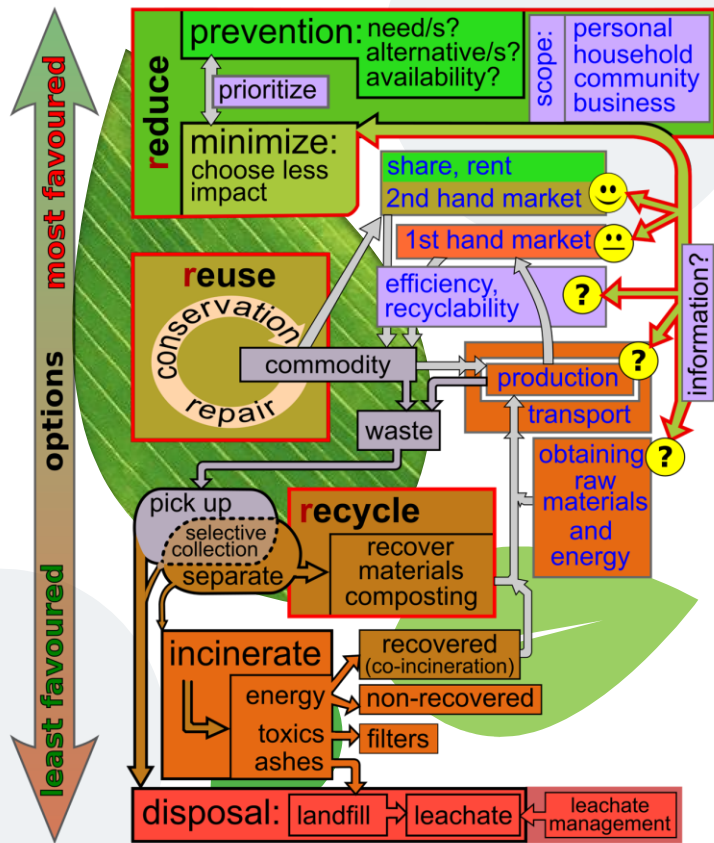


West Oakland Environmental Indicators Project



Ms. Margaret Gordon
Brian Beveridge






Our Mission

- Increase environmental justice, public health, air quality and land-use awareness
- Encourage environmental justice education and solutions to problems facing West Oakland residents who bear the brunt of disproportionate exposure
- Provide motivational leadership development to West Oakland residents
- Inform the neighborhood of advocacy tools, help set priorities, foster political education, and make research and data available



History of West Oakland

- Heavy industrial pollution from port and associated activities
 - Cypress Freeway divided neighborhood
 - Lack of grocery store for decades
 - Neighborhood starved of resources
 - Chronic unemployment
- 

