West Oakland Mobile Source Data Collection Pilot Project

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California Air Resources Board
WOAK Steering Committee Meeting
October 3rd 2018

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Overview

- Objectives

- Methodology

- Proposed locations for data collection
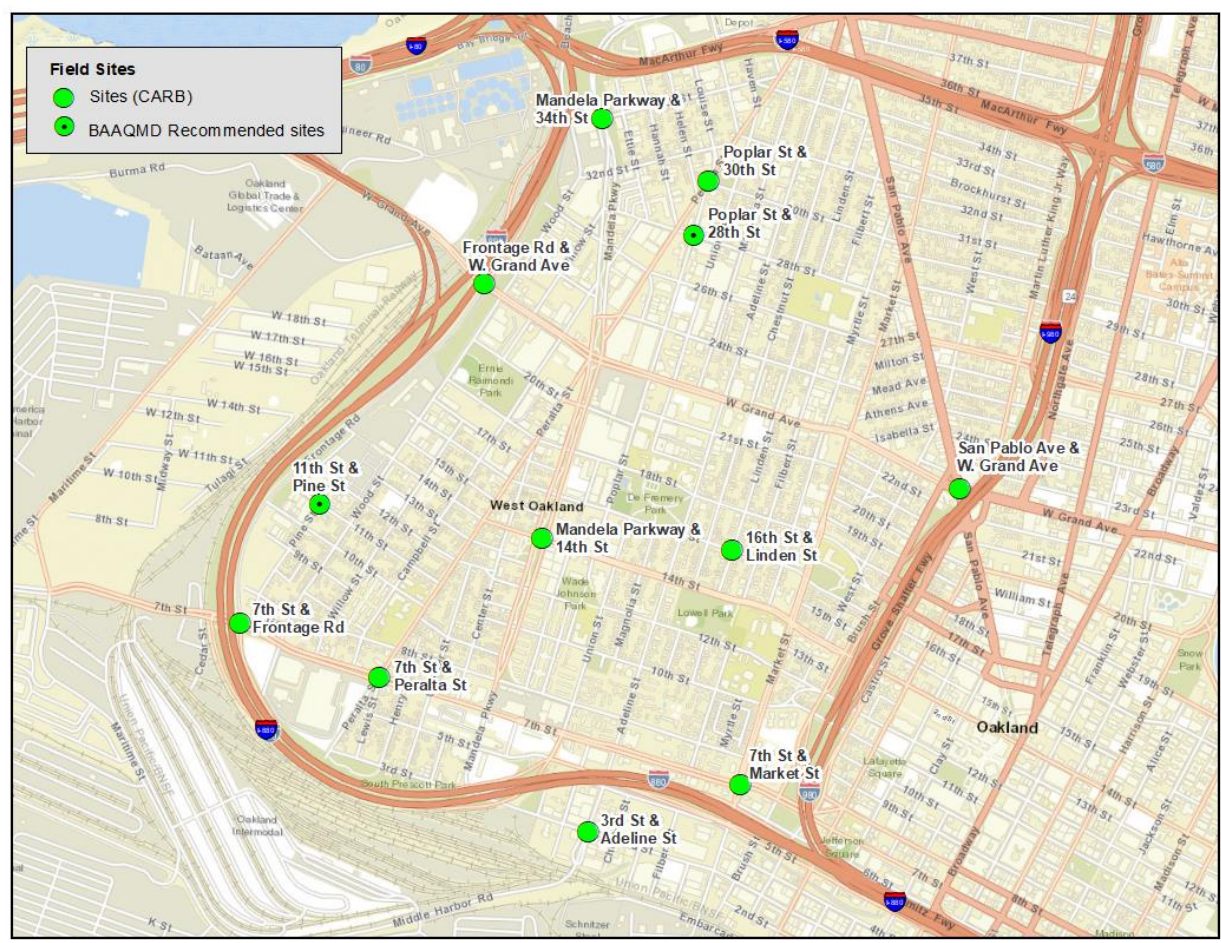
- Logistics

- Data analysis

- Timeline

Objectives

❖ To improve current model-based estimates of car and heavy truck pollutant emissions (e.g. diesel particulate matter) in communities

  ✓ CARB's mobile source inventory is currently geared towards the county scale, but limited for community-level applications

  ✓ Important for tracking baseline emissions and future emissions reductions in communities as required by AB617

  ✓ "Ground truth" model emissions estimates by collecting data on vehicles operating within communities

❖ Pilot program will start in the Community of West Oakland

❖ Upon successful implementation of this project, it will be implemented for other AB617 communities

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Methodology

- Collect footage with digital cameras in the community

- Transcribe (i.e., digitize) license plates from footage with a computer software

- Link license plate data to key vehicle features using vehicle registration databases

Proposed Locations for Data Collection

Logistics

- Conduct 2 weeks of video footage collection

- 3 teams collecting footage at a time from 8:00 am to 5:00 pm

- 24 hours of video footage per location

- Multiple cameras per intersection to capture multiple directions of traffic

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Data Analysis

- License plate data from the camera footage will be used to estimate:
  - ✓ Total traffic counts
  - ✓ Number of cars and trucks
  - ✓ Number of port and non-port trucks
  - ✓ Number of out-of-state trucks
  - ✓ Vehicle weight
  - ✓ Vehicle age distribution

- Validate community-level emissions estimates

- Share aggregated results with community-based organizations, community members, air districts, and other interested stakeholders

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Timeline

- Input from community members, community-based groups, and BAAQMD

- Scope out data collection locations: early October

- Data collection campaign: mid-to-late October

- Data Analysis: late October/November

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Thank you!