Technical Note

Project: Faversham 20mph Zone

Subject: Recommended Treatments

Client:	Faversham Town Council	**Version:**	3
Project No:	03773	**Author:**	ANS
Date:	19/03/2019	**Approved:**	PJ

1 Summary

1.1.1 This note summarises the recommended interventions that would assist in achieving the proposed town-wide 20mph Zone, the extents of which have been agreed in principle with Kent County Council (KCC). The purpose of these recommendations is not to set out a concrete scheme, but to suggest measures that could be introduced as part of the implementation of the 20mph Zone or rolled out in a phased manner. It is likely that community input could further shape these recommendations, once the 20mph Zone is agreed in principle.

2 Introduction

2.1 Context

2.1.1 This is the third report prepared by PJA on the matter of Faversham's 20mph Zone. Previous work has focused on the general feasibility of a town-wide limit (2016 report) and the feasible extents of the zone (2018 report).

2.1.2 The 2016 report is attached as Appendix A, and the 2018 report attached as Appendix B and should be read to understand the full context of this study in addition to the scope set out below.

2.1.3 Since that analysis, agreement in principle has been reached with KCC officers on a 20mph Zone in Faversham, subject to addressing the traffic conditions on a handful of streets where it is felt that additional measures would be required to enhance the self-enforcing nature of a 20mph Zone.

2.2 Scope

2.2.1 The scope of this note is therefore to confirm the extents of the proposed 20mph Zone as agreed between Faversham Town Council and Kent County Council.

2.2.2 This note also sets out a schedule of interventions or treatments that are recommended on certain streets to support or enhance the self-enforcing nature of the 20mph Zone.

2.3 Definition

2.3.1 Prior to the 2016 Traffic Signs Regulations and Directions (TSRGD) legislation, there was a wider legal distinction between a 20mph Limit and a 20mph Zone. The recent regulations blur this distinction somewhat, and our analysis is largely mute on which of these two legal entities should be introduced. However, in practical terms it is recommended that only one or the other is introduced, as a combination of a *Limit* and a *Zone* contiguously results in excessive traffic signage. Generally, where sign clutter is to be minimised, however, a *Zone* is preferred as only entry and exit signs are required, with roundels and repeater signs only necessary as a traffic calming measure.

3 Proposed 20mph Zone extents

3.1.1 Following engagement between the Faversham Town Council (FTC) 20's Plenty Working Group (TPWG), PJA and Kent County Council (KCC), the following matters were resolved:

- That the A2 could not form part of the proposed town-wide limit because of the overwhelmingly traffic-focused nature of this route: however, it should be noted that concerns about the severing effect of the A2 remain and that mitigation of this would be desirable such that in the longer term it might also constitute part of the town-wide 20mph Zone;
- That Western Link and Love Lane are also outside the scope of the proposed zone; the latter two may be considered suitable later once proposed housing development is built-out or if funding is secured ahead of that to provide traffic calming;

3.1.2 Oare Road west of Ham Road was also considered unsuitable by KCC without traffic calming measures. However, like Love Lane, housing is being constructed nearby which suggests a change in the road's character is likely. The far western part of Oare Road serves numerous employment sites and provides access to Lakeside Avenue housing estate. To avoid these parts of the town being excluded from the town-wide Zone for the sake of a short section of Oare Road, this report therefore recommends inclusion of Oare Road regardless. This does not preclude interventions being delivered, should KCC or others have concerns about the traffic environment on this short section of highway. Notwithstanding, we understand that discussions are ongoing with the developer of the Oare Road housing site in terms of bringing forward

funding for traffic calming measures on Oare Road, and that KCC would support the inclusion of this section of Oare Road if these were implemented

3.1.3 The recommended extents of the proposed Faversham 20mph Zone are shown in Figure 1 below. The Ospringe area is subject to separate proposals for a 20mph Zone or Limit (not shown). The proximity of the hamlet of Oare to the scheme boundary suggests that a separate 20mph Zone for Oare would have merit.

Figure 1: Recommended extents of Faversham 20mph Zone

3.1.4 It should be noted that The Abbey School lies outside the proposed zone, as a result of the exclusion of the A2. It should also be noted that future housing development is earmarked on land south of the A2, which will change the A2 from a peripheral road, to a street that is within the contiguous built-up area. As such, it is desirable that longer-term measures are investigated that would calm traffic along the A2 as well such that the town-wide zone can be truly inclusive, and that the A2 is not a barrier to walking and cycling between the new developments and the existing settlement.

4 Recommended supporting measures

4.1 Overview

4.1.1 Department for Transport guidance prefers that 20mph Zones cover areas where the road layouts are self-enforcing such that compliance with a 20mph Zone or Limit is widespread. The guidance doesn't stipulate that these conditions must exist on every street, however a highway authority or police force will reasonably consider that areas with widespread instances of streets where speeds are excessively above 20mph would bring the scheme into disrepute or be a burden on enforcement.

4.1.2 Therefore, in giving its agreement in principle to the town-wide 20mph Zone in Faversham, KCC officers highlighted the desirability of introducing low-cost supporting measures in certain streets where it was felt that the natural layout of the highway was conducive to speeds above 20mph. Streets that were specifically cited were Bysing Wood Road, Lower Road, Newton Road and Ospringe Road but the observations are nevertheless applicable to many other primary streets within the town's highway network, e.g. Crescent Road, Forbes Road and Whitstable Road.

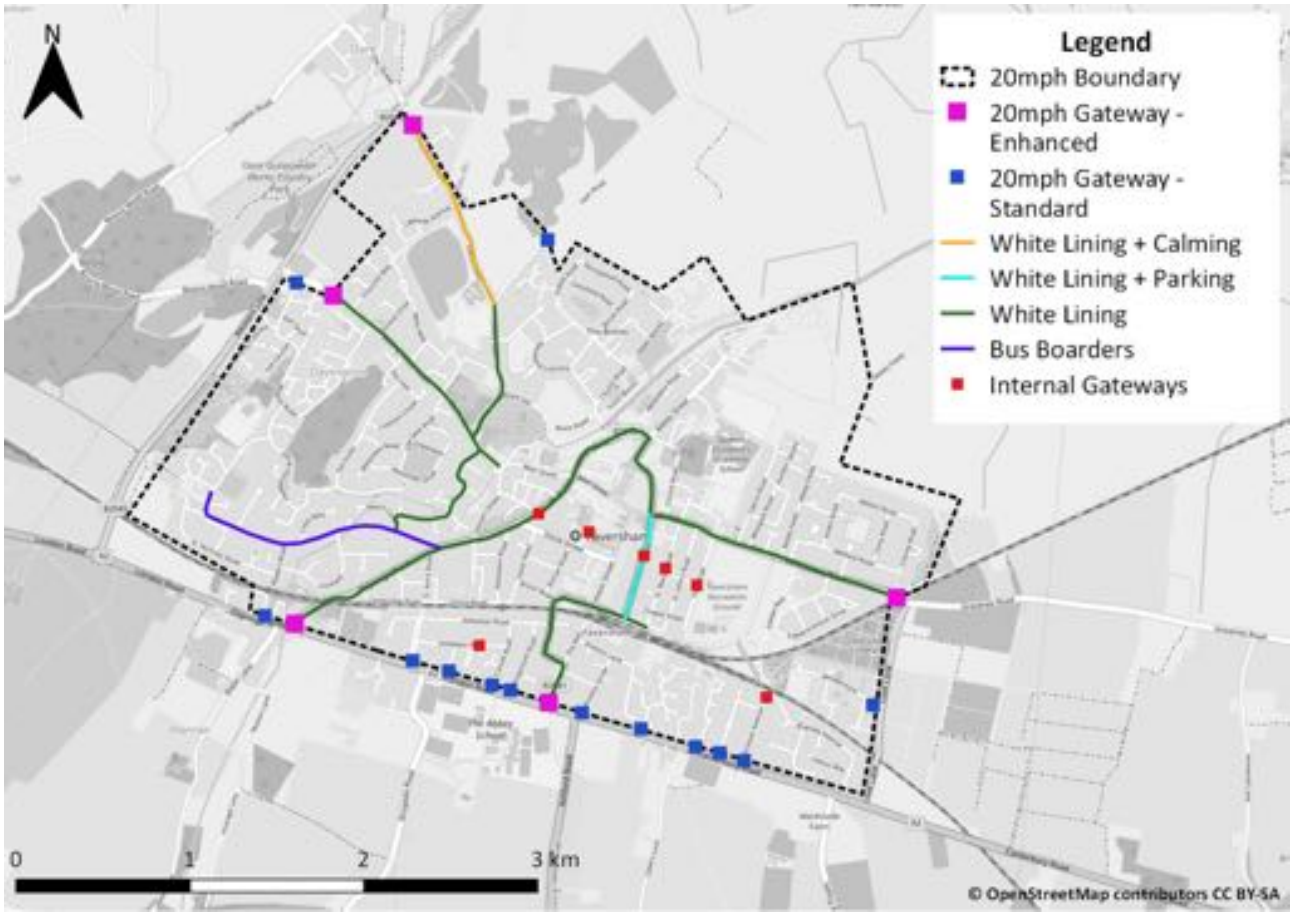
4.1.3 The interventions that this section presents are the following:

- Point treatments
  - Gateways – at the entry to the proposed zone
  - Internal Gateways – highlighting locations where pedestrian flows interact with vehicles
- Linear treatments
  - White Lining Scheme – altering the feel of a street by adjusting the road markings
  - Parking Relocation – creating natural chicanes and so providing a traffic calming function
  - Physical Traffic Calming – physical measures such as buildouts, bumps or raised tables
- Ad hoc treatments

– Bus stop platforms – where the above linear treatments are not feasible or desirable, bus stop boarding platforms can be built out from the footway such that buses momentarily hold up traffic flow while at the stop, thus acting as a traffic calming feature

4.1.4 Pursuant to the recommendations in PJA's 2018 report, none of the interventions recommended – other than the legally required standard gateway treatments – should be seen as being a prerequisite for the 20mph Zone. These recommendations reflect the treatments discussed with KCC in order to secure their in-principal support for the zone.

Figure 2: Recommended intervention to support the 20mph Zone



4.2 Gateway treatments

4.2.1 An essential requirement of a 20mph Zone is that is has entry and exit signs around its perimeter. The advantage of a town-wide scheme – as opposed to a collection of separate zones in residential streets – is that the requirement for less onerous as fewer internal boundary signs are required within the town. There will nevertheless still be a number of points of entry to the scheme, and these are in fact opportunities to promote the scheme and the town in addition to fulfilling legal signage requirements. Two different types of gateway are therefore recommended:

- Enhanced gateways – on the primary access routes into the town; these would be the legally-required signs but also with supplementary street furniture that creates an attractive or prominent gateway to the town and communicates to motorists that the purpose of the highways within Faversham is more than just the movement of vehicles. Enhanced gateways are not a pre-requisite to the introduction of the zone, so can be introduced separately, perhaps through sponsorship by a local organisation who wishes to be positively associated with the town. They could use low-cost temporary materials such as moveable planters if the scheme is introduced experimentally, and then more permanent features could be included. These could be designed with the involvement of community groups.

- Standard gateways – on minor or residential streets; these would be mostly the turnings off the A2 into side streets and would consist of the standard 20mph Zone entry sign. These still have scope to include artwork within the 20mph Zone entry sign themselves.

