### WEBINAR WILL BEGIN AT 14:00

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CHANGING ROAD USE POST-PANDEMIC

RICHARD OWEN, CRAIG SMITH AND DAN SAUNDERS (BASEMAP)

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## WEBINAR SUPPORT

- Please use the chat function to discuss topics raised as we go along
- If you have a question, start your comment with QUESTION to make it clear to the presenter
- This is being recorded and will be available to review shortly
- The PDF slides are also available



# CHANGING ROAD USE POST PANDEMIC

## Traffic levels

## Behaviour – Speed

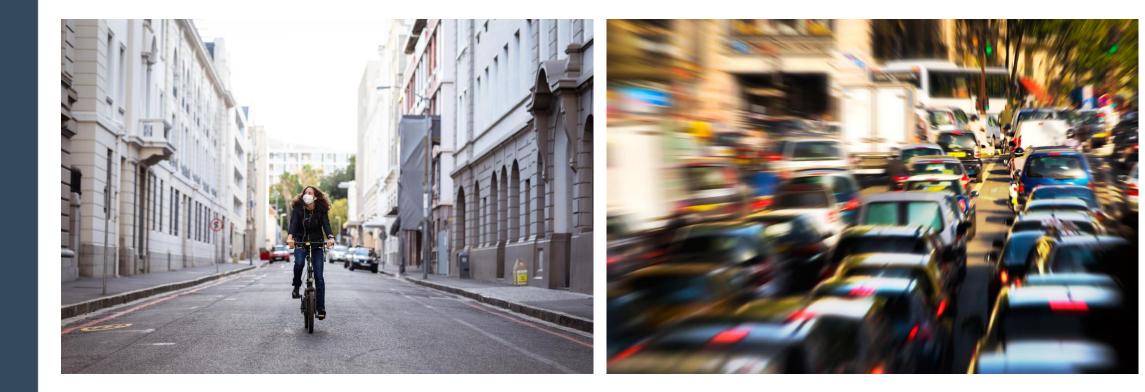
## **Road casualties**











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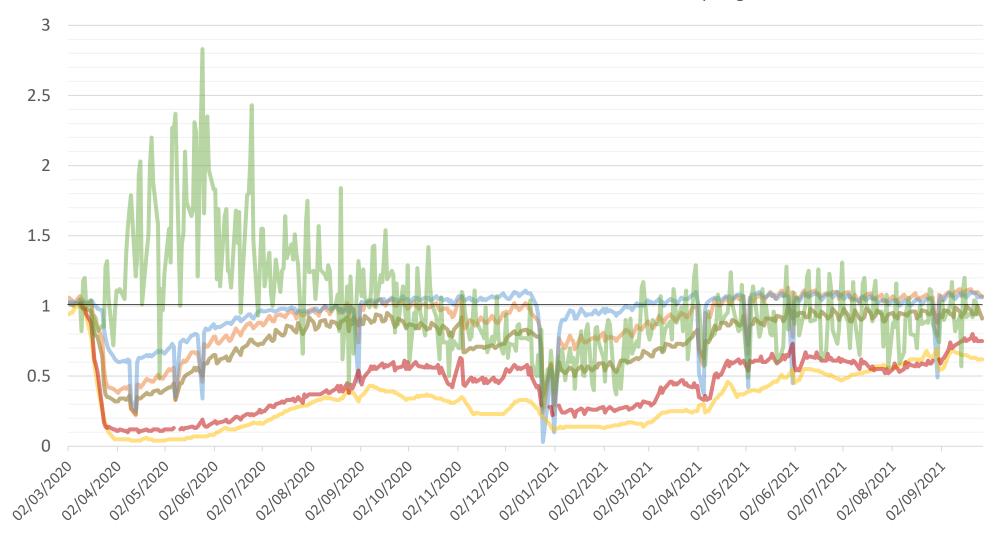


