Sustainable Port Master Planning

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What is Sustainable Port Master Planning?

> A “Sustainable Port Master Plan” is one developed with a more complete understanding of all the issues facing a Port today, so that it can “sustain” one’s business into the future.

> Scope is defined through a “port-specific” analysis that better defines the specific needs and elements of each Port’s “Plan”.
Current Method of Port Master Planning

**Facilities master planning**
- Inventory and condition of assets
- Transportation logistics
- Maintenance, recapitalization, or improvement

**Business planning**
- Economic payback
- Cargo forecasting
- Identify tenants/users
Traditional Port Planning Has Been Mostly “Cargo Based”

We’ve all seen these planning scopes:
> Task 1 – Market Assessment or Cargo Forecast
  – Develop 20-year Cargo Projections

The One Thing We Know for Sure – The Cargo Forecast will be “Wrong”
Sustainable Approach To Port Master Planning

> Start with an understanding of the biggest Risk to long-term success for the Port

> The driver for successful business outcome is not always an economic one (e.g. cargo forecast)

> Certain drivers can increase the risk for a negative outcome:
  
  – Environmental considerations (permitting, regulatory requirements, natural disasters)
  
  – Stakeholders not brought into process
  
  – Community concerns not addressed
  
  – Port Governance
A New “First Step” - Identify The “Risks”

> Necessary to consider all risks to the Port’s long-term success

> Risk Assessment
  - More than just an “add-on” to a typical feasibility or preliminary port plan
  - Comprehensive, systematic approach to port master planning

> Needs to be Top-Down Approach With All Key Port Management Engaged

> Start with defining the Port’s Mission, Objectives, and Goals

> Identify Business Case Risk Management and Planning
  - Defining Threats
  - Likelihood
  - Severity
  - Risk Identification
  - Alternatives
Port Sustainable Master Plan Elements

> Understand mission and risks
> Market plan
> Facility plan
> Business plan
> Financial plan
> Master plan
> Environmental assessment plan
> Social/community engagement plan
Comprehensive Sustainable Port Master Plan Approach

> The process and products are customized to fit the port’s situation
> Flexible and modifiable
> Identifies and coalesces leadership and staff priorities
> Stakeholder engagement is critical

Results

> Integrating economic, environmental, and social concerns throughout the entire planning process
> Identifies development ‘trigger points’ or areas to manage risk and incorporate them into the “Plan”
Examples of Non-Traditional “Risks”

**Port of Long Beach**
- Issue: Community’s environmental concerns
- Action: Becoming a “Green Port” with Sustainable Design Guidelines

**Port of Baltimore**
- Issue: Port’s Dredge Disposal Program Not Understood
- Action: Initiate a Public “Harbor Team” to garner stakeholder support
Sustainable Port Master Plan Value to Port

**Optimize economic returns**
- Improve revenue streams
- Successfully compete in evolving marketplace

**Improve environmental results**
- Minimize regulatory impacts
- Utilize technological advancements

**Leverage social engagement**
- Public participation leads to better planning, shortened schedules, and durable results
- Collaborating with stakeholders to improve port stability, enhance operational effectiveness, improve project efficiencies & timelines
About Cardno
Cardno: Global reach, local experience

> Founded in 1945 in Brisbane, Australia
> Industry-recognized firm with domestic and international operations

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100+
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Provide Port Strategic, Business, and Facility Planning Services with focus on Problem Solving

> Strategic and Master Plans
> Feasibility Studies
> Operational Studies
> Conceptual Design
> Capital Costs Estimates
> Environmental Studies and Permits, including dredged material disposal
> Financing Due Diligence and Privatization Concession Support

Provide ‘Program Management Type Services

> Preliminary Designs and Design Reviews
> Asset Management and Facility Conditions Reviews
> Design/Build Procurement Support
> Construction Oversight
Thank you

For more information

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