

I understand that you have received a letter from the 20's Plenty campaigners, triggered by my emails sent to Chichester and West Sussex Councillors on 20 July and 23 July. 20's Plenty did not have the courtesy to send a copy to me but a Councillor who does not subscribe to their views kindly forwarded it to me. I am pleased to put the record straight.

20's Plenty's are clearly desperate to limit the damage done to their campaign by revelations about the effects of 20mph limits on road safety, ie increased casualties. But you will see that their "rebuttal" of my Conference Paper exposes the shallowness of their thinking and their propensity to make false assumptions. They claim to provide "compelling counter arguments" but those arguments are nothing of the sort.

The rebuttal document contains no author but it was sent by Sarah Sharp and I suspect was prepared with help from the 20's Plenty Campaign Director, Rod King, who debated with me at the 20mph Places Conference in May.

Item Under Review	Reviewer comments
<p><b>20's Plenty "rebuttal" of Eric Bridgstock's handout summarising his presentation to the 20mph Places Conference on 1 May 2012. Sent to Councillors end July 2012.</b></p> <p><b>This column contains the complete text of the 20's Plenty document.</b></p>	<p><b>This column contains the response from Eric Bridgstock, issued 20 Aug 2012</b></p>
<p><b>Rebuttal of Mr Eric Bridgstock's e-mail dated 20 July 2012 to Chichester District Councillors and of the his accompanying Abstract regarding 20mph speed limits</b></p> <p>We understand that you have been sent an e-mail from Mr. Bridgstock, accompanied by an abstract of a presentation he gave on 20's Plenty schemes.</p> <p>We are aware that, as a District Councillor, you will not be directly involved in the decision making for 20's Plenty in Chichester, but we felt that, having received Mr. Bridgstock's email, you would want to be aware of what we consider to be compelling counter arguments.</p> <p>We would refute Mr. Bridgstock's claims as follows:-</p>	<p>As a professional engineer, with responsibility for the safety of a range of civil and military systems, I consider myself to be a man of integrity and am considered to be so by my peers, management and customers. I would not last long in my job I were anything other than open and honest; I have been in my current Head of System Safety role for over 8 years and have worked on the safety of systems for over 20 years. My job involves compiling coherent and compelling safety arguments and presenting them in a safety case, and reviewing similar work conducted by others.</p> <p>There is very little compelling about 20's Plenty's "counter" arguments – they are built on emotion, wishful thinking, selective evidence and misinformation. <b>They effectively admit that 20mph schemes are detrimental to road safety in terms of casualties and collisions, but claim that there are other benefits. This is not a tenable position for any serious road safety organisation.</b></p>

**1) Content of the e-mail:**

In his e-mail, Mr. Bridgstock refers to being *invited* to the "20mph Places" conference held on 1<sup>st</sup> May 2012. It should be emphasised that Mr. Bridgstock was not invited because the organisers were aware that he had any recognised expertise. Rather, the organisers issued a "call for papers", and Mr. Bridgstock responded with an abstract criticising 20mph limits, which was accepted in the interest of hearing as many viewpoints as possible.

20's Plenty are wrong on several counts.

I did indeed respond to the call for papers but **I was not critical of 20mph limits. As a result I was invited to contribute to the debate (as you will see below).**

My abstract explained that

*The safety claims for road improvement schemes are based on the totality of evidence and argument for the proposed implementation, supported by experience of similar schemes. This forms the Safety Case.*

*I will discuss the evidence for 20mph schemes, from the viewpoint of pedestrians, cyclists and drivers, using some of the techniques and elements from my job as Head of Safety Engineering for a UK aerospace and defence company*

I went on to explain some of the methodical approach used in my industry and how it might usefully be applied to the world of road safety.

My full original abstract is attached.

