

Government Regulation, Anticipation, and Participation

Bryant Walker Smith

University of South Carolina School of Law

University of South Carolina School of Engineering

Center for Automotive Research at Stanford (CARS)

Center for Internet and Society at Stanford Law School

cyberlaw.stanford.edu/bws

newlypossible.org



United States

Eliminated in round of 16

Matches

Standings

Full-time • Round of 16

Arena Fonte Nova, Salvador



Belgium

2 - 1

United States



Timeline

Match stats

Lineups





U-Robotics®



AA



CB



RD



SD



TR



CS



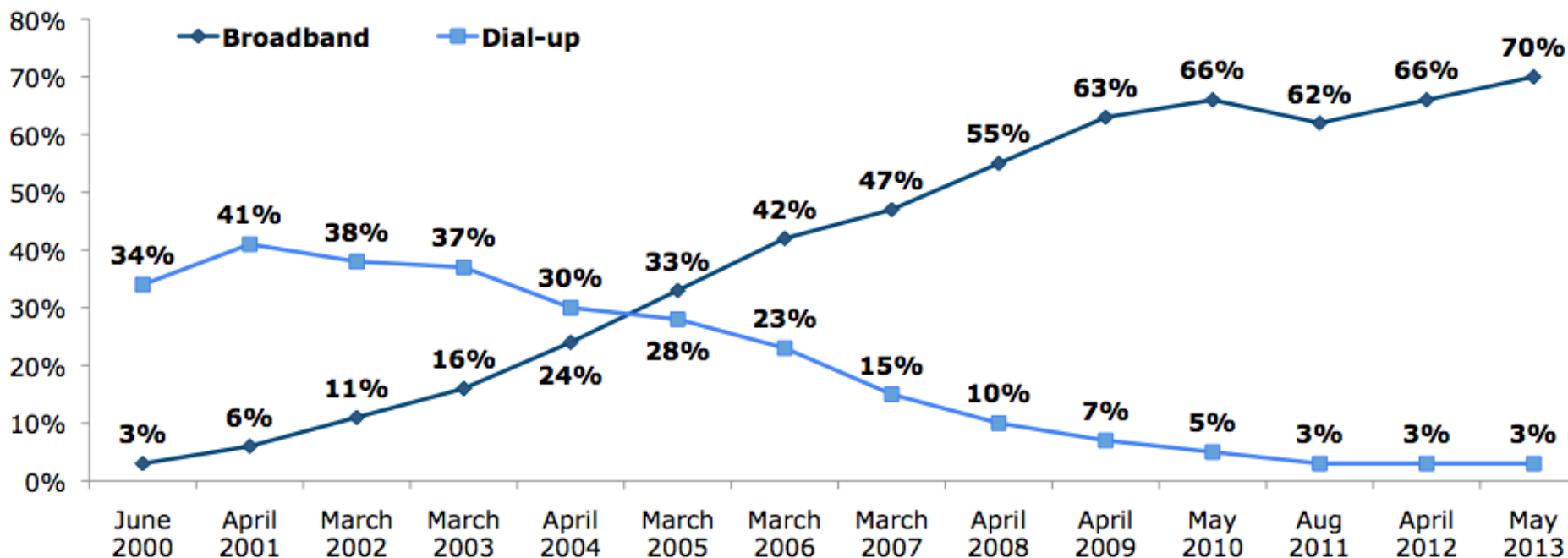
ARD/FAX

Sportster®
14,400 FAX MODEM
CCITT V.32 bis with V.42 bis

US Home Broadband and Dial-Up Adoption Trends

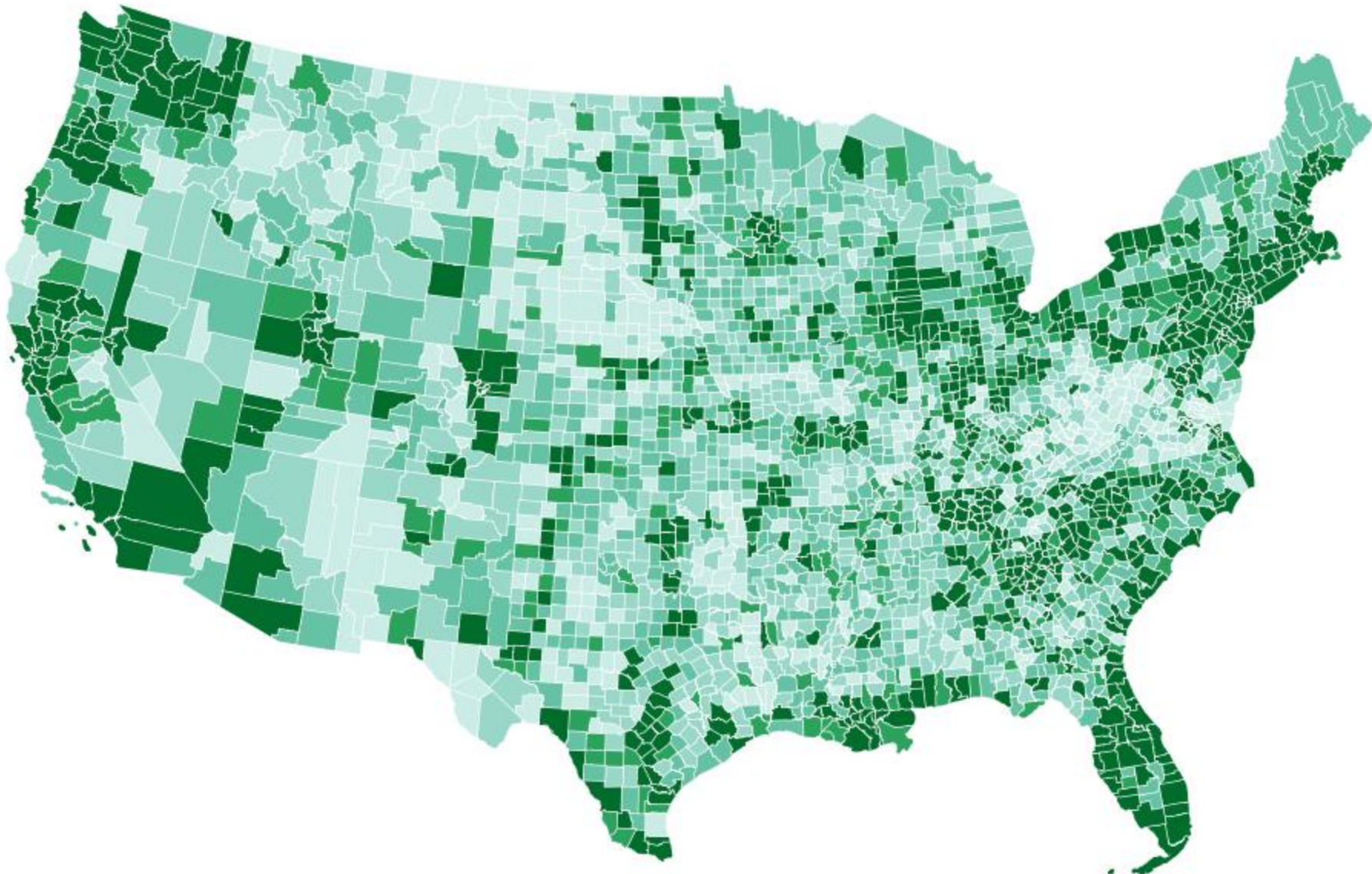
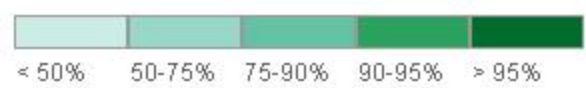
(%, among American adults aged 18 and older)

