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**RAC Foundation**

**Mobility/Safety - Topic Project Brief (2020-21)**

**RAC Foundation Advisor for MSc Student:**

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| Ivo Wengraf  Research & Data Manager | Email: ivo.wengraf@racfoundation.org |

**RAC Foundation background:**

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| The RAC Foundation is a transport policy and research organization which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist. |

**Project title (welcome rewording):**

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| What is happening on the road? Analysis of speed, flow, incident, accident and message information on the road network. |

**Project description:**

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| The RAC Foundation conducts research that uses speed/flow (high frequency traffic counters) data, Variable Message Sign data, breakdown records and crash data to learn more about how people move around on the road.  **Project could examine:**   * The future of the peak – what will changes to patterns of work and the role of traditional retail and business travel mean for the way we provide and manage traffic? * Spatio-temporal trends of breakdown locations * The changing journey – over the past 10 years are trips taking longer, are there more delays, more crashes? * How traffic responds to traffic information signs (e.g., “Please slow down”, etc.) * The relationships between speed/flow/volume of traffic and air quality   *We welcome students’ interpretations of the topic and suggestions to further specify it.*  **Data sources could include:**   * Highways England or RAC breakdown data (geo-located, time-linked incident data) * STATS19, the police record of all road crashes (geo-located, time-linked crash descriptions) * Motorway flows, speed and message data (per minute, or per 15 minute, speed/flow/count data for all motorways per section of motorway, along with changes to overhead signage) * Data from air quality measuring stations * Traffic flow data from local roads, taken from the Covid-19 response to capture local area road traffic behaviour |

**Deliverables:**

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| * Dissertation in full * Executive summary for policy and practitioner audience (with possible scope for media release) * Access and sharing of code on RACF GitHub |