Long-Term Development of US Ports

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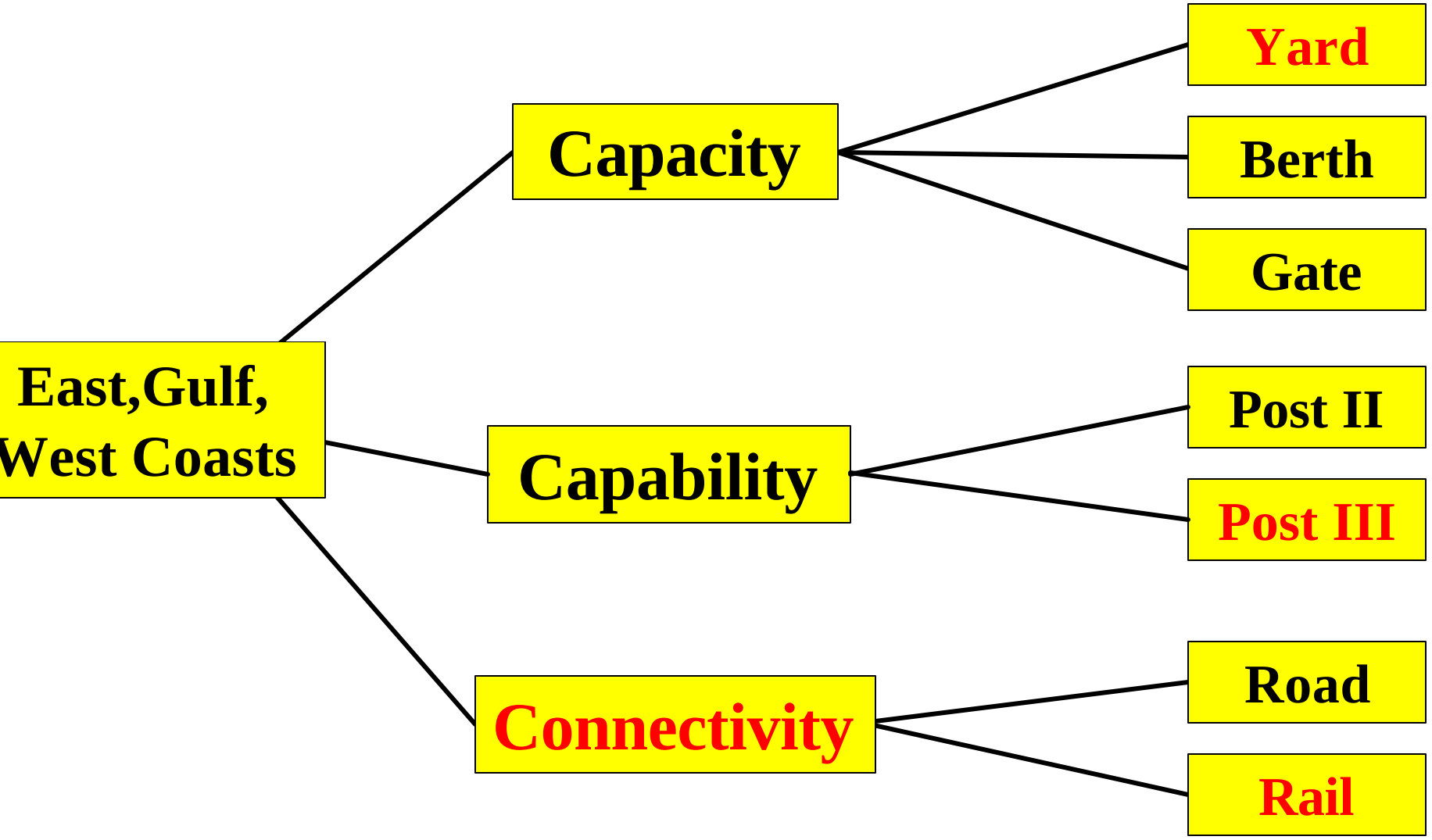
Typology of US Ports' Long-Term Concerns



