



What I am going to cover:

2018 Vessel Speed Reduction (VSR) request

Share a few results from the 2017 VSR data analysis

Ship strike and acoustic impact risk reduction studies underway

Share paper we published on ship traffic along the California Coast

Industry Engagement

New collaboration with the Air Quality Management District

Marine Mammal Commission grant and next steps





2018 Vessel Speed Reduction (VSR):

Who: Vessels 300GT or larger

When: May 1- November 15, 2018

Where: San Francisco Traffic Lanes

What: Request vessels transit at speeds not in excess of

10 knots.

Why: Reduce the risk of lethal ship strikes, with a

secondary outcome of reducing ocean noise and air

pollution.





How Vessel Speed Reduction request is communicated:



April 15, 2015

Dear Mariner,

NOAA's Office of National Marins Sanctuaries (ONAS) will be instinut a voluntary Versel Speed Reduction (VSR) effective May 1 - November 15, 2015 for the San Francisco Traffic Separation Schame (TSS) within the Cordell Bank, Guilf of the Frailboses, and Montevey Bay National Marine Sanctuaries to protect whales inteld under the federal Endangered Species Act, the Marine Mammal Protection Act, and the National Marine Sanctuaries Act. ONAST recommends all vessels 300 gross registered tons or larger reduce speeds to 10 knots during this time period. We request your company's commitment to the voluntary VSR to protect endangered whales that annually migrate to this area in summer and full to feed within the sanctuaries. The combination of commercial shipping traffic, migratory whale routes and concentrations of whales in feeding awas, increases the risk of ship strikes to whales that can result in serious injury or death to whales. Between 1988 and 2012, there were 100 documented large whale ship strikes along the California coast.

NOAA's National Marine Sanctuaries is moving to this type of fixed-date voluntary VSR in order to:

- Reduce vessel strikes and the lethality of strikes to threatened and endangered whales in the marine sanctuaries;
- Establish predictable start and end dates for industry that bracket peak periods of whale abundance in the sanctuaries; and
- Address the lack of fine scale, real-time data documenting shifting distribution and abundance of whales in the area.

NOAA is committed to the long-term protection of the nationally significant marine resources of the sanchuries by enhancing marine safety and environmental awareness in the maritime community. During the VSR, NOAA well be monitoring AIS to assess the industry's commitment to this effort. We encourage vessel crews to report whale sightings to whales@noax.cov, or through the Whale Alert App. Your support of the voluntary 10 knot vessel speed request during whale season will holy reduce strikes and protect whales within the national marine sancturies.

Thank you in advance for your commitment to protecting endangered and threatened whales.

Sincerely

Daniel F. Howard

Daniel F. Howard, Superintendent Cordell Bank National Marine Sanctuary Maria Gown

Maria Brown, Superintendent Gulf of the Farallones National Marine Sanctuary



UNITED STATES DEPARTMENT OF COMMERCE

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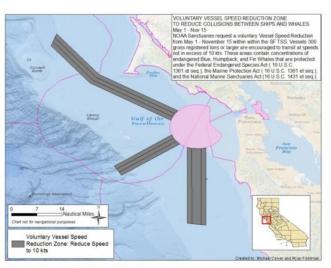


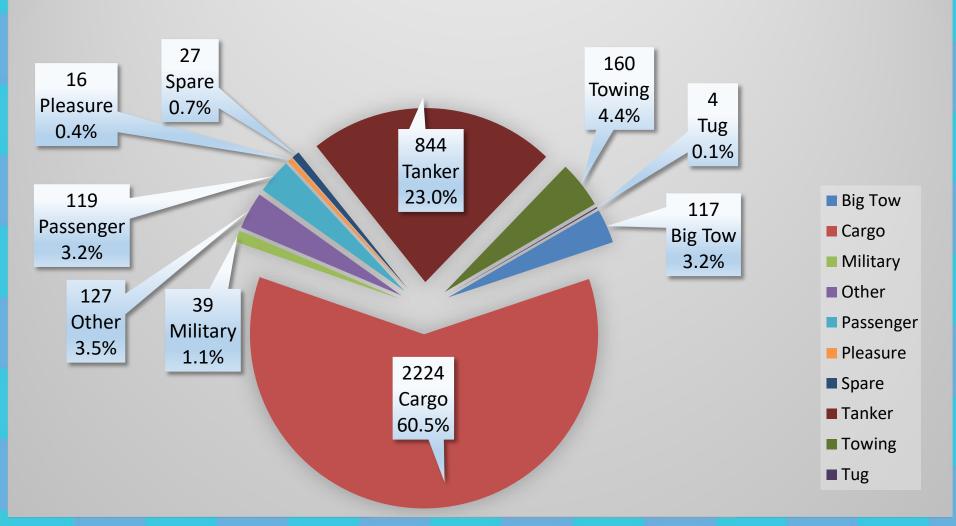
Figure 1. San Francisco Traffic Separation Scheme (TSS) within national marine sanctuaries







