POPE of Major Schemes Summary Report

Scheme Title	**M1 Junction 31-32 Widening**
Opening Date	February 2008
POPE Stage	One Year After

Scheme Description

The scheme comprised of widening of the M1 between junctions 31 and 32. Specific elements of the scheme include:

- Widening 1.2 miles of the northbound and southbound carriageways from three to four lanes;
- Installation of new electronic signage, providing better driver information and improved traffic management;
- Installation of new emergency telephones;
- Improved road markings including a 'ghost island' separating two merging lanes between the M18 and M1 southbound;
- Low noise surfacing and environmental mounds constructed to reduce the noise impact; and
- Planting to reduce the visual impact.

Objectives (Traffic Appraisal and Economics Report)	Objective Achieved?
•To reduce congestion by increasing the overall capacity of the section by adding a fourth lane for traffic in both directions	Yes
•Improve safety through improved traffic management	Too early to conclude
•Improve journey times and journey time reliability	Yes
•Reduce or minimise traffic diverting onto Local Authority routes	Yes
•Reduce traveller stress by improving traffic flow and reducing delays.	Yes

Key Findings

- The key objectives of the scheme to reduce congestion, improve journey times and reliability and reduce or minimise traffic diverting onto Local Authority roads has been achieved.
- Outturn traffic volumes are lower than forecast. The forecasts did not anticipate the general decrease in motorway traffic flows in the area that has occurred in recent years.
- The scheme appraisal did not take into account the impact beyond the scheme length. In terms of traffic volumes, the impacts do not appear to extend further, but accident and journey time impacts may have extended further upstream and downstream of the improved section.
  There has been a general decrease in journey times on most motorway links, including the widening M1 between junctions 31 and 32
- Travel time benefits are considerably lower than forecast, but there are un-certainties relating to journey times.

- The outturn accident dis-benefits are marginally greater than predicted.
- Outturn costs are lower than forecast, but the lower benefits mean the BCR is lower than predicted.
- Environmental impacts are generally as expected and mitigation measures have been incorporated as planned;
- Noise, air quality and greenhouse gas emissions may be better than forecast due to the lower than forecast traffic flows.
- The scheme has had no impact on accessibility as was expected, but conforms to local, regional and national policy.

Summary of Scheme Impacts

Traffic

- Traffic volumes between Junction 31 and 32 have decreased by between 1% and 2%. On all motorway sections in the area traffic has fallen on average by 2%.
- The downward trend in traffic growth on the motorway is reflected by trends across the whole Yorkshire & North East Region, where traffic flows have also reduced.
- On Local Authority roads in the area, traffic has increased by around 1%.
- Long term trends in traffic on the network have continued since the scheme was constructed which suggests that it has had a negligible impact on traffic volumes in the area at the OYA stage.
- The forecasts showed that traffic volumes were predicted to increase between the baseline level and the scheme opening year as a result of background traffic growth However, the actual traffic volumes were significantly lower than forecast, which reflects traffic reductions on the motorway network in the region.
- The scheme itself was not forecast to have any significant effect on traffic volumes and that has been the case after opening.
- Average journey times in the AM and PM peak for the northbound and southbound directions have decreased across all five motorway sections. This is likely to be a result of the increased capacity provided by the widening scheme but is also affected by the decreasing traffic volumes on the motorway.

Safety

- Using the original appraisal area, one year after opening, the scheme has resulted in an increase in accidents of 3.7 per year. This is in line with the predicted impact.
- Over the widened section between J31 - J32, the accident rate has increased from 0.033 PIA/mvkm to 0.052 PIA/mvkm, but remains well below the national average for a modern motorway of this type.
- When evaluated using a wider revised accident boundary, the scheme produced an accident saving of 14.3 per year.
- The results of the accident analysis are not statistically significant, as post-scheme accidents are only available for one year after opening. Therefore, some caution needs to be used when drawing conclusions about accidents and the impacts will be evaluated with a greater level of certainty at the five year after stage.

Environment

- As traffic flows have reduced after scheme opening and are lower than forecast, it is considered that noise and air quality due to traffic should be no worse than before the scheme and might be better than expected.
- Carbon emissions have increased slightly by less than 0.5%. This compares to the forecast increase of 1%.
- The impact on the landscape is considered to be as expected, ongoing establishment will be essential if the planting is to fulfil its long term objective.
- Lighting proposed for this scheme was not taken forward to the final design.

- Impacts on other environmental objectives are as expected and mitigation measures have been implemented as planned.

Accessibility

- The scheme has had no impact on accessibility as was expected.
- The scheme has not resulted in new public transport schemes or improved access to public transport. Due to the nature of the scheme (motorway widening) there has been no direct impact on any routes used by pedestrians, equestrians or cyclists or to the standard and quality of the routes.

Integration

- The appraisal forecast a neutral impact on local, regional and national land use policy, as the scheme had both adverse and beneficial effects. The schemes objectives are generally consistent with those in the following documents: White Paper: 'A New Deal For Transport: Better For Everyone' (1998), South and West Yorkshire Multi-Modal Study (SWYMMS); The Yorkshire & Humber Plan: Regional Spatial Strategy to 2026: (2008) and South Yorkshire Local Transport Plan 1 (2001 – 2006).
- The increased accident rate and adverse impacts on biodiversity, heritage and landscape do not align with the objectives in the White Paper, but these impacts are as predicted before scheme construction.

Summary of Economic Performance

	Costs in £m 2002 Prices discounted to 2002	
	Pre Scheme Forecast Order Publication Report (OPR) COBA	Post-scheme Re-forecast
Journey Time Benefit	£329.0m	£77.2m
Safety Benefits	- £11.4m	- £18.0m
Total 60 Year Benefits (PVB) (including Vehicle Operating Costs and maintenance delay benefits).	£295.6m	£39.7m
Costs (2002) prices	£17.1m	£11.3m
Benefit Cost Ratio (BCR)	17.4	3.5

- The re-forecast of scheme benefits has concentrated on journey time and safety impacts. The vehicle operating costs and the maintenance delay impacts have been assumed to be the same as the appraisal.
- Journey time benefits at £77m are 75% less than predicted (OPR COBA). About 50% of this inaccuracy is explained by assumptions about traffic growth. The full report examines the source of the error in detail by re-running the COBA with correct traffic forecasts.
- Despite costs being less than forecast, the lower benefits result in the BCR being much lower than expected, but at 3.5 still representing good value for money.

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