

APPROACH TO IMPLEMENTING 20MPH SPEED RESTRICTIONS IN SHROPSHIRE

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1. Summary

This report provides information on Shropshire Council's current approach for dealing with 20mph speed restrictions. The approach taken is embedded in Shropshire Council's Road Safety Policy and is based upon supporting the delivery of appropriate, proportionate, and achievable traffic management interventions in locations where the potential benefits are greatest and where specific concerns have been identified, whilst also recognising the resource demands across the entire county.

This report has been written in response to the growing '20s plenty' campaign which looks to make 20mph the default speed limit on residential and urban streets, and as such adopts a more area wide signed only approach. 20mph speed restrictions can demonstrate a positive relationship with public health, road accident severity, and quality of life and environmental benefits.

The report outlines how 20mph can be implemented in Shropshire and the considerations that must be made. Current guidance from the Department for Transport suggests that vehicle speeds must already be low before a signed only 20mph speed limit is introduced, so the extent to which a defined benefit can be achieved needs to be considered. There are further considerable financial implications for sites where traffic calming is deemed necessary to achieve low vehicle speeds, either as part of a scheme or post-implementation. It is important that the potential financial legacy of area-wide signed only 20mph speed restrictions is recognised.

2. Recommendations

- **To note the existing technical guidance which outlines Shropshire Council's approach to implementing 20mph speed restrictions. This provides the basis for the Council's current policy and recognises Department for Transport guidance and liaison with West Mercia Police.**

REPORT

3. Risk Assessment and Opportunities Appraisal

20mph speed restrictions can present a number of potential benefits to Shropshire's people and places:

- A reduction in road traffic collision frequency and casualties.
- A lower risk of fatal injury to casualties where collisions occur.
- Modal shift to healthier and more sustainable transport such as walking and cycling. Walking and cycling can improve health, contribute towards tackling congestion, improve accessibility, reduce carbon emissions and improve local environments.
- Improved quality of life and community benefits.
- Environmental benefits. Where motorists drive appropriately at a slow and steady pace they can reduce pollution and save fuel.

The current approach to the implementation of 20mph speed restrictions in Shropshire is based upon Department for Transport (DfT) guidance and is expected to ensure that appropriate and achievable traffic management interventions are delivered in locations where the potential benefits are greatest, particularly to i.e. children, elderly and others with a mobility impairment.

As a key partner in road safety and speed management, Shropshire Council's highway officers have detailed discussions with the local traffic liaison officer for West Mercia Police, who provides additional support and guidance in determining appropriate traffic management interventions.

In line with DfT guidance, there is a presumption that 20mph speed restrictions are self-enforcing which presents a risk to Shropshire Council in managing the public's perceptions of what can be realistically achieved on many of Shropshire's roads.

4. Financial Implications

20mph speed restriction schemes would typically be funded from the Integrated Transport Block capital grant. This grant is 100% externally funded and is not supported directly by Shropshire Council. This budget is under considerable pressure from other traffic management demands raised by local councils across Shropshire and dealing with accident sites. Demand upon this budget is always greater than the available financial resource, and funding for the infrastructure associated with '20's plenty' schemes would put further pressure on the available funding.

The introduction of area-wide signed only 20mph speed limits would present a future maintenance burden. The implementation of additional signs would place a requirement on the Authority to maintain them to an acceptable standard and would consequently incur additional revenue costs.

There are considerable financial implications associated with delivering schemes where traffic calming is required to achieve a 'self-enforcing' speed restriction, as recommended by the Department for Transport (DfT). Where vehicle speeds are considered to be not low enough post implementation, either through data or perception, this inevitably puts a burden on the highway authority to address this.

Evidence identified from other local authorities has been researched

<http://www.telegraph.co.uk/news/2017/12/17/20mph-limit-dangerous-costly-reverse-council-admits/>.

Obviously positive outcomes have been deified in local 20 mph zones outside of schools, where locally the community and evidential case supports the intervention, the question of a blanket approach is therefore the discussion point, rather than a blanket approach which brings into play other issues, especially in the current financial environment.

