Local Policy for Automated Mobility

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OUTLINE

- Policy Context
- Policy Roles for Cities
- Simple Takeaways
Policy Context

- Background
- Uncertainty & Travel Behavior
- Policy Patchwork
Background from Policy Activities

- Group processes at:
  - Autonomous Vehicles and City Conference
  - Planetizen 2019 - Web Technologies Benchmarking Study
  - AVS Proceedings / Road Vehicle Automation 7
Uncertainty is a Given

To transform planning, autonomous vehicles will reshape cities
Slow, Incremental, and Uncertain Transitions in Platforms & Behavior

- Personal AVs and AV Taxis could increase VMT/GHG and eliminating parking
  - or NOT
- AVs could increase roadway capacity
  - or NOT
- Shared AV taxis could reduce VMT and GHGs;
  - or NOT
- Private fleet ownership could go down
  - or NOT
Patchwork of Policy

**AV START Act** and **SELF DRIVE Act** – concept to create a national framework for the testing and deployment of automated vehicles

**Automated Vehicles 4.0** – guidelines to support AV industry maturation, w/principles to: 1) protecting users and communities; 2) promoting efficient markets; 3) and facilitating coordinated efforts.

State regulation varies; little direction for local government; **12% have some kind of AV policy**
Sum of Number of Records for each Responsive1 broken down by City Size1. Color shows details about AV Policy1. The view is filtered on AV Policy1, which keeps Yes-General Plan, Yes-mention, Yes-Ordinance and Yes-white paper.

- Planetizen 2019 - Web Technologies Benchmarking Study

- AVS Proceedings / Road Vehicles Automation 7
  https://link.springer.com/chapter/10.1007/978-3-030-52840-9_14
Policy Roles for Local Governments

- Cities “preempted” from many aspects of vehicle design, safety, operation
- Can engage in operational and asset management
- Can explore functional rideshare pilots and partnerships
- Can invest in technology: signs, lines and potholes
A Focus on Low-Cost Short-term Local Policy Actions

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Reimagining and Repurposing Parking for Human-Centric Use

Lane thinning and parking reductions
More efficient curb space
Thinking shared

Incorporating Transportation Electrification into City-level Priorities

Modernize parking minimums to balance ADA-compliant charger installations;
Prioritize "make-ready" requirements for new construction

Adopt local incentives for EVs, with special consideration given to people living in communities of concern

Consider Positive-Sum Road Design to Reduce Speeds

Pedestrian zones
Vision Zero synergies

low

cost

term

short

long
POSITIVE SUM ROADWAY DESIGN, PEDESTRIAN ZONES AND VISION ZERO PLANS
ELECTRIFICATION & ZERO EMISSION TRANSPORT ZONES
**Standardizing Right of Ways to Increase Road Safety**

- Regular maintenance for physical infrastructure
- Planning for predictable and AV-readable signage
- Advanced and standardized alerts around construction zones

**Reimagining Curb Use and Allocation**

- Implement curbside designations and signage
- Integrate AVs into dropoff strategy
- Encourage high-productivity curbs
REIMAGING CURBS
Best practice on pricing...

- Complexity confounds
- Conduct tactical experiments
- Consider price anchoring / social norms
- Use dynamic / variable pricing
- Involve the public
RETHINKING RIGHT OF WAY ALTOGETHER
Thin Lanes | Remove Parking | Think Shared

Thin Lanes | Remove Parking | Think Shared

Thin Lanes | Remove Parking | Think Shared

Thin Lanes I Remove Parking I Think Shared

Thin Lanes | Remove Parking | Think Shared

RETHINKING TRANSIT
Simple Takeaways

• Consider multiple users / implications for bikes and pedestrians
• Don’t overthink digital infrastructure that’s nice to have—have clear signs, lines and good pavement
• Think about operational and asset management; how can you use speeds and ROW to facilitate and guide future mobility
• Consider / explore mobility partnerships or corridors; new ways to think about AV transit
Thank you for joining us for:
Local Policy for Automated Mobility

View the full report at:
https://transweb.sjsu.edu/research/2055-Policy-Framework-Future-Automated-Mobility

Tune in for our next webinar “Safe Routes to School in 2021: Let’s Walk the Walk” on February 16, 2021 at 10a.m. (PST)! Visit https://transweb.sjsu.edu/events for details and registration.

Have a suggestion for a webinar topic you’d like to see featured? Email irma.garcia@sjsu.edu

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