

A303 Amesbury to Berwick Down

Statement of Matters issued 30 November 2021: Applicant's response to the matters on which the Secretary of State invites further representations (Paragraph 2)

Response to Bullet Point Four – Environmental Information Review Appendix: Transport Assessment Review

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1 Introduction

1.1 Overview

- 1.1.1 The aim of this document is to review the Transport Assessment (TA) submitted as part of the A303 Amesbury to Berwick Down (Stonehenge) scheme (the Scheme) Development Consent Order (DCO) application.
- 1.1.2 The review considers changes in policy / guidance, changes in key modelling assumptions and changes in traffic forecasts since the Transport Assessment was submitted to assess whether any of the changes affect the conclusions of the Transport Assessment. Separate consideration is given to the effect of these changes on environmental topics, from what was reported as part of the application and DCO Examination process, in the 'Response to Statement of Matters Bullet Point Four Environmental Information Review' which has been produced as part of National Highways' response to the Secretary of State's (SoS) Statement of Matters (SoM).

1.2 Structure

- 1.2.1 The structure of the rest of this document is as follows:
 - a. Chapter 2: Planning policy This chapter reviews the materiality of any changes in policy documents which may affect the Transport Assessment methodology and conclusions, which have been updated since the preparation of the TA as part of the DCO application in October 2018.
 - b. Chapter 3: Development of the traffic forecasts This chapter gives an overview of the changes in assumptions underpinning the development of the traffic forecasts for the Scheme and which have led to updated traffic forecasts.
 - c. Chapter 4: Traffic forecasts This chapter reviews the differences in the impact of the Scheme reported from the latest traffic models that have been developed since the DCO submission. This chapter focuses on differences in the impact of the scheme arising from changes to traffic forecasts.
 - d. Chapter 5: Road safety This chapter reviews the differences in the impact of the Scheme as it relates to road safety arising from the updated traffic models.
 - e. Chapter 6: Summary and conclusions This chapter gives an overview as to the key changes to guidance, policy, and traffic forecasts since the DCO submission



2 Planning policy

2.1 Overview

- 2.1.1 The information below summarises policy documents that have been updated or created since the submission of the DCO in December 2018. Of relevance to the TA, this is limited to the National Planning Policy Framework (NPPF).
- 2.1.2 All other policy documents included within the DCO TA are still of relevance as there have been no further updates to these. Furthermore, our review identified no additional policy documents of relevance produced since the DCO TA.

2.2 Description of the local transport system

National Planning Policy Framework (NPPF)

- 2.2.1 The NPPF sets out the Government's national economic, environment and social planning policies and its strategy for sustainable development.
- 2.2.2 The DCO TA documents the July 2018 version of the NPPF, however since then there has been an update in February 2019 and again in July 2021.
- 2.2.3 Through a review of the 2018 NPPF content and the subsequent 2021 update, it is confirmed that there have been no updates to the policy that affects the policy content for the TA.



3 Development of the traffic forecasts

3.1 Introduction

3.1.1 This chapter discusses updates to the DfT's Transport Assessment guidance, which have led to updates to the traffic modelling for the Scheme. It summarises the changes in the demand and supply forecasting assumptions and methodologies used to develop the traffic forecasts between the forecasts developed to support the DCO application and the most recent forecasts developed post-decision. The implications of these changes are set out in subsequent chapters.

3.2 Summary of changes between application for DCO and postdecision

3.2.1 The information below summarises the changes, at a high level, between the 'Core' scenario forecasts¹ developed to support the application for DCO (and as used for the Outline Business Case (OBC)) and the latest forecasts.

Demand forecasting assumptions

3.2.2 Table 3-1, below, summarises the key changes in the demand forecasting assumptions between the two sets of traffic forecasts.

Table 3-1: Differences between the DCO application and post-decision forecasting methodology (demand) for the 'Core' scenario

Item	DCO application	Post-decision
Forecast years	2026, 2031, 2041, 2051	2029, 2034, 2044, 2051
TAG Databook	Early release of May 2018 TAG Databook	Sensitivity Test version of the July 2020 TAG Databook (v1.14)
Uncertainty Log	To Spring 2018	To Winter 2020
LGV / HGV growth	RTF15 ² , Scenario 1	RTF18, Scenario 1

- 3.2.3 It should be noted that the modelled forecast years have changed since the modelling undertaken to support the DCO application. This reflects the updated Scheme programme, which notes a schedule range for opening between December 2028 and December 2029. On the basis of just one month of this range falling within the calendar year 2028, it was agreed with the National Highways Transport Planning Group (TPG) and Economics Business Partners to model an opening year of 2029, assuming the Scheme is open for the full year. It is not expected that, should the Scheme open in December 2028, this will have any material impact on any assessment.
- 3.2.4 Consequently, the Design Year forecast has been updated to 2044 (from 2041 at DCO application, maintaining 15 years from the modelled Opening

¹ The 'Core' scenario is the basis for all published analysis. It has been defined in accordance with guidance given in TAG Unit M4 and represents a realistic and plausible forecast that is unbiased and based on published plans.

² Road Traffic Forecasts (RTF) from 2015 (RTF15) and 2018 (RTF18). These are forecasts of road traffic, congestion and emissions in England and Wales up to 2050 published by the DfT.



Year). The final modelled year is maintained as 2051, which is the last date for which national planning data is available in the National Trip End Model (NTEM) version 7.2 datasets (used for both DCO application and postdecision modelling).

