

# MAINTENANCE & ROADWAY OPERATIONS WORKSHOP

PEOPLE, PARTNERSHIPS & PROGRESS

MAY 15-17, 2016

# NEWPORT, RHODE ISLAND











**PROGRAM** 

International Bridge, Tunnel and Turnpike Association

#### MAINTENANCE & ROADWAY OPERATIONS WORKSHOP

### People, Partnerships & Progress

Welcome to Newport! Sharing ideas and best practices is a continuous process in serving and providing value to our customers. As operators we need to know what is going on our road so we can communicate with our customers in a timely basis. Co llaboration with the entities and agencies that surround our facilities is key as most of our customers don't know or care where one jurisdiction ends and another takes over. We need to work with our service providers, law enforcement, contractors, consultants and their associations to balance risk, develop better specifications and assure we are getting the best value for projects and safest facilities.

#### **ABOUT OUR HOST**

#### RHODE ISLAND TURNPIKE AND BRIDGE AUTHORITY



The Rhode Island Turnpike and Bridge Authority was created in 1954 by the Rhode Island General Assembly as a body corporate and politic, with powers to construct, acquire, maintain and operate bridge projects as defined by law. The Authority has no stockholders or equity holders. It is directed by a five-member board of directors, four of whom are appointed by the governor. The Authority was

responsible for construction of the Claiborne Pell Bridge (formerly the Newport Bridge) which was opened for traffic on June 28, 1969, and has been responsible for the operation and maintenance of the Mount Hope Bridge between Bristol and Portsmouth, Rhode Island, and the Claiborne Pell Bridge between Newport and Jamestown, Rhode Island, since 1964 and 1969, respectively. No tax dollars, federal, state, or local, are received by the Authority for debt service or expenses incurred in the operation and maintenance of the bridges and associated buildings and grounds. Rather, all obligations are satisfied with funds received in the form of toll revenue and investment income. www.ritba.org

#### SPECIAL EVENTS DURING THIS WORKSHOP

IBTTA FOUNDATION ANNUAL SERVICE PROJECT May 15, 2016 | 8:00am – 5:00pm

This project will benefit the Fort Adams Trust, the Boys and Girls Club of Newport County and the James L. Maher Center supporting individuals with developmental disabilities.

#### IBTTA SPRING BOARD & COMMITTEE MEETINGS

May 18-19, 2016

This meeting will be held following the Maintenance & Roadway Operations Workshop. (see page 7 for the agenda)

#### CERTIFICATION/ **PROFESSIONAL DEVELOPMENT HOURS**

IBTTA recognizes the need for professional engineers and planning professionals to demonstrate continuing professional competency in their respective fields and earn certification maintenance (CM) credit or professional development units (PDU). IBTTA will provide interested attendees with a certificate of attendance following the workshop.

#### **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 stateof-the-art, innovative user-based transportation financing solutions to address the critical infrastructure challenges of the 21st Century.

#### MEETING PLANNING GROUP

#### **Chief Meeting Organizer**



Peter Merfeld Maine Turnpike Authority

**Track Leaders TECHNICAL** 

Eric Hemphill, North Texas Tollway Authority

MANAGEMENT

Jim Wilson, TransCore

#### **Meeting Planning Group Members**

Christine Aczel RS&H

Allen Beck Atkins N.A.

Eric Becker

Kansas Turnpike Authority

**Donald Bell** 

Traffic Technologies, Inc.

John Benda **HNTB** Corporation

Randolph Brown

RK&K

Amy Burlarley-Hyland DBi Services, LLC

John Cannell

Maine Turnpike Authority

**Daniel Castrigano** Greenman-Pedersen, Inc.

Mario Cecchi WSP|Parsons Brinckerhoff

Maria Connolly Florida's Turnpike Enterprise

Rod Emery

Jacobs Engineering Group

Robert Fischer New Jersey Turnpike

Authority Chad Gill

State Road & Tollway Authority

Robert LaGatta Atkins N A

James Laurita **Gannett Fleming** 

Roland Lavallee **HNTB** Corporation Jim Manni

Rhode Island Turnpike and Bridge Authority

Lauren Meek Stantec Consulting Services Inc.

John Mike Perceptics, LLC

Tyler Milligan Milligan Partners LLC

George Nyikita Pennoni Associates Inc.

