

16th October 2024

WM-Air, Strand#2 Vehicles

Prof. Francis D. Pope

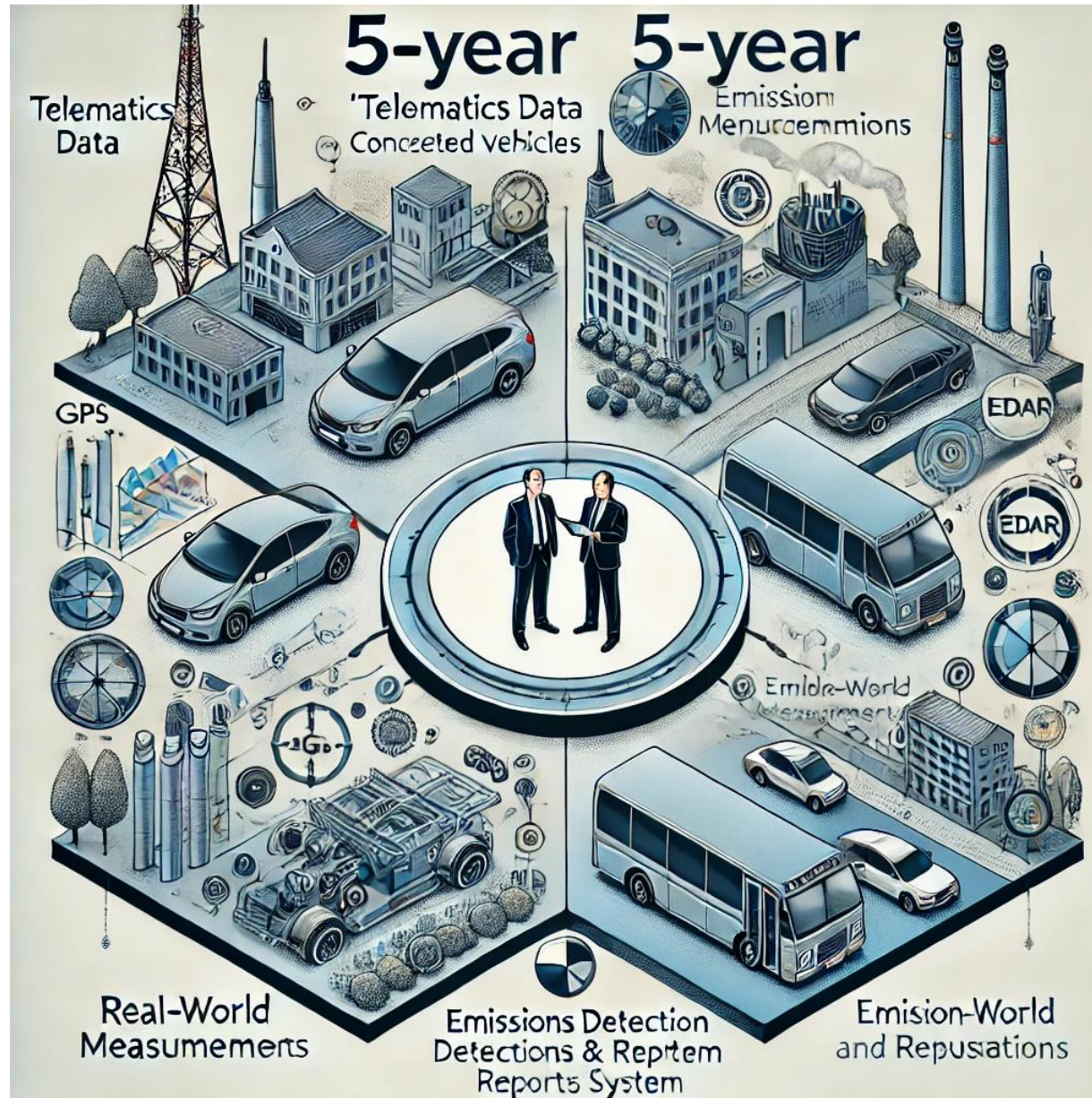
Dr. Omid Ghaffarpasand

School of Geography, Earth, and Environmental Sciences,
University of Birmingham, Birmingham, UK

