



Tools & Techniques for Port Property Management

June 19, 2007

Early Port – Downtown Development Evolution

Port facilities

- Deep water / sheltered harbor
- Crossroads of trade
- Developed to foster maritime trade

City supported port activities

- Housing workers
- Storage of goods
- Trade and commerce

Urban flight / suburbs

- Downtown industrial area
- Unpleasant environments



Source: POLA Website

Today's Port's Face Competition for Use of Land Area

- Maritime Land Uses (water dependant)
- Maritime Land Uses (non-water dependant)
- Quasi-Maritime Land Uses
- Non-Maritime Land Uses
- Urban Redevelopment
- Developer Interests

Non-Maritime Land Uses Returning to Port Areas

- Hotels
- Convention Centers
- Sports Arenas / Stadiums
- Residential development
- Office / Commercial development
- Recreational uses
- Others

Why the Change in Attitude?

- Urban renewal policy
- Downtown redevelopment activity
- Limited waterfront land and access to coastal areas
- Urban waterfronts are hip



Port's are Valuable Assets – Why Protect Them?

- Unique location
- Sunk investment cost
- High replacement value
- Viable economic engines
 - Regional asset
 - Statewide asset
 - National asset



Potential Replacement Costs



- Wharf \$15k to \$25K per LF
- Dredging \$6 to \$100 per cu. yd.
- Backlands \$250K to \$600K per acre
- Buildings \$100 to \$300 per sq. ft.

Constraints to Port Development

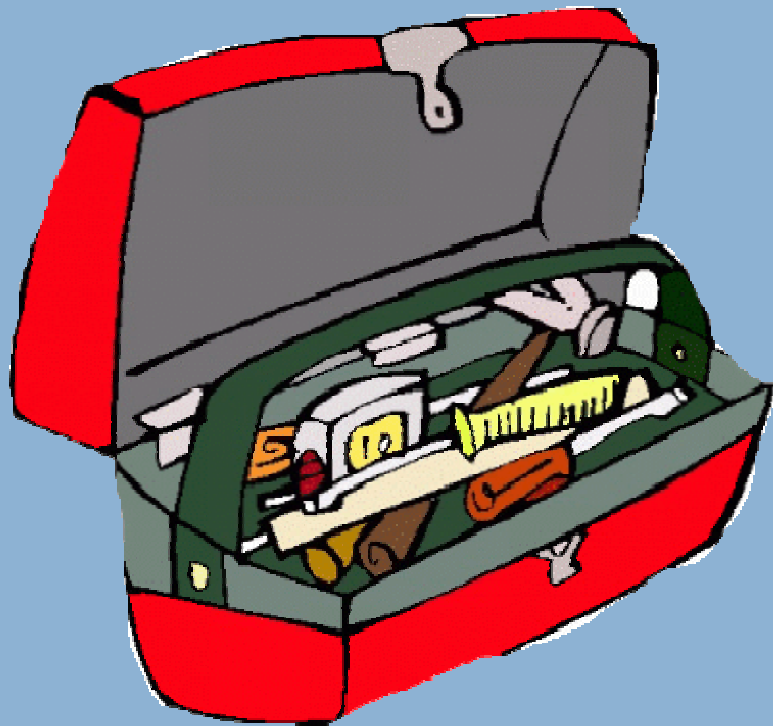
- Lack of available land with deep water access
- Dramatic increase in land values
- Price of construction products have nearly doubled in the last 5 years
- Continued material price escalations likely, due to increased demand for building materials worldwide
- Environmental constraints to development

Initial Conclusions:

- Creation of new port facilities are costly and difficult
- We need to protect what we have
- We need the ability to expand
- We are sailing into new waters
- We need the tools to effectively thrive in today's environment



Port Tool Box for Port Property Management



- Port Master Plan
- Current Market Forecast
- Economic Impact Data
- Community outreach
- External communication
- Compromise / Negotiation

