

Cambridgeshire County Council
A & B ROAD SPEED LIMIT REVIEW

Road Name: B1049

Priority Number: 19

Site Name: Impington to Wilburton (A14-A1123)

1. SITE ASSESSMENT

The B1049 is around 11 km long, extending from the A14 roundabout to the A1123 junction at Wilburton. For the purposes of this review the B1049 is divided into nine links based on environment and road characteristics.

The national accident rate for rural 'B' roads is 35 accidents per 100 million vehicle kilometres, 66 accidents per 100 million vehicle kilometre for semi-urban / partial development areas and 100 accidents per 100 million vehicle kilometres for built-up areas / villages.

Link 1

This is a single carriageway section 0.96 km long from the A14 roundabout to the New Road junction. It is subject to a national limit of 60mph. An off road footpath / cyclist facility is provided on one side of the road and partly on the other side. The general nature is partial development / rural.

The average speed is 36.23 mph for northbound traffic and 41.32 mph for southbound traffic. The average speed over the section is 38.77 mph. The average annual daily traffic flow (AADT) is 24,100. Pedestrian and pedal cycle activity is medium.

Five slight personal injury accidents were reported in this link during the 3-year from 2005-2008. The accident rate per 100-million vehicle kilometre for the link is 19.7.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, there is scope for a reduction in the existing speed limit.

Link 2

This is a single carriageway section 0.82 km long from the New Road junction to the Impington Lane junction. It is subject to a 40mph limit. An off road footpath / cyclist facility is provided on both sides of the road. An on road cycle lane runs for part of the link on the western side. The general nature of the area is one of a village. Three signal controlled junctions fall within this link.

Seven injury accidents were reported in this link during the 3-year from 2005-2008 resulting in 1 fatality, 1 serious and 5 slight injuries. The accident rate per 100-million vehicle kilometre for the link is 32.3

The average speed is 29.19 mph for northbound traffic and 31.94 mph for southbound traffic. The average speed over the section is 30.57 mph. The average annual daily traffic flow is 24,100. Pedestrian and pedal cycle activity is high.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, there is scope for a reduction in the existing speed limit.

Link 3

This is a single carriageway section from the Impington Lane junction to the national speed limit gateway, 1.6km further north. It is subject to a 40mph limit. An off road footway / cyclist facility is provided on one side of the road for the entire length and partly on other side. The general nature of the link is partial development / village.

Ten slight personal injury accidents were reported in this link during the 3-year from 2005-2008. The accident rate per 100-million vehicle kilometre is 53.8.

The average speed is 36.58 mph for northbound traffic and 36.7 mph for southbound traffic. The average speed over the section is 36.6 mph. The average annual daily traffic flow is 10,600. Pedestrian and pedal cycle activity is high.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, no change in speed limit is justified for the link.

Link 4

This is a single carriageway section 1.13km long from the national speed limit gateway, 1.6 km north of the Impington Lane junction to the 30 mph gateway at Cottenham. It is subject to a national limit of 60mph. The general nature of this link is rural. An off road pedestrian / cyclist facility is provided on the eastern side of the road.

Eight personal injury accidents were reported in this link during the 3-year from 2005-2008 of which 1 was fatal, 2 serious and 5 were slight injury accidents. The accident rate per 100-million vehicle kilometre for the link is 61.

The average speed is 44.87 mph for northbound traffic and 44.44 mph for southbound traffic. The average speed over the section is 44.65 mph. The average annual daily traffic flow is 10,600. Pedestrian and pedal cycle activity is low.

The link has an accident rate above that normally expected for a rural environment which lends weight to a lower speed limit.

Based on the speed data, there is some scope for a reduced speed limit.

Link 5

This is a single carriageway section from the 30mph gateway on the south village approach to the 40 mph gateway north of the Church Close mini roundabout.

As this link is subject to a 30mph speed limit it is out of the scope of this review.

Link 6

This is a single carriageway section, 0.53km long, from the 40 mph gateway north of the Church Close junction to the national speed limit gateway after Lockspit Hall Drive junction. The general nature is rural / partial development and it has a speed limit of 40mph. An off road footpath / cyclist facility is provided for part of the link on either side.

One slight personal injury accident was reported in this link during the 3-year from 2005-2008. The accident rate per 100-million vehicle kilometre for the link is 30.2.

The average speed is 35.09 mph for northbound traffic and 43.05 mph for southbound traffic. The average speed over the section is 39.07 mph. The average annual daily traffic flow is 5,500. . Pedestrian and pedal cycle activity is medium to low.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, no change in speed limit is justified for the link.

Link 7

This is a single carriageway section, 5.93km long, from the national speed limit gateway after Lockspit Hall Drive junction to the 40 mph gateway at Wilburton. The link has a national speed limit of 60mph. The general nature is rural. No pedestrian facility is provided on this link.

Eleven personal injury accidents were reported in this link during the 3-year from 2005-2008 of which 1 was fatal, 1 serious and 9 were slight injury accidents. The accident rate per 100-million vehicle kilometre for the link is 30.8.

