

MEETING NOTES

Iowa Advisory Council on Automated Transportation (ATC)

Policy & Legislation (P&L) Subcommittee Meeting

Tuesday, May 17, 2022

1:00-2:00 pm CT

Action Items:

- *CAT in Planning* working group will finalize the CAT in Planning document and post on the ATC website in June of 2022. Subcommittee members can share that document with planners and others that may be interested once available
- P&L subcommittee members can email Steve Spears at steven-spears@uiowa.edu or Dylan Mullenix at dmullenix@dmampo.org if they or someone they know would like to be involved in the DEI working group. New members or possible members are below following the meeting:
 - Tracy Bradley – Iowa DOT, Civil Right Bureau (confirmed)
 - Kristin Haar – Iowa DOT, Public Transit Bureau (confirmed)
 - Mark Wyatt – Iowa Bicycle Coalition (confirmed)
 - Brooke Lovelace – Iowa Development Disabilities Council
 - Anne Crotty – Iowa Olmstead Consumer Taskforce
 - Iowa Office of Native American Affairs
- Continue to track federal activities (e.g., rulemaking, AV letter from US senators to Sec. Buttigieg)
- Reach out to Iowa Pupil Transportation Association for involvement on the subcommittee and possible advanced technology projects

1. Welcome and introductions – Dylan Mullenix, Policy & Legislation Subcommittee Chair

a. Attendees – 26 attendees

- Dylan Mullenix – Des Moines Area MPO (P&L Chair)
- Dr. Laura Sandt – University of North Carolina Safety Research Center
- Stephan Bayens – Iowa Department of Public Safety
- Rob Denson – Des Moines Area Community College
- John Hartog – Northwest Iowa Community College
- Mark Wyatt – Iowa Bicycle Coalition
- Carl Lingen – Iowa Public Transit Association
- Kirby Wagner - Growmark
- Marcus Coenen - FHU
- Paul Steier – American Association of Motor Vehicle Administrators (AAMVA)
- Skylar Knickerbocker – Iowa State University
- Steven Spears – University of Iowa, School of Planning and Public Affairs
- Dan McGehee, Omar Ahmad, Jacob Heiden, Cherie Roe – University of Iowa, National Advanced Driving Simulator
- Tracey Bradley, Joe Drahos, Kristin Haar, Alex Jansen, Renee Jerman, Peggi Knight, Andy Lewis, Adam Shell, Sara Siedsma, Toni Smith – Iowa DOT

b. New members

- i. Kirby Wagner – Associate Manager, Government Relations, Growmark
- ii. Tracy Bradley – Compliance Officer, Civil Rights Bureau, Iowa DOT
- iii. Marcus Coenen – Transportation Planner, FHU (transportation consultant)

2. Mobility Justice in AV Planning and Community Readiness – Dr. Laura Sandt, Senior Research Associate, University of North Carolina Safety Research Center

- a. Dr. Laura Sandt is a senior research associate at the University of North Carolina Highway Safety Research Center. She serves as director for the Collaborative Sciences Center for Road Safety, a National University Transportation Center, which is leading numerous projects related to automated vehicles and safety. She has authored publications related to automated vehicles, such as the Discussion Guide for Automated and Connected Vehicles, Pedestrians, and Bicyclists and Exploring the Promise and Limits of Pedestrian Detection, which are among the first to raise the issues of safety needs regarding pedestrians and bicyclists with the advent of automated technologies.
- b. Vulnerable road user (VRU) safety has come to the forefront nationally and locally in recent years. Traditionally, bicyclists and pedestrians are considered vulnerable due to their size and speed. Research shows VRUs can be extended beyond bikes and pedestrians. Travelers can be made vulnerable when auto-oriented, ableist, racist, classist, and/or sexist policies deny access to critical places/services and fail to offer protection against physical, social, and environmental harm.
- c. The [US DOT's Equity Action Plan](#) highlights how disparities heighten vulnerabilities, including wealth creation (e.g. Black and Hispanic owned businesses are underrepresented receiving about 2 percent of FY20 US DOT direct contract dollars), access (e.g. lower income, rural, and BIPOC communities are less likely to have access to high-speed internet, high quality transit, and adequate bike/ped facilities), and exposure to risk (e.g. American Indian and Alaskan Native and Black individuals have significantly higher rates of traffic death than other racial groups). Transportation can help bridge some of these gaps by providing equitable solutions.
- d. Mobility equity is a transportation system that increases access to high quality mobility options, reduces air pollution, and enhances economic opportunity for marginalized populations such as low-income people, people of color, the elderly, and people with disabilities. Social equity and community power must be prioritized to achieve mobility equity in transportation planning and investment. AVs have the potential to help communities address their mobility needs through access, job creation, and safety.
- e. The Greenlining Institute offered one potential framework for sustainable transportation equity: equity in the mission, equity in the process, equity in the outcomes, and equity in the measurement and analysis. This framework is applicable as the US moves forward with equity in the forefront of the Safe Systems Approach as part of the [National Roadway Safety Strategy](#). Equity should be considered in all stages of the process from the beginning of a project through the end and into implementation. Community residents should be involved in the process and are crucial to understanding a problem holistically.
- f. Agencies are testing AV technologies to understand the operating, policy, and deployment challenges. Early data from these projects have shown basic data about number of trips and riders' perceptions of the AVs. The data haven't considered the demographics of the riders or community needs, which highlight "missing data sets" in transportation. Community health assessments from public health departments are a rich source of information on health mobility needs.
- g. Moving forward, agencies should go beyond the baseline level of data and think about the AV needs for different users in a community. To reach mobility equity in AVs, stakeholders must clearly define AV mobility justice goals, assess community-engagement and power sharing processes, and identify needed partners and data to perform equity checks and evaluations.

3. P&L Work Plan & Tactical Actions Updates

- a. Ensure CAT in Planning – Dylan Mullenix, Chair
 - i. In support of this AT Vision tactic, a working group was formed to develop a white-paper resource on CAT considerations for planning. The membership of this working group consists of consultants, MPOs, Iowa DOT, and transit. The resource has been developed and is the final stages before publishing and sharing.
 - ii. The resource includes actionable planning considerations, strategic considerations for allocating resources, identification of related planning tools, and identification of related functional areas. This document will be available on the ATC website once finalized in June 2022 and will likely need to be updated periodically.