The introduction of physical traffic calming either initially or as a remedial measure to an existing scheme, will significantly increase cost and as such put pressure on the available budget or would consequently divert limited finance away from other community driven projects. The following estimates provide an indication of costs associated with such schemes:

Table 1: Estimated costs for a hypothetical scheme containing three raised speed tables

Traffic data collection (revenue cost) per Automatic Traffic Counter	£500
Scheme design (based on 20% scheme construction)	£20,000
Construction	£100,000

5. Background

Department for Transport Guidance

The Department for Transport (DfT) gives traffic authorities the power to set local speed limits in situations where local needs and conditions suggest a speed limit which is lower than the national speed limit. The DfT Circular 01/2013 "Setting Local Speed Limits" is the key guidance relating to why and how speed limits are determined on local roads. This DfT Circular is used as a basis for reviewing Shropshire Council's position in relation to speed limit policy and strategy. A technical guidance note outlining Shropshire's approach to implementing 20mph speed restrictions has been produced and was approved by the Portfolio Holder for Highways and Transport in 2013.

The "Setting Local Speed Limits" Circular states that speed limits should:

- Be evidence-led and self-explaining;
- seek to reinforce people's assessment of what is a safe speed to travel, and
- encourage self-compliance.

The Circular also states that speed limits must be appropriate for the individual road, reflect local needs and be seen by drivers as the maximum rather than a target speed.

The Circular states that traffic authorities can, over time, introduce 20mph speed limits or zones on:

- Major streets where there are – or could be - significant numbers of journeys on foot, and/or where pedal cycle movements are an important consideration, and this outweighs the disadvantage of longer journey times for motorised traffic.

This is in addition to:

- Residential streets in cities, towns and villages, particularly where the streets are being used by people on foot and on bicycles, there is community support and the characteristics of the street are suitable.

Where are 20mph speed restrictions implemented in Shropshire?

In Shropshire, the approach to implementing 20mph speed restrictions is based upon supporting the delivery of appropriate and achievable traffic management interventions in locations where the potential benefits are greatest.

The technical guidance note that was approved by the Portfolio Holder for Highways and Transport in 2013 states that in Shropshire 20mph restrictions should only be considered in the following locations:

- Outside schools or where there are high numbers of vulnerable road users;
- On urban residential streets in specific cases (where wide community support can be demonstrated, where there is evidence that streets are being used by people on foot and on bicycles and where the characteristics of the street are suitable) and,
- On town centre streets / pedestrian dominated areas.

Where appropriate, Shropshire Council advocates design speeds of 20mph or below as part of any new residential developments. This is in accordance with current guidance contained in the Department for Transport's Manual for Streets (2007 and 2010) which outlines the design principles for new and existing residential streets.

The guidance note states that 20mph speed restrictions must be implemented with clear objectives and with an understanding of potential future liabilities. There are a number of key considerations that need to be taken into account if such schemes are to be progressed:

- **Is a 20mph speed restriction the most suitable measure to implement to address a defined problem?**
- **Is it likely to have a measurable and positive speed reducing effect?**

- **Is there something that would better address the community's concerns?**
- **Is implementation of a 20mph speed limit going to need additional physical measures to promote self-compliance and is this suitable in the given location?**

A number of additional considerations that traffic engineers might employ are outlined as follows:

- Are there / or could there be significant numbers of non-motorised users?
- Are there / could there be high numbers of vulnerable road users present?
- Will a 20mph limit improve the perception of safety for non-motorised users?
- How will residents and users respond to a 20mph speed limit?
- Do the advantages of slower speeds outweigh the disadvantage of longer journey times for motorised traffic?
- Is there aesthetic sensitivity on the street? How much will a signed only speed limit add to sign clutter?
- Current guidance suggests that average speeds need to be 24mph or less for a signed only speed limit. If this average speed is already being achieved, is there a need for additional sign clutter?

How are 20mph speed restrictions implemented and enforced?

There are two main ways in which a 20mph speed restriction can be implemented: a 20 mph speed limit or a 20mph zone.

20mph speed limits are signed only and do not require traffic calming but do need repeater signs. 20 mph limits are similar to other local speed limits and normally apply to individual or small numbers of roads. DfT evidence suggests that these limits typically only lead to small reductions in vehicle speeds. In order to implement a signed only limit, a mean vehicle speed of 24mph or less must be achieved. Current DfT guidance suggests that the installation of 20mph speed limits over a large number of roads can now be considered, this is something that previous guidance advised against. However, this approach should only be considered where the speed thresholds outlined above are achieved over a number of roads.