# POLL





-Cars -Vans -LGV -Trains -Bus -Cycling

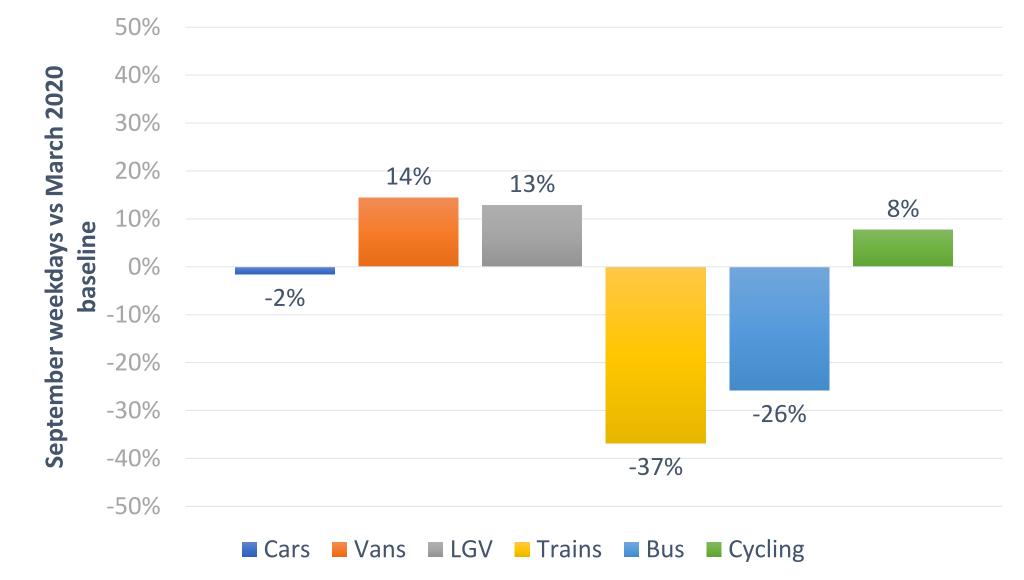


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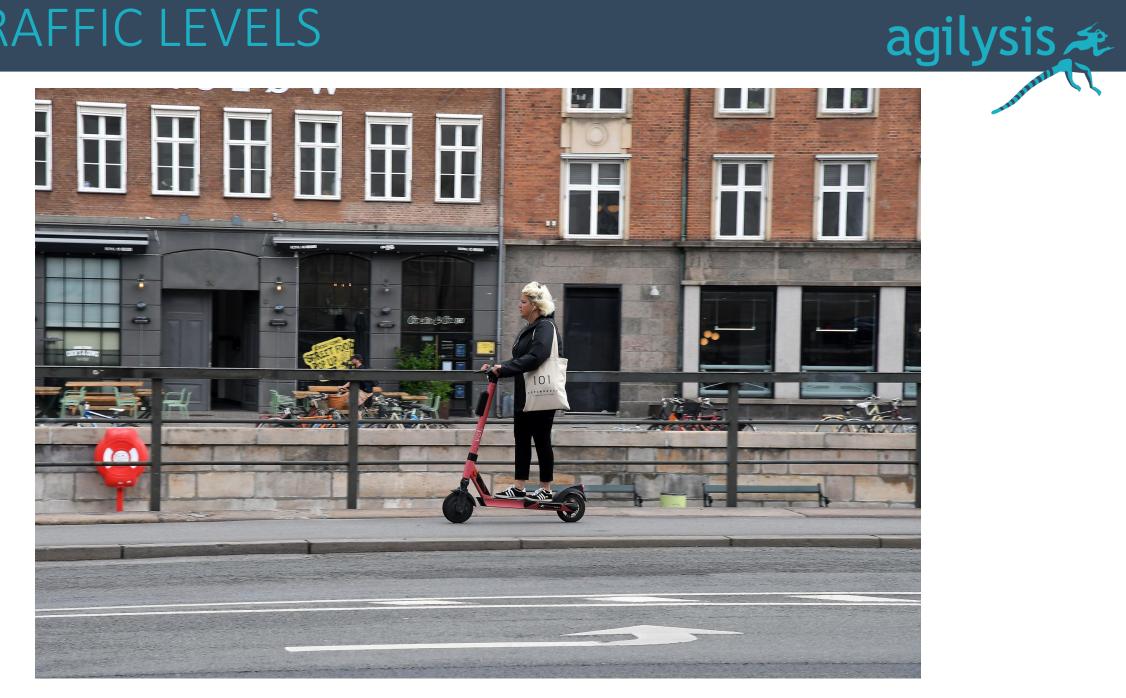
#### **Current Traffic Levels – September 2021**

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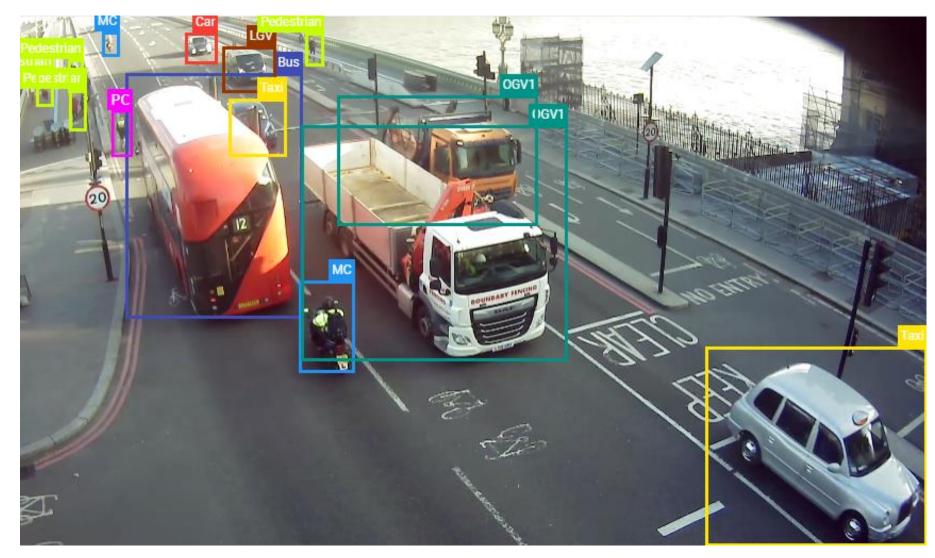