On 15 Feb 2012, the exact words of the conference organiser (Ian Chatfield) in his email response were:

*"I am pleased to tell you that we would like to **invite** you to speak at the Conference. We are proposing to have a debate session between 1500 hours and 1630 hours and would like you and three other contributors to speak for up to 10 minutes which would then be followed by discussion and debate."*

After the conference, Mr Chatfield confirmed that he had Googled my name and found that I was campaigning against 20mph limits on grounds of safety and decided that would add some balance to the debate. He said **"we [PTRC] see it as our role to explore the arguments and certainly the 20mph speed limit proponents have had a fairly clear field up to now."**

At the conference, Ms Semlyen's comment about "wanting implementation rather than debate" can be seen as quite reasonable if one remembers that the number of organisations now supporting 20mph limits on residential roads is huge. Supporters includes the DfT, the National Audit Office, NICE, the Association of Directors of Public Health and, in repeated surveys by the British Social Attitudes Survey, 70% of people say that 20mph should be the limit for residential roads.

It is not a matter of how many organisations support 20mph. Most of the ones quoted by 20's Plenty have little road safety expertise (NAO, NICE, ADPH) and have been fed misinformation by 20's Plenty, Brake, etc who are choosing to ignore the effects on casualties and instead make spurious claims about air quality, noise, etc.

**20's Plenty do not want debate because it is exposing their anti-road safety position.**

Indeed schemes introducing 20 mph zones for most residential streets have already been implemented or are due to be implemented by councils in places such as Liverpool, Lancashire, Portsmouth, Oxford, Cambridge, Bath, Edinburgh, Islington, Waltham Forrest, Brighton and Hove, Bristol, Wirral, Wigan, Middlesbrough, Newcastle, Otley and Warrington.

Clearly there has already been much debate and the time has come for implementation.

As my presentation explains, the casualty data from 20mph schemes shows a consistent detrimental trend. That is why Anna Semlyen did not want debate and shame on her for that. There is nothing reasonable about not wanting debate where safety is concerned. **Safety is improved by continuously answering challenging questions. Those who want to suppress debate have lost the argument.**

<p>Mr Bridgstock selects an increase in casualties from the Portsmouth statistics and goes on to ascribe that increase to the 20mph limits in Portsmouth. However, while the increase did occur, its selection as an out of context statistic is little more than cherry picking. Here is a comment from a Portsmouth City Council spokesman:-</p> <p>The 20mph limit was implemented in 2008 and this [increase in 2011] was the first rise in serious injuries in ten years.</p> <p>While the number of casualties on 20mph streets increased in 2011, he said bigger rises were recorded on higher speed roads. “Although the vast majority of road space in the city is covered by 20mph limits, there were 30 serious accidents on such roads in 2011,” [whereas] “On roads 30mph and above – representing only a small minority of road space – there were 111 serious accidents.”</p>	<p>It is a bit rich to be accused of cherry picking by an organisation whose very existence relies on selective reporting and conveniently ignoring facts that do not suit their view.</p> <p>20’s Plenty have done so here. My comment on KSI increasing from 19 to 20 was one of four measures that I quoted from the Portsmouth report (the others were <b>38% increase in pedestrian KSI, 11% increase in cycling KSI, 6% increase in KSI at a time when KSI reduced by 12% (despite a 12% reduction in the traffic volume in the 20mph area).</b></p> <p>20’s Plenty have not challenged those figures, all taken directly from the Portsmouth report. Nor did they comment on the increased school children casualties.</p> <p>I also note that the 20’s Plenty website still quotes “22% fewer casualties in Portsmouth”, despite the recently declared <b>57% increase</b> for 2011. <b>If they are an honest organisation, they will replace that claim with a more accurate one based on the 2011 results.</b></p> <p>And the PCC spokesman is clearly little more than a spin doctor, desperately trying to present a rosy picture when the reality is dire. Throughout 2010, I exchanged dozens of emails with PCC – they never challenged my assessment, simply claimed they had followed their procedures.</p>
<p>Mr Bridgstock fails to explain exactly how an intervention made in 2008 should suddenly cause an increase in casualties 3 years later.</p>	<p>My conference presentation explains that 20mph creates the conditions for casualties – such as pedestrians becoming increasingly blasé about their own safety, when traffic is often actually going no slower than it was when the limit was 30. I am not surprised that the most recent [2011] increase is significantly worse than the previous years. The more 20mph is promoted as a place to “feel safe”, the worse the casualties will get – that explains the sudden increase in Portsmouth.</p> <p><b>How many more have to be injured before the authorities recognise that the 20mph “medicine” is not working?</b> There is no reason to suppose it will not get even worse in 2012. This is already feeding into the total injuries to pedestrians and cyclists as reported by the DfT (<i>note that I am not commenting on the reported increases in 20mph areas, but what I believe to be the impact of 20mph on national total KSI trends</i>).</p>
<p>He also comments on the “simplistic” presentations made by 20’s Plenty, Living Streets and BRAKE. The simplicity or otherwise of the 20’s Plenty and Living Streets presentations is a matter of opinion. However, BRAKE’s presentation is surely beyond reproach, since they never gave one.</p>	<p>This is a cheap and unworthy comment, adding nothing to the debate, and hardly worth responding to.</p> <p>I agree that Brake did not present at the conference, but my sentence also referred to people being “misled by the standard propaganda” and Brake are as guilty as 20’s Plenty and Living Streets on that score.</p> <p>Simplistic is certainly one of my opinions on the various 20mph campaigns. They are also naïve, misleading, emotional, selective, dishonest, and often simply untrue. My 20mph campaigning over the last few months has triggered sympathetic and supportive responses from many who agree with my assessment of 20’s Plenty, Brake, Living Streets, etc.</p>