Most Critical Factors

Concern	Unit	Present	Future
Capacity	TEU/acre	4,000	6,000
Capability	Draft (ft)	50	52
Connectivity	IM-Yards & Rail Connection		

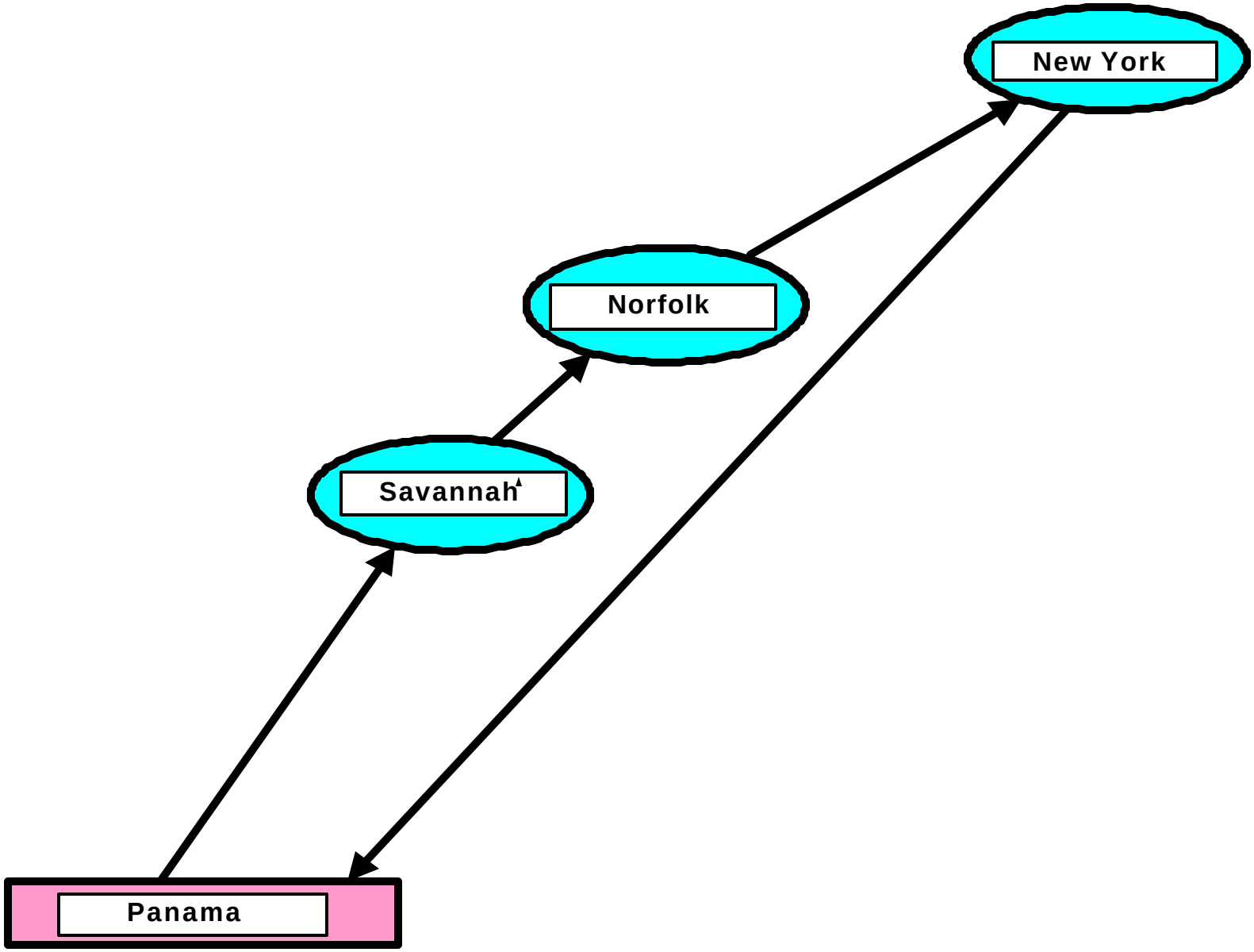
Containership Dimensions & Arrangement

Ship Class	Capacity (TEU)	Length x Bean x Draft (m)	Arrangement (rows)
Panamax	4,500	295 x 32.3 x 12	8 - 5 - 13
Post II	8,500	345 x 43 x 14.5	9 - 6 - 17
Post III	12,000	400 x 51 x 15	10 - 6 - 20

