



ARIZONA
FORWARD

**OUR ENVIRONMENTAL LEGACY.
YOUR SUSTAINABLE FUTURE.**

Autonomous Vehicles & Community Planning

Presented by Arizona Forward

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Rural Transportation Summit
Lake Havasu, October 2018

Arizona Forward



MISSION

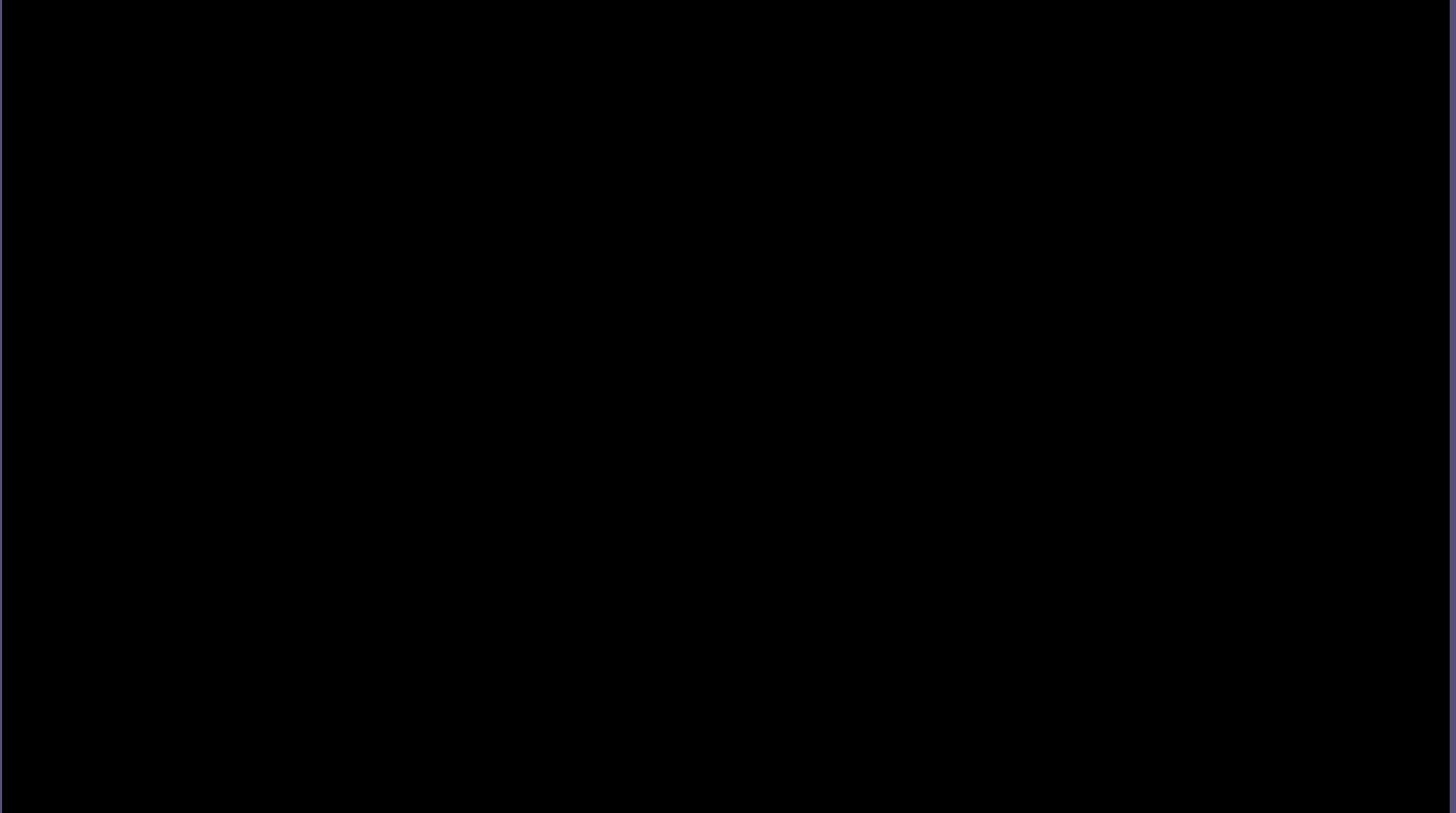
Arizona Forward brings businesses and civic leaders together to promote cooperative efforts to improve the environmental sustainability and economic vitality of our state and local regions

