

# HIGHWAY PERFORMANCE MONITORING DATA COLLECTION COORDINATION

Streets Committee

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# HPMS Overview

- HPMS is a transportation database developed by the FHWA and maintained by State Highway Agencies nationwide
- It has a Geographical Information System framework
- The database houses:
  - Route and performance information, such as length, number of lanes, federal functional classification, AADT, IRI, etc.
  - Estimated total public mileage by different geographies
  - Boundaries for urbanized area and other geographies



# HPMS Requirements

- Maintenance of HPMS is considered to be critical to the functioning of the FHWA as it:
  - Is the basis of FHWA's reports to the Congress on the Condition and Performance of the Nation's Highways
  - Is the basis of Highway Statistic – a long standing statistical series on transportation characteristics
  - Under previous transportation authorizations was the basis of funding allocations



# HPMS Key Data Items: AADT

- ADOT is required to provide Average Annual Daily Traffic on following cycle:
  - Principal Arterials – every three years
  - Minor Arterial and Major Collector – every six years
- Data Sources:
  - ADOT counts State Highways
  - MAG provides counts it collects for its models
  - Agency counts are obtained through the MAG website
- **Problem:**
  - **Insufficient AADT data to meet Federal requirements**



# HPMS Key Data Items: IRI

- ADOT is required to collect International Roughness Index information on a two-year cycle for roadways that are federally classified as Principal Arterial.
- Data Sources:
  - ADOT collects IRI data on the State Highway System
  - MCDOT provides IRI data on County owned facilities
  - Phoenix provides IRI data on Phoenix owned facilities
- **Problem:**
  - **IRI data collection requires special equipment and only ADOT, MCDOT and Phoenix currently have this equipment**

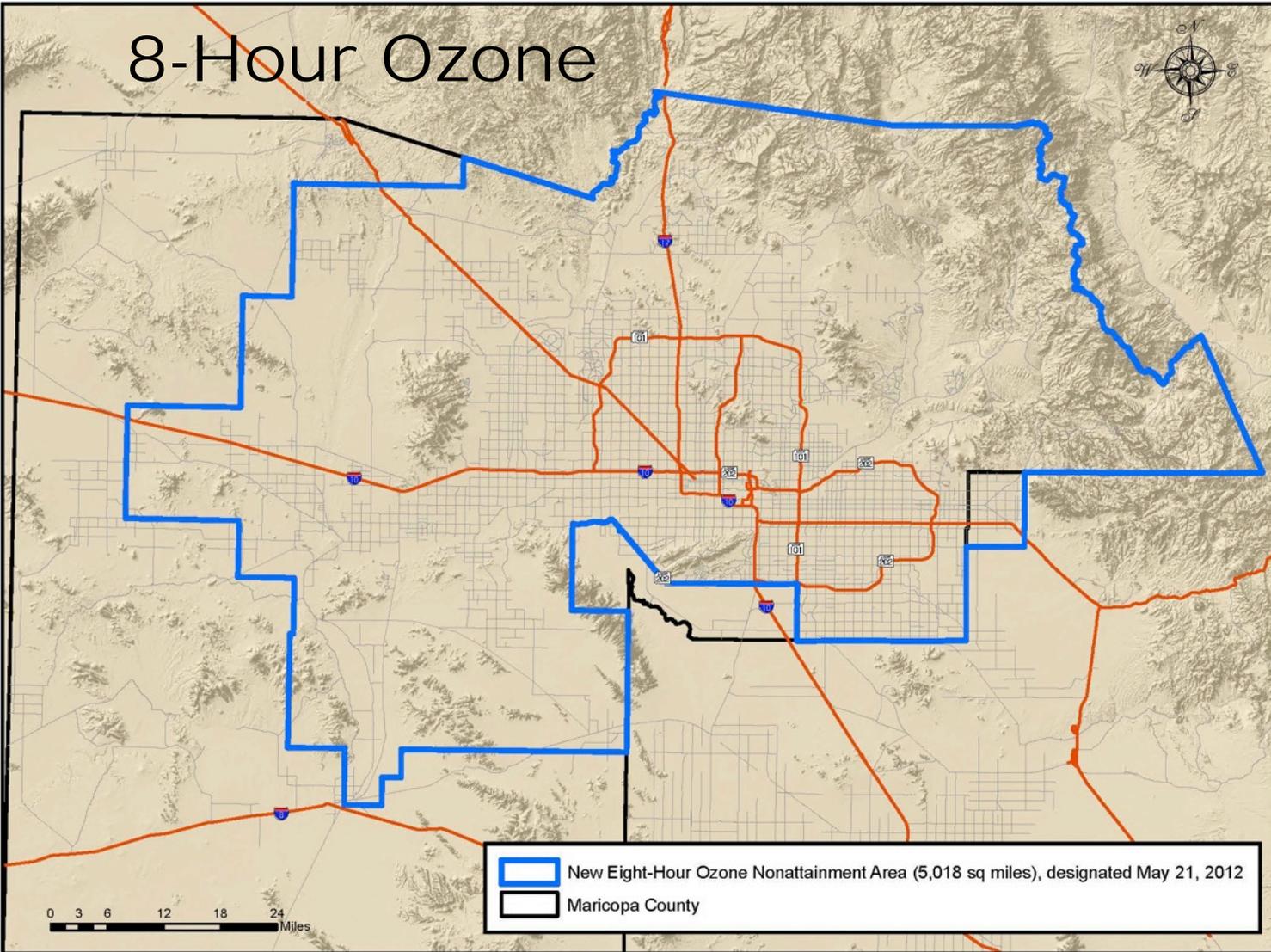


# HPMS Key Data Items: Public Mileage

- By June of each year, ADOT is required to submit a public mileage report for the previous calendar year
- The report is to be broken down by:
  - agency ownership
  - urban/rural location
  - 8-hour Ozone Nonattainment Area
- It is anticipated that member agencies will be requested to update total mileage tables on file and that thereafter these totals will need to be refined to match the needed geographies.



# 8-Hour Ozone



# 8-Hr Ozone



# HPMS Key Data Items: Other

- ADOT is required to report the following:
  - Roadway ownership
  - Roadway maintainer
  - Roadway length
  - Roadway number of through lane
- At the end of the week MAG will send out a listing of HPMS segment data and ask that member agencies update and return the data to MAG.