



Meeting: Transport Working Party

Date: 23rd April 2018

Wards Affected: All

Report Title: Strategy for Prioritising 20mph zones in residential areas

Executive Lead Contact Details: Councillor Robert Excell

Supporting Officer Contact Details: John Clewer, Senior Engineer

1. Purpose

Following a request from members, highways were asked to investigate the possibility of introducing 20mph speed limits in residential areas.

Subsequently, in June 2016, highways brought a report to the Transport Working Party to seek approval to carry out further investigation in readiness to progress with the introduction of such limits / zones, as and when the existing programme of schemes outside educational establishments is complete and suitable funding becomes available.

Some funding has now been identified as part of the current Local Transport Plan funding allocation and therefore members are being invited to consider priority areas for potential reduced speed limits

This report highlights what progress has been made and, as requested by members in 2016, details recommendations of possible areas that could be considered.

2. Proposed Decision

- 2.1 That Members recommend the consultation, preparation and implementation of Residential 20mph limits to areas listed as 'Category A' in Appendix 3, the number of schemes subject to the limit of current budget allocation; and
- 2.2. That the priority sites are agreed by the Executive Head of Assets and Business Services in liaison with the Executive lead for Community Services with progress reported back to a future meeting of the Working Party.

3. Action Needed

- 3.1 If the recommendations in 2.1 and 2.2 above are supported, priority sites will be identified and consultations commenced. Traffic Regulation Orders for new speed limits will need to be formally advertised and any objections will be considered by the Executive Head of Assets and Business Services in liaison with the Executive Lead for Community Services.

4. Summary

- 4.1 Following the recommendations of the Working Party in June 2016, officers have further investigated potential areas for residential 20mph limits or zones in readiness for implementation as and when the existing programme of schemes outside Educational Establishments is complete and suitable funding becomes available.
- 4.2 The programme of schemes outside of schools in Torbay has been continuing and is yet to be completed.
- 4.3 As part of the current Local Transportation Plan a £65,000 allocation was agreed by Full Council to fund Road Safety Improvements, including Residential 20mph limits. The Working Party is therefore requested to recommend the type of areas where this funding should be directed, based on the categories identified in Appendix 3 to this report.

5. Supporting Information

- 5.1 Nationally, the introduction of 20mph speed limits aimed at protecting pedestrians and cyclists has been gathering momentum over the last decade. However, whilst there is great support for their introduction, there is a gap between driver attitudes and actual behavior. This may be due to habit, the presence of wide straight roads, peer pressure from other drivers, social norms or lack of enforcement.

In the 2012 / 2013 Road Safety Initiatives report it was proposed that an ongoing programme of schemes would be developed to introduce 20mph zones outside schools.

The first batch of schemes were presented to members of the Working Party as part of the Road safety Initiatives Report 2013 / 2014, with further schemes proposed in subsequent years. These schemes were made up of a selection of variable advisory 20mph zones and permanent 20mph limits.

The current situation regarding the implementation of schemes fronting educational establishments is as listed in Appendix 1.

- 5.2 Evidence from several towns and cities across England shows that the implementation of 20mph limits reduces the number and severity of road traffic collisions and therefore the government has recommended to local authorities that they consider introducing 20mph zones. This is based on the evidence that 20mph makes roads safer and helps to reduce the number and severity of collisions.

Reducing the speed limit to 20mph will have a direct impact on pedestrian safety and is one of the principal reasons for introducing the original schemes fronting educational establishments across the bay area.

Speed significantly increases the chance of being injured in a collision. Research has shown that the risk of death for pedestrians struck by cars increases at higher impact speeds, although the exact risk levels varied between the studies.

The severity of injuries sustained in the event of a collision is directly linked to the speed at which vehicles travel. According to ROSPA, up to 45% of motorists exceed the current 30mph limits, however a pedestrian struck at 20mph has a 97% chance of survival whilst this falls to 80% at 30mph and 50% at 35mph.

Evidence suggests that casualty reductions are more successful in 20mph zones than 20 mph limits and that 20mph limits in roads where there are not already speeding problems, only shows an average speed reduction of 1mph.

5.3 In 1999, the law was changed by the Road Traffic Regulation Act (Amendment) Order 1999, which gave Highways Authorities more flexibility so they no longer had to apply for permission to introduce a zone. The updated legislation made two distinct types of 20mph speed limit possible:

- 20mph limits, which consist of just a speed limit change to 20mph which is indicated by the speed limit (and repeater) signs, and
- 20mph zones, which were designed to be “self-enforcing” due to the traffic calming measures that were introduced along with the change in the speed limit.

