Welcome

Chairman, David St. Amant, Econolite Group, Inc.
President and CEO, Scott Belcher, ITS America
State of the ITS Industry
America’s Transportation Challenges

- **Gridlock in Washington, D.C.** does not just apply to the Beltway.

- **Financial stability** must be brought to the nation’s transportation system and revenue options must be explored.

- **FCC seeking to open up the 5.9 GHz band** to unlicensed users, potentially interfering with Connected Vehicle signals.
We live in an increasingly interconnected world.
• Connected vehicle technology and other intelligent transportation systems (ITS) are transforming safety and mobility on our nation’s roadways.
Big and open data is driving the future of roadway safety

- The future of transportation lies increasingly in the **continued investment and use of real-time information** to make our infrastructure smarter, including enabling vehicles to communicate with each other and with the world around them.

According to U.S. DOT, **nine out of 10 drivers** would like to have vehicle-to-vehicle safety features in their own vehicles and believe the technology would be useful in improving driver safety overall.
ITS Market Data Study

The U.S. ITS Market: Revenues of Services, Opportunities and Challenges

- Developed as an update on ITS America’s market data study in 2011.
- The goal of the study was to segment the market by ITS services and identify opportunities and challenges facing the ITS industry.
ITS Market Study Key Findings: U.S. ITS Market Segmentation

Revenue of $48 billion U.S. ITS industry is distributed fairly evenly among all eight ITS service packages.

- **Vehicle Safety & Traffic Management** are the biggest two services (17%).
- Smallest service package accounts for about 10% of ITS industry.
Several ITS areas have been experiencing high growth:
- Vehicle: Advanced Driver Assist Systems, in-vehicle and aftermarket devices to connect to the cloud, in-vehicle location-based service
- Infrastructure: tolling, smart parking, new payment system

Technological advancement continues driving the industry:
- Communication: DSRC, 4G LTE, M2M, Wi-Fi, Bluetooth, satellite radio
- Computing: Big Data, data integration, data analytics and mining
- Sensors: active safety systems, semi-autonomous and autonomous driving, computer vision, radar, Lidar, GPS, sensor fusion

Challenges ahead include funding, business model, and professional capacity building.
ITS America Releases State DOT ITS Spend Report

- **Focus:** assess and project areas in ITS most likely to receive increased funding at State DOT level for the next 18-36 months

- **Methodology:**
  - Analyze state-level budgets and expenditures including looking at STP, STIPs, etc.
  - Online survey - received 140 responses
  - In-depth phone interviews with public sector transportation members - (14 interviews)
Initial Findings Were Not Surprising

- Estimated annual State DOT ITS spend is roughly $5.4B
- State DOT spend is projected to grow to $5.6B annually over the next three years
- Top three motivating factors for deploying ITS besides safety
  - Improve traffic flow/reduce congestion
  - Optimize existing infrastructure
  - Improve traffic management
Roughly 67% ($3.59B) of the State DOT ITS spend is concentrated in 16 states.
Respondents Identified a Number of Barriers to Additional Investment in ITS

- Lack of funding
- Insufficient understanding of ITS and its benefits
- Difficulty integrating ITS with existing infrastructure
- Constant evolution of technology has created its own barriers to ITS deployment
- Lack of education, understanding and professional development
Online access to bids, contracts and market information for the infrastructure and transportation sectors

INTELLIGENT INFRASTRUCTURE NAVIGATOR MEMBERSHIP INCLUDES:

- Instant access to RFPs and bids
- Contract awards
- Pre-RFPs and developing opportunities
- Complete jurisdiction index
- Market alerts
- Buyer contact information for bids

Special rates apply for ITS America members and public sector entities.
Infrastructure Navigator Can Provide a Wealth of Information

- Contains historical information since 2009
- Multiple search parameters
  - Category, bid-type, dates, location, and jurisdiction
  - Contacts
  - Saved search parameters
- Ability to obtain value of contract (if listed)
  - Market Alert and pre-RFP information
  - Ability to look for and create partnering opportunities
In the Past Year, Almost 3,500 Procurements Were Issued

Records Search Dates
(7/30/2012-6/10/2013)
Total # of Records - 3496
Source of Procurements are Fairly Evenly Distributed

Records Search Dates
(7/30/2012-6/10/2013)
## Navigator Snapshot - Recent Month

<table>
<thead>
<tr>
<th>Categories of RFPs</th>
<th># of RFPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Cameras, Closed Circuit TVs</td>
<td>163</td>
</tr>
<tr>
<td>Traffic Signals/Ramp Meters</td>
<td>61</td>
</tr>
<tr>
<td>Consulting and Outreach</td>
<td>30</td>
</tr>
<tr>
<td>Freeway/Highway Control Monitors</td>
<td>24</td>
</tr>
<tr>
<td>Weather Maintenance Equipment</td>
<td>19</td>
</tr>
<tr>
<td>Automatic Vehicle Location Systems</td>
<td>13</td>
</tr>
<tr>
<td>Computer Aided Dispatch</td>
<td>13</td>
</tr>
<tr>
<td>Transit Management Systems</td>
<td>13</td>
</tr>
<tr>
<td>Electric Vehicle Systems</td>
<td>12</td>
</tr>
<tr>
<td>Transit Telecommunications</td>
<td>11</td>
</tr>
<tr>
<td>Variable Message Signs, Dynamic Message Signs, Variable Speed Limit Signs</td>
<td>11</td>
</tr>
<tr>
<td>Transit Control Centers</td>
<td>6</td>
</tr>
<tr>
<td>Toll Systems</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>377</strong></td>
</tr>
</tbody>
</table>
2013 Has Gone Well

