

ARIZONA MILEPOST

LTAP Electronic Newsletter

Arizona Local Technical Assistance Program

Winter 2020 Vol. 1, No 13

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The AZ LTAP mission is to foster a safe, efficient and environmentally sound transportation system by improving skills and knowledge of the transportation provider through training, technical assistance and technology transfer. The AZ LTAP vision is to be recognized as a premier resource in developing and transferring innovative technologies, proven solutions and reliable services to successfully meet the evolving educational and training needs of the transportation community within Arizona. AZ LTAP will actualize its vision and accomplish its mission by paying personal attention to customer needs.

All courses on the AZ LTAP training schedule have been requested by our customers. You may request training to be delivered at your location by completing an on demand request form, please visit: www.azltap.org.

National Work Zone Awareness Week

National Work Zone Awareness Week 2020 National Work Zone Awareness Week 2020 is scheduled for April 20-24. This year's theme is Safe Work Zones for All: Protect workers. Protect road users. It features a poster reminiscent of the World War II poster with Rosie the Riveter. In her place are a male and female roadway worker proclaiming, "We Can Do It!", which is the original language used in the WWII poster.

Michigan chose that image as a reflection of its industrial heritage. Original "Rosies" worked as riveters in an aircraft factory in Ypsilanti, Michigan that built B24 bombers, which is now the site of the American Center for Mobility (ACM).

This year's NWZAW kickoff is hosted by the Michigan Department of Transportation (MDOT) and will be held in Ypsilanti on April 21 at the ACM.

For more information, check out the website below.

•National Work Zone Awareness Week

<http://www.nwzaw.org/>





Dates & Location

August 30-September 2, 2020
New Orleans, Louisiana

About PWX

PWX draws thousands of public works professionals from all over the world. If you're like many, you have limited resources for professional development, so you've chosen APWA's PWX 2020 in New Orleans as your preferred venue for:

- Outstanding education sessions that address current public works issues—as well as sessions that will be presented by your colleagues—who will impart their vital knowledge and experience to you. APWA's education sessions are based on the very latest learning models—classroom, interactive and "live" learning labs.
- The chance to see an extensive gathering of exhibitors and The Expo Experience that will showcase the latest products, services and technologies specific to public works. Special "non-compete" hours allow you to visit the floor—uninterrupted.
- Opportunities to network with your peers, hone your leadership abilities and learn new job skills. APWA offers PWX attendees MANY opportunities to meet and mingle with your peers—the Get Acquainted Party, Awards Ceremony and more! Build lasting professional relationships and make a few lifelong friends at the same time.

Who Should Attend?

- Public Works Directors
- Superintendents and Managers
- Directors and Managers of Operations and Operations Personnel
- City and County Engineers
- Consulting Engineers
- Construction Directors and Managers
- Solid Waste Managers and Coordinators
- Public Fleet Directors and Managers
- Public Facilities and Grounds Directors and Managers
- Water Services Directors and Managers
- Streets/Roads/Bridges Directors and Managers
- Transportation Directors and Managers
- Stormwater and Flood Control Directors and Managers
- Emergency Management Directors and Coordinators
- City Planners
- Sustainability Specialists
- Anyone else whose responsibilities are public works-related

More Information:

https://pwx.apwa.net/PWX/Event_Details/PWX/Event_Details.aspx?hkey=65b9af03-ef6c-45eb-a0ef-0d0e19df57b2

Build a Better Mousetrap Competition

https://www.fhwa.dot.gov/clas/ltap/build_better_mousetrap.aspx



The Build a Better Mousetrap National Competition highlights innovative solutions to everyday problems and issues that local and tribal transportation workers encounter. They can range from the development of tools, equipment modifications, to processes that increase safety, reduce cost, improve efficiency and the quality of transportation.

