Port of Oakland Seaport Security Presentation

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PORT OF OAKLAND
Your Gateway to the World

PORT OF OAKLAND

Who Are We?

Established in 1927 as an independent agency for the City of Oakland

Financially self-supporting

Early Pioneer in Containerization

Northern California's prominent container port

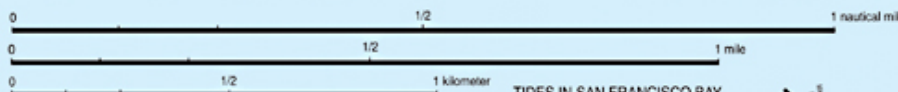Landlord Port as Opposed to Operating Port

MARITIME DIVISION UPDATE

- 4th Largest Container port in U.S. serving 4th largest metropolitan area in U.S. and the 2nd largest Exporting Region in the Nation

- 2.04 Million Total TEU's in 2004:
  54.4% Export   45.6% Import

- Over $800 Million spent on Capital projects since 1995; $ 1 Billion [today's dollars] needed to help us meet growth in demand over the next 15 years
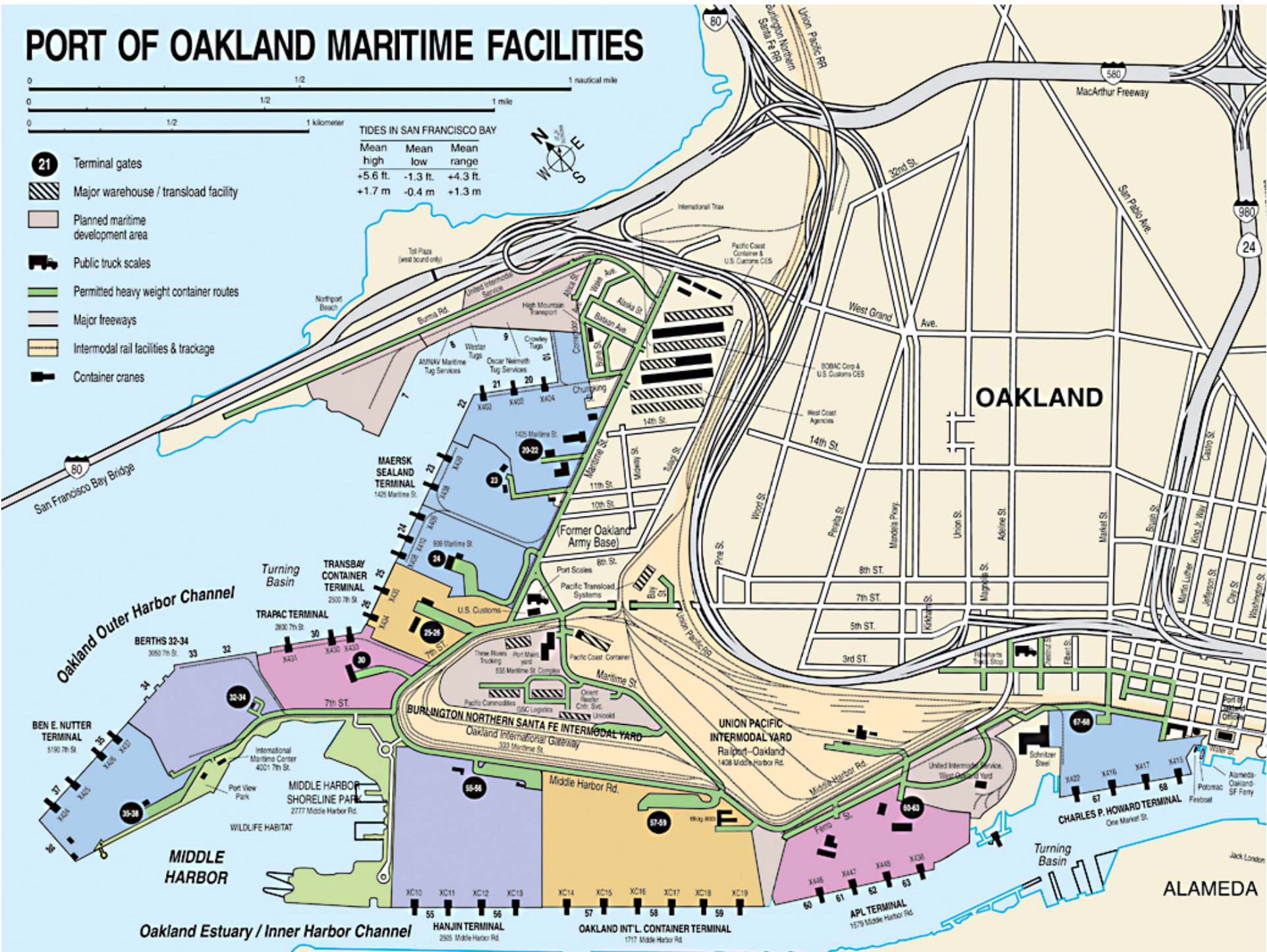
PORT OF OAKLAND MARITIME FACILITIES