WM-AIR
CLEAN AIR SCIENCE FOR
THE WEST MIDLANDS



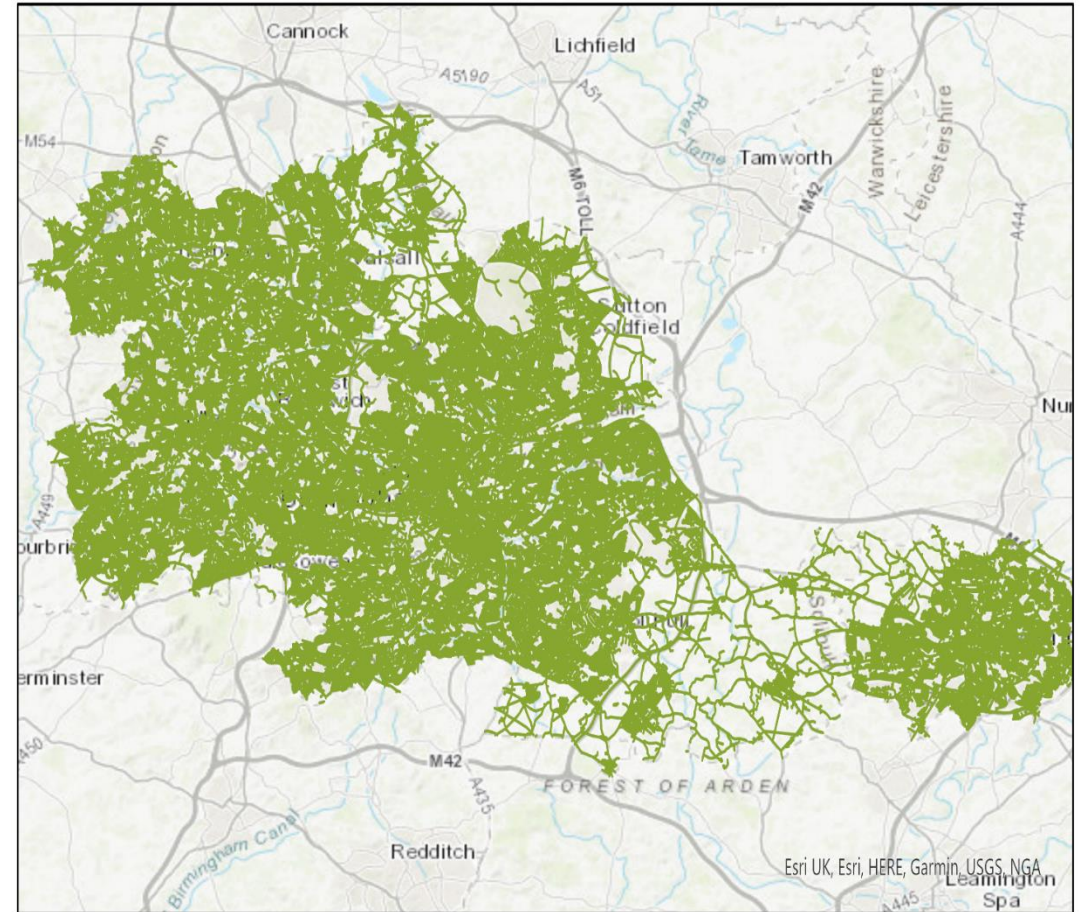
Strand #2; vehicles



Birmingham, October 2019



Telematics data a paramount need for sustainable transport

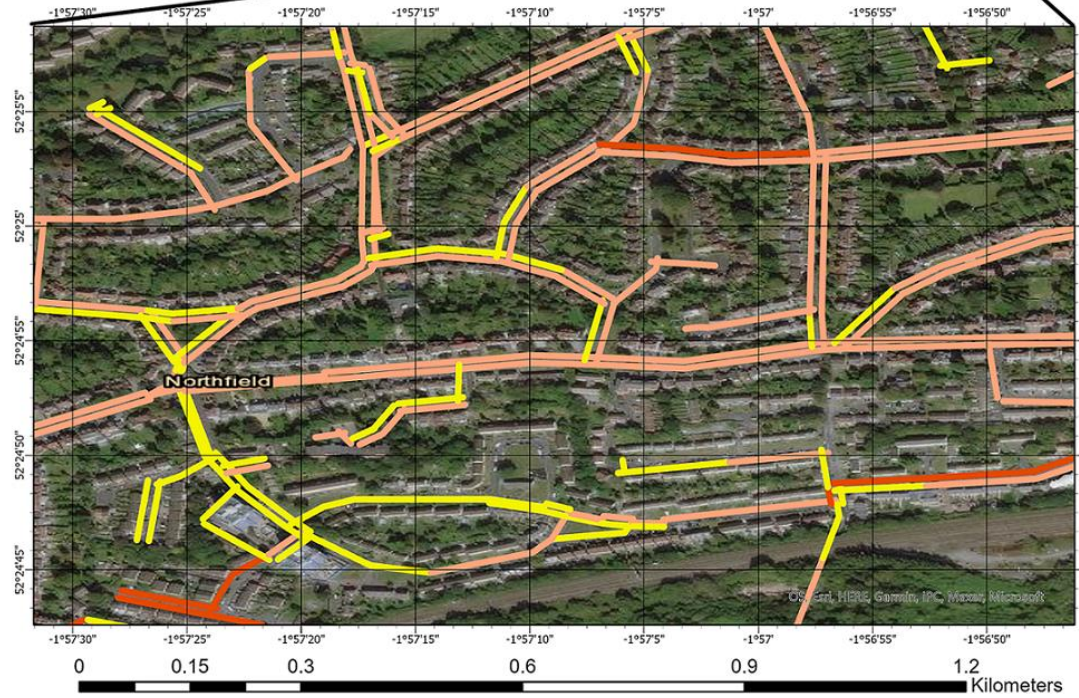
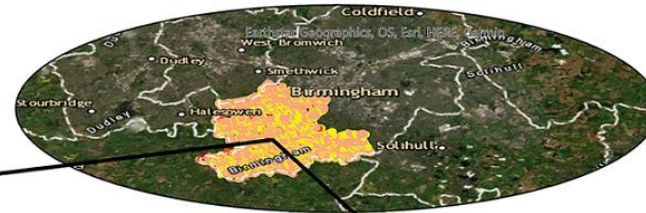


 **The FLOOR**

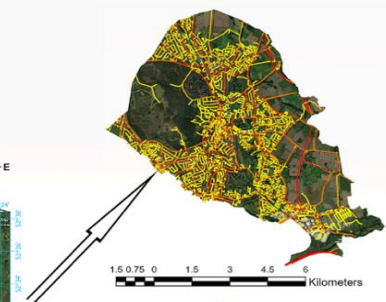