Supply forecasting assumptions

3.2.5 In addition to the demand forecasting assumptions, the supply (highway network) forecasting assumptions have also been reviewed and refined. This includes updates to fixed speeds to align to RTF18, and to generalised costs to align to the July 2020 Sensitivity Testing TAG Databook (v1.14).

Construction forecasts

- 3.2.6 As set out in section 5.6 of the Transport Assessment, modelling of two principal phases of the construction programme was undertaken as part of the modelling to support the DCO application. This modelling was used to inform the Environmental Impact Assessment (EIA), as noted in the TA, and for the economic appraisal to support the OBC.
- 3.2.7 The changes to traffic forecasting assumptions set out above mainly affect the longer term trajectory for traffic growth and, therefore, are not relevant to the construction forecasting assumptions, which are in the shorter-term. The construction forecasts, therefore, do not need to be updated.
- 3.2.8 It is also the case that the changes to the construction programme, reflecting the change in Opening Year to 2029, are immaterial to the assessment undertaken. This is because the overall construction programme is still the same and the forecast traffic volumes are only likely to change by approximately 2% (as per National Trip End Model (NTEM) forecasts), which will not have a material impact on the assessment.

4 Traffic forecasts

4.1 Introduction

- 4.1.1 In this section the conclusions of the Transport Assessment, regarding the impact of the Scheme on the Design Year traffic flows, have been assessed with reference to the latest traffic models developed pursuant to the revised scenarios discussed above.
- 4.1.2 The Design Year represents a forecast year that is a longer-term forecast of the Scheme beyond the Opening Year. To align with guidance on noise assessment given in the Design Manual for Roads and Bridges (DMRB) LA 111 'Noise and vibration', a forecast year 15-year post-opening has been selected. Owing to the change in the assumed Opening Year since the production of the DCO application models (2029, instead of 2026), the Design Year for the post-decision models is assessed as 2044 (instead of 2041).



4.2 Forecast network performance – traffic flows

- 4.2.1 Figure 6-3 of the Transport Assessment (included as Figure 4-1 of this document) shows the change in Annual Average Daily Traffic (AADT) volumes from the DCO application Design Year forecast (2041), comparing the 'with scheme' scenario 'to the 'without scheme' scenario. The figure has been reproduced (as Figure 4-2 of this document) with the information from the post-decision forecasts (noting a Design Year of 2044).
- 4.2.2 The main change between the DCO application forecasts and the postdecision forecasts is that the change in traffic volumes forecast to arise from the Scheme is greater in the post-decision forecasts. The increase predominantly arises from the additional traffic forecast to use the Strategic Road Network because of lower perceived Vehicle Operating Costs set out in the updated TAG Databook; without the Scheme the network constraints prevent this growth from materialising on the Scheme section of the A303.

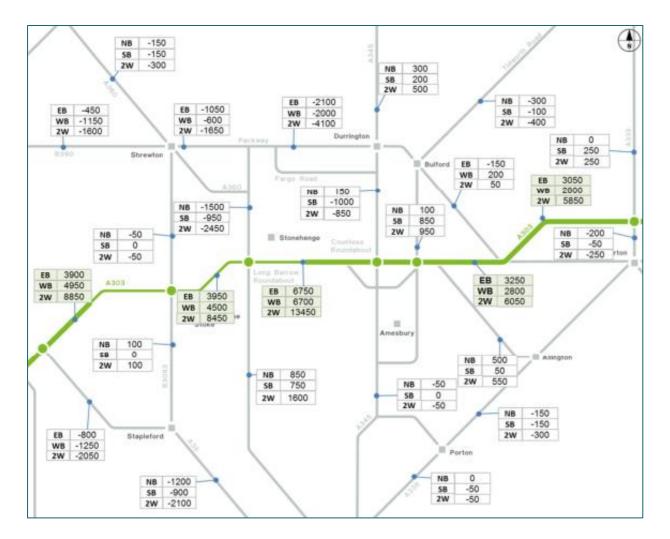


Figure 4-1: Transport Assessment – Impact of the Scheme on AADT traffic volumes in 2041 (DCO application forecasts)

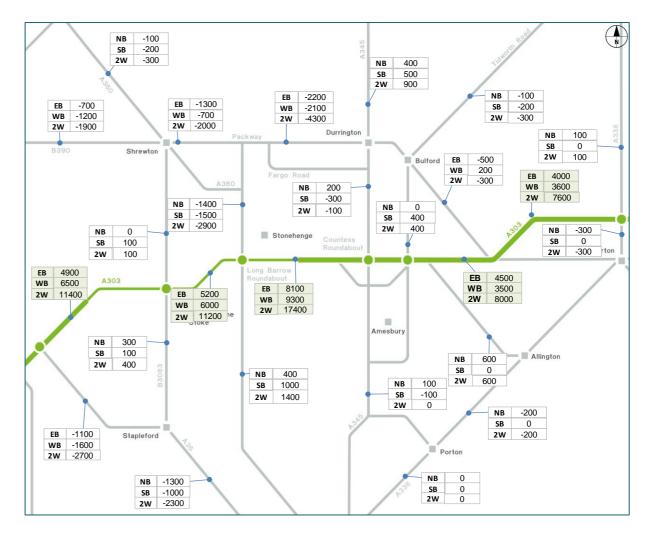


Figure 4-2: Revised Transport Assessment – Impact of the Scheme on AADT traffic volumes in 2044 (post-decision forecasts)



