Why Connectivity is key to a Safer, Smarter, Greener driving future

Paul Gray

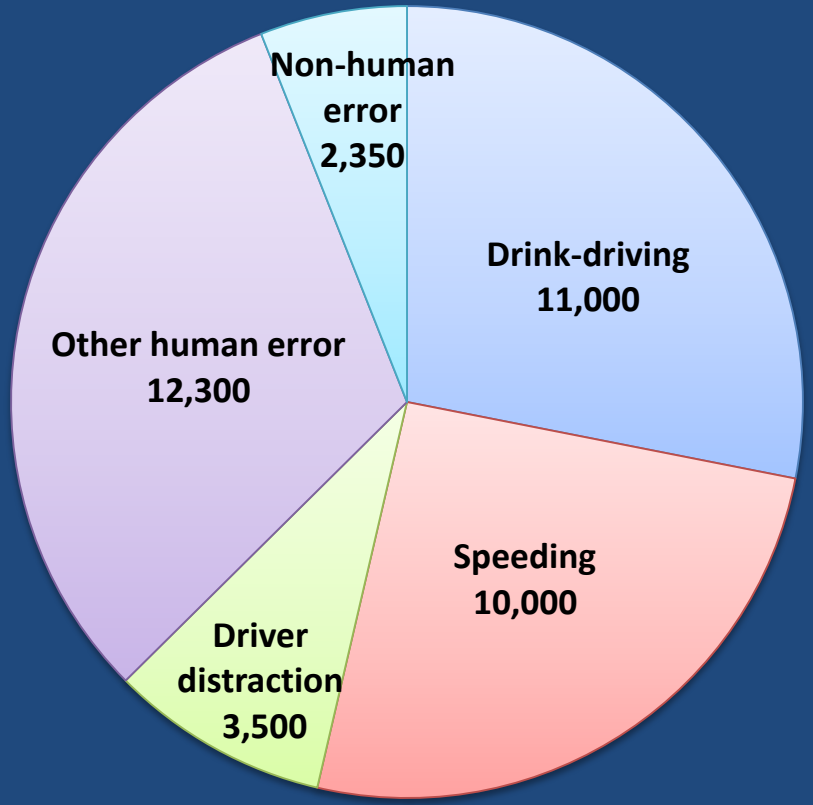
1.25M people die every year on the roads globally
A further 50M are estimated to be injured
That’s one person every 25 seconds