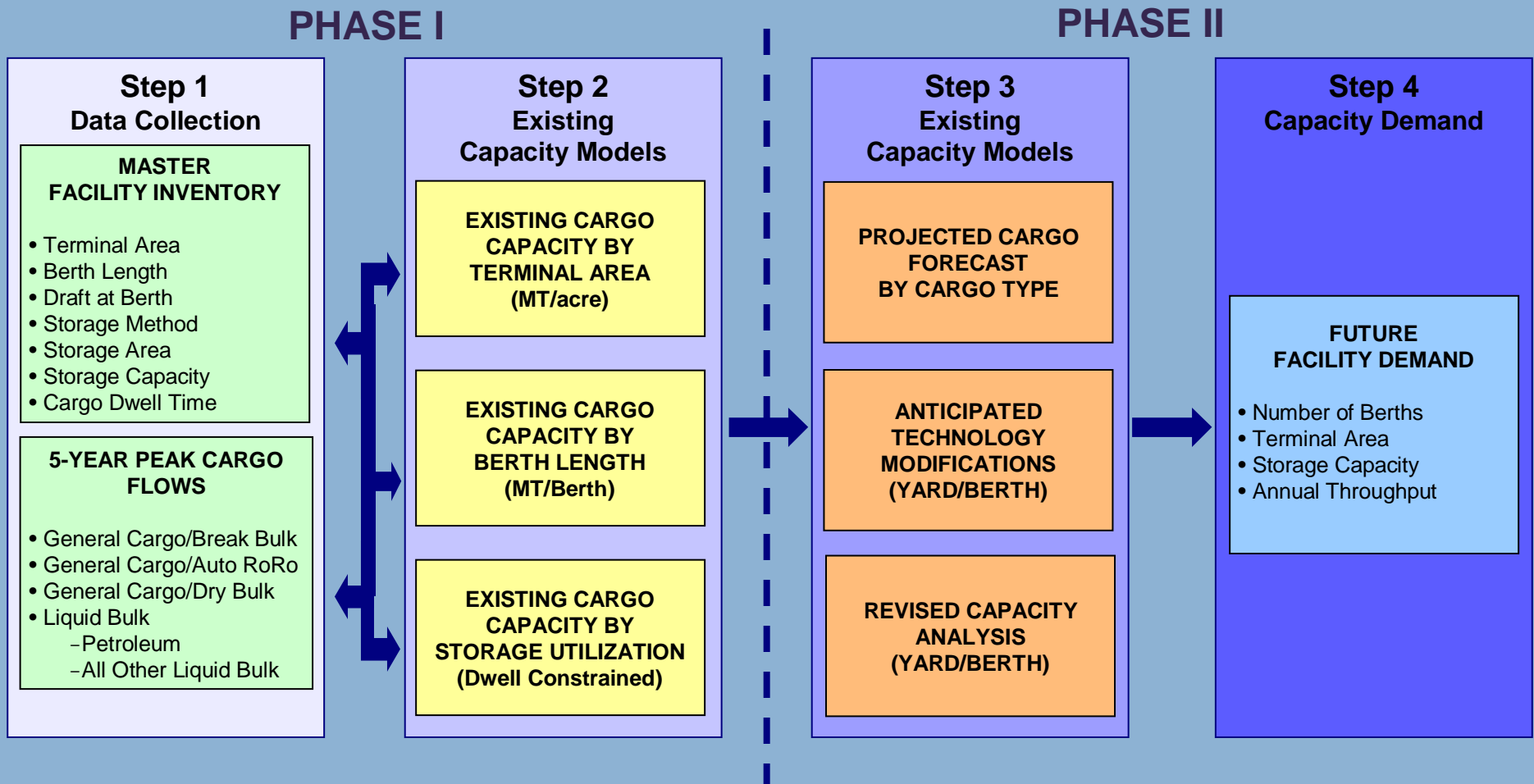
Components of a Solid Comprehensive Master Plan

- Market forecast
- Capacity analysis
- Efficiency enhancement study
- Technical studies
- Terminal needs assessment / Land Use Plan
- Project identification / Cost estimate
- Economic impact modeling
- Phased development plan / CIP