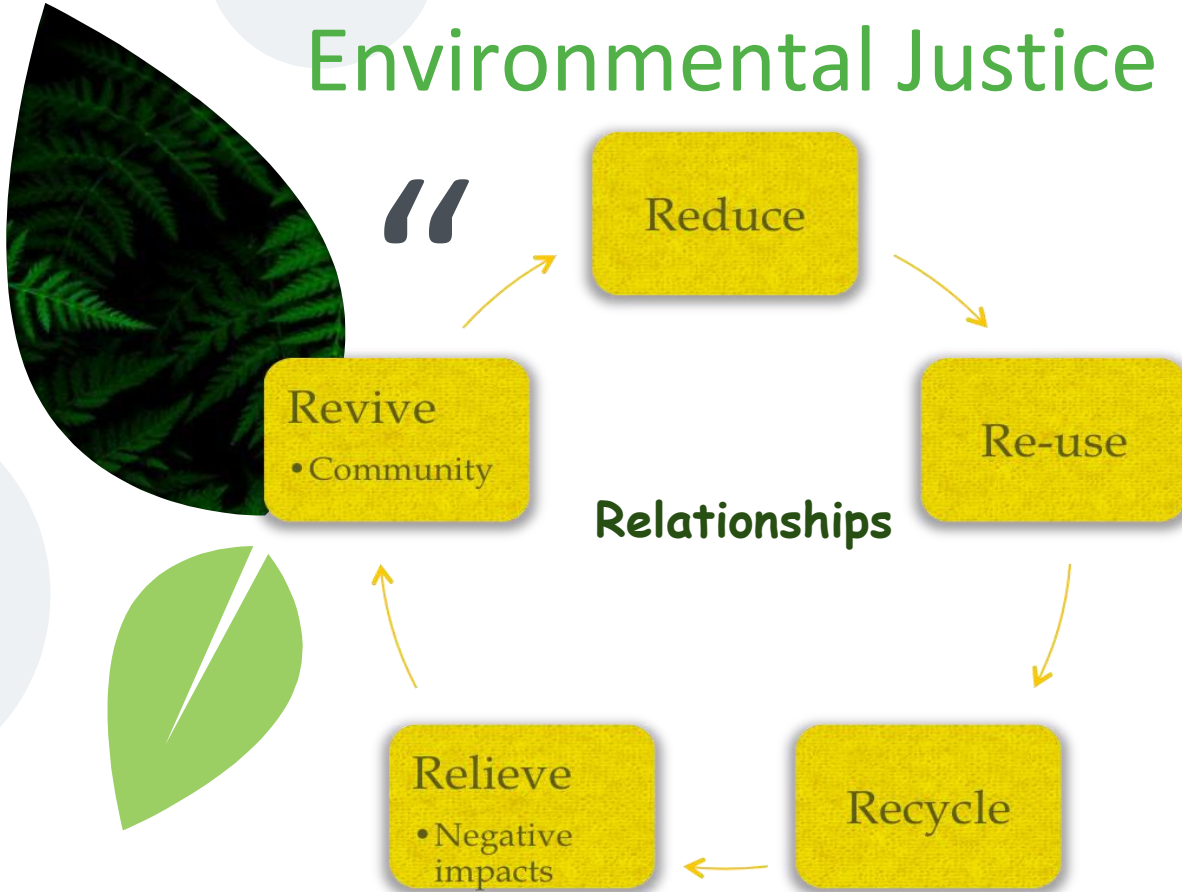


West Oakland



Children living near freeways in urban Oakland are hospitalized for asthma at 12 times the rate of youths in the city's more affluent, greener suburb of Lafayette

Our Method of Environmental Justice



WHAT WE DO





PROGRAM AREAS



AIR QUALITY

- Indoor Air Quality- Healthy Homes
- Outdoor Air Quality- Ditching Dirty Diesel

CLIMATE CHANGE ADAPTATION

- Removing recyclers from the neighborhood
- Ensuring that West Oakland redevelopment helps revive community

COMMUNITY INFLUENCED REVITALIZATION

- Helping provide residents with energy security, protection from flooding

Tools We Use

- Research
 - ◆ Community-based participatory research
- Education
 - ◆ Hands-on skills development
- Outreach
- Community members
 - ◆ Other organizations,
 - ◆ Sharing our methodology
- Base Building
- Leadership Development
- Advocacy





Collaborative Model: Sharing the Process and the Power

Everyone Sits at the Same Table:

- Community Residents
- Local Businesses
- City of Oakland
- Port of Oakland
- Regulatory Agencies
 - EPA
 - CARB
 - BAAQMD
 - ACDPH

Partnership Agreements

- Empowers Community
- Establishes roles of partners
- Defines goals of partnership
- Responsibility for partners
- Accountability for partners