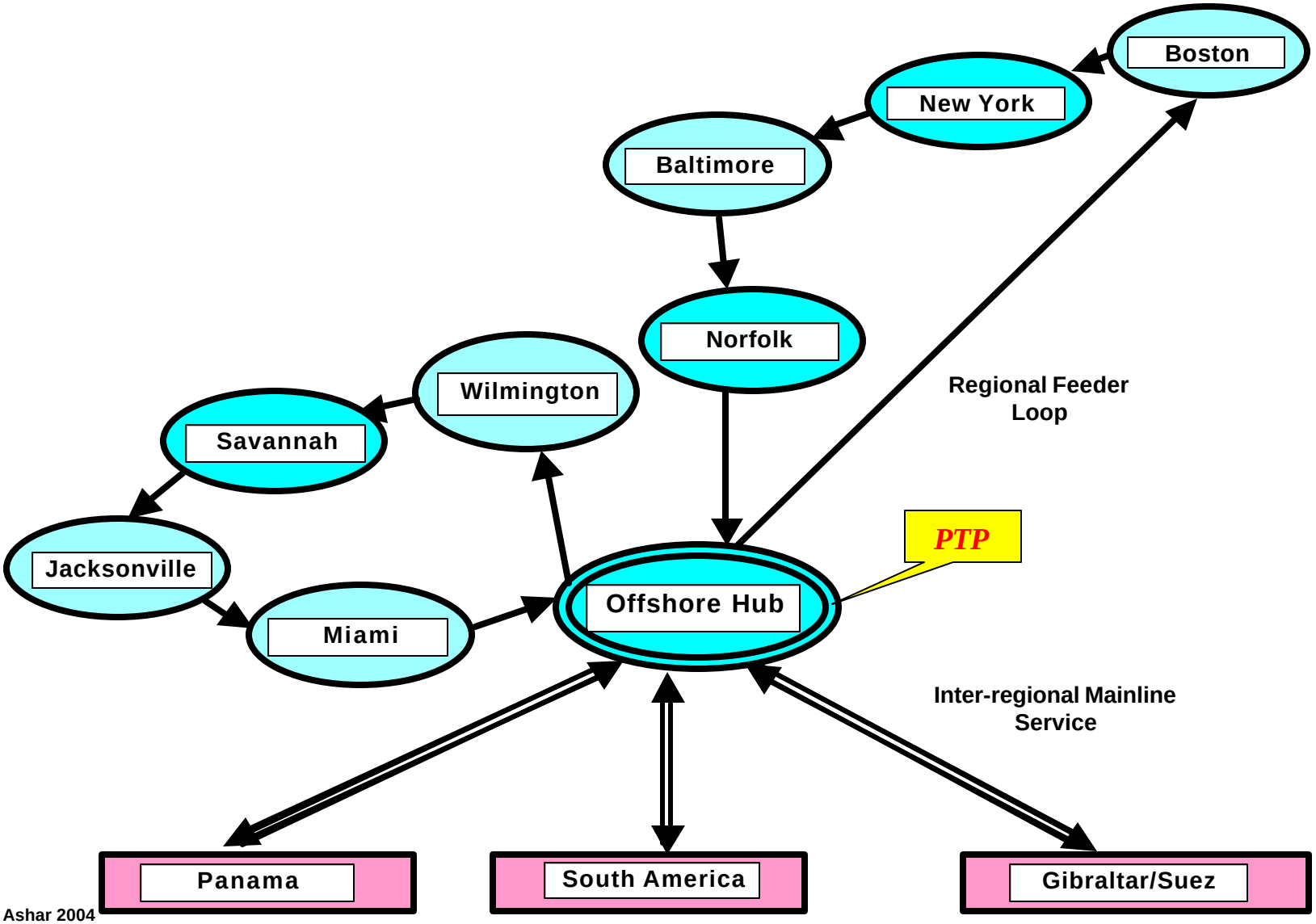
Global “Mega” Trends

- **Shipper-Controlled Routing**
- **Distribution Centers Nearby Ports**
- **53-ft Domestic Trailers / Containers**
- **Panama Canal Expansion**
- **Post III Ships**
- **Off-Shore “*Pure Transshipment Ports (PTP)*”**