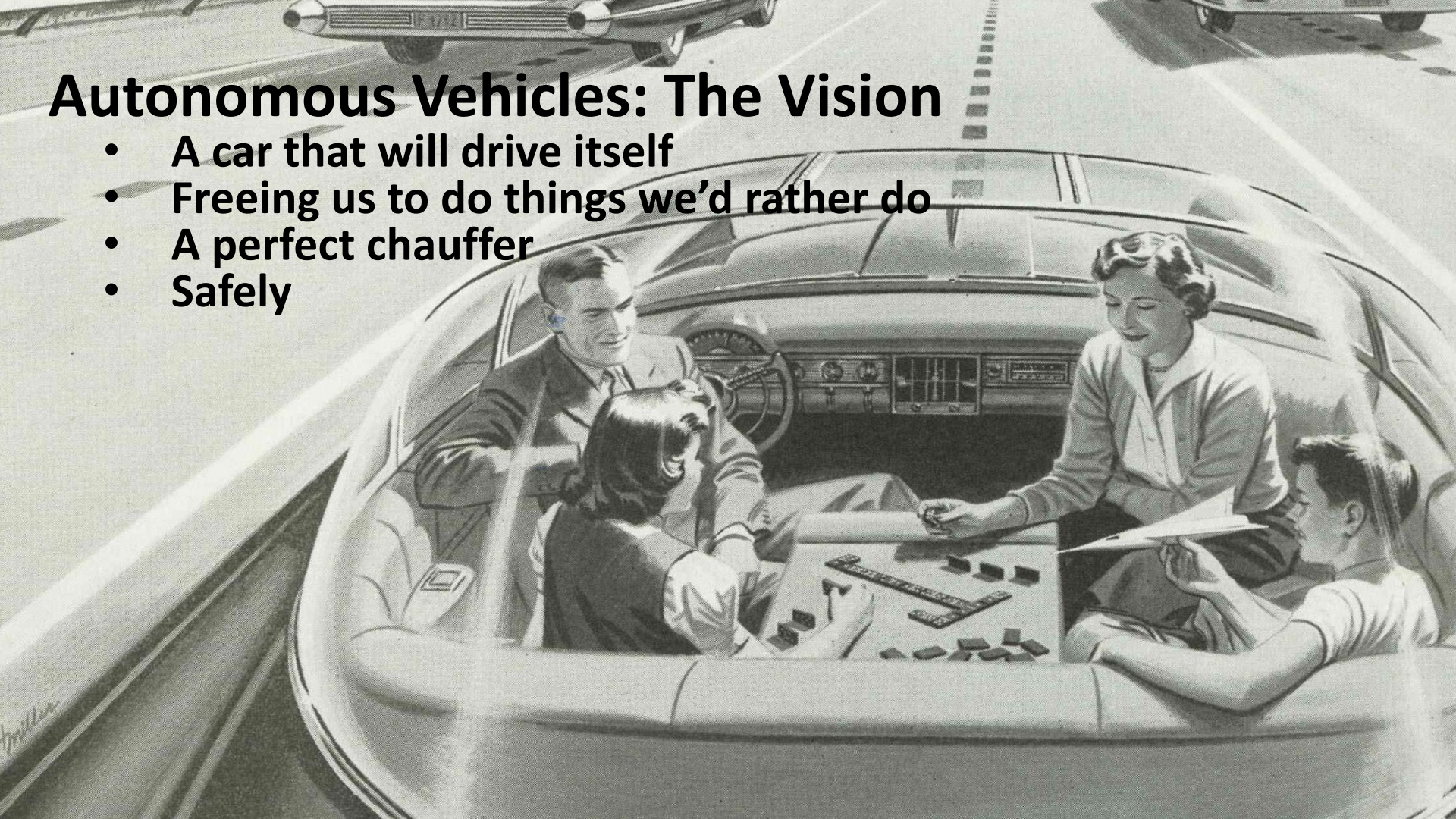
1% GDP lost due to congestion

We spend *9 days* commuting every year

20%
of CO2 emissions
from road transport

94% road deaths due to human error