Kathrvn O'Connor Rhode Island Turnpike and Bridge Authority

Eric Offenberg Rhode Island Turnpike and

Bridge Authority

**Douglas Prager** Jacobs Engineering Group

**David Raines** RS&H

James Romano

Rhode Island Turnpike and **Bridge Authority** 

**Gregory Stone** Maine Turnpike Authority

Raymond Szczucki

Chubb

Ali Vaezi Dewberry

Kristi Van Ooyen Maine Turnpike Authority

Christopher Warren HDR|ICA

#### HOTEL INFORMATION

#### LOCATION

Hyatt Regency Newport

1 Goat Island Newport, RI 02840 Phone: 401-851-1234 Toll-Free: 1-800-323-7249 www.newport.hyatt.com



#### **IBTTA MEETINGS APP**



**■**: Scan this QR code with your smartphone to download the IBTTA

Meetings app







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

White: Delegate (Member) Blue: Companion/Guest Yellow: Media

Orange: Delegate (Non-member) Green: Exhibitor

**CERTIFICATION MAINTENANCE**: 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 and can be identified by green ribbons on their badges.

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

**NEW ATTENDEES:** First-time attendees will have an aquamarine ribbon attached to their badge. New IBTTA members will have purple ribbons. Get to know your new colleagues and help introduce them to other IBTTA members.

PRESENTATIONS: Presentations authorized for distribution will be posted 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 INFORMATION: Please support our generous sponsors and exhibitors by reviewing the Sponsor and Exhibitor section of this program as well as the material tables in the registration area.

#### **SUNDAY MAY 15, 2016**

#### 8:00am - 3:00pm

#### **EXHIBIT SET-UP**

(Grand Ballroom)

#### 8:00am - 5:00pm

#### **SERVICE PROJECT**

(see page 7 for details)
Meet in the Hotel Lobby at 7:45am

#### 8:00am - Noon

#### **TECHNICAL TOUR - MORNING**

(see page 7 for details)
Meet in the Hotel Lobby at 7:45am

#### 1:00pm - 5:00pm

#### **TECHNICAL TOUR - AFTERNOON**

(see page 7 for details) Meet in the Hotel Lobby at 12:45pm

#### 6:00pm - 7:00pm

#### **REGISTRATION**

(Ballroom Foyer)

#### 6:00pm - 7:30pm

#### **WELCOME RECEPTION WITH EXHIBITS**

(Grand Ballroom)

#### SESSION KICKSTARTERS!

Kick off your learning experience with the latest innovations in industry technology products. These brief session KickStarters will give you just the right amount of information to get you thinking of how you can apply new technologies to your next big project.

#### PARTICIPATING ORGANIZATIONS:

3M

**EMSEAL** 

Innovative Products
Kapsch TrafficCom

Kueper North America

Olin/POLY-CARB

Xerox

#### **MONDAY** MAY 16, 2016

#### 7:00am - 5:30pm

#### **REGISTRATION**

(Ballroom Foyer)

#### 7:00am - 8:30am

#### **BREAKFAST WITH EXHIBITS**

(Grand Ballroom)

#### 8:30am - 9:00am

**GENERAL SESSION** 

#### **OPENING REMARKS**

(Benton Hall)

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

**Buddy Croft**, Executive Director, Rhode Island Turnpike and Bridge Authority and President, IBTTA, Newport, RI

**Peter Merfeld,** Chief Operating Officer, Maine Turnpike Authority and Chief Meeting Organizer, Portland, ME

#### 9:00am - 10:30am

#### **ROADSIDE SAFETY INNOVATIONS, TOOLS & POLICIES**

MODERATOR: Randy Brown, Senior Manager – Toll Facilities, RK&K, Baltimore, MD

Reducing Traffic Congestion and Accidents with Active Traffic Management in Japan

Toshiyuki Oka, Engineer, NEXCO-Central, Nagoya, Aichi, Japan

Improving Incident Management and Traveler Information Through Data Partnerships: Waze Case Study

**Robert Taylor, P.E., PTOE,** Manager of Traffic Operations, Pennsylvania Turnpike Commission, Middleton, PA

The Illinois Tollway's I-90 Smart Corridor and Active Traffic Management Plan

**John Benda,** Senior Technology Project Manager, HNTB Corporation, Chicago, IL

#### 10:30am - 11:00am

#### **REFRESHMENT BREAK WITH EXHIBITS**

(Grand Ballroom)

