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IATR Modernizes Mobility in Arizona – Next Stop? Florida 2024!

The **International Association of Transportation Regulators** ("IATR") held its 36th Annual Conference in Scottsdale, Arizona from September 27th to 30th, 2023. Under the theme of "**Modernizing Mobility**," the conference concentrated on automation, electrification, and multi-modal integration with an eye toward the future of regulation.

As usual, the IATR conference did not disappoint. The full agenda offered excellent keynote speakers, a daylong automated and electric vehicle "bootcamp" for regulators, and two full days of inspiring and enlightening educational sessions, as well as entertainment and networking. No IATR conference would be complete without a magical gala event – and this year was no different. Held at the Desert Botanical Gardens, the gala was an enchanting evening under the Arizona stars, surrounded by the breathtaking beauty of the desert and the musical stylings of rocking regulators. It was an unforgettable night of networking, celebration, and lasting memories. Attendees also hailed driverless taxis from Waymo and Cruise in the Scottsdale and Greater Phoenix area, and shared their experiences in a dynamic day-long workshop on AV model regulations.

Post-conference survey results showed that 100% of respondents found the conference useful, while 40% reported the conference completely met expectations, and the remaining 60% said it exceeded expectations. 70% of respondent attendees rated the conference as "excellent" and 25% indicated it was the best IATR conference ever. Several attendees noted that it was "the best conference I ever attended their lives!"

The IATR conference could not have been possible without the generous support from its sponsors: Windels Marx Lane & Mittendorf LLP, the University Transportation Research Center ("UTRC") at the City College of New York, Uber, Flywheel, Voyager Global Mobility, Waymo, Cruise, Curb, The Black Car Fund, iCabbi, Carmel, the Independent Drivers Guild ("IDG"), Nexar, RideShare Mechanic, Research Underwriters, Via, Integra Energy, and Revel. Also, the conference planning team did a magnificent job, including our membership director, *Kim Ramkishun*, our videographer/Photographer, *Andriy Blagay*, and our conference planner *Bianca Blag* and her team (*Jairina Capellan and Ava King*) <u>https://biancab.com/.</u> A special thanks goes out to our incredible conference host, *Chandler City Council Member Mark Stewart*, who went above and beyond to ensure we had one of the best conferences and experiences ever!

Keynote Speakers



Hon. Mayor David D. Ortega

Conference host **Mark Stewart**, *Chandler City Councilmember*, introduced **Scottsdale Mayor David D. Ortega**, who gave a warm welcome to all conference attendees. Ortega spoke about how Scottsdale has welcomed AVs into what he calls the city's "untethered on-demand mass transit" system.



Professor Daniel Sperling

The first keynote speaker was **Professor Daniel Sperling**, **Ph.D.**, *Distinguished Blue Planet Prize* Professor and Director of the Institute of Transportation Studies at the University of California, Davis, and a former member of the California Air Resources Board, which implemented the Clean Miles Standard setting zero-emission vehicle ("ZEV") mandates for rideshare vehicles by 2030. He highlighted the regulatory challenges that electric vehicles ("EVs"), automated vehicles ("AVs"), and transportation network companies ("TNCs") present, especially in California. He also offered insight on accelerating EV adoption and steering AVs toward the public interest. According to Sperling, the transportation industry is committed to full electrification, calling it a "done deal." However, EV adoption in the U.S. lags behind Europe and China. The most important, effective policies to drive EV adoption, Sperling said, are emission mandates with aggressive greenhouse gas (CO2) standards. That said, he thinks the Clean Miles Standard is unnecessary now because Uber and Lyft are unlikely to continue on the same steep trajectory as AVs become more prevalent.



Jeff Nieman - Hertz

Jeff Nieman, Senior Vice President of Global Product Operations and Field Technology for The Hertz Corporation, gave a keynote speech that featured a special video by **Stephen Scherr**, Chair and CEO of The Hertz Corporation. Hertz currently has the largest EV fleet in the U.S. thanks in part to a partnership with Tesla for 100,000 vehicles. Scherr highlighted Hertz's new partnerships with rideshare companies and the company's continuing efforts to electrify its fleet. Nieman elaborated on Hertz's efforts for electrification, which includes offering 50,000 Tesla vehicles to Uber, and dove into the challenges that Hertz faces. The main challenge, according to Nieman, is charging infrastructure. Customer adoption is also a significant challenge, he said, noting that it is many renters' first time driving an EV, and they may need a lesson on how to use it. For rideshare drivers, a big issue is the charging time and availability of chargers. Rideshare drivers need to charge between trips, which means it needs to be fast. He concluded by emphasizing the need for educating rideshare drivers on the benefits of EVs.



From Left: Matt Daus & Debs Schrimmer (US Joint Office of Energy & Transportation)

Deborah ("Debs") Schrimmer, Senior Advisor for Community and Urban Charging at the U.S. Joint Office of Energy and Transportation, closed out the keynote speaker series and received a warm introduction from **Gabe Klein**, Executive Director of the Joint Office. Schrimmer spoke about the U.S. National Blueprint for Transportation Decarbonization—which is a joint effort of the departments of Energy, Transportation, Housing and Urban Development, and the Environmental Protection Agency to accelerate the nation's affordable and equitable clean transportation future—and her office's role in supporting EV strategies for decarbonizing the transportation sectors. This included a status update on efforts to build new convenient and reliable EV charging stations under the National Electric Vehicle Infrastructure Formula Program.

