Driving the Future of Mobility

ANNUAL TECHNOLOGY SUMMIT

March 30 - April 2, 2019 ORLANDO, FLORIDA

PROGRAM

HOSTED BY





PARTNERED WITH











WELCOME TO ORLANDO!

ABOUT OUR HOSTS



The Central Florida Expressway Authority (CFX) is an independent, locally controlled toll agency that is responsible for construction, maintenance and operation of a 118-mile limited access expressway system that serves more than 3 million residents and an estimated 72 million annual visitors in Brevard, Lake, Orange, Osceola, and Seminole counties. CFX is committed to operating a world-class mobility network that

advances customer-first transportation solutions - most recently introducing E-PASS Xtra, the first Florida-based dual-protocol toll transponder that seamlessly works everywhere E-PASS or E-ZPass is accepted in 18 states.



With 483 miles of beautifully maintained safe toll highways, Florida's Turnpike system includes the Mainline from Miami to Central Florida, as well as the Homestead Extension, the Sawgrass Expressway, the Seminole Expressway, the Beachline Expressway, the Southern Connector Extension of the Central Florida GreeneWay, the Veterans Expressway, the Suncoast Parkway, the Polk Parkway, the Western Beltway and the I-4 Connector. On average, 1.8 million motorists use Florida's Turnpike each day.

ABOUT OUR PARTNERS

McasMarket The ITS International MaaS Market is for organizations exploring new ways of getting people to Concept to Delivery their destination and new ways for them to pay for transport services. As a growing number of governments and communities are looking for new ways to deal with transportation crises in both urban and rural areas alike. The economic impact of severe congestion and poor connectivity, along with increasing concerns at the health of citizens living in areas of dangerous air quality are creating huge pressure for change. The potential is being underlined by technologies that are creating new business models and new ways for authorities to regulate and organize transport provision. www.maas-market.com

TRB Committee on Managed Lanes (AHB35) This Committee is concerned with the evolving role of high-occupancy vehicle, high-occupancy toll and managed lanes in response to the challenges of congestion, energy consumption and climate change. The Committee examines methods for enhancing person throughput, energy conservation, air quality and user choices and safety through the optimization of preferential lanes, priority treatments and other supporting systems for bus transit, carpooling and vanpooling. The Committee's activities focus on the planning, design, operation, pricing and evaluation of preferential lane facilities and on the development, validation and dissemination of theoretical, experimental and applied research related to preferential lanes. http://managedlanes.org

TRB Committee on Congestion Pricing (ABE25) This Committee fosters research aimed to gain a better understanding of the technological, operational, business, administrative, political and institutional aspects of innovative congestion pricing of systems and services for all modes of transportation. The Committee seeks to develop a comprehensive understanding of the effects of congestion pricing on the transportation system, in addressing passenger and freight mobility, transit and highway interdependence and interoperability of systems. www.trb-pricing.org



ATI's Mission is to promote and implement interstate interoperability for the benefit of customers and member agencies. ATI goals and objectives are to establish interstate customer video tolling and interoperability; establish protocols and systems that allow for secure sharing of vehicle information; develop and support policies and legislation that allow for secure information sharing and interoperability; investigate RFID toll technology interoperability; assist agencies with the

implementation of interoperability technology and planning for future innovations; provide resources and guidance to agencies to develop operating rules and procedures in an interoperable environment; promote cost effective and efficient toll operation standards; improve the tolling experience for customers and preserve the public trust. www.tollinterop.org



TEAM Florida was formed to facilitate the exchange of information among toll agencies and the transportation industry in the state of Florida. Membership is made up of board members and executive staff of eight statewide expressway and four transit authorities, the Florida Transportation Commission and over 250 private sector transportation partners. www.teamfl.org



MEETING PLANNING GROUP

CO-CHIEF MEETING ORGANIZERS



Laura Kelley Central Florida Expressway Authority Orlando, FL



Fran O'Connor **Atkins** Freehold, NJ

TRACK TEAM LEADERS

Innovation "Tech" Talks

Tyler Milligan, Milligan Partners, Dallas, TX

Managed Lanes

Mike Davis, P.E., DBIA, RS&H, Orlando, FL

Mobility-as-a-Service (MaaS)

Colin Sowman, ITS International MaaS Market, London, England

Technology

Some Joe Averkamp, Parsons Corporation, Alexandria, VA

E Leadership Academy Alumni

INTERNET ACCESS

Complimentary in-room wireless connection is included for all guests in the IBTTA Room Block. WiFi will be available throughout the conference space.

Network Name: Renaissance_Conference WiFi Password: ibtta2019 (case-sensitive)

ABOUT IBTTA

The International Bridge, Tunnel and Turnpike Association (IBTTA) is the worldwide association for the owners and operators of toll facilities and the businesses that serve them. Founded in 1932, IBTTA has members in 20 countries on six continents. Through advocacy, thought leadership and education, members are implementing state-of-the-art, innovative user-based transportation financing solutions to address the critical infrastructure challenges of the 21st Century.

HOTEL INFORMATION

Renaissance Orlando at SeaWorld® 6677 Sea Harbor Drive Orlando, FL 32821 Phone: 1-407-351-5555

Toll-Free: 1-800-327-6677 www.marriott.com



BADGES: Badges are required to gain entry into all sessions. In consideration of other attendees, please wear your name badge to all scheduled functions.

CERTIFICATION: IBTTA will forward a certificate of attendance to all who sign the attendance form at the IBTTA registration desk.

COMPETING EVENTS: It is against IBTTA policy for other organizations to schedule events or meetings during the program.

CONSIDERATIONS: During the meeting, please silence all cellular phones and take side conversations outside of the room.

DRESS: Business or business casual is encouraged for all sessions.

MEDIA: Members of the media are permitted to attend sessions only.

MEMBER PUBLICATIONS AND COLLATERAL: All members of IBTTA are welcome to place their publications in the registration area.

PRESENTATIONS: Presentations authorized for distribution will be available to IBTTA members only on IBTTA's website within two weeks following the meeting.

RECORDING OF SESSIONS: Personal recording of any session is strictly prohibited. IBTTA reserves the right to video and record sessions for future repurposing.

REGISTRATION FEES AND EVENT TICKETS: Delegate and Speaker fees include all meals, functions and sessions. Tickets may be available to evening and other events.

SATISFACTION SURVEY: Please help IBTTA improve future meetings by completing the survey that will be emailed to you following the conference.

SPECIAL ACCOMMODATIONS: If you need special accommodations to fully participate in IBTTA events, please notify the staff at the IBTTA registration desk.

SPONSOR/EXHIBITOR INFORMATION: Please support our generous sponsors and exhibitors by reviewing the Sponsor and Exhibitor section of this program and spending time in the Exhibit Hall.



All session descriptions, speaker bios and much more can be found in the IBTTA Meetings app.



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Scan this QR code with your smartphone to download the IBTTA Meetings app







TECHNICAL TOURS & NOTES

SPACE FLORIDA

NOTE: All tours include some walking. Participants are encouraged to wear comfortable shoes and dress for the weather. Tours will take place rain or shine. Buses for both technical tours load from the north side of the hotel parking lot, accessible from the entrance by the Starbucks and Toppers concessions on the ground floor.

TECHNICAL TOUR - CAPE CANAVERAL SPACEPORT

Sunday, March 31, 2019* 8:20am - 1:00pm

Fee: \$40.00 per person

- Tour is open to registe
- Space is limited to 1
- Advance registration is required.
- U.S. citizens only. Proof of citizenship is required.
- Non-transferrable.



TECHNICAL TOUR - SUNTRAX TEST TRACK

Sunday, March 31, 2019 8:20am - Noon

Fee: \$40.00 per person

- Tour is open to registered delegates
- Space is limited.
- Advance registration is required.





Please note: The Airport Intermodal Terminal Facility Tour is cancelled due to low participation.

IBTTA IS TAKING STEPS TOWARD GREENER MEETINGS!

