

Road Traffic Speed and Safety: Proposals for Minsterworth

Prepared by Minsterworth Parish Council

Road Traffic Speed and Safety: Proposals for Minsterworth

1 Introduction

- 1.1 Issues concerning road traffic through the village of Minsterworth are often raised by residents and discussed by the Parish Council (MPC). In particular the discussions focus on traffic speeds and road safety. There has been considerable discussion recently, both within the Parish Council itself and from residents more generally.
- 1.2 This document presents a summary of these concerns, along with rationale for a review of the traffic speed limits and the introduction of other measures designed to reduce speed, improve road safety and reduce noise for residents of the Minsterworth.

2 Minsterworth Village

- 1.1 Minsterworth lies on the western side of the River Seven between Gloucester and the Forest of Dean. It is a particularly long and mostly linear village, with the majority of houses built along the length of the A48.
- 1.2 The village has a long history, and in the past it was heavily involved with salmon fishing in the Severn. The local church, St Peter's, lies next to the river, with three ancient yews in the churchyard. F. W. Harvey, war poet and broadcaster, dubbed the "Laureate of Gloucestershire", is buried in the village churchyard. The village has a well-used Village Hall which is located near to the Church, directly on the A48.
- 1.3 The population of the village as at the 2011 census was 444. The population in mid-2014 was 470 people, with 70 people aged 0–15, 270 people aged 16–64 and 135 people aged 65+¹, although these numbers may not necessarily have captured all the residents on the 9 traveller settlements within Minsterworth. The population will have increased further due to the development of a number of building plots, in particular 14 houses at Ellis Bank, adjacent to Minsterworth Village Hall. In addition, there are approximately 23 houses currently nearing completion (8 houses at Seven Acres, 6 houses in Pound Lane and 9 houses at Moorcroft House farm), 16 houses with full planning permission but where building has not yet started, and many more sites where planning permission has been requested.

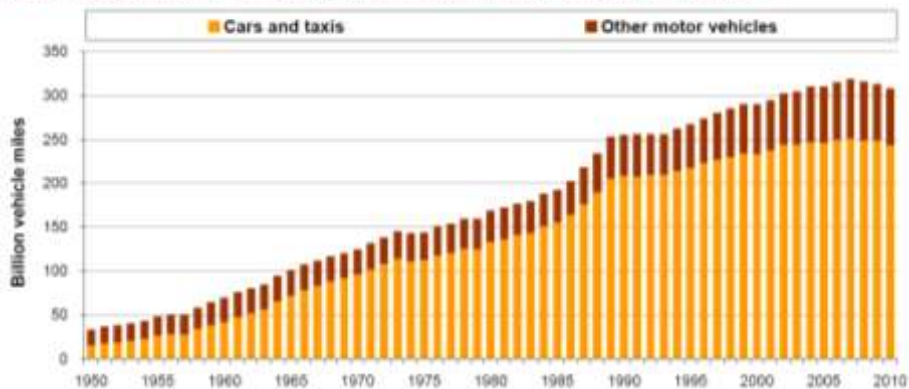
3 Road Traffic – The National Picture

- 3.1 According to the Department of Transport (DfT), the overall motor vehicle traffic volume in Great Britain in 2010 was 308.1 billion vehicle miles². Traffic levels in 2010 were 6.2 per cent higher than in 2000. Chart 1 (below) shows the steady increase in traffic since 1950.

¹ Local Insight profile for 'Minsterworth CP' area: September 2017.

² Transport Statistics Great Britain: 2011

Chart 1: Road traffic by vehicle type (cars and all motor vehicles): 1950-2010



3.2 Forecasts from the Department of Transport, National Transport Model suggest that motor vehicle traffic in 2035 will be 43 per cent higher than in 2003.

4 Road Traffic Safety – The National Guidance

4.1 The Department for Transport Circular 01/2013³ sets out guidance to traffic authorities for setting local speed limits and a requirement that they ‘keep their speed limits under review’. The Circular goes on to state that ‘Roads should be designed so that mistakes made by road users do not result in death or serious injury. Effective speed management is part of creating a safe road environment which is fit for purpose. It involves many components designed to work together to require, encourage and help road users to adopt appropriate and safe speeds below the speed limit’.

