PNE

ANNUAL REPORT

pavecampaign.org

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ABOUT PAVE

PAVE is a diverse coalition that unites industry partners, nonprofit groups, academics, and public sector entities who believe in the potential of automated vehicle technologies -- and understand the importance of education in realizing that potential.

This annual report outlines
PAVE's activities, milestones
and progress during 2023. We
are proud of how far we've
come, and we're looking
forward to new opportunities in
the year ahead.



FROM THE EXECUTIVE DIRECTOR

When PAVE was founded in 2019, we knew that the AV sector would experience ups-and-downs. New technologies rarely advance in a linear fashion, but our mission to build public understanding of AVs realized the ongoing need for meaningful engagement. In fact, as the automated vehicle ecosystem grows, evolves and negotiates obstacles, the importance of public education is greater than ever.

As we reflect on 2023, we see evolution across all facets of the AV ecosystem: new technologies, new regulatory developments, and indeed, new challenges with public perception.

PAVE adapted our activities and initiatives over the past year to reflect these broad changes, as we sought to engage diverse audiences in an inclusive, thoughtful dialogue.

A key aspect of those efforts last year included engaging with our partners in the public sector. As automotive technologies evolve, public sector entities across all levels of government seek to adapt, to ensure that their regulations, infrastructure and first responders are all prepared to meet the needs of these new vehicles. Along with PAVE's Public Sector Advisory Council, we work to help empower public sector entities with the facts, resources, and information they need to make the best decisions for their communities.

PAVE convened many 2023 public sector engagement activities with our diverse membership. In November, we teamed up with PAVE member May Mobility to provide AV demonstration rides to hundreds of city officials at NLC's City Summit in Atlanta. We enjoyed hearing about transportation challenges in diverse communities and helping to think through ways that AV technologies could potentially augment existing transportation systems.

We attended a National Conference of State Legislatures summit to discuss diverse state approaches to AV adoption and how to integrate public education into the framework. In the fall, PAVE and the Consumer Technology Association hosted a standing-room-only symposium on Capitol Hill entitled "Navigating the Future of Autonomous Vehicles." We were also honored to welcome the U.S. DOT Senior Advisor for Innovation, Vinn White, as the keynote speaker at our Annual Meeting to discuss the federal government's AV initiatives.

In order to help facilitate interaction between public and private sector AV stakeholders, we worked with the eight-state AV Pooled Fund to build an online forum, AccelerateAV.org, where all members of the AV ecosystem can collaborate, network, and share resources.

In addition to these new initiatives, we also continued some of our ongoing engagement activities. We completed our 110th PAVE Virtual Panel, convening diverse voices on different AV-related topics; we're proud that the series has attracted more than 27,000 views on YouTube. Our podcast, the PAVEcast, also continued to grow in 2023, surpassing 7,500 downloads since its launch, across six continents.

Understanding the important role that AV technology will have on mobility for future generations, we engaged young voices through our first annual PAVE Essay Contest and Scholarship Program. The contest encourages high school students to think about autonomous vehicles and write a well-crafted essay about what these new technologies could mean for their communities. We received more than 100 entries and awarded \$15,000 in scholarship funding, thanks to our generous member sponsors. The winning students were invited to visit the sponsors' facilities and experience AV technology firsthand.

Recognizing that AV education is a global challenge, PAVE continued to expand its international footprint as well. PAVE Europe and PAVE Canada attracted new members and embarked on new activities, and, in 2024, PAVE UK will join the PAVE international family. In recognition of PAVE's inclusive activities worldwide, we were proud to win a Reuters D.R.I.V.E. Honour for PAVE's leadership in promoting diversity, equity and inclusion in the automotive industry.

We are proud of all that we accomplished in 2023, but we recognize that all we do is thanks to the steadfast support of our incredible membership.

Their technological innovation, thought leadership, and steadfast commitment to education all propel our mission forward: We are united in our belief in the transformative potential of AV technology and the urgent need for informed public discourse.

So thank you, PAVE members, for your leadership in our program and educational initiatives that help to shape public perception, trust, and understanding in these lifesaving technologies. And thank you to our community partners and friends for joining our activities, for sharing your input, and for supporting our mission to build a safer, cleaner, and more inclusive transportation future.

Tara Andringa
PAVE Executive Director

-Tara

OUR **MEMBERS**













































































































































































BIG PICTURE

PAVE continued to grow in 2023, both embarking on new initiatives and building on its successful existing programs. We joined 12 industry events, including providing demonstration rides for over 250 city officials at the NLC City Summit. Through PAVE's first annual essay contest for high school students, we awarded \$15K in college scholarships, and Reuters recognized PAVE with an international award for leadership in promoting diversity, equity and inclusion in the automotive industry. We continued our popular virtual panel series - reaching 110 panels held -- and recorded 30 episodes of the PAVECast. We also continued to welcome new members; from our inception in 2019, we've grown over 300%.



