

# Update on Other CARE Activities



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CARE Task Force Meeting

November 18, 2008

# Overview

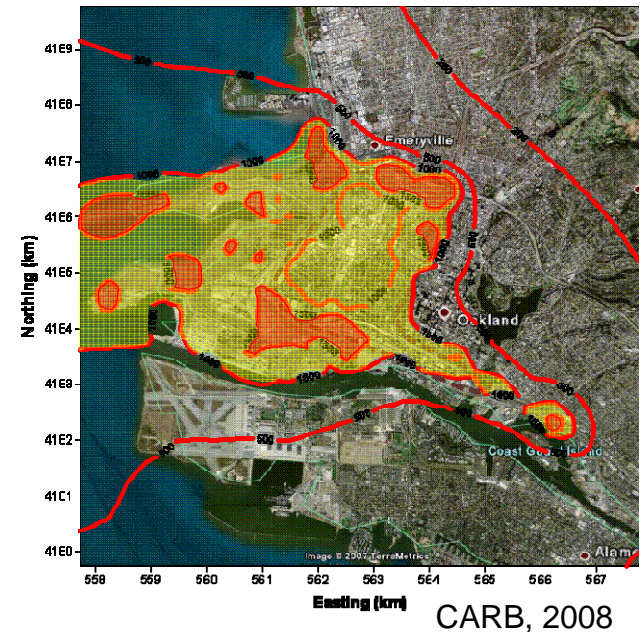
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- West Oakland Studies Update
  - Truck Traffic Survey
  - Measurement Study

# Key Findings, Uncertainties from the West Oakland Health Risk Assessment

- Diesel PM concentrations in West Oakland are almost three times the estimated background diesel PM concentrations in the Bay Area
- On-road heavy-duty trucks result in the largest contribution to the overall air-related health risk
- There is significant uncertainty in the number of trucks on local streets and the proportion of trucks associated with Port activity
- More detailed truck traffic information is needed