It, therefore, suggests that 20mph limits are appropriate for roads where average speeds are already low (below 24mph) and 20mph zones used where there are existing traffic calming measures. Ultimately the Local Authority is responsible for deciding which of these was the most appropriate.

A local traffic authority may introduce a 20mph speed limit or 20mph zone without obtaining consent from the Secretary of State. However a consultation process must be followed before implementing a new speed limit or zone as an essential part of the implementation process and needs to include local residents, members, the Police and other emergency services and any other relevant local groups.

5.4 It should be noted that there is a significant difference between 20mph speed limits and 20mph zones and these are as listed below:

20mph Speed Limits

- These do not require the presence of physical traffic calming measures, such as road humps.
- Areas are signed on entry with corresponding 30mph signs on exit and include further 20mph speed limit repeater signs and / or markings within the area.
- Entry and exit signs can be illuminated though the repeater signs do not need to be.
- 20mph limits are most appropriate for roads where average speeds are already low, and the guidance suggests below 24mph.
- The layout and use of the road must also give the clear impression that a 20mph speed or below is the most appropriate.

20mph Zones

- These use traffic calming features throughout the area to encourage compliance with the speed limit.

- These zones can include a range of traffic calming features including road humps, raised tables, speed cushions, traffic chicanes, road narrowing, coloured surfacing and other physical / visual measures to emphasise the nature of the road.
- Signage is at entry and exit points and does not need to be illuminated and repeater signs within the area are not required.

Traffic calming programmes can incorporate a wide range of measures designed to work in partnership to reduce speeds and improve the overall environment, and in effect this means there can be significant differences between schemes.

There are four main techniques to traffic calming programmes:

- Vertical deflections
- Horizontal deflections
- Road narrowing
- Central islands

Vertical deflections in the carriageway are the most effective and reliable of the speed reduction measures currently available. There are several different techniques available to achieve this:

- Road hump
- Plateau (speed table)
- Cushion
- Uneven road surface (rumble strips)

However, it should be noted that both Torbay and other authorities are moving away from this form of physical calming due to complaints ref noise and pollution (residents) and poor ride quality (buses and emergency vehicles).

Some traffic calming measures can be unpopular due to the inconvenience and discomfort caused to some road users, including cyclists and motorcyclists.

The introduction of physical traffic calming measures also leads to a significant increase in costs resulting in a smaller number of areas being treated from any available budget.

Physical road narrowing and other traffic calming features can also require parking restrictions to be implemented resulting in a potential loss of on street parking provision.

- 5.5 Accident risk is not usually the only intended outcome to a traffic calming scheme, as 20mph zones and limits can also lead to a number of other benefits, such as a reduction of traffic flow in the area. Although results of studies do vary, it is generally suggested that traffic volumes reduce following the implementation of a 20mph zone or limit. Roads no longer become so appealing for those commuters, looking to short cut areas of congestion.

- 5.6 As well as road safety benefits, it is important to highlight the contribution that 20mph zones can have in improving air quality, reducing noise pollution and encouraging more physical activity, such as walking and cycling, by contributing towards a safer environment. The money spent on the schemes can also greatly improve the residential area.

A recent study calculated casualty rates and the effects of vehicles on air pollution in 30mph zones in Wales. The researchers then estimated the casualty rate and the impacts of vehicles on air pollution in 20mph speed limit areas.

Evidence from the study suggested that a default speed limit of 20mph would substantially reduce road traffic casualties, and at worst would not lead to a direct change in air pollution. However, indirectly, if reduced traffic speeds encourage people to switch to active modes of travel, such as cycling and walking, there are likely to be greater reductions in air pollution.

The study concluded that health and costs savings are likely to be substantial, and the costs of implementing 20mph limits are likely to be far lower than the benefits reduced speeds bring.

- 5.7 The Department for Transport is currently conducting a review into the use of 20mph speed limit zones, based on studies of implemented schemes which is expected to be published later this year.