State of the IATR

As IATR President, I gave the annual State of IATR presentation, where I emphasized the IATR's mission of "*Multi-Modal Mobility Innovation for All*" and the need for regulators to be ahead of the rapidly-changing transportation landscape. I welcomed our new advisory board members: the Non-Emergency Medical Transportation Accreditation Commission ("NEMTAC"), the International Road Federation, and Together for Safer Roads. I also welcomed **Grant Heather**, *Manager of Vehicles for Hire at the City of Winnipeg Parking Authority*, as the new co-chair of the Canadian Regulator Committee and **Wendy Thompson**, *Director of Transport Regulation for the Ireland National Transport Authority*, as the new co-chair of the European Regulator Committee.

I provided a status update and overview of IATR's completed projects: "Guiding Principles for Mobility Polity & Congestion Mitigation;" "Best Practices, Guiding Principles & Model Regulations for Robotaxis: Testing & Implementation of Shared-Connected-Automated-Electric For-Hire Vehicles (S-CAEVs);" "The Role of Transport Agencies in Shaping Disruptive Technologies and Service Models" with the World Road Association (known as "PIARC"); and "Modernizing Taxi Regulations: An Innovative Governance Framework for the Future." I also introduced new projects that IATR will be undertaking this year: "Mobility Agency of the Future" which will suggest a new framework to modernize taxi, FHV, and TNC regulation in a multi-modal and streamlined environment; updates to IATR's "Model Regulations for Accessible Taxis & For-Hire Vehicles" to encompass NEMTAC Certification Standards; and a "Modernizing Taximeter Regulations" project to address smart and soft meters. Finally, I announced the topic of IATR's 2024 Hack-A-Thon as "Equitable EV Infrastructure Planning." This challenge asks participants to (1) evaluate the mismatch between FHV trips, driver origination, and the location of EV infrastructure and (2) propose ways to equitably and efficiently locate charging infrastructure.

IATR Awards Regulator of the Year Award



From Left: Sylvain Tousignant, Grant Heather, Matt Daus, and David Do.

IATR bestowed the 2023 Regulator of the Year award on **Grant Heather**, *Manager of Vehicles for Hire at the City of Winnipeg Parking Authority*. **David Do**, 2022 Regulator of the Year and current *Commissioner and Chair of the NYC Taxi and Limousine Commission* ("TLC"), presented Heather with the award, along with **Sylvain Tousignant**, the co-Chair of the Canadian Regulators Committee, who recommended Grant and his agency for the award. Since taking over regulation of the vehicle-for-hire industry in 2018, the Winnipeg Parking Authority, under Grant Heather's leadership, have collaborated with the industry and community stakeholders, worked to make for-hire service more accessible through improved on-demand accessible service, and ushered several initiatives to improve safety and service. The Authority has taken steps to implement Cultural Competency Training in line with the National Calls for Justice from the MMIWG2S+ (Missing & Murdered Indigenous Women, Girls, and 2Spirit Peoples) inquiry and implemented other policies to modernize the vehicle-for-hire industry in Winnipeg. Heather is also an active IATR member and co-chair of the IATR Canadian Regulators Committee. He believes strongly in the connections and support afforded through IATR and regularly conducts outreach to other members and jurisdictions for input, ideas, and information. This commitment to collaboration, innovation, and modernization, as well as effective regulation, is what made Heather Regulator of the Year.

Norma Reyes Scholarship



Kristen Burch – IATR Scholarship Recipient (NCSTS & Illinois Commerce Commission)

The IATR established the **Norma Reyes Scholarship** in 2013 in memory of the late former Commissioner of the Chicago Department of Business Affairs and Consumer Protection ("BACP"). As an active member of the IATR, an accomplished lawyer, and a public servant, Norma left her mark on the world and her IATR friends and colleagues. The Norma Reyes Scholarship provides a chance for regulators who are new to IATR to participate in the IATR's annual conference. This year's Norma Reyes Scholarship went to **Kristen Burch**, *a Compliance Specialist at the Illinois Commerce Commission and Secretary of the National Conference of State Transportation Specialists*.

Driver of the Year Award



From Left: Kirk Dobson, DFHV Acting Director Melinda Bolling, and Danette Williams receiving her award in Washington D.C.

Every year, the IATR chooses one driver who has performed in an extraordinary manner that exemplifies the highest level of the profession. This year's Driver of the Year Award was presented to **Danette Williams**, a driver for the District's microtransit system, DC Neighborhood Connect. The D.C. Department of For-Hire Vehicles ("DFHV") nominated Williams to recognize her consistent performance year after year. At the time of her nomination, she had provided over 3,997 rides in 2023 with on-time service for over 90% of trips. Williams is also a passenger favorite, with an astounding 4.9 out of 5 average rating. Ms. Williams also excels in driver safety performance. Williams leads all DC Neighborhood Connect drivers with the highest safety score in 2023, so far. After the event, **Kirk Dobson**, *Chief Performance Officer for DFHV*, presented Williams on the award and thanking her for her decades of service to the District.

Public Service Award



Hon. Mark Stewart

This year, the IATR conferred this rare *Public Service Award* on Chandler Councilmember Mark Stewart in recognition of his unwavering volunteerism, dedication, and support as conference host for the IATR 36th Annual Conference. More importantly, the award recognizes his bold leadership and commitment to mobility innovation, including his work with AVs in Chandler, Arizona.

