Overview and Scrutiny Committee 24 July 2012

Ashford Ring Road Report on Three Years of Two-Way Operation

In August 2011 the Overview and Scrutiny committee was presented with an update report by Mr Bob White (KCC Planning Development Manager) on Ashford Shared Space monitoring.

During the course of the debate the Committee were advised that the scheme was in the final stages of its three year post implementation monitoring, with a report expected early in 2012.

The attached document, which was circulated to Members of this Authority in May 2012, reports the results of that three year post implementation monitoring and Mr White will again be at the meeting to present it.

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ASHFORD RING ROAD REPORT ON THREE YEARS OF TWO-WAY OPERATION

INTRODUCTION

The Ashford ring road scheme was one of the proposals agreed through consultation for the Greater Ashford Development Framework (GADF) process. The ring road had long been identified as a constraint to the growth and development of the town.

A number of reports dating from the 1990s identified the ring road as a barrier, separating the town from the station, the Civic Centre and Stour Centre, Victoria Park and so on. These reports successively identified the need to 'calm' or 'break down' the ring road in order to provide better connections and a more attractive public realm. Ultimately the expansion of the town would provide a better shopping offer for both residents and visitors, create better freedom of movement and attract an improved quality of development into the future.

Growth Area status provided Ashford with the means to take a transformational approach to the breaking down of the ring road.

The original proposal was to take a four stage approach to the project:

- Stage 1 Convert the one-way ring road to two-way use
- Stage 2 Transform the Church Road to New Street section as Shared Space
- Stage 3 Transform New Street/Wellesley Road as a high quality route
- Stage 4 Transform Station Road as '21st Century High Street'

Stages 3 and 4 have yet to be undertaken, and it is likely that the aspiration for these areas will change and adapt as Ashford's growth proceeds. Furthermore, vacant sites between Elwick Road and the railway mean that a significant length of the Shared Space has yet to reach its full potential as a place.

The entire ring road was converted to two-way flow in July 2007. The opportunity was taken to minimise 'vehicle-only' areas, increase public space where possible and reduce street clutter. Work was then commenced on the south west quadrant, between Church Road and New Street, and including Bank Street up to Tufton Street, to create a slow speed, pedestrian friendly, high quality public realm. This work was completed in November 2008. This section is known as the Ashford Shared Space. The speed limit for the Shared Space is 20 mph, with the remainder of the ring road being 30 mph, as was the case for the original one-way ring road.

The Shared Space has attracted an enormous amount of interest, especially from local authorities, and visits have been made by groups coming from as far away as Japan.

The scheme has been a major award winner, capturing ten awards in the year after completion. These included the prestigious Royal Town Planning Institute award for Town Regeneration.

This report looks at the recorded casualty incidents on the ring road 'before and after' the implementation of the changes, and considers traffic flows and vehicle speeds in the Elwick Road part of the Shared Space. This information will contribute to a longer-term assessment of the ring road scheme in relation to the overall objectives.

SAFETY

In Table 1, the Personal Injury Crash (PIC) record for the three full calendar years (2004 to 2006) **before** conversion to two-way use is compared with the first three year period (December 2008 to November 2011) **after** completion of the overall scheme.

Three separate parts of the scheme are considered in Table 1, before the PICs for the whole of the ring road (plus Bank Street) are compared. These are the Shared Space, the Elwick Road/Station Road/Station Approach/Dover Place junction (S.E. Junction), and the remainder of the ring road. The S.E. Junction is considered separately because it was reconfigured without guard railing.

Table 1
THREE YEARS BEFORE AND AFTER SAFETY RECORD

LOCATION	Personal Injury Crashes	Casualties	Involving Pedest- rians	Involving Cycles	Number of Vehicles
SHARED SPACE – before	14	16	6	1	20
SHARED SPACE – after	7	8	1	2	9
CHANGE	-7	-8	-5	+1	-11
S.E. JUNCTION – before	12	14	2	2	22
S.E. JUNCTION – after	7	11	0	0	13
CHANGE	-5	-3	-2	-2	-9
REMAINDER - before	35	44	8	2	61
REMAINDER – after	22	28	5	4	39
CHANGE	-13	-16	-3	+2	-22
RING ROAD – before	61	74	16	5	103
RING ROAD - after	36	47	6	6	61
CHANGE	-25	-27	-10	+1	-42
	(-41%)	(-36%)	(-63%)	(+20%)	(-41%)

Safety on the ring road has improved significantly as a result of making it two-way and introducing the Shared Space. The greatest improvement is seen in PICs involving pedestrians. The one recorded pedestrian incident in the Shared Space occurred in Bank Street and was not related to the street design.

