both forecast to be 7% lower than previously. The inquiry document concludes that, in view of the various factors affecting future traffic flows, a change of this magnitude is likely to be of limited significance and not so significant as to justify an update of the M4CaN Traffic Model at this stage of the Public Inquiry.
- 3.106 WebTAG Guidance indicates that a proportionate approach should be adopted to updating models and appraisals in response to changes to WebTAG. The approach adopted to the December 2017 Databook follows this advice by producing the partial indicative analysis demonstrating the impact of the changes on the economic appraisal.
- 3.107 This analysis indicates that as a result of the revised values of travel time savings the current benefits of the Scheme would reduce so that the Benefit Cost Ratio (BCR) would fall by around 0.14 and the Adjusted BCR, taking account of the wider economic impacts, would reduce by about 0.19.At the start of the inquiry the Initial and Adjusted BCRs for the Scheme were 1.62 and 2.22, respectively. The most recent revisions in December 2017 to take account of the works to address the impact of the Scheme on Newport Docks updated the BCRs to 1.70 and 2.29. An analysis using the updated values of time savings taking account of the latest WebTAG Databook reduce the Initial and Adjusted BCRs by some 0.14 and 0.19, respectively. However, it remains the case that, if wider economic benefits are included, the benefits of the Scheme outweigh its costs by a ratio greater than 2 to 1 and it continues to represent good value for money.

# Conclusions on Sustainable Development and the Requirements of Planning and Agriculture

- 3.108 Many objectors have presented evidence on planning and sustainable development and I have read their written submissions and heard the views of their supporting witnesses at the inquiry. Whilst no criticism is intended, many witnesses had not had the time or opportunity to become familiar with the extensive evidence prepared by the Welsh Government and their submissions were therefore not based on the Scheme but on generalised transport or academic studies. Much of the evidence presented for the objectors has hence been characterised by lack of familiarity with the Welsh Government's evidence supporting the Scheme, and, instead, witnesses have advanced conclusions or concerns drawn from these wider studies. By contrast, the Welsh Government's evidence is based on detailed analysis and modelling of the Scheme itself. I have found it more relevant, detailed and convincing.
- 3.109 Objectors have sought to demonstrate that the environmental impact of the Scheme, particularly on the Gwent Levels SSSIs and on protected species, is of such a scale that the Scheme should not proceed. However, their evidence has been characterised, in my view, by concerns and assertions that the Welsh Government's evidence has answered comprehensively. This is confirmed by the large measure of agreement reached with NRW, the Welsh Government's principal adviser on issues relating to the environment and natural resources. My original proof acknowledged the long-term impacts on protected species but the Welsh Government's witnesses have provided examples of successful mitigation implemented elsewhere<sup>69</sup>.
- 3.110 The Ecosystems Services Report sets out clearly the advantages and disadvantages of the Scheme, including the permanent loss of a large area of productive agricultural land. However, I have already taken this into account in my original proof (paras64-70) where I conclude that the overriding need to address the problems associated with the M4 around

<sup>69</sup> WG/REB/OBJ0270.16 - GWT/Byrne, Appendix 1

Newport justifies the loss of agricultural land in exceptional cases such as this.

- 3.111 I have taken account of the information provided in the Ecosystems Services Report including the calculated net benefit over 100 years, but the scale of this benefit does not materially affect the BCR for the Scheme. The Report does not change the fact that the Scheme continues to offer good value for money. The Report contains no new evidence sufficient to alter the conclusion I stated in my original evidence to the inquiry that, when the extensive mitigation is taken into account, the balance of advantage lies with the Scheme.
- 3.112 The impact of removing the Severn Bridge Tolls does not change my conclusions in respect of air quality, noise or carbon. The impending removal of the Tolls strengthens the economic case for the Scheme since it continues to represent good value for money and the likely increase in traffic and congestion on the existing M4 would otherwise diminish the benefits of toll removal. The revised values for time savings in the updated December 2017 WebTAG Databook reduce the Scheme's BCR, but it continues to offer good value for money, with its benefits outweighing its costs by a ratio greater than 2 to 1. I have considered all other evidence relating to planning issues but this does not change my original conclusion that, on balance, the benefits the Scheme would provide constitute a compelling case in its favour that outweighs the cumulative policy conflicts.
- 3.113 Much of the opposition to the Scheme refers to the Well-being of Future Generations Act (the Act) and an instinctive view of the meaning of 'sustainable development'. One of the objectors expressed concern at the inquiry regarding the use of the word 'sustainability'. In her view, 'sustainability' meant "*being able to do something over and over again*". Many objectors appear to oppose the Scheme on the basis that no new motorway or road building project can be sustainable.
- 3.114 However, the Act now provides a definition of sustainable development and the sustainable development principle, and sets out well-being goals.
   Section 2 of the Act defines "sustainable development" as

"the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals".

The sustainable development principle is defined in section 5 as follows:

"(1) In this Act, any reference to a public body doing something "in accordance with the sustainable development principle" means that the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

This is supplemented by section 5(2), which sets out the five ways of working.

The decision as to whether the Scheme constitutes sustainable 3.115 development must therefore be made on the basis of the definitions in the Act. I have explained in my original proof and in responses to objections and submissions to the inquiry how the Scheme accords with the sustainable development principle (see in particular responses to the Future Generations Commissioner, to the RSPB and to the Gwent Wildlife Trust<sup>70</sup>). Nothing I have read or heard leads me to revise my view stated in my original proof that the process leading to the published Scheme for the M4 corridor around Newport was in accordance with the sustainable development principle and that the Welsh Government has acted in line with its duties under the WFG Act. My original proof set out the manner in which the Scheme would contribute to meeting the Welsh Government's well-being objectives. I have produced a separate evidence update<sup>71</sup> demonstrating how the Scheme would meet the updated 2017 objectives and hence contribute to achievement of the well-being goals. The Welsh Government's efforts to relocate Woodland House further demonstrate its commitment to carry out sustainable development and meet its well-being objectives, and in so doing maximise its contribution to the well-being goals of the WFG Act. I conclude that the Scheme would constitute sustainable development as defined in the Act.

<sup>&</sup>lt;sup>70</sup> WG/REB/ISU0024, WG/REB/ISU0024, WG/REB/OBJ0030, WG/REB/OBJ0270.16 71 PIQ/146 - WG 1.23.5

- 3.116 I have also considered the Future Generations Commissioner's views in respect of the balancing exercise set out in her letter of 13 September 2017 and have dealt with them in my response (WG/REB/ISU0024-2). In my view the balancing exercise I have carried out accords with established legal principles and with the Well-being of Future Generations (Wales) Act 2015.
- 3.117 The Scheme would deliver the "*significant improvement to the M4 around Newport*" intended by the Welsh Government's 2017 national strategy and is in my view the only satisfactory option before the inquiry that would do so. It would make a significant contribution to at least half of the Welsh Government's updated 2017 well-being objectives. It is integral both to delivery of the national strategy and the well-being objectives and, consequently, is essential to ensure the Welsh Government maximizes its contributions to the well-being goals under the Act, in accordance with its well-being duty.
- 3.118 I confirm that the statement of truth and professional obligations to the inquiry from my main proof still applies.