6th Annual Bootcamp – Modernizing the Vehicle: AV & EV Technical & Regulatory Primer

This year's Bootcamp series focused on the technical side of EV charging and AV technology. Attendees heard from experts who explained how these systems work and what benefits and challenges they present. They also learned about the U.S. regulatory framework for testing and deploying AVs, as well as the funding sources, processes, and planning for EV infrastructure. The Bootcamp sessions also

discussed ways for vehicle rental companies, private property owners, and others to contribute to the growth and development of EV infrastructure in the taxi, TNC, and for-hire vehicle ("FHV") sectors.



Bootcamp Session 101: Electric Vehicle & Infrastructure Primer

From Left: Matt Daus, Mark Stewart, Sylvain Tousignant, Don Onwiler, Steven Coons, and Victor Atlasman.

Sylvain Tousignant, *Directeur Général of the Bureau du taxi de Montréal*, moderated the 101 session that taught the basics of EVs and infrastructure. **Victor Atlasman**, *Director of Strategy and Charging at Nxu, Inc.*, focused on the power grid. According to Atlasman, the limitations of rural power grids that serve 56% of America's landmass limit charger deployment. The future of charging networks requires a solution to the grid problem: addressing the power limitations and eliminating range anxiety will encourage EV adoption and increase demand for charging infrastructure while opening up access to rural destinations, becoming an economic driver, and providing a path to EV ownership for rural residents.

Steven Coons, *Partner in Integra Energy*, gave a high-level overview of EV power electronics—where the battery is, heating and cooling mechanisms to help the battery perform—and walked through charging basics, including the differences between levels 1, 2 and 3 (DC fast charging) chargers, battery-charger compatibility, and battery technology.

Don Onwiler, *Executive Director of the National Conference on Weights and Measures* ("NCWM"), wrapped up the session by explaining NCWM's role in Electric Vehicle Supply Equipment (public charging stations), which he described as massively unregulated by the states. NCWM is concerned with establishing consistent units of measurement (kilowatt-hours, not time connected to charger), minimum fees, transparency during the transaction, the accuracy of alternating current ("AC") and direct current ("DC") systems, and responsibility statements.

Bootcamp Session 102: Electric Vehicle Incentives & Planning

From Left: Eric Richardson, Regina McCormack, Matt Daus, Glenn Cook, and Sylvain Tousignant.

Sylvain Tousignant moderated *Bootcamp Session 102, Electric Vehicle Incentives and Planning*, which introduced attendees to planning for EV purchases and related infrastructure. **Glenn Cook**, *owner of EVTransports and SafeRydr*, talked about his experience in EV and AV efforts, particularly in Florida, and working with the Department of Defense Innovation Unit, various arms of the U.S. military, venture capitalists, and startups working in an incubator with which he is involved.

Eric Richardson, *Deputy Chief Fleet Management Officer for the NYC Department of Citywide Administrative Services* ("DCAS"), gave an overview of the NYC Fleet and NYC's efforts to electrify its fleet and assist with public charging stations. DCAS is expanding its base of electric chargers to support NYC's electric fleet, which includes all types of vehicles, from sedans and SUVs to garbage trucks. In addition to installing charging stations around NYC, DCAS has deployed solar carports so EVs can be independent of the electrical grid, which is important in a power outage.

Regina McCormack, *Senior Manager at the Center for Sustainable Energy*, focused on government grants, rebates, tax credits, and other incentives at the federal and state levels to drive EV adoption. Federal incentives are offered under the Infrastructure and Investment Jobs Act, including grants for Public Charging on Alternative Fuel Corridors through the National Electric Vehicle Formula Program, which gives \$5 billion to states for major highways, and the Discretionary Grant Program for Charging and Fueling Infrastructure that gives \$2.5 billion of competitive grants. The other major federal incentive is the enhanced tax credits for consumers in the Inflation Reduction Act, which provides up to \$100,000 per station for public charging in non-urban, low-income areas, up to \$7,500 for the purchase of a new EV, and up to \$4,000 for a pre-owned EV. McCormack believes federal incentives will drive EV adoption more than state incentives because they are generally higher.

Bootcamp Session 103: AV Level Setting – "Where Are We Now?"



From Left: Mark Stewart, Magid Elabyad, Matt Daus, Jane Lappin, and Junfeng Zhao.

Conference host and Chandler Council Member Mark Stewart moderated the two-part Bootcamp Session 103, AV Level Setting – "Where Are We Now?" In Session 103A: How Do AVs Work? How & Who Regulates AVs?, panelists Magid Elabyad, Senior Vice President at the International Road Federation ("IRF"), Jane Lappin, Partner at Blue Door Strategy and Research, and Junfeng Zhao, Ph.D., Assistant Professor at Arizona State University, explained terminology and technology involved in automated and connected vehicles.

Lappin began the 103A session by explaining the SAE standards for levels of driving automation (levels 0-5), explained the difference between connected and automated vehicles, and provided examples of vehicles operating at these different levels today. She also explained non-technical challenges, such as writing code that accounts for regional driving differences (*e.g.*, the "Pittsburg left") and legal driving versus reasonable driving (*e.g.*, going 30 mph in a 25 mph zone).

