



RISK MANAGEMENT: REFLECTIONS ON PORT SECURITY

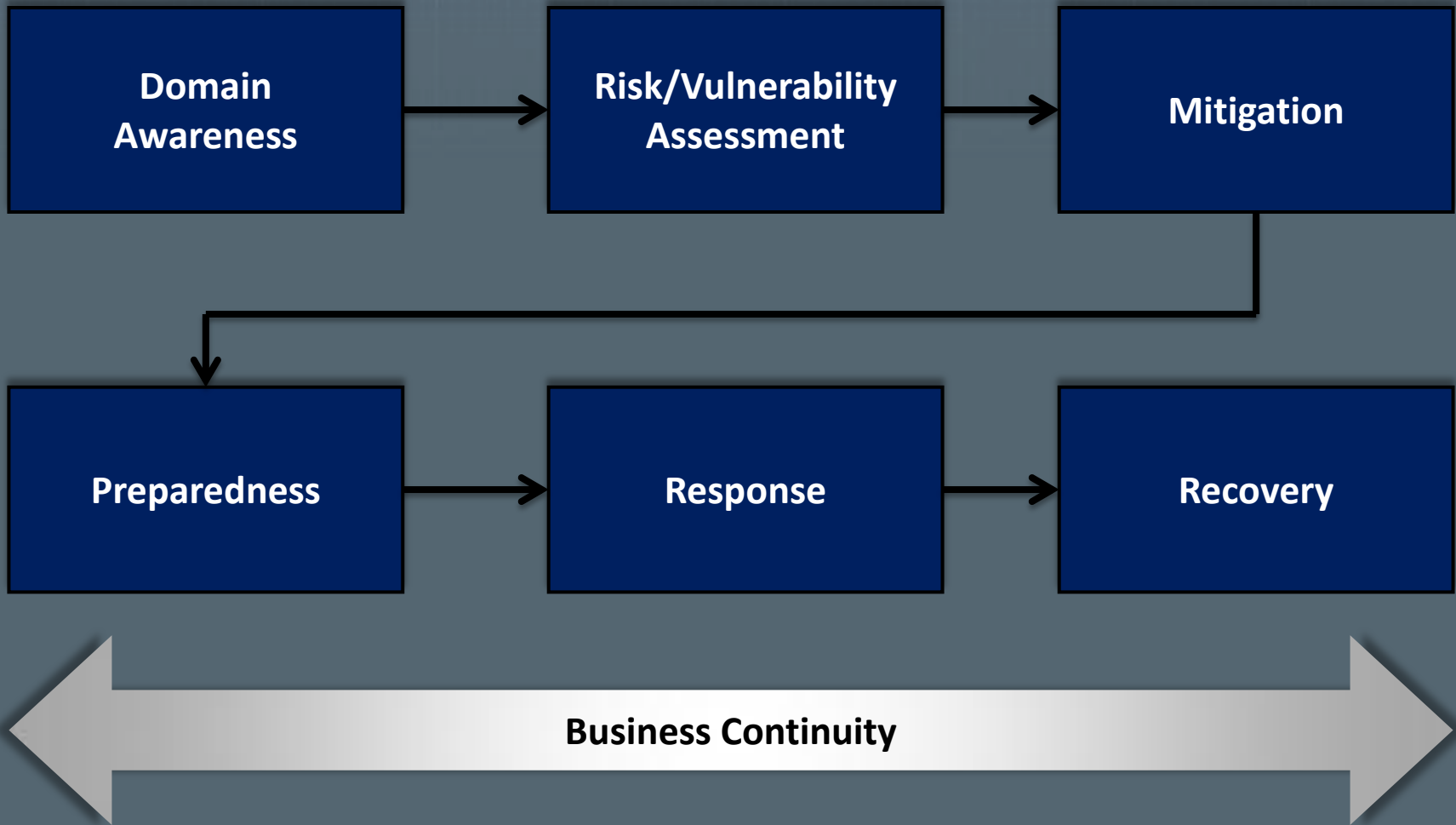
Presented by Cosmo Perrone

Principal, Cosmo Perrone & Associates

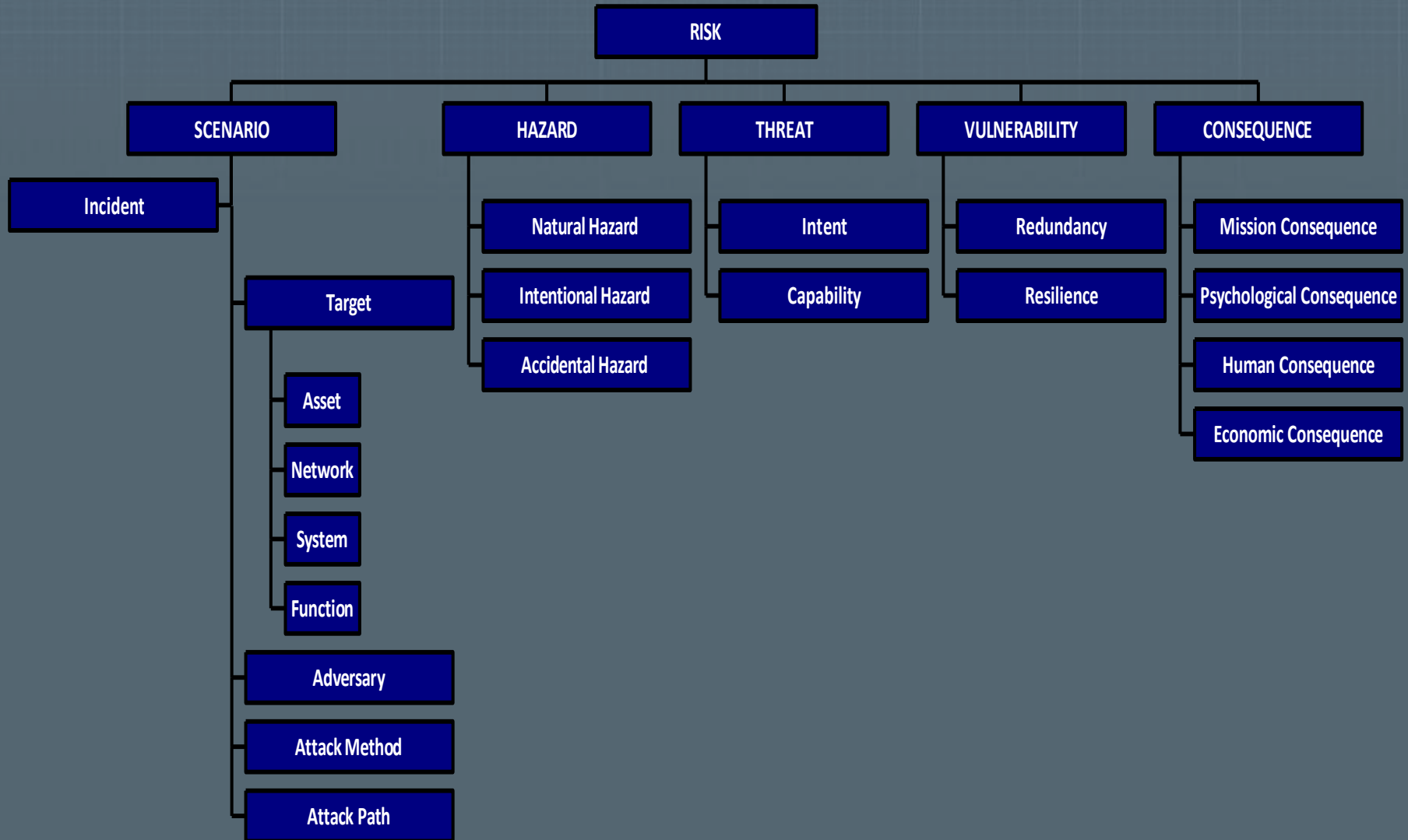
San Pedro Bay – 2 Ports, 1 Harbor



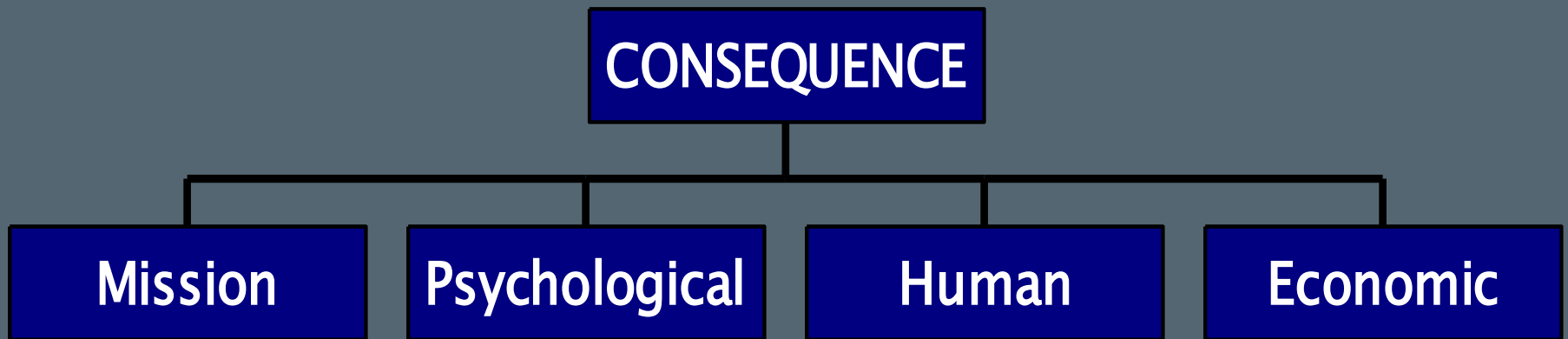
Security System Model



DHS Risk Model



Consequence



Risk Analysis Model



High

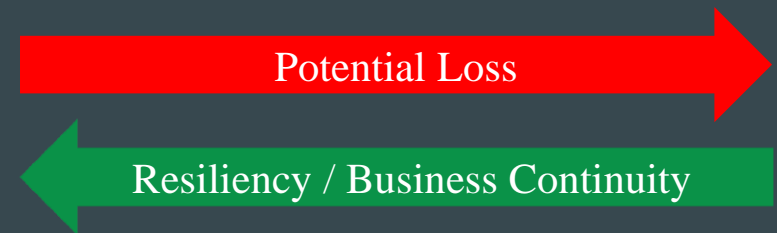
Medium

Low

Very low

C	B	A	A
C	B	B	A
