



## ITS America Leadership Circle Forum Report

The ITS America Leadership Circle brings together transportation and technology leaders from the public, private and academic sectors as thought leaders on behalf of ITS America and the broader transportation community. Their thought leadership will provide strategic approaches and policies to advance adoption and innovation of ITS and solutions throughout the nation's transportation systems.

The first ITS America Leadership Circle Forum was held in Nashville, Tennessee on April 20-21, 2013. The Forum was a very successful engagement of leaders from private industry, state and local governments, and academia. The Forum was filled with thought-provoking discussion, high energy and an optimistic vision for the Leadership Circle. Throughout the course of the discussion, participants fulfilled a major objective by identifying a topic for the second Leadership Circle Forum planned for August 2013.

The *ITS America Leadership Circle Forum Report* presents a summary of the discussions and results from the first meeting. To ensure that the momentum of the first Leadership Circle Forum continues, this report also identifies follow up steps to be taken in subsequent meetings.

### ITS America Leadership Circle Background

The Leadership Circle was created to:

- Advise the ITS America Board on how to increase widespread ITS deployment;
- Promote and champion ITS solutions; and
- Assist in providing thought leadership while advocating on behalf of ITS America.

### Inaugural Leadership Circle Forum Nashville, TN—April 20-21, 2013 *Stated Purpose & Objective*

**Purpose:** The first ITS America Leadership Circle Forum will focus on establishing expectations and goals for the newly created body and provide a venue for in-depth discussion on policy areas relevant to the ITS and broader transportation communities. By doing this, the Forum will position the ITS America Leadership Circle as the foremost thought leaders in the ITS community.

**Outcome:** This first ITS America Leadership Circle Forum is designed to lead to a shared vision and policy agenda for the first year of the ITS America Leadership Circle. Specifically, this meeting will identify a specific topic for the second ITS America Leadership Circle Forum, and establish mechanisms for membership leadership in these areas.

## ITS America Leadership Circle Forum Report

The Leadership Circle works alongside the ITS America Board of Directors and ITS America staff on cutting-edge projects that define and expand the ITS marketplace, forge new public-private partnerships, educate decision-makers, shape policy, and encourage investment in transportation technology.

Prior to the April Forum, each Leadership Circle member was interviewed by ITS America staff, Outgoing Board Chairman Peter Sweatman and Incoming Board Chairman David St. Amant. The interviews solicited members' views on the objectives of the Leadership Circle and factors that would make it successful. The interview results clearly showcased a desire from Leadership Circle members to be thought leaders and advocates for the ITS community. Further, members recognized that the Leadership Circle must provide practical business benefits to all members, particularly those in the private sector.

### **ITS America Leadership Circle Forum Summary**

The first meeting of the Leadership Circle was designed to create mutual understanding between Leadership Circle members. In addition, the forum identified topics of shared interest where the Leadership Circle can serve as an influential force. To accomplish this objective, three sessions were held to discuss thought leadership for the ITS America Leadership Circle. The session topics were:

- Understanding and dispelling the myths and stereotypes about the public, private and academic sectors;
- Identifying prime opportunities for thought leadership in transportation policy; and
- Performance management measures using data and technology.

Each session is summarized below.

#### **Understanding and Dispelling the Myths and Stereotypes about the Public, Private and Academic Sectors**

The purpose of this session was to open a dialogue between the public, private and academic sectors, allowing members an opportunity to "walk in each other's shoes." The session opened with brief remarks from Leadership Circle panelists representing each sector. The panelists explored common stereotypes that can lead to misunderstanding. Breakout group discussions provoked open dialogue and resulted in better understanding of the pressures and constraints that each sector must manage. A brief summary of the discussions on each sector follows.

Public Sector Myth: *The public sector is stodgy, risk-averse and slow to innovate. It should be run like a business.*

Panelist for Public Sector: John Barton, TxDOT

**Public sector** agencies operate in a highly transparent environment where every decision is subject to public and media scrutiny, and political perspectives must be carefully considered. Repeatable and defensible processes are important for transparency, and risk must be prudently managed. Public agencies bear the ultimate responsibility for their work, even when

some work may be performed by others. Trust between the agency and the public it serves is essential to success, as is trust between the agency and the contractor community who serves them. For some agencies, highly skilled technical internal staff is in short supply, and the agency must rely on contractors for additional support. The ultimate purpose of public agency leadership is to do what is best for citizens.