Potential Cancer Risk in West Oakland from All Sources



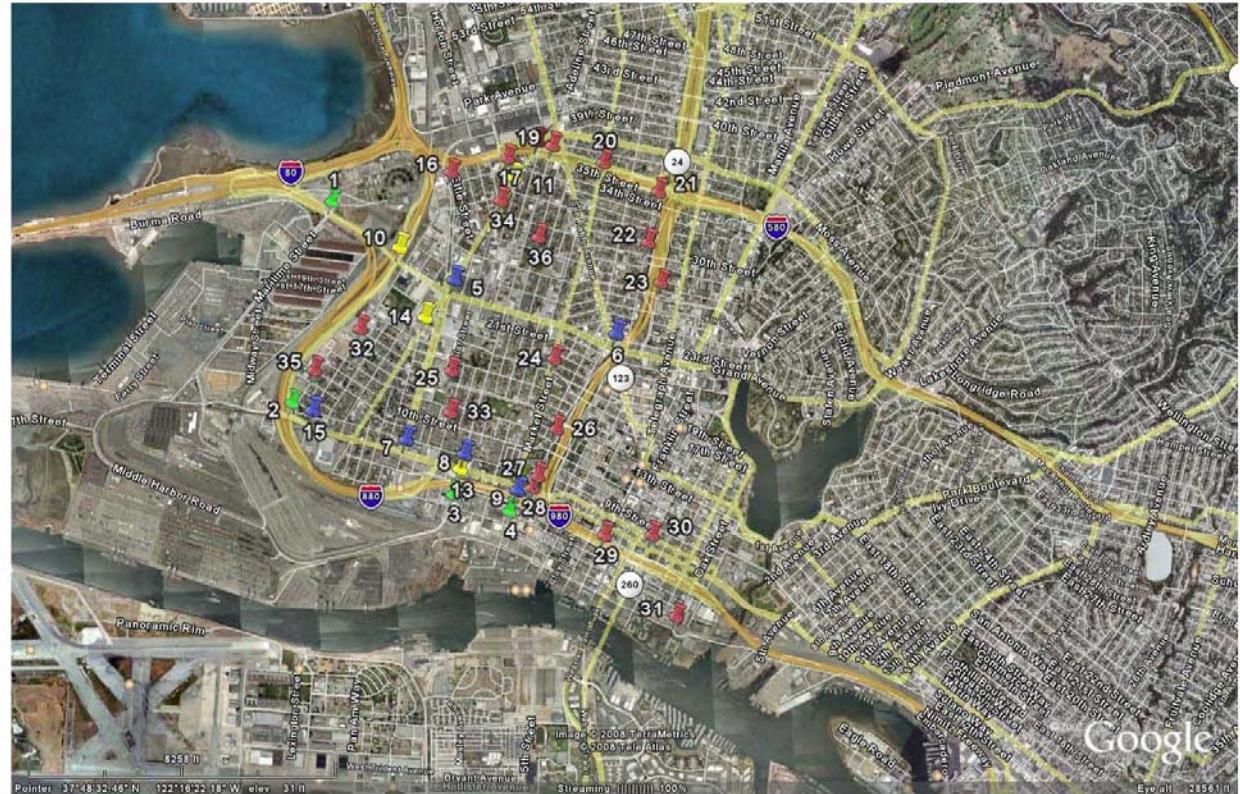
# West Oakland Truck Traffic Survey

- District collaboration with community
- West Oakland Environmental Indicators staff, community surveyors, Air District staff, and Sonoma Technologies, Inc., counted trucks at over 30 locations for two weeks: Aug. 18<sup>th</sup> – 29<sup>th</sup>
- Surveyors recorded
  - Number of trucks
  - Truck movements
  - Truck types (axles, Port vs. non-Port)
  - License numbers
- Automatic counters were deployed at high to medium traffic locations



# Truck Traffic Survey Locations

- **Green** – 4 locations representing Port entrances surveyed for 3 days
- **Blue** – 6 locations representing major intersections surveyed for 2 days
- **Yellow** – 5 locations representing I-880 ramps surveyed for 1 day
- **Red** – 21 locations at entrance points to West Oakland and non-truck routes surveyed for ½ day



# Truck Traffic in the West Oakland Community

West Oakland Weekday Truck Traffic  
Number of trucks on various routes, 7am-6pm



# Preliminary Statistics

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- On average, over 8,000 trucks per day travel into West Oakland
- Almost 4,000 trucks per day are associated with Port activity
- Manual counts provided truck movements from 7:00 am to 6:00 pm
- Truck activity highly variable by day and by hour

