Adventures in Crowdsourcing Webinar Series: Data Management & Governance

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

Source: Pixabay, Unsplash and FHWA
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.

---

30+ States are pursuing Crowdsourcing for Operations.

Source: FHWA
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.

Source: Unsplash, FHWA, and Pixabay
Existing and Potential Crowdsourcing Applications in Transportation

Data Sources
- Crowdsourced Data
- Citizen Calls
- ITS Field Devices
- Third-Party Data
- Partner Data
- Service Patrol

Crowdsourcing Applications
- Traveler Information
- Incident Management
- Freeway Traffic Management
- Arterial Management
- Road Weather Management
- Planned Events

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

- **Webinar series: Adventures in Crowdsourcing**
  - 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/](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/](https://www.fhwa.dot.gov/innovation/grants/)
Contacts

James Colyar  
James.Colyar@dot.gov  
(360) 753-9408

Paul Jodoin  
Paul.Jodoin@dot.gov  
(202) 366-5465

For more information on the EDC Program

www fhwa dot gov innovation everydaycounts/

Email: https://www fhwa dot gov innovation/

to subscribe to weekly and bimonthly newsletters