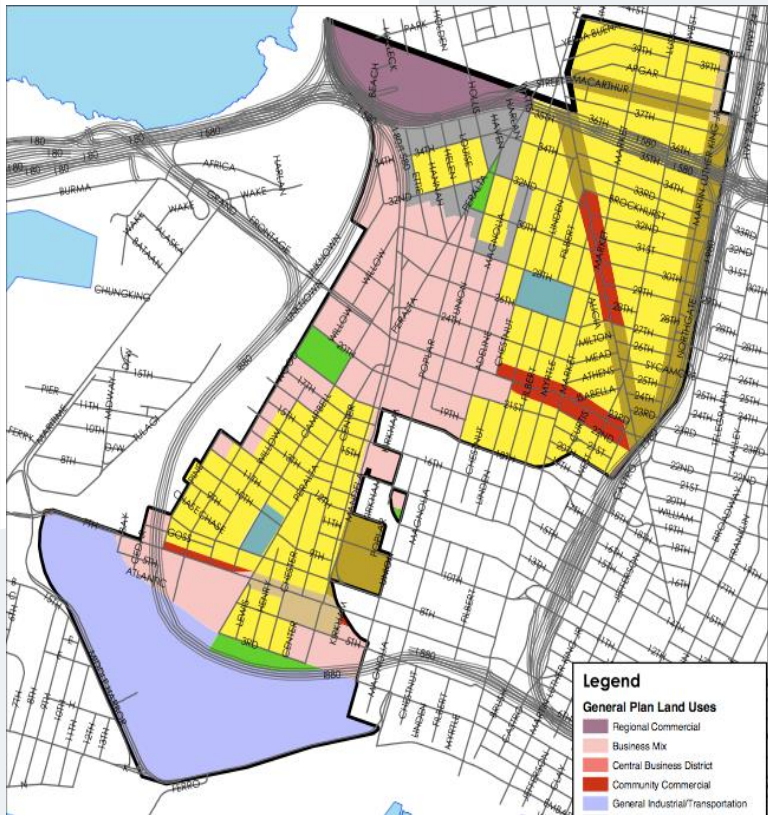
AIR QUALITY

Common Sense Project- with Intel Labs Berkeley

- Provides opportunity to:
 - Engage citizens in air quality monitoring and management practices
 - Fill in the gaps in state monitoring networks
 - Use new data sources for scientific research.



Community Influenced Revitalization



West Oakland Land Use Planning
-Oakland Redevelopment Agency

- We work with city and regional planners, regulators, policy makers and business to improve the community
- Created roadmap to identify brownfields with Department of Toxic Substances and Control
- Work to remove industrial recyclers and trucking from the residential neighborhood
- Participate in West Oakland Project Area Committee since 2003
- Economic Development: Local Small Business Incubator

Climate Change Adaptation

- We partner with vulnerable communities
- Educate residents on resilience, preparing for heat, cold, rain, flooding, drought and sea-level rise
- Advocate with local and regional government to ensure sufficient disaster preparedness, and energy security



Predicted Sea Level Rise
-Pacific Institute



The Beginning of Citizen Science for WOEIP

Partnering with the community to
share the necessary tools and
resources to measure air quality and
discuss the disparities.





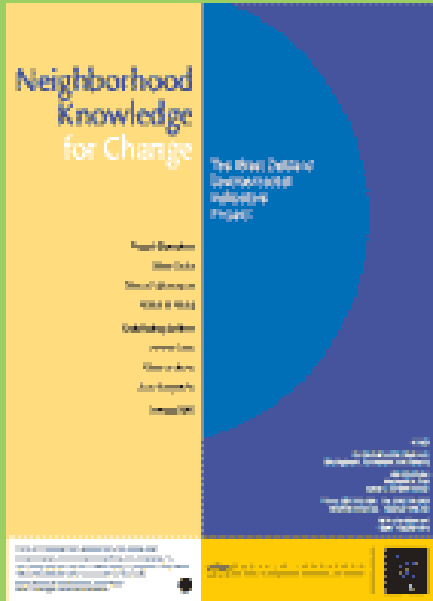
Residents Coming Together and Learn to Measure

West Oakland Environmental Indicators Project came together as an education exercise to learn the power of Community Based Participatory Research starting in 2002. This effort was supported by the Pacific Institute, with assistance from staff and graduate students of UC Berkeley's Institute of Urban and Regional Development (IURD).

