

# West Coast Marine Logistics Employment Trends, 1980-2010

## Some Preliminary Observations

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An examination of employment trends in marine logistics must look beyond the waterfront and the traditional port employment to the whole marine cargo handling chain. As ship sizes and cargo volumes have increased, port functions have expanded into the adjacent metropolitan and regional hinterlands. This port regionalization process is visible in the creation of inland ports, intermodal terminals and suburban warehousing complexes, as well as increasing connections between these inland functions and the marine terminal.

Marine logistics employment includes cargo and information services, warehousing and trucking. This briefing paper covers four important topics, for the Tri-State/West Coast (CA, ORE and WA) region between 1980 and 2010:

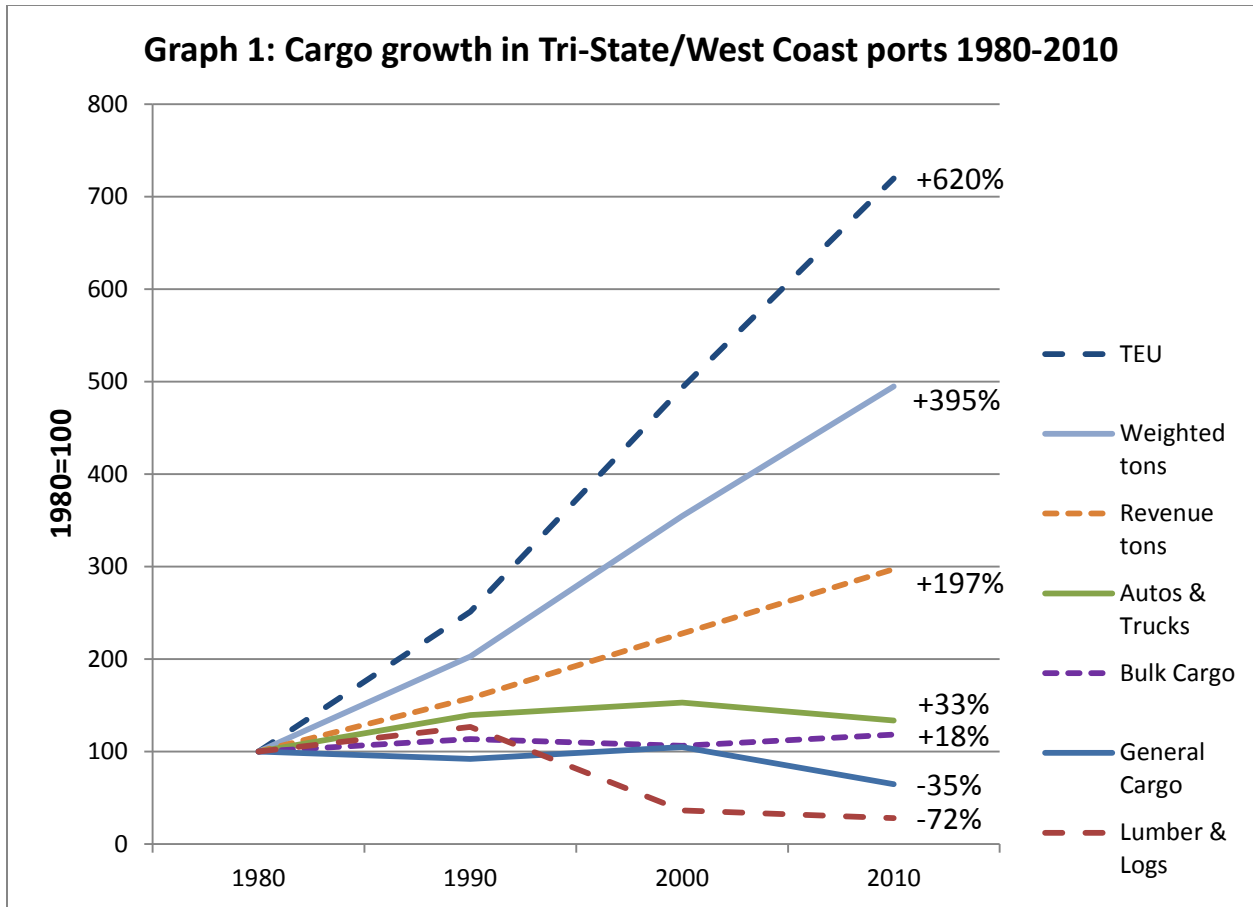
1. Growth in Marine Cargo.
2. Trends in On-dock/In-port Longshore Employment.
3. Trends in Off-Dock Employment – Logistics Information Services & Freight Transport Arrangement, Warehousing and Trucking.
4. Ratio Comparisons – Tonnage to Employment and Longshore Employment to Off Dock Employment.

1. **Growth in Marine Cargo**<sup>1</sup>: By almost any measure, except lumber & logs and general cargo, the growth of cargo movement has been impressive. In 1980, 2.1 million TEU's were handled in the ports of the West Coast. In 2010, 14.9 million units were handled. This is a 620% increase. In the same time frame, revenue tons increased by 189% and weighted tons by 395%.<sup>2</sup> See Graph 1, below.