- b. DEI Working Group – Dr. Steve Spears, University of Iowa
 - i. Dr. Steve Spears is an Associate Professor in School of Planning and Public Affairs at the University of Iowa. His research includes bikes, pedestrians, and transit in low-income neighborhoods. He recently joined the Policy & Legislation subcommittee last meeting in January 2022, and he has offered to provide his expertise & experience as a tactical lead for improving equity & accessibility.
 - ii. The DEI working group had their first meeting in late April as a brainstorming session and discussed developing guidance and measurements for equity goals in the ATC. P&L subcommittee members are invited to send names of individuals to participate in the DEI working group. Names can be sent to Steve Spears at steven-spears@uiowa.edu, Adam Shell at adam.shell@iowadot.us, or Dylan Mullenix at dmullenix@dmampo.org.
- c. Policy Update – Adam Shell, Iowa DOT
 - i. [Non-Traditional and Emerging Transportation Technology \(NETT\) Council](#) - The Office of the Secretary of Transportation (OST) invites public comment on projects, issues, or topics that DOT should consider through the NETT Council.
 - ii. [Authorized Windshield Area for the Installation of Vehicle Safety Technology](#) - FMCSA amends the Federal Motor Carrier Safety Regulations (FMCSRs) to increase the area on the interior of commercial motor vehicle (CMV) windshields where certain vehicle safety technology devices may be mounted. In addition, FMCSA adds items to the definition of vehicle safety technology.
 - iii. [Occupant Protection for Vehicles with Automated Driving Systems](#) - This final rule amends the occupant protection Federal motor vehicle safety standards (FMVSSs) to account for future vehicles that do not have the traditional manual controls associated with a human driver because they are equipped with Automated Driving Systems (ADS). This final rule makes clear that, despite their innovative designs, vehicles with ADS technology must continue to provide the same high levels of occupant protection that current passenger vehicles provide.
 - iv. [New Car Assessment Program \(NCAP\)](#) – Proposes the addition of four ADAS features to NCAP (blind spot detection/intervention, lane keep support, and pedestrian automatic emergency braking)
 - v. [Congressional Letter on AV Implementation](#) – a letter signed by a dozen U.S. Senators to Transportation Secretary Pete Buttigieg. Includes a handful of questions related to planning, policy, and engagement by the USDOT as it relates to emerging technology like connected and automated vehicles.

4. Advanced Technologies Project & Opportunities Discussion – All subcommittee members

- a. March 2022 ATC Meeting Charge - The Iowa Advisory Council on Automated Transportation is intended to increase roadway safety, personal mobility, and freight movement within the state of Iowa by advancing highly automated vehicle technologies. At the last ATC meeting, Director Marler encouraged the ATC and its subcommittees to:
 - i. Explore opportunities to deploy advanced technologies this year
 - ii. Focus on freight, mobility, or safety
 - iii. Pursue discretionary grants
- b. The Infrastructure Investment and Jobs Act (IIJA) includes more than \$1 trillion to strengthen an array of government systems and services. The massive piece of legislation provides grants to state and local governments to improve transportation, cybersecurity, public safety, water and energy utilities, broadband internet connectivity, and more. The ATC, its chairs, and stakeholders across the state are monitoring opportunities and funding streams to address current needs and advance transportation goals related to AT.

- c. Notices of funding opportunities have been opening monthly in response to the passing of the IJIA. The ATC is monitoring these streams regarding their purpose, criteria, funding amount, and timeline. While some opportunities have already opened and closed, others are soon to be opened. Many of these funding opportunities are part of multi-year programs and will have yearly call for proposals, and other opportunities are open until funding is expended. Funding from these programs will likely only be one-time so it's important to consider how to sustain activities beyond funding. Iowa's transportation stakeholders should work to identify needs and specific use cases first, and then they can begin to identify funding opportunities and partners.
- d. Adam, subcommittee chairs, and other stakeholders have brainstormed potential advanced technology projects in Iowa related to each subcommittee. Projects related the Policy & Legislation subcommittee are cross-cutting and currently focused on automated transit opportunities and community readiness. Some AT activities may already be in discussions at certain agencies and university partners, and all transportation stakeholders are encouraged to connect and collaborate on opportunities.
- e. Dylan and Adam have had discussions with Carl Lingen at the Iowa Public Transit Association (IPTA) to identify use cases for an automated shuttle in public transit while considering DEI goals. There are potential opportunities in Iowa's larger urban systems or regional systems. Public transit is being used more as a means of workforce transportation, and IPTA has been looking for pilot opportunities with large employers for an automated shuttle to fill this need. The public transit industry is similarly facing driver shortages like the trucking industry so automation could help fill this gap well. The Iowa Pupil Transportation Association may also have specific needs for automation, and this subcommittee will work to connect with them.

5. Information and key meeting dates

- a. **Policy & Legislation Subcommittee Meeting – Tuesday, May 17 from 1-2 pm**
 - i. *Mobility Justice in AV Planning and Community Readiness – Dr. Laura Sandt, Senior Research Associate, University of North Carolina Safety Research Center*
- b. **Economic Development & Infrastructure Readiness Joint Subcommittee Meeting – Tuesday, May 24 from 1-2 pm**
 - i. *Autonomous Vehicles Navigating to American Cities and Towns – Brittney Kohler, Legislative Director, Transportation & Infrastructure Service, National League of Cities*
- c. **Public Safety & Enforcement Subcommittee Meeting – Wednesday, June 29 from 1-2 pm**
 - i. *Keynote presentation – Dr. Dan McGehee, Director, National Advanced Driving Simulator at the University of Iowa*
- d. **AT Council Meeting - Wednesday, October 5 from 10 am - 12 pm**
 - i. *Presentations – Paul Steier, Director Vehicle Programs; Robert Heilman, Director at the Highly Automated Systems Safety Center of Excellence, US DOT; Neal Hawkins, Associate Director InTrans Iowa State Univ*

ATC SUBCOMMITTEE MEETING

Policy & Legislation
May 17, 2022

Automated drive

Destination: 50° 43' 50.34" N - 6° 10' 55.294" E
Arrival: 08:55 pm - Distance 783 miles

TCP/IP: 192.56.327.684.1
SYNC: **enabled** | Sensors: **active** | Cameras: **active**

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MEETING AGENDA

1. **Welcome and introductions** – Dylan Mullenix, Policy & Legislation Subcommittee Chair
2. **Mobility Justice in AV Planning and Community Readiness** - (30 minutes)
 - a. Dr. Laura Sandt, Senior Research Associate, University of North Carolina Safety Research Center
3. **P&L Work Plan & Tactical Actions or Updates** – (10 minutes)
 - a. Ensure CAT in Planning – Dylan Mullenix (Subcommittee Chair)
 - b. DEI Working Group – Dr. Steve Spears (University of Iowa)
 - c. Policy Update – Adam Shell (Iowa DOT)
4. **Advanced Technologies Project & Opportunities Discussion** – (20 minutes)
 - a. March 2022 ATC Meeting Charge
 - a. Explore opportunities to deploy advanced technologies this year
 - b. Focus on freight, mobility, or safety
 - c. Pursue discretionary grants
5. **Information and key upcoming dates**
 - a. Economic Development & Infrastructure Readiness Joint Subcommittee Meeting – Tuesday, May 24 from 1-2 pm
 - b. Public Safety & Enforcement Subcommittee Meeting – Wednesday, June 29 from 1-2 pm
 - c. AT Council Meeting - Wednesday, October 5 from 10 am-12 pm

WELCOME AND INTRODUCTIONS

Dylan Mullenix –
Policy & Legislation
Subcommittee Chair



NEW SUBCOMMITTEE MEMBERS

- Kirby Wagner – Associate Manager, Government Relations, Growmark
- Tracy Bradley – Compliance Officer, Civil Rights Bureau, Iowa DOT
- Marcus Coenen – Transportation Planner, FHU (transportation consultant)





MOBILITY JUSTICE IN AV PLANNING AND COMMUNITY READINESS

Dr. Laura Sandt – Senior Research Associate,
University of North Carolina Safety Research Center

Mobility Justice in AV Planning and Community Readiness

Laura Sandt, PhD

University of North Carolina, Highway Safety Research Center

May 17, 2022

Iowa ATC Policy and Legislation Committee



What makes travelers vulnerable?

