



# 20's Plenty for Us

...making Cambridgeshire a better place to be

## May 2021 - Briefing Note for Parish Councillors

### 1. Introduction

This briefing is for Cambridgeshire County, Town and Parish Councillors and Cambridge City about our call for wide-area signed 20mph limits with engagement for our settlements. It's been prepared by Anna Semlyen, 20's Plenty for Us National Campaign Manager, in consultation with other group members. 20mph is healthier, safer and cleaner than 30mph and has already been adopted as normal by 21M people's UK authorities (see [https://www.20splenty.org/20mph\\_places](https://www.20splenty.org/20mph_places)).

20's Plenty for Cambridgeshire formed in March 2021, one of 500 branches of 20's Plenty for Us, the National Campaign for 20mph limits. We meet on Zoom. All those interested are welcome – email [cambridgeshire@20splentyforus.org.uk](mailto:cambridgeshire@20splentyforus.org.uk) for the links. Or email [anna.s@20splenty.org](mailto:anna.s@20splenty.org) or call 07572 120439 to start a branch or join our e-lists.

### 2. Summary

- 20's Plenty for Cambridgeshire offers you a free presentation if you need it. Our aim is to help you to table and vote through a motion of Supporting 20's Plenty for Cambridgeshire – default signed 20mph limits with public engagement where people live, work, shop, play and learn for your residents.
- Please pass a motion  
“This Parish supports 20's Plenty for Cambridgeshire's aim for wide area, default signed 20mph limits with public engagement for this Parish and across Cambridgeshire's urban and village settlements.”
- Some roads can be exempted where the needs of vulnerable road users are catered for.
- We are campaigning for County and City policy to be updated and for costs to be met through the Council applying for Government grants or from County or City Level funding.
- At Parish level, once a motion is adopted, we suggest you tell County level councillors (who have powers), to form a working party and work with other elected representatives across Cambridgeshire to call for 20mph limits to bulk buy/reduce costs by sharing the legal traffic regulation orders (£5k).
- We can **send you a slide deck or offer to speak at your meetings** and answer questions. The [www.20splenty.org](http://www.20splenty.org) site has many facts and figures to back you up, too.
- 20mph limits have signage, whereas zones are used to describe places with physical calming (humps chicanes, etc). However, the difference between a 20mph zone and limit is almost non-existent now. NB in 20mph *zones*, Department for Transport guidance is that traffic calming features (including repeaters) are at 100m intervals, in a *limit* at 200m intervals. A limit is therefore less expensive – see [https://www.20splenty.org/signs\\_regs\\_changes](https://www.20splenty.org/signs_regs_changes) for details of signage regulation changes which have decreased signage costs.

- 20 mph limits are **affordable and have significant, proven road safety, societal, environmental, economic and climate benefits**. Benefits do not depend on regular police enforcement – any speed reduction reduces traffic risk particularly to walkers, cyclists and scooter riders. They are accepted as normal by authorities for 21M people in the UK. It is global best practice where people mix with motor traffic and the sole theme of UN Global Road Safety week 2021 this May ([www.unroadsafetyweek.org](http://www.unroadsafetyweek.org)).
- 20mph limits **do not affect journey times significantly** in settlements. Due to stop go traffic in built up areas, it takes about 10 secs longer per mile. In a default 20mph limit, some roads can be exempted to higher 30mph speeds where the needs of vulnerable road users are met. Bus journeys and timetable times are generally unaffected.
- 20 mph limits are **popular** –Government surveys find 71% in favour in residential streets.
- Increased **compliance** with 20 mph limits can be done in ways that do not rely on police enforcement – e.g. education, Speedwatch etc., and all new car models will have in-car speed limiters from April 2022.
- The **cost** of a village-wide 20 mph limit has at least two phases. A design and consultation phase and an implementation of signs phase. Costs depend on detailed factors. Sharing design and legal order costs between settlements will **hugely reduce costs**. Parishes can work together. **Funding sources include** Council-level grants from Govt, Local Transport Plan, Dir of Public Health funds ringfenced for health improvement, parking funds, bridge tolls, house builder developer contributions to parish improvement funds where building is occurring – CIL and section 106, parish precepts etc.
- Scheme design isn't complex - it details how many signs would be placed where, usually on existing lampposts. Painted roundels are also an option. Designing a resident consultation on the proposed scheme and engagement on why 20mph is beneficial with both paper and digital responses (e.g. the common place platform). Costs depend on who carries it out – the local authority or a private transport consultancy.


### **3. Current Cambridgeshire Speed Policy and 'What's the difference between 20 mph zones and 20 limits?**


Policy is at page 81 of this document: <https://www.cambridgeshire.gov.uk/asset-library/Highway-Operational-Standards-April-2020-v3.pdf>

It accepts signage • **where the mean speed of traffic is 24mph or lower** • in combination with self-enforcing speed reduction features necessary to achieve a mean speed no greater than 24mph.


Note that in the opinion of Rod King MBE, the founder of 20's Plenty for Us, "It doesn't follow DfT guidelines as per 01/2013. It seems to be invented. I also suspect many 20mph limits in city of Cambridge wouldn't meet this Cambridge county policy. Note that the Highway Authority for Cambridge City is Cambridge County Council."


