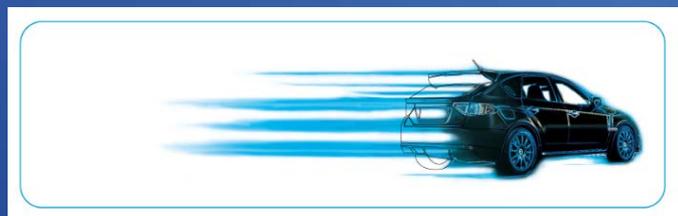




Transforming Transportation: Connected and Automated Vehicles



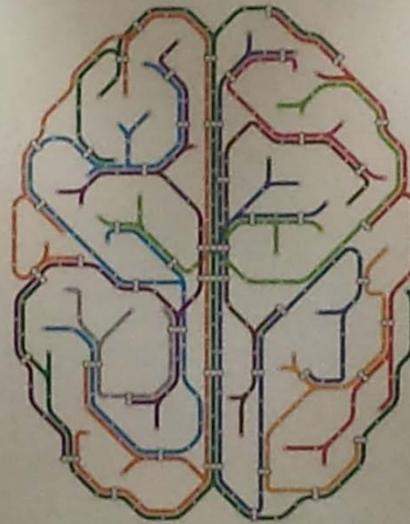
Blaine D. Leonard, P.E., F.ASCE
ITS Program Manager
Utah Department of Transportation



4th Conf on Electric Roads and Vehicles
Logan, Utah
May 16, 2016

Tomorrow will be nothing like today!

In the future, transport networks
will think for themselves.



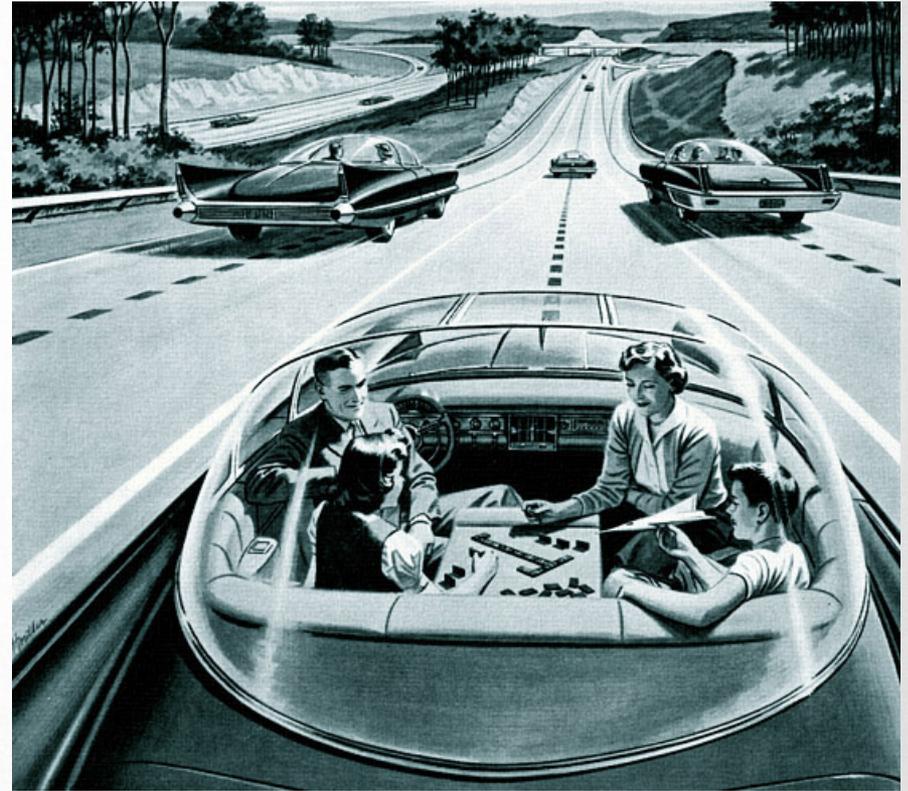
Tomorrow will be nothing like today.

www.hsbc.com/intothefuture

HSBC 

Automated (Driverless) Vehicles

Electricity may be the driver.
One day your car may speed along an electric super-highway, its speed and steering automatically controlled by



Bosch

Automated (Driverless) Vehicles

- Drives by sensors:
 - LiDar (64 laser beams)
 - Digital Cameras
 - GPS
 - Radar sensors



- Technology motivated by:
 - Safety
 - Reduced energy use
 - Democratization of access



Existing Automated Applications

- Parallel Parking Assist
- Lane Departure Warnings / “Lane Assist”
- Adaptive Cruise Control
- Collision Warning
- Automatic Emergency Braking
- “Traffic Jam” driving: automated steering, braking, acceleration

