

A night photograph of a US Coast Guard cutter, likely a WMEC, with a bright searchlight beam illuminating the dark sea. In the foreground, a tripod-mounted instrument, possibly a theodolite or surveying instrument, is visible on the deck. The sky is dark with some stars visible. The text "United States Coast Guard" and "Annual Performance Report" is overlaid in white serif font.

United States Coast Guard Annual Performance Report

Fiscal Year 2019

LETTER FROM THE DEPUTY COMMANDANT FOR OPERATIONS

Vice Admiral Daniel B. Abel

United States Coast Guard

Deputy Commandant for Operations

I am pleased to present the Coast Guard's Annual Performance Report for Fiscal Year 2019.

While a small service, the Coast Guard impacts the lives of nearly all Americans by ensuring the continued safety, security, and prosperity of our nation. The clothes we wear, cars we drive, and so many other products we buy and sell are delivered via a maritime transportation system that the Coast Guard is charged with supporting and protecting. We are the sole Federal agency postured and equipped with the broad legal authority to exert national sovereignty and enforce laws and treaties in our internal waters, littorals, and on the high seas. We protect our maritime borders from terrorist threats, illegal drugs, undocumented migrants, and contraband. Additionally, we have established a reputation as one of the world's premier lifesaving and crisis response organizations. Our service regularly rises to meet ever-changing man-made and natural disasters that threaten our people and our way of life.



Our greatest strength and most important resource has always been and will continue to be our people. The quality, dedication, and professionalism of Coast Guard men and women never ceases to amaze. They are a unique and elite breed of U.S. Military Service Members, Civilian Employees, and volunteer Auxiliarists—quiet heroes who with little fanfare or attention, on a daily basis, save lives, stop transnational criminals, protect the environment, and fight our nation's wars. They are committed to excellence in all they do, exemplified by their adherence to the Coast Guard's core values of ***Respect, Honor, and Devotion to Duty*** in all that they do.

A handwritten signature in blue ink that reads 'D. Abel'. Below the signature, the name 'Daniel B. Abel' is printed in a black, sans-serif font.

Vice Admiral, U. S. Coast Guard

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COVER: The crew of the U.S. Coast Guard Cutter HEALY conducts their Arctic West Summer 2018 science mission with the northern lights visible above the ship while in the Arctic Ocean, November 12, 2018.
(Coast Guard photo by Master Chief Petty Officer Andrea Martynowski)

COAST GUARD MISSIONS AND MISSION PROGRAMS

The Coast Guard upholds and safeguards the Nation's maritime interests; we protect those on the sea, we protect the Nation against threats delivered by sea, and we protect the sea itself.

We ensure the territorial integrity of America's maritime domain, which is comprised of 95,000 miles of shoreline and a nearly 4.5 million square mile exclusive economic zone. In the Nation's ports and harbors, and across the vast expanse of the ocean, coastal and inland waterways, we protect the safety and security of the U.S. people and ensure the stewardship of natural and commercial resources, against all threats internal and external, natural and man-made.

The Homeland Security Act of 2002 transferred the Coast Guard to the newly created Department of Homeland Security (DHS). It delineated 11 Coast Guard's missions to ensure that performance is reasonably tracked and non-homeland security results did not suffer because of the transfer. These are managed within the six mission programs that comprise the Coast Guard's strategic mission management construct, which is based upon the Service's prevention and response architecture. The six Coast Guard mission programs and their Homeland Security Act mission responsibilities are listed in the table below.

U.S. COAST GUARD MISSION PROGRAMS	HOMELAND SECURITY ACT MISSIONS
Maritime Prevention	Ports, Waterways & Coastal Security — <i>Prevention Activities</i> (PWCS-P)
	Marine Safety (MS)
	Marine Environmental Protection — <i>Prevention Activities</i> (MEP)
MTS Management	Aids to Navigation (ATON)
	Ice Operations (ICE)
Maritime Security Operations	Ports, Waterways & Coastal Security — <i>Response Activities</i> (PWCS-R)
Maritime Law Enforcement	Migrant Interdiction (MIGRANT)
	Drug Interdiction (DRUG)
	Living Marine Resources (LMR)
	Other Law Enforcement (OLE)
Maritime Response	Search and Rescue (SAR)
	Marine Environmental Protection — <i>Response Activities</i> (MER)
Defense Operations	Defense Readiness (DR)

The Coast Guard has other mission responsibilities not explicitly listed in the Homeland Security Act, including products and services for the Intelligence Community; activities and efforts provided in support of U.S. diplomacy and international relations; Cyber Security; and Bridge Administration, Great Lakes Pilotage and other Waterways Management functions supplementary to Aids to Navigation.

COAST GUARD MEASURES AND TARGET SETTING PROCESS

The Coast Guard has established a balanced set of indicators for measuring and assessing progress toward attaining or maintaining primary mission outcome goals. Actual results inform performance discussions, initiative development, strategic plans, operational direction, and budget priorities. The results also provide a means of communicating Coast Guard actual and expected performance to interested partners and stakeholders.

Outcome metrics are the most useful for assessing progress toward achieving enterprise purposes; and the Coast Guard Annual Performance Report consequently focuses on *key outcome indicators*. Output and activity measures are not reported, nor are all outcome measures available or used presented. The Coast Guard report includes measures not used by the Department of Homeland Security; and measures named and defined in the Appendix may differ somewhat from corresponding names and definitions adopted by the Department. Developing meaningful measures and ensuring data availability and validity is challenging; consequently the suite of reported measures evolves as new and improved measurement and reporting capabilities are developed.

Each March, the Service completes a year long process of performance assessment, improvement planning, and target setting to coincide with its annual budget submission. Targets are ambitious, yet realistic expectations of future results. They are realistically derived from reliable baselines and credible performance benefits anticipated from ambitious initiatives and improvement plans. In determining such expectations, we do not presume every target will always be attained. Identifying and understanding target variance is a key function and benefit of performance analysis.

The baseline is the reference point from which expectations of change are determined. In a stable environment, where results are expected to deviate within normal limits of variation, the baseline is typically just a forward projection of the past several years' average. In a period of dynamic change, the baseline is more appropriately determined from some trend line with due care given to both the type of trend line and its expected duration.

Each target is set by the Coast Guard, but some are derived from external mandates. Except for targets that reflect performance standards established with specific stakeholders, we annually refine targets by:

- Determining the anticipated out-year benefits of Coast Guard performance initiatives (e.g., strategy modifications to incorporate new technology);
- Identifying the expected benefits of Coast Guard continuous improvement efforts (e.g., improved operational execution);
- Ascertaining the impact of any constraints on Coast Guard capabilities such as budget or operational limits on staffing, training, equipment, infrastructure, and information; and
- Assessing external driver impacts (such as an increase or decrease in economic activity).

FY 2019 SUMMARY OF COAST GUARD MISSION PERFORMANCE

	SECURITY ACT MISSION	Prior Year (Note 1)	FY19 Actual	FY19 Target	FY20 Target
MARITIME PREVENTION					
M Annual MTSA facility compliance rate with transportation worker ID credential regulations	PWCS-P	99.4%	99.0%	≥99.0%	≥99.0%
S Annual Number of Breaches at High Risk Maritime Facilities	PWCS-P	329	331	≤307	≤312
S 3-yr average number of serious marine incidents	MS	734	748	≤689	≤713
Annual number of commercial mariner deaths and critical, serious & severe injuries	MS	119	101	≤128	≤99
M 3-yr average number of commercial mariner deaths and critical, serious & severe injuries	MS	126	113	≤132	≤112
Annual number of commercial passenger deaths and critical, serious & severe injuries	MS	125	158	≤101	≤92
M 3-yr average number of commercial passenger deaths and critical, serious & severe injuries	MS	104	123	≤132	≤110
Annual number of recreational boating deaths	MS	621	593	≤599	≤630
M 3-yr average number of recreational boating deaths	MS	668	633	≤602	≤629
Annual number of chemical discharge incidents	MEP	15	16	≤19	≤14
M 3-yr Average of Chemical Discharge Incidents per 100 million short tons shipped	MEP	8.0	8.1	≤14.5	≤8.0
Annual number of oil spills>100 gallons	MEP	98	82	≤90	≤92
M 3-yr Average of Oil Spills in the Maritime Environment per 100 million short tons shipped	MEP	9.2	8.8	≤10.2	≤9.5
MARINE TRANSPORTATION SYSTEM MANAGEMENT					
S Availability of maritime navigation aids	ATON	97.1%	96.9%	≥97.5%	≥97.5%
M Percent of time high-priority waterways in Great Lakes and Eastern Seaboard open during ice season	ICE	89.5%	97.2%	≥95.0%	≥95.0%
Annual number of navigational accidents	ATON	1,117	1,078	≤1,822	≤1,200
M 5-yr average number of navigational accidents	ATON	1,378	1,202	≤1,749	≤1,300
MARITIME SECURITY OPERATIONS					
M Percent reduction of all maritime security risk subject to USCG influence	PWCS-R	52.0%	52.0%	≥49.0%	Note 2
M Percent reduction of maritime security risk—USCG consequence management	PWCS-R	2.0%	2.0%	≥2.0%	Note 2
M Percent reduction of maritime security risk—USCG terrorist entry prevention	PWCS-R	60.0%	60.0%	≥59.0%	Note 2
M Percent reduction of maritime security risk—USCG WMD entry prevention	PWCS-R	46.0%	45.0%	≥44.0%	Note 2
S Percent risk impact of maritime security operations (new for 2020)	PWCS-R	N/A	N/A	N/A	≥42.0%
M Maritime security operations efficiency (new for 2020)	PWCS-R	N/A	N/A	N/A	≥80.0%
MARITIME LAW ENFORCEMENT					
Number of undocumented migrants attempting to enter U.S. by maritime routes	MIGRANT	5,197	7,093	≤9,000	≤9,000
M Number of undocumented migrants attempting to enter U.S. by maritime routes interdicted	MIGRANT	3,603	6,107	≤4,718	≤4,718
S Migrant interdiction effectiveness in the maritime environment	MIGRANT	72.0%	86.1%	≥75.0%	≥75.0%
Percent undocumented migrants attempting to enter U.S. by maritime interdicted by USCG	MIGRANT	33.4%	34.4%	≥50.0%	≥50.0%
Metric tons of cocaine removed	DRUG	209.6	207.9	≥240.0	≥240.0
M USCG removal rate for cocaine from non-commercial vessels in maritime transit zone	DRUG	7.3%	9.3%	≥10.0%	≥10.0%
S Fishing regulation compliance rate	LMR	97.8%	97.9%	≥97.0%	≥97.0%
Percent of federal fisheries found in compliance with laws and regulations	LMR	23.0%	29.0%	≥28.0%	≥28.0%
Number of detected incursions of foreign fishing vessels violating U.S. waters	OLE	201	185	≤206	≤206
S Interdiction rate of foreign fishing vessels violating U.S. waters	OLE	31.3%	40.5%	≥18.0%	≥18.0%
MARITIME RESPONSE					
S Percent of people in imminent danger saved in the maritime environment	SAR	78.0%	78.1%	≥80.0%	≥ 80.0
M Percent of time rescue assets are on-scene within 2 hours	SAR	93.0%	94.0%	100%	100%
Percentage of property “in danger of loss: saved	SAR	60.0%	49.2%	≥66.0%	≥66.0%
Marine Environmental Response Compliance	MER	86.5%	90.5%	≥90.0%	≥90.0%
DEFENSE OPERATIONS					
Defense readiness of major cutters for Department of Defense contingency planning	DR	100%	92.9%	100%	100%
Defense readiness of patrol boats for contingency planning	DR	100%	100%	100%	100%
Defense readiness of port security units (deployed)	DR	93.5%	100%	100%	100%
Defense readiness of port security units (ready to deploy)	DR	100%	100%	≥85.0%	≥85.0%

S – [Strategic] measure reported publically by DHS M – [Management] measure not reported publically by DHS, but provided to congress

Note 1: Prior Year numbers may have been updated to reflect additional information received after the FY 2018 Annual Performance Report was published

