

A National Conversation on the State of US Ports



Goods Movement and Ports: Community Impacts & Collaborative Solutions

Tuesday, January 14, 2014

Webinar Agenda

- **Welcome**
- **Opening Remarks**
- **Webinar Format and Housekeeping**
- **State of the Science: Community Health Impacts and Current Research**
- **Case Studies in Collaborative Action: Examples from Across the Country**
- **Open Floor/Questions and Answers**
- **Concluding Remarks**



Welcome:
Karl Simon

**Director, Transportation and Climate Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency**



Moderator:
Matthew Tejada, Director
Office of Environmental Justice
U.S. Environmental Protection Agency

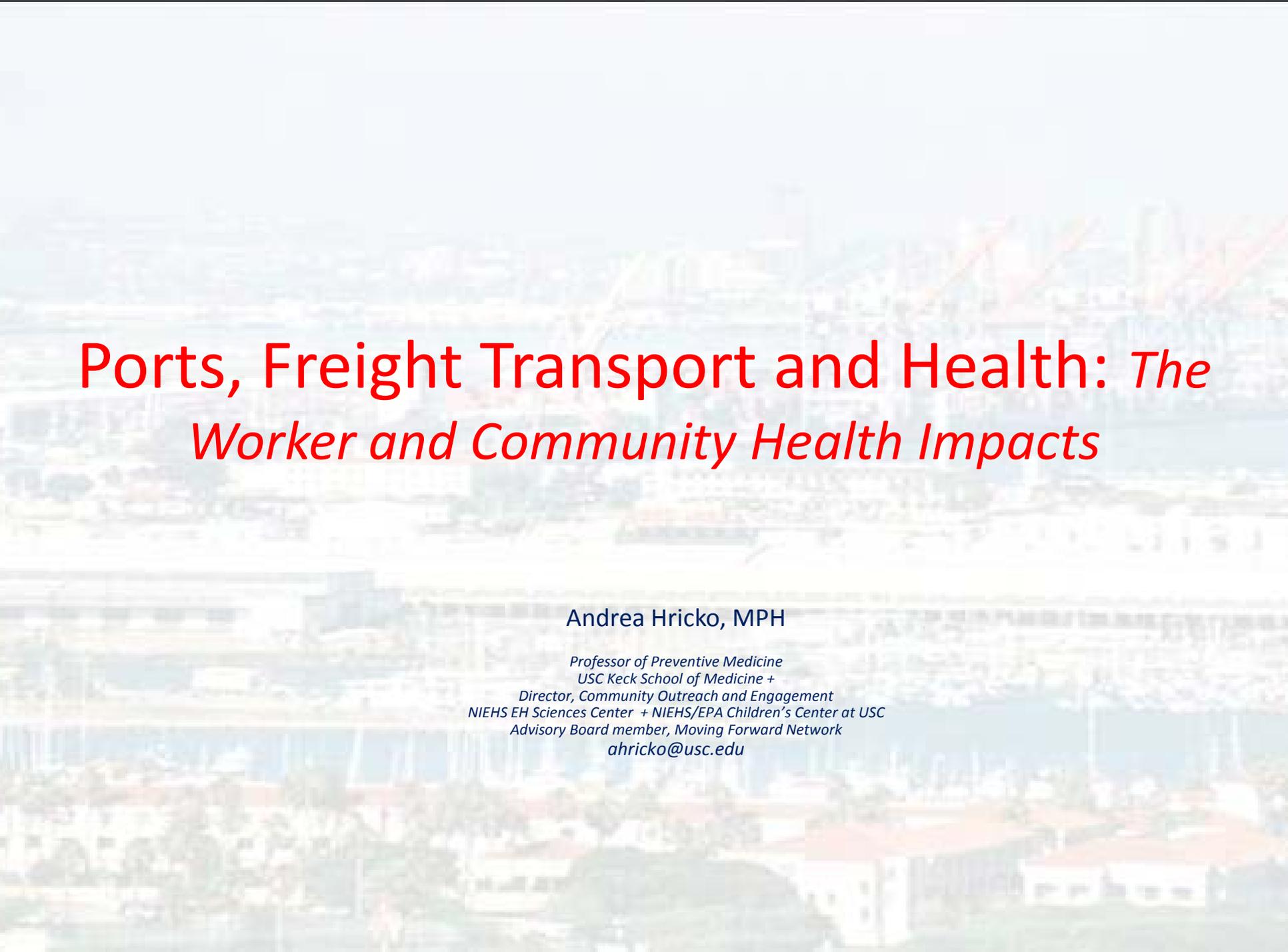


Opening Remarks:

**Lisa Garcia, Associate Administrator
Office of Environmental Justice
U.S. Environmental Protection Agency**



**Andrea Hricko, Director
Environmental Health Sciences Center
Children's Environmental Health Center
Keck School of Medicine
University of Southern California**

An aerial photograph of a port area, showing numerous shipping containers stacked in rows and several large gantry cranes. The background shows a cityscape with buildings and a body of water.

Ports, Freight Transport and Health: *The Worker and Community Health Impacts*

Andrea Hricko, MPH

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USC Keck School of Medicine +
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Structure of presentation

- Widespread use of diesel in international trade and freight transport
- Disproportionate impacts
- Current research findings
 - Regional pollution
 - Why proximity matters -- living close to car/truck/locomotive/ship exhaust
 - Diesel (DE) and diesel particulate (DPM) exposure
 - Emerging areas of concern
- Long history of concern about diesel exhaust and cancer
- New engines/filters/catalysts
- Questions/concerns about the future

An aerial, slightly blurred photograph of a large port facility. Numerous yellow and red gantry cranes are visible along the waterfront, with many ships docked. The background shows a cityscape under a hazy sky.

REASON WE ARE HERE TODAY:

INTERNATIONAL TRADE

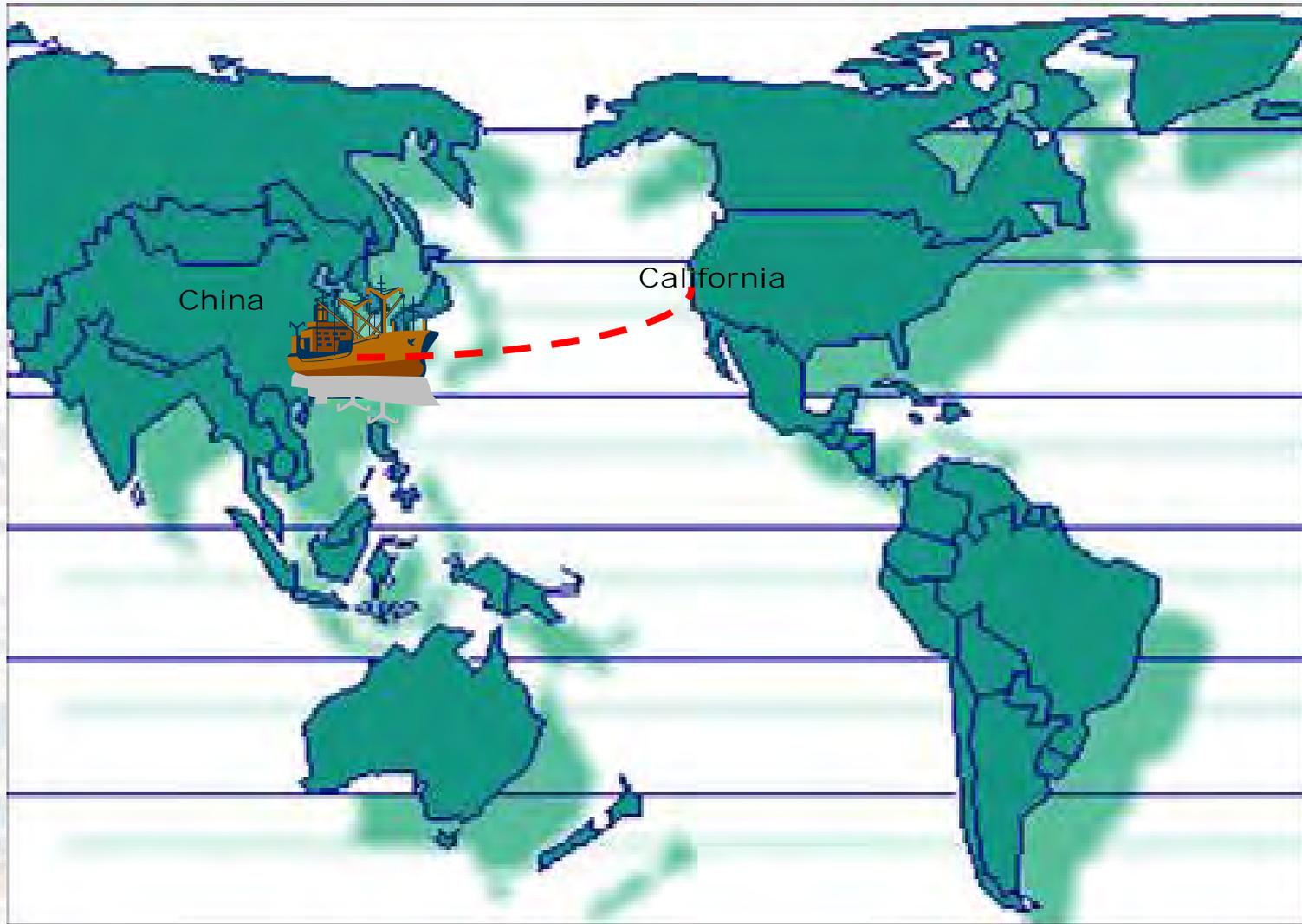
How does a doll made in China get to Chicago?



Container Ship

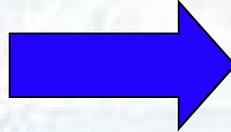


Port in Asia

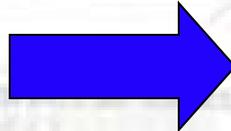




Ship arrives in L.A.



rail



truck

Containers travel on trucks and trains to warehouses/distribution centers & retail stores



Truck traffic in Los Angeles



Containers on train in the Southwest heading East



Why we are concerned...

Doll arrives in Chicago



Mileage

- She traveled 8000 miles or more
- Transported by bunker and diesel-fueled conveyances the whole way

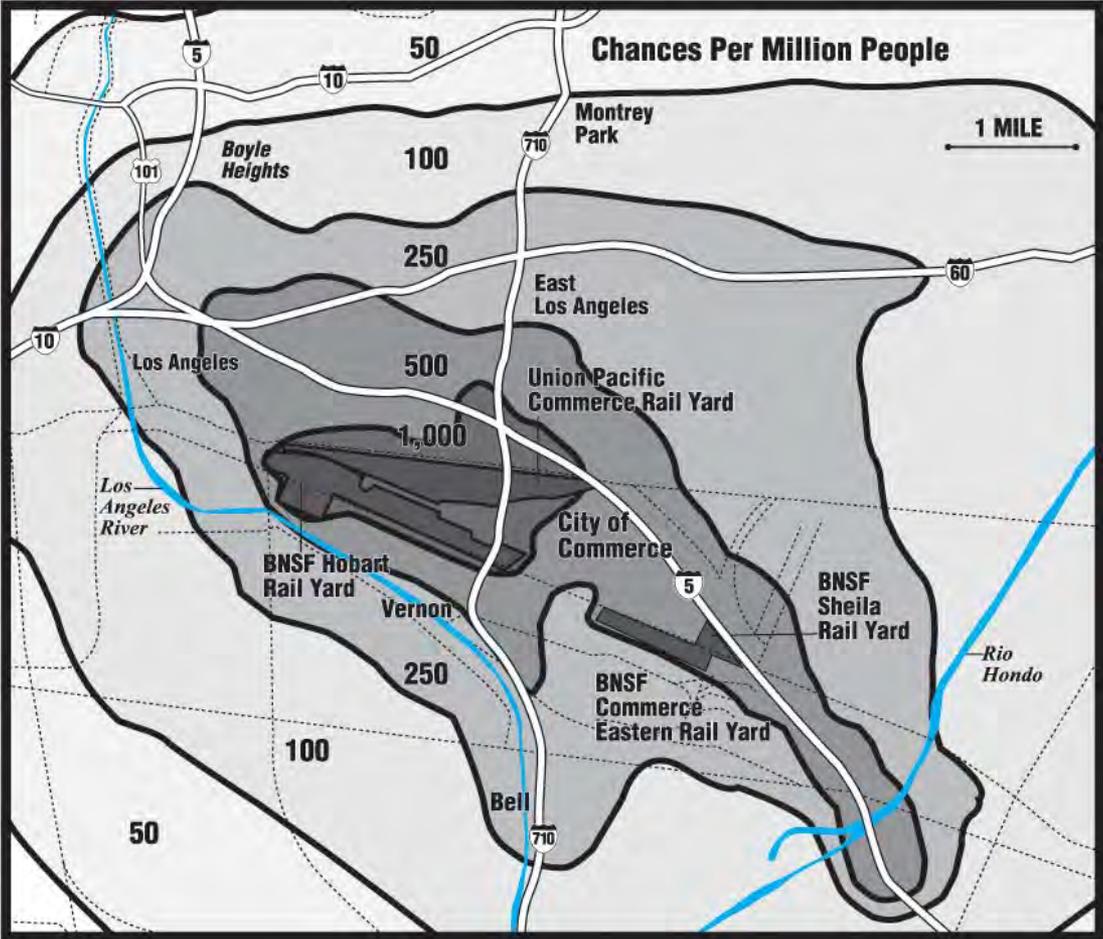
An aerial photograph of a city, likely Los Angeles, showing a large stadium with a distinctive roof structure in the center. The surrounding area is densely packed with residential and commercial buildings. The text "DISPROPORTIONATE IMPACTS" is overlaid in red at the bottom.

DISPROPORTIONATE IMPACTS

Who lives in close proximity to ports and rail yards?

- In 2003, U.S. EPA commissioned studies on:
 - the U.S. population living near
 - 47 selected marine ports and
 - 37 selected rail yards
- *Results:*
 - at least 13 million people live in the vicinity of these facilities and are exposed to diesel particulate matter
 - includes a **disproportionate number of low-income households, African-Americans, and Hispanics**

Increased cancer risk found near rail yards



Environmental Justice Implications

- When we are talking about ports, rail yards and other goods movement facilities – we are talking about **nearby communities** that are **more often working class/working poor communities of color**

An aerial photograph of a city, likely Los Angeles, showing a large stadium with a distinctive roof structure in the center. The surrounding area is densely packed with buildings and infrastructure. The image is slightly hazy, suggesting a clear but bright day. The text 'REGIONAL POLLUTION AND HEALTH' is overlaid in red at the bottom.

REGIONAL POLLUTION AND HEALTH

Health Effects from Pollution

Regional

- Ports and goods movement: significant contributors regional pollution
- Children growing up in more polluted communities have:
 - More school absences
 - Worse asthma when air pollution gets worse
 - An increased risk of abnormal lung function development
- Adults exposed to elevated levels of particulate matter (PM) have higher rates of cardiovascular disease and death



California Air Resources Board, 2006

US EPA NEJAC, 2010

Gauderman, McConnell et al, 2002-present

Brook RD et al, 2010

An aerial photograph of a city, likely Los Angeles, showing a large stadium with a distinctive roof structure in the foreground. The city extends to the ocean in the background. The text 'WHY PROXIMITY MATTERS' is overlaid in red at the bottom.

