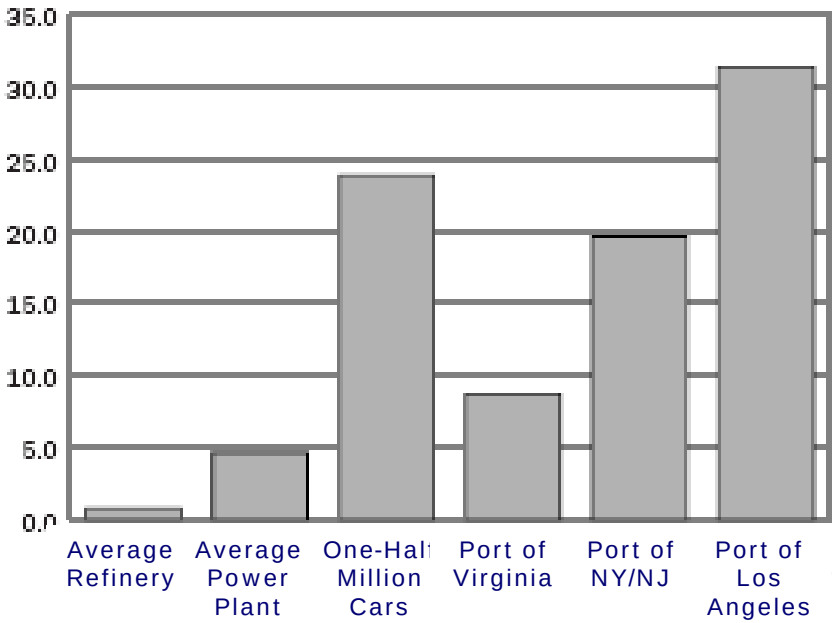
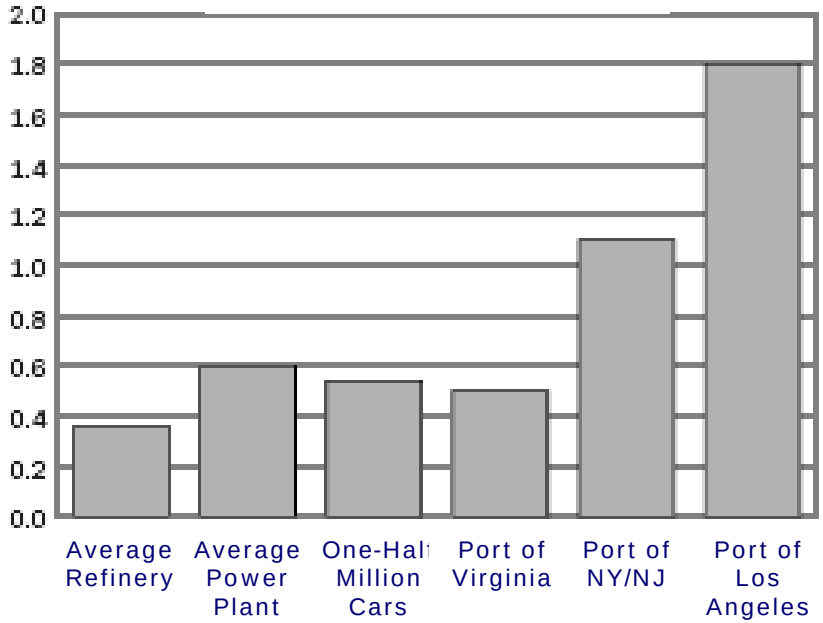
Port Pollution and Impacts on Communities in New Jersey