The minor increase in PICs involving cyclists warrants further consideration. It could simply be a product of more cycling in the area, but there are no cycle traffic counts to confirm or dismiss this idea. However, in all six cases it appears that lack of concentration on the part of the cyclists caused the collision. As such, the increase cannot reasonably be attributed to the new layout.

It is inevitable that the seven PICs in the Shared Space section will be of the greatest interest. For this reason, they are summarised below.

Table 2
SHARED SPACE PERSONAL INJURY CRASHES

LOCATION	SUMMARY
1. Bank Street, at junction with	Car pulled away from stationary and hit pedestrian
Tufton Street	walking past closure barrier.
2. Forge Lane, close to New	Motorcyclist weaving in and out of stationary traffic
Street junction	hit kerb and pillion passenger fell off.
3. Elwick Square (Elwick	Cyclist from Bank Street crossed eastbound traffic
Road/Bank Street junction)	and hit westbound car.
4. Elwick Square	Westbound car hit lighting column.
5. Elwick Road, between Bank	Cyclist riding "head down and not looking" hit side
Street and Church Road	of car emerging from private car park.
6. West Street, at junction with	Southbound car hit brick wall in central garden.
Northwood Gardens	Driver failed breath test.
7. Elwick Road, west of Elwick	Passenger fell over as bus pulled away.
Square	

Incidents 4 and 6 above involved collisions with Shared Space design features. As such, it could be argued that they exposed design flaws. However, it seems more likely that they were both a product of lack of concentration, albeit apparently for different reasons.

It is clear that the two-way ring road, with its Shared Space section, is considerably safer than the old one-way layout. The reduction in crashes involving pedestrians is particularly impressive, demonstrating that certain key objectives have been met.

It is interesting to compare Table 1 above with Table 4.1 of Ashford Town Boulevard: Report on the Transport Environment, Safety, Accessibility and Integration Objectives (Jacobs, July 2005). Using PIC data from 2002 to 2004 and a very slightly different extent of coverage in the south east corner, the report suggests that a 34% (21 out of 61 recorded incidents) reduction in PICs could be achieved. Table 1 shows that this has been exceeded (41%), against a matching baseline of incidents.

TRAFFIC FLOWS AND VEHICLE SPEEDS

Unfortunately, it has not been possible to identify any speed checks on the one-way ring road such that meaningful comparisons can be made with the use of the new layout. Anecdotal evidence suggests that many drivers exceeded the 30 mph limit at various locations, with some people referring to the ring road as a 'race track'.

It is nonetheless interesting to consider the average vehicle speed information taken in the Elwick Road Shared Space between Bank Street and Church Road in 2009, 10 and 11. This information is shown in Table 3.

Table 3 SHARED SPACE (MAXIMUM) 12 HOUR TRAFFIC FLOWS AND AVERAGE SPEEDS (mph)

	WEST	BOUND	EAST	BOUND	TWO	WAY
DAY – YEAR	TRAFFIC	SPEED	TRAFFIC	SPEED	TRAFFIC	SPEED
W/DAY – 2009 ^A	4817	20.7	4679	19.9	9432	20.4
SAT – 2009 ^B	4772	21.0	4259	20.2	9031	20.6
SUN – 2009 ^B	2684	23.6	2922	22.2	5606	22.9
W/DAY – 2010 ^C	4694	19.5	5112	20.0	9204	19.4
SAT – 2010 ^D	4196	20.0	4273	22.2	8469	21.1
SUN – 2010 ^D	2659	21.6	2048	24.8	4707	23.2
W/DAY – 2011 ^E	5172	20.1	5506	19.1	10678	19.6
SAT – 2011 ^B	4761	19.2	4924	17.7	9685	18.5
SUN – 2011 ^E	3332	20.9	3090	23.7	6422	22.3

- ^A Eight survey days in July
- Two survey days in July
- ^c Four survey days in June/July
- Done survey day in June
- E One survey day in July

A single weekday traffic count taken in Elwick Road in October 2002 shows a one-way 12 hour flow of over 19,600 vehicles. Table 3 shows that there has been a dramatic reduction since the two-way and Shared Space schemes were implemented. The effect of the 2011 opening of Victoria Way, which provides an alternative route parallel with Elwick Road south of the railway, has yet to be assessed.