Market Forecast

- Conservative forecasting
- Tenant interviews
- Industry trends
- Understand your strengths and weaknesses
- Identify potential marketing opportunities

Simplified Master Planning Process



Existing Terminal Capacity Example

Break Bulk - Steel Products	- Berth 5
	Existing Operations
Type of cargo	Steel + Coils
Number of Berths	1
Berth length (ft)	900
Typical vessel LOA (ft)	600
Vessel calls per year	48
Vessel calls per month	4
Berth operating hours per day	14
Cargo handling speed (MT/hour)	60
Cargo transfer per vessel call (MT/vessel call)	6,000
Annual existing berth throughput (MT)	288,000
Terminal acres (Acres)	15
Storage type	Outdoor/Decked
Total static storage capacity (MT)	35,000
Dwell time (days)	30
Annual existing yard throughput capacity	425,833
Unit Throughput Capacity (MT/Acre)	28,389

Increased calls –
weekly service

Berth capacity limits

Terminal Efficiency Enhancements - Improve What is There

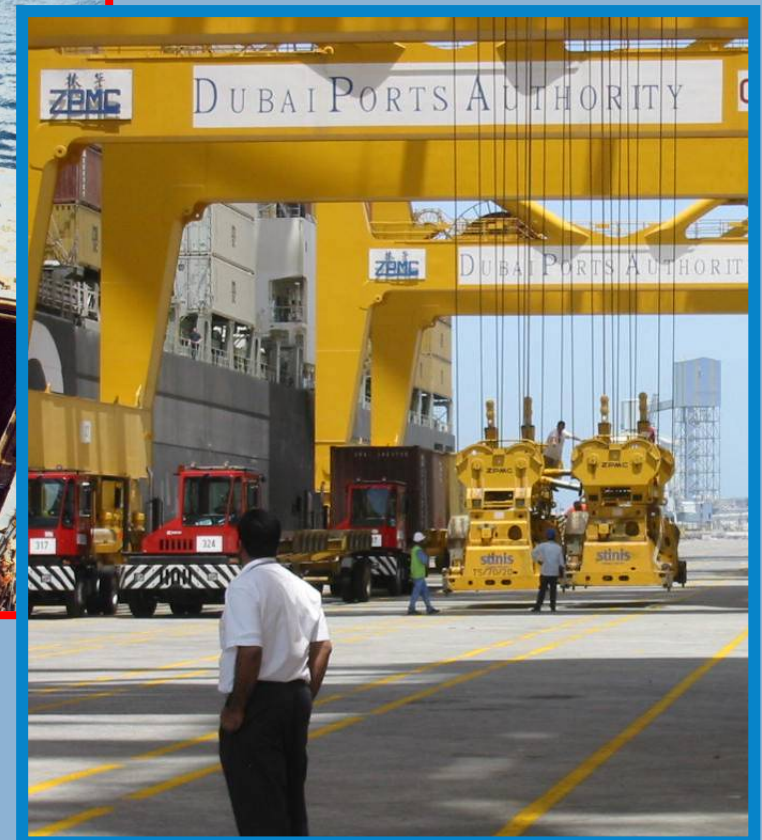
- Cargo handling technology
- Storage densification
- Terminal/Gate automation
- Reduced dwell times
- Empty storage depots