People are made vulnerable when auto-oriented, ableist, ageist, racist, classist, and/or sexist policies deny access to critical places/services and fail to offer protection against physical, social, and environmental harm



Disparities that heighten vulnerability

Wealth creation

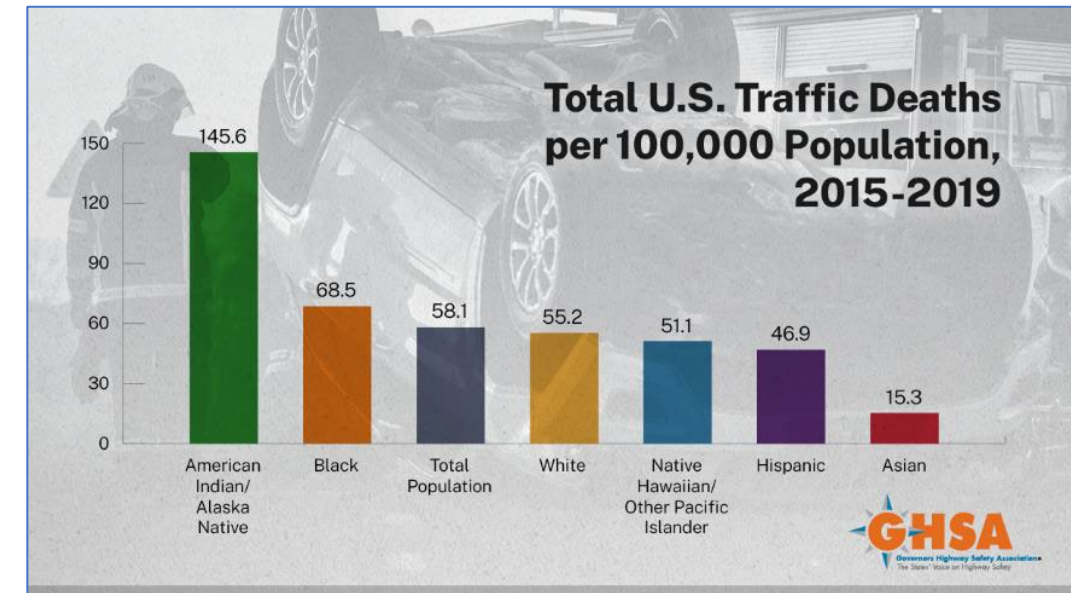
- Black and Hispanic-owned businesses are underrepresented, receiving only 1.7% and 2.4% of FY20 USDOT direct contract dollars distributed to engineering, construction, and computer related services

Access

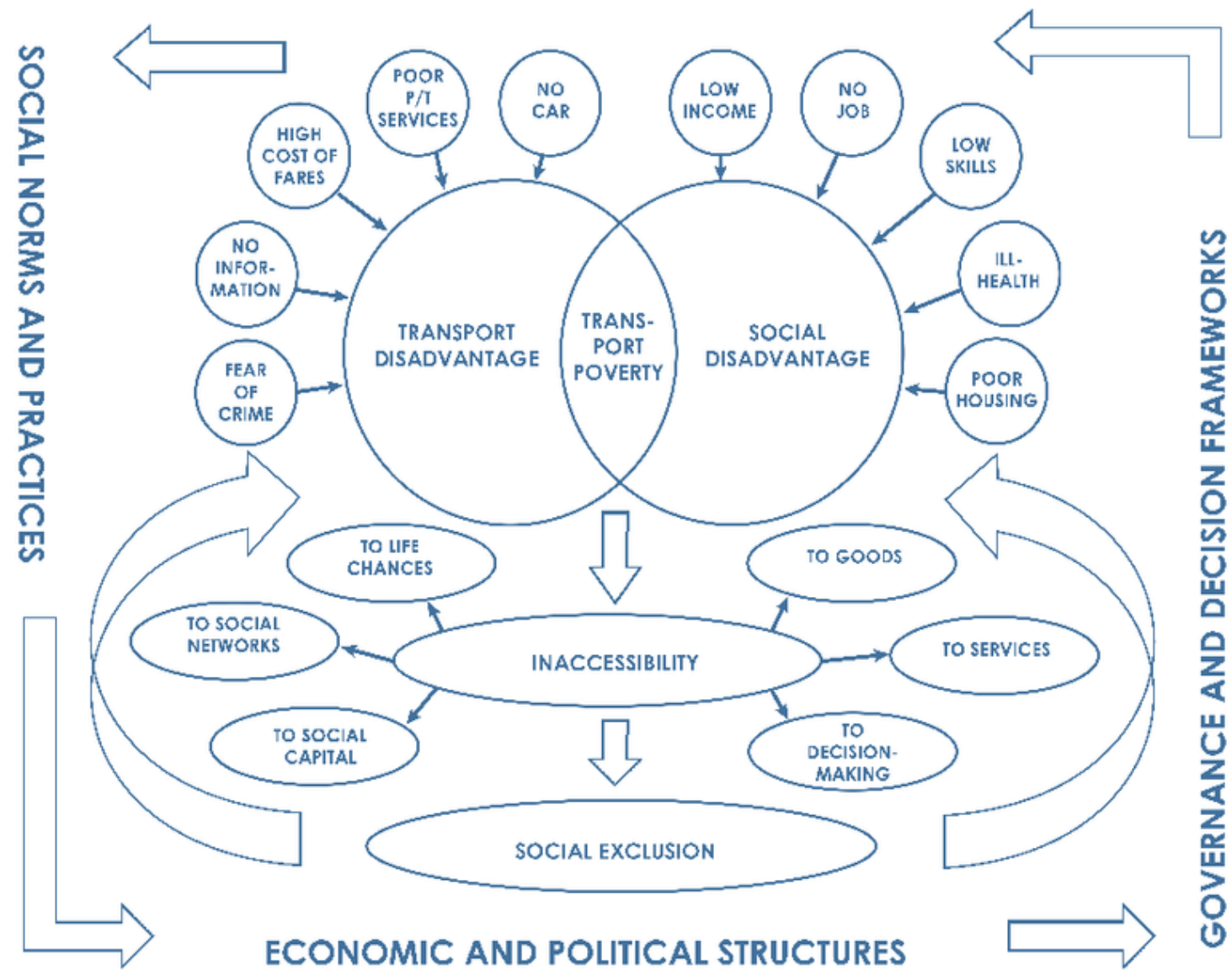
- Lower income, rural, and BIPOC communities are often less likely to have access to high-speed internet, high quality transit service, and adequate pedestrian/bicycle facilities and more likely to spend more time and household income on transportation

Exposure to risk

- Black and Hispanic individuals are exposed to higher levels of transportation-related air pollutants than other racial groups
- American Indian and Alaskan Native and Black individuals have significantly higher rates of traffic death than other racial groups



Sources: Tessum et al. (2019). "Inequity in Consumption of Goods and Services Adds to Racial-Ethnic Disparities in Air Pollution Exposure." *Proceedings of the National Academy of Sciences USA*, Vol. 116, No. 13.; GHSA (June 2021), *An Analysis of Traffic Fatalities by Race and Ethnicity*. https://www.ghsa.org/sites/default/files/2021-06/An%20Analysis%20of%20Traffic%20Fatalities%20by%20Race%20and%20Ethnicity_0.pdf; USDOT *Equity Action Plan* (January 2022). https://www.transportation.gov/sites/dot.gov/files/2022-04/Equity_Action_Plan.pdf.