D	C	B	B
D	D	C	C

Low Medium High Very High



$$\text{Risk} = \frac{\text{Probability} \times \text{Potential Loss}}{\text{Robust Security} \times \text{Resiliency / Bus. Continuity}}$$

Hazards

- Earthquakes
- Infrastructure Failure
- Hazmat Release
- Labor Issues
- Power Failure
- Flooding
- Epidemic
- Tsunami
- Terrorist Act
- Sabotage
- Radiological Release



Population

25 MILES = 8.2 MIL
POPULATION

5 MILES = 500K
POPULATION

CITY OF LONG BEACH VENUES, ANNUAL EVENT EXAMPLES AND ATTENDEES

QUEEN MARY

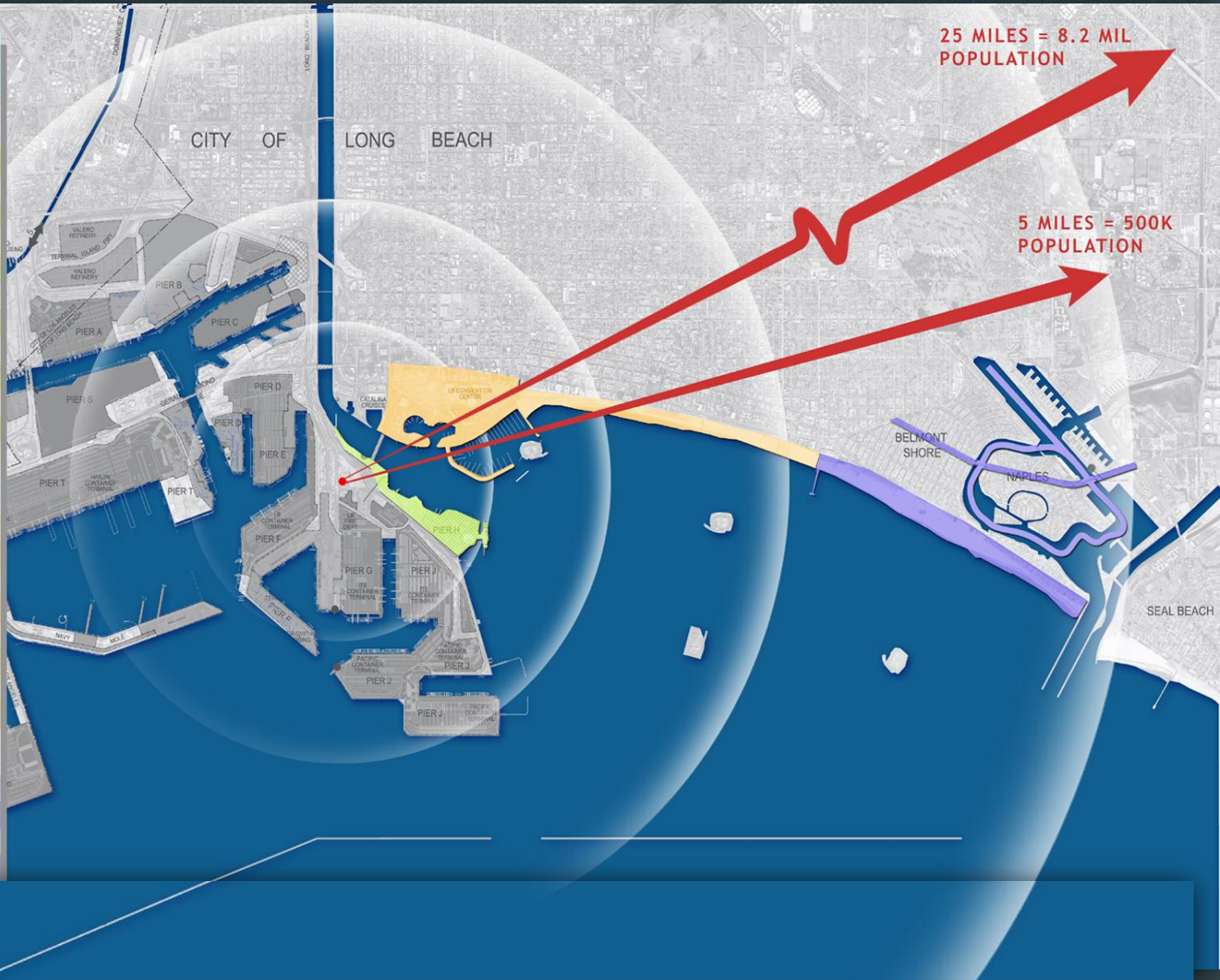
QUEEN MARY	1.5 MIL
CARNIVAL CRUISE TERMINAL	350 K
SHIPWRECK	70 K
LA CALENDAR MOTORCYCLE SHOW	20 K
AMA SUPERMOTO SERIES	9 K
QUEEN MARY SCOTTISH FEST.	9 K
COLUMBIA FAMILY FESTIVAL	8.5 K
B.I.G. HAIR AND TRADE SHOW	8 K
LA RAZA FESTIVAL	7 K
LONG BEACH BAYOU FESTIVAL	6 K
DIA DE SAN JUAN FESTIVAL	6 K
REVOLUCION DE REGGAETON	5 K

