



Case Study – UK Road Safety

A geographically targeted analysis
on serious or fatal road accidents
2018-2020



Why is there a need for such a campaign?

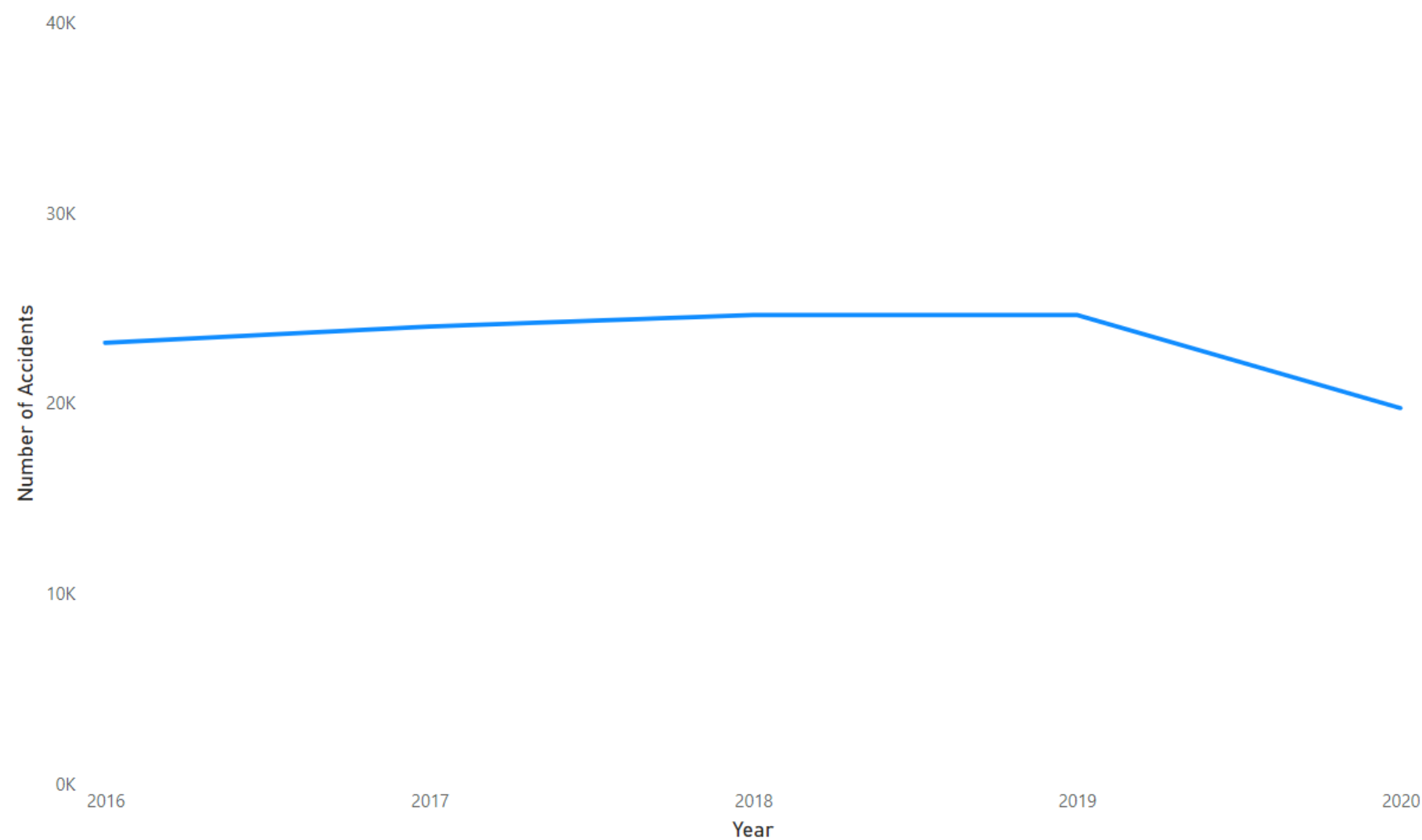
Where do the most serious/fatal accidents occur?