0   1/2   1 nautical mile
0   1/2   1 mile
0   1/2   1 kilometer

TIDES IN SAN FRANCISCO BAY

	Mean high	Mean low	Mean range
	+5.6 ft.	-1.3 ft.	+4.3 ft.
	+1.7 m	-0.4 m	+1.3 m

N E S W

Legend

- 21 Terminal gates
- Major warehouse / transload facility
- Planned maritime development area
- Public truck scales
- Permitted heavy weight container routes
- Major freeways
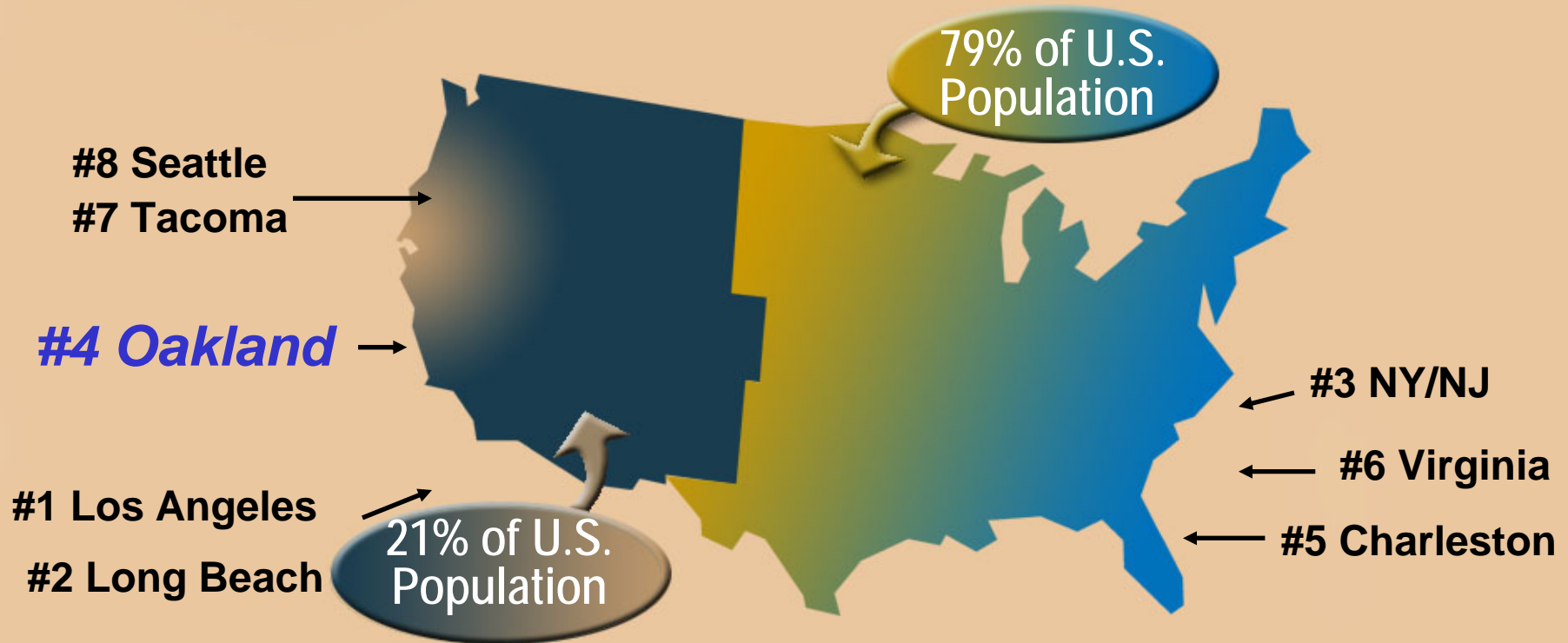- Intermodal rail facilities & trackage
- Container cranes

OAKLAND

ALAMEDA

Burlington Northern Santa Fe RR
Union Pacific RR
MacArthur Freeway

International Trnx

Pacific Coast Container & U.S. Customs CES
BOBAC Corp & U.S. Customs CES
West Coast Agencies

Toll Plaza (west bound only)

West Grand Ave.
32nd St.
San Pablo Ave.

Northport Beach

Burma Rd.
United Intermodal Service

High Mountain Transport

Wave Ave.
Alaska St.
Bataan Ave.

AMNAV Maritime Tug Services
Westar Tugs
Oscar Neimeth Tug Services
Crowley Tugs

Chunking St.
14th St.
11th St.
10th St.
8th St.

X403 X402 X404
1425 Maritime St.

20-22

MAERSK SEALAND TERMINAL
1425 Maritime St.

909 Maritime St.

(Former Oakland Army Base)

Port Scales
Pacific Transload Systems

TRANSBAY CONTAINER TERMINAL
2500 7th St.

U.S. Customs

TRAPAC TERMINAL
2600 7th St.

25-26

Turning Basin

Oakland Outer Harbor Channel

BERTHS 32-34
3050 7th St.

X431
X430 X433

30

San Francisco Bay Bridge

32-34

BEN E. NUTTER TERMINAL
5190 7th St.

X406 X407
35-38
X404 X405

International Maritime Center 4001 7th St.

Port View Park

MIDDLE HARBOR SHORELINE PARK
2777 Middle Harbor Rd.

WILDLIFE HABITAT

MIDDLE HARBOR

Three Rivers Trucking
Port Main Yard
556 Maritime St. Complex
Pacific Commodities
GSC Logistics
Orient Reefer Cntr. Svc.
Unicold

BURLINGTON NORTHERN SANTA FE INTERMODAL YARD
Oakland International Gateway
333 Maritime St.

Maritime St.

7th ST.

Middle Harbor Rd.

55-56

57-59

Bldg 630

UNION PACIFIC INTERMODAL YARD
Railpod--Oakland
1408 Middle Harbor Rd.

United Intermodal Service West Grand Yard

Schnitzer Steel

67-68

X422 X416 X417 X415
67 68
Potomac Fireboat
Alameda-Oakland-SF Ferry

CHARLES P. HOWARD TERMINAL
One Market St.

60-63

X446 X447 X448 X436
60 61 62 63

APL TERMINAL
1579 Middle Harbor Rd.

Turning Basin

Jack London

Oakland Estuary / Inner Harbor Channel

XC10 XC11 XC12 XC13
55 56

HANJIN TERMINAL
2505 Middle Harbor Rd.

XC14 XC15 XC16 XC17 XC18 XC19
57 58 59

OAKLAND INT'L. CONTAINER TERMINAL
1717 Middle Harbor Rd.

Port of Oakland Office

Pine St.
Wood St.
Kirkham St.
Peralta St.
Mandela Pkwy.
Union St.
Adeline St.
Market St.

8th ST.
7th ST.
5th ST.
3rd ST.

Fisherman's Trailer Shop

Martin Luther King Jr. Way
Castro St.
Brush St.
Jefferson St.
Clay St.
Washington St.