CONVENTION CENTER AND DOWNTOWN

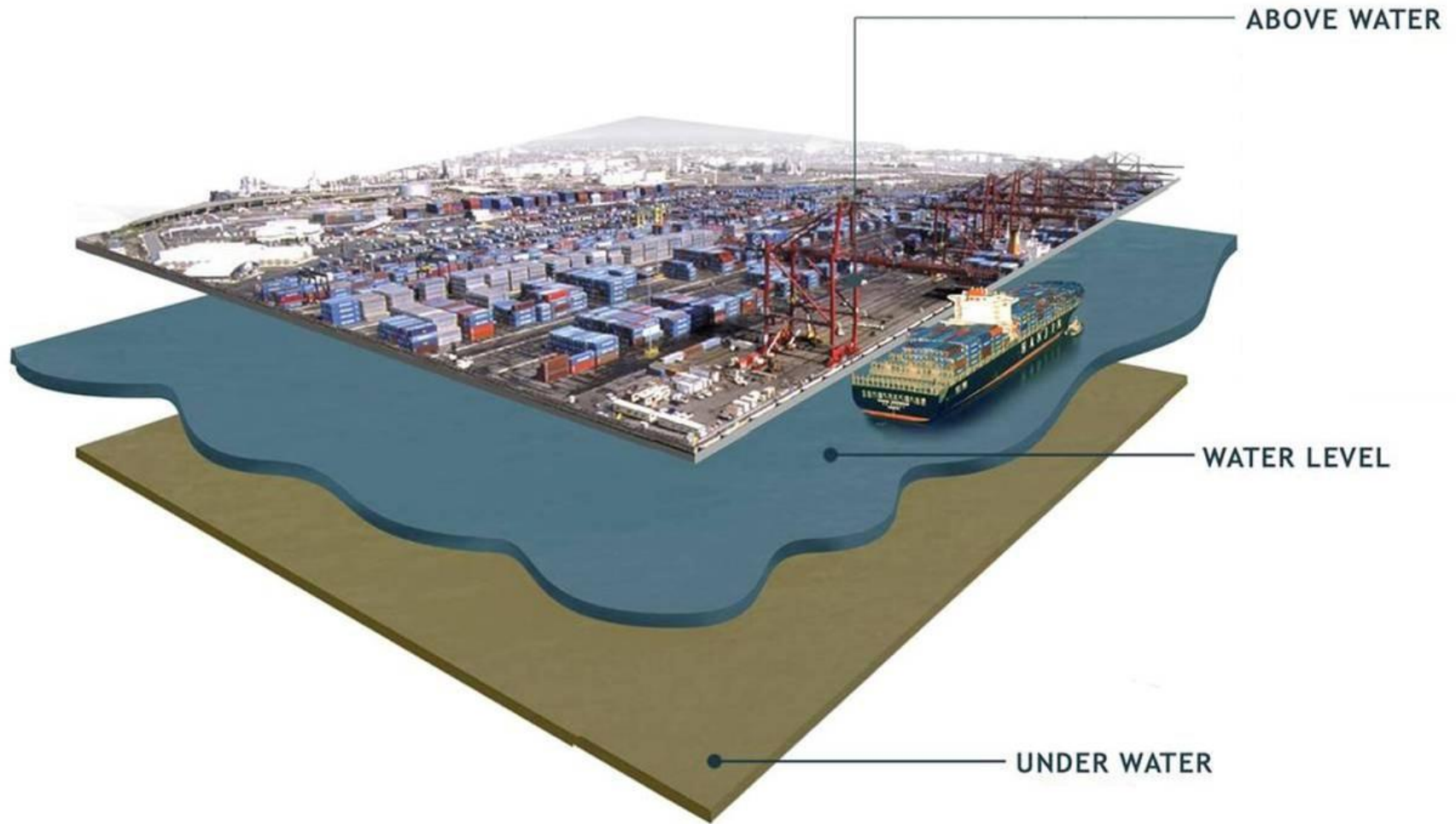
THE AQUARIUM OF THE PACIFIC	1.2 MIL
LONG BEACH CONVENTION CENTER	500 K
2006 TOYOTA GRAND PRIX OF LONG BEACH	200 K
AMGEN TOUR OF CALIFORNIA	200 K
LONG BEACH PRIDE FESTIVAL	70 K
INTERNATIONAL CITYBANK MARATHON	15 K
C.A.R.E. TRIATHLON	15 K
LONG BEACH JAZZ FESTIVAL	4 K

