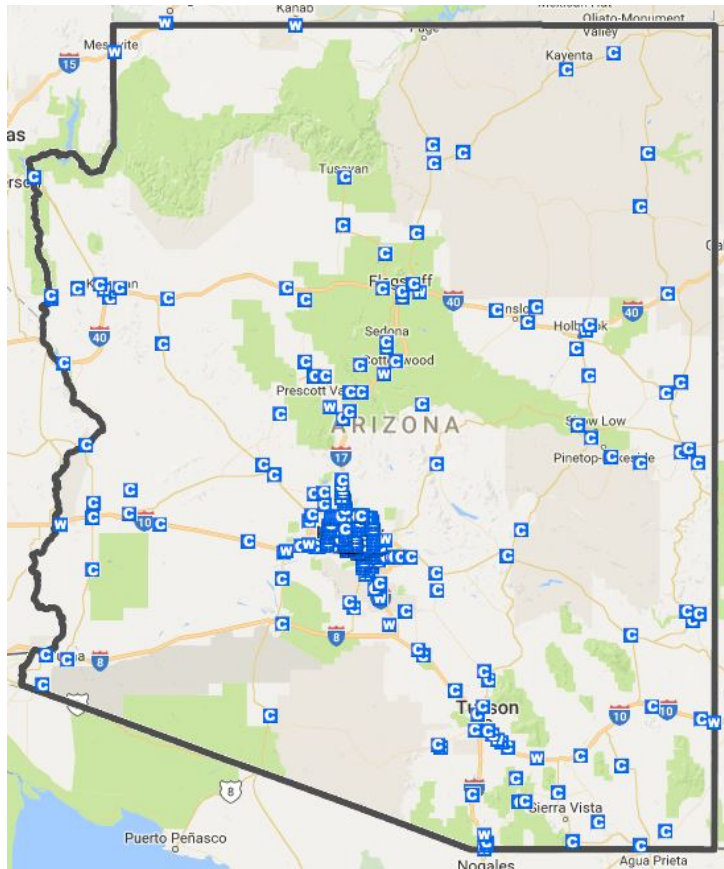# Session 1: Data

Integrating data; legal, institutional issues; probe data use; crowdsourcing data

- What data sources are you integrating?

- What type of data sharing agreements do you have

- Do you use probe data? If so, how are you using probe data for operations? Are you using the probe data in real time?

- Have you been able to crowdsource data for operations activities? If yes, describe the operations activities.

- What type of legal and institutional issues have you been challenged with and how have you overcome them?
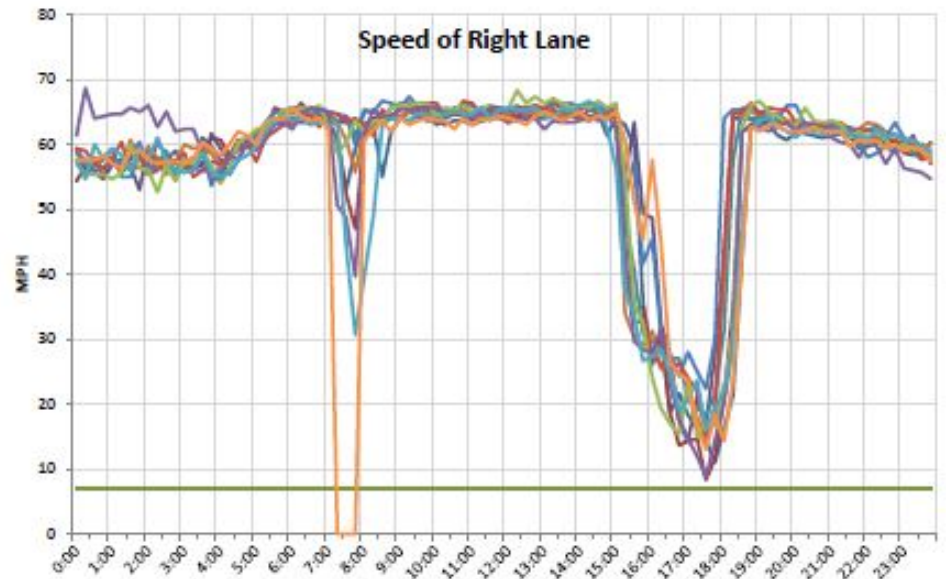
Data - Existing