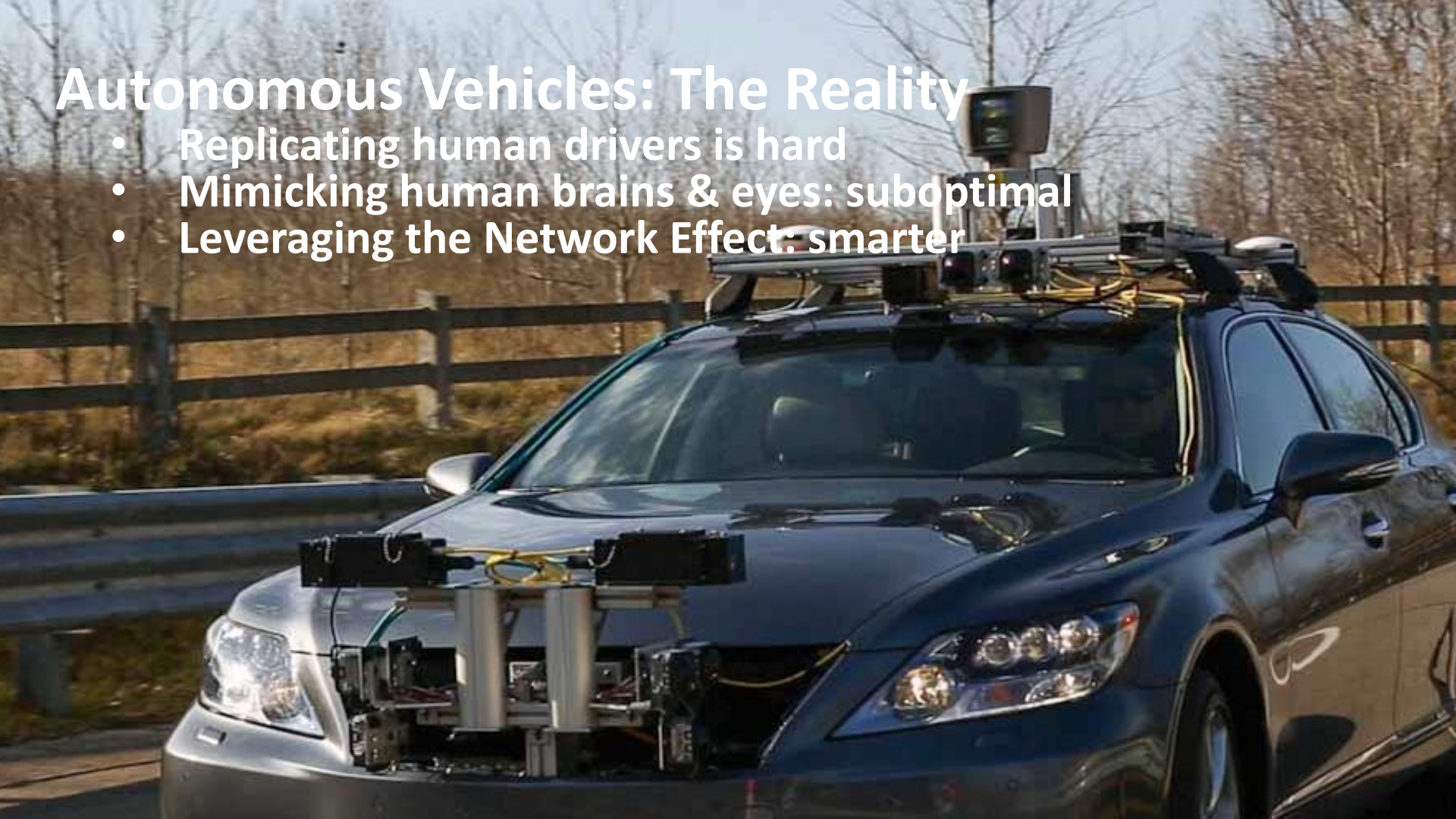


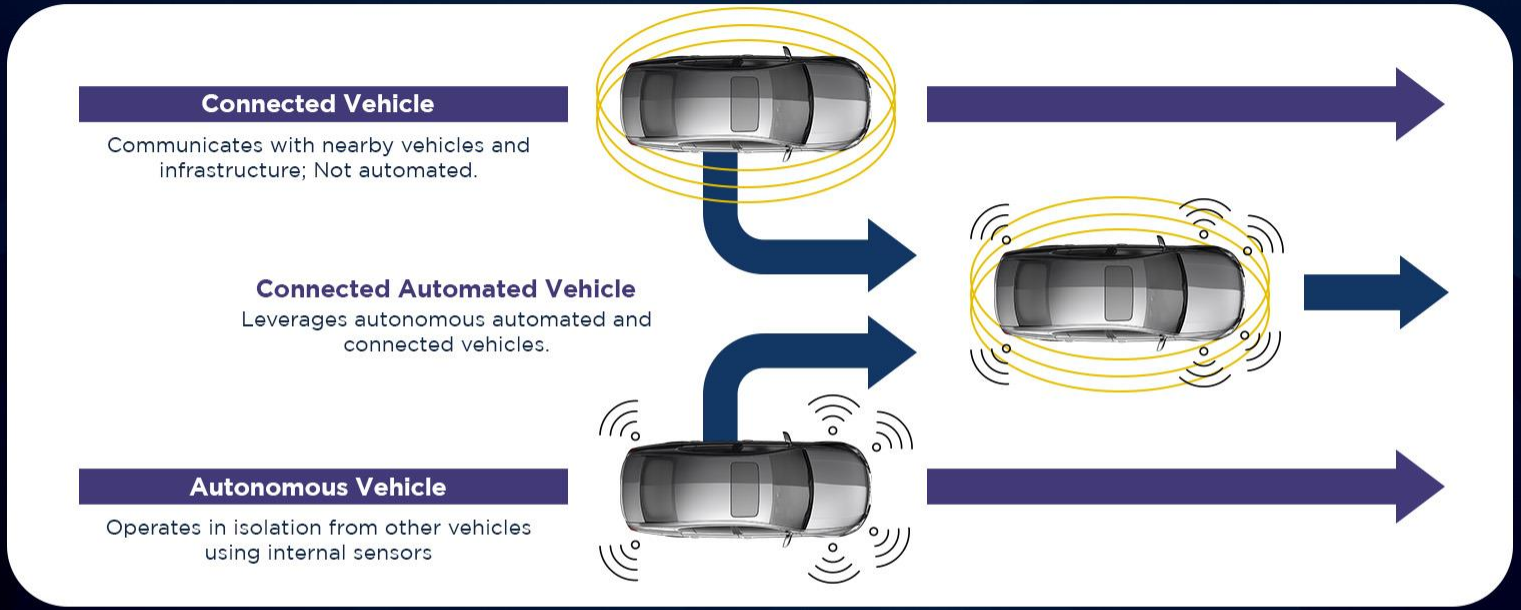
Autonomous Vehicles: The Vision

- A car that will drive itself
- Freeing us to do things we'd rather do
- A perfect chauffer
- Safely