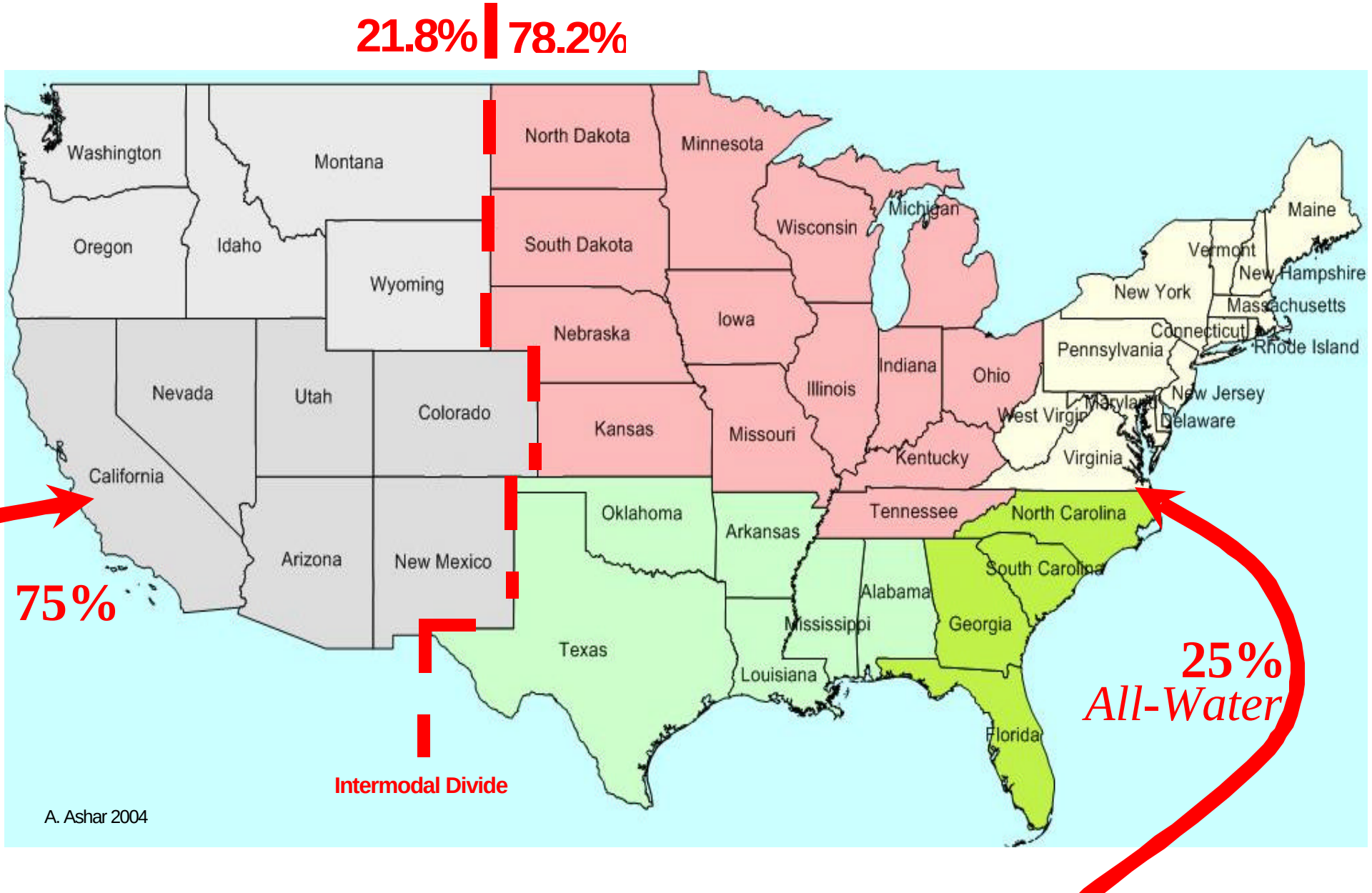
Present USEC Service Pattern