The end of the e-mail attacks “campaigning businesses” such as 20’s Plenty. ‘20’s Plenty’ are a voluntary body and only have one paid employee working on a half-time basis. The vast majority of 20’s Plenty’s efforts come from thousands of campaigners in 150 local campaigns around the country (including our group in Chichester) who simply want to make their localities better places to be. The Campaign Director, Rod King's efforts are completely voluntary in support of those aspiring communities around the country. Hardly what one could class as a “business”.

20’s Plenty receives funding from the Environmental Transport Association and invites donations on its website. They have a paid national campaign manager (Anna Semlyen) and Rod King is the Campaign Director. 20’s Plenty is not a charity.

I put “campaigning businesses” in quotes as, compared to me (totally self-funded and entirely independent) they act very much like a business (clearly with sufficient resources to assemble media and publicity campaigns), but one which should be prosecuted for their breach of Duty of Care where safety is concerned.

**2) To address the Abstract from Mr. Bridgstock's conference presentation (using his headings):**

**Portsmouth**

Yes, there was a rise in KSI, but the Portsmouth "number crunchers" did not deem a rise from 19 to 20 to be statistically significant (i.e. not sufficiently trustworthy to identify any kind of pattern).

The next statistics given by Mr Bridgstock are very selective. His presentation singles out the 38% increase in pedestrian KSI, and the 11% rise in cyclist injuries. But these percentages are based on very low numbers of 6.3 to 8.7 (pedestrians) and 5.0 to 5.6 (cyclists). What his presentation did not report was that the total pedestrians injured reduced from 45.3 to 38.1 (16% reduction) and for cyclists from 39.7 to 33.8 (15% reduction). Mr. Bridgstock also neglected to report that vehicle passenger casualties dropped by 31%, and the casualty figures for drivers (including drivers riding mopeds and motorbikes) fell by 23%.

In fact the report on the initial results of the Portsmouth scheme, as delivered to councillors of Portsmouth City Council (PCC) said:-

“The provisional casualty data provided directly by the DfT (from 2004 to 2009) shows an underlying trend of decrease in national casualties [of 14%] ..... Whilst not directly comparable due to differences in time period, the total casualty reduction of 22% for the roads within the 20mph Speed Limits in Portsmouth is greater than the total GB casualty reduction. The overall reduction of 16% in pedestrian casualties in Portsmouth is also greater than the national average of reduction of 13%.”

Again, whilst Mr. Bridgstock puts great emphasis on the increase in Killed and Seriously Injured (KSI) by 1, the report actually said:-

“The number of deaths and serious injuries rose from 19 to 20 per year. Because the total numbers of deaths and serious injuries and of casualties by road user type and cause are relatively low, **few inferences about the scheme’s impacts should be drawn from these figures.**”

And

“In conclusion, early figures suggest that the implementation of the 20 mph Speed Limit scheme has been associated with reductions in road casualty numbers. The scheme has reduced average speeds and been well-supported during its first two years of operation.”

