POPE of Major Schemes Summary Report

Scheme Title **M27 J11-12 Climbing Lanes**
Opening Date September 2008
POPE Stage One Year After Study

Scheme Description

This is a Highways Agency major scheme to provide climbing lanes approximately 1.1 miles (1.8 km) long in each carriageway, approaching a summit between junctions 11 and 12 of the M27. The widened sections of carriageway are now 4 lanes wide, and return to 3 lanes by outside lane merging.

Objectives	Objective Achieved?
• To improve traffic flows and reduce congestion (ES)	Yes
• To minimise environmental impacts (ES)	Yes
• To improve safety (public exhibition leaflet)	Too early to conclude
• To improve journey times and reliability (public exhibition leaflet)	Yes

Main Findings

- Traffic flows were predicted not to change as a result of the scheme, and this has been confirmed.
- Time savings were better than predicted; hence the economic benefit is better than predicted.
- Accident levels were predicted to be unchanged with the scheme, and this had been confirmed.
- The outturn cost of £13.2 million is almost exactly as predicted.
- Environmental outcomes are broadly as predicted.
- Noise and local air quality are generally as expected. Greenhouse gas emissions are greater than before (due to higher vehicle speeds) but the increase is less than predicted.
- Landscape and biodiversity: mitigation measures are generally in line with proposals, although it is too soon to evaluate the establishment of new planting. The proposed motorway lighting has been reduced, resulting in less light impact than predicted
- The impacts on heritage, water, physical fitness, and journey ambience are generally as predicted.

Summary of Scheme Impacts

Traffic

- The traffic volume on the M27 J11-12 is about 116,800 vpd, one year after scheme opening. This is about 3% lower than before the scheme. This is similar to reductions observed at other nearby sites, and to general background traffic reduction.
- It is therefore likely that traffic levels have been influenced by the economic recession, and not by the scheme.
- Even though the expected traffic increase due to background traffic growth has not occurred, the actual traffic flow remains within 10% of the prediction.
- Journey time savings have been greater than predicted. Average peak journey time savings are 32 seconds (compared with 15 seconds predicted). Average offpeak journey time savings are 5 seconds (compared with 2 seconds predicted).

Safety

- There has been a small reduction in accidents and casualties, but the change is not statistically significant.
- The accident rate before the scheme was a little higher than the national average, and is now about the same as the national average.
- There was no reduction in the number of accidents following scheme opening, this is in line with expectation. This conclusion is based on one year of post opening accident data and therefore requires further analysis in the five year after study.

Environment

- Noise and local air quality are likely to be generally as expected, although additional noise mitigation is likely to mean that the noise impact is a little better than expected for a few properties. Greenhouse gas emissions are greater than before (due to higher vehicle speeds) but the net increase is less than predicted.
- Landscape and biodiversity: mitigation measures are generally in line with proposals, although it is too soon to evaluate the establishment of new planting. The proposed motorway lighting has been reduced, resulting in less light impact than predicted.
- The impacts on heritage (neutral), water (slightly beneficial), physical fitness (neutral), and journey ambience (neutral) are generally as predicted.

Accessibility

- The scheme was limited to works within the existing motorway boundary, and has not had an impact on community severance or the public transport services available.

Integration

- The scheme is generally supported by regional and local land use policies, including the Regional Spatial Strategy for the South East.

Summary of Scheme Economic Performance

- The outturn cost was £13.2 million, almost exactly as predicted, while the Present Value of Cost (PVC), which is lower due to the indirect tax revenue, is £4.9 million.
- The monetary benefit from time saving is re-forecast to be £94.6 million, higher than predicted. No safety benefit was predicted, or seems likely to result from the scheme, based on the first year of operation.

Costs and Benefits (2002 present value year)	Forecast	Outturn
Journey Time Benefit	£65.7m	£94.6m
Safety Benefits	n/a	n/a
Present Value Benefits (60 years)	£65.7m	£94.6m
Investment Costs	£13.3m	£13.2m
Indirect Tax revenue	-£8.3m	-£8.4m
Present Value Costs	£4.9m	£4.9m
Benefit Cost Ratio (BCR)	13.4	19.3

This document summarises the findings of the five year after post opening evaluation study completed in September 2010.