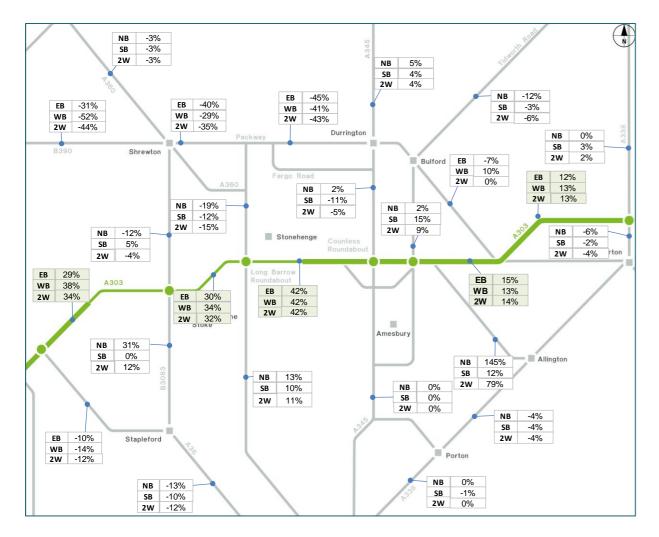


Figure 4-3: Transport Assessment – Impact of the Scheme on AADT traffic volumes in 2041 (%) (DCO application forecasts)

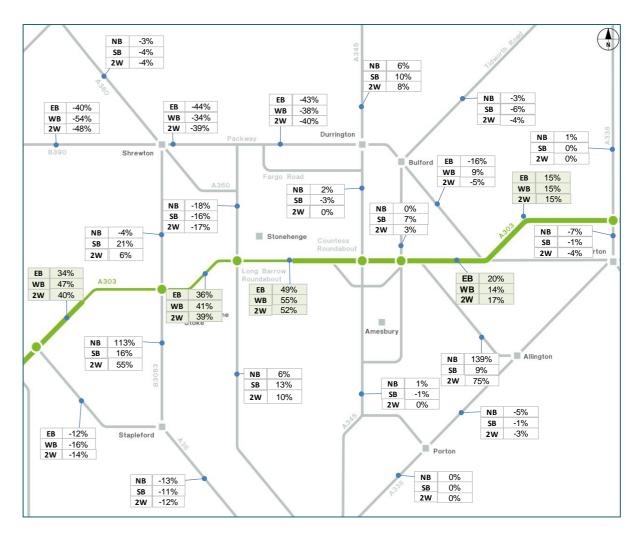


Figure 4-4: Revised Transport Assessment – Impact of the Scheme on AADT traffic volumes in 2044 (%) (post-decision forecasts)