4.2 It is worth emphasising the stated objectives of Circular 01/2013 which include:

- achieving **local speed limits that better reflect the needs of all road users**, not just motorised vehicles;
- **continued reductions in the number of road traffic collisions**, injuries and deaths in which excessive or inappropriate speed is a contributory factor;
- ensuring **improved quality of life for local communities** and a better balance between road safety, accessibility and environmental objectives, especially in rural communities.

4.3 Furthermore, the Circular states that ‘Unless a speed limit is set **with support from the local community**, the police and other local services, with supporting education, and with consideration of whether engineering measures are necessary to reduce speeds ...it may be ineffective and drivers may not comply with the speed’.

³ <https://www.gov.uk/government/publications/setting-local-speed-limits/setting-local-speed-limits> (reference August 2021)

5 Road Traffic in Minsterworth

- 5.1 There has been considerable comment from Minsterworth residents recently about road traffic safety, with dissatisfaction being expressed about traffic speeds; road safety and noise disturbance. This is often heightened after a road traffic incident/accident which is, unfortunately, a fairly regular occurrence on the A48. Some of these incidents are minor in nature, and the police are not always involved; some are more major including a number of fatalities.
- 5.2 The majority of the incidents occur on the stretch of the A48 towards the west of the village, where the speed limits are higher, and where there is already a yellow board announcing the number of casualties on that stretch of carriageway.
- 5.3 A list of all known, locally logged incidents is attached at Appendix 1.
- 5.4 **On behalf of its parishioners, Minsterworth Parish Council is seeking a reduction in the road speed limits throughout the Village, accompanied by a range of other speed management measures, in order to improve traffic safety, reduce the number of road traffic collisions; address the road safety concerns of people living on or near the A48; reduce road noise and to improve the quality of life of the local community.**

The speed reduction measures requested pertain specifically to the stretch of road travelling westward, from the village Hall to the west end of the village; this is where the speed limits are higher and where the majority of accidents (and numerous near misses) happen.

Minsterworth Parish Council requests a maximum speed limit of 50mph on the A48 throughout the length of the village, along with safer pedestrian crossing points.

This is in addition to a number of speed reduction measures which include:

- The central lane improved by central reservations either side for traffic travelling west and turning into Oakle Street. This will have the triple safety benefit of preventing the perilous overtaking that regularly occurs on this stretch of road as well as providing safety for west bound traffic turning right into Oakle Street, and at the same time protecting the residents who need to slow down to access their properties directly off this stretch on the A48. The A48 is wide enough at this point to accommodate this.
- Further safe central reservations, with low level lighting; one by each bus shelter and one at the westbound end of the village.
- Gateways to denote the start and end of the village to provide a clear visual prompt to drivers that they are entering a different environment with different hazards including vulnerable road users.
- Speed marking on the road (circular 50mph signs), including in combination with red road colouring.