We recommend signage schemes as they are much more cost effective per mile per hour reduced. Humps are not required for 20mph limits to be effective. Signs and public engagement are seven times better value for money than humps.

  
How Wide-Area 20mph plus engagement is 7 x more Cost Effective than Speed Bumps




Small, isolated 20mph zones with bumps endorses going 10mph faster elsewhere








20mph with physical calming such as speed bumps cost about **£40-60k per km**




20mph (including community engagement) costs about **£1.1k per km**

In May 2022, all new car models will have Speed Limiters fitted, so bumps will become increasingly obsolete








20mph sees a **3dB(A)** cut in noise - equivalent to halving sound heard




Bumps **INCREASE** Air and Noise Pollution - due to acceleration and braking






Bumps are very time-consuming to install

**WE WOULD PREFER TO GIVE**




**12,500 people** in a community, signed 20mph plus education and community feedback


RATHER THAN



**250 people** a 20mph road with bumps - for the same cost



NICE\* recommends **no bumps** and 'smooth' driving in its air quality advice



Making 20mph normal is **7 x** better value for money than 20mph with bumps

For more information visit: [www.20splenty.org](http://www.20splenty.org)

Design by Sue Nicholls (20's Plenty for Herts)

20 mph limits are now being introduced in villages, towns and cities throughout the UK - more than half of the 40 largest local authorities have them. Limits involve installing road signs and markings to inform road users of the change in the maximum legal driving speed. They can be enforced by the police, like any other speed limit. Whilst enforcement increases their effectiveness, it is not essential for worthwhile benefits.

20 mph limits prioritise quality of life, helping to create places where human activity – including walking, cycling and talking - takes precedence over traffic movement.

20 mph limits are supported by Government. Department for Transport (DfT) Circular 1/13<sup>1</sup> 'Setting Local Speed Limits' states that '*Traffic authorities are asked to...consider the introduction of more 20 mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists...*'

The importance of encouraging more people to make short journeys on foot and cycle has become even more apparent during Covid-19. In November 2020 DfT published new statutory guidance to local authorities on their duties under the Traffic Management Act 2004<sup>2</sup>. This states that local authorities should 'swiftly' take measures to encourage active travel and notes that they include: '*Reducing speed limits: 20mph speed limits are being more widely adopted as an appropriate speed limit for residential roads, and many through streets in built-up areas.*'

<sup>1</sup> <https://www.gov.uk/government/publications/setting-local-speed-limits>

<sup>2</sup> <https://www.gov.uk/government/publications/reallocating-road-space-in-response-to-covid-19-statutory-guidance-for-local-authorities/traffic-management-act-2004-network-management-in-response-to-covid-19>

20 mph limits are supported by many organisations - the World Health Organisation (WHO), Association of Directors of Public Health, the National Institute for Health and Care Excellence (NICE), the Royal College of Paediatrics & Child Health, Alzheimer's Society, UK Health Forum, and Public Health Wales.

In July 2020 the Welsh Government voted to make 20 mph the default speed limit for all urban areas in Wales, with 30 mph limits becoming the exception, and with a target date of April 2023 for the law change<sup>3</sup>. They are signing the remaining 30mph roads, which is a cost effective method.

The UN Global push for road danger reduction in 2021 for the Global road safety week in May 17-23<sup>rd</sup> 2021 and second decade of action focuses on 20mph/30kmh. Wales and Spain have agreed it.

#### **4. Benefits**

Evidence on the benefits of introducing a 20mph limit in residential areas of the County would include:

- **POPULAR WITH VOTERS**

Most people 71% want 20mph limits. This rises after implementation. Wide area 20mph limits have never been removed anywhere in the UK. **Property prices rise as the area improves.**

- **SAFER STREETS FOR ALL, PARTICULARLY CHILDREN AND THE ELDERLY**

Significantly less risk of serious injury especially for vulnerable road users; less fear and intimidation from motor vehicles for all road users and especially those walking and cycling. Increasing use of silent electric vehicles – cars, e-bikes, e-scooters means more stealth danger in the road. 20mph means that unheard vehicles are less likely to injure people badly.

- **PROMOTING ACTIVE HEALTH FOR RESIDENTS**

Reinforcing healthy lifestyles by encouraging walking and cycling. Less obesity, heart disease, loneliness. The elderly and vulnerable retain independent mobility longer, preventing falls, keeping them self sustaining in daily life which reduces social care costs. Children get to play out and learn independent mobility, less escort and taxi duty for parents and carers.

- **BETTER PUBLIC HEALTH**

Less pollution reduces respiratory disease and deaths (these are 20 – 25 times more prevalent than road deaths), more active travel (inactivity is killing British people early), traffic reduction, people sleep better, less anxiety, more sociability, less loneliness. Better all round physical, mental and emotional health.

- **ENVIRONMENTAL IMPROVEMENTS**

Reduced vehicle emissions and noise due to lower speeds and traffic volumes. 20mph is half as noisy as 30mph. It's good for sustainability and is climate friendly due to less acceleration and braking. Less fumes, especially less diesel which is the most toxic. Tourism improves as it's a nicer place to be.