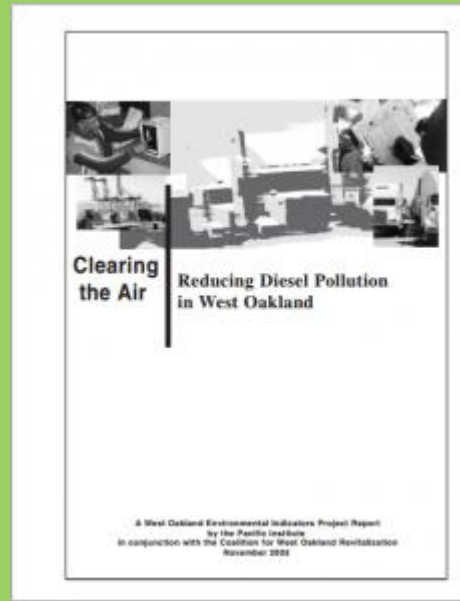


WOEIP FOR CBPR

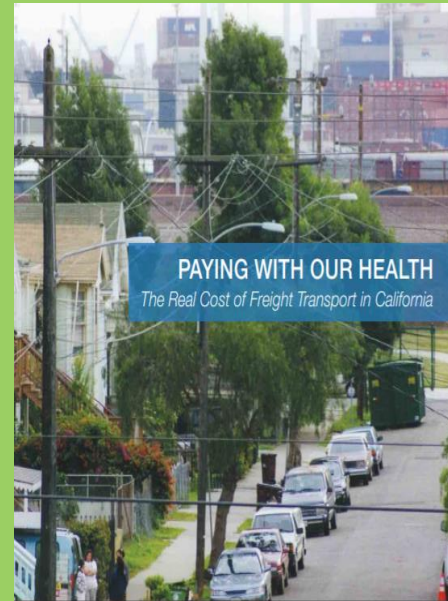
Our partnership with the Pacific Institute yielded these three reports:



Neighborhood Knowledge of Change (2002)



Clearing the Air (2004)



Paying With Our Health (2006)