WHY PROXIMITY MATTERS

Living close to busy highways and sources of traffic pollution linked to adverse health effects



PROXIMITY TO TRAFFIC POLLUTION - HEALTH OUTCOMES

- Children living near traffic-related pollution are more likely
 - to have reduced lung function
 - to get new cases of asthma
 - to have respiratory symptoms (bronchitis)
- Mothers are more likely
 - to have premature or low birth weight babies
- Adults are more likely to
 - die from stroke and heart disease (especially if they have diabetes) and from lung cancer
- The elderly are more likely to
 - suffer cognitive decline

McConnell R et al 2005, 2010

Gauderman WJ et al, 2007

Maheswaran R and Elliott P, 2003

Kan et al. 2003-4.

Gatto NM et al, 2013

Weuve J et al, 2012

Kan H et al, 2008

Wilhelm et al, 2011-2

Chen JC et al, 2009

Basu R et al, 2013

Costs of freight transport on children's health



The health costs from living in “freight transport” communities with heavy traffic

- USC investigators
 - Studied children in Long Beach and Riverside CA
 - Heavy port-related truck traffic
- LB -- exposure to ship emissions
- Estimated burden of disease attributable to living near freeways and near the ports
 - Results
 - **Approximately 9% of all childhood asthma cases in Long Beach and 6% in Riverside were attributed to traffic proximity**
 - **Ship emissions accounted for 21% of bronchitis episodes in Long Beach children with asthma**
 - **Costs to these two communities per year: \$18 million**

Perez L et al, 2009

Brandt S et al, 2012

An aerial photograph of a city, likely Los Angeles, showing a large stadium under construction in the center. The stadium's steel framework is visible, with several large red cranes positioned around it. The surrounding area is densely packed with residential and commercial buildings. The sky is clear and blue.

EMERGING RESEARCH FINDINGS

Emerging research findings - diabetes

- Long-term exposure to PM2.5, even at low levels, is related to an increased risk of mortality attributable to diabetes
 - “These findings have considerable public health importance given the billions of people exposed to air pollution and the worldwide growing epidemic of diabetes.”
- 2-4 times as many mice exposed to air pollution and fed a high fat diet developed Type 2 diabetes than mice exposed to clean air and the same high fat diet

Sun et al, 2009, 2013

Rajapolalan, 2012

Liu, 2013

Emerging research findings... pregnancy

- Prenatal exposure to PAHs (polycyclic aromatic hydrocarbons) is associated with obesity in childhood
- Living near traffic pollution when pregnant may increase the risk of having a child who develops autism

Rundle et al, 2012

Volk H et al, 2012-13

An aerial photograph of a large industrial port facility, likely a container terminal. The image shows several large gantry cranes with red and yellow structures extending over a body of water. In the foreground and middle ground, there are numerous large, rectangular storage containers and various industrial buildings. The background shows a dense urban area with many smaller buildings and houses. The overall scene is a busy industrial and commercial hub.

WORKPLACE EXPOSURES

30-40 studies of long-term effects of exposure to diesel

- Studies of workers
 - Truckers
 - Railroad workers
 - Miners
- Most studies
 - Show an elevated risk cancer among
- Some studies
 - Found higher rates of death from disease or COPD



cardiovascular

Hart JE et al, 2006-2013

Attfield M et al, 2012

Garshick E et al, 2012

But DE exposure is not just a concern for workers!

- 2012 study of miners concluded:
that ***“high air concentrations of elemental carbon [from diesel exhaust] reported in some urban areas may confer increased risk of lung cancer” [for residents].***
- 2013 study of diesel risk estimated that ***“exposure to DE causes 6% of all lung cancer cases in the U.S. and U.K.”***

*Silverman D et al, 2012
Vermeulen R et al, 2013*

An aerial photograph of a city, likely Los Angeles, showing a large stadium in the foreground and a dense urban area in the background. The text is overlaid on the image.

BRIEF CHRONOLOGY:

**DIESEL EXHAUST STUDIES, EVALUATION,
REGULATION AND PUBLIC EDUCATION**

Diesel exhaust: what we know today

- “Known carcinogen ...
- “Contributes to smog and climate change ...
- “Diesel engines are #1 source of NO_x and PM emissions ...
- “2007 standards:
 - Vehicle operators typically install DPFs to reduce PM and catalytic converters to reduce NO_x.”
 - 2010 standards even stricter

Harley R, 2013

Evaluation of diesel exhaust health effects

- 1950s: First concerns raised about possible cancer-causing constituents of diesel exhaust
- 1980: U.S. EPA - International Symposium on Diesel Exhaust Health Effects
 - A diesel engine *“produces small particulates of carbon in an amount about 30 to 100 times higher than a catalyst-equipped gasoline powered car of corresponding performance”*

Kotin et al, 1955

U.S. EPA, 1980

- 1987+: First of numerous Garshick studies showing elevated lung cancer risk in workers - in this case railroad workers
- 1988: NIOSH classifies diesel a “potential occupational carcinogen”
- 1998: CA declares DPM a Toxic Air Contaminant
 - Based on the studies showing excess cancers in exposed workers
 - Develops a unit risk value for cancer potency
 - » Regulations & HRAs follow

- 1999+: U.S. EPA funds university particle centers to investigate the toxicity of particulate matter in air pollution, including ultrafine particles
- 1999: U.S. EPA review concludes DE is “likely to be carcinogenic to humans”
- 2002: U.S. EPA review concludes DE is “likely to cause a lung cancer hazard”
- 2002: MSHA issues new rules to protect miners from diesel exhaust exposure, recognizing it is a carcinogen

2000+

- CA Air Resources Board issues regulations for diesel-fueled vehicles
 - Faster time frame for compliance than US EPA
- US EPA issues regulations for heavy duty diesel trucks, marine and locomotive engines

- 2012: National Cancer Institute and National Institute for Occupational Safety and Health publish DE and miners' studies, showing excess cancers in exposed miners
- 2012: International Agency for Research on Cancer (IARC) of World Health Organization classifies DE as a known human carcinogen (Group 1)

- 2012: Federal OSHA issues a hazard alert for workers on diesel exhaust, stating exposure to DE can cause lung cancer
- 2012-2013: U.S. EPA – no response to the IARC designation of diesel exhaust as a carcinogen
 - » no alert to the public
 - » last U.S. EPA evaluation of diesel was in 2002

An aerial photograph of a busy port area, likely a container terminal. The image shows numerous large cargo ships docked at long piers. Several large gantry cranes are visible, extending over the ships. The water is a light blue-grey color. In the foreground, there are some buildings and greenery, suggesting an urban or industrial setting. The overall scene is one of active maritime trade and logistics.

**NEW – OR RETROFITTED -- DIESEL
TECHNOLOGY AND FUEL**

Does exposure to exhaust from new or retrofitted engines cause lung cancer?

- Too soon to know
- *Exposure*: many studies show impressive reduction in particles and gases with new emission control technologies
 - But some studies show increases in certain pollutants and in proportions of pollutants (e.g., OC/EC ratio)
 - More studies needed
- *Health*: New short-term mice and rat studies show promise
 - Chronic studies underway
 - Vapors and ultrafine particles need to be part of the toxicity studies
- Need to review all research conducted by U.S. EPA Particle Centers over last 10+ years

McDonald J et al, 20110-2012

Fanning E et al.

Lipmann et al.

Hu et al, 2013.

Potential concerns with new emission control technologies?

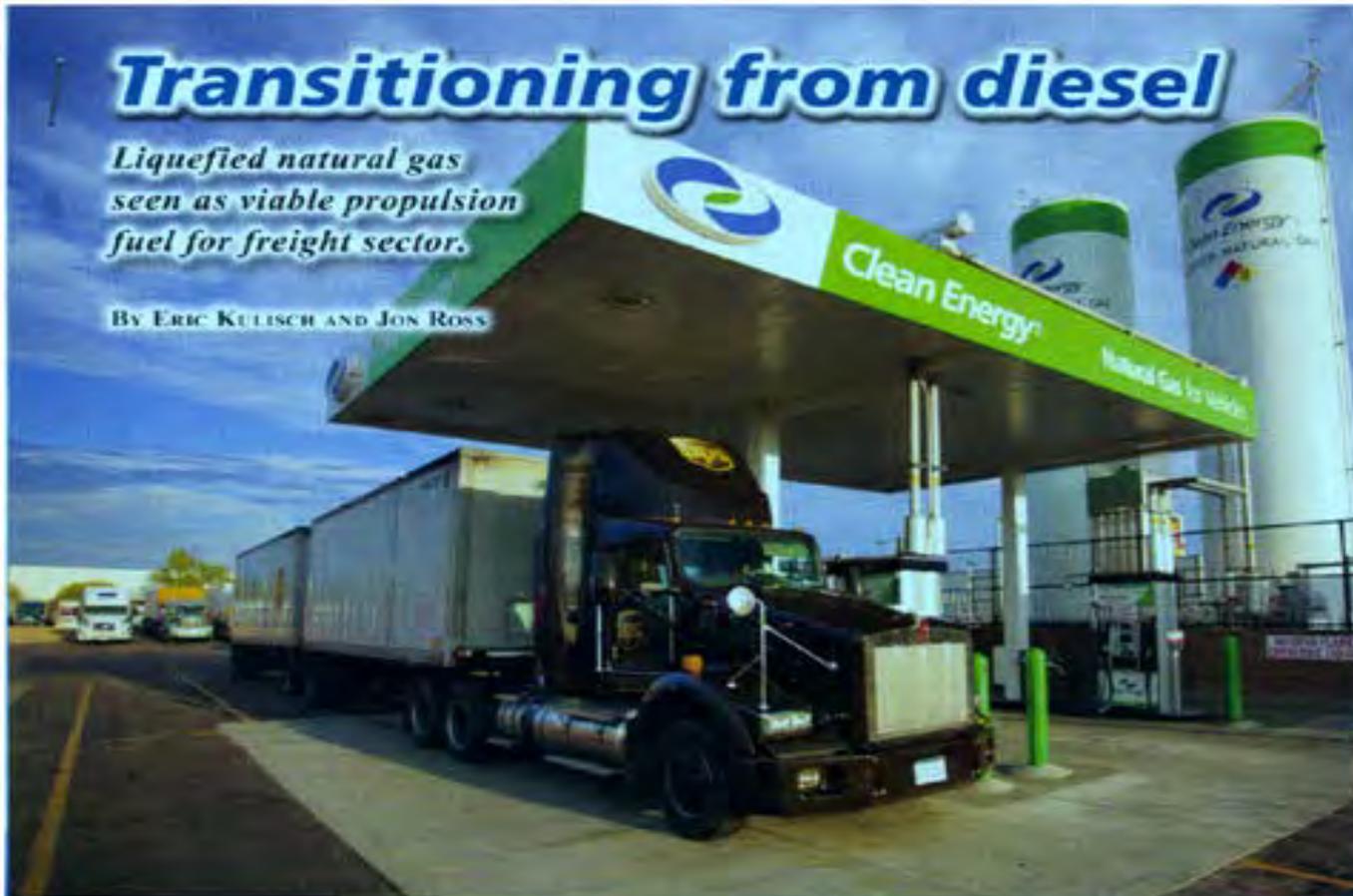
- How will filters and catalysts hold up over 20-30+ years of use?
- Need for additional testing
 - On different engine types and operating modes
 - One study shows that idling at ports waiting for container pickup reduces effectiveness of filters and catalysts
 - Temperatures don't get hot enough to reduce some pollutants

Bishop, et al, 2013.

Issues of concern with the legacy fleet

- Years before older engines in the fleet are phased out
- When CA regulations on heavy duty diesel trucks are fully in place – old trucks may be sold in other states

Also under consideration:
alternative fuels... hybrid electric engines



From: *Journal of
Commerce, January
2013*

Alternative technologies

- LNG ships/trucks/yard equipment
- Electric vehicles
- Innovative technologies

Conclusion

- Proximity to traffic pollution matters
- There are disproportionate impacts on working class/working poor communities of color when it comes to “goods movement”
 - This may increase as imports increase
 - Expanded ports
 - New or expanded rail yards
 - Expanded highways
- Issues of concern:
 - Legacy fleet
 - Old trucks sold from CA to other states
 - Do filters and catalysts remove ALL toxic constituents?
 - Need studies on operating modes and types of engines
 - Studies on toxicity of vapors and ultrafines

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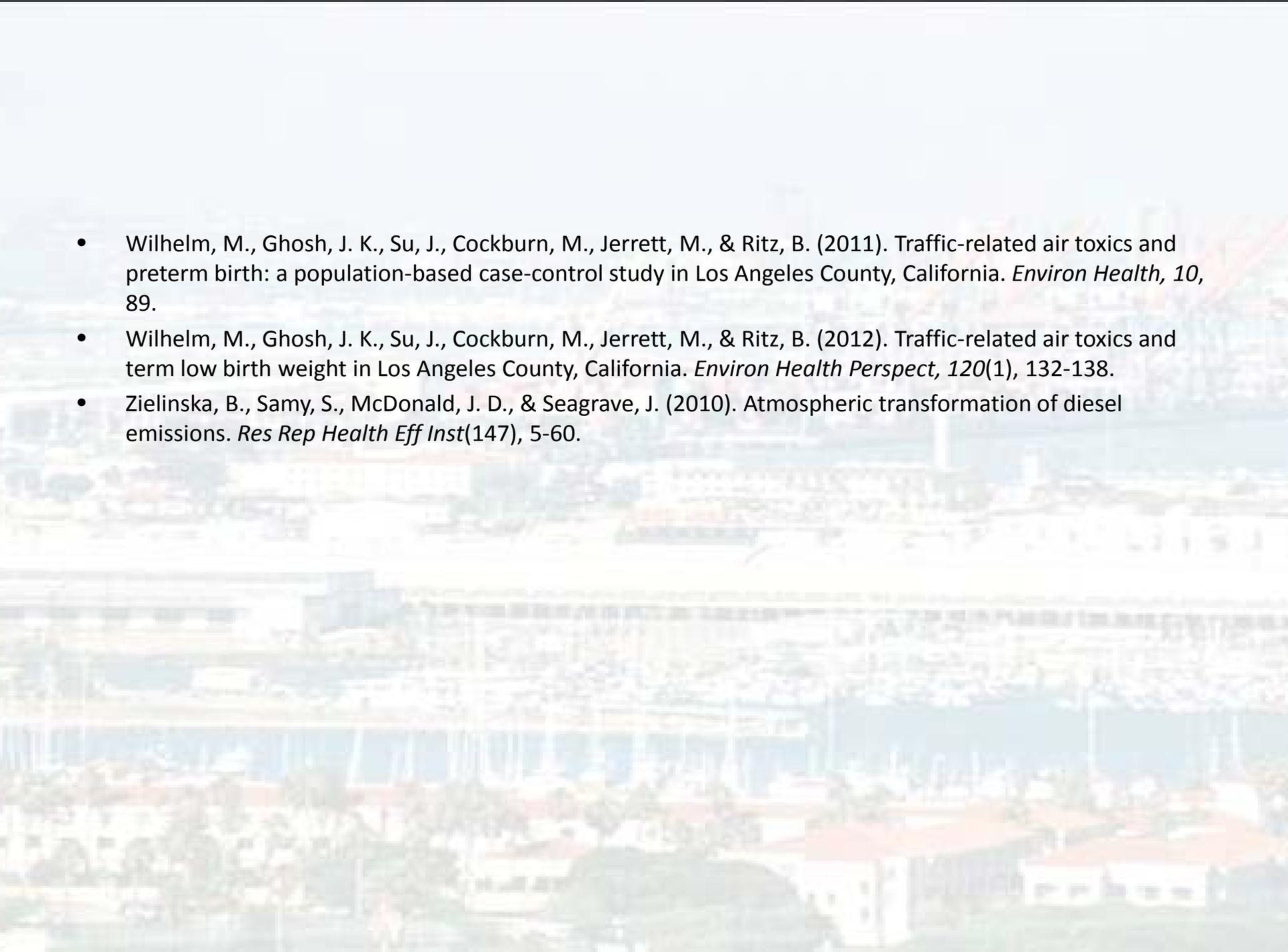
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Case Studies in Collaborative Action: Examples from Across the Country

