



# Adventures in Crowdsourcing Webinar Series: Data Management & Governance

Tuesday, January 28, 2020  
FHWA Every Day Counts Round 5 -  
Crowdsourcing for Operations Program

# Today's Agenda



## Welcome and Introductions

James Colyar, EDC-5 Crowdsourcing for Operations Program Co-Lead, FHWA Office of Operations,



## Managing Waze and Free Tools for Traffic Analytics

Michael Schnuerle, Chief Data Officer, Office of Civic Innovation and Technology, Louisville, KY



## Maryland DOT Data Initiatives for Better Outcomes

Subrat Mahapatra, Deputy Director, TSMO & CATS Office of CHART & ITS Development, Maryland DOT



## Industry Trends in Data Management and Governance

Benjamin Pecheux, Director of Information Research, AEM Corporation

## FHWA EDC-5 Crowdsourcing Innovation Goal

To increase the number of agencies that use crowdsourcing to better operate the transportation system through new, cost-effective, and proactive operational strategies and applications.

### **Crowdsourcing for Operations**

*Crowdsourced data allows agencies to more effectively operate the transportation system.*



Source: FHWA

30+ States are pursuing Crowdsourcing for Operations.

# Why Crowdsourcing?

## When integrated with an agency's existing efforts, crowdsourcing helps agencies:

- Expand geographic coverage and resolution.
- Reduce information time lags for improved real-time situational awareness.
- Reduce dependence on and cost associated with roadside sensors and systems.
- Overcome jurisdictional stovepipes.
- Implement proactive operations strategies.

**Crowdsourcing is a proven lower-cost solution to improving safety and operations.**

# Types of Crowdsourced Data

- **Probe** – Speed and travel time.
- **Event** – Crashes, stalled vehicles, potholes, snow, rain, etc.
- **Travel Behavior** – Where, when, how (mode used) people travel.
- **Social media** – Capture sentiment on road and agency performance.
- **Vehicular** – Heavy braking, wiper on/off, temperature, and more from connected vehicles.
- **Mobile Infrastructure / Internet of Things** – For example, work zone cones sharing location, surrounding speed.



Source: Pixabay



# Operations Application Area Highlights

- Most common applications of Crowdsourced data are for traveler information and incident management.
- Agencies are now expanding its use across application areas such as maintenance, road weather and work zone management.



