



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

*Committed to Achieving Clean Air to Protect
the Public's Health and the Environment*

West Oakland Health Risk Assessment: Emissions Inventory Development

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CARE Task Force Meeting

March 14, 2007

Health Risk Assessment (HRA)

Overview

- **Includes three parts:**
 - Maritime Port of Oakland
 - Union Pacific Rail Road
 - West Oakland Community
- **Assesses lifetime cancer and non-cancer risks from diesel particulate matter (PM)**
- **Provides technical basis to help identify most effective diesel PM emission reduction strategies**

Health Risk Assessment (HRA)

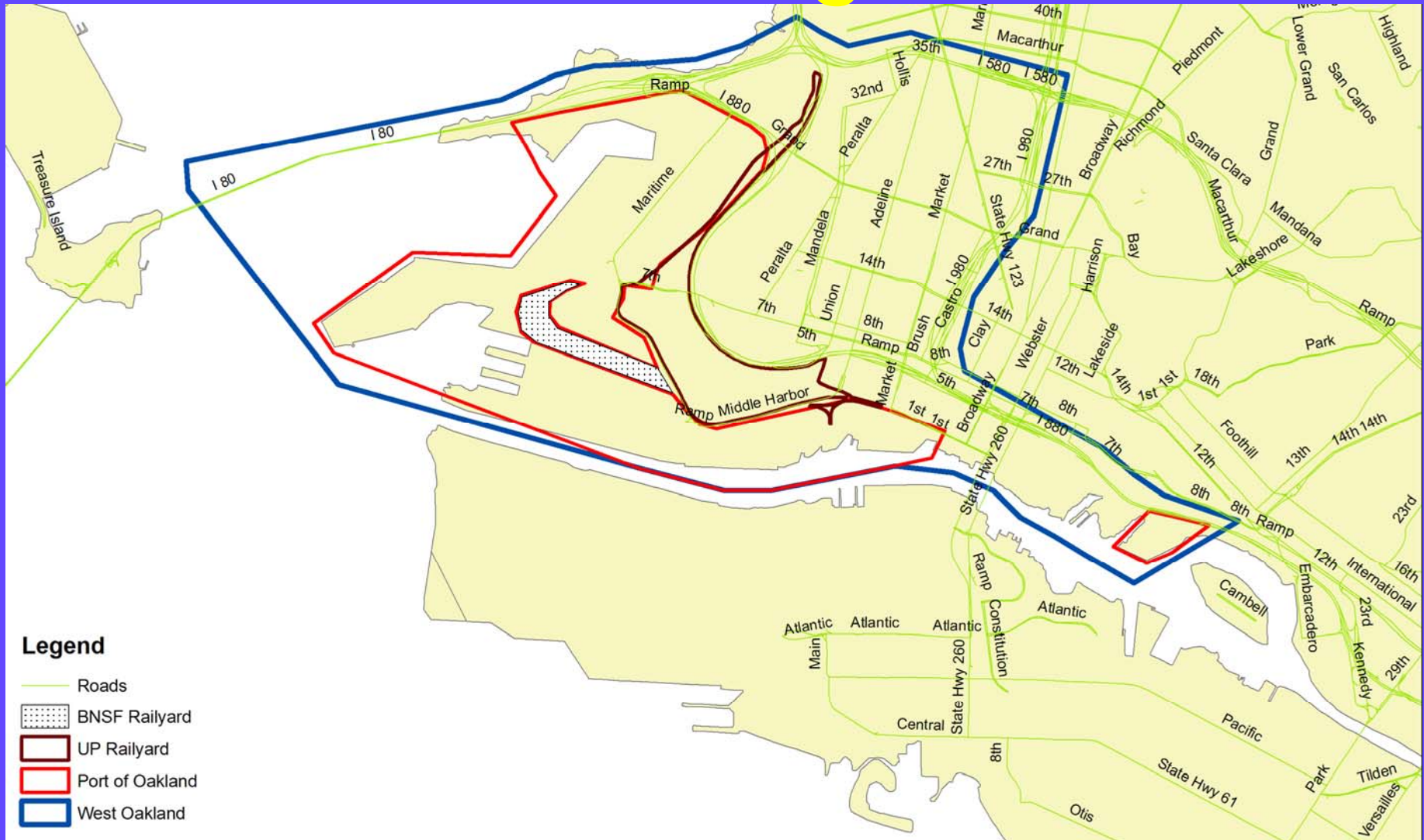
- **Will**

- Generate contours of annual average diesel PM concentration and associated risks
- Provide relative risk contribution from various sources of diesel PM