BELMONT SHORE / NAPLES

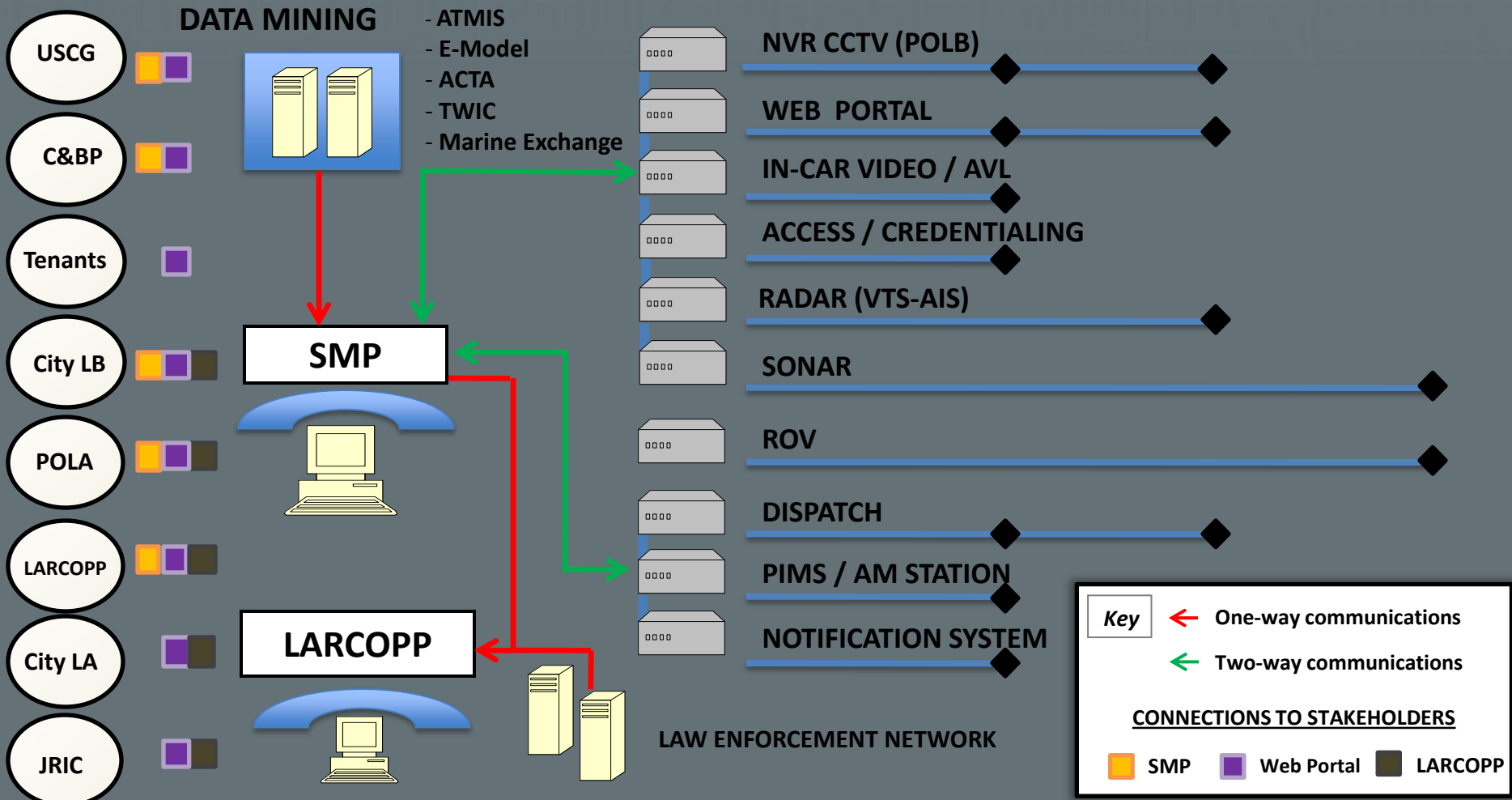
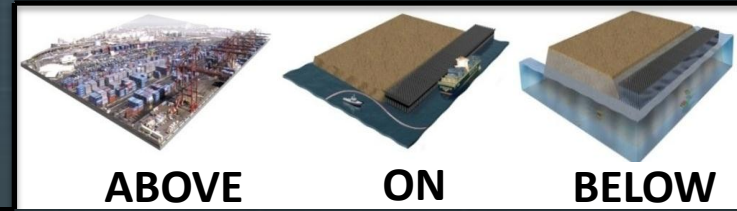
BELMONT SHORE CAR SHOW	60 K
BELMONT SHORE 2nd ST XMAS PARADE	60 K
NAPLES ISLAND XMAS BOAT PARADE	20 K
LONG BEACH MUSEUM OF ART	55 K