6 Supporting Evidence

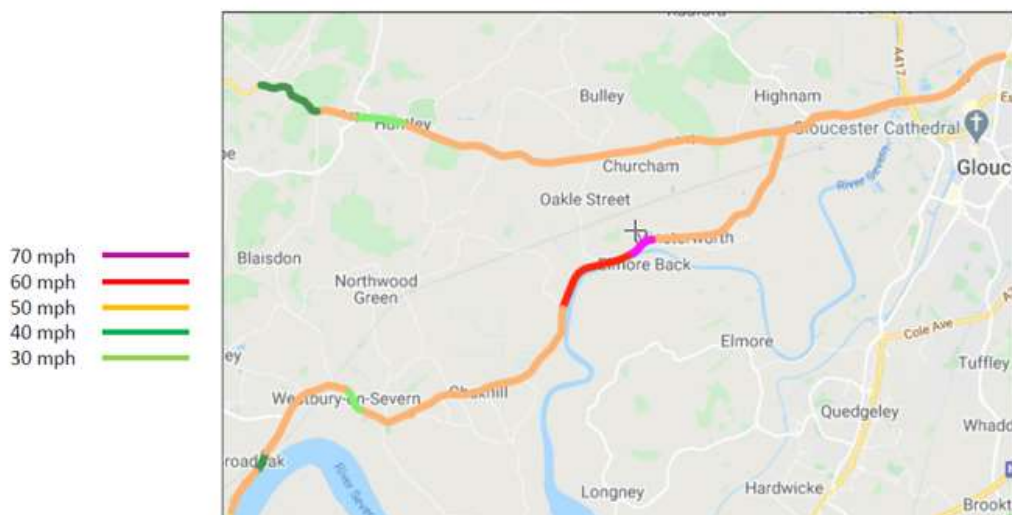
6.1 Arterial Roads Speeds

6.1.1 It is tempting to believe that arterial roads need to have higher speed limits in order to reduce travel times. However the DfT Circular 01/2013 states that on rural roads there is often a difference of opinion as to what constitutes a reasonable balance between the risk of a collision, journey efficiency and environmental impact. Higher speed is often perceived to bring benefits in terms of shorter travel times for people and goods. However, evidence suggests that when **traffic is travelling at constant speeds, even at a lower level, it may result in shorter and more reliable overall journey times**, and that journey time savings from higher speeds are often overestimated (Stradling et al., 2008).

6.2 Consistency with Other Areas

6.2.1 As noted in the (amended) speed survey, the speed limit on the stretch of road by Oakle Street is 60mph; the national speed limit for a single carriageway road. The national speed limit also applies to the short stretch of dual carriageway just after the Village Hall, when travelling west. On this section the speed limit is therefore 70mph. These limits are at variance with the speed limits in other areas. The 70/60mph sections are the highest limits from Gloucester to beyond Newnham. This can be seen on the map below. The 60mph speed limit is inconsistent with the speed limits in other villages in the area on either the A48 or the nearby A40.

- All major roads in the area are 50mph
- Except a 1.4 mile stretch of National Limit at Minsterworth
 - 1.1 mile of 60 mph single carriageway and 0.3 miles of 70 mph dual carriageway



6.2.2 It is important to note that the 70mph speed limit on the 0.3 miles (480 metres) of dual carriageway is at odds with the guidance of the DfT Circular 01/2013 for a single carriageway which states that 'The minimum length of a speed limit should generally be not less than 600 metres to avoid too many changes of speed limit along the route.'

6.3 Village Quality of Life

6.3.1 DfT Circular 01/2013 states that ‘Fear of traffic can affect people’s quality of life in villages and it is self-evident that villages should have comparable speed limits to similar roads in urban areas. It is therefore **government policy that a 30 mph speed limit should be the norm through villages**’. The DfT Traffic Advisory Leaflet 01/04 suggests that the definition of a village should be based on simple criteria relating to frontage development and distance, as shown below:

- 20 or more houses; and
- a minimum length of 600 metres

6.3.2 Moreover, the leaflet suggests that the existence of a notable building, such as a Village Hall, would strengthen this definition. The leaflet goes on to say that ‘In situations where the above criteria for a village is not met, and there is a lesser degree of development, there may still be a need for a limit lower than the national limit (e.g. 40 or 50mph). Minsterworth Village does have over 20 houses and is more than 600 meters in length and therefore meets the 01/04 definition of a Village; meaning that speed limits on the A48 are at odds with government policy. For example, using the Gloucestershire PROW map, on the A48 from Pound Lane to Church Lane there are 33 houses on the westbound side and 28 houses, together with the Village Hall on the eastbound side, giving 61 houses in total just for this stretch of road.

6.3.3 The DfT Circular also notes ‘severance of local communities’ as a matter for consideration in terms of quality of life and there is certainly a view from residents that the A48 forms such a barrier. Many residents express concern over crossing the road due to the volume and speed of traffic. This is of particular note given the number of people in the village aged 65+ (see Sections 1.3 and 6.4.2)

6.4 Traffic Speed

6.4.1 Following a request from the Parish Council, a speed survey was conducted by Gloucestershire County Council, at 4 sites, over a period of time between June and July 2021. The results (combined mean speed and 85th percentile) are summarised in Table 1 below.