Next up was Dr. Zhao, founder and Director of the Battery Electric & Intelligent Vehicle (BELIV) Lab at ASU, which specializes in the design, optimization, and control of advanced systems, including connected and automated vehicles, battery electric vehicles, and smart mobility. Dr. Zhao talked about the work his lab is doing to develop a proposed safety case-based framework for AV stakeholder acceptance. He also described the different sensor configurations that operate AVs (LIDAR, radar, and cameras) and some benefits and considerations for each.

Elabyad talked about the work of the IRF, including the Task Force on Road Adaptation for Autonomous Vehicles, which will produce non-binding, globally applicable recommendations on adapting road infrastructure design, construction, and operations to the new needs of AVs. He touched on policy developments in Europe, liability and insurance, and case studies of AVs in Sweden and Belgium.



From Left: Scott Belcher, Matt Daus, Valerie Lefler, and Mark Stewart.

Session 103B: The Socio-Economic Issues–Access, Equity, Labor & Sustainability examined AVs in the context of socio-economic issues around access, equity, labor, and sustainability. Scott Belcher, Executive Director of the ACES Mobility Coalition, and Valerie Lefler, Executive Director of Feonix–Mobility Rising, joined moderator Mark Stewart as speakers for this session.

Belcher began the 103B session by discussing the challenges associated with autonomous shuttles and the importance of promoting their safe deployment, which led to the creation of the ACES (Autonomous, Connected, Electric, Shared) Mobility Coalition. ACES consists of public agencies and private companies that aim to ensure legislative reforms are inclusive of shared AVs and to ensure public transportation operators benefit from shared-use AV technology. According to Belcher, key standards for AVs are 1) safety, such as improved communication with pedestrians and other road users, and accessibility standards, and 2) accessibility, like designing for those with disabilities, including wheelchair users and riders with sight or hearing impairments.

Lefler introduced Feonix - Mobility Rising, a non-profit whose mission is to fill gaps in local mobility systems with local volunteers and transportation providers to provide free or low-cost rides. Lefler highlighted her company's collaboration with the University of Michigan Transportation Research Institute, May Mobility, and the American Spinal Injury Association to research accessible and crash-test safe AVs. She noted important details affecting paratransit services, such as weather conditions and pedestrian infrastructure, which can present serious issues for AV services. The panelists advocated for equity and inclusivity, longer pilot periods, addressing cost concerns, and complying with regulations.

Bootcamp Session 104: AV Shark Tank (Where Are We Going? – Business Models & Community Engagement)



From Left: Scott Belcher, Alex Roy, Valerie Lefler, Matt Daus, Glenn Cook, and Mark Stewart.

Chandler Council Member Mark Stewart moderated a lively "AV Shark Tank" that looked at lessons learned from testing and deployment, the viability of various business models, and the need for government subsidies. The panelists were Alex Roy, principal of Johnson & Roy Advisors, Editor-at-Large of The Drive, founder and co-host of the Autonocast, and co-host of /DRIVE on NBC Sports, Glenn Cook, owner of EVTransports and SafeRydr, Scott Belcher, Executive Director of the ACES Mobility Coalition, and Valerie Lefler, Executive Director of Feonix – Mobility Rising.

Roy—who was Director of Special Operations at Argo AI, an independent company that built software, hardware, maps, and cloud-support infrastructure to power self-driving vehicles—offered regulators tips for when AV companies pitch them to start service in their city. For example, Roy said regulators should ask what the community engagement plan is and look at the safety culture of the company. Ideally, the community engagement function should be separate from policy and have the goal of embedding the company in the community.

Lefler advocated for conditioning operating authority on AV companies investing in the sidewalk infrastructure of the communities where they want to operate. Roy offered support for this idea in the form of network effects—if a company's operation domain covers an area where transit operates, then there should be a good-faith effort to have the AV service intersect with that transit.

Regarding who will pay for AVs, Cook believes the private sector will primarily fund AV efforts, not the government. Cook noted that the government already heavily subsidizes—and in many cases provides—transit, so that is likely to continue with AVs. Belcher agreed that the government should

subsidize AVs because transportation is fundamental to our society. Belcher, however, is skeptical that he will see the day when individuals own AVs because there is yet to be a business case for it.



Professor Alain Kornhauser

Alain Kornhauser, *Professor of Operations Research and Financial Engineering at Princeton University*, delivered a presentation during the conference. Professor Kornhauser is also the Director of the Transportation Research Program, Faculty Chair of Princeton Autonomous Vehicle Engineering (PAVE), and the Chair and Organizer of the SmartDrivingCar initiative, whose **6th SmartDrivingCars Summit is May 31, 2024** (<u>https://summit.princeton.edu/</u>).

Global Regulator Spotlight (Star Trek)

From Left: Kirk Dobson, Matt Daus, Rupal Bapat, Grant Heather, Bharathi Kumaran, and Jill Plaza.

The Global Regulator Spotlight is the IATR's very popular Star Trek-themed panel that features "regulatory stars" from different continents who share the projects and initiatives they are doing in their respective jurisdictions. This year focused on jurisdictions that have or are undergoing regulatory modernization. The panel of regulators included **Kirk Dobson**, *Chief Performance Officer for DFHV*, **Grant Heather**, *Manager of Vehicles for Hire at the Winnipeg Parking Authority*, **Bharathi Kumaran**, *Deputy Director of Point-to-Point Transport Division in the Public Transport Group of the Singapore Land Transport Authority (LTA)*, and **Jill Plaza**, *Taxi/Contracted Transportation Services Administrator at SunLine Transit Agency*.