Mitigation Approach



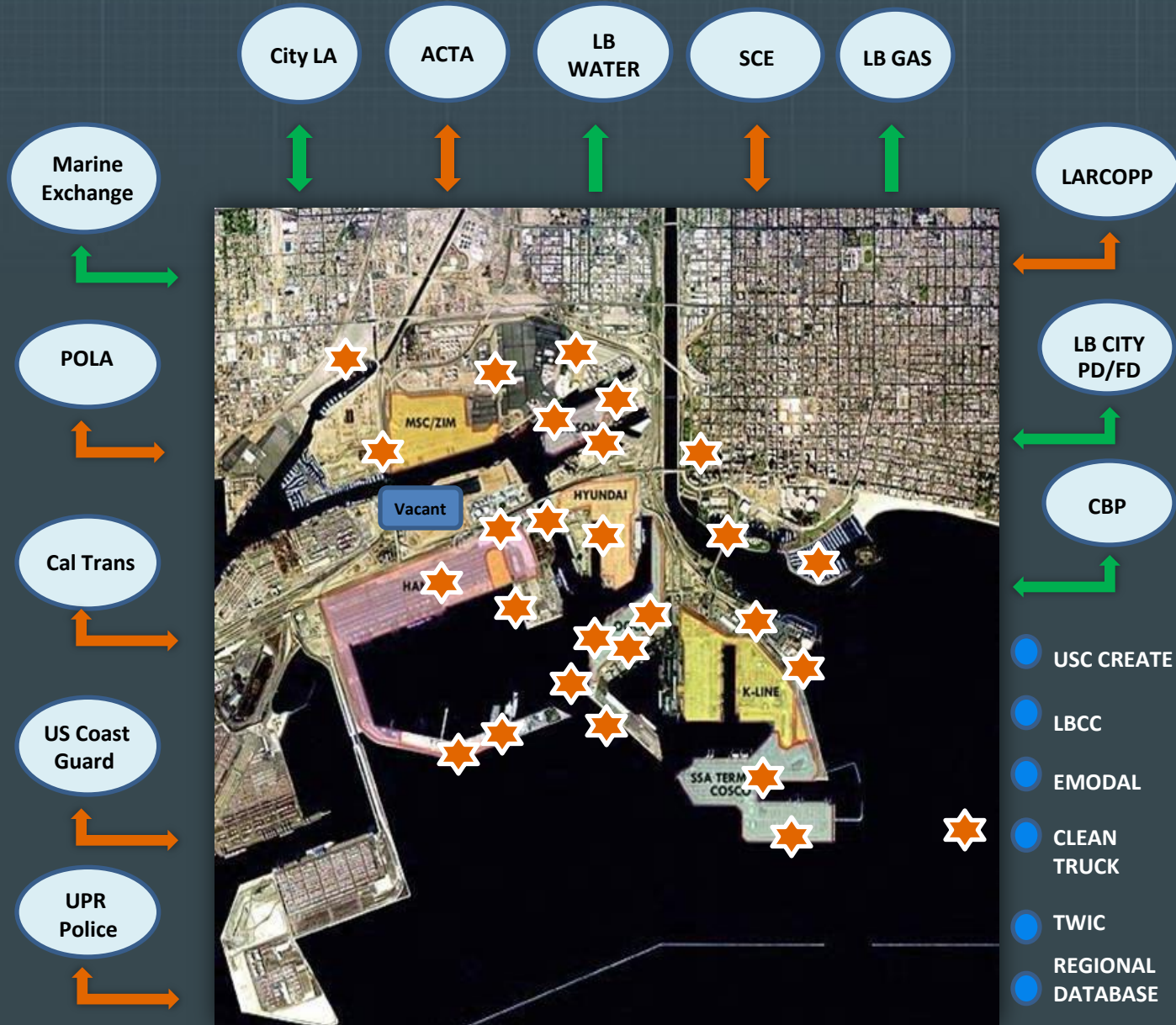
System / Regional Integration



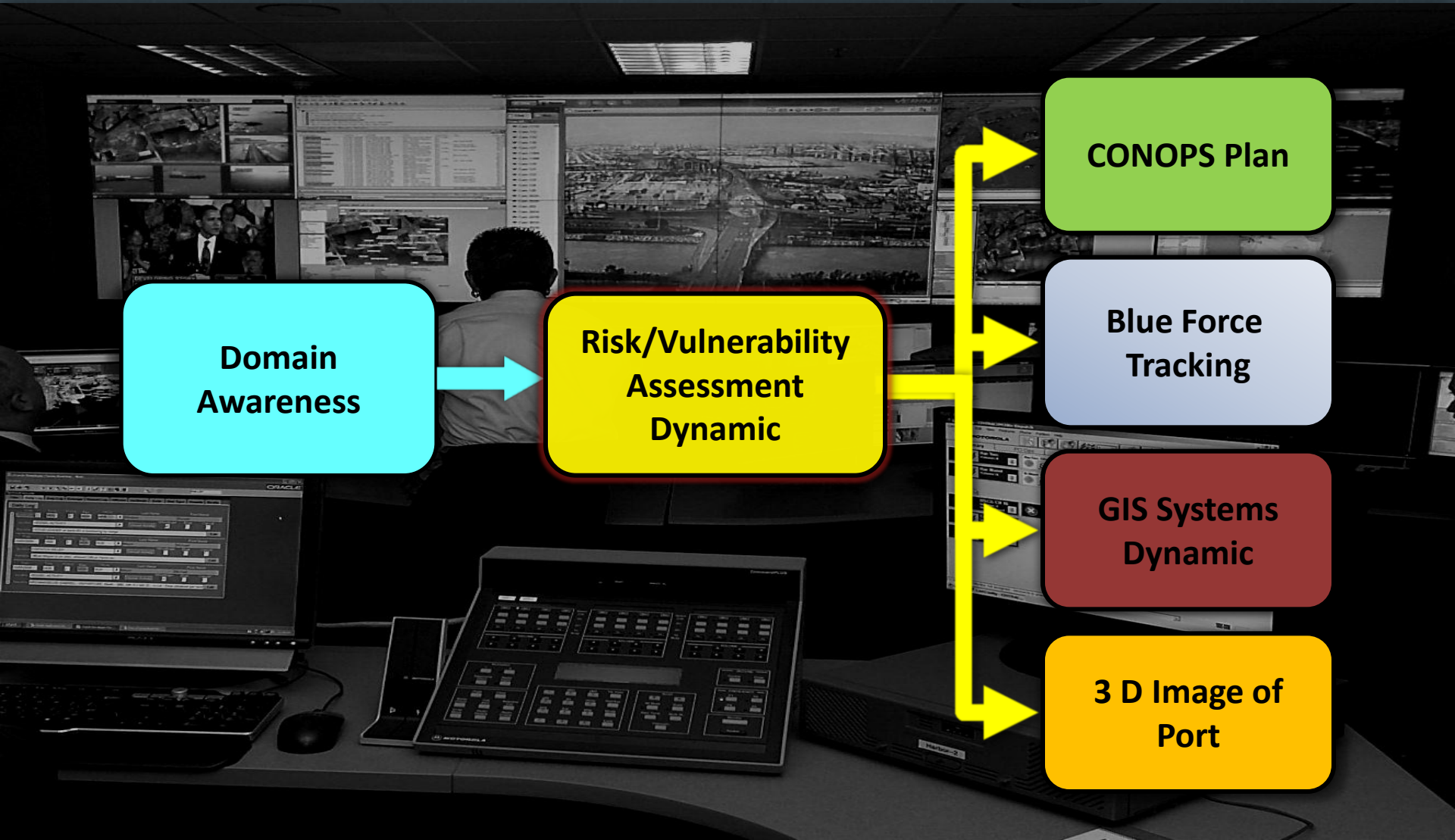
Regional Integration

Strategic MOU's

1. Total Terminals Inc.
2. SSA Four Locations
3. Long Beach Container Terminal
4. Sea Launch
5. Catalina Express
6. Mitsubishi Cement Corporation
7. Morton Salt
8. Queen Mary
9. Carnival Cruise Lines
10. Metropolitan Stevedore Company
11. Jacobsen Pilot Services
12. Georgia Pacific Gypsum Company
13. British Petroleum
14. Baker Commodities
15. Foss Maritime
16. Chemoil
17. California United Terminals
18. Harbor Rail Line
19. Pacific Tug Bats
20. Weyerhaeuser
21. Pacific Coast Recycling
22. THUMBS