I-80
I-580
I-980
I-24

2004 U.S. Port Rankings

79% of U.S. Population

#8 Seattle
#7 Tacoma

#4 Oakland

#3 NY/NJ

#6 Virginia

#1 Los Angeles

#2 Long Beach

21% of U.S. Population

#5 Charleston

PORT OF OAKLAND

OAKLAND'S TRADING PARTNERS
Calendar Year 2004
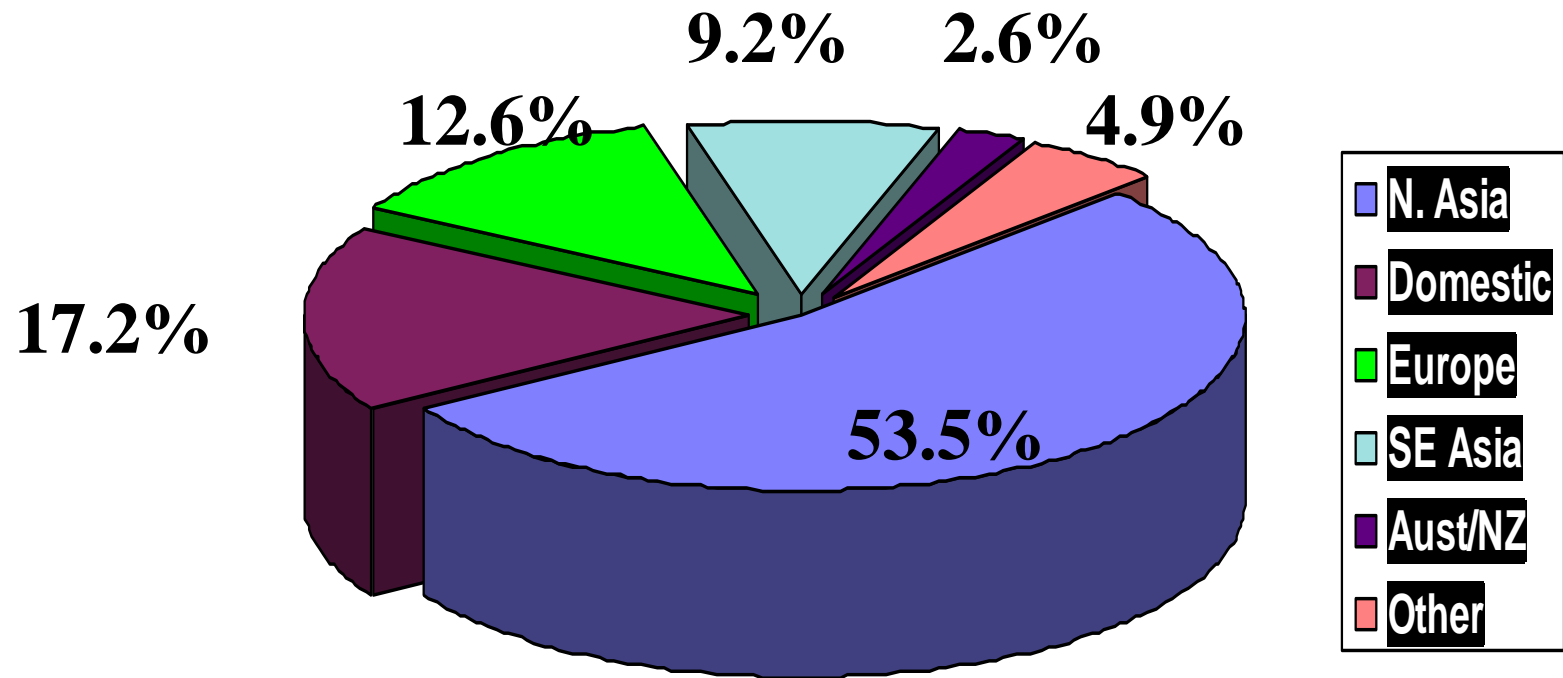
PORT OF OAKLAND

TOP COMMODITIES...

EXPORTS

PRODUCE POULTRY MEAT WINE/
BEVERAGES

IMPORTS

ELECTRONICS CAR PARTS BEVERAGES CONSUMER GOODS

PORT OF OAKLAND

CALIFORNIA'S GLOBAL POSITION

California is the World's 5th Largest Economy:

- Single largest trading entity in the U. S.

- International waterborne commerce through California Ports

  accounts for approximately 42% of the Nation's total.

- Three of the Nation's four largest container ports are located in

  California.

- The value of trade through the California Customs Districts is

  estimated at nearly $500 billion [preliminary] in 2004.

- 81.6 % of Containerized cargo handled on the U.S. West Coast moved

  through California Ports in 2004.

- Volume through California Ports has increased 5 times faster than

  corresponding growth in infrastructure

PORT OF OAKLAND

STATE ECONOMIC BENEFITS OF CALIFORNIA PORTS [2000]*

Impact on:

State Revenue $1.48 Billion

Gross State Product $26.9 Billion

Personal Income $32.5 Billion

Total Employment 838,000 Jobs

*   Source: CManc, 2001

PORT OF OAKLAND

OAKLAND'S REGIONAL ECONOMIC IMPACTS [2001]

	Maritime	Total Port
Total Economic Impact [millions]	$1,566	$ 6,814
Includes: Payroll	$ 753	$ 1,918
State and Local Taxes	$ 74	$ 238
Direct and Other Jobs [By Type]		
Direct	7,900	22,600
Induced	3,800	11,600
Indirect	2,100	6,300
Related Jobs	240,300	486,800

PORT OF OAKLAND

PORTS ISSUES TODAY

OPERATIONAL

Surface Infrastructure/Goods Movement

Dredging

Urban Congestion & Air Quality

PORT SECURITY

Asset and Cargo Protection

Cost Impact of Regulatory Requirements

Today we will focus our presentation on Security

PORT OF OAKLAND

TRANSPORTATION VULNERABILITY

- **Transportation Services are a Critical Part of the Global, Low-Inventory [i.e. Just-in-Time] Distribution Model Prevalent in the U.S. and Globally.**

- **The Transportation System is Designed to SPEED commerce, not IMPEDE commerce!**

THE U.S. MARITIME SYSTEM...

…Includes more than 300 sea and river ports with more than 3,700 cargo, passenger terminals and numerous recreational marinas,
vessel arrivals per day and more than 1,000 harbor channels spread along thousands of miles of Coastline.