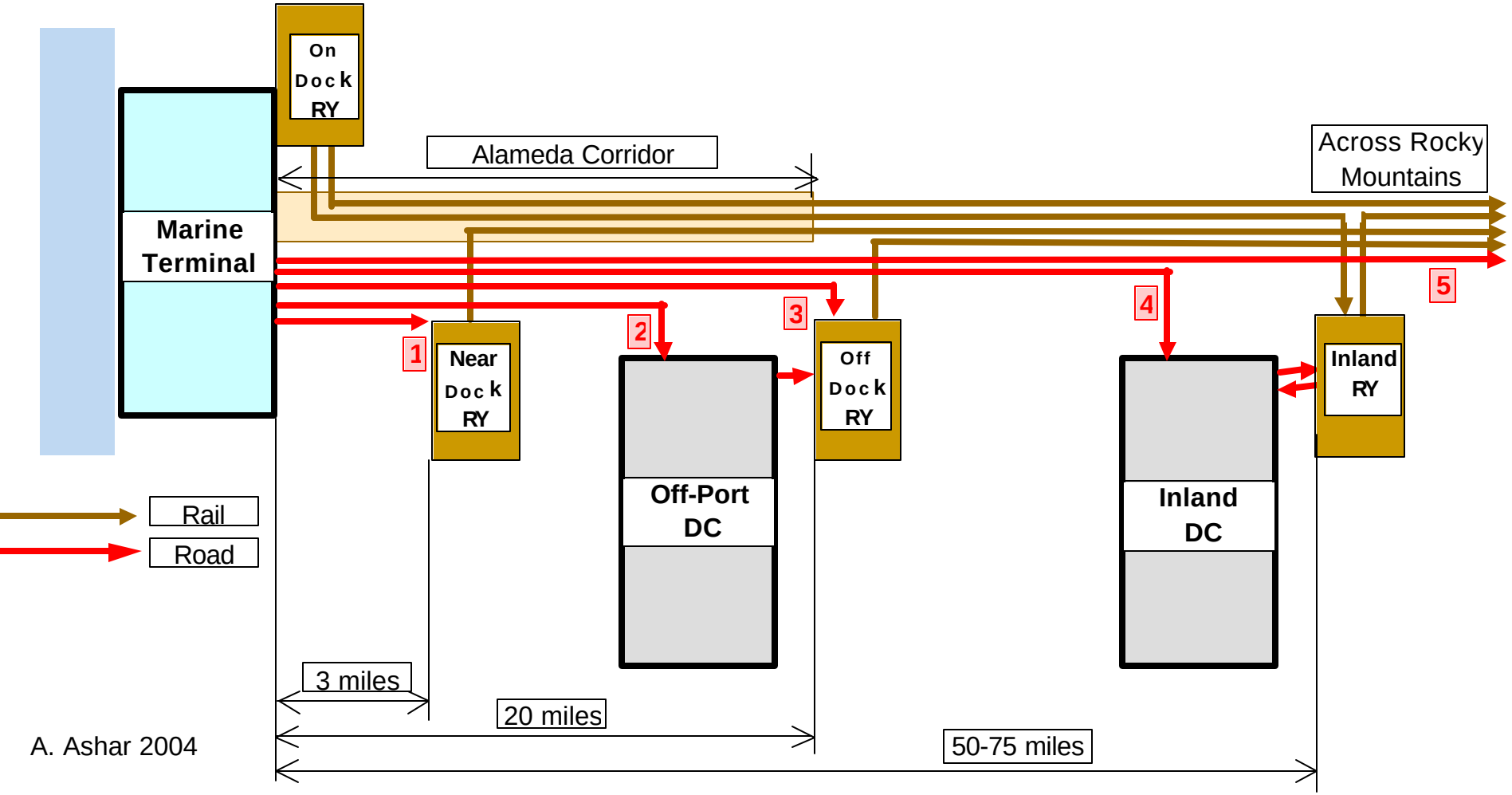
Future USEC Service Pattern



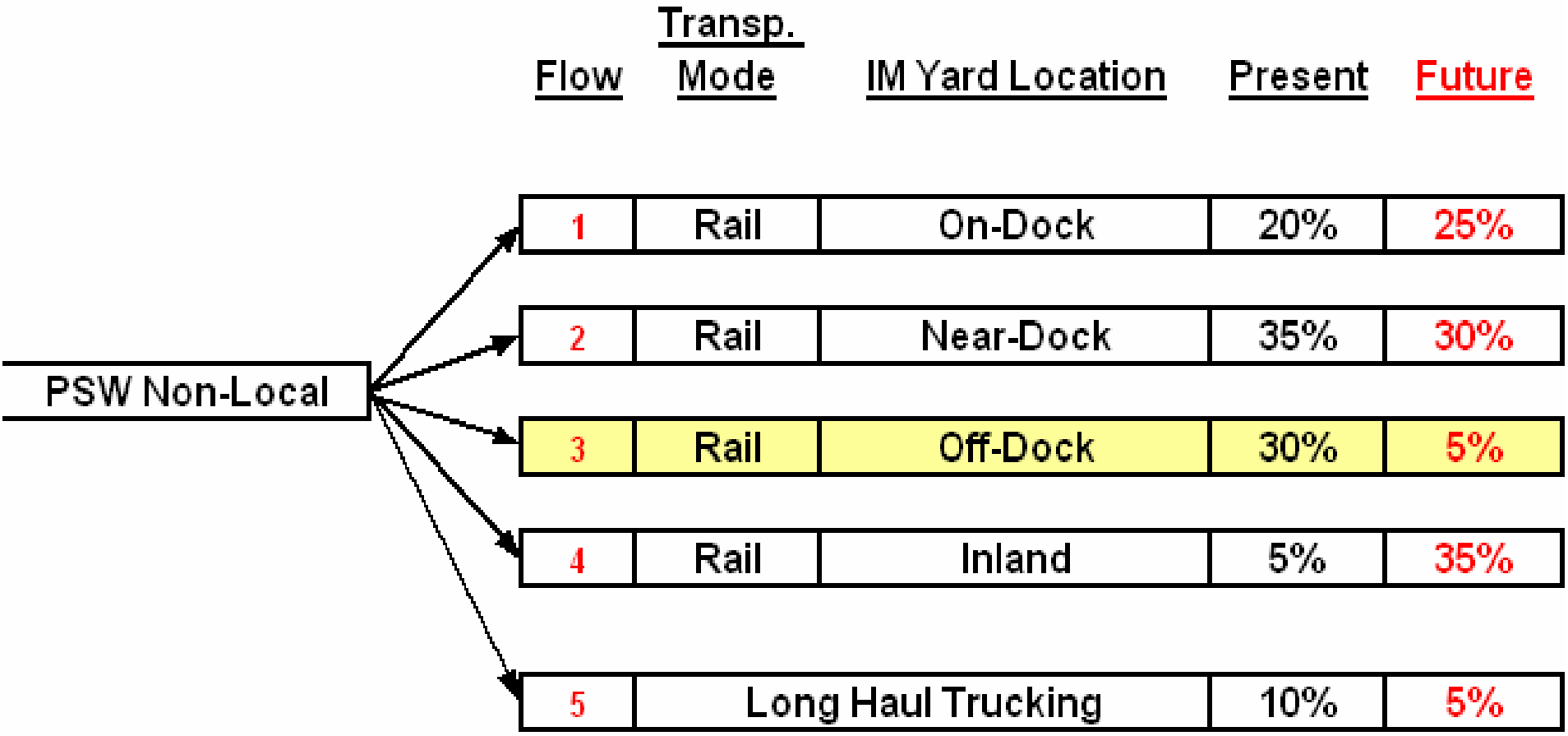
