THE FUTURE OF TRANSPORT

Technical research into construction standards for e-scooters

- Project overview

July 2023

Technical research into construction standards for e-scooters

- TRL and WMG have been commissioned by the DfT to undertake a programme of research to provide evidence and recommendations to help develop the technical requirements for future construction standards of e-scooters.
- The objective of the programme is to build the evidence base and formulate proposals to aid DfT in devising a legal framework for e-scooters that will be proportionate, effective, enforceable, and responsive to innovation.
- The project is structured around six work packages – as outlined below:

WP0: Stakeholder engagement

- Running for the duration of the project - structured engagement with key stakeholders including:
  - Manufacturers
  - Retailers
  - Rental operators
  - Road safety organisations
  - Industry associations
  - Charities representing disabled people

WP1: Literature review

- Focused literature review to build a clear understanding of the construction standards being used in other countries and the wider evidence base from research, collision data and defect reports.
- **This work package has been completed (delivered June 2023)**

WP2: Technical requirements

- Generate a strong evidence base on the recommended minimum technical requirements, in particular covering the following areas:
  - stability standards and test specifications
  - steering column strength and other e-scooter load cases
  - seated and 3 or 4 wheeled e-scooters
  - battery safety
  - hill climb ability
  - requirements for private e-scooters compared to rental
  - potential additional requirements

WP3: Accessibility

- Implications of future Construction and Use Regulations for e-scooters on the mobility needs and challenges for disabled people to ensure e-scooters are as inclusive as possible, and investigate any potential for overlap with current legislation for vehicles for disabled people.

WP4: Sustainability and environmental impact

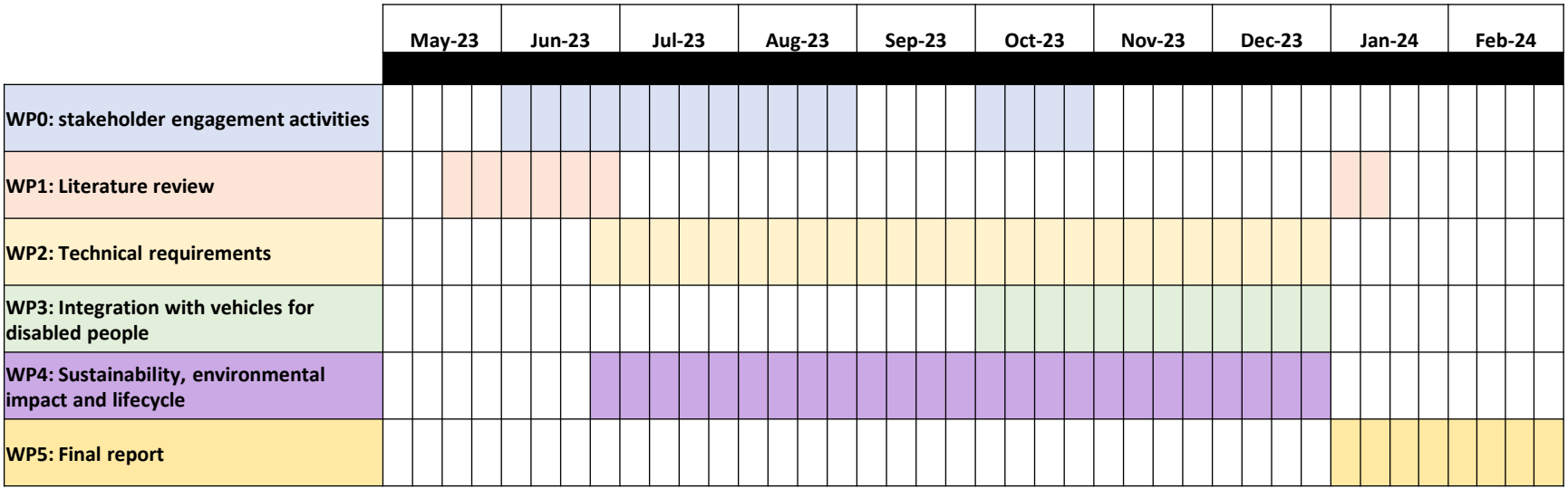
- Understand the cost implications (e.g., to manufacturers and retailers) and viability (e.g., ability to enforce, availability of technology or facilities) and potential benefits of different sustainability improvements