Pollution From Ports Compared to Other Sources

NOx Emissions
Tons per day



PM10 Emissions
Tons per day



Source: *Harboring Pollution*, NRDC 2004

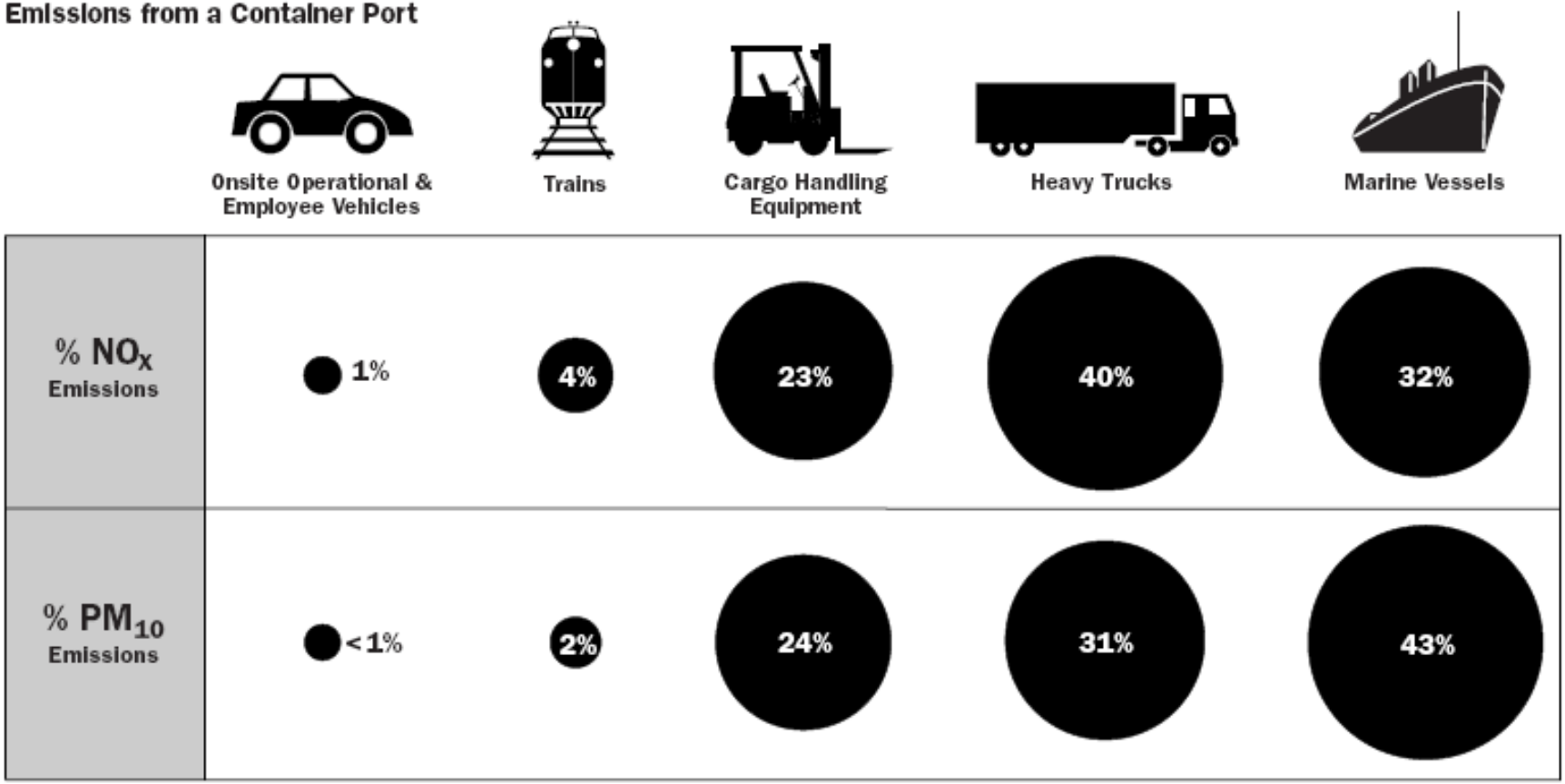
In 2000, container vessels calling at the 10 largest US ports polluted the air with more sulfur dioxide than all of the cars in the states of NY, NJ and CT combined.

More than…
18.5 million cars of SOx
80,000 of CO
182,000 cars of VOC
3.2 million cars of NOx
8.1 million cars of PM10

Source: *Harboring Pollution*, NRDC 2004

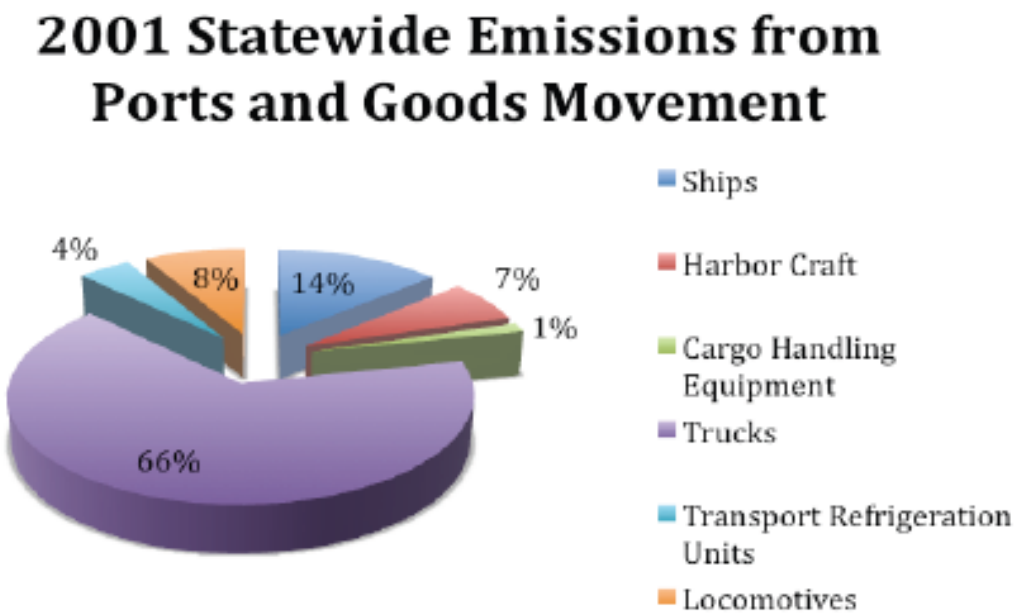
FIGURE 1-1

Average Contributions of Various Port-Related Sources to Total Nitrogen Oxides (NO_x) and Particulate Matter (PM_{10}) Emissions from a Container Port