Intermodal Divide of the US



Truck and Rail Connections in LA / LB Ports



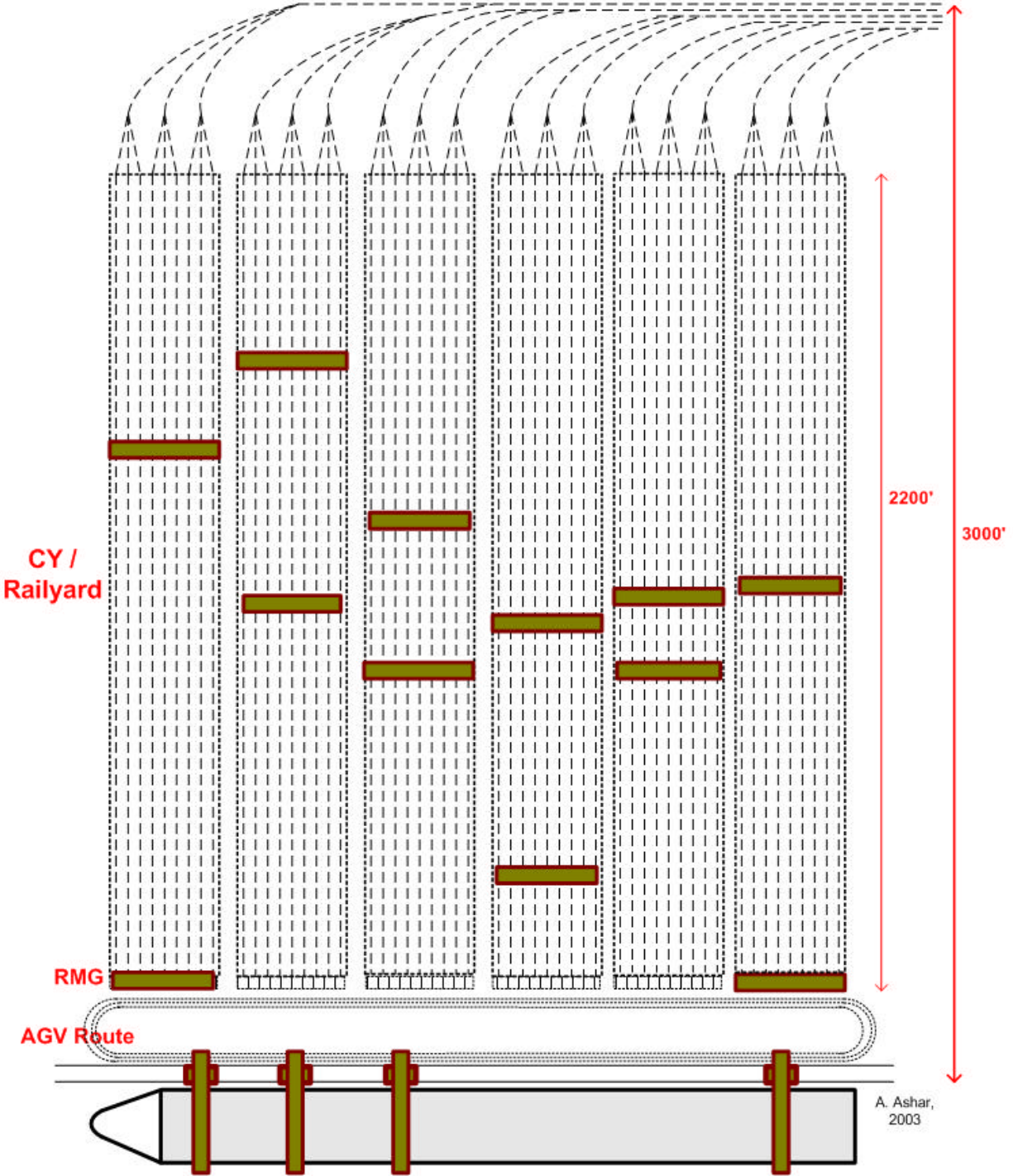
Impact of California "Inland Port"



