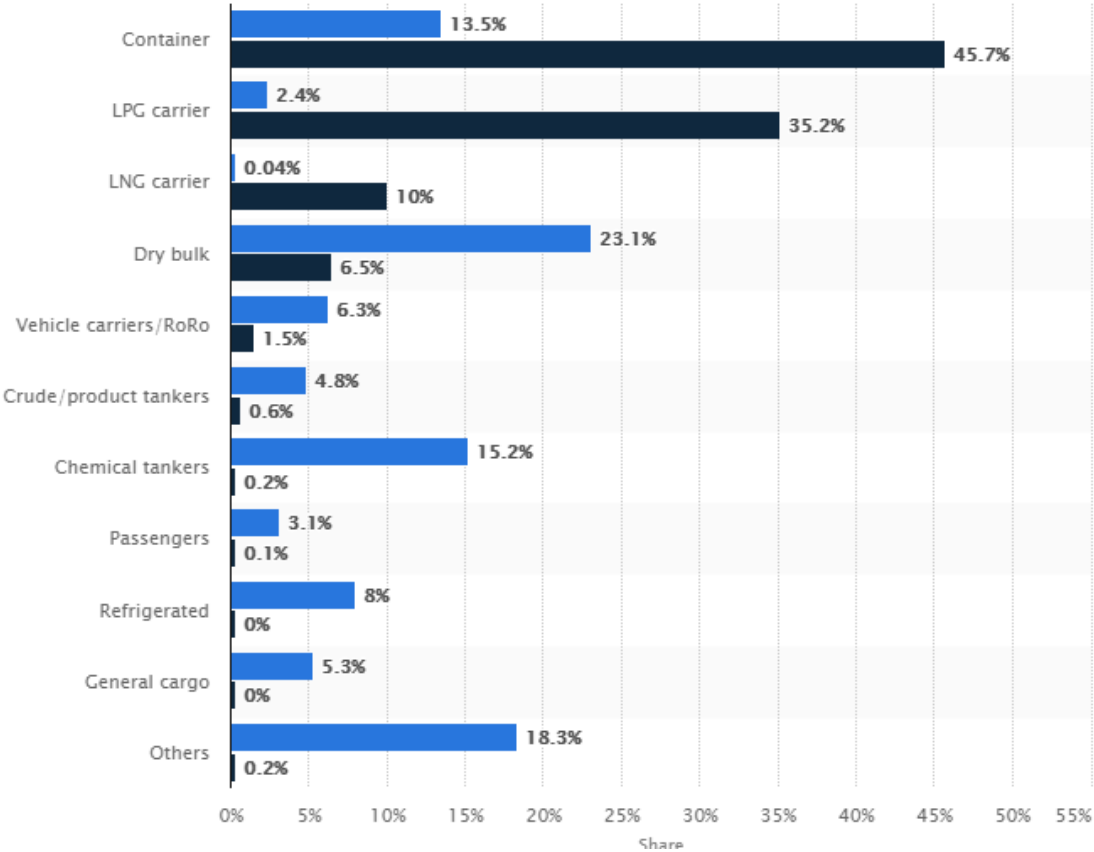


**Supplements**

**Distribution of the Panama Canal traffic from October 2016 to April 2017, by ship dimensions and cargo type.**



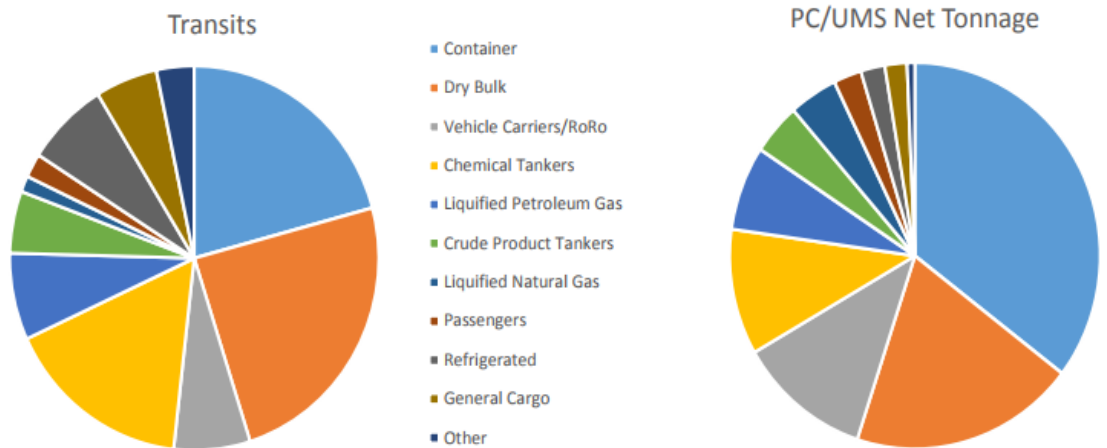
Source: canal de panama (2016)

