

# 20mph is Key to Vision Zero. No Fatal or Serious Injuries

A 20's Plenty for Us Briefing Nov 2019

[http://www.20splenty.org/briefings/vision\\_zero](http://www.20splenty.org/briefings/vision_zero)

Vision Zero adopts a safe systems approach and commitment to injury prevention. Slower speeds and 20mph (30km/h) limits are key. Transport for London are setting a 20mph limit on all its roads inside the Congestion Charging Zone. Cambridge, Massachusetts is reducing city limits from 25mph to 20mph. San Francisco is adopting city-wide 20mph.

## 20's Plenty for Us

...making your place a better place to be

Vision Zero (VZ) is a safe systems approach to mobility policy. It says the setup, maintenance of roads, vehicles and their user rules should aim at zero deaths or serious injuries. It's normal to set zero for air or rail risks and it is the ethical standard for roads. Transport for London and authorities in Brighton, Blackpool, Liverpool, Birmingham and many others are adopting it. Key is less system-wide kinetic energy, where  $e = \frac{1}{2} mv^2$  ( $e$  = energy,  $m$  = mass of vehicles and  $v$  = velocity/speed).

Injury to our human bodies above 20mph rises sharply to severe. 20mph is the inflection point of the graph of survivability. People, especially children and the elderly, make mistakes. As speeds reduce those mistakes aren't as serious. Taking avoiding action at a lower speed results in a near miss or slight injury. There are 7-10 times fewer fatalities if hit at 20mph compared to 30mph. Traffic can stop at half the distance (12m vs 23m). Small differences in speed make large differences in safety!



### Likelihood of severe or fatal injury for pedestrians struck by drivers traveling at these speeds<sup>1</sup>

Vision Zero policies, duty of care to public health, traffic reduction and the climate emergency are all arguments for lower speed limits in political and moral debates on healthy streets and place making. 25mph wasn't low enough for Cambridge, Massachusetts which is going 20mph<sup>2</sup>. Transport for London are reducing speeds to 20mph on some of its red route network including all of its roads in the Congestion Charging Zone<sup>3</sup>.

Action Vision Zero [www.actionvisionzero.org](http://www.actionvisionzero.org) shows how to press your council for a Vision Zero commitment in the UK with policies like speed reduction, creating safe conditions for walking and cycling (eg protected cycle lanes), reducing traffic and safe vehicles. In the US its [www.visionzeronetwork.org](http://www.visionzeronetwork.org) with 30+ cities that have set a goal of eliminating traffic deaths and serious injuries among all road users within an explicit timeframe. **Cite Vision Zero and safe systems when you argue for 20mph limits where you live.**

<sup>1</sup> Tefft, Brian C. [Impact Speed and a Pedestrian's Risk of Severe Injury or Death](#), AAA Foundation for Traffic Safety, Washington DC, September, 2011

<sup>2</sup> [www.cambridgema.gov/Departments/trafficparkingandtransportation/speedlimitsincambridge](http://www.cambridgema.gov/Departments/trafficparkingandtransportation/speedlimitsincambridge)

<sup>3</sup> [tfl.gov.uk/info-for/media/press-releases/2019/september/plans-for-20mph-speed-limit-in-central-london-given-the-green-light](http://tfl.gov.uk/info-for/media/press-releases/2019/september/plans-for-20mph-speed-limit-in-central-london-given-the-green-light)

20's Plenty for Us campaigns for a 20mph default speed limit in built up areas without physical calming.

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