In recent years, you may have seen one of IBTTA's keynote speakers reflecting on issues related to environmental waste, climate change and the damage that we humans are doing to the earth. It has become painfully clear to us, as meeting planners/conveners, that we are contributing, in our own way, to the very situations we are concerned about. Large stocks of plastic name badge holders, material portfolios, satin ribbons and lanyards end up in landfills or float in the ocean, for generations to come.

With all of this in mind, our goal is to replace these damaging materials with new materials that are recyclable and/or biodegradable. These replacement materials are hard to come by, but we are making this initiative a priority and are taking steps in 2019 to begin to reduce the environmental impact of our meetings.

Some of these changes will be notable to our veteran meeting participants. We hope you will appreciate this effort and join in with new ideas and suggestions for further changes.

-THE IBTTA STAFF

CASH RAFFLE - ANOTHER FU TO SUPPORT THE IBTTA **FOUNDATION SCHOLARSHI** FUND!

In support of the IBTTA Foundation Scholarship Fund, the Foundation is holding a Cash Raffle during the Summit. Beginning at noon on Monday, you can buy a raffle ticket (or multiple raffle tickets) for \$20 (cash only) from a staff member at the IBTTA Registration Desk. Tickets will be sold through lunch on Tuesday. We'll pull a winner from the stage at 2:00pm on Tuesday, prior to the last General Session. This is a 50/50 raffle!

NOTES:

- 1. You do not need to be present to win, as long as you write your name clearly and hold on to your ticket!
- 2. There is an ATM machine in the hotel and again, this is a cash only raffle.

FEATURED SPEAKERS



KEVIN THIBAULT Monday, April 1, 2019 8:30am - 9:15am, Welcome Remarks Kevin J. Thibault was named Secretary of the Florida Department of Transportation by Governor Ron DeSantis on January 18, 2019. Kevin most recently served as the Southeast Regional Senior Vice President of TranSystems Corporation and

has extensive experience in state government having previously served in senior leadership positions with the Florida Department of Transportation for more than 16 years. Kevin received his Bachelor of Science Degree in Civil Engineering from the University of Massachusetts Dartmouth.



RAHUL GUPTA Monday, April 1, 2019 9:15am - 10:00am, Keynote Speaker Rahul Gupta is a Managing Director in Deloitte Transactions and Business Analytics LLP focusing on Smart Infrastructure. He has over 30 years of combined federal government (legislative and executive branches as well as independent

commissions) and private sector experience leading major initiatives in mobility, smart cities, infrastructure, ICT and innovation. He previously served as Smart Mobility Advisor to the European Union and has published numerous studies and given speeches on the topic of urbanization, smart cities, resilience and sustainability. Rahul is an adjunct faculty at Georgetown University's graduate program and is engaged in STE(A)M activities.



MICHAEL SCHWARZ Monday, April 2, 2019 10:30am - 11:00am, Keynote Speaker Michael Schwarz is Chief Economist and Corporate Vice President at Microsoft. Michael joined Microsoft in 2017. This is not the first time Michael is in the chief economist role. Before joining Microsoft, Michael worked at Google in various

roles. Most recently he was the Chief Economist for Google Cloud. Prior to that he led the team that built a carpooling marketplace that was fully launched in Israel (Waze Carpool). Subsequently Michael became the Chief Scientist for Waze. Before his five-year long tenure at Google, Michael was the head of the economics research unit at Yahoo! He played a critical role in designing Yahoo! ad marketplaces. His most externally visible project at Yahoo! was developing algorithms for setting optimal reserve prices for search advertising auctions, which had significant impact on overall company earnings. Michael started his professional life as a faculty member at Harvard University's Economics Department. Michael holds a PhD from Stanford Graduate School of Business.



BUDDY DYER Tuesday, April 2, 2019 9:45am - 10:00am, Welcome Remarks Buddy Dyer has served as Mayor of the City of Orlando since 2003, and from his first day in office, he has worked tirelessly to advance the community's shared vision for Orlando as America's 21st Century City. Under Mayor Dyer's

leadership and through strategic investments, Orlando is one of the nation's fastest-growing cities and is the most visited destination in the country, hosting more than 72 million visitors each year. Mayor Dyer has defined Orlando as America's new home for inclusiveness, opportunity and quality of life, with a strong focus on innovation, transportation, sustainability and government efficiency.



PETER NORTON Monday, April 2, 2019 2:00pm - 3:00pm, Closing Speaker Peter Norton is a historian of engineering and society, with particular interests in streets and people. He is an associate professor in the Department of Engineering and Society, where he has taught since 1998. He is the author of Fighting

Traffic: The Dawn of the Motor Age in the American City (MIT Press, 2008). For his article "Street Rivals: Jaywalking and the Invention of the Motor Age Street" (Technology and Culture, 2007) Norton won the Abbott Payson Usher Prize of the Society for the History of Technology. He is winner of the Hartfield-Jefferson Scholars Teaching Prize (2012) and of the Trigon Engineering Society's Hutchinson Award "for dedication and excellence in teaching".

PRE-SUMMIT EVENTS

SATURDAY, MARCH 30, 2019

6:30am - 2:00pm

IBTTA FOUNDATION GOLF TOURNAMENT AT FALCON'S FIRE GOLF COURSE



Buses will load 30 minutes prior from the north side of the hotel parking lot, accessible from the entrance by the Starbucks and Toppers concessions on the ground floor. Buses will leave at 6:15am. Buses can accommodate clubs if you're bringing vour own.

2:00pm - 4:00pm

(Labrid)

YOUNG PROFESSIONALS COUNCIL - KICKOFF MEETING

Come join the newly formed Young Professionals Council (currently defined as 35 years old and under). This is the next generation of diverse and future innovators in the toll industry looking to build long-lasting professional relationships with their peers in a casual and comfortable setting.

Discussion led by: Tyler Milligan, Managing Partner, Milligan Partners, Dallas, TX

4:00pm - 7:00pm

(Function Lawn)

IBTTA FOUNDATION INAUGURAL BACKYARD OLYMPICS ON THE HOTEL GROUNDS

Pre-registered participants can pick up tickets and wristbands in the Oceans Ballroom Foyer. On-site tickets available for purchase in Oceans Ballroom Fover. The \$50 fee includes two drinks and all the games you can play!



SUNDAY, MARCH 31, 2019

7:30am - 7:00pm

REGISTRATION

8:00am - 3:00pm

EXHIBIT SET-UP

(Oceans Ballroom)

8:20am - Noon/1:00pm

TECHNICAL TOURS

>> SunTrax Test Track

>> Cape Canaveral Spaceport SOLD OUT - NO WALK ONS!

Buses will load 15 minutes prior from the north side of the hotel parking lot, accessible from the entrance by the Starbucks and Toppers concessions on the ground floor. (see page 4 for info)

11:30am - 2:00pm

(Palani)

COUNCIL OF PLATINUM SPONSORS (CoPS)

(by invitation)

This roundtable is exclusively for the 18 members of the IBTTA Council of Platinum Sponsors (CoPS). Discussion will focus on the initiatives that are in progress. An agenda will be provided by the Chair.

Discussion led by: Jim Wilson, PMP, Senior Vice President, TransCore, and Chair, CoPS, Orlando, FL

11:30am - 2:00pm

(Labrid)

EXECUTIVE DIRECTORS ROUNDTABLE

(by invitation)

This roundtable is exclusively for Executive Directors or persons with similar titles that make them the chief staff executive of their toll agency, authority or concession. Only one individual per organization may attend. Participants will be polled in advance to identify the issues that will be discussed during the informal roundtable discussion. This is a good opportunity to discuss thorny issues in a quiet, off-the-record setting.

Discussion led by: Chris Tomlinson, Executive Director, State Road & Tollway Authority and Georgia Regional Transportation Authority and President, IBTTA, Atlanta, GA

2:00pm - 5:00pm

ROUNDTABLES

(Oceans 1-4) (see all four on page 7)

5:30pm - 7:30pm

RECEPTION WITH EXHIBITORS

(Oceans Ballroom)

ROUNDTABLE AGENDA All four sessions will be held from 2:00pm – 5:00pm in the Oceans Ballroom.