Note 2: Measures retired after FY 2019

FISCAL YEAR 2019 SELECTED PERFORMANCE HIGHLIGHTS

- Conducted over 5,500 Maritime Transportation Security Act-related inspections.
- 1,837 vessel exams and 1,300 safety decals issued by the Auxiliary.
- Conducted 601 transfer monitors of regulated facilities.
- Completed 15,996 U.S. vessel safety/security inspections; resulted in 87 flag state detentions.
- Conducted 8,748 foreign-flagged vessel inspections resulting in 106 detentions.
- Conducted 29,993 container safety inspections.
- Completed 5,944 fishing vessel exams and issued 3,643 decals.
- Conducted 3,537 investigations into reportable marine casualties.
- Conducted 199 International Port Security Program assessments in 40 countries.
- Completed 2,665 pollution investigations; and 6,247 enforcement actions for 8,944 violations.
- Issued 60,485 merchant mariner credentials or endorsements.
- Issued 229,960 Certificates of Documentation.
- Reviewed over 16,000 commercial vessel plans for compliance.
- Oversaw 44,571 Aids to Navigation with maintenance on 16,595; corrected 6,440 discrepancies.
- Issued 32 Bridge Permits for projects with an estimated construction cost of \$1.57 billion.
- Conducted 6,756 hours of icebreaking.
- Tracked 1,515 icebergs.
- Established 1,022 waterways controls; reviewed 4,071 applications for marine event permits.
- Completed 48,623 patrols of critical infrastructure/key resources
- Conducted 512 waterborne enforcement activities of fixed security zones, and provided support for 28 military out load security zones.
- Tactical Law Enforcement for 49 Coast Guard and 16 U.S. Navy and Allied ship deployments.
- Completed 12,054 hours of coverage and 105 escorts in the Arabian Gulf.
- Air crews responded to 148 active air defense events to the Washington, D.C. area, and deployed 29 times to support Presidential Protection and National Special Security Events.
- Interdicted 2,441 undocumented migrants.
- Removed 207.9 metric tons of cocaine.
- Conducted 7,052 boardings of U.S. fishing vessels; interdicted 75 foreign fishing incursions.
- Responded to 15,257 SAR cases; saved 4,335 lives; assisted 19,986 people; protected \$41.6 million of property from loss.
- Responded to 9,378 pollution incident reports; managed 328 federal cleanup projects.
- Conducted 156 site inspections of Oil Spill Removal Organizations.
- Directed 137 Government Initiated Unannounced Exercises.
- Reviewed more than 7,000 submissions for compliance with the Oil Pollution Act of 1990.
- Performed 420 exercises and 160 Preparedness for Response quarterly notification drills.
- Identified and warned of the pending arrival to the U.S. of 5,430 travelers of concern.
- Screened 114,441 commercial vessels, 12,103,796 crew members, and 27,000,000 travelers.
- Hosted 278 international students; coordinated 52 Mobile Training Team missions.
- Resolved over 140,000 tickets for Information Technology issues.
- Activated and deployed 450 reservists in support of operations along the U.S. southern border.

PREVENTION MISSION-PROGRAMS

The Assistant Commandant for Prevention Policy, through its *Maritime Prevention Program* and *Marine Transportation System Management Program*, develops and promulgates mission strategy, doctrine, and policy guidance to enable the safe and efficient flow of people and commerce on the Nation's waterways. The Assistant Commandant also provides strategic planning direction to ensure successful operational execution against programmatic standards; and maintains outreach to key stakeholders and federal, state, tribal, military, industry, and international partners.

HIGHLIGHTS

- Conducted over 5,500 Maritime Transportation Security Act-related inspections.
- 1,837 vessel exams and 1,300 safety decals issued by the Auxiliary.
- Conducted 601 transfer monitors of facilities regulated under 33 CFR 127 and 33 CFR 154.
- Completed 15,996 U.S. vessel safety/security inspections resulting in 87 flag state detentions.
- Conducted 8,748 foreign-flagged vessel inspections resulting in 106 detentions.
- Conducted 29,993 container safety inspections.
- Completed 5,944 fishing vessel exams and issued 3,643 decals.
- Conducted 3,537 investigations into reportable marine casualties.
- Completed 2,665 pollution investigations; and 6,247 enforcement actions for 8,944 violations.
- Issued 60,485 merchant mariner credentials/endorsements.
- Issued 229,960 Certificates of Documentation.
- Reviewed over 16,000 commercial vessel plans for compliance.
- Oversaw 44,571 Aids to Navigation with maintenance on 16,595; corrected 6,440 discrepancies.
- Issued 32 Bridge Permits for projects with an estimated construction cost of \$1.57 billion.
- Conducted 6,756 hours of icebreaking.
- Tracked 1,515 icebergs.
- Established 1,022 waterways controls, reviewed 4,071 applications for marine event permits.

SUCCESS STORIES

Coast Guard Approves First Fuel-Cell Ferry

The Coast Guard received a concept review request for a small passenger vessel using fuel cell drive technology. By creatively applying pertinent sections of available regulations and guidelines, the Coast Guard established criteria by which this first-in-the-world fuel cell ferry could be built to operate and carry passengers at safety levels equivalent to traditional gasoline and diesel fueled vessels. The WATER-GO-ROUND, which is an aluminum hull catamaran, is designed to carry 84 passengers and hopes to start service in the San Francisco Bay area by March 2020.



Small Passenger Vessel WATER-GO-ROUND in San Francisco, CA. (Coast Guard photo)

The WATER-GO-ROUND uses compressed hydrogen stored in carbon-fiber composite cylinders; and integrates fuel cells and lithium-ion batteries into a power management system for propulsion. This novel design introduced unexpected regulatory uncertainty surrounding bunkering, fire safety, and enclosed space ventilation; none of which are addressed in current U.S. vessel construction and inspection regulations.

The company submitted a proposal to address the absence of regulations; and the Coast Guard Office of Engineering Standards and the Marine Safety Center staff engineers worked together to establish a framework of standards and requirements to address this new emerging technology. The framework, known as a design basis, drew on a mix of international codes and standards, some of which are very recently developed. Once the design basis was established and vessel plans reviewed to ensure materials and equipment met agreed-upon requirements, continuing support was provided to the Officer in Charge, Marine Inspection throughout the construction and testing phases.

As industry develops more innovative and complex designs, the Coast Guard continues to draw on its technical competence and cooperative relationship within the maritime community to ensure the safe application of new emerging technologies.

Global Partnerships Enhance Security

In March 2019, the United Kingdom's (UK) Department for Transport hosted representatives from the Coast Guard's Office of International and Domestic Port Security to share best practices and discuss engagement challenges with certain countries. In July, an International Port Security Capacity Building team from the Coast Guard, with partners from the UK Department for Transport, met in Tunisia with Port Directors, Security Officers, Police, and representatives from Tunisian Customs & Immigration, Navy, and Ministry of Transport.



Coast Guard International Port Security Capacity Building Team members conduct tabletop exercises in Tunisia with support from the UK Department for Transport. (Coast Guard photo)

The Coast Guard began cultivating a relationship with partners in the UK Department for Transport in 2015. The collaboration has improved situational awareness and efforts to share the burden of assessing and assisting other nations' compliance with the International Ship and Port Facility Security (ISPS) Code.

Participants in the March meetings compared and contrasted their two programs and discussed different approaches to port security evaluation and capacity building. This *train-the-trainer* workshop concentrated on the process for creating and conducting drills and tabletop exercises, and examined curriculum and resource considerations through a combination of lessons and interactive sessions.

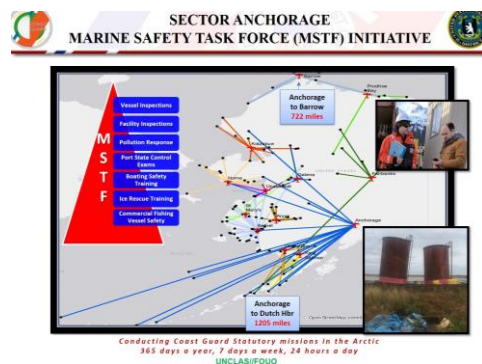
Four months later, the Coast Guard and British partners worked together to help Tunisian officials develop their own port security tabletop exercise. They demonstrated and instructed the Tunisians on how to create objectives, how to build and manage exercises, develop scenarios, and how to document and evaluate the exercise to improve planning. The Tunisian participants broke into groups and developed their own objectives and plans based on ISPS Code requirements and their communications, agency cooperation, resource capabilities, and access control considerations.

Sector Anchorage Establishes a Marine Safety Task Force

Sector Anchorage, which has an area of responsibility one-fifth the size of the continental U.S. and has more facility inspection requirements than all other Pacific Area units combined, developed an innovative way to reduce operational risk and improve its effectiveness and efficiency in the remote Arctic area.

These facilities are mostly small bulk oil tank farms that supply vital fuel to Alaskan villages—their only source for heat and power. Of the 394 facilities subject to inspection, 360 are located in remote villages and many are only accessible by bush planes, all-terrain vehicles, and snow machines. Due to their remoteness, lack of support infrastructure, and extremes in weather, inspections that normally take a few hours in the lower 48 can take days.

The possibility of a tank failure at one of these remote facilities not only poses a critical survival risk, it could severely impact commercial and subsistence fisheries and result in clean-up costs that are substantially more expensive than would be the case elsewhere. A 3,000-gallon heavy fuel oil spill in Kodiak cost \$9 million to clean up, while a spill of comparable size within the continental United States, for example, would cost less than \$500,000.



Visits to these facilities require substantially more travel time and cost; and because of all the constraints, Sector Anchorage is typically able to inspect only 12% of their facilities each year. To address this challenge, Sector Anchorage created the Marine Safety Task Force initiative; a new model for executing marine safety activities, building knowledge and response capacity in remote regions, and enhancing maritime safety and stewardship throughout Western Alaska.

The Marine Safety Task Force initiative deploys teams to hub communities for extended periods, which will allow visits to an additional 146 remote villages annually. Sector Anchorage is coordinating with Civil Air Patrol to provide transportation, which will save time and cost; and is leveraging Coast Guard Reserve facility inspectors to broaden capacity. They have also invited participation by state and tribal partners to increase risk awareness and to help identify prevention and response solutions.

The Marine Safety Task Force initiative will permit physical inspections of all Coast Guard regulated facilities over the next three to five years, and create a baseline assessment of facility compliance and risk prioritization. It not only will improve maritime safety and stewardship, it also will enable the Coast Guard to increase national security in the region by having a regular presence in these remote areas.

Coast Guard Diligence Spurs Third-Party Oversight



Structural Deficiencies Identified by Marine Inspectors from U.S. Coast Guard Activities Far East. (Coast Guard photos)

A review of a Recognized Organization's database by Coast Guard Activities Far East inspectors uncovered a failure by the Recognized Organization to address structural issues recorded a year earlier. The Coast Guard inspectors' diligence led to acknowledgement that deficiencies were overlooked and corrective actions were needed and would be taken to prevent a reoccurrence.

Recognized Organizations are third-party entities that conduct compliance activities on behalf of the Coast Guard. This Recognized Organization identified and noted wastage on structural members in the lower engine room of a vessel it inspected a year earlier; but failed to require permanent repairs—a violation of the international safety construction certificate issued to the vessel on behalf of the Coast Guard.

Activities Far East initiated a Quality Case, which requires a Recognized Organization to perform an internal investigation into the root cause of an identified failure related to their delegated function, and to determine how to address it.

The Recognized Organization performed the investigation, acknowledged their deficiency, and enacted measures to ensure additional surveyors are involved in each dry-docking, a surveyor-in-charge documents all findings, and case studies with lessons learned are sent to appropriate staff to prevent any reoccurrence.

Coast Guard Mathematicians Contribute to Boating Safety



The National Association of State Boating Law Administrators (NASBLA) recognized U.S. Coast Guard Station Marblehead, OH as the winner for outstanding medium-sized unit among the over 570 agencies that participated in the weekend-long Operation Dry Water surge operation. (Coast Guard photo)

The Coast Guard's Office of Boating Safety teamed with First-Class Cadets from the Coast Guard Academy's Mathematics Department to study factors involved in recreational boating deaths. Their findings were used to enhance surge operations that have substantially increased boating safety enforcement.

The cadets employed various quantitative analysis methods to examine some 18 years of historical data. They were able to determine contributing factors of recreational boating deaths and use machine learning models to predict whether a recreational boating death will occur given a boating accident. Use of alcohol and lifejacket wear were two key variables. The team concluded that between two to seven deaths per year could be prevented if alcohol use was decreased by just 10%; and increasing lifejacket use by 10% could prevent between five and 11 deaths.

