

POPE of Major Schemes Summary Report

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| Scheme Title | A5 Nesscliffe Bypass |
| Opening Date | 27 th March 2003 |
| POPE Stage | Five Year After Study |

Scheme Description

The scheme comprises of a 2.8 mile section of new dual carriageway bypassing the village of Nesscliffe. Specific components of the scheme also included:

- Two new roundabouts linking the dual carriageway with the former A5;
- Two new bridges to support local traffic movements across the A5; and
- A new footbridge across the bypass to improve connectivity for non car users between Nesscliffe and Wilcott

Objectives (Appraisal Summary Table)

- Reduce traffic through Nesscliffe Village, improve noise and air quality; and improve pedestrian safety
- Reduce accident risk at low standard junctions
- Improve journey time reliability.

Objective Achieved?

Yes
Yes
Yes

Key Findings

- The objectives of A5 Nesscliffe bypass have been met - to reduce adverse impacts of traffic through the village, improve safety and enhance journey times reliability.
- Whilst the percentage reduction in accidents was in line with forecasts, the actual number of accidents saved was less than expected. This difference can largely be attributed to the forecasts calculating savings relative to a period 1984-1988, compared to an evaluation period of 1998 – 2003.
- A reduced accident rate and severity index five years after opening are a further indicator of the schemes success.
- There are some outstanding safety concerns amongst local residents relating to Felton Butler roundabout at the southern extent of the scheme although the HA has since installed some interim remedial measures whilst it investigates issues further.
- The scheme was supported by and has been well received by the local community. Quality of life benefits such as reduced severance have been particularly well recognised by the local population.
- Although benefits were less than predicted, the scheme costs were lower than predicted, resulting in a better than forecast BCR.
- Traffic forecasts were largely accurate in that observed traffic levels five years after opening were in the range of the low and high growth forecasts.
- Journey time savings remain evident five years after opening.
- The time lag between the original appraisal and evaluation has resulted in only limited information on scheme traffic and economic information being available.
- Environmental mitigation measures appear to have been effective in minimising impacts and should achieve the objectives by the design year.
- The scheme has contributed to achievement of objectives in local plans and policies.
- Safer conditions due to lower traffic levels have resulted in an increase walking and cycling.
- Despite local concerns pre-construction, the reduction in traffic in Nesscliffe does not appear to have caused the closure of any facilities.

Summary of Scheme Impacts

Traffic

- Five years after opening, the A5 Nesscliffe bypass carries around 20,400 vehicles per day. This represents almost a 5% increase on one year after opening traffic levels.
- Compared to pre-scheme traffic levels on the old A5 have reduced by 93%, although flows have increased by 12% since 2004 when the one year after evaluation study was completed.
- Compared to the pre-opening scenario, traffic travelling within the Nesscliffe area has increased by 17%. This is marginally higher than that which would be expected through background traffic alone.
- Traffic flow forecasts for this scheme were reasonably accurate and within the boundaries set by low and high growth forecasts.
- Traffic flows on the old A5 are marginally above the forecast estimates, but at worst this represents an underestimate of just 300 vehicles per day. On the bypass, observed five year after flows were more closely aligned to the high growth forecasts.
- Post opening journey times on the bypass are approximately 2-3 minutes quicker than was previously the case on the former A5.
- Generally the journey time savings observed at the one year after opening stage have been maintained five years after opening.
- Peak hour journey time savings were similar to those predicted, yet journey time savings in the inter-peak period were more than double those expected.

Safety

- The number of Personal Injury Accidents (PIAs) over the modelled area has reduced from an average of 10 per year prior to scheme opening, to 4 per year (five years after opening). However, 4 less accidents per year have been saved than forecast.
- The observed reduction in PIAs on the extent of the scheme is statistically significant.
- 90% of residents surveyed agreed that the bypass had helped improve safety for road users and pedestrians.
- Whilst on balance most residents felt the issue of speeding had declined following opening of the scheme, there were 30% who perceived that 'speeding' in the area has increased as a consequence of the scheme.
- There are a number of outstanding safety concerns amongst local residents, businesses and politicians regarding safety at the Felton Butler roundabout at the southern extent of the scheme.

Environment

- Traffic flows were broadly in line with forecasts and therefore the scheme has beneficial impact on noise levels and air quality, as expected.
- Due to an increase in average vehicle speeds on the A5, carbon emissions have increased by 13%. However, this increase in emissions was predicted in original scheme impact forecasts.
- Planting is establishing satisfactorily and, subject to ongoing management, it should reach its desired screening effect by the design year.
- There has been an adverse impact on local townscape and heritage; however these impacts are in line with expectations. Felton Butler Manor and Beam House (both grade II listed) are particularly affected by lighting and noise exposure from the Bypass.
- As expected, the bypass has resulted in the re-routing of some public rights of way, although the number of routes across the bypass have been maintained following scheme opening.
- Additional minor health benefits have also been achieved through creation of a more attractive walking and cycling environment for local residents.

Accessibility

- A large number of residents felt that reduced traffic levels on the old A5 had encouraged them to walk and cycle more.
- As forecast the scheme has had a beneficial impact on reducing the severance caused by the A5. This has been achieved through the installation of an underpass.
- In line with forecasts, the scheme has had no impact on access to the public transport system or option values.

Integration

- The removal of traffic on the old A5 through Nesscliffe has made a positive impact on the waiting environment for public transport users.;
- There were some local concerns prior to scheme opening regarding the effect of reduced traffic on businesses located on the old A5. There is no evidence to suggest that the construction has adverse impacts on local businesses.
- The scheme objectives are consistent with those set out in a number of local and regional policies including the West Midlands Regional Spatial Strategy; Shropshire Local Transport Plan and the Shropshire, Telford and Wrekin Structure Plan.
- In line with expectations, reduced traffic levels and congestion in Nesscliffe village have helped to improve perceptions of quality of life amongst its residents. 44% of residents surveyed felt that Nesscliffe had become a better place to live since the opening of the bypass. Only 4% of respondents felt that quality of life had deteriorated.

Summary of Scheme Economic Performance

| | Costs in £m 2002 Prices discounted to 2002 at 3.5% | |
|------------------------------|--|-------------------------|
| | Re-Forecast ¹ of pre-scheme expectation | Post-scheme re-forecast |
| Journey Time Benefit | £49.42m | £54.91m |
| Safety Benefits | £22.58m | £12.28m |
| Total 30 Year Benefits (PVB) | £72m | £67.19m |
| Costs (2002) prices | £25.55m | £20.35m |
| Benefit Cost Ratio (BCR) | 2.8 | 3.3 |

¹A re-forecast was undertaken due to discrepancies between the supplied COBA outputs and economic forecasting reports

- Journey time saving forecasts were reasonably accurate. Five years after opening it is estimated that journey time savings are equivalent to £54.91m, this is around 11% higher than expected.
- A lower than expected accident saving has offset the additional journey time savings emerging following scheme opening.
- Out-turn costs were 20% lower than forecast.
- Despite total benefits being less than forecast, the BCR was higher than expected and represents excellent value for money.

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