#### 11:00am - 12:30pm

**GENERAL SESSION** 

#### **DRONES – MORE THAN JUST AN IRRITATING BUZZ!**

(Benton Hall)

MODERATOR: Trey Baker, Associate Research Scientist, Texas A&M Transportation Institute, Austin, TX

**Barritt Lovelace, P.E.,** Regional Manager, Collins Engineers, Inc., St. Paul, MN

**Jennifer Zinc, P.E.**, Bridge Inspection Engineer, Minnesota Department of Transportation, St. Paul, MN

#### 12:30pm - 2:00pm

#### **LUNCH WITH EXHIBITS**

(Grand Ballroom)

#### **TECHNICAL TRACK**

#### **Maintaining Mobility while Making Improvements** (Benton Hall)

MODERATOR: Bob LaGatta, P.E., Senior Tolls Consultant, Atkins N.A., Charlotte, NC

A Comprehensive Review of Maintenance Productivity and Frequency Standards for the Pennsylvania Turnpike Commission

Cory Greene, P.E., PTOE, Technical Manager II, Michael Baker International, Middletown, PA

In-House Bridge Preservation

Eric Becker, Director of Roadway Operations, Kansas Turnpike Authority, Wichita, KS

Traffic Management on Managed Lanes

Nic Barr, Vice President – Operations, Transurban, Alexandria, VA

#### **MANAGEMENT TRACK**

#### **Getting the Most Utility from Roadway Improvements –** People, Partnerships & Progress (Heritage Room)

MODERATOR: John Mike, Chief Operating Officer, Preceptics, Farragut, TN

Improving Tunnel Throughput While Balancing Demand, Safety and Local Needs

Daniel Jacobs, P.P., General Manager, Transportation & Revenue, The Port Authority of New York & New Jersey, New York, NY

Matt Milligan, Managing Partner, Milligan Partners LLC, Dallas, TX

Hardy Toll Road — Improvements to a 30-Year-Old Facility

Quinton Alberto, P.E., Assistant Director, Maintenace & Traffic Engineering, Harris County Toll Road Authority, Houston, TX

#### 3:30pm - 4:00pm

#### **REFRESHMENT BREAK WITH EXHIBITS**

(Grand Ballroom)



#### 4:00pm - 5:30pm **TECHNICAL TRACK**

### **Roadway Maintenance for Today**

(Benton Hall)

MODERATOR: Steve Tartre, P.E., Director of Engineering & Building Maintenance, Maine Turnpike Authority, Portland, ME

Wrong Way Drivers

Eric Gordin, P.E., Assistant Traffic Operations Engineer and Kelly Kinney, TMC Team Manager, Florida's Turnpike Enterprise, Ocoee, FL

Snow and Ice Operations – The Good, the Bad and the Ugly

Derek Slack, Roadway Maintenance Manager and Nicki Beckford. Operations Technical Manager, E-470 Public Highway Authority, Aurora, CO

If You Cannot Control the Drivers, Protect the Employees

Eric Hemphill, P.E., Director of System and Incident Management, North Texas Tollway Authority, Plano, TX

#### **MANAGEMENT TRACK**

#### Achieving a "State of Good Repair" - The Long and Winding Road (Heritage Room)

MODERATOR: John Benda, Technology Project Manager, HNTB Corporation, Chicago, IL

Reducing Maintenance Costs by Adapting Total Asset Management in Japan

Jun Takeuchi, Manager, International Business, NEXCO-Central, Nagoya, Japan

Optimizing the Road to a MAP-21 State of Good Repair by Integrating the Rolling Wheel Deflectometer (RWD)

Curt Beckemeyer, P.E., Senior Vice President, Transportation, Applied Research Associates, Inc., Champaign, IL

Moving the Dial – Realizing the Benefits of Asset Management: Successes, Challenges and What's Next? Rapid Fire Q&A with Audience Participation

David Rose, Vice President, Gannett Fleming, New York, NY

Mildred Chua, Acting Vice President and Chief Financial Officer, Planning and Budget, MTA Bridges and Tunnels, New York, NY

Quinton Alberto, Assistant Director, Maintenance and Traffic Engineering, Harris County Toll Road Authority, Houston, TX

Paul Wai, P.E., Director of Transportation Operations, Florida's Turnpike Enterprise, Fort Lauderdale, FL

#### 6:00pm - 10:00pm

#### **EVENING EVENT – CLAMBAKE BY THE BAY**

(Hyatt Regency Newport Pavilion) (see page 7 for details)