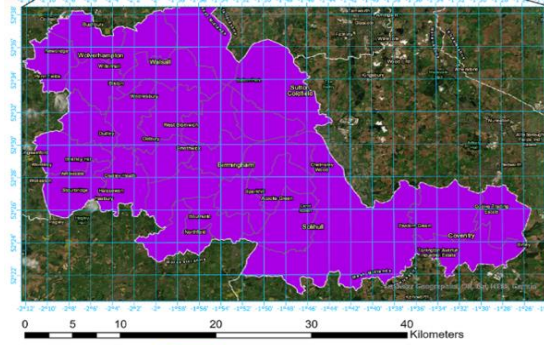
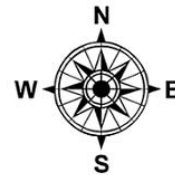


Urban mobility characteristics; spatially

Average Speed in Edgbaston,
Birmingham, UK
9-11 Mondays 2016



Average Speed
(km/h)



(a)

(e)



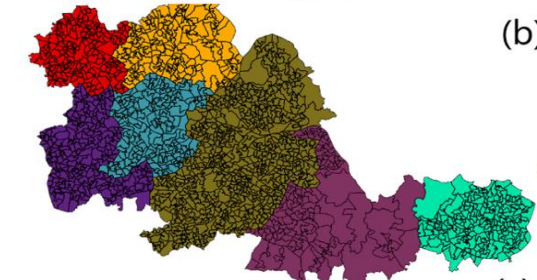
(b)



(f)



(g)



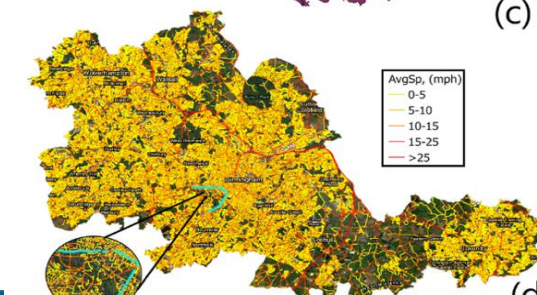
(c)