WOEIP FOR CBPR

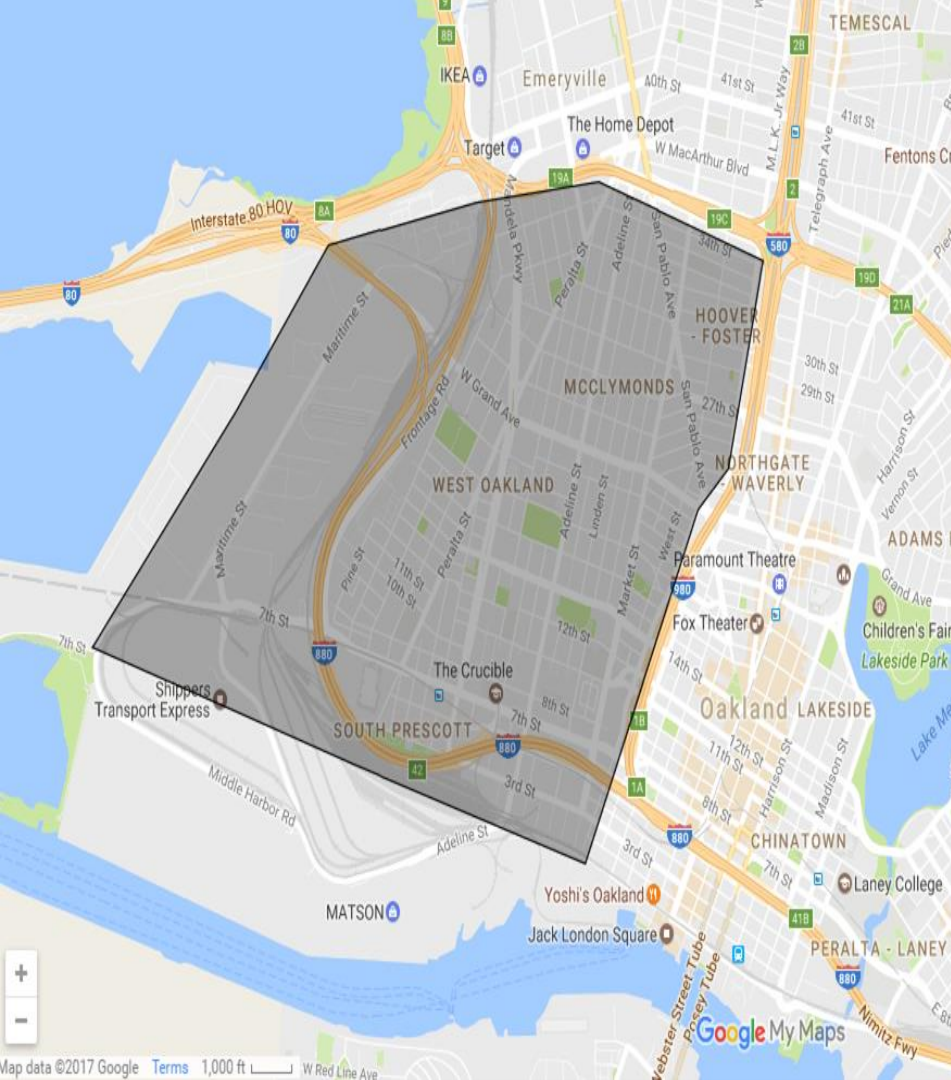


- In 2008, WOEIP partnered with Intel and Common Sense Science to collect air quality data using handheld devices designed by researchers at the University of California-Berkeley Intel Labs.
- WOEIP recruited neighbors and youth into the 'Personal Air Monitoring Project, a study using TSI Dusk Tracker, a portable sensor that collects both GPS information and data on particulate matter (PM) in the air.
- WOEIP provided hands-on training to affected residents, allowing them to not only participate in problem-solving but also empowering the citizens to realize that they have ownership of the data.



100 x 100 Black Carbon Study

- The project involved deploying 100 low-cost Black Carbon sensors throughout the West Oakland Community to measure air pollution for 100 days.
- WOEIP engaged and recruited residents and local businesses to host the air sensors. T
- The aim of the project was to create a dense monitoring network that would enable residents to see how pollution levels vary within their neighborhoods and identify local air pollution hotspots that are not captured by regulatory monitors.



GOOGLE/ACLIMA STUDY

- Google cars equipped with sensors drove more than four hundred miles of streets in West Oakland at least thirty times on 150 separate days taking nearly 3 million measurements over 14,000 miles.
- Shows that pollution levels vary between neighborhoods, and also on a hyperlocal level within neighborhoods.
- Residents near industrial operations or high-traffic corridors were found to be inhaling several times the amount of airborne toxins as neighbors a block away.



AB 617

- In 2017 WOEIP partnered with the Bay Area Air Quality Management District to implement AB 617, a bill that was passed to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants.
- The bill includes community air monitoring and community emission reduction plans to reduce people's exposure to particulate matter and toxic air contaminants.
- Designed for communities that are often exposed to greater amounts of air pollution as a result of their location near stationary sources such as ports, rail yards, warehouses, and freeways or from greater densities of mobile sources like cars, diesel trucks, or ships in the area.

AB 617 ELEMENTS • Focus on Community Action



Community
emissions
reduction
programs



Accelerated
retrofit of
pollution
controls on
industrial facilities



Community-level
air quality
monitoring



Enhanced
emissions
reporting



Increased
penalty
provisions



Grants
to local
community
groups



AB 617 for Communities

- An important part of AB 617 is the *high level* involvement from the *community*.
- AB 617 creates a way to incorporate community expertise and direction into the development and implementation of clean air programs in their community.
- Community residents must be active partners in *envisioning*, *developing*, and *implementing* actions to clean up the air in their communities.
- Community members and local air districts will work together to craft solutions for each selected



OWNING OUR AIR



- Partnering with Prescott Elementary to inform residents about truck traffic as a major polluter in West Oakland coming from the port.
- Exposing children to high levels of diesel particulate can cause cancer, asthma, hypertension, brain tumors, asthma attacks, heart failure and strokes due to reduced air quality near the Port of Oakland.
- Project will work with families to educate and train them on how to properly identify trucks that contribute to lower air quality in your West Oakland neighborhoods.