Autonomous Vehicles: The Reality

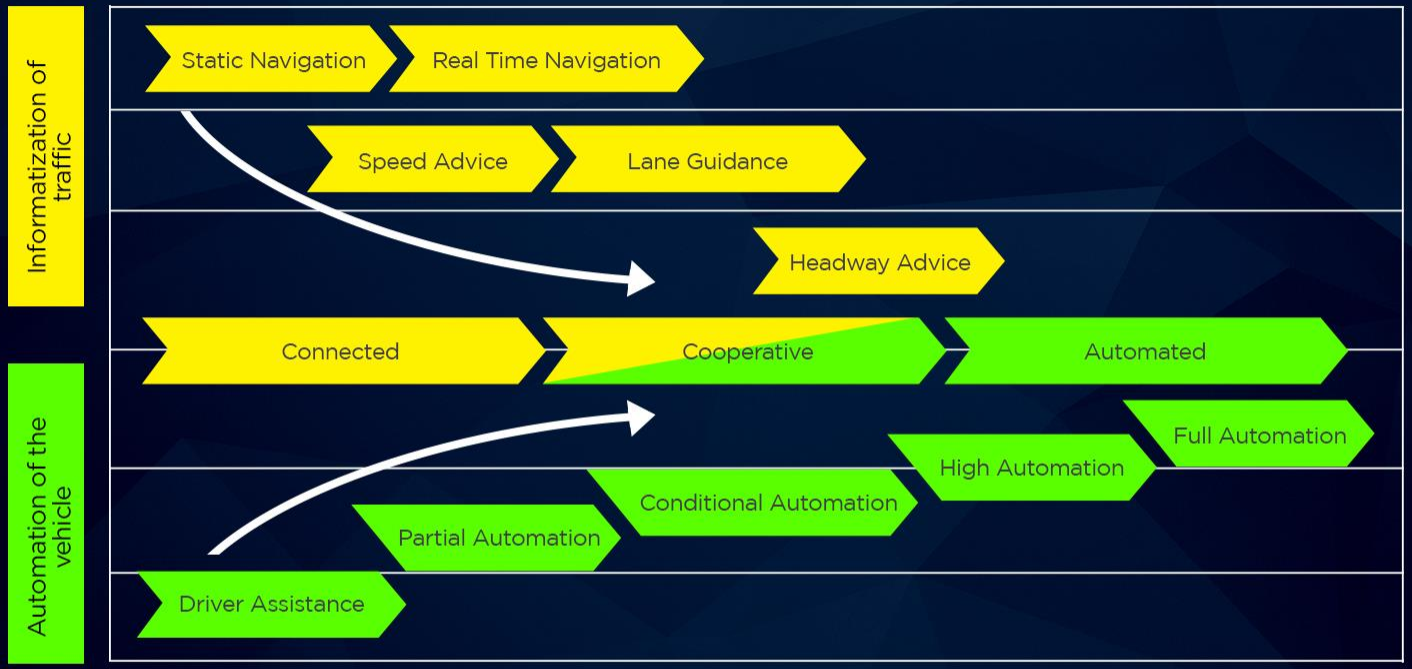
- Replicating human drivers is hard
- Mimicking human brains & eyes: suboptimal
- Leveraging the Network Effect: smarter





