The Panama Canal: It's all about connectivity



No.

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Panama at a glance

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GDP growth rate – last 10 years	7.5%
GDP estimated- 2013 (dollars)	38,6b
GDP per capita - 2013 estimated (in dollars)	13,032
Population (million)	3.5
Unemployment rate (in %)	4.0
Inflation rate - 2013 (in %)	4.08

It's all about Connectivity



The Panama Canal's value added service

The Panama Canal Service Package

Economies of Scale

Connectivity

17-3

Sustainability

Reliability



Reliability

- Opens 24 hours a day, 7 days a week, 365 days a year
- Safe and secure
- 98% customer satisfaction
- Strikes not allowed by law; only two closures in its history
- Predictability: Published tariffs and fixed transit date with reservation

TIME AND DISTANCE SAVINGS

			ALTERNATE ROUTES						
	PANAMA CANAL		SUEZ		CAPE HORN		CAPE OF GOOD HOPE		
	DAYS	DISTANCE	DAYS	DISTANCE	DAYS	DISTANCE	DAYS	DISTANCE	
East and Gulf Coast US - Asia	20.0	9,640	29.5	14,178	35.6	17,112	31.6	15,417	
West Coast South America – East Coast US	7.3	3,351	43.3	19,776	21.3	9,753	43.1	19,693	
West Coast South America - Europe	14.1	6,433	39.8	18,184	22	10,506	42.3	19,321	
West Coast US - Europe	17.5	8,005	35.5	16,210	30	13,702	42.4	19,385	
West Coast Central America – East Coast US	6.3	2,900	43.2	19,756	24.9	11,379	44.4	20,299	

Source: Fairplay Distance Table Speed: 20 knots Distance from point to point, travel days without considering port calls

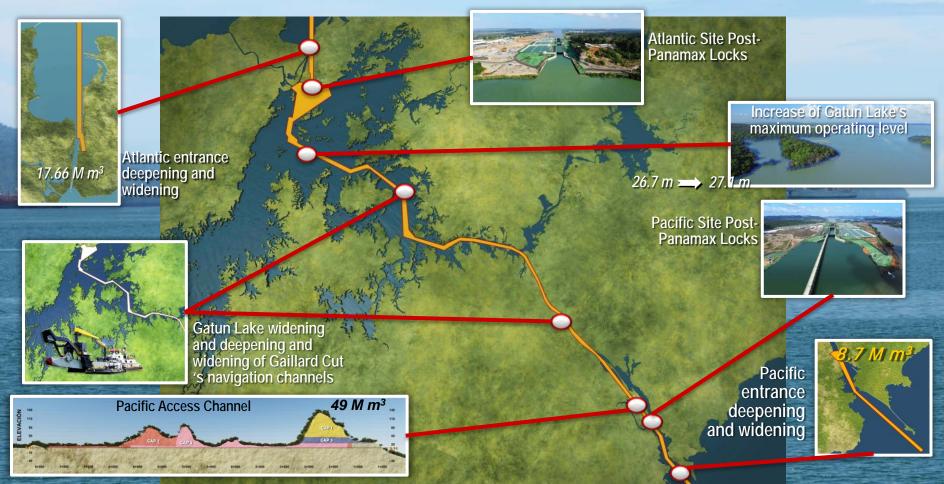
Sustainability

Panama Canal - 2015

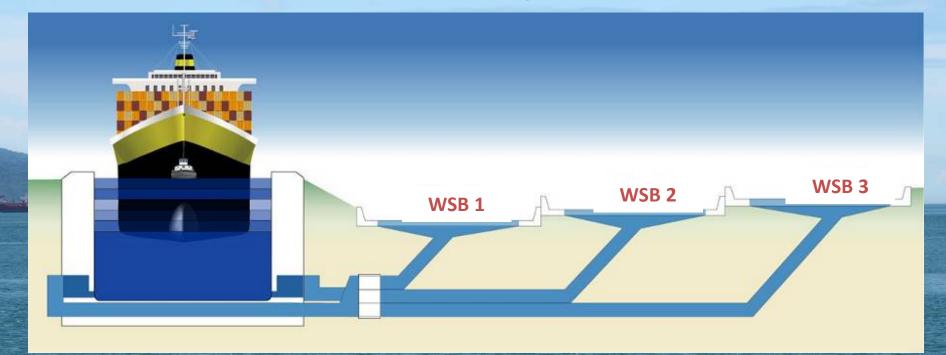
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Capacity: Existing Canal: 330m PC/UMS tons Expanded Canal: 600m PC/UMS tons

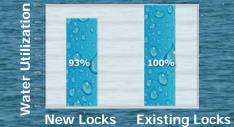
Expansion Program Components



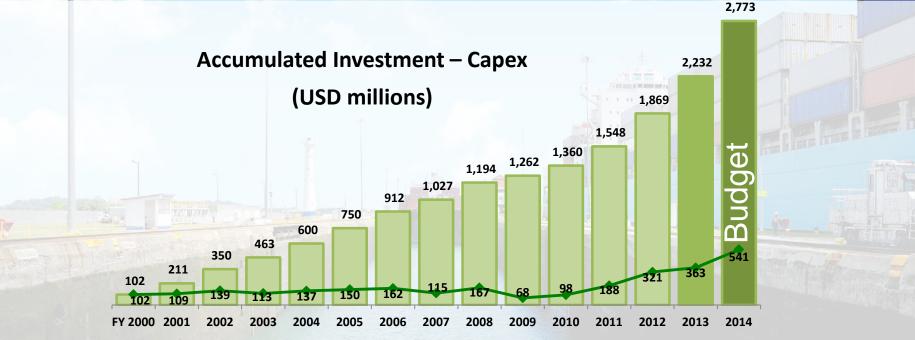
Post Panamax Locks Operation



With the water saving basins the new locks will use <u>7% less</u> water than the existing locks



