

POPE of Major Schemes Summary Report

Scheme Title	A419 Blunsdon Bypass
Opening Date	March 2009
POPE Stage	Five Years After

Scheme Description

The A419 Blunsdon bypass scheme is a Highways England major scheme situated between Swindon city centre and Cirencester, which opened in March 2009. Before the scheme opened, traffic congestion which occurred at the Turnpike Roundabout and at the junction with Lady Lane resulted in long delays, particularly at peak times. This resulted in driver frustration and traffic collisions. In addition, the A419 in Blunsdon was difficult to cross for pedestrians and vehicles. The trunk road severed Blunsdon village and properties adjacent to the trunk road experienced high levels of traffic noise and air pollution.

The scheme comprised of the following:

- A dual carriageway bypass to the west of Blunsdon, including a short climbing lane in the southbound direction on the approach to Lady Lane junction.
- Two signal controlled junctions (Lady Lane Junction and Turnpike Junction) connected by a local road in place of Turnpike Roundabout.
- A dedicated pedestrian/cycle way on the A4311 with pedestrian/cycle phases incorporated in the signalised Lady Lane Junction.
- A new bridleway bridge at the end of Widhill Lane to allow non-motorised users to cross the bypass safely.
- An underpass provided at the northern end of the bypass to maintain access to a landfill site and Upper Widhill Farm.
- In partnership with Swindon Borough Council, improvements have been carried out on the downgraded former route between Widhill Lane and Lady Lane which is now the responsibility of Swindon Borough Council. These improvements included lighting, a pedestrian/ cycle way and widened grass verges.

Objective (Source: Environmental Statement)	Objective Achieved?
To minimise noise and visual impact on property in Blunsdon	✓
To improve the safety of the A419 for all road users through Blunsdon and at the Turnpike Junction.	✓
To remove severance through Blunsdon Village and encourage walking, cycling and equestrians.	✓
To remove the bottleneck on the A419 at Lady Lane and Turnpike Junctions and improve journey times and reliability.	✓

Summary of Scheme Impacts

Key Findings

- Traffic flows along the new A419 have increased by approximately 5,000 vehicles per day, and traffic has successfully reassigned from the old A419, where traffic flows have reduced by 98%.
- The bypass has reduced journey times across all periods, and most notably reduced times have by 7.5 minutes in the southbound direction in the PM peak, and 3.5 minutes northbound in the AM peak.
- A larger than expected collision saving of 8.2 per annum is seen, which is substantially higher than the forecast saving of 2.2 collisions per annum.
- The majority of environmental impacts are as expected.
- When indirect tax is considered as a benefit, the scheme delivers a Benefit Cost Ratio (BCR) of 2.7, considered to be high value for money by the DfT.

Traffic

- Traffic flows on the former A419 have reduced by 98%, illustrating the reassignment of traffic onto the bypass.
- There has been an increase in traffic on the A419, north and south of the bypass section, in line with expectations.
- Traffic flows across the network (where observed data is available) are generally closer to the low growth forecast. The exceptions are Lady Lane, where the flows were considerably higher than forecast, and Thamesdown Drive, where the flows were significantly lower. This highlights inaccuracies in assumptions on these two roads before the scheme was implemented.
- Average journey times on the scheme section five years after are consistently lower than pre-scheme journey times on the old route alignment. Journey time variability has also reduced, and journey times are now more consistent throughout the day.

Safety

- Within the area of the bypass, collisions have reduced by an average of 8.2 per annum. This is higher than was forecast at the appraisal stage, where savings of 2.2 collisions per annum were expected. Statistical tests show that this reduction is unlikely to have occurred by chance, and is therefore related to the scheme.
- The collision severity index has increased from 6% to 35% since scheme opening. Whilst the number of slight collisions has fallen by an average of 14.6 collisions per year, there has been an increase in serious collisions of 1.2 collisions.
- Pre-scheme, there was a cluster of collisions at what was formerly the Turnpike Roundabout and on the A419 approaches to it. Post-scheme, collisions at junctions have reduced substantially. However, there were a larger proportion of serious collisions, located on the slip roads west of the junction.
- It is considered that the scheme has had a slight beneficial impact on personal security, reflecting the inclusion of lighting and footpaths as part of the downgrading of the old A419.

Environment

- The reduction in through traffic along the old A419 as a result of the bypass has been more than forecast. Therefore, the impacts for noise and air quality are considered to be better than expected.
- Observed carbon emissions between the pre- and post-scheme periods increased by a lesser extent than forecast.
- Overall, the landscape impacts of the scheme are considered to be as predicted, with screening and integration functions of earthworks, planting, barriers and bunding enabling the scheme to fit well into the surrounding landscape.

- While weed control has been undertaken, the scheme remains affected by noxious weed infestations and will require continuing maintenance. Four plots planted as species rich grassland have reverted to open grassland. Natural colonisation by species-rich grassland has not occurred as expected in the landscape proposals.
- Regarding townscape, the former A419 through Blunsdon is quiet, with road furniture and traffic levels more suited to the village.
- A good proportion of bat boxes, installed under the contract of the scheme, have been observed to be used. Inspections also confirmed badger activity in an artificial badger sett was provided off-site as part of the scheme.
- Community severance and access has improved along the old A419 due to the reduction of traffic.
- The new road layout and segregation of non-motorised users from traffic has led to a reduction in fear of collisions and reduced driver stress, which was as expected.

Accessibility and Integration

- The reduction of through traffic in Blunsdon, combined with the provision of pedestrian, cyclist and equestrian facilities, mean that severance has reduced as a result of the scheme.
- The scheme is aligned with local, regional and national policies relating to land-use and development including improving accessibility, protecting and enhancing the built and natural environment, and improving safety.

Summary of Scheme Economic Performance

All monetary figures in 2002 prices and values		Forecast	Outturn Forecast
Investment Cost in Present Value (PVC)		£53.0m	£56.8m
Journey Time Benefits		£118.1m	£117.0m
Vehicle Operating Cost		- £53.9m	£12.4m
Safety Benefits		£9.3m	£30.4m
Construction Delay		- £0.1m	- £0.1m
Present Value Benefit (PVB)		£73.3m	£159.7m
Indirect Taxation		-£37.7m	£8.7m
Benefit Cost Ratio (BCR)	Indirect Tax impact Treated as a Cost	4.8	2.4
	Indirect Tax Impact Treated as a Benefit	2.1	2.7

- Journey time benefits are £117.0 million, which is within 1% of the £118.1 million forecast. Due to the nature of the improvements, journey time benefits would be expected from the opening of the scheme due the removal of delays for A419 through traffic.
- The safety benefits are substantially higher than forecast, at £30.4 million, as compared to £9.3 million.
- The overall Present Value Benefit (without indirect tax) is £159.9 million, which is higher than the forecast of £73.6 million.
- The total investment cost for the scheme was £55.7 million (2002 prices not discounted), which is higher than the £51.5 million forecast (2002 prices not discounted).
- When indirect tax is considered as a benefit, the scheme delivers high value for money with a BCR of 2.7.

This document summarises the findings of the Five Year After (FYA) post opening evaluation study completed in December 2015.