4.2.2 The recommendation for gateway treatment types are shown in Figure 3 over.

Figure 3: Recommended gateway treatments: Green = enhanced; red = standard

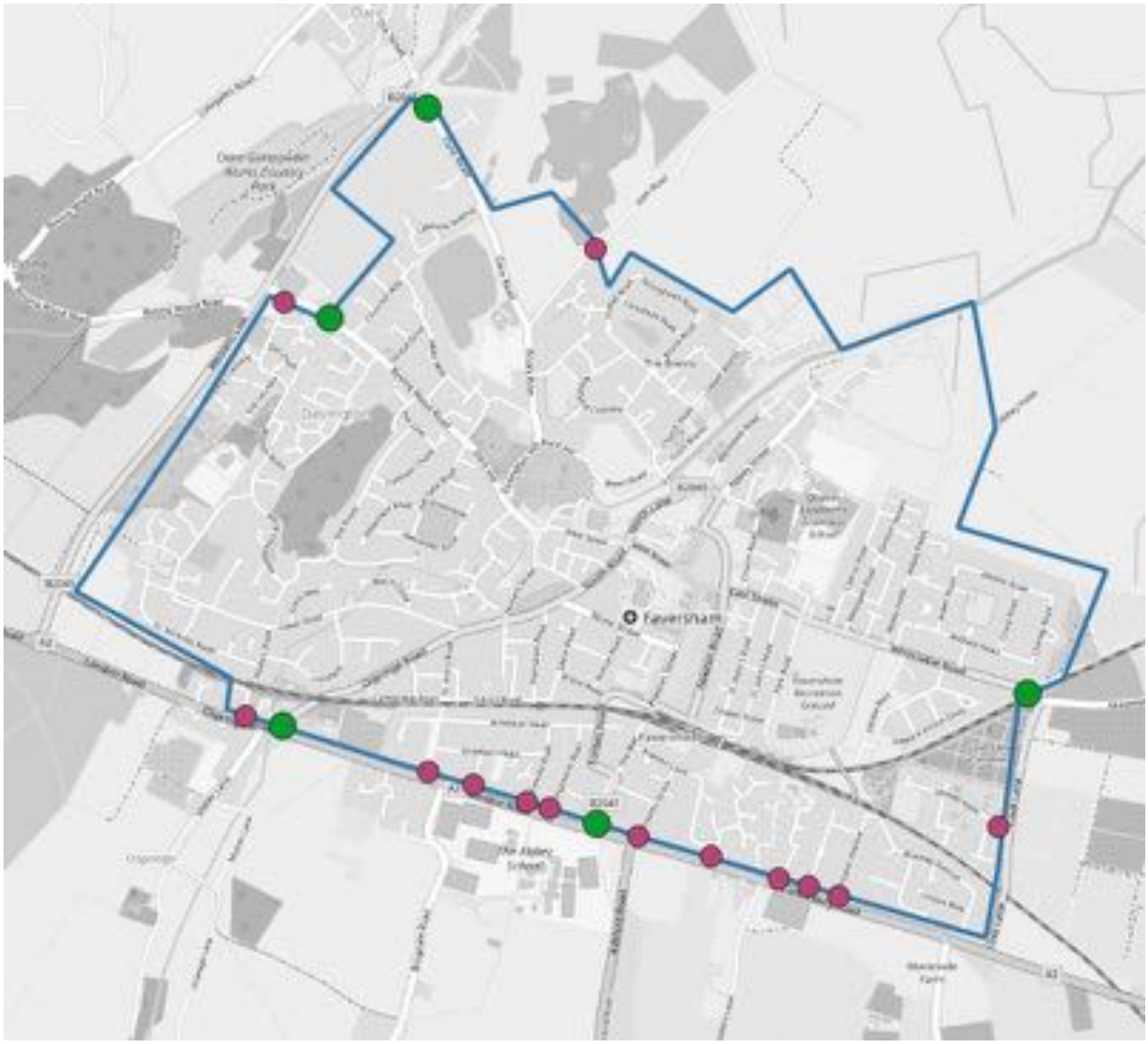


Figure 4: Standard 20mph zone entry sign; with artwork (L), no artwork (C), with area name (R)

Figure 5: Planters used to accentuate gateway to a low-traffic high street in Walthamstow Village, London

Figure 6: Visualisation of Gateway Sign mounted in planter (L) and supplemented with surface dressing (R)

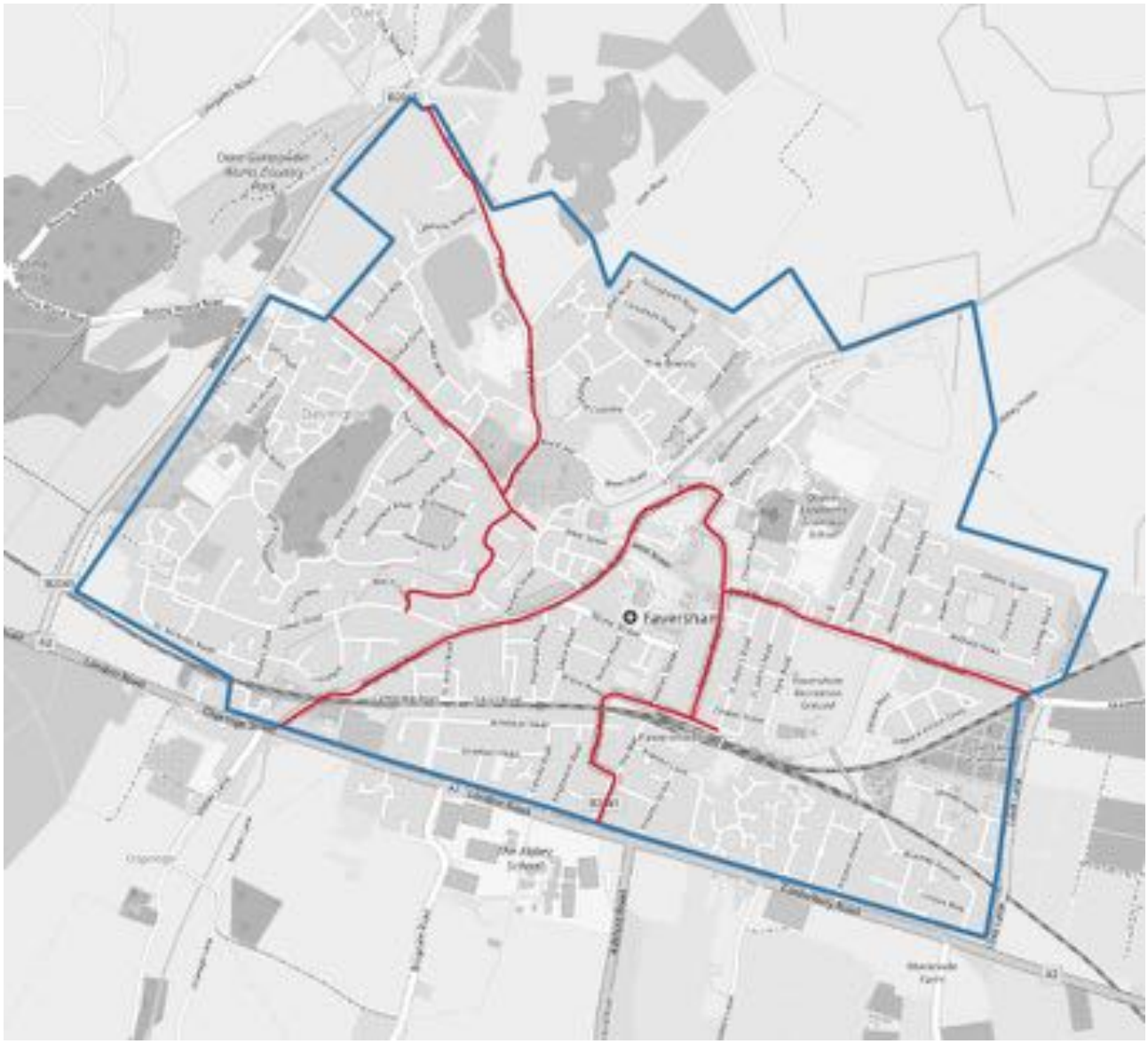
4.3 White lining schemes

4.3.1 Studies by Transport for London have shown that the removal of unnecessary centre line road markings – or their non-replacement after resurfacing – can result in a significant reduction in observed traffic speeds. This is discussed further in the previous work undertaken by PJA, included as appendices to this note.

4.3.2 It should be noted that most streets in Faversham already have no centre-line except at junctions, which is the usual best practice. However, it is nevertheless common practice for principal roads to be centre-lined throughout with the hazard marking to TSRGD diagram 1004, even though this is only supposed to be used at junctions, bends and other hazards. Faversham is no exception to this, and as such there is considerable scope to influence driver behaviour by the removal of these superfluous centre line road markings.

4.3.3 The diagram at Figure 7 below shows the location of the streets where white lining adjustment is recommended. As these streets correspond to the principal road network, it is likely to be desirable that 20mph roundels or upright signs are placed on these streets at regular intervals to fulfil the "traffic calming requirement" of a 20mph Zone, as directed by legislation and guidance. 20mph roundels on the carriageway tend to be more visible as they are closer to the centre of a drivers' field-of-vision but may not be appropriate in visually sensitive areas or streets that are surfaced in concrete, block paving or other non-laminar material. Upright roundel signs on existing street furniture would be recommended in their stead in these circumstances.

Figure 7: Extents of recommended centre-line removal, and application of roundels or repeaters where appropriate



4.4 Parking relocation

4.4.1 On-street parking can have the same effect as a physical planter in that it reduces available width, and as such traffic speeds. Data in Manual for Streets shows a linear relationship between carriageway width and vehicle speeds. On-street parking can also reduce the "straight through" line of sight that might otherwise encourage motorists to pick up speed: by creating a deflection, a row of parked cars can have the same geometrical effect as an engineered build out.

4.4.2 Again, holding that the principal streets are those which KCC would like to see remedial measures introduced because of their perception as "faster" roads, the primary opportunity to use parking to affect vehicle speed lies on Newton Road, shown at Figure 8 below. Currently, parking on Newton Road is located down a single side of the street only. By alternating the parking stalls, gentle deflection of the running carriageway can be created that will help reduce vehicle speeds, particularly for longer vehicles that will be less able to "straight line" any restriction. Newton Road is a bus route and a principal access route for freight into and out of the town centre.