Table 1	Start of Village (East)	Deep Furrow	Village Hall	Oakle Street
Mean Speed (mph)	47.0	47.0	39.0	51.0
85th %ile (mph)	52.0	52.0	48.0	57.5
Current Speed Limit	50mph	50mph	50mph	60mph

6.4.2 By presenting 85th %ile figures, the speed result survey tend to mask the problem some residents face, particularly those living on the stretch of road by

Oakle Street. For example, in this area the report shows mean speeds at night and early morning of 56mph and 85th percentile of 65mph. This means that some vehicles are traveling at speeds up to 74mph (97.5 percentile) and it is these are the vehicles that are going to cause the most damage to other cars or people. This is of particular concern for residents using the bus shelter opposite the telephone exchange near Denny/Dinney Bridge, where the speed limit is 60mph. Traffic travelling at these speeds make it very difficult for a person to safely cross the road in the time available from a car first appearing round the bend. Minsterworth Village is served by a regular bus service (every 20 minutes) and MPC would encourage residents to use the service, but one of the factors discouraging residents, especially the elderly, is the risk when crossing the road.

6.4.3 A number of residents in Minsterworth have expressed a desire to use bicycles, either for commuting or for leisure. However many people have expressed the view that they fear for their safety and therefore do not use the road. Reducing the speed would go some way towards providing some renewed confidence in using a bike on the village highways.

6.4.4 One of the arguments against lowering the speed limit is that a lack of understanding about the need for a lower restriction results in widespread non-compliance, and an over reliance on enforcement. However this does not seem to be of significant concern throughout the remainder of the village, judging by the results of the 3 other speed survey sites, particularly considering the fact that 'vehicle flows are reduced and in some cases the average speed is approx. 2-3 mph above a neutral time period'. This would suggest that a 10mph reduction in the speed limit would not require the majority of drivers to lower their speed by any significant extent.

6.5 Noise

6.5.1 Many people in the village live with excessive road noise. Noise levels on the roadside peak at well over 90dB, over the level that the HSE mandates the use of ear defenders in industrial settings! It is known that road noise increases sharply with vehicle speed. A report commissioned by the UK Noise Association states that "reducing 70mph and 60mph speeds ... would cut noise by 50%". Data shows that reducing vehicle speed from 60mph to 50mph will reduce individual road noise by approximately 8dB, equivalent to nearly halving the noise (ref: ECMT/OECD 2006:45 Figure 2.8) - this is a very significant reduction and will improve quality of life hugely, particularly for residents living along the Duni-Denny Bridge section of the A48. Similarly, a reduction from 50mph to 40mph would reduce road noise by around 6dB; again this would be a very significant improvement for people living in the central sections of the village. The DfT Circular specifically states that noise and vibration should be considered in determining revised speed limits.

6.6 Road Safety Measures

6.6.1 The DfT Circular states that as a general rule for every 1 mph reduction in average speed, collision frequency reduces by around 5% (Taylor, Lynam and

Baruya, 2000). For typical types of road traffic collisions the risk of death for drivers and pedestrians involved reduces with reduced vehicle speeds. There is therefore irrefutable evidence for the benefits of reducing traffic speed.

6.6.2 The Royal Society for the Prevention of Accidents (RoSPA) Rural Road Environment Policy Paper⁴ states that environmental factors, including the road environment ...contribute to around 18% of road accidents in total. However, altering and redesigning the road environment can have a much greater influence on preventing accidents’.

6.6.3 The road throughout Minsterworth is mostly of a good standard, but it is particularly wide towards the west end of the village where accidents occur most regularly. Speed reduction measures could be introduced without compromising on safe road width.

7 Conclusion

This document provides a request from Minsterworth Parish Council for speed limit reductions throughout the length of the A48 throughout Minsterworth, along with a package of road safety solutions for the village. These speed management measures respect the needs of all road users and will help raise driver awareness of their environment. These are necessary in order to ensure a safe environment – both for drivers and other road users - and an improved quality of life for all the residents of Minsterworth.

In summary we request

- a. a maximum speed limit throughout the whole village of 50mph
- b. verge gates at the entrance to each end of the village
- c. central reservations with low lighting each side of the Oakle Street turning
- d. safer crossing points, with central reservations, at each of the bus stops to encourage greater use of public transport
- e. Speed marking on the road (circular 50mph signs), including in combination with red road colouring.

Prepared by Minsterworth Parish Council
November 2021

⁴ <https://www.rospace.com/rospaweb/docs/advice-services/road-safety/rural-road-environment.pdf>
(referenced August 2021)