



Fall Edition — 2018

Heartland ITS Pulse

VOLUME 1, ISSUE 1

SEPTEMBER 2018

INSIDE THIS EDITION:

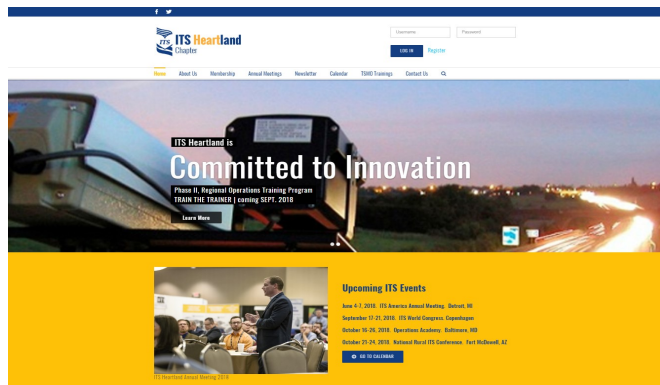
- President Randy Johnson provides an update on all the happenings within ITS Heartland
- Updates from each of the five Heartland member states
- A preview of what's to come at next year's conference in Kansas City
- News from ITS America
- Articles from ITS Heartland Members on topics ranging from Autonomous Vehicles to TSMO Trainings
- Member Spotlight: Get to know Shari Hilliard!
- This Edition's Vendor Product Highlight: General Traffic Controls & GRIDSMART Technologies, Inc.

Refreshed.

ITS Heartland gets a new, updated look!



It's the ITS Heartland Board's pleasure to introduce you to the new and improved Heartland Pulse! After almost a year of reflecting, brainstorming, and trying several different layouts, the board has approved a new direction for the Pulse newsletter to better align with the priorities and needs of ITS Heartland members. The new Heartland Pulse will be released quarterly (instead of monthly) to all registered ITS Heartland Members. The Pulse will continue to provide articles about the happenings of ITS in and around the world and will also focus on news specific to ITS in the Heartland. Look forward to updates from each of the ITS Heartland member states, a spotlight on ITS Heartland members, and a quarterly message from ITS Heartland's President to update members on all of the happenings inside Heartland.



In addition to the new direction of the Pulse, we are also excited to announce our new website! The ITS Heartland Board has been working toward a website redesign for the last two years. This past spring, a steering committee was appointed and they worked through the summer to design a website to serve the entire ITS Heartland community. The new site is user

friendly, visually appealing, and offers a lot of great resources. We hope you like it! One of the most exciting new features is a Members Only page with resources and information only accessible by ITS Heartland members. This is our way of saying "thank you" to the individuals and organizations that support us. The new website launches October 1st!



Calendar — Upcoming Events

October 2018: 2019 Call for Abstracts to be released via e-mail and Twitter

October 16-26, 2018: [Operations Academy Senior Management Program](#)

October 21-24, 2018: [National Rural ITS Conference](#)

October 23, 2018: [ATSPM Class \(Kansas City\)](#)

October 25, 2018: [ATSPM Class \(St. Louis\)](#)

April 29-May 1, 2019: [2019 ITS Heartland Conference in Kansas City!](#)



Message from President Randy Johnson

Five states in five days was how I started my exciting year as your President. My first objective was to visit each board member at their place of work to gain insight on how to improve the ITS Heartland Chapter and to get to know them personally. This listening tour gave me a better understanding of both our strengths and areas of improvement of our chapter. With this information, a 2018-2019 Strategic Plan was created and has been adopted by the board of directors. It lays out our goals and action items for the year.

Our 3 major goals revolved around our members. They are:

- Improve Membership Benefits
- Improve Outreach to Members and Non-members
- Fostering a Successful Team Culture

In October, several exciting improvements will be revealed. The ITS Heartland website will be more modern looking with richer content and relevant resources for members which are easy to navigate. A new addition being revealed in January 2019 is a member's only section that will host a library of shared documents from members ranging from DOT training videos to collegiate white papers. The PULSE newsletter will be refreshed with content that will be relevant to our members and a wide variety of articles that will suit all member backgrounds.