- **Los Angeles/Long Beach**

- Angelo Logan, East Yard Communities for Environmental Justice

- **New York/New Jersey**

- Amy Goldsmith, New Jersey State Director, Clean Water Fund & Clean Water Action

- **Charleston, South Carolina**

- Herbert Fraser-Rahim, Low Country Alliance for Model Communities

- **Houston, Texas**

- Juan Parras, Executive Director, Texas Environmental Justice Advocacy Services

- **San Bernardino/Riverside, California**

- Penny Newman, Center for Community Action for Environmental Justice

- **Baltimore, Maryland-Masonville Cove Restoration**

- Carol Eshelman, Former Director of the Brooklyn and Curtis Bay Coalition



Angelo Logan
East Yard Communities for Environmental Justice



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Environmental Justice
www.eycej.org





Pacific Coast Hwy
1 SOUTH
EXIT ONLY

1 Pacific Coast Hwy
NORTH
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Angelo Logan
East Yard Communities for
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www.eycej.org



**Amy Goldsmith, New Jersey State Director
Clean Water Fund and Clean Water Action**

Collaborating for Results

Amy Goldsmith,
Chair, Coalition for Healthy Ports (CHP) ~ NJ/NY

NJ State Director,
Clean Water Action and Clean Water Fund



January 14, 2014

Ports of NY & NJ

- ▶ 3rd largest U.S. port
- ▶ Biggest East Coast port
- ▶ 7,000 trucks per day move 85% of goods
- ▶ Most goods and pollution stay in the region
- ▶ Several terminal expansions
- ▶ Doubling container capacity
- ▶ Raising Bayonne Bridge 64 ft to accommodate supersized Panamax ships



Elements of Effective Collaboration

- ▶ Pool resources and expertise.



- ▶ Involve more diverse and affected constituencies and voices.
- ▶ Develop more creative solutions that yield multiple benefits for the affected community – both short and long term.

Coalition for Healthy Ports: Working together for a Purpose

CHPS consists of over 40 diverse groups in NY/NJ:

- Labor
- Public Health
- Immigrant
- Environment
- Faith-Based
- Environmental Justice
- Social Justice
- Community

Common Goal

Healthy Neighborhoods
Clean Environment
Good Jobs

Grassroots – Agency Collaborations for the Public Good

Three basic elements:

1. Government entities coordinate amongst themselves; not at cross purposes.
2. Public have easy access to information.
3. Affected public have a real seat at the decision-making table.

NY/NJ Experience



- ▶ Port Authority of NY&NJ falsely projected its Truck Working Group as meaningful input and approval of their Clean Trucks Program.
- ▶ *Fast tracked* Bayonne Bridge pushed permit approvals with limited meaningful input/changes.
- ▶ PANYNJ and US Coast Guard unresponsive to public, including long delays to FOIA requests.
- ▶ USEPA largely ignored despite expertise.

Agency Coordination

Lead agency should:

- ▶ Possess expertise in major areas of concern.
- ▶ Actively work with and integrate expertise and recommendations of other agencies to maximize public protections.
- ▶ Resolve conflicting goals, messages and actions between agencies.

Access to Public Information

- ▶ Public documents must be readily available on the web and other means.
- ▶ Freedom of Information Act (FOIA) requests should be *last* resort for getting documents.
- ▶ Technical assistance/funding are necessary to allow for meaningful public review and engagement in the decision-making process.

A Real Seat and Voice at the Table

We want more than 3 minutes of testimony.

- ▶ Create functioning decision-making body that includes the affected public in negotiating positive outcomes.
- ▶ Prepare joint recommendations with attached supplemental report where consensus absent.
- ▶ Develop legally binding *Community Benefits Agreement (CBA)* where all parties agree.

Coalition for Healthy Ports

18 Oliver Street, 3rd Floor
Newark, NJ 07102

Amy Goldsmith, Chair, CHP
agoldsmith@cleanwater.org

NJ State Director
Clean Water Action and Clean Water Fund



**Herbert Fraser-Rahim, PE
Environmental Director
Low Country Alliance for Model Communities**



CREATING OPPORTUNITIES FOR OUR COMMUNITIES

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“Creating a Sustainable Vision”

SC State Ports Authority (SPA) Environmental Impact Statement

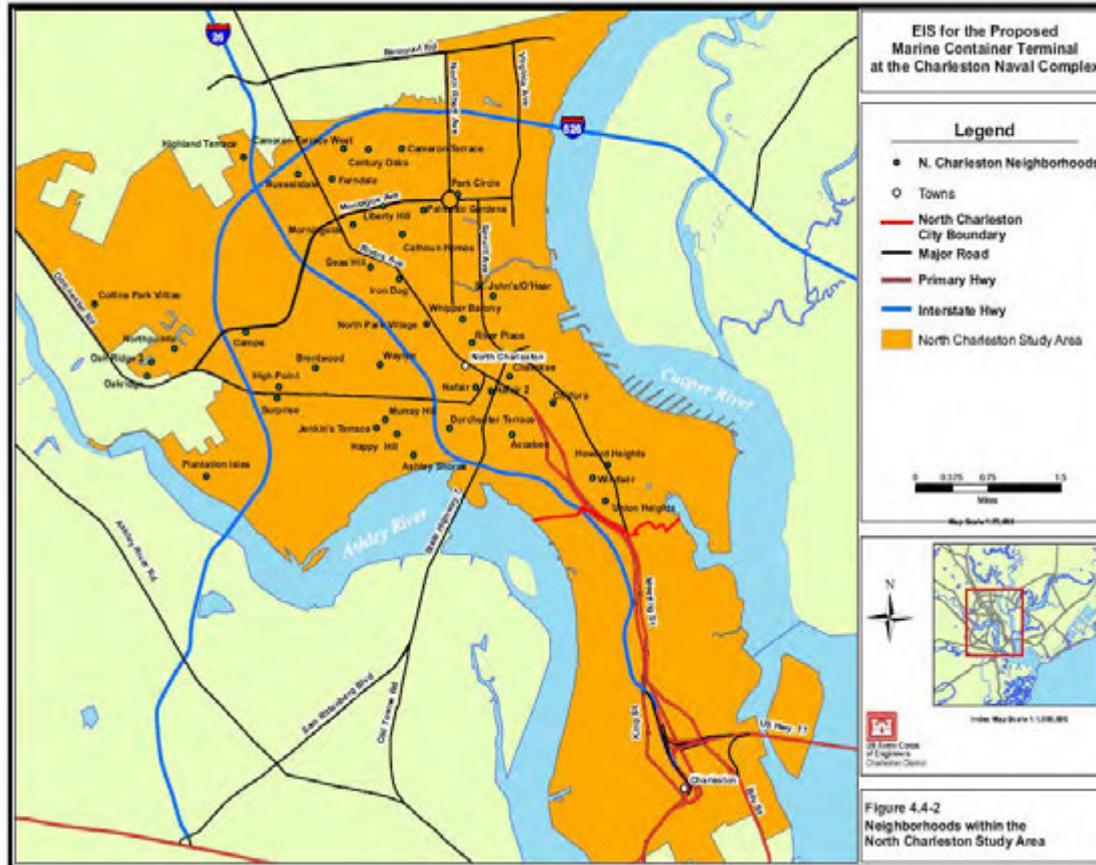
- January 2003, SCSPA and SCDOT applies to Army Corps of Engineers for new terminal construction permits requiring an Environmental Impact Statement (EIS)
- October 2005, Corps completes the environmental assessment that evaluated community and environmental impacts in accordance with National Environmental Policy Act (NEPA)
- The Corps received over 800 comments submissions from interested parties during the Draft EIS comment period



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Community Impact Area



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SCSPA DEIS Mitigation

- \$4 Million for Land Preservation
- Donation of 17 ac. Site on Former Naval Base
- \$500,000 to the ICBP
- Buffers
- Stormwater Management
- Community Direct Benefits
 - Development of a 2-acre park
 - Scholarships for 5 years



Executive Order 12898

- When required by NEPA, Federal agencies must analyze the environmental, health, economic and social impacts of its activities on minority and low-income communities.
- Each Federal agency shall provide opportunities for community input, including identifying potential impacts and mitigation measures.



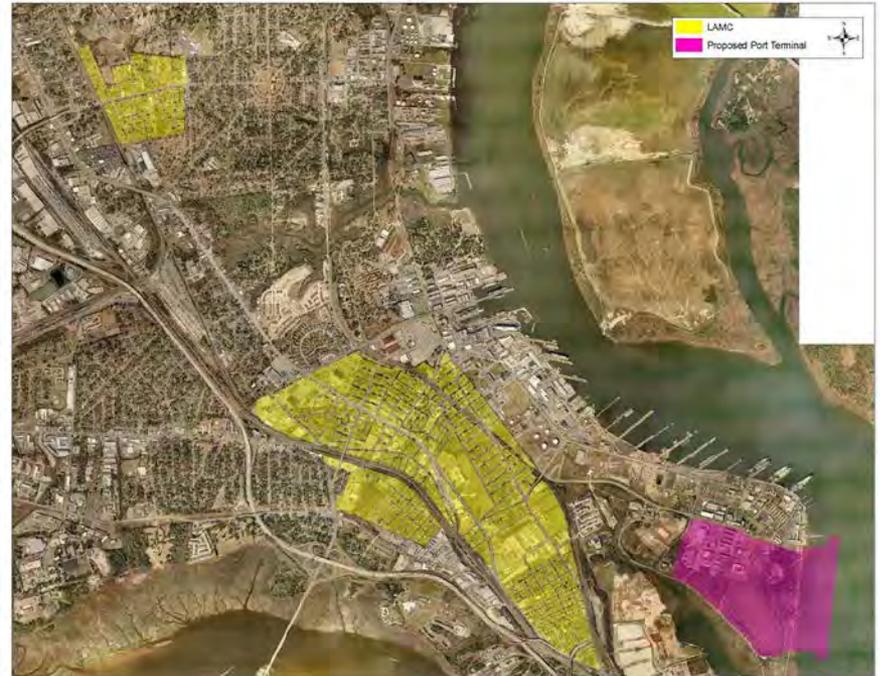
Mitigation Measures Defined

- The mitigation measure must be a specific action that will reduce, avoid or offset the potential adverse construction activities or environmental consequences identified in the DEIS
- The agency must clearly demonstrate a link between a mitigation measure to be imposed and the impact it is intended to address
- An agency cannot use its authority to achieve a generalized public benefit unrelated to the project. Nor can it levy mitigation that creates a benefit that exceeds the defined impact of the project



Lowcountry Alliance for Model Communities (LAMC)

- Grassroots community group that formally organized October 2005 as a direct result of SC General Assembly's action to locate new port terminal on former naval base
- LAMC Board membership consists of neighborhood presidents representing the seven impacted neighborhoods and at-large representatives
- Accabee, Chicora/Cherokee, Five Mile, Howard Heights, Liberty Hill, Union Heights, and Windsor Place Neighborhoods



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COMMUNITY EXCLUSION

Rosemont Group Say They Were Tricked by Developers, Corrupt Officials



Homeowners Assoc. President Nancy Button

Staff Reports

Residents of the Rosemont community are seeking mitigation from the S.C. State Port Authority for an access road to U.S. Highway 26 from the new port facility at the former Charleston naval base. But port officials say the proposed road won't impact the community and since the community failed to join others five years ago in a collective mitigation process, Rosemont is S-O-L (stuck outta luck).

Rosemont Homeowners Association President Nancy Button said the former neighborhood association leadership didn't see a

need to become part of a mitigation process with seven North Charleston communities impacted by the new port facility.

Those communities - Union Heights, Accabee, Chicora/Cherokee, Windsor Place, Five Mile, and Liberty Hill banded together five years ago to form the Lowcountry Alliance for Model Communities (LAMC). About four years ago the SPA awarded LAMC \$4 million to mitigate the impact of the new port facility on their communities.

Button said the Rosemont community did not join LAMC for several reasons - all the LAMC

See pg 2

- Over 33 neighborhoods excluded themselves from the EIS process
 - Misguided
 - Mistrust
 - Uniformed
 - Hidden Agendas



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City and LAMC Partnership

- Numerous special interest groups and individuals asserted themselves as representatives of the community
- November 2005, LAMC decided that the City would represent their interests and concerns
- City comments on behalf of LAMC found that that the DEIS did not fully evaluate impacts to the *human* environment



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Agreement Signing Ceremony

May 11, 2006



Seated (L-R): Myrtle Barnett – Chicora/Cherokee, Councilman Michael Brown – Accabee, Mayor Keith Summey, Thomasina Greene – Union Heights, Bernie Groseclose – Exec. Director SCSPA. Standing (L-R) Karrim Rahim – Union Heights, Wannetta Mallette – Project Manager, William James – Accabee, Coakley Hilton – Liberty Hill. Not pictured: Judy Miller – Five Mile, Herb Frazier Rahim – Union Heights, Shredia King Boyd – Union Heights



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“Community Opportunities”

Affordable Housing Trust	\$1,000,000
Ongoing Environmental Monitoring	100,000
Education Endowment	250,000
Job Creation/Training	950,000
Healthy Lifestyles	500,000
Master Plan/Community Development	600,000
Inflation/Contingency	680,000
Total	\$4,080,000



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Community Air Monitoring Program

- Elimination of 85% of pre-1994 engine model trucks
 - Commissioned truck survey
- SCSPA funded ambient air monitoring program administered by South Carolina Department of Health and Environmental Control
 - $PM_{2.5}$



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CMP Funding/Benefit Schedule

- Upon issuance of Federal and State permits for terminal construction - \$750,000 paid to City c/o LAMC
- Annual payments of \$300,000 during active construction of the Project
- Remaining balance will be paid upon new terminal dedication and opening



SPA/City Agreement Highlights

- City/LAMC recognizes the SPA's on-going community support
- SPA will publicize construction bids and jobs announcements
- City will lead and administer the elements of the CMP and seek additional funding sources
- City will establish an advisory group



City/LAMC Agreement Highlights

- City/LAMC will form a Mitigation Oversight Committee and Working Group
- City will provide overall fiscal administration, oversight of compliance, administrative support, project management and technical assistance
- City will retain title to all capital assets valued in excess of \$1,000 purchased with mitigation funds



City/LAMC Agreement Cont'd

- City will use its best efforts to complete or sustain mitigation activities
- City will provide annual reports on the use of mitigation funds
- City will share resource options to leverage mitigation funds as necessary



LAMC Responsibilities

- LAMC will publicize and inform their constituents of on-going mitigation program activities
- LAMC will assist the City with identifying and recommending partnership opportunities
- LAMC will work cooperatively with local, state and federal agencies to maximize use of mitigation funds



SCDOT Port Access Road DEIS

- SCDOT submitted separate permit application to construct port access road
- Alternative 1-C was presented as recommended alignment by SCDOT
- Alternative 1-D identified as preferred alignment by LAMC and other stakeholders



City Review of Port Access Road DEIS

- Identified and addressed community impacts/environmental justice issues
 - Resulted in formation of North Charleston/Charleston Joint Planning Transportation Committee
- Prompted review of entire transportation network including new road and rail facilities
 - Neck Area Master Plan



SCDOT Community Mitigation Plan

- Education and employment opportunities for LAMC residents
 - HS Freshman and Sophomore Summer Transportation Institute
 - School to Work Program for 16 – 22 year-olds
 - College Scholarships
 - Pre-employment/On-the-Job Training
- Selection of two certified DBE Firms for specialized training
- Community Infrastructure Improvements
 - “Quiet Zones” at Rail Crossings
 - Streetscape/Pedestrian Enhancements along major arterials
 - Convey to the City excess property associated with I-26 exit ramp removal



Challenges to Realizing Vision

- SCSPA/City/LAMC agreements did not include implementation schedule
 - Define “project ownership” and yearly project progress
- LAMC’s lack of capacity and operational funding
- Identification of legacy and succession strategies



Opportunities

- Collaboration with community groups to define a singular community vision
- “Model Pilot” for other communities (local, state, and national)
- Expansion of stakeholder base to include the private sectors and universities
- Garner local, state and national political support to evaluate existing policies and establish new public policies relative to LAMC’s community development efforts
- Development of legacy and succession strategies



Outcomes/Conclusion

- Working relationship between the Federal, State, local agencies, local government and community.
- Collaborative Partnerships with EPA, SCSPA, SCDOT, SCDHEC, City of North Charleston, USC,UMD, Clemson, MUSC, Trident Workforce Investment Board, SC State, etc.
- National, State and Local recognition; leveraged almost \$3 million in grant funding
- Sustained community involvement. LAMC is now a Community Developer.