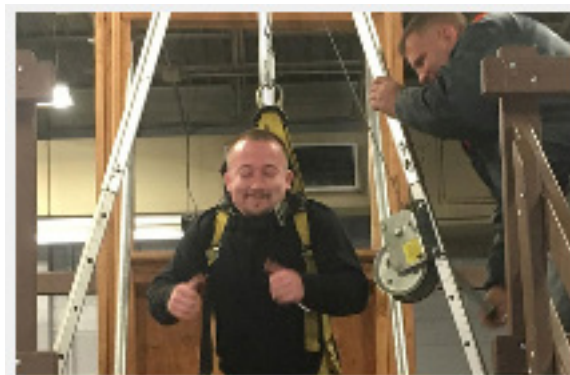
2018 Winners



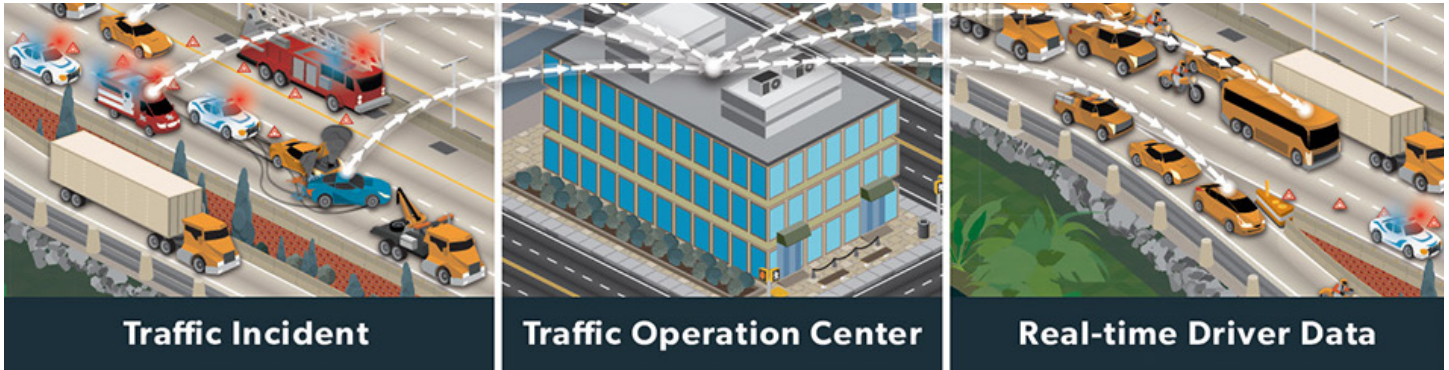
https://www.fhwa.dot.gov/clas/ltap/2018_mousetrap_winner_mobile_app_tracks_potholes.aspx



https://www.fhwa.dot.gov/clas/ltap/2018_mousetrap_winner_old_guardrails_find_new_purpose.aspx



https://www.fhwa.dot.gov/clas/ltap/2018_mousetrap_winner_portable_manholes.aspx



Crowdsourcing for Operations

Crowdsourcing turns transportation system users into real-time sensors on system performance, providing low-cost, high-quality data on traffic operations, roadway conditions, travel patterns, and more.

State and local transportation systems management and operations (TSMO) programs strive to optimize the use of existing roadway facilities through traveler information, incident management, road weather management, arterial management, and other strategies targeting the causes of congestion. TSMO programs require real-time, high-quality, and wide-ranging roadway information. However, gaps in geographic coverage, lags in information timeliness, life-cycle costs for field equipment, and jurisdictional stovepipes associated with fixed sensor and camera monitoring can limit agencies' ability to proactively operate the system.

Public agencies at the Federal, State, and local levels are increasing both their situational awareness and the quality and quantity of operations data using crowdsourcing, which enables agency staff to cost-effectively apply proactive strategies and make better decisions that lead to safer and more reliable travel.

Real-Time, Low-Cost, Valuable Data

Three common mechanisms for crowdsourcing include data extracted from social media platforms, data acquired from third-party crowdsource providers, and data collected from specially developed mobile apps. These data can be passively or actively transmitted and may be quantitative or qualitative in nature. Included is information related to speed, travel time, incident type (e.g., crash, stalled vehicle, or debris on roadway), travel behavior (where, when, or how people travel), public sentiment (how people feel about travel, the road, or the transportation agency), vehicular operation (e.g., heavy braking or wiper status), and more (e.g., mobile smart cones at work zones). Some data are free with little to no cost to process, while other data can be purchased at a more effective cost point than that of traditional traffic monitoring equipment (e.g., roadway sensors and cameras).

Because crowdsourced data are obtained whenever and wherever people travel, agencies can capture in real time what happens between sensors, in rural regions, along arterials, and beyond jurisdictional boundaries. Crowdsourced data can often be accessed by traffic management centers (TMC) with minimal or no time lags, and it does not suffer from local sensor or system outages. Complementing crowdsourced data with tools for data integration enables TMC operators to more quickly focus on proactively managing emerging events, rather than reacting to them after congestion forms.