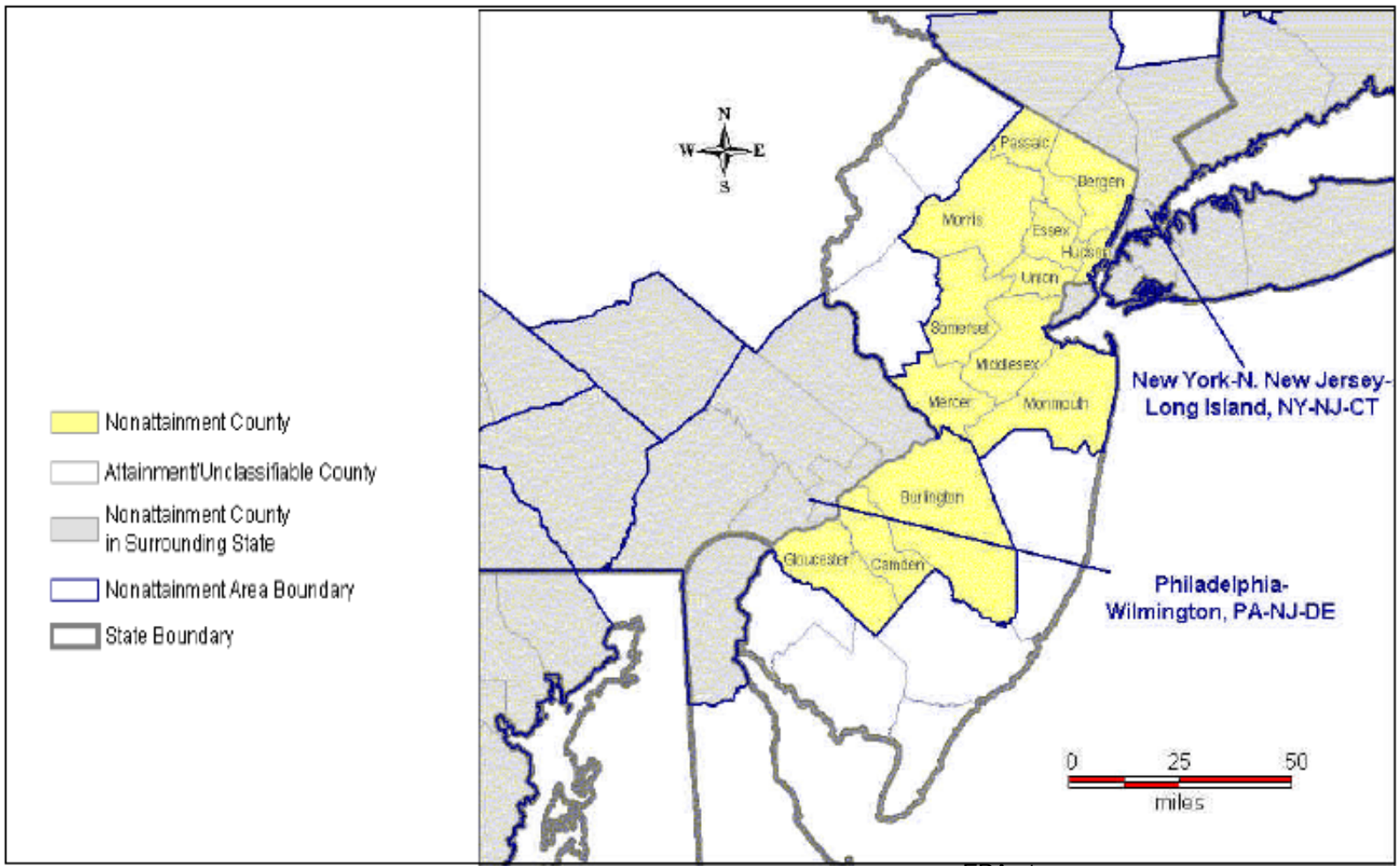
Source: *Harboring Pollution*, NRDC 2004

Figure 2.



[7] South Coast Air Quality Management District, 2007 AQMP.
[8] California Air Resources Board Emission Reduction Plan for Ports (2006).
[9] California Air Resources Board Vehicle Emissions.

Counties in New Jersey violating federal health standards for particulate matter



source: EPA at http://www.epa.gov/pmdesignations/states/New_Jersey.htm

What is a “Hot Spot”?