Virtual Port Model



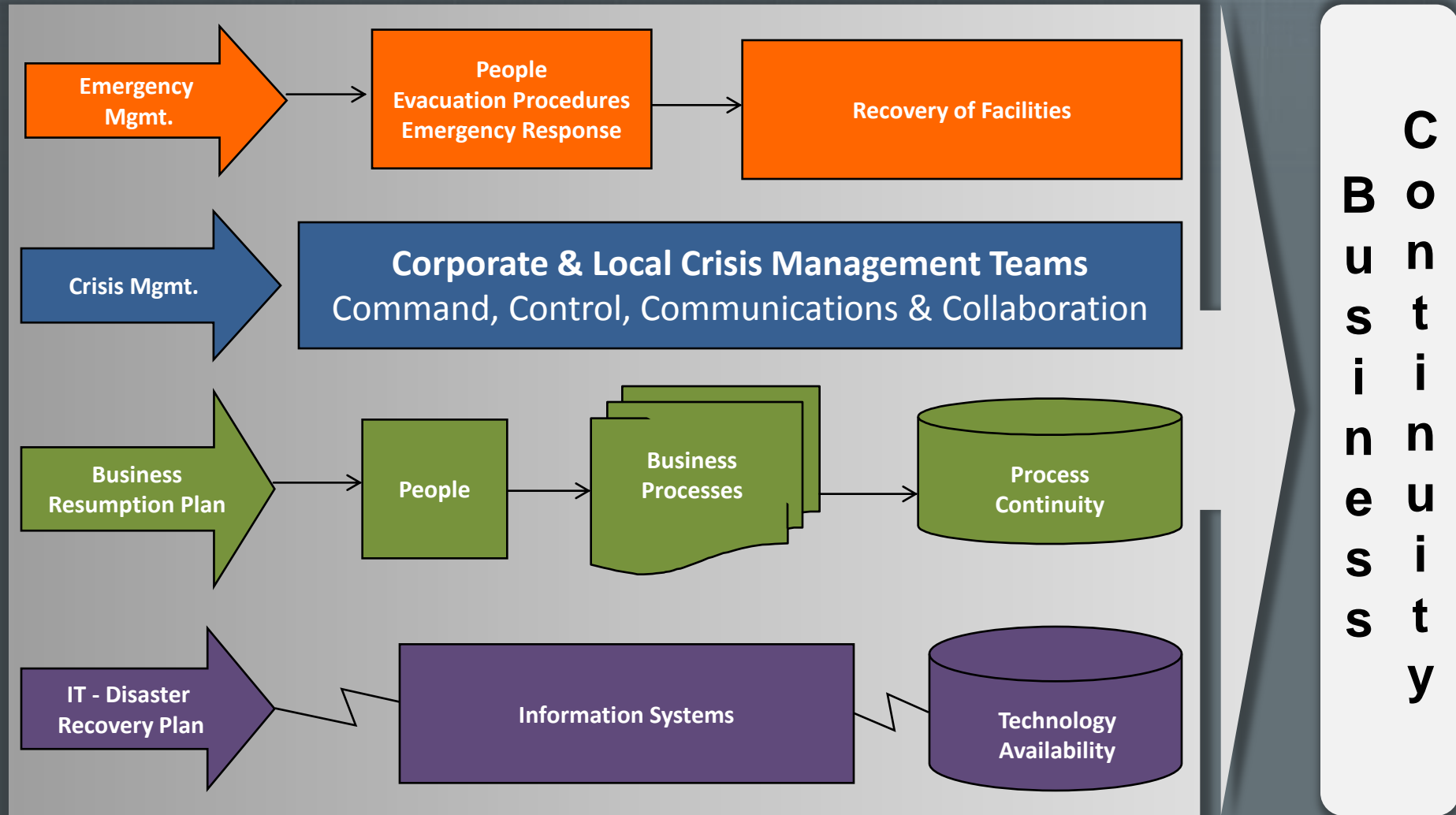
Business Continuity

- Business Model
 - Governance and decision making
 - Organizational resilience: key single point failures?
 - Processes and procedures
 - Stakeholder participation and interdependencies
- Value Chains
 - Flowchart process
 - Identify critical support functions
 - All dependencies and interdependencies

Business Impact Analysis

- Critical Infrastructure
 - Geospatial approach
- Communications
- Suppliers & Vendors
 - Single source?
 - Within same threat environment?
- Emergency Operations
- Labor
- Critical Societal Factors
- “Psychology Of The Incident”

How It Fits Together



Resiliency Culture

- Assessment on a regular interval
- Designing and delivering improvement
- Exercise of plan
- Maintenance of the plan
- Audits
 - Self
 - 3rd party

Benefits

- Ability to absorb stress and operate critical functions
- Quick decision making
- Adaptability
 - Pre-identified alternatives
- Improvement management systems
 - Identifies waste

Regional Strategic Planning

- POLB Security Strategy
 - Future Business Model: 5, 10, 20 Years
- Area Maritime Security Committee
 - 7B Risk Mitigation Plan
- LB City Homeland Security Strategy
- LA County OA Strategic Plan (UASI)
- California Maritime Security Council
- Pan-Pacific Strategy?
 - Canada And Mexico?
 - All West Coast Ports?





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