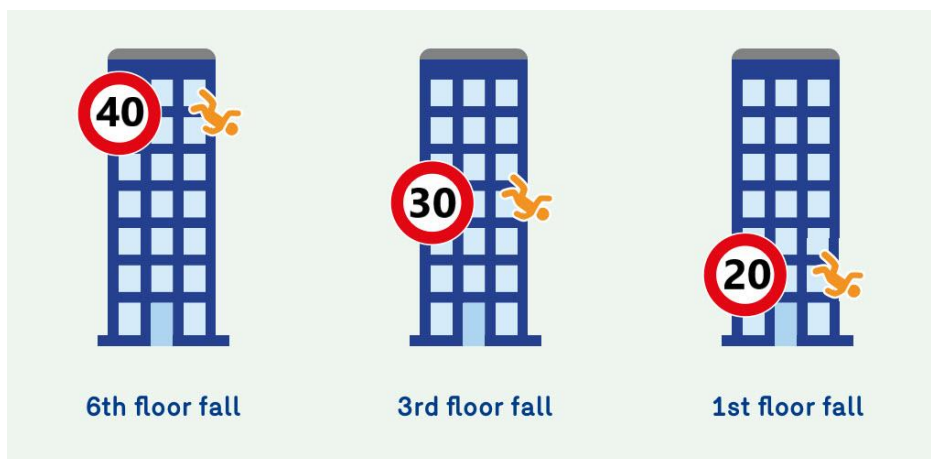


- **BETTER COMMUNITY LIFE**  
20mph enables lifestyle changes, renewed community life, sociability and the positive atmosphere we all want where we live. Our towns and villages will be more attractive, liveable and sustainable places, in keeping with Staffordshire’s growing eco-friendly ethos. Covid recovery too.
- **STRENGTHENING THE LOCAL ECONOMY**  
20mph aids local business as people want to shop and live in 20mph places. Helps fight the trend to online buying only towards local economy.
- **LOWERS THE COST OF TRAFFIC DANGER**  
Road casualties waste over 2% of GDP. Collisions are predictable and preventable. Introducing a safer system by reducing speed will reducing casualties saves everyone money (less time off work for instance, social care costs) as well as pain and suffering.

The trend towards 20mph is well-established in the UK and other countries.

**20mph is coming and we don’t want Cambridgeshire left behind.**

## 5. Road Safety



People struck by a motor vehicle are at least 5 times less likely to die if hit at 20mph than 30mph. This increases to 10 times if the pedestrian is over 60 years old. 30mph is like a 3<sup>rd</sup> floor building fall, 20mph a first floor.

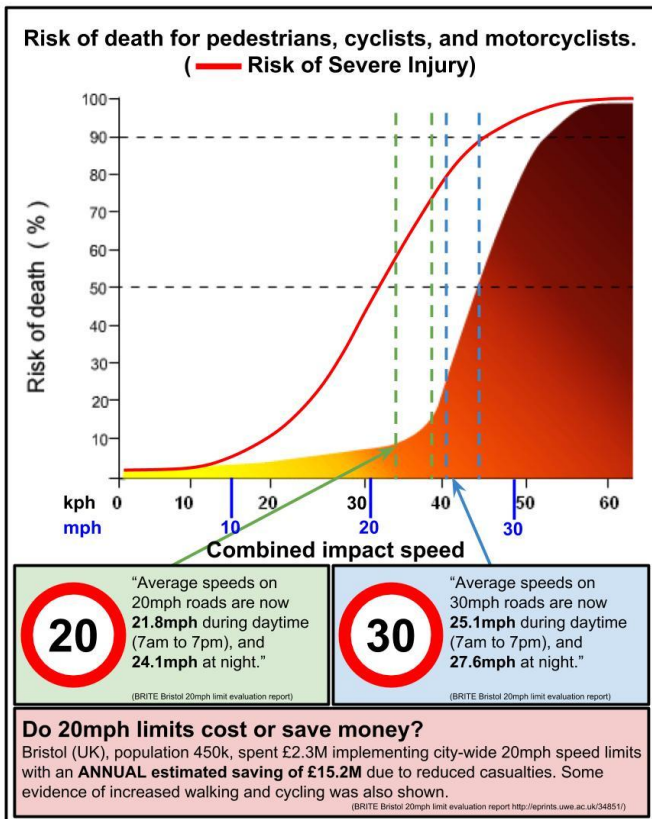
### The effect of speed

	Average for all ages	Over 60 year olds
At <b>40</b> mph	• 31% are killed	• 98% are killed
At <b>30</b> mph	• 7% are killed	• 50% are killed
At <b>20</b> mph	• 1% are killed	• 5% are killed