Research into signed-only 20 mph speed limits shows that they generally lead to only small reductions in traffic speeds. Signed-only 20 mph speed limits are therefore most appropriate for areas where vehicle speeds are already low. This may, for example, be on roads that are very narrow, through engineering or on-road car parking. If the mean speed is already at or below 24 mph on a road, introducing a 20 mph speed limit through signing alone is likely to lead to general compliance with the new speed limit.

DfT Circular 01/2013 "Setting Local Speed Limits"

A 20mph zone requires either traffic calming or signs at frequent intervals. At least one traffic calming feature must be placed in a zone, however distributor roads can be signed only where traffic calming is not suitable. DfT evidence suggests that 20mph zones are more effective in reducing vehicle speeds than 20mph speed limits.

In both cases, there is a presumption that vehicle speeds are already low and that 20mph speed restricted areas are self-enforcing. The DfT's guidance "Setting Local Speed Limits" (2013) clearly states that to achieve compliance there should be no expectation on the police to provide additional enforcement beyond their routine activity. Therefore, in Shropshire general compliance needs to be achievable without reliance on enforcement.

The concept of introducing self-enforcing speed limits and zones may, in a number of circumstances, require supporting engineering measures to encourage compliance and correspondingly the costs of implementation can increase significantly.

In addition to the approaches outlined above, the highway authority is now able to introduce 20 mph speed limits that apply only at certain times of day. These variable limits are most applicable where for example a school is located on a road that is not suitable for a full-time 20 mph zone or limit. Shropshire currently has one such system in place in Minsterley.

6. Additional Information

Requests for 20mph speed restrictions

Requests for 20mph speed restrictions are currently dealt with as community led concerns within Shropshire Council's Road Safety Policy and as such must have the support of the Shropshire Council local member, the town or parish council, West Mercia Police and the local Shropshire Council traffic engineer if they are to be recommended for inclusion in future programmes of work.

The Road Safety Policy puts an emphasis on determining the appropriate type of intervention on a site by site basis. The nature and function of residential roads in Shropshire can vary considerably and consequently what is realistic and appropriate in terms of traffic management can also vary. For this reason, the Road Safety policy enables town and parish councils to highlight areas of specific concern and for Shropshire Council's traffic engineers to consider the most appropriate remedial measure, which in some cases may be a 20mph speed restriction.

Existing 20mph speed restrictions

A number of 20mph speed limits and 20mph zones have already been put in place in Shropshire. Since 2013, the implementation of 20mph speed restrictions in Shropshire has been based upon the technical guidance note, which was approved by the Portfolio Holder for Highways and Transport. Prior to this date, 20mph speed restrictions were installed on a site by site basis depending on particular hazards and

Enterprise and Growth Scrutiny Committee: Approach to Implementing 20mph speed restrictions in Shropshire engineering judgement. In some instances, advisory only 20mph speed limits have been put in, however these are not enforceable.

Appendix A contains a list that shows where 20mph speed restrictions are in place in Shropshire, and supported by a Traffic Regulation Order, the majority are associated with schools or town centres where there is high levels of footfall or cycling. This list does not include advisory only 20mph limits.

7. Conclusions

If Shropshire Council was to adopt an approach to implement area wide 20mph speed restrictions on residential roads in addition to its current approach, the following would need to be recognised:

- There would be a need to manage the public's expectations of what can be achieved on roads that do not satisfy the DfT's requirement for low vehicle speeds prior to the introduction of a scheme. Where physical traffic calming is required, the cost of schemes would be significant.
- Where vehicle speeds are already low, and a signed only 20mph speed restriction is feasible, the extent to which a defined benefit could be achieved would need to be demonstrated.
- The Transport and Highways technical guidance note approved in 2013 would need to be updated and approved as new Shropshire Council policy.

List of Background Papers (This MUST be completed for all reports, but does not include items containing exempt or confidential information)

Department for Transport (2013). *Circular 01/2013 "Setting Local Speed Limits*. London: TSO.

Shropshire Council Technical Guidance Note. Available from:

<https://shropshire.gov.uk/committee-services/Data/Decision%20Making%20Session%20by%20Portfolio%20Holder%20for%20Highways%20and%20Transport/20131220/Agenda/1A%20Appendix%20A%20Technical%20guidance%2020mph.pdf>

Department for Transport (2007). *Manual for Streets*. Available from:

<https://www.gov.uk/government/publications/manual-for-streets>

Cabinet Member (Portfolio Holder)

Steve Davenport – Portfolio holder for Highways and Transport

Local Member

All Members

Appendices

Appendix A: Existing 20mph speed restrictions in Shropshire

Appendix A

The following list shows where 20mph speed restrictions are in place in Shropshire, and supported by a Traffic Regulation Order, the majority are associated with schools or town centres where there is high levels of footfall or cycling. This list does not include advisory only 20mph limits.