#### **TUESDAY** MAY 17, 2016

7:00am - 3:30pm

#### **REGISTRATION**

(Ballroom Foyer)

7:00am - 8:30am

#### **BREAKFAST WITH EXHIBITS**

(Grand Ballroom)

8:30am - 10:00am

**GENERAL SESSION** 

#### **KEEPING OUR BRIDGES SAFE**

(Benton Hall)

MODERATOR: Chris Warren, P.E., Director of Operations, HDR | ICA, Orlando, FL

Florida's Turnpike Enterprise – Intrastructure Knowledge Management System

Debbie Meyer, Ph.D., P.E., Deputy Maintenance Engineer and Aran Lessard, P.E., Structures Maintenance Engineer, Florida's Turnpike Enterprise, Pompano Beach, FL

Frank Robinson, P.Eng., Maintenance Engineer, Halifax Harbour Bridges, Halifax, Nova Scotia, Canada

William Pines, P.E., Deputy Director of Engineering, Maryland Transportation Authority, Baltimore, MD

10:00am - 10:30am

#### REFRESHMENT BREAK WITH EXHIBITS

(Grand Ballroom)

10:30am - Noon

**BREAKOUT SESSIONS** 

#### **TECHNICAL TRACK**

**Carrying the Load – Collaboration and Innovation to Enhance Safety and Preserve Infrastructure** 

(Benton Hall)

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

Virtual Weigh Stations – Technology for Preserving our Infrastructure Nikola Ivanov, Deputy Director, CATT Laboratory at the University of Maryland, College Park, MD

Collaboration with Public Enforcement Entities to Improve Road Safety David Kollenhofer, Manager International Relations, ASFINAG, Vienna, Austria

Load Ratings and Bridge Strengthening in Practice – The Maine Turnpike Experience

Kristi Van Ooyen, P.E., Engineering Program Manager, Maine Turnpike Authority, Portland, ME and Tim Cote, P.E., Structural Department Manager, HNTB Corporation, Westbrook, ME

#### **MANAGEMENT TRACK**

Toll Facilities and Their Partners – Providing our Customers with Value through Collaboration

(Heritage Room)

MODERATOR: David Raines, Toll Technology Senior Specialist, RS&H, Austin, TX

Optimizing Road User Safety on Israel's Highway No. 6 Hagai Tal, CEO, Advanced Solutions Road Systems Ltd, Hod HaSharon, Israel

2015 Philadelphia Papal Visit – Special Event Planning

Timothy Scanlon, P.E., Director of Traffic Engineering and Operations, Pennsylvania Turnpike Commission, Harrisburg, PA

Faith or Forgiveness? An Evolving Relationship of Toll Plaza and Toll Facility Maintenance Responsibilities Relinquished from a DOT to Toll Authority Angela Louie, P.E., Toll Facilities Maintenance Program Manager, Bay

Area Toll Authority, Metropolitan Transportation Commission, Oakland, CA

Partnerships for Transportation System Management and Operations Christopher Poe, Assistant Director, Connected & Automated Transportation, Texas A&M Transportation Institute, Dallas, TX

#### Noon - 2:00pm

#### **LUNCH WITH EXHIBITS**

(Grand Ballroom)

2:00pm - 3:30pm

GENERAL SESSION

### RHODE ISLAND TRANSPORTATION – TOP TO BOTTOM

(Benton Hall)

MODERATOR: Buddy Croft, Executive Director, Rhode Island Turnpike and Bridge Authority and President, IBTTA, Newport, RI

Peter Garino, Acting COO, Rhode Island Department of Transportation, Providence, RI

Kathryn Coleman, ETC Manager, Rhode Island Turnpike and Bridge Authority, Newport, RI

Eric Offenberg, Director of Engineering, Rhode Island Turnpike and Bridge Authority, Newport, RI

Jim Manni, Director of Operations, Safety & Security, Rhode Island Turnpike and Bridge Authority, Newport, RI

#### 3:30pm

#### **WRAP-UP AND ADJOURN**

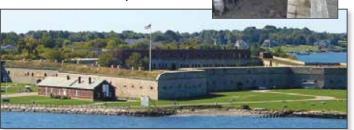
## **TOUR & EVENTS**

#### IBTTA FOUNDATION ANNUAL SERVICE PROJECT

BUILDING BRIDGES AT FORT ADAMS

Sunday, May 15, 2016 8:00am - 5:00pm Fee: \$50.00 per person

Meet in the Hotel Lobby at 7:45am



#### **Host Agency**



#### **Partner Organizations**







**Community Sponsors** 







#### **IBTTA Sponsors**

























#### **TECHNICAL TOUR** PELL BRIDGE

Sunday, May 15, 2016 8:00am - Noon 1:00pm - 5:00pm Fee: \$35.00 per person

- · Each tour is open to registered delegates.
- Each tour can accomodate a maximum of 25 attendees.
- Meet in the Hotel Lobby 15 minutes prior to start time.