1 TECHNOLOGY ROUNDUP

Part I: Toll Agency Roundtable

We'll open this session with a moderated conversation with a few agency members sharing what's keeping them up at night.

Leader: Systems & Solutions. Parsons Corporation, Alexandria, VA

Jose Dios, Chief Information Officer, New Jersey Turnpike Authority, Woodbridge, NJ

Sabu Stephen, Director of Information Technology, North Texas Tollway Authority, Plano, TX

Brian Kelley, Chief Technology Officer, Ohio Turnpike and Infrastructure Commission, Berea, OH

Nick Roethel, Director, Technology Services, Bay Area Toll Authority, Metropolitan Transportation Commission, San Francisco, CA

Part II: Emerging Technologies

Leader: James Hofmann, Interim Executive Director, NTTA and Chair, IBTTA Emerging Technologies Committee, Plano, TX

Connected and Automated Vehicle Working Group Update Leader: Director, Tolling Operations & Innovation, Transurban, Alexandria, VA

IBTTA TollMiner™ Update

Leader: Cindy Norcross, Database Manager, IBTTA, Washington, DC

Part III: Security and Operations Considerations

Leader: Mark Cantelli, Vice President and CTO. Public Sector. Conduent Transportation, Germantown, MD

Frank Reid, Senior Cyber Security Consultant, AECOM, Plattsmouth, NE

Lyle Sudin, Senior Manager, Mandiant Consulting Services, Chicago, IL

William Crosbie, P.Eng., MSS, Senior Vice President – Global BD Director, Critical Infrastructure, Parsons, Tysons, VA

Brian Kelley, Chief Technology Officer, Ohio Turnpike and Infrastructure Commission, Berea, OH

2 TOLLING 101

The session for industry newbies will be interactive so bring your questions, no matter how basic, and ask the experts!

- >> Toll Organizations, Facilities and Financing
- >> Roadside Toll Collection
- >> ETC Customers, Business Rules, Back Office Operations and **Customer Service**
- >> Toll Interoperability

Leaders: Marty Stone, Ph.D., AICP, Chief Operating Officer, Business Development, Egis (USA), Tampa, FL and Tom Knuckey, National Tolls Technology Group Director, Atkins N.A., Orlando, FL

3 PROCUREMENT ROUNDTABLE

The public procurement process is something that all IBTTA members endure. Agencies issue RFPs that their consultants help draft and the vendors respond to. After a lot of time and money spent, hopefully there is a meeting of the minds and a new partnership. But often there is so much unsaid about the process and what could have made it better or help match up the agencies needs with the vendor's goods or services. Come participate in an interactive discussion as representatives from the public agency, vendor and consulting worlds have a frank and open discussion on the public procurement process in the toll industry. The conversation will go where the audience takes it and hopefully, we will all learn new ways to improve this age-old process!

Chris Tomlinson, Executive Director, State Road & Tollway Authority and Georgia Regional Transportation Authority and President, IBTTA, Atlanta, GA

Kevin Holbert, Executive Vice President, Business Development. ETC. Richardson, TX

JJ Eden, Vice President and Director of Tolling & Managed Lanes, AECOM, Raleigh, NC

PIARC COMMITTEE ON MOBILITY – INTERNATIONAL **IDEA EXCHANGE**

Come meet with members of PIARC, The World Road Association that brings together the road administrations of 122 governments from over 140 countries. PIARC's focus is on the global approach to mobility in urban areas as they share the common goal of an integrated, sustainable and safe transport system.

PRESENTERS:

State Policy for Urban Mobility Plan

Diane Gutierrez-Scaccetti, Commissioner, New Jersey Department of Transportation, Trenton, NJ

Chairman of PIARC TC B3 on Sustainable Mobility in Urban Areas André Broto, President's Advisor, VINCI Autoroutes, Rueil-Malmaison, France

ROUNDTABLE EXCHANGE:

Overview of the Development of Managed Lanes in the U.S. Thomas Hutchinson, AICP, Project Manager, HNTB Corporation, Atlanta, GA

I-85 Express

Annie Gillespie, P.E., Director of Engineering, State Road & Tollway Authority, Atlanta, GA

Measuring Equitable Access to Neighborhood Amenities at Seiona City

Ok Namkung, Ph.D. Candidate, Candidate, Seoul National University, Seoul, South Korea

Express Lanes in Texas

Mike Heiligenstein, Executive Director, Central Texas Regional Mobility Authority, Austin, TX

SR 836 Express Transit Services

Juan Toledo, P.E., Deputy Executive Director, Miami-Dade Expressway Authority, Miami, FL

Are New Shared Mobility Services Going to Re-define the **Urban Landscape?**

Wanda Debauche, Head of Division, Belgian Road Research Centre, Brussels, Belgium

Recommendations to Improve the Performance of Bus Rapid Transit Projects

Oscar Fariñag, Asociación Argentina de Carreteras, Buenos Aires, Argentina and Mathieu Luzerne, Multimodal Road Designer, Cerema, Aix-en-Provence, France

MONDAY, APRIL 1, 2019

REGISTRATION 7:00am - 5:00pm

7:00am - 8:30am **BREAKFAST WITH EXHIBITORS**

(Oceans Ballroom)

GENERAL SESSION 8:30am - 9:15am

(Crystal Ballroom)

OPENING REMARKS

Patrick Jones, Executive Director & CEO, IBTTA, Washington, DC

Chris Tomlinson, Executive Director, State Road & Tollway Authority and Georgia Regional Transportation Authority and President, IBTTA, Atlanta, GA

Laura Kelley, Executive Director, Central Florida Expressway Authority and Co-Chief Meeting Organizer, Orlando, FL

Paul Wai, P.E., Executive Director, Florida's Turnpike Enterprise, Ocoee, FL

Fran O'Connor, Senior Vice President, Director of National Tolls, Atkins N.A. and Co-Chief Meeting Organizer, Freehold, NJ



Kevin Thibault, P.E. Secretary Florida Department of Transportation Tallahassee, FL (see bio on page 5)

9:15am - 10:00am

GENERAL SESSION

(Crystal Ballroom)

KEYNOTE SPEAKER



Rahul Gupta Advisory Managing Director Deloitte Transactions and Business Analytics LLP Arlington, VA (see bio on page 5)

10:00am - 10:30am REFRESHMENT BREAK WITH EXHIBITORS

(Oceans Ballroom)

10:30am - Noon

BREAKOUT | MANAGED LANES

(Oceans 3)

BUILDING CONNECTED NETWORKS OF MANAGED LANES

Connecting managed lanes between adjacent facilities provides a seamless network that improves travel by more efficiently serving high-volume traffic movements in a region. The decision to establish a connected network of managed lanes requires careful evaluation and consideration of many factors as part of policy development, planning, design, operations and corridor management, particularly when multiple partners are included in the process.

MODERATOR: Dan Lamers, P.E., Senior Program Manager, Transportation Planning, North Central Texas Council of Governments, Arlington, TX

Florida's Express Lanes Networks and Facility Operations

Christina Colón, P.E., Director of Transportation Development and John Easterling, P.E., PTOE, District Traffic Operations Engineer, Florida's Turnpike Enterprise, Ocoee, FL

Performance History and Forecasting Model Development for a Network of Managed Lanes in Southeast Florida

Phani Jammalamadaka, P.E., PMP, Toll Traffic and Revenue Specialist, CDM Smith, Dallas, TX

Handling Congestion for Dynamically Priced Managed Lanes with a Maximum Toll Cap

Nick Wood, P.E., Assistant Research Engineer, Texas A&M Transportation Institute, Austin, TX

10:30am - Noon

BREAKOUT | TECHNOLOGY

(Crystal Ballroom)

CASE VEHICLES, SMART CITIES AND THE FUTURE

Disruptive technologies and new business models are affecting the way we live, work and travel. In the future. Connected, Automated, Shared and Electric (CASE) vehicles will be a major part of our lives. Their impact on congestion and transportation revenue is murky. Toll road operators, states, cities and municipalities wrestle with the impacts of the technologies on city and infrastructure planning, revenue collection and violation enforcement policies. CASE vehicles are being touted in their ability to improve throughput, and make roadways safer, but will they really?

