West Oakland Mobile Source Data Collection Pilot Project

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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
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
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
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
Thank you!