- **Will not**

- Actually measure diesel PM in the air
- Gather or use health data on local residents
- Determine daily maximum concentrations

Health Risk Assessment Source Regions



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Part 3 Objectives

- **Estimate the health impacts of diesel soot in the West Oakland community**
 - Sources not on Port of Oakland or UP property
- **Work on Part 3 is nearing completion to estimate activity and emissions**
- **Community meetings have helped to**
 - Identify important sources
 - Voice local concerns

Sources of Diesel Particles

- **Diesel vehicles on freeways, major roadways, and Bay Bridge toll plaza**
 - Truck activity from Metropolitan Transportation Commission's (MTC) Network
 - Supplement with local traffic studies & traffic counter data
- **Harbor craft, tug boats, ocean going vessels**
 - ARB inventory of off-Port activity
 - Vessel counts, survey of tug operators
- **Locomotives, including Amtrak**
 - Train counts of off-Port and off-UP activity

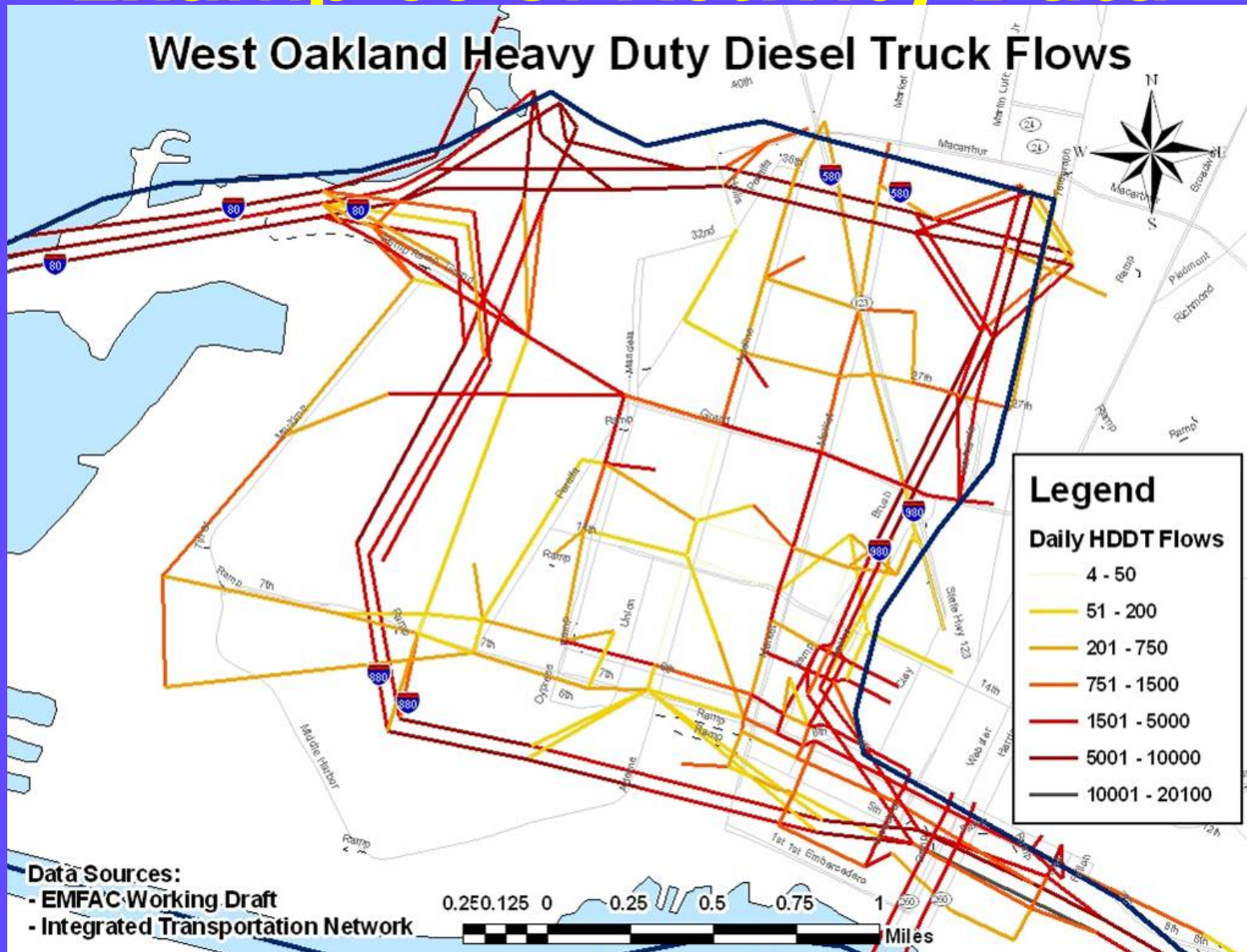


More Sources of Diesel Soot

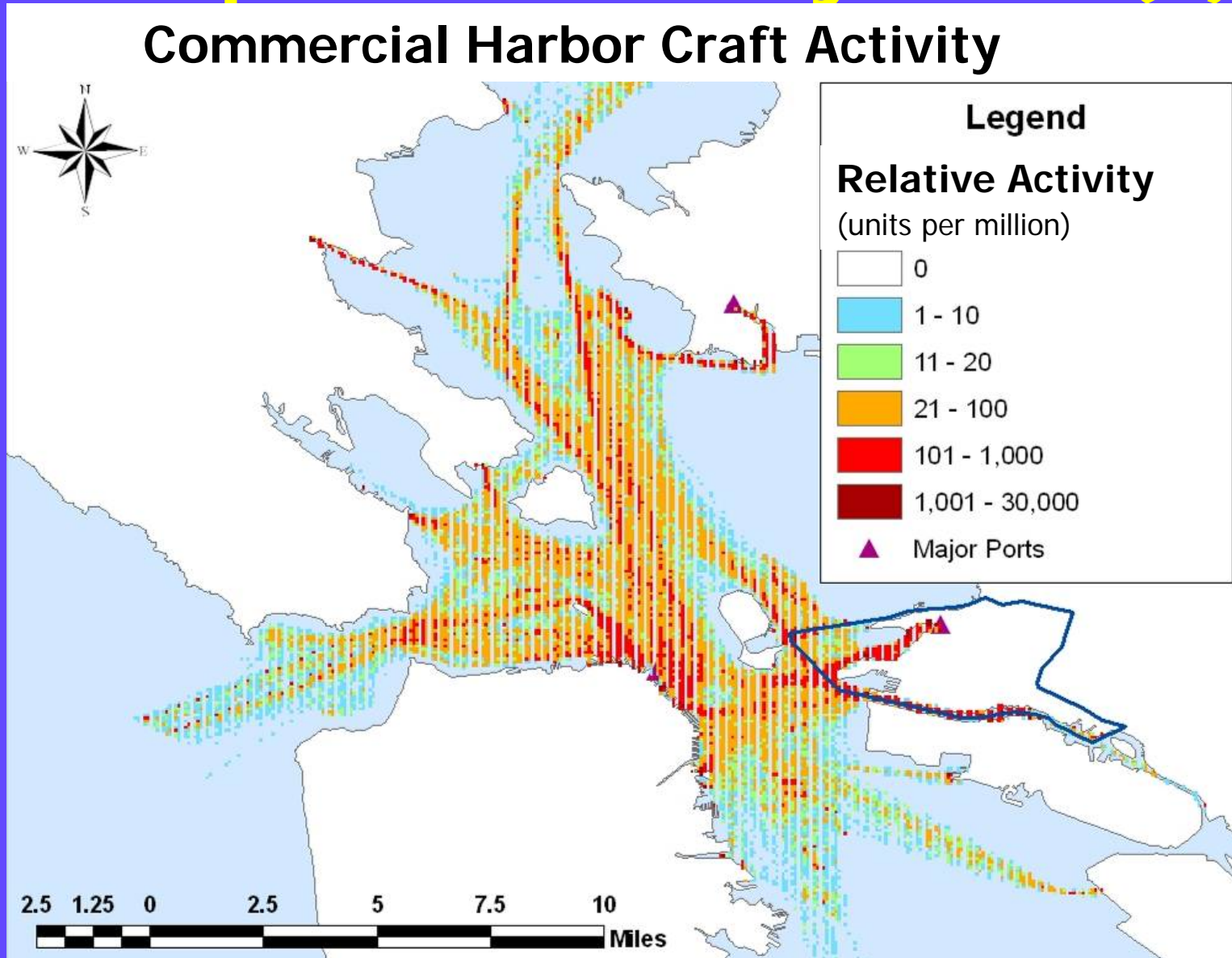
- **Truck-related businesses, including USPS, Greyhound Bus**
 - InfoUSA database
 - City of Oakland survey
 - Field visits, phone surveys
- **Construction activity, including Bay Bridge construction**
 - City of Oakland list of development projects
 - EIR/EIS documents, field visits
- **Schnitzer Steel**
 - Permit information, cargo surveys, vessel inventories
- **Stationary diesel sources**
 - Air District data on permitted facilities



Examples of Activity Data



Examples of Activity Data (2)



Examples of Emissions Estimates