The Office of Boating Safety put these findings into action with its sponsorship of Operation Dry Water, an annual nation-wide effort to highlight awareness and enforcement of boating under the influence (BUI). Coast Guard, state, tribal, and local law enforcement authorities have increased BUI enforcement actions by 20% each of the past two years, and law enforcement participation has grown by over 15% each year.

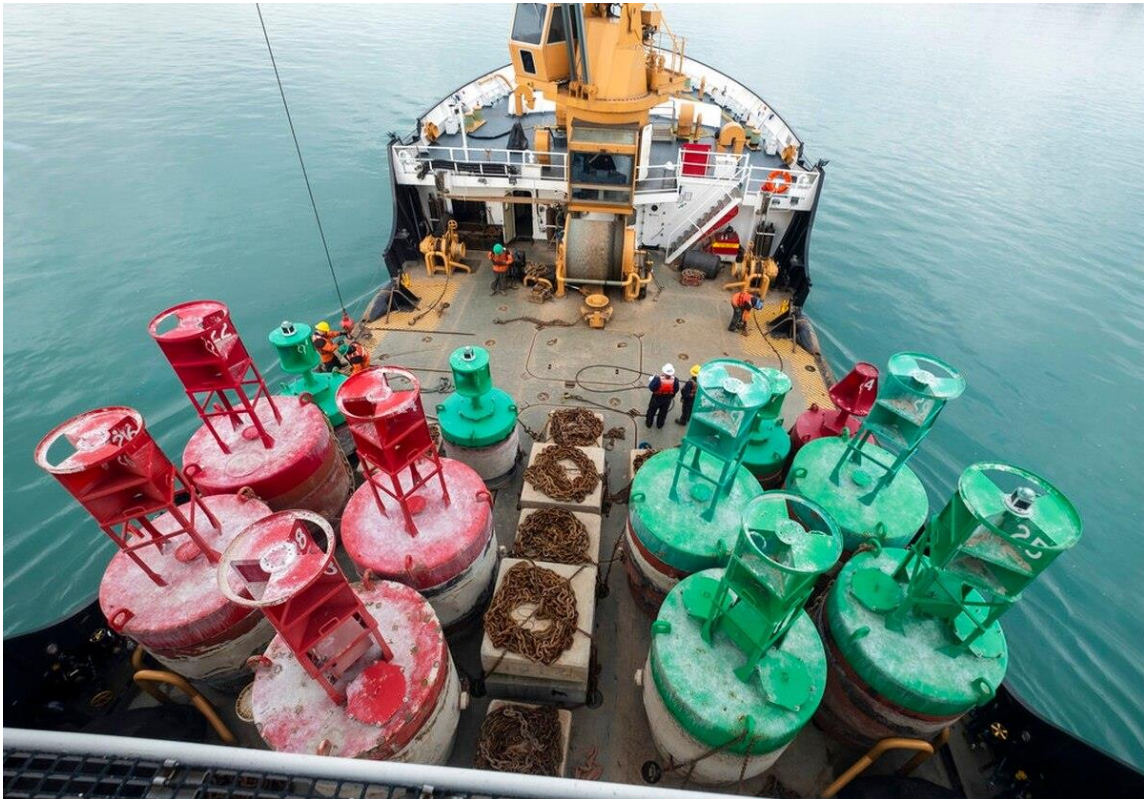
Operation Dry Water is funded through the Sport Fish Restoration and Boating Trust Fund, administered by the Coast Guard. Heightened enforcement as a result of Operation Dry Water is essential in reducing boating under the influence, and a highlight this year was Coast Guard Station Marblehead, OH, boarding 34 vessels and finding six operators under the influence of alcohol or drugs during the three-day weekend following July 4, 2019.

Buoy Tender Sets Record

In May, the USCGC HOLLYHOCK set a ship's record for the number of buoys worked during a one day evolution. The schedule included working 17 buoys, which broke the ship's previous record of 14. Work included pulling winter buoys, or marks, and replacing them with summer buoys and placing summer buoys where other winter marks had previously been removed. Winter buoys are

designed to be able to float under the ice and to withstand the pressure, while summer buoys are light and easier to see, which facilitates more commerce overnight.

To help facilitate some of the work, the HOLLYHOCK'S Aids to Navigation boat was deployed with several crew members to handle some of the smaller buoy work that wouldn't require it be removed from the water, such as installing or removing a light. It takes about two months to replace about 150 buoys from Lake Huron to Lake Ontario.

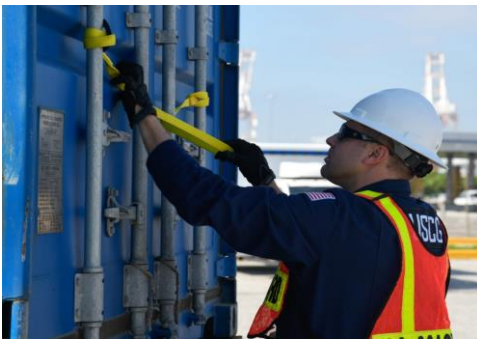


Buoys on the deck of the USCGC HOLLYHOCK. (Photo by Brian Wells of the Times Herald)

MARITIME PREVENTION PROGRAM

The Maritime Prevention Program prevents personnel casualties and property losses, minimizes security risks, and protects the marine environment. The Coast Guard develops and enforces federal marine safety, security, and environmental regulations. It reviews and approves vessel and maritime facility security plans, conducts security and safety inspections, and enforces Transportation Worker Identification Credential (TWIC) regulations. The program conducts domestic and international port security assessments, analyzes maritime security risk nationwide to identify high-risk targets and support risk reduction measures, and supports administration of port security grant funding. The program periodically reviews the effectiveness of anti-terrorism measures in foreign ports by conducting assessments of those ports to determine compliance with the International Maritime Organization's (IMO) International Ship and Port Facility Security (ISPS) Code, and requires vessels arriving in the United States from ports with inadequate anti-terrorism measures to take additional security precautions. The Coast Guard develops and applies design, construction and equipment standards for vessels; conducts compulsory, as well as voluntary vessel exams and inspections; certifies and licenses U.S. mariners; and promotes best practices by investigating marine casualties and sharing its findings. It provides grants to states to improve recreational boating safety, and supports a variety of government and nongovernment boating safety efforts in partnership with other federal agencies, state and local governments, marine industries and associations, including the Coast Guard's uniformed volunteer Coast Guard Auxiliary. The Coast Guard also maintains strong leadership roles in many international maritime organizations, contributing shared inspection techniques and best practices.

PORTS, WATERWAYS, AND COASTAL SECURITY—*PREVENTION ACTIVITIES*



A Coast Guard container inspector from U.S. Coast Guard Sector Maryland-National Capital Region does an inspection at the Port of Baltimore, May 7, 2019, as part of a multi-agency involving 12 other federal, state and local agencies to verify compliance with facility security regulations. (Coast Guard photo)

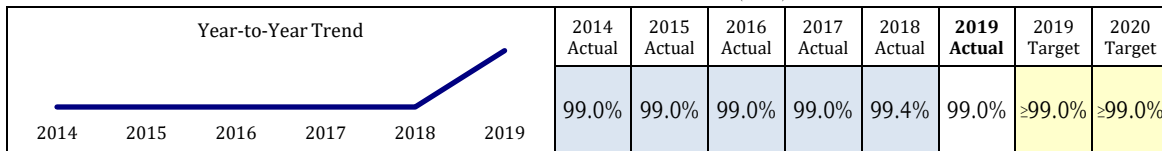
The focus of the Coast Guard's Ports, Waterways and Coastal Security—*Prevention Activities* mission is to prevent security incidents, including terrorist attacks, sabotage, espionage, or subversive acts in the maritime domain, upon the global supply chain, or to the U.S. Marine Transportation System (MTS). It also seeks to improve security in the world's ports and thus reduce risk to the Nation. The Coast Guard strives to deny terrorists the ability to use or exploit the maritime domain or marine transportation system as a means for attacks on U.S. territory, population centers, vessels, and maritime critical infrastructure and key resources.

The mission requires intelligence support, establishment and oversight of maritime security regimes, employment of maritime domain awareness activities, and initiatives that enhance the resilience of the marine transportation system, maritime critical infrastructure and key resources.

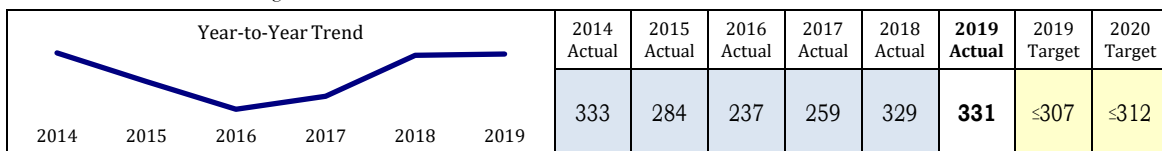
To do so, the Coast Guard employs a layered and collaborative strategy that relies upon the cooperation of U.S. citizens, and governmental, private sector, and international partners.

FY 2019 Performance Results

Annual MTSA Facility Compliance Rate with Transportation Worker Identification Credential (TWIC) Regulations



Annual Number of Breaches at High Risk Maritime Facilities



Explanation of Results

In FY 2019, the Coast Guard conducted over 5,500 Maritime Transportation Security Act (MTSA) related inspections, finding only 25 instances of non-compliance with TWIC regulations that led to an enforcement action. This resulted in a 99.0% compliance rate, meeting the FY 2019 target and revised actual for FY 2018.

There were 331 breaches of security at MTSA regulated facilities in FY 2019, which exceeded the target expectation. None of the 331 breaches of security, however, resulted in a Transportation Security Incident. Breaches of security numbers have started to normalize post-2016 policy changes outlining criteria and reporting processes; and future targets have been adjusted accordingly. The Coast Guard completed a data collection improvement effort in FY 2019 in order to determine the primary reasons for security breaches, and whether or not there was nefarious activity associated with the breach. Using that data, the Coast Guard has refined its data collection methods, and the improvements as a result of that effort should be reflected in FY 2020 outcomes.

MARINE SAFETY

The Marine Safety mission focus is prevention of deaths, injuries, and property loss in the U.S. Maritime Domain. Marine Safety responsibilities include ensuring the safe and environmentally sound operation of millions of recreational vessels and thousands of U.S. flagged commercial vessels wherever they are in the world, as well as exercising Port State Control for foreign vessels in U.S. waters. The Coast Guard develops and enforces federal marine safety regulations, certifies and provides credentials to over 200,000 mariners, administers




A member of U.S. Coast Guard Sector Honolulu's prevention team checks a commercial vessel crewmember's life jacket (Coast Guard photo)


the approval program for marine safety equipment and materials, provides vessel documentation, investigates commercial marine casualties and shares its findings, conducts compulsory inspections, and utilizes the Coast Guard Auxiliary extensively to conduct voluntary safety exams.

FY 2019 Performance Results


Three-year Average Number of Serious Marine Incidents

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	761	709	709	716	734	748	≤689	≤713


Annual Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	161	138	142	114	119	101	≤128	≤99


Three-year Average Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	161	153	147	133	126	113	≤132	≤112


Annual Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	140	127	100	87	125	158¹	≤101	≤92 ²

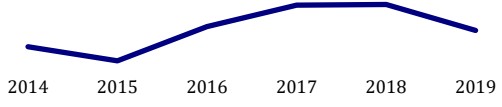
Three-year Average Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	161	141	122	105	104	123¹	≤132	≤110 ²

Annual Number of Recreational Boating Deaths

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	600	618	697	686	621	593	≤599	≤630

Three-year Average Number of Recreational Boating Deaths

Year-to-Year Trend	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
	611	592	638	667	668	633	≤602	≤629

¹ FY 2019 result includes 33 passenger deaths from one incident in September 2019.

² FY 2020 target was established using a historic baseline that does not include the 33 passenger deaths from one incident in September 2019.

Explanation of Results

Performance results are those reports of casualties recorded to date. Casualty reports are often delayed in reaching the Coast Guard; consequently, results are expected to rise as additional reports are received, and published data is subject to revision with the greatest impact affecting recent quarters. Thus, all numbers for FY 2018 and other prior fiscal years have been revised to reflect the most current data. For example, recreational boating deaths are based on reports submitted by state reporting authorities, and recent experience suggests the number of FY 2019 deaths could increase roughly 15% as additional state reports are received, reviewed, and reconciled with news media accounts.