If there had been a reduction of 1 KSI, I have little doubt that Portsmouth would have claimed it as an indicator of success.

I quoted figures which concerned the vulnerable people 20’s Plenty falsely claim will benefit from 20mph.

By citing “total injuries”, the KSI get swamped by minor injuries (which are well known to be under-reported). Total injuries are not a reliable indicator for road safety (and I’m not keen on KSI for similar reasons – there is usually a huge difference between death and serious injury, and they should not be mixed).

This is PCC spin – there is no mention of the reduced traffic volume, which more than cancels out the “improvement” on national trend.

**I stand by my figures and my assessment – Portsmouth was a tragic failure and its 2011 results turn it into an unmitigated disaster.**

If there had been a reduction of 1 KSI, Portsmouth would have claimed it pointed to success. More spin-doctoring.

The comment that “casualty benefits greater than the national trend have not been demonstrated” is due to the relative low numbers involved in the scheme. To claim that this means that “benefits were lower than the national trend” is incorrect.

### Bristol

Once again Mr. Bridgstock selects the one figure he can find to substantiate his views. He neglected to quote any of the key findings from the report, namely:-

- Pedal cycle casualties in the Inner South area have fallen by 3 in the same period but remained constant in the Inner East
- Pedestrian casualties have remained constant in both areas.
- Support for 20mph limits amongst pilot area residents is around 82%
- Around 70% support a citywide expansion of 20mph limits in residential areas
- 89% of residents supported 20 mph on all residential streets
- 56% of residents supported 20mph on ‘main’ roads

**On 26<sup>th</sup> July 2012 Bristol City Council decided to roll-out their 20mph limits across the whole city.**

### Oxford

Once again Mr. Bridgstock makes great play of a small change in KSI. What he does not report is that total casualties dropped considerably. If one looks further and compares 2007/8 with 2009/10, then the following are notable:-

Table: Total Casualties - broken down by class of road user

	All	Pede strian child	Pedestri an adult	Cycle child	Cycle adult	M- cycle	Car	Bus
2007/ 8	1044	42	130	20	296	95	334	94
2008/ 9	884	20	106	16	267	68	328	58
Chang e	-15%	-52%	-18%	-20%	-10%	-28%	-2%	-38%

Again, had the benefits been better than national trend, they would have been attributed to the 20mph scheme.

**Why is “pedestrian casualties have remained constant” a “key finding”?** Unless they/you were expecting them to increase? Surely they should have gone down if 20mph is a safer place, particularly with reduced traffic volume? **Public support counts for nothing in a safety system**, especially when the campaigns are deliberately misleading and the survey questions are biased.

Bristol are also laying themselves open to prosecution for breach of their Duty of Care.

Again, total casualties are not a valid measure.

But why quote data to 2008/9 when later data must be available? Presumably that later data shows 20mph in a less favourable light.

*(I note that the paragraph says 2009/10 but the table says 2008/9 – whichever is correct, it smacks of more cherry picking. All available data to date must be shown in any safety report, if it is to be trusted. From that, it is then possible to identify key statistics and trends.)*

*{The original table can be seen in 20’s Plenty’s original note}*

## Warrington

Mr. Bridgstock chose his figures from many very positive findings in the report. The Town Centre is a very specific area, and the results were remarked upon by officers in the report. In particular:-

Para 8.1. It would appear that multiple injuries to bus passengers have therefore skewed the injury figures, leading to a marked increase in injured parties.

Nor did he report a key finding that :-

Para 13.10 Within the trial study period the three areas combined produced an injury collision reduction of 13.68 in 18 months (taking into account the borough wide borough trend). This would equate to a 9 injury collision reduction in a 12 month period. Taken as an actual first year collision reduction figure with the implementation costs as shown in 17.1 this shows a FYRR of 800%.

