Community-Academic Engagement through Community Monitoring: Neighborhood Assessment Teams ("A" Teams)

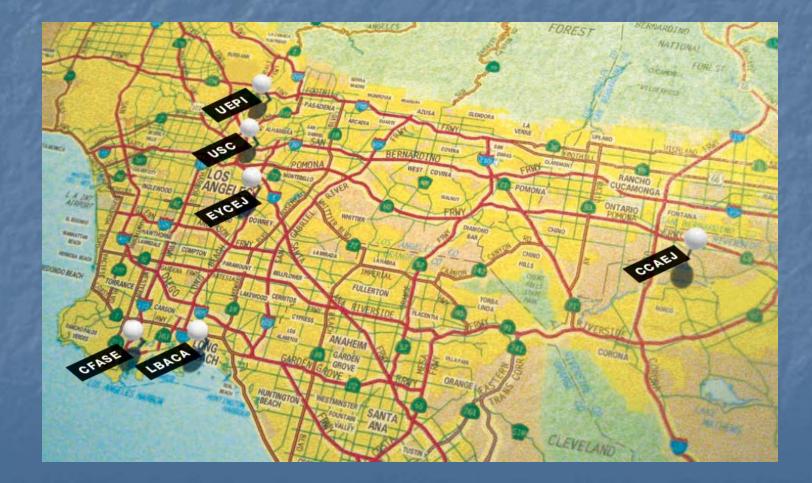
Jessica Tovar, Long Beach Alliance for Children with Asthma

Andrea Hricko and Carla Truax Community Outreach and Engagement Program Southern California Environmental Health Sciences Center University of Southern California

Asthma Coalition of Los Angeles County meeting January 27, 2014

Environmental Health Centers based at University of Southern California Southern California Environmental Health **Sciences Center** www.usc.edu/medicine/scehsc USC and UCLA scientists Funded by NIEHS Community Outreach and Engagement Core Children's Environmental Health Center

The Trade, Health, and Environment Impact Project



Terminal Island Freeway – trucks heading to Union Pacific rail yard

HINA SHIPPING

Existing Union Pacific rail yard on POLA land

Hudson School







LBACA

<u>http://lbaca.org/</u>
Community coalition
partnership to improve the lives of children with asthma in the greater Long Beach

Who are the A-Team members?



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Q,

MAKING THE CASE FOR CHANGE



vimeo

Me

A-Team trainings

Air pollution 101 training
 Air pollutants

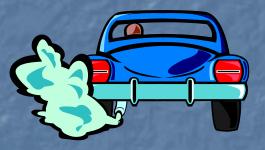
Where Does Air Pollution Come From? + What Kinds of Health Effects Does It Cause?