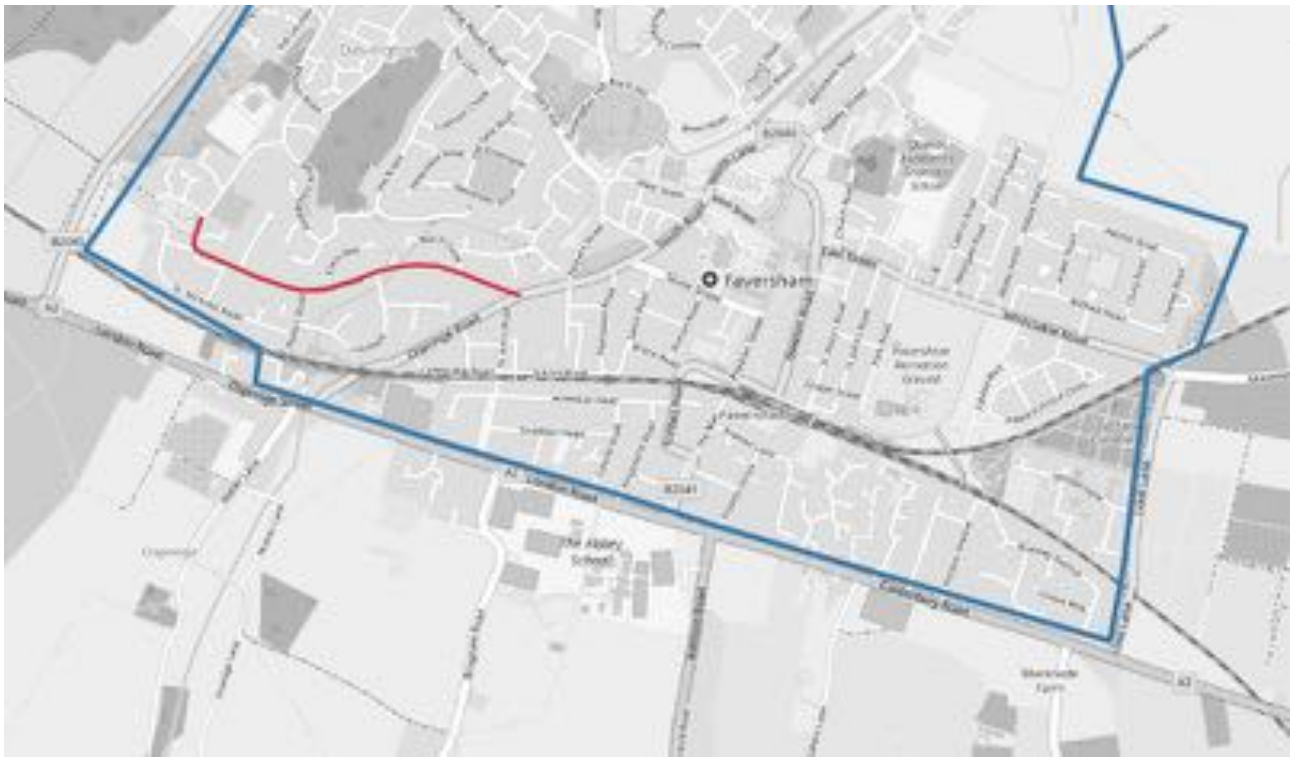
4.4.3 The only other principal street where there is significant opportunity to adjust parking is Whitstable Road, alongside the park, where parking is provided on the residential side of the street only. However, we did not recommend including this in our treatment schedule as relocation the parking would require residents to cross the street. While this may also be the case in Newton Road, the fact it has residents on both sides means the same proportion of residents would need to cross the road.

Figure 8: Plan showing the extent of Newton Road where parking bays can be relocated to create a chicane effect

4.5 Carriageway narrowing

4.5.1 As we've already seen, Manual for Streets presents data showing a linear relationship between carriageway width and vehicle speeds. Clearly there is significant scope to reduce carriageway width across some of the major streets in the town, however doing so is costly and other measures such as white line removal has already been recommended. Carriageway narrowing might therefore be reserved for difficult streets where speeds need to be addressed, but other measures not appropriate. The street discussed that falls into this category is Lower Road, shown at Figure 9 below. The street already has no centreline, so to address the concerns about speeds, other measures need to be put forward. As the budget for the Faversham 20mph Zone is restricted, a comprehensive traffic calming scheme would be prohibitively expensive. However, it would be cost-effective to provide bus stop boarder buildouts along Lower Road, which not only act as localised narrowings – creating a chicane traffic calming effect – but the inability to overtake stopped buses, or at least at speed, provides an additional temporary traffic calming feature.

Figure 9: Map showing the recommended extents of bus boarder build outs on Lower Road



4.6 Traffic calming

4.6.1 KCC suggested Oare Road (west of Ham Road) should remain outside the 20mph Zone on account of its more rural nature, but this would leave a significant employment site in the town outside the zone and thus compromising the "town-wide" ethos. We would still recommend including on the basis that future housing development on the at the corner of Oare Road and Ham Road will change the character, and also bearing in mind that the DfT speed limit guidance does not state that every single road within a zone needs to be compliant with the self-enforcement characteristic – only that *a number of roads* should be.

4.6.2 We would recommend that the removal of centre line and application of roundels would be a sufficient initial or interim treatment, but that physical traffic calming would nevertheless be desirable. As noted in para 3.1.2this could be funded by S106 contributions from the new development and we understand that KCC would support its inclusion on this basis.

4.6.3 A plan of the extents of the recommended traffic calming on Oare Road is shown at Figure 10 below.

Figure 10: Plan showing the recommended extents of traffic calming on Oare Road

4.7 Internal gateways

4.7.1 The town has many internal gateways where different movement streams interact. One of the most notable movement streams in Faversham is the historic path the cross the town from west to east. This provides a highly accessible route for pedestrians as it is more direct than vehicular routes, however it is interrupted by losing priority at each point where it interacts with other highways.

4.7.2 Similar to the planters suggested for the external gateways, internal gateways could also be used to mark these interactions, slowing traffic such that pedestrians can more easily cross and follow the historic right of way. These features could also be used on residential streets outside school as a self-enforcing measure on school no-stopping zones (see previous reports). These locations are shown at Figure 12 over. Again, these can be temporary using moveable materials, and then upgraded to permanent works when further budget allows. Similarly, like the external gateways, these also have scope to attract local sponsorship and/or community involvement.

4.7.3 Over time, some streets within the town might become low-traffic neighbourhoods – where through traffic is proactively engineered to create a more attractive environment for residents, children, the elderly, pedestrians and cyclists – which might then warrant residential streets themselves having more significant gateway treatments.

Figure 11: "Quiet Neighbourhood" gateway at the entrance to a low-traffic neighbourhood in Enfield, London

Figure 12: Map showing proposed locations of internal gateways with opportunities for community-led design

Appendix A PJA Concept Appraisal Technical Note 2016

Technical Note

Project: Faversham 20's plenty

Subject: Concept appraisal

Client:	Faversham Town Council	**Version:**	4
Code:	02322	**Author:**	Andrew Saffrey
Date:	21 September 2016	**Approved:**	Phil Jones

1 Summary

1.1 This note sets out an independent objective technical appraisal of the feasibility of a 20mph zone encompassing the town of Faversham. It seeks to advise the local stakeholders in order to ensure that relevant issues and considerations are understood by all parties involved in the delivery of any proposal, and that a comprehensive overview of the benefits and requirements of a 20mph are properly considered.

1.2 The note considers both the strengths of the concept as well as possible drawbacks, and makes recommendations on a method of delivery and direction of travel that is consistent with the aims of the concept in a comprehensive and holistic fashion.

2 About the author

2.1 This technical note has been prepared by Andrew Saffrey of Phil Jones Associates. Andrew is a highways and traffic engineer with previous experience at Sunderland City Council, London Borough of Harrow, and London Borough of Waltham Forest. He has worked on the implementation of the borough-wide 20mph zone in Waltham Forest, in addition to corridor schemes, junction improvements, and parking regulation schemes for all three authorities. His work at Harrow on the Mollison Way town centre scheme (2011) was recognised in the Transport for London (TfL) best practice document "Better Streets: Delivered".

2.2 At PJA, Andrew has led on the design of TfL Cycle Superhighway CS9 between Chiswick and Kensington Olympia, working closely with the host boroughs of Hounslow and Hammersmith & Fulham. He has also been seconded to Sustrans to act as Senior Highway Engineer on the cycling Quietways design and delivery contract on behalf of TfL.

2.3 PJA is a multi-disciplinary transport planning, urban design and public realm consultancy. Phil Jones heads up the business, and Phil is recognised within the industry as a leading thinker in progressive approaches to streets design and urban development. He has been centrally involved in the production of Manual for Streets and Manual for Streets 2, amongst other notable guidance documents.

3 General principles of 20mph zones and limits

3.1 There is a considerable nationwide movement towards making 20mph the default speed limit in urban areas. London Boroughs such as Camden and Islington already have blanket 20mph limits, and Birmingham is moving towards a city-wide 20mph limit in all residential streets. Reduced speed limits can help create conditions more favourable for walking and cycling.

3.2 The normal approach to 20mph limits and zones is for them to be self-enforcing or self-explaining as far as practicable as regular police enforcement is burdensome. This means that streets should be narrow and without significant lengths of clear straight road, i.e. not conducive to speeding. It would be expected that long straight roads without urban frontage would struggle to fulfil these conditions.

3.3 It is appreciated that not all streets may experience conditions that are consistent with 20mph, however the application of a default 20mph sets out an important message about the local community's priorities and values, and also provides "social proof" or "consent" so that compliance is ***expected*** if not always achieved. Where overtaking is naturally limited, the driver of a leading vehicle sets the speed of the entire convoy behind, and as such when compliance with a 20mph limit begins to increase, there is almost a universal effect.

3.4 The development of autonomous vehicles, which will be regulated by computers with reference to set rules of behaviour, presents an opportunity for 20mph zones to become self-enforcing without the need for comprehensive traffic management and road re-engineering.

4 Local context

4.1 Faversham is a compact town that is relatively untouched by large-scale 20th-century highway infrastructure, as it lies off the main A2 road. Historic proposals for a major road across Abbey Street in the north of the town centre had been resisted locally. A significant proportion of the town's housing predates the motor car and hence is laid out in terraced streets and a traditional permeable street network. There has been little in the way of urban sprawl by comparison to other nearby towns. Faversham is therefore of a size and urban form that lends itself to walking or cycling, although specific facilities for the latter are largely absent, and pedestrian desire lines are not always met with commensurate crossing facilities. Nevertheless, it is essentially a "slow speed" town by virtue of its narrow main road network, and as such a town-wide design speed of 20mph will ensure that additional development is consistent with the existing character. Many of its main roads are narrow and winding, and parking one or both sides restricts comfortable passage of two-way traffic. Parking therefore acts as a form of natural traffic calming, and as such is part of a self-enforcing mechanism that will aid compliance with a 20mph zone.

4.2 A number of development sites are earmarked around the edge of town. The southerly development parcels are south of the A2 Watling Street, which currently is effectively the southern perimeter of the urban area. The A2 is a former trunk road and carries traffic both

cross town (east-west) and, also forms part of a route from many areas of the town towards the M2 motorway.

5 Challenges and exceptions

5.1.1 There are a handful of roads that are incongruous to the otherwise “slow speed” nature of the town, namely:

- A2 Watling Street (London Road / Canterbury Road)
- Crescent Road
- Love Lane
- Oare Road
- Western Link
- Whitstable Road

5.1.2 Other than Crescent Road which lies in the town centre, these roads are essentially peripheral to the town. Crescent Road is a purpose-built road skirting the town centre to the north east, and appears to date from the 1950s. It is effectively part of an incomplete inner ring around the very centre of Faversham

5.1.3 Western Link is currently a national speed limit peripheral road leading from the A2 to the main industrial area at the north western edge of the town. Its lack of any frontage would mean an urban speed limit would be inappropriate. However, its current National Speed Limit may be inappropriate given its relatively short length, and the staggered junction midway along its length.