Nor did he refer to the fact that, after reading and considering this report, the Borough Council decided to roll out 20mph limits as the default for all residential roads in the borough. This had the support of all three political parties in the council, and since then the council has gained Local Sustainable Transport Funding (LSTF) to support some of the implementation costs.

I have become used to explanations as to why increased injuries are not due to the speed intervention. Any reductions would be attributed to the 20mph scheme, but any increases are attributed to freak incidents or circumstances.

Other points to note.

The average speed reduced by less than 1.5mph (ludicrously quoted to five significant figures in the report as 1.4532mph). An amount imperceptible to a pedestrian or cyclist, and most unlikely to have any positive effect on road safety.

The Warrington public survey asked "*Do you think there has been a reduction of speed since the introduction of 20mph speed limits?*" The answers to this question are of interest only to those promoting 20mph. The measured data (casualties, traffic volume, speed) can be relied upon – human perceptions, sought in a political atmosphere with active 20mph campaigns, cannot, and are of no value.

The FYRR is a fraudulent calculation as it treats values of injuries as if they are costs/savings (the report describes reduced collisions as "costs saved to the community"). Rod King is quoted as saying that the "cost of road casualties in Warrington is put at £50m per annum" – that is patently not true.

Savings are a reduction in expected expenditure but the numbers used (£104,000 for the cost of a collision) are [mostly] not costs but notional values, which would never be expended. When properly calculated, the true FYRR is negative, and that continues year after year.

Such calculations result in fraudulent fantasy figures and may explain some of the UK credit crisis.

I established the importance of not using costs and values interchangeably during extensive correspondence with the NAO in 2010 (culminating in letters from the Comptroller, Amyas Morse).

This expensive and dangerous folly, not yet implemented, would mean yet another organisation in breach of its Duty of Care.

### St Albans

It is not clear what relevance this scheme has to the overall picture, as (1) the location in question was not part of a wide area 20mph limit scheme, (2) the figures Mr Bridgstock provides (from information apparently supplied privately to him) are incomplete (any suggestion that they were somehow randomly extracted can be confidently dismissed), and (3) there is none of the usual additional information given by officers within reports which would put into perspective even such figures as are supplied.

**That said, we note that Mr. Bridgstock failed in his attempt to persuade his own local council not to proceed with a large 20 mph zone in the city centre which has been implemented this year.**

### Summary

Mr. Bridgstock says in his pamphlet that: *"I have seen arguments that **the numbers are too small to be meaningful.**"* Indeed the figures he selects *are too small to be meaningful.*

Indeed – data without spin from Council officials.

In what way is my "failure" in St Albans relevant? It just underlines the degree to which 20's Plenty have **conned** Councillors, who then used skewed and biased surveys to claim public support. Such nonsense motivates me to campaign harder on behalf of the vulnerable road users who are being injured needlessly in 20mph schemes.

Incidentally, the latest St Albans scheme is an area, not a zone.

My point, which has been selectively omitted here, is that **that may be true of individual examples but, when taken together, these projects show a consistent and intolerable detrimental effect on road safety caused by 20mph limits. I have found no examples where 20mph led to a reduction in casualties, after accounting for national trends and traffic volume.**

**I await, and would welcome, such an example.**

### How 20's Plenty deal with road safety and casualties.

Whilst 20's Plenty have always recognised that there are wide ranging benefits from 20mph limits that go far beyond casualty reduction, there is ample information on their website regarding 20mph and road safety. A few are;-

Perceptions and Realities: a closer look at the risks which children and young people face in Britain today and what we can do to reduce them	<a href="#">A report from the Parliamentary Advisory Council for Transport Safety</a>	This report concludes that the greatest risks to children are on the road and looks at ways government and other agencies should work together to reduce road danger. They specifically name 20mph streets as a recommendation.
EFFECT OF 20 MPH TRAFFIC SPEED ZONES ON ROAD INJURIES IN LONDON, 1986-2006: CONTROLLED INTERRUPTED TIME SERIES ANALYSIS	<a href="#">Grundy, Steinbach, Edwards, Green, Armstrong &amp; Wilson</a> <a href="#">Download Article</a>	BMJ Article
THE EFFECT OF 20 MPH ZONES ON INEQUALITIES IN ROAD CASUALTIES IN LONDON	<a href="#">Grundy, Steinbach, Edwards, Green, Armstrong &amp; Wilson</a> <a href="#">Download Report</a>	Full report to London Road Safety Unit