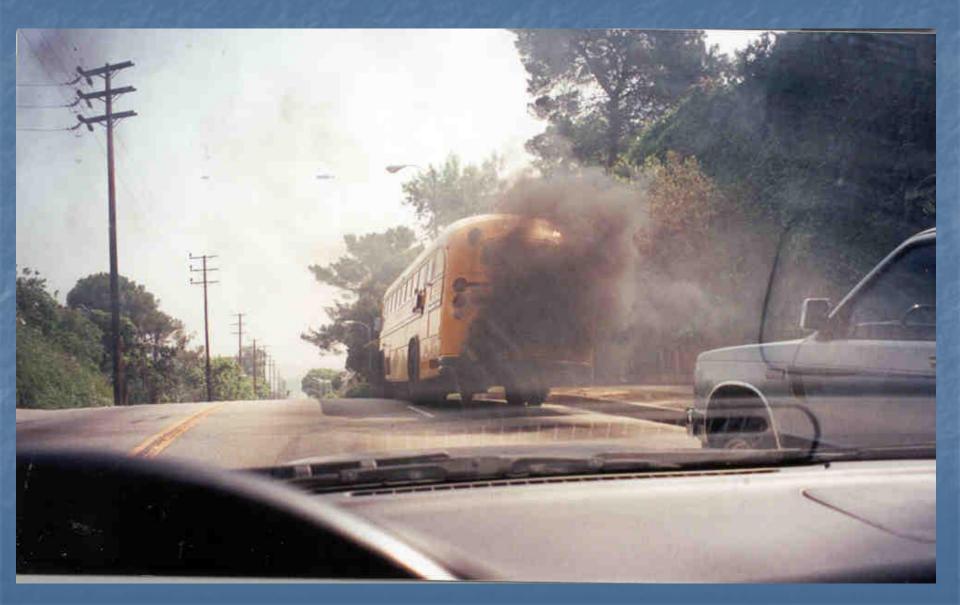
Important Air Pollutants

 \Box Ozone (O₃) Particulate Matter (PM) Carbon Monoxide (CO)Nitrogen Dioxide (NO_2) Sulfur Dioxide (SO₂)





Particulate matter



USC Children's Health Study

Children are more vulnerable to air pollution
 In the more polluted communities, children have:

More doctors' visits
More missed school days
Reduced lung growth and function
Makes asthma worse
More new cases of asthma near freeways



Monitoring and traffic counting



P-Trak

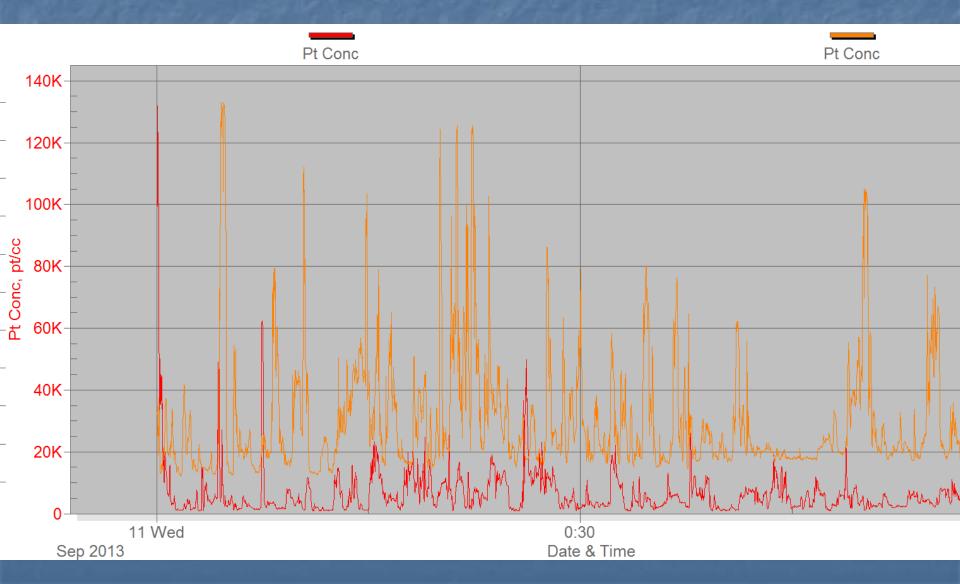
P-Trak measures ultrafine particles
 Ultrafine particles are a good marker for traffic exhaust

 Measures number of particles per cubic centimeter

Many factors can affect readings, including wind direction and speed



Comparison of particle levels Pacific Palisades and Commerce



USC kit

A-Team field protocol Log sheet Presentation template P-Trak instructions Instructions for downloading and saving data (English and Spanish)

A-Team Manual Instruction manual and case studies English and Spanish Download at: http://hydra.usc.edu/scehsc/web/



Neighborhood Assessment Teams Case studies from Southern California and instructions on community investigations of traffic-related air pollution

How have these methods been used?



Moving Forward Network

Moving Forward conferences
 Sharing tools around the country



http://themovingforwardnetwork.blogspot.com/

Questions and discussion

Are any other groups doing communitybased monitoring?
Questions or opinions on the instruction manual?

Thank you

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<u>www.usc.edu/medicine/scehsc</u> <u>http://hydra.usc.edu/scehsc/web/</u> <u>http://lbaca.org/</u>