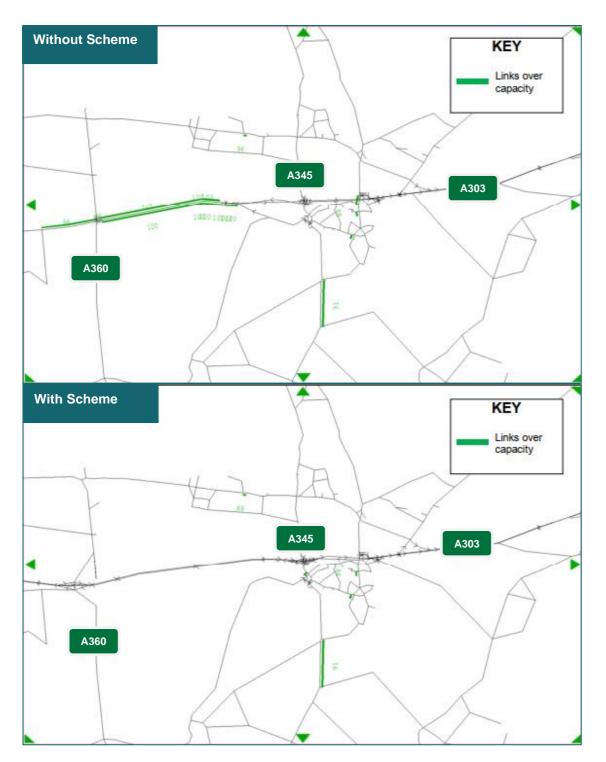


- 4.2.3 Paragraph 6.3.12 of the TA states that the Scheme will enable significant increases in traffic volumes to use the A303 through increasing capacity and reducing delays. On the whole, this results in net reductions in traffic on local roads, although there are some increases as traffic diverts onto some routes to access the A303. **This conclusion is still valid.**
- 4.2.4 Paragraph 6.3.13 of the TA states that the main local impacts of the Scheme are the reduction of trips on the existing A303 alignment through Winterbourne Stoke and the reduction in trips on The Packway, shown in Figure 6-3. **This conclusion is still valid.**
- 4.2.5 As noted in paragraph 6.3.14 of the TA, this reduction along The Packway is complemented by other reductions north of the A303 including the B390 through Shrewton and the A360/B3086 between Longbarrow junction and Rollestone Cross. These changes represent a reduction of just over 40% of traffic that is forecast to use these roads without the Scheme. **This conclusion is still valid,** the post-decision forecasts show that the Scheme reduces traffic volumes on the B390, the A360 and the B3086. The reduction in traffic volumes forecast in the latest models represent a similar percentage reduction as in the DCO application forecasts.
- 4.2.6 Paragraph 6.3.15 of the TA states that little change in traffic is forecast for traffic flows on the B3083 north/south through Winterbourne Stoke, the main change being access to Berwick St James for the A303 west becoming to the south and via the A36. There is some re-routing at the Rollestone junction with vehicles forecast to access the A360 at Airman's Corner (Stonehenge Visitor Centre), rather than through the centre of Shrewton. This conclusion does not materially change. The post-decision modelling forecasts an increase in traffic using the B3083, with traffic volumes expected to increase by 6% as a result of the Scheme rather than a decrease of -4% north of the A303. South of the A303 there is a greater increase in flows predicted due to the Scheme, increasing from the +12% in the TA to +55% in the latest forecasts. Whilst this is a large percentage change this is equivalent to an increase of around 300 vehicles AADT.
- 4.2.7 The Scheme is forecast to have little net impact on traffic volumes to the east of Durrington, as noted in paragraph 6.3.16 of the TA. Whilst there are routeing changes evident on The Packway, the increase in traffic from Bulford and Durrington accessing the A303 rather than using The Packway is offset by a reduction in traffic from Amesbury accessing The Packway. The main change evident is a forecast increase in the use of Salisbury Road between Bulford and Solstice junction (950 vehicles represents less than a 10% increase), together with a corresponding reduction (850 vehicles per day, about 5%) in traffic forecast to use the A345 between Durrington and Countess roundabout. This conclusion is still valid. The post-decision models forecast no material change in traffic using local routes to the east of Durrington due to the Scheme. The change in traffic using Salisbury Road and the A345 because of the Scheme is less evident in the post-decision forecasts (3% as opposed to 9%).



- 4.2.8 Paragraph 6.3.17 of the TA states that, to the south of the A303, the largest change is forecast to be some re-routeing for areas to the north west of Salisbury to access the A303 /west via the A360 rather than the A36, due to the journey time savings delivered by the Scheme along the new Winterbourne Stoke Bypass relative to the existing route through Winterbourne Stoke. The forecast reductions of just over 2000 vehicles per day on the A36 and an increase in 1,600 vehicles on the A360 represent a change of about 10%. This conclusion is still valid. The latest models forecast a decrease in the use of the A36 (and increase in use of the A360) as a result of the Scheme to a similar extent as the DCO application forecasts (12%, or ~1,400 vehicles).
- 4.2.9 TA paragraph 6.3.18 states that, within north Amesbury, the closure of the existing A303 means that Stonehenge Road can no longer serve traffic from Amesbury to the west. The dominant change is forecast to be re-routeing of traffic from the Woodford Valley and Stonehenge Road, instead to use Church Street and High Street to access the A303 via Countess roundabout with the Scheme. **This conclusion is still valid.** The latest traffic model forecasts show approximately a further 50 vehicles AADT using High Street which is immaterial given this represents a change across the whole day.
- 4.2.10 TA paragraph 6.3.19 states that, to the west of Amesbury, the Scheme will include stopping up of the direct connection between Allington Track and the A303 and instead providing a link to Equinox Drive within Solstice Park. While traffic volumes are low, this is forecast to improve access to north Amesbury and through Solstice junction to Bulford, with an increase of about 500 vehicles per day forecast to use Allington Track rather than taking alternative minor routes from the A338 to the A345. **This conclusion is still valid.**
- 4.2.11 It is noted in paragraph 6.3.20 of the TA that the DCO application forecasts indicated no material changes on the A345 south of Amesbury or A338 and other roads to the north of Salisbury (other than the re-routeing between A360 and A36 previously discussed). On busy days the forecasts suggested that there may be some small additional demand for the A338/A36 route, arising from delays on the A303 past Stonehenge without the Scheme, that the Scheme will alleviate. **This conclusion is still valid.**
- 4.2.12 Forecast network performance link capacity
- 4.2.13 Figure 6-7 of the TA shows volume over capacity (V/C) ratio plots for the A303 and local roads near the Scheme in the 'without scheme' and 'with scheme' 2041 forecast year AM average hour models. This figure has been reprinted below, as Figure 4-5, along with the 2044 post-decision model forecasts for comparison (Figure 4-6). The general trend indicated by the link capacity diagrams in the TA is that the Scheme reduces the number of links which are near to the scheme that are either near to or above capacity. **This conclusion is still valid.**







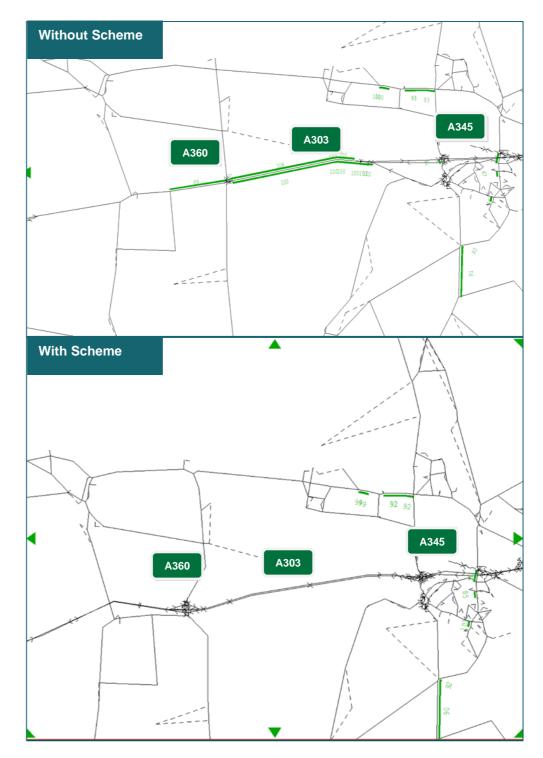


Figure 4-6: Revised Transport Assessment – Impact of the scheme on V/C ratios in the average AM hour in 2044 (post-decision forecasts)



4.2.14 Table 6-1 of the TA shows V/C ratios on the A303 at a point parallel to Stonehenge in 2041 for all modelled time periods. This table has been reproduced below, as Table 4-1, whilst the data from the 2044 post-decision models are shown in Table 4-2 for comparison. In the with scheme scenario there is still sufficient reserve capacity.