MODERATOR: Suzanne Murtha, Associate Vice President, Connected and Automated Technology, AECOM, Alexandria, VA

Connected Work Zone Pilot

Michael Pack, Manager, Incident Management & Traffic Operations, Pennsylvania Turnpike Commission, Middletown, PA

Coming Disruptive Mobility Change: How It Will Affect Tolling Edward Regan, Senior Vice President, CDM Smith, Maitland, FL

Connected Vehicles

Abenezer Yohalashet, Head of Tolling, PayTollo/Automatic, San Francisco, CA

Potential Headaches of CASE Vehicles and How to Solve Them Now

Philip Underhill, Senior Vice President, Strategic Partnerships, Commercial Services, Verra Mobility, Mesa, AZ

Smart Cities Orlando

Charles Ramdatt, P.E, PTOE, AICP, Director of Smart Cities and Special Projects, City of Orlando, Orlando, FL

(Oceans 4)

WHAT IS MAAS AND WHY IS IT IMPORTANT?

Mobility-as-a-Service (MaaS) is a customer-centric approach to providing transportation services. It represents a shift from independent infrastructure owners and service providers to a coordinated approach that allows customers a choice of single or multi-modal transportation options and includes information about the time and price for the full trip and often the carbon footprint. However, the term MaaS has different meanings depending on your geography and role in the transport ecosystem, including management, marketing and delivery of services, distribution of user information, and multiple payment approaches. International transportation operators and payment providers will describe MaaS as it exists today and how it might look tomorrow.

MODERATOR: Mary Sallach, PMP, Director of Integrated Program Delivery, State Road and Tollway Authority, Atlanta, GA

MaaS – What People Think About Mobility

Jack Opiola, President, Mobility Plus LLC, Reston, VA

Putting Transit Front and Center of the Conversation Andrew Tate, PMP, Senior Solutions Architect, Cubic Transportation Systems, San Diego, CA

The Rise of MaaS in Changing Travel Behaviors to Utilize Multi-Modal Travel

Mike Papineau, President, RideFlag Technologies, Mississauga, Ontario, Canada

Shared Mobility Corridors: The Future of Intercity Passenger Rail

Russell "Rusty" Roberts, Vice President, Government Affairs, Brightline Trains, LLC, Orlando, FL

10:30am - Noon

BREAKOUT | INNOVATION "TECH" TALKS

(Oceans 2)

"TECH" TALKS ROUND 1

FACILITATOR: S Jeff Weiss, Senior Toll Consultant, Gannett Fleming, New Paltz, NY

Innovating Technology Services – It's OK Not to Have All the Answers Up Front

Darius Eshragh, Director, Platform Engineering, Transurban, Irvine, CA

Business Intelligence - Making Your Data Work For You Mike Lahey, Business Intelligence Analyst, E-470 Public Highway Authority, Aurora, CO

License Plates - The Original Unique Identifier John Mike, President, Perceptics, Farragut, TN

A Beginner's Guide to Implementing Toll Systems Rick Gobeille, P.E., Senior Principal, Stantec, New York, NY

Noon - 1:30pm

(Oceans Ballroom)

Noon - 1:30pm

RAFFLE

Raffle sales open at registration desk. See page 4 for information.

1:30pm - 3:00pm

BREAKOUT | MANAGED LANES

(Oceans 3)

CHANGES IN TRAVEL BEHAVIORS TO UTILIZE MULTI-MODAL TRAVEL

An efficient and inclusive transportation system provides a wide range of mobility options to its users. For more than 20 years, managed lanes have been deployed in metropolitan areas to reduce congestion and improve mobility. Panelists will discuss how managed lanes impact travel behavior and mode choice as well as shifts we've seen in managed lane corridors that offer park and ride, carpool, bus, and/or rail alternatives.

MODERATOR: Patty Rubstello, P.E., Assistant Secretary, Urban Mobility & Access, Washington State Department of Transportation, Seattle, WA

MoPac Express Lane – A Real Lane Changer for Central Texas Transportation Demand Management

Mike Heiligenstein, Executive Director, Central Texas Regional Mobility Authority, Austin, TX

Multi-Modal Approach to Managed Lanes Projects to Improve Mobility

Chris Lillie, P.E., Principal, Project Delivery Manager, Bay Area Toll Authority, San Francisco, CA

Mobility Diversity Using Technology – The Oregon Way! Chuck Larsen, Technical Architect, Oregon Department of Transportation, Salem, OR

1:30pm - 3:00pm

BREAKOUT | TECHNOLOGY

(Crystal Ballroom)

ROADSIDE SYSTEMS AND INNOVATIONS

This session will focus on the latest innovations and enhancements to roadway systems. Designed to increase accuracy, performance, reliability and/or redundancy - and with a focus on enabling technologies and services such as Big Data, IoT and CASE vehicles, panelists will discuss innovative roadside solutions that are addressing such areas as video-based vehicle detection and classification, vehicle occupancy detection, dynamic trip building, next generation advanced traffic and maintenance management systems, as well as the use of enabling technologies such as machine learning to enhance system performance or increase the automation of service. Learn which systems and processes have been deployed and implemented, and what can we expect for the future.

MODERATOR: Rick Nelson, Director, Toll Operations Division, Director, TxDOT, Austin, TX

Multi-Protocol Readers and Multi-Protocol Tags

Alice Klemashevich, PMP, Associate Vice President, TransCore, Dallas, TX

AGENDA

Toll System for Managed Lanes on Interstate 75 and State Road 826

Mark Beall, Interim Director, Toll Systems and Director of Business Development and Concession Management, Florida's Turnpike Enterprise, Ocoee, FL

Advanced Traffic Management Systems - New Technologies to Improve Toll Operations

Roberto Perez, Vice President, Systems, Parsons Corporation, Peachtree Corners. GA

Innovations in Europe – ASFINAG's Commitment to Support CASE Vehicles

Jacqueline Erhart, Program Manager, Cooperative, Connected and Automated Driving, ASFINAG, Vienna, Austria

1:30pm - 3:00pm

BREAKOUT | MOBILITY-AS-A-SERVICE

(Oceans 4)

WHY AND HOW SHOULD THE TOLL INDUSTRY GET **INVOLVED IN MAAS?**

As Mobility-as-a-Service changes the transportation landscape, why should the tolling industry be involved, what is at stake and how do we ensure that user financed facilities are a viable and valuable tool? This session will explore the how and when the toll industry should drive interaction with MaaS providers including what the role the toll industry should play.

MODERATOR: Tom Delaney, Vice President, Senior Division Manager, Atkins, Orlando, FL

Tolling for Mobility-as-a-Service

Yousuf Kamal, Manager, Marketing & Business Development, TransCore, Albuquerque, NM

Using Games and Rewards to Change Multi-Modal Travel Behaviors

Randy Moore, CPA, Vice President of Business Development, ETC. Richardson, TX

MaaS: Which Way Does the Toll Road Go?

David Dick, Senior Consultant, Jacobs Engineering, San Francisco, CA

MaaS Highlights Our Interoperability Gap – Ripe for Disruption Christopher Higgins, Co-Founder & CEO, VeriToll, LLC, Walnut, CA

1:30pm - 3:00pm

BREAKOUT | INNOVATION "TECH" TALKS

(Oceans 2)

"TECH" TALKS ROUND 2

FACILITATOR: Susiness Analyst, E-470 Public Highway Authority, Aurora, CO

It's Time to Start Counting People, Not Cars

Paul Steinberg, Chief Business Officer, Carma, Austin, TX

Machine Learning and All-Electronic Tolling

Rafael Hernandez, Director of Toll Operations, Tampa-Hillsborough Expressway Authority, Tampa, FL

Real-time Dynamic Pricing: Three Left Turns to Make a Right?

