



## **An Inside Look: The Green Port**

SCTC members are frequent users of West Coast Ports. With the dried fruit and nut export season in full swing, SCTC decided to talk to some of the Ports exporting your cargo. This 3 part series started with our SCTC team interviewing Mr. J. Christopher Lytle, Executive Director at the Port of Long Beach (POLB) to get an update on current projects; how to become “big ship” ready; and how the Port specifically prepared for the busy season.

SCTC: What are some of the current projects the POLB is working on?

POLB: Despite economic challenges, the Port of Long Beach is maintaining a long-term focus. We’re investing \$4.5 billion in planned capital improvements over the next decade, the most of any U.S. port. The projects will create tens of thousands of construction jobs, and more importantly it will keep the Port competitive for decades to come, protecting the 300,000 trade related jobs we help support in the region while adding more. These projects will allow us to handle cargo more efficiently whether they are inbound or outbound.

One of the signature projects in our modernization plan is the \$1.3 billion Middle Harbor Redevelopment Project, which is under way. It combines two aging container cargo terminals into one dramatically upgraded facility that is the model for our “Port of the Future” concept. It will be the greenest and most technologically advanced container terminal in the nation. When completed in 2019, the new terminal will be able to move about 3.3 million containers, which is more than double the previous capacity, while cutting air pollution by half. It will include a major on-dock rail yard able to move one-third of the cargo by rail.

Earlier this year we announced the signing of a 40-year, \$4.6 billion lease with Hong Kong-based Orient Overseas Container Line and its American subsidiary, Long Beach Container Terminal. LBCT is a long time Port tenant and this lease, the largest in U.S. history, showed unprecedented commitment and faith in our future.

Another large scale project we have is the replacement of the Gerald Desmond Bridge, which connects the I-710 freeway – a major cargo corridor, to Terminal Island, home to our biggest container terminal Total Terminals International and the Port of Los Angeles. TTI in our Pier T also will be home to our first grain transloading facility. The Gerald Desmond Bridge was built in the 1960s and is deteriorating. It was not designed to handle today’s traffic volumes of thousands of cargo trucks and commuters every day. About 15 percent of all cargo containers coming in and out of the United States pass over that bridge. It is a critical piece of the country’s good movement system, and the Port of Long Beach with its partners, including Caltrans, is building a new more modern span.



We recently awarded a \$650 million contract for the final design and construction of the bridge. Construction will begin next year and it should be completed by 2016. Total cost of the bridge will reach the \$1 billion mark. The new bridge will be wider, safer and taller to allow the new generation of bigger ships to pass under and reach our back channel terminals. It also will have amenities like bicycle and pedestrian paths and observation decks.

In addition to Middle Harbor and Gerald Desmond Replacement, we have about \$1 billion in planned rail projects within the Port what will streamline our tracks and create better support for on-dock. We are also putting the finishing touches on a \$550 million upgrade of our Pier G facilities that began in 2006. We've installed new truck gates, expanded its on-dock rail yard and deepened the berths. And we are proposing to build a new modern container terminal in Pier S, our last large piece of undeveloped land. With Pier S, we will set the bar for what a modern, sustainable cargo terminal should look like.

The Port of Long Beach is not the only one banking on a bright future, our railroad partners have stepped up too with billions in upgrades to their infrastructure; keeping with our ultimate goal to remain the Port of Choice for transpacific trade.

SCTC: What does "The Green Port" mean and how has this impacted the POLB?

POLB: At the Port of Long Beach, we're very proud that our business success goes hand-in-hand with our green success. It is not only about being green, but sustainable and efficient. Our Board of Harbor Commissioners adopted a landmark, industry-leading Green Port Policy in 2005 with an aggressive, comprehensive and coordinated approach to reducing the negative impacts of Port operations on our community and the environment. It includes a wildlife component, a water quality component and air quality component among other things. One example of how our green policy directly impacted our operations is our Clean Trucks Program, which gradually banned the oldest, most polluting drayage trucks from doing business at the Port.

January 1st of this year, we banned the last few remaining older drayage trucks from our terminal and all of the 11,000 trucks that serve the Port of Long Beach are 2007 or newer, cleaner models. Bottom line is that today air pollution from drayage trucks is 90 percent less than it was when the program started in 2008. We are also tackling pollution from ships, the largest source of air pollution at the Port. We have a Vessels Speed Reduction Program, our Green Flag Program, which financial rewards to ship operators that slow down their vessels in the harbor and burn less fuel thus cutting pollution. We have over 90 percent participation.