"One of the greatest gifts you can give is your time." This well-known saying is at the heart of your ITS Heartland Board of Directors. I know they are busy with the demands of work and life and I am grateful for the time they give to help not only maintain a high quality chapter, but find ways to improve it. I appreciate our

members and want to extend this opportunity to get involved. The best way to start is in one of our 10 Committees that revolve around preparing for the 2019 Annual Conference. A listing of the committees and the members involved is shown on the next page. If you are interested, please reach out to the committee leader and they will connect you with the team. Also, keep an eye out for our Call for Abstracts and help make our 2019 conference the best ever!

Please feel free to let me know any thoughts or feedback you may have. I may be reached at randy.johnson@modot.mo.gov. Stay tuned on announcements for future events or opportunities to get involved.

Update from ITS America:



In late August, ITS America President and CEO Shailen Bhatt met with the U.S. Senate's Democratic Policy and Communications Committee (DPCC) to discuss automation in the transportation industry. Bhatt met with the committee alongside NYCDOT Commissioner Polly Trottenberg and both

emphasized the ability of new ITS technologies to improve safety and reduce fatalities on the roadway. Bhatt also mentioned the crucial role ITS plays in international competition for automotive infrastructure and technology. Bhatt testified before the House Transportation and Infrastructure

Committee on September 5th about innovative intelligent transportation projects across the nation. Read the full story here:

<https://www.itsa.org/momentum/2018/7/26/momentum-issue-1-september-4-2018>

ITS HEARTLAND 2019 GETTING READY!

KANSAS CITY



Planning is well underway for the 2019 edition of ITS Heartland’s annual conference in Kansas City! The 2019 conference will take place at the Sheraton Kansas City Hotel at Crown Center. The board had its September meeting on-site and toured

the facility as well as some possible social event locations. Several committees are now set up and working to begin detailed planning of the event including: keynote speakers, abstract topics, social events, and others! Stay tuned as we continue to

work in making the 2019 Heartland Conference the best one yet.

Be sure to watch for the call for abstracts at the beginning of October!

*“I look forward to the Heartland Conference every year! Heartland members are warm, inviting, and really feel like a family.”
- 2018 Conference Attendee*



ITS Heartland 2019 Committees and Committee Leaders

Agenda:

Kurt Rotering, Tim Simodynes, Randy Johnson

Abstracts:

Henry Brown, Joe Finley, Tim Simodynes

Keynote Speakers:

Randy Johnson, Matt McLaughlin

Student Competition:

Ron Barnes, Jessica Sherwood, Lee Baer

Technical Tours:

Slade Engstrom, Kurt Rotering

SHRP2 Training:

Marcus Slaughter

Monday PM Sessions:

Tom Hein, Randy Johnson

Social Event:

Anthony Gallo, Slade Engstrom, Mathew Baker

Vendor Reception:

Jamie Gilbert

Best of ITS:

Alex Wassman, Alan Stevenson, Lee Baer

Fall 2018 State Updates



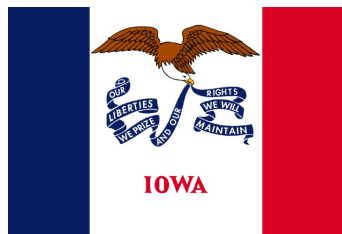
Nebraska: Austin Yates

Nebraska DOT is proud to announce the operation of our first fiber optic communication corridor: the fiber on I-80 between Lincoln and the Platte River was lit up on August 8, 2018. We hosted a live traffic incident management exercise in North Platte, dubbed

TIMEX18, which brought together over 60 first responders from dozens of jurisdictions, including an air ambulance helicopter, to respond to a staged crash. Lastly, we completed a TSMO capability maturity framework workshop, led by FHWA, to self-assess our TSMO efforts.