VALUE

Arizona Forward mobilizes the state's business leaders and policymakers to leverage their collective power to influence how we best grow our communities, stimulate our economy, and enhance our environment



Autonomous Vehicles



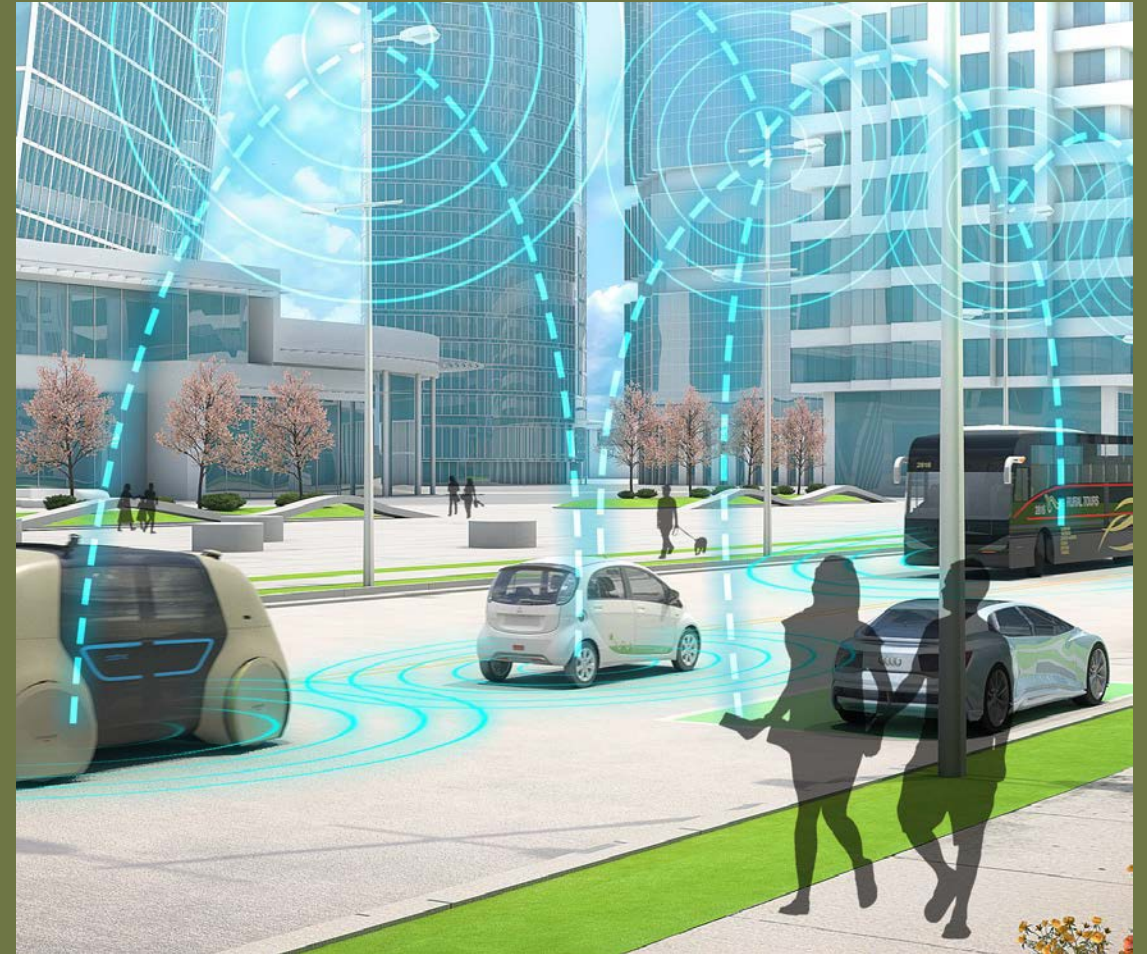
Autonomous Vehicle Town Halls

Goal: Start a discussion on how Autonomous Vehicles will impact the future of transportation in Arizona