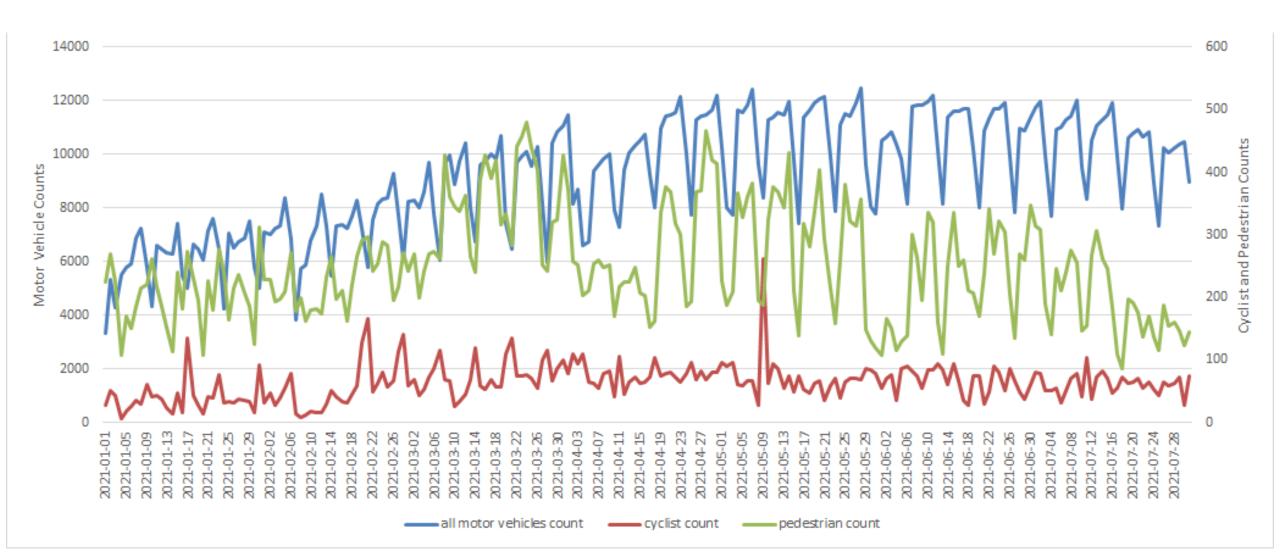
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#### Alternative data sources – Video analytics