Some useful definitions

MOBILITY EQUITY DEFINITIONS AND PRINCIPLES

Mobility Equity: a transportation system that increases access to high quality mobility options, reduces air pollution, and enhances economic opportunity for marginalized populations such as low-income people, people of color, the elderly and people with disabilities.

To achieve mobility equity in transportation planning and investments, we must prioritize:

1. Social equity: Addressing past and current injustices by redistributing societal benefits, burdens, and resources in a way that lifts up marginalized communities who have been left behind.
2. Community power: The ability of marginalized communities to influence decisions in a way that addresses their needs and concerns.

Mobility Justice centers

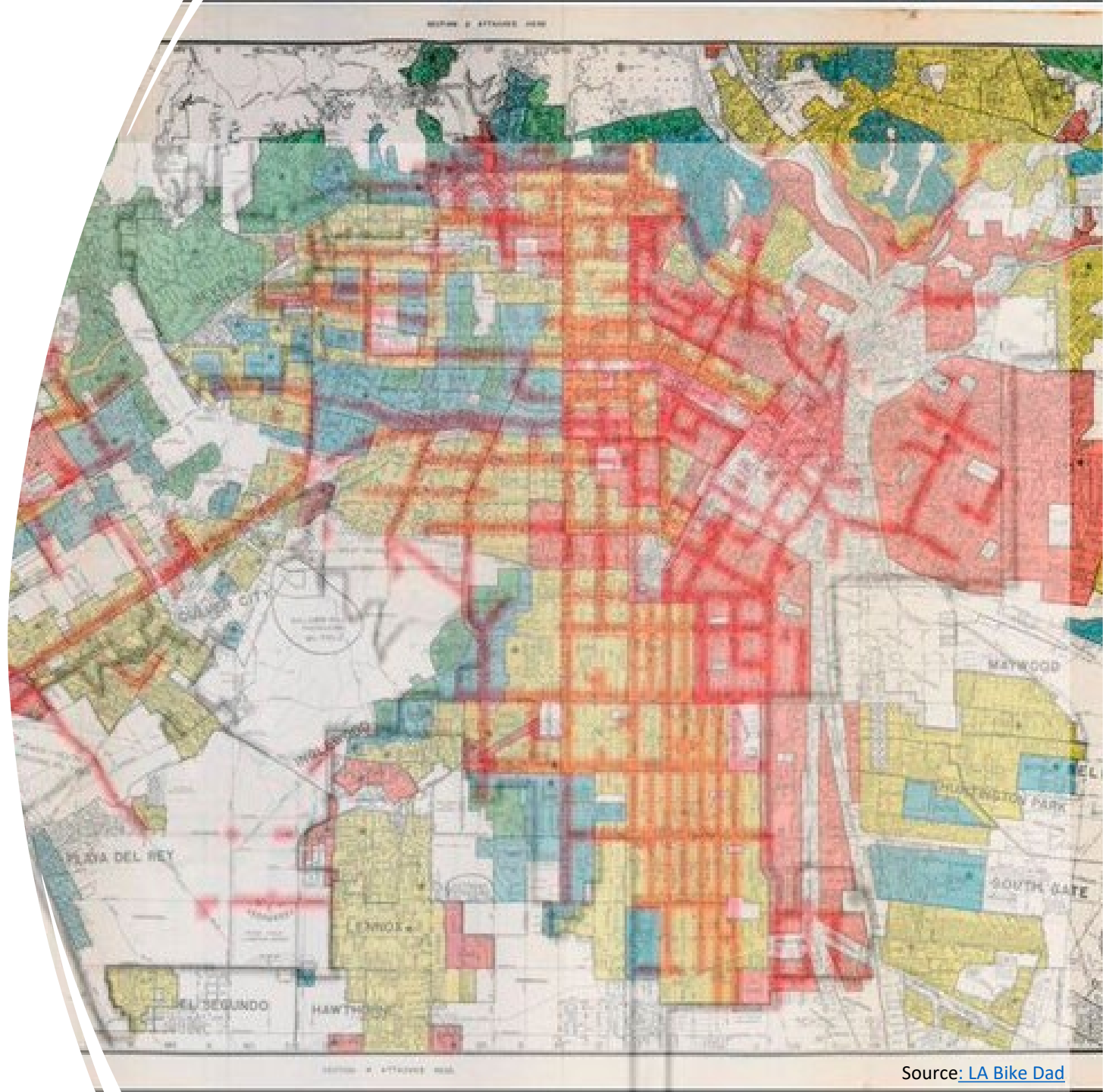
people over profit, property or placemaking, and prioritizes the community's lived experiences and aspirations as the primary driver of change and progress. It recognizes the significance of human infrastructure and ensures new projects enhance rather than erase or displace existing communities or neighborhood mobility strategies.