2041 'Core' scenario							
Time period	Direction	V/C without Scheme	V/C with Scheme				
AM average	EB	107	50				
hour	WB	100	41				
Interpeak	EB	101	40				
average hour	WB	100	41				
PM average hour	EB	101	41				
	WB	100	45				
Busy day average hour	EB	122	56				
	WB	128	54				

Table 4-1: V/C ratios at Stonehenge in 2041 (DCO application forecasts)

Table 4-2: V/C ratios at Stonehenge in 2044 (post-decision forecasts)

2044 'Core' scenario							
Time period	Direction	V/C without Scheme	V/C with Scheme				
AM average	EB	108	51				
hour	WB	100	43				
Interpeak	EB	104	42				
average hour	WB	100	45				
PM average hour	EB	102	42				
	WB	100	50				
Busy day	EB	133	61				
average hour	WB	140	66				

4.3 **Forecast network performance – journey times**

4.3.1 The impacts of the Scheme on journey times, both for the A303 Scheme section and the impact on local roads is given below.

Journey time of the scheme section of the A303 (A36 Wylye to A34 near Barton Stacey)

4.3.2 Table 6-2 of the Transport Assessment (Table 4-3 of this document) shows journey times for 2017, 2026 and 2041 for the A303 between the A34 and A36, without the Scheme. This information is reproduced for the latest forecasts in Table 4-4. In the without scheme scenario, journey times in the neutral periods are approximately 1 minute slower than was forecast by the modelling at DCO application stage, due to the change



in background traffic growth. Forecast journey times in the busy day period are approximately 5 minutes slower in the opening year and 10 minutes slower in the design year than what was forecast by the modelling for the DCO application. This is because the additional increase in background demand has a greater impact on journey times as the route is already at over-capacity.

 Table 4-3: Without scheme scenario journey times on the A303 scheme section (DCO application forecasts)

	Without Scheme journey times (hh:mm:ss)						
Route	Time period	Direction 2017 2026 2		2041			
	0.04	EB	00:29:57	00:30:42	00:32:12		
	AM	WB	00:31:46	00:33:22	00:35:45		
Route	IP	EB	00:30:21	00:31:03	00:32:24		
11-1 A303:		WB	00:30:09	00:30:57	00:32:39		
A303. A34 to	PM	EB	00:31:06	00:32:12	00:34:30		
A36		WB	00:29:59	00:30:54	00:32:03		
	Busy day	EB	00:40:36	00:43:24	00:50:32		
		WB	00:37:57	00:42:33	00:48:53		

Table 4-4: Without scheme scenario journey times on the A303 scheme section (post-decision forecasts)

	Without Scheme journey times (hh:mm:ss)						
Route	RouteTime periodDirection201720		2029	2044			
	0.54	EB	00:29:57	00:30:52	00:33:06		
	AM	WB	00:31:46	00:33:49	00:36:09		
Route	IP PM Busy day	EB	00:30:21	00:31:17	00:33:26		
11-1 A303:		WB	00:30:09	00:31:14	00:33:31		
A303. A34 to		EB	00:31:06	00:32:40	00:35:35		
A36		WB	00:29:59	00:31:07	00:32:45		
		EB	00:40:36	00:48:29	01:00:02		
		WB	00:37:57	00:44:37	00:56:59		

4.3.3 Table 6-3 of the Transport Assessment (reproduced in Table 4-5 of this document) shows the impact of the scheme in the Design Year. This information is provided in Table 4-6 for the 2044 Design Year from the post-decision forecasts. The impact of the scheme is greater in the post-decision forecasts compared to the DCO application forecasts. In the neutral day periods the Scheme is expected to save an additional 1 minute of journey time. In the busy day period, an additional 6-8 minutes of journey time savings are forecast. This is primarily because the 'with Scheme' scenario alleviates the additional



congestion forecasts in the without scheme forecasts, as explained in paragraph 4.4.2, arising from the forecast increase in background traffic.

2041 Design Year journey times (hh:mm:ss)							
Route	Time period	Direction	Without Scheme	With Scheme	Difference	% Difference	
	0.04	EB	00:32:12	00:27:55	-00:04:17	-13%	
	AM	WB	00:35:45	00:29:55	-00:05:50	-16%	
Route	IP	EB	00:32:24	00:28:12	-00:04:12	-13%	
11-1		WB	00:32:39	00:28:23	-00:04:16	-13%	
A303: A34 to	PM	EB	00:34:30	00:29:46	-00:04:44	-14%	
A36		WB	00:32:03	00:28:26	-00:03:37	-11%	
	Busy day	EB	00:50:32	00:31:05	-00:19:27	-38%	
		WB	00:48:53	00:30:38	-00:18:15	-37%	

Table 4-5: Design Year journey times on the A303 scheme section (DCO application forecasts)

Table 4-6: Design Year journey times on the A303 scheme section(post-decision forecasts)