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<sup>1</sup> All cargo numbers are from Pacific Maritime Association (PMA) annual reports.

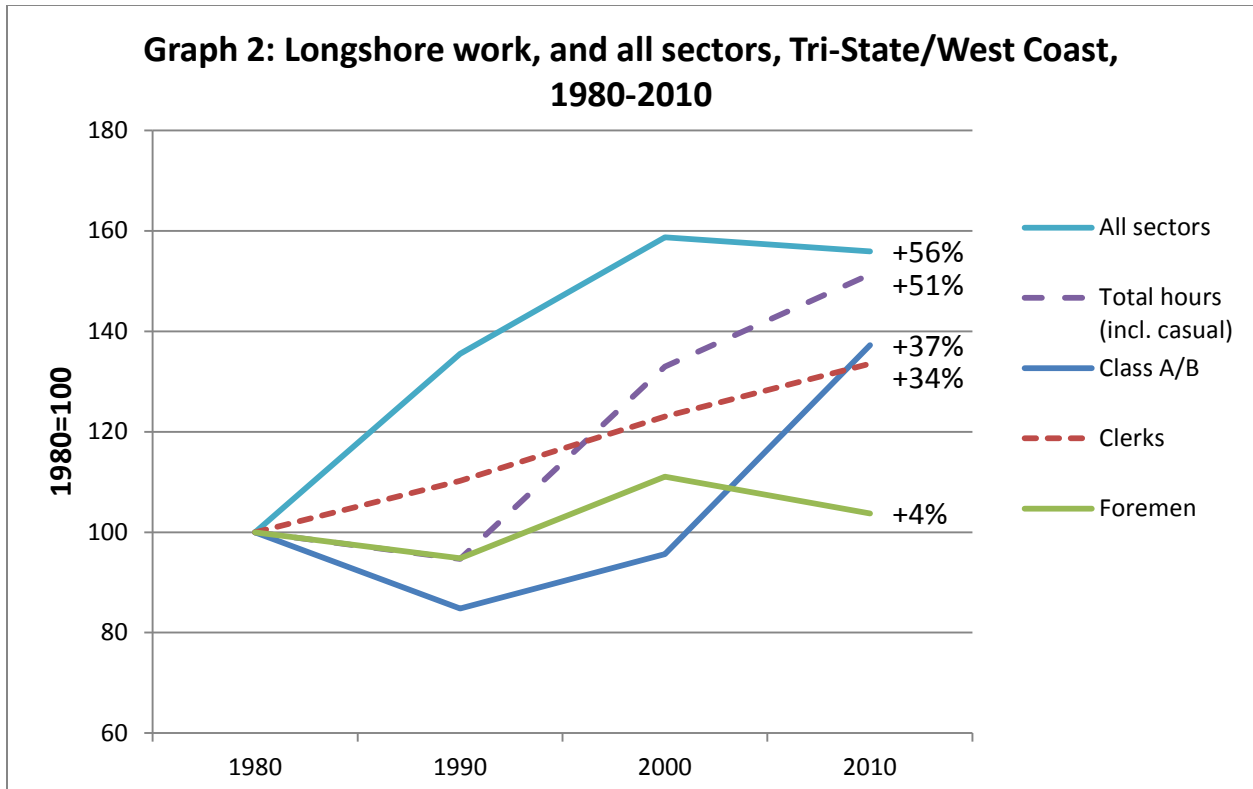
<sup>2</sup> Some cargos create more jobs per ton than others. The PMA uses revenue and weighted tons to adjust for this.



2. **Trends in Longshore Employment<sup>3</sup>:** Total registered employment for Class A/B longshore, clerks and foremen was 10,245 in 1980. In 2010 the same group of registered employees numbered 13,829. <sup>4</sup> This is a 35% increase in employment (see Graph 2). Figures are not available for casual employment but “hours paid” includes casuals. In 1980 hours paid total was 18,204,341. In 2010, this number has increased to 27,546,832, a 51% increase over 30 years. The increase in total longshore hours worked has kept pace with overall employment growth (56%) in the Tri-State, but those increases must be compared to the dramatic increases in cargo profiled in Section 1, as well as the increases in off-dock employment (Section 3).

<sup>3</sup> Longshore, clerk and foremen employment numbers and hours are from PMA annual reports.

<sup>4</sup> Some registered longshore workers do not work in a given year. In 2010, there were 13,286 registered and working longshore workers. Registered and working numbers are reported in Graph 3.