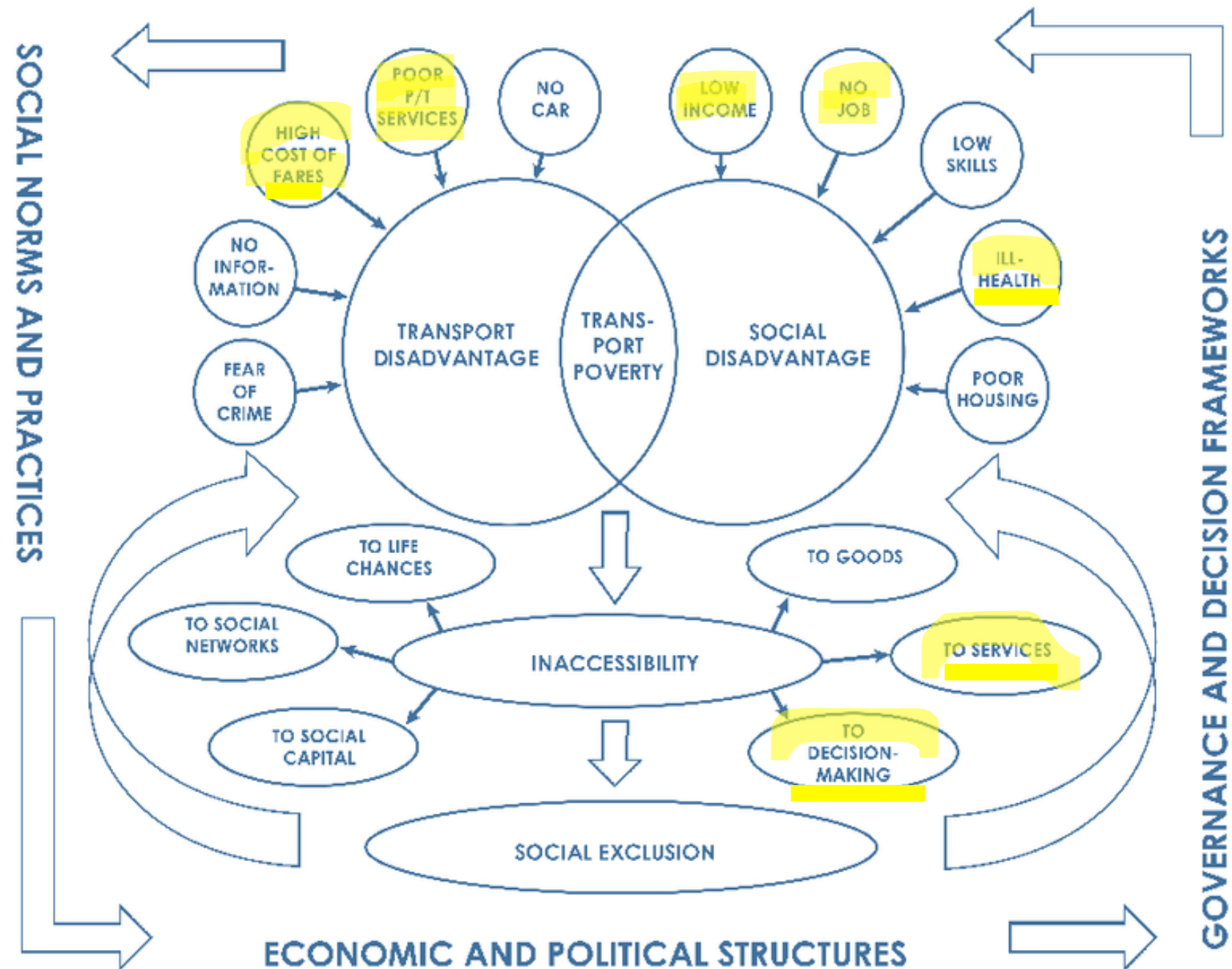
Source: Creger, Espino, Sanchez (January 2019). *Autonomous Vehicle Heaven or Hell? Creating A Transportation Revolution That Benefits All*. The Greenlining Institute. https://greenlining.org/wp-content/uploads/2019/01/R4_AutonomousVehiclesReportSingle_2019_2.pdf.

Source: Untokening, <http://www.untokening.org/updates/2017/11/11/untokening-10-principles-of-mobility-justice>

How will AVs help communities with real mobility and readiness needs?

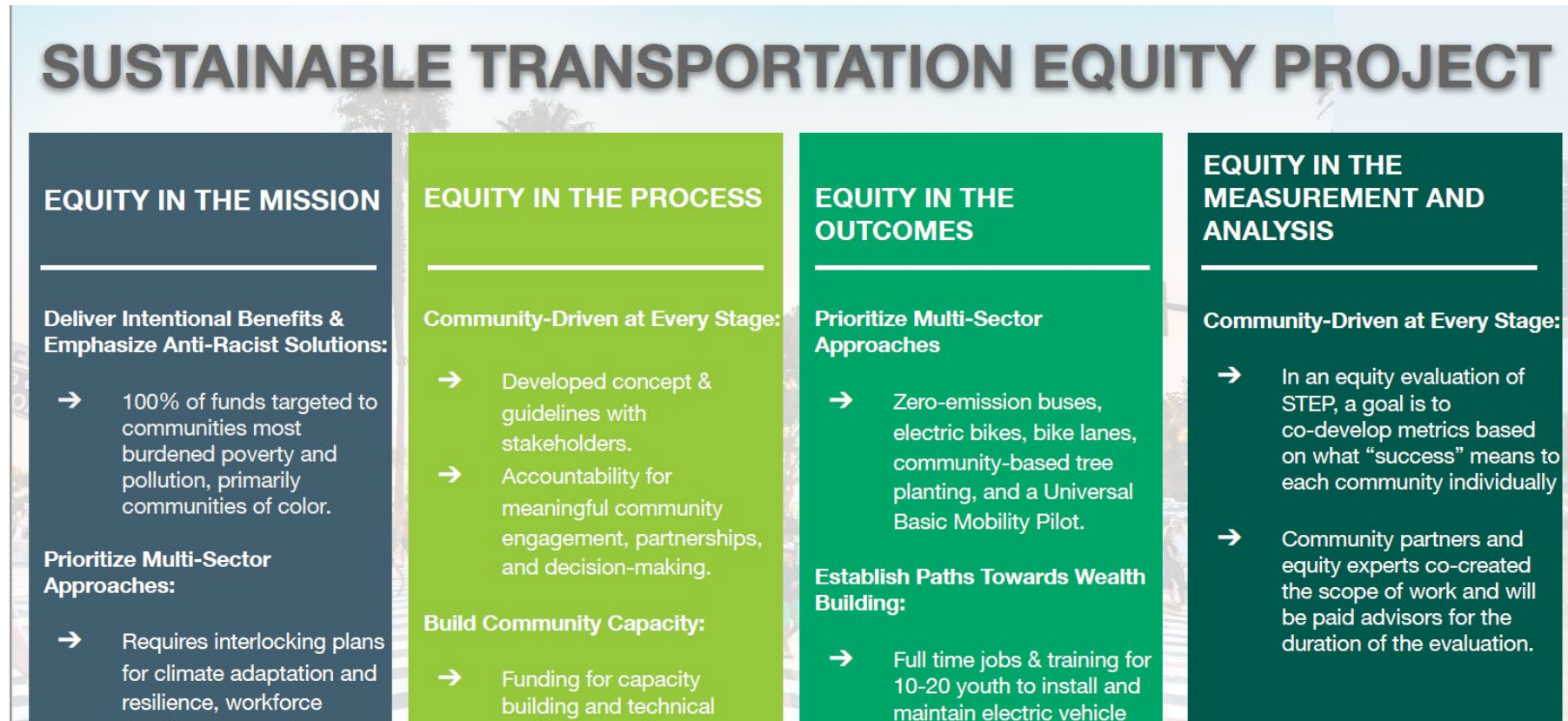
- High transportation cost burden and/or low transportation access
- High and/or persistent poverty
- Unemployment/underemployment
- Racial and ethnic segregation and linguistic isolation
- Underinvested neighborhoods with poor transportation infrastructure
- Environmental hazard exposures
- Disproportionate impacts from climate change





Source: Adapted from Lucas et al., (2012)

One potential framework offered



Source: Hanah Creger. *Mobility Equity Framework*. (Jan 2022). The Greenlining Institute. Presentation at the TRB Annual Meeting.

The Safe System requires a paradigm shift:
equity in the mission



Source: [Youth For Road Safety](#)

How can
AV
readiness
plans
center
equity
issues?