- Containers are an important segment of Maritime Commerce.
- The Top 50 Ports in the U.S. account for approximately 90% of cargo tonnage and the Top 25 Ports account for nearly 98% of all container shipments. In 2004, nearly 8 Million Containers entered the U.S.
- Trade now accounts for 25% of the U.S. Gross Domestic Product [GDP], up from 11% in 1970 and is expected to double over the next 2 decades.

PORT OF OAKLAND

TODAY'S "TROJAN HORSE"
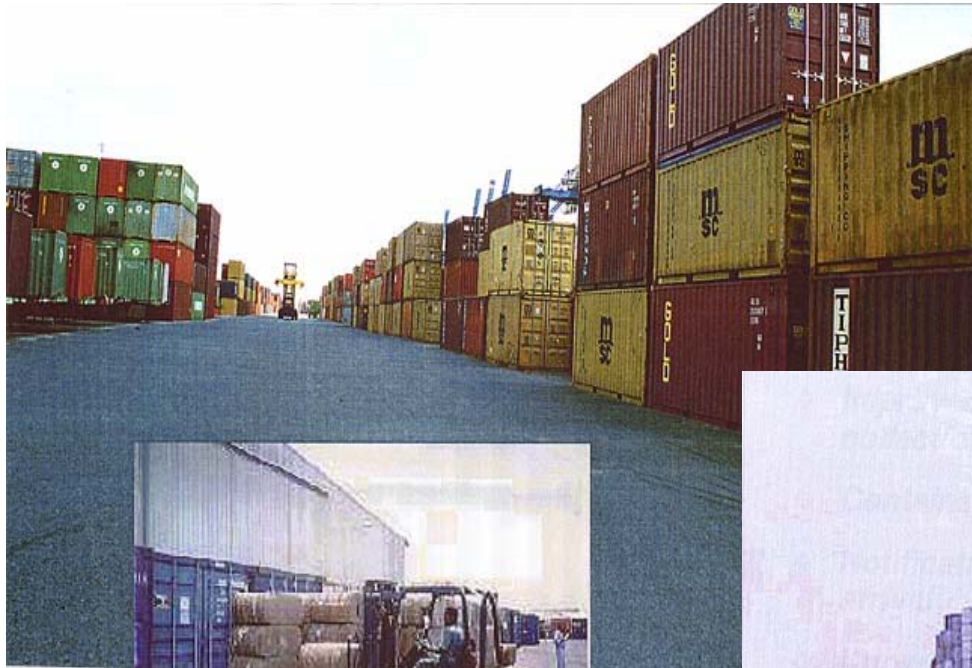
Ships with 8,000 TEU Capacity are now in service

Ships with 12,000 TEU Capacity are expected by 2011

PORT SECURITY

To Date, Mandated Security Programs have cost the Port of Oakland and its major tenants in excess of $18 million. Estimates of future costs on a regional basis are as high as $160 million. The Port of Oakland costs alone could be in the $60-80 million range with an additional $125 million in aviation and maritime security costs over the next 5-7 years.

- A significant component of capital spending over the next 5 years will be devoted to support security enhancements mandated by Congress and directed by regional security requirements.

- A TSA Grant Funding Program is in place, BUT NO REGULAR FUNDING SOURCE HAS BEEN COMMITTED

PORT OF OAKLAND

PORT SECURITY RISK FACTORS

Ports are Vulnerable to Terrorist Use…

- Extensive in size with multiple landside points of entry.
- Accessible by water and land.
- Close proximity to metropolitan areas.
- Large volume of cargo, passengers and HAZMAT.
- Hub of activity for multiple modes of transportation.
- Just-in-Time delivery system.
- Large numbers of trucks moving in and out
- Harbor for fishing and recreational boats.

PORT OF OAKLAND

PORT SECURITY RISK FACTORS…

- **Currently no known <u>credible</u> <u>threats</u>**

- **Possible scenarios include:**

- Ports as gateways for dangerous materials and WMD to enter the country via container

- Ports as a point of entry for terrorists entering the U.S. illegally

- Attack via small boat, missile launch or other means against cruise ships, ferries, waterside facilities or port infrastructure

- Suicide attacks on foot or using bicycles, motorcycles, car or truck bombs

- Close range shooting attacks at Port entrances, at loading and unloading points, from public transport and vessels, from land or from sea.

- An explosive device or device containing HAZMAT or RDD laid/planted in the Port grounds, quays, terminals, storage areas, vehicles, etc.

- Sinking of a vessel in the Port or its approach lanes and blocking a pier, channel or all traffic to/from a Port

- Seizure of a vessel for use as a weapon against another vessel or a target on shore

- Obstructing operations through controlling/influencing riots or demonstrations to cause economic damage.

PORT OF OAKLAND

POTENTIAL TARGETS - SHIPS

Cruise ships

Ro-Ro / passenger ferries

Container ships

Private Vessels

Bulk Tankers

POTENTIAL TARGETS - PORTS

Storage areas

Pipe lines

Loading facilities

Discharge facilities

Container Terminals

PORT SECURITY IS A PARTNERSHIP

- **US Coast Guard**
  - **Waterside and Facility Security**

- **US Customs and Border Protection**
  - **Cargo Security**

- **The Port and it's Tenants**
  - **Facility Security [tenants]**
  - **Infrastructure [the Port]**

- **The Local Responder**
  - **Front line Prevention Mitigation and Response**

FEDERAL SECURITY ACTIVITIES

THE MARINE TRANSPORTATION SECURITY ACT OF MANDATED MAJOR CHANGES TO THE NATION'S APPROACH TO PORT AND MARITIME SECURITY

- **PLANNING REQUIREMENTS**
  - **Risk & Threat Analysis**
  - **Security Plans for Vessels Facilities, Port Areas and the Nation**
  - **Incident Response Plans**
  - **Exercises to Test Plans**
  - **Assess Foreign Port Risks**
  - **Establish Area Security Committees to assure communication exchange**
- **IDENTIFICATION OF PERSONNEL**
  - **Security Cards and controlled access**
- **TRACKING OF VESSELS IN AND AROUND THE PORT**
  - **Automatic ID Systems on vessels**
  - **Land-based facilities to track, send and receive information**

PORT OF OAKLAND

U. S. Coast

US COAST GUARD ROLES

- Nation's Principal Maritime Law/Treaty Enforcement Authority

- Lead Agency for the Maritime Component of Homeland Security, Including Port Security

- Other Maritime Safety Responsibilities Include:

  Search and Rescue, Marine Safety Ice Patrol/Ice Breaking Recreational boating, Drug and Alien Interdiction, Pollution, Prevention Response and Enforcement

TO COUNTER THE THREAT THE COAST GUARD:

- Implemented Security Zones around waterside facilities/transportation infrastructure [airports, bridges, etc.