Traffic Signal Management



Incident Management



Traveler Information



Work Zone Management

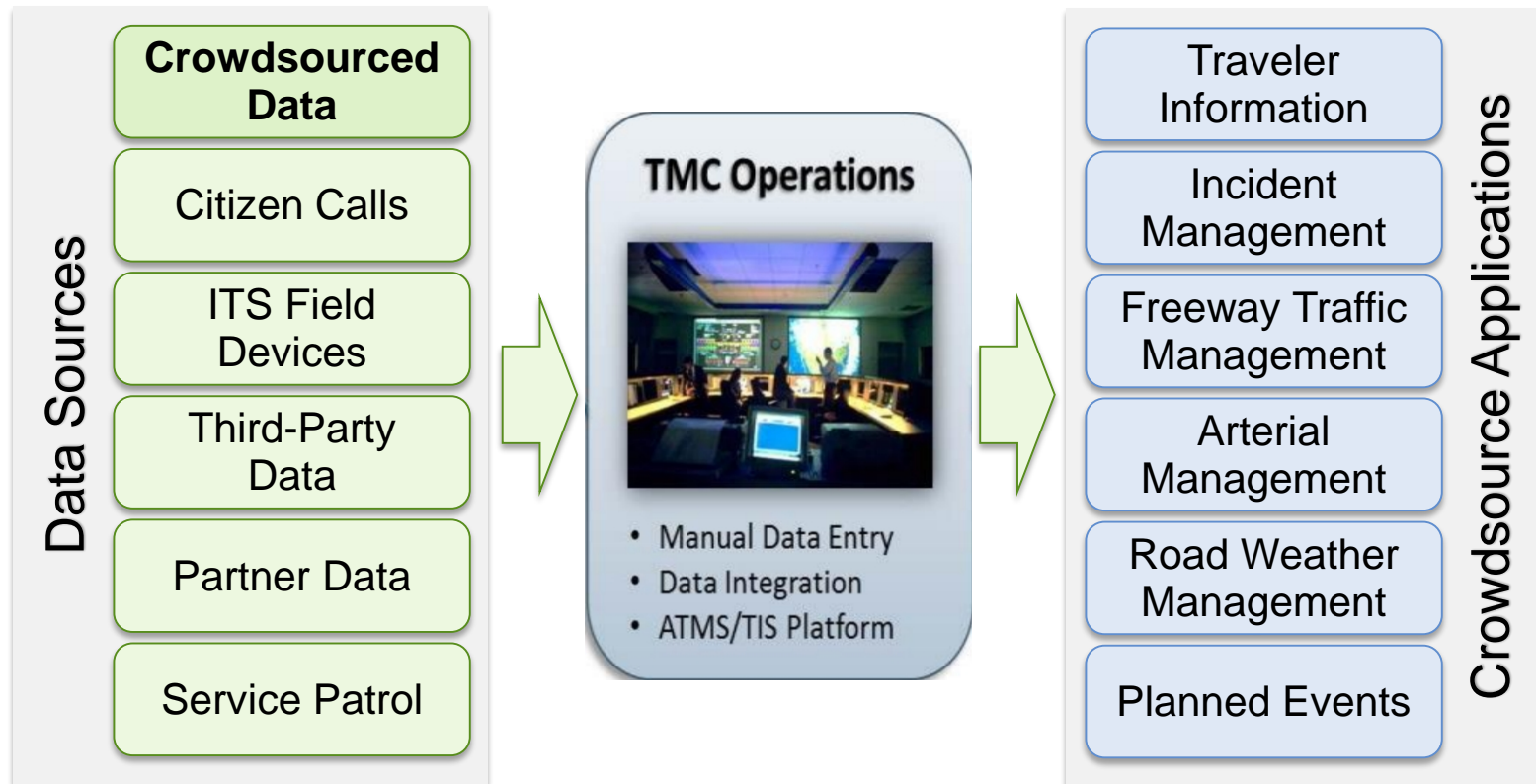


Road Weather Management



Maintenance Management

# Existing and Potential Crowdsourcing Applications in Transportation



Other possible applications include freight management, work zone management, and performance assessment and reporting.

# Initiative Resources

- **Webinar series: Adventures in Crowdsourcing**
  - Traffic Signal Management and Planning.
  - Crowdsourced Data for Back of Queue Applications.
  - Crowdsourced Social Media Data.
- **Workshops (see downloadable workshop flier)**
  - Information on applications and readiness activities.
  - Available to State and regional agencies and customizable.
- **Peer exchanges (targeted for March/April)**
  - Making the Most of Real-Time Vehicle Probe Data.
  - Making the Most of Free Crowdsourced Data.
- **On-site technical assistance**
  - To help bridge technical, policy, or process gaps in State or local implementation of crowdsourced data.



# EDC-5 Deployment Funding Opportunities & News

## State Transportation Innovation Councils (STIC) Incentive Program

- ✓ Up to \$100,000 per STIC per year to standardize an innovation
- ✓ <https://www.fhwa.dot.gov/innovation/stic/>

## Accelerated Innovation Deployment (AID) Demonstration Program

- ✓ Up to \$1 million available per year to deploy an innovation not routinely used
- ✓ <https://www.fhwa.dot.gov/innovation/grants/>

# Contacts

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For more information on the EDC Program

[www.fhwa.dot.gov/innovation/everydaycounts/](http://www.fhwa.dot.gov/innovation/everydaycounts/)

Email: <https://www.fhwa.dot.gov/innovation/>



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