What conditions have the greatest affect and **when**?

Who should the campaign target?

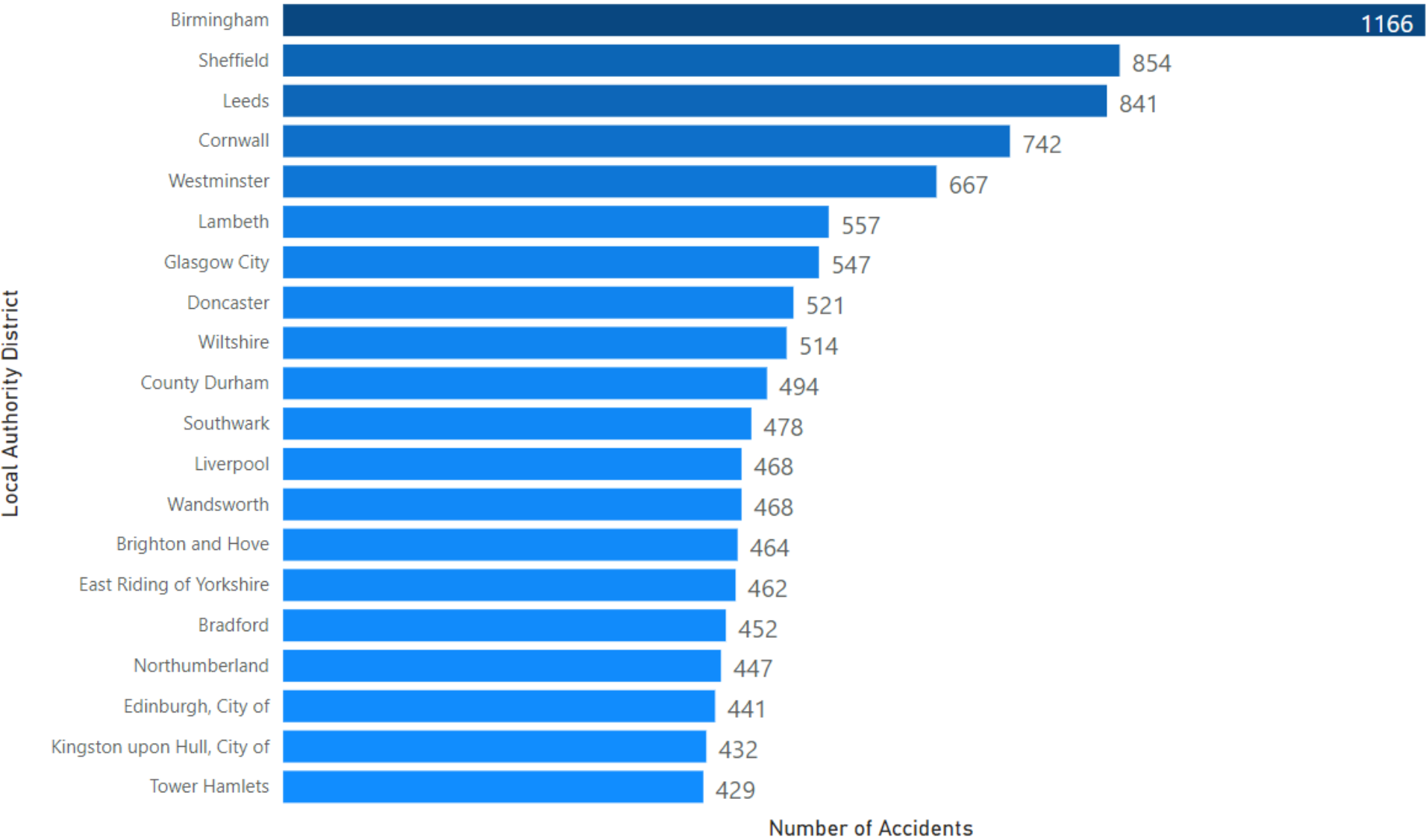
Serious/fatal accident numbers have gone effectively unchanged in 5 years