- Established Security teams to inspect certain high interest vessels and escort certain ships transiting the harbor

- Implemented new reporting requirements for ships entering/leaving U.S. harbors. Notice of Arrivals provided 96 hours. Detailed information on crew, passengers, cargo and the vessel

- Implemented concept of Maritime Domain Awareness, fusing intelligence information with information from public, private, commercial and international sources to provide a more complete picture of maritime security threats

TO COUNTER THE THREAT THE COAST GUARD:

- **Implemented requirements of Maritime Transportation Security Act by developing, publishing and implementing security regulations contained in 33 CFR, Parts 101-106, including:**
  - Regional Seaport Security Committees
  - Vessel and Facility Security Plans
  - AIS Transponders on Vessels
- **Worked with the International Maritime Organization to implement the first Global Security Standard for vessels, ports and facilities**
- **Implemented Port State Control and International Port Security Program to assure compliance of vessels and foreign ports with international security regulations**

U.S. CUSTOMS & BORDER
PROTECTION [CBP]

CBP IS RESPONSIBLE FOR PREVENTING TERRORISTS AND WMD FROM ENTERING THE U.S. WHILE FACILITATING THE MOVEMENT OF INTERNATIONAL COMMERCE

ADDITIONAL ROLES

- **Drug Interdiction**
- **Food & Drug Exams with FDA**
- **Protection from Counterfeit Merchandise entering the US**
- **Protection from Unfair/Illegal Trade**
- **Stolen Vehicle Interdiction**
- **Prevention of Illegal Aliens from entering**
- **Collection of Customs Duties and Fees**

CUSTOMS HAS LAYERED APPROACH TO SECURE CARGO

- **Automated Targeting System to randomly select containers to be examined**
- **Container screening and inspection utilizing both non-intrusive inspection systems and physical examinations**
- **24 Hour Rule requiring shipment documentation being transmitted to customs 24 hours before the cargo is loaded at a foreign port.**
- **Requiring more comprehensive and specific cargo shipment to more efficiently evaluate independent container shipments for risk of terrorism**
- **Customs Security Initiative at Key overseas ports which place US customs personnel at key international ports to assist in screening cargo before it is loaded to US bound vessels**
- **Customs-Trade Partners Against Terrorism [CTPAT] voluntary Industry/federal cargo security initiative**
- **Free and Secure Trade [FAST] Program along borders**
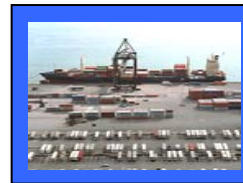- **Pilot Programs such as Operation Safe Commerce**