NIH Grant and LAMC Mitigation Plan

Environmental Justice and the Mitigation Plan

Project Excellence



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For More Information:

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wmallette@northcharleston.org

Patrick Moore, South Carolina State Ports Authority

bmiller@scspa.com



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FOR OUR COMMUNITIES

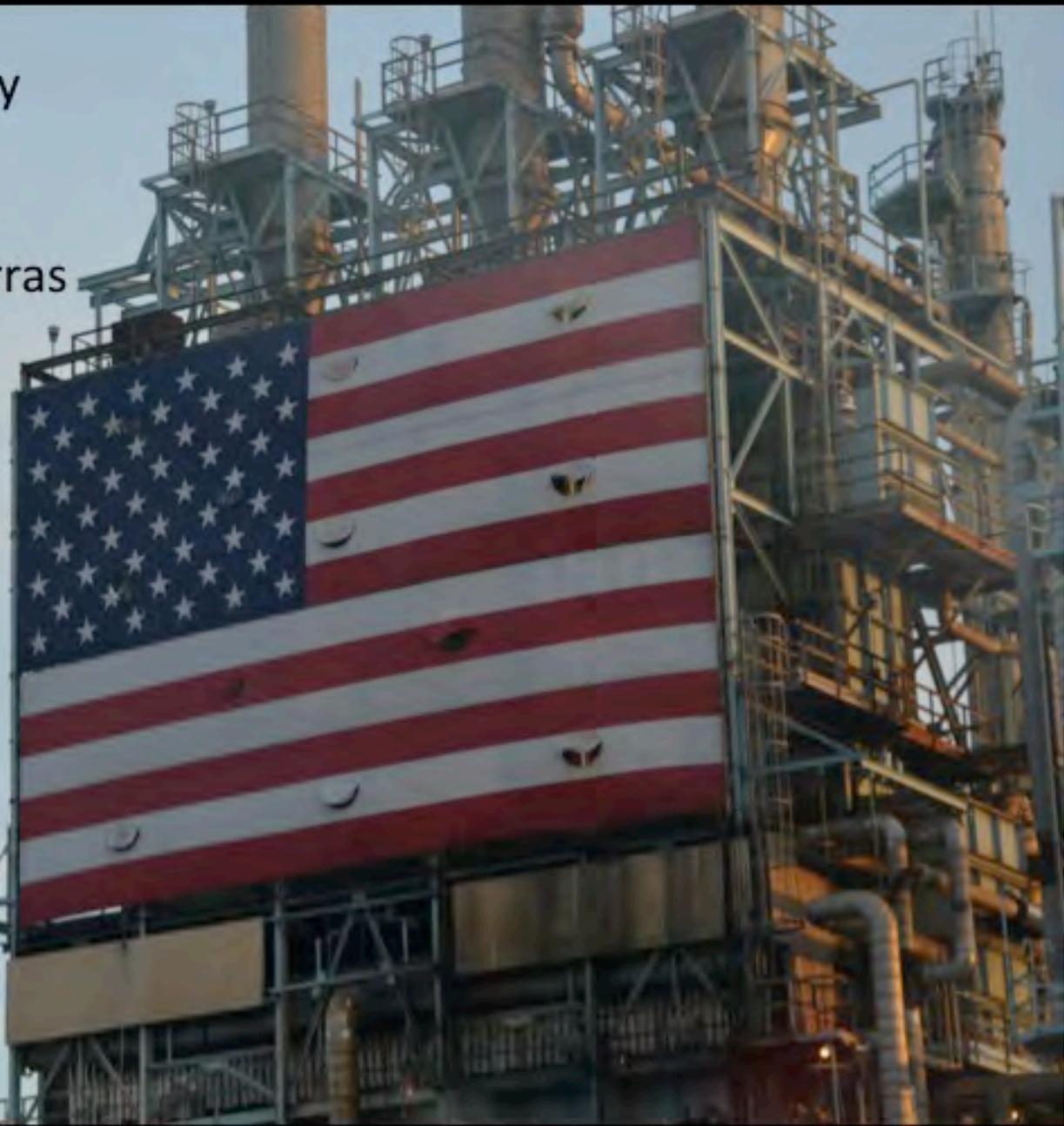
LAMC, City of North Charleston & SCSPA
Working to Enhance our Quality of Life



**Juan Parras, Executive Director
Texas Environmental Justice Advocacy Services**

“We live in Democracy
that simply has too
many loopholes”

-Juan Parras



THE HOUSTON-BAYTOWN AREA IS HOME TO 405 CHEMICAL PLANTS EMPLOYING ROUGHLY 36,000 PEOPLE.



Nearly every major chemical company operates a plant near Houston, including
•BASF AG •Bayer Corp. •Chevron •Phillips •Chemical Co. •E. I. •du Pont
•de Nemours Co. •ExxonMobil •Chemical Co. •Shell •Chemical LP.

EXCESSIVE FLARING



LACK OF ZONING RESULTS IN TOO MANY WAREHOUSES IN LOW-COME NEIGHBORHOODS, AND AS YOU CAN SEE, THEY TOO BURN.



THIRTEEN AUTO CRASHING FACILITIES EXIST IN LOW INCOME COMMUNITIES. THIS ONE BORDERS THE SHIP CHANNEL, WATER QUALITY ISSUES A HUGE PROBLEM IN THE HOUSTON SHIP CHANNEL.



UNLOADING NITRO -PHOS FERTILIZERS NEXT TO APARTMENTS APPROXIMATELY ½ MILE FROM DOWNTOWN HOUSTON.



PORT EXPANSIONS ARE ALREADY CAUSING STREET CLOSURES IN OUR COMMUNITY, WITHOUT PRIOR NOTICE OR PUBLIC MEETINGS FOR THE PUBLIC.



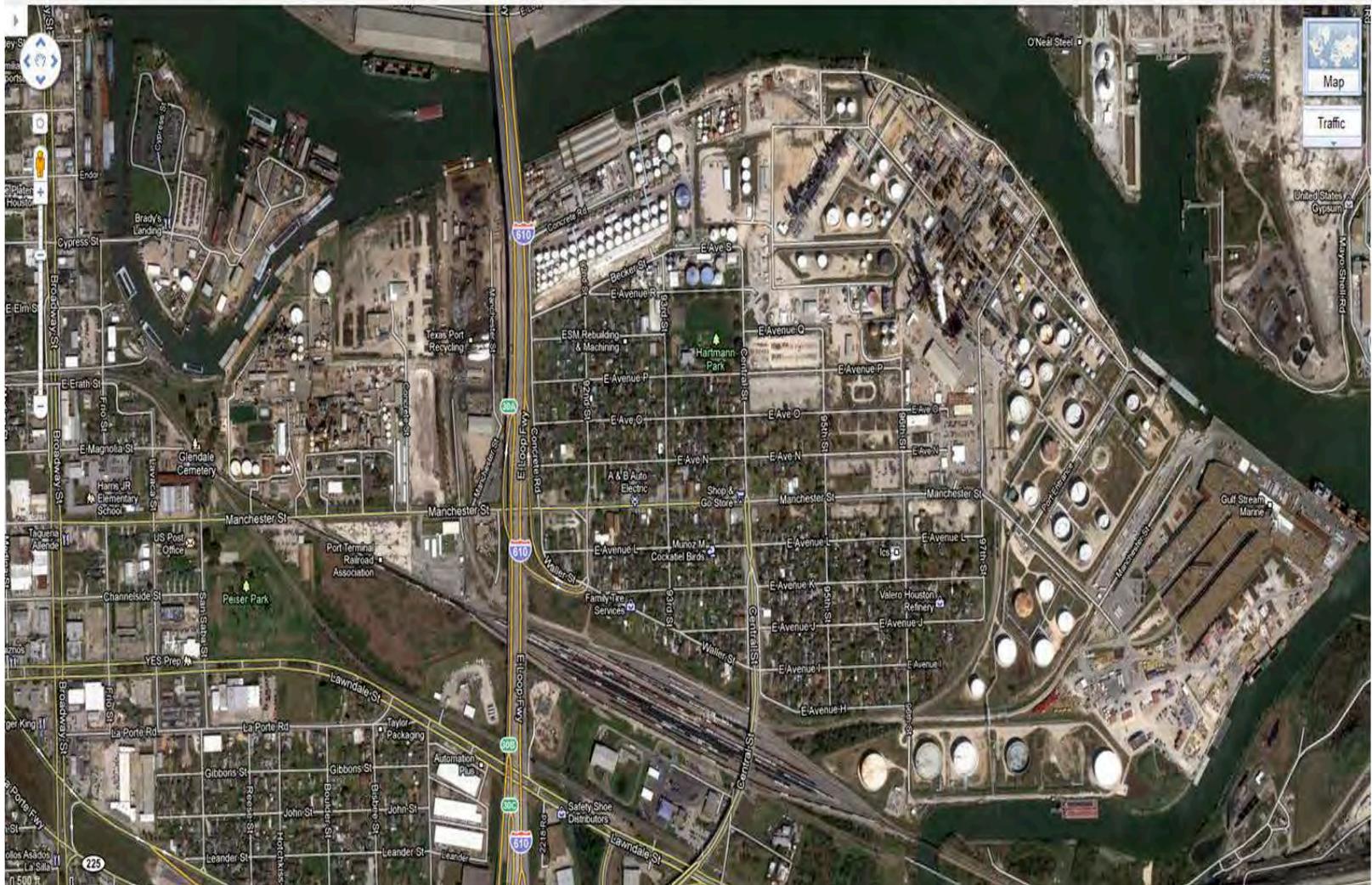
18 WHEELER STUCK ON RAIL-LINE, WE EXPECT TO SEE MANY MORE SUCH INCIDENTS AS A RESULT OF INCREASE TRUCKING TRAFFIC IN OUR COMMUNITY



MANCHESTER COMMUNITY, SURROUNDED BY INDUSTRY, RAIL YARDS, SHREDDING PLANTS, FERTILIZER PLANT, ETC.

Google maps

Manchester Houston TX



TESTIMONY ON "CHEMICAL FACILITY SECURITY AND SAFETY ACT.
TEXAS CITY, TEXAS



SOUTHERN KEYSTONE PIPELINE ALREADY COMPLETED.
MORE TOXICS COMING TO ENVIRONMENTAL JUSTICE
AREAS.



HOUSTON PORT COMMUNITIES COALITION WALKING THE PICKET LINES FOR LOCAL 848 IN LONG BEACH. PLANT EMPLOYEE WORKERS ARE THE FIRST TO BE HARMED OR INJURED IN INCIDENTS THAT ARE PREVENTABLE.



HOUSTON REFINERIES ALSO MAKE A LOT OF THE CHEMICALS THAT GO INTO PRODUCTS FOR HOUSEHOLD CLEANING USE AND COSMETICS. NEED TSCA REFORM.





Cesar Chavez High School is in the top 1% most toxic schools in the Nation.

86 schools of the 283 in HISD are in the top 5% of the most toxic schools in the nation, all of which are majority Latino and/or African Americans.

-[the smokestack effect](#), USA today

TOXIC SCHOOLS

THE PORT OF HOUSTON IS THE WORLD'S SIXTH LARGEST PORT. IT RANKED FIRST IN THE NATION IN TOTAL FOREIGN TONNAGE HANDLED IN 2003, AND SECOND IN TOTAL TONNAGE.



Major commodities traded at the port include:

- chemicals
- petroleum
- petroleum products
- machinery
- motor vehicle
- iron
- steel



RECOMMENDATION



Listen and hear our Communities Voices, as waiting for Environmental Justice should not take another 20 years. Environmental Justice NOW!

RECOMMENDATIONS: FOR COMMUNITY-EPA COLLABORATION INITIATIVES WITH PORT COMMUNITIES

Texas Coast is home to 13 Ports, all ports should be required/mandated to have a Citizen's Advisory Board, selected by the communities bordering the port.

Texas ports should be required to provide yearly, free medical and health care to residents living within a two-mile radius of the ports.

Cumulative impacts and risk factors have to be recalculated for communities bordering the ship channel ports.

Hazardous chemical should not be permitted via communities. (rail cargo, trucking industry, or other methods of transporting hazardous chemicals)

Implementation of the Executive Order on Chemical Facility and Safety Act throughout the Nation.

Criminal Charges should be filed against CEO for deaths that occur in plant operations, or outside the area.

Deny port expansions if they encroach on existing EJ Communities.

75% of Supplement Environmental Project(SEP's) must benefit the community impacted

Houston is EPA,DHS, and DOJ worse case scenario

Thank You....