In section 1.5 of the Ashford Town Centre Model: Interim Options Cases 1-8 – REPORT (Jacobs, March 2006) it was stated that:

"The 'shared surface' aspiration for Elwick Road can only be achieved if traffic flows can be reduced to approximately 1,000 vehicles per hour at peak times. Also, enough pedestrians need to be encouraged to use the road, as driver(s) will not see the need to slow down and give some priority to pedestrians."

It is evident from Table 3 that the Shared Space is coping well with around 10,000 vehicles between 07:00 and 19:00 on weekdays. Not surprisingly, vehicle speeds tend to be higher when there is less traffic. The highest hourly two-way flows are around 1,000 vehicles.

It is disappointing to note that, in the main, more drivers (marginally) exceed the speed limit than stay within it. That said, an average speed of around 20 mph is proving to be relatively safe, according to the PIC records. There is no evidence that pedestrians are avoiding key crossing areas, such as Elwick Square, and the 'driver give way rate' reported in previous research is commensurate with a lower speed environment. (See NATIONAL GUIDANCE AND OTHER RESEARCH)

Development of the southern side of Elwick Road, and greater recreational and retail use of Elwick Square, will almost certainly reduce vehicle speeds through the Shared Space, if only by a few miles per hour. More pedestrian activity will emphasise the sense of place, over and above the current greater emphasis on the Shared Space as a link with key crossing/sharing locations.

Section 1.5 of the Jacobs report goes on to draw parallels with the Exhibition Road scheme which was then under consideration for the Royal Borough of Kensington and Chelsea. That scheme was completed in Autumn 2011.

NATIONAL GUIDANCE AND OTHER RESEARCH

The Department for Transport's Local Transport Note 1/11: Shared Space (DfT, October 2011)¹ has within its evidence base, research carried out by MVA Consultancy at Ashford. A subsequent research report "Shared space – implications of recent research for transport policy" (Moody, S. and Melia, S., University of the West of England, 2011)² challenged aspects of the MVA work, with particular reference to Ashford.

The MVA research indicated that the driver/pedestrian rate of giving way to each other in Elwick Square was observed to be around 50/50. Moody and Melia observed a similar rate of ease of crossing the square by pedestrians, albeit by adding the percentage of pedestrians who did not stop to those to whom drivers gave way. Both reports demonstrate that Elwick Square is relatively easy to cross on foot.

A separate Briefing Note³ was prepared in December 2011 as a response to the 'Moody and Melia' report, with particular reference to the Local Transport Note. This note also included, as an appendix, an earlier Interim Briefing Note, which considered Positive Outcomes and Learning Points as they were understood at the time.

PUBLIC OPINION

Strong public engagement prior to and during construction of the ring road scheme was not followed through into ongoing communication with the wider community following completion. This is recognised as a weakness in the management of the project (see Communication section in the Briefing Note). However, formal and reactive communication has included the following:

- Two workshops, aimed primarily at Access Groups.
- Engagement with users referred to in MVA Consultancy's evidence base work for the Local Transport Note.
- Engagement with pedestrian users referred to in the Moody & Melia report.
- Press releases.

The two workshops were held in November 2008 and December 2009³. Delegates considered the Ashford Shared Space scheme and, on the second occasion, other relevant public realm schemes, with the aim of identifying positive aspects and areas for improvement in future schemes.

Outcomes from the first workshop included the identification of positive and negative features listed below:

What positive features were there in the scheme?

- The Puffin crossing
- Generally smooth path and road surfaces
- Guidance path
- Lower traffic speeds than before
- Removal of clutter
- Dramatic improvement in breakdown of ring road barrier

What negative features are there for people with impaired mobility?

