

POPE of Major Schemes Summary Report

Scheme Title	A1(M) Bramham to Wetherby
Opening Date	July 2009
POPE Stage	Five Years After

Scheme Description

The A1(M) Bramham to Wetherby improvement scheme was a major Highways England project north-east of Leeds which opened in 2009. The purpose of the scheme was to widen and upgrade the A1 to motorway standard to the east and south of the town of Wetherby. This involved:

- Upgrading of 6.2 miles (10km) of the A1 from all-purpose A road to motorway standard between A64 Bramham Crossroads junction and Kirk Deighton junction, tying into the Wetherby to Walshford upgrade north of York Road. Of the 6.2 miles, 2.5 miles (4km) of the A1 was widened from two to three lanes.
- The closure of the following junctions:
 - Tenter Hill (Bramham)
 - Wetherby Grange (Wetherby)
 - Walton Road (Wetherby)
- Following the scheme opening, the only access points onto the A1(M) between Bramham and Wetherby are at Junction 44 Bramham Crossroads, Junction 45 Grange Moor Junction and the newly constructed Junction 46 at Kirk Deighton.
- Construction of a single carriageway Local Access Road between the A64 Bramham Crossroads junction to the south, and Sandbeck Lane on the north-eastern perimeter of Wetherby to cater for local and non-motorway traffic. The local access road completes the 'inner bypass' of Wetherby by connecting with the local access road under the Wetherby to Walshford Scheme at Sandbeck Lane roundabout.
- The construction of a separate segregated route for non-motorised users (NMUs) provided between the A64 Bramham Crossroads junction in the south and Sandbeck Lane on the north-eastern perimeter of Wetherby.
- Replacement of road overbridges and the improvement of existing bridges over the Wharfe River.



Scheme Objectives

Objectives Source: Statement of Case (2005), Environmental Statement (2005) and Appraisal Summary Table (2006)	Objective Achieved?
Reduce accidents and congestion caused by vehicles transitioning from a dual three lane all purpose (D3AP) standard road to a dual two lane all purpose (D2AP) standard road around Wetherby.	\checkmark
Provide an upgraded section of motorway consistent with adjoining sections in Yorkshire which will become a high standard transport link between the north and south of England on the eastern side of the Pennines.	\checkmark
Deliver an environmentally acceptable scheme that protects and enhances the built and natural environment, and that minimises and mitigates any significant environmental impacts to an acceptable level.	\checkmark
Create savings in journey times.	\checkmark

Summary of Scheme Impacts

Key Findings

- Traffic flows on the A1(M) have decreased since opening (due to re-assignment of traffic onto the Local Access Road). The observed traffic flows on the A1 are lower than forecast.
- A1(M) traffic is experiencing more reliable journey times and journey times have reduced slightly.
- The number of collisions has reduced since the scheme opened, but this saving is lower than forecast.
- Monetary benefits are lower than expected, primarily due to lower than expected journey time savings.
- The environmental impacts of the scheme have generally been mitigated as expected.

Traffic

- Annual average daily traffic flows on the A1(M) between junctions 44 and 45 are 88,800 five years after opening, a slight fall of 1%.
- Between junction 45 and the former Wetherby Grange Junction, annual average daily traffic flows fell 16% to 75,200, reflecting the re-assignment of some local traffic onto the local access road.
- Between the former Wetherby Grange junction and junction 46, annual average daily traffic flows at the five year after stage were unchanged compared to the pre-scheme period.
- There has been a 21% increase in annual average daily traffic flows on Bridge Road (east of the A1(M) junction 45) at the five years after stage (600 vehicle increase), which is due to the re-assignment of local traffic travelling between Wetherby and Boston Spa following the closure of Wetherby Grange junction.
- The closure of Wetherby Grange junction also appears to have led to 20% less traffic on the A58 south-west of Wetherby, given that the route is no longer attractive for vehicles travelling onto the A1(M) from the west.
- Significantly less traffic uses the A1(M) and local access road than expected:
 - The forecasts of how much traffic there would be on this section when construction started were too high.



