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<td>Raquel Kravitz</td>
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Automated and Intelligent Systems
California Energy Commission

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Climate Findings

Key takeaway: This best case 3R scenario envisions a future that could reduce CO₂ by 80% compared to a “business-as-usual” scenario or even a “1R” scenario with automated but mostly single occupant. (Eggart, Sperling 2018)
State Level Automation Policy

• Mostly states only passed preliminary policies (e.g. exploratory committees, definitions)
• CA is the only state with legislation that addresses AVs and emissions for fleet operators
• Urgent policy gap for regulating emissions of privately owned AVs and partial automation already resulting in increases to VMT.

(Fleming 2020)
Best Opportunities for Aligning Automation with Environmental Goals

1. AV Fleet electrification
2. Pricing Travel
3. Data Sharing
4. Pooling
Will Pooling return? Or will Single-Occupant Travel Linger?

Begin with Risk Definitions:

- **Safety** is defined as being secure from *accidental harm*. (Kurani 2019)
- **Security** is defined as being safe from *intentional harm*. (Kurani 2019)
- **Personal risk constellations** are groupings of safety and security risks that are weighed against benefits to determine behavior. These vary by age, gender, etc. (Grunwald 2016)
State Goal Is To Minimize Risks & Assess Tradeoffs

- The Pandemic will heighten risks for safety from other passengers
- AVs may address some of these risks, and add other risks
- Electrification reduces risks from environmental harms
- 3Rs travel will inevitably expand risk constellations
- **State should endeavor to address all risks and ensure there is equity, to avoid disparities of risks.**
Thank you

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