- ITS America Annual Meeting
- Planning for the 2014 World Congress
- Smart Parking Symposium
- Leadership Circle
- Intelligent Infrastructure Navigator
- Spectrum Sharing
2013 Annual Meeting A Success

- State DOT CEO Roundtable
- Telematics, U.S. DOT and freight plenaries
- Town Hall sessions
- Three U.S. DOT sponsored training sessions
- VIP tours of the exhibit hall
- DOT meet-and-greets
- Over 60 sessions on safety, sustainability, transportation management, commercial vehicles and freight among other issues
Save the Date
2014 Detroit World Congress

Cobo Center  Michigan
September 7-11, 2014
Three Successful Regional Meetings

March 2013 | Berkeley, CA
Smart Parking Symposium

Keynote speaker Dr. Donald Shoup
Smart Parking exhibitor hall
Former U.S. Sec. of Transportation Ray LaHood with David Jumpa.

June 2013 | Washington, D.C.
Capitol Hill Fly-In and Smart Transportation Technology Showcase


July 2013 | Chicago, IL
Complete Streets Symposium

Divvy Bike tour of Chicago
Keynote speakers Gabe Klein and Scott Kubly
Congressman Earl Blumenauer (D-OR) with Congressman Thomas Massie (R-KY).
ITS America’s Regional Meetings

**March 2013**
- Smart Parking Symposium – San Francisco, Calif.

**April 2013**
- 2013 Annual Meeting & Expo – Nashville, Tenn.

**June 2013**
- Capitol Hill Fly-In and Smart Transportation Technology Showcase

**July 2013**
- Complete Streets Symposium – Chicago, Illinois

**October 2013**
- ITS World Congress Tokyo, Japan

**February 2014 (tentative)**
- Complete Streets Symposium – Atlanta

**May 2014 (tentative)**
- Interior Corridor Management Symposium – Texas
Leadership Circle Successfully Launched

- Board of Directors approved at December 2012 meeting
- Reached target membership of 30 in February – 16 public sector, 14 private sector; now up to 34 with several more in the works
- ITS America website prominently displays Leadership Circle member logos
- Weekly Leadership Circle Spotlight articles in Transportation Technology Newsletter
- Concluded first Leadership Circle at ITS America Annual Meeting
Public Sector Members

- Caltrans
- PATH
- Metro
- Contra Costa Transportation Authority
- State of Florida Department of Transportation
- HELP INC.
- NREL
- MDOT
- MTRI
- Texas A&M Transportation Institute
- Traffic21
- UMTRI
- Virginia Tech Transportation Institute
Private Sector Members
Ongoing ITS Legislative Advocacy

- **New** MAP-21 Reauthorization Principles and legislative outreach brochure
- **Educate** new Chairs, Ranking Members, Committee Members, staff
- **Refresh** ITS Congressional Caucus
- **5.9 GHz** band and the FCC
  - NTIA study on DSRC spectrum sharing
  - **File comments** for NPRM
  - **Testify** before the House Transportation Committee
- **Nine Congressional Roundtables** slated for 2013
- **Revamp legislative outreach** and updates through the new Leadership Circle
- **Capitol Hill Fly-In and Smart Transportation Technology Showcase** June 26
National Operations Center of Excellence (NOCoE)

An Update to ITSA Board
June 27, 2013
What is a Center of Excellence?

- Team, shared facility or an entity collaborating to pursue excellence in a particular area
- Leadership
- Knowledge synthesis
- Identify best practices and guidance
- Identify research needs
- Workshops and training
- Facilitate peer to peer relationships and community forums
Why Now?

Issues

- Lack of awareness of current activities related to travel time reliability and transportation systems management and operations (TSM&O)
- Strong desire to draw on practitioner knowledge through best practices and peer exchanges
- Resources are spread across multiple agencies and organizations NTOC, Operations Academy, FHWA, AASHTO, ITE, ITS America, etc.
Why Now?

