AAPA – Profitable developments while increasing community goodwill – a recipe for success. ©

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Since 2003, Aegir Port Property Advisers are the pioneer consultancy engineered to meet the unique property challenges faced by the ports and maritime industries. Aegir’s focus is to enhance a port’s competitive position and financial value through the more strategic use of its largest asset - property.

In the last decade Aegir has undertaken complex port property lease, asset management, valuation, development feasibility, management consultancy and strategy instructions in Europe, the Middle East, Africa, the Americas and Asia with port asset values in the billions of US dollars.

From our origins in 1970 London to a 21st century maritime and shipping consultancy, Drewry has established itself as one of the most widely used and respected sources of impartial market insight, industry analysis and advice. This in-depth understanding and objectivity provides our clients with the actionable advice and recommendations they need to achieve their ambitions and stay ahead of the market.

- Last 10 years - over 400 port assignments in 50 countries.
- Since 2010 - $20bn value in commercial and due diligence advice in port M&A and financing.
- Last 5 years - provided advice on vessel valuations on asset value of more than $180bn (combined).
- Last five years - advised on container shipping industry on investments totalling $6bn.

Helping you navigate the world of ports by bridging the gap between the port and property sectors.
Presentation agenda

- Introduction – increasing community goodwill
- Financial challenges
- International example
- US example
- Conclusions
Partnership

‘A real partnership in which all parties help all others to be more fully themselves.’

Derrick Jensen - environmentalist

‘The most important single factor about free market is that no exchange takes place unless both parties benefit.’

Milton Friedman - economist
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Ports being pulled by all sides…

The business of port authorities is being forced to change; better to manage change than react to it

- PA’s pay for infrastructure, port clients use at subsidized prices. End consumer must choose: pay with taxes (ie, subsidies) or pay real cost of logistics at point of purchase; either way, they pay.

- Larger ships require more infrastructure, land (velocity, throughput); land needs to do more on same footprint (operationally and financially); automation increasingly critical.

- How will infrastructure be paid for? Property portfolio to become increasingly important as a capital asset.

- Balancing stake and share holder interests’, environment and other issues to continue; but PA’s will increasingly be structured and operated like private sector enterprises; ports’ economic development goals will be addressed after ‘bottom line’ - not above.
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Port Antioquia – major port project in Colombia, South America: the catalyst that will lift the region to a new level of competitiveness

PiO SAS is one of the premier port developers in Latin America today, with a long track record of building successful, complex maritime port infrastructure projects.
Located in the Gulf of Urabá (Turbo)

- Closest port to 40% of main production and consumption centers in the country, 70% of Colombian GDP
- Urabá holds largest agricultural export operation with 1.6 m tons of Bananas, 2.2 m tons total
- Proximity to the Panama Canal
- US$1.5 bn investment in infrastructure underway will drastically improve the region’s connectivity
- Notwithstanding lack of port infrastructure, main shipping lines call Turbo with geared, palletized ships.
Current method of shipping bananas
MAIN DRIVER

• Sea-side operations: from boat-to-boat loading to port-to-ship loading

• What takes 3.5 days palletised will take 3.5 hours containerised

Bananas are currently loaded at sea without proper port infrastructure: a fraction only of Colombia’s banana production is shipped in reefers

Puerto Antioquia will allow port-to-ship loading: larger cranes will be able to load refrigerated containers onto larger ships, resulting in more efficient and larger-scale loading
Capacity impact – leap-frogging decades of ship growth

**URABA TODAY**

**A**
- Early Containerships (1956-)
  - 500 – 800 TEU
- Fully Cellular (1970-)
  - 1,000 – 2,500 TEU
- (LOA - Beam - Draft)
  - 137x17x9
- 4 containers across
- 4 containers high on deck
- 4 containers high below deck

**B**
- Panamax (1980-)
  - 3,000 – 3,400 TEU
- Panamax Max (1985-)
  - 3,400 – 4,500 TEU
- (LOA - Beam - Draft)
  - 250x32x12.5
- 6 containers across
- 4 containers high on deck
- 4 containers high below deck

**C**
- Post Panamax (1988-)
  - 4,000 – 5,000 TEU
- Post Panamax Plus (2007-)
  - 5,000 – 8,000 TEU
- (LOA - Beam - Draft)
  - 295x40x13
- 9 containers across
- 5 containers high on deck
- 5 containers high below deck

**D**
- New Panamax (2014-)
  - 12,500 TEU
- (LOA - Beam - Draft)
  - 300x45x14.5
- 10 containers across
- 6 containers high on deck
- 6 containers high below deck

**E**
- Post New Panamax (2006-)
  - 15,000 TEU
- Triple E (2013-)
  - 18,000 TEU
- (LOA - Beam - Draft)
  - 387x56x15.5
- 22 containers across
- 10 containers high on deck
- 10 containers high below deck