Northern Arizona Town Hall was held in September 2018

Southern Town Hall will be hosted in Tucson and is scheduled for December 2018

Central Town Hall will be hosted in Phoenix and is scheduled for February 2019



Autonomous Vehicle Town Halls



Eric Plapper

Project Manager,
Transportation
Technology at HDR



Veronica Siranosian

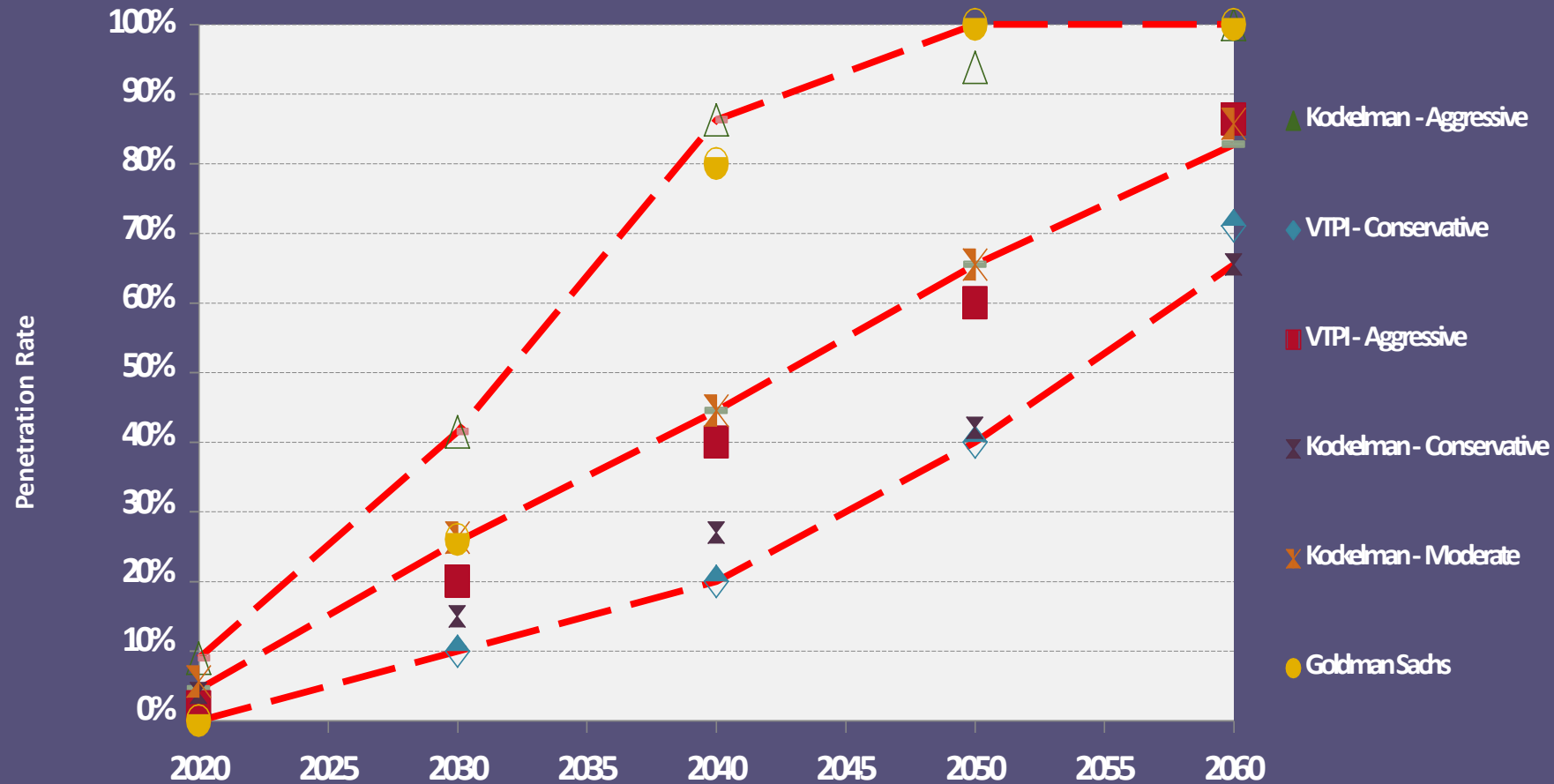
Director, AECOM Ventures



Gregory Rodriguez

Of Counsel at Best Best &
Krieger

AV/CV Adoption Rates



	2020	2030	2040	2050	2060
Autonomous	0-10%	10-40%	20-85%	40-100%	65-100%
Connected	0-10%	40-60%	80-100%	~100%	~100%

