

## POPE of Major Schemes Summary Report

<b>Scheme Title</b>	<b>A21 Lamberhurst Bypass</b>
<b>Opening Date</b>	23 <sup>rd</sup> March 2005
<b>POPE Stage</b>	Five Year After Study

### Scheme Description

The A21 Lamberhurst Bypass which opened on 23<sup>rd</sup> March 2005 is located in Kent, and forms part of the London to Hastings trunk road. The scheme bypasses the village of Lamberhurst in the form of a 1.6 mile dual carriageway running between the B2169 junction, and the A262. The key features of this scheme are:

- Construction of a new dual carriageway bypass to the east of Lamberhurst village;
- A new roundabout at the northern end of the bypass (Forstal Farm roundabout);
- A new roundabout at the southern end of the bypass (Scotney Castle roundabout);
- Construction of a land-bridge carrying the access drive to Scotney Castle over the bypass; and
- Environmental mitigation measures.

### Objectives (DfT Roads Review, 1997)

### Objective Achieved?

- |  |     |
|--|-----|
| • To improve conditions in the village of Lamberhurst by removing through-traffic                                    | Yes |
| • To improve road safety in the village and at the junctions with the A262, B2162 and the entrance to Scotney castle | Yes |
| • To improve access to the Assisted area of Hastings   | Yes |
| • To provide additional capacity on the A21 to cater for predicted future traffic growth.                            | Yes |

### Key Findings

- The scheme has met all objectives.
- In addition to the benefits of the scheme reducing traffic through Lamberhurst and reducing accidents, traffic calming implemented on the former A21 route by the Highways Agency, and on other local roads south of Lamberhurst village by the local authority has also improved safety in the area;
- This has led to a greater reduction in accidents than forecast at the time of the appraisal;
- More traffic has reassigned from the former A21 route to the bypass than was forecast, and this is also likely to be due to the aforementioned traffic calming;
- Journey time benefits for traffic using the bypass have been smaller than predicted, however this appears to have been due to the forecasts over-estimating journey times on the old road without the scheme (Do-Minimum);
- There have been no journey time savings on the old road through the village, and this is due to the traffic calming implemented after the bypass opened;

- On balance, monetary benefits of the scheme have been roughly in line with forecasts, however scheme costs have been higher than forecast, resulting in a lower outturn BCR (Benefit Cost Ratio);
- The additional costs have been due to additional Land fees largely associated with compensation claims due to the effect of the scheme to neighbouring land;
- The perception of respondents to the Residents survey does not fully align with the observed reduction in accidents. Many have expressed concerns regarding the positioning of traffic calming posing new safety hazards to drivers;
- The scheme has taken environmental considerations into account during design and construction to minimise environmental impacts, and the reassignment of traffic away from Lamberhurst centre has improved the local amenity of the village. The bypass is, however, within an Area of Outstanding Natural Beauty and as expected there has been an adverse impact on this high quality landscape; and
- The land bridge has successfully maintained the Scotney Castle access along its historical line as well as visually linking retained woodland planting and providing a wildlife corridor over the bypass.

## Summary of Scheme Impacts

### Traffic

- The bypass, five years after its opening carries 20,300 vehicles on an average weekday (2-way), and this has increased by 14% since the One Year After stage. This increase between 2006 (OYA) and 2010 (FYA) is well in excess of national and local trends;
- The scheme has removed 82% of traffic from the centre of Lamberhurst village;
- Of the roads through Lamberhurst, the B2169 west of Spray Hill has shown the only significant increase (just under 50%) compared to the pre-scheme situation, and this is due to local traffic at The Down and to the south of Lamberhurst village now using this route to join the southern end of the bypass;
- The scheme has removed virtually all HGVs from the former route, and the small numbers remaining are likely to be those making deliveries to the few shops within the village itself. The adjoining 'B' roads (B2100, B2169) have also witnessed a significant reduction in HGVs;
- Growth assumptions made about overall traffic in the corridor were reasonably accurate. The amount of traffic which has reassigned from the former A21 to the bypass was however underestimated. This is likely to have been due to the traffic calming measures implemented along the former route to encourage further through-traffic to use the bypass, and these measures were not included in the model;
- Five years after the opening, average time savings along the bypass are apparent in both directions and all time periods, when compared to the average times along the old A21 route before the scheme opened. These time savings are in the region of 0.5 to 1 minute, and are similar in each direction; and
- On the old A21 route compared to the same route before scheme opening, journey times have increased in all time periods except the southbound inter-peak. This is likely to be associated with the traffic calming measures introduced shortly after the bypass opened.

