

# AAPA Harbors and Navigation Committee– Quality Partnership Initiative - Webinar

## Vessel Operating Costs – Cruise Vessels

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**December 17, 2015**



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# DDNPCX

- Mission:
  - ▶ **ALL ECONOMIC PRODUCTION**
    - Accomplished with in-house staff and virtual team members
    - DDNPCX is ultimately responsible
  - ▶ Review Plans - Reviews and endorses
  - ▶ Peer Review (ATR, IEPR)
- Get the DDNPCX involved early



# Vessel Operating Costs

- Developed by USACE Institute for Water Resources (IWR)
- Published in - Economic Guidance Memorandum (EGM) 15-04, Deep Draft Vessel Operating Costs – 28 September 2015
  - ▶ Expanded this FY to include cruise vessel classes
  - ▶ VOCs for cruise vessels were previously developed using the General Cargo class



# Cruise Vessels - VOC Cost Components

- Cruise Ship Vessel Types
  - ▶ International
  - ▶ US
- General Vessel Specifications – used to determine which cost to use
  - ▶ Average Passenger Numbers (Capacity)
  - ▶ DWT
  - ▶ Vessel Dimensions
  - ▶ Immersion Rate
  - ▶ Bunkerage Consumption (At Sea vs. In Port)
  - ▶ Etc.



# Cruise Vessels - VOCs

- Cost Components
  - ▶ Hull Asset Capital Costs (Fixed)
  - ▶ Operating Costs (Variable)
  - ▶ Intensity of Employment
  - ▶ Average Daily/Hourly Bunkerage Costs (Variable)



# Cruise Vessels - VOCs

- Cost Components (continued)
  - ▶ Applied Bunkerage Cost(s) and Scrap/Breakage Value
    - Heavy Viscosity Oil Price (default)
    - Intermediate Fuel Oil Price
    - Marine Diesel Oil Price
    - Liquefied Natural Gas Price
    - Methanol Price
    - Scrap Price



# Analysis

- Channel Modification
  - ▶ Harbor Deepening
    - Historically has not attracted new cruise traffic
    - Can result in less harbor congestion due to reduction in number of vessels interacting with the cruise fleet
      - ▷ Safety Zones/Critical Commodity
      - ▷ No Meeting (Passing/Overtaking)



# Analysis

## ■ Channel Modification

### ▶ Widening

- Reduces harbor congestion due to change in operations (passing/overtaking)
  - ▷ Combined Beam Width
- Tug Assist? - Specific characteristics of cruise vessels

### ▶ Anchorage/Turning Basins

- Design Vessel???





# Questions?



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