Private Sector Myth: *The private sector is only in it for the money and cannot be trusted.*

Panelists for Private Sector: Pat McGowan, Schneider Electric; Jon Morrison, Meritor WABCO; David Sparks, TransCore

**Private sector** companies represent many different business models, varying in size, scope and net worth. Many companies work in direct support of public agencies. Others are business-to-business or business-to-consumer companies within the ITS space. Particularly for companies who work for public agencies, profit margins can be thin, and disruptions in government processes or limited information from public agencies can have a large impact. Trust between companies and a public agency is essential for business success. For all companies, return on investment is key, and profits are essential for reinvestment, innovation and stability. The private sector needs to see results quickly to support a fast and innovative environment. The difference in innovation cycles between some private sector companies and public agencies can create disconnects in strategies and in procurement processes. Risk must be carefully managed by private companies; they innovate in ways that accept calculated risks and that allow them to learn and move forward quickly. Private sector employees are passionate and proud of their work, their reputation is everything. The timely flow of information and predictable project development processes are critical to a healthy private sector in ITS.

Academic Sector Myth: *The finding from every research report is "more research is needed." There's never an end and the results aren't practical.*

Panelist for Academic Sector: Al Biehler, Carnegie Mellon University

**Academic sector** institutions are focused on research, as well as teaching. Academic organizations and their staff exist to ask questions, find new ways to do things, and help create new products or services. The culture and demands of the academic sector are such that staff is naturally inquisitive and self-motivated. Each research activity is designed to answer questions, but the process of executing research inherently generates new questions. It is the nature of progress. Many public agencies work closely with university research institutions. Public agencies recognize that research carries inherent uncertainty. Consequently, public agencies can use research as a way to undertake projects that are riskier than would be acceptable in a non-research environment. For many university research institutions, work with public agencies provides an important source of funding for ongoing research.

Following the panel discussion, all Leadership Circle members and guests were divided into breakout groups for further discussion.

#### Breakout Summary

**Group 1** identified the need for better mechanisms to support public-private collaboration. The group emphasized that the rapid pace of innovation brings new opportunities. For example,

there is the potential for public agencies to make “big data” available to innovators in a way that could return monetary benefit.

**Group 2** further reinforced the need for public and private sectors to work together in new ways to ensure the future of ITS. For instance, this may include new relationships with automotive manufacturers and major suppliers.

**Group 3** discussed the issue of trust and, in general, the public's distrust of public agencies like state and local Departments of Transportation (DOTs). Trust for a public agency grows through accountability, and public agencies use tightly controlled procurement processes as a means to achieve accountability. However, ITS America could help facilitate new procurement models that better protect the revenue margin of private companies while ensuring accountability to the public.

**Group 4** tackled the topic of risk. They discussed the ability of private sector and research institutions to work together to reduce risk. The group specifically identified two examples of risk management- bundling smaller and higher risk projects with large ones, and utilizing higher risk approaches during periods of crises when the public's risk tolerance is higher.

**Group 5** echoed the other groups' observations that better processes are needed to move ITS from research into deployment. They commented that while some businesses and startups have difficulty working with public agencies, many public agencies recognize the need to accelerate delivery time and embrace technology. The group emphasized the need to “tell the ITS story” in ways that resonate with DOT issues like safety, congestion, economic competitiveness and fiscal constraints.

**Group 6** acknowledged the need for better ways to solicit ITS solutions from industry while minimizing public sector risk. The group noted that the Department of Defense (DOD) openly requests ideas. The DOD model provides a more open forum than the traditional DOT models that assume predetermined solutions. With any new model, there needs to be better information sharing across state DOTs, such that successful models can be accepted across state lines.

### Identifying the Prime Opportunities for Thought Leadership in Transportation Policy

The key objective of the Leadership Circle Forum was to identify a central topic for further discussion in future meetings. This session was organized to present significant issues facing the transportation and ITS industries, and prompt a robust conversation around these topics.