3. **Trends in Off Dock Employment<sup>5</sup>**: While longshore employment has increased in line with overall employment, the most dramatic increases in marine logistics have occurred in three sectors: Logistics Information Services/Freight Transport Arrangements (FTA), Warehousing and Trucking (see Graph 3):

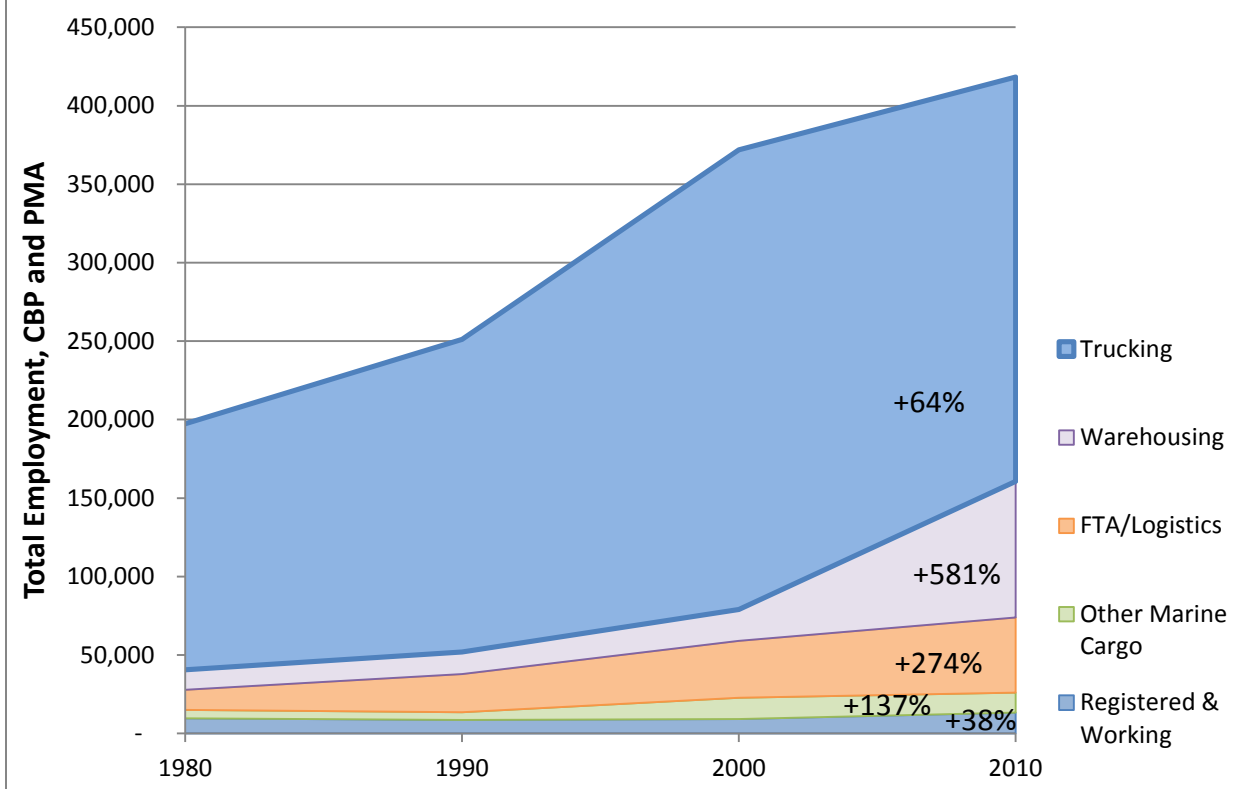
- **FTA** – 1980: 12,816 to 2010: 47,890. This is 274% growth.
- **Warehousing** – 1980: 12,738 to 2010: 86,737. This is 581% growth.
- **Trucking** – 1980: 156,808 to 2010: 257,673. This is 64% growth.

The increases in these off dock sectors are much more in keeping with the triple digit increases in cargo volumes.<sup>6</sup> Even non-ILWU on-dock employment (Other Marine Cargo in Graph 3) grew more than ILWU registered and working employment: 137% vs 38%.

<sup>5</sup> Off dock (and non-ILWU Other Marine Cargo) employment numbers are from the County Business Patterns data series from the Census Bureau. Analysis of the Quarterly Census of Employment and Wages data series from the Bureau of Labor Statistics shows the same trends.

<sup>6</sup> Some jobs in warehousing and trucking serve local populations, and hence are not directly related to marine logistics. We expect growth in these jobs to approximate growth in overall employment. However, growth in warehousing (+581%) tracks container growth (+620%) more closely than overall employment growth (+56%) between 1980 and 2010.

**Graph 3: Employment in marine and off-dock logistics, Tri-State/West Coast, 1980-2010**



4. **Ratio Comparisons:** Longshore workers have become increasingly productive in the thirty year period as measured by revenue and weighted tons per hour. Revenue tons per hour were 6.26 in 1980, up to 12.30 in 2010. Weighted ton per hour growth is equally impressive: 2.95 in 1980, up to 9.65 in 2010.

Finally there has been a dramatic decline during the thirty year period in the ILWU registered and working portion of:

- All on-dock marine work: from 64.2% down to 51.1%
- FTA and on-dock marine work: from 34.6% down to 18.0%
- Logistics chain (including warehousing and trucking): from 4.9% down to 3.2%

**Conclusion** – Cargo flows have increased dramatically in the 30-year period in the ports of the three West Coast states. Longshore employment has increased but at a modest rate. However, employment in the marine logistics chain has increased dramatically away from the docks.