Moderator **Rupal Bapat**, *Deputy Commissioner of the Chicago BACP*, kicked off the session with the guiding principles that are steering the voyage to the next generation of transportation regulation: safety, agility, knowledge, resilience, accessibility, and equity. Each of the regulators on the panel talked about developments at their agencies that touch on those principles.

Dobson talked about D.C.'s AV efforts and unique challenges, as well as the plan for all new vehicles registered in the District to be EVs by 2030. D.C. expects to publish proposed rulemaking for AV testing and deployment in fall 2023. Dobson also gave updates on DFHV projects, including "next fare DC" heat maps, new digital taxi roof lights, and other DFHV mobility programs.

Focusing on accessibility and equity, Heather talked about Winnipeg WAV, a pilot project for a centralized accessible vehicle dispatch system that works with all taxi operators. The goals of the city-funded project are to improve safety, availability of WAVs, and tracking trips and wait times. The pilot

has been successful, and the city expects to make it permanent. Heather also talked about Winnipeg's building cultural competency training to help ensure safe transportation for indigenous women.

Kumaran gave an overview of LTA and its regulatory framework, which is responsible for all aspects of land transport in Singapore, from regulating taxis to providing public transit to building roads. She also explained LTA's three golden rules. First, enable Singaporeans to enjoy 20-minute towns and a 45-minute city regardless of mode of transport. This means it should take only 20 minutes to reach the neighborhood town and 45 minutes to reach the central business district. Second, provide transport for all by ensuring the transport system accommodates Singapore's aging population, persons with disabilities, and families with young children. Third, promote healthy lives and safer journeys by, among other efforts, EVs and reduced emissions.

Finally, Plaza explained the operating structure of SunLine Transit Agency in California's Coachella Valley operates. The cities of the Coachella Valley and Riverside County formed SunLine Transit Agency in 1977 as a Joint Powers Authority to operate a public transit system. Each member entity appoints one of its elected officials to serve on the SunLine Board of Directors. Today, SunLine also oversees taxi regulation for the jurisdiction.

Modernizing Regulations to Support Innovative Mobility Partnerships



From Left: Tarek Mallah, Celia Gale, Erin Abrams, Matt Daus, Izzy Aala, and Jose Alejandro Hernández.

I moderated a session on Modernizing Regulations to Support Innovative Mobility Partnerships, during which I unveiled IATR's draft report "Modernizing Taxi Regulations: An Innovative Governance Framework for the Future" and obtained input from private sector panelists involved in innovative mobility partnerships globally (https://bit.ly/3uuWDJa) Panelists Erin Abrams, Chief Legal Officer at Via Transportation, Inc., Celia Gale, General Manager of Taxi Operations for the US and Canada at Uber, Jose Alejandro Hernández, Administrator for TaxExpress Colombia, Izzy Aala, CEO of Flywheel Technologies, Inc., and Tarek Mallah, Global Head Channel Development at Curb Mobility, shared their

views on where the mobility industry is going, and how regulators can facilitate and encourage modernization through the application of the principles in the Draft Report.

The Draft Report draws from international experience and sets a framework to streamline regulations, make the vehicle, driver, and company approval process more efficient, and maximize regulatory flexibility and benefits to customers, operators, and drivers. The goal is to do all of this without compromising safeguards for health, safety, and consumers. The Draft Report includes the following recommendations, among others: allow taxis to use e-hail and up-front fares; allow soft meters where metered fares are necessary; ensure driver eligibility criteria are relevant in the age of GPS; and make taxi companies responsible for driver credentialing. It is past time that regulators reexamine taxi rules and remove those that impede innovation. Regulations should support multi-modal mobility, sustainability, accessibility, equity, and partnerships.

The panel also updated attendees on the taxi-TNC partnerships in San Francisco, New York City, and Colombia and similar integrations between for-hire ground transportation and public transit globally. Gale used Uber's integration of taxis into its app in certain cities as an example of innovation that gives drivers access to Uber customers, which maximizes driver profits and minimizes downtime. Aala explained that Flywheel's partnership with Uber in San Francisco gives taxi drivers new access to demand for their service. Mallah recounted Curb's success with a similar program in New York City, where Curb-connected drivers could receive trip requests from Uber users. Hernandez explained that the ubiquity of Uber's platform helps drivers in Bogota connect with international passengers unfamiliar with local taxi systems. Abrams highlighted some of Via's partnerships, including connecting passengers to Uber's platform during demand overflows, using May Mobility's AVs to bring elderly riders to medical appointments, and connecting taxi drivers to their platform to augment local paratransit services. The panel also discussed best practices for licensing taxi and transportation services, fair competition and compensation for drivers, innovative business models, and modernizing regulations.

Modernizing the Mobility Data Paradigm Industry Mobility Data, Trends & Initiatives



From Left: Eran Shir, Ira Goldstein, and Peter J. Hicks.

Ira Goldstein, *Executive Director of the New York Black Car Fund*, moderated a session that explored the latest trends and technology in the for-hire ground transportation industry. Goldstein was joined by an expert panel that included **Peter J. Hicks**, *Executive Director of NEMTAC*, and **Eran Shir**, *co-founder and CEO of Nexar*.