We are also outfitting our terminals with shore power, or cold ironing. Shore power will eliminate 90 percent of emissions from a ship at berth by allowing it to "plug in" to landside electricity. Four of our terminals have these plug-in facilities now, and by 2014, all of our major terminals will have shore power capabilities. Our environmental initiatives already have cut diesel pollution from Port operations by a whopping 75 percent since 2005. . We continue to



invest millions of dollars through our Technology Advancement Program to spur the development of zero emission technology, for example.

SCTC: How has “The Green Port” impacted Long Beach and its surrounding communities?

POLB: Our success in greatly reducing air pollution from our operations, 75 percent from 2005 levels, has had an immediate impact on our communities. The air we breathe is cleaner. But we’re not investing our money only on machines and clean technologies. Since 2010, we’ve provided nearly \$ 10 million in community grants to reduce or remedy the effects of air pollution in our communities to pay for things like air filters in nearby schools and senior centers, and mobile health clinics. Next, we will award more than \$5 million to projects that reduce or capture greenhouse gases.

SCTC: What has POLB done to become “big ship” ready?

POLB: Indeed, we are big ship ready. We are one of a handful of ports in the country capable of servicing the next generation of large, 12,000-plus TEU vessels. In September, we welcomed the MSC Beatrice at our Pier T, the largest container ship to ever dock in North America. The Beatrice can hold 14,000 TEUs, or twenty foot equivalent units. If stood upright, it would be almost as tall as the Empire State building. What makes us big ship ready is the depth of our channels; our main channel is one the deepest dredged channels in the U.S. at 76 feet, and our modern container terminals. We have latest post-Panamax gantry cranes tall and wide enough to service the bigger ships, many ports don’t.

The Port of Long Beach has on-dock rail capacity and is serviced by a reliable, modern fleet of drayage trucks. This is all possible because of the Ports Clean Trucks Program. Going forward, our \$4.5 billion capital improvements program will mean we’ll be even more big ship ready and far ahead of the competition. It is the way of the future. Larger ships are more cost-effective for ocean carriers and reduce impacts on the environment by decreasing fuel consumption.

SCTC: Can you tell us more about the recent visit by MSC Beatrice?

POLB: On September 30, we welcomed the MSC Beatrice, the largest container ship ever to a North American port. It was quite a site to see as it came in to dock at Long Beach’s Pier T in Terminal Island. It sailed from Yantian, China, and after Long Beach, it continued on to the Port of Oakland.

The vessel is one of the newest in the world fleet, built in South Korea in 2009. It is operated by the Mediterranean Shipping Co. of Switzerland. It measures 1,200 feet long, 167 feet wide and is capable of carrying 14,000 container units. The Beatrice will be too wide to pass through the new expanded Panama Canal opens in 2015.



Until this year, the largest container ships serving North America had capacities of about 10,000 TEUs. Ships carrying up to 12,500 TEUs began calling at the Port of Long Beach earlier this year. The larger ships are more efficient and greener – the bigger loads mean less fuel is expended per container.

SCTC: How is the POLB getting ready for the heavy dried fruit and tree nut export season?

POLB: As the landlord, the Port of Long Beach does not handle cargo directly, but we work closely with our tenants, and other industry stakeholders like the shipping and transportation industries to make sure cargo flows smoothly through our Port.

What we can do is deliver the very best state-of-the-art terminal facilities and infrastructure.

SCTC: Can you give a brief overview of the infrastructure of the POLB?

POLB: The Port of Long Beach began more than a century ago with a single wharf and is now the second busiest seaport in the country. We sit on 3,200 acres of land where we've built 10 piers and 80 berths and 66 post-Panamax gantry cranes.

We welcome close to 5,000 vessels from 217 seaports around the world, and move more than \$150 billion worth of cargo every year. We are a primary gateway for U.S.-Asia trade not only because of our industry leading facilities and programs, but because of all the other supporting infrastructure, including a vast rail network that connects us to every corner of continental U.S. and locally close to 1.7 billion square foot of commercial and industrial space to support logistics.

SCTC: What are the world's top ports for exports out of the POLB?

POLB: The top export partners for the Port of Long Beach are: 1 – China, 2 – Japan, 3 – South Korea, 4 – Taiwan, 5 – Australia

If you have any further questions on how POLB can help you and your container transportation needs, please feel free to contact Erika Tarr, Program Director of SCTC, at (559) 233-7249 Ext. 108.