- ADOT data sources are traditional infrastructure
  - Travel time: In-pavement loops in metro Phoenix only
  - Volume: Statewide count stations and annual collection program (mainline volumes only)
  - Safety: Police crash reports
  - Pavement: Annual visual inspection
- Many sources from different Divisions and Departments
  - Need common integration – AZTAMS (MAP-21)
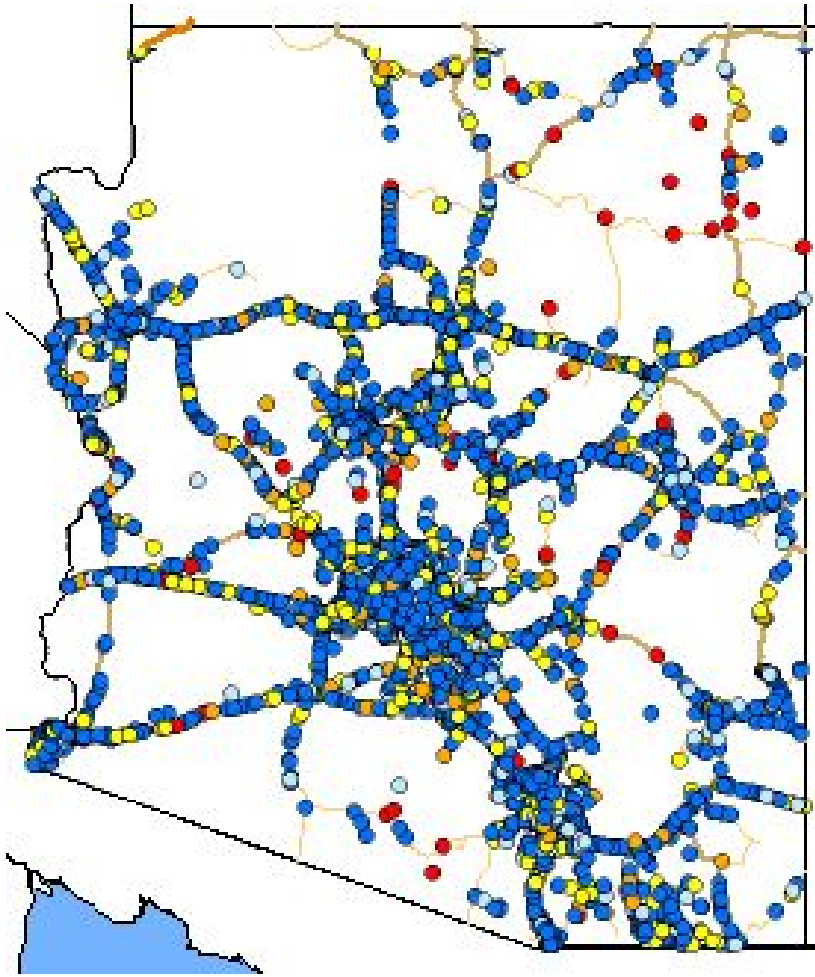 - GIS-based platform exists

Data - Existing

- 300 permanent loops
- Individual lane analysis for ramp metering
- Volumes and speed data all public/online

Data - Existing

AZ-TAMS serves as a planning tool for performance measures.

Common GIS platform for:
- Bridge Ratings
- Pavement Condition
- Crash Data
- Traffic Volumes

National Operations Center of Excellence

Data - Regional

- AZ Tech is regional partnership formed 20 years ago around ITS deployment.
  - Federally sponsored Model Deployment Initiative
- Data sharing with "Center-to-Center" information in real-time.
  - Regional Archive Data System (RADS) is a data repository system housed at ADOT TOC
  - Data is non-proprietary and interoperable.
  - Data processing provides travel time data to DMS
  - Arterial signal timing data is shared across jurisdictions.

Data – Probe

- Probe data offers great benefit to travel time and safety operations
  - Inexpensive and nonintrusive data in rural areas
  - Track real-time travel time and speeds
  - Identify queues associated with incidents (assist with secondary crashes, rerouting)
- ADOT is developing RFP to solicit vendor(s) for on-call data sources
- Currently have historical data through FHWA agreement with HERE

Data - Probe