These statistics shows the distribution of the Panama Canal traffic from October 2016 to April 2017, broken down by ship dimensions and cargo type. During the period of consideration, containers held the biggest share of traffic in the Neopanamax vessel class. To find out more

about the number of transits in the Panama Canal from 2014 to 2016. The Panama Canal is an artificial 48-mile waterway in Panama that connects the Atlantic with the Pacific Ocean. It takes the 7th place as one of the seven wonders of the modern world and is, to this date, the largest man-made structure in the world.

### Panama Canal Traffic by Market Segment

Market Segment	Number of Transits		Panama Canal/UMS Net Tonnage <sup>(2)</sup> (thousands)		Long Tons of Cargo (thousands)		Percent of Increase or Decrease		
	2017	2016	2017	2016	2017	2016	Transits	CP/SUAB	Cargo
Container	2,493	2,977	142,614	119,800	53,656	39,651	▼ (16.3%)	▲ 19.0%	▲ 35.3%
Dry Bulk	2,915	2,634	79,135	65,800	96,241	89,525	▲ 10.7%	▲ 20.3%	▲ 7.5%
Vehicle Carriers/RoRo	801	809	46,806	46,759	4,791	4,824	▼ (1.0%)	▬ 0.1%	▼ (0.7%)
Chemical Tankers	1,959	1,899	42,473	39,619	39,464	38,319	▲ 3.2%	▲ 7.2%	▲ 3.0%
Liquified Petroleum Gas	876	449	28,498	11,542	15,319	6,234	▲ 95.1%	▲ 146.9%	▲ 145.7%
Crude Product Tankers	627	581	17,342	15,575	14,780	15,066	▲ 7.9%	▲ 11.3%	▼ (1.9%)
Liquified Natural Gas	163	17	17,092	1,507	6,360	550	▲ 858.8%	▲ 1034.4%	▲ 1056.7%
Passengers	240	213	9,812	8,185	-	-	▲ 12.7%	▲ 19.9%	-
Refrigerated	868	948	8,450	9,040	3,274	3,340	▼ (8.4%)	▼ (6.5%)	▼ (2.0%)
General Cargo	654	710	7,808	8,419	5,038	4,846	▼ (7.9%)	▼ (7.3%)	▲ 4.0%
Other	396	447	2,740	3,199	2,083	2,349	▼ (11.4%)	▼ (14.4%)	▼ (11.3%)
<b>Total</b>	<b>11,992</b>	<b>11,684</b>	<b>402,770</b>	<b>329,445</b>	<b>241,007</b>	<b>204,704</b>	▲ 2.6%	▲ 22.3%	▲ 17.7%



<sup>(1)</sup> Only includes oceangoing commercial traffic, those paying tolls greater than the minimum tariffs implemented on June 1, 1998. (Small commercial traffic not included)

<sup>(2)</sup> The tonnage measurement system for Panama Canal tolls assessment, the Panama Canal Universal Measurement System (PC/UMS). This amount also includes the PC/UMS tonnage for full containership and passenger vessels.

Source: [pancanal.com](http://pancanal.com)

## **In an interview with *World Maritime News*, about the expanded Panama Canal they were assured:**

Less than a week before the awaited inauguration of the expanded Panama Canal, when the first commercial transit of a Neopanamax vessel will take place, which will take place on June 26, 2016. The Panama Canal Authority said that, until On the date, most of the locks have been tested and have met the performance requirements.

At the beginning of June, the vessel hired by the Panama Canal, the Baroque Neopanamax MN bulk carrier, built in 2011, began to make steps through the expanded locks for testing and training that is expected to last 30 days.

