

# POPE of Major Schemes Summary Report

Scheme Title	A69 Haydon Bridge Bypass
Opening Date	March 2009
POPE Stage	Five Years After

### Scheme Description

The A69 Haydon Bridge Bypass scheme is a Highways England (formerly known as the Highways Agency) major scheme located between Newcastle and Carlisle, which opened in March 2009. Before the scheme opened, the A69 passed through the village of Haydon Bridge and the high traffic volume caused problems such as; poor air quality, traffic noise and community severance. The scheme involved the construction of a bypass to the south of the village to remove through traffic from the village and address the problems associated with the high traffic volumes.

### **Scheme Objectives**

<b>Objectives</b> Source: Highways England Non-Technical Summary of the Environmental Statement (June 2005)	Objective Achieved?
Improve safety for all road users in Haydon Bridge by removing through traffic and by providing a better standard of trunk road.	$\checkmark$
Reduce congestion and delays along the A69.	Not Applicable
Ease the existing problems of community severance, noise and air pollution by improving the environment for residents, pedestrians and cyclists in Haydon Bridge.	$\checkmark$
Provide an environmentally acceptable solution that minimises the impact on the built and natural environment.	$\checkmark$

## Summary of Scheme Impacts

#### Key Findings

- Traffic flows in Haydon Bridge have reduced by approximately 12,000 vehicles per day (vpd), meaning around 3,000 vehicles per day now travel through Haydon Bridge. This shows that traffic has successfully reassigned from the old A69 to the bypass as 13,100 vehicles are using the scheme.
- Travelling along the A69 bypass takes between 22 and 45 seconds less than using the old A69 through Haydon Bridge. Observed journey times on the bypass are around 10 seconds lower than forecast.
- Before scheme opening journey time variability was low and traffic flows were relatively consistent throughout the day. Minimum average vehicle speeds were 27mph and therefore it is considered that congestion and delays were not an issue, hence the objective to 'reduce congestion and delays along the A69' is not applicable to the scheme.



- The scheme forecast collisions would increase by 0.2 per annum due to the introduction of two new junctions. Since scheme opening, average annual collision numbers have reduced by 0.3, however, statistical tests show that this cannot be attributed to the scheme itself.
- The scheme delivers a lower than forecast Benefit Cost Ratio (BCR) of 1.2 rather than 2.5 and this is due to journey time benefits being 33% lower than forecast.
- The majority of environmental impacts are as expected.

#### Traffic

- Observed traffic flows on the bypass are 4% higher than predicted indicating that more traffic than forecast has transferred from the old route.
- Traffic flows on the old A69 have reduced by between 80% and 85%, which is slightly higher than the forecast reduction of between 70% and 80%. Observed flows on the old A69 are approximately 25% lower than forecast, due to a combination of traffic growth being lower than the rate expected and more traffic than forecast transferring to the new route.
- Accounting for the potential background reduction of up to 5%, observed traffic flows on the A686, A69 outside of Haydon Bridge and Church Street have not changed.

#### Safety

- Within the Haydon Bridge area, collisions have reduced by 0.3 per annum, however statistical tests show that this is unlikely to be a result of the scheme.
- Observations of collision locations show that there are fewer collisions on the old A69 and this could be attributed a reduction of 12,000 vpd. Collision rates on the old A69 have reduced from 0.87 to 0.42 collisions per million vehicle kilometres travelled since the scheme opened and this reduction is higher than forecast.
- Post opening, there has been an observed increase in collisions at the eastern junction of the bypass with the A686 Alston Road, however, it is noted that the scheme appraisal recognised that the introduction of junctions may result in an increase in collisions.
- The One Year After (OYA) post opening report documented that new lighting had been installed at the eastern junction as a response to safety concerns, however, collision data shows that several collisions have occurred since the installation. The data shows that turning movements at the eastern junction from the bypass onto the A686 and vice versa are a common cause for collisions in this location.

#### Environment

- Traffic flows are lower than forecast in Haydon Bridge and impacts for noise and local air quality adjacent to the old A69 are considered to be better than expected.
- It is likely that biodiversity impacts generally are as expected, however, more detailed information would be required to confirm the success or otherwise of the mitigation measures incorporated into the scheme for species and habitats.
- Operational monitoring of river gravels was a commitment in the scheme Environmental Statement (ES) and there was also an agreement with the Environment Agency to provide such data if a 1 in 10 year flood event were to occur. A 1 in 10 flood event has occurred and it would appear that no post construction monitoring has been undertaken. In the absence of this, site visit observations and as built drawings indicate that the impact of the scheme on water and drainage is likely to be as expected.
- The Parish Council has raised concerns about the lack of a deceleration lane and driver vulnerability at the eastern bypass junction with the A686 Alston Road. Since OYA collisions at the eastern junction have increased and this may have led to fear of accidents being greater than expected.
- Townscape has benefitted as expected with the significant reductions in through traffic particularly HGVs, although not all the expected streetscape improvements have been taken forward. As part of the de-trunking works, the ES stated that trees would be planted along the old A69. The allowance put aside to undertake these works is reported to have



been used to address issues with the old bridge over the river, although the consultation response from the Parish Council is not aware of any bridge works taking place.

- Landscape mitigation measures have been implemented in line with proposals; earthworks have provided immediate screening of traffic using the bypass, new planting is establishing well and dry stone walls help integrate the scheme into the local landscape by providing a sense of place.
- The impact of night time lighting is worse than expected for some properties as lighting was not envisaged at the time of the ES.

#### Accessibility and Integration

- Severance in the village has reduced as a result of the scheme. The reduced traffic flows make it safer to cross the road and reduce the need for the underpass.
- The scheme has had a beneficial impact on achieving local and central government policies including improving accessibility, air quality and noise in Haydon Bridge and protecting and enhancing the built and natural environment.

All monetary figures in 200	Forecast	Outturn Reforecast	
Investment Cost in present	£18.4m	£31.3m	
Journey Time Benefits	£32.9m	£21.9m	
Vehicle Operating Costs	-£0.06m	-£0.06m	
Safety Benefits	-£3.7m	£0m	
Future Maintenance Benefits	£16.4m	£16.4m	
Present Value Benefits	£45.5m	£38.2m	
Indirect Tax	£0.08m	£0.08m	
Benefit Cost Ratio (BCR)	Indirect Tax impact treated as a Cost	2.5	1.2
Benefit Cost Ratio (BCR)	Indirect Tax impact treated as a Benefit	2.5	1.2

#### **Summary of Scheme Economic Performance**

- Journey time benefits are £21.9 million, 33% less than the £32.9 million forecast.
- The collision saving of 0.3 per annum was shown not to be significant, hence safety benefits were not monetised.
- The overall Present Value Benefit (without indirect tax) is £38.2 million, which is 16% less than the forecast £45.5 million.
- The total investment cost for the scheme was £32.5 million (2002 prices not discounted), 31% more than forecast.
- Regardless of indirect tax being treated as a benefit (current appraisal approach) or part of the cost, the outturn BCR of 1.2 is lower than forecast and indicates the scheme is delivering low value for

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