Goldstein talked about the NYC TLC's Taxicab Passenger Enhancement Program ("T-PEP")—perhaps the first integrated data collection and payment system for taxis—that he was integral in establishing when we worked at TLC. At the Black Car Fund, which administers workers' compensation benefits for FHV drivers in New York City, Goldstein sought to use telematics technology to learn about potential claims earlier than they otherwise would. The Black Car Fund now works with Nexar, which is the largest platform for public space visual data and real-time mapping of roads. Nexar has a portfolio of vision-based data services for public and private sector partners to make roadways safer and more efficient. Shir gave an indepth look at Nexar's smart AI dash cams and monitoring dashboard, which record drives and provide immediate evidence of incidents.

Hicks explained that NEMTAC serves as an impartial third-party accredited by ANSI, dedicated to developing standards for the non-emergency medical transportation ("NEMT") industry. He spoke about NEMTAC's development of various industry standards, including standards for NEMT service levels (*e.g.*, curb-to-curb), modes of transport, and trip terminology.



MDS 2.0 - Mobility Data Platforms & Automated Enforcement

From Left: Matt Daus, Jana Lynott, Eric Plosky, Sahar Shirazi, Jarvis Murray, and Sylvain Tousignant.

This session, moderated by **Sahar Shirazi**, *Partner at CityFi* explored the Mobility Data Specification ("MDS") and the latest use of mobility data by regulators and private industry stakeholders to enhance service and promote safety. The session featured speakers **Jana Lynott**, *Senior Strategic Policy Advisor at*

AARP Public Policy Institute Jarvis Murray, For-Hire Transportation Administrator for the Los Angeles Department of Transportation ("LADOT"), Eric Plosky, Executive Director of MobilityData, and Sylvain Tousignant, Directeur Général of the Bureau du taxi de Montréal.

Shirazi began by emphasizing the need for a common language for data and information across different transportation sectors and services. Plosky highlighted the need for clear use cases, especially in traveler information, and the need to explain the value of data standards to various stakeholders, particularly legislators. Tousignant shared his experience leading Montréal's modernization of the taxi industry, discussing the decision-making process and implementing a real-time data collection system for taxis. He emphasized the importance of using data effectively and addressing legislative changes, privacy concerns, data governance, and data sharing within the taxi industry.

Lynott stressed the significance of the General Transit Feed Specification and the need for data specifications for demand-responsive transportation. Murray shared his experiences with LADOT's use of MDS, which is a standard for exchanging data between mobility operators and cities or other regulators. According to Murray, MDS is central to taxi operations in Los Angeles and contributes to real-time data and real-time decision-making. The group discussed regulatory issues, including open data and freedom of information laws, and how data platforms can assist in furthering Mobility-as-a-Service, Vision Zero, robotaxi deployment, clean air goals, and other regulatory endeavors.



Modernizing Airports - AGTA Session

From Left: David Bird, Matt Daus, and Ray A. Mundy, Ph.D.

During a breakfast session on Modernizing Airports, I presented a report that I published with UTRC on best and accepted practices for managing commercial ground transportation at airports during construction and redevelopment projects, with specific attention to the redevelopment of John F. Kennedy International Airport ("JFK Airport") in New York City. **"The Airport of the Future: A Sustainable &**

Equitable Ground Transportation Management Paradigm" outlines goals for curb space allocation around safety, passenger experience, transportation provider experience, throughput and efficiency, revenue, and accessibility (<u>https://bit.ly/3QEb4Ci</u>).

I was joined by **Ray A. Mundy, Ph.D.** *Executive Director of the Airport Ground Transportation* ("AGTA"), and **David Bird**, *AGTA President*. Bird highlighted the impact of TNCs like Uber and Lyft on the taxi industry and the need for regulators to embrace technology. Mundy discussed the evolution of transportation services and touched on the challenges and opportunities that electric and driverless vehicles present. Mundy believes transportation services should be easier and more convenient for customers and underscored the importance of implementing efficient and customer-friendly regulations.



AV Deployment Experiences

From Left: Jane Lappin, Matt Daus, Henry Greenidge, Frank Martz, Thomas Dwiggins, and Ellie Casson.

Jane Lappin, Partner at Blue Door Strategy and Research, moderated the AV Deployment Experiences session. The session featured AV policymakers, industry stakeholders, and experts Ellie Casson, Head of City Policy and Government Affairs for Waymo, Thomas Dwiggins, Chief of the City of Chandler Fire Department, Henry Greenidge, Senior Manager of New Markets for Cruise, and Frank Martz, City Manager the City of Altamonte Springs, Florida. The speakers shared their first-hand experiences deploying AVs, including safety standards, wheelchair accessibility, equity, and labor impacts.

Lappin introduced the session by highlighting the need for a comprehensive national regulatory framework to ensure investor confidence and facilitate the integration of AV technologies into transportation networks. She stressed the need for collaboration between the AV industry and community leaders and the importance of addressing societal issues such as employment equity and environmental

impact. Martz spoke about the partnership between Altamonte Springs and Uber, which was the first mixed-traffic multimodal AV program in partnership with the state of Florida.

Casson underscored that Chandler, Arizona was the first city to work with Waymo. Chandler Fire Chief Dwiggins shared his experience with AVs in Chandler and stressed the importance of understanding the impacts on emergency response and safety protocols and having clear strategies for when AVs are involved in crashes. He mentioned the development of the nation's first emergency response guide for autonomous vehicles and his involvement in a national committee focused on developing training programs for police and fire agencies.