subtle increase pre-pandemic



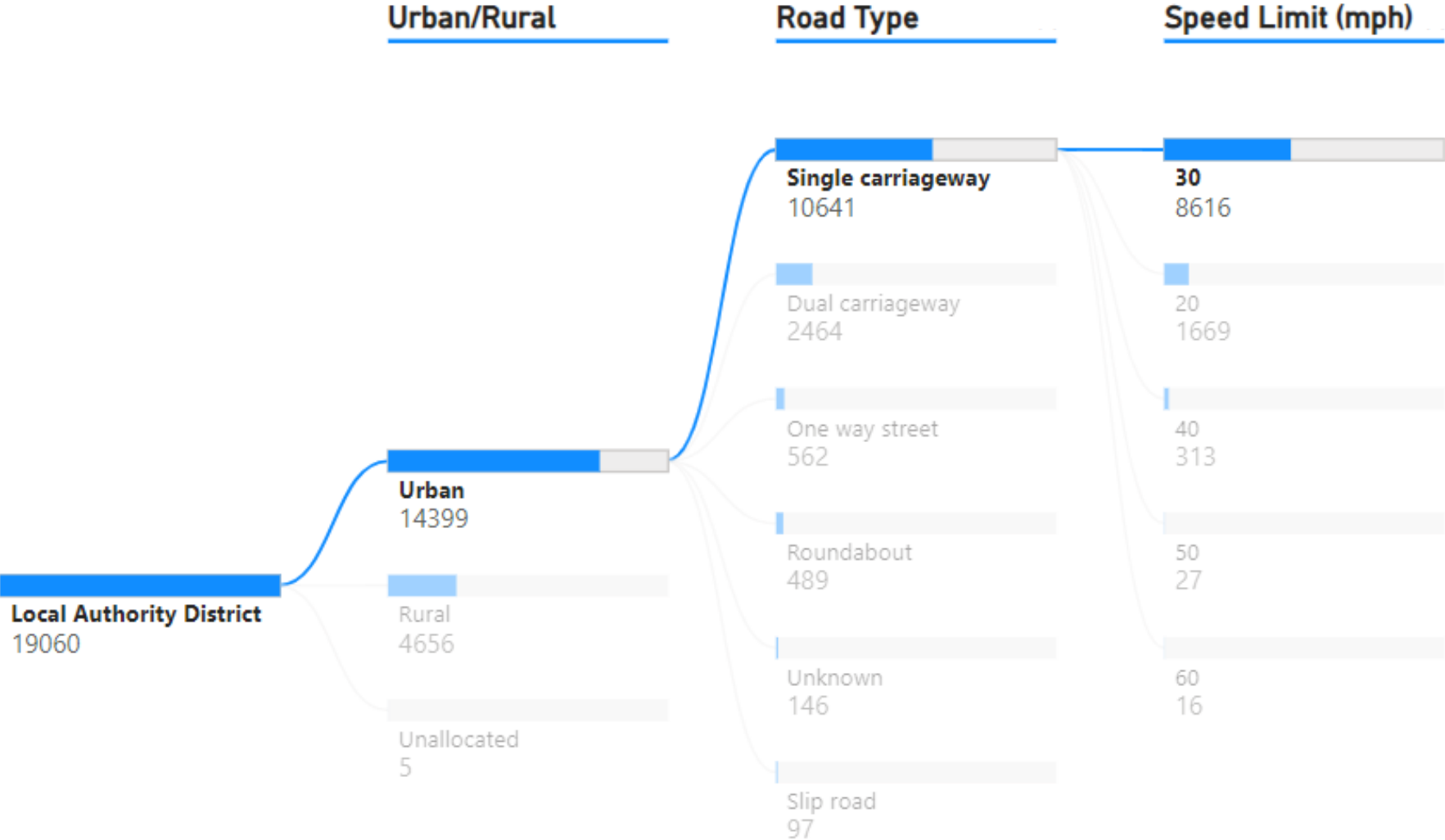
Birmingham leads the 20 Local Authority Districts with the highest number of accidents