- 5.8 There are a number of areas within the bay which are already traffic calmed and all new and recent housing developments (e.g. Great Parks, The Willows etc) have been designed and engineered with traffic calming features in place which encourage people to drive slower and may therefore be relatively easy to implement as a 20mph zone (see appendix 3)

The costs of implementation are not to be underestimated and a basic cost to sign, implement an order and carry out consultation would be around £20,000 minimum cost for an average development area. If additional traffic calming is also implemented the cost would increase considerably.

- 5.9 As part of the current Local Transport Plan, Full Council have allocated a budget of £65,000 to implement Road Safety Schemes including Residential 20mph Zones as part of the Implementation Plan for 2016-2021.

- 5.10 Historic requests have been received from the following areas for the reduction of the speed limit to 20mph:

- Cecil Road / Woodland Park (outside Sacred Heart School) – Now a 20mph limit school scheme.
- Colley End Road
- Galmpton village
- Hayes Road, Paignton – Part already 20mph outside school.
- St Marys, Brixham
- The Willows estate

It was noted that in the areas stated there have been no KSI Casualties in the last 3 years.

- 5.11 In order to consider areas that would be appropriate for reduced speed limits, locations have been divided into 3 categories, which are detailed in Appendix 3 and are based on the levels of likely effectiveness and difficulty to implement a 20 mph zone. The areas listed are not necessarily exhaustive and there may be further areas that could be considered for inclusion in categories A and B in the future. There are however likely to be many areas in Torbay that will require significant engineering measures to meet the criteria for a self-enforcing 20 mph zone.
- 5.12 In general the enforcement of 20mph zones / limits are not seen as a priority by Devon and Cornwall Police. The Police have limited resources to enforce 20mph speed limits and as a result, any speed limit should fit the road environment in order that it can be self-enforcing.

6. Possibilities and Options

- 6.1 Members recommend that the current funding allocation is directed to consultation, preparation and implementation of 20mph limits to areas identified in Appendix 3 to this report under Category A. It is likely that the allocation may be sufficient to fund limits in up to 3 Category A areas.
- 6.2 Members recommend that the current funding allocation is directed to consultation, preparation and implementation of 20mph limits to areas identified in Appendix 3 to this report under Category B. It is likely that the allocation may be sufficient to fund limits in 1-2 Category B areas only.
- 6.3 Members recommend not to direct this funding to residential 20 mph limits and that implementation of limits outside of Educational Establishments only continue.

7. Preferred Solution/Option

- 7.1 Members are recommended that option 6.1 above, would be the most appropriate option. However, members should be aware that advertising any changes made to the existing Traffic Regulation Orders as part of these works may attract objections, which will have to be presented to the Executive Lead for Community Services.

8. Consultation

- 8.1 Consultation will be undertaken with Council Ward members and major stakeholders prior to the finalisation of any scheme. Where changes to the existing Traffic Regulation Orders are involved, these will be advertised and should there be any objections these will be presented to the Executive Lead for Community Services for consideration.

9. Risks

- 9.1 Whilst consultation will be undertaken with major stakeholders prior to the introduction of works, it is possible that when the alterations to the existing Traffic Regulation Orders (TRO) are advertised (both on site and in the local

media), these will attract objections from the members of the public. Any such objections will then have to be referred back to the Executive Lead for Safer Communities.

- 9.2 There is a risk that consultation in some areas may show that there is low support for the implementation of a 20 mph Zone or Limit.
- 9.3 There is a risk that the implementation of a 20 mph zone to an area may not deliver the expected reductions in vehicular speeds.

Appendices:

Appendix 1 – The current situation regarding the implementation of schemes fronting educational establishments

Appendix 2 – List of current permanent 20mph limits and 20mph zones within Torbay

Appendix 3 – Current list of possible roads by category for possible treatment.

Additional Information:

None

Documents available in Members' Rooms:

None

Background Papers:

ROSPA Road Safety Factsheet November 2017 - '20mph Zones and Speed Limits'.

Report to Transport Working Party June 2016.

Appendix 1

Schools that have 20mph limits implemented at March 2018.

Primary Schools

- Barton Primary and Nursery, Torquay #
- Brixham Infants and Nursery, Brixham #
- Cockington Primary School, Torquay
- Curlledge Street Primary, Paignton
- Hayes Road, Paignton #
- Homelands, Torquay
- Ilsham, Torquay
- Preston, Torquay
- Roselands, Paignton
- Sherwell Valley, Torquay
- Watcombe, Torquay #
- Sacred Heart, Paignton (Cecil Road)

Secondary Schools

- Brixham Community College, Brixham #
- St Cuthbert Mayne, Torquay.
- Paignton Community College (Lower school) Waterleat Road. Paignton #
Paignton Community College (Upper school) Borough Road, Paignton
- Torquay Academy, Torquay

Special Schools

- Combe Pafford, Torquay #
- Mayfield, Torquay #

Note:

Schools marked # Permanent 20mph speed limits, all others variable 20mph advisory limits.