It is expected that the steps through the locks serve to test the integration of the doors, their opening and closing capabilities, as well as the opening of the valve and the closure through the control system.

The inauguration ceremony of the Panama Canal Expansion will serve as the official opening of the two new locks complexes, *Agua Clara* (Atlantic side) and *Cocolí* (Pacific coast), and their access canals.

*World Maritime News* spoke with a representative of the Panama Canal Authority (ACP), ***Argelis Moreno De Ducreux***, executive vice president of Planning and Business Development, maritime lines segment, to obtain more information about the current situation in the place, as well as the of the expected impact of the new canal on the maritime transport industry.

### **How would you evaluate the interest in transit through the new locks since the reservations for passage of Neopanamax vessels are open?**

The interest in transit through the new locks can be evaluated in terms of reserves and the expression of interest of the main shipping lines that transit the Panama Canal in all market segments. For the container segment, shipowners have shown interest, and are planning to deploy approximately six to seven Neopanamax services during the first months after the

opening of the new locks. Currently, we have received more than one hundred reservation requests, most of the container ships, for the new locks of the Panama Canal.

**The Panama Canal Authority said the new canal would offer four more spaces per day for ships in this initial period, in addition to the 25 spaces of the current canal. As the authority plans to increase this number in the future, when would we expect to see the opening of more spaces? How many additional vessels could transit in the expanded Canal?**

We are being conservative regarding the number of space quotas offered in the initial stages of the operation until we acquire sufficient experience with respect to the operation of the expanded Canal. Once we are sure that we can handle a higher traffic demand, we will be increasing the number of reservation spaces. We are prepared to handle more than four Neopanamax vessels per day. The maximum will depend on mix of ships and traffic restrictions. We expect that the initial demand for the new locks will be relatively low but will gradually increase as our clients feel confident in the operation of the new canal. We hope to reach our maximum capacity in time with approximately 12-13 transits per day. In addition, depending on the mix of vessels and other variables, we expect to be able to handle between 35 and 38 vessels per day when considering the locks for Panamax and Neopanamax vessels.

**What will be the key impact of the expanded canal in the shipping industry and which shipping sectors / regions will be affected the most and why? What are your key expectations?**

The expansion of the Panama Canal is already having an impact on the maritime industry, and it is expected to change the trade patterns of all nations. Shipping lines, port facilities, roads and distribution centers in different regions are preparing to take advantage of larger and more efficient ships. The shipping companies are making the composition of their fleet bigger and the expansion of the canal will allow them to deploy larger ships through this waterway. Furthermore, the ports of the East and the Gulf Coast of the United States, some of

which serve vessels of up to 9,000 TEUs, are adapting their infrastructures to allow larger ships to reach their terminals. The ports on the east and west coasts of Central and South America are preparing to increase their commercial participation by taking advantage of the expansion of the Panama Canal. In this sense, giant vessels that transport coal from northeastern Colombia and iron ore from Brazil will be able to take the raw material to China through Panama at a lower price. Likewise, for Chilean copper producers it will be easier to export to European markets. The liquefied natural gas (LNG) that leaves Trinidad and Tobago to Chile can pass through the expanded Canal, saving hundreds of miles of maritime traffic.

**Can the expanded Canal compete with the Suez Canal or do we need a fourth series of locks that allows the passage of 18,000 TEU + vessels for real competition? Any plans for this fourth pair of locks?**

The Panama Canal recently implemented a new toll structure specifically designed to attract container ships through our route. The Panama Canal route provides greater time and distance savings, among other competitive advantages, compared to Suez, especially for traffic from Northeast Asia to the East Coast of the United States.