**URABA with PUERTO ANTIOQUIA**
Port Antioquia project overview – Colombia has most extensive port concessions in the world

• Two interconnected facilities:
  – offshore deck
  – onshore logistics platform on the banks of Leon River

• Six mile causeway connecting onshore platform with offshore container terminal

• Project has exclusive right over offshore 322 acre through 30-year concession; onshore facilities to be built on 95 acre privately owned site:

• At end of concession, unless renewed, offshore terminal reverts to State, State has option to buy onshore intermodal platform

• Port designed to accommodate postpanamax ships (14,500 TEUs), and bulk cargos of 80,000 t

• Port layout accommodates multi purpose operations:
  – Containers
  – General Cargo
  – Bulks
  – Vehicles (ro-ro)

• Phase 1: 600,000 teu’s, five berths
Project Overview

- Bridge Hub
- Built on private land (38 ha)
- Deck
  - Built on concession area
- 3.8 Km. Viaduct
- Leon River
- Bridge
- All west side of Leon River is a National Park. The Project has previous permits to pass through this in a 30 m width
- Pass Through National Park
Project Overview

Deck Design

Static Capacity:
- Dry Containers: 4,900 Teus
- Reefers: 860 Plug-ins

Berth:
5 positions distributed as follows:
- 4 along the deck
- 1 parallel with the viaduct entrance and the deck.
Onshore intermodal platform

1. Central Gate
2. Control & Security
3. Recreational zone
4. Office space
5. Truck parking
6. Warehousing
7. Refrigerated containers (reefer points); consolidation warehouse
8. Empties
9. Full container holding
10. 120 m tonnes – grain PH1
11. 240 m tonnes – grain PH2
12. Maintenance
13. Fire fighters
14. Water tanks
15. Service centre
Impact to Nueva Colonia and the State of Antioquia

- Nueva Colonia is a small, underdeveloped town
- Economic impact to the town and state will be immeasurable
- Port will be a major development and job creation catalyst

- Free Zone of Uraba, major industrial zone in region, promoting itself as being 20 kilometres from the ‘Port of Antioquia’ – when it has yet to be built
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Infrastructure challenges
Port Hueneme – the little port that can and does!

- Very successful niche port with visionary leadership and very effective senior management
- Deepest natural harbour between Los Angeles and San Francisco
- Specialises in autos, perishables and bulk cargoes
- Land constrained in a land constrained County
Port Hueneme – a victim of its own great success

- Within 10 years, POH needs a minimum of 200 additional acres – assuming port footprint can be modernized to process forecasted cargo growth
- Acquisition, permitting, planning and development process can take up to 3 years.
- Need to increase the POH’s land banks is immediate and critical.
Off port expansion strategy

• Maximum radius, based on physical limitations - approximately ten miles

• POH client requirements - outermost radius from port of six miles (outermost ring)

• Red border is area within the City Urban Restriction Lines (CURB), only viable location for port related properties

• SOAR also establishes CURB lines in various cities and their urban areas. Land lying outside CURB lines are protected by SOAR.
Many challenges and the alignment of planets…

- Area for off-port expansion is severely limited
- Challenge - have county, city officials embrace port expansion
- Convergence of circumstances facilitates this
- Port management vision, delivers this
Significant progress underway…

• Issues faced:
  – Outside of its immediate environs, port was not as well known as it should have been
  – Perception of ‘ports’ in the area was dated and conjured up images of container ports of decades ago
  – Port and its clients operating at over 130% capacity for existing land banks – not sustainable, will impact growth, economic viability

• Challenges:
  – Change perceptions of port
  – Establish port as a ‘county’ economic engine, not just city, local one
  – Need city and county officials to buy in, become effective port supporters
  – Fast track off port expansion strategy

• Results so far:
  – Numerous meetings held with government, community, positively received
  – Case made that port is an environmental leader, its off port expansion would be ‘biggest positive environmental impact’ for the county by greatly reducing truck traffic, more use of rail assets
  – Case made that port will be major generator of ‘family sustaining jobs’
  – Based on thorough, measured consideration by port management of every community concern and need, city, county governments now major port supporters and of its expansion plan
Proposed 250 acre logistics park development

- The following are port objectives:
  - Addressing immediate and near term port client land needs
  - Continuing the port’s long history of following the highest environmental standards
  - Obtaining highest possible LEED standards for like-kind facilities (e.g., all vertical planes to be solar panels; advanced water storm drainage system
  - Community sports park to be included
  - Designed to be a port facility - off port
  - Located less than 2.5 miles from port central gate
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Conclusions

• The landscape ports operate in is dramatically changing, port authorities need to adapt through innovation

• Reality needs to set in, the real costs of logistics needs to be addressed so ports can invest in expansion, modernization and deliver dividends to shareholders for community and economic development initiatives

• Two examples presented herein (one completely private sector, the second public/private), have investments solely coming from the private sector; this shows that it is possible to access private capital for port needs
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