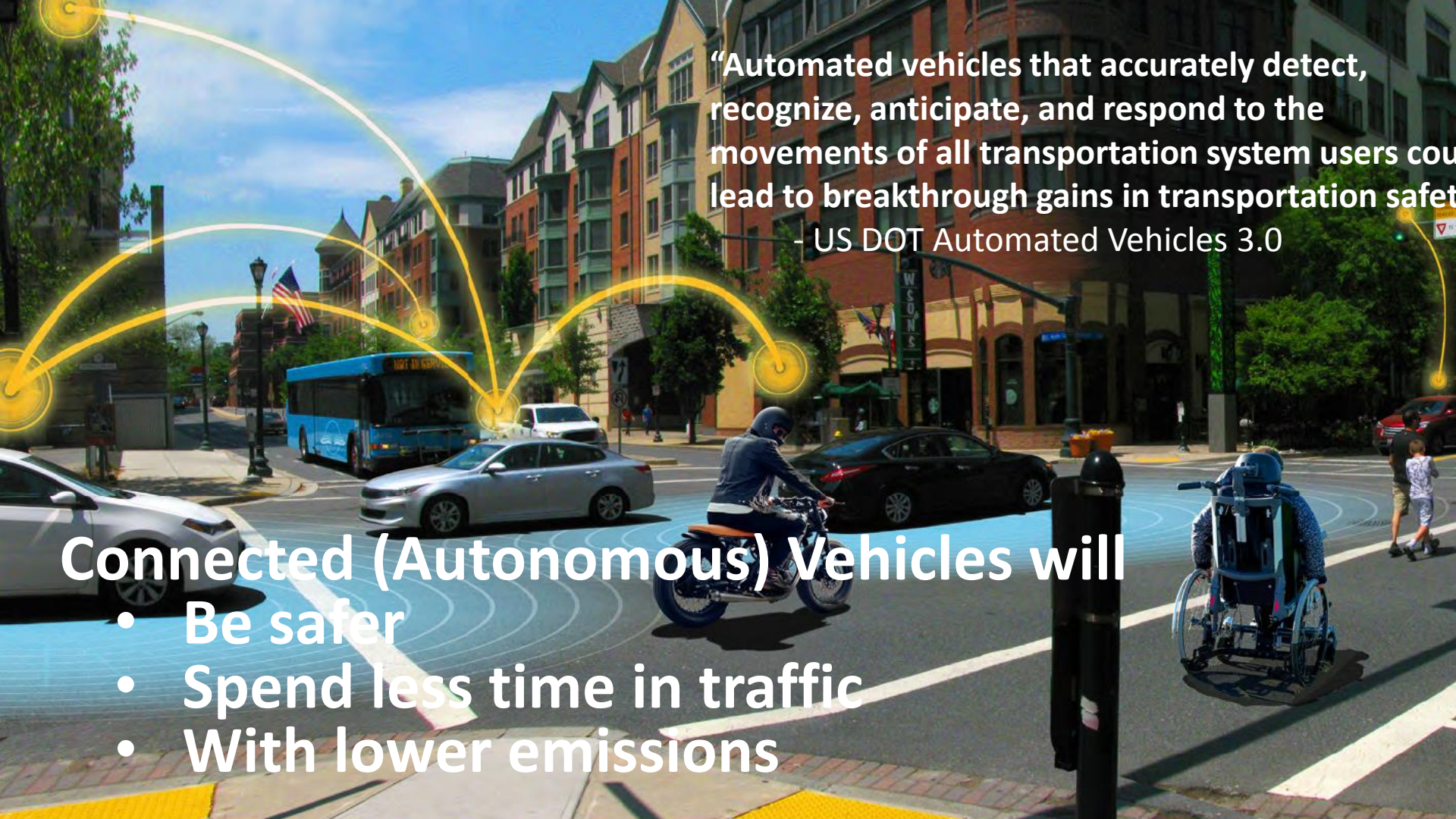
“The agency believes that this fusion of connectivity and vehicle-resident technologies will advance the further development of vehicle automation systems, including the potential for truly self-driving vehicles.”

