A1 in Northumberland: Morpeth to Ellingham

Scheme Number: TR010059

GEN.5 Technical Note on BCR

AFPF Regulation Rule 8(1)(b)

Planning Act 2008

Infrastructure Planning (Prescribed Forms and Procedure) Regulations 2009

January 2021

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

The A1 in Northumberland: Morpeth to Ellingham

Development Consent Order 20[xx]

GEN.5 Technical Note on BCR

Regulation Reference:	APFP Regulation Rule 8(1)(b)
Planning Inspectorate Scheme Reference	TR010059
Application Document Reference	TR010059/7.8.33
Author:	A1 in Northumberland: Morpeth to Ellingham Project Team, Highways England

Version	Date	Status of Version
Rev 0	January 2021	Deadline 1

HE551459-WSP-GEN-M2F-TN-TP-0081 – STAGE 4 BENEFITS

Project:	A1 'Morpeth to Felton' and 'Alnwick to Ellingham' Dualling	**Date:**	11/01/2021
		TN Ref:	81
Subject:	Stage 4 Benefits Updated		
Author:	Arjuna Kulupana	**Project Ref:**	70038286text
Reviewed:	Paul Smith		

INTRODUCTION

The A1 in Northumberland DCO submission includes the Economic Assessment results for the core M2E scenario, which generate a Benefit to Cost ratio (BCR) of 0.8 as described in Chapter 5 of the Case for the Scheme [APP-344].

Various sensitivity tests have been undertaken throughout the project lifecycle in order to reflect changes to the Scheme design, cost and programme, and to capture updates to national traffic forecasts and WebTAG. Since the submission of the application, additional appraisal work has been undertaken, driven by the Applicant's lifecycle governance with the moving the Scheme from preliminary design into planning phase. A sensitivity test produced in May 2020 was used to inform the updated business case, and demonstrated that the M2E scheme is expected to provide an improved BCR of 0.95. The updated business vase is set out in the Table below

This note summarises the differences in input assumptions and monetised outputs arising from this sensitivity test. The key differences in input assumptions were:

- Core – Model based on TAG Version December 2017 and TUBA 1.9.10
- Sensitivity – Model based on TAG Version May 2019 and TUBA 1.9.13
- The Sensitivity test also includes additional assessments for Resilience and Off-peak, Weekend and additional Summer traffic

Table 1: M2E Core and Sensitivity Test Benefits (£000)

Benefits	Core Scheme Benefits	Sensitivity Test Benefits
Noise	389	389
Local Air Quality	-6,222	-6,222
Greenhouse Gases	-61,558	-61,558
Accidents	32,489	29,988
Additional Accident Benefits (HE method)	NA	4,127
Economic Efficiency: Consumer Users (Commuting)	13,547	16,710
Economic Efficiency: Consumer Users (Other)	44,717	53,965
Economic Efficiency: Business Users and Providers	25,402	47,626
Wider Public Finances (Indirect Taxation Revenues)	49,330	23,072
Journey Time Reliability	8,095	8,101
Wider Impacts	24,157	24,075
Resilience Benefits	NA	45
Offpeak, Weekend and Bank Holiday Benefits	NA	21,207
Summer Benefits	NA	6,708
Present Value of Benefits (PVB)	130,346	168,233
Present Value of Costs (PVC)*	156,792	176,699
Net Present Value (NPV)	-26,446	-8,467
Benefit to Cost Ratio (BCR)	**0.8**	0.95

*includes reduction due to maintenance cost savings resultant from scheme

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