Marine Terminal Automation
AAPA Marine Terminal Management Training

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The Port of Virginia
HAMPTON ROADS HARBOR

NNMT
Future CIMT
NIT
VIG
PMT
PPCY
NIT NORTH GATE EXPANSION

26 new truck gates
Ties into new I-564 connector
$42 million investment
Opened June 2017
Automated Gate Technology

- Automated Truck Identification (RFID)
- Biometric TWIC Security Validation
- Remote Damage Inspection
- Optical Character Recognition
- Fully Automated Outgate Process
- Weight In Motion Scaling – North Gate
- PRO-PASS Truck Reservation System
Semi-Automated Rail Interchange

- Remote Damage Inspection
- Weight-In-Motion Scaling
- Automated UTR Identification
- NIT – 3 OCR Portals (1 x Bi-directional Lane)
- VIG – 4 OCR Portals
Semi-Automated vs Fully Automated

• Fully Automated
  - Long Beach Container Terminal
  - TraPac

• Semi-Automated
  - Global Container Terminals Sayonne
  - The Port of Virginia
Semi-Automated vs Fully Automated

• Fully Automated
  • Automated horizontal transport
    • AGVs, Automated Shuttle Trucks

• Semi-Automated
  • Operator driven transport
    • Shuttle Trucks, UTRs
Semi-Automated vs Fully Automated

PROs

Semi-Automated

• Safer
• Higher Productivity Possible
• Flexibility

Automated

• Safest
• Consistent Productivity
Semi-Automated vs Fully Automated

CONs

Semi-Automated

- Variability
- More to Manage
- Labor Expense

Automated

- Higher Infrastructure Cost/Requirements
- Less Flexibility
VIRGINIA INTERNATIONAL GATEWAY

Phase II Expansion:
Increases capacity to 1.2 million containers
Expanded Rail Operation
Extended Berth
4 new STS Cranes
Q1 2019: All 28 Stacks Complete
$320 million investment
VIRGINIA INTERNATIONAL GATEWAY
NORFOLK INTERNATIONAL TERMINALS

Increase capacity by 400,000 containers (46%)
2018: first stacks complete
2020: all 30 stacks complete
$350 million investment
Increase capacity by 400,000 containers (46%)
2018: first stacks complete
2020: all 30 stacks complete
$350 million investment
WE ARE VIRGINIA’S GLOBAL GATEWAY™.
Thank you