## Safety

- Five years after the opening of the bypass, there has been a reduction of 11 accidents per year over the same area used in the original scheme modelling (COBA) (an average of 19 accidents over the five years before construction, to just 8 per year in the five years after opening);
- Casualty numbers have reduced from an average of 28 per year before construction, to 12 per year in the five years since opening;
- The accident rate along the former route has more than halved since the opening of the bypass taking it to half that of the national average for a carriageway of its type. The new bypass has an accident rate slightly higher than the national average for a carriageway of its type; however it is well below the accident rate for the old A21 before the bypass opened.

## Environment

- The scheme has resulted in improved noise from traffic and local air quality for Lamberhurst. The reduction in through traffic has also improved the amenity of the village although some residents consider the use of materials unsympathetic to the status of the village as a Conservation Area and village within an Area of Outstanding Natural Beauty (AONB);
- The bypass road alignment has been kept close to existing ground levels, with earth mounding and new planting provided which will in time screen vehicles using the bypass and integrate it into the local landscape. However, the bypass is routed within an AONB and there has been an adverse impact on the landscape as expected;
- Archaeological reporting is complete and evaluation during construction has resulted in the discovery of an important medieval site with close links to Lamberhurst's Wealden ironworking heritage;
- The land bridge has successfully maintained the Scotney Castle access along its historical line. Planting has established well and provides a wildlife corridor suitable for use by a variety of species.

## Accessibility

- 30% of the respondents to the Residents Questionnaire stated that they were making more journeys on foot since the opening of the bypass. A much smaller proportion (just 12%) however stated they were making more journeys by cycle;
- Severance has been reduced by the removal of more than 80% of the traffic from Lamberhurst village. However, some respondents to the Residents Questionnaire have remarked that crossing the road and accessing facilities is still difficult due to the increased number of parked cars along the former A21;
- The scheme has facilitated the implementation of new bus services and benefited existing services by making it easier for them to stop without causing significant delays to traffic. It has also created a more pleasant waiting environment by the significant reduction in traffic; and
- The scheme has not had a detrimental impact on visitor numbers to Scotney Castle.

## Integration

- The scheme aligns with historical as well as current national, regional and local policy. It also supports Regional Economic Strategy.

## Economy

### Summary of Scheme Economic Performance

	Pre-Scheme Forecast	Outturn
Journey Time Benefits	£43.4m <sup>1</sup>	£24.4m
Safety Benefits	£19.3m	£34.1m
Total PVB	£62.7m <sup>1</sup>	£58.5m
PVC	£17.46m <sup>1</sup>	£28.4m
BCR	<b>3.6</b>	<b>2.1</b>

<sup>1</sup> High Growth forecasts used

- The scheme's Journey Time Benefits of £24.4m were lower than forecast due to over-estimation of Do-Minimum journey times on the former A21 route, and traffic calming implemented shortly after the bypass opened;
- The scheme's Safety Benefits of £34.1m are significantly higher than forecast, and this is due to the safety improvements brought about by the traffic calming measures implemented along the former route and other roads around Lamberhurst, as well as the removal of over 80% of traffic through the village as a result of the bypass;
- The scheme's total re-forecast 30-year PVC is £28.4m compared to the forecast of £17.5m made shortly before construction. The additional cost originates in the additional Land costs associated with the scheme; and
- The scheme's outturn BCR is 2.1 which is lower than the forecast of 3.6, and this is primarily because of the higher than forecast costs. However, the scheme has still delivered a BCR of more than 2 which is considered to be high Value for Money.

This document summarises the findings of the five year after post opening evaluation study completed in March 2011.