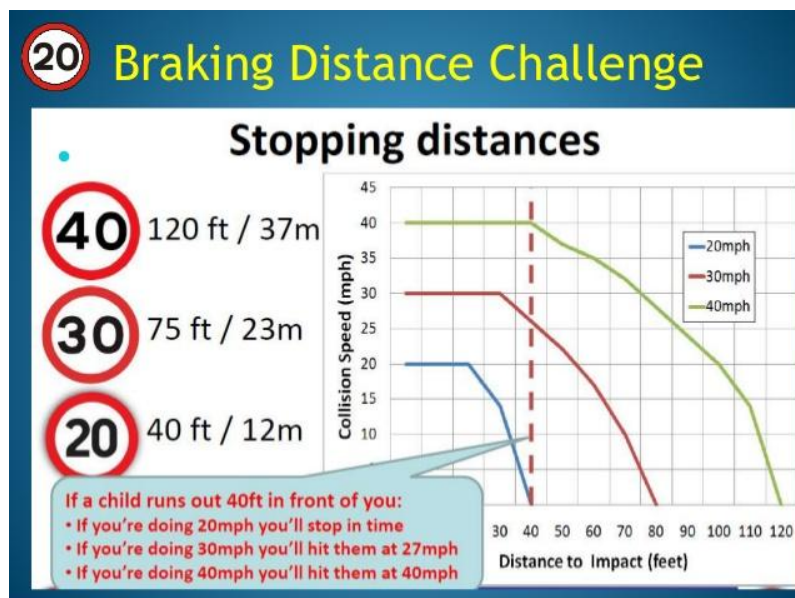
Data from Road Safety Web Publication No. 16 *Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants* - Department for Transport (September 2010)

A child is **3 times** more likely to die if hit by a car on a 30mph road than on a 20mph road.

We need a 20mph national speed limit in urban areas, with 30mph being the exception.



In the distance a 20mph car can stop, a 30mph car will still be moving at 24mph.