Area	Location	Street	
Central (rural)	Minsterley	A488	
North west	Gobowen	School Lane	
		Morda	B5069 Morda Bank Ern Wen
	Oswestry	Beresford Gardens	
		Liverpool Road	
		Lutton Close	
		Morda Road	
		Old Fort Road	
		Oswald Place	
		Upper Brook Street	
	Ruyton-XI-Towns	Olden Lane	
		School Road	
	North east	Baschurch	Eyton Lane
		Shawbury	Church Close
Church Street			
Glebelands			
Hazeldine Crescent			
Leasows Park			
Park Avenue			
The Paddocks			
White Lodge Park			
Wem		Barnard Street	
		Castle Court	
		Chapel Street	
		Cordwell Park	
		Crown Street	
		Drawwell Lane	
		Garbett Close	
		High Street	
		Leek Street	
		Market Street	
	Mill Street		
New Street			
Noble Street			

North east	Wem (continued)	Tannery Court
		The Grove
		Wellgate
	Whitchurch	Bluegates
		Church Street
		Deermoss Lane
		Green End
		High Street
		Pearl Yard
		Pepper Street
		St Marys Street
		Shrewsbury
Salters Lane		
Harlescott	Bainbridge Green	
	Dutton Green	
	Gloucester Road	
	Rutland	
	Worcester Road	
	York Road	
Meole	Alexandra Avenue	
	Burnside Gardens	
	Church Lane	
	Church Road	
	Church Row	
	Meole Crescent	
	Meole Walk	
	Mill Road	
	Stanley Lane	
	Station Road	
	Upper Road	
	Vicarage Road	
	Victoria Road	
Washford Road		
Monkmoor	Belvidere Road	
	Clive Road	
	Crowmere Road	
	Grinshill Drive	
	Harcourt Crescent	
	Upton Lane	
Shelton	Shelton Lane	
St Julian's Friars	English Bridge	
	St Julian's Crescent	
	Williams Way	
	Wyle Cop	

Shrewsbury	Town Centre	Barracks Passage
		Beeches Lane
		Bellstone
		Belmont
		Belmont Bank
		Blackfriars Crescent
		Butcher Row
		Castle Gates
		Castle Street
		Chester Street
		Church Street
		Claremont Bank
		College Hill
		Crescent Lane
		Cross Hill
		Dogpole
		Fish Street
		High Street
		Mardol Head
		Market Street
		Milk Street
		Murviance
		Pride Hill
		Princess Street
		Quarry Place
		School Gardens
		Shoplatch
		St Alkmund's Place
		St Alkmund's Square
		St Chad's Terrace
		St John's Hill
		St Julian's Friars
		St Mary's Place
		St Mary's Street
St Mary's Water Lane		
Swan Hill		
Swan Hill Court		
The Square		
Town Walls		
Windsor Place		
Woodfield Avenue		
Woodfield Road		
Wyle Cop		

South east	Bridgnorth	Innage Gardens
		Innage Lane
		Richmond Gardens
	Broseley	Dark Lane
		High Street
South west	Church Stretton	Beaumont Road
		Burway Road
		Central Avenue
		Churchway
		Easthope Road
		Essex Road
		High Street
		Kings Court
		Lion Meadow
		Mayfair Court
		Queens Court
		Sandford Avenue
		Shrewsbury Road
		St. Dunstan Close
		Cleobury Mortimer
	Ludlow	Bell Lane
		Brand Lane
		Broad Street
		Bromfield Road
		Bull Ring
		Camp Lane
		Castle Street
		College Street
		Corve Street
		Dinham
		Fish Street
		High Street
		King Street
		Lower Broad Street
		Lower Fee
		Lower Mill Street
		Lower Raven Lane
	Market Street	
	Mill Street	
	Old Street	
	Pepper Lane	
	Raven Lane	
	Silk Mill Lane	
	St. John's Lane	

South west	Ludlow (continued)	St. John's Road
		Upper Fee
		Upper Linney

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