Greenidge discussed Cruise's deployment approach, highlighting values such as inclusive innovation, responsible deployment, and transportation accessibility for all. He emphasized the importance of working with cities to align with their goals and engaging with different stakeholders to facilitate the successful integration of autonomous technology.



Tackling the Socio-Economic Issues of Robotaxi Deployment

Top Row from Left: Matt Daus, Jarvis Murray, Alain Kornhauser, Andrew Don, Sahar Shirazi, and Valerie Lefler. Bottom Row from Left: Isabelle Ducharme, Camille Kamga, Adam Cohen, Eric Fidler, Michele Dottin, and Leah Kaplan.

Adam Cohen, Senior Research Manager at the University of California, Berkeley Transportation Sustainability Research Center, and I moderated a session about Tackling the Socio-Economic Issues of **Robotaxi Deployment**. The session centered around the IATR's "Best Practices, Guiding Principles & Model Regulations for Robotaxis: Testing & Implementation of Shared-Connected-Automated-Electric For-Hire Vehicles (S-CAEVs)" (https://bit.ly/3G5rjmY). During this unique session, attendees split into four groups led by industry experts to identify ways that AVs can help solve longstanding socio-economic problems and identify challenges that AV implementation may create. Each group focused on a specific issue: (1) accessibility and equity, (2) safety, (3) insurance and risk management, and (4) labor and workforce. The information obtained in from the workshop will be incorporated into the final draft principles.

The groups discussed their respective topics and then presented their findings to the group. The accessibility and equity group—led by **Isabelle Ducharme**, *Chairwoman of the Board of Directors at Kéroul*, and **Camille Kamga**, *UTRC Director*—said that AVs might help solve driver shortages and acceptance of service animals. However, they expressed concerns about the lack of a human driver, such as who would assist a wheelchair passenger into the vehicle without a driver. The safety group—led by **Valerie Lefler**, *Executive Director of Feonix - Mobility Rising*, and **Sahar Shirazi**, *Partner at Cityfi*—discussed the benefits of AVs are that they would automatically follow rules such as signaling and stopping at stop signs. However, the group expressed concerns that vehicles could be hacked to control the vehicle or steal data. The insurance and risk management group—led by **Andrew Don**, *CEO of Research Underwriters*, and **Jarvis Murray**, *LADOT For-Hire Transportation Administrator*—highlighted the confusion over who is responsible for a claim involving an AV and recommended a federal or national insurance standard for AVs. The labor and workforce group—led by **Michele Dottin**, *Organizer with IDG*, and **Leah Kaplan**, *Systems Engineering and Ph.D. Candidate at George Washington University*—looked at the impact robotaxis will have on the industry and drivers.

Sustainable Mobility & EVs: Public and Private Planning, Regulatory Incentives, and Clean Air Policy in Action



From Left: Matt Daus, Frank Reig, David Do, Sam Jurkowicz, and Charles de la Chevrotière.

David Do, *Commissioner and Chair of the NYC TLC*, moderated a session on **Sustainable Mobility and EVs** that delved into the sustainability movement in the for-hire ground transportation sector. The panel discussed EV and emissions mandates, public and private sector partnerships, and public policy to move towards zero emissions goals in the taxi, for hire, non-emergency medical transportation, and TNC space.

Do described EV mandates as a "chicken or egg" issue—drivers will not buy EVs if there is insufficient charging infrastructure, yet infrastructure builders will not install chargers if there is no demand. According to Do, the TLC knew of that issue when it implemented NYC's Green Rides Initiative that mandates all Uber and Lyft vehicles, except for wheelchair-accessible vehicles, must be electric by 2030. TLC applied to a Charging and Fueling Infrastructure Discretionary Grant Program along with the NYC Department of Transportation to bring needed chargers before the mandate takes effect.

Joshua Cunningham, *Vehicle Program Specialist, Sustainable Transportation and Communities Division, at the California Air Resources Board*, spoke about the California Clean Miles Standard that will require large TNCs to reduce fleet-wide CO2 greenhouse gas emissions to zero by 2030 and to have 90% of passenger miles traveled be fully electric by the same time. The California Public Utilities Commission is working with stakeholders to achieve ZEV adoption, including a driver assistance program to provide financial support.

Charles de la Chevrotière, *Director of Business and Mobility Strategies at the Montréal Agence de Mobilité Durable*, provided an overview of his agency's purpose and Montréal's sustainability efforts. The Agency is responsible for paid on-street and off-street parking and curbside management, as well as public charging stations. The Agency plans to convert 150 public parking lots into mobility hubs with various sustainable mobility services, level 2 and level 3 charging stations, and taxi stands.

Frank Reig, *co-founder and CEO of Revel*, explained how his company uses its captive FHV service to build c to accelerate EV adoption. The Revel model has guaranteed utilization—they have 500 vehicles and 1,400 employee drivers making 7,000 rides per day—which makes it financially viable, and it is also open to the public. Reig provided insight on the issues with finding suitable locations to build Superhubs in NYC. According to Reig, zoning does not allow charging stations in 90% of the city. Of the remaining 10% of the city, a lack of sufficient power to the site further decreases suitable locations. Another issue is finding long-term leases for desired properties.

