Planning for Cruise Terminals

PRESENTED BY: Larry Levis, AIA
Principal, BEA International, Inc.

American Association of Port Authorities
Planning Process

- Community buy-in – Starts with Public Sector
- Public Involvement Program
- Visioning “Charrettes”
- Stakeholders’ Needs
- BALANCE
Aged Waterfront – formerly industrial

Community Vision – 1994
Need to improve roads
Balanced Interests

Plan 2002
Minimal investment

Pieces of Puzzle come together....
Port-of-Call Mini-Terminal

Passenger Flow
Contextual Mindset
Portland, ME

Industrial Marine & Emerging Leisure Waterfront
Portland, ME

Early Visioning – 1997 Urban Design Emphasis
3 Public “Charrettes”

Future Joint Development

Access
Bikes
Parks

Community Visioning – 2001 (w/ferry + cruise)
Budget Constraints Shouldn’t Restrict Vision Implementation

Phase 1:
- Car ferry
- 2 transit
- Cruise berths
- Park

Budget Constraints Shouldn’t Restrict Vision Implementation
Architectural Tradition – 19th Century
Portland, ME

Modernity meets tradition
Ocean Gateway

New England motifs
Case Study #3 – Larger City: 700,000 - Quebec
CRUISE & EXHIBITION

Nouveaux espaces commerciaux

Remplacer espaces déplacés

Initial Plan

Cruise-based Planning - 1999
Balance

...public waterfront access with ship access and security
Seasonal Port - Mixed-Use

Restaurant

Terminal / Exhibition Hall

Non-Cruise Parking
Flexible Space — (independent operator)

Ground Level – Exhibition Space
Case Study #4 – Larger City: 1,000,000 + }
Integrated Site

Existing Maritime Museum

New Terminal/Events Hall

New Marina

Veterans' Memorial/Riverfront Park

(No on-site parking)

Main Street

Integrated Site
Function Hall

- Column-free 13,000 sf Ballroom
- Moveable Check-In Counters
- Conference Center (VIP and Group check-in)

Second Floor Plan
Terminal Typologies
Temporary

15,000 – 20,000 sf  $10,000 / call

Port of Quebec, Norfolk, etc…
Entry-Level

POM CT-10
Entry-Level Terminal

POM CT-10
Occasional Use Terminal
Port Everglades CT-29 Cruise/cargo joint use
Regular Use Terminal

North Elevation

South Elevation

Miami Cruise Terminal D & E
Disperse and separate flows to minimize congestion

Maximize curbside

POM D&E – Ground Plan
Multiple check-in areas to separate people
Mixed-Use Terminal

Early check-in @ attraction

Long Beach Cruise Complex
Adjacent Activities Relieve Burden on Terminal

Long Beach Cruise Terminal Highlights
“Cow Bay” revitalization district

Prince Rupert, BC
## Types

<table>
<thead>
<tr>
<th>Types</th>
<th>Cost (in million)</th>
<th>Size (in sf)</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Temporary Facility</strong></td>
<td>- $10,000 / call</td>
<td>3,000 – 20,000</td>
<td>Seasonal or Emergency turnarounds</td>
</tr>
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<td></td>
<td>- $1.5 m infrastructure</td>
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<tr>
<td><strong>Entry-Level Terminal</strong></td>
<td>$3.0m – $10.0m</td>
<td>20,000 – 60,000</td>
<td>Entering Cruise Market in Seasonal or Limited Growth Area</td>
</tr>
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<td><strong>Occasional Use Terminal</strong></td>
<td>$7.0m – $14.0m</td>
<td>50,000 – 80,000</td>
<td>Seasonal or Year-round turnaround in Growth Port</td>
</tr>
<tr>
<td><strong>Regular Use Terminal</strong></td>
<td>$12.0m – $35.0m</td>
<td>80,000 – 120,000</td>
<td>Established Cruise Homeport</td>
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<td><strong>Mixed-Use Terminal</strong></td>
<td>$12.0m – $35.0m</td>
<td>80,000 – 120,000</td>
<td>Port of Call / Downtown / Attraction</td>
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### Trends: Vessel Sizes

(Pinnacle / Genesis Class)

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Embark

✓ Security
  ✓ 4-6 Hours Process
  ✓ Peak Period 1.5 Hours – 2400 PAX
  ✓ 12 Metal Detectors / Scanners
✓ Managing Check-in 5400-6000 pax
  ✓ Break Up Ship into Smaller Groups
    ✓ General / VIP / Groups (3-4)
    ✓ Use Airline Check-in for Cruise Marshalling
✓ Remote Check-in via Internet
✓ Kiosks (self check-in)
✓ Photo ID @ Counter (minimize # of bottlenecks)
✓ Maximize curb length & Sidewalk width
Debark

- Luggage
  - 12,000 Pieces = two 30,000 sf halls
  - 5 Shifts of 2400 Bags (4 Conveyors @ 600p/conveyor)
- Conveyors
  - Speed (Customs clearance)
  - Real Estate (reduced building size)
  - Operation Cost (maintained in union ports)
- CBP
  - Single Face Inspections
  - Separate Primary into Two Inspection Areas with Secondary Between Primaries
- Parking 1000 – 1500/ship
- Buses 16 – 20 at a time
- Increased Remote Staging Areas
- Traffic Management / Engineering
When do conveyors make sense?

Considerations:  
- Cost amortization  
- Airlift sensitivities  
- Pax Experience  
- Unionized?  
- Curbside check-in?

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<th>Design Solutions</th>
<th>Bags / s.f.</th>
<th>Speed</th>
<th>Hard Capital Improve Cost</th>
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<td>Traditional Lay Down (with &amp; without Luggage Tables)</td>
<td>6 – 8 s.f. / Bag</td>
<td>5.5 hrs</td>
<td>$5.6 – $9.0 m</td>
</tr>
<tr>
<td>Compartmentalized Baggage Lay Down Access</td>
<td>4 – 5 s.f. / Bag</td>
<td>4.5 hrs</td>
<td>$3.0 – $5.0 m</td>
</tr>
<tr>
<td>Conveyor</td>
<td>5 – 5.5 s.f. / Bag</td>
<td>3 hrs</td>
<td>$5.0 – $6.0 m</td>
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Urban Design for the Cruise/Ferry Industry

- Ascertain *if* there is a market for cruise or ferry
- Local/Regional Government Support
- Local & Community Planning Workshops (1-2 yr process)
  - Integrate with Existing Urban Master Plan
  - Solicit Joint Private Development
  - Maximize Public Access to Water’s Edge
  - Be able to create Security during ship days
  - Create Long-term (20-yr +) Vision
- Make terminals multi-use (Exhibition or Function Hall)
- Create programs with other attractions for early arrivers