Iowa: Tim Simodynes



Iowa is either finalizing plans or constructing major interstate projects in six different metro areas. Each involves relocating and expanding fiber and ITS devices, and deploying temporary Intelligent Work Zone (IWZ) devices. 2018 has been Iowa's 5th construction season utilizing our Statewide approach to IWZ which included deploying systems or devices on over 30 projects. We are

preparing to re-post our ATMS and ATIS RFP in October with the new option of proposing on either or both services. We are in the process of filling a redefined position who will spend half of their time on Connected/Automated Vehicle work.

Kansas: Joe Finley

Kansas let a regional project in July which will deploy rural ITS in the SW portion of the state. The project involves adding 13 DMS, 15 cameras (13 of which are fixed), and 16 vehicle sensors from Liberal to Kingman and around Newton. KDOT anticipates project completion in fall of 2019. In addition, KDOT is working hard on their truck parking project by adding cameras and video analytic software to 22 rest areas along I-70 from Colorado to Topeka and on I-135 from Salina to Wichita. Construction is nearly com-

plete and testing/system validation will take place this fall with anticipated operation in January 2019.

Kansas has several smaller projects adding just a few devices in needed areas around the state, and is beginning to plan for the replacement of many rural DMS. KDOT's ITS unit has hired an embedded engineer to supplement their staff, but hopes to gain additional staff and increased maintenance funds to match increased needs. Other projects that KDOT is working on include: auto-



mated TMA, remotely operated snow gates, and portable weather stations to assist field staff and automate road condition data for use by Kansas' TMCs.

Missouri: Alex Wassman



Missouri is partnering with FHWA to bring two Automated Traffic Signal Performance Measures (ATSPM) workshops to Missouri in late October. The workshops will explain ATSPMs, how they are used to time traffic signals, real-world applications with ATSPMs, and advanced applications using high-resolution data. MoDOT is also creating a new platform to distribute near real-

time data to its partners. The platform is being developed in-house with a goal of providing a data feed available for use by public and private partners upon approval. Being developed in parallel to the platform are a new process to evaluate data sharing requests and a standard agreement to cover the terms of use.

Oklahoma: Alan Stevenson

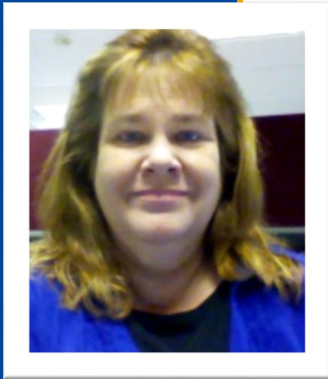
Oklahoma is currently experiencing great growth and development of our Traffic Incident Management Program. To help ensure all areas of the state have access to TIMs Training we have divided the state into four regions as broken up by I-35 and I-40. Our goal is for each region to have at least one training available per month at either an ODOT Training room or local Career

Technical Center. The Current month has exceeded those goals as we currently have 12 training sessions available across the state with an average of 50 attendees at each session.



Member Spotlight:

Shari Hilliard—Kansas Department of Transportation



How did you get into/start in ITS?

I started in ITS in 2005. I was getting back into the work force after working part-time when my kids were small. I previously worked in electric demand forecasting and performance measurement so ITS was a career change – it was a pleasant surprise when many of the skills used on those jobs were applicable to ITS.

What is the best part of working in ITS?

The best part is being able to provide information and infrastructure that benefits

the traveling public through improved safety and mobility.

What is the most interesting/fascinating thing you've done/seen with ITS?

Getting our first devices connected to fiber in Kansas and working with and understanding software associated with devices has been very interesting.

What would you say to new ITS Heartland Members or those who are considering joining?

ITS Heartland is a great sounding board and support system as you plan

programs within your organization.

