

Self-Driving Vehicles in the Park Bryant Walker Smith Center for Internet and Society Center for Automotive Research

cyberlaw.stanford.edu/about/people/bryant-walker-smith

A robot by any other name

- Self-driving
- Driverless
- Automatic
- Automated
- Autonomous
- Autonomated

- Robotic

- Robotic

- Unmanned



Not your father's Oldsmobile

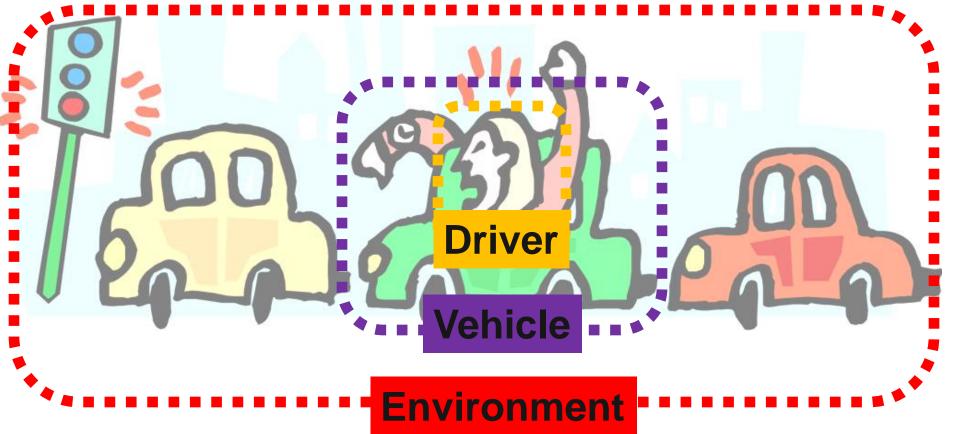
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LawSchool





Real-time sensing performed by the...

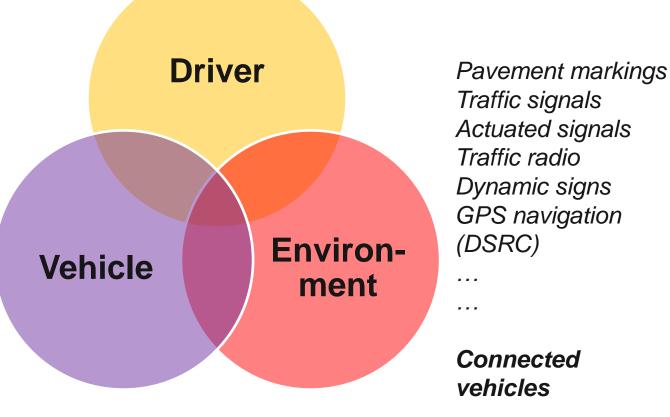


Evolving and revolving

Antilock brakes Cruise control Stability control Park assist Adaptive CC Lanekeeping Obstacle detection

Fully automated vehicles

. . .



