KEEP MOVING,
TOWARDS
SUSTAINABLE MOBILITY

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Information and Communications Technology (ICT) Unleashed

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Sustainable mobility

• It is not enough to incrementally reduce the negative impacts of transport
• A new, open, multimodal system that will serve us for at least 50 years
• A vibrant transportation services economy
• Intelligent systems that invite users to behave differently
• Creating order-of-magnitude improvements across the triple bottom line: economy, environment and society (relative to Transportation 1.0)
Sustainable mobility must compete

- Business as usual is incremental at best
- Safety is a high bar, well-entrenched
- We are not accustomed to high rates of change in transport
  - But change will now be rapid
- Other big goals, such as resilience, may take over the debate
  - With unfamiliar characteristics like modularity, diversity, adaptive capacity, anticipation
The new ITS is transformational

• Expanded boundaries
  – Service-oriented, revenue streams, big data and analytics, consumer platforms for communication
• Consumer-oriented
  – In-vehicle technologies lead growth
• Industry-government partnership
  – Platforms for entrepreneurs
Where are we today?
We are living in a connected world with new mobility choices
Connectivity has changed the face of commercial vehicles as well
Companies involved in transportation are changing
Change driven by billions of consumer choices

- Whether travel is needed
- What mode, or combination of modes?
- What routes?
- Smart parking
- Access to additional services

- How open is the data?
- Can the consumer own and control their data?
There are 11699 people sharing 1443 cars in France
The power of the ITS transaction

Strength of influence on user

Autonomous on call
- Car sharing
- Signal pre-emption for buses
- V2V, V2I

Reliability of information

Traffic info
LDW
ESC

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Change driven by policy decisions

- Civil transport decisions based on accessibility
  - Connectivity and proximity are alternatives to mobility
- Open data and owned data
- Platforms for connectivity and autonomy
- Smart cities
  - Platforms for data, payments and information
Policy creates innovation: vehicles that don’t crash
Who's Behind the Wheel? Nobody. The driverless car is coming. And we all should be glad it is.

56MPH - I THINK I'LL HAVE A NAP; Ken Gibson gets a taste of the future in a 'road train' convoy of cars controlled by a single driver.

Self-driving cars 'not far off'; General Motors reckons most of the building blocks are already in place for a semi-autonomous self driving car, but that full autonomy is a way off.

Hands off the wheel. If the going's tough, the car gets cover.
• Sustainable cities
• Intelligent traffic solutions, green buildings, wastewater management, and smart grid infrastructure are just a few of the technologies helping to steer today’s urbanization toward sustainability.
Change by an order of magnitude

• 1 in 7 vehicles in-use in peak hour
• 7 people can share 1 car
• Household expenditure on transport (individual car ownership) is 10x a shared/driverless system
• Investment in vehicles is 10x investment in infrastructure