5.1.4 The A2 Watling Street runs to the southern edge of the built-up area, and with a few exceptions, marks a strong boundary of the town. Some of it is bounded on both sides by buildings, but some sections feel more like a trunk road, particularly around The Abbey School, which is somewhat incongruous. A narrow footbridge is provided to allow children to cross this section of the A2, and it becomes very congested at school times. However, new development is earmarked south of the A2 which will mean it will over time become more part of the town, and its barrier status will need to be overcome in order to achieve local legibility.

5.1.5 Love Lane is at the eastern edge of the town, and connects to the A2. It somewhat mirrors the Western Link in terms of peripheral function, although it is not a purpose-built by-pass road. It is fronted on one side with residential properties, and abuts farmland on the other.

5.1.6 Oare Road is a north-western radial into Faversham from the hamlet of Oare. It is predominantly built up but has a short section with undeveloped frontage, between Lakeside Avenue and Ham Road

6 Recommendations

6.1 In light of the local context, opportunities and challenges, this technical notes makes some guiding recommendations. These are not exhaustive, but should be considered as a general guidance to explore further during the process of scheme development, design, and scrutiny.

6.2 These recommendations are grouped into four categories:

- overall approach
- interim and initial low-cost measures
- longer-term strategy
- additional considerations

Overall approach

6.3 Whilst not all streets may exhibit inherent "low speed" characteristics, there is nevertheless scope for an in-principle 20mph zone to be cast around the entire urban area, given the predominant "slow-speed" nature of the town's streets. Many residential side streets are culs-de-sac or narrow and short, and thus volumes and speeds are expected to be low.

6.4 Streets peripheral to the town would form part of a transition buffer of 30 or 40mph to help bring down speeds in a stepped but logical manner. Normally, speed limits are to be a minimum of 800m in length to be consistent with national guidance. It therefore may be appropriate or necessary to extend the 30mph or 40mph buffer beyond existing change in speed limit locations. The recent change to TSRGD has relaxed the requirements for repeater signs, hence a comprehensive 30mph or 40mph buffer zone would now require far less signage than previously was the case.

6.5 Following this principle, it is advisable to reduce the speed limit on Western Link to 40mph, in recognition of its relatively short length and its interruption by a staggered junction and uncontrolled pedestrian crossing points. Turning off Western Link at Bysing Wood Road would result in a strong 20mph gateway at the edge of the contiguous urban area. The junction of Oare Road and Western Link would also be 20mph, so there is a clear termination of the high-speed environment at the end of Western Link.

6.6 Along the A2, the speed limit could be reduced to 20mph within the contiguous urban section. That is, from the west of Ospringe to the junction with Love Lane. The section between Brogdale Road and Love Lane is more or less trunk road in characteristics, and hence some intervention here may be required to reinforce the 20mph limit. This is discussed further in the subsequent sections of this note.

6.7 Oare Road should be within the 20mph zone, although its short rural section between Lakeside Avenue and Ham Road may feel like an exception. This could be addressed by permitting development to front the road, consistent with a 20mph design speed, or introducing traffic calming features.

6.8 A pre-implementation programme of speed surveys would inform where 20mph conditions may already be met, and then this can be compared at a later date to determine the effect of the interim measures. This is consistent with the 20mph default speed limit in Camden, where the authority accepts that not all roads are self-compliant, but monitoring speeds allows it to set in motion a programme where funds are sought to improve the effectiveness of the scheme over time. The pre-implementation surveys may help give certainty to the external boundary of the 20mph zone, although it is desirable for the entire urban area to be consistently covered.

Interim and initial low-cost measures

6.9 Parking in some streets could be amended to create natural chicanes, i.e. alternating from one side of the road to the other, or in other streets rotated through 45 or 90 degrees in order to reduce carriageway width. Control of footway parking, i.e. so that vehicles park wholly on the carriageway, would also create a natural traffic calming effect, although it is noted that footway parking appears to be rare in Faversham.

6.10 Some streets could benefit from the introduction of cycle lanes in order to reallocate road space. This could take the form of "parking-protected" cycle lanes, i.e. where parking is moved 2m out from the kerb to create a cycling lane between the nearside of vehicles and the footway. This may be achievable on parts of Whitstable Road.

6.11 Most streets could have the centre line marking removed. TfL research has found that this has the effect of reducing traffic speeds as drivers are less confident and hence take more care. Although some specific sites may require turning pockets for capacity reasons, where volumes are low, consideration should be given to removal of turning pockets and reallocating kerbside space to parking or additional footway or cycleway. Low-cost road narrowing could be introduced by using stick-down kerbs, kerbside hatching or ground-mounted planters. This could then be improved at a later date when the concept has been proven and funds become available.

6.12 These interim low-cost measures would be feasible along the A2 around The Abbey School, where the current "trunk road" typology is in conflict with the need to cater for crossing movements to and from the school

Longer-term strategy

6.13 Monitoring of the scheme will identify where compliance is achieved and where further work may be required.

6.14 Moneys from Section 106 and CIL could be utilised to introduce point traffic-calming measures or corridor schemes to address streets where 20mph conditions are not observed after the introduction of the zone.

6.15 Point measures would comprise junction geometry tightening, raised tables, or localised narrowings (e.g. at pedestrian crossing points). Corridor treatments would comprise "road space reallocation" (i.e. cycle tracks, footway widening) along main roads, or neighbourhood traffic calming schemes (essentially a local programme of point measures).

6.16 A town-wide traffic management plan would be of benefit to identify a more comprehensive package of measures that can support growth in Faversham in a sustainable manner that is also consistent with the character of the "slow speed" town.

Additional considerations

6.17 A corridor scheme could replace the proposed new roundabout at the A2/A251 junction, which is incongruous with the town's urban form. Roundabouts are not pedestrian or cycle friendly, and generally create the feeling of motor priority. As such, a roundabout is likely to re-emphasise the barrier effect of the A2 road, whereas effort ought to be made to "urbanise" the A2 so that new development to the south is better tied-in with the rest of the town. The corridor scheme could still bring about capacity improvements if, with lower speeds achieved, gap acceptance is improved and courtesy behaviour observed. Moreover, a more walking and cycling friendly A2 would support efforts to encourage trips away from the private car, as evidence has shown that people are more willing to consider e.g. cycling where the environment to do so is conducive. This in turn would help manage traffic congestion.

6.18 It is advisable that an independent consultant with experience in innovative street design reviews the current junction proposal, with a view to making recommendations that may include a junction arrangement that is at a more "human scale" that would unlock movement by active modes.

Appendix B PJA Feasibility Study 2018

Faversham Town Council

Faversham 20's Plenty

Town-wide 20mph Limit - Feasibility Study

November 2018

Project Code: 03773

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Version Control and Approval

Version	Date	Main Contributor	Issued by	Approved by
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B	19 November 2018	PJ / ANS / DB	PJ	PJ

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Contents

1 Introduction

1.1 Overview

1.1.1 PJA has been commissioned by Faversham Town Council to provide technical advice on the feasibility of a town-wide 20mph speed limit in Faversham. This report reviews the work carried out by the 20s Plenty for Faversham campaign group and Kent County Council, summarises the analysis undertaken by PJA and makes our recommendations on the appropriate extent of the proposed area to be subject to the 20mph speed limit.

1.1.2 Faversham Town Council wishes to implement a town-wide 20mph limit in order to:

- Reduce road casualties
- Improve air quality; and
- Reduce health inequalities, including obesity among adults and children

A consistent town-wide 20mph limit will be simpler to sign and promote and will make it easier for local people to comprehend, leading to higher levels of compliance.

1.1.3 The report has reviewed published data on these three issues and has analysed speed survey data collected on behalf of the Town Council on a number of roads within the town. This has been supplemented by a more comprehensive data set of traffic speeds which has generously been provided by Ordnance Survey Ltd free of charge.

1.2 Background

1.2.1 Faversham in Kent is a small and compact historic town situated immediately to the north of the A2, with a current population of around 20,000. It is generally low-lying with an historic core alongside the Creek, which flows into the Swale Estuary a short distance to the north. Faversham has a railway station with a direct service to London.

1.2.2 Although there are numerous roads serving the town, the town's location away from the principal road network means that there is little through traffic, except along the A2. Faversham's compact layout – roughly a mile across north-south and two miles across east-west – means that many internal trips in the town could feasibly be undertaken on foot or by cycle. We expect that there are many short car trips taking place across the town and that there is significant potential for an increase in the number of walking and cycling trips, the uptake of which can be supported by the more favourable conditions that result from a 20mph traffic environment.

1.2.3 Because of its location and the nature of the roads within the town, there are few roads where the primary or sole function is for the movement of vehicular traffic. The majority of roads and

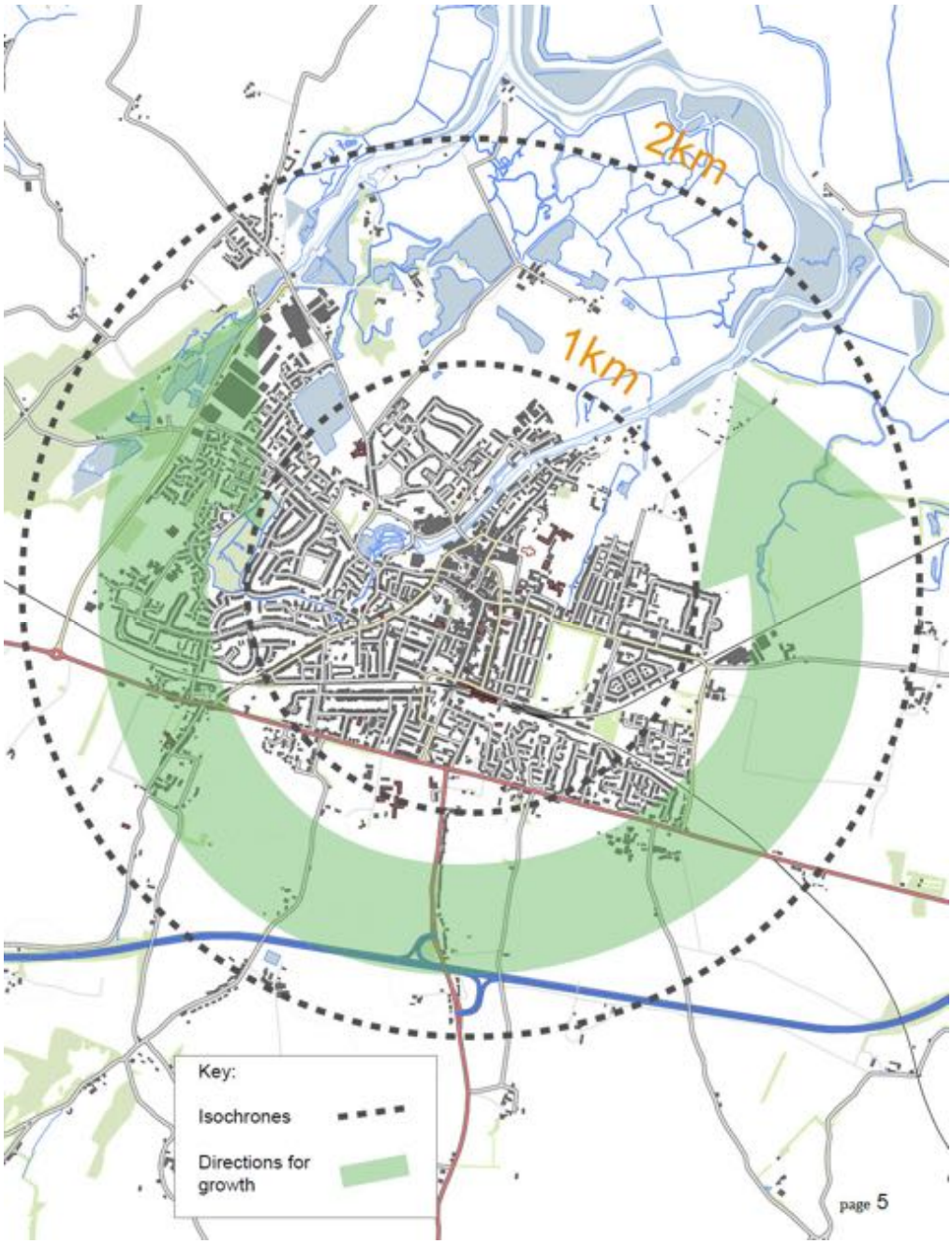
streets are residential, commercial, or are fronted by community facilities, e.g. schools – i.e. where pedestrian activity can be expected and there is the potential for more walking and cycling.

