

Executive Summary

Scheme Description

The A14 Haughley New Street to Stowmarket Improvement scheme is a Highways Agency major project which opened in December 2008 and provided a section of new, realigned dual carriageway linking Haughley New Street and Stowmarket in Suffolk. This section of the A14 previously had safety issues as a result of the sub-standard staggered crossroads, road alignment and visibility from local access roads entering the A14. The scheme retained one of the former carriageways for a two way local access road, and downgraded the other carriageway to be a cycle, pedestrian and equestrian route.

This document summarises the findings of the five years after post opening evaluation study completed in 2015.

Scheme Objectives

Objectives (Environmental Statement 2006)	Objective Achieved?
To improve safety, fewer accidents	 ¹
To separate long distance and local traffic	
To improve journey times and reliability	
To improve access for non-motorised users (NMUs)	
To achieve the above objectives in an environmentally sustainable and sensitive way	Partial

¹ For further details see key findings and safety summary below.

Key Findings

- Average journey times along the A14 corridor have reduced in line with expectations for traffic using the A14.
- Post opening traffic flows have increased by around 7% along the scheme section, slightly less than forecast, with the majority of through traffic using the route moving to the new route.
- When only the scheme section is considered, post opening collision data shows there has been a small increase of 0.4 collisions per year (6.5%), but this small change does not allow any conclusions to be drawn over the longer term performance of the scheme. When looking over the whole area considered for the scheme appraisal, there has been an average increase of 32%. It is noted that the scheme has eliminated a sub-standard staggered crossroads which had previously been considered highly dangerous for local residents.
- Landscape mitigation measures are considered to be underperforming, impacting upon biodiversity, landscape and townscape.
- Monetary benefits are lower than expected, with outturn present value benefits of £74.4m compared to a forecast of £91.7m. This is primarily due to the collision savings being lower than forecast.

Summary of Scheme Impacts

Traffic

- Average weekday traffic flows (AWT) on the A14 scheme links have increased by 7% post opening, from approximately 38,700 vehicles per day (vpd) to 41,200 vpd.
- Traffic along the former A14 route has reduced by 90% (a reduction from 38,700 vpd to 3,900 vpd). As the majority of traffic on the A14 is through traffic, this has transferred to the new carriageway post opening.

- Observed flows on the A14 are 17% below that forecast, most of which is likely to be due to the lower than expected traffic growth nationally and slightly less new housing and employment development in Stowmarket than expected.
- Along the scheme, average journey times have reduced during all time periods, and in both directions. The greatest savings (three minutes and 50 seconds) are seen in the eastbound direction, where average journey times pre scheme were highest.
- Forecast journey times for the A14 route were accurate. This is to be expected as the majority of journey time savings are due to the raising of the speed limit from 50mph pre scheme to the national speed limit for a dual carriageway post opening.

Safety

- The scheme removed a sub-standard staggered crossroad on the A14 at this location. This eliminated the need for local traffic to cross the dual carriageway and the potential of slow moving traffic being involved in collisions when entering or exiting from local roads and facilitated the raising of the speed limit to 70mph.
- When collisions are considered only for the A14 key links (both new carriageway and former route), an increase of 6.5% (0.4 collisions annually) is observed, but this small change does not allow any conclusions to be drawn over the longer term performance of the scheme.
- Collision data obtained for the study area indicates an annual increase in collisions of 32% (an additional 13.3 collisions per year) post opening. This includes the urban area of Stowmarket.
- Both areas had fewer collisions in the five years after opening than in the five years prior to construction; but that reduction was smaller than the decline we would expect to occur in line with the national trend.
- When traffic flow changes are taken into account, the collision rate for the scheme key links has changed from 0.121 to 0.127, an increase of less than 5%.
- The appraisal forecast a saving of 3.1 collisions per year over the key links, and a saving of 4.6 collisions per year for the whole study area. This was an overestimation, particularly for the larger appraisal area, which suggests that the impact of the scheme on the wider area was overstated.

Environment

- Based on traffic flows, the noise impacts of the scheme are considered as expected for the new A14 and the eastern end of the former A14. As traffic flows are lower than forecast for the western section of the former A14, it is likely that the noise climate is better than expected here.
- Air quality is likely to be better than expected at all locations along the new and former A14 routes as traffic volumes and heavy vehicle numbers are below forecasts.
- Carbon emissions between the pre and post scheme periods have increased by a slightly lesser extent than forecast, mainly due to lower than expected traffic flows.
- The landscaping measures are being maintained as specified, however the plant stock in general is not maturing in line with reasonable expectations at this stage. Therefore the impacts (particularly visual screening/amenity functions) are considered to be worse than expected.
- The impact of the scheme on biodiversity is considered to be worse than expected as the full potential of woodland and shrub planting has not been realised and is likely to have impacted on local ecology.
- In line with the impact on landscape, the impact of the scheme on townscape is considered to be slightly worse than expected as the Tot Hill junction has not been fully integrated into the local landscape as well as would be expected at this stage.
- Remedial works to address the performance of the carriageway in poor weather conditions have been implemented. No other visible issues with water and drainage were found during the site visit undertaken for the study.
- Physical fitness benefits are considered to be as expected, as pedestrians, cyclists and equestrians are segregated from traffic along the former A14 route, and can easily negotiate the new Tot Hill junction.
- The route is generally well signposted and the new junction removes opposing movements across the carriageway reducing driver stress, particularly for local traffic. However ongoing concerns raised by local stakeholders regarding visibility and frequent damage-only collisions at the off slip road to the Tot Hill junction means that driver stress is considered to be worse than expected, resulting in the overall assessment of being slightly beneficial for journey ambience, to be worse than expected.

Accessibility and Integration

- The removal of traffic from local settlements has benefited local communities by improving the quality of the local environment. Local communities are further benefitted by the conversion of the former A14 carriageway for pedestrian, cycle and equestrian use.

Summary of Scheme Economic Performance

All monetary figures in 2002 prices and values		Forecast	Outturn Re-forecast
Journey Time Benefits		£105.3m	£92.6m
Safety Benefits		£12.5m	£0m
Vehicle Operating Costs		-£26.0m	-£18.2m
Present Value Benefits (PVB)		£91.7m	£74.4m
Indirect Tax		£17.8m	£12.5m
Present Value Costs (PVC)		£25.0m	£30.6m
Benefit Cost Ratio (BCR)	Indirect Tax as a cost	12.7	4.1
	Indirect Tax as a benefit	4.4	2.8

- Journey time benefits are less than forecast, due to lower than forecast traffic flows.
- Outturn safety impacts have not been monetised, as the small increase in collisions observed post opening is not statistically significant, and therefore cannot be confidently attributed to the scheme. However this is clearly lower than forecast.
- Overall the outturn PVB of £74.4m is 19% lower than forecast.
- The outturn BCR of 2.8 is lower than forecast, however the scheme is still considered to deliver value for money.