# Stopping Distances in Normal Conditions for the Average Car

20mph 6m 6m 12m (40ft) 3 cars

Thinking Distance

30mph 9m 14m 23m (75ft) 6 cars

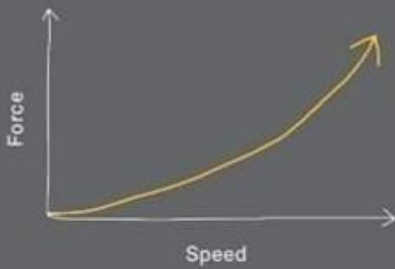
Braking Distance

40mph 12m 24m 36m (118ft) 9 cars

## How Speed Kills

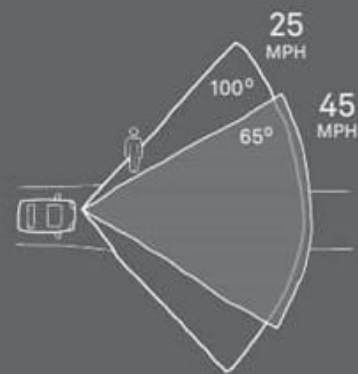
1

Crashes at higher speeds are more **forceful** and thus more likely to be fatal



2

Drivers traveling at higher speeds have a **narrower field of vision**



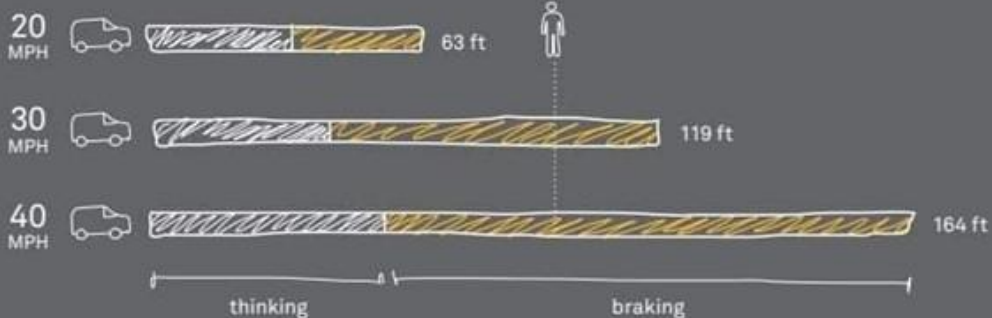
3

Drivers traveling at higher speeds **travel further** before they can react



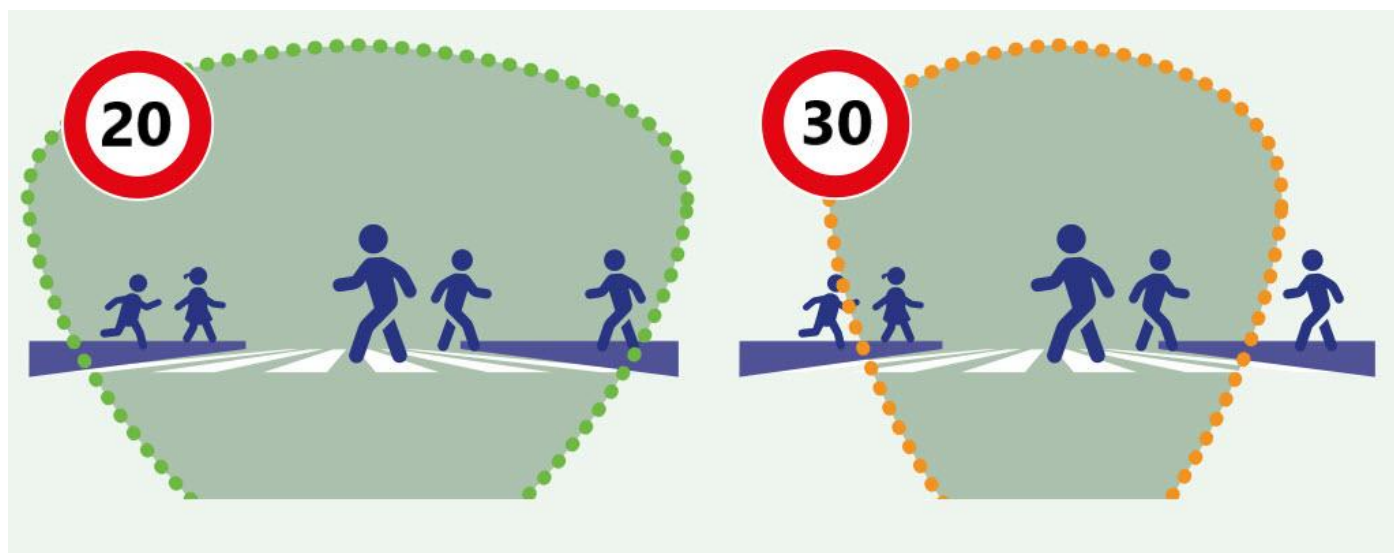
4

Vehicles traveling at higher speeds have **longer braking distances**



It is important to recognise that any reduction in vehicle speed reduces risks of injury and death. Research quoted by DfT in Circular 1/13 found that on urban roads with low average traffic speeds any 1 mph reduction in average speed can reduce the collision frequency by 6%.<sup>3</sup>

Road safety is therefore improved even when full compliance with the 20 mph limit, whether through traffic calming or enforcement, is not achieved. Studies (see Bristol case study. below) have confirmed that relatively small changes in average speed result in significant casualty savings; and that speed reductions are greatest on the fastest roads where the risk of casualties is the highest.



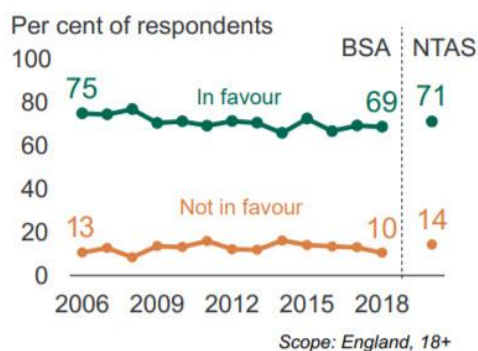
Visually, the driver sees more peripherally at 20mph than 30mph. Vision scientist have proven that children can't handle looming until their teens. They make mistakes and step into fast traffic (Dr John Wann and Prof Jodie Plumert). 10 year olds will make mistakes in crossing simulations at 25mph one in 20 times. It's not till 14 that their eyes can cope with traffic over 20mph.

Over time, as 20 mph limits become more established, it is expected that average speeds will reduce further, aided by changing attitudes and technologies such as in car speed limiters.

## 6. Public Opinion

Repeated surveys show that 20 mph limits are popular. The most recent National Travel Attitudes Study carried out by DfT<sup>4</sup> found that 71% of people are in favour of 20 mph speed limits in residential streets. Once schemes are installed support for the 20 mph limit typically increases.

Speed limits of 20mph in residential streets



<sup>3</sup> Taylor, M. C., Lynam, D. A. and Baruya, A. (2000), TRL Report 421 – The Effects of Drivers' Speed on the Frequency of Road Accidents. Crowthorne: TRL

<sup>4</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810908/national-travel-attitudes-study-2019-wave-1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810908/national-travel-attitudes-study-2019-wave-1.pdf)

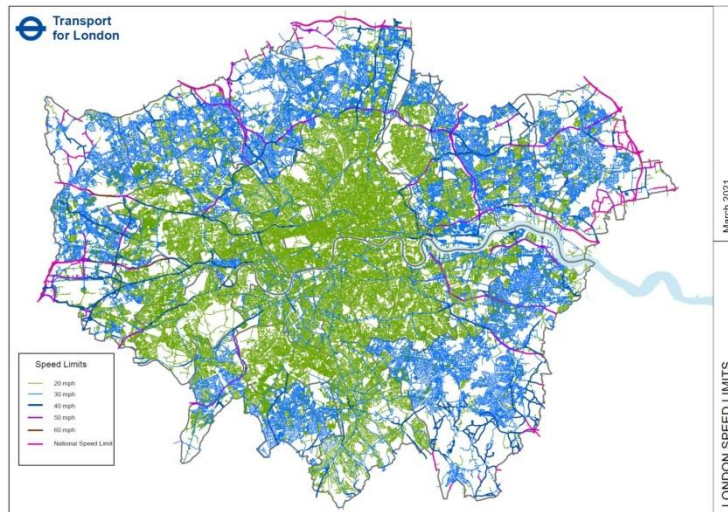


## 7. Case Studies

20 mph limits have been introduced to large parts of cities, to towns and to villages. Some examples:

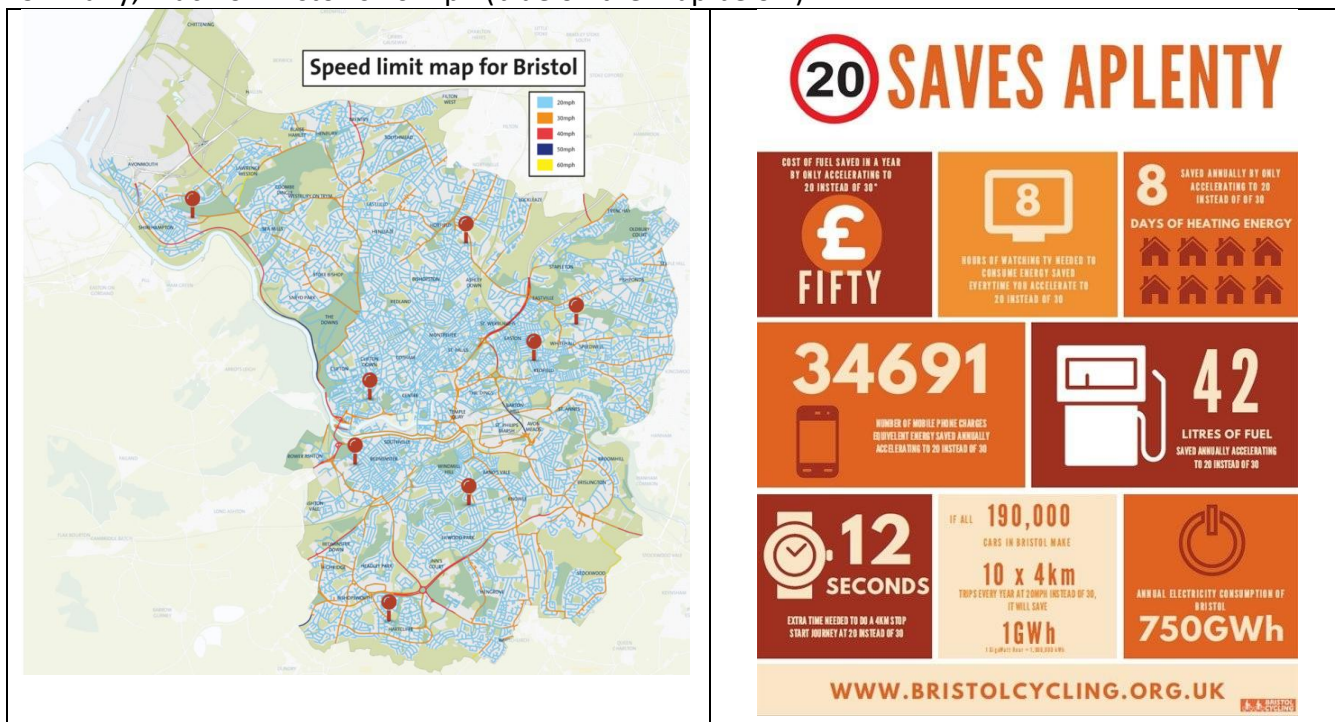
### London

Most parts of London now have a 20 mph limit (green on the map below) including all of the congestion charging zone



### Bristol

Similarly, much of Bristol is 20 mph (blue on the map below)



The Bristol 20 mph project has been extensively studied.<sup>5</sup> The BRITE study<sup>6</sup> found 94% of surveyed roads had slowed, 2.7mph reductions in average speed and estimated casualties avoided per year of 4.53 fatalities, 11.3 serious injuries and 159.3 slight injuries.

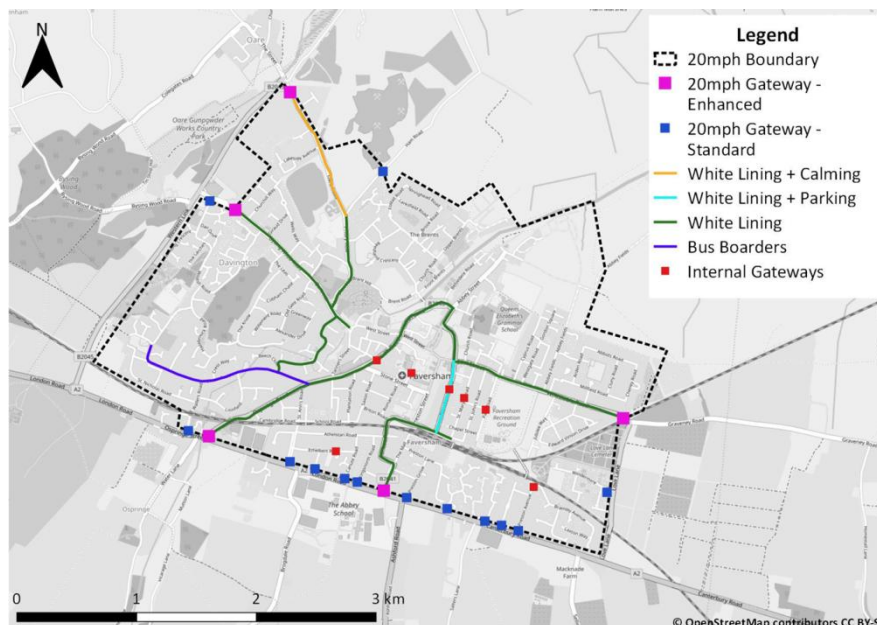
These sum to estimated cost savings of over £15 million per year - annual savings over 5 times greater than the one-off roll out cost of £2.77m mostly funded by Government. Over a ten year period 20mph in Bristol will have saved 45 lives, 113 serious injuries, 1,593 minor injuries, and save over £147m net - a fantastic return on a public health investment! It also saves drivers on average £50 per vehicle per year on fuel.