2044 Design Year journey times (hh:mm:ss)							
Route	Time period	Direction	Without Scheme	With Scheme	Difference	% Difference	
	0.04	EB	00:33:06	00:28:07	-00:04:59	-15%	
	AM	WB	00:36:09	00:30:10	-00:05:59	-17%	
Route	IP	EB	00:33:26	00:28:25	-00:05:01	-15%	
11-1 A303:		WB	00:33:31	00:28:42	-00:04:49	-14%	
A303. A34 to	PM	EB	00:35:35	00:29:33	-00:06:02	-17%	
A36		WB	00:32:45	00:28:43	-00:04:02	-12%	
	Buoy doy	EB	01:00:02	00:31:30	-00:28:32	-48%	
	Busy day	WB	00:56:59	00:31:51	-00:25:08	-44%	

4.3.4 Paragraph 6.5.8 of the TA states that there will be modelled journey time savings in both directions on the A303 between the A34 and A36 as a result of the Scheme. This applies to all time periods during the neutral months, with journey time savings amounting to over four minutes in all cases except PM eastbound. For a busy day, the average journey time saving due to the Scheme approaches twenty minutes in each direction. The conclusion that the scheme has significant travel time savings in all peaks is still valid. The scheme is forecast to produce approximately 5 minutes of travel time



savings in the neutral time periods by the design year and approximately 25 minutes of travel time savings in the busy day period.

4.3.5 Paragraph 6.5.9 of the TA goes on to state that the Scheme will deliver significant journey time benefits in all peaks [and that] the benefits most pronounced in the busy period, where substantial journey time savings will result in journey times being comparable with the neutral month time periods where there will be minimal congestion and delay. **This conclusion is still valid.**

Local journey time routes

- 4.3.6 Paragraphs 6.5.15 6.5.22 of the TA discuss the impacts of the Scheme on local journey time routes.
- 4.3.7 Paragraph 6.5.17 of the TA states that there is little change in most local journey times as a result of the Scheme in the opening year. The following paragraphs note:
 - **a.** [Paragraph 6.5.17] There is an increase in modelled journey times of around 30 seconds in all time periods for the route on the A360, which is a negligible impact. The increase in journey time is due to the length of this route being extended by 0.4km around Longbarrow junction with the Scheme in place. **This conclusion is still valid.**
 - b. [Paragraph 6.5.18] In the busy period the journey times on The Packway are forecast to improve with the Scheme by over two minutes in both directions. **This conclusion is still valid.**
 - **c.** [Paragraph 6.5.18] There is also a reduction in journey times of almost a minute on the A345 southbound in the busy day period. **This conclusion is still valid.**

4.4 Forecast network performance – Longbarrow junctions

- 4.4.1 Section 6.6 6.13 of the Transport Assessment detail the operational performance of links and junctions affected by the Scheme.
- 4.4.2 For the post-decision model forecasts, and as set out above, there are no material changes in the performance or impacts of the Scheme on local roads and accordingly the operational assessments undertaken at the time of the DCO application are deemed sufficient.
- 4.4.3 Discussions on how best to balance the tensions between potential light pollution affecting the World Heritage Site and operational safety at Longbarrow Junction continued after assumptions were made to prepare forecasts for the DCO application. The decision reached that the junction should not be lit and that it should be signalised was agreed and documented in DCO evidence (e.g. the Statement of Common Ground (SoCG) with Wiltshire Council [AS-147] and section 4 of the Outline Environmental Management Plan (OEMP) [AS-129]. Given this specific change to the Scheme design assessed, the operational assessment at Longbarrow junction (previously reported in section 6.7 of the TA) has



therefore been updated to represent a signalised junction. (The previous operational assessment, as per the strategic modelling, had assumed that this junction would be non-signal controlled.) The results from this exercise conclude that the junction is able to operate within capacity without causing queueing back to upstream junctions, as was the case with the DCO application model forecasts.

5 Road safety

5.1 Scheme impact on accident rates

- 5.1.1 Chapter 7 of the TA summarises the accident appraisal undertaken at the time of the application for DCO. This appraisal has been refreshed using the post-decision model forecasts.
- 5.1.2 Table 7-1 of the Transport Assessment shows the results of the accident assessment using the DfT's Costs and Benefits to Accidents Light Touch (COBA-LT) tool for the Scheme section. Paragraph 7.3.4 of the TA reports that the Scheme is forecast to reduce the number of accidents and casualties. This included five fewer fatalities over the appraisal period and 108 fewer casualties in total. Table 7-1 of the TA is reproduced in this report as Table 5-1, below.
- 5.1.3 An updated version of this table has been produced using data from the post-decision model forecasts. This is presented as Table 5-2. The conclusion that the scheme reduces accidents and casualties on the A303 scheme section is still valid. The scheme is now forecast to reduce accidents by a greater magnitude.