Deployment Scenarios

Personal AV Adoption

Public Cost: Low

User Cost: High

Operating Extent: High

Readiness: 5+ years

Full-Sized Transit AV Adoption

Public Cost: Medium

User Cost: Low

Operating Extent: Medium

Readiness: 10+ years

AV Microshuttle Adoption

Public Cost: Low

User Cost: Low

Operating Extent: Low

Readiness: Now





Opportunities for
**infill and adaptive
reuse** of parking
lots and structures



Decoupling land from land use

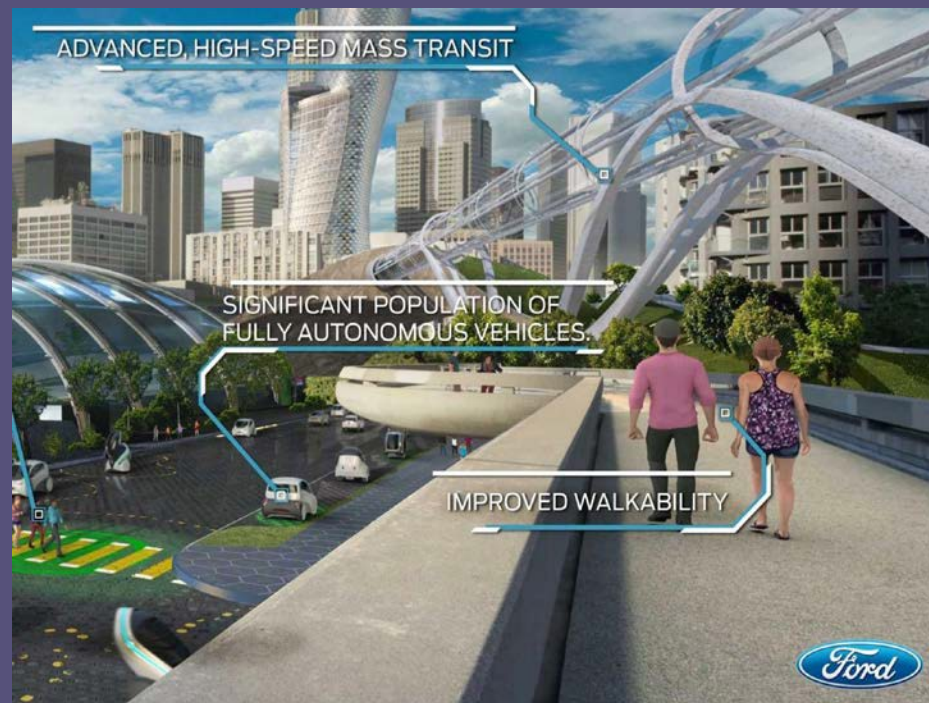
Who is Driving Change?

Whose vision?



ONE GAJILLION
NEW STOPS.