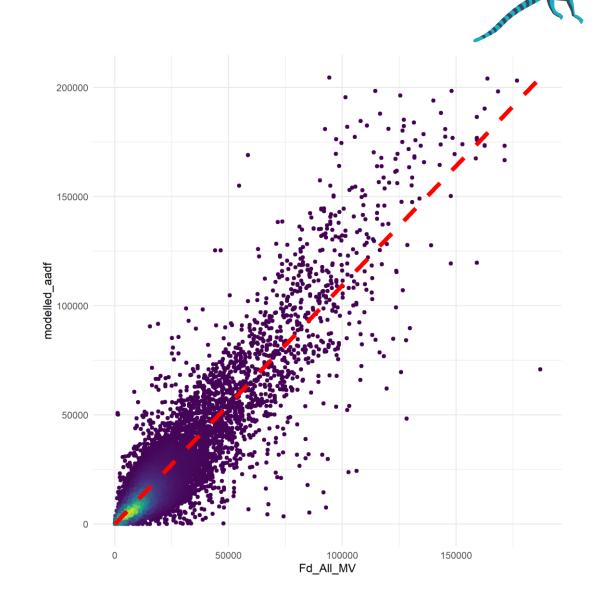


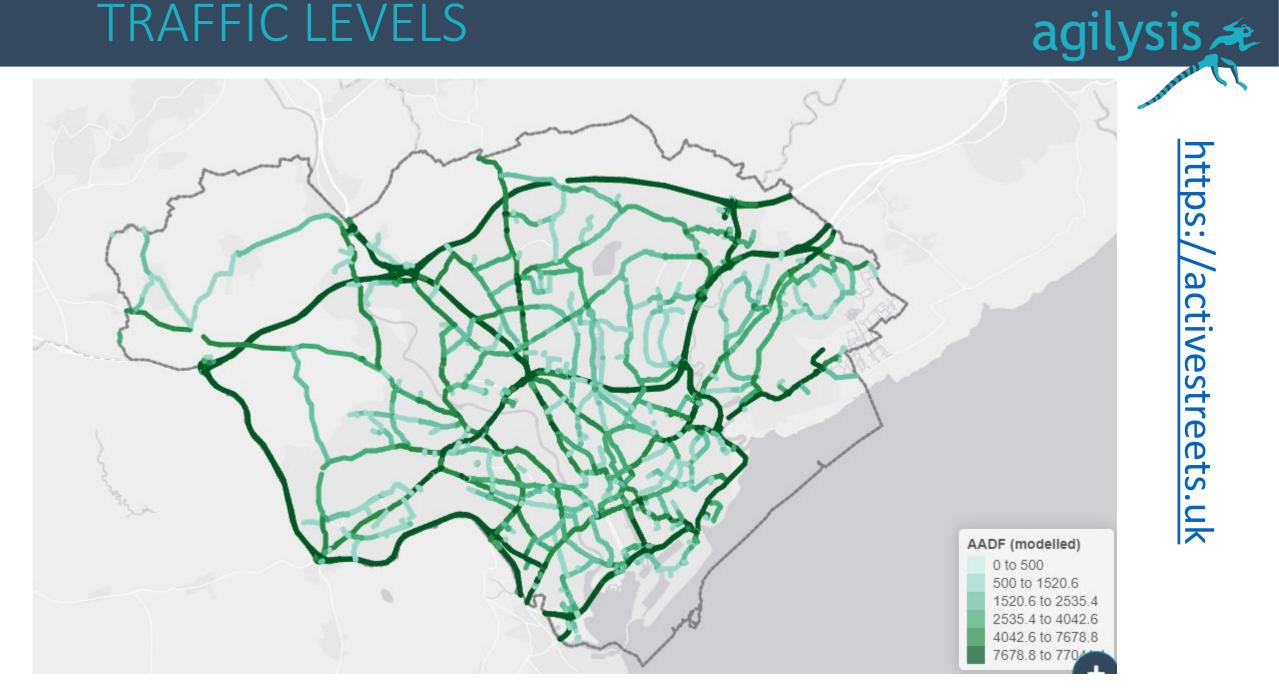


#### Alternative data sources – GPS tracks



- Telematics counts are matched to 18,278 DfT count point locations
- Bayesian Model used
- Assumes AADF is Poisson distributed
- With mean proportional to the telematics counts
- Scaling factor varies by road type (Single/Dual/Slip Road/Other)
- Tensorflow uses known DfT traffic counts (and MCMC) to sample from the distributions of these scaling factors
- Gives us a probabilistic model of AADF based on the telematics counts





