We can contribute to the following tasks as described in the Topic:
- The services deployed should enable the idea of a social optimum in mobility from several perspectives while considering the implications for transport infrastructure and urban design.
- Adaptation of transport infrastructure (e.g. bike-lanes or new street designs) to promote the use of shared mobility while reducing transport congestion.

Our approach:
Our competencies range from i) traffic hotspot detection (recurring and ad-hoc incidents, percolation), ii) data fusion of classical traffic sensors, floating car data, and social media data to iii) dynamic and predictive road traffic modeling and control approaches. An important element of our approach is co-simulation: we have demonstrated experience in realizing digital twins of the considered traffic network based on real-time data, microscopic, and agent-based traffic simulations.

Road Traffic Control Laboratory
The scope of our laboratory involves road traffic modeling, simulation, and control using classical and data-driven methods. We do scientific research on integrating highly automated vehicles with the traffic infrastructure. Moreover, we have close ties to players in the Hungarian automotive industry and the ZalaZONE Proving Ground (specially created for CAV and CCAM testing).

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS (BME)
With its regular high-ranking positions (between 200 and 800) BME is among the top universities (2-6%) globally. At the university's 8 faculties and 76 departments, there are 1,200 lecturers teaching 5,000 subjects and 10,000 courses each semester. In the H2020 Framework Programme BME has ranked #2 among the Hungarian institutions (67 funded projects). The University is an active member of the European Engineering Learning Innovation and Science Alliance (EELISA) European University, the CESER association of universities of science and technology and the European University Association.

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RESEARCH TEAM
HORIZON-CL5-2022-D6-02-04:
ACCELERATING THE DEPLOYMENT OF NEW AND SHARED MOBILITY SERVICES FOR THE NEXT DECADE

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