# How to Manage New Port Developments

AAPA XVIII Latin American Congress of Ports



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# How to Manage New Port Developments in 2009

or

what happened to 20% growth rates and readily available finance?





## Typical pattern in last 5 years

 Cargo growth rates have been so rapid, new developments are at capacity almost as soon as they are in operation

 The challenge evolved into how fast can more capacity be added





## Last 10 years

In last 10 years explosion in port developments:

- Valparaiso, San Antonio, Chile
- Callao & Paita, Peru
- Buenaventura/Aguadulce, Colombia
- Balboa, MIT, CCT Panama
- Lazero Cardenas & Manzanillo, Mexico
- Cartagena & Santa Marta, Colombia
- Santos & Santa Catarina, Brazil
- Buenos Aires Argentina



## Next 5 to 10 years

- Punta Colonet, Mexico (U\$\$4bn+)
- Puerto Moin, Costa Rica (US\$800m)
- Farfan, Panama (US\$600+)
- Embraport, Brazil (US\$1Bn)
- Coal terminals Colombia
- Puerto Brazil, Brazil
- Minerals export, Peru, Chile
- LNG terminals, grain terminals, etc.



## Capacity - Caribbean/Central America

Port	Capacity (TEU M)	
	Existing*	Potential†
Caribbean		
MIT, Panama	2.2	4.0
CCT, Panama	0.8	1.3
PPC, Cristobal	0.7	3.5
KCT, Jamaica	1.8	3.0
Freeport, Bahamas	1.5	3.5
Port of Spain, Trinidad	0.6	1.3
Port of the Americas, Puerto Rico	0.7	1.5
SPRC, Cartagena, Colombia	1.6	3.2
West Coast Central/South America		
Balboa, Panama	3.0	4.5
PSA Rodman, Panama	0.0	0.5
Lazero Cardenas, Mexico	0.6	4.0
Manzanillo, Mexico	1.5	3.5
Buenaventura, Colombia	0.9	1.6
TOTALS	15.8	35.3

<sup>\*</sup>including developments currently in progress



<sup>†</sup> Estimated

## Timescale

- A major infrastructure development takes many years:
  - Increasing environmental requirements
  - Lengthy permitting times anywhere from 6 months to 7 years
  - Planning and design between 6 to 18 months
  - Construction is typically18 months to 3 years

Minimum duration for a simple berth is 3 years; for a major new development could easily be 10 years



## Demand

- There has been an under investment in infrastructure development in Latin America, thus the demand for new port facilities continues
- Delivery durations remain the same with the current economic conditions – therefore preliminary stages need to continue progressing to be ready for when growth returns
- BUT take care as 'Demand' does not equal 'need'; it is a question of economics



## Port Development

Main Stages of Port Development



## **Economics & Pre-Feasibility**

- Market studies which sectors, what is demand now and over next 20 to 25 years
- Revenue studies what is the income from the market opportunities
- Planning and conceptual engineering what are the capital and operating costs

#### Result:

IRR – Internal rate of return on investment



## First Stage Implementation

- Submit permit applications environmental studies, municipal, state, federal permits
- Property confirm ownership, utility ROW's, land access
- Planning and preliminary engineering master plan, preliminary designs, capital cost estimates

#### Goal:

 Procure financing – raise own capital, equity share, concession, public money, bonds, etc.



## Second Stage Implementation

- Detailed Engineering design of civil works, equipment specifications, property acquisition
- Obtain construction permits
- Procurement request proposals, evaluate and award contracts
- Construction = including delivery and commissioning of equipment, staff training

#### Goal:

Operation - handling cargo & generating revenue



## What has changed for 2009?

- Access to finance ability of banks to borrow funds; evaluation of investment returns
- Cargo sharp falls e.g. around 20% in transpacific volumes, 15% in transatlantic
- Severe drop in commodity prices e.g. 30% drop in price of iron ore; large falls in oil
- Future economic growth rates flat or negative growth in many areas for next 2 years, 3 to 5% for next 5 years



## Impact on new port development

#### **Downsides**

- Need robust growth forecasts, rigorous cost estimates, higher IRR's
- Delay getting funding for projects

#### **Upsides:**

- More time for implementation opportunity to optimise cashflow and costs
- Government support for infrastructure development to help stimulate economy – permits, funding,
- Port has a chance to review and optimise existing operations



## A shift in emphasis

- Ensure market forecasts are realistic
  - What are the key factors specific to your development
    - Type of cargo transshipment or gateway?; import or export?
    - Source of demand locally generated export e.g.
      Brazil, Chile or import e.g. Venezuela or transshipment and distribution – e.g. Caribbean Basin
    - Impact of other planned developments (e.g. Panama Canal Expansion)



## Cartagena, Colombia

## Some key facts:

- Transshipment comprises around 50% of traffic
- Transshipment has experienced large growth over the last 5 years
- Gateway traffic (import/export) serves not only Cartagena area but Bogota and Medellin

#### Future:

- Panama canal expansion
- Transshipment comes because of gateway cargo, not vice versar actions a feet of the cargo and the cargo and the cargo and the cargo and the cargo are cargo.



## Example - Panama

### Some key facts:

- Traffic is approximately 90% transshipment
- Huge investments over last 10 years and huge growth (over 30% per year in 2007)
- Further additional capacity planned for both Atlantic and Pacific side

#### Factors:

- Strategic location
- Panama canal expansion

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Google

Eye alt 5.98 km



## Santos, Brazil

### Key facts:

- Traffic is dominated by gateway
- Traffic serves huge local market of Sao Paulo
- Demand exceeds capacity (significant ship waiting time

#### Future:

- Cargo demand depends on local economy
- Permitting process takes minimum 7 years to develop new major port infrastructure
- Legislation for new terminals

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23"58'29.05" S 46"17'20.35" W

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## Implementation - future

- Environmental issues increasing legislation and focus on these, e.g. lending agencies and air emissions
- Planning allow flexibility in future development,
  e.g. room for logistics, project cargoes, steel
- Operations increasing use of IT
- Operations security requirements for containers
- Operations cost of fuel and environmental considerations





## Thank you

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