Source: Kimley Horn (2016). *NCDOT CAV Roadmap Development Project*.
https://ncav.wpengine.com/wp-content/uploads/2016/03/NC-Roadmap-for-CAV_Final_ALL.pdf

Equity in the process



Source: Creger, Espino, Sanchez (March 2018). *Mobility Equity Framework: How To Make Transportation Work For People*. The Greenlining Institute. https://greenlining.org/wp-content/uploads/2019/01/MobilityEquityFramework_8.5x11_v_GLI_Print_Endnotes-march-2018.pdf.

Mobility
justice-
oriented AV
planning
requires
consideration
of:

- **Who** is allowed to participate in the project, and who gets to decide?
- **Who** is collecting and analyzing the data?
- **Who** benefits from the project or policy?
- **Whose** perspectives are considered?
- **Whose** perspectives are excluded?

Example: Justice40

Justice40 held roundtable series to examine barriers to accessing funding opportunities (FOAs) for Department of Energy (DOE) grants

J40 Stakeholder Engagement: DOE FOA Barriers

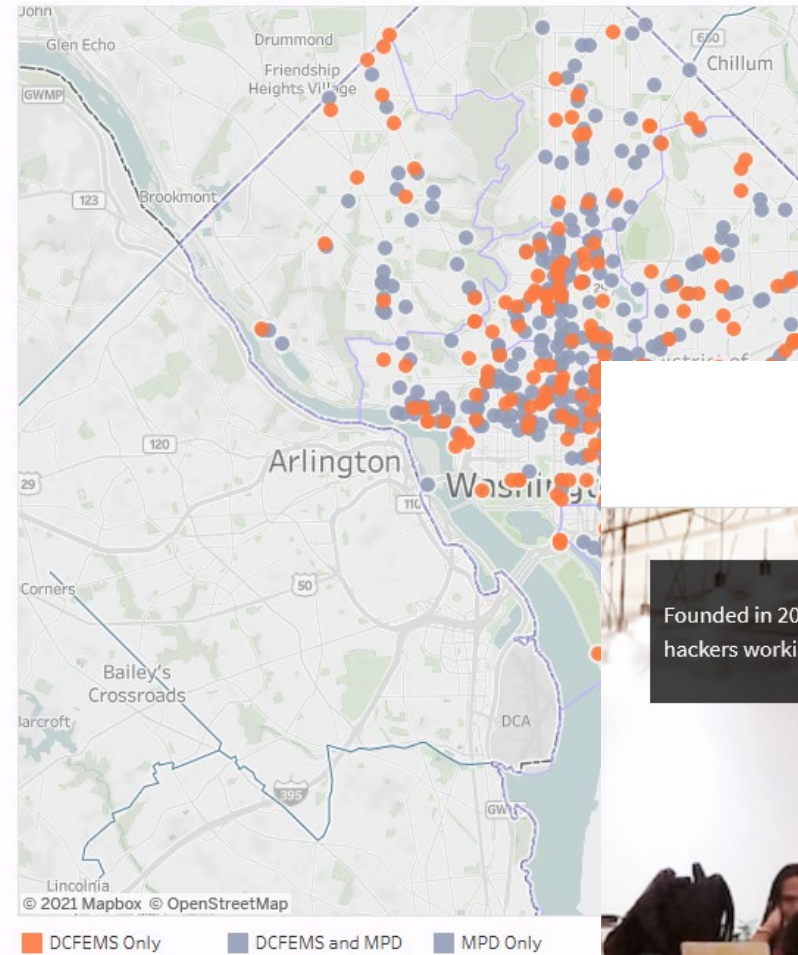
- 50% cost share is too high for disadvantaged communities (DACs)
- FOA timing, funding topic, and funding level are inconsistent each year
- FOA application process is too complex
- DACs may want to participate as a subrecipient but don't know how to join an applying team
- FOA structure does not allow community engagement to impact project plan
- Existing FOA award reporting requirements do not include information necessary to evaluate benefits to DACs

U.S. DEPARTMENT OF ENERGY OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY

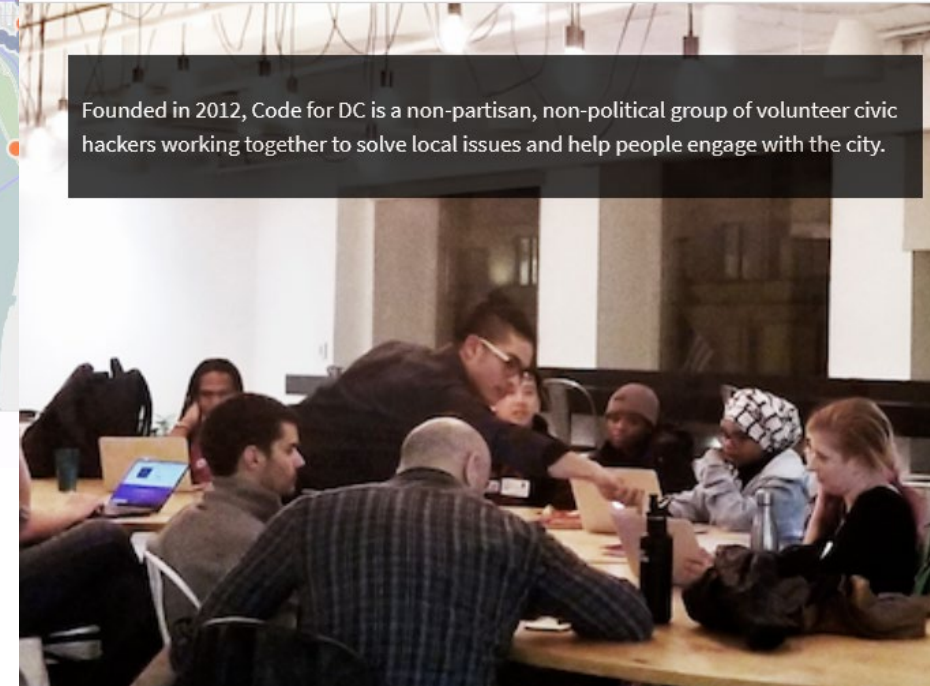
Source: Margaret Smith. (January 2022). *Vehicle Technologies Office Justice40 Pilot Program*. U.S. Department of Energy, Vehicle Technologies Office. Presentation at the Transportation Research Board Annual Meeting.

Equity in the measurement and analysis


Unreported Pedestrian Crashes in Washington DC



Founded in 2012, Code for DC is a non-partisan, non-political group of volunteer civic hackers working together to solve local issues and help people engage with the city.



Source: [Charlotte Lee Jackson, Women Who Code](#)

A photograph of a modern, minimalist interior space. The scene features a large, curved white structure that resembles a staircase or a large piece of furniture. A window is visible in the background, showing a view of a building outside. The floor is covered with a patterned carpet. The overall aesthetic is clean and contemporary.

We have a “Library of Missing Data Sets”

- Where do people want to walk and bicycle?
- How many miles of sidewalks do we have?
- Who needs to make a trip but cannot due to lack of travel options?
- How are people experiencing the health and equity impacts of our transportation policies?

