Channel Design Breakout Session 1
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- Port utilization – level of vessel activity
  - At what point does channel become "substandard?"
    - Maneuverability issues
    - Channel configuration
    - Channel width vs. vessel width

- Port operations
  - Can channel design impact port operations?

- Incorporation of risk into equation
  - Risk assessment
    - U of Washington methodology
    - Accident data
    - Expert testimony
    - Port users
    - Vessel transit data

- Maneuverability of channel
  - Once channel is built, there is no way to say exactly what kind of ship will use channel
  - Need for proactive process to look at improving channels to meet larger vessels
  - Consideration of bridge heights
  - Design of passenger vessels (additional height)
    - Need to consider height as well as width and depth
  - Transit speeds w/in harbor

- Communication between agencies
  - Concerning lands, bridges
  - Air draft, blockage, surge
  - Effect on moored vessels / passage by moored vessels / distance from moored vessels
  - One way – two way traffic
  - Underkeel clearance beneath moored vessels
  - Operational conditions

- Larger vessels at terminals, at same time larger vessels are moving thru channel
- Pilot impact

- Environmental issues
  - When does a situation become "too risky"

- Economic drivers
  - Moving a channel to accommodate moored vessels
  - Restrictions on traffic movements to accommodate larger vessels (1 way vs. 2 way)
  - Impact of restrictions on plant operations
    - Movement of gasoline out of plant example
  - Effect of weather (fog) on vessel movements
  - Inventory levels at plants

- Advisory committees
  - Getting all parties involved
    - Railroads, terminal operators

- Change in plan formulation process
  - Reliability factors
  - Just in time inventory

- What is the appropriate window for channel design?

- Looking at future ship design

- Procedures for channel design
  - Standardization?

- Procedures for reassessing projects
  - Assess channel use post-project construction

- O&M considerations in channel design process
  - Siltation, sedimentation rates
  - Sedimentation studies
  - Frequency of O&M – does it need to be done more often?

- Business process teams w/in corps

- Environmental windows impact on dredging
- Reliability of channel issues
- Pilots
- Port authorities
- Capt of port
- Overdepth for purpose of advance maintenance.
- Don’t claim benefits for advanced maintenance
- Reference depths
- Real-time monitoring of physical condition
- Channel design to maximize reliability, safety
- Use of channel simulation
  - Way vessels behave in real life vs. in simulation
- Other tools to help w/ channel design?
  - What info is maintained by various orgs
- Changes in channel usage
  - Vessel size, frequency
- Environmental impacts/considerations of channel design
- Running out of disposal space for material
- Shortening time to plan design and construct channel projects
- Public education as to role of MTS
- Users of channel must be forth-coming with assistance to Federal agencies.