<sup>5</sup> <https://www.bristol20mph.co.uk/find-out-more/research-and-monitoring/>

<sup>6</sup> [http://eprints.uwe.ac.uk/34851/7/BRITE%20Bristol%2020mph%20limit%20evaluation%20report\\_20July18update.pdf](http://eprints.uwe.ac.uk/34851/7/BRITE%20Bristol%2020mph%20limit%20evaluation%20report_20July18update.pdf)

## Faversham

Faversham is an historic market town of 20,000 people in Kent. 20's Plenty for Faversham instigated the introduction of a town-wide 20 mph limit, which went live in June 2020.



### Faversham 20 mph limit area

Kent County Council was initially opposed to a town-wide limit but was persuaded by the strength of local support and the technical case made.<sup>7</sup> It was successfully demonstrated that a 20 mph limit covering the whole town would be cheaper (because no changes in speed limit would need to be signed) and more effective, since drivers would find it easier to comprehend.

Low-cost techniques to reduce traffic speeds have been accepted by the highway authority, such as attractive gateways to the settlement announcing the change in speed limit, the removal of road centrelines (which has been shown to lower average speeds by up to 4 mph) and 'Community Corners', resident-led measures such as planters at key locations<sup>8</sup>.

There is no reason such techniques could not be used in Cambridgeshire's settlements.

## 8. Enforcement

20 mph limits are like any other speed limit and are enforceable by the police. Policies for speed limit enforcement vary between police authorities – some, such as the Metropolitan Police in London, actively enforce all 20 mph limits. The policies of Cambridgeshire Police towards enforcement will need to be reconfirmed after the Police and Crime Commissioner elections in May 2021.

However, even in the absence of regular enforcement, research shows that 20 mph limits reduce speeds, collisions and casualties. Furthermore, driver education through community engagement can help drivers voluntarily comply with 20mph (the enforcement threshold is 24mph. Atkins' research for the Department of Transport found 80% of drivers comply with 20mph in urban areas and 74% on residential streets.

<sup>7</sup> <https://www.favershamtowncouncil.gov.uk/wp-content/uploads/2020/10/Technical-Note-19-03-19.pdf>

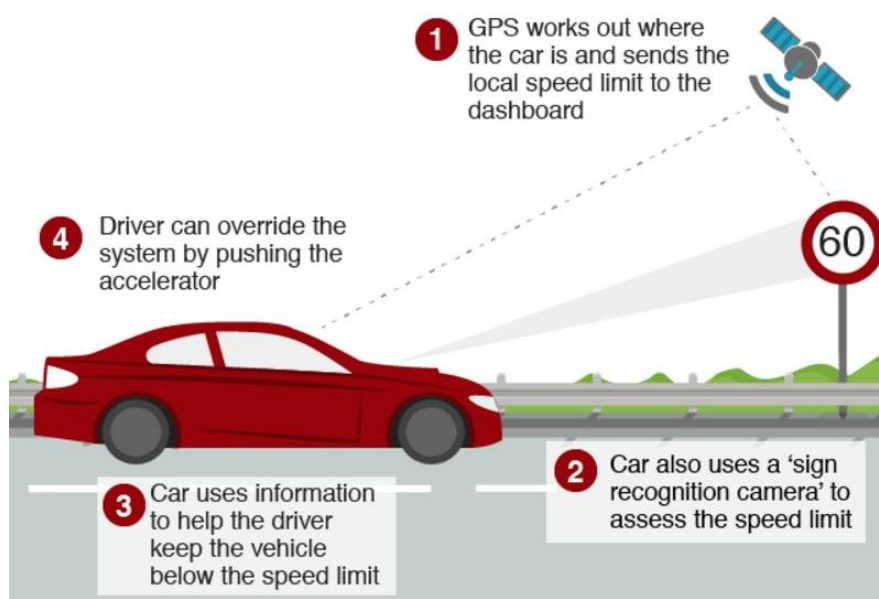
<sup>8</sup> <https://static1.squarespace.com/static/5d0a03b295f37b00018da721/t/5d2342e8eb83b800013132f8/1562591982860/Community-Corners-TRL.pdf>

Compliant drivers become pacer vehicles which enforce 20mph on the traffic behind them. Community Speedwatch can help— whereby drivers exceeding the speed limit are sent warning letters.

In the near future in-car speed limiters will progressively reduce the need for active enforcement. From May 2022 all new model cars sold in the EU and the UK will have them. This will prevent the car exceeding the limit unless the driver consciously pushes past a point of resistance on the accelerator. From May 2023 the requirement for ISA will apply to all new cars sold.

Whilst drivers can override the limiter, research shows that most won't, and in fact welcome the reassurance that they are not breaking a law inadvertently. The car will also black box record if the speed limit has been exceeded in the event of a collision, which would affect the driver's liability.