Source: Mimi Onuoha, [Library of Missing Datasets](#)

AV project analysis 1.0



Source: Steve Sudder & Charlie Gould (January 2022). *ADS in the NPS: Lessons Learned from Automated Shuttle Pilots at National Parks*. Presentation at the Transportation Research Board Annual Meeting.

AV project analysis 1.0

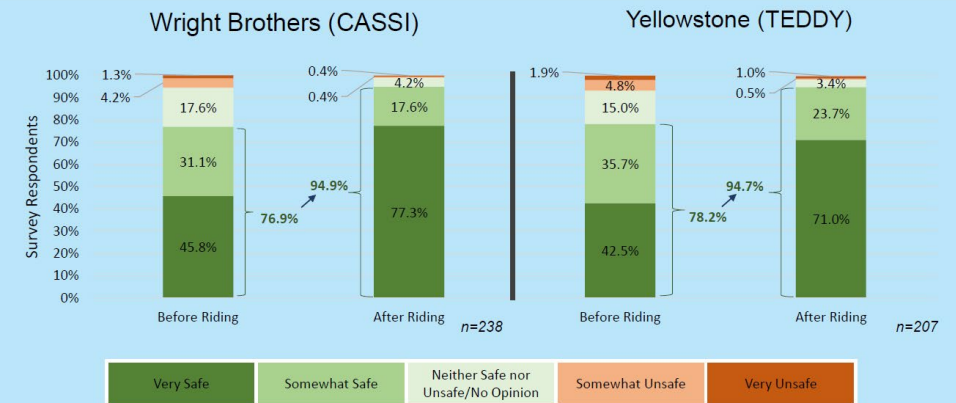
2.7 EVALUATION: RIDERSHIP

- Each had high ridership, given the characteristics of the pilots
- Yellowstone (TEDDY) had more passengers and trips overall
- The two pilots had a similar number of riders per trip

Category	Wright Brothers (CASSI)	Yellowstone (TEDDY)
Number of Days in Operation	54	74
Number of Trips	809	2,544
Number of Passengers	3,380	10,057
Average Passengers per Trip	4.2	4.0
Average Passengers per Vehicle per Operating Day	62.6	68.0
Average Trips per Vehicle per Operating Day	15.0	17.2

3.4 SURVEY RESULTS – SAFETY PERCEPTION

- When asked to indicate how safe they felt before and after riding the shuttle, visitors indicated an increased perception of safety after taking a ride



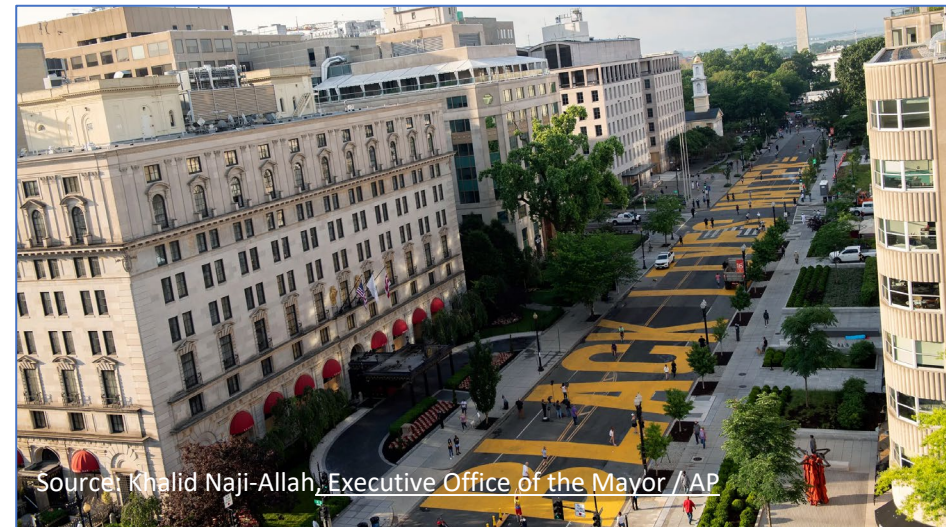
Source: Steve Sudder & Charlie Gould (January 2022). *ADS in the NPS: Lessons Learned from Automated Shuttle Pilots at National Parks*. Presentation at the Transportation Research Board Annual Meeting.

CV project analysis 1.0



Source: FHWA ITS,
https://www.its.dot.gov/pilots/pdf/NYCDOT_Performance_Measurement_Transition_Plan_Webinar_12_15_21.pdf

AV project analysis 2.0?



Committee Call to Action

1

Clearly define your AV
mobility justice goals

2

Assess community-
engagement and
power sharing
processes

3

Identify needed
partners and data to
perform equity checks
and evaluations

Initiatives and Additional Resources

- Federal
 - [FHWA Equity Action Plan](#)
 - [Justice40](#)
- Academic
 - [NC Transportation Center of Excellence in Advanced Technology Safety and Policy](#) (TSAP)
- Nonprofit
 - [Algorithmic Justice League](#)
 - [Greenlining Institute](#)



PROJECT 1

Impacts of CAV-ready infrastructure on Vulnerable Road Users (VRUs): Guidance for North Carolina's Local and State Transportation Agencies

PROJECT 2

IOT Solutions for Near Horizon Challenges in Smart City Pedestrian Travel

PROJECT 3

Operational and Economic Impacts of Connected and Autonomous Vehicles

PROJECT 4

Intelligent Data Exploration & Analysis for New & Existing Transportation Technology (IDEANETT)

PROJECT 5

Plan for Advanced Technology Data Readiness

POLICY & LEGISLATION WORK PLAN & TACTICAL ACTIONS OR UPDATES



P&L Subcommittee Tactics Summary

2.1 Tactics Summary Table

	Deliverables	Lead(s)	Resources	Scenarios	Timeline
Monitor Legislation	Tracking and feedback on Iowa, other states, and federal activity	Adam Shell, Iowa DOT	Staff time and engagement	N/A	Follows annual cycle
Ensure CAT in Planning	Incorporation of CAT into various plans and programs	Dylan Mullenix, Des Moines Area MPO & Garrett Pedersen, Iowa DOT	Staff awareness and follow-up with in/outreach	In/outreach materials, organizational meetings	With planning and conference cycles
Bolster State Leadership	Specific engagement and general education opportunities	Dylan Mullenix, Des Moines Area MPO	Staff time, collaboration with Communications working group	Visits, tours, presentations, meetings, etc.	Ongoing
Modify Administrative Rules	Stakeholder meetings, research, <u>draft</u> and final recommendations	Sara Siedsma, Iowa DOT	Staff time, consultant support	Subject to rulemaking needs that arise	
Improve Equity & Accessibility	Recommendations and outreach	Dr. Steve Spears, University of Iowa	Staff time	Focus on a specific disadvantaged community	TBD



POLICY & LEGISLATION WORK PLAN & TACTICAL ACTIONS OR UPDATES

Ensure CAT in Planning – Dylan Mullenix (Subcommittee Chair)

DEI Working Group – Dr. Steve Spears (Univ. of Iowa)