 Table 5-1: DCO application forecasts - Estimated accidents and casualties for 60-year appraisal period, A303 scheme section

Accident type	Without Scheme	With Scheme	Difference					
Summary of accidents								
No. accidents	1,406	1,374	32					
Summary of casualties								
Slight	1,794	1,728	66					
Serious	223	186	37					
Fatal	32	27	5					
Total	2,049	1,941	108					

Note: COBA-LT outputs rounded to nearest whole number



Table 5-2: Post-decision forecasts - Estimated accidents and casualties for 60-year appraisal period, A303 scheme section

Accident type	Without Scheme	With Scheme	Difference				
Summary of accidents							
No. accidents	1,543	1,474	69				
Summary of casualties							
Slight	1,969	1,852	117				
Serious	245	196	47				
Fatal	35	29	6				
Total	2,249	2,079	170				

Note: COBA-LT outputs rounded to nearest whole number

5.1.4 The scale of the benefit is reduced reflecting greater volumes of traffic in the post-decision models on other, unimproved sections of the corridor, as a result of changes to background traffic growth. The conclusion given in paragraph 7.3.9 of the TA, that the *"net effects of re-routing and increased traffic along the A303 corridor is to moderate the accident reductions expected on the new route relative to the existing A303 Scheme section"* therefore remains appropriate in the post-decision forecasts.

Personal Injury Accident (PIA) analysis

- 5.1.5 Table 5-3 and Table 5-4 illustrates a comparison of the Personal Injury Accident (PIA) data provided in the DCO TA. Table 5-3 provides a comparison of the five-year period (2012 – 2016) in the DCO TA with the most recent available data (a three-year period; 2017 – 2019) since submission of the DCO. The purpose of this analysis was to identify the absolute numbers of accidents since the TA was submitted.
- 5.1.6 Table 5-4 illustrates a direct comparison of the DCO TA five-year PIA analysis with the most recent five-year accident data (2015 2019). This provides a direct comparison of the two five-year sets of data.
- 5.1.7 From comparison of the datasets, there does not appear to be a pattern in the increases or decreases in accidents or casualties in the most recent five-year period. The overall increase in observed accidents is around 3% and casualties is around 7%. This is not considered a material change in the baseline data.
- 5.1.8 Paragraph 7.4.65 of the TA concludes that the analysis of the [2012-2016] accident data does not indicate inherent existing safety issues in the area around the site that could be exacerbated by the Scheme. The analysis of the most recent five-year data set confirms there is no material change in the baseline data and, therefore, the conclusion reached in the TA still stands. On this basis, the approach to assessing the Scheme impact on safety, and the assessment of accidents is unchanged.

Table 5-3: PIA analysis for the three year period since DCO submission, January 2017 - December 2019



Site No.		2012 – 2016 (5-years)		2017 – 2019 (3-years)		Difference		% Difference	
	Site Description		Total Casualties	Total PIAs	Total Casualties	Total PIAs	Total Casualties	Total PIAs	Total Casualties
1	Allington Track between Allington and A303	4	4	1	1	-3	-3	-75%	-75%
2	A3028 between Bulford and A303	4	6	3	7	-1	1	-25%	17%
3	Roundabout joining Solstice Park Avenue, Equinox Drive and A303 on/off slips	4	4	3	4	-1	0	-25%	0%
4	Roundabout joining Porton Road, Solstice Park Avenue and London Road	6	8	4	4	-2	-4	-33%	-50%
5	London Road link between Porton Road and A345	6	7	2	2	-4	-5	-67%	-71%
6	Salisbury Road link between A303 and A3028	3	3	1	1	-2	-2	-67%	-67%
7	Salisbury Road / A3028 Junction at Bulford	2	2	3	3	1	1	50%	50%
8	A3028 between Bulford and A345	7	8	4	5	-3	-3	-43%	-38%
9	A345, north of A3028	2	2	1	3	-1	1	-50%	50%
10	Roundabout joining A345, A3028 and The Packway	6	10	3	3	-3	-7	-50%	-70%
11	A345, north of Countess Roundabout	8	13	3	5	-5	-8	-63%	-62%
12	Countess Roundabout	8	11	8	9	0	-2	0%	-18%
13	High Street / Salisbury Street link (Amesbury Centre)	8	8	0	0	-8	-8	-100%	-100%
14	Church Street / Recreation Road Junction	1	1	0	0	-1	-1	-100%	-100%
15	A345 between Countess Roundabout and Amesbury Library	8	20	1	1	-7	-19	-88%	-95%
16	Earls Court Road / Boscombe Road link between Amesbury Library and Underwood Drive	10	12	1	1	-9	-11	-90%	-92%
17	Roundabout joining Porton Road, Boscombe Road, Butterfield Drive and Raleigh Crescent	2	2	1	1	-1	-1	-50%	-50%
18	Stockport Avenue link between Underwood Drive and A345	3	3	1	1	-2	-2	-67%	-67%
19	A345 between Amesbury Library and Stockport Avenue	2	2	2	4	0	2	0%	100%
20	Roundabout joining A345 and Stockport Avenue	1	1	0	0	-1	-1	-100%	-100%
21	A345, south of Stockport Avenue	3	3	8	13	5	10	167%	333%
22	Longbarrow Roundabout	9	13	10	12	1	-1	11%	-8%
23	A360, south of Longbarrow Roundabout	3	4	2	3	-1	-1	-33%	-25%
24	B3083 between Winterbourne Stoke and Stapleford	3	3	0	0	-3	-3	-100%	-100%
Total	Total		150	62	83	-51	-67	-45%	-45%

Table 5-4: 6 PIA Analysis comparing the most recent five year period (January 2015 - December 2019) with the five year highways period analysed in the DCO TA (January 2012 – December 2016)