WP5: Final report

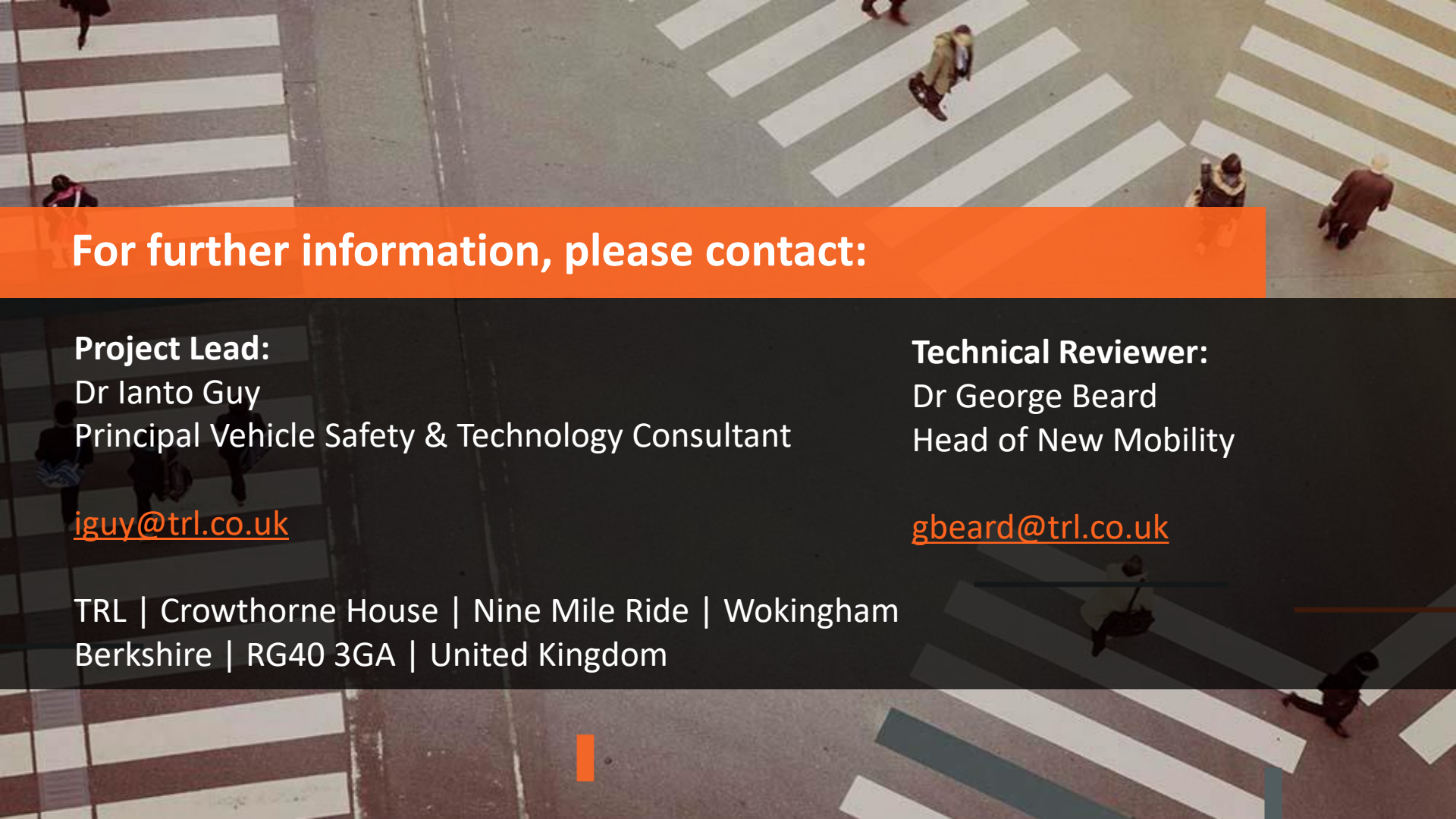
- Bring together previous work package findings into a single consolidated document with clear recommendations for the DfT

Timeline

- The project commenced in late May 2023 and is due to be completed by end of February 2024.
- The approximate timing of the six work packages are provided below:



- **Stakeholder engagement is critical for the success of this project and TRL invites any organisations with involvement in micromobility to get in touch to discuss the project in further detail.**



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