82
PAVE
MEMBERS



28% ARE STARTUPS

332%

GROWTH SINCE LAUNCH

12

INDUSTRY EVENTS

ENGAGEMENT

ENGAGEMENT SNAPSHOT



...ı150% **INCREASE IN SOCIAL ENGAGEMENT**













4.5K **PAVECAST DOWNLOADS**

IMPACT AND REACH

VIRTUAL PANELS

PAVE continued to build on its virtual panel series in 2023, reaching 110 panels completed since our inception. We had over 1,500 registrations for PAVE panels in 2023, and surpassed 27,000 panel views on YouTube.

1.5K 110 27K
REGISTRANTS PANELS PANEL VIEWS

WEBSITE & SOCIAL MEDIA

In 2023, PAVE's social media audience grew to over 8,000 individuals. We garnered over 122,000 social media impressions, and nearly 5,000 engagements. Our website continued to host visitors worldwide, reaching 103,000 visits.

PAVECAST

In its second year, the PAVEcast had over 4,500 downloads, a 65% increase year over year. Top episodes included "How to Test, Verify, and Validate AV Technology with Applied Intuition," and "A chat with CEOs of Oxbotica and Applied EV live from CES."

PAVE NEWSLETTER

PAVE's newsletter has nearly 3,000 subscribers. Average open and engagement rates both increased year over year.

MEDIA ENGAGEMENT

In 2023, PAVE was featured in a number of publications, including Automotive News, Repairer Driven News, ITSdigest, and more. We also had an op-ed placed in the Orange County Register.



INITIATIVES AND **ACTIVITIES**

VIRTUAL PANELS

PAVE's virtual panel series continued with great success in 2023. As of the end of the year, PAVE had hosted 110 panels, with more than 19K registrations and more than 27K views of the recordings on YouTube.



Panels covered a wide range topics within the AV ecosystem. Popular sessions included "How Advanced Vehicle Technologies Can Improve Pedestrian Safety," and "AV Technology and the Future of American Infrastructure," among others.

FEATURED PANEL GUESTS



Anuja Sonalker STEER



Tracy Cheung Cruise



Greg Rodriguez Stantec



Allanté Whitmore SAFE



Brett Fabbri Kodiak Robotics



Mark de la Vergne Michigan Central



Gary McCarthy Aurora



Raquel Urtasun Waabi



Dr. Billy Riggs University of SF



Kristin White FHWA

NATIONAL LEAGUE OF CITIES **DEMONSTRATION WITH MAY MOBILITY**

In November, PAVE partnered with May Mobility to provide AV demo rides to more than 250 attendees of the National League of Cities' annual City Summit in Atlanta, Georgia.

The event gave us an opportunity to engage with local government officials from across the country about how AV technology could improve their local transportation ecosystems.



"Even highly knowledgeable municipal officials may never have had the opportunity to ride in an automated vehicle. This demonstration event allowed officials from around the country to experience a vehicle designed for one of the most important potential uses of this technology." - PAVE Executive Director Tara Andringa

CAPITOL HILL EVENT WITH CTA

"NAVIGATING THE FUTURE OF AUTONOMOUS VEHICLES"

In October 2023, PAVE partnered with the Consumer Technology Association (CTA) to hold a symposium on the future of autonomous vehicles. The event included remarks by AV Caucus Chair Rep. Bob Latta, a fireside chat with Aurora President Ossa Fisher, and video remarks from Acting NHTSA Administrator Ann Carlson. PAVE members from Cruise, Kodiak, May Mobility, SAFE and Applied Intuition spoke on two panels.







PAVE ESSAY CONTEST & SCHOLARSHIP **PROGRAM**

In our first annual PAVE Essay Contest and Scholarship Program, we received more than 100 submissions. These high school students wrote essays that described what AV technology could mean for the future of transportation in their respective communities.

The contest was open to students in Albuquerque, Washington, D.C., and Southeast Ohio. Generous PAVE member sponsors - Torc, STEER, DriveOhio, and Transportation Research Center, Inc. provided the scholarship funding.

In each contest location, the sponsors held an event for the winning students at which they could experience AV technology in person.















PAVE EUROPE GROWTH



Following its 2022 launch in Paris, PAVE Europe grew significantly in 2023, reflecting growing global recognition that public education is essential for AV technology to reach its potential.

