

New Alliances and the Quest for Efficiency

By Dr. Noel Hacegaba, Chief Commercial & Operations Officer

May 2017



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Biography

Noel Hacegaba serves as Managing Director and Chief Commercial & Operations Officer for the Port of Long Beach. He oversees the daily business activities of the Port.

Previously, Dr. Hacegaba served as the Port's Acting Deputy Executive Director and Chief Operating Officer and, before that, as the Executive Officer to the Board of Harbor Commissioners.

Dr. Hacegaba has more than 20 years of management experience in the public and private sectors spanning a variety of industries in small to Fortune 500 companies. Prior to joining the Port of Long Beach, he worked for Republic Services, the nation's second-largest environmental services company, where he was the principal contract administrator and negotiator for several government contracts totaling \$200 million. He has also held senior leadership roles for an elected official, a public affairs and management consulting firm, an export company and a policy research center.

Dr. Hacegaba is a graduate of the University of Southern California, where he earned degrees in economics (BA and MA), business administration (BS) and urban planning (MPL). He also earned his doctorate in public administration at the University of La Verne, where he continues to serve on the faculty of the school's College of Business and Public Management. Dr. Hacegaba is also a graduate of the Coro Fellows Program in Public Affairs, one of the nation's premier post-graduate fellowship programs. Additionally, he is a Certified Port Executive (CPE) and a Professional Port Manager (PPM).

Abstract

New shipping alliances and the continuing introduction of mega vessels (10,000-plus TEUs) into the world's container ship fleets are changing the way U.S. ports are approaching operations and plans for infrastructure.

With the shrinking of major alliances from four to three in 2017, vessel operators are increasingly relying on vessel-sharing agreements to maximize use of their ships and boost economies of scale. And fewer calls by the bigger and bigger ships of today has amplified the stress on supply chains that have struggled to accommodate them.

In this evolving environment, where shippers are searching for the fastest conduits for their goods to markets, communication along the whole length of the supply chain is paramount. For years, the Port of Long Beach has been preparing for the mega vessels that are becoming more common at U.S. seaports, investing more than \$4 billion on capital improvements this decade to increase cargo-handling efficiency with sustainable facilities and practices that can withstand community and regulatory scrutiny.

This paper will briefly examine what the Port of Long Beach has done to prepare its supply chains for the future demands of shipping alliances and larger ships. The findings of this paper will help policymakers and executives at U.S. port authorities understand their role as they position their ports to benefit from the changing landscape in the maritime shipping industry.

Introduction

The rapid pace at which container vessels are growing is affecting the entire supply chain. When the 18,000-TEU CMA CGM Benjamin Franklin, the largest container vessel ever to come to North America, visited the Port of Long Beach in February 2016, dockworkers moved 23,000 TEUs over four days, while working between six and eight cranes.

The efficiency displayed with the Benjamin Franklin was the result of many years of planning. The Port of Long Beach hosted the first 14,000-TEU vessel to come to North America in 2012, and has been a world leader on adjusting its practices and building its facilities to accommodate the rapid adoption of mega vessels over the last decade.

The deployment of these mega ships in new shipping alliances presents physical, financial and operational challenges that must be met by port authorities across the country. Port authorities must be able to evaluate how the changes in the industry could impact their port and identify ways in which some of these challenges can be mitigated. This paper examines some of the ways the Port of Long Beach has approached the issues involved with efficiently serving customers in the era of big ships.

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From a Crisis, Solutions

Many of the tools the Port of Long Beach uses today to ensure cargo flows freely through docks came as a result of the congestion that hit our terminals at the end of 2014 through the beginning of 2015. After the well-publicized slowdown, congestion disappeared and the Port of Long Beach rolled through the rest of 2015, moving 7.2 million twenty-foot equivalent units, the third-highest volume in our history. How did this happen?

The need for quick solutions during the crisis resulted in unprecedented collaboration with the Port of Los Angeles and industry partners. Among other measures, implementing a shared "gray" chassis pool helped alleviate critical shortages, and the ports met to look at ways to optimize the supply chain, meetings that continue to this day.

Since then, our terminal operators have also used new methods like "peel-off piles" to move containers *en masse* out of the port to large customers. Under normal circumstances, a trucker comes to a port and waits in a line while a longshore worker retrieves a container to place on a chassis. The process usually involves moving other containers in a large stack to get to the desired container, taking up valuable time.

The peel-off process eliminates these steps by identifying containers on a ship destined, for example, for a big box retailer and setting the containers aside in a designated area. When the stack is large enough, a trucking company dispatches dozens of trucks to swarm the pile and get the cargo on its way to a destination.

In the past, attracting customers might have been as simple as expanding and modernizing facilities, but as the industry continues to seek economies of scale, ports must continually show they are offering something more than their peers through innovative solutions that drive efficiency and cost reductions.