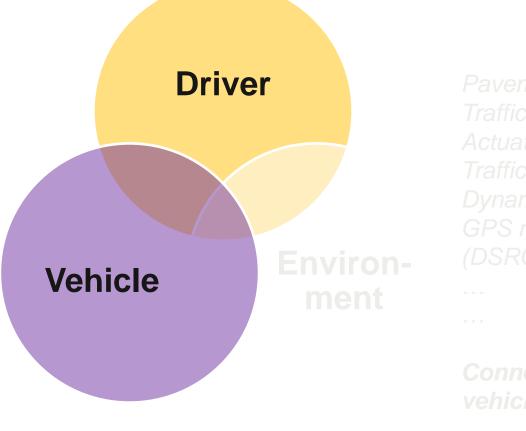
Connected and automated

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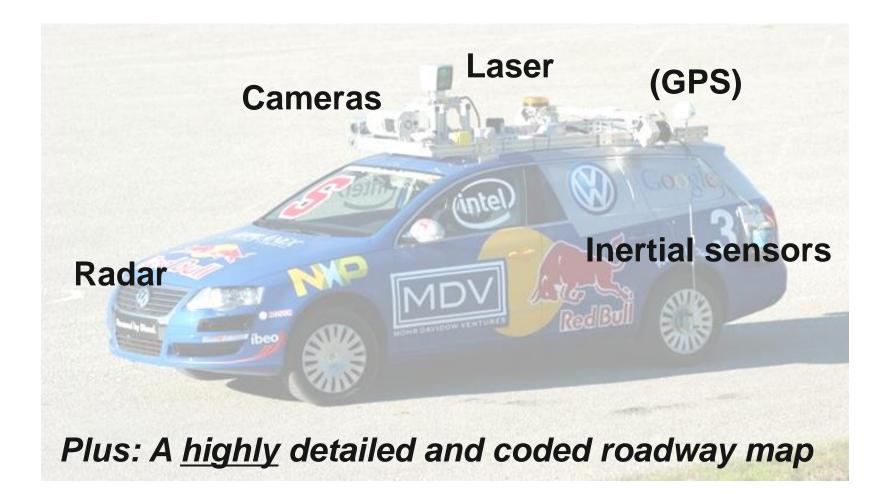
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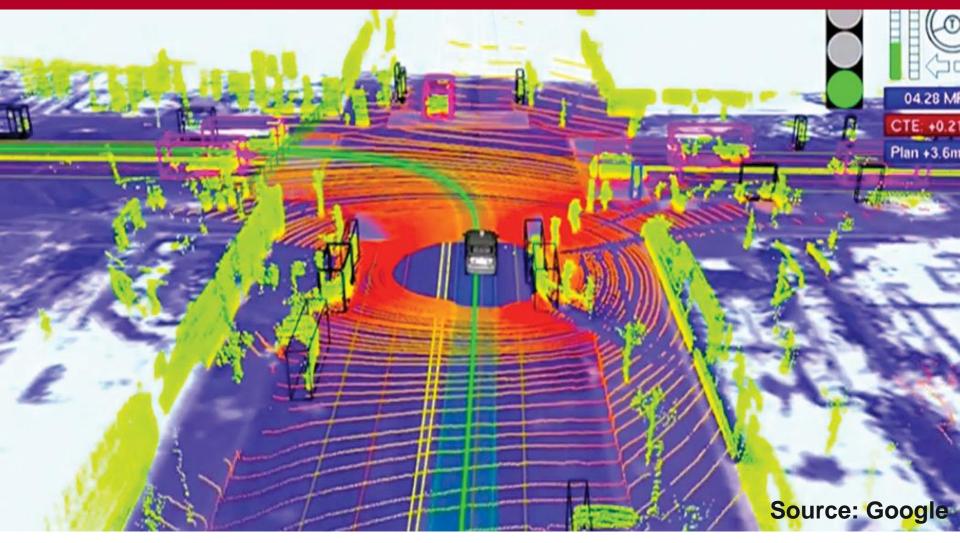
Connected and automated



Look Ma: No hands! But:



A different kind of MAP-21



Bryant Walker Smith



Generally speaking

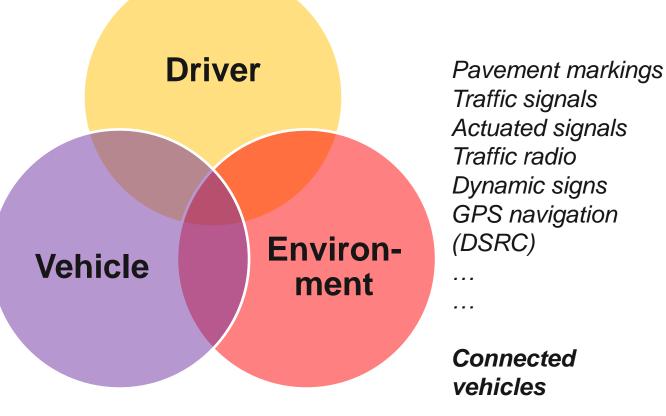
	Driver Assistance Systems (Production)	Highly Automated Vehicles (Research)
Examples	Numerous optional or standard packages	Many automakers, universities, Google
Radar/camera	Yes	Yes
Laser	No	Yes
Roadway map	No	Yes
V2V/V2I communication	No	No*