Regular Capital Investment Program





Dredging



Locomotives



Technology



Ground Dams





Tugboats

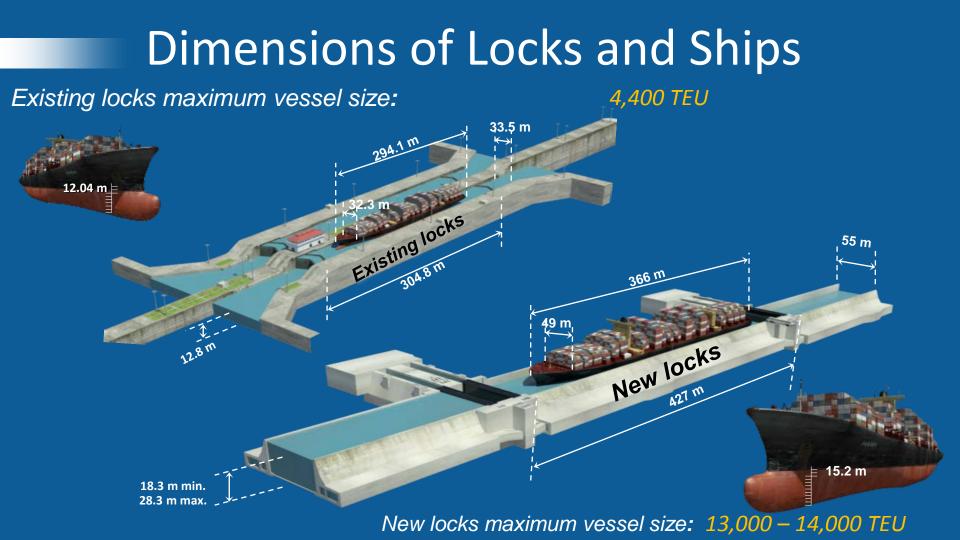
Panama Canal's share of global seaborne trade

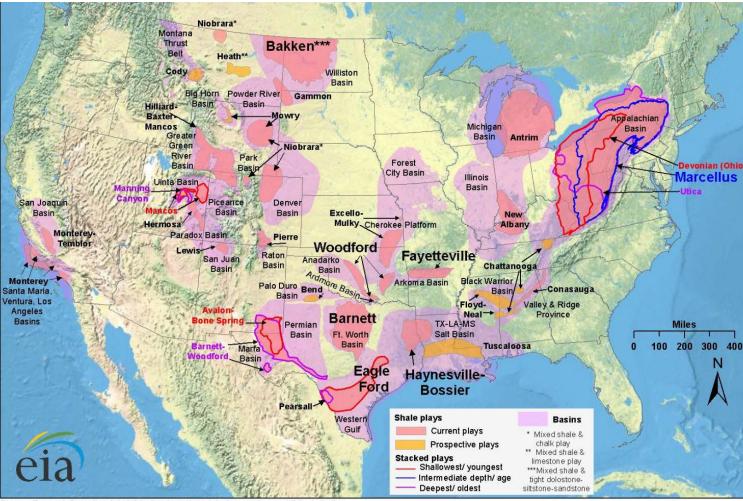
- 3% of world maritime trade
- 10.6% of grains
- 5.8% of chemicals
- 4.7% of containers

The Transportation and Logistics Hub of the Americas



Economies of Scale





Source: Energy Information Administration based on data from various published studies. Updated: May 9, 2011

Lower 48 states shale plays

LNG Trade – U.S. Gulf to Fukuoka, Japan

31 Days Shipping Cost LNG 155,000 m³: \$47.56/m³

21 Days Shipping Cost LNG 155,000 m³: \$33.7/m³

Panama Canal: 9,640 nm

Savings of 4,538 nm Approx. 10 days less

Suez Canal: 14,178 nm

Thermal Coal Trade – Colombia to Chile

8 Days 70K DWT: \$22/MT

25 Days 70K DWT: \$27/MT

Panama Canal Sea distance: 2,524 nm

Savings of 5,698 nm Approx. 17 days less Cape Horn Sea distance: 8,222 nm

Fuel Oil Trade – U.S. Gulf to South Korea

28 Days Shipping Cost Aframax \$29/MT Suezmax \$24.8/MT

43 Days Shipping Cost Aframax \$35/MT Suezmax \$29.5/MT

Panama Canal Sea distance: 9.664 nm Savings of 5,794 nm

Approx. 15 days less

Cape of Good Hope Sea distance: 15,458 nm

Diesel Trade – U.S. Gulf to Chile



12 Days Shipping Cost Aframax \$17.9/MT Suezmax \$15.6/MT

> 26 Days Shipping Cost Aframax \$22.5/MT Suezmax \$19.2/MT

Panama Canal Sea distance: 4,129 nm Savings of 5,062 nm Approx. 14 days less

Cape Horn

Sea distance: 9,191 nm

LPG – U.S. Gulf to South Korea

25 Days Shipping Cost LGC \$135/MT VLGC \$86/MT

40 Days Shipping Cost LGC \$208/MT VLGC \$132/MT

Panama Canal Sea distance: 9,733 nm Savings of 5,660 nm Approx. 15 days less Cape of Good Hope Sea distance: 15,393 nm

Summary Schedule of Main Projects with Baseline and Contingency As of 30 June 2014