Topics were generated through panelists' remarks, group discussion and in breakout sessions. The Leadership Circle ultimately selected the focus for their future work and next meeting as a result of these discussions.

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*Topic Criteria:* Important policy area that would benefit from thought leadership; area of growing interest; helps public agencies improve transportation service; provides private sector opportunity; takes advantage of the strengths of both the public and private sectors; is an area where thought leadership is needed in the community; is a topic where ITS America is, or could be, relevant.

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Remarks from selected panelists opened this session.

Panelists: John Barton, TxDOT; Gabe Klein, Chicago DOT; Gerry Mooney, IBM; Karen Rasmussen, HELP, Inc.; Anton Steenman, Intel; Zia Yusuf, Streetline

### Speaker Summary

**Gerry Mooney** discussed the importance of providing industry foresight in technology and business models. He emphasized the need for technology objectivity and fact-based decision making. Achieving this level of objectivity would allow the ITS America Leadership Circle to advocate in a larger market, with the power to convene and drive collaboration.

**Karen Rasmussen** discussed the importance of freight, and the intersection between policy, deployment and current technology. Specifically, she discussed the freight planning requirements set out in MAP-21, and the potential burden these requirements may place on states. Karen highlighted the opportunity for ITS America to help the trucking industry address its needs by better understanding the potential role of ITS solutions.

**Anton Steenman** discussed the importance of developing a flexible eco-system for ITS. Eco-systems in other industries enable formation of fluid value chains to solve problems. He spoke about the need to identify the platforms for innovation that would attract an alliance of interested public and private entities. This type of approach will facilitate rapid innovation and deployment.

**Gabe Klein** discussed the use of performance measures and how they can track success or failure of projects. He highlighted that cities, states and the Federal government often disagree on what measures should be used, and how they should be tracked. In Chicago, there is a focus on urban innovation and congestion management. As a result, the city is looking for technologies that improve safety and reduce congestion with a payback period of seven years. Cities have assets to offer like right-of-way and, they can showcase technological solutions at work.

**Zia Yusuf** discussed the important role of startups in the ITS industry. He encouraged the ITS community to think from a consumer perspective. The technology industry can move quickly and respond to consumers' needs. He also explained that there are often non-traditional sources of economic value that can be collectively tapped. State and local entities are becoming more creative in how they partner with technology companies. Government partners are more willing to capture benefits for citizens in exchange for value that a company derives from the partnership.

Following the panel discussion, all Leadership Circle members and guests were divided into breakout groups for further discussion.

### Breakout Summary

**Group 1** pointed out the need for collapsing the innovation and deployment processes. They also focused on cycles that are fast, robust and replicable. Collaborative partnerships can help

manage risk. For broad acceptance of new approaches, an approval or validation process is needed to encourage others to adopt without needing to personally retest.

**Group 2** stated that the ITS Leadership Circle needs to advocate for transportation as a larger system, rather than advocate only for ITS investments. The Leadership Circle should “tell the story” of the transportation eco-system as it impacts a variety of stakeholders in ITS, such as large companies and startups; state DOTs, local agencies, transit providers; and organizations serving diverse customers such as consumers and truckers.

**Group 3** discussed the importance of understanding return on investment (ROI) and sharing information about benefits. Public and private entities have different expectations for ROI, which makes meeting everyone's needs challenging. There is also a need to facilitate the time to market and procurement of innovative ITS applications.

**Group 4** discussed the need to encourage deployment and innovation at both the national and state level. They also asked how ITS America state chapters can better engage with legislators, and how ITS America can become more involved with other associations that are doing similar work.

**Group 5** also mentioned the importance of a state-level focus, which may allow for greater influence on public policy around topics such as: mileage-based user fees, managed lanes and automated speed enforcement.

**Group 6** continued the focus on state and local advocacy. They also discussed the importance of new collaborative business models that capture the energy of both the public and private sectors. States and cities that are part of the Leadership Circle may become a “laboratory of ideas” for new implementation approaches.

#### Discussion Summary

During the course of discussion within the Leadership Circle, the following themes emerged as key ideas from the first day. Throughout all themes, ITS America was viewed as an honest broker for discussion and collaboration.