Cargo Handling Improvements - New Quay Cranes

Dual Hoist and Head Blocks
ZPMC



Single Hoist and Head Block
Bromma Spreader



Cargo Handling Improvements – Next New Quay Cranes



Source: Cargo Systems May 2007

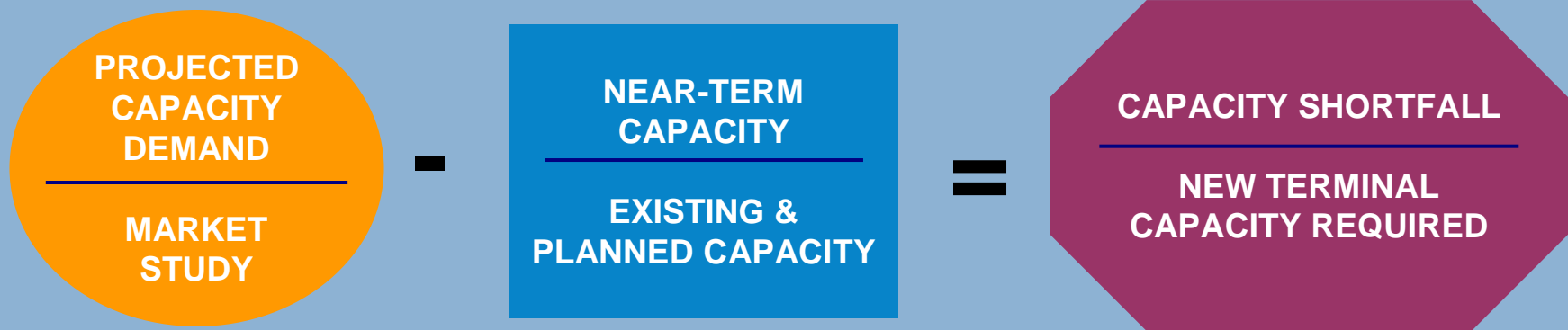
Cargo Handling Improvements – General Cargo

Specialized loading equipment

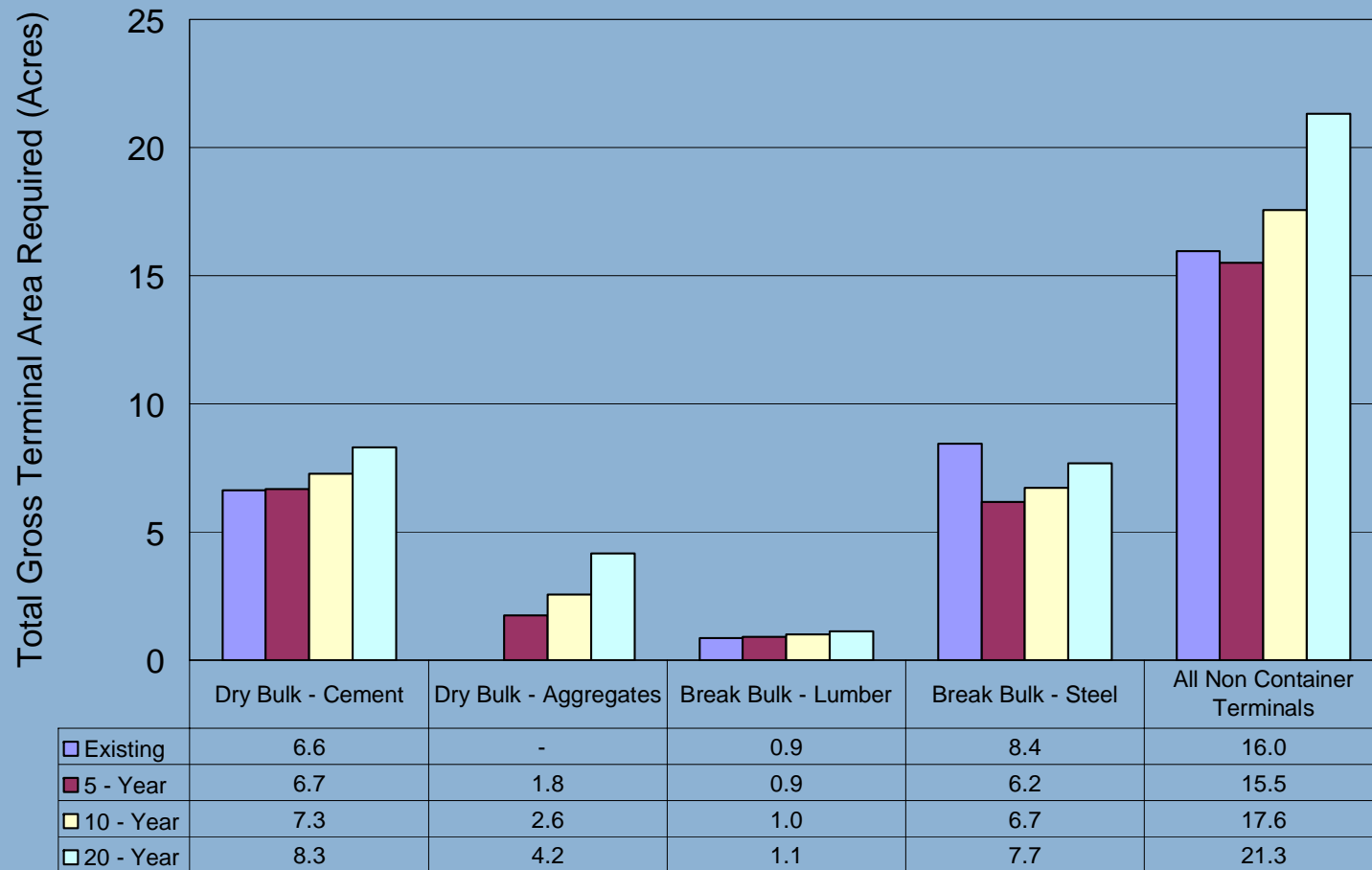
- Multi-Hook Spreader Bar
- Pallet Racks
- Increased lifts per hour