Penny Newman
Center for Community Action for Environmental Justice
San Bernardino/Riverside, California

Key Issues:

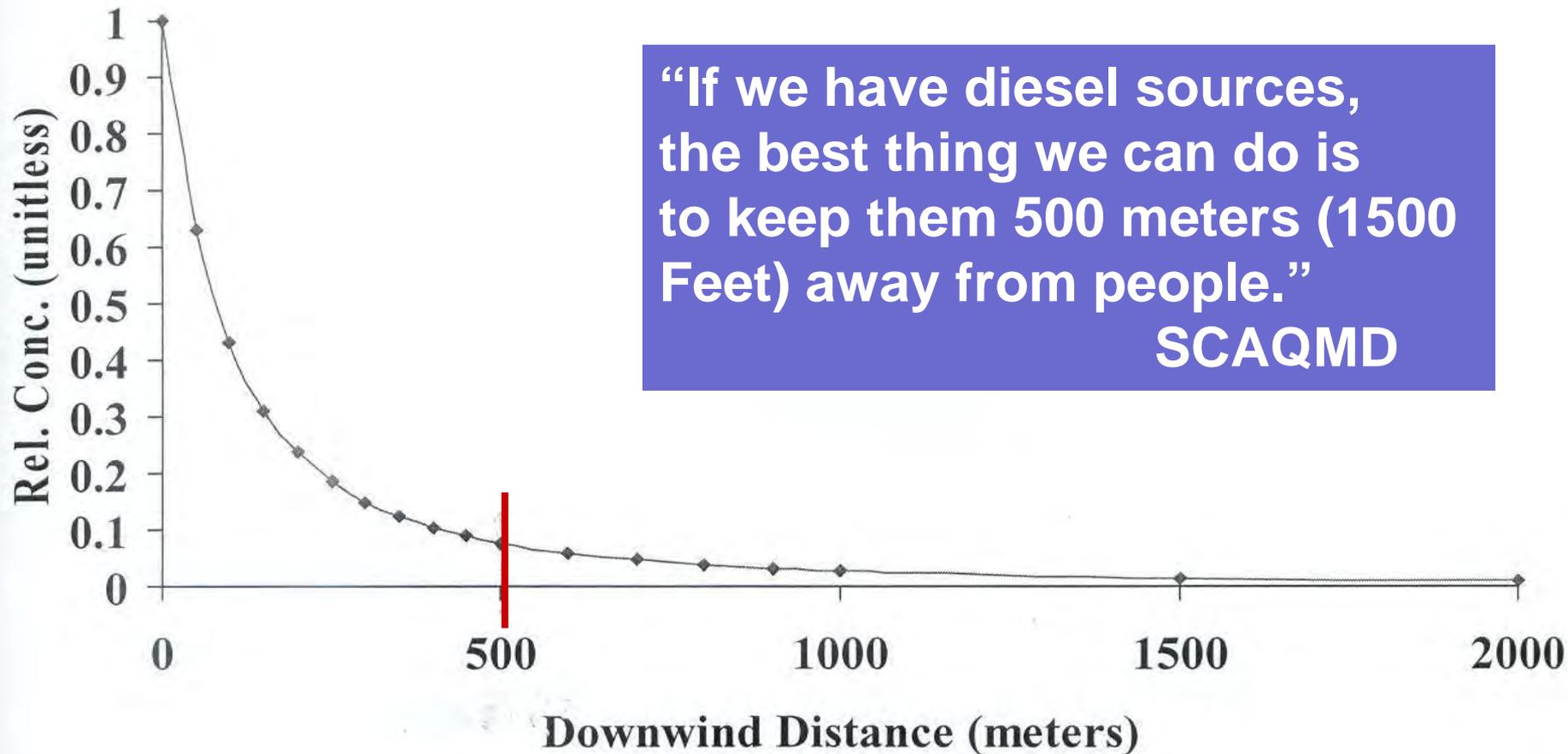
Diesel Kills

Multiple and serious health impacts

Proximity Matters

The closer to a diesel source the
greater health risk

Sensitivity of Concentrations to Downwind Distance



POLLUTION DISPERSION AROUND A BUSY ROAD

TYPES OF POLLUTANTS

FINE PARTICLES



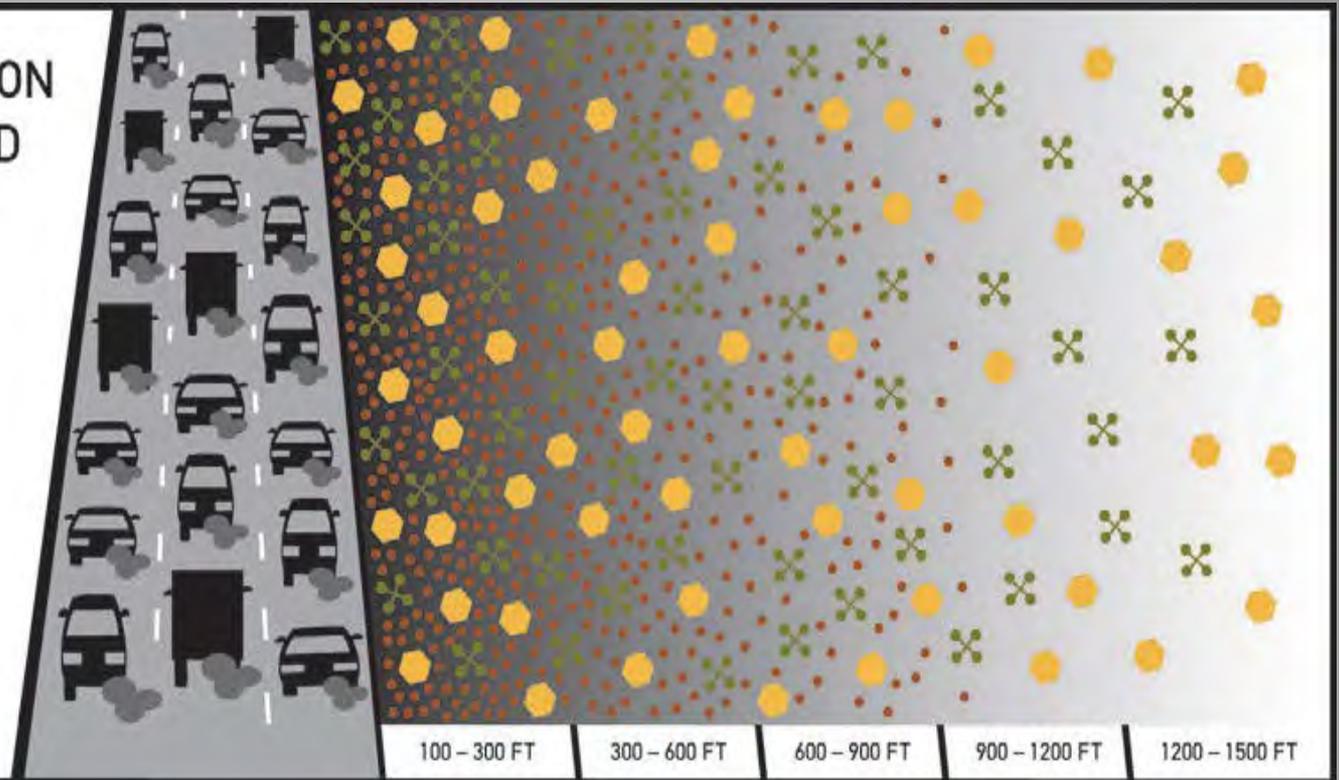
NITROGEN DIOXIDE



ULTRAFINE PARTICLES



DISTANCE FROM THE SOURCE



1500 FEET
LUNG DEVELOPMENT



500 - 1500 FEET
CHILDREN'S ASTHMA

EXAMPLE DISTANCES WHERE HEALTH EFFECTS ARE FOUND



400 FEET
CHRONIC HEART DISEASE



300 FEET
ADULT LUNG DISEASE



300 FEET
ACUTE HEART ATTACKS



Inland Valleys



California Counties

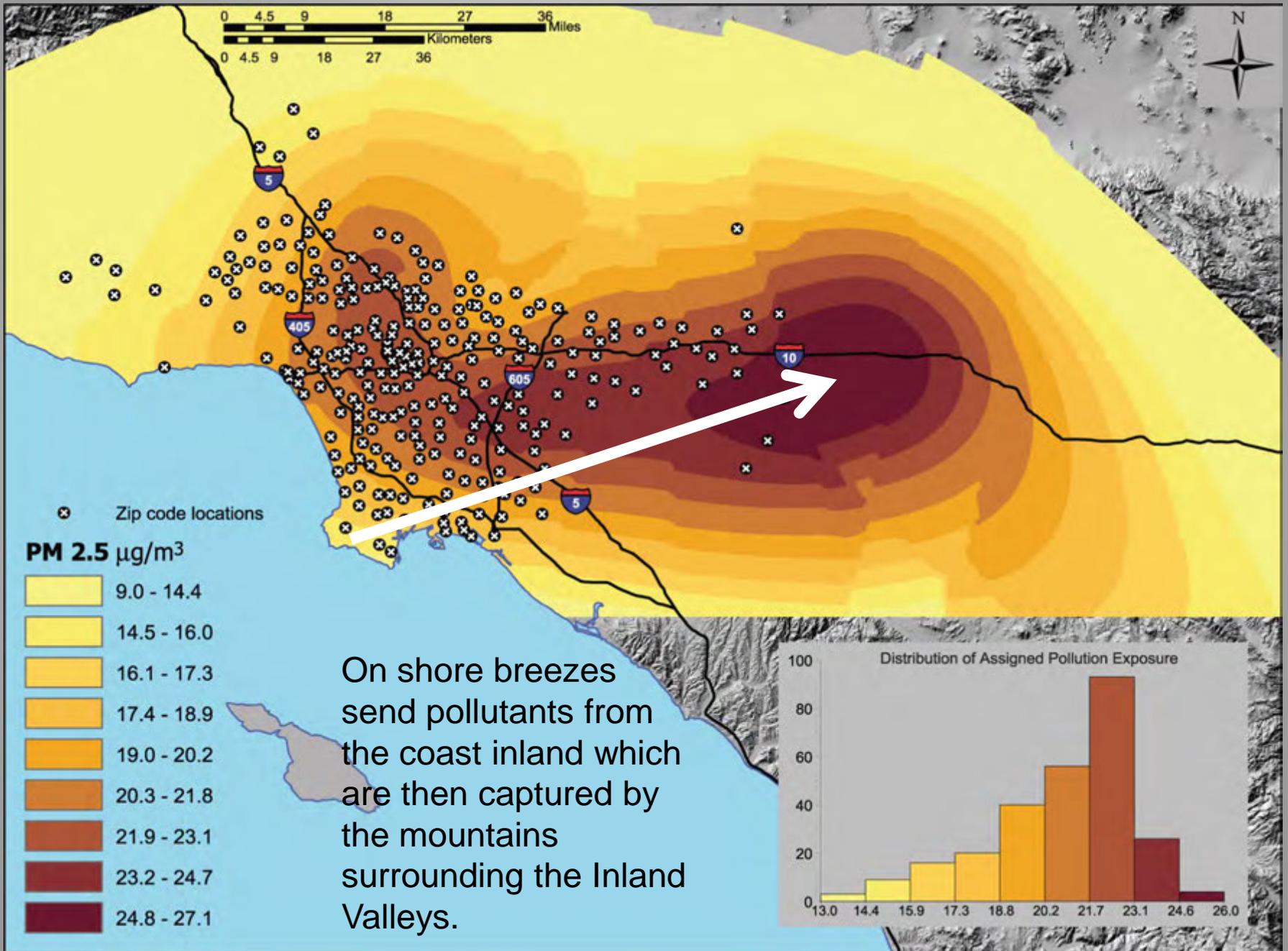


Population

San Bernardino – 2,017,673

Riverside – 2,125,440

Region wide - 4,143,113



Community Driven Collaboration

- Impacted Community defines issues of concern
- Identify solutions from community perspective
- Develop Platform for Action
- Pull together multi agency Task Force – federal, state, regional, local, academicians/researchers
- Identify resources, authority, etc. of each agency that can contribute to solutions
- Implement solutions

Task Force Members

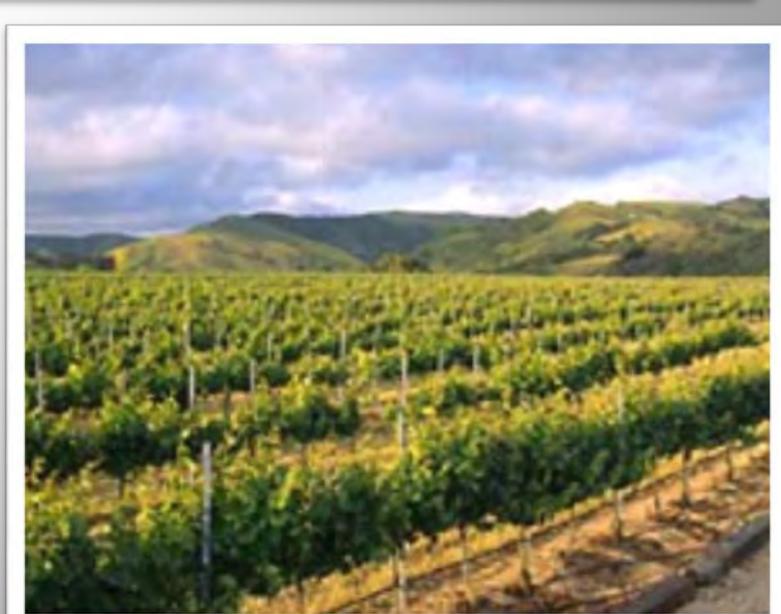
- Mira Loma Residents
- Westside Residents
- US EPA
- CARB
- DTSC
- Attorney General
- South Coast AQMD
- SB County CUPA
- Loma Linda University
- UCLA
- UC Davis
- County Health Depts.
- City of San Bernardino
- City of Jurupa Valley



MIRA LOMA

Low Income, working class,
community of color-
primarily Latino and Immigrant

In 2000, Mira Loma was a rural agricultural community with dairies and vineyards

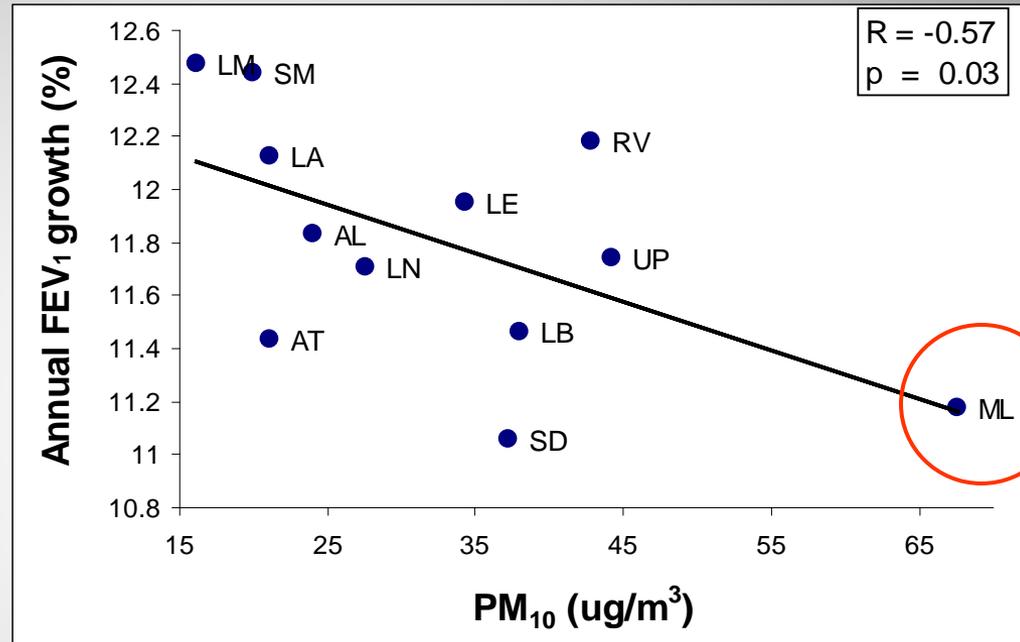


By 2003, Mira Loma had become industrialized as massive warehouses moved in attracting thousands of diesel spewing trucks and trains