- **Collaboration.** ITS America can facilitate connections and collaboration at all levels: such as between companies that are new to the ITS space and those that have been involved since the beginning; between large and small organizations; between public, private and academic sectors; and between those that are accustomed to rapid innovation and those that traditionally move at a cautious pace.
- **Focus on the Innovation Process.** There was a desire to separate traditional, slow construction-centric processes from fast and creative technology-centric processes. The Leadership Circle could be a forum that enables public agencies to take advantage of the fast-paced innovation cycle to identify new partnerships for contracting or innovative pilot opportunities.
- **Risk Management.** Public agencies are often forced to avoid high-risk opportunities. Private companies typically have more flexibility to manage and reduce risk. The Leadership Circle should explore ways to allocate risk so that both sectors benefit. For example, the private sector may accept more risk on a pilot project if larger deployments are likely to follow.

- **New Data.** Data offers new opportunities if it can be harnessed. There are multiple approaches for developing and using data. For example, data can be provided for free or for a fee; data can be open or proprietary. Data characteristics and constraints impact business approaches and the industry's ability to innovate without constraints.
- **Eco-Systems and Platforms for Innovation.** There is a need to identify platforms for innovation in ITS. The platform would support the eco-system in which organizations large and small, public and private engage. Similar platforms of innovation seed development of consumer products for transportation. While open software systems are desirable to some, many companies maintain proprietary software.
- **Share Performance Information.** New ways to share lessons learned and performance experiences of contractors, projects and pilots are needed. This ensures that the same work and mistakes are not repeated.
- **Benefits and Return on Investment.** Information on benefits and ROI of ITS investments should be better documented and more widely available. This information is particularly important for public sector agencies who use quantifiable evidence to influence decision-making.
- **Focus on State and Local Levels.** Historically, there has been a strong focus on federal ITS initiatives. Shifting that focus to the state and local levels may encourage deployment. ITS America state chapters may be a useful way to increase state and local engagement.
- **Advocacy.** In today's technology-rich world, the Leadership Circle should focus on advocacy and "telling the story" about technology benefits, investments and uses in transportation.

### **Performance Management Measures, Data and Technology Workshop**

U.S. DOT Under Secretary for Policy, Polly Trottenberg, and Federal Highway Administrator, Victor Mendez, provided an overview of MAP-21 rulemaking requirements for performance measures, and U.S. DOT's implementation efforts.

Administrator Mendez described U.S. DOT's three-tiered approach to the rulemaking activities. In the first tier, U.S. DOT will begin with safety performance measures, relying on the good history of safety data and existing partnerships with stakeholders. The Federal Highway Administration (FHWA) plans to issue a Notice of Proposed Rulemaking (NPRM) in the third quarter of 2013. Infrastructure performance measures are in the second tier, and a NPRM is planned for the fourth quarter of 2013. System performance and freight performance measures are in the third tier, and a NPRM is expected in the first quarter of 2014.

Both Under Secretary Trottenberg and Administrator Mendez urged the Leadership Circle and their constituencies to become involved now, while the rulemaking process allows for dialogue with the community. Several examples were discussed for increasing involvement.

- **Increase education.** U.S. DOT has done extensive outreach to engage the broad stakeholder community on the topic of performance measures. Several Leadership Circle members noted that there are still many who are uninformed. Administrator Mendez encouraged Leadership Circle members to share information with their communities and to communicate with FHWA about where more outreach is needed.

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- **Create and share ideas.** U.S. DOT representatives encouraged the Leadership Circle to continue their work in performance measures and to bring their good ideas to U.S. DOT as a group. The Leadership Circle was counseled to push ahead with progress. Under Secretary Trottenberg asked the Leadership Circle to provide additional input on ITS technology and the capabilities it can bring to performance management.
- **Respond to U.S. DOT.** The Leadership Circle has an opportunity to work with U.S. DOT now before the NPRMs are written. Further, once an NPRM is issued, Leadership Circle members and their communities should respond officially. This is a key part of the rulemaking process and engagement is strongly encouraged.

Leadership Circle members were given an opportunity to engage directly with U.S. DOT to provide ideas, solutions and suggestions to be included in performance measurement considerations.