Annie Gillespie, P.E., Director of Engineering, State Road and Tollway Authority, Atlanta, GA

Utilizing Technology to Transform Safety – CFX's Award Winning Wrong Way Driving System

Bryan Homayouni, P.E., Manager of Traffic Operations, Central Florida Expressway Authority, Orlando, FL

3:00pm - 3:30pm

REFRESHMENT BREAK WITH EXHIBITORS

(Oceans Ballroom)

3:30pm - 5:00pm

BREAKOUT | MANAGED LANES

(Oceans 3)

FUTURE APPLICATIONS OF MANAGED LANES

Advances in technology continue to expand how we can manage a lane. As an industry, we are still learning the full implications connected and autonomous vehicles (CAV) will have in the tolling and priced managed lanes industry. Technology will allow agencies to vary the designation and use of a lane dynamically in response to consumer demand and policy objectives. The tools to plan for such a world are in the evolutionary state. This session will discuss how we plan for a world of managed lanes that may include lanes that are CAV only, truck platoon only, electric vehicles only, or MaaS vehicles only. What are their implications for our stakeholders including our customers, our investors and the general traveling public?

MODERATOR: Mike Davis, P.E., DBIA, Vice President, National Tolls and Technology Service Group Leader, RS&H, Orlando, FL

Future Proofing Managed Lanes

Robert Edelstein, Ph.D., P.E., PTOE, Senior Vice President, AECOM, Pompano Beach, FL

Modeling CAVs in an Express Lane World

Barbara Davis, AICP, Toll Studies & Express Lanes Development Administrator, Florida's Turnpike Enterprise, Ocoee, FL

Technology and Its Impact on Managed Lane Credit Risk Scott Monroe, CFA, Director of Infrastructure, Fitch Ratings, San Francisco, CA

Let's Manage All the Lanes!

Chris Swenson, P.E., Assistant Vice President, WSP USA, Atlanta, GA

(Crystal Ballroom)

BACK OFFICE SYSTEMS

Today's Back Office Systems must do more than simply storing local data. Smart businesses are continually looking for the most innovative ways to improve and accomplish their business objectives. Staying up-to-date on the latest developments should be a priority. From cloud computing to data analytics, these systems contain a gold mine of information and should offer real-time data to the business to allow them to identify anomalies and make decisions faster. Join us as we delve into back office related topics centered around self-service technologies via data mining and data analytics to innovations in transaction processing, as well as disaster recovery and business continuity.

MODERATOR: Michelle Maikisch, Chief of Staff/Public Affairs Officer, Central Florida Expressway Authority, Orlando, FL

Intelligent Toll Operations

Saïd Majdi, Senior Solution Architect, TollPlus, Chandler, AZ

The Data Centric Tolling Enterprise: Building a Roadmap for Success

Will Etheredge, Toll Revenue & Budget Lead, TxDOT, Toll Operations Division Austin, TX and Dan Montgomery, Associate Vice President, Data & Analytics, North Highland Consulting, Austin, TX

Blockchain: Real Applications in a Distributed, Connected System Lee Roche, Vice President, Platform Development & Integration, Conduent Transportation, Morrisville, NC

From Four to Eight Cylinders: A Revenue Engine Story Shana Whitehead, Chief of Business Systems, Illinois Tollway, Downers Grove, IL

GeoAnalytics in Action at the Pennsylvania Turnpike Commission Robert Marsters, Senior IT Manager, Pennsylvania Turnpike Commission, Middletown, PA

3:30pm - 5:00pm

BREAKOUT | MOBILITY-AS-A-SERVICE

(Oceans 4)

MAAS IMPLEMENTATION AND OPERATIONS

Operations, Metropolitan Transportation Commission, Bay Area Toll Authority, San Francisco, CA

Once Upon a Time, a Toll Operator Became a Mobility Provider Jason Wall, Chief Executive Officer, USA, A-to-Be, Downers Grove, IL

MaaS - Our Shared Mobility Future

Mark Feltham, Chief Technology Officer, RideFlag Technologies, Mississauga, Ontario, Canada

MaaS – Same Old Stuff, Something New or a Solution to Revolutionize Transport?

Crissy Ditmore, Director of Strategy, Cubic Transportation Systems, San Diego, CA

Different Strokes for Different Folks

Cédric Bourgoin, Director, Sales and Marketing, EasyTrip, Dordrecht, Netherlands

(Oceans 2)

3:30pm - 5:00pm

"TECH" TALKS ROUND 3

FACILITATOR: Snehal Ambare, P.E., Project Manager, HNTB Corporation, Ocoee, FL

Reload – Rethinking Infrastructure for Today's Driver David Wynne, Director of Toll Operations, Central Florida Expressway Authority, Orlando, FL

The Price of Innovative Mobility – Who Pays and How? Vincent Brigidi, Executive Vice President, Commercial Services, Verra Mobility, Mesa, AZ

Re-Envisioning Customer Interactions: The Transformation from a Call Center Operation to a Contact Center Operations Helen Barton, Vice President, Operations, Conduent Transportation, Newark, NJ

Friction Points - Creating a Truly Frictionless Payment Program for Even the Cash-Based User

Shannon Swank, Vice President, BancPass, Austin, TX

MaaS – What's Missing in the US and How Tolling Could Help Marty Stone, Ph.D., AICP, Chief Operating Officer, Business Development, Egis US, Tampa, FL

6:30pm - 9:30pm

EVENING EVENT

UNIVERSAL STUDIOS CITYWALK™

Buses will load 30 minutes prior from the north side of the hotel parking lot, accessible from the entrance by the Starbucks and Toppers concessions on the ground floor.





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TUESDAY, APRIL 2, 2019

REGISTRATION 7:00am - 3:00pm

7:00am - 8:30am

BREAKFAST WITH EXHIBITORS

(Oceans Ballroom)

8:30am - 9:45am

GENERAL SESSION

(Crystal Ballroom)

VENDOR FORUM

Join your colleagues for this session of new ideas and technologies for improving back-office systems and/or roadway operations, presented by the IBTTA vendor community. With no veiled messages, hidden content or subliminal channeling, IBTTA members will showcase their innovative products and solutions in a way that's informative and eye-opening. Learn how their technologies and systems can be used to transform your agency into running the ultimate modern toll facility.

MODERATOR: Tyler Milligan, Managing Partner, Milligan Partners, Dallas, TX

PRESENTERS:

Björn Crona, Product Manager, Vehicle Detection and Classification, Kapsch TrafficCom, Jönköping, Sweden

Suresh Kakarla, CEO, TollPlus, Chandler, AZ

Jennifer Sherblom, Business Development Manager, Perceptics, Farragut, TN

Barry Pelletteri, Chief Strategy Officer, Kyra Solutions, Inc., Lakeland, FL

Shannon Swank, Vice President, BancPass, Austin, TX

Stephen Lockhart, Chief Technology Officer, Star Systems International, Allen, TX

Ken Kao, Director and Transportation Solution Architect, Advantech Industrial IoT Group, Ottawa, IL

George Thiel, Account Executive, SICK, Inc., Bloomington, MN Teri England, Director, Red Fox ID, Newark Notts, United Kingdom

9:45am - 10:00am

GENERAL SESSION

(Crystal Ballroom)

WELCOME REMARKS



The Honorable Buddy Dyer Mayor of the City of Orlando Orlando, FL (see bio on page 5)

REFRESHMENT BREAK WITH EXHIBITORS 10:00am - 10:30am

(Oceans Ballroom)

10:30am - 11:00am

GENERAL SESSION

(Crystal Ballroom)

KEYNOTE SPEAKER



Michael Schwarz Corporate Vice President & Chief Economist Microsoft Corporation Redmond, WA (see bio on page 5)

11:00am - 12:30pm

GENERAL SESSION

(Crystal Ballroom)

TECHNOLOGY - WHO'S ZOOMIN' WHO

MODERATOR: So Joe Averkamp, Vice President for Systems and Solutions, Parsons Corporation, Alexandria, VA

PANELISTS:

Michelle Maggiore, P.E., Global Business Development, Transportation & Smart Cities, Cisco, Washington, DC

Lisa Peterson, Head of Business Development, AiRXOS, Part of GE Innovation, Washington, DC

Brennan Hamilton, Senior Product Manager, Connected Vehicles – Smart Cities, Ford Smart Mobility, Dearborn, MI

Michael Noblett, President & CEO, American Center for Mobility, Ypsilanti Township, MI

Michael Schwarz, Corporate Vice President & Chief Economist, Microsoft Corporation, Redmond, WA

12:30pm - 2:00pm

LUNCH WITH EXHIBITORS

(Oceans Ballroom)

2:00pm - 3:00pm

GENERAL SESSION

(Crystal Ballroom)

CLOSING SPEAKER



Peter Norton Professor of History Department of Engineering & Society University of Virginia Charlottesville, VA (see bio on page 5)

3:00pm

ADJOURN

CLOSING – QUICK BREAK!