What is your favorite thing about ITS Heartland?

Meeting the people from other states and hearing their lessons learned.

What is one interesting fact about you?

I am a movie addict!



ATSPM! What is that!?

Automated Traffic Signal Performance Measures

The Federal Highway Administration is offering two free, one-day workshops to learn how use of ATSPMs can improve the operations of traffic signal systems. The workshops will focus on what ATSPMs are, how they're used to time traffic signals, explore real-world applications of ATSPMs, and look at some



advanced applications using high-resolution data. The intended audience for this workshop is signal operators

and engineers at local agencies and the consultants that work for them. Expect to get deep into the weeds about how to use SPMs to improve signal operation and better maintain signal systems, as well as additional ways outside of signal timing that high resolution data can be utilized. Seating is limited.

Registration Links:

October 23rd — Kansas City: [Click Here!](#)

October 25th — St. Louis: [Click Here!](#)

TSMO—Training the Trainer



ITS Heartland has a SHRP2 grant to facilitate training on the subject and those strategies for the five ITS Heartland states – Iowa, Nebraska, Kansas, Missouri and Oklahoma. On September 5th and 6th, representatives from all five state DOTs as

participant had to practice their public presentation skills and were graded by their peers.

Adult learning principles were discussed as well as meeting facilitation techniques. Finally, materials for TSMO presentations were reviewed and each participant had to practice presenting some aspect of TSMO to a mock audience that acted the part and really got into their roles! It was a very positive and fun experience for all and the confidence level of all partici-

TSMO or Transportation Systems Management & Operations is a philosophy of managing our extremely valuable transportation system in a manner that preserves what we have now, ensures investments made are needed, and improves operations. It utilizes low cost strategies like restriping or optimizing signals all the way to implementing managed lanes to control demand and provide as much information to motorists as possible.

well as some local consultants gathered in Kansas City to attend a 2-day TSMO Train-the-Trainer class conducted by HDR.

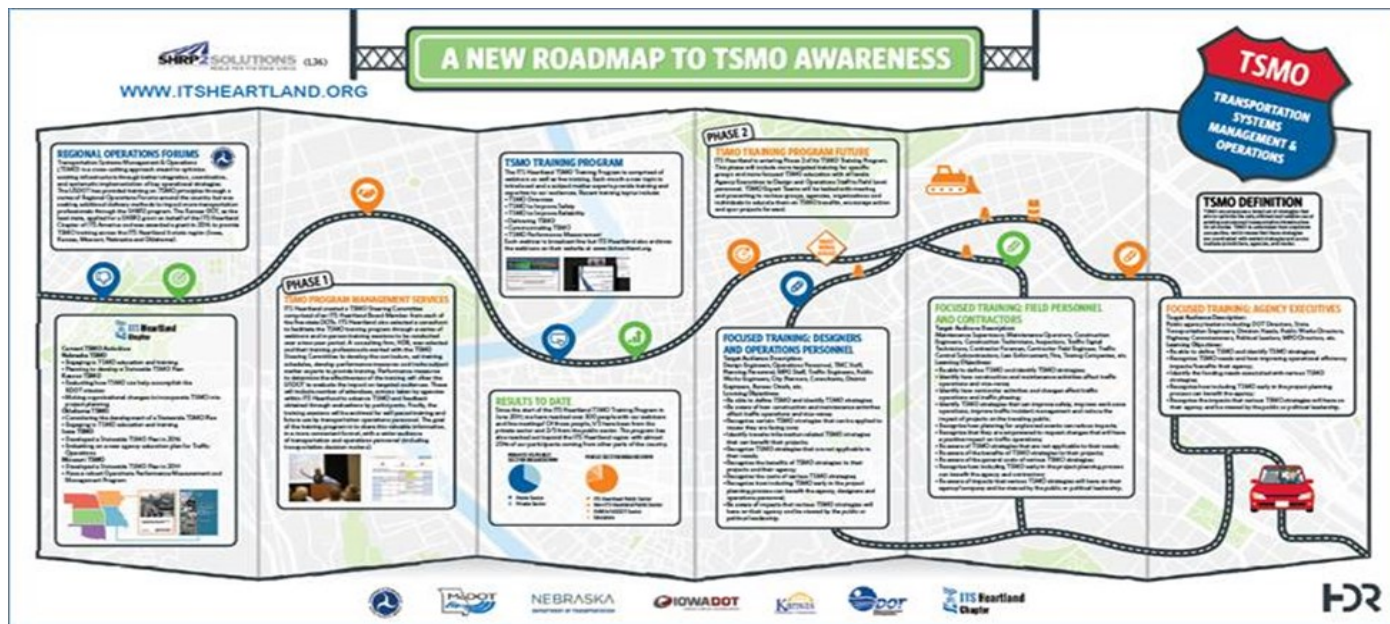
The class was designed as train-the-trainer to focus on how DOT representatives can deliver information about TSMO to various groups from executive level leaders in their DOTs to operations staff, designers, contractors, and maintenance personnel. Each



