POPE of Major Schemes Summary Report

Scheme Title	**A11 Roudham Heath to Attleborough Bypass Improvements**	Major Schemes No:	015
Opening Date	March 2003		
POPE Stage	5 Years After		

Scheme Description

The scheme involved the dualling of the existing single carriageway A11 which runs between Roudham Heath and the Attleborough bypass. The scheme is located southwest of the town of Attleborough (population 9,700), and consisted of the following key improvements:

- Dualling of 9.9km of carriageway between Roudham Heath and Breckland Lodge on the A11
- Construction of a new roundabout junction at Breckland Lodge
- Closure of Northend Lane junction with the A11
- A new bridge over the A11 to connect Sallow Lane with the main road
- A new junction with the B1111 now passing under the A11, and new link roads connecting minor roads Harling Road, Watton Road, Wretham Road

Objectives	Objective Achieved?
To reduce the accident rate along the route	Yes
To improve the unreliable journey times along the route	Yes
Provide additional traffic capacity	Yes
To contribute to the completion of the dualling of the A11 between the M11 and Norwich (along with two other A11 schemes)	Yes

Main Impacts

Environment

- Retention of existing vegetation has helped integrate the scheme into the local landscape although some new planting is slow to establish
- Removal of traffic from sections of old A11 provides safer and quieter route
- Generally, environmental impacts are as expected. Traffic flows are higher than forecast and this may have impacted on local noise and air quality.

Safety

- A statistically significant saving of 22 accidents and 42 casualties on average per year
- Percentage of Killed or Seriously Injured (KSI) casualties reduced from 23% to 9%
- Improved safety for non-motorised users
- The accident rate for this section of the A11 is now well below the National Average for a dual carriageway

Economy

- Traffic levels are significantly higher than forecast
- Journey time improvements on the A11 in both directions
- Improved journey time reliability for A11 traffic in both directions
- Reduced route stress from 95% to 37%
- Economic benefits higher than forecast

Accessibility

- Vehicles and non-motorised users wishing to join the A11 and cross the corridor from east to west can do so more safely

Integration

- The scheme has facilitated the economic growth in the area, particularly in relation to the motor-sport industry and warehousing at Snetterton
- The scheme aligns with Regional, County and District Policy

Detailed Traffic Impacts

- Traffic volumes on the A11 at Roudham Heath five years after the scheme opened have increased by 13% to 26,900 vehicles per day. This is roughly in line with growth experienced elsewhere on the A11 in this region at Wymondham and Thetford.
- There have been increases of 48% in traffic using the B1111, and of 18% using the B1077.
- Traffic on the A140 running parallel to the A11 has reduced by 7% five years after opening of the scheme, after taking background expected traffic growth into account.
- The number of heavy goods vehicles using the improved A11 has shown very little change since the scheme opened, with the proportion of HGVs being 21% on an average weekday.
- Traffic growth on Heath Road south of the Snetterton interchange has been in the region of 60%, reflecting the degree of economic expansion in this area.
- Journey time savings of between 4 and 5 minutes in both directions are shown for this section of improved A11.
- Journey time reliability improved on the A11 in both directions. Variability between peak and inter-peak journeys has reduced from 1 – 2 minutes to less than half a minute.
- Average speeds on the A11 between Roudham Heath and Attleborough have increased from around 40mph to around 70mph.
- Traffic is now able to overtake slower moving vehicles, and is not slowed by traffic joining the trunk road at Northend Lane and the improved grade separated junctions at Harling Road and Snetterton.

Economic Summary

	Forecast (1)	Actual (2)
	Not directly comparable	
30 year Benefits	£36.2m	£215m
Costs	£15.8m	£51.2m
Benefit Cost Ratio (BCR)	2.3	4.2

(1) Original forecast based on high growth. 1988 prices, discounted to 1988 at 8%, forecast opening year of 1996
(2) Actual benefits based on observed 5 year after data: VOT and safety benefits, actual costs are based on as-spent costs supplied by HA, 2002 prices discounted at 3.5%.

Key Findings

- The observed accident statistics for the first five years after opening were closely in line with forecast safety impacts, and one year after estimates.
- Opening year flows on the A11 were in the region of 25% higher than forecast (based on High growth forecast). More accurate forecasts may have been achieved through explicit consideration of nearby Snetterton Industrial zone and motor racing-circuit, and the construction of the A11 Thetford bypass, rather than reliance on NRTF growth factors for Norfolk.
- The time lag between forecast construction and opening, and actual construction and opening was considerable for this scheme. It has therefore been difficult to provide reasonable comparisons between the economic forecasts and outturn cost and benefits at the five year after stage.
- The input-decks for the scheme's COBA model were no longer available therefore it was not possible to re-assess the Safety and Economy impacts using the same methodology and hence not possible to make a judgement on the accuracy of the forecasts.