The two studies by Grundy *et al* provide some interesting counters to Mr Bridgstock's assertions. In '*Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis*' (*British Medical Journal*, 2009; 339: b4469) their research clearly showed that "20mph zones are effective measures for reducing road casualties and deaths" Their data also showed that

"The introduction of 20 mph zones was associated with a 41.9% reduction in road casualties, after adjustment for underlying time trends. The percentage reduction was greatest in younger children and greater for the category of killed or seriously injured casualties than for minor injuries. There was no evidence of casualty migration to areas adjacent to 20 mph zones, where casualties also fell slightly by an average of 8.0% (4.4% to 11.5%)." (p. 1 of 6)

It is interesting to note that, when presented with damning current data on the effects of 20mph, 20's Plenty resort to old academic reports, or reports based on same.

They also use one of their favourite phrases "benefits ... far beyond road safety". This means supposed benefits, but not road safety improvements. And those supposed benefits have been challenged numerous times (eg low speeds use more fuel, not less, and cause more pollution).

**PACTS did not recommend 20mph**, they discussed it under "Good Practice Examples". They quote "the first year evaluation [for Portsmouth's 20mph] looks positive ...". **Unfortunately, in the light of more recent results, and full evaluation of all the Portsmouth results, that perception has since proved to be a false one.**

PACTS then consider a 1996 report (TRL215), which is weak on traffic volume and attributes success to 20mph zones even when credit is due to areas being by-passed (and then draws a invalid causal link between speed reductions and accident reductions). It does not consider long term trends, selection bias, etc. In any case, going back over 15 years, you would find reports that Concorde is safe to fly and other claims that have since been disproved. **Safety must include the most recent data and we must be wary of old information. The PACTS report does not provide ANY evidence to support 20mph.**

None of the referenced reports separates the effects of confounding variables such as engineering changes, traffic volumes, long term trends, etc from the effect of 20mph limits. Their references to traffic volume (or flows) are weak and it is not credible that casualties did not migrate out of the zones with the migrating traffic volume (note that the BMJ report says that there was "no evidence of casualty migration", which is not the same as saying it did not happen).

BMJ considers under-reporting of injuries (but then they authored the report on casualty under-reporting in 2006), but acknowledge that it is notoriously difficult to estimate. In any case, when did the BMJ become experts in road safety? If you wanted to know about cancer would you believe an IAM report? You should be asking why organisations with no road safety experience are producing reports on the subject - I suspect that they found a desperately needed source of funds and, of course, there was no need for new research, just a re-hash of measurements of varying quality provided by local authorities.

**The BMJ reports do not provide any evidence to support 20mph.**



### And Living Streets

Mr Bridgstock finds it 'repugnant' to suggest that lower speeds will result in lower injury. This is surely not debatable and is evidenced by almost every road safety organisation. It is also evidenced by simple laws of physics in that the time or distance to take avoiding action is inversely proportional to speed, and the kinetic energy in a moving vehicle (i.e the force of impact in an accident) is proportional to the speed *squared*. (Double the speed, and the force of impact goes up four times).

His claim that only low single figure percentages of pedestrians are killed where traffic flows at 30mph or 40mph has neither reference nor relevance.

Of course I do not dispute that lower speeds usually reduce the degree of injury. What I find repugnant is that anyone who is supposedly seriously interested in road safety would base their case on "hitting people at slower speeds kills fewer of them".

And by basing a road safety argument on the "simple laws of physics" misses the central human element.

The Laws of Physics are also being misquoted here (a point I made to Rod King at the Conference, but it suits him to peddle the same error). When a small object collides with a large object it is transfer of momentum that is predominant in damage caused (force of impact), not the kinetic energy. Momentum is proportional to speed, not speed squared.