participants in being able to discuss TSMO with their agencies was raised!

There are numerous TSMO strategies that can be employed and

The class was designed as train-the-trainer to focus on how DOT representatives can deliver information about TSMO to various groups...



The ITS Heartland TSMO Awareness Roadmap poster developed for TRB and other conferences

Vendor Product Highlight: STREETSMART by GRIDSMART Submitted by: General Traffic Controls, Inc.

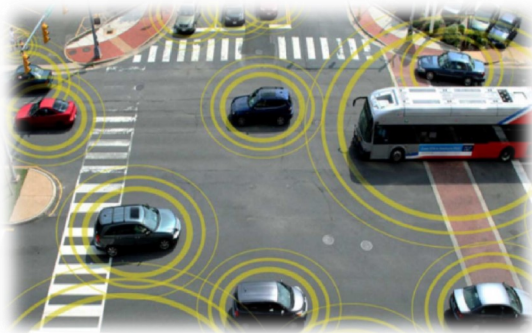
A simple but powerful new tool for transportation professionals is here! STREETSMART™ by GRIDSMART Technologies, Inc. delivers a new simple to install congestion management technology. Using Wi-Fi technology to continuously stream traffic data, it provides traffic managers with travel time, real-time congestion analytics, and the ability to adjust traffic flow strategies based on current conditions. STREETSMART collects information such as travel



time, congestion mapping, and origin destination, creating a timing plan analysis to rework

problematic areas and reduce congestion. All data is archived and converted into reports used to identify trends, new areas of need, and analyze improvements made over time. STREETSMART provides an easy to use web interface to analyze data delivered from sensors in the field. The system can be installed and collecting data in minutes. STREETSMART uses a patented next generation Wi-Fi detection technology to collect the highest data sample rates in a non-intrusive and non-personally identifiable manner. [Learn more!](#)

Our Autonomous Future...



As autonomous vehicles (AVs) continue to rise in popularity, government agencies must prepare for their arrival before knowing crucial details about what infrastructure these vehicles will need. In "On the Road to Connectivity," Tim Austin and Slade Engstrom explore practical infrastructure investments that will ease implementation of AVs and with-

stand public demand, budgetary restrictions, and future variability. The full article, which discusses fiber optics and data strategies as potential solutions, can be found here:

<http://www3.apwa.net/Resources/Reporter/Articles/2018/7/On-the-road-to-connectivity>

Note from the Editor: How did we do??

Please provide feedback with your thoughts on the new Pulse!

Did you love it? Did you hate it? We want to know so we can make changes!

Please send comments to the Editor/Communications Director, Zach Hanson:

zhanson@srfconsulting.com

Also, be sure to follow @ITSHearthland on Twitter for updates and great articles!