

# POPE of Major Schemes Summary Report

<b>Scheme Title</b>	A66 Long Newton Grade Separated Junction
<b>Opening Date</b>	June 2008
<b>POPE Stage</b>	Five Years After

## Scheme Description

The A66 Long Newton junction scheme was a Highway's Agency major project in Stockton-on-Tees which opened to traffic in June 2008. The purpose of the scheme was to replace a series of substandard junctions on the A66 with a grade separated (split level) junction, which in turn would improve access to Durham Tees Valley airport. A local link road was also included in the scheme to enable an increase in public transport provision.

## Scheme Objectives

Objectives (Public Inquiry/Statement of Case 2003)	Objective Achieved?
To improve road safety by reducing personal injury collisions (PICs) on the A66.	✓
To reduce the volume of traffic on roads in west Long Newton, as a result of airport traffic being rerouted through the new grade separated junction. Consequently, journey time delays should also be reduced.	✓
To increase the provision of public transport facilities in both Long Newton and Elton.	✓
To limit the impact of the scheme on the surrounding environment.	✓
To provide a safer route affecting fewer properties to the airport.	✓

## Key Findings

- Collision data indicates an annual saving of 2.5 personal injury collisions (PICs) over the study area, lower than forecast. However a saving of 3.5 PICs is seen over the routes directly impacted by the scheme, which is in line with forecasts.
- Traffic flows are lower than forecast. This is likely to be partly linked to the decline in passenger numbers at Durham Tees Valley airport.
- Journey time savings for traffic using the new junction are higher than forecast.
- Failure of some of the landscaping elements (such as planting to alleviate visual intrusion purposes) is likely to result in an adverse impact for landscape and biodiversity in localised areas.

## Summary of Scheme Impacts

### Traffic

- Average weekday traffic flows have reduced on the A66 by around 1% west of the scheme, with a small increase of 3% observed to the east of the scheme.
- Traffic flows on the alternative route of the A67 and A135 have seen a decrease of 31% and 12% respectively.
- Observed traffic flows were generally lower than forecast with and without the scheme. This is likely to be partly linked to the decline in passenger numbers at Durham Tees Valley airport.

- Average journey times have reduced for traffic using the new junction, with greater savings seen in the peak periods.
- Overall journey time savings are higher than forecast for traffic using the new junction, whilst traffic using the alternative A67/A315 route receive lower than forecast journey time savings.

## Safety

- After accounting for the background reduction in collisions rates, collisions over the study area have reduced by 2.5 per year, a reduction of 10%.
- Analysis of observed collision data for the key routes (the A66 and Darlington Road through the village of Long Newton) in the vicinity of the scheme which were directly affected by the scheme shows an average reduction of 3.5 collisions a year (a reduction of 54%). This is higher than the wider study area, strongly suggesting that the scheme has had a direct impact on safety for the A66 improved section.
- The savings observed on the scheme key links are in line with the forecasts (around a 54% reduction in annual collisions), but the forecast saving of 17% of collisions over the wider study area has not been achieved, with a reduction of 10% observed.
- The severity of collisions has reduced post opening, although as the number of collisions is low, no firm conclusions can be drawn on the impact of the scheme on severity.

## Environment

- Based on observed traffic flows, the noise and air quality impacts of the scheme are considered to be as expected for the village of Elton, and better than expected for the village of Long Newton.
- Carbon emissions have increased in line with expectations, due to improved journey times (increased speeds) for traffic using the new junction.
- The landscape mitigation measures (such as planting to tie in the new works to existing, and for reducing visual intrusion of the route) are generally as expected (slight adverse) however the failure and poor performance of significant elements of the planting stock are likely to have resulted in localised moderate adverse effects that are worse than expected.
- Biodiversity mitigation measures have been implemented as expected; therefore the overall evaluation of the scheme is neutral, as expected. However the failure of some of the landscaping elements is likely to result in a slight adverse impact for localised areas.
- All aspects of heritage mitigation have been addressed. The effects of the scheme on heritage and archaeology are considered to be as expected.
- The scheme drainage measures appear to be performing as intended. The overall effect of the scheme on water quality and drainage are as expected.
- The new link road and footway successfully segregates walkers and cyclists from the main A66 traffic.
- Journey ambience has improved as expected with farm accesses onto the A66 removed and replaced by the new junction improving safety.

## Accessibility and Integration

- The removal of traffic from the villages has reduced severance, and the provision of the new link road has improved links between the villages. The new link road has also enabled a local bus service to be reinstated for the two villages.

## Summary of Scheme Economic Performance

		Forecast	Outturn Re-forecast
<b>Journey Time Benefits</b>		£3.77m	£3.31m
<b>Vehicle Operating Costs</b>		-£0.54m	-£0.54m
<b>Safety Benefits</b>		£18.62m	£8.09m
<b>Present Value Benefits (PVB)</b>		£21.85m	£10.86m
<b>Present Value Costs (PVC)</b>		£10.40m	£10.86m
<b>Indirect Tax</b>		£0.1m	£0.1m
<b>Benefit Cost Ratio (BCR)</b>	<b>Indirect Tax as a cost</b>	<b>2.09</b>	<b>1.01</b>
	<b>Indirect Tax as a benefit</b>	<b>2.08</b>	<b>1.02</b>

- Outturn safety benefits of £8.09m are lower than forecast.
- Journey time benefits are slightly lower than forecast, partly due to lower than expected traffic flows, although journey time savings are also slightly higher than forecast.
- Overall the outturn PVB of £10.86m is 50% lower than the forecast PVB.
- The scheme has been delivered within budget.
- The outturn BCR, which is lower than forecast, indicates that the scheme is low value for money.

This document summarises the findings of the post opening evaluation study completed in September 2014.