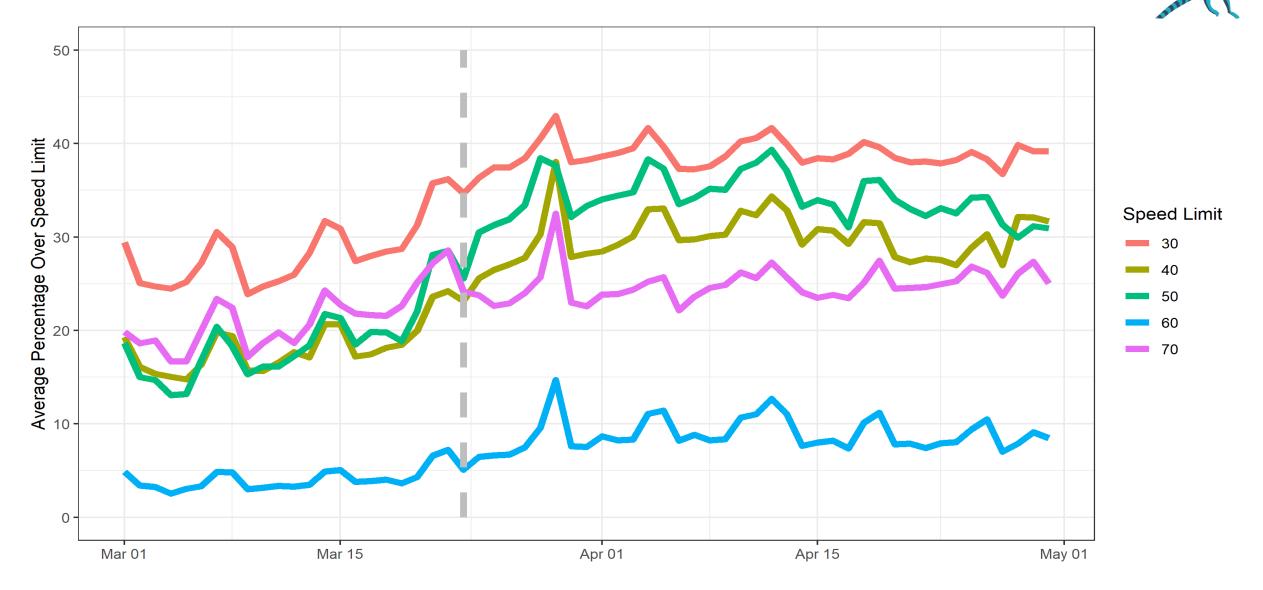
## **BEHAVIOUR - SPEED**





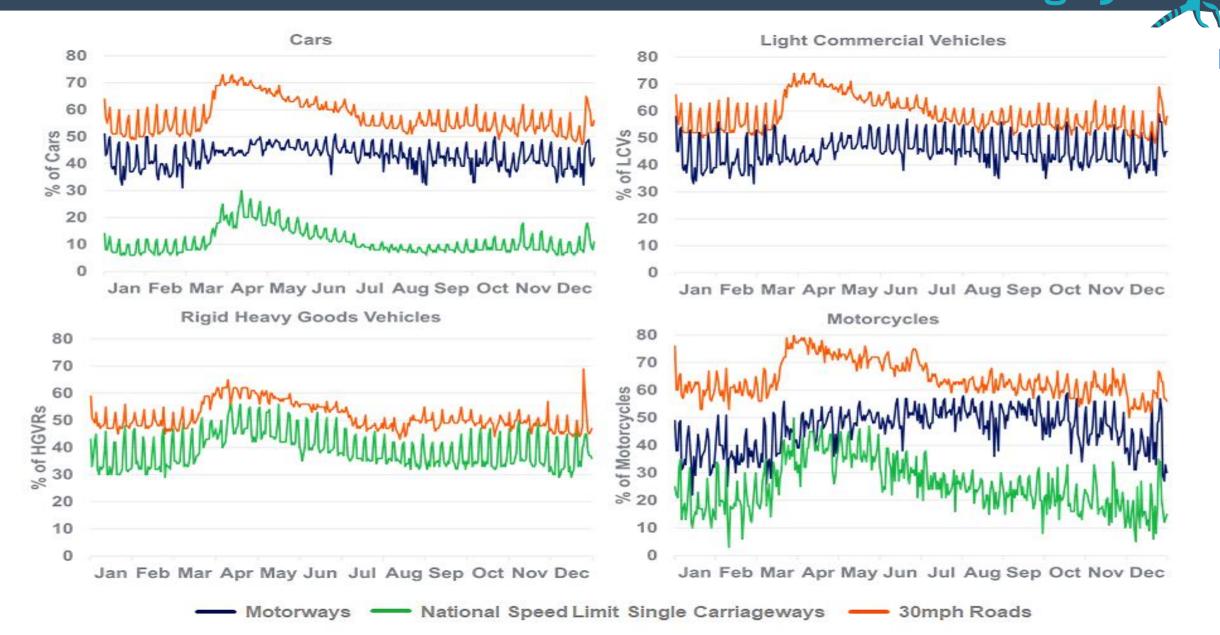
# POLL

### **BEHAVIOUR - SPEED**



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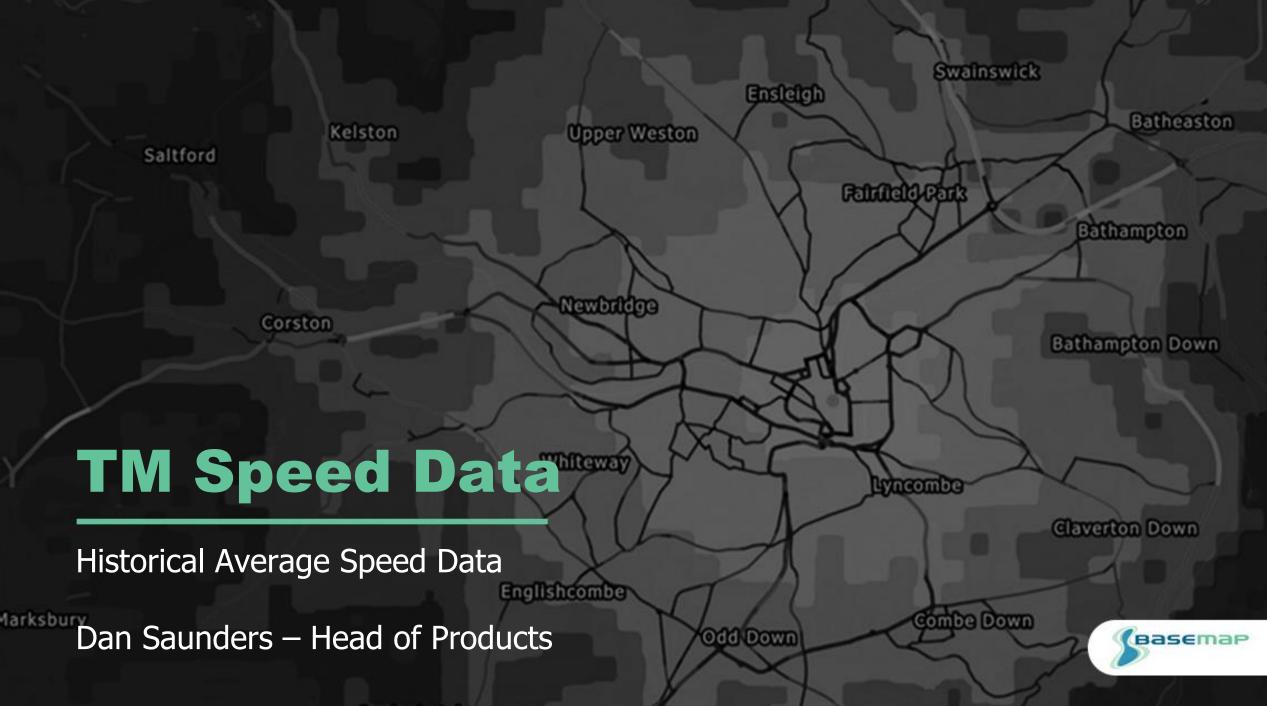
#### BEHAVIOUR - SPEED



https://www.gov.uk/government/statistical-data-sets/vehicle-speed-compliance-statistics-data-tables-spe

Average Speed (Cars, mph)	2020	2019
(a) Motorways (28 sites)	70	69
(b) National speed limit single carriageways (20 sites <sup>2</sup> )	51	50
(c) 30 mph speed limit roads (21 sites)	31	31
(d) 20 mph speed limit roads <sup>3</sup> (10 sites)	26	26

https://www.gov.uk/government/statistical-data-sets/vehicle-speed-compliance-statistics-data-tables-spe