SUPPLY CHAIN SECURITY – SECURE THE TRANSIT POINTS

Manufacturing Facility

Port of Origin

Transshipment Port
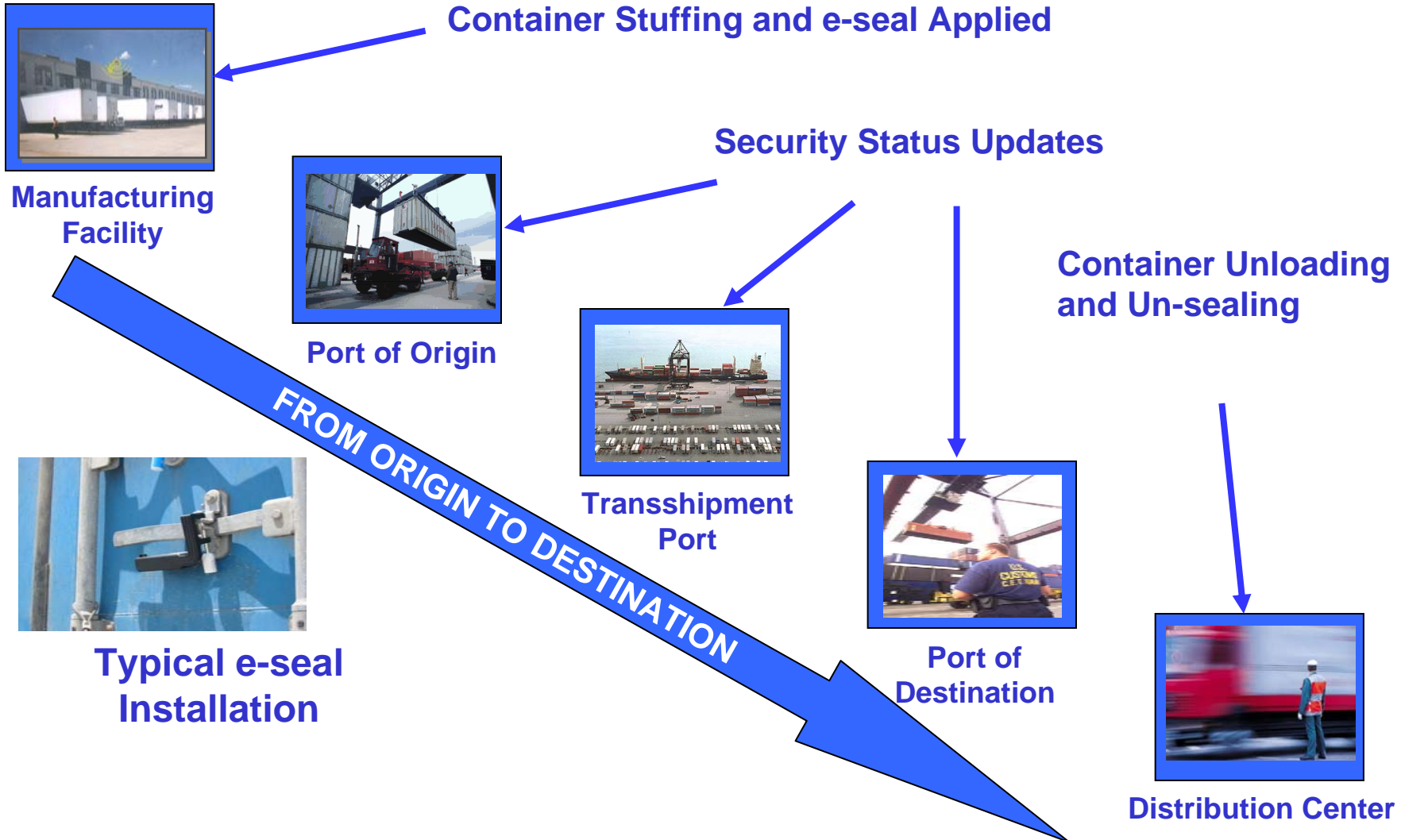
Port of Destination

Distribution Center

- Container Security Initiative
- Advanced Manifest Requirement
- Scanners & Chem/Bio Detectors
- Port Security Assessments/improvements
- Credentialing Systems

- C-TPAT
- ID Systems/access control
- Scanners & Chem/Bio Detectors
- Third Party Inspection

Slide Courtesy of Bearing Point

SUPPLY CHAIN SECURITY – IN-TRANSIT VISIBILITY

Container Stuffing and e-seal Applied

Security Status Updates

Manufacturing Facility

Container Unloading and Un-sealing

Port of Origin

FROM ORIGIN TO DESTINATION

Transshipment Port

**Port of Destination**

Typical e-seal Installation

Distribution Center

NON-INTRUSIVE INSPECTION TECHNOLOGY

- **Large-scale X-ray and Gamma-ray Imaging Devices**

- **Portal Radiation Monitors**

- **Portable and Handheld Personal devices to detect radiation, WMD, explosives, chemicals and contraband**

- **Mobile x-ray vans and Specialized Tool Trucks**

RADIATION PORTAL MONITORING (RPM) PROGRAM IMPLEMENTATION FOR US CUSTOMS AND BORDER PROTECTION (CBP), US DHS

First major container port to implement RPM Program at multiple facilities, Port-wide

PORT OF OAKLAND
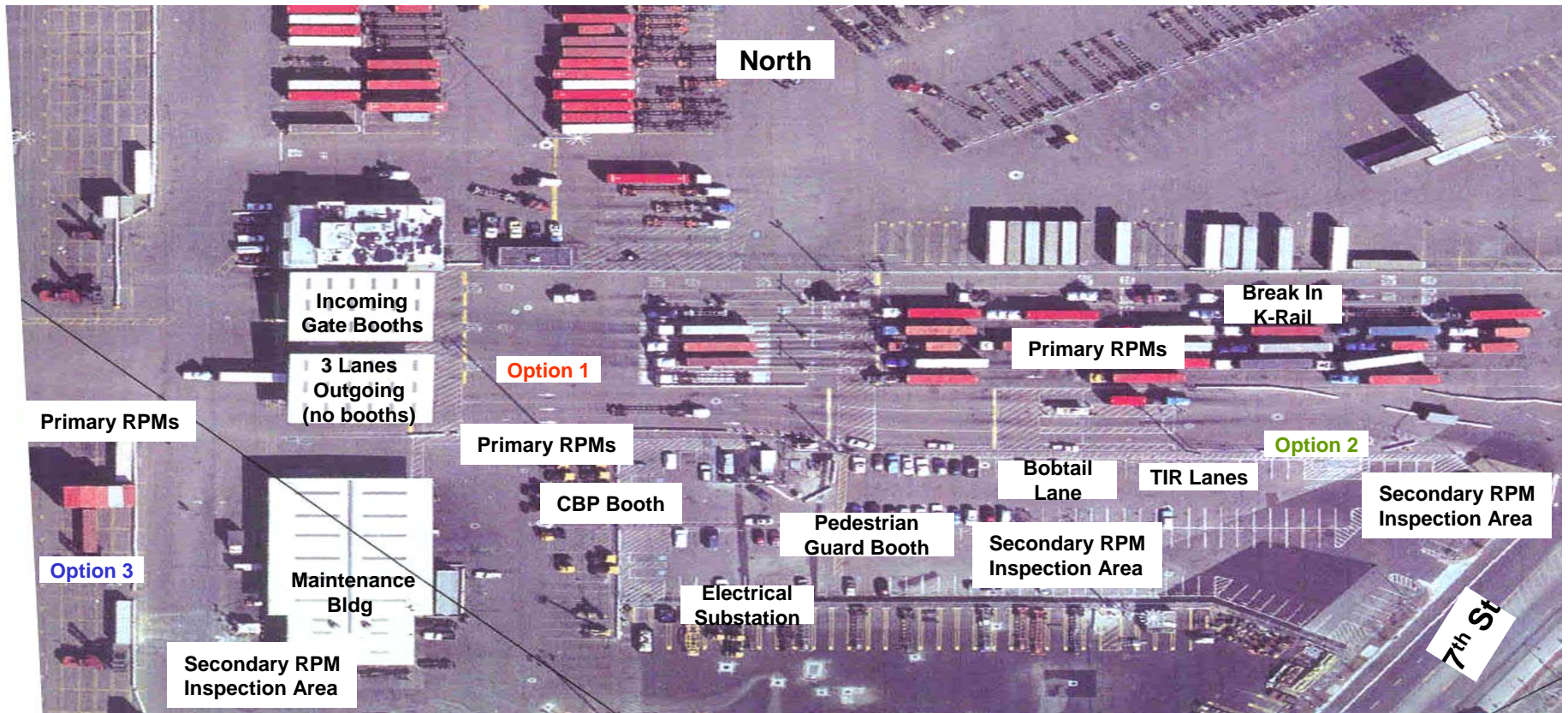
RADIATION PORTAL MONITORS [RPMs]