#### **EVENING EVENT**

CLAMBAKE BY THE BAY **HYATT REGENCY** NEWPORT PAVILLION

Monday, May 16, 2016 6:00pm - 10:00pm Fee: included in registration

- The evening event is open to registered delegates.
- Dress is casual.





#### **BOARD & COMMITTEE MEETINGS SCHEDULE**

#### **TUESDAY, MAY 17, 2016**

4:00pm - 5:30pm

**PLATINUM SPONSOR ADVISORY** COUNCIL

(by invitation)

5:30pm - 6:30pm

RECEPTION WITH PLATINUM **SPONSOR ADVISORY COUNCIL AND BOARD MEMBERS** 

(by invitation)

#### WEDNESDAY, MAY 18, 2016

8:30am - 5:00pm

**BOARD OF DIRECTORS AND COMMITTEE MEETINGS** 

(open to all) (Rose Island)

5:00pm - 6:00pm

**RECEPTION** 

(open to all)

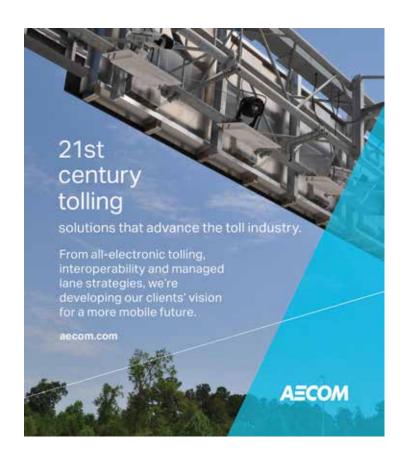
#### **THURSDAY, MAY 19, 2016**

9:00am - 11:00am

**BOARD OF DIRECTORS MEETING** 

(open to all) (Rose Island)





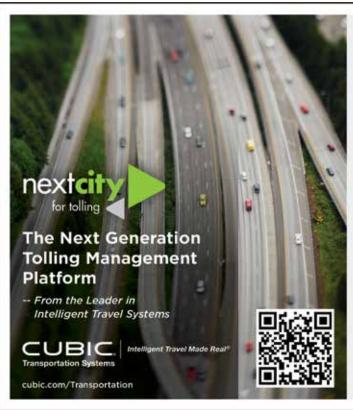


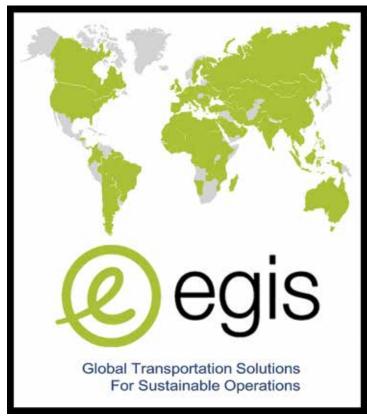
- · Safe and efficient AET Systems
- · Managed Lanes planning and implementation
- · Comprehensive and cost effective Toll System Procurement
- Emerging Technology