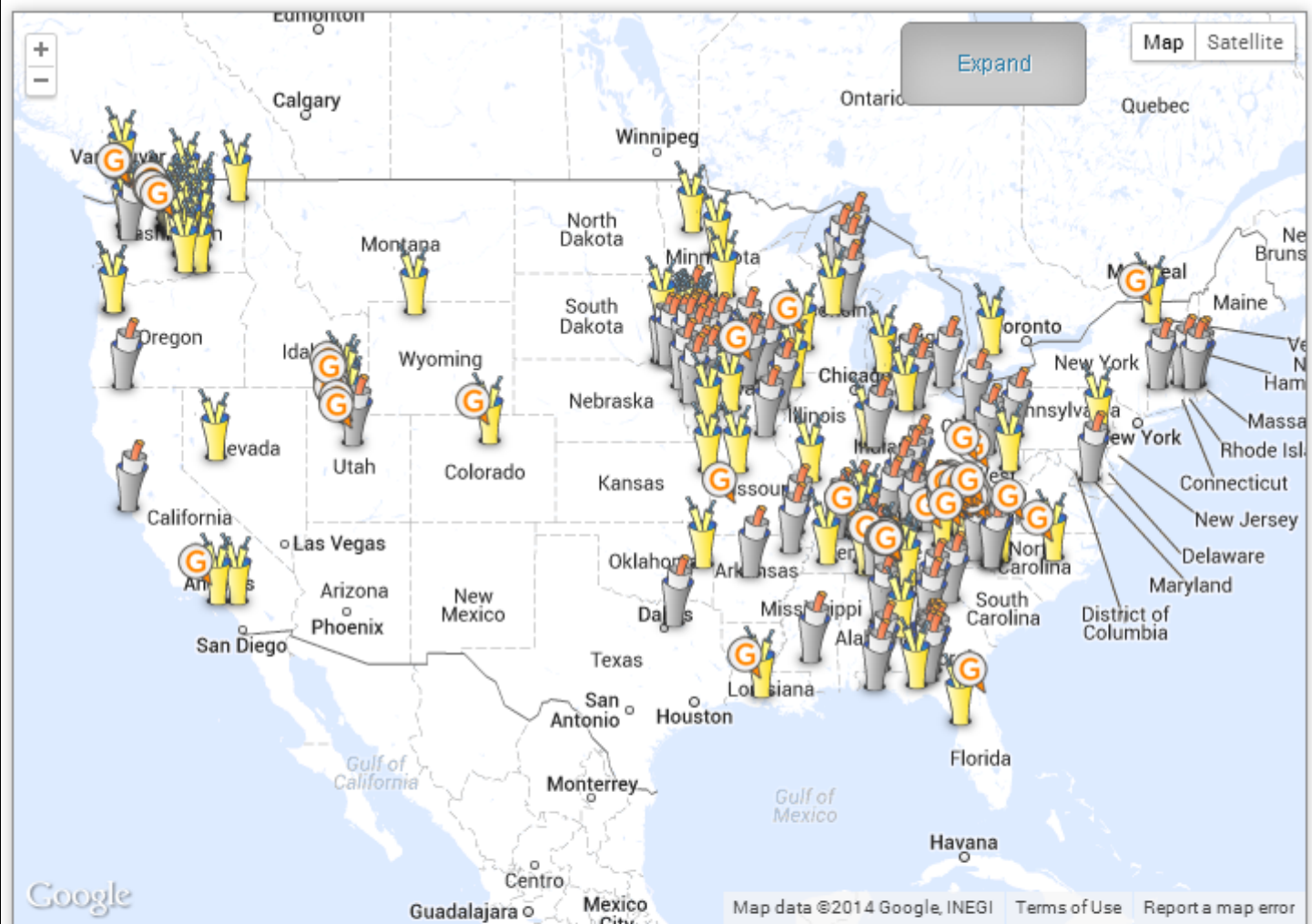
Snapshots, June 2000-May 2013



* change in methodology

Population with access to advertised download speeds at least 6mbps





Click the controls below to turn on or off the markers.