Sam Jurkowicz, *co-founder and co-CEO of Voyager Global Mobility*—which operates Buggy, one of the largest dedicated rideshare rental companies in North America—supported Reig's assessment of the NYC real estate market. Jurkowicz said his company does not have the physical space for fast-charging infrastructure in NYC. He added that drivers take the rental vehicles home with them and lack a way to charge them at home, further complicating electrifying FHV rentals.

Gala Event

The IATR Gala took place at the Desert Botanical Garden, an expansive 140 acre haven in Phoenix, Arizona, showcasing a diverse array of cacti, trees, and flowers from various corners of the globe. It was an enchanting evening under the Arizona stars, surrounded by the breathtaking beauty of the desert.



Matt Daus playing at the IATR Dinner Reception & Awards Dinner



From Left: Ed Bandas, Broda Regional Manager, and Matt Daus













2024 Conference Preview: South Florida

IATR Going Next to South Florida in 2024 "Regulatory Sunshine & A Taste of South Florida!"

Save the Dates: October 6th – 10th, 2024 in Fort Lauderdale

We are excited that IATR members will be flying south to Florida for our 37th Annual IATR Conference in October 2024. We have several motivated conference hosts, including Broward, Miami-Dade and Palm Beach regulators, so rather than choose between our friends, the IATR's conference planning committee has elected to make our conference a "Taste of South Florida" by visiting all three locations as part of our events and festivities. We will be selecting a conference hotel in Fort Lauderdale, which should allow for easy travel between all locations.

Our conference hosts will be: **Raul A. Gonzalez**, *Chief of the Miami-Dade County Passenger Transportation Regulatory Division*; from Broward County, **Joseph O'Geen**, *Administrator of Regulated Business for the Department of Consumer Affairs, Consumer Protection Division*, and **Robert Apicella**, *Supervisor of Regulated Business*; and, from Palm Beach County, **Rob Shelt**, *Director of Consumer Affairs*, and **Michelle Jimerson**, *Compliance Investigator*.

The theme of our conference, consistent with Florida's Sunshine State motto, will be "<u>Regulatory</u> <u>Sunshine – Let the Mobility Sunshine In!</u>" Building on our "modernizing mobility" and "transportation equity" themes from our last two conferences, we will be covering topics that center around IATR projects and initiatives – including NEMTAC standards, smart meters and the agency of the future. We have listened and responded to suggestions from our members stemming from our "unconference" session on the last day of the Scottsdale conference, as well as our post-conference survey.

The following topics are tentatively going to be covered as part of our 37^{th} Annual IATR conference:

- <u>7th Annual Bootcamp</u>: We plan to hold sessions on <u>taximeter regulation</u> (smart meters and apps) to provide an understanding of how the technology works and the regulatory paradigm, as well as the impact of <u>Artificial Intelligence</u> on regulated industries, and a primer in <u>mobility insurance</u> issues;
- <u>Sustainability EVs & Congestion Pricing</u>: Many jurisdictions continue to make Electric Vehicle policy related to increasing turnover of taxi and for hire fleets to clean air vehicles, and the build-out of infrastructure in the U.S. and beyond. We will explore what the U.S. and other countries have been doing in this area, as well as cities that have and/or will be implementing <u>congestion pricing</u> sharing their experiences and impact on decarbonization and congestion mitigation;
- <u>Automated Vehicles:</u> The results of our 2023 workshop will be digested, and a plan of action to finalize our model regulations will be presented, along with panel discussions with industry stakeholders and regulators involving issues of safety/deployment, governance, equity/accessibility, labor/workforce displacement, and risk/insurance;

- <u>International Regulator "Star Trek" & The TLC of the Future:</u> Once again we will bring regulators together from multiple continents to discuss a wide variety of issues, but with a specific focus on the *"regulatory agency of the future"*, and agency operations how to best conduct licensing, enforcement and other regulatory functions;
- **<u>Road Safety & Vision Zero:</u>** Discussions will be held on the use of open mobility data platforms and other government and private technology that use mobility data, AI, telematics, and other technologies to assist in enhancing road safety and furthering Vision Zero goals, including automated enforcement and policy-making (MDS 2.0 and beyond);
- **<u>NEMT Regulation Workshop:</u>** The IATR's Accessible Transportation Committee and the Non-Emergency Medical Transportation Accreditation Commission (NEMTAC), as well as other stakeholders, will work together to host a day-long workshop on developments in the public paratransit and private NEMT arena, with the goal of addressing key issues to update the IATR's Accessible Transportation Model Regulations, which were issued ten years ago;
- <u>Innovative Private Mobility Partnerships:</u> Building on the very popular sessions over the last two years on taxi-TNC partnerships, in addition to providing an update on the status of these initiatives, other private partnerships will be explored that will impact regulated industries, passengers and regulators alike;
- <u>Hack-a-Thon Winners:</u> The winners of the 2024 competition, which focuses on AV-EV Equity, will present their innovative solutions to the challenge questions using mobility data; and
- <u>**Regulator Shark Tank**</u>: We will be trying something different this year, by inviting transportation technology start-ups to present their business models before regulators and other experts, to provide critical feedback on how these companies can help regulators and the industry achieve their mutual goals.

Registration will be open in late November 2023, as well as sponsorship opportunities. There will be *deeply discounted early bird registration and sponsorship available until December 31, 2023*, as well as membership renewal discounts. To check for conference updates visit <u>www.iatr.global</u>, and to join our mailing list or inquire about speaking and/or sponsoring, contact us at <u>info@iatr.global</u>.