National Audit Office

HIGHWAYS AGENCY

A5 Queue Relocation in Dunstable – Wider Lessons

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SUMMARY


WELCOME TO
DUNSTABLE
MARKET TOWN SINCE 1109
TWINNED WITH
PORZ AM RHEIN AND
BOURGOIN-JALLIEU

Dunstable town centre suffers severe traffic congestion, due to limited road capacity and high volumes of heavy goods vehicles, causing poor air quality. The Dunstable A5 queue relocation scheme was designed to provide a co-ordinated traffic management control system using existing and new traffic signals along the A5. The scheme's aims were to improve the flow of traffic; reduce queues; improve safety and accessibility for pedestrians; improve the accident safety record at Caddington Turn junction and lessen noise and pollution. Construction began in 1999 and was completed in 2004. The scheme was budgeted to cost £1.4 million and the final outturn was £2 million.

The way the scheme's objectives were described by the Highways Agency created high expectations locally which were not ultimately satisfied. Although there has been an overall reduction in accidents, there has been an increase in the number of accidents occurring at junctions in Dunstable town centre since the queue relocation scheme came into operation. Local stakeholders attributed this to increased waiting times and pedestrian unfamiliarity with the new road layout. Despite the overall fall in the number of accidents, the scheme has not delivered the expected decrease in their severity. (It should be noted though, that beyond the post opening period covered by the Agency's Post Opening Project Evaluation report, the total figures for accidents causing injury, and pedestrian injuries in particular, have fallen.)

The modifications the Agency made to the scheme resulted in busier roads and longer waits at pedestrian crossings.

The Agency accepts that it did not recognise or manage this 'expectation gap', which is at the heart of residents' and local councils' dissatisfaction with the completed scheme.

Following initial public consultation, the Agency modified the specification for the scheme but did not impart these changes effectively to local residents and local councils, who still expected the completed scheme to reduce congestion, improve journey times and improve air quality.

The Agency's Post Opening Project Evaluation report[1] indicates that the scheme has not delivered some of the benefits forecast for safety, journey times, environment, accessibility, and scheme costs. The evaluation makes no mention of the impact on congestion on the A5, in the Town Centre or on surrounding routes, and did not fully evaluate changes in air quality. Local stakeholders were not consulted during the post-completion evaluation of the scheme. The Agency may not therefore be aware of additional costs and other unintended outcomes arising from its schemes.

The Transport Minister and the Agency's Chief Executive have met local representatives to discuss ongoing problems. Local dissatisfaction has highlighted the potential for conflict between national and local interests when proposing solutions to problems affecting the trunk road network. The MP for Bedfordshire South West referred the matter to the Comptroller and Auditor General and the National Audit Office for investigation, through the Chairman of the Committee of Public Accounts. The results of the Comptroller and Auditor General's review are set out in this report.

Whilst the circumstances of the Dunstable scheme are specific to that location, our enquiries have identified lessons which could apply more widely across the Agency. Our findings and suggestions for improvement are set out in the rest of this report.

1 LNMS Evaluation Report: A5 Dunstable Queue Relocation, September 2005, amended and re-released in January 2006.

RECOMMENDATIONS

On managing stakeholder expectations:

1 For future schemes, the Agency should:

- consider making local stakeholders aware as soon as possible of constraints on delivering service improvements, so as to help manage expectations.
- provide training for Project Sponsors on managing stakeholder expectations to promote realistic outcomes for schemes.

2 Where modifications are made to the specifications of road schemes or to scheme objectives after consultation locally, the Agency should inform all parties of changes and their likely impact especially if these are potentially adverse.

On prioritising road schemes:

3 In view of the potential for sub-optimal prioritisation of road schemes, the Agency should carry out a re-evaluation of the merits of a scheme when costs or specification are revised, or the expected benefits of the scheme have been re-assessed. The Agency introduced a cost control procedure in March 2003 for all schemes over £500k. Schemes with a low first year rate of return (FYRR) like Dunstable require approval at senior management level above the team promoting the scheme. Similarly scheme cost increases greater than 10% require Divisional Director approval, including review of the first year rate of return.

On modelling:

4 As far as possible, the Agency should model the full effects of a proposed traffic scheme to pick up issues like increased 'rat running'.[2]

On improving cost data:

5 In the absence of reliable preparation and supervision cost data on schemes using novel traffic management measures, the Agency should benchmark cost data from other organisations, such as local transport authorities, who have implemented similar schemes. This would need co-operation from local highways authorities.[3]

On post project evaluation:

6 The Agency should consider commissioning and publishing a review of the operation of the Split Cycle Offset Optimisation Technique (SCOOT)[4] system in Dunstable.

7 Surveying local councils and local highways authorities after completion of the work, would provide useful feedback on whether the schemes have delivered the benefits promised and help the Agency identify areas for improvement.

8 The Agency should also consider consulting local authorities on accident trends as part of its Post Opening Project Evaluations.

2 Where drivers use other routes to make regular frequent journeys.
3 The Traffic Management Act 2004 requires any future schemes of this nature to be developed in partnership with the local highways authority.
4 Split Cycle Offset Optimisation Technique (SCOOT) is a tool for controlling traffic signals in urban areas. On-street detectors embedded in the road allow it to respond automatically to fluctuations in traffic flow.



On improving traffic schemes generally:

9 To improve information sharing about novel solutions devised to address difficulties when implementing schemes:

- The Agency should establish a central database of schemes, allowing Project Sponsors to identify other schemes, for example, which reduce congestion and are using SCOOT and other traffic queuing measures.
- Traffic Operations Directorate's Regional Operations Managers should discuss novel or problematic schemes at their monthly meetings.
- The Agency should also consider publicising on its web site and in trade magazines the lessons learned from its use of novel schemes and new technologies that will be of interest to local highways authorities.