Policy Update – Adam Shell (Iowa DOT)

ENSURING CAT IN PLANNING

Status & Next Steps

- Final document for publishing
- Market to planning stakeholders and local agencies
 - Presentation to the Iowa American Planning Association Chapter on May 19
- Final document anticipated to be available June 2022 on the ATC website
 - <https://iowadrivingav.org/policyleg.aspx>



POLICY & LEGISLATION WORK PLAN & TACTICAL ACTIONS OR UPDATES

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POLICY & LEGISLATION WORK PLAN & TACTICAL ACTIONS OR UPDATES

Ensure CAT in Planning – Dylan Mullenix (Subcommittee Chair)

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Policy Update – Adam Shell (Iowa DOT)

POLICY UPDATE

Federal Rulemaking – Notices (Request for Comment – RFC) and Final Rules

- Non-Traditional and Emerging Transportation Technology (NETT) Council ([link](#))
- Authorized Windshield Area for the Installation of Vehicle Safety Technology ([link](#)) – FMCSA
 - Final Rule, Effective Date: May 6, 2022
- Occupant Protection for Vehicles With Automated Driving Systems ([link](#)) – NHTSA
 - Final Rule, Effective Date: September 26, 2022
- New Car Assessment Program (NCAP) ([link](#)) – NHTSA
 - Proposes the addition of four ADAS features to NCAP (blind spot detection/intervention, lane keep support, and pedestrian automatic emergency braking)
 - Comment period extended to June 8, 2022

Other

- Federal Congressional Letter on AV Implementation – April 27, 2022 ([link](#))

ADVANCED TECHNOLOGIES PROJECT & OPPORTUNITIES DISCUSSION

March 2022 ATC Meeting Charge

- Explore opportunities to deploy advanced technologies this year
- Focus on freight, mobility, or safety
- Pursue discretionary grants



ADVANCED TECHNOLOGY PROJECT BRAINSTORMING

Infrastructure Readiness (IR)

- Slow-speed roadway maintenance operations
- Technology solutions to collect or validate transportation data
- Driver behavior in work zones
- Statewide Traveler Information and Work Zones/Operations real-time data
- Pavement Markings
 - Statewide inventory & expansion of 4" to 6" markings to support ADAS and ADS
- Smart City technology partnership opportunities

Economic Development (EcDev)

- Labor & Workforce
 - Develop courses, training, and/or certificate programs for future AT workers
 - Develop outreach material for K-12 students to engage them in an AT related career
- Freight pilot deployment

Public Safety & Enforcement (PS&E)

- Law Enforcement & First Responder Training/Curriculum
- Public Understanding Survey – Emerging Technology and appropriate use of ADAS
- Address Vulnerable Road User (VRU) Safety

Policy & Legislation (P&L)

- Automated Transit or Shuttle Demonstration
- Community Readiness - associated Smart City technology idea for the IR subcommittee

ADVANCED TECHNOLOGY PROJECT FUNDING STREAMS

Agency	Name of Program	Overview	Criteria/Opportunities	Funding	Application Timeline
US DOT OST	Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program	These discretionary grant awards have supported projects that improve safety, economic strength and global competitiveness, equity, and climate and sustainability consistent with DOT's strategic goals	Introduce new technologies through innovative partnerships	\$1.5 billion	April 14, 2022
US DOT OST	Strengthening Mobility and Revolutionizing Transportation (SMART) Grants	Grant program designed to support demonstration projects focused on advanced smart city or community technologies	Improve transportation efficiency and safety	\$100 million	TBD
US DOT FHWA	Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD)	Program for the development of model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure ROI	Deploy advanced transportation and congestion management technologies	TBD	TBD
US DOT ARPA-I	Advanced Research Projects Agency-Infrastructure (ARPA-I)	A new agency leveraging science and technology to address efficiency, safety, and climate goals for our nation's transportation infrastructure	Support advanced research and deployment	TBD	TBD
US DOT	Open Research Initiative	Establishment of an advanced transportation research pilot program that addresses unmet DOT research needs across sectors	Implement pilot program and advance AT readiness	TBD	TBD
US DOT	MEGA Projects	A program that supports large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits	Generate economic, mobility, and safety benefits	\$5 billion total (FY22-FY26); available until expended	May 23, 2022
US DOT	INFRA Grant Program	Program awarding competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas	Improve safety, generate economic benefits, reduce congestion, enhance resiliency	\$7.25 billion total (FY22-FY26)	May 23, 2022
US DOT	Rural Surface Transportation Block Grant	Program that supports projects to improve and expand the surface transportation infrastructure in rural areas	Increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life	\$1 billion (FY22-FY26)	May 23, 2022
US DOT OST	Safe Streets for All	Program that supports regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries	Address pressing roadway safety issues	\$5-6 billion (FY22-FY26)	TBD
US DOT	Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)	Program intended to incentivize state and local communities as they seek to improve the resiliency of natural infrastructure	Accelerate infrastructure readiness	\$18 million per year	TBD
US DOT OST	Reconnecting Communities Pilot Program	Restore community connectivity by removing, retrofitting, or mitigating highways or other transportation facilities that create barriers to community connectivity	Improve mobility, access, or economic development	\$1 billion total; available until expended	TBD
US DOT	Small Business Innovation Research program	Program awarding contracts to domestic small businesses to pursue research on and develop innovative solutions to our nation's transportation challenges	Engage with Iowa Businesses	TBD	March 7, 2022
US DOT FHWA	Highway Safety Improvement Program (HSIP)	FHWA guidance implemented a provision of the IIJA/BIL that will help protect VRUs by requiring at least 15% of HSIP funds be dedicated to VRUs if the prior year's total crashes includes 15% VRUs	Address VRU Safety	TBD	TBD
NSF	National Science Foundation (NSF) Smart and Connected Communities (S&CC)	Program to accelerate the creation of the scientific and engineering foundations that will enable smart & connected communities to bring about new levels of economic opportunity & growth, safety & security, health & wellness, accessibility & inclusivity, and overall quality of life.	Advance AT Readiness	\$26 million total; available until expended	April 1, 2024
IA DOT	Iowa DOT State Research Funds	Program supporting research ideas that consider all aspects of transportation and related infrastructure through research, innovation, implementation and technology transfer efforts	Advance AT Readiness	TBD	TBD

INFORMATION AND KEY MEETING DATES

Economic Development & Infrastructure Readiness Joint Subcommittee Meeting – Tuesday, May 24 from 1-2 pm

- *Keynote Presentation – Brittney Kohler, Legislative Director, Transportation & Infrastructure Service, National League of Cities*

Public Safety & Enforcement Subcommittee Meeting – Wednesday, June 29 from 1-2 pm

- *Keynote presentation – Dr. Dan McGehee, Director, National Advanced Driving Simulator at the University of Iowa*

AT Council Meeting – Wednesday, October 5 from 10 am -12 pm

- *Presentations – Paul Steier, Director Vehicle Programs; Robert Heilman, Director at the Highly Automated Systems Safety Center of Excellence, US DOT; Neal Hawkins, Associate Director InTrans Iowa State Univ*



THANK YOU