- Similarly, the traffic flow forecast for after the scheme opened were higher than the observed flows. On the A1(M), annual average daily traffic flows were overestimated by 18-19%, representing 16,100 to 20,980 vehicles.
- Comparison of pre and post-scheme vehicle speeds reveal a modest increase in speeds of 3-5mph across the A1(M) junction 44 to 46.
- Since opening, the scheme section is considered less stressful to drive.

Safety

- When factoring in the background reduction in collisions over time, there has been a 33% reduction in personal injury collisions across the scheme between the pre and post-scheme periods, an annual average saving of 5 personal injury collisions in the first five years after opening.
- This result is statistically significant, suggesting the collisions savings are a result of the scheme.
- Across the scheme area, fatal collisions have fallen by 60%. However, the severity index has increased as a result of the number of slight collisions falling by a greater rate than serious or fatal collisions.
- Across the wider model area, collisions have increased by 1% compared to a forecast reduction of 12%.

Environment

- The impact of the A1(M) on noise is as expected, whilst the impact of the Local Access Road on noise is better than expected.
- Local air quality impacts are likely to be better than expected given that observed flows are lower than forecast.
- The scheme's outturn impact on greenhouse gas emissions is better than expected, with an increase in emissions of 1,206 carbon tonnes against a re-forecast increase of 12,000 carbon tonnes.
- The longer term screening and integration objectives of the planting plots are considered likely to be broadly on target to being achieved, although there are locations where the performance of the plant stock is considered to be less than satisfactory.
- The environmental fence adjacent to the southbound carriageway north of Farfield House has had a greater than expected visual impact on the surrounding landscape.
- It is considered that the effects of the scheme on protected and notable species are likely to be as expected, though the lack of animal mortality data has limited the evaluation.
- The habitat potential of a number of marginal/tree and shrub planting plots has likely not been realised to the extent expected at this stage. However, these areas are relatively localised.
- There is no evidence to suggest that the overall effect of the scheme on water quality and drainage is anything other than what would be expected at this time.
- Footpaths, bridleways, and cycleways generally appear to be maintained and capable of
 performing as expected, although the dedicated equestrian crossing point on the local
 access road just to the north of Wattle Syke Roundabout may not be benefiting the
 equestrian community to its full extent. The vast majority of issues raised by the nonmotorised user audit and by stakeholders appear to have been resolved, including the
 outstanding snagging (construction) issues.

Accessibility and Integration

- There is no evidence to suggest that the scheme has impacted on the provision of public transport links, though anecdotal comments from a local bus operator suggest that use of the local access road has improved service reliability.
- The scheme included a non-motorised user facility, provided alongside the local access road, with provision for pedestrians, cyclists and equestrians.



- Sustrans cycling group provided largely positive comments in regards to the facility, but noted the need for improved signage.
- The failure to connect the non-motorised user facility with the Freemans Way cycle route appears to be a missed opportunity to further enhance cycle connectivity across the area.
- The scheme is aligned with local, regional and national land use policy that was current at the time of scheme appraisal.

Summary of Scheme Economic Performance

		Forecast	Outturn Reforecast
Journey Time Benefits	3	£264.9m	£54.0m
Safety Benefits		£40.7m	£18.2m
Journey Time and Sat	fety Benefits	£305.6m	£72.2m
Investment Costs		£56.2m	£61.6m
Indirect Tax		-£20.8m	-£5.7m
Benefit Cost Ratio	Indirect Tax as a Cost	7.9	1.2
	Indirect Tax as a Benefit	4.6	1.1

Note: all monetary figures in 2002 prices discounted to 2002.

- The scheme is delivering journey time benefits, although they are considerably lower than forecast due to the saving in journey times being less than expected and traffic flows being less than expected.
- Safety benefits resulting from the scheme were forecast to be £40.7m, however, the outturn benefit is 55% below this at £18.2m.
- Outturn investment costs totalled £61.0m, 9% higher than the forecast of £56.2m.
- The forecast impact on indirect tax was for an increase in tax revenues to the Government. The outturn indirect tax evaluation shows that the Government is receiving lower than expected indirect tax revenue because traffic volumes are lower than forecast.
- Taking indirect tax as a benefit to the Treasury, the scheme achieves a BCR of 1.1. This is regarded as low value for money by the Department for Transport.

This document summarises the findings of the Five Year After (FYA) post opening evaluation study completed in 2015.