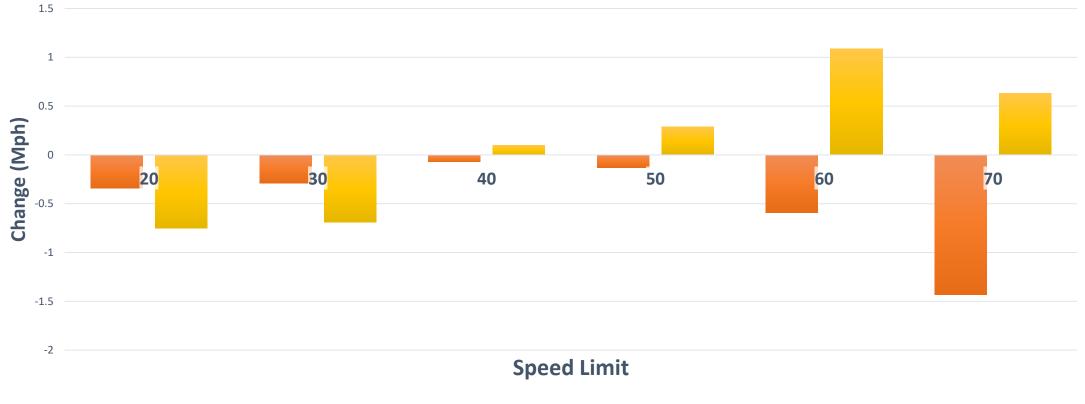
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#### **BEHAVIOUR - SPEED**



#### **TM Speed Analysis**

April '19 – Mar '20 vs April '20 – Mar '21



■ 85th Percentile Speed ■ Average Speed







# POLL

Chart 1: Percentage change of casualties of all severities and motor traffic, compared to 3-year average for 2017 to 2019, Great Britain, 2020

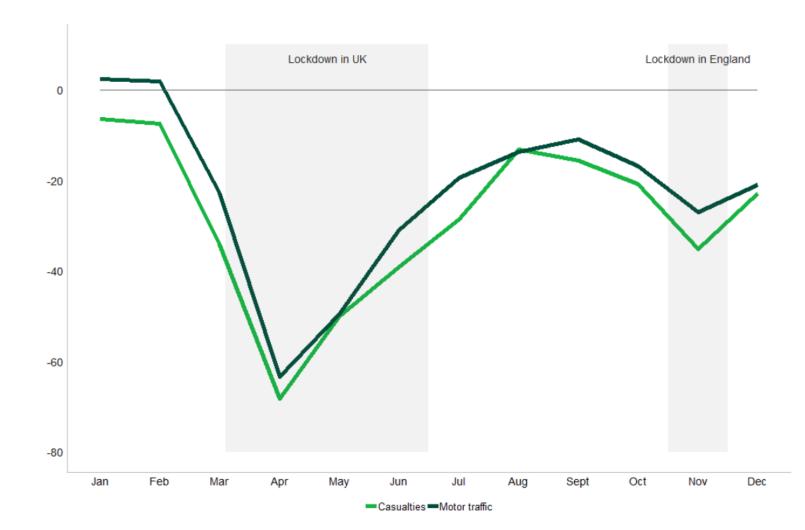


Chart 3: Percentage change of casualties and motor traffic, compared to the 3-year average for 2017 to 2019, by severity, Great Britain, 2020

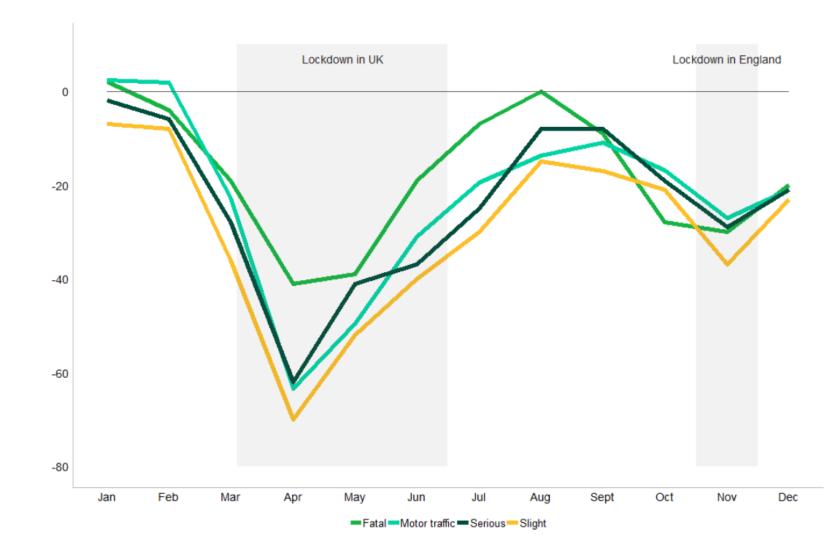
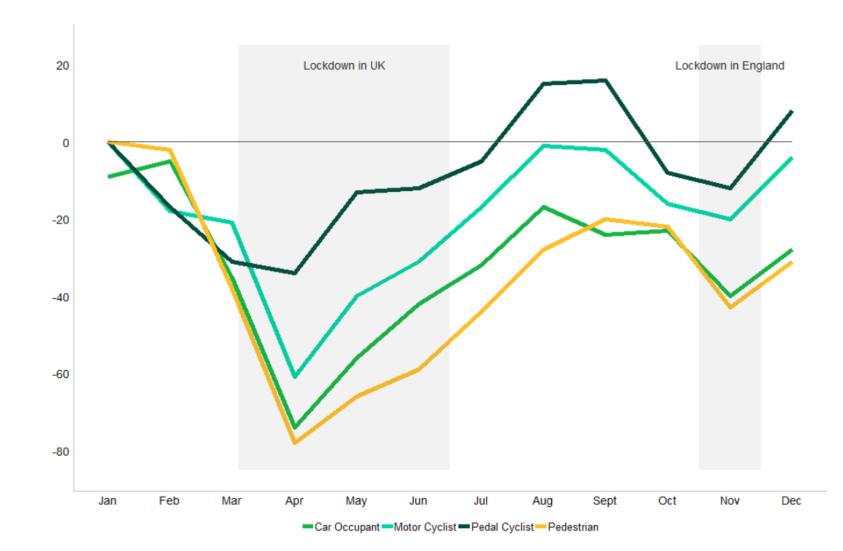