- **All containers, loaded or empty, are required to pass through the Portal System as they exit the marine terminal.**
- **Trucks enter one portal set, if alarm then move through 2nd portal set; if alarm then checked by the Customs Officer on duty at the terminal gate who uses handheld devices to verify content.**
- **Computers to allow CPB to check documentation and/or contact Department of Energy if questions or to resolve issues.**
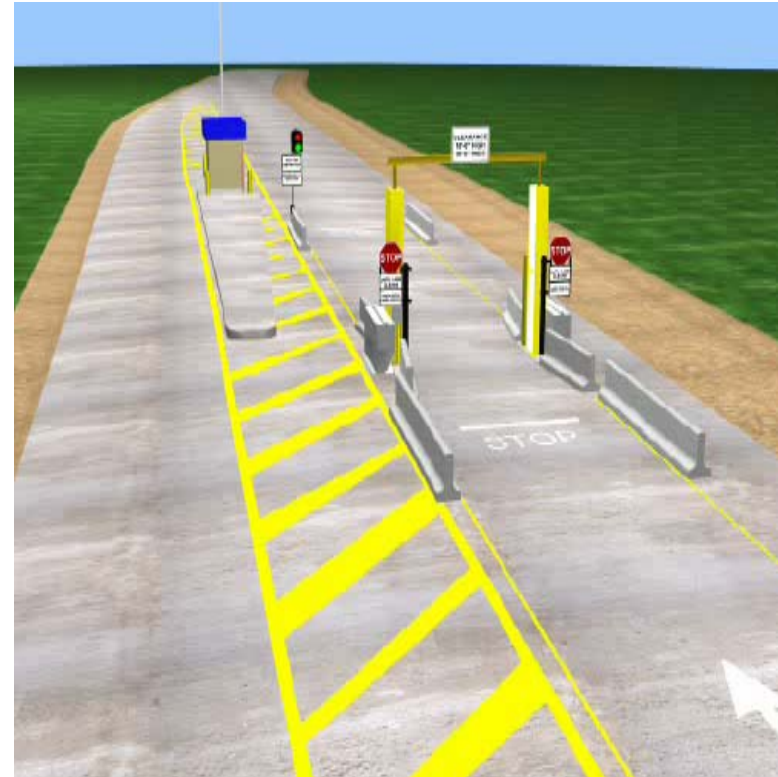
SMART CONTAINER TECHNOLOGIES

Customs Initiatives to Explore…

- **Tamper Detection –**
  Motion, door opening, light change, internal air changes, changes in container structure or arrangement of cargo, specialty sensors [CBRNE]

- **Condition Monitoring –**
  Temperature, humidity, vibration, container empty/ full status

- **Content Monitoring –**
  RFID [tags on shipping cartons/pallets]

TRACE EXPLOSIVE DETECTION PROJECTS

- TSA Trace Portal Pilot Programs Implemented

  - Deployed at Passenger Airports [NYC, Providence RI, Rochester NY, San Diego CA, Tampa FL, Gulfport-Biloxi]

  - Deployed at air cargo-handling facilities [Atlanta, Dallas with Anchorage, LAX and Chicago planned.

- TSA Detection Pilot Programs to Begin or Planned

  - Secure Automobile Inspection Lances [SAIL]. Explosives screening of autos boarding Cape May-Lewes Ferry, using Z Backscatter Technology.

  - Evaluating Systems to screen rail and airline passengers using walk through trace portal machines & document scanners

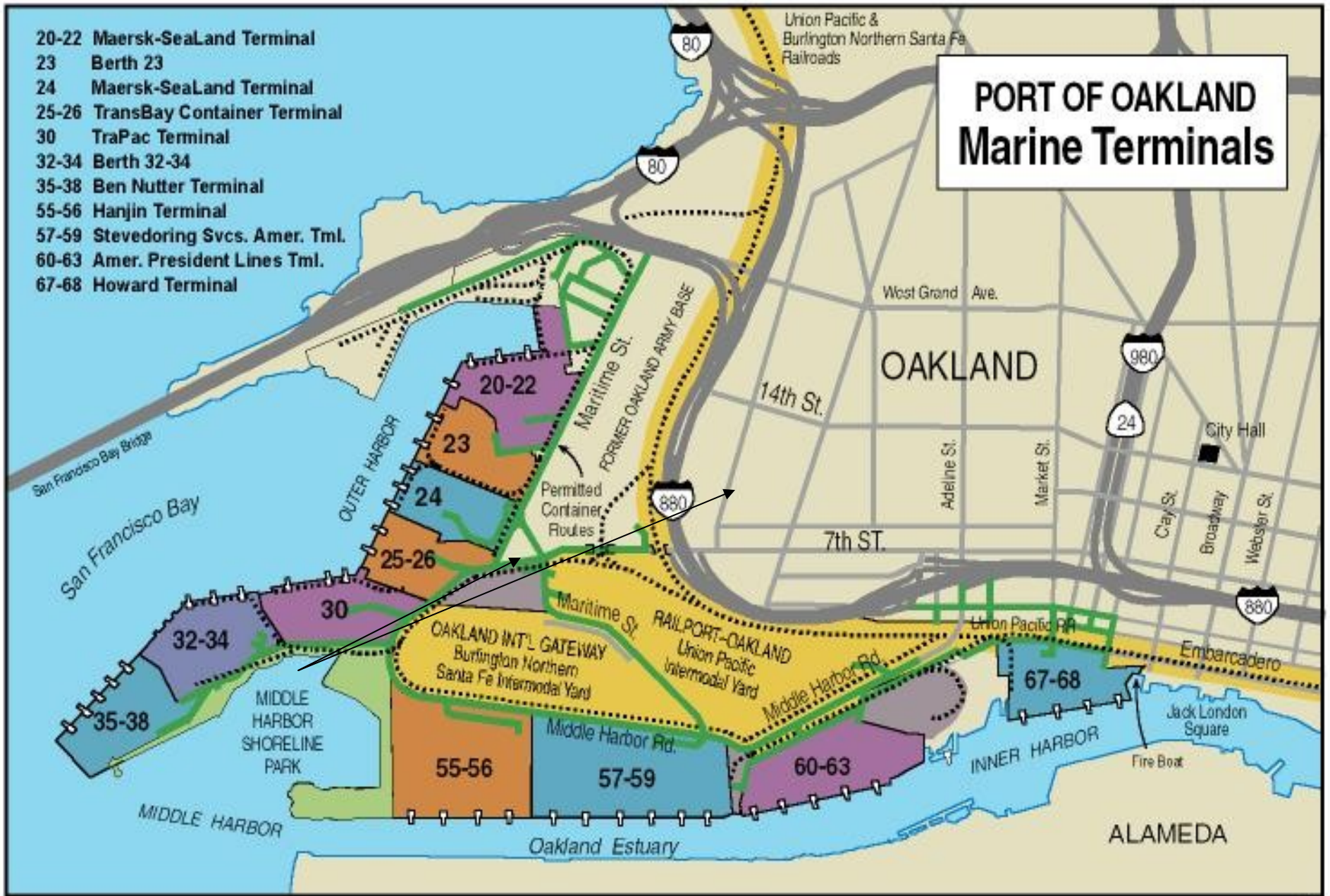 - Testing Systems for screening cargo transported by land, rail & air.

