

# Ideation Workshop

## Transportation Area Concept

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Online



Association for Standardization of  
Automation and Measuring Systems

# Use Cases and Stakeholder

# Urban digital twins for simulation

<https://youtu.be/LDSvDEsvnig>



# Urban digital twins for simulation

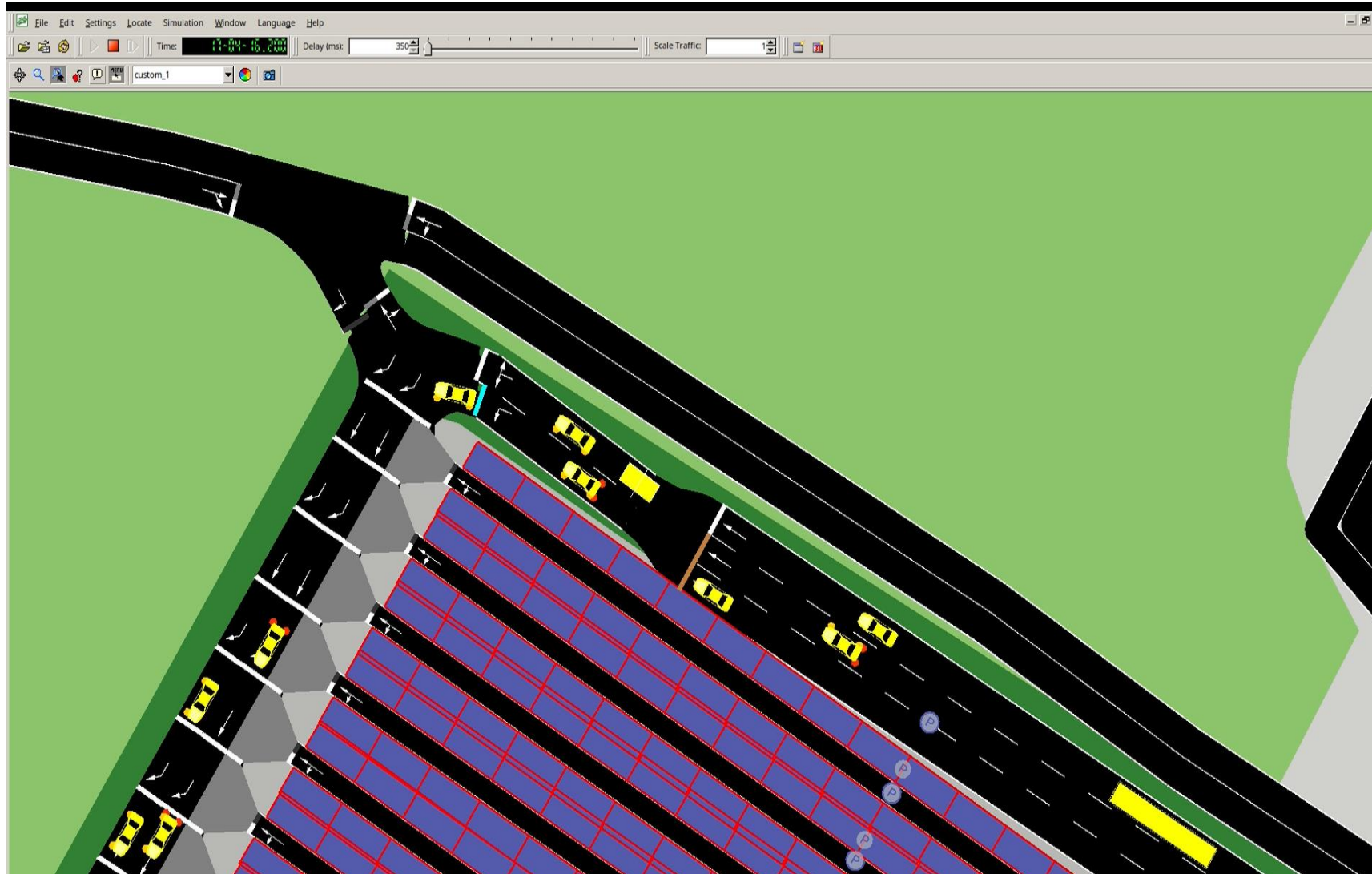
## Characteristics

- HD road networks
- Traffic infrastructure
- Logical linking of elements
- Road environment
  
- Precise geometric modeling (w. surface for vehicle dynamics)
- Parametric geometries ("smooth")
- Comprehensive visualization
  
- Synthetic scenarios
- Real-world scenarios

## Stakeholder

- Automotive companies
- Tool vendors
- Mapping companies
- Urban planners/  
public authorities