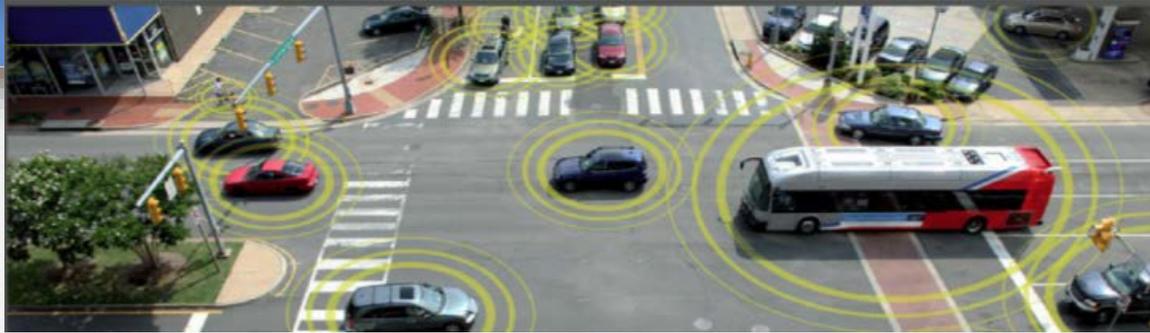




“By the time we get to the autonomous vehicle, it won’t be that big of a deal”

- Bill Ford, Executive Chairman, Ford Motor Co

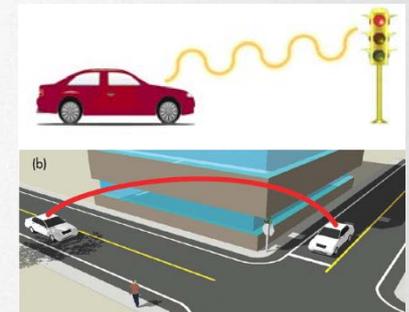
Connected Vehicle Technology



- The Connected Vehicle system will combine technologies:

- advanced road
- wireless comm
- advanced veh
- onboard com

to provide vehicle-to-vehicle communication on the roadway and to communicate this to the driver through alerts and warnings.



Utah Applications

- Smart Transit Priority at Traffic Signals (MMITSS)



- Mobile Weather Data Collection

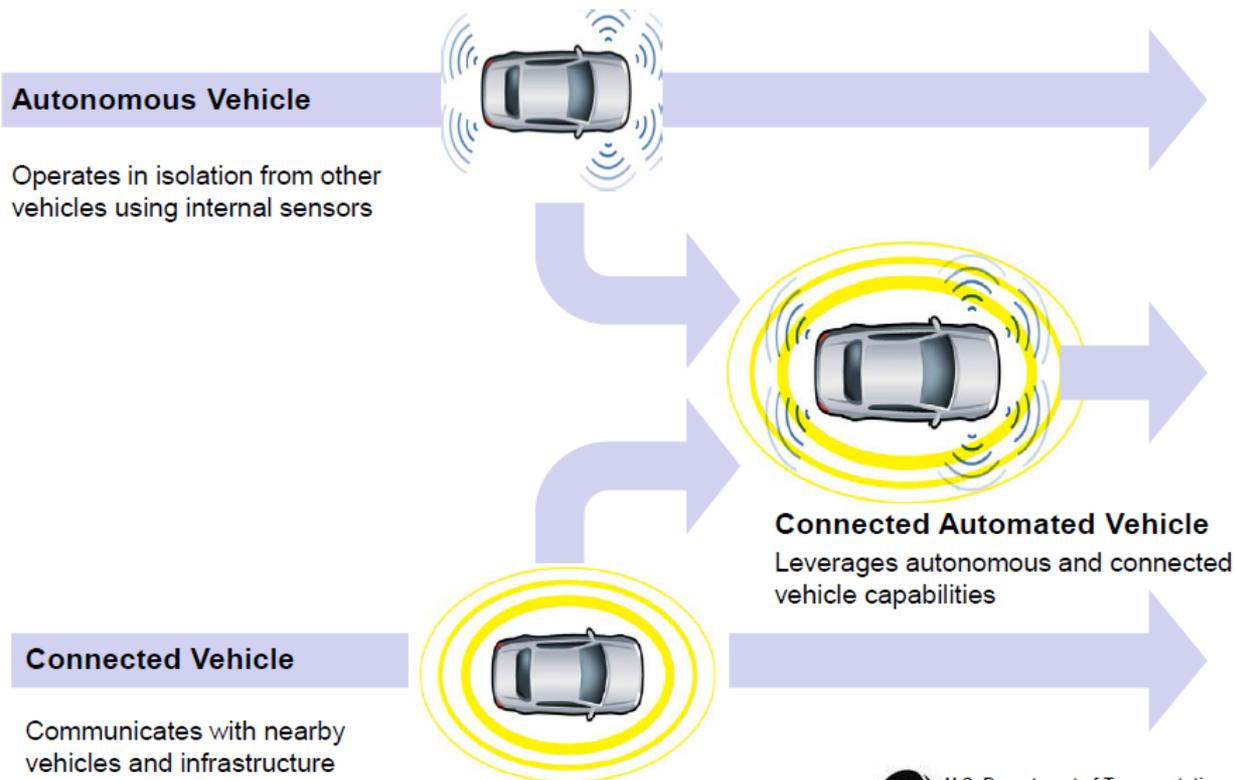


- Truck Platooning



Connected Automation

Connected Automation for Greatest Benefits



QUESTIONS / DISCUSSION