- Momentum and opportunities
  - SHRP2 Reliability Research product implementation underway-
    - Organizing for reliability (L01/L06)
    - Regional operations forums (L36)
    - Knowledge Transfer System, or KTS (L17)
  - Completion of NCHRP Project 20-7/298, study of potential audience, scope, and business models for an Operations Center of Excellence
  - AASHTO SSOM revitalization & leadership
    - Board of Directors resolution
    - NCHRP project to update SSOM strategic plan and develop OCoE business plan
Strengths of the Organizations

• **AASHTO** - *Voice of Transportation for the State DOTs*
  - Established program and committee structure that mirrors State DOT operations
  - Lead agency with FHWA for SHRP2 program implementation
  - History of Centers of Excellence and Technical Services Programs supported by state DOT financial contributions

• **ITE** - *Large international membership of public and private sector traffic and safety engineers, M&O/ITS practitioners, and transportation planners*
  - Technical program services to membership and supporting infrastructure
  - Connections to universities and student members entering profession
  - Functions as the host for the NTOC program with FHWA financial support

• **ITS America** - *400 organizational members nationally and another 1,000 unique members in its state and regional chapters*
  - Membership is 50-50 public/academic-private
  - Programs have a strong technology focus
  - Strong contribution as a knowledge source and support for the operations community of practice.
Next Steps

- A *Cooperative Model of* shared governance, co-branding, and resource support lends itself best to the strengths and opportunities provided by each association
- Build the OCoE on the foundation provided by ITE’s NTOC program
- Prepare an MOU between AASHTO, ITE, and ITS America
- Work with FHWA to establish the OCoE in conjunction with the development of the SHRP2 Enhanced Knowledge Transfer System
- Development a business plan:
  - General OCoE description
  - Products, services & branding
  - Operational plan
  - Management & organization
  - Financial plan
  - Start-up expenses & capitalization
  - Performance measures
### AASHTO NOCoE Path...

<table>
<thead>
<tr>
<th>2013 SSOM Meeting</th>
<th>2013 AASHTO Spring Meeting</th>
<th>2013 SSOM Activities</th>
<th>2013 AASHTO Annual Meeting</th>
<th>2014 Spring Meetings</th>
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<tr>
<td>SSOM Revitalized</td>
<td>SCOH Adopted NOCoE Resolution</td>
<td>Established NCHRP 20-7 Project Scope and Panel</td>
<td>Present SSOM Strategic Plan and OCoE Business Plan to SCOH and AASHTO BoD for Approval</td>
<td>SSOM Develops OCoE Technical Service Program Requirements</td>
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<td>SSOM Strategic Plan Updated with strong Emphasis on CoE</td>
<td>SCOH Approved NCHRP 20-7 Project to develop SSOM Strategic Plan and OCoE Business Plan</td>
<td>Includes ITE and ITSA Members Webinar to Address TSP formation</td>
<td></td>
<td>Ballot TSP Resolution</td>
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<td>OCoE Task Force Established</td>
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<td>Present Resolution to SCOH and BoD</td>
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### AASHTO / SSOM Efforts

- SSOM Passed Resolution to Develop Business Plan and Establish OCoE
- AASHTO BOD Approved OCoE Concept
- Directed SSOM to Develop Business Plan and report back at Annual Meeting
- Panel met in May Workshop on SSOM Strategic and OCoE Business Plan Scheduled for August
- Anticipate SCOH and BoD approving OCoE Business Plan at 2013 AASHTO Annual Meeting
- If TSP formation approved, AASHTO will invoice DOTs for TSP contributions beginning July 2014

### NOCoE Outcomes

- SSOM Revitalized
- SSOM Strategic Plan Updated with strong emphasis on CoE
- OCoE Task Force Established
- SCOH Approved NCHRP 20-7 Project to develop SSOM Strategic Plan and OCoE Business Plan
- Established NCHRP 20-7 Project Scope and Panel
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- Present SSOM Strategic Plan and OCoE Business Plan to SCOH and AASHTO BoD for Approval
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- Ballot TSP Resolution
- Present Resolution to SCOH and BoD

- If TSP formation approved, AASHTO will invoice DOTs for TSP contributions beginning July 2014.
**National OCoE Path...**

**SHRP2 L17 KTS Soft Launch**
- **Soft Launch**
  - Identify Target Audience
  - Provide Outreach
  - IT/Systems Support Feedback and Input to Enhanced KTS
  - Establish and Hold Advisory Board Activities
  - Content Management

**KTS and NTOC**
- **Phase 1**
  - NTOC + KTS Web Portal Integration
  - Merge NTOC and SL KTS
  - Merge NTOC Governance with KTS Advisory Board

**Enhanced KTS**
- **Phase 2**
  - Expand Integration of EKTS and NTOC Web Portal
  - EKTS IT development
  - EKTS Soft Launch
  - EKTS Fully Functional

**NOCoe**
- **Phase 3**
  - Integrated Web Platform
  - Other Defined Services
  - Interim OCoE Board will become Full NOCoE Board
  - AASHTO TSP to Support NOCoE and Fully Functional NOCoE is established

**Lead for National OCoE Advisory Board – AASHTO w/ITE and ITS America Reps**
**Lead for NOCoE Operations – ITE**
**Lead for NOCoE Industry Partnerships – ITS America**