Chart 4: Percentage change of casualties compared to 3-year average for 2017 to 2019 by month and road user type: Great Britain, 2020



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Chart 8: Percentage change of casualties compared to the 3-year average for 2017 to 2019 by month and sex: Great Britain, 2020

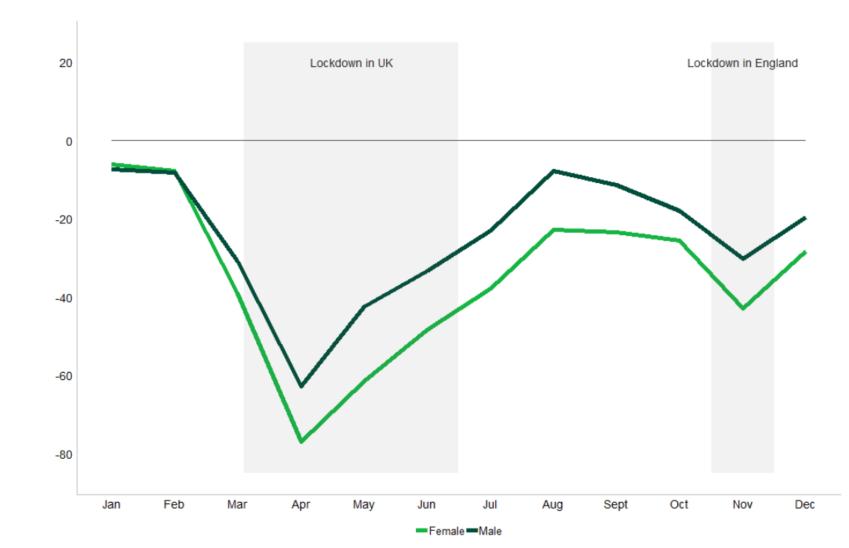


Chart 9: Percentage change of casualties compared to 3-year average for 2017 to 2019 by month and age group: Great Britain, 2020 <u>RAS30024</u>

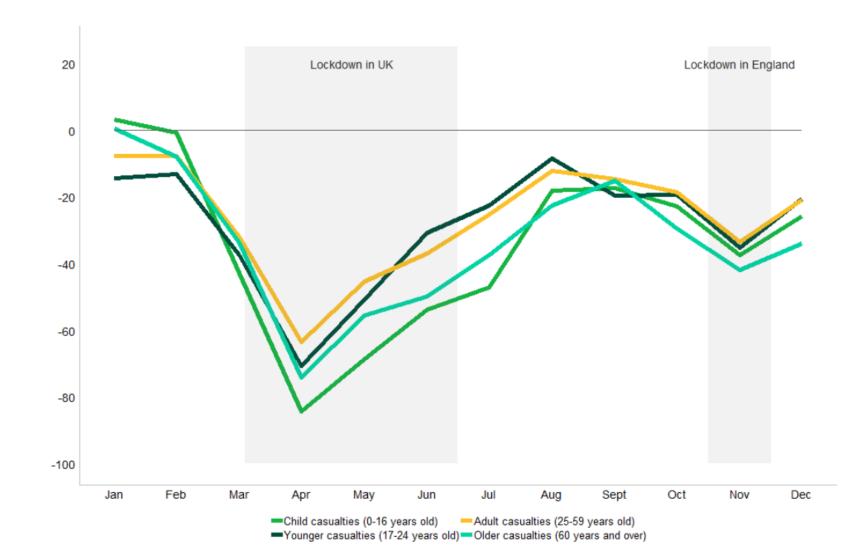


Chart 3: Casualty rates per billion vehicle miles by severity in Great Britain 2010 to 2020 (RAS30001)

