The evolution of the connected Car
From contextually aware cars to automated driving vehicles

Ogi Redzic
VP Connected Driving, HERE
Smart, safe and enjoyable connected car experience
by HERE

HERE Location Cloud

Smarter Guidance
predictive, contextual, intelligent, personalized

Safer Driving
computational, automated, predictive, real-time

Enjoyable LBS
cross-ecosystem, social, inspirational, contextual multi-screen, everyday
Safer Driving – the evolution to automated vehicles

Smarter Guidance
predictive, contextual, intelligent, personalized

Safer Driving
computational, automated, predictive, real-time

Enjoyable LBS
cross-ecosystem, social, inspirational, contextual multi-screen, everyday
The implementation of Automation will be evolutionary

When will we get there?

- **Assisted**
  - Driving assistance in longitudinal or lateral driving activity
  - Park Assist / Collision Prevention

- **Driver Only**
  - No assistance system
  - Driver fully executing driving maneuvers and vehicle controls

- **2000**
  - Driver Only

- **2013**
  - Partially Automated
  - Car has limited control
  - Driver must observe at all times and be ready to take control instantly (Traffic Jam Assist)

- **2018 - 2020**
  - Highly Automated
  - Car has full control for periods of time
  - Under controlled circumstances the vehicle can take over driving controls

- **2025**
  - Fully Automated
  - Car has full control
  - No driver – only passengers

© 2014 HERE | HAD Product Vision | Company confidential
HERE Automated Driving

**HD Map**
Precise positioning for lateral & longitudinal control of vehicle on the road surface

**Dynamic Context**
Accurate planning of vehicle control maneuvers beyond sensor visibility.

**Humanized Driving**
Making automated driving comfortable and acceptable for humans
Standard Map
HD Map
HD Map
HD Map
HD & Standard Maps
Dynamic Context
Humanized Driving

- Speed profiles for link level road network
- Individualization based on driving behavior
- A personal identity for automated vehicles

© 2014 HERE | HAD Product Vision | Company confidential

7.2 million probe points
2009 – 2013
Observation:
- Humans entering exit ramp with the speeds much higher than the speed limit and rapidly decelerating to the speed about 50% of the speed limit. Then they start accelerating
At HERE, we enable the automotive industry to create intelligent and context aware automated vehicles that are **comfortable**, **personal**, and above all **trusted** and safe.