Benefits

Crowdsourcing benefits transportation operations by enabling quicker monitoring and assessment of system performance, a more targeted and proactive response, and programmatic operational improvements. Crowdsourcing can also be used to promote acceptance of public decisions, improve transparency and efficiency of public expenditures, and foster traveler satisfaction with transportation services. Key outcomes from the application of crowdsourcing for operations include:

Improved Operations. Crowdsourcing enables agency staff to provide better traveler information and more proactive and effective operations strategies that can lead to reduced traffic congestion.

Increased Safety and Reliability. Crowdsourcing allows agency staff to identify problems more quickly and confidently, leading to faster and more accurate responses to traffic incidents and other congestion-causing events, which in turn reduces the likelihood of secondary crashes and improves travel reliability.

Cost Savings. Crowdsourcing is cost-effective and could reduce the need for additional roadway sensors and equipment that require installation and maintenance. In addition, crowdsourcing allows agencies to leverage and more effectively use their existing intelligent transportation systems infrastructure.

State of the Practice

Most State departments of transportation (DOTs) and many local agencies are using crowdsourcing to improve one or more TSMO applications. Some integrate crowdsourced data from multiple sources with data from traditional sources to proactively monitor and manage operations. Following are examples of State and local agency crowdsourcing applications:

Utah DOT launched the Citizen Reporter Program in 2013, which enlists volunteers to report on current road weather conditions along specific roadway segments. The UDOT Citizen Reporting app is freely available on iOS® and Android™ devices and requires a brief training program for users. It provides an efficient means for the public to report changing road weather conditions to UDOT, especially in rural areas.

Indiana DOT uses third-party probe data to actively manage traffic on major highways and corridors of interest. The agency worked with Purdue University to create Traffic Ticker, a tool that identifies locations that may need real-time attention. It also supports training and after-action reviews.

The Kentucky Transportation Cabinet integrates data from two crowdsourcing providers, a third-party probe, and a mobile app to create email alerts for use by traffic operations center staff. Agency staff share this data to improve road maintenance.

The Delaware DOT mobile app makes available multiple functions for users, from reporting traffic or roadway issues to accessing traveler information and live traffic camera video, Department of Motor Vehicles wait times, bus information, and Waze (a community-based traffic and navigation app) reports.

Florida DOT is using crowdsourced data in combination with computer-aided dispatch to improve the response for crashes and road closures.

The city of Louisville, KY, uses archived crowdsourced data from apps, including Waze, to assess the effects of signal retiming. This has eliminated the cost and time-consuming effort of travel-time runs. Now, with the click of a few buttons, staff can determine with greater resolution whether the retiming was effective.

The city of Austin, TX, used to retime traffic signals on a rotating schedule every 3 years, given its very limited monitoring infrastructure. After procuring crowdsourced data from a third-party vendor, staff now use a performance-based approach to prioritize corridors by operational need.

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Resources

[Crowdsourcing Applications](#)

[Factsheet](#)

[Frequently Asked Questions](#)

[EDC-5 Orientation Webinar](#)

[Innovation Spotlight: Crowdsourcing for Operations Video \(2:48\)](#)





AZLTAP NOW ACCEPTS VISA, MASTERCARD, AMERICAN EXPRESS AND DISCOVER FOR PAYMENTS. PLEASE CALL 602-712-4050 FOR MORE INFORMATION.

TCH3046	Certified Payroll Workshop	3/19/2020	Phoenix
LTP0012	BWTC/ Flagger	3/31/2020	Tucson
TCH3046	Certified Payroll Workshop	4/16/2020	Phoenix
GEN5004	CPR/AED/First Aid	4/21/2020	Phoenix
LTP0117	Safety in the Workplace	4/21/2020	Tucson
GEN5004	CPR/AED/First Aid	4/22/2020	Phoenix
TCH3046	Certified Payroll Workshop	5/14/2020	Phoenix
LTP0012	BWTC/ Flagger	6/11/2020	Tucson
TCH3046	Certified Payroll Workshop	6/11/2020	Phoenix
TCH3046	Certified Payroll Workshop	7/9/2020	Phoenix
TCH3046	Certified Payroll Workshop	8/13/2020	Phoenix
TCH3046	Certified Payroll Workshop	9/10/2020	Phoenix
TCH3046	Certified Payroll Workshop	10/8/2020	Phoenix
TCH3046	Certified Payroll Workshop	11/12/2020	Phoenix
TCH3046	Certified Payroll Workshop	12/10/2020	Phoenix
LTP0012	BWTC/ Flagger	12/31/2020	City of Maricopa



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Tapping In!

(email request to ttraining@azdot.gov Please include Name, Agency, Location, Email Address)