USC Children's Health Study

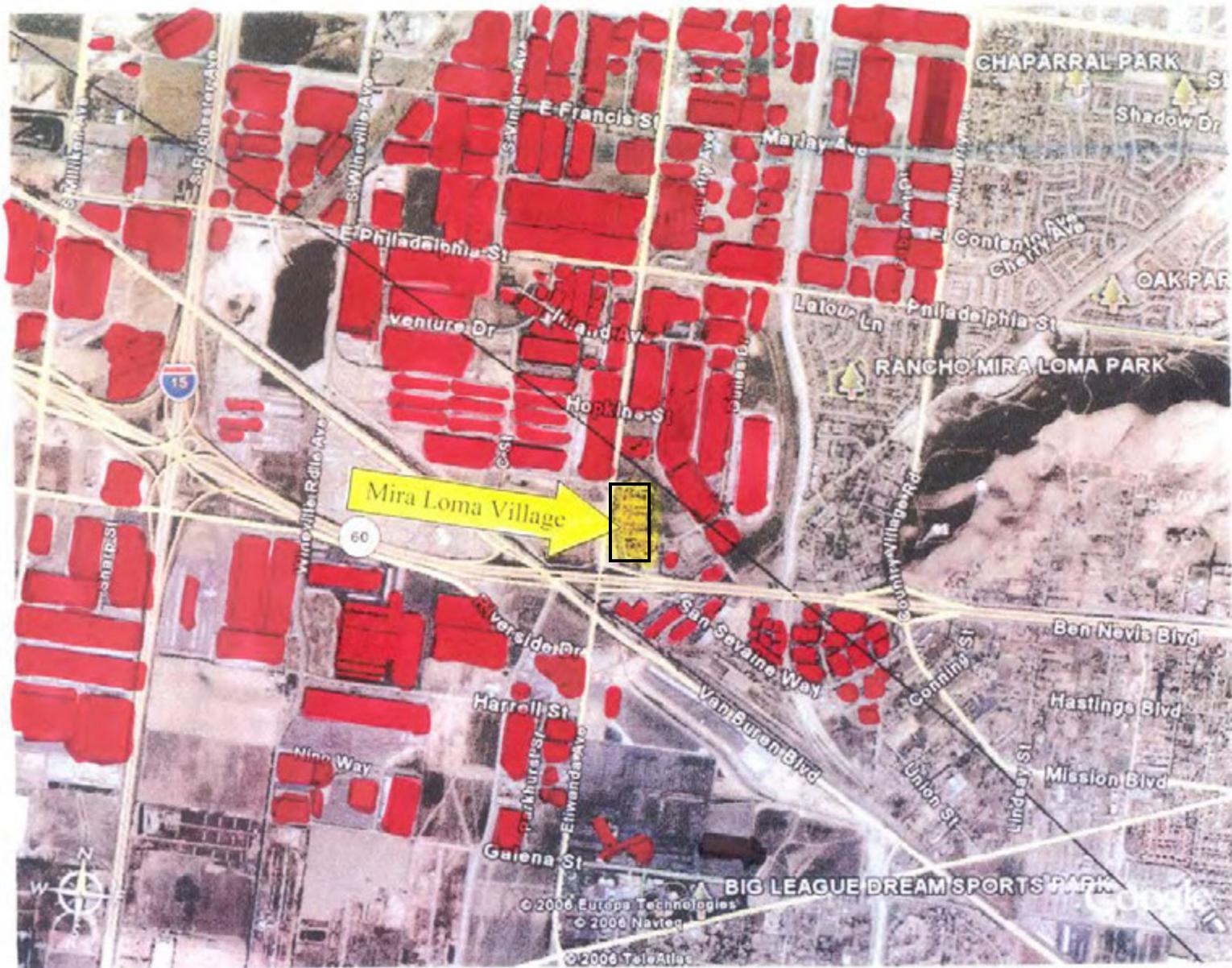
- University of Southern California (USC), Children's Health Study found children in the Mira Loma area to have the **slowest lung growth** and **weakest lung capacity**.²



²“Association Between Air Pollution and Lung Function Growth in Southern California Children”, American Journal of Respiratory and Critical Care Medicine; Gauderman, W. James; McConnell Rob; et al, Department of Preventive Medicine, University of Southern California School of Medicine, Los Angeles.







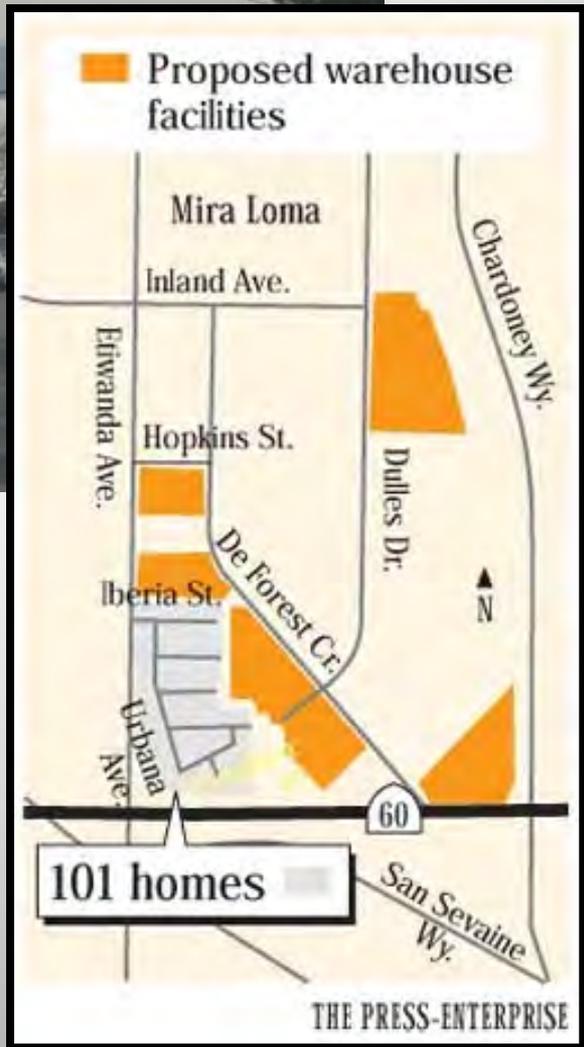
 WAREHOUSES

 MIRA LOMA VILLAGE









Mira Loma Platform

- Air Quality – Reducing the levels of pollution at our homes
- Truck Traffic – Too many trucks near our homes
- Reduce Noise
- No More warehouses
- Realign Etiwanda to reduce truck traffic
- Don't block our views-reduce height of buildings
- Keeps trucks out of our neighborhood



Mira Loma Settlement

Reduced Height of Buildings: No warehouses near homes – Business/commercial buildings

- 1. Air Filters**
- 2. Restricted Truck Route**
- 3. Anti-Idling Enforcement**
- 4. Clean Trucks**
- 5. Buffers**
- 6. Air Monitoring**
- 7. Electrification plug in for trucks**
- 8. Solar.**
- 9. Green Building:** LEED Silver or higher level for all buildings 100,000 sq ft. or larger.
- 10. EJ Element in General Plan.**
- 11. CEQA Analysis** for Future Plans must address impacts to Overburdened and Sensitive Communities:

Westside - City of San Bernardino

Poor Latino neighborhood with 60% of residents making an annual income of less than \$10,000