Next, Leadership Circle panelists, members and guests engaged in open discussion on performance measures and the role that ITS solutions can play. The discussion began with remarks from invited panelists.

Panelists: Ananth Prasad, Florida DOT; Andy Fremier, MTC; Dennis L. Christiansen, TTI; Brian Heath, IIS/Drivewyze; Abbas Mohaddes, Iteris; Michael L. Pack, University of Maryland

### Speaker Summary

**Ananth Prasad** confirmed the need for open discussion and community engagement so that upcoming NPRMs result in meaningful performance measures that consider measures currently in use. He emphasized that many states already use performance measures. Experiences at the state level must be shared, and should influence U.S. DOT's decision-making. He asked for full discussion with American Association of State Highway and Transportation Officials (AASHTO) so that experiences nationwide are part of the rulemaking process.

**Andy Fremier** spoke from the perspective of a large metropolitan planning organization. He talked about the complexities in the Bay Area region and the current use of performance measures that are coordinated across four major metropolitan areas in California. He expressed concern that performance measures released by U.S. DOT might not align with measures already in use by MTC. New measures may not support their existing standards. Leadership Circle guests added their concurrence that large metropolitan areas are unique and have different goals for which some measures may not be well suited.

**Dennis L. Christiansen** shared Texas' experience during the evacuation of Houston prior to a major hurricane. TTI developed a Bluetooth system that successfully provided cheap and effective traffic data from Houston to Dallas (200 miles) at a total cost of \$200,000.

**Brian Heath** pointed out that performance measures must be carefully crafted to incentivize the desired end result. Some performance measures are designed for current technology, but as technology evolves outdated performance measures can be a hindrance. For example, Drivewyze technology allows trucks to be weighed without entering a weigh station; however,

current performance measures count trucks entering a weigh station as a measure of effectiveness.

**Abbas Mohaddes** shared the experience of Iteris concerning the magnitude of data currently available. He noted the need to efficiently digest and repurpose data for decision-making and performance measurement. Data offers the opportunity to create new measures like assessing the carbon footprint. The result is a dashboard of actionable information. Arterial data is also becoming more widely available.

**Michael L. Pack** described his center's work with MPOs and DOTs to collect data for a national traffic data repository. His center first collects data, then examines ways to best share that data with users in an easy-to-understand format. This information can help with decision-making and monetizing projects.

### Discussion Summary

Leadership Circle members and guests engaged in open discussion on performance measures. Below are key points that emerged from the discussion.

- **Definition of Measures.** All participants encouraged U.S. DOT to develop and require performance measures that use open standards and focus on the desired performance outcome. Performance measures should not specify or imply a particular technology.
- **Focus on People.** Increasingly, state and local DOTs look at issues from the perspective of people, such as livability, parking and biking, instead of solely the perspective of traffic flow. State DOTs recognize that technology in transportation should serve citizens.
- **Data Availability.** Several members and guests emphasized the large amount of data that is becoming available from consumers, vehicles and social media and through commercial and automotive collaboration. To be useful for decision-making, this raw data needs to be managed and scrubbed, but it was not clear who should be responsible for this task.
- **Freight.** Freight performance measures should consider various modes of goods movement. It was also noted that the marketplace, rather than the quality of the transportation system, often determines how freight moves.

### **Outcome Discussion**

In the final discussion session of the meeting, David St. Amant and Peter Sweatman led the group in deliberating on the topic for the next Leadership Circle meeting. The topics listed below served as a starting point for the discussion.

### Initial Discussion Topics

- **Eco-System Working Session.** The Leadership Circle would expand the emerging ITS eco-system by working through the application of a specific new ITS technology. Representatives across public, private and academic sectors would have a role in the eco-system and would be able to discuss what they contribute, what they take from the process, and what synergies are developed. This could result in a new platform for innovation. Specific ITS topics mentioned include:

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- Smart-parking
  - Real-time traveler information
  - Infrastructure (transportation, water, electric, etc.) data integration
- **New Model Incubator.** The Leadership Circle would leverage the strong interest of the state DOT members and local agency members to develop new and innovative models to deploy technology. Interested agencies could become incubators for new partnership models, applications of technology, or contracting approaches. The approaches tested in these local and state environments should be replicable, and relevant to other states and local governments. Through this activity, the ITS America Leadership Circle could encourage new ways of sharing information between private and public sector entities.
  - **Risk Management.** The Leadership Circle would explore new and creative ways to mitigate public sector risk while managing private sector risk and ROI. By balancing the risk profiles of the public sector and various private sector businesses, the Leadership Circle could examine new partnership models, and encourage their use throughout the transportation technology sector.
  - **State Level Advocacy.** The Leadership Circle would develop materials that can be used by public officials, industry leaders and ITS America state chapters to educate state legislatures about the benefits of ITS, and the need to include funding for ITS in future funding proposals.
  - **Performance Measurement.** The Leadership Circle would build upon the initial performance measurement dialogue with U.S. DOT leadership by convening the agencies and companies that can influence and shape public policy on performance measurement. The U.S. DOT offered continued opportunities for input over the next few months before the rulemaking process restricts open discussion.

### Discussion Summary

The Leadership Circle membership agreed that the Forum's discussion was robust, dynamic and high-energy. The discussion displayed a rapport that was different from ITS America Board of Directors meetings. There was a feeling of optimism that the Leadership Circle's efforts can make a difference and help "move the needle." However, there was also agreement that quick action is needed to maintain business interest. The impact on the industry must justify the time spent, and should reach across as much of the industry as possible.

The discussion centered on a process around which an expanded ITS industry eco-system could be developed. Clear identification of a problem and goals would need to drive the definition of the market activity or technology to be developed. The process would be focused on moving the innovation eco-system from identification and experimentation into deployment. This process represents a different approach to solving problems. In this new eco-system, ITS America's Leadership Circle can serve as the convener. Together, technology companies both large and small and public sector entities can drive innovation and technology solutions forward. In this approach, the velocity of innovation is faster.

In addition, a real-world innovation process could emerge that uses new ways to develop trust and manage risk while shortening the deployment cycle. Both private companies and public

agencies will need to share the risk of innovation appropriate to their organization. The approach that emerges should not be constrained by current policies and processes.

The suggested approach was to assemble a list of candidate innovation topics to use in the process; pick a topic; and allow the Leadership Circle to facilitate implementation of the process.

### Final Topic Statement

The Leadership Circle will develop a new problem-solving business model that will accelerate innovation in transportation in a way that is unconstrained by current policy. This model will include a new ITS eco-system. We will establish this model through an ITS incubator and as a means of managing risk. Our work will focus on one or more barriers to transportation innovation and ITS deployment.

### **Next Steps**

- Share the topic statement with the Leadership Circle membership and request suggestions for problem statements. On a conference call with the Leadership Circle, discuss and finalize the topic statement and selection of one or two problem statements;
- Based on the conference call, consolidate input into a final topic statement and problem statement(s) and share with the Leadership Circle;
- Conduct background research on the selected problem;
- Incorporate the final topic statement and problem statement(s) into the next workshop agenda; and
- Share the agenda with Leadership Circle members, discuss and revise.

### Conclusion

Based on observations of the meeting and comments from Leadership Circle members, the first meeting was successful and exceeded expectations. Discussion was robust and engaging. Leadership Circle members and guests actively participated throughout the entire Forum. The context of the meeting was bold, with a new sense of reality in public-private exchanges, and with more disruptive business models and agency goals expressed. A new level of engagement with senior U.S. DOT representatives presented itself during the working sessions.

The success of this Forum must now be transferred to the broader membership. In the months to come, ITS America leadership must ensure that these substantive topics are anchored to the current reality of all ITS America members. ITS America has many important constituencies who should see the Leadership Circle as both a visionary and practical body.

Leadership Circle members should feel pleased with their accomplishment. The primary objective of the Leadership Circle meeting was achieved. A strategically rich topic was identified that will be the subject of the next meeting in August. The group left with high energy and optimism that the Leadership Circle will meet its intended purpose and with a sense that it will be a major asset to ITS America and to the larger ITS industry.