0.11		2012 – 2016 (5-years)		2015 – 2019 (5-years)		Difference		% Difference	
Site No.	Site Description		Total Casualties	Total PIAs	Total Casualties	Total PIAs	Total Casualties	Total PIAs	Total Casualties
1	Allington Track between Allington and A303	4	4	5	7	1	3	25%	75%
2	A3028 between Bulford and A303	4	6	5	11	1	5	25%	83%
3	Roundabout joining Solstice Park Avenue, Equinox Drive and A303 on/off slips	4	4	6	7	2	3	50%	75%
4	Roundabout joining Porton Road, Solstice Park Avenue and London Road	6	8	7	9	1	1	17%	13%
5	London Road link between Porton Road and A345	6	7	5	6	-1	-1	-17%	-14%
6	Salisbury Road link between A303 and A3028	3	3	2	3	-1	0	-33%	0%
7	Salisbury Road / A3028 Junction at Bulford	2	2	4	4	2	2	100%	100%
8	A3028 between Bulford and A345	7	8	8	10	1	2	14%	25%
9	A345, north of A3028	2	2	4	6	2	4	100%	200%
10	Roundabout joining A345, A3028 and The Packway	6	10	3	3	-3	-7	-50%	-70%
11	A345, north of Countess Roundabout	8	13	7	10	-1	-3	-13%	-23%
12	Countess Roundabout	8	11	10	12	2	1	25%	9%
13	High Street / Salisbury Street link (Amesbury Centre)	8	8	1	1	-7	-7	-88%	-88%
14	Church Street / Recreation Road Junction	1	1	1	1	0	0	0%	0%
15	A345 between Countess Roundabout and Amesbury Library	8	20	5	9	-3	-11	-38%	-55%
16	Earls Court Road / Boscombe Road link between Amesbury Library and Underwood Drive	10	12	5	5	-5	-7	-50%	-58%
17	Roundabout joining Porton Road, Boscombe Road, Butterfield Drive and Raleigh Crescent	2	2	3	3	1	1	50%	50%
18	Stockport Avenue link between Underwood Drive and A345	3	3	2	2	-1	-1	-33%	-33%
19	A345 between Amesbury Library and Stockport Avenue	2	2	3	6	1	4	50%	200%
20	Roundabout joining A345 and Stockport Avenue	1	1	0	0	-1	-1	-100%	-100%
21	A345, south of Stockport Avenue	3	3	13	20	10	17	333%	567%
22	Longbarrow Roundabout	9	13	12	17	3	4	33%	31%
23	A360, south of Longbarrow Roundabout	3	4	3	5	0	1	0%	25%
24	B3083 between Winterbourne Stoke and Stapleford	3	3	2	3	-1	0	-33%	0%
Total		113	150	116	160	3	10	3%	7%



6 Summary and conclusions

6.1 Summary

- 6.1.1 The principal elements of the Transport Assessment (TA) produced in support of the application for development consent for the A303 Amesbury to Berwick Down (Stonehenge) scheme have been reviewed.
- 6.1.2 The review has considered changes in policy and guidance, changes in key traffic modelling assumptions and the subsequent impact of these on traffic forecasts for both the 'without scheme' and 'with scheme' scenarios, and any implications for road safety. A summary of the key conclusions drawn from the review is set out below.

Planning policy

6.1.3 Since the submission of the DCO Transport Assessment there has been no material change to the policy imperative for the Scheme or for the scope of the transport assessment required.

Model assumptions

- 6.1.4 Since the submission of the DCO Transport Assessment, the following changes relating to key modelling assumptions, have been identified:
 - a. Updated assumptions underpinning the forecasts (relating to demand and supply inputs); and
 - b. Minor refinements to the scheme design at Longbarrow agreed as part of the DCO Examination.

Traffic forecasts

- 6.1.5 Since the submission of the DCO Transport Assessment, there are no major substantive changes relating to the traffic impact of the Scheme.
- 6.1.6 There are minor changes relating to the magnitude of the Scheme's impact. For example, the latest forecasts detail a greater impact of the Scheme as it relates to traffic volumes on the A303. This is because in the latest forecasts (in both the 'without scheme' and 'with scheme' forecasts) there is an increase in background traffic growth. In the 'with scheme' forecasts, the Scheme section of the A303 has the capacity to accommodate the increase in demand. In the 'without scheme' forecasts the A303 does not have the capacity to accommodate this demand.

Road safety

6.1.7 The conclusion that the Scheme produces, in economic terms, a net accident benefit is still valid. The conclusion that the number of accidents through the scheme section reduces as a result of the Scheme is also still valid; as is the conclusion that this benefit is offset by additional accidents arising from induced traffic.



6.2 Conclusions

6.2.1 The changes in the impact of the Scheme identified as part of this review are not considered to be material in traffic terms. National Highways has a legal agreement with Wiltshire Council to monitor local traffic volumes and, should a material increase be identified, undertake appropriate mitigation. The changes in the impact of the Scheme identified as part of this of this review are not considered to be material.



Abbreviations List

Definition (Acronym)	First page defined
Annual Average Daily Traffic (AADT)	6
Costs and Benefits to Accidents - Light Touch (COBA-LT)	
Design Manual for Roads and Bridges (DMRB)	5
Development Consent Order (DCO)	2
Environmental Impact Assessment (EIA)	5
National Planning Policy Framework (NPPF)	
Outline Business Case (OBC)	4
Outline Environmental Management Plan (OEMP)	
Personal Injury Accident (PIA)	
Road Traffic Forecasts (RTF)	
Secretary of State's (SoS)	2
Statement of Common Ground (SoCG)	
Statement of Matters (SoM)	2
Transport Assessment (TA)	
Transport Planning Group (TPG)	
Volume over Capacity (V/C)	

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