Maximizing Efficiency

One key way to measure efficiency at seaports is truck turn time, or the time a driver spends to get through the terminal gate queue, into the terminal to pick up or deliver a container, and exit back through the gate. Two years ago, the median truck turn time at the Port of Long Beach was 138 minutes. In March 2017, the

median truck turn time was 58 minutes, and at our Middle Harbor terminal, median truck turn times were 34 minutes.

Phase 1 of the \$1.3 billion Middle Harbor facility came online in April 2016. This all-electric cargo-handling operation features tandem ship-to-shore cranes capable of handling two 40-foot containers at a time, along with automated stacking cranes and robotic container transporters. This technology, combined with a mandatory truck appointment system, is leading to these turn times that are setting the pace for the entire Port.

Another initiative focused on trucking is the "gray" chassis pool, created to alleviate the "street dwell" time for chassis that hold containers, something that has been a significant issue for our importers. Every day that a chassis sits idle at a distribution center, waiting to be unloaded before it is returned to the Port, has an adverse effect on the overall availability of chassis at terminals. At the height of congestion, our street dwell averaged five to eight days. Now it's down to two or three days. We achieved this by partnering with major chassis providers and the Port of Los Angeles to create a "pool of pools" that covers 80 percent of the chassis in the combined harbor area. Trucks are now able to pick up and deliver chassis to multiple locations regardless of who owns the equipment, further increasing their efficiency.

Infrastructure for Tomorrow

The largely automated Middle Harbor terminal is only one way to prepare for the big ships of today and tomorrow. As the ocean carrier industry continues to consolidate and seek greater efficiencies, modernizing marine terminals helps keep the Port of Long Beach competitive, keeping more cargo flowing through the Port, and sustaining trade jobs here.

For other terminal operators, boosting productivity and safety starts with raising cranes. To grab cargo from today's mega ships, wharf-side gantry cranes must rise to 150 feet or higher — the equivalent of reaching over a 14-story building. To this end, three of the Port's container terminals have completed or embarked upon crane raising and replacement projects.

The Port of Long Beach has worked to support its tenants' projects by deepening waterways and through the

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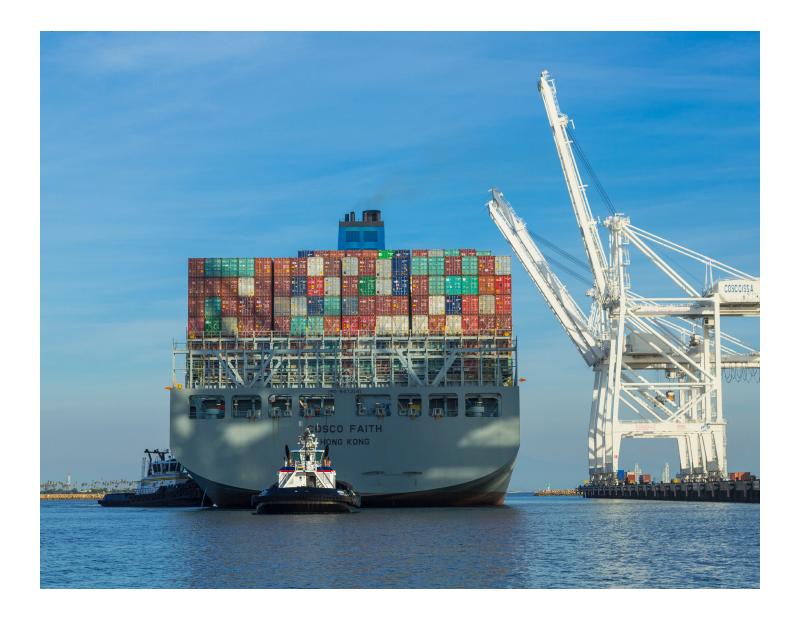


\$1.5 billion Gerald Desmond Bridge Replacement Project. The new bridge, passing 205 feet above the water, will allow large ships to easily enter the Inner Harbor and dramatically improve traffic flow for cars and trucks. It will replace the current, obsolete span, which carries 15 percent of the nation's waterborne cargo.

To better speed cargo out of terminals and to market — while also removing 1 million-plus truck trips from roadway — the Port is also investing more than \$1 billion to expand to 35 percent on-dock rail capacity in the near term, with a long-range goal of 50 percent.

So, while the Port of Long Beach has for more than two years successfully removed any sign of congestion at its terminals, it has not rested on that accomplishment. Rather, it continues to move forward proactively and aggressively to develop new facilities and practices that will ensure the efficient movement of cargo for many decades to come.

At the Port of Long Beach, we're building the Green Port of the Future, modernizing infrastructure and leading the way in service and supply chain advances that enhance safety, reliability and velocity.



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