#### Plan Design Enable

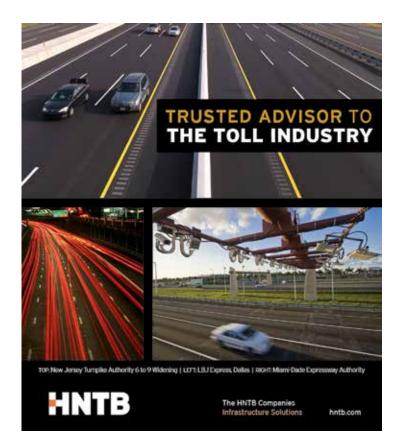
www.atkinsglobal.com/northamerica

800.477.7275







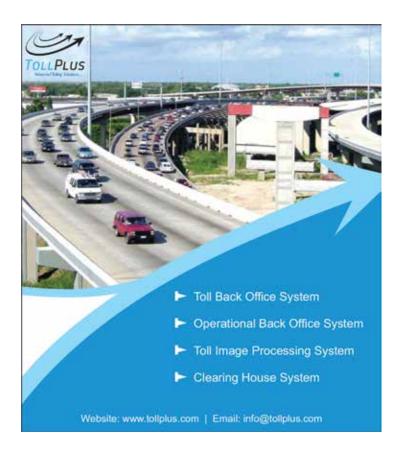


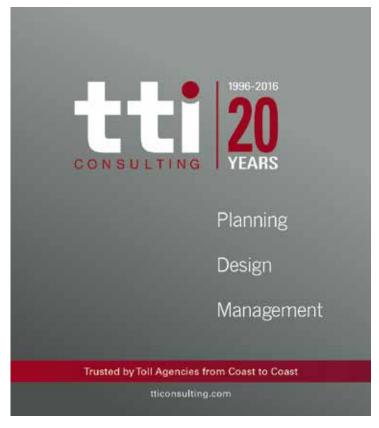


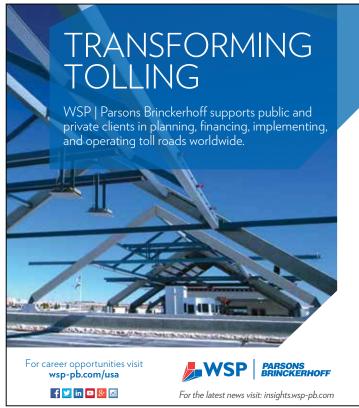


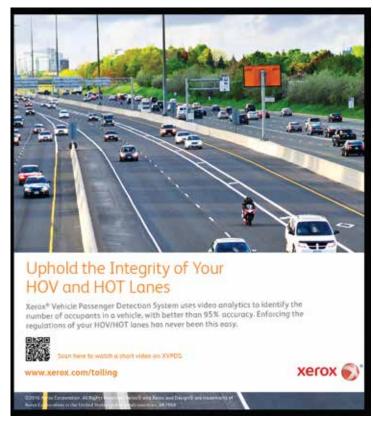












## **EXHIBITORS**



Founded in 1954 as a motorway company in Verona, Italy, today A4 Holding Group's companies design, build, maintain and manage infrastructure and mobility networks, technologies, services and solutions. A4's team of 1200

professionals provides integrated engineering, construction, maintenance and management services for highway infrastructure and cutting-edge technologies, services and solutions for intelligent transport systems for traffic control, tolling and security. www.a4holding.it



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transitions with factory-fabricated universal-90 units, kickouts, and custom pieces to ensure a watertight seal. www.emseal.com



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in bridge/structural, site/civil, and roadway design; hydraulics and drainage; bridge and structure inspections; environmental permitting, traffic engineering, surveying services; and construction inspections and management. GM2 possesses significant vertical design experience, including special inspections and resident engineer services. Our site/civil group provides complete design including: all stormwater and sewer design, grading, parking lot, sidewalk, roadway design, and utility coordination. Over the years GM2 built up a construction management group, which now includes highly experienced resident engineers and inspectors. Other strong capabilities that GM2 possesses include hydrology, hydraulic modeling, scour analysis, flood plain mapping, regulatory permitting, and state-of-the-art land surveying expertise throughout New England. GM2 has also completed several bridge and building projects utilizing the Design/Build delivery method. www.gm2inc.com

Kueper North America is the exclusive distributor in North America for Kueper specialty snow plow

cutting edges, now used in over 45 states and 8 Provinces. Our blades are made to outperform and outlast traditional steel, carbide, rubber and polyurethane plow edges meaning better cleaning and less downtime in your plowing operations. Certain Kueper edges may also be used on specialty coatings and structures found on bridges and other unique operational environments. www.kueperblades.com



Lindsay Transportation Solutions is the manufacturer of The Road Zipper System™

and the world leader in moveable barrier technology. The Road Zipper is used for both construction and managed lanes applications. It is used to create additional highway capacity, relieve traffic congestion, and provide positive barrier separation between opposing lanes of traffic. The Road Zipper reconfigures the roadway based on peak traffic demand, borrowing lanes from the off-peak direction to improve traffic flow in the peak direction. BSI also manufactures a full line of highly reusable, cost-effective crash cushions, specialty barriers, and guardrail terminal end products. www.lindsay.com