**Appendix 1 – Leadership Circle Members**

**John Barton**

Deputy Executive Director  
Texas Department of Transportation

**Allen Biehler**

Executive Director  
T-SET, Carnegie Mellon University

**Dana Christensen**

Deputy Laboratory Director for Science and Technology  
National Renewable Energy Laboratory

**Dennis L. Christiansen**

Agency Director  
Texas Transportation Institute

**Steve Dellenback**

Director  
Southwest Research Institute

**Thomas A. Dingus**

Director  
Virginia Tech Transportation Institute

**Malcolm Dougherty**

Director  
California Department of Transportation

**Andy Fremier**

Deputy Executive Director, Operations  
Metropolitan Transportation Commission

**Brian Heath**

President  
Intelligent Imaging Systems/Drivewyze

**Rich Hoke**

Chief Executive Officer  
Digital Traffic Systems, Inc.

**Randell H. Iwasaki**

Executive Director  
Contra Costa Transportation Authority

**David Jumba**

Chief Revenue Officer  
Airbiquity

**Appendix 1 – Leadership Circle Members**

**David (Dave) Kachemov**

Vice President, ITS/AFC  
Product and Operations  
Trapeze Group

**Frank LoPresti**

General Manager  
Complete Transportation and e-Vehicle Infrastructure  
Siemens Industry, Inc.

**Patrick McGowan**

President  
Schneider Electric

**Abbas Mohaddes**

President and CEO  
Iteris, Inc.

**Gerry Mooney**

Vice President  
Global Public Sector  
IBM Corporation

**Chris Murray**

President and CEO  
Kapsch TrafficCom IVHS

**Michael L. Pack**

Director  
CATT Lab  
University of Maryland

**Ananth Prasad**

Secretary  
Florida Department of Transportation

**Karen Rasmussen**

President and CEO  
HELP Inc.

**William L. (Bill) Russell**

President and CEO  
Eberle Design, Inc.

**Kirk Steudle**

Director  
Michigan Department of Transportation

**Appendix 1 – Leadership Circle Members**

**David Sparks**

Executive Vice President  
TransCore Holdings, Inc.

**David St. Amant**

President and COO  
Econolite Group, Inc.

**Anton Steenman**

Vice President-IAG/GM  
Intelligent Systems Group  
Intel

**Peter F. Sweatman**

Director  
University of Michigan Transportation Research Institute

**Kris B. Tufto**

President and CEO  
Image Sensing System, Inc.

**Linda S. Watson**

President and CEO  
Capital Metropolitan Transportation Authority

**Thomas West**

Director  
California PATH  
University of California, Berkeley

**Appendix 2 – Leadership Circle Forum Participants**

**Leadership Circle Members**

John Barton	Texas DOT
Al Biehler	Carnegie Mellon
Dana Christensen	NREL
Dennis L. Christiansen	Texas Transportation Institute
Steve Dellenback	Southwest Research Institute
Thomas A. Dingus	Virginia Tech
Martin Engelmann	Contra Costa Transportation Authority
Andy Fremier	Metropolitan Transportation Commission
Brian Heath	IIS/Drivewyze
Rich Hoke	Digital Traffic Systems, Inc.
David Jumpa	Airbiquity
Frank LoPresti	Siemens
Patrick McGowan	Schneider Electric
Abbas Mohaddes	Iteris
Gerry Mooney	IBM
Chris Murray	Kapsch
Michael L. Pack	University of Maryland
Ananth Prasad	Florida DOT
Karen Rasmussen	HELP Inc.
William Russell	Eberle Design
David Sparks	TransCore
David St. Amant	Econolite
Matt Smith	Michigan DOT
Anton Steenman	Intel
Peter F. Sweatman	UMTRI
Kris B. Tufto	Image Sensing Systems, Inc.

**Speakers**

Gabe Klein	Chicago DOT
Victor Mendez	U.S. DOT, FHWA
Jon Morrison	Meritor WABCO
Shelley Row	Shelley Row Associates LLC
Polly Trottenberg	U.S. DOT
Zia Yusuf	Streetline

**Appendix 2 – Leadership Circle Forum Participants**

**Guests**

Chris Body	Kapsch
Mike Doyle	Econolite
Josh Johnson	Southwest Research Institute
Ken Leonard	U.S. DOT, RITA, ITS JPO
Ed Seymour	Texas Transportation Institute
Tom Taylor	Verizon

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