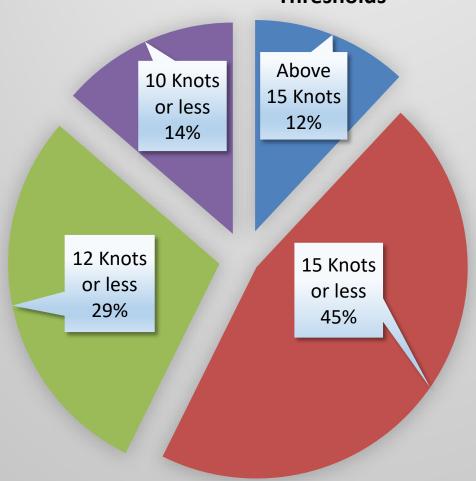
2017 Vessel Transits by Type During the NMS San Francisco Vessel Speed Reduction







Percent of Total 2017 Transits Relative to 10, 12 and 15 Knot Speed Thresholds



■ Above 15 Knots

■ 15 Knots or less

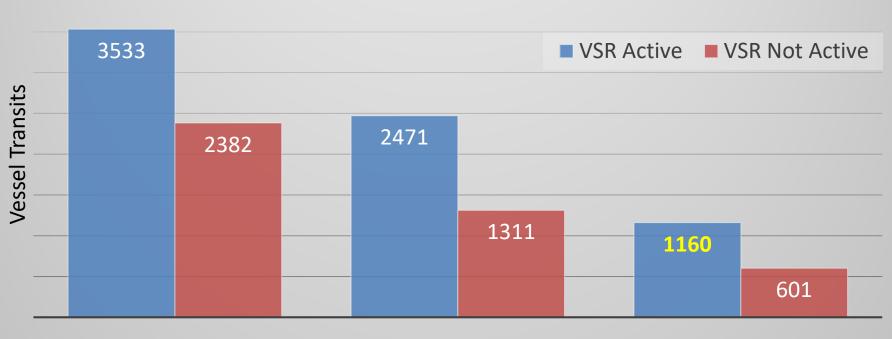
■ 12 Knots or less

■ 10 Knots or less





2017 Transits VSR Active vs Not Active



Percent Distance Traveled
15 Knots or less

Percent Distance Traveled
12 Knots or less

Percent Distance Traveled 10 Knots or less





	2015	2016	2017
Total Transits (all tonnage)	7109	7274	7473
VSR Transits (300gt, May 1-November 15)	3785	3614	3944
% Transit Distance <10 knots, all transits	28.7%	45.3%	44.9%
	•		
% Transit Distance <10 knots, tanker	28.8%	35.9%	42.8%
% Transit Distance <10 knots, passenger	4.3%	2.8%	26.6%
Reporting Companies			109

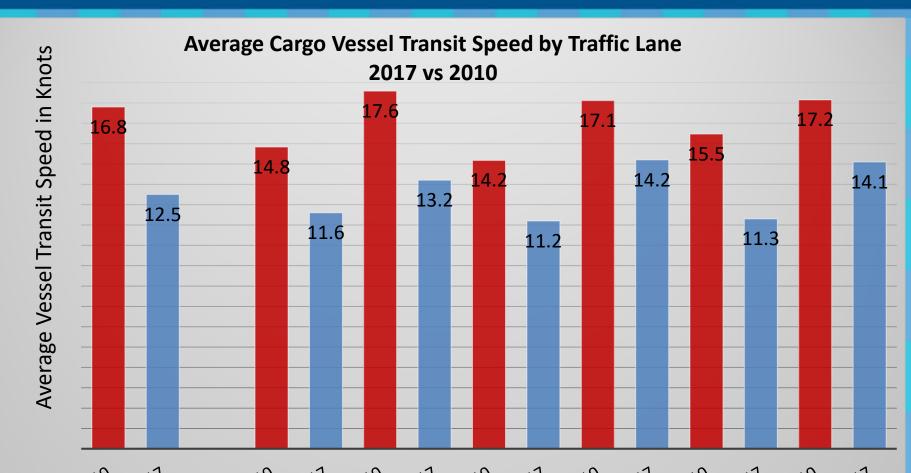




Sanctuary Vessel Speed Reduction (VSR)	2017 Cooperation
Channel Islands NMS VSR	≈ 17%
Greater Farallones and Cordell Bank NMS VSR	≈ 45%







AVERAGE SPEED 2010
NORTH INBOUND 2017
NORTH OUTBOUND 2017







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Exploring ship traffic variability off California

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Slow steaming
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ABSTRACT

Seaborne trade continues to grow and is an important component of the global economy. Threats from shipping to marine ecosystems include oil spills and other water pollution, air pollution, anchor scouring, biological invasions, container loss, chronic noise, and collisions between ships and large whales. Shipping and its associated threats can be influenced by a suite of regulations and economic events. The dynamic nature of ship traffic can be characterized using ship tracking data from automatic identification system (AIS) technology. These data enhance our ability to analyze the ecological threats from commercial shipping as a component of spatially

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5 Key messages

- 1. We are seeing a large difference in cooperation between when the VSR is active vs not active.
- 2. There is a significant difference between cooperation for San Francisco Traffic Lanes vs the Santa Barbara Channel.
- 3. The emission reductions of the VSR are significant
- 4. Ship traffic has slowed down considerably over the last decade.























