Appendix 2

List of current permanent 20mph limits and 20mph zones within Torbay

Current 20 limits include:

- Ilsham Marine Drive

20mph zones:

- Church Street, Paignton (Part)
- Crown and Anchor Way, Paignton
- East and West Pafford, Torquay
- Eastern Esplanade, Paignton
- Higher Polsham / Oldway Road / Southfield Road and Woodland Park, Paignton (ongoing, under construction)
- Well Street, Paignton.
- Winner Street, Paignton
- Shiphay Manor Drive, Torquay

Appendix 3

Areas have been split into three categories based on the ease of implementation and predicted effectiveness of each scheme. Please note that the lists of areas in Categories A and B are not necessarily exhaustive.

Category A

Areas that are traffic calmed on main through routes with side roads off and areas that have been engineered and constructed to 20mph design speeds. Areas will be self-enforcing and cost effective to implement. These roads will normally have little evidence of collision history or speed related problems.

Possible areas that could be considered under category A could include:

- Barton Road (lower section) Torre Marine area, Torquay
- Exe Hill area, Torquay
- Fisher Street area, Paignton
- Fore Street, Barton area, Torquay
- Foxhole Road area, Paignton
- Great Parks development, Paignton
- Queensway area, Torquay
- Roselands Drive area, Paignton
- St Marys Hill development area, Brixham
- Willows development areas, Torquay
- Yannons Farm / Whiterock developments, Paignton

Category B

Areas that are self-contained and generally have a residential environment which would encourage slower driving. Areas are unlikely to have any evidence of collisions or speed related issues, however the addition of traffic calming or additional engineering measures is unlikely to be required to encourage compliance.

Possible areas that could be considered under category B could include:

- Broadpark Road / Broadley Drive area, Torquay
- Chelston area / Sherwell Valley area, Torquay
- Churston Village, Brixham
- Clifton Road / Primley Park area, Paignton

- Galmpton Village, Brixham
- Hele Village (Audley Avenue – Hele Road) area, Torquay
- Higher Preston Down Road estates, Paignton
- Hookhills / Cherrybrook area, Paignton
- Kingsway Avenue / Gibson Road area, Paignton
- Lyme View Road / Perrinville Road area, Torquay
- Penn Meadows / Penn Lane area, Brixham
- Roselands Drive (South area) Paignton
- Shiphay area, Shiphay Lane area, Newton Road / Edginswell Lane, Torquay
- St Michaels area, Paignton
- Summercourt Way estate, Brixham
- Wall Park Road area, Brixham

Category C

All other residential areas that are not identified as Category A or B. These include areas that are not self-contained, may be small or single street residential areas or have environments that may not encourage drivers to maintain speeds below 20mph currently.

These areas will have a higher level of difficulty to implement both in terms of physical constraints and environment. Such areas are unlikely to see any significant reduction in speed from signage alone and are likely to require additional engineering in places.

Non 20mph roads

Major routes and distributor roads are not generally suitable for 20mph limits and traffic speeds are deemed to be appropriate at 30mph or posted higher limits. These roads in Torbay will include some residential properties but will have strategic importance. Consideration of these roads for permanent or variable 20 mph speed limits may only be appropriate where they are in the vicinity of Educational Establishments.

Roads unsuitable for 20mph limits could include:

- All Principal Roads (A classification)
- All B Classification Roads
- Strategic Distributor Roads including but not restricted to the following:
 - Barton Hill Road / Great Hill Road, Torquay.
 - Bascombe Road / Copythorne Road, Brixham

- Browns Bridge Road, Torquay
- Colley End Road, Paignton.
- Goodrington Road, Paignton
- Lindthorpe Way / Northfields Lane, Brixham
- Marldon Road / Shiphay Avenue, Torquay
- Monksbridge Road / Burton Street / Gillard Road, Brixham
- Preston Down Road – Headland Park Road, Paignton
- Newton Road, Torquay
- St Marychurch Road, Torquay
- Westhill Road, Torquay