Serious Marine Incidents (SMIs) comprise deaths or injuries requiring professional treatment beyond first aid, reportable property damage greater than \$200,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance. Annual SMIs decreased 3.3% from FY 2018, but the three year average didn't meet the FY 2019 target. This may be attributed to an 8% rise in passenger vessel SMIs, which accounted for more than 50% of total SMIs. It is believed that some SMIs may be outside Coast Guard control, such as a heart attack on a cruise ship. The Coast Guard is looking at a possible policy change, which may result in the measure targets being adjusted. An emphasis on risk-based inspections of passenger vessels and a review of safety and reporting requirements, especially in light of the CONCEPTION tragedy, should also have a favorable impact on this metric in the future.

In FY 2019, there were 101 commercial mariner deaths and critical, serious, and severe injuries (25 deaths, 76 injuries), contributing to a three-year average of 113, thus meeting the FY 2019 target. This also represents a 10.3% improvement compared to FY 2018. Approximately 40% of the total commercial mariner deaths and significant injuries occurred on fishing vessels. Another one-third of these casualties occurred on towing vessels and barges, and this number is expected to decrease as more towing vessels are certificated for inspection.

In FY 2019, there were 158 commercial passenger deaths and critical, serious, and severe injuries (44 deaths, 114 injuries), which was impacted by the passenger vessel CONCEPTION tragedy. The three-year average increased 18.3% in FY 2019, but still met target. The increase over the prior year is not indicative of a trend as the 33 deaths from CONCEPTION tragedy accounted for 20.7% of the total deaths and significant injuries during FY 2019.

In FY 2018, there were 593 recreational boating deaths, contributing to a three-year average of 633. Though the target was not met, the average improved 5.2% from FY 2018 to FY 2019. A study conducted during FY 2019 to identify statistically significant factors related to recreational boating deaths, identified alcohol use and lifejacket wear as key contributors. The Coast Guard will continue campaigns to combat boating while intoxicated, but unless states mandate lifejackets be worn for all vessel operators, the Coast Guard does not expect recreational boating deaths will decrease significantly.

MARINE ENVIRONMENTAL PROTECTION—*PREVENTION ACTIVITIES*



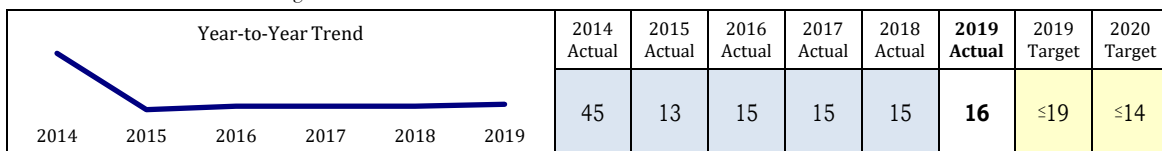
An inspector from Coast Guard Sector Anchorage prepares to inspect a fuel storage facility in Oscarville, AK, July 9, 2019. (Coast Guard photo)

The Marine Environmental Protection-Prevention mission preserves precious natural resources by regulating handling of oil, hazardous substances, and other shipboard wastes; preventing their discharge into U.S. and international waterways, reducing ship-based air emissions, stopping unauthorized ocean dumping, and averting the introduction of invasive species. The Coast Guard develops regulations and operating standards for domestic vessels and marine facilities; and advocates for

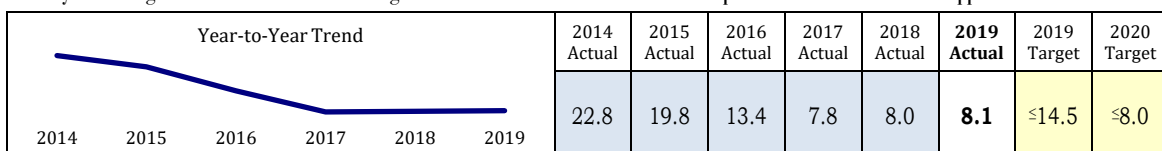
responsible environmental and operational standards at the International Maritime Organization and the International Organization for Standardization. The Coast Guard enforces standards by conducting vessel examinations and inspections, performing inspections and spot-checks of waterfront facilities, and conducting criminal investigations into violations. Transfer monitoring activities are performed to ensure vessels and facilities engaged in the movement of oil, hazardous materials, and explosives have implemented required safeguards. Containers used in the transport of hazardous materials are examined to ensure structural integrity is enough to withstand global transport and hazardous materials are packaged, labeled, and declared properly.

FY 2019 Performance Results

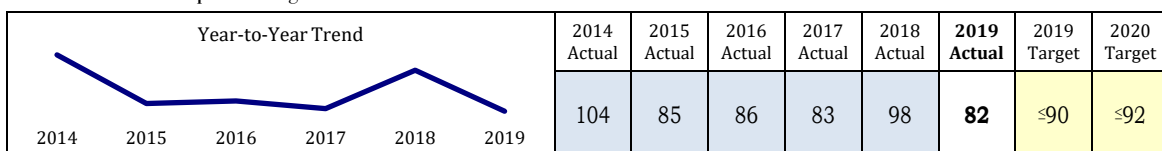
Annual Number of Chemical Discharge Incidents



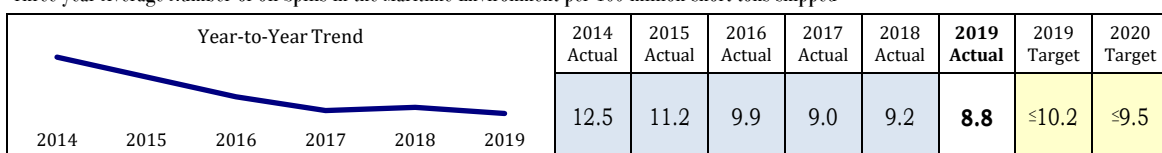
Three-year Average Number of Chemical Discharge Incidents in the Maritime Environment per 100 million short tons shipped



Annual Number of Oil Spills >100 gallons



Three-year Average Number of Oil Spills in the Maritime Environment per 100 million short tons shipped



Explanation of Results

In FY 2019 there were 16 hazardous chemical discharge incidents. The three-year average number of chemical discharge incidents in the maritime environment per 100 million short tons shipped was 8.1, a slight increase from FY 2018, but still meeting the FY 2019 target. Mobile offshore drilling units, offshore supply vessels, and offshore facilities accounted for 81% of the hazardous chemical discharges.

In FY 2019, there were 82 spills of 100 gallons or more of oil, a 16.3% improvement over FY 2018. 49% of the oil spills over 100 gallons occurred at maritime facilities. The most frequent sources of spills over 100 gallons were tugs and barges, representing 12% of the total. The three-year average number of oil spills over 100 gallons in the maritime environment per 100 million short tons shipped was 8.8, a 4.3% improvement over FY 2018, which met the FY 2019 target.

REGULATIONS, STANDARDS, LICENSING, AND DOCUMENTATION

The Coast Guard develops and enforces federal marine safety regulations. Additionally, it certifies and provides credentials to over 200,000 mariners, administers the approval program for marine safety equipment and materials, and provides vessel documentation.

Project management methodologies and ISO 9000 compliant best practices form the basis of the regulatory development process. The goal is timely and cost-effective with regulations that balance government, industry and the public's needs. The

Administrative Procedures Act, various Executive Orders, and other statutory and Administrative directives require proving the benefits of proposed actions exceed costs or costs are minimized for statutory mandates; impacts to small businesses or other entities mitigated; and environmental impacts characterized, all of which must be reviewed by the Administration and subject to public comment before coming into effect. Statutes, international agreements, changes in technology and lessons learned from marine accidents are driving forces.

The Regulatory Development Program is also a key mechanism for outreach and engagement with the regulated public, industry and international partners. The Coast Guard further develops and applies design, construction and equipment standards for vessels to ensure compliance with U.S. and international requirements, including the review of vessel designs and modifications.

The Coast Guard develops regulations and sets policies governing U.S. merchant mariner credentialing and maritime labor issues; and issues merchant mariner licenses and other credentials.



Admiral Karl Schultz - U.S. Coast Guard Commandant, Senator Shelley Moore Capito (WV), and National Maritime Center's Commanding Officer, Captain Martin, discuss Merchant Mariner Credentialing processes. (Coast Guard photo)

It provides a register of vessels available in time of war or emergency to defend and protect the nation through vessel documentation that provides evidence of nationality for international purposes and unhindered commerce between the states.

Discussion of Results

The Regulatory Development Program comprises the Marine Safety and Security Council (MSSC) and Headquarters offices charged with developing, issuing, and maintaining Headquarters regulations. The Office of Regulations and Administrative Law (CG-LRA) and the Office of Standards Evaluation and Development (CG-REG) form the Program's core offices. The Regulatory Development Program focused on deregulation during FY 2019 with estimates that deregulation activities could save an estimated \$39.5 million annually for the maritime industry and the public. Other initiatives included publishing the final rules for tanker automatic pilot systems, seafarers' access through port facilities, and amendments to the requirements for periodic radar observer re-training. In addition, the Coast Guard published proposed rules on revising the requirements for the person-in-charge of fuel transfers and fire protection equipment on recreational vessels. The Coast Guard also finalized the revised policy for reducing the frequency of costly drills under the National Preparedness for Response Exercise Program.

The Coast Guard maintained high responsiveness to merchant mariners needs in FY 2019 by ensuring no mariner was at risk of a gapped credential when the National Maritime Center (NMC) was unable to produce credentials or medical certificates during the FY 2019 government closure. Coupled with a targeted effort to resolve the associated 12,129 backlogged applications, this contributed to the 96% average customer satisfaction rating and enabled the return to normal operating levels by end of summer 2019. Over 23,000 mariners continued to benefit from applying directly for their medical certificates, an increase of over 8,000 from FY 2018. Screening time related to assessing mismatched Transportation Worker Identification Credential (TWIC) records was also reduced from eight weeks to one week. With improved centralization and continued focus on digital processing, the Coast Guard successfully tested a 100% electronic application workflow cycle without handling any paper for the 2019 U.S. Coast Guard Academy graduating class.

Despite issues throughout the year with informational technology (IT), the Coast Guard issued 229,960 Certificates of Documentation for renewals, initial issues, exchange or reinstatements, and other miscellaneous needs. Of these, 162,671 were for recreational vessels, 45,360 for commercial vessels, and 21,929 for fishing vessels. Additionally, the National Vessel Documentation (NVDC) recorded over \$388 billion in mortgages during FY 2019. New legislation required the availability of multi-year Certificates of Documentation for recreational vessels. The NVDC issued 11,957 of them despite the fact that they had no IT solution and had to do them manually.

MARINE TRANSPORTATION SYSTEM MANAGEMENT PROGRAM

The Marine Transportation System Management Program ensures a safe, secure, efficient, and environmentally sound waterways system. The Coast Guard minimizes disruptions to maritime commerce by assessing and mitigating risks to safe navigation, and by providing waterway restoration capabilities after extreme weather events, marine accidents, or terrorist incidents. The Coast Guard works in concert with other Federal agencies, state and local governments, marine industries, maritime associations, and the international community to optimize balanced use and champion development of the Nation's marine transportation system.

AIDS TO NAVIGATION



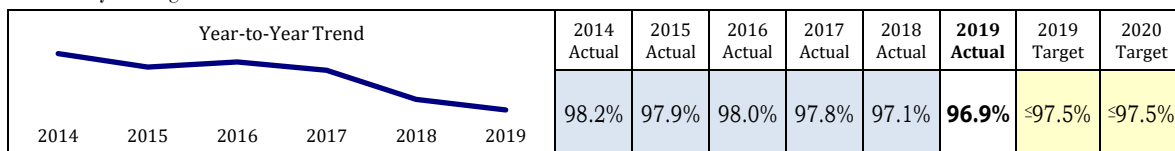
The Coast Guard Cutter ASPEN and crew finish placing a buoy marking the entrance to Tillamook Bay, OR, August 17, 2019. The ASPEN is a 225-foot seagoing buoy tender currently maintaining aids to navigation in the Pacific Northwest. (Coast Guard photo)

The Aids to Navigation (ATON) mission is to mitigate transit risks and promote the safe, economic and efficient movement of military, commercial, and other vessels by assisting navigators with determining their position, setting a safe course, and warning them of dangers and obstructions. The Coast Guard establishes, maintains, and operates more than 45,000 buoys and beacons, both lighted and unlighted, and ensures system compliance with international standards, such as those promulgated by the International Association

of Marine Aids to Navigation and Lighthouse Authorities. The Coast Guard is responsible for administration of a nearly equivalent number of private ATON. The Service also provides electronic navigational aids, including Automatic Identification System (AIS) Aids to Navigation, to facilitate efficient and reliable transfer of Marine Safety Information between and among vessels and shore facilities. Marine Safety Information provided by the Coast Guard includes navigation rules; schemes and standards; support for mapping and charting; and tide, current, and pilotage information.