1.2.4 Faversham is connected to London, Thanet, Dover, Canterbury and the Medway towns via the Southeastern High Speed Rail line. The town's station is an important location and is situated immediately south of the town centre, within walking distance of most of the town and comfortably within cycling distance of the whole town.

Figure 1: Open Street Map of Faversham, showing the A2 passing through the southern fringes

1.2.5 Faversham is an expanding town, with significant new development planned to the north, west, south and east. Even with this expansion Faversham will remain a relatively small place – it will still be a town where all areas are within 1.5 miles of the town centre, around a 5-6 minute cycle ride. Enabling walking and cycling to be a favourable transport choice will ensure that the town's growth does not generate excessive volumes of motor vehicle-based trips.

Figure 2: Expected growth around Faversham from Design South East's 'More Faversham' (2017)[1]



1.2.6 Despite the favourable geography and topography in Faversham for walking and cycling, people experience concerns about road safety. The 20s Plenty for Faversham campaign group asked local people where they felt there were road safety problems in the town – these locations are shown on the map below.

[1] Design South East (2017) 'More Faversham: Report and recommendations from the workshops 28th & 29th October 2016'

Figure 3: Public perceptions map of where local people experience concerns about road safety

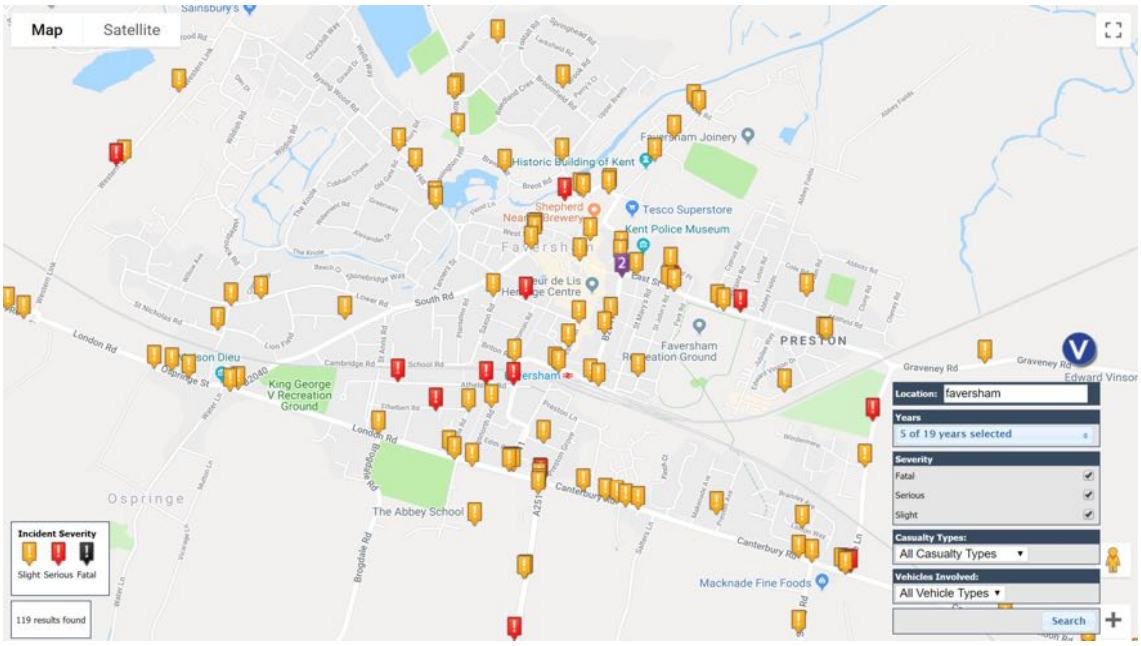
1.2.7 The locations where people expressed greatest concern are along the main roads in the town, and the streets in and around the town centre and railway station.

1.2.8 These perceptions are important to address, as perception of safety can influence transport choices.[2] By addressing concerns about road safety, it becomes more possible to encourage a greater uptake of walking and cycling, which benefits individuals in terms of elevated physical activity and wider benefits of reducing congestion and poor air quality.

1.2.9 While we have made no comparisons with other locations in Kent, like most urban areas there are frequent and widespread personal injury accidents throughout Faversham. There is a strong correlation between the locations of the recorded collisions and the places where local people said they have concerns.

[2] Department for Transport (2010) 'Transport choices segmentation: final report' https://www.gov.uk/government/publications/climate-change-and-transport-choices-segmentation-study-final-report

Figure 4: Plot of all personal injury collisions in Faversham 2013-2017 inclusive



~~1.2.11~~1.2.10 There is one Air Quality Management Area in the town, where the A2 passes through the historic village centre of Ospringe, and where the route is narrow and congested.

~~1.2.12~~1.2.11 Along with other areas in Kent, parts of Faversham have a significant child obesity problem. In St Ann's ward the proportion of Year 6 children who are officially obese is over 28%.

~~1.2.13~~1.2.12 Currently levels of cycling in the town are low, despite its favourable size and topography. There are few dedicated cycling facilities and any would-be cyclists are required to share the highway with motor vehicles on roads subject to a 30mph limit. The 2011 Census found that cycling accounted for only around 2-3% of trips across most of the town.

~~1.2.14~~1.2.13 The Department for Transport's Propensity to Cycle Tool[3] indicates that if Faversham residents were as likely as Dutch people to cycle a trip of a given distance and level of hilliness, the town's topography and journey patterns would yield cycling commuting levels of around 15%. This reflects the much lower levels of interaction with fast and heavy motor traffic which is typical in the Netherlands. Such a mode shift would bring significant benefits to in terms of road danger reduction, air quality and public health.

~~1.2.15~~1.2.14 There is growing evidence from the UK that where traffic speeds and volumes are reduced over a significant area there is a commensurate increase in walking and cycling. Research by the University of Westminster into three areas that had been subject to 'mini-Holland' treatments,

[3] www.pct.bike

including measures to reduce traffic speeds and introduce protected cycle lanes along main roads, resulted in up to a 24% increase in cycling in one year.[4]

2 Guidance and policy background

2.1 National guidance

2.1.1 When implementing or reviewing speed limits, councils in England must 'have regard' to the relevant Government guidance: Department for Transport circular 01/2013, Setting Local Speed Limits, published in January 2013.[5]

2.1.2 The Circular explains that 20mph limits may be introduced which are sign-only and do not require traffic calming. Such limits are increasingly being applied to large areas and provide a cost-efficient method of encouraging lower and safer vehicle speeds. In contrast 20mph zones require traffic calming measures at regular intervals and usually cover 'a number of roads' although only one of these measures needs to be a physical feature - the rest can be road signs or markings.

2.1.3 Examples of sign-only 20mph limits introduced elsewhere have resulted in small but worthwhile reductions in driver speeds overall, including on streets where the after speed remains above 20mph, and where the reductions in speed have been greatest. They have also been associated with an improvement in highway safety and increases in walking and cycling, which in turn will improve public health. Examples of area-wide 20mph limits are discussed below.

2.1.4 The DfT's current advice on setting 20mph limits over a larger area is given in Para 97 of the Circular, which states:

> *97. The implementation of 20 mph limits over a larger number of roads, which the previous Speed Limit Circular (01/2006) advised against, should be considered where mean speeds at or below 24 mph are already achieved over a number of roads. Traffic authorities are already free to use additional measures in 20 mph limits to achieve compliance, such as some traffic calming measures and vehicle activated signs, or safety cameras. Average speed cameras may provide a useful tool for enforcing compliance with urban speed limits.*

[4] Aldred R, Croft J and Goodman A (2018) 'Impacts of an active travel intervention with a cycling focus in a suburban context: One-year findings from an evaluation of London's in-progress mini-Hollands programme'. Elsevier

[5] Department for Transport (2013) 'Circular 01/2013: Setting Local Speed Limits' https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/63975/circular-01-2013.pdf

2.1.5 As noted in the quoted paragraph, this represents a significant change from the previous DfT advice, published in 2006, which stated that 20mph limits should be used for individual roads, or for a small number of roads. **Current Government guidance is therefore that it is not necessary for all roads within the proposed 20mph limit to have an existing mean speed of 24mph or below.**

2.1.6 The Circular mentions favourably the example of a city-wide 20mph limit in Portsmouth, which is discussed further below. It notes in Para 96 that:

> *96. 20 mph limits covering most streets in Portsmouth have demonstrated that it is possible to introduce large-scale 20 mph limits in some built-up environments. Traffic speeds in most of the streets treated were relatively low (less than 20 mph) to start with. The early evidence suggests that it is likely that some speed and casualty reductions have taken place and this is consistent with previous research that has indicated that 20 mph limits without traffic calming reduce mean speeds by about 1 mph on average. A minority of streets in Portsmouth had average speeds of 25 mph or higher before the 20 mph speed limits were introduced and here the reductions in average speed tended to be greater, but insufficient to make the resulting speeds generally compliant with the new 20 mph limits. City-wide schemes may also contribute to changing travel and driving behaviour positively in the longer run, and the objectives of the Portsmouth speed limits spread well beyond improving road safety. Schemes need to aim for compliance with the new speed limit.*

2.1.7 It should be noted that the Portsmouth scheme included a minority of roads where the average speed was in excess of 24mph before the limits were introduced, and that these roads experienced a greater reduction in traffic speed than the other roads, and hence a greater reduction in road danger.

2.1.8 The Circular also recommends paying regard to the function of a street when determining the suitability of a 20mph speed limit:

> *90. 20 mph zones are predominantly used in urban areas, both town centres and residential areas, and in the vicinity of schools. They should also be used around shops, markets, playgrounds and other areas with high pedestrian or cyclist traffic, though they should not include roads where motor vehicle movement is the primary function. It is generally recommended that they are imposed over an area consisting of several roads.*

2.1.9 Within the entire built-up area of Faversham, streets are multi-functional, being either residential or commercial – or a mixture of the two – and with community facilities located on them, e.g. schools. The only substantial road where vehicle movement is the primary function – in fact the only function – is Western Link. It is a purpose-built access road to serve the

industrial area to the north-west of the town. It should therefore not be part of the scope of a 20mph limit.