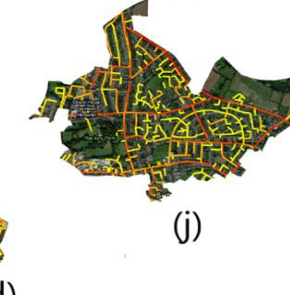
(h)



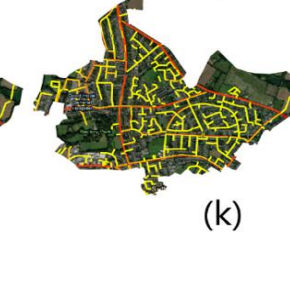
(i)



(d)

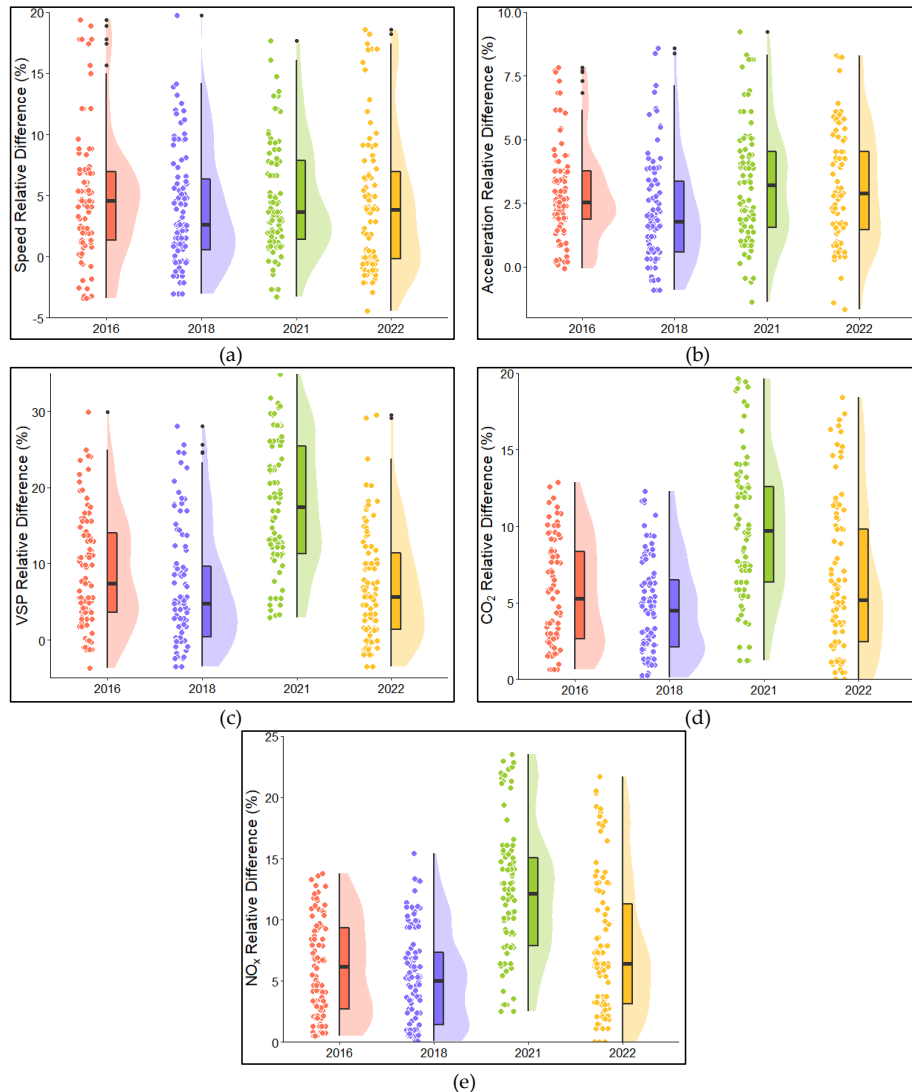


(j)



(k)

The impact of Easter holidays on transport environment



Article

Assessing the impact of calendar events upon urban vehicle behaviour and emissions using telematics data

Junjun Xiang, Omid Ghaffarpasand and Francis D. Pope *

Figure 8. The box-violin-scatter plots for the relative difference of (a) vehicle speed, (b) acceleration, (c) VSP, (d) CO₂ EF, (e) NO_x EF for the studied years of 2016, 2018, 2021, and 2022 on both major and urban roads. Each scatter point represents one of the 35 distinct measurements for the time of the day and day of the week.



EDAR 2022 campaign, over 94,000 measurements, different vehicles subsets