serious/fatal, 2018-2020



Signs would be most effective on urban single carriageways where the speed limit is 30 mph

top 20 districts, serious/fatal, 2018-2020





T or STAGGERED JUNCTIONS

are involved in over 30% of accidents



RAIN

is the most prevalent weather
condition during accidents

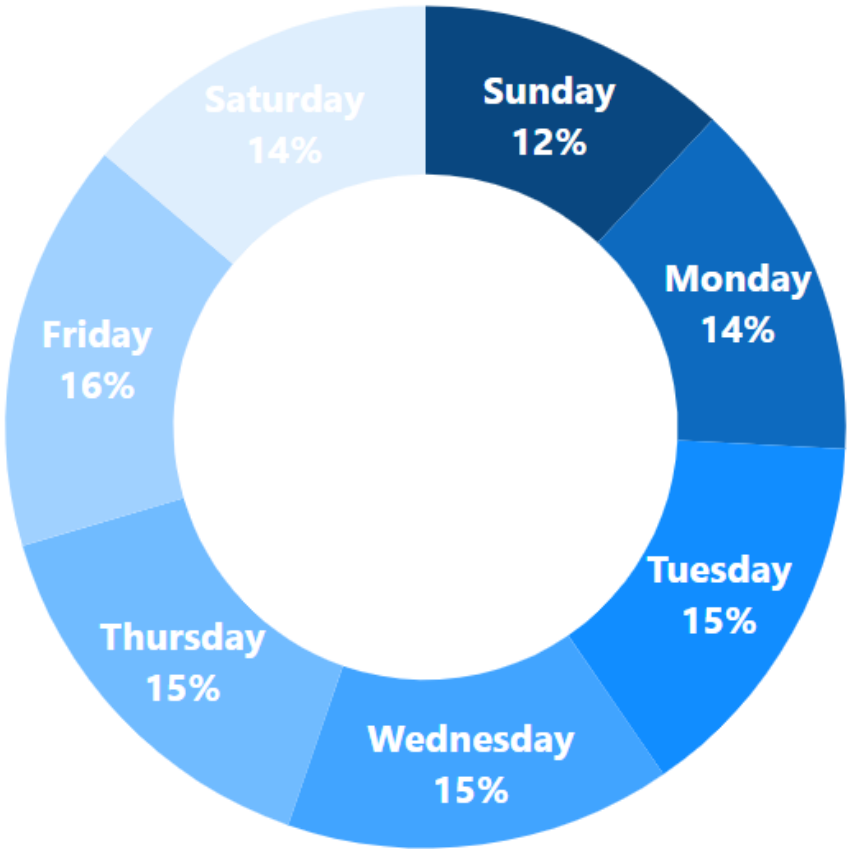
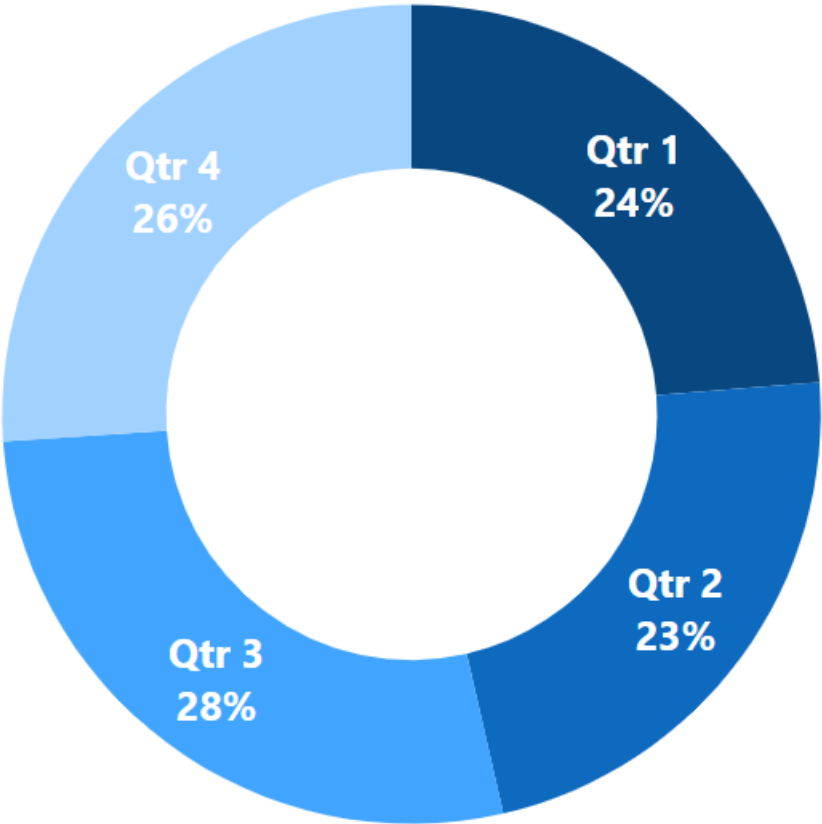