2.2 Kent County Council policy

2.2.1 The local highway authority, Kent County Council, published an updated policy on setting 20mph limits and zones on 3 October 2013, following the publication of Circular 01/2013. The Kent policy states that that the County Council will not deviate from the DfT's guidance, and indeed notes that to do so may be unlawful (Para 12.6).

2.2.2 The Kent policy provides (Para 3.5) a summary of the DfT Circular, which includes the following bullet point:

- *20mph limits are generally only recommended where existing mean speeds are already below 24mph.*

2.2.3 We disagree with this interpretation of the DfT Circular, which appears to suggest that sign-only limits should only be implemented on roads where existing mean speeds are below 24mph. As noted earlier, the Circular is quite explicit that some 20mph limits have been introduced where a minority of roads are operating at higher speeds before the scheme was introduced.

2.2.4 The Kent policy also states (Para 10.1) that Kent Police will not support 20mph limits unless the average speed is 24mph or less as sign-only schemes have had little or no effect on speeds and accidents.

2.2.5 We disagree with this assessment – as set out in the DfT Circular, sign-only schemes have been shown to have worthwhile benefits across a wide area and that the reduction in speed tends to be greater where the pre-scheme speeds are higher. We also note that the decision whether to implement a 20mph limit is for the local highway authority, not the Police.

2.2.6 The fundamental test must be whether the proposed 20mph limit meets the guidance of Circular 01/2013.

3 The benefits of 20mph Limits

3.1 Introduction

3.1.1 Research[6] has found that, as a general rule, for every 1mph reduction in average speed, collision frequency reduces by around 6%. Reductions in speed also reduce the severity of any casualties that may result: The Royal Society for Prevention of Accidents found that if a pedestrian is struck by a vehicle travelling at 20mph there is a 2.5% chance of fatal injury, compared to a 20% chance at 30mph.[7]

3.1.2 20mph schemes have also been shown to encourage the uptake of sustainable transport modes such as walking and cycling, as well as environmental benefits such as a reduction in carbon emissions.

3.2 Case studies

3.2.1 An increasing number of authorities are introducing large-scale 20mph limits in built-up environments.

3.2.2 The Portsmouth scheme referred to in Circular 01/2013 was the first of this type of scheme and was established in 2007. As previously stated, not all of the roads within the Portsmouth scheme had an average speed of less than 24mph prior to the change in speed limit. A number of roads within the area with higher speeds were included to avoid inconsistency in the signed speed limits.

3.2.3 A study of the Portsmouth scheme carried out on behalf of the Department of Transport found that mean speeds were reduced by some 1.3mph on average. For those roads where the average speed was greater than 24mph, the average speed reduction was much greater – 6.3mph.

3.2.4 A number of London boroughs have established borough-wide 20mph limits which cover all of the roads across their area, with the possible exception of some sections of the Transport for London Road Network (TLRN).

3.2.5 After the introduction of a borough-wide 20mph limit in Southwark, 85th percentile traffic speeds were observed to be around 2mph lower than before the limit was introduced. In Camden, the reduction in speed was smaller, around 0.4mph. However, this is probably be due

[6] Taylor, M. C., Baruya, A., Kennedy, J. V. (2002). TRL Report 511 – The Relationship Between Speed and Accidents on Rural Single Carriageway Roads. Crowthorne: TRL

[7] RoSPA (2017) 'Road Safety Factsheet: 20mph Zones and Speed Limits Factsheet' https://www.rospa.com/rospaweb/docs/advice-services/road-safety/drivers/20-mph-zone-factsheet.pdf

to higher levels of congestion across Camden[8] and thus a lower baseline speed before the implementation of the borough-wide limit.

3.2.6 Following a pilot study of two trial areas in 2010, Bristol City Council decided to introduce 20mph speed limits through the city in 2012 and the final scheme was completed in 2015. On average there was a 2.7mph decrease in vehicle speeds, with the largest reductions in speeds on A and B roads. Some 94% of the road network surveyed saw a reduction in average speeds. The estimated annual reduction in casualties across the city is 4.5 fatal, 11.3 serious and 159.3 slight injuries.

3.2.7 There was also high public support for 20mph limits across the city, with 62% in favour for residential streets and 72% for busy streets. The number of people who walk and cycle to work in Bristol increased between 2010 and 2015.[9]

3.3 Summary

3.3.1 Research shows that driving at 20mph has proven environmental and social benefits, as well as improving highway safety.

3.3.2 Large scale 20mph limits have proven to be effective, with examples from Portsmouth, Bristol and London showing decreases in driver speeds and a reduction in collisions.

[8] WSP (2017) 'Analysis of Impact of 20mph Limits' https://crossriverpartnership.org/media/2017/08/170531-Analysis-of-Impact-of-20-mph-Limits-Research-Report-Issue.pdf

[9] Pilkington, P., Bornioli, A., Bray, I. and Bird, E. (2018) The Bristol Twenty Miles Per Hour Limit Evaluation (BRITE) Study. UWE. http://eprints.uwe.ac.uk/34851

4 Previous studies on 20mph Limit in Faversham

4.1 PJA report 2016

4.1.1 Following the formation of the 20s Plenty for Faversham Working group, PJA was commissioned to provide high-level advice on the practicality of a town-wide 20mph Zone or Limit.[10] The advice in our Technical Note reflected the guidance in Circular 01/2013 that 20mph Zones and Limits should be used in urban areas where pedestrian activity can be expected. The note also reflected on experiences from other locations with area-wide 20mph Zones or Limits, and identified streets where there may be more challenging conditions. The note then suggested longer-term measures that may address locations where challenging conditions might be addressed.

4.1.2 The note was formulated without the benefit of any data on actual vehicle speeds, so it reflected a "typology" assessment that considered the layout and function of streets in the town. Given that many of Faversham's streets are historic, narrow and residential, the note recommended that a town-wide limit would be suitable in principle.

4.1.3 The 2016 PJA note described the principle in terms of Faversham being a 20mph *Zone*, but since the update to the Traffic Signs and Regulations in 2016 that same year, the distinction between a 20mph Zone and a blanket 20mph Limit is now somewhat blurred, since both can include traffic calming measures.

4.2 Faversham Town Council engagement with Kent County Council

4.2.1 Faversham Town Council and the working group then used the 2016 PJA note as the basis for engagement with Kent County Council via the Swale Joint Transport Board. This culminated in a Kent County Council highways officer undertaking a street-by-street typology assessment, drawing on the principles of the 2016 PJA note and the officer's experience.

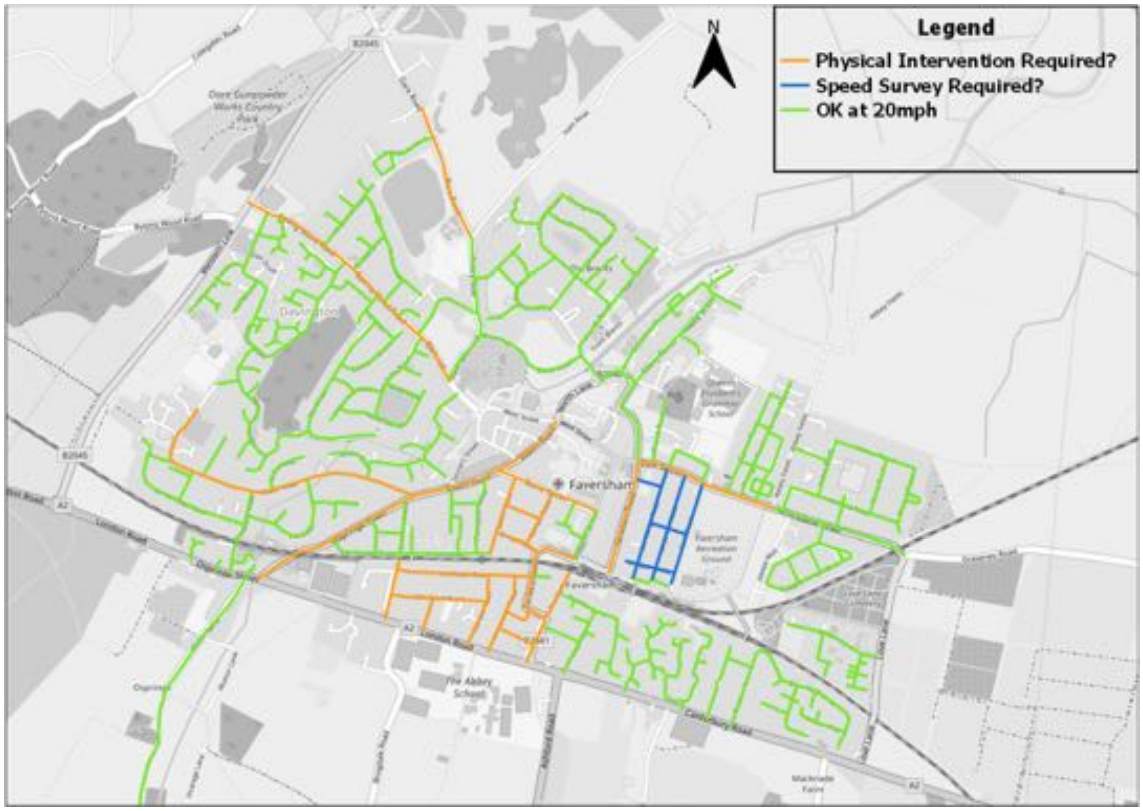
4.3 Kent County Council typology assessment

4.3.1 The KCC typology assessment identified all the streets in the town where due to their geometry, they could automatically be considered appropriate for a 20mph Limit. The assessment also identified streets where physical interventions would in KCC's view be required or desirable, and streets where data would be needed to make a decision one way or another.

[10] PJA (2016) 'Faversham 20's plenty: concept appraisal'
http://www.favershamtowncouncil.gov.uk/_UserFiles/Files/TNFaversham20mph.pdf

4.3.2 The map in Figure 5 below shows the extents of the streets in each of these categories. It should be noted that despite having residential frontage and a major school, KCC's typology assessment did not include the A2 through Faversham.

Figure 5: Map of Faversham showing the streets considered by KCC's typology assessment



4.3.3 Much of the town's street network was considered by KCC to be suitable for a 20mph Limit, however there were numerous streets where it was considered that physical intervention may be required or at least data produced to provide a better understand of existing speeds.

4.3.4 Kent's approach appears to base the justification of a 20mph Limit on existing driver speed choice (actual or assumed), rather than the function of the street. This is at odds with the advice of Circular 01-2013, which encourages the use of 20mph in urban areas. The Circular also advises that the introduction of sign-only area-wide 20mph limits has led to decreases in observed speeds, even if speeds do not necessarily reduce to below 20mph. Given the safety benefits of even a small reduction in speed, any reduction in driver speed should be regarded as a desirable outcome even if compliance with a 20mph Limit is not universal.