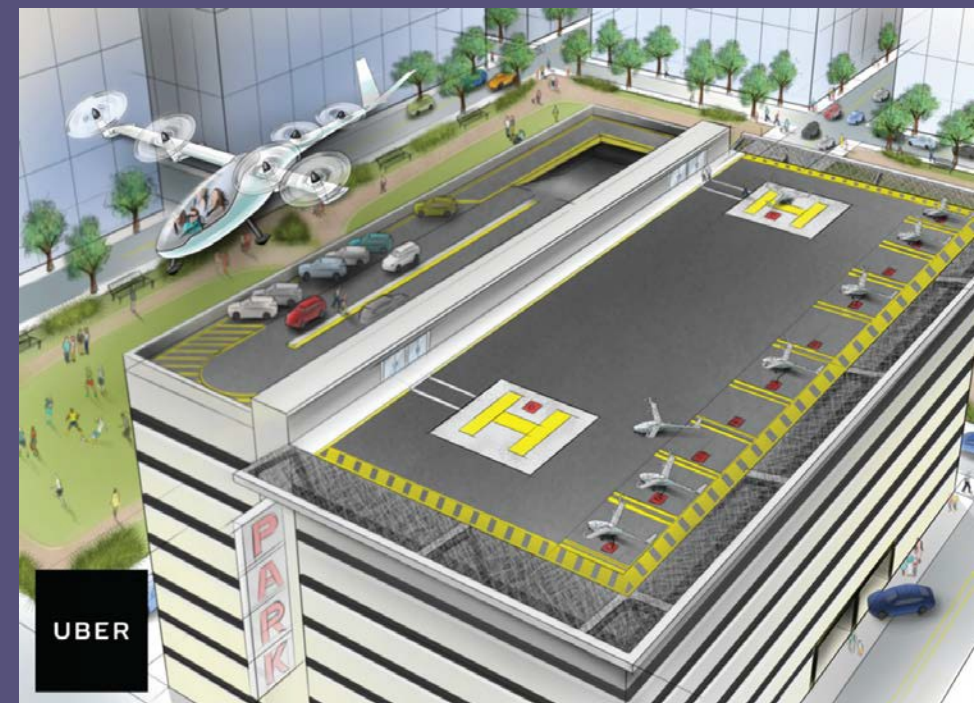

DOWNLOAD & RIDE




ADVANCED, HIGH-SPEED MASS TRANSIT

SIGNIFICANT POPULATION OF FULLY AUTONOMOUS VEHICLES.

IMPROVED WALKABILITY



UBER



Considerations for Implementation



Planning and Policy

Safety and Security

Partnerships

Examples



CAPRI, London, UK



Zoning Code Amendments,
Chandler, AZ



Colorado DOT Smart Mobility Plan,
Colorado DOT



Ultimate Urban Circulator,
Jacksonville Transportation Authority



Multimodal Technology Vision
City of Lincoln, NE

Who is Liable?



Flagstaff Town Hall Key Findings

Mobility and Equity

- **Microtransit** can solve First Mile/Last Mile barriers
- AV/CV will cut operation costs for transit
- Potential **equity** challenges