FY 2019 Performance Results

Availability of Navigation Aids



Explanation of Results

Short-range federal Aids to Navigation (ATON) were available 96.85% of the time in FY 2019. This performance fell below the target for the year, which is derived from standards established by the International Association of Marine Aids to Navigation and Lighthouse Authorities. Overdue Aids to Navigation repairs attributable to the 2017 and 2018 hurricane seasons negatively impacted Aid Availability Rates (AAR), particularly in Districts Seven and Eight. Additionally, resource constraints have created an extensive and growing repair backlog for fixed ATON, which will continue to drive down the future overall AAR. The Coast Guard is exploring solutions to mitigate risks to the Marine Transportation System which include systemic efficiencies in ATON maintenance and centralized prioritization of fixed structure repairs and recapitalization.

ICE OPERATIONS

Coast Guard icebreakers, in cooperation with the Canadian Coast Guard, keep the Great Lakes and Northeastern U.S. connecting waterways open for commercial traffic, assist vessels transiting ice-filled waterways, and prevent ice-related flooding. The International Ice Patrol promotes safe navigation by monitoring icebergs and broadcasting the iceberg geographical limit to vessels transiting the North Atlantic between North America and Europe. Coast Guard Polar icebreakers support national security and sovereignty, and National Science Foundation missions in the Polar Regions. They are used to determine and demonstrate the extent of U.S. Extended Continental Shelf claims, enforce U.S. laws and international treaty obligations in the Polar Regions, and provide a science platform in the Arctic region for obtaining vital ecological and geographic data necessary to protect U.S. Arctic marine environment and resources.



The USCGC MACKINAW breaks ice and maintains Aids to Navigation across the Great Lakes. (Coast Guard photo)

FY 2019 Performance Results

Percent of Time High Priority Waterways in the Great Lakes and along the Eastern Seaboard are Open during Ice Season

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	99.3%	85.5%	81.9%	100%	89.5%	97.2%	≥95.0%	≥95.0%

Explanation of Results

The availability of Tier One waterways is essential to public health and safety and the economies of the Great Lakes and Northeastern United States. The Coast Guard exceeded performance

standards in FY 2019 by maintaining a 97.2% availability rate for high priority waterways in the Great Lakes and along the eastern seaboard that are open during ice season. Partial closures and restrictions in District Nine (Great Lakes) on the St. Clair and Upper St. Marys Rivers were experienced due to a polar vortex and a heavy wind event creating significant ice coverage. This resulted in 47% availability on these waterways and 86% of the total closures and restrictions.

WATERWAYS MANAGEMENT



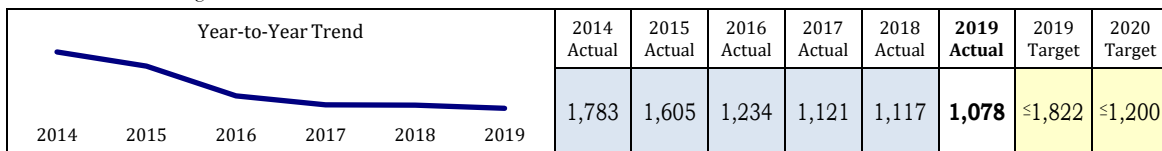
Coast Guard Station Point Allerton crew members respond during the grounding of the ferry LIGHTENING in Boston Harbor, August 16, 2019. (Coast Guard photo).

The Waterways Management Program leverages other federal agencies, harbor safety committees, pilots, port authorities, and other industry and waterway stakeholders to foster a safe, secure, resilient, and environmentally sound marine transportation system. This includes cooperative work with the U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration, Marine Board of the Transportation Research Board, the Committee on the Marine Transportation System, and regional Federal Advisory Committee Act bodies.

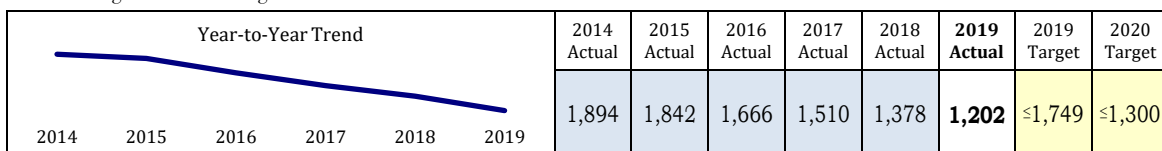
Waterways Management encompasses Vessel Traffic Services, which minimize safety risks in the Nation's most congested ports by monitoring and coordinating vessel traffic; Great Lakes pilotage, which ensures navigation safety on the Great Lakes by regulating pilotage for foreign trade vessels; and Coastal and Marine Spatial Planning, which collaborates with other federal agencies and stakeholders to support the balanced use of national waters in forums such as the regional planning bodies created by the President's National Ocean Policy.

FY 2019 Performance Results

Annual Number of Navigational Accidents



5-Year Average Number of Navigational Accidents



Explanation of Results

Performance results are those reports of accidents recorded to date. Reports are often delayed in reaching the Coast Guard; consequently, results are expected to rise as additional reports are

received. Thus, all numbers for FY 2018 and other prior fiscal years have been revised to reflect the most current data. Navigational accidents, consisting of distinct collisions, allisions (vessel striking a fixed object), and grounding events, provide a proxy measure of Waterways Management effectiveness in preventing disruptions to commerce; they can and often do result in waterway closures. Targets for FY 2019 were exceeded. There were 1,078 navigational accidents reported in FY 2019, 3% fewer than the updated and revised number of 1,117 recorded in FY 2018, and substantially fewer than the five-year average of 1,202 in FY 2019 and the revised FY 2018 average of 1,378. As a result, both the annual target and the five year average targets for FY 2020 have been revised downward. In FY 2019, groundings accounted for 49% of navigational accidents, allisions for 43%, and collisions only 8%.

BRIDGE ADMINISTRATION

The Coast Guard collaborates with federal, state, local agencies, industry, and other stakeholders to ensure that over 20,000 bridges and causeways spanning the navigable waters of the U.S. do not unreasonably obstruct navigation. This includes issuing permits, establishing bridge lighting and marking requirements; approving drawbridge schedules; investigating bridges that may be unreasonably obstructive; monitoring rehabilitation, repair, maintenance and construction activities; and managing design construction and funding for Truman Hobbs projects.

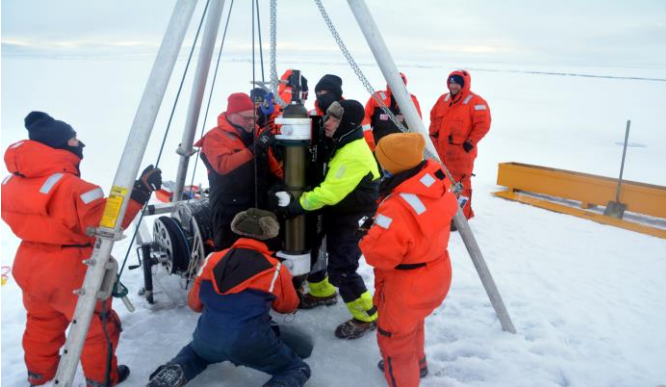


Boaters pass under a bridge on Lake Washington during Seafair, August 3, 2019. Coast Guard crews worked with federal and local law enforcement partners to patrol for high speed and reckless boating. (Coast Guard photo)

Discussion of Results

In FY 2019, the Coast Guard issued 32 Bridge Permits with an estimated construction cost of \$1.57 billion. These permits included a permit for the Kivalina Lagoon Bridge that will provide an all-season evacuation route between the communities of Kivalina and Kisimigiuqtuq (K-Hill) in the Northeast Arctic Borough of Alaska. Additionally, the Coast Guard evaluated and redeveloped best practices to comply with requirements to reduce infrastructure permitting review times as outlined in Title 41 of the Fixing America's Surface Transportation Act (FAST-41), and EO 13807 (One Federal Decision). On average, the Coast Guard permit processing time for each bridge project has decreased from 10 months to less than 180 days.

ARCTIC OPERATIONS



USCGC HEALY crewmember oversees the deployment of an ice profiler by Woods Hole Oceanographic Institute personnel while on an ice floe in the Arctic Ocean, September 19, 2019. (Coast Guard photo)

The U.S. has been an Arctic Nation since 1867, when it purchased Alaska from Russia for \$7.2 million. The U.S. has significant equities in the region, and the Coast Guard is responsible for ensuring that there is safe, secure, and environmentally responsible maritime activity throughout this vast domain. Included is the exercising of maritime sovereignty and maintaining persistent maritime domain awareness in the Arctic; providing effective maritime

border control; overseeing and ensuring the safety of maritime activities; protecting natural resources; providing governance regimes; and supporting collaborative engagement that safeguards U.S. Arctic interests and promotes cooperative effort in forums such as the Arctic Council, the International Maritime Organization, and Inuit Circumpolar Council.

Discussion of Results

During FY 2019, the office responsible for Arctic policy continued to work collaboratively with Coast Guard commands and other partners to enhance Coast Guard readiness, relevance, and responsiveness in Arctic security. In recognition of the urgent national security risks and the new dynamic geo-political Arctic landscape, the Coast Guard updated the Arctic Strategic Outlook in April 2019, four years earlier than planned. The 2019 Arctic Strategic Outlook supersedes the Coast Guard's 2013 Arctic Strategy, and identifies more than 55 action statements and commitments to enhance holistic security in the region. It aligns with the 2017 National Security Strategy and 2018 National Defense Strategy, and builds on the foundation laid by other national strategic documents and direction. An implementation plan for the Arctic Strategic Outlook is under development.

RESPONSE MISSION PROGRAMS

The Assistant Commandant for Response Policy through its four Coast Guard mission programs: *Maritime Security Operations*, *Maritime Law Enforcement*, *Maritime Response*, and *Defense Operations*, develops and promulgates doctrine and policy guidance for all Coast Guard forces to effectively and efficiently accomplish operational maritime missions in the areas of law enforcement, maritime security, counterterrorism and defense operations, incident management and preparedness, search and rescue, and contingency exercises. The Assistant Commandant also provides strategic planning direction to ensure successful operational execution against programmatic standards; and maintains outreach to key stakeholders and federal, state, tribal, military, industry, and international partners.

HIGHLIGHTS

- Completed 48,623 patrols of critical infrastructure and key resources; 3,357 high-capacity passenger vessel and 401 vessels carrying certain dangerous cargos escorts; and 80 Navy vessel escorts.
- Conducted 512 waterborne enforcement activities of fixed security zones, and provided support for 28 military out load security zones.
- Tactical Law Enforcement Teams completed 49 Coast Guard major cutter deployments, and 16 separate deployments onboard U.S. Navy and Allied ships.
- Boat Forces deployed to U.S. Central Command completed 12,054 hours of coverage and 105 escorts in the Arabian Gulf.
- Air crews responded to 148 active air defense events to the Washington, D.C. area, and deployed 29 times to support Presidential Protection and National Special Security Events.
- Interdicted 2,441 undocumented migrants.
- Removed 207.9 metric tons of cocaine.
- Conducted 7,052 boardings of U.S. fishing vessels; interdicted 75 foreign fishing incursions.
- Responded to 15,257 SAR cases; saved 4,335 lives; assisted 19,986 people; and protected approximately \$41.62 million of property from loss.
- Responded to 9,378 pollution incident reports; managed 328 federal cleanup projects and associated costs of more than \$101.4 million.
- Conducted 156 site inspections of Oil Spill Removal Organizations.
- Directed 137 Government Initiated Unannounced Exercises.
- Reviewed more than 7,000 submissions for compliance with the Oil Pollution Act of 1990.
- Performed 420 exercises and 160 Preparedness for Response quarterly notification drills.
- Certified approximately 100 members in Incident Command System competencies.