The average speed is 54.11 mph for northbound traffic and 53.08 mph for southbound traffic. The average speed over the section is 53.6 mph. The average annual daily traffic flow is 5,500. Pedestrian and pedal cycle activity is low.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, no change in speed limit is justified for the link.

Link 8

This is a single carriageway section, 0.6km long, from the 40 mph gateway at Wilburton to the 30 mph gateway. This link has a speed limit of 40mph. The general nature is partial development. No pedestrian facility is provided in this link.

One slight personal injury accident was reported in this link during the 3-year from 2005-2008. The accident rate per 100-million vehicle kilometre for the link is 27.7.

The average speed is 41.0 mph for northbound traffic and 43.49 mph for southbound traffic. The average speed over the section is 42.3 mph. The average annual daily traffic flow is 5,500. Pedestrian and pedal cycle activity is low.

The link has an accident rate within the DfT acceptable limits. Hence, no change in speed limit is recommended on an accident basis.

Based on the speed data, no change in speed limit is justified for the link.

Link 9

This is a 30mph single carriageway section from the 30mph gateway in Wilburton to the A1123 junction.

As this link has a 30mph speed limit it is out of the scope of this review.

2. **ACCIDENT SUMMARY**

- 2.1 In total, 51 personal injury accidents were reported over the 3 year accident period of which 43 accidents indicated speed as a factor. Of the 43 accidents, 3 were fatal, 4 serious and 36 slight injury accidents.

3. **CYCLEWAY PROPOSALS**

- 3.1 As part of the work programme for the Cycle Demonstration Town project, it is proposed to construct new cycle facilities along several of the speed limit review links and these changes to the road environment need to be taken into account as part of the review.
- 3.2 On Link 1 the provision of on-road cycle lanes will reduce traffic lane widths, thereby helping to suppress vehicle speeds to some extent. Similarly, the proposed on-road cycle lanes on a substantial section of Link 2 will influence the mean speed.
- 3.3 The proposed cycle/pedestrian dual use footways to be constructed along Link 3 adjacent to the carriageway may give drivers the impression of a wider, more open road environment and, therefore, are unlikely to achieve any speed reduction. Similarly, on Link 4 the proposed cycle/pedestrian dual use footway on the east side is unlikely to achieve any speed reduction.

4. **CONCLUSIONS**

- 4.1 Taking into account the recorded average speed of under 39mph and the change in road layout that will result from the proposed cycle lanes it is recommended that the existing 60mph speed limit on Link 1 be reduced to 40mph.
- 4.2 On Link 2 the recorded mean speed suggests some scope for a reduction in the current limit although it is noted that heavy congestion during the peak periods is probably influencing the overall mean speed. In light of the high levels of cycle and pedestrian activity it is proposed to reduce the limit from 40mph to 30mph, subject to the provision of the proposed on-road cycle facilities to change the road environment.
- 4.3 On Link 3 the existing speed limit of 40mph is to be retained, although the situation will be reviewed once the cycle facilities are completed and the traffic situation has stabilised.
- 4.4 In light of the low mean speed on Link 4 and the high accident rate compared with the national average, a reduced limit of 50mph is recommended. Consideration should also be given to accident reduction measures as and when resources permit.
- 4.5 No other changes to speed limits are recommended although additional speed reduction measures should be considered for Link 8, as and when resources allow, to achieve greater compliance with the current limit.

SUMMARY TABLE

Link Number	Location of Section	Length (km)	Existing Speed Limit	AADT	Mean Speed	Injury accidents over 3 year period	Injury accidents per million vehicle kilometre	Recommendations
1	Single carriageway section from A14 roundabout till New Road junction.	0.96	60	24,100	38.8	5	19.7	Reduce speed limit to 40 mph
2	Single carriageway section from New Road junction to Impington Lane junction.	0.82	40	24,100	30.6	7	32.3	Reduce speed limit to 30 mph
3	Single carriageway section from Impington Lane junction north to the national speed limit gateway.	1.6	40	10,600	36.6	10	53.8	Retain existing speed limit Situation to be reviewed following completion of cycle facilities
4	Single carriageway section from national speed limit gateway to the 30 mph gateway at Cottenham.	1.13	60	10,600	44.66	8	61	Reduce speed limit to 50 mph Consider accident reduction measures when resources permit
5	Single carriageway section.	Out of scope of speed limit review.						

Link Number	Location of Section	Length (km)	Speed Limit	AADT	Mean Speed	Injury accidents over 3 year period	Injury accidents per million vehicle kilometre	Recommendations
6	Single carriageway section extending from 40 mph gateway near Church Close junction to national speed limit gateway after Lockspit Hall Drive junction.	0.53	40	5,500	39.1	1	30.2	Retain existing speed limit
7	Single carriageway section from national speed limit gateway after Lockspit Hall Drive junction to 40 mph gateway at Wilburton.	5.93	60	5,500	53.6	11	30.8	Retain existing speed limit
8	Single carriageway between the 40 mph gateway and 30 mph gateway in Wilburton.	0.6	40	5,500	42.3	1	27.7	Retain existing speed limit Consider further speed reduction measures when resources allow
9	Single carriageway section from 30mph gateway in Wilburton to the A1123 junction.	Out of scope of speed limit review.						