POPE of Major Schemes Summary Report

Scheme Title	**A66 Carkin Moor to Scotch Corner Improvement**
Opening Date	29th September 2007
POPE Stage	One Year After Study

Scheme Description

The scheme comprised the construction of dual carriageway between Carkin Moor and Scotch Corner, at the Junction with the A1. Specific elements of the scheme include:

- Construction of a new carriageway next to the existing single carriageway over a distance of 3.7 miles;
- Closure of some minor side roads and accesses;
- Improvements to remaining junctions; and
- Improved facilities for pedestrians, cyclists and horse riders. Three dedicated crossing points including central corrals for equestrian use.

Objectives (from Technical Appraisal Report and AST)	Objective Achieved?
• Improve the poor safety record, particularly reducing the number of serious and fatal accidents	Too early to assess with confidence
• To ease congestion when essential maintenance work is carried out	Likely to be achieved
• Improved journey times and reliability	Yes

Key Findings

- The objective of the A66 Carkin Moor to Scotch Corner Scheme to improve journey times and reliability has been achieved, but it is too early to assess the impacts on safety, in particular the severity rate of accidents, with any confidence.
- The number of accidents in the first year after opening has increased, but not to a statistically significant level. The impact of the scheme on accidents will require a further re-assessment 5 years after, when more data is available and firmer conclusions can be made.
- A number of local safety concerns have been raised by local district and parish councils in relation to a number of junctions and crossings along the scheme. These concerns were addressed by the HA's Stage 3 Road Safety Audit.
- Traffic predictions have been reasonably accurate with observed flows one year after opening being between the low and high growth forecasts.
- There has been little re-assignment of traffic as was expected.
- The simplistic approach to modelling was appropriate for a scheme of this type.
- Journey time savings are lower than predicted for the peaks, but higher than predicted for the inter-peaks. The reasons behind this will be explored further in the 5 year after study.
- Whilst costs were lower than forecast, the outturn BCR is lower than predicted because travel time benefits are lower than predicted. Safety benefits cannot be monetised at the one year after stage.
- Environmental impacts are generally as expected and mitigation measures have been incorporated as planned.
- The scheme has contributed to achievement of objectives in local plans and policies.

Summary of Scheme Impacts

Traffic

- The improved section of the A66 is used by approximately 16,000 to 16,500 vehicles per day (vpd) – this is broadly in line with the traffic levels forecast prior to opening.
- Flows are between 2% and 7% higher than before opening, in line with expected background traffic growth.
- As expected in the scheme appraisal, there has been little reassignment of traffic from local roads.
- Flows on the access roads are above both the low and high growth forecasts, but the absolute differences are small at between 100 and 200 vehicles per day.
- Journey times have improved by up to 1 minute compared to the before situation, but the improvement is less than predicted in the peaks.

Safety

- The main objective of the scheme was to reduce fatal and serious accidents. Changes in annual fatal and serious accident rates observed at the one year after stage have been insignificant and therefore it may take more time for more measurable and conclusive impacts to become evident.
- The total annual average number of Personal Injury Accidents has increased from an average of around 7 to almost 9 per year following opening, an increase of over 2 accidents per year. This contrasts with a prediction that the scheme would reduce accidents by just under 1 per year. However, the changes in accident numbers are not statistically significant and it cannot be inferred that the changes are a direct result of the scheme.
- Consultation with local councils raised a number of safety concerns with various junctions and crossings along the improvement. However, these have been addressed by the HA Stage 3 Road Safety Audit.

Environment

- Post opening traffic flow levels were broadly in line with forecasts and therefore as expected the scheme has had a beneficial impact on noise levels and air quality.
- Increase of 4% in tonnes of carbon emissions in the opening year. This can be attributed to the increase in traffic flows and speeds since the scheme opened. This compares to a forecast increase of 6%.
- Landscape planting appears to have been implemented as expected and to be establishing satisfactorily. Subject to successful ongoing establishment the landscape mitigation measures should fulfil their long term objectives.
- Impacts on other environmental objectives are as expected and mitigation measures have been implemented as planned.
- Whilst provision for pedestrians, cyclist and equestrians has largely been implemented as expected some comments were received relating to crossing points In particular, visibility at the crossing has been raised, as well as issues relating to the design of equestrian crossings. These have been addressed by the HA Stage 3 Road Safety Audit.

Accessibility

- Severance has reduced for the small number of pedestrians and other non-motorised users due to the improved crossing facilities.
- As expected, the scheme has had no impact on access to the public transport system or option values as there is no significant public transport activity in the area. However, it is

likely that the journey time savings will assist in the reliability of long-distance coaches and bus services.

Integration

- As expected, the scheme had had no impact on transport interchange. It was not the intention of the scheme to directly improve public transport services and interchanges and no improvement to facilities have been made as a result of the scheme.
- Whilst the appraisal forecast no impact on land use policy, the scheme objectives are consistent with those set out in a number of local and regional policies including: North East Regional Transport Strategy, County Durham Structure Plan, North Yorkshire County Council LTP, Durham County Council LTP and Richmondshire Local Plan

Summary of Economic Performance

	Costs in £m 2002 Prices discounted to 2002 at 3.5%[1]	
	Pre-scheme forecast	Post-scheme re-forecast
Journey Time Benefit	£55.4m	£30.7m
Safety Benefits	-[2]	-
Total 30 Year Benefits (PVB)	£55.4m	£30.7m
Costs (2002) prices	£12.8m	£10.2m
Benefit Cost Ratio (BCR)	4.3	3.0

- Journey time benefits at £30.7m are 45% less than predicted, due to lower journey time savings than predicted.
- Accident benefits cannot be monetised for this scheme at the one year after stage.
- Out-turn costs at £10.2m were 25% lower than forecast.
- Despite costs being less than forecast, the lower benefits result in the BCR being lower than expected, but still representing good value for money.

This document summarises the findings of the one year after post opening evaluation study completed in October 2009.

[1] Discounted to 2002: the year 2002 has been used as the standard base year

[2] Accident benefits removed to enable a like for like comparison with the outturn. This reduces the predicted total PVB from £75 million and the BCR from 5.8