17:00 – 18:00

is the time period that most
accidents occur

No sizable seasonality or daily variation

top 20 districts, serious/fatal, 2018-2020





PEDAL CYCLES

are the most accident prone vehicles
apart from cars



25-35

year old drivers are involved in the
highest number of accidents



WORK JOURNEYS

are the most common type of trip
leading to accidents

A final consideration: can the presence of digital signs cause accidents?

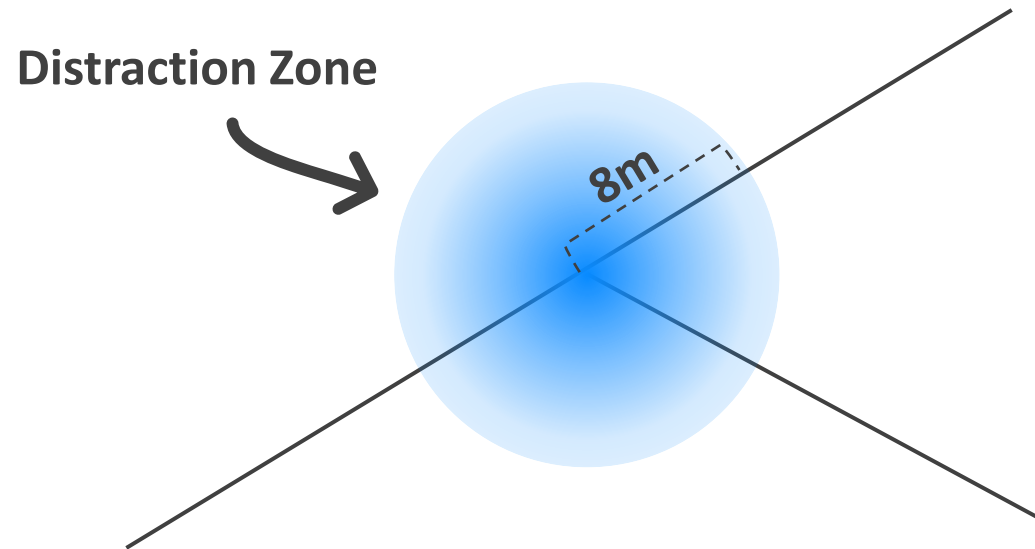
How long does a human take to react to avoid a collision?

*Safe approximation – 600 milliseconds**

How much distance is covered in that amount of time if travelling at the speed limit?

8 meters at 30 mph

Should signs be built outside of this zone?



* MIT News, 'Study measures how fast humans react to road hazards' (2019)



Top 20 Local Authority Districts

Urban, Single Carriageways, 30 mph Zones

T/Staggered Junctions, Rain, 17:00-18:00

Pedal Cyclists, Drivers 25-35, Work Journeys

Keep Digital Signs Outside of Distraction Zone

An aerial, high-angle view of a multi-lane highway with several cars driving on it. The highway is on the left side of the frame, and a body of water is on the right. The text 'Thank You' is overlaid on the right side of the image.

Thank You