5th Street Rock
Crusher

Arroyo Valley
High School

Robertson's
RediMix

OmniTran

Ramona Allesandro
School

5th Street

Park and Child
Care Center

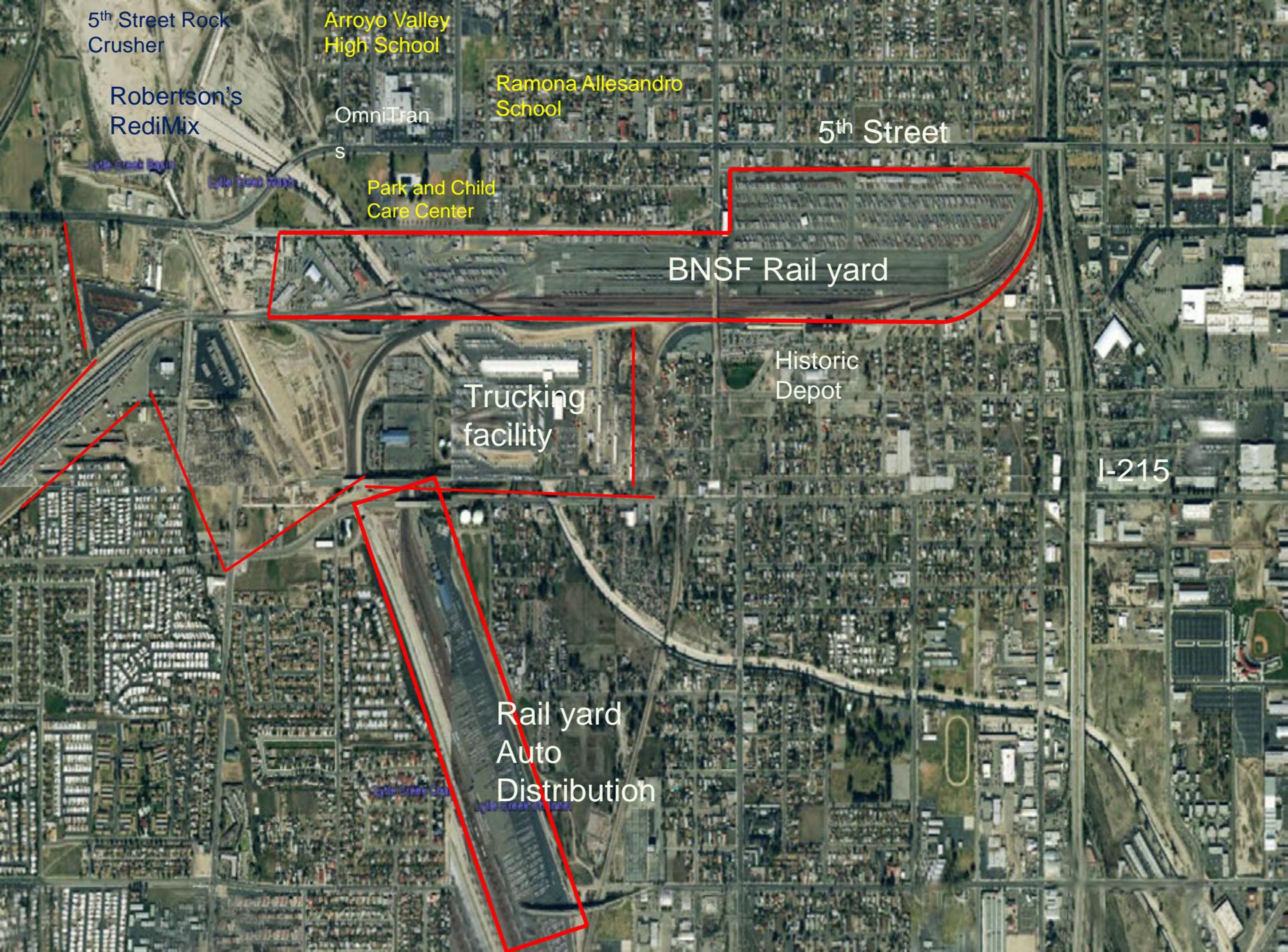
BNSF Rail yard

Trucking
facility

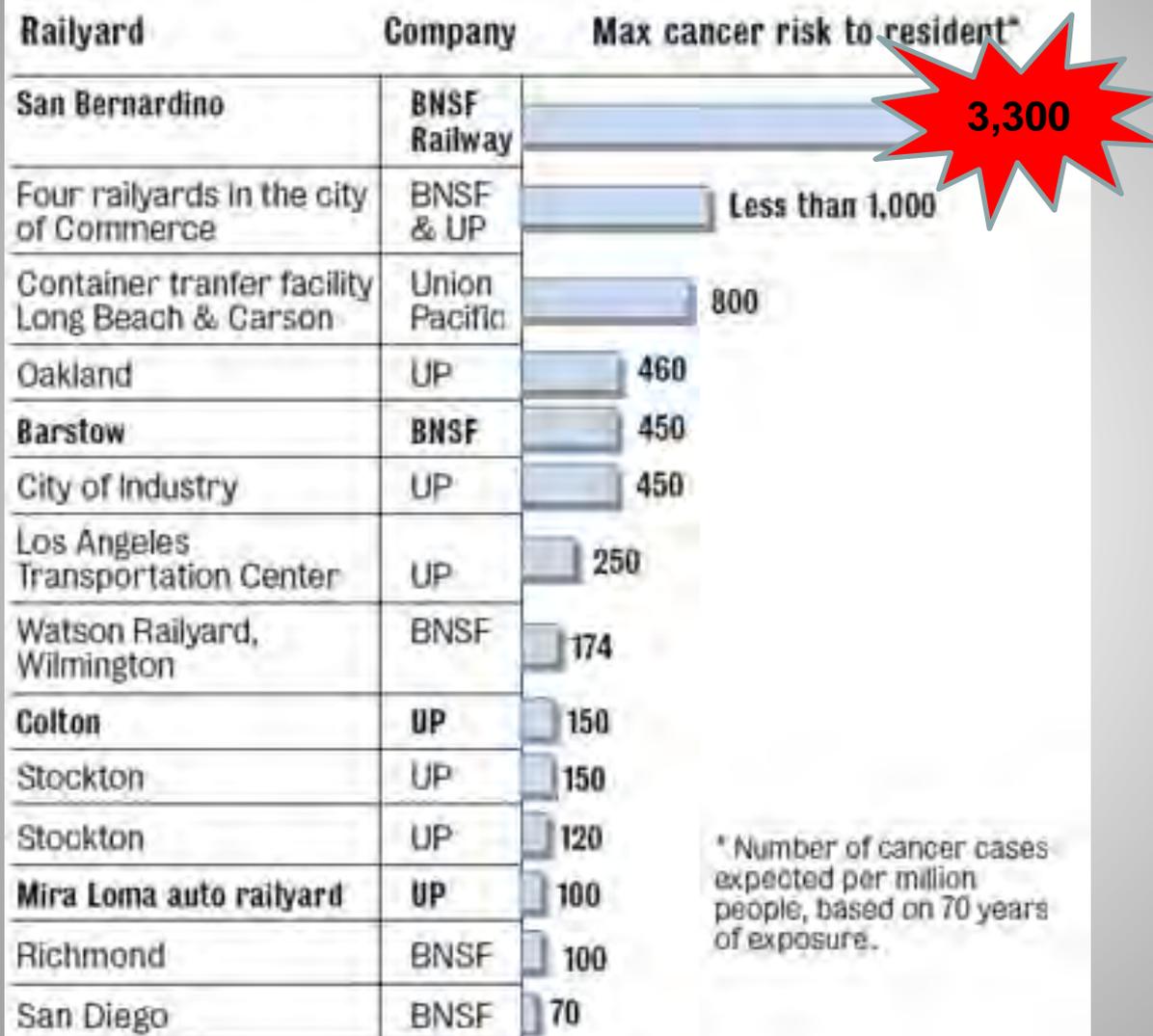
Historic
Depot

I-215

Rail yard
Auto
Distribution

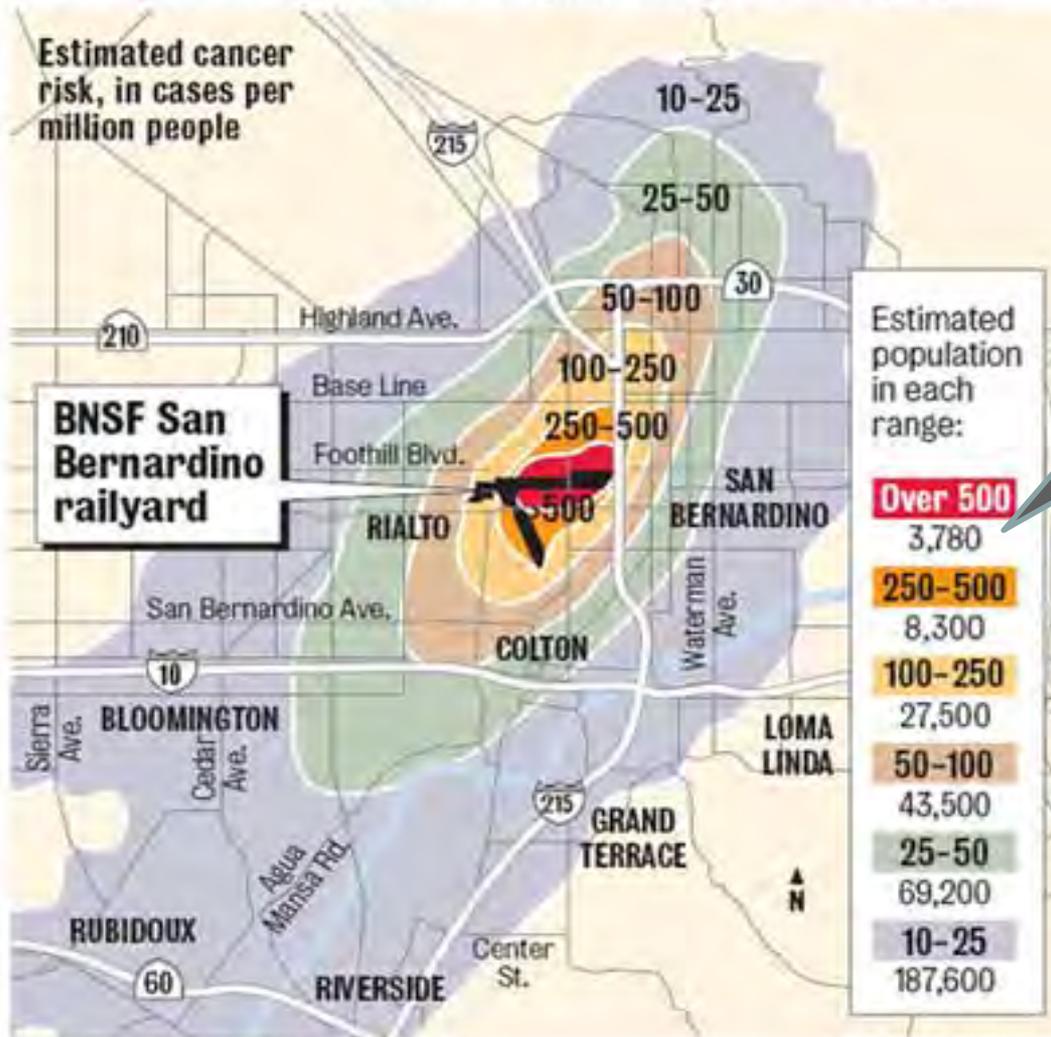


CANCER RISK: People living near BNSF Railway operations in San Bernardino face a much greater railyard-related cancer risk than people living near any of 15 other rail operations examined in state studies.



SOURCE: CALIFORNIA AIR RESOURCES BOARD

DANGER ZONE: A state study found that people living downwind of the BNSF railyard in San Bernardino face an increased cancer risk of as many as 2,500 cases per million people. The estimated regional cancer risk from all air pollution is 1,000 cases per million people.



3,780



Recent health screening at school found a 47% asthma rate among students.

Life expectancy age is 65.



San Bernardino Platform

- Buffers
- Retrofit-Weatherize Homes
- New/Alternative technology-
- Health Clinic in the community
- Breathe Mobile for testing in the local schools
- Move the gate and reconfigure operations
- Control truck congestion and diesel emissions in our neighborhoods
- Enforce noise regulations



- Maintain a clearly defined method of communication and accountability to the community
- Air Monitoring continuously
- Move the Omnitrans tanks away from the community
- No more commercial facilities in the middle of a residential



0 0.5 1 Miles



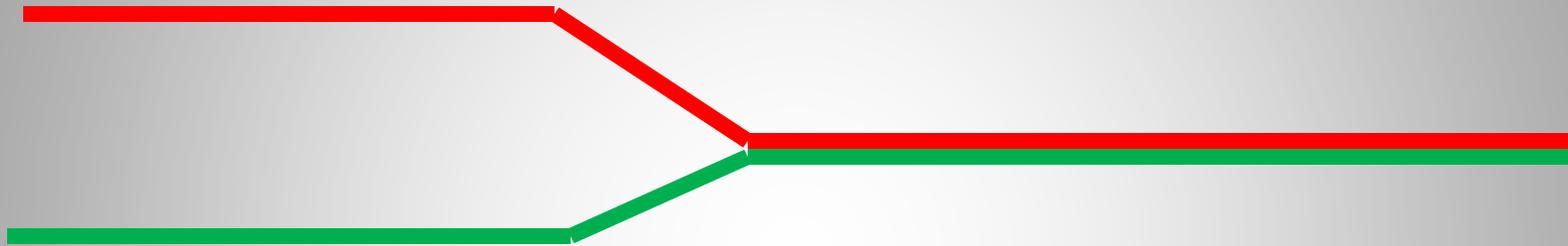
Loma Linda Health Study

47% of children screened at Ramona Alessandro have Asthma

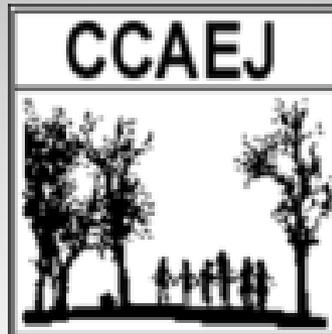
- 60% of households make less than \$10,000 annually
- Don't have health insurance
- Can't afford medical care
- Don't use ER
- Using over the counter and home remedies

- Weekly Mobile Clinic with Arrowhead Medical Center
- Air Filtration units
- Vegetative Barriers – trees, shrubs that absorb ultrafine particles
- 4th Street Beautification and Traffic Calming Project
- Investigating inexpensive home filter systems
- Developing “Breath of Life” Asthma Education and Prevention Program

- MAP 21
- Freight Advisory Committees
 - Increase throughput;
 - comprehensive plan for efficient transport



- EJ Mandate
- Interagency Working Group on EJ
 - Goods Movement Committee (DOT, Homeland Security, EPA)
 - Address health, safety and quality of life on impacted communities
 - Ensure local voice in decision making



CCAIEJ

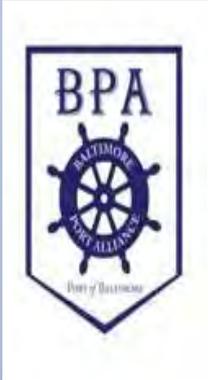
www.ccaiej.org

penny.n@ccaej.org

951-360-8451



Carol Eshelman
Former Director of the Brooklyn and Curtis Bay Coalition



National Conversation with Port Stakeholders

Goods Movement and Ports:
Community Impacts & Collaborative
Solutions

Case Study: Masonville Project

Before this goes too far,
you really need some
stake-holder input!



Masonville Project Dovetails with EPA

EJ Goods Movement Goals



- Increasing capacity & effectiveness of communities to engage in - and influence - decisions related to goods movement
- Reaching agreements on actions needed to reduce health impacts from goods movement



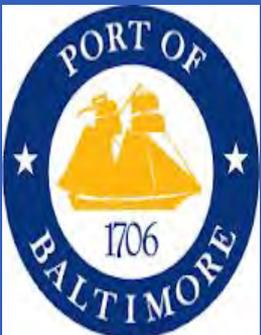
Port of Baltimore



The Port of Baltimore is a Vast Maritime, Industrial & Transportation Complex

- Over 45 miles of waterfront facilities & industries
- 30 private terminals & facilities handle nearly all the bulk cargo
- MPA's 6 public terminals handle over 90% of the general cargo



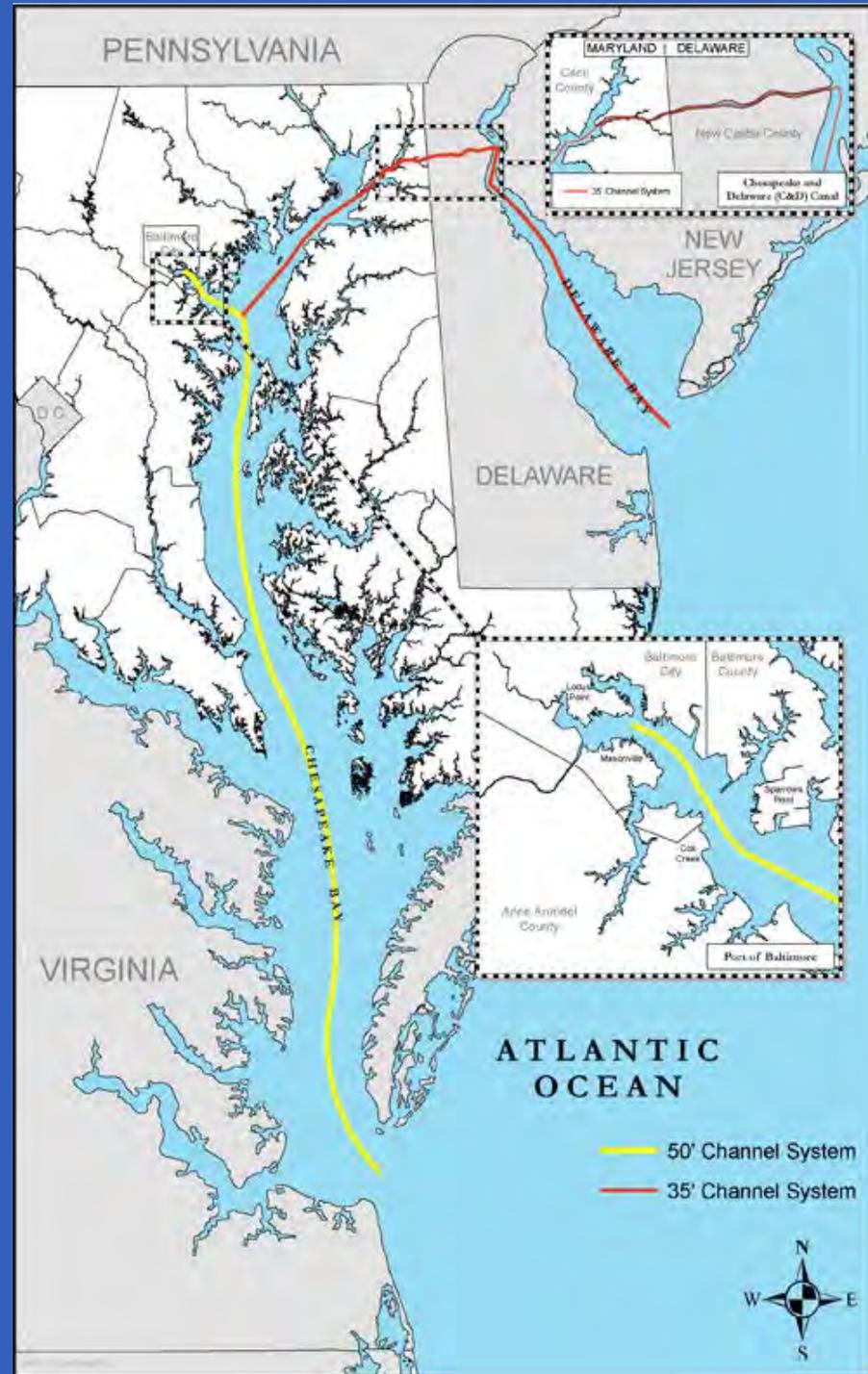


Cargo Diversity



DREDGING: HUGE ISSUE

- Estuarine port located about 150 miles from the Atlantic Ocean
- Chesapeake Bay is the Nation's largest estuary
- About 5 million cubic yards of sediment are dredged annually



MARYLAND DREDGING REQUIREMENTS



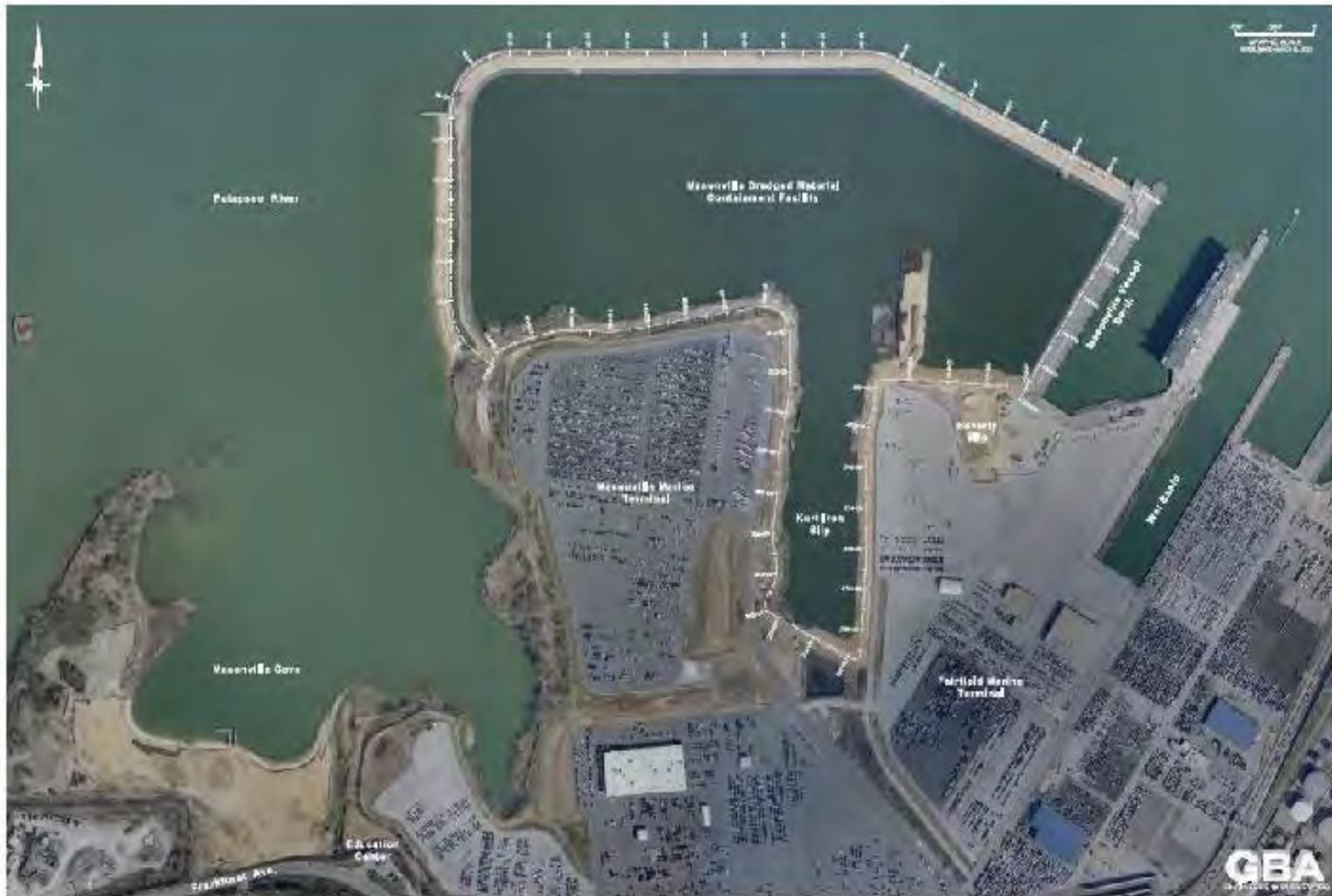
Public Input – Learning from Past Experience Hart-Miller Island



Masonville Cove



Masonville Project



March 2012

Masonville Cove - Before





Masonville Cove - After



- Cleaner natural environment.
- Building the foundation (literally) for a future marine terminal & new jobs for the community.
- Ongoing education programs, recreation opportunities, restored access to the water.