POST-SUMMIT – ATI & TEAMFL MEETINGS

(Open to all. No additional fee for IBTTA Summit Attendees.)

TUESDAY, APRIL 2, 2019

1:00pm - 6:00pm

REGISTRATION

3:15pm - 6:00pm

(Crystal Ballroom)

JOINT ATI/TEAM FLORIDA ROUNDTABLES

MODERATOR: PJ Wilkins, Executive Director, E-ZPass Group/IAG Service Corp, Wilmington, DE

Abenezer Yohalashet, Head of Tolling, PayTollo, San Francisco, CA Tyler Milligan, Managing Partner, Milligan Partners LLC, Dallas, TX Matthew Chiodo, Vice President of Sales, Gentex Corporation

- >> Technology and Innovation (transitions, entry barriers, road alternatives)
- >> Toll Operations (congestion management, interstate tolling)
- >> Transit and Connected Vehicles (disruptive tech, mobility change and preparation)
- >> Finance & Policy (changing models: ownership, CAV and toll use choices)
- >> Public Relations & Communications Strategies

6:00pm - 7:00pm

(Oceans Ballroom Foyer)

ATI AND TEAM FLORIDA RECEPTION





WEDNESDAY, APRIL 3, 2019

8:15am - 9:00am

(Atrium AB)

CONTINENTAL BREAKFAST

9:00am

(Crystal D & E)

Call To Order - TEAMFL Session

Van Fuller, Chairman, TEAMFL (3.0 PDH)

Chairman's Update

Van Fuller, Chairman, TEAMFL

Keynote Speaker

Governor DeSantis (invited)

RIVER, a Challenging Multi-State Issue

JJ Eden, President, Alliance for Toll Interoperability, Regional Interstate Violations Enforcement Reciprocity – History, Progress & Where Do We Go From Here?

JTA The Future of Mobility – From Transportation Authority to Mobility

Integrator – Nat Ford, CEO, JTA, Jacksonville's Smart City Initiative

HART Transit Update

Van Fuller, Chairman, TEAMFL (3.0 PDH)

10:30am

(Crystal D & E)

TEAMFL New Members and Sponsor Acknowledgement Amy Davies, Ambassador Chair, TEAMFL

11:00am

(Crystal D & E)

Tampa-Hillsborough Expressway Authority

Joe Waggoner, Executive Director, Tampa-Hillsborough Expressway Authority, Connected Vehicle Pilot Program Initiative

FDOT I-4 Ultimate Update

John Tyler, FDOT, District 5, Update on Future Plans for I-4 Managed Lanes

SunRail

Nicola Liquori, Executive Director, SunRail



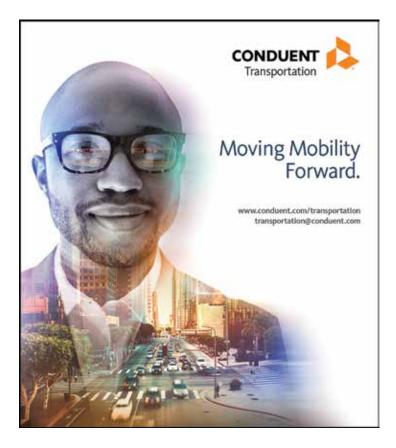


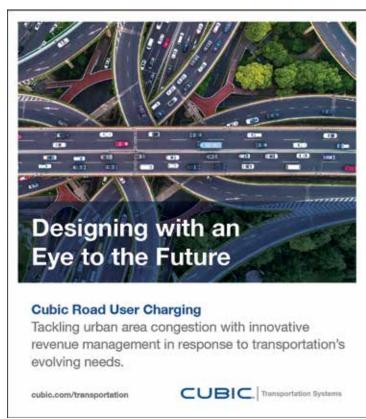




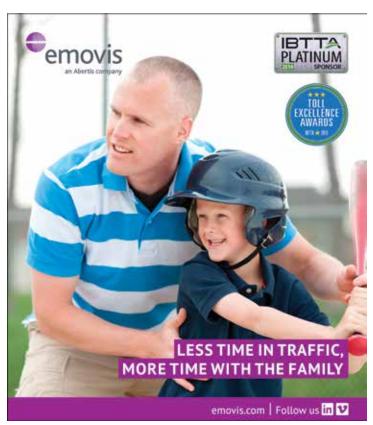








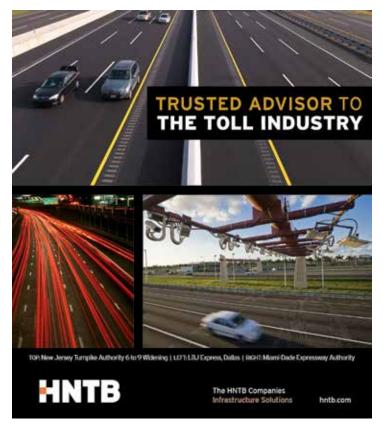


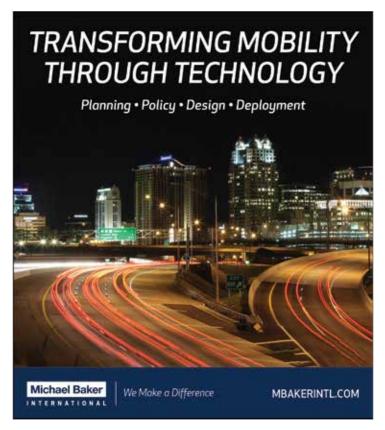










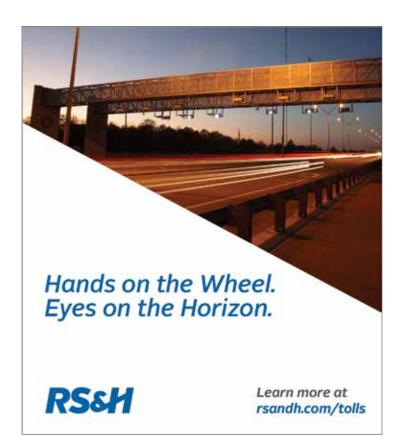






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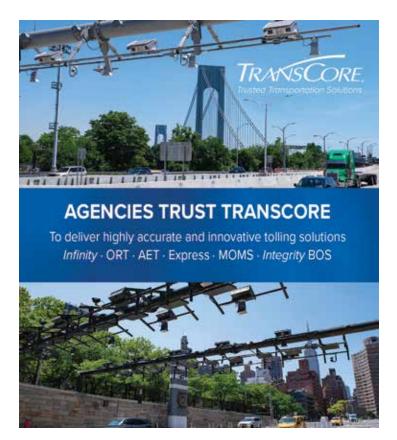




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Duncan Solutions specializes in revenue recovery for toll violations and negative balance customer duncan accounts. Our delinquent account collection service is customized to meet the specific