SUCCESS STORIES

Counter-Unmanned Aircraft Systems Deployed for UN General Assembly

The Coast Guard, under DHS authority and in concert with the U.S. Secret Service, conducted the first-ever Counter-Unmanned Aircraft Systems (C-UAS) deployment during the September 2019 United Nations General Assembly meeting in New York City. The C-UAS operation was reported as an “overwhelming success,” with detection and coordinated responses to multiple unauthorized UAS operators.



Coast Guard members demonstrate C-UAS capabilities to partner agency representatives. (Coast Guard photo)

The potential risk to the maritime community and Marine Transportation System presented by Unmanned Aircraft Systems is a growing concern that prompted Congress to pass and the President to sign the Preventing Emerging Threats Act of 2018. The Act authorized the Coast Guard to take mitigation actions to protect people, vessels, and facilities from Unmanned Aircraft Systems.

The Coast Guard developed and is continuing to collaborate with interagency working groups to enhance C-UAS tactics. In two instances where C-UAS engagement was authorized, the Coast Guard achieved 39 detections with nine operators located and seven interdicted by law enforcement response teams.

Coast Guard Provides Indo-Pacific Engagement and Partnership

The USCGC BERTHOFF made the first full-length deployment to the Western Pacific in seven years. During the deployment’s first and last segments, the BERTHOLF enforced economic sanctions against North Korea, working to interdict oil shipments into the country and shipments of coal and other goods out. The crew dealt with vessels large and small, from 150 feet to more than 500 feet in length, that were engaged in a range of questionable maritime activities.



A family waits for the arrival of the USCGC BERTHOLF, July 2, 2019, at Coast Guard Base Alameda, CA, after a 164 day deployment to the Western Pacific. (Coast Guard photo)

The cutter also did partner training with Japanese and South Korean Coast Guard forces with a focus on search and rescue. This provided continued joint operations with partner nations during a period when DoD had suspended large-scale military-to-military training exercises with the Republic of Korea amid efforts to de-escalate nuclear tensions with North Korea.

Exercising its role as a U.S. warship, the BERTHOLF transited the Strait of Taiwan in March alongside the Navy guided-missile destroyer USS CURTIS WILBUR as part of an ongoing effort to extend rules-based order; enforce international maritime norms; and ensure free movement through international waters. It was the fifth transit of this kind within six months, but a first for a Coast Guard cutter.

Coast Guard Cutter makes Record Cocaine Haul



USCGC MUNRO crew members inspect a self-propelled semi-submersible on June 19, 2019, in international waters of the Eastern Pacific Ocean. (Coast Guard photo)

The USCGC MUNRO returned to port after its maiden drug interdiction mission with a record 39,000 pounds of cocaine seized from smugglers in the Pacific Ocean. The cocaine and 933 pounds of marijuana were seized during 14 drug interdiction and disruptions off the coasts of Mexico, Central America and South America. The drugs had a combined street value of \$569 million. Perhaps the most dramatic moment was the pursuit and boarding of a self-propelled semi-submersible vessel on June 18, 2019, when a Coast Guard member leaped on board the fleeing craft and commanded it to a halt.

Vice President Michael Pence welcomed the crew back and during a ceremony aboard MUNRO, commended their work disrupting the flow of narcotics into the U.S. “What you seize and put on these decks to be offloaded has prevented lives and communities from tearing apart,” Pence said.

Self-propelled semi-submersible and low profile vessels are watercraft specifically constructed or adapted to be capable of putting much of their bulk under the water surface in order to evade detection. These vessels are responsible for transporting some of the largest bulk cocaine shipments in the Western Hemisphere Transit Zone. Despite being nearly impossible to detect with radar and very difficult to observe visually, the Coast Guard stopped 24 of these trafficking vessels in 2019, resulting in the removal of 53 metric tons of cocaine. This equates to preventing domestic drug dealers from distributing approximately 116.8 million fatal doses on the streets of the United States.

Fast Response Cutters Make their Mark in Living Marine Resources Enforcement



Fast Response Cutters at U.S. Coast Guard Sector Key West. USCGC ISAAC MAYO is second in line. (Coast Guard photo)

In February 2019, the Coast Guard Fast Response Cutter ISAAC MAYO detected and boarded a commercial fishing vessel operating inside the Tortugas Ecological Reserve. During the course of the boarding it was found that the master violated the 75 minute tow time restriction by towing for more than seven hours. With concurrence from the National Oceanic and Atmospheric Administration (NOAA), the ISAAC MAYO boarding team

seized the catch of approximately 8,500 pounds of shrimp and turned custody of it over to NOAA in Key West.

In July 2019, the USCGC ROLLIN FRITCH and USCGC LAWRENCE LAWSON issued eight significant violations to vessels targeting Highly Migratory Species (HMS) and Sea Scallops without federal fisheries permits. The HMS fleet typically operates more than 50 nautical miles offshore and generally do not carry identification systems, which make them challenging to track. The capabilities and versatility of the Fast Response cutters, however, make them ideal platforms for monitoring HMS compliance and ensuring these critical fish stocks are available for generations to come.

Unified Command Removes 450,000 gallons of Oil from Wreck

The SS COIMBRA, a British tanker, was torpedoed and sunk by a German U-Boat in the Battle of the Atlantic on January 15, 1942. It is one of 87 wrecks prioritized for oil pollution risk in a 2010 study by the National Oceanic and Atmospheric Administration (NOAA). These wrecks are routinely monitored, and NOAA observed oil slicks that showed this wreck still actively leaking.



The Coast Guard and NOAA are partners in the Remediation of Underwater Legacy Environmental Threats project, which addresses threats from vessels sunk off U.S. shores that contain significant volumes of oil.

The COIMBRA lies 30 miles south of Shinnecock, NY. Coast Guard Sector Long Island Sound conducted site assessments and established a unified command to support removal operations, which began on May 11, 2019. More than 100 government, industry, and environmental specialists supported the Coast Guard, NOAA, and New York State Department of Environmental Conservation in the successful removal of more than 450,000 gallons of oil from the wreck.

Multinational Effort Saves Indonesian Fishing Vessel Crew.



Coast Guard C-130 aircraft involved in the rescue of the KM ALELUYA crew. (Coast Guard photo)

On August 13, 2019, Joint Rescue Sub-Center (JRSC) Guam received notification from the Japan Coast Guard that a Japanese Fishing Vessel, KINSEI MARU NO.3, had rescued one person on a rowboat 140 nautical miles northwest of Palau. The individual explained his vessel, a wooden Indonesian fishing vessel, was in distress with no life rafts or satellite enabled distress location device, and eight crewmembers still onboard with no electricity, food, or water—for more than 10 days.

After rescuing the one crewmember, the KINSEI MARU NO.3 was unable to locate the distressed vessel and had to discontinue its search due to poor on-scene weather. JRSC Guam passed updated information to Indonesia, continued communications through the Japanese Coast Guard to the KINSEI MARU NO. 3, and meticulously developed a search action plan using state of the art drift simulation software. JRSC Guam diverted Coast Guard rescue units, Air Force 36th Wing assets, and leveraged the Coast Guard managed, volunteer Automated Mutual-Assistance Vessel Rescue (AMVER) network. The following morning, a Coast Guard C-130 fixed wing aircraft, diverted from Pohnpei for a first light search, located the disabled vessel on the first leg of their search. The C-130 lowered a raft, water, and a radio to the vessel, then remained on scene awaiting the arrival of the diverted merchant vessel ISL STAR. The eight survivors were transferred to ISL STAR without incident and safely delivered to Palau. JRSC Guam also successfully vectored the Coast Guard buoy tender KISKA to the scene, and they were able to tow the disabled vessel to Palau.

Fast Response Cutter Migrant Interdiction

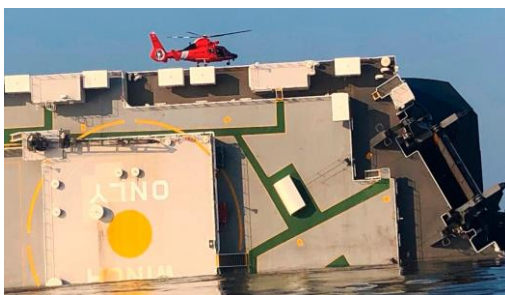
In August 2019, the Coast Guard Fast Response Cutter WILLIAM TRUMP interdicted 146 Haitian migrants off the north coast of Haiti, embarking them from an overloaded 40-foot vessel due to safety of life at sea concerns.

This was the second largest Coast Guard migrant interdiction in 2019, and largest interdiction by a Fast Response Cutter to that date.



USCGC WILLIAM TRUMP law enforcement team interdicts 146 Haitian migrants. (Coast Guard photo)

Coast Guard Rescues Trapped Crew



A Coast Guard helicopter on the M/V GOLDEN RAY in St. Simons Sound, Ga., on September 9, 2019. (Coast Guard photo)

On September 9, 2019 the Coast Guard rescued the fourth and last crew member trapped inside the capsized cargo ship GOLDEN RAY off the coast of Georgia. Three other crew members had been rescued earlier, more than a day after the vessel overturned while leaving a port on the Georgia coast. The rescue followed nearly 36 hours of work after the GOLDEN RAY, a 656-foot cargo vessel that carries automobiles, rolled onto its side as it was leaving Brunswick, bound for Baltimore.

The vessel was grounded after a fire was reported, and immediately after the accident, the Coast Guard responded and lifted 20 crew members into helicopters before determining that smoke and flames and unstable cargo made it too risky to venture further inside the vessel. Officials were also

concerned about the stability of the ship, which was carrying 4,000 vehicles, some of which had broken loose. At the time four members were still unaccounted for.

After hearing taps from inside the hull from the missing crew members, rescuers landed on the side of the GOLDEN RAY and rappelled down the hull. They found three men in a room close to the propeller shaft, near the bottom of the stern. Holes were drilled through the hull which eventually allowed the trapped men to climb out.

Coast Guard Advances Multi-National Fisheries Enforcement in the North Pacific

Coast Guard Cutter MELLON conducted 45 boardings and identified 68 possible violations during OP NORTH PACIFIC GUARD 2019. This long-standing, multi-national patrol in the North and Western Pacific combines the law enforcement activities of U.S., Canada, China, Japan, Russia, and South Korea participants.

Since 1993, the Coast Guard has embarked Chinese ship-riders in a joint effort to detect and deter illegal High Seas Driftnet fishing. This year, for the first time in 25 years, the Coast Guard conducted the annual operation without a Chinese ship-rider.

This year was also the first where the Coast Guard was permitted to board vessels on the high seas in the North Pacific Fisheries Commission convention area. Coupled with existing authority under the Western Central and Pacific Fisheries Commission, the MELLON could board nearly any fishing vessel operating on the North and Western Central Pacific Ocean to ensure compliance with conservation measures. This operation and other similar endeavors are critical to the success of Coast Guard multi-national fisheries enforcement efforts on the high seas.



USCGC MELLON small boat standing by during a boarding of Panamanian flagged trans-shipment vessel YUNG DA FA 102 on July 9, 2019. The boarding team identified one potential conservation management measure violation for engaging in trans-shipment without registering with the North Pacific Fishery Commission. (Coast Guard photo)

MARITIME SECURITY OPERATIONS PROGRAM

The Maritime Security Operations Program encompasses activities required by executive and policy mandates to detect, deter, prevent, disrupt, and recover from terrorist attacks and other criminal acts in the maritime domain. It includes the execution of antiterrorism, counterterrorism, and security response operations. The program conducts and oversees the operational elements of the Coast Guard Ports, Waterways, and Coastal Security (PWCS) mission, which is complemented by the Service's Maritime Domain Awareness and PWCS—*Prevention Activities*.

PORTS, WATERWAYS, AND COASTAL SECURITY—*RESPONSE ACTIVITIES*

The PWCS-*Response Activities* (PWCS-R) mission of the Maritime Security Operations Program is to prevent and disrupt terrorist attacks, sabotage, espionage, or subversive acts in the maritime domain and U.S. Marine Transportation System (MTS). Coast Guard Maritime Security Operations deny the use and exploitation of the MTS by terrorists as a means for attacks on U.S. territory, population centers, vessels, and critical maritime infrastructure and key resources. Coast Guard PWCS-R efforts complement the establishment and oversight of maritime security operations regimes and employment of maritime domain awareness capabilities; execution of antiterrorism, counterterrorism, response and recovery operations; and related preparedness activities.