For the record, braking distance is proportional to the square of speed, because the brakes have to convert kinetic energy to heat, and energy is proportional to the square of speed (energy = mass x velocity<sup>2</sup>; but momentum = mass x velocity).

But that all that is academic. We should be looking for ways of reducing collisions, not increasing collisions (which has happened in every 20mph scheme) while hoping to marginally reduce their impact. Further, the 20mph schemes usually report a small drop (say 1.5mph) in average speed (which would make negligible difference to injuries), but there will still be vehicles travelling at greater than average speeds that will increase the severity of the injuries.

### So why did these schemes fail?

Well firstly he has not demonstrated any degree of failure. None of his comments actually refer to 20mph, 30mph or even 40mph. Moreover, if you accept the line of thinking that Mr. Bridgstock presents, you would need to subscribe to the view that:

- *Roads should be made to feel less safe so that pedestrians and cyclists take more care (ensuring they keep well out of the way of drivers so that drivers do not need to slow down)*
- *Vehicles should be noisier so that 'vulnerable road users' keep out of their way*
- *Drivers should be allowed to go fast enough not to feel frustrated*
- *Drivers should drive faster so that 'vulnerable road users' pay more attention to the fast moving objects in their peripheral vision*
- *Drivers should be allowed to drive faster so that they are forced to concentrate more*
- *Drivers should not have to check speed limit signs or their speedometer*
- *Drivers should decide for themselves what is safe rather than sticking to what is legal.*

That is certainly not our vision of safer roads.

This is a desperate comment.

My list is presents some of the factors that influence road safety, and specifically ones where reducing the limit from a higher value to 20mph would have a detrimental effect on road safety.

It is scurrilous to suggest that my approach leads to the alternative views that are listed on the left, particularly when they include the emotive language favoured by 20's Plenty (language which is unprofessional and only obscures the factors which actually influence road safety.

20's Plenty are in denial about the injuries being caused by the conditions created by 20mph, particularly where pedestrians are encouraged to feel safer.

I wonder what 20's Plenty's vision of safer roads is?

The evidence from what they have long proposed is one where roads feel safe but where the risks (and hence injuries) are greater, especially among the vulnerable road users who they are desperate to appeal to.

What's more, they do not want to debate the effectiveness of 20mph on casualties.

## Safety Principles and the Law

Here Mr. Bridgstock is unbelievably scathing about the 'wisdom' of the general public and their right to have their views taken account of. Yet at the same time it is the general public that he seems to put so much faith in to drive at an appropriate speed.

He goes on to talk about what causes (road) accidents. This is a point that many people make. It is not that speed necessarily causes collisions, but that when you get a combination of conditions, (fog, parked car, tired driver, tired pedestrian, busy street, unsignalled move, etc) it is the speed which dictates both whether those involved can avoid a collision and also the severity of the consequence of a collision. No-one is saying that driving at 30mph in itself causes collisions, but merely that in our crowded towns driving at 30mph has so few benefits to weigh against all the disbenefits that come with such a speed.

He then goes on to cite two irrelevant sections of the law to 'prove' that 20 mph speed limits are 'unlawful'. Most road traffic law relating to speed limits is contained in the Road Traffic Regulation Act 1984. Part IV deals specifically with speed limits and the speed limit order making process. Ultimately, it is Parliament that makes the law, and as the Government is increasingly supportive of the '20s Plenty' approach, one assumes that they consider it to be 'lawful'.

I explained quite clearly why the public cannot be in possession of all of the information necessary to make important decisions about road safety. That is compounded when they are bombarded by misinformation from 20's Plenty, Brake, etc.

Tell the public what has actually happened to casualties in 20mph schemes (and why) and then ask if they support 20mph. The results will be very different to those derived using manipulative surveys.

I talk about the causes of accidents because, as a safety engineer, that is what I am trained to do. Only by understanding those can we make progress towards reducing them.

20's Plenty assert that "it is the speed which dictates both whether those involved can avoid a collision". **That is patently not true.** As I explained in my conference presentation, once an accident sequence has started it is the actions of the parties involved (which could involve braking, accelerating or swerving, or a combination), road engineering and luck.