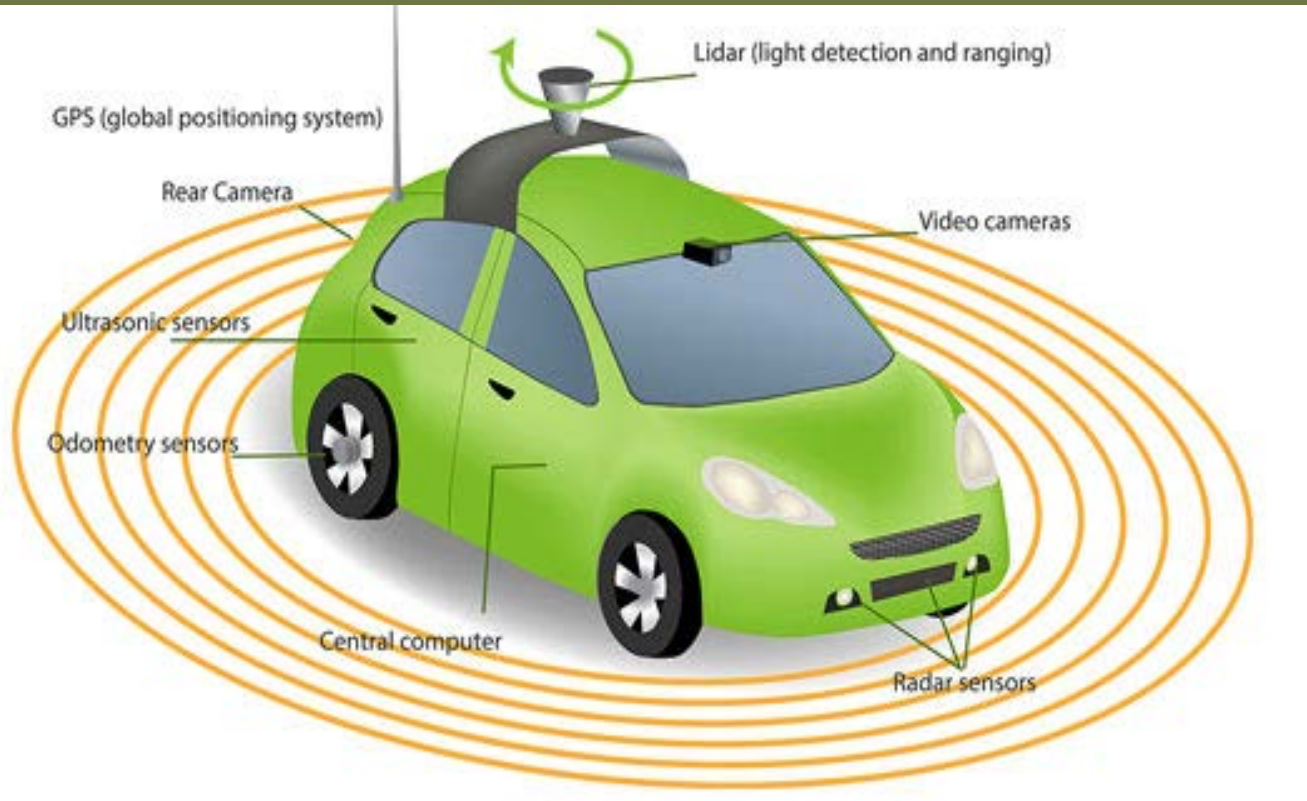
Flagstaff Town Hall Key Findings



Law Enforcement

- Challenging transition period
- Traffic Laws will need to be updated
- Concerns about people using AV/CVs for illegal activity
- Expect Decrease in Traffic Violations

Flagstaff Town Hall Key Findings



Safety

- Potential to enhance safety
- Safety precautions when technology fails
- Possible safety and perception concerns

Flagstaff Town Hall Key Findings

Funding

- **P3** potential
- Attract partnerships through demonstrating unique qualities
- Constrained budgets will be a limitation for planning for AV/CV



Discussion

- 1. What are the primary opportunities and problems that autonomous vehicles will introduce in your community?**
- 2. Are autonomous vehicles part of your vision for the future?**
- 3. What do you need in order to be ready?**

How to Get Involved in the Conversation

- Ongoing comment opportunities:
 - Impact of AV Technologies on Workforce – **Due Nov. 5**
 - ANPRM for AV Pilot Programs – **Due Nov. 23**
 - AV 3.0 – **Due Dec. 7**
- Comment opportunities “down the road”:
 - Streamlining FMVSS exemption process
 - Automated Driving Systems and Commercial Trucks
 - Update to Uniform Traffic Control Devices Manual
- <https://www.federalregister.gov/documents/2018/10/09/2018-21842/notice-of-request-for-comments-scope-of-the-study-on-the-impact-of-automated-vehicle-technologies-on> (**Federal Register**)
- https://columbiangwu.co1.qualtrics.com/jfe/preview/SV_aWvDombNyzEeBqB?Q_SurveyVersionID=current&Q_CHL=preview (**National Association of Regional Councils**)



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Thank you!

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