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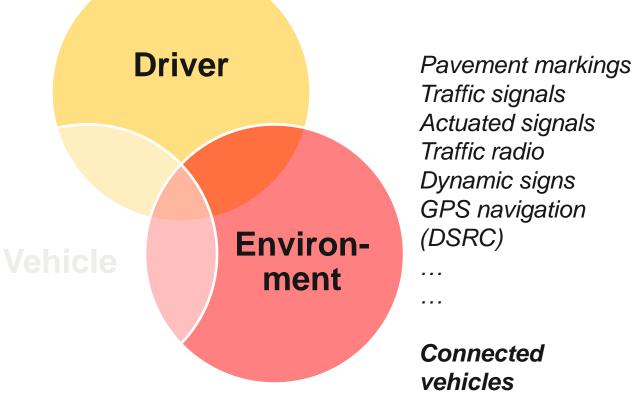
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Connected and automated

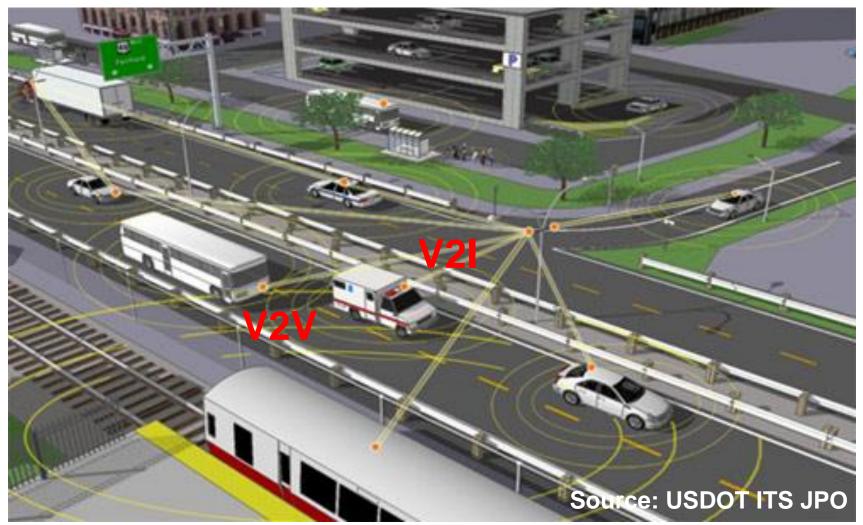
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Connected and fully automated

You talkin' to me?





Dedicated to DSRC?

- FCC allocated the 5.850-5.925 GHz band for ITS-specific "dedicated short-range communications" in the United States
- Potential uses: Look-ahead warnings, collision avoidance, signal prioritization, toll payment, traffic information, platoons....
- NHTSA decision on next steps for vehicle communication is (over?)due in 2013



What's law got to do with it?

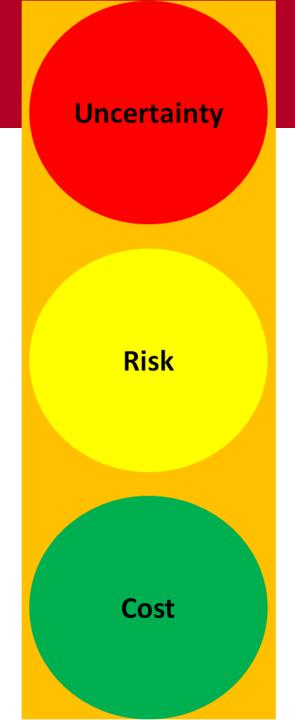
Regulation

- Legality, standards, licensing, rules of the road
- Compensation
 - Liability, reputation, insurance
- Information
 - Data, privacy, security, IP
- Preparation
 - Socioeconomics



Questions!

- Uncertainty about:
 - Technology
 - Deployment
 - Law
 - Effects
 - Responsibility



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