A LASTING ENVIRONMENTAL RESOURCE



A LASTING ENVIRONMENTAL RESOURCE



Masonville Waterfront Access



SENSE OF PLACE...RENEWED COMMUNITY





The Helen Delich Bentley

Port of Baltimore

MARCH/APRIL 2013

A GREEN PORT by the NUMBERS

750

kilowatts generated with
Cruise Maryland Terminal
photovoltaic system



79 PIECES

of equipment retrofitted,
replaced or upgraded



41
flex fuel vehicles
used by the MPA

0

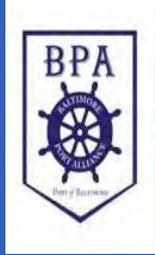
underground
storage tanks
remaining by
end of 2013



11
acres of new
Masonville Cove
nature area open
to public

21%

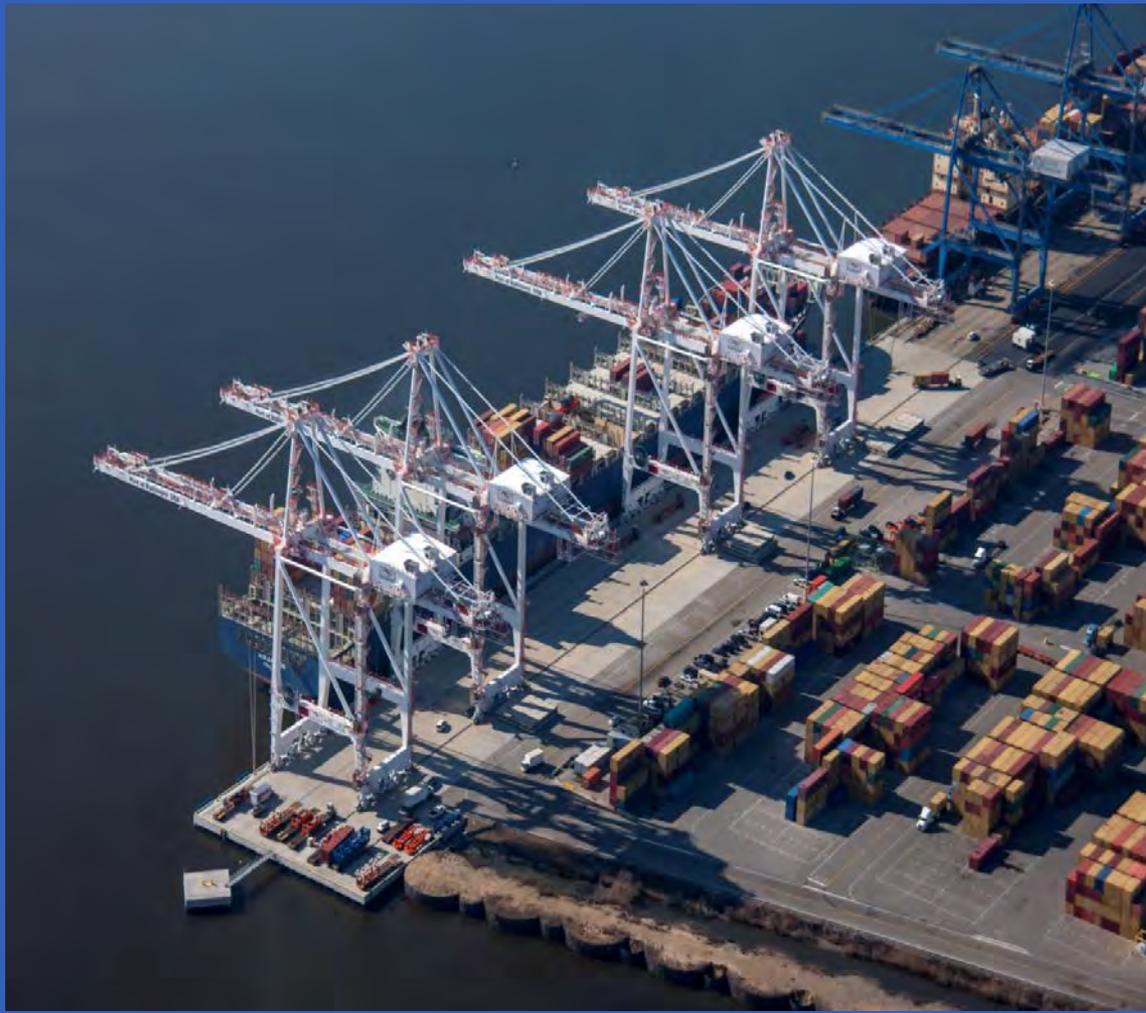
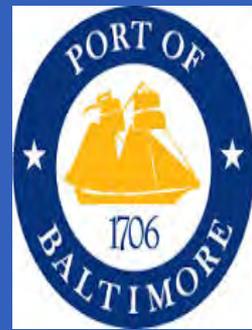
increase in recycling rate at
Dundalk Marine Terminal

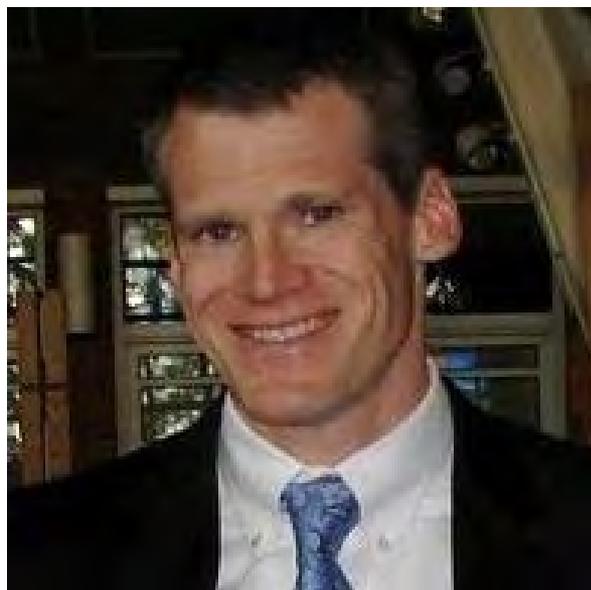


SUMMARY



- Active engagement with all constituencies - beginning early and continuing throughout the Masonville process - ultimately saved the Port time and resources
- The Port Alliance process empowered the community to really shape the project outcomes – a welcome change.
- Project included investments - by the port and others - to ensure that Masonville would be a valued environmental resource over the long-term.
- Masonville example started with water and dredge material --- but opened the door for collaborative partnerships and resource investments on other issues

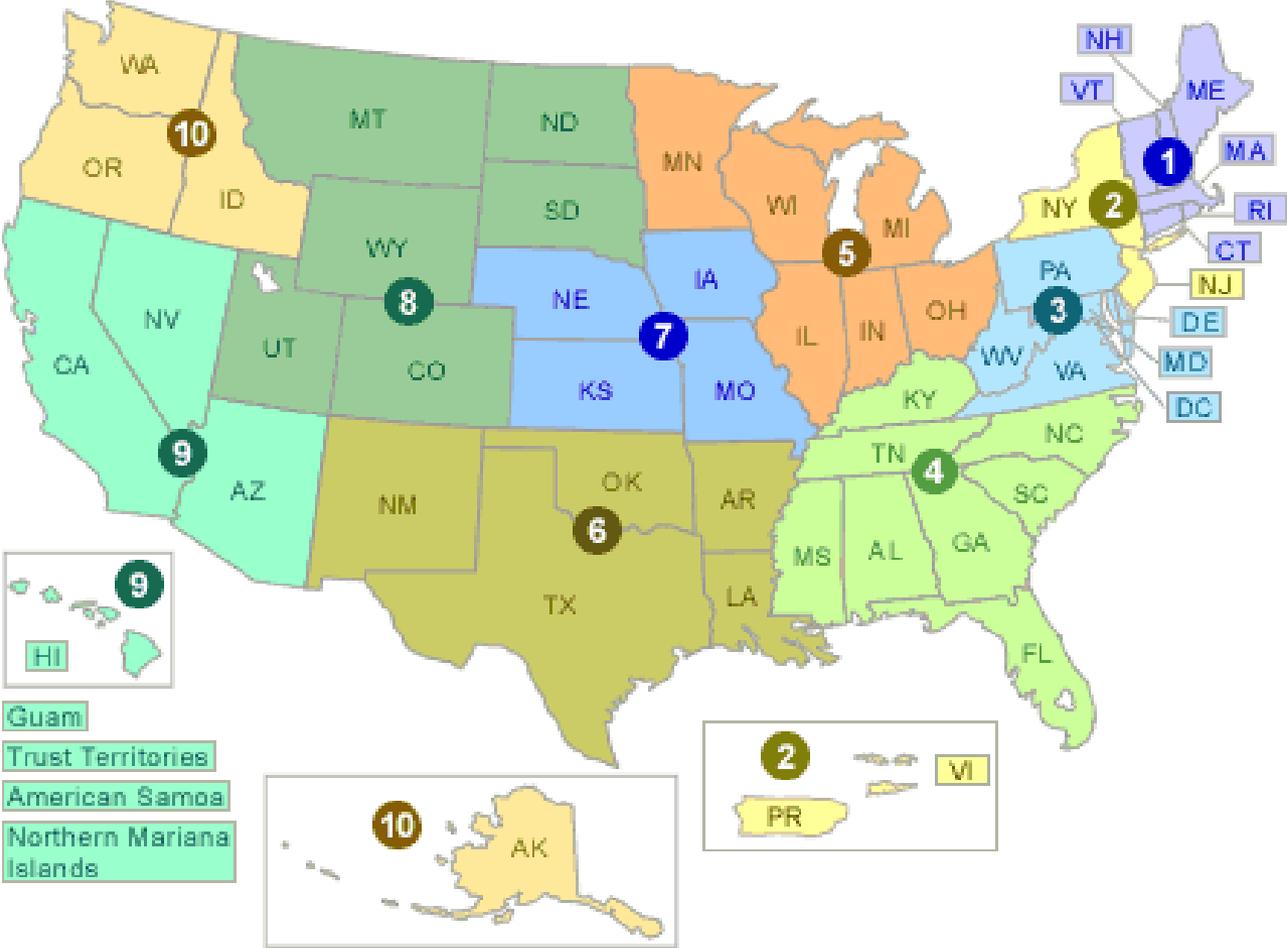




Closing Remarks:
Mike Moltzen, Chief
Mobile Source Section

U.S. Environmental Protection Agency, Region 2

Map of EPA Regions



EPA Regional Port Contacts

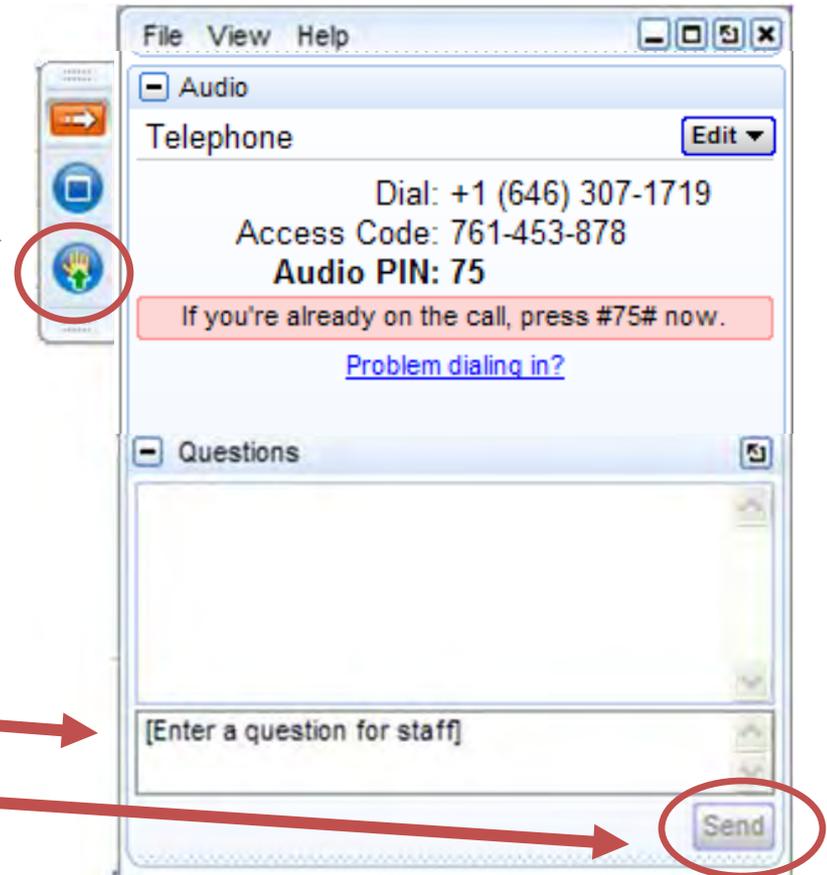
EPA Region	Name	Email	Telephone
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2	Reema Loutan	Loutan.reema@epa.gov	212-637-3760
3	Catherine Magliocchetti	Magliocchetti.catherine@epa.gov	215-814-2174
4	Alan Powell	Powell.alan@epa.gov	404-562-9045
5	Anthony Maietta	Maietta.anthony@epa.gov	312-353-8777
6	Michael Miller	Miller.michael@epa.gov	214-665-7550
7	Gregory Crable	Crable.gregory@epa.gov	913-551-7391
8	Kyle Olson	Olson.kyle@epa.gov	303-312-6002
9	Francisco Domez	Donez.francisco@epa.gov	213-244-1834
10	Dan Brown	Brown.dan@epa.gov	503-326-6832

Q&A Participation Instructions

By default, you are in listen-only mode (muted).

If you would like to verbally ask a question or comment during the Q&A session, click the ***raised hand button***. We will unmute your phone line and announce your name when it is your turn to speak. ****Please make sure your phone is unmuted on your end.***

You may also submit a question by typing into the ***Enter a question for staff box*** and click the ***Send button***. Staff will read and answer these questions as time allows.



Questions and Answers

- **Raise your hand to speak**
- **Please state your name and company/
organization**
- **To allow others an opportunity to speak please
limit responses to 60 seconds**

Follow Up

Please join us—

Our next national conversation on the state of US ports is scheduled for March 4th and will focus on “Advancing Solutions to Support More Sustainable Ports”

Find out more about EPA’s Ports Initiative at: www.epa.gov/otaq/ports

Please contact us at talkaboutports@epa.gov to ask a question or to submit a comment