PORT OF OAKLAND SECURITY ACTIVITIES

Port of Oakland — Marine Terminals map

20-22 Maersk-SeaLand Terminal
23 Berth 23
24 Maersk-SeaLand Terminal
25-26 TransBay Container Terminal
30 TraPac Terminal
32-34 Berth 32-34
35-38 Ben Nutter Terminal
55-56 Hanjin Terminal
57-59 Stevedoring Svcs. Amer. Tml.
60-63 Amer. President Lines Tml.
67-68 Howard Terminal

FEDERAL FUNDING PROGRAMS

- **1st Round of TSA Grant Requests:** $28 million requested and $4.8 million received. 3 Projects have been completed.

- **2nd Round of TSA Grant Requests:** $68.7 million in requests and $1.6 million awarded for one project, underway.

- **3rd Round of TSA Grant Requests:** $57 million requested and received $315,000 funding for two projects received, one completed and one scheduled to start.

- **4th Round of TSA Grant Requests:** $18 million requested and $1.97 million funding awarded for two projects.

- **5th Round of TSA/ODP Grant Requests:** Applications submitted 10 June 2005; $5.9 Million requested; Awards announced 30 September 2005

PORT SECURITY PROJECTS COMPLETED OR UNDERWAY

- Perimeter Video Surveillance and Intrusion Detection System for Port's Marine Terminal facilities [$2.217 Million]
- Automated Pedestrian Access Control System for Port's Marine Terminal facilities [$2.5 Million]
- Emergency Communications System for Response and Incident Control [$150,000]
- Mobile Traffic Barrier System for Port Access Roads [$1.6 Million]
- Perimeter Video Surveillance System for Port of Oakland Ferry Dock [$65,000]
  Perimeter Video Surveillance System for Port of Oakland Joint Intermodal Rail Facility [$250,000]
- Area Surveillance System of Port Intermodal Access points [$675,000]
- Hardening of Port's major substation and 115KV power distribution lines [$525,000]

PORT FUNDING CONCERNS

- **Coast Guard Estimates $1.5 Billion in costs for the first year and $7.3 Billion over the succeeding decade to implement MTSA**

- **Federally mandated security performance standards are beyond the scope of California's Ports to shoulder alone.**

- **The debate is over whether port security should be paid for with federal revenues, by state and local governments, by the maritime industry, or by a cost sharing arrangement along all of the above**

PORT FUNDING CONCERNS

- **Although federal grant funds for Port Security have been awarded to fund one-time capital projects [$650 Million through FY 2005], there is an additional need and cost to upgrade/replace and maintain the systems as they age.**

- **Consequently, we may see in the future security systems not being maintained appropriately or staffed properly to ensure maximum protection.**

- **The most important security activity that needs to take place -- a single national id system -- is still not in place 3 years after 9-11, 2 years after MTSA.**

The IED/RDD Challenge for Ports and Ships

IED/RDD OBJECTIVES

- IED focus more on casualties

- RDD focus more on disruption, panic, damage to the economy.

PORT PROTECTION MEASURES

- **Establish vehicle inspection points at safe distances from the facility**

- **Use pre-positioned surveillance cameras to assist in inspection**

- **Visually inspect all vehicles including interiors, all major compartments of vehicles such as trunks, spare tire, cabinets, truck beds, etc.**

PORT PROTECTION MEASURES

- **Check all unattended or suspicious vehicles parked in close proximity to the target facility**

- **Consider verifying the material being delivered**

- **Be alert for wires running to/from large containers or any unusual smells**

- **Restrict private automobiles from entering the target facility**

PORT PROTECTION MEASURES

- **Arrange for law enforcement vehicles to be parked near entrances and exits or encourage frequent patrols.**

- **Recognize that possession of some combination of official ID's, uniforms, government license plates and vehicles tend to reduce suspicion. Check multiple forms of valid ID and verify business purpose.**

PORT PROTECTION MEASURES

- **Develop Plan and interface procedures with local responder [Port/City Police and OES personnel].**

- **Ensure adequate alert systems are in place.**

- **Implement Awareness Training and conduct periodic exercises to ensure personnel adequately prepared.**

PORT RECOMMENDATIONS

- **The State should urge the Federal Government to:**

  – Increase federal funding for security grants and provide a guaranteed source for funding for such grants.

  – Coordinate all grant applications within the Port's jurisdiction through the Port Authority to avoid duplication of projects and wasted funds.

  – Ensure federal funding of multi-year security projects, rather than one-time, short-term projects.

PORT OF OAKLAND

PORT RECOMMENDATIONS

The State should allocate a portion of the State Homeland Security Grant Program Block Funding to a Specific State Port Security Grant Program to finance on-going security initiatives or unfunded federal mandates, help pay for newly created security positions, contract guards and security training.

PORT RECOMMENDATIONS

- **The State should implement the following Security Initiatives:**
  - Pro-active/Participation/Fostering of the Federal TWIC program – considered critical to ensure safety at our Seaports.
  - Implement a Pre-Incident Information Sharing System to prevent and deter potential or criminal acts by proactive joint information sharing among California Ports.
  - Implement a Critical Incident and Information Management System that would allow each Port in the State to know the security status of every other State Port.

PORT OF OAKLAND

THANK YOU

Questions?