On August 21, 2019, U.S. Coast Guard Maritime Safety Response Team West personnel fast-rope onto the deck of an Aerial Target Launch Ship while conducting training operations off the coast of San Diego, CA. (U.S. Navy photo)

FY 2019 Performance Results

Percent Reduction of all Maritime Security Risk Subject to U.S. Coast Guard Influence

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	55.0%	58.0%	44.0%	49.0%	52.0%	52.0%	≥49.0%	Note 1

Percent Reduction of Maritime Security Risk Resulting from U.S. Coast Guard Consequence Management

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	3.0%	4.0%	1.0%	2.0%	2.0%	2.0%	≥2.0%	Note 1

Percent Reduction of Maritime Security Risk Resulting from U.S. Coast Guard Efforts to Prevent a Terrorist Entering the U.S. via Maritime Means

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	42.0%	59.0%	59.0%	59.0%	60.0%	60.0%	≥59.0%	Note 1

Percent Reduction of Maritime Security Risk Resulting from USCG Efforts to Prevent a WMD from Entering the United States via Maritime Means

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	56.0%	39.0%	42.0%	44.0%	46.0%	45.0%	≥44.0%	Note 1

Note: These four measures will be replaced with two new measures in FY 2020.

Explanation of Results

The Coast Guard exceeded or met PWCS-response FY 2019 targets, and continued an upward trend of improvements. Maritime security risk subject to Coast Guard Influence stayed stable after improving from 44% in FY 2016 to 52% in FY 2018. Percentage risk reduction resulting from Coast Guard efforts to prevent a terrorist entering the U.S. also stayed stable. Coast Guard efforts to prevent a weapons of mass destruction (WMD) from Entering the U.S. improved from 42% in FY 2016 to 45% in FY 2019. Percent risk reduction from consequence management met target.

Maturation of the Coast Guard Risk-Based Maritime Security Operations tool and utilization of risk-based Patrols at all 37 Sectors has increased Coast Guard presence, allowed more effective use of operational assets, and improved risk reduction within all ports and localities. Also notable were changes in Coast Guard Intelligence Coordination Center threat level assessments, which resulted in risk reduction achieved that was a greater share of overall risk subject to Coast Guard influence.

The Coast Guard will replace these measures in FY 2020 with two new indicators that more directly and reliably measure performance of the Coast Guard Maritime Security Operations Program. They are Percent Risk Impact of Maritime Security Operations, and Maritime Security Operations Efficiency.

MARITIME LAW ENFORCEMENT PROGRAM

The Maritime Law Enforcement (MLE) Program protects America's maritime borders from encroachment, defends U.S. maritime sovereignty from illicit activity, facilitates legitimate use of the waterways, and suppresses violations of federal law on, under, and over the high seas and waters subject to U.S. jurisdiction. The Coast Guard is the lead federal maritime law enforcement agency and the only agency with both the authority and capability to enforce national and international law on the high seas, Outer Continental Shelf, and inward from the U.S. Exclusive Economic Zone (EEZ) to inland waters. Coast Guard responsibilities include detecting and interdicting contraband and illegal drug traffic; at sea enforcement of U.S. immigration laws and policies; enforcing U.S. fisheries and marine protected resource laws and regulations; ensuring the integrity of the EEZ; monitoring compliance with international living marine resource regimes and international agreements to which the U.S. is party; and through compliance with international agreements, combating illegal, unreported and unregulated fishing that negatively impacts maritime and economic security in coastal and regional areas worldwide.

UNDOCUMENTED MIGRANT INTERDICTION



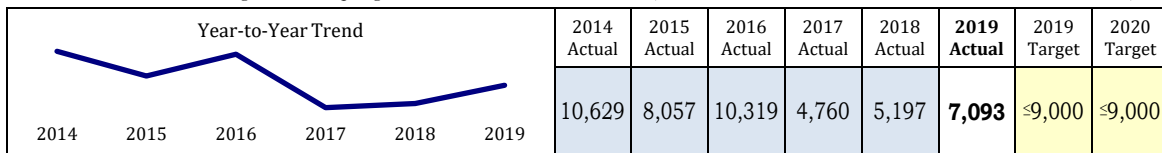
USCGC ROBERT YERED small boat approaches a 30-foot panga vessel with 50 Haitian migrants aboard approximately 46 miles north of Cap Haitien, Haiti, May 20, 2019. (Coast Guard photo)

Coast Guard interdiction of undocumented migrants provides effective law enforcement presence at sea and achieves the three main objectives of safe, legal, and orderly migration. Coast Guard migrant interdiction operations also stem the flow of human smuggling and trafficking through maritime routes and U.S. approaches. Leveraging statutory authority, bilateral agreements and policy, the Coast Guard conducts these interdictions as far from

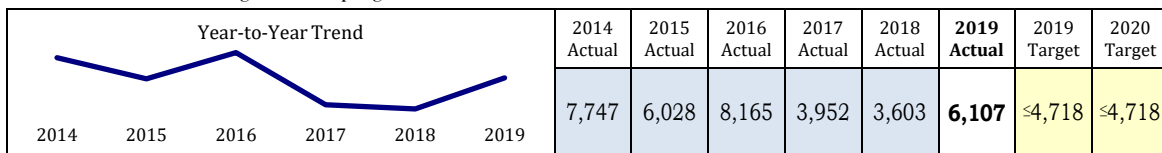
U.S. borders as possible. Doing so facilitates the return of migrants to their home country while further protecting them from an often-perilous sea voyage. Strong partnerships and information sharing with other agencies, such as Citizenship and Immigration Services, Immigration and Customs Enforcement, Customs and Border Protection and Department of State, are critical. While the Coast Guard leads the high seas interdiction mission, partnerships with other agencies are essential for carrying out timely disposition of interdicted migrants via repatriation and removal operations and for conducting further investigation and prosecution in the case of human smugglers or traffickers.

FY 2019 Performance Results

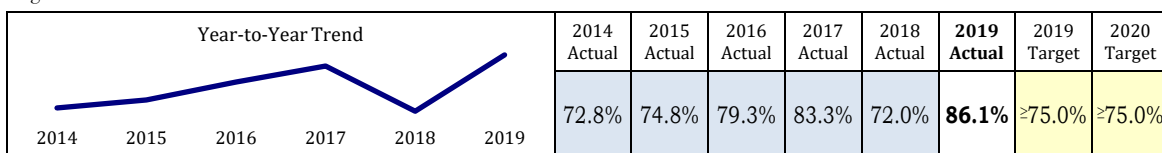
Number of Undocumented Migrants Attempting to Enter U.S. via Maritime Routes (Note: 2018 numbers have been updated to reflect new partner nation reporting)



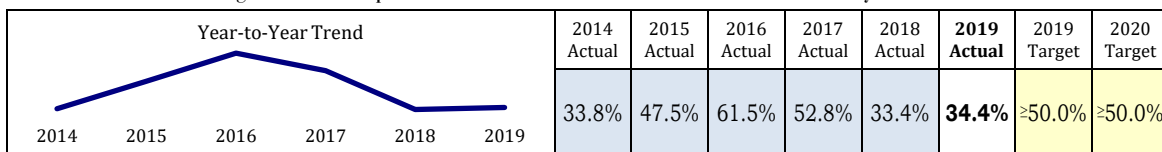
Number of Undocumented Migrants Attempting to Enter U.S. via Maritime Routes Interdicted



Migrant Interdiction Effectiveness in the Maritime Environment



Percent of Undocumented Migrants who Attempt to Enter the United States via Maritime Routes Interdicted by the Coast Guard



Explanation of Results

Performance results are those reports of migrants recorded to date. Reports are often delayed in reaching the Coast Guard; consequently, results are expected to rise as additional reports are received. Thus, all numbers for FY 2018 and other prior fiscal years have been revised to reflect the most current data. Total known flow of undocumented migrants attempting to enter the U.S. by maritime routes increased from 5,197 in FY 2018 to 7,093 in FY 2019. This is largely attributable to the 154% increase in Dominican and 34% increase in Haitian migrant flows. The Coast Guard interdicted 2,441 undocumented migrants, with a total of 6,107 interdicted by the Coast Guard and its partners. This was 86.1% of the total known flow, an increase from 72% in FY 2018 and the highest rate of effectiveness in over a decade. The Coast Guard itself interdicted 34.4% of the undocumented maritime migrants, an increase from FY 2018 though below the target of 50%.

The Coast Guard effectively leveraged bilateral agreements for interdiction and disposition with countries like the Bahamas, Dominican Republic, Cuba, and Haiti. Achievements like this have lead to discussions with other partner nations for them to consider similar bilateral agreements. Likewise, interagency cooperation through Maritime Operational Threat Response standing concurrences has allowed expedited disposition and afforded Coast Guard assets more time for interdiction efforts.

Besides the good news of increased partner nation contributions, these countries have also made significant enhancements in their reporting processes, allowing more accurate and timely capture of undocumented migrant flow and interdictions.

ILLEGAL DRUG INTERDICTION

The Drug Interdiction mission supports national and international strategies to deter and disrupt the market for illegal drugs, dismantle Transnational Organized Crime and Drug Trafficking Organizations, and prevent transnational threats from reaching U.S. borders. The Coast Guard is the lead federal agency for drug interdiction on the high seas. In the territorial seas of the U.S., it shares the lead with U.S. Customs and Border Protection (CBP) and receives assistance from numerous

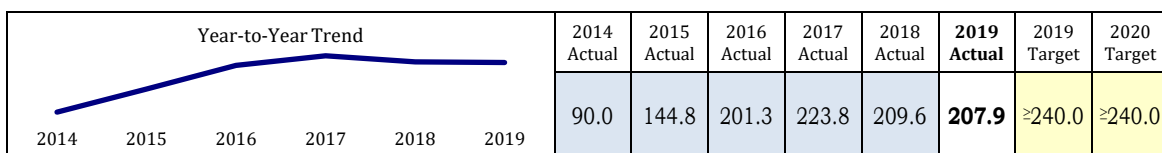


The USCGC JAMES conducts a counter-drug patrol, alongside the USCGC PAUL CLARK in the Caribbean Sea, September 6, 2019. (Coast Guard photo)

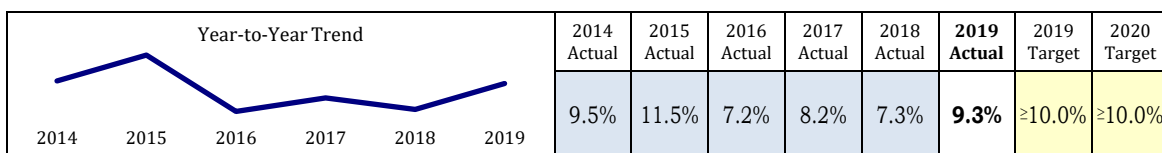
other agencies. The Coast Guard strategy is to maintain a strong interdiction presence that denies smugglers access to maritime routes and deters trafficking activity; to strengthen ties with source and transit zone nations to increase their willingness and ability to reduce the production and trafficking of illicit drugs within their sovereign boundaries and territorial seas; and to support interagency and international efforts to combat drug smuggling through increased cooperation and coordination.

FY 2019 Performance Results

Metric Tons of Cocaine Removed



Removal Rate for Cocaine from Non-Commercial Vessels in Maritime Transit Zone



Explanation of Results

In FY 2019, the Coast Guard removed 207.9 metric tons of cocaine, a decrease of less than 1% from the prior year. The overall removal rate increased from FY 2018, increasing from 7.3% to 9.3%. Over the reporting period, known cocaine flow through the transit zone via non-commercial means decreased by 23% to 2,226 metric tons in FY 2019 from 2,892.4 metric tons in FY 2018. As

in previous years, the total amount of non-commercial maritime cocaine removed by the Coast Guard as lead component is more than all domestic and border enforcements efforts combined. The Coast Guard sets performance targets to be realistic yet ambitious. Each target considers maritime flow of cocaine in the Western Hemisphere Transit Zone against resource availability to combat total known flow. While the Coast Guard did not meet its performance target of removing 10% of non-commercial maritime cocaine flow, the Coast Guard did meet its highest removal rate of non-commercial maritime cocaine since 2015. Further, the Coast Guard removed the second highest rate of tonnage of cocaine per interdiction in FY 2019 than anytime following FY 2008.