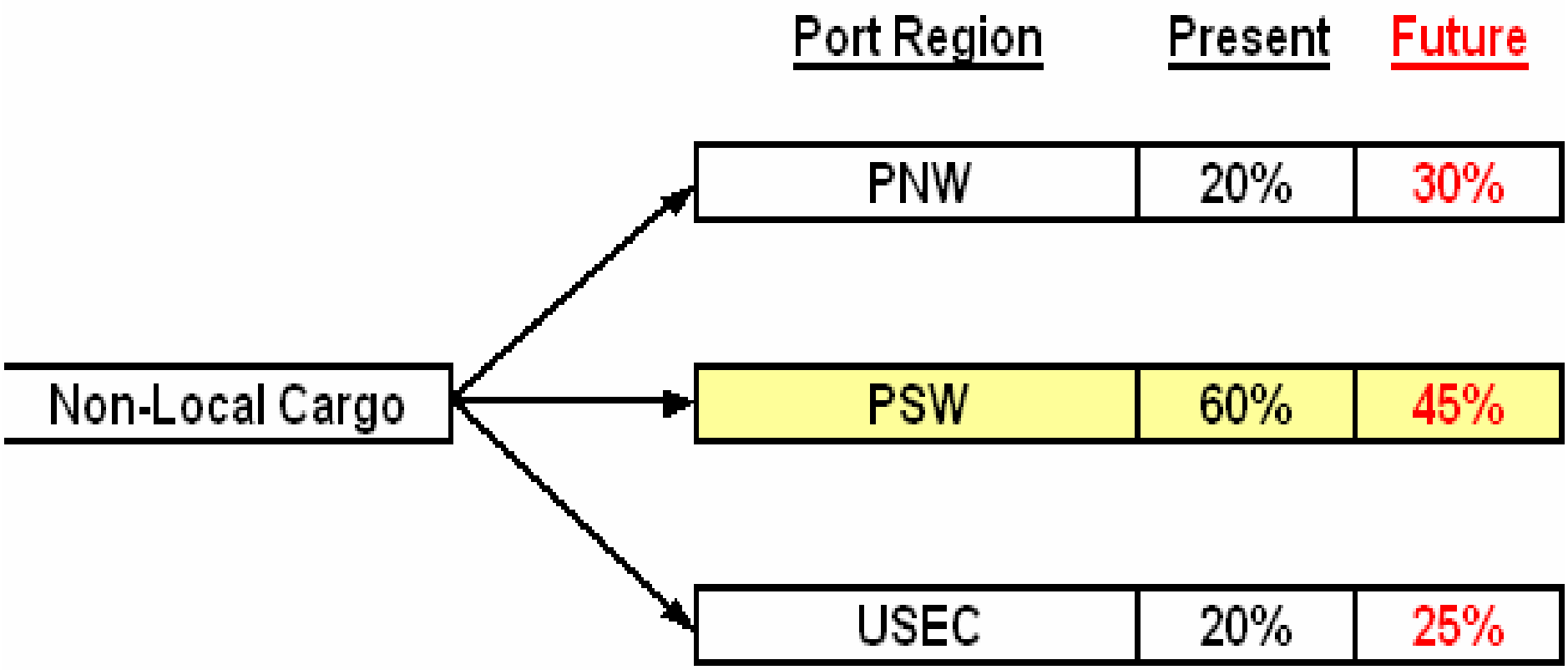
Flow	Transp. Mode	IM Yard Location	Present	Future
1	Rail	On-Dock	20%	25%
2	Rail	Near-Dock	35%	30%
3	Rail	Off-Dock	30%	5%
4	Rail	Inland	5%	35%
5	Long Haul Trucking		10%	5%

The flow numbers correlates with Figure 4.

Pure Rail Ports



Potential Diversion of Asian Traffic



Non-Local = East of the Rocky Mountains

PSW = Pacific Southwest = Long Beach, Los Angeles, Oakland

PNW = Pacific Nothtwest = Portland, Tacoma, Seattle, Vancouver BC

National Port Database

- Port Facilities
- Port Connections
- Port Master Plans
- Shipping Services
- Port Performance