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For over 100 years, Gannett Fleming has shaped transportation infrastructure, connecting people

and communities around the world. We provide public and private industry clients with extensive infrastructure design and construction management services for transportation systems. Adept at toll system operations, our consultants have worked on several high-profile toll system projects and conversions throughout the country. At the forefront of innovative strategies and financing methods to improve system performance and financial sustainability, Gannett Fleming provides user-based transportation solutions that address today's challenges and advance future mobility. With expertise in tolling and

other pricing systems, we help deliver electronic, open-road, variable and dynamic tolling, real-time traffic data, and GPS-based systems. Additionally, our turnkey solutions reduce administrative burden, accelerate projects, provide a single point of responsibility, and, in some cases, achieve faster revenue collection for owners. Gannett Fleming's entire team works together to deliver excellence to every project, every day. www.gannettfleming.com

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lancpass BancPass offers an alternative account management and payment system that

networks commercial account management payment systems, including cash credit/debit and mobile wallets to Toll Systems. Consumers can choose to have transactions posted directly to Bank, Credit Card, or pre-paid cash accounts using either Toll Transponders or the PlusPass™ phone app. For Toll Operators, the BancPass system offers a network of low-or-no cost payment tools that each guarantee payment to the Toll Operator. Our system makes use of existing financial platforms and networks, as well as retail chains which allows consumers to buy and reload products on the BancPass Network™. This creates a widely available interoperable network for users Nationally. The payment application also extends into other markets including parking and quick serve restaurants. www.bancpass.com



Carma Technology Corporation is a world leader in technology for encouraging, verifying and rewarding high-occupancy commuting. Occupancy is in our DNA, from launching the world's first ridesharing

smartphone app in 2008, to verifying millions of carpool trips, and enabling high-occupancy toll discounts. As a trusted partner of federal and state transportation agencies over the past decade, we're helping to drive a smarter and more sustainable transportation system. www.gocarma.com



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Cofiroute USA is a tolling and express lanes operator specializing in the management,

operation and maintenance of express lane systems. With 23 years of expertise in Customer Service Center System Operations and Call Center Services, Cofiroute provides a complete host of services for end-to-end Customer Service Center Operations. We serve our clients as an operations partner focused on open communications, data-driven decisions, and dedication to a collaborative, transparent, and candid approach to partnering; delivering on our customer's goals by incorporating operational excellence with solutions designed around proven people, processes and technology. www.cofirouteusa.com



Cogensia is a big data analytics consulting firm that brings customer-level data analysis to the tolling industry to enable initiatives such as converting cash payers to transponders, congestion analysis and alleviation, and

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Conduent Transportation has been helping transform the way the world travels for more

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and services for intelligent travel solutions. We deliver integrated systems for transportation and traffic management, including a next-generation, tolling back office system. We're uniquely positioned between traditional tolling, road user charging suppliers and large payment processors. At Cubic, we believe our identity is intrinsically linked with our customers and the people our customers serve. How they get from one place to the next – how that impacts their lives, their fellow travelers and their cities – and how it feels along the way. That is why we are passionate about developing transportation solutions that improve the way we move throughout cities. Innovation is in our culture, and our 45-year history speaks for itself. We've delivered state-of-the-art public transit and traffic management system to over 450 operators in major cities and four continents. We are getting you there. Smarter. www.cubic.com/solutions/transportation/tolling



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The E-ZPass Group is an association of toll facilities in 17 states that operates the wildly

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EXHIBITORS



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JAI is a world leader in high-performance vehicle imaging technologies targeting the specific needs of roadway operators and transit

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Kapsch TrafficCom is a provider of intelligent transportation systems in the fields of tolling,

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We specialize in the art and science of digital transformation in government, with a focus on Transportation and Tolling programs. As a trusted partner with decades of award-winning

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local public agencies throughout the United States. Founded in 1987, we customize collection solutions to meet our client's business rules and use the highest ethical standards to provide world-class customer service to their customers. We provide innovative solutions for first party and third party collections for delinquent toll and negative balance accounts. Our DMVInfoNow™ registered owner retrieval service enables your agency to submit out-of-state plates for retrieval from most state DMVs, and four Canadian provinces, where qualified. DMVInfoNow™ will identify more out-of-state customers and help you maximize collection of toll fees. Offered at industry best pricing, call today for a no cost, no obligation side-by-side comparison test with your current vendor. Contact Richard Carrier at 212.300.5930 or Richard.Carrier@PennCredit.com. www.penncredit.com

Perceptics engineers and delivers

the most accurate high performance imaging systems in the industry. For more than 35 years we have designed vehicle identification and license plate recognition products that serve the Border Security, Electronic Toll Collection, Commercial Vehicle Enforcement, and Highway & City Security markets. Our solutions are optimized for the revenue collection demands of tolling, providing more reliable automation capabilities to reduce the cost of collecting tolls. With imagers that can read plates other systems may not, and an OCR engine that learns from ongoing exposure to the widest possible range of plate types from across North America, Perceptics delivers performance you can truly bank on. Contact us to learn more about our imaging products and services, including our new G7x imager and OCR Cloud service, and their impact on ETC. www.perceptics.com

pitney bowes



Confirm® Intelligent Infrastructure Management from Pitney Bowes is the

innovative way to streamline how information related to infrastructure assets is captured, stored and managed, providing the instant insight you need to make informed decisions on repairs, maintenance and future investments. www.pitneybowes.com/us/software/ smart-cities-asset-management



Q-Free is a leading global supplier of class-leading Tolling, Parking, Traffic Management and Connected ITS (C-ITS)/ Connected Vehicle solutions. To us, a society with less congestion, pollution and accidents is achievable through smart and innovative transportation solutions. Founded in

1984, Q-Free is headquartered in Trondheim, Norway and has approximately 400 employees with 18 offices around the world. Our open standard solutions allow for seamless integration with our clients and partners, allowing Q-Free to provide tailored robust and enhanced hard- and software components that meet the project needs, no matter the size. Under the vision "Changing the movements of life", Q-Free continues to evolve our solutions to meet the needs of a modern world, ensuring efficient, safe, and environmentally friendly transportation, from region to neighborhood, shaping tomorrow's movements of life. www.q-free.com

redfoxid As a developer of innovative, high accuracy, intelligent transport solutions, Red Fox ID has unique and specialist skills specifically focused on tolling applications. The skill set covers sensor technology development with a particular speciality in; automatic vehicle identification and classification, lane controller design, lane system design and installation. For over 20 years, systems integrators, toll authorities, roadway operators and others looking for the best possible results for vehicle detection and classification systems have turned to the team behind the new Quantum technology for their vehicle detection solution. The Red Fox ID team, (including Andy Lees, the inventor of Idris AVC technology) has unmatched experience in free-flow toll system development enabling its customers to install low risk, operationally-proven solutions, extracting the full value from their transport system. Red Fox ID's innovative patented Quantum software has been proven to deliver 99.9% or better axle classification accuracy in all traffic conditions. www.redfoxid.com



RideFlag - Occupancy Validation is in Our Lane™ We make it easy to form carpools by Occupancy Validation is in our Lane connecting commuters together and we

qualify HOV status through our unique proprietary mobile digital occupancy verification system. The RideFlag public/private collaboration platform delivers multi-tier incentives such as toll reduction to promote positive commuter behavior change, enables validated execution of transportation policies, and provides real-time data to measure the effectiveness of the effort. www.rideflag.com

SICE is a multinational technology integration company operating in the fields of traffic, tolling and transportation among other industries. SICE's activity

mainly focuses on providing added value services through the integration of a range of in-house and third party technologies and systems, always with the aim of offering the best solution tailored to each customer. With its extraordinary level of experience in designing, installing, integrating, testing and maintaining large transportation projects, SICE has successfully completed Tolling Systems, Intelligent Transportation Systems (ITS), and Tunnel Management Systems all around the world. www.sice.com

SICK

Profiling, classifying and detecting vehicles at all traffic speeds, SICK sensor solutions increase the accuracy of toll collecting, while maintaining a

safer, greener environment with overhead technologies that do not require disturbing the road surface. Technology from SICK, makes it possible to track vehicles in intersections or monitor dangerous railway intersections. Laser-based solutions designed to withstand harsh outdoor environments are easy to setup while time-of-flight technology solutions ensure maximum application reliability. Sick has expanded it's over height detection solutions that prevent bridge and tunnel strikes with one solution able to count vehicles based on shape. Sick is known throughout the world for its LIDAR technology and now intends to be known for RADAR technology as well. Creating system solutions with an Industry 4.0 and IIOT data collector and data analyzer, Sick is in a position to solve many problems like wrong direction detection. www.sick.com/traffic