# Traffic simulation



# Traffic simulation

## Characteristics

- SD/HD road networks
- Logical linking of elements
- Simplified visualization
- Real-world scenarios

## Stakeholder

- Urban planners/  
public authorities
- Mobility service providers
- Road operators
- Automotive companies

# Autonomous driving development

<https://youtu.be/RDXXBqL42W8>



# Autonomous driving development

## Characteristics

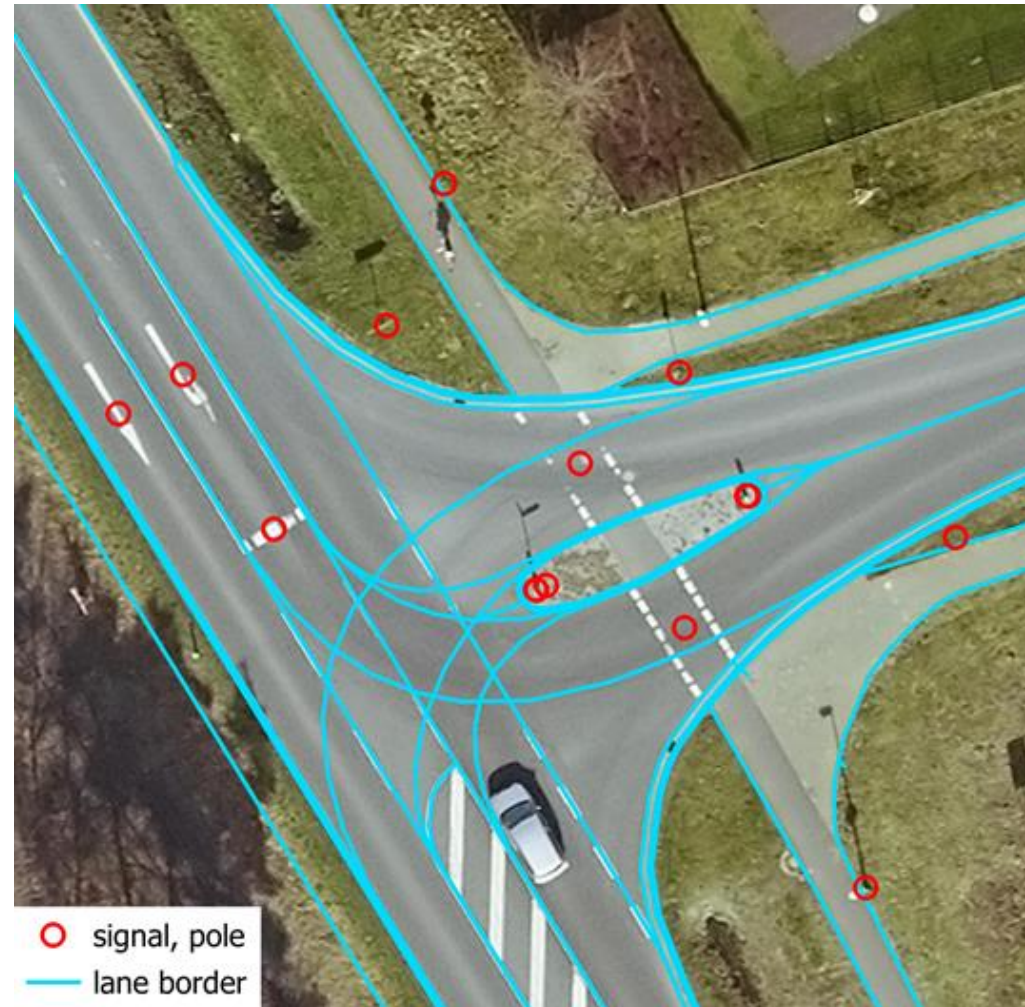
- HD road networks
- Infrastructure elements
- Logical linking of elements
  
- Material properties for sensor simulation
  
- Real-world scenarios
- Synthetic scenarios

## Stakeholder

- Automotive companies
- Tool vendors
- Mapping companies
- Testing organizations
- Urban planners/  
public authorities
- Road operators



# Urban planning and operation



Orthophoto © City of Braunschweig, 2020

# Urban planning and operation

## Characteristics

- SD/HD road networks
- Traffic infrastructure
- Whole environment
  
- Discrete geometries
- Real-world scenarios
  
- GIS tooling and data modeling
- Heterogeneous data bases
- Well-standardized data formats and exchange interfaces

## Stakeholder

- Urban planners/  
public authorities
- Mobility service providers
- Road operators
- Tool vendors

# Stakeholder survey



[Survey link](#)