Key factors to success in the transit zone include interdictions, detections, cueing, and adversary patterns. As noted above, tonnage removed per event has kept pace with FY 2018 which was at a 10-year high. However, the tonnage removed per event was not enough to overcome a similar number of interdictions compared to FY 2018. One reason for the lower number of interdictions is likely due to the increasing expanse of the trafficking area and the transnational criminal organization's efforts to exploit that area. Thus, long-range air and cutter assets are key to successful surface interdiction operations. The Coast Guard continues to believe the future target is achievable assuming that sufficient interdiction assets remain available and current flow trends do not substantially change.

Coast Guard analysis over the past 18 months indicate interdiction assets have the capacity to interdict more when patrolling on station when effectively complemented with intelligence cueing and maritime patrol aircraft. Synthesized operational schedules, combined with continued adjustments to outflank evolving drug trafficking organization activity to maintain tactical cueing; remains a critical part of effective interagency and internationally-coordinated maritime interdiction operations, targeting cartel and other criminal network activity in the Western Hemisphere Transit Zone. Of particular note for the success of recent years is the ability for organic intelligence cueing through the use of Tactical Cryptology Afloat. This enhanced capability has shown immediate impact to the drug interdiction mission as well as other mission opportunities. The Coast Guard will continue to maximize its commitment of ships, use of force-capable assets, and maritime patrol aircraft, while fully leveraging its over 25 bilateral agreements and operational procedures with partner nations in the Western Hemisphere Transit Zone to improve the Service's performance in countering illicit maritime activity.

LIVING MARINE RESOURCES LAW ENFORCEMENT

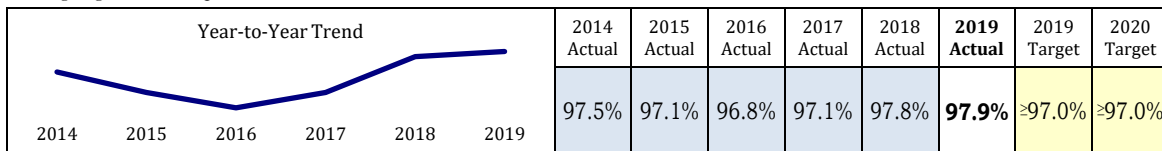


Members from U.S. Coast Guard Station Menemsha inspect a fishing vessel off Martha's Vineyard, MA, on October 25, 2019, to verify compliance with safety and fishing regulations. (Coast Guard photo)

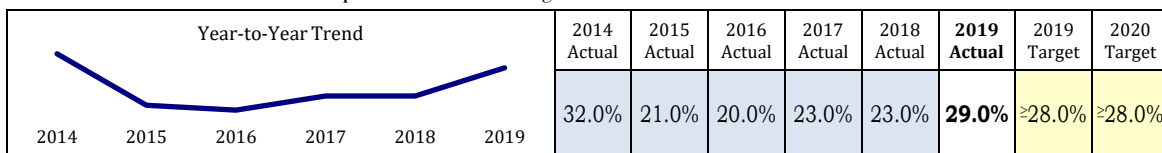
Living Marine Resources Law Enforcement is an obligation under the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, and several other federal laws focused on the protection of marine resources. The core objective of these efforts is to provide effective and professional enforcement to advance national goals for the conservation, management, and recovery of living marine resources, marine protected species, and national marine sanctuaries and monuments. This includes the enforcement of Living Marine Resource (LMR) regulations in addition to numerous other activities that strengthen both domestic and international fisheries management regimes.

FY 2019 Performance Results

Fishing Regulations Compliance Rate



Percent of Federal Fisheries Found in Compliance with Laws and Regulations



Explanation of Results

The Coast Guard uses the percentage of fishing vessels observed at sea complying with domestic regulations as an indirect measure of the Coast Guard's impact on the health of U.S. fisheries and marine protected species. During FY 2019, the Coast Guard conducted an all-time high of 7,052 boardings on U.S. flagged vessels, an increase of 6% from FY 2018, citing 148 significant fishery violations. In FY 2019, the observed at-sea regulation compliance rate was 97.9% for LMR, as compared to 97.8% in FY 2018.

The percent of federal fisheries found in compliance provides a measure of the Coast Guard's level of effective enforcement. It measures the percentage of fisheries in which the Coast Guard met its boarding standard and found an adequate level of compliance (the standard is to board 20% of vessels in high precedence fisheries and 10% in low precedence fisheries). The Coast Guard met its combined boarding and compliance standards in 29% of the 202 fishery components for which we have an enforcement obligation. This was an increase of 6% from last year and represented the

first time the Coast Guard has met its target since 2014. The Coast Guard’s Office of Maritime Law Enforcement is continuing to refine its data analytics methods to increase operational efficiency and improve resource management.

OTHER LAW ENFORCEMENT

Other Law Enforcement (OLE) mission responsibilities include issues related to foreign fishing vessels. This takes two forms. The first is the deterrence, detection, and interdiction of illegal foreign fishing vessel incursions into the EEZ, which represent a threat to U.S. renewable natural resources and a violation of U.S. sovereignty. Protecting the U.S. EEZ is a fundamental Coast Guard maritime security objective. The second aspect is ensuring compliance with international agreements for the management of living marine resources. This is accomplished through enforcement of conservation and management measures created by Regional Fishery Management Organizations. The Coast Guard also helps build organic enforcement capacity within partner nations for resource management and commercial fishery regulations. These partnerships serve as force multipliers, helping to monitor compliance with various international agreements and deter illegal, unreported and unregulated fishing activity worldwide.



Crew members from USCGC MUNRO prepare to conduct a law enforcement boarding in the Central Pacific, December 2, 2018.
(Coast Guard photo)

FY 2019 Performance Results

Number of Detected Incursions of Foreign Fishing Vessels Violating U.S. Waters

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	198	224	176	136	201	185	≤206	≤206

Interdiction Rate of Foreign Fishing Vessels Violating U.S. Waters

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	16.8%	17.4%	25.5%	22.8%	31.3%	40.5%	≥18.0%	≥18.0%

Explanation of Results

In FY 2019, there were 185 detected incursions of foreign fishing vessels in U.S. waters, an 8% decrease from the 201 detected incursions in FY 2018. Coast Guard units interdicted an all-time high of 75 incursions, resulting in an interdiction rate of 40.5%, an increase of 31.3% from FY 2018.

Over 95% of the documented incursions in FY 2019 were Mexican lanchas located in the Gulf of Mexico. Lanchas are active along the Mexico/U.S. EEZ boundary and will typically deploy fishing gear in the U.S. EEZ, then return to Mexican waters until they are ready to retrieve their gear. Their small size, low profile, and homemade floats make these incursions difficult to detect.

Combatting illegal, unregulated, and unreported (IUU) fishing is of vital importance not only to the U.S. economy but also the conservation of global fish stocks. In FY 2019, the Coast Guard conducted 136 of these types of boardings, which resulted in 38 violations or potential violations. These boardings were conducted under the authority of a bilateral ship rider agreement or the authority of a Regional Fisheries Management Organization (RFMO) High Seas Boarding and Inspection (HSBI) scheme. The Coast Guard continues to work with the RFMOs and partner nations to help eradicate IUU fishing around the world.



A boarding team from the USCGC MELLON approaches a fishing vessel on the high seas in the Pacific, January 2019, while patrolling in support of counter-Illegal, Unregulated and Unreported fishing and global security missions. Mellon's crew was supporting international fisheries on the high seas and enforcement of the Western Central Pacific Fisheries Commission. (Coast Guard photo)

MARITIME RESPONSE PROGRAM

The Coast Guard is the Nation's maritime first responder. It searches for and rescues persons in distress, alleviates human suffering, and mitigates marine casualties and other disastrous events. The Maritime Response Program also mitigates pollution and damage to the marine environment through incident response operations. The Coast Guard's all-threats and all-hazards preparedness efforts ensure incident response and recovery resources are fully ready and capable of scalable mobilization in coordination with, and in support of, local, state, tribal, federal, and private sector partners. Additionally, the Coast Guard provides these same services in support of U.S. interests during international incidents.

SEARCH AND RESCUE



A missing crew member smiles after being rescued from the M/V GOLDEN RAY on September 9, 2019. (Coast Guard photo)

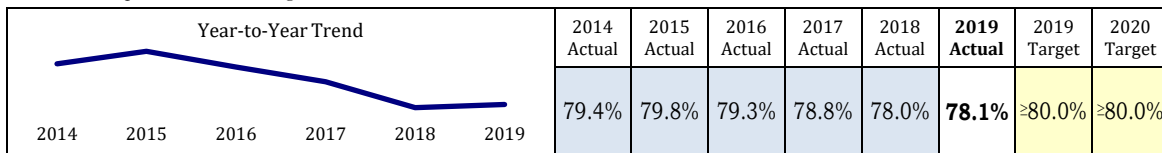
The Coast Guard is the lead agency for maritime Search and Rescue (SAR) in U.S. waters. The Coast Guard also works with other nations through the International Maritime Organization, International Civil Aviation Organization, and other regional forums to save lives and advance the SAR system both nationally and globally. The Coast Guard strives to alleviate human suffering and minimize loss of life and property by rendering aid to those in distress in the maritime environment and elsewhere when Coast Guard intervention can influence the outcome of life-

threatening incidents. The Coast Guard maintains a high state of vigilant readiness and continuous distress monitoring, and employs sophisticated drift modeling and search optimization tools to improve SAR planning and execution. When someone is in peril, the Service coordinates search and rescue efforts utilizing afloat and airborne Coast Guard units, and those of other federal, state, and local responders. The Coast Guard manages the maritime mass rescue response preparedness program, and using its Captain of the Port authorities and responsibilities, coordinates response efforts on waterways after an incident or disaster.

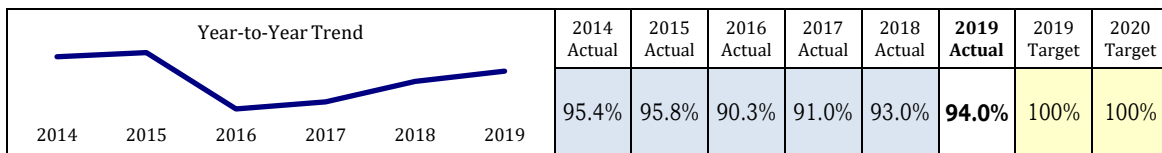
In support of the global and U.S. SAR system, the Coast Guard is one of four federal partners in the Search and Rescue Satellite-Aided Tracking (SARSAT) Program and participates in the governance and operation of the International Cospas-Sarsat Program. The Coast Guard is also partner with the world's merchant fleet to rescue mariners in distress around the globe through the Automated Mutual-assistance Vessel Rescue (AMVER) system, a computer based voluntary global ship reporting system used worldwide by SAR authorities to arrange for assistance to persons in distress at sea.

FY 2019 Performance Results

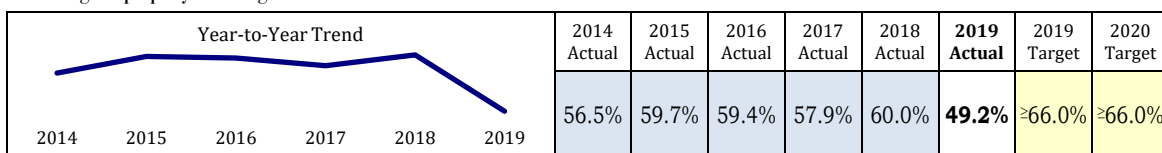
Percent of People in Imminent Danger Saved in the Maritime Environment



Percent of Time Rescue Assets on Scene within Two Hours



Percentage of property "in danger of loss" saved



Explanation of Results

In FY 2019, the Coast Guard responded to 15,257 maritime search and rescue cases, assisted 19,986 people, and saved 4,335 lives in imminent danger. These statistics do not include people saved or assisted by Coast Guard disaster response efforts directly related to Hurricane Dorian in order to keep the data normalized from year to year.

The percentage of people in imminent danger in the maritime environment saved by the Coast Guard was 78.1% in FY 2019, which is slightly higher than the 78.0% achieved last year. The Office of Search and Rescue, through operational analysis, has determined that the number of cases the Coast Guard is called to respond to are becoming increasingly complex, requiring greater levels of SAR planning proficiency. Therefore, the Office of Search and Rescue is developing innovative Service-wide training solutions to improve SAR planning across the Service an effort to retain and sharpen the skills necessary to execute complex maritime SAR.

The time it takes to reach the