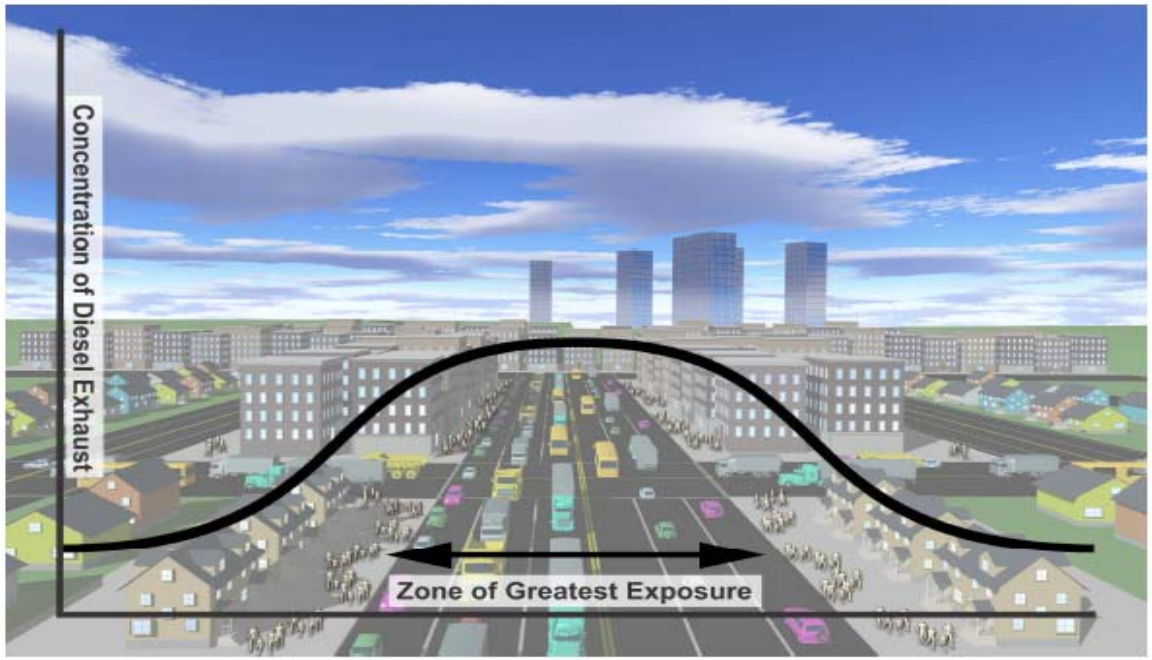


Figure 2: Diagram illustrates the impacts of traffic “hotspot”. (Courtesy Clean Air Task Force, artist Alan Morin)

DIESEL HOT SPOTS: A Snapshot of Newark, New Jersey

FINDING A PATH TOWARDS
"KIDS CLEAN AIR ZONES"

Kids Clean Air Zone

New Jersey Environmental Federation
and Clean Water Fund

June 2006

Monitoring Locations in Newark

Figure 2: Map of recreational areas in Newark where particulate monitoring occurred.