Future Terminal Needs Assessment



Market Driven - Terminal Needs Assessment Example



Fitting 10 Pounds into a 5 Pound Sack

- Evaluate future needs
- Develop reasonable approaches to accommodate growth
- Consider multiple alternatives using an iterative review process
- Prepare for compromise
- Create a long-range vision, with interim phases

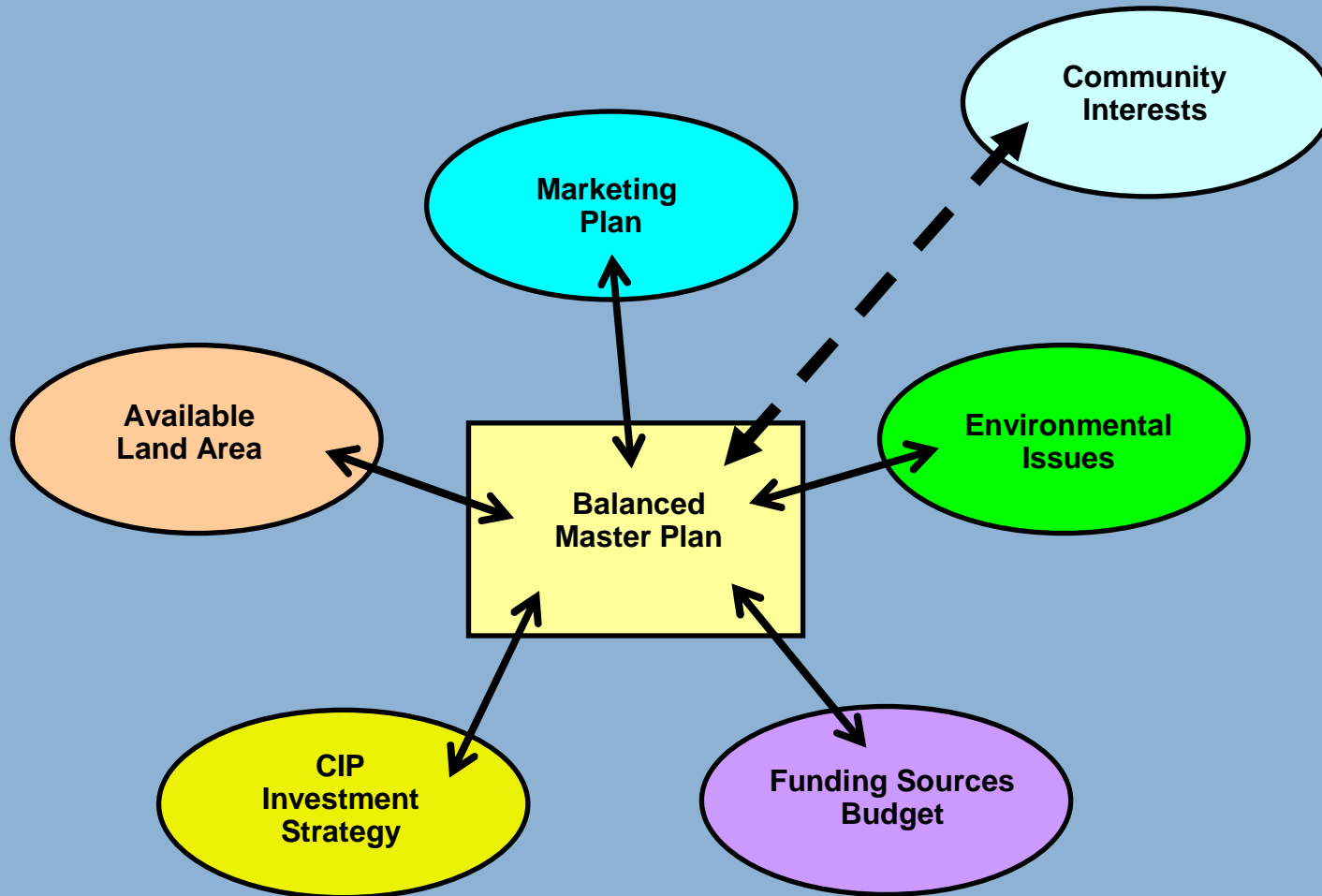
Economic Impact Data

- Identify key economic impacts
 - Jobs
 - Wages
 - Taxes
- Stratify by city, region, state, congressional
- Summarize data into one page fact sheet
- Publish data on Port website
- Help community understand your importance

Benefits of a Comprehensive Port Master Plan

- Provide a long-range vision for future growth
- Balanced market-driven vision plan
- Identify future areas of growth/acquisition
- Identify declining and emerging markets
- CIP provides solid investment strategy
- Regular updates to evaluate goals and directives

Balance master plan with local realities



Multi-pronged Community Outreach Program

- Port Stakeholders
- Public Stakeholders
- Governmental Stakeholders
- External Communication

Community Outreach - Port Stakeholders

- Port staff
- Tenants
- Pilots
- Labor unions
- Shipping lines
- Federal and State agencies
- Seek their input and goals through charrettes
- Build consensus for plan internally

Community Outreach – Public Stakeholders

- Identify key public stakeholders
- Involve them early
- Identify key issues
- Involve them in the beginning, middle and end
- Continuous education process



Community Outreach – Governmental Stakeholders

- Identify local business leaders
- Regular interaction with local government leaders
- Joint workshops for appointed/elected officials
- Reach out to your state government officials
- Invite Governor and other officials to tour your facilities
- One page fact sheets
- Long-term / on-going program

Community Outreach – External Communication

- Website postings
- Speak at community meetings
- Local newspaper
- Cable networks
- Local television news programs

External Communication Topics – Get the Word Out

- Update public on the Master Plan process
- Post items of interest and key findings
- Educate public on port operations
- Identify local/regional/state economic impacts
 - Jobs, wages, revenue, etc.
- Identify environmental programs and benefits

Community Outreach Benefits

- Make stakeholders part of the “team”
- Educate local community
- Build political support at local and statewide level
- Solidifies the port’s local and regional importance
- Build consensus for future port operations

Compromise and Negotiation

- Know which battles are important
- Compromise can open the door to opportunity
- Identify alternative solutions
- Participate in off-port options if necessary
- Usually the path of least resistance and reduced cost
- Avoid legal remedies if possible

Conclusions

- Develop a road map
- Balanced flexible market driven Vision Plan
- Supported by sound analysis and study
- Involve stakeholders throughout plan development
- Review and update plan on regular intervals
- On-going outreach and education
- Seek consensus