## How does speed limiting work?



### ***Intelligent Speed Assistance***

#### **9. Costs**

Wide area 20mph limit schemes have typically cost about £3 per head for urban settlements and £5 per head for villages. The cost components are the scheme design, consultation on it, the legal traffic regulation order (£4-5k), signage and a marketing campaign of the benefits to drivers. When several villages are done together the costs reduce from needing only a single traffic regulation order. Costs reduce when more roads are in the scheme at 20mph rather than exempting main roads due to not requiring as many terminal signs (60cm round signs). Repeater signs are 30cms wide.

Other Counties e.g. Lancashire, Bath and North East Somerset, Calderdale have agreed 20mph for every settlement. Wales too. We call on Cambridgeshire for this policy.

Funding for 20mph in other places has come from various sources – the County Highways budget, parish funds, developer funds, public health, government grants, councillor's locality budgets, fines, tolls and charities. It is not an expensive intervention in transport terms. A once off cost gives benefits for years and it typically pays back within a few months in casualty reductions alone, though there are other benefits.

## 10. Next Steps

This briefing note has described a proposed 20 mph limit for areas in Cambridgeshire in general terms, together with its benefits and costs. 20's Plenty for Cambridgeshire have begun asking Parish Councils to support the campaign. We are happy to present to any elected representatives.

Speed limits are set by Cambridgeshire County Council as Highway Authority, who would be responsible for making the necessary Traffic Regulation Orders and overseeing erecting signs, usually by employing private contractors.

Being able to demonstrate local support will be critical to securing County Councillor and the County's agreement to #ActOn20mph. To that end it is hoped that Parish and Town Councils would be willing to work with 20's Plenty for Cambridgeshire to assess the potential benefits and feasibility of a 20 mph limit. Each local parish council vote for 20mph limits will help progress our call for wide area 20mph.

### Please pass a motion

"This Parish supports 20's Plenty for Cambridgeshire's aim for wide area, default signed 20mph limits with public engagement for this Parish and across Cambridgeshire's urban and village settlements."

If each Parish gave a modest £100-£200 contribution to buy 20mph posters for gardens, bins and car window and bumper stickers, it would be most helpful to local groups of 20's Plenty in Cambridgeshire. 150 car stickers are £61.50 for instance.

[https://www.20splenty.org/stickers\\_and\\_campaign\\_materials](https://www.20splenty.org/stickers_and_campaign_materials) has the details of how to purchase them. Large sticker posters, for instance are £1.



It would pay back within 5 months - see the table on the next page.

More enforcement is promised too - Email from February 2021:

The South Cambridgeshire Area Commander - Superintendent James Sutherland - admitted more needs to be done in Cambridge city on enforcing speed limits. He's committed to rolling out training in the Ultralite handheld speed gun for all uniformed officers in 2021.

		Local Authority: <b>Cambridgeshire excl Peterborough</b>	
	All roads	30mph roads	
<b>Total number of police reported road casualties in Cambridgeshire in 2019</b>	<b>1,646</b>	<b>648</b>	
Of which: Killed	25	1	
Seriously injured	329	125	
Slightly injured	1,292	522	
<b>Cost of police reported casualties (DfT casualty cost estimates)</b>	<b>£148.5m</b>	<b>£39.7m</b>	
Including medical and ambulance	£7.1m	£2.7m	
<b>Total number of police reported collisions in Cambridgeshire in 2019</b>	<b>1,258</b>	<b>559</b>	
<b>Additional collision costs (extrapolated from DfT estimates for GB)</b>			
Other collision costs (police time, damage to property etc)	£8.6m	£2.3m	
Collisions resulting in damage only (no casualties)	£56.0m	£15.0m	
Casualties not reported by police	£185.4m	£49.6m	
<b>Total estimated collision / casualty costs in Cambridgeshire in 2019</b>	<b>£398.5m</b>	<b>£106.6m</b>	
Cost per person in Cambridgeshire	£611	£164	
<b>Cost:benefit of implementing 20mph on 80% of roads in Cambridgeshire</b>			
One-off implementation cost (capital)		£2.6m	Covers 80% of the population
Casualty reduction		104	(all severities)
Annual revenue benefits (costs for police reported casualties <u>only</u> )		£6.4m	Assumes 20% reduction in casualties
<b>Payback (months)</b>		<b>4.9</b>	
According to police records (note 1), Cambridgeshire had 1258 collisions and 1646 casualties in 2019. 648 of these casualties were on 30mph roads, at a total cost (note 2) of £148.5m including £39.7m for 30mph roads.			

## 20's Plenty for Cambridgeshire

Email: [cambridgeshire@20splentyforus.org.uk](mailto:cambridgeshire@20splentyforus.org.uk)

Twitter: @20Cams

Facebook: [facebook.com/20Cams](https://www.facebook.com/20Cams)

## Anna Semlyen, 20's Plenty for Us Campaign Manager

T: 07572 120439

Email: [Anna.s@20splenty.org](mailto:Anna.s@20splenty.org)

Web: [www.20splenty.org](http://www.20splenty.org)

Follow us on Twitter @20splentyforus; @AnnaSemlyen1

**20's Plenty where people are  
...making Cambridgeshire a better place to be**