4.3.5 Nevertheless, the typology assessment by KCC is a useful basis for further study, and Automatic Traffic Count (ATC) speed surveys were commissioned by KCC to provide further clarity on the traffic conditions on the roads where further interventions were considered to be necessary or where data on traffic speeds would aid assessment of the town-wide 20mph Limit.

4.3.6 KCC's speed surveys were undertaken during the first week of school term in September 2017. The data has now been assessed in detail by PJA, which forms the basis of our analysis in the section below.

5 2018 PJA analysis of 20mph Limit in Faversham

5.1 Overview

5.1.1 While we advocate as strongly as possible a user needs-oriented decision on introducing a 20mph Limit – i.e. considering the function of the street and the likelihood of pedestrian and cyclist activity – we do recognise that where existing traffic speeds are too high, public acceptance of a 20mph Limit could be brought into question, both in terms of complaints about lack of compliance and people considering that maintaining excessively low speeds is onerous.

5.1.2 Therefore, it is prudent to have an understanding of traffic speeds in respect of how significantly they differ from a target threshold of 24mph. This is the value cited in Circular 01/2013 - if mean speeds are above 24mph, it suggests that signage alone is less likely to engender compliance with the posted limit.

5.2 KCC average speed data

5.2.1 By looking at mean average speeds across Faversham, we can determine how close to compliance any streets are where average speeds are not currently below 24mph. If there are numerous streets where mean speeds are only slightly above 24mph, then we could have some confidence that a sign-only 20mph limit would result in greater compliance over time.

5.2.2 We took a conservative average of the speeds recorded in KCC's ATC speed surveys. This average was based on 19 hours of data per day over 7 continuous days. The 19 hours were selected to provide consistency with an additional source of speed data, that being MasterMap speed data supplied to Faversham Town Council free of charge by Ordnance Survey Ltd, as discussed below.

5.2.3 The average is made up of:

- Peak hours (0700-0900 and 1600-1900)
- Inter peak (1000-1600)
- Evenings (1900-2300)
- Overnight (2400-0400)

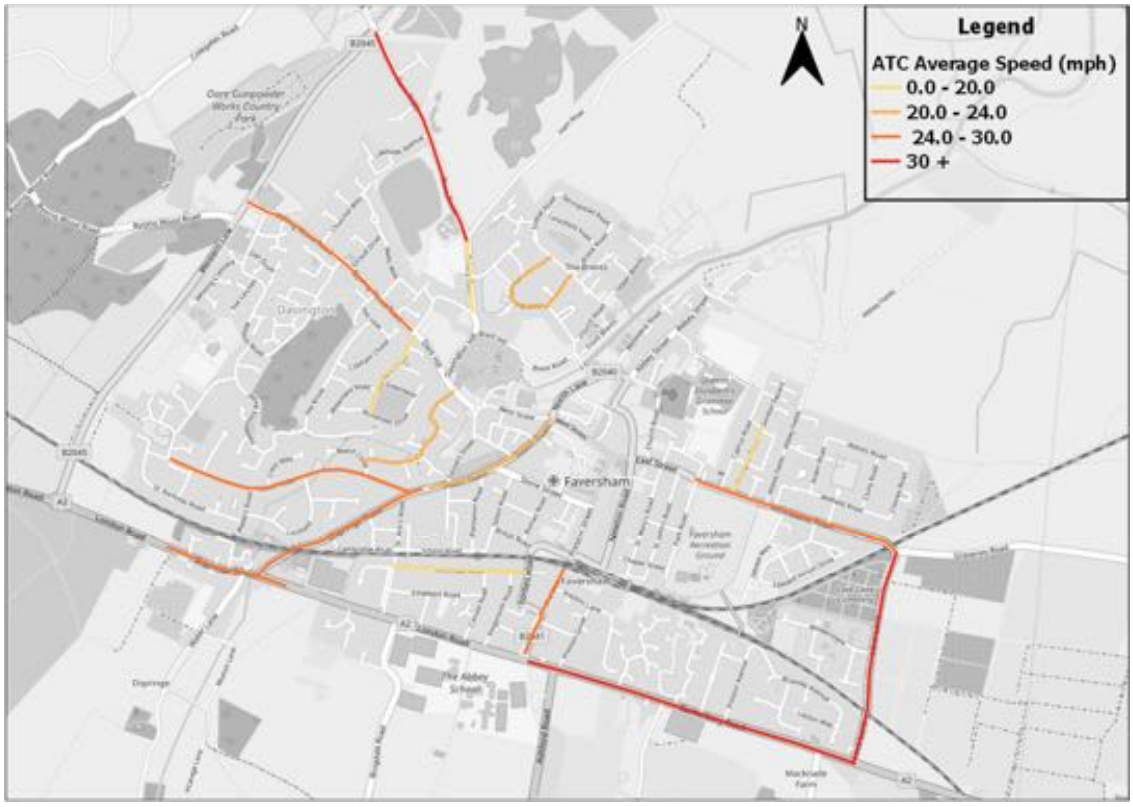
5.2.4 This conservative 19-hour average therefore includes peak hour, daytime, evening and overnight speeds. Average speeds tend to be higher overnight because of less congestion and a perceived reduced risk of collisions, so we consider the assessment to be robust and reflective

of a diverse range of traffic conditions, and not just daytime or peak time when traffic speeds may be lowest. However, by only taking half of the 8-hour overnight period into account, we avoid data being overtly skewed by excessive overnight speeding.

5.2.5 The sites monitored in KCC's ATC speed surveys included a wide range of street types in Faversham. While these mainly were busier roads, the speed surveys also included quieter side streets. The side streets ranged from those that are long and straight, where high speeds could be expected, to more tortuous and shorter ones where slower speeds are generally expected.

5.2.6 These range of streets are helpful in that the data from the surveys enable recommendations to be made about other similar side streets in Faversham, and also the practicalities of including faster, busier main roads in the proposed 20mph Limit.

Figure 6: 19-hour average speeds in Faversham, from KCC's Automatic Traffic Count speed surveys



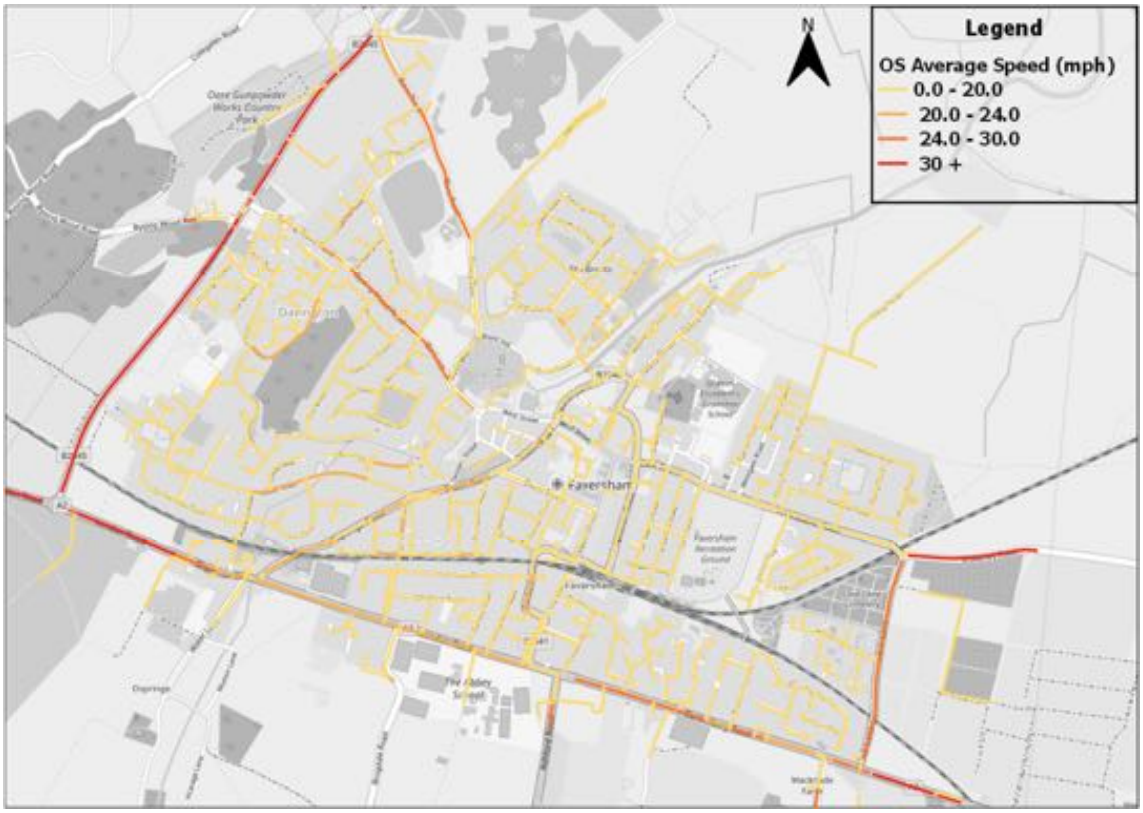
5.2.7 The most significant point of learning from the above data is longer, straight residential streets such as Athelstan Road – where KCC expected that traffic calming would be required – actually reported very low average speeds, below 20mph. Even busier streets such as South Road lie within the 24mph maximum threshold. Even where streets lie above 24mph average speed, most of these are in the range of 24 to 30 mph.

5.3 Ordnance Survey MasterMap speed data

5.3.1 However, the drawback of ATC surveys is that they record speeds at a specific point in the road, and their placement away from junctions and pinchpoints mean they often reflect a maximum case rather than one that is representative of overall conditions along a road or section of road.

5.3.2 Data at a finer granularity was obtained from Ordnance Survey's MasterMap dataset, which uses mobile phone and GPS tracking to provide a much more comprehensive picture, not only on every street in the town but also on multiple sections of longer streets. This data was averaged over a similar 20-hour period as the KCC data, to provide a more complete picture of average traffic speeds across Faversham. This is shown in Figure 7 below.

Figure 7: Map showing 20-hour average speeds in Faversham according to OS MasterMap data



5.3.3 The 20-hour average is made up of:

- Monday – Friday peak hours (0700-0900 and 1600-1900)
- Monday – Friday inter peak (1000-1600)
- Weekend daytime (Sat/Sun, 0700-1900)
- Evenings (7 days, 1900-2300)
- Overnight (7 days, 2400-0400)

5.3.4 While this average is not exactly the same as that used in the ATC analysis, it differs by only 2 hours in the whole week: 0900-1000 on Saturdays and Sundays are omitted in the ATC analysis, which are not considered to have fundamentally different speed profiles relative to the periods either side that were included in the ATC average.

5.3.5 The average speed data from OS MasterMap in Figure 7 above shows there to be much less significant exceedance of the 24mph threshold across the town. These are primarily at the peripheral roads and streets, such as Western Link and Love Lane, and short sections of the more internal main roads in the town. The granular data is re-created as a simple above/below 24mph diagram in Figure 8 below.

Figure 8: OS MasterMap average speeds categorised above or below 24mph threshold

6 Proposed extents of Faversham town-wide 20mph Limit

6.1.1 Given the findings above we suggest that there is no practical impediment to introducing a town-wide 20mph Speed Limit Faversham, including large parts of the A2, subject to determining a suitable contiguous boundary of the scheme. The boundary of the scheme is essentially the streets marked green in the above plan, plus consideration of which of the streets not coloured green are considered appropriate for inclusion as well.