NEXCO-Central is a major P3 player in Japan and has over 60-years of experience at every stage of an expressway project such as construction, maintenance, inspection & repair and rest area management. Our

network in operation is 2,058 km, and its daily traffic volume reaches 1.87 million. Traffic and road asset management are our hallmarks. We have achieved Active Traffic Management (ATM), and developed Pavement Management System (PMS) respectively to pursue precise, time and cost-effective O&M management. Now, NEXCO-Central seeks ways to contribute to P3 projects in North America. We provide added value to road projects with our innovative technologies and expertise. global.c-nexco.co.jp

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designs and manufactures finely tuned, purpose-built license plate recognition (LPR) systems that take machine perception to a whole new level. For over 30 years, the U.S. government has trusted Perceptics LPR solutions for vehicle data collection at border crossings and security at some of the most highly sensitive facilities in the nation. Today, these high performance imaging systems are optimized for the revenue collection demands of electronic toll collection (ETC), providing more complete data capture, guaranteed accuracy, higher confidence levels, and 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 imaging technologies and their impact on ETC. www.perceptics.com

POLY-CARB, Inc. is a wholly owned subsidiary of The Olin Chemical Company. In 1973, POLY-CARB set out to serve society by providing high-quality, environmentally safe solutions to combat infrastructure erosion problems. Today, Olin/POLY-CARB is a 40+ year leader in both Bridge Preservation & Performance and Road Safety infrastructure solutions. FLEXOGRIDTM, a thin polymer overlay system, helps prevent the deterioration of bridge decks and extends the decks life by 15+ years. SAFE-T-GRIDTM offers increased public safety by adding a high skid resistance surface to ramps, toll plaza, etc. UregridTM is a monolithic waterproofing membrane that protects bridge decks located underneath a layer of asphalt. With POLY-CARB's in-field expertise and Olin's advanced technology and science, Olin/POLY-CARB is advancing infrastructure protection with performance based solutions, like Asset Preservation, that deliver unprecedented levels of performance and accountability to meet the rigorous demands we place on our infrastructures. www.poly-carb.com

## ISESA

Founded in 1986 in Rhode Island, SESA is a high quality ITS solution manufacturer focused on providing

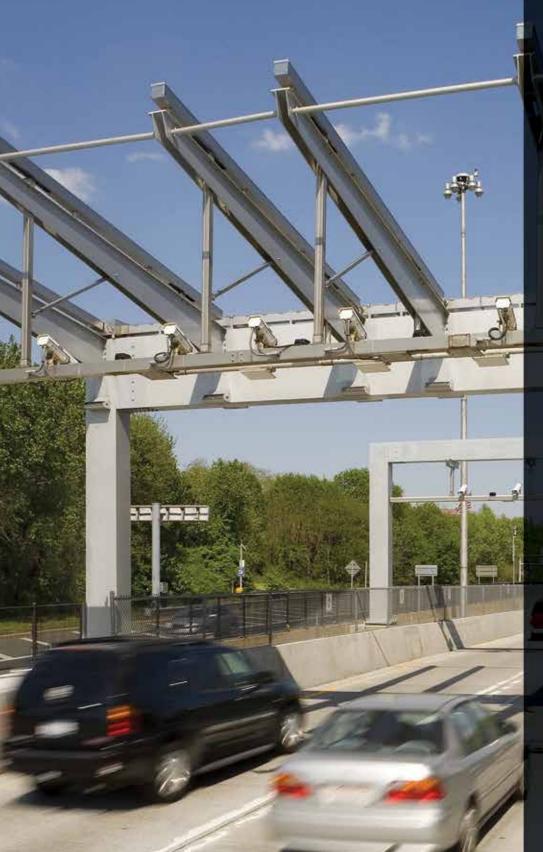
Dynamic Message Signs and retrofit packages to clients across the United States. Having recently relocated to new, larger facilities, we are proud to say that our signs are manufactured right here in the US and that we are fully equipped to meet our clients' unique needs, accomplishing our core goal of delivering quality, innovative ITS products and customized solutions. Our experienced, expert technicians and engineers work diligently to fill the requirements of any project, whether it is a single sign, a more complex ITS system, or a situational, customtailored product solution. www.sesamerica.com



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Planning

Design

Management

CONCEPT TO COMPLETION tticonsulting.com