



AAPA/NAWE/MARAD Marine Terminal Management Training Program

Pam Everitt, Director Information Technology

April 26, 2006

# Presentation Outline

- Port Charleston Overview
- Why Automate?
- Port Authorities / Marine Terminals
- Marine Terminal Technologies



# PORT CHARLESTON

Five terminals in operation with a sixth terminal in the planning stage.





# Union Pier Terminal



## **Cargo at UPT**

Breakbulk/heavy lift charter ships, and passenger cruise vessels.

# Columbus Street Terminal



## **Cargo at CST**

Container and  
breakbulk /  
heavy lift.

2 container  
berths with  
on- terminal  
rail yard. 4  
breakbulk  
berths; 3875  
feet total.

78 acres of  
open storage.



# North Charleston Terminal



## **Cargo at NCT**

Container cargo.

3 berths with on-terminal rail yard; 2500 feet.

123 acres of open storage.

# Wando Welch Terminal



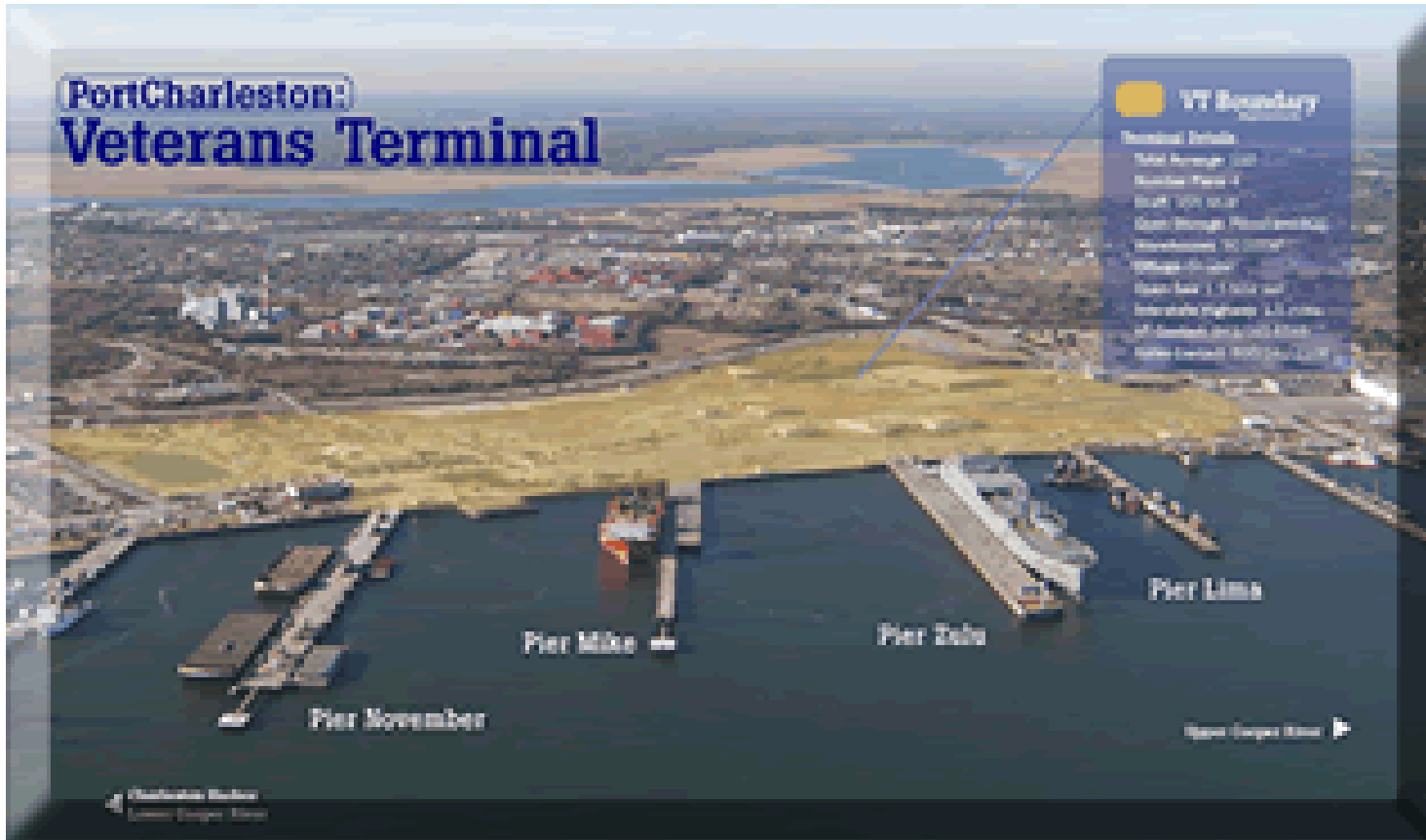
## **Cargo at WWT**

Container cargo.

4 container berths, 10 container cranes; 3800 feet of berth.

194 acres of open storage.

# Veterans Terminal



## Cargo at VT

Breakbulk,  
project, RoRo  
cargo.

4 finger piers.

110 acres



# Volume Statistics FY05

- Port of Charleston handled 1.97 million TEUs
- Total SCSPA breakbulk tonnage nearly two million tons
- Operating revenues totaled \$138 million

# Yard Management System

Real-time inventory, yard configuration management, cargo handling intelligence

Five applications  
manage gate operations, yard work, yard configuration, vessel operations, business reporting









SCPA-Wando-Pole3



# Why Automate?

- Increase Productivity
- Improve Customer Service
- Decrease Costs
- Improve Efficiency
- Regulatory Compliance
- Maximize Capacity
- Enhance Business Intelligence

# Technology in Marine Terminals

- Global Positioning System (GPS)
- Satellite and cellular communications
- Radio Frequency Identification (RFID)
- Wi-Fi
- Optical Character Recognition (OCR)



# Technology in Marine Terminals: One solution does not fit all

## *Terminal Constraints and Differences*

- Land
- Number of berths
- Sources of labor
- Landlord vs. tenant
- Private vs. public facility
- Ingress/egress
- Number of shipping lines, services
- Cargo: Container, breakbulk, bulk, passenger

# Technology in Marine Terminals: One solution does not fit all

## *Regional differences*

- Labor contracts
- Physical equipment inspections
- Regulatory pressures (emissions, environmental)
- Chassis pools

# Automation Opportunities

- Vessel tracking: AIS-Automatic Identification System
- Vessel scheduling
- Cranes
- Yard Equipment: Automated Guided Vehicles, Automated Stacking Cranes, Rail Mounted Gantries
- Automated inventory via OCR, GPS, RFID in conjunction with Terminal Operating System
- Network systems: wireless, high bandwidth
- Web portals: Intra, eModal, NEXUS, PortNet



**PORTCHARLESTON**

# Thank You

Pam Everitt

SC State Ports Authority

176 Concord Street

Charleston, SC 29401

(843) 577-8678

[peveritt@scspa.com](mailto:peveritt@scspa.com)