In 2023, PAVE Europe:

- > EXPANDED TO INCLUDE 24 MEMBERS
- > HELD 11 VIRTUAL PANELS
- > JOINED 23 INDUSTRY EVENTS

PAVECAST

In its second year, the PAVECast grew tremendously. We recorded 30 episodes with more than 4,500 downloads, a 65% increase year over year.

Our panelists spanned all areas of the AV ecosystem, from robotaxi companies and suppliers, to academia and government agencies.



RETUERS DEI AWARD



In October 2023, PAVE was honored to receive an award from Reuters at the Automotive D.R.I.V.E event for DEI Commitment. The award recognized five organizations who were driving diversity, equity and inclusion within the automotive industry.

This award is a testament to the incredible work that PAVE members do every day to build a more inclusive future in the automotive industry.

PAVE ANNUAL MEETING

PAVE member Stantec hosted the 2023 PAVE Annual Meeting at their Washington, D.C. office. Vinn White from U.S. DOT delivered the keynote address and answered questions from PAVE members. We discussed recent PAVE activities and future priorities, held our annual member survey, and concluded the day with a rooftop networking reception. It was a great opportunity to connect with the PAVE community, hear input from members, and discus plans for the future.



ACCELERATEAV.ORG LAUNCH

PAVE won a contract from the AV Pooled Fund to create an online forum designed to spur collaboration between public and private sector AV stakeholders. That forum -- AccelerateAV.org -- launched in June 2023. The site allows users to network, share resources, join discussions, and more.

SPEAKERS AND PANELS

PAVE participated in many events worldwide, including providing speakers and panels to discuss AVs and public education. PAVE's 2023 events included:

- CES (joint presentation with AEye)
- California Transportation
 Foundation Mobility Summit (PAVE panelist)
- Louisiana Transportation Conference (PAVE panelist)
- AASHTO reception with Cavnue (PAVE sponsor)
- Lifesavers Conference (PAVE panelist)
- ITSA Conference and Expo (PAVE panelist and moderator)
- ARTS (PAVE Europe plenary panel)

- PAVE Essay Contest & Scholarship Competition
- 8 PAVE virtual panels
- 13 PAVE Europe virtual panels
- 30 PAVEcast episodes
- PAVE Annual Meeting & Reception
- PAVE / CTA AV event on the Hill
- SAFE webinar (PAVE moderator)
- NLC demo with May Mobility
- Reuters Automotive USA (PAVE moderator)
- National Conference of State Legislatures (PAVE panelist)





















GOVERNANCE

BOARD OF DIRECTORS

PAVE's Board of Directors includes a diverse group of leaders from a broad array of industry stakeholders. They represent the automotive and tech industries, advocacy groups, insurers, and consumer organizations.

"PAVE members believe in the transformative power of automated vehicles, but we also understand that we need public trust in order to reach that potential. Our broad educational curriculum is designed to speak to diverse audiences: we engage with public sector officials to help them to prepare their communities for new technologies mobility choices, we speak to consumers to help demystify the technologies on the roadways today, and we work with students to give them a glimpse of what is possible for their transportation future. PAVE's invaluable work in educating the public helps to ensure that societal understanding aligns with technological innovation."

BRAD STERTZ PAVE CHAIRMAN

DIRECTOR OF GOVERNMENT AFFAIRS, AUDI OF AMERICA



ORGANIZATIONS REPRESENTED ON PAVE'S 2023 BOARD:

AAA

Audi of America

Aurora

Consumer Technology Association

Cruise

Luminar

Mobileye

NADA

National Federation of the Blind

Plus

Quantiv Risk

Securing America's Future Energy

(SAFE)

STEER

Toyota

United Spinal Association

Zoox

COMMITTEES AND WORKING GROUPS

PAVE's member-led committees drive the messaging and direction of our organization. The committees include the Communications & Events Committee and the Public Sector Engagement Committee. PAVE also convenes two working groups, one focused on trucking and freight and the other focused on insurance.

ADVISORY COUNCILS

PAVE maintains two advisory councils, an Academic Advisory Council and a Public Sector Advisory Council. These councils provide insight from leaders who believe in the coalition's mission to educate the public about AVs and their potential societal effects.

COUNCIL LEADERSHIP



Dr. Jeffrey Michael Johns Hopkins University PAVE Academic Advisory Council Chair



Tara Olds Minnesota DOT PAVE Public Sector Advisory Council Chair

PAVE'S ADVISORY COUNCILS INCLUDE REPRESENTATION FROM: 27 PUBLIC SECTOR ENTITIES SIX COUNTRIES COUNTRIES