- Traffic flow theory
- Driver behaviour modelling
- Crowd dynamics
- Traffic facilities design vehicles
- Route development
- Schedule development
- System evaluation
- Rake assignment
- Pavement design
- Pavement analysis
- Rehabilitation of pavements



Transit Systems

RESEARCH **THEMES**

Pavement **Engineering**

> Infrastructure Management

Road Safety

Networks

Connected and autonomous

Big data analytics

Machine learning

Materials

Engineering

- Material characterization
- Recycling of infrastructure materials
- Chemical stabilization of soils/aggregate
- Utilization of industrial by-products
- Statistical modelling of crashes
- Analysis of road user behaviour
- Traffic conflict analysis
- Impact assessment of road safety improvements

- Facility-level deterioration and improvement modelling
- Automated data collection of infrastructure condition
- Disaster recovery

- Transportation network modelling
- Optimization and control
- Network design
- Congestion pricing