PM2.5: Roberto Clemente Field, Newark, NJ

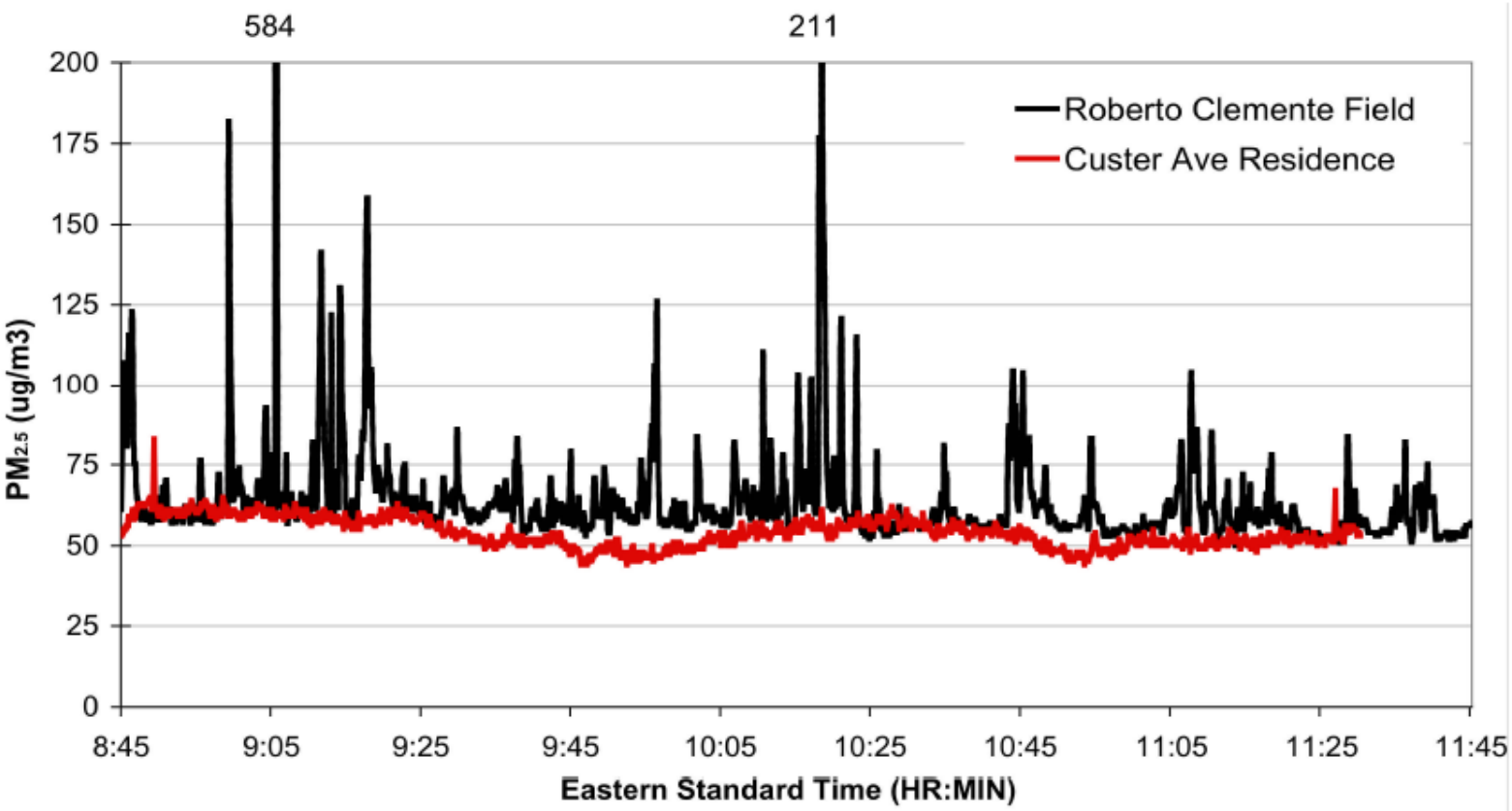


Chart 1: Truck traffic significantly elevates fine particle concentrations on the bleachers at Roberto Clemente Field, Newark (black) as compared to air quality conditions outside a Custer Avenue residence in Newark (red), located on a relatively quiet residential street.

Ultrafines: Hayes Pool, Newark, NJ

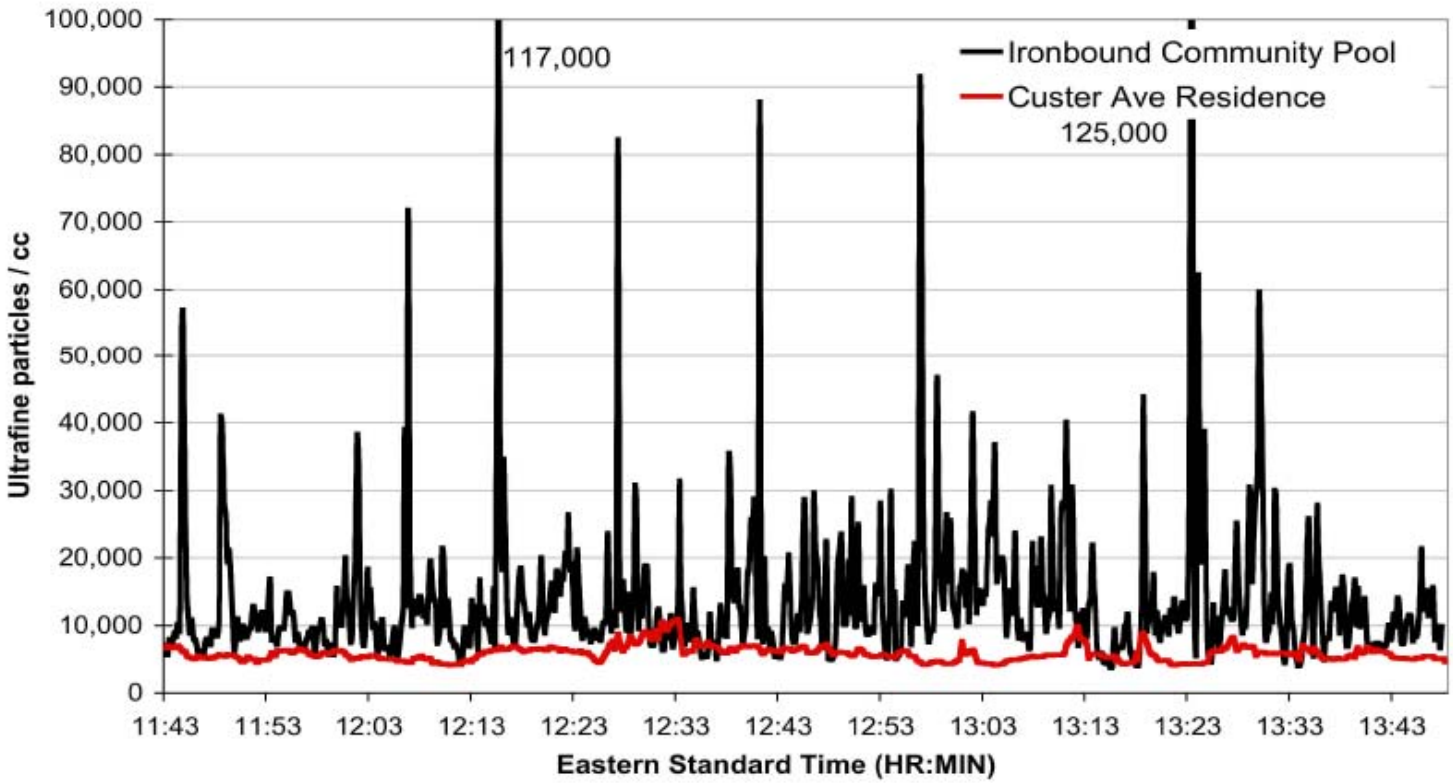


Chart 2: Ultrafine particles, an indicator of diesel exhaust outside Hayes Pool, Ironbound community (black) as compared with the Custer Avenue residence (red). Similarly to Chart 1, spikes in concentrations at Hayes pool are indicative of the impact of nearby truck traffic on the park.

