Seamless Mobility in the Smart City
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Individual Mobility…
That’s what the automobile has represented for more than 100 years

Primarily driver-focused

… what’s next?
World Trends and their Impact on Future Mobility

Motivation

9 Billion hours of daily internet usage

9.7 Billion world population in 2050

~20% CO₂-emissions caused by road traffic

Sources: IEA, European Commission, Internet Live Stats, GlobalWebIndex, WHO
World Trends and their Impact on Future Mobility

Three world trends will lead to disruptive changes in mobility:

- **Digitalization**
  - Computing power
  - Connectivity
  - 4th Industrial revolution and IoT
  - …

- **Demographic change**
  - Urbanization
  - Aging society
  - Population density
  - …

- **Decarbonization**
  - Emissions regulations
  - Peak oil
  - Regenerative energy
  - …

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**Sharing Economy**

**E-Mobility**

**Automated Driving**

**Connectivity**
The Road to Automated Driving
A New Duality

Privately owned
Highly Automated Car

Public shared
Self-Driving Car

Something everywhere

Infrastructure

Everything somewhere

Restricted Infrastructure

Fleet management and traffic flow

City Traffic
The new “duality” leads to a future of Seamless Mobility
<table>
<thead>
<tr>
<th>Statistic</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>3,200+ people</strong></td>
<td>More than 3,200 people die each day by urban air pollution.</td>
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<tr>
<td><strong>95%</strong></td>
<td>Today's cars are parked 95% of the time. Only 5% are in use.</td>
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<td><strong>65%</strong></td>
<td>Today, 65% of all travel kilometers are made in urban areas. This number is expected to triple by 2050.</td>
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<td><strong>80%</strong></td>
<td>Cities produce 80% of the global greenhouse gas emissions and consume 75% of the natural resources.</td>
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<td><strong>100%</strong></td>
<td>In average the commuting time doubles during rush hour in megacities.</td>
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<td><strong>41</strong></td>
<td>Today, there are 28 megacities. This number will increase to 41 by 2030.</td>
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Intelligent Intersection
Safe and Dynamic Driving towards Vision Zero

Sense Plan Act