SINELEC is the technology company of Gavio Group, the third largest operator in the management of toll motorway concessions and a global player in the major infrastructure sector. SINELEC gathers together the technological expertise of the group in the fields

of Electronic Tolling, Intelligent Transportation Systems and ICT. Today, thanks to more than twenty years of experience in developing, deploying and maintaining advanced technological solutions for the highway sector, SINELEC is leading the digitalization process of Italian transportation infrastructures helping road operators be ready to face future mobility challenges. Recently, in line with the Gavio Group USA strategic growth plan which already found the first evidence through the acquisition of 50% of Halmar International, NY based EPC company, SINELEC has started operations in USA to expand its international presence by leveraging the unique integrated value proposition that the group can bring in the field of transportations infrastructure construction and management. www.sinelec.it

EXHIBITORS



STAR Systems International is a market leader providing solutions including RFID transponders, readers and professional consulting services for Auto ID & Vehicle

Identification Applications. STAR Systems leverages technical implementation expertise, training and support to ensure customer success. "Your Success Is Our Vision". Our focus is providing best-in-class technologies for Smart City Initiatives including; Electronic Tolling (ETC), Electronic Vehicle Registration (EVR), Fleet Management, Parking and Secure Access Control applications. Our mission is to enable our partners and users to experience highperformance and reliable integrated solutions which are key elements of any modern Smart City initiative. www.star-int.net

Founded in 1988, Tattile is a Leading Italian company committed to the realization of

intelligent vision systems at the service of a more efficient use of resources in industrial processes and traffic control. It is structured in three different divisions: Industrial, Traffic and Railway. The Traffic Division, which specializes in ANPR cameras design and development within ITS installations, develops systems for license plate recognition used for speed control, with the aim of reducing the use of fuel and pollution. Sensitive to environmental issues and to the desire, felt by many, to create model cities (Smart Cities), starting from a streamlined traffic dispersal, Tattile creates cameras used in the field of Tolling, Speed Enforcement, Red Light Enforcement, Traffic Tracking and Access Control but also in Tunnel Security. www.tattile.com



TollPlus LLC, is a software company founded in 2007 by a group of seasoned professionals from the Tolling, Banking, and IT industries. TollPlus has designed from the ground up a

sophisticated end-to-end toll management solution that is scalable, lightweight, secure, and highly customizable to address the challenges of the Electronic Toll Collection (ETC) market. Innovation-driven, TollPlus' core products and services include the design, development, integration, implementation, and maintenance of ETC/AET, violation enforcement, image processing, and clearinghouse systems for toll roads, parking, ferry, metro, and other transit operations. In a rapidly-changing market, TollPlus puts a strong focus on technology and continuous R&D to offer worldclass level products and services. These solutions are developed using leading-edge technologies that focus on significantly improving transportation agency efficiencies by reducing their operating expenses and maximizing revenue, while ensuring exceptional customer service. TollPlus LLC is headquartered in Chandler, AZ. www.tollplus.com



TrafficVision is a dynamic ITS software company that provides a value-added layer of intelligence

analyzing existing traffic camera feeds. With this TrafficVisionTMC software in a traffic management center, highway and tollway management agencies can be proactively alerted to incidents in real time and can collect highly accurate data in a non-intrusive way. TrafficVisionTMC can seamlessly integrate into an agency's architecture and use the existing ITS infrastructure to make sense of the overwhelming numbers of cameras, reducing incident response times and deployment costs for data collection, leading to enhanced safety for motorists and effectiveness of an agency's ITS program. www.trafficvision.com

TransCore develops and deploys trusted Tolling TRANSCORE. and Intelligent Transportation System solutions. A

pioneer in tolling, we provide full-scale operations and maintenance services for nearly half of all U.S. toll lanes. Our flagship Infinity Digital Lane System® is a complete roadside toll collection solution deployed in thousands of lanes across the U.S. Since developing the nation's first High Occupancy Toll lane system in 1997, we have deployed over 600 miles - the vast majority – of all express lanes throughout the U.S. Our Integrity Back Office system combines advanced financial management software with 30 years of proven customer service excellence. Our TransSuite® traffic management systems are utilized at over 29,000 intersections across North America and internationally, and we currently support the country's largest Connected Vehicle Deployment project in NYC. Our RFID systems provide secure access for airports, hospitals, parking garages, border patrols, trucking fleets, and the toll and rail industries. www.transcore.com



Verra Mobility serves the world's largest commercial fleets and rental car companies to manage tolling transactions and violations for

millions of vehicles. A leading provider of connected systems, Verra Mobility processes millions of transactions each year through connectivity with more than 55 individual tolling authorities and more than 450 issuing authorities. Verra Mobility also fosters the development of safe cities, partnering with law enforcement agencies, transportation departments and school districts across North America operating thousands of red-light, speed, bus lane and school bus stop arm safety cameras. www.verramobility.com



With more than 25 years of experience in VERSILIS INC highway safety, Versilis has developed various

automated access control solutions that meet the highest industry standards. Road authorities across North America have adopted our solutions to increase their traffic operations' safety and efficiency. With motorist and operator safety in mind, Versilis traffic engineers bring experience and ingenuity to each project, from the planning stage, all the way to installation, testing and training. Visit our booth to learn more about our new MASH crash tested 40' long automated gate! www.versilis.com



Driving the Future of Mobility

2019 IBTTA President

Christopher Tomlinson State Road & Tollway Authority

2019 IBTTA and Partner Events Calendar*

Spring Board & Committee Meetings May 18-19, 2019 | Philadelphia, PA | Loews Philadelphia

Summit on Finance & Policy May 19-21, 2019 | Philadelphia, PA | Loews Philadelphia www.IBTTA.org/philadelphia

47th ASECAP Days

May 29-31, 2019 | Costa Navarino, Greece | www.asecapdays.com

2020 Conference Planning Ideas Roundtable June 22, 2019 | Norfolk, VA | Hilton Norfolk The Main

IBTTA Foundation Annual Service Project June 23, 2019 | Norfolk, VA

Maintenance & Roadway Operations Workshop June 23-25, 2019 | Norfolk, VA | Hilton Norfolk The Main www.IBTTA.org/norfolk

JULY

Communication and Change Management Summit July 28-30, 2019 | Seattle, WA | Hyatt Regency Seattle www.IBTTA.org/seattle

SEPTEMBER

Fall Board & Committee Meetings September 13-14, 2019 Halifax, Nova Scotia, Canada | Prince George Hotel

87th Annual Meeting & Exhibition

September 15-17, 2019 Halifax, Nova Scotia, Canada | Halifax Convention Centre www.IBTTA.org/halifax

OCTOBER

Global Tolling Summit October 27-29, 2019 | Lisbon, Portugal | Altis Grand Hotel www.IBTTA.org/lisbon

SEPTEMBER 2020

IBTTA 88th Annual Meeting & Exhibition September 13-15, 2020 | Austin, TX | Hilton Austin

OCTOBER 2021

IBTTA 89th Annual Meeting & Exhibition October 10-12, 2021 | Anaheim, CA | Anaheim Marriott

* All information subject to change.

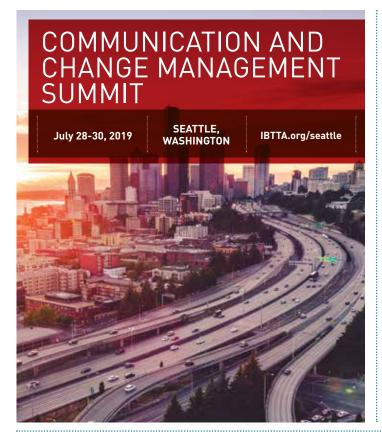


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NOTES

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Next Generation
Cognitive Tolling Systems