Black Carbon: Weequahic Park, Newark, NJ

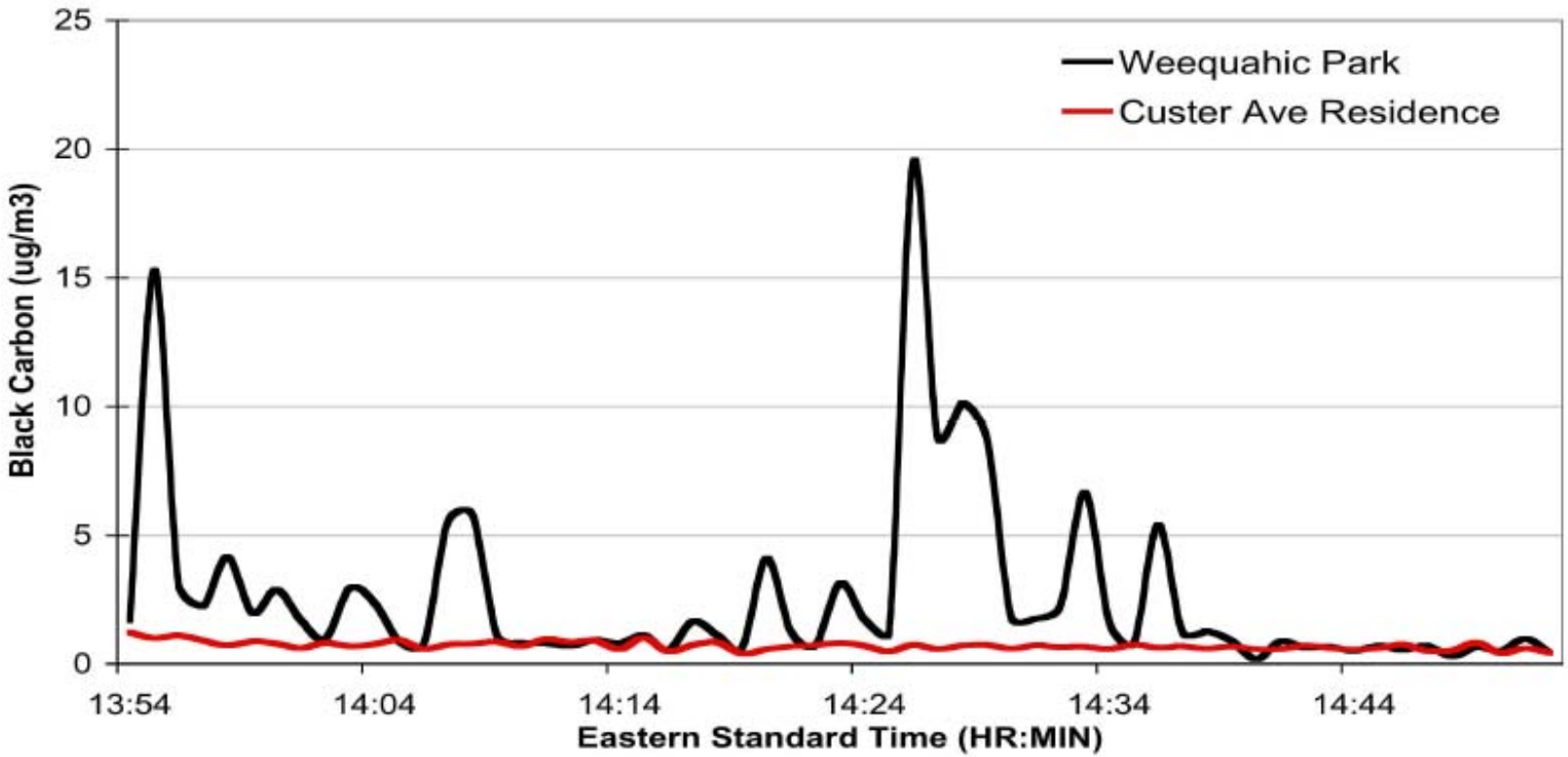


Chart 3: Elevated black carbon concentrations along Frelinghuysen Blvd at Weequahic Park as compared to the residence at Custer Avenue. Increases in black carbon were recorded as trucks rolled by the park and nearby neighborhood housing projects.

Diesel Soot Health Impacts Projected in New Jersey (1999)	
Health Impact	Annual Cases
Premature Deaths	880
Non-Fatal Heart Attacks	1,382
Asthma Attacks	17,926
Chronic Bronchitis Cases	535
Pediatric Emergency Room Visits	541
Acute Pediatric Bronchitis	1,290
Children With Lower & Upper Respiratory Symptoms	26,958
Lost Work Days	107,364
Minor Restricted Activity Days	620,975

Table 1: Clean Air Task Force (CATF) estimates based on 2005 United States Environmental Protection Agency (USEPA) methodology and 1999 USEPA diesel particulate levels. See www.cleanwateraction.org/njef/diesel.html for more county by county data.

Essex County Asthma Related Death & Hospitalization Rates

~ *An environmental health injustice* ~

	Newark	Suburban/Rural Essex County
Death Rate (per 100,000)	**5.8**	**2.8**
Hospitalization Rate (per 100,000)	**110**	**46**

Source: UMDNJ

Newark Children at Great Risk

- **1 out of every 10 NJ students in grades K-12 has asthma, resulting in ½ a million school days lost in one year alone.**
- **In contrast, 1 out of every 4 urban kids have asthma.**

This is an environmental health injustice.