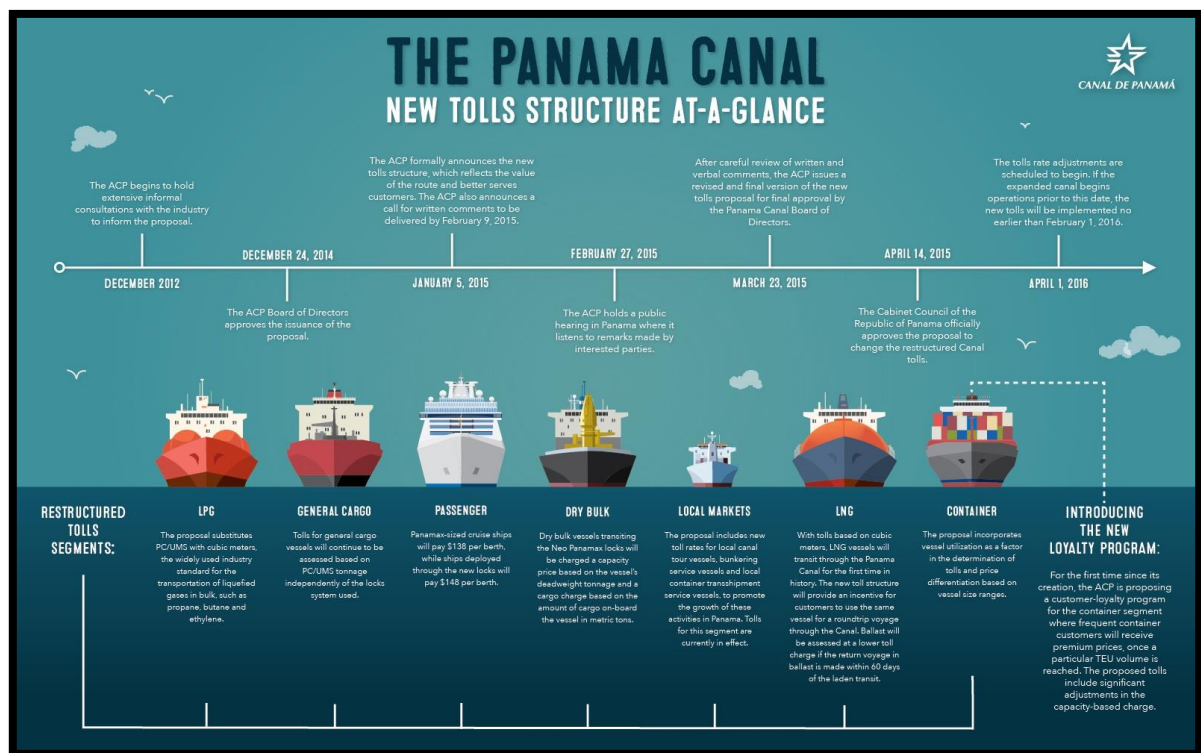
At this time, we do not expect to see the 18,000 TEU vessels arriving at the East Coast ports, as they do not have the infrastructure to handle them at the time. However, if the infrastructure limitations are resolved and there is the possibility of capturing the additional demand due to the increases in ship sizes, we can consider the construction of a fourth set of locks. We have already established the path for this new lane.

**Low fuel prices have prompted the Suez Canal to sacrifice 30% discounts for container ships sailing from the east coast of the United States back to Asia to ensure they do not avoid passage through the canal. Could we expect the Panama Canal to do something similar to increase interest in the new locks?**

On April 1, 2016, the Panama Canal implemented a pricing scheme that, for the first time, includes a customer loyalty program for the container segment. The objective of the

loyalty program is to animate TEU capacity volumes in container vessels that transit through the Panama Canal through the application of a system of tariff preferences. The new tariffs for the container ship segment differentiates TEU's total vessel (TTA) from tariff capacity and TEUs charged with the container ship's cargo rate using Neopanamax locks and / or existing locks. The TEU rate to be charged for container ships depends on the ship's load factor, which is defined as the amount of TEU charged at the time of transit.

Figure 1: New tolls structure at a glance



source: Panama Canal

**The Panama Canal Authority rejected the ITF safety study in the new locks and the project itself. Has the authority considered that the studies are wrong, if so, in what way? What would you say are the main conclusions that I disagree with and if there are plans for the discussion of safety issues with the ITF?**

The ACP dismissed the ITF's claims, since they are not based on mathematical models and did not include physical navigation test data as was done in the preparation of operations in the expanded Canal. Therefore, it lacked scientific precision and credibility. In addition, the authors had not traveled through the Panama Canal and are not qualified to do so. The ACP spent almost 10 years evaluating and analyzing the design of the locks, a process that included internal and external studies to determine how the new locks should work methodically and professionally. Moreover, the ACP has invested heavily in the improvement of its Maritime Simulation, Research and Development Center, as well as the construction of training facilities with the new scale maneuvering model for better training of pilots and tug captains.