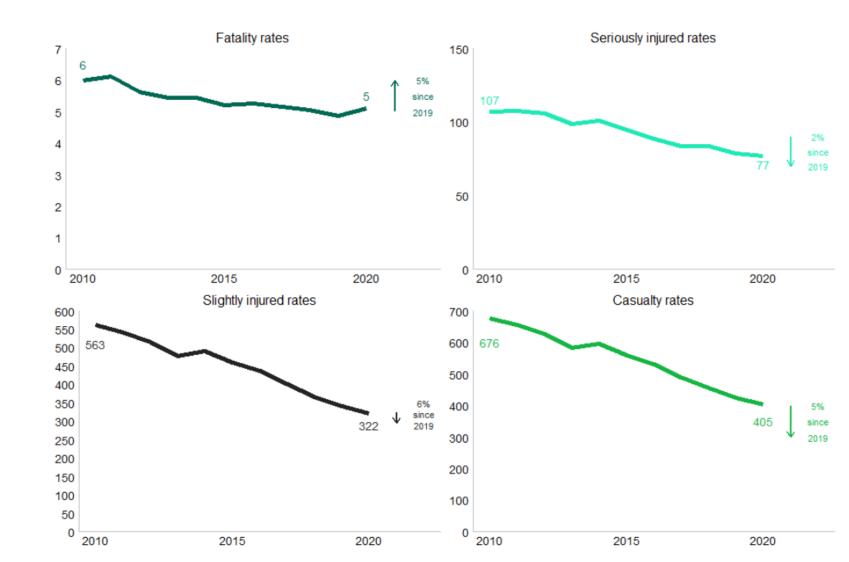
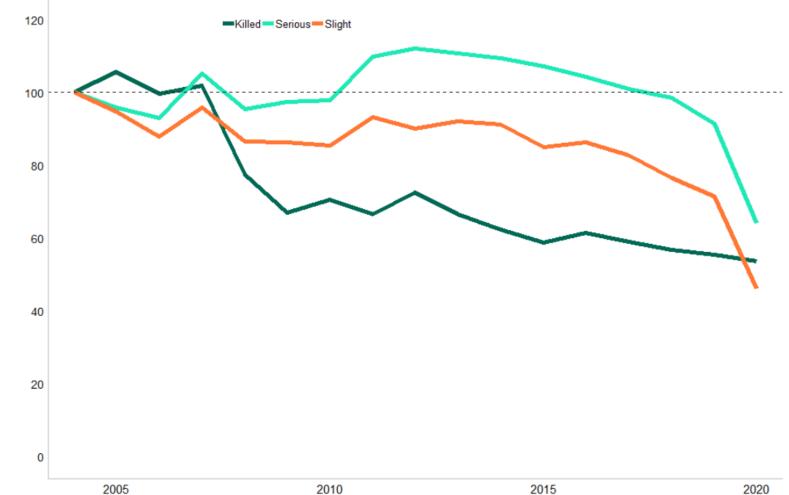


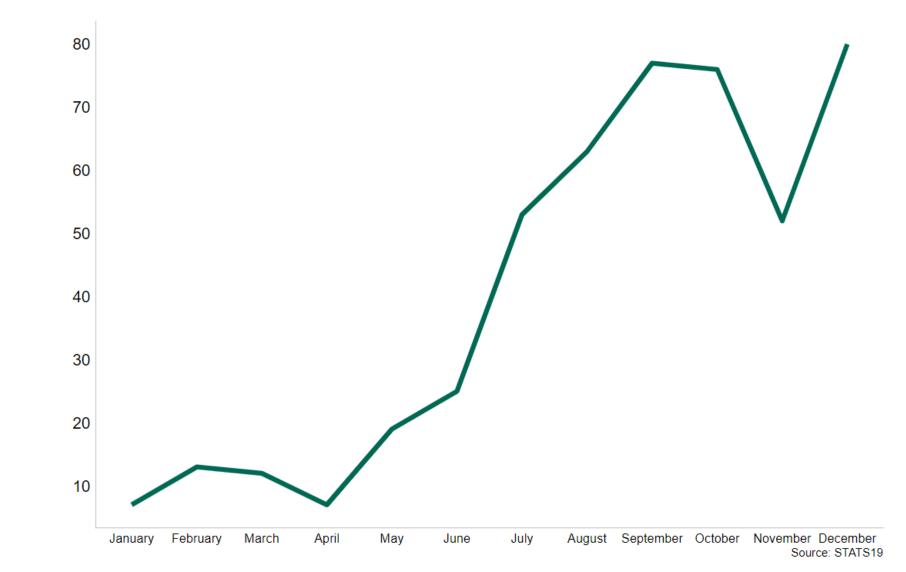
Chart 2: Index of casualty rates of pedal cycle casualties by severity, GB: 2004 to 2020 (Index 2004=100)



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Chart 1: Reported casualties in accidents involving e-scooters by month, GB:2020



# WHAT DOES THIS MEAN?

- Have road use patterns changed significantly?
- Have road user behaviours changed?
- Are road risks evolving?
- What does this mean for you?



## Road Safety: What Works and What Does Not Work?

Tuesday 12th October 2021 at 14:00-15:00

Presented by Richard Owen and Tanya Fosdick, with guest speakers Neale Kinnear from TRL, Matt Staton from Road Safety GB, Brian Lawton from the Road Safety Foundation and Jessica Truong from Towards Zero Foundation

Register now

Read more

#### Second Decade of Action

Tuesday 2nd November 2021 at 14:00-15:00

Presented by Dan Campsall with guest speakers Lotte Brondum from the Global Alliance and Jonathan Passmore from Road Safety, Injury & Violence Prevention

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New Ways of Accessing Road Safety Data

Customer.

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Tuesday 19th October 2021 at 14:00-15:00

Presented by Richard Owen

😰 Register now 🥤 📼 Read more

#### What Works part 2

Tuesday 9th November 2021 at 14:00-15:00

#### Presented by Dan Campsall and Tanya Fosdick

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Read more



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