(source: NJDEP)

Estimated Annual Medical & Other Economic Costs Related to Diesel Exposure (PM2.5) in Essex County

Health Impact	Estimated Cost per Person or Day*	Number in Essex County**	Total Cost per Category***	Total Cost in the County****	County Cost Minus Premature Death*****
Premature Death	$5,500,000	94	$517,000,000		
Non Fatal Heart Attack* **	$82,222	130	$10,688,860		
Missed Work Days	$138	10,586	$1,460,868		
Asthma Attacks	$42	1,802	$75,684		
				$529,225,412	**$12,255,412**

* Based on estimate generated by the USEPA Region II for a Philadelphia report (8/24/04) which included the medical/other costs of diesel

** Based on county chart released by NJEF, CWF and CATF (February 2005) and based on USEPA methodology and most recent data (1999).

*** Average based over a range of ages and includes lost wages and medical expenses over a 5 year period.

**** Does not include children 's ER visits, chronic/acute bronchitis, lower/upper respiratory ailments & hospital emission related to respiratory & cardiovascular needs.

***** This number more accurately reflects the partial cost of diesel-related health impacts of those trying to get on with their daily lives.

We can do better:

New technologies can reduce diesel emissions

- Retrofits
- Fleet Upgrades

The pollution from sixty 2007 trucks is equal to one 1997 or earlier truck

Broken Port Trucking System

- Drivers are misclassified as owner operators, are responsible for the costs of doing business but do not have the ability to set rates
- Drivers are paid by the load rather than by the hour – because they are not compensated for their time there is no market incentive to improve wait times at the port
- Many drivers make less than $8 per hour and as a result drive older, more highly-polluting trucks
- In order to keep pace with truck payments, rising costs of fuel and other expenses, many drivers take work at lower rates, creating a race to the bottom.

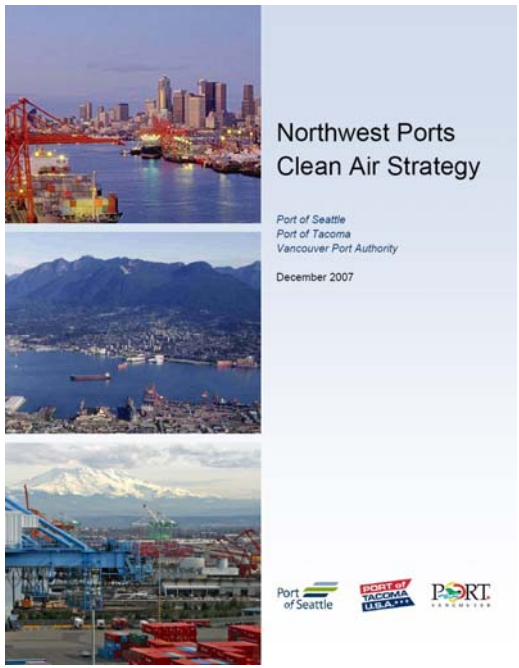
Top 5 US Seaports

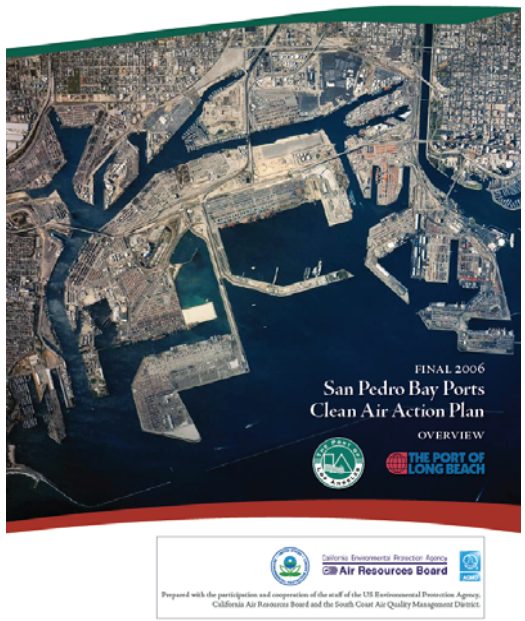
(order by volume)

1. Los Angeles
2. Long Beach
3. New York/New Jersey
4. Oakland
5. Seattle

All of these ports except New York/New Jersey are considering policies to reduce diesel pollution from port trucks

Other Harbor Commissions and Port Authorities around the nation are standing up for communities by regulating diesel emissions





Coalition of Leading Enviros, Public Health Advocates & Port Drivers Laud Port of LA's Clean Trucks Program

'High Road to Clean Air' Policy Expected to Pave Way for Green Growth

Press-Telegram
www.presstelegram.com

Employee status required of Port truckers

EMISSIONS: Final section of L.A. Clean Trucks Program will ban independents by 2012.

La Opinión DIGITAL

Imprimir esta página

IMPRIMIR ENVIAR VOLVER

Se avecina conflicto en puertos

En San Pedro exigen que choferes trabajen como empleados; dan versión de Programa Camiones Limpios

An analysis by Boston Consulting Group (BCG) determined the Los Angeles drayage system imposes between $500 million and $1.7 billion of costs on the public each year through:

- **Operational Inefficiencies** (e.g impact on truckers and trucking companies of truck under-utilization, traffic congestion and lack of driver health/benefits)

- **Community Costs** (e.g. road maintenance, environmental damage, vehicle and driving safety and residential impacts from truck traffic and parking)

- **Public Health** (premature death, hospital admissions, workday and school-day loss, and restricted activity).