Speed does not have a simple relationship with accident likelihood. To illustrate that, consider a vehicle going through a traffic light junction on red; the faster it goes, the less time it is in the junction and the less chance there is of it being hit or hitting something. But if another vehicle happens to be on a collision course then the result will be worse, and the drivers will have less time to react. **But the faster speed would have reduced the original likelihood.** Note that I am obviously not advocating going through red lights, just using it to illustrate factors that influence severity and likelihood.

Further, the claimed benefit that drivers have more time to react is relevant only when they have driven in such a way as to create an emergency situation. Most drivers are sufficiently aware most of the time to avoid emergency situations. The argument that 20mph might offer a benefit in an emergency situation takes wishful thinking to new levels.

And finally, since 20mph limits are often implemented only where the 85%ile is already below 25mph, and the typical reduction in average speeds is 1-2mph, then the reaction times are going to be virtually identical.

**It is wrong and seriously misleading to suggest that speed dictates whether a collision may be avoided, and inconceivable that any small reduction in vehicle speeds due to 20mph makes a measurable difference to reaction times.**

**This is further compounded by typical findings that average speeds increase on some roads following a change from 30mph to 20mph (Portsmouth, Bristol and Warrington all reported this)**

### Eric Bridgstock's Credentials

Eric Bridgstock calls himself an 'Independent Road Safety Researcher' but he is not a ROAD safety expert. He is someone who is:

*"responsible for assembling, reviewing and authorising safety cases for systems as complex and diverse as air traffic control radars, ship navigation, and weapons. He has previously worked on unmanned air vehicles, weapon test ranges and civil flight control systems."*

#### **i.e. nothing to do with road safety.**

On the other hand. Road safety experts in the country with the safest roads in the world (the Netherlands) are busy implementing 30 kph (18.6 mph) limits on residential roads, and organisations such as RoadPeace and BRAKE, whose aim is to reduce deaths and injuries and support those who've lost loved ones through road collisions, are shouting loudly for 20mph limits.

Would these organisations really call for something which would lead to increased death and injury?

**I am sure that the County Councillors will make a correct decision about implementing 20mph limits in Chichester. Many people in Chichester want a better environment with lower speeds, lower noise, less pollution, easier and safer walking and cycling, all positive things. I have every confidence that, with a full investigation and consideration of all the facts, the people of Chichester will opt to create a better city by implementing this scheme. I trust that as a Councillor you will be able to help them.**

I have never described myself as a road safety expert. I have spent over five years challenging bogus claims for the benefits of speed management interventions, including reducing speed limits.

I note that the summary omits my road safety

*... held a full driving licence since 1972 and was Chairman of the London and Herts. RoSPA Advanced Drivers Group from 1991-94.*

*He is not a member of, or affiliated to, any road safety organisation and is independent of all vested commercial or political interests. He is self-funded and has not received payment in connection with any road safety activities.*

I passed the RoSPA Advanced Driving Test on each of the three occasions I took it, applying the Roadcraft system of car control and hazard management.

Many of the methods used during my "day job" can be applied to road safety – indeed that was the thrust of my proposed conference presentation, some of which I managed to convey during my pre-debate presentation. The thrust of my talk was the need to introduce more rigour and safety engineering into road safety, akin to the air safety and military safety world. I explained the anatomy of an accident, comprising a hazardous condition and a triggering event - and was pleased that one or two delegates quickly recognised the validity in that (eg recognising the hazard of a silent electric car and the event of someone walking in front of it). This approach revealed the invalidity of claims that reducing average speeds by 1-2 mph cannot prevent collisions.

I am happy to compare road safety credentials with Rod King, or anyone else from 20's Plenty.

I have had many exchanges with Brake on the subject of what can improve road safety, but they have shown themselves more interested in protecting their income stream from the speed camera industry (PACTS, incidentally, receives thousands of pounds annually from speed camera manufacturers, providers of speed awareness courses, etc.

**20's Plenty say "Would these organisations really call for something which would lead to increased death and injury?". I have evidence that they do.**