6.2 Edge cases

6.2.1 There are a few streets within the town where average traffic speeds exceed 24mph over a significant length. We have described these as "edge cases" and these are:

- Western Link
- London Road (Western Link to Ospringe Street)
- Oare Road & Bysing Wood Road
- Canterbury Road (East of Ashford Road) & Love Lane

6.2.2 A decision on including these streets in the 20mph Limit should be based on their function and typology.

Western Link

6.2.3 Western Link, as we have already suggested, is inherently a primary traffic route, being a purpose-built connector to the industrial area in Oare. It should therefore be considered part of a "buffer" around the 20mph Limit. Our previous note suggested a 40mph limit be applied to Western Link and we still consider this to be appropriate. This would facilitate a gentler step down in speed compared to dropping from the existing National Speed Limit (60mph).

London Road (Western Link to Ospringe Street)

6.2.4 Similarly, the western section of the A2 (between Western Link and Osringe) could be a buffer stepping down to 20mph at the edge of the built-up area. However, it should be noted that as development comes forward around Ospringe, then the character and function of this section would change. Given the difference is where the boundary signs are located and nothing else more significant, we do not consider our recommendation on this section to be salient one way or the other.

Oare Road and Bysing Wood Road

6.2.5 While these routes have locations where average speeds exceed 24mph, they are essentially still internal to the town, and both represent key walking links from the town centre to

Sainsbury's and Oare respectively, likely to attract use by shoppers and commuters. Furthermore, Oare Road is close to Davington Primary School.

6.2.6 We therefore recommend that these two streets are included in the town-wide 20mph Limit, and post-implementation monitoring can be undertaken to determine if compliance improves by the introduction of the limit alone, or if other interventions could be developed to contribute.

Canterbury Road (east of Ashford Road) and Love Lane

6.2.7 Given the peripheral nature of these roads, and a greater sense from their layout that they are perceived as primarily traffic routes, we would not recommend they be included in the town-wide 20mph Limit at this time. However, it should be noted that both streets are still partly residential, and that excluding some residents from a "Faversham-wide" scheme is not in keeping of the close community spirit of the town.

6.2.8 We therefore recommend that these streets be included in a second phase of the roll-out of the 20mph Limit, as large-scale development adjacent to these streets will fundamentally change their character. The developments themselves should be required release funding via Section 106 or Section 278 agreements to allow the road environment to be altered, e.g. carriageway narrowing.

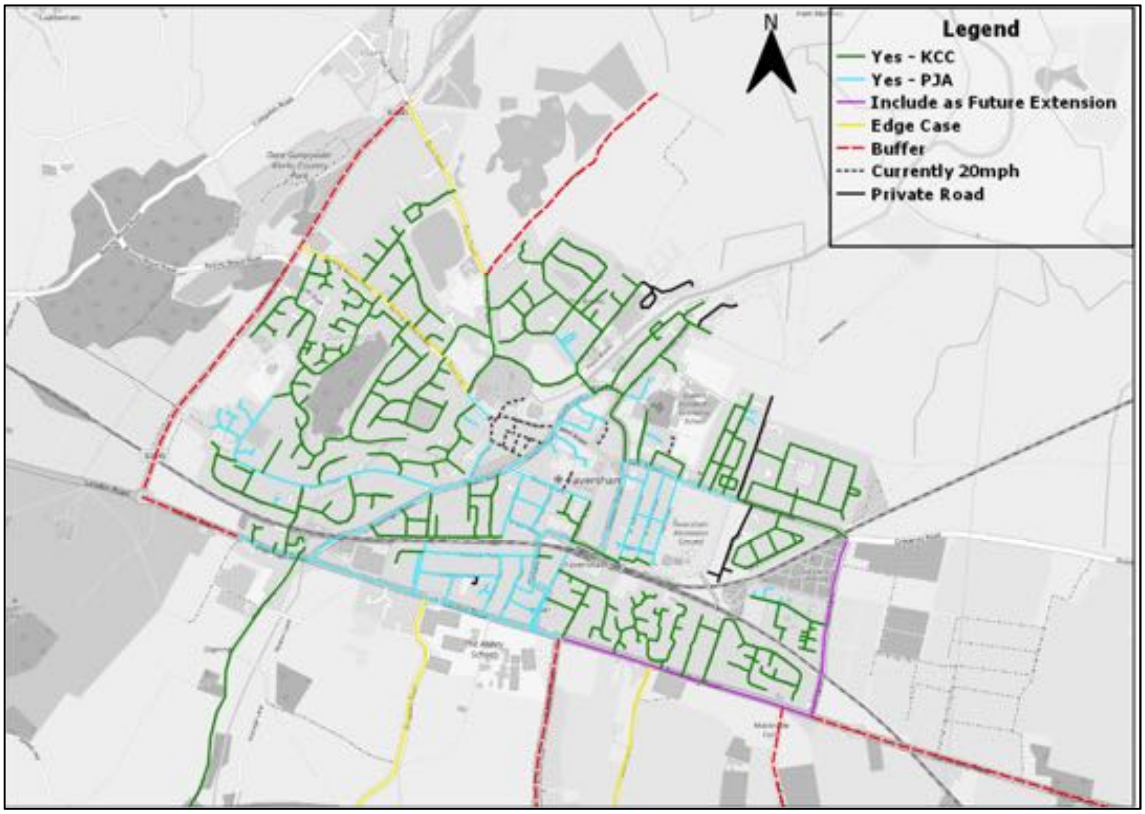
7 Recommendations

7.1 Short Term – introduction of Phase 1 town-wide 20mph Limit

7.1.1 We recommend the introduction of a town-wide 20mph Limit in Faversham, which will present a comprehensible, consistent and appropriate speed limit to all road users. The streets to be included are shown in the diagram below. The recommendation extents are made up of three classes of street:

- Streets considered acceptable by Kent County Council = "Yes – KCC"
- Streets considered acceptable following further analysis by PJA = "Yes – PJA"
- Edge cases where speeds or conditions may not be appropriate if the street were being considered in isolation, but where speeds are not significantly in excess of 24mph and where their exclusion would detract from the effectiveness of a town-wide scheme.

Figure 9: Faversham 20mph Limit Recommendations



7.1.2 Approximately 83% of Faversham's roads by length are recommended as suitable for a sign-only 20mph limit, or already has a 20mph limit. A further 3% can be included as a future extension to this. Edge cases account for only some 5% of the roads by length in Faversham. Highway

Authorities do not have the ability to introduce 20mph Limits in private roads, although the freeholder is able to introduce their own limit.

Table 1: Total Road Lengths

Category	Total Length (km)	Percentage
Yes – KCC	40.9	52%
Yes – PJA	17.9	23%
Edge Case	4.1	5%
Currently 20mph	2.1	3%
Include as Future Extension	2.4	3%
Buffer – excluded from 20mph Limit	8.9	11%
Private Road – excluded from 20mph Limit	2.0	3%

7.1.3 A key concern for some stakeholders is the visual impact of signage where speed limits change from one street to another. Having a town-wide limit is partly justified by the fact that change of speed limit signs is minimised. However, it should be noted that until Love Lane and the eastern part of Canterbury Road are brought into the scheme, there would be a cluster of signs at the entrance each of those roads into residential side streets. With Canterbury Road and Love Lane to be included after future development, the visual impact of these signs would only be during the interim period, after which they can be removed.

7.2 Medium-term – low-cost interim works on edge case streets

7.2.1 Once a phase 1 scheme is in place, low-cost measures can be considered as a means of improving compliance on edge case streets, or other streets where excessive speeding may cause concerns.

7.2.2 These measures can include:

- Placing low-cost interventions such as planters at the edge of carriageway to reduce – or visually reduce - the running lane. These could be designed and implemented with community/Town Council involvement.
- Marking out informal parking bays to encourage parking patterns that create natural chicanes and encouraging parking wholly on the carriageway
- Moving parking away from the kerb to create a cycle lane
- Speed awareness campaigns, in addition to any community engagement ahead of the Phase 1 roll-out

- Removal of the centre-line – either specifically or as part of routine maintenance, or replacement of centre-line with kerb-side cycle lanes. Research carried out by TfL has found that this very low-cost measure can have a significant effect on traffic speed.[11]

Figure 10: Planters placed in carriageway to discourage stopping outside school and reduce speed

Figure 11: "Floating parking bays" and reduced road width create cycle lane and reduce speed

[11] Centreline Removal Trial, TfL 2014.

Figure 12: Superfluous centre-line on South Street, Faversham

Figure 13: The Avenue, Norwich, with centre-line removed and kerb-side cycle lane instead

Figure 14: Carriageway narrowing and no centre-line on A6 at Clifton in Cumbria

7.3 Long term – expansion to the south east with scope for further intervention

7.3.1 Canterbury Road east of Ashford Road, and Love Lane should both be brought into the extents of the town-wide 20mph Limit as part of or as mitigation for the proposed developments at the south east of the town. The streets within those developments should also be laid out to be consistent with a town-wide 20mph limit, and the development should have a strong relation with both Canterbury Road and Love Lane so those streets feel more urbanised. The development themselves can be sources of funding for works that make permanent informal or interim schemes introduced in the medium term.

8 Summary and Conclusions

8.1.1 This report has built upon previous work carried out by the 20s Plenty for Faversham campaign group, Kent County Council and PJA on the feasibility of introducing a town-wide 20mph limit for the town of Faversham.

8.1.2 A consistent town-wide 20mph limit will be simpler to sign and promote and will make it easier for local people to comprehend, leading to higher levels of compliance, compared to a scheme where the limit varies from street to street. A 20mph sign-only limit will be much more cost-effective to introduce than one which includes extensive traffic calming measures and is likely to lead to fewer objections from the public.

8.1.3 We have reviewed data on existing road collisions and local people's perceptions of road danger and the existing patterns of trip-making across the town. We consider there is the potential for a significant increase in walking and cycling and a commensurate reduction in short car trips; and that a town-wide 20mph limit would help to achieve this. Such a shift in travel mode throughout the town would improve road safety, air quality and public health.

8.1.4 Government policy states that it while it is desirable that existing speeds are not excessive where a 20mph limit is proposed, it is not necessary for all roads within an area to have an existing average speed of less than 24mph. A number of area-wide schemes have been introduced across the UK in recent years where a small proportion of the network has had higher before speeds. It has generally been found that there has been a small but worthwhile reduction in speed across these areas, with the greatest reductions in speed taking place on the fastest roads.

8.1.5 We have analysed traffic speed survey data on a number of key routes provided by Kent County Council, supplemented by a more fine-grained dataset provided by Ordnance Survey Ltd. These data have shown that only a minority of routes within the town have an existing average traffic speed of more than 24mph, and that in most of these cases the function and typology of the road would support its inclusion in a town-wide limit.

8.1.6 We therefore conclude that a 20mph town-wide limit is feasible, with only small exceptions at the outset, for example along the Canterbury Road to the east of the Ashford Road.

8.1.7 As funds permit, and with the possible involvement of the local community, it should be possible to introduce low-cost physical measures to help reduce traffic speeds further and enhance the effectiveness of the 20mph limit. In the longer term, as development around the town proceeds, it will be possible to use developer funding to change the character of roads such as the eastern section of Canterbury Road, so that they may be added to the scheme.