Port of Los Angeles
http://www.portoflosangeles.org/CAAP/CTP_O&B.pdf

Objectives for the CTP : Environmental, Port Operations, and Safety/Security

Environmental

- Reduce emissions from drayage (port trucking) to comply with CAAP guidelines
- By 2011, CAAP requires an aggregate reduction in pollutants from all Port sources including trucks
  - 47% DPM
  - 45% NOx
  - 52% SOx
- Enable continued migration towards newer and cleaner technologies over time

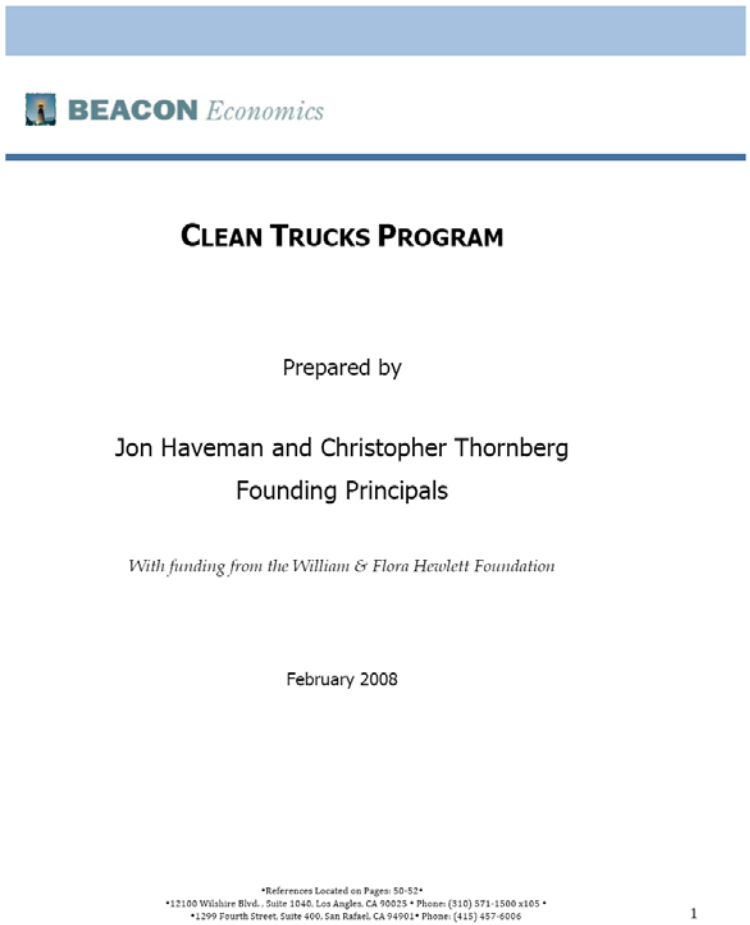
Port operations

- Improve stability of the port trucking market
  - Establish stable drayage service business
  - Avoid service disruptions during implementation
- Ensure long term sustainability
  - Truck fleet and market participants
  - Incomes that attract and retain drivers
- Enable green growth
  - Improve trucking operational efficiency and reliability

Safety and security

- Ensure compliance with safety standards
  - Vehicle safety
  - Driver
- Ensure that port security objectives are met

Source: CTP / CAAP presentations, 2006 CAAP Overview



BEACON Economics

CLEAN TRUCKS PROGRAM

Prepared by

Jon Haveman and Christopher Thornberg
Founding Principals

With funding from the William & Flora Hewlett Foundation

February 2008

References Located on Pages: 50-52
*12100 Wilshire Blvd., Suite 1040, Los Angles, CA 90025 * Phone: (310) 571-1500 x105 *
1299 Fourth Street, Suite 400, San Rafael, CA 94901 Phone: (415) 457-6006

1

*"This consolidation also holds the promise of **encouraging a significant increase in the overall efficiency of the system**. This includes, for example, less wait time at the ports to pickup and drop off containers, better matching of inbound and outbound loads, and **other cost reductions that come from economies of scale**."*

- Jon Haveman, Beacon Economics

STAFF RECOMMENDS CONCESSION OPTION 3 FOR PORT OF LOS ANGELES

- Licensed Motor Carriers in good standing
- $2500 application fee + $100 per truck
- 5 year term, option for renewal
- Transition to 100% employees in 5 years
- Strict controls on operation, maintenance, training, safety and security with record keeping and monitoring by concession administrator.
- Compliance with TWIC, technology and efficiency improvements
- Off-street parking of trucks
- Insurance requirements
- Preference to hire drayage drivers, use of First Source Hiring Center
- Placards on Trucks with 1-(800)-phone No.

NJ deserves a Plan to Reduce Diesel Particulate Emissions:

- The Coalition for Healthy Ports (CHPs) urges the Clean Air Council (CAC) to advise the state to enact a Plan for **reducing the diesel pollution at the port**

- We pledge to work with the CAC to implement solutions that allow the port to **remain economically viable** while ending the damage pollution from port commerce is causing neighboring communities.