Citywide Cable
 Citywide Fiber
 Portions of City
 Dark Fiber

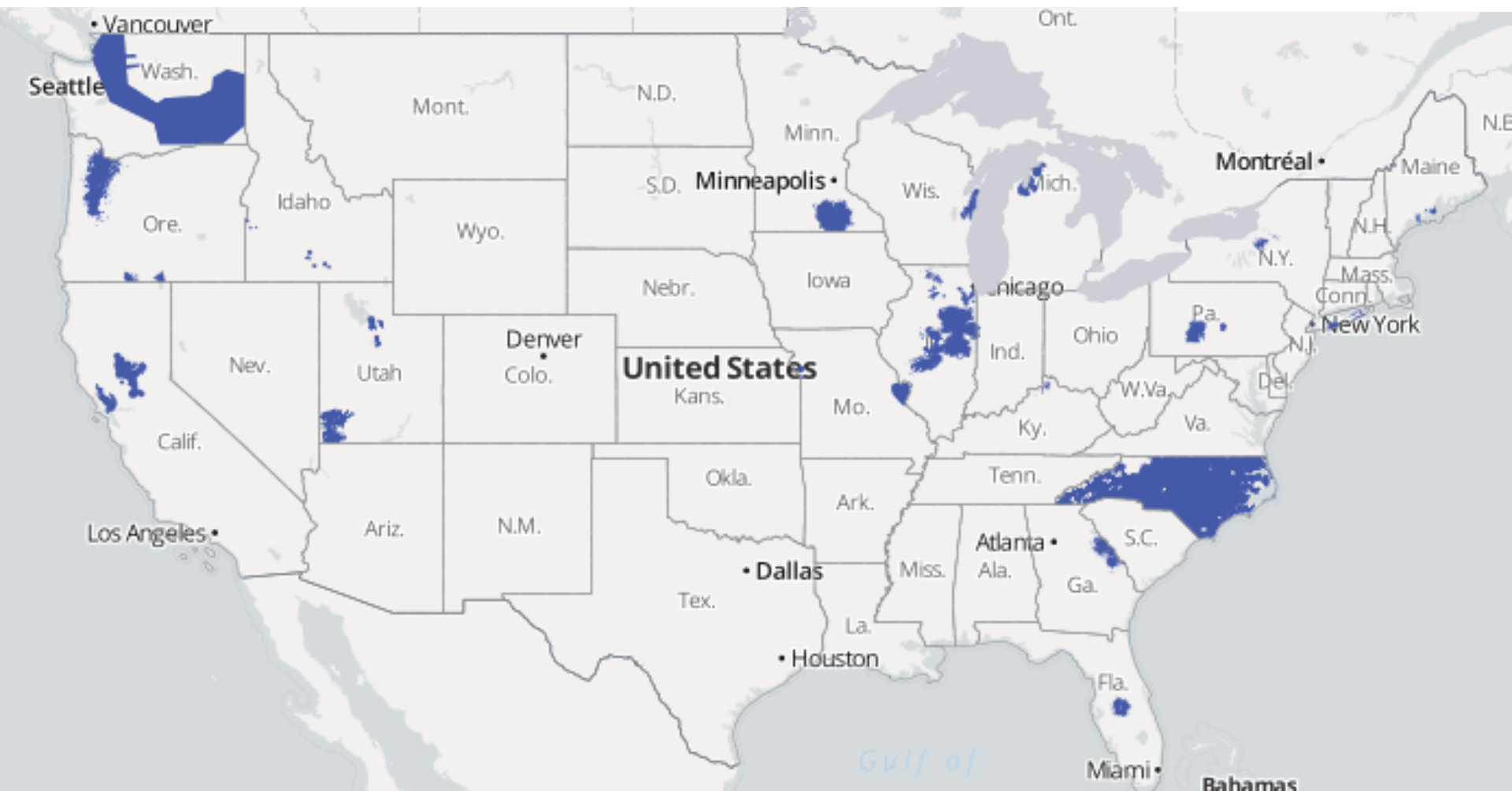
Stimulus Project
 Gigabit Speeds
 States with Barriers

Google fiber



Download Speed: **50 - 100 Mbps . . . 1 Gbps+**

WIRELESS



<http://www.broadbandmap.gov/speed>

Don't be like this.



Level	Definition	Execution of steering and acceleration/ deceleration	Monitoring of driving environment	Fallback performance of <i>dynamic driving task</i>	System capability (<i>driving modes</i>)
0 No Automation	the full-time performance by the <i>human driver</i> of all aspects of the <i>dynamic driving task</i> , even when enhanced by warning or intervention systems	Human driver	Human driver	Human driver	n/a
1 Driver Assistance	the <i>driving mode</i> -specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	Human driver and system	Human driver	Human driver	Some driving modes
2 Partial Automation	the <i>driving mode</i> -specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	System	Human driver	Human driver	Some driving modes
3 Conditional Automation	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> with the expectation that the <i>human driver</i> will respond appropriately to a <i>request to intervene</i>	System	System	Human driver	Some driving modes
4 High Automation	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> , even if a <i>human driver</i> does not respond appropriately to a <i>request to intervene</i>	System	System	System	Some driving modes
5 Full Automation	the full-time performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> under all roadway and environmental conditions that can be managed by a <i>human driver</i>	System	System	System	All driving modes

Anticipating Automation

- Increasing driver assistance *everywhere*
- Location-specific automation *somewhere*
 - Limited geographic/weather capabilities
 - Limited mapping
 - Varying business cases
 - Diverse state/local regulation
 - Pilot projects
 - Transit projects
-

What Municipalities *Cannot** Control

- Development and deployment of new technologies by automakers
- Federal motor vehicle standards
- State vehicle codes and insurance laws
- Many consumer preferences
- The weather

What Municipalities *Can** Control

- Local infrastructure
 - Managed lanes
 - Downtowns
 - Signals
 - Sidewalks
 - ...
- Local vehicle fleets
- Transit systems
- Taxicab regulations and concessions
- Local traffic rules and enforcement
- Parking rules and pricing
- Land use
-

Some Relevant Articles

- SAE Levels of Driving Automation
- A Legal Perspective on Three Misconceptions in Vehicle Automation
- Managing Autonomous Transportation Demand
- The Impact of Automation on Environmental Impact Statements
- Planning for Autonomous Driving

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