

# ITS HEARTLAND'S TSMO UNIVERSITY EDUCATIONAL PROGRAM

BY ITS HEARTLAND AND HDR

## INTRODUCTION AND BACKGROUND

In response to a U.S. Department of Transportation (U.S. DOT) request for additional Transportation Systems Management and Operations (TSMO) delivery methods that were innovative and provided greater impact, ITS Heartland created the TSMO University Educational Program to deliver monthly webinars and in-person trainings to broaden the implementation and integration of TSMO among ITS Heartland members. Through SHRP2 funding, ITS Heartland along with their consultant HDR Inc. facilitated two phases of the TSMO University Education Program. The program content is archived for self-paced training on the ITS Heartland website at [www.itsheartland.org/TSMOTraining.html](http://www.itsheartland.org/TSMOTraining.html). PDH certificates were also offered for each webinar to encourage participation and completion in the TSMO University Education Program.

The ITS Heartland TSMO University Education Program increased the TSMO capacity with this innovative training approach in the region of Iowa, Kansas, Missouri, Nebraska, Oklahoma and for ITS Heartland members nationally. ITS Heartland is a strong advocate for better traffic operations and transportation system management through the use of technology, cooperation, communication and education.

**The ITS Heartland TSMO University Education Program was modeled as a means to keep transportation professionals abreast of the latest technologies and trends. ITS Heartland recognized that TSMO was a way for state DOTs and other public and private transportation professionals to do more with less, and get the most operational capacity out of existing infrastructure.**

ITS Heartland also recognized that education of transportation professionals would pave the way for change through top-down and bottom-up supported knowledge transfer at all levels of an agency. Guided by a steering committee of ITS Heartland Board Members, the goal of the TSMO University Education Program was to provide greater penetration of TSMO knowledge for a wider audience of transportation and operations professionals.

## PROGRAM PLAN

Development of phase one of the TSMO University Education Program was completed in early 2017 through a literature search for TSMO resources to

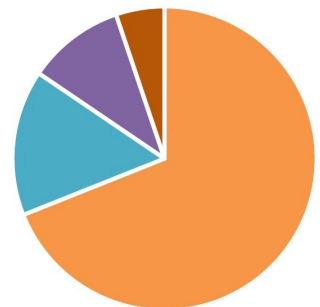
determine topics and speakers that would be suited for ITS Heartland members. From June 2017 to April 2018, eight monthly webinars and two live training sessions were conducted by ITS Heartland via the TSMO University Education Program.

The webinars featured a wide range of topics starting with the basics and working into more complex TSMO subjects. Each of the monthly webinars built upon the information presented in previous webinars, but each was also an opportunity to learn about a specific TSMO topic.



## PHASE 1 DEMOGRAPHICS

- ITS Heartland Public Sector
- FHWA/USDOT
- Non-ITS Heartland Public Sector
- Educators



In early 2018, ITS Heartland entered into phase two of the TSMO University Education Program focused on live trainings at a greater frequency for smaller groups in a specific sub-region (i.e.: a specific state DOT), based on skills a group seeks to develop further (i.e.: performance measures and system monitoring), and toward specific sectors of TSMO professionals (i.e.: operations personnel).

## CASE STUDY: ITS HEARTLAND'S TSMO UNIVERSITY EDUCATIONAL PROGRAM

The phase two TSMO University Education Program provides TSMO principles using subject matter experts based on the desires and needs of TSMO professionals within a specific sector and sub-region.

As part of the phase two TSMO University Education Program, a two-day TSMO Train-the-Trainer session was hosted by ITS Heartland in September 2018 with representatives from all five ITS Heartland state DOTs, MPOs and local consultants. The session focused on how state representatives could deliver TSMO information across all levels of personnel including executives, engineers, operations and maintenance personnel, as well as independent contractors.

The Train-the-Trainer session, as part of the ITS Heartland TSMO University Education Program, included coaching on public presentation skills, adult learning principles and meeting facilitation techniques related to a specific aspect of TSMO. Overall, the comprehensive approach to the TSMO University Education Program increased the knowledge and confidence of participants in being able to discuss and integrate TSMO across all aspects of an agency.

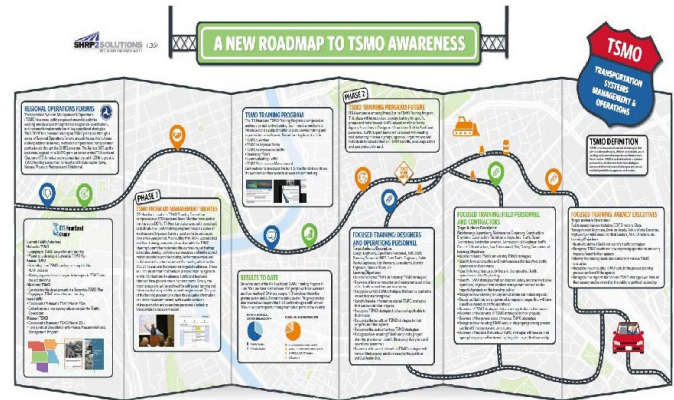


### PROGRAM IMPACT

Beyond the U.S. DOT's Regional Operations Forum on TSMO, ITS Heartland wanted to ensure availability of TSMO education for everyone interested in the TSMO University Education Program. Of the total participants in the program, one third of them were private sector and two thirds were public sector. The program also reached well beyond the ITS Heartland region, with 20 percent of participants coming from other parts of the United States. To date, there have been over 600 webinar and live training attendees as part of the ITS Heartland TSMO University Education Program.

**Small group live training and Train-the-Trainer sessions as part of phase two efforts are paying off with widespread presentations on the benefits of TSMO being made to regional leaders in the ITS Heartland region and beyond. ITS Heartland is also seeing an increase in TSMO advocacy for inclusion in the long-range planning processes of numerous transportation agencies.**

### PROGRAM ROADMAP



### CONCLUSION

The TSMO University Education Program, created and executed by ITS Heartland, has provided an excellent platform for the presentation and exchange of TSMO practices in their region and for national TSMO leaders. The program continuously received positive feedback for the diversity of the educational programs and participation kept growing through the duration of the TSMO University Education Program. Transportation professionals in the region have confirmed that the TSMO University Education Program has led to a greater understanding of TSMO within their agencies, and also directly to the planning and implementation of TSMO related projects.

### FURTHER INFORMATION

NOCoE Knowledge Center: <https://transportationops.org/knowledge-center>  
TSMO Awards: <https://transportationops.org/tsmoaward>