- Lack of kerb lines
- Inconsistent Guidance path
- Lack of contrast in materials lack of visual clues
- Misleading blister paving arrangements
- Low level seating without back support and arm rests
- Lack of colour contrast creating trip hazards

Similarly, outcomes from the second workshop included identification of most liked and most disliked features listed (as relevant to Ashford) below:

Shared Space Layouts – Most liked features

- Reduced speed
- Reduced impact from traffic
- Greater pedestrian priority
- Good quality materials
- Even, uncluttered surfaces
- Low kerbs (where provided)

Shared Space Layouts – Most disliked features

- Lack of legibility for users
- Feeling of vulnerability lack of kerbs or other orientation clues
- Specific designs curved lamp columns, pavement uplighting
- Inappropriate seating

MVA Consultancy engaged with 12 drivers and 12 pedestrians in Ashford as part of the "Shared Space: Qualitative Research" (October 2010)⁴. In Section 3, "Findings: Drivers and Pedestrians", there is a full discussion of the opinions expressed, along with the same approach for three other locations under consideration.

Uncertainty among users was a key finding in respect of the Ashford scheme.

The Moody and Melia research refers to interviews with 144 people at Ashford, with Section 8, "Results", being the main presentation of the outcomes. Table 1 in that Section summarises the interview responses, and includes the following:

- 72% had "worried about sharing space in Elwick Square".
- 64% said they would "prefer traditional pavements and traffic light crossings".
- 80% said they felt "safer in the previous scheme".
- 78% felt they had "less priority over vehicles".

It is clear from these statistics that there is work to be done in terms of communicating the positive aspects of the ring road scheme. However, the 'age/gender' analysis included in the report appears to be consistent with long term continental experience with Shared Space. As such, attitudes towards the Ashford scheme are likely to take some time to adjust. Crucially, there is no clear evidence that pedestrians are avoiding it.

Publication of the Moody and Melia research prompted renewed media interest in the scheme. Opening of the Exhibition Road scheme in London, continuing interest in pursuing similar schemes among some local authorities, and an incident in a West Midlands scheme have also prompted responses consistent with the Briefing Note, and additional information contained in this report.

MATERIALS AND MAINTENANCE

Some of the materials used in the Shared Space have been criticised for their cost, source and/or appropriateness. With the benefit of experience, it is apparent that a much tighter approach to design and specification should have been followed.

Allied to problems associated with the choice of materials are the maintenance issues that need to be addressed. Oil staining and flume damage in Bank Street are the most obvious of these.

These materials and maintenance issues are now being considered separately from the operational performance of the ring road scheme. Relevant Learning Points contained in the Interim Briefing Note are the subject of detailed investigation and the formulation of options for action to address concerns.

CONCLUSIONS

The Ashford ring road scheme, with its Shared Space element, has achieved a 41% reduction in crashes involving personal injuries overall, and a 63% reduction in those involving pedestrians. Within the Shared Space itself, the reductions are 50% and 83% respectively.

The average speed of vehicles in a key part of the Shared Space is around 20 mph, which is also the speed limit. Weekday two-way traffic over the main 12 hour period is around 10,000 vehicles. Average speeds tend to be higher when there is less traffic at weekends. However, it is important to recognise that Elwick Square is not

yet utilised as a civic space and the southern side of Elwick Road is substantially undeveloped. As such, the full potential of the Shared Space as a place is yet to be realised.

Considerable research and scrutiny has not shown that any particular pedestrian groups are avoiding the Shared Space, and its performance appears to match that of lower speed environments. The interaction between pedestrians and drivers in Elwick Square is particularly encouraging.

It is recognised as a weakness of the management of the project that substantial engagement with the public prior to and during construction was not followed through after completion, other than with representatives of Access Groups. However, the reported opinions of users are consistent with experience with Shared Space elsewhere, and it is hoped that the positive aspects of this report will facilitate further beneficial engagement.

The first two stages of the transformational approach to Ashford town centre and its ring road have been successfully implemented, and even greater benefits are likely to be seen as further development occurs and as the later stages are implemented. While there are maintenance issues to be addressed, and the overall acceptance of the concept among local people may take more time, after three years Ashford can reasonably be described as 'living with Shared Space'.

LINKS

- Local Transport Note 1/11: Shared Space (October 2011) http://www.dft.gov.uk/publications/ltn-01-11
- Shared space implications of recent research for transport policy (2011) http://eprints.uwe.ac.uk/16039/1/Shared%20Space%20-%20Implications%20of%20Recent%20Research%20for%20Transport%20Policy.pdf
- Briefing Note, and other documents Available from bob.white@kent.gov.uk
- Shared Space: Qualitative Research (October 2010) http://assets.dft.gov.uk/publications/ltn-01-11/ltn-1-11-qualitative.pdf

The two Jacobs reports are not currently available in electronic form.

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