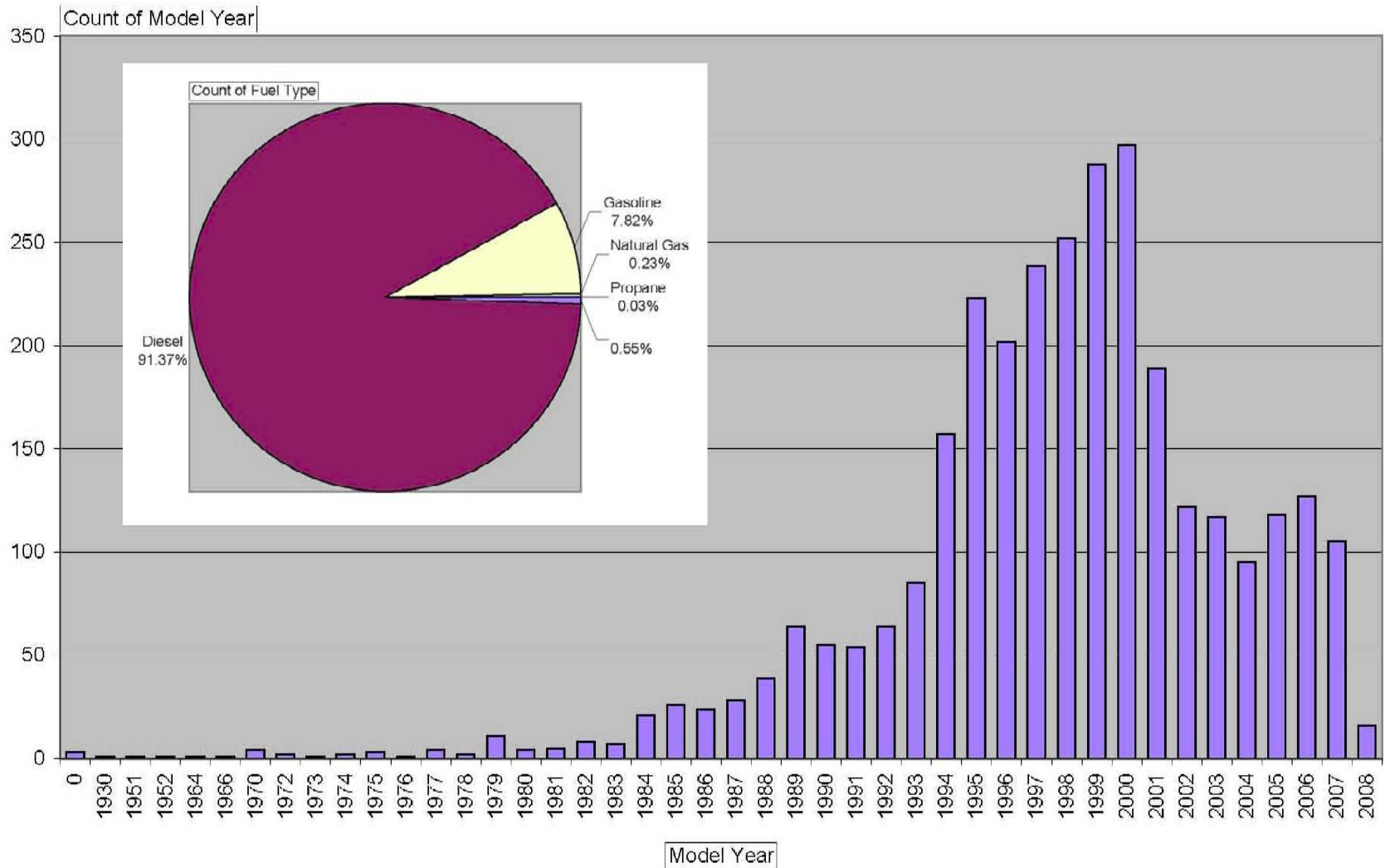
# License Plate Data

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- Collected 7,324 license plates
- 4,824 unique license plates
- 3,069 were matched to DMV records
  - 1,861 are registered in the Bay Area
  - 1,208 are registered outside of the Bay Area



# License Plate Data



# West Oakland Measurement Study

- Study goals:
  - Determine spatial variations of toxic air contaminants in West Oakland
  - Examine day-of-week variations
  - Estimate source contributions of diesel PM to ambient PM levels
  - Compare measurements to model-based health risk analysis
- Contract with Desert Research Institute
- Air District funding 2008/2009 winter measurements
- Additional seasons depend on EPA funding
- Next step: Design/test sampling van; prepare field study plan



AirMetric Minivol Aerosol Sampler: particle collection for speciation and analysis



Radiello passive samplers for VOC, aldehydes and H<sub>2</sub>S (size of a roll of pennies)

# Mobile Sampling Van

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- Purpose/Goals
  - Assist with data collection in West Oakland study
  - Collect local-scale air quality samples in other communities
  - Assess air quality between regional monitoring stations
- Nitric oxide, ozone, VOC, particle sampling
- The Air District purchased a mobile sampling van and the monitoring equipment
- Next steps:
  - Install racks/equipment
  - Develop field survey plan
  - Conduct measurements



# Additional Monitoring Sites

- Community concerns about metals around a recycling facility in West Oakland
- Add additional sites near the facility during measurement study
- Year-long sampling beyond measurement study
- Next steps