– US National Highway Traffic Safety Administration



"Work towards a coherent European framework for the deployment of interoperable connected and automated driving, which should be available, if possible, by 2019"

– European Commission Declaration of Amsterdam


“Automated vehicles that accurately detect, recognize, anticipate, and respond to the movements of all transportation system users cou lead to breakthrough gains in transportation safet
- US DOT Automated Vehicles 3.0
Connected (Autonomous) Vehicles will
• Be safer
• Spend less time in traffic
• With lower emissions

Safety

CVs & CAVs will

- Be connected to other vehicle
- Share sensor data & intention data
- Be aware of vulnerable road users
- Perceive more than we can see

Mobility

CVs & CAVs will

- Be tightly integrated with roads
- Enable fine tuned traffic management
- Exploit the network effect
- Make our cities Smart Cities

Environment

CVs & CAVs will

- Enable Co-operative Adaptive Cruise Control (CACC) & Platooning
- Reduce fuel consumption
- Extend EV range
- Lower CO2 emissions

27
Cohda Wireless
NO VEHICLE ACCESS
27
Cohda
Wireless
SOUTH
AUSTRALIA

OUR MISSION

TO MAKE TRANSPORTATION SAFER AND MORE ENJOYABLE FOR ALL ROAD USERS, AND WITH LESS IMPACT ON THE ENVIRONMENT

Ann Arbor, USA

Munich, Germany

Seoul, South Korea

Tokyo, Japan

Shanghai, China

Headquarters
Adelaide, Australia

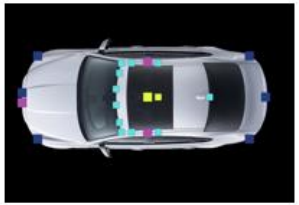
- Cohda Office
- Cohda Distributor

Four Key Sectors

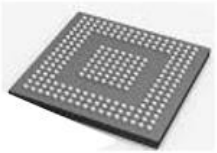
PRODUCT PORTFOLIO

Cohda has developed a hardware agnostic software solution that is enabling hardware products to communicate in the fast developing connected and autonomous vehicle market

Software: V2X-Stack



Software: CAV Applications



Chip Set Solution

On Board Unit ("OBU")

Road Side Unit ("RSU")

22,000
devices sold

850
Customers

60%
share of trials

70
design-ins

35
design-wins

Platooning Video

Cohda Wireless

Takeaways

- Connected vehicles are key for a safer, smarter future for all road users
  - Autonomous Vehicles must be connected
  - Enables deployment of applications for safety, productivity, mobility
  - Makes available valuable data for traffic intelligence
- There is the chicken-or-egg problem of connectivity adoption
  - Cohda working with others to actively solve this
- Cohda is the leader in Vehicle Connectivity and putting the C in CAV

Cohda Wireless

SAFER | SMARTER | GREENER

Follow us: