



**SPEED MANAGEMENT REVIEW:
A217 BRIGHTON ROAD JUNCTION WITH
M25 NORTH TO BOROUGH BOUNDARY
SURREY COUNTY COUNCIL'S LOCAL
COMMITTEE FOR REIGATE & BANSTEAD
21 JULY 2003**

KEY ISSUE

To consider the findings of the Speed Management Review for the A217 Brighton Road from junction 8 of the M25 northwards to the Borough boundary.

SUMMARY

This report presents the findings of a speed assessment of the A217 from the junction with the M25 north to the Borough boundary.

OFFICER RECOMMENDATIONS

The Committee is asked to

1. Agree to change the speed limit from 70mph to 60mph for Section 8, from the junction with the A2022 Banstead crossroads for a distance of 1400m northwards to the Belmont roundabout, and to progress associated modifications to the Traffic Order.
2. Agree the implementation of the proposed speed limits for sections 1 to 7, following confirmation that they are consistent with the revised Speed Management Strategy (para. 6.3), and a successful bid to the Government for funding of the central barrier (para. 6.6).

1 INTRODUCTION

- 1.1 Surrey County Council has a speed limit policy that either aims to reduce vehicle speeds where it can be demonstrated that the speed reduction will contribute to casualty reduction targets/Corporate Plan/Local Transport Plan, or alternatively, to increase the speed limit to be more suitable for that stretch of road.
- 1.2 It is the intention of the policy to support a target reduction in the percentage of speed related accidents by 1% per year (2000 base = 18%) over the next 10 years. It sets out in detail
- The assessment process to calculate the appropriate speed for any given section of road.
 - The procedure for identifying appropriate measures to achieve that speed.
 - A complimentary education, training and publicity strategy to bring about long term reductions in vehicle speed and improve driver awareness, therefore enhancing road safety.

2 CALCULATING APPROPRIATE SPEED

- 2.1 When undertaking a speed management project the first step is to identify the appropriate vehicle speed for the length of road being studied. The A217 was divided into 8 separate lengths with an assessment form completed for each section. The sections surveyed were as follows:
1. M25 to Babylon Lane, length: 880m
 2. Babylon Lane to Buckland Road, length: 520m
 3. Buckland Road to Chipstead Road, length: 1240m
 4. Chipstead Road to Bonsor Drive Roundabout, length: 1390m
 5. Bonsor Drive Roundabout to A240 Reigate Road, length: 1400m
 6. A240 Reigate Road to Garratts Lane, length: 1550m
 7. Garratts Lane to Banstead Cross Roads, length: 1040m
 8. Banstead Cross Roads to Borough Boundary, length: 1400m
- 2.2 The speed assessment form takes into account road hierarchy, frontages, severance (road dividing community), road layout factors, road condition factors, accidents and any future proposed measures. See **Annex I** for a copy of the assessment form.

3 BACKGROUND TO EXISTING SPEED LIMITS

- 3.1 In 1996 the A217/Dorking Road Roundabout traffic signal scheme came into operation. As a result of the safety audit, the approaches to the Dorking Road roundabout were reduced to 40mph. In 1998 the

whole length of the A217 north of the M25 was reduced to 40mph following a request from the police for speed consistency.

- 3.2 In a report presented to the Joint Transport Committee in 1998, in respect of the section labeled 8 in this report, namely from Banstead crossroads to Belmont roundabout, it was recommended that the speed limit should be reduced to 50mph. At the time this was not considered a priority and the scheme was not progressed. However, the A217 had not been subject to an assessment of appropriate speed that is now part of the County Speed Management Policy.
- 3.3 There have been 265 personal injury accidents between January 1997 and November 2002 along the section of the A217 in question. National research has demonstrated that travelling at inappropriately high speed is a causation factor in a third of all accidents; hence we are keen to encourage drivers to travel at appropriate speeds.

4 DETERMINING EXISTING SPEED

- 4.1 Speed surveys have been undertaken by an independent consultancy (The Paul Castle Consultancy) at eight locations for a period of 7 days, to allow for an understanding of existing speed patterns on the A217. **Annex J** highlights each section and the 85 percentile speeds. The data revealed that motorists are ignoring the current speed limits by at least 10mph. It has been advised by the DoT Circular 1/93 that should the 85th percentile speed be greater than 7mph or 20% more than the existing, that a higher speed limit should be introduced, as drivers often choose to ignore unrealistic limits. The circular also notes that the “most important factor is what the road looks like to a road user.” New speed limits should therefore be introduced to reflect the surrounding area.
- 4.2 The 85th percentile speeds produced by the automatic speed surveys were then compared to the speed limit assessed using Surrey County Council criteria as shown in **Annex J**. It should be noted that the full length of this road currently has a 40mph speed limit, with exception to Section 8, which has a national speed limit of 70mph.

5 PROPOSED SPEED LIMITS

- 5.1 The following highlights each section and the proposed speed limit (which have been calculated in line with the SCC Speed Assessment). These can be linked to **Annex J**.
 - **Section 1** - Existing speed limit: 40mph, proposed speed limit: 50mph, from the junction with the roundabout serving the M25 for a distance of 880m north to the junction with Babylon Lane roundabout. The SCC speed score gave a speed limit of 60mph, however, due to

comments collected from various sources it would appear that 50mph would be best suited, for both safety and avoidance of large speed fluctuations.

- **Section 2** - Existing speed limit: 40mph, proposed speed limit: 40mph, from the junction with the Babylon Lane roundabout for a distance of 520m north to the junction with Buckland Road.
- **Section 3** - Existing speed limit: 40mph, proposed speed limit: 40mph, from the junction with Buckland Road for a distance of 1240m north to the junction with Chipstead Lane.
- **Section 4** - Existing speed limit: 40mph, proposed speed limit: 50mph, from the junction with Chipstead Lane for a distance of 1390m north to the junction with the Bonsor Drive Roundabout.
- **Section 5** - Existing speed limit: 40mph, proposed speed limit: 50mph, from the junction with Bonsor Drive Roundabout for a distance of 1400m north to the junction with the A240 Reigate Road.
- **Section 6** - Existing speed limit: 40mph, proposed speed limit: 40mph, from the junction with the A240 Reigate Road for a distance of 1550m north to the junction with Garratts Lane.
- **Section 7** - Existing speed limit: 40mph, proposed speed limit: 40mph, from the junction with Garratts Lane for a distance of 1040m north to the junction with the A2022 Banstead crossroads.
- **Section 8** - Existing speed limit: 70mph, proposed speed limit 60mph, from the junction with the A2022 Banstead crossroads for a distance of 1400m north to the Borough boundary.

6 CONSULTATION

- 6.1 The police were consulted for their views on these proposals and realised that whilst speed consistency would be lost, they did support the need for lower speed limits in residential areas and the chance to enhance speed limit signs and markings where the changes in limits have occurred. It was mentioned that maybe Intelligent Signs, which use variable messaging could be investigated, should funds be available. They were also supportive for the proposal to lower the speed limit from 70mph to 60mph for the section of the A217 from Banstead cross roads to the Borough boundary.
- 6.2 The Traffic & Road Safety Group noted various concerns: "Past studies have proved that on free flow roads, the greater the speed difference between slow and fast moving vehicles, increases the likelihood of accidents. The disparity between the existing speed limits and the actual speed of vehicles on the A217 could well be contributing to the

accidents". They have also noted that "observed speeds are well above the existing speed limit, this is not desirable as it brings the speed limit into disrepute". However, they have expressed concern that simple signing and road markings may not be effective, and were wary that any increases in speed could lead to a possible increased risk of accidents. It has been suggested that maybe a continuous 50mph speed limit could be desirable?

- 6.3 Another point made by the Traffic & Road Safety Group was that the current speed management strategy is soon to be under review, along with the assessment of appropriate speed method, and as a result may be amended. This does not imply that the current policy should be ignored, but that there should simply be awareness that changes may occur in the future.
- 6.4 The T&RSG provided accident data throughout the section of the A217 in question (9,700m), which showed that from January 1997 to November 2002 there were 265 personal injury accidents, of which 46 (17.3%) were speed related. The fatal and serious injury accidents for this period amounts to 49 (18.5%). A split was made between the north and south, the dividing point being the A240. This revealed that the northern section (4,050m) incurred 141 personal injury accidents of which 32 (22.7%) were speed related. The fatal and seriously injured accidents amounted to 26 (18.5%). Whereas the southern section (5,650m) showed that there were 133 personal injury accidents of which 17 (12.8%) were speed related. The fatal and serious injury accidents amounted to 22 (16.5%).
- 6.5 Generally the speed related accidents are spread over the length of the A217. However, there are particular clusters at the B2230 Belmont roundabout, the A2022 Banstead crossroads and Garratts Lane (which has recently seen improvements made to the traffic signal control and crossing facilities). From this data alone the interpretation would be that the northern section should stay at 40mph, whilst the southern section should rise to 50mph.
- 6.6 The County Safety Audit raised a requirement that, in accordance with the Government Traffic Directive 19/85, all new and existing dual carriageways with a speed limit of 50mph or above require central reserve barriers. For Section 8 (from Banstead crossroads to Belmont roundabout) a bid by County Traffic Safety has already been submitted for Government funding. A total of £190,500 has been requested for this work to be completed.

Reducing the speed limit from 70mph to 60 mph will not affect this bid. Should the proposed sections 1, 4 & 5 be raised to 50mph, a barrier will have to be installed at an estimated cost of £550,500. Further bids would have to be submitted to the Government to cover the cost of installing these barriers.

- 6.7 Graham Bath from the Traffic Systems team has advised that future 85%ile speeds will need to be assessed and appropriate facilities included, which could include new traffic signal equipment. However, as one can expect 85%ile speeds above 45mph on the A217, all signal installations currently include this equipment so the effect should be minimal. He also recommended that it would be necessary to install/upgrade at least 60m of anti-skid surfacing from the stop line at the signals. Concern was raised over the possibility of increasing speed on the approaches to roundabouts, due to loss of control or over-turning etc.
- 6.8 County Councillor Mrs Bowes is supportive to the majority of the proposals, provided speeds are monitored and adequate signing is introduced. However, support has not been given to Section 4, due to the positioning of the Kingswood church and a further three turnings into the Kingswood residential areas as one heads south. Full support is given to Section 8.
- 6.9 Councillor Cowle, Councillor Fraser and Mr Ohlson of the Walton Village Forum, are all in favour of the proposals, though Mr Ohlson requested that maybe Section 2 could be lowered to a 30mph speed limit? Cllr Fraser also raised the potential for activated signing to warn drivers of speed limits.
- 6.10 Cllr Mrs Gates was against the proposals as various limits could confuse drivers, and that speed limits will be ignored even if they were raised. Cllr Dixon was in favour of keeping to the existing 40mph speed limit, and Mrs Childs of the Tadworth & Walton Residents Association finds it hard to believe that variable speeds will make the road safer. Cllr Stead can see no reason for changing the 40mph speed limit and would like to see a 40mph speed limit introduced along Section 8, which would enhance road safety in that area.
- 6.11 Mr Brown of the Lower Kingswood Residents Association supported the idea of keeping the 40mph speed limit along Sections 2 & 3, though concern was raised that "it will be unrealistic to expect motorists to adhere to speed limits when there is so many changes in the limits over such a relatively short stretch of road." They also had little confidence that new road markings and signing would have a significant impact, as there is currently little enforcement of the speed limits. They would however, like to see the introduction of vehicle-activated signs.
- 6.12 Anne Holden Secretary of the Kingswood Residents Association wrote that they firmly oppose the introduction of a 50mph speed limit within Section 4. They mention that this stretch of the A217 has a residential area along its eastern side using 4 access points plus the village church, without any filter roads, any increase in traffic speed would also add to the noise pollution. They would rather see a pedestrian crossing installed somewhere along this stretch of road.

- 6.13 Mr Wilcox, President of the Kingswood Residents Association, writes that Section 1 would be better suited to a 50mph speed limit, and supports Sections 2 & 3. With regards to Sections 4 & 5 however, support is given to the 50mph speed limit, though during peak flows this obviously would not be attained. It is suggested that Sections 6 & 7 should stay at a 40mph speed limit, while he is supportive of the 60mph speed limit for Section 8. A concern was also raised for the need to introduce a pedestrian crossing on Section 4.

7 FINANCIAL IMPLICATIONS

- 7.1 £10,000 has been allocated for the Traffic Order and new signs from the Minor Highway Improvement Scheme MHIS 9/243. Additional funds may be required to accommodate possible changes to the existing traffic signals on the A217, and the upgrade of anti-skid surfacing where necessary. Should the proposed sections 1, 4 & 5 be raised to 50mph, then a barrier will have to be installed at an estimated cost of £550,500. Further bids would have to be submitted to the Government to cover the cost of installing these barriers.

8 ENVIRONMENTAL IMPLICATIONS

- 8.1 The changes in speed limit will enhance the road safety at locations where a 40mph speed limit is expected and for Section 8 where the speed limit will be dropped from 70mph to 60mph. New signs and road markings will be installed where a change in speed limit occurs.

9.0 CONCLUSION

- 9.1 Due to support for the lowering of the speed limit from 70mph to 60 mph for Section 8, it is proposed to progress with this change in the interest of road safety, despite a possible revision in the Speed Management Strategy.
- 9.2 Further to advice from the Traffic & Road Safety; the Speed Management Strategy is likely to be revised (along with the assessment of appropriate speed method) and as a result may be amended. Implementation of Sections 1 - 7 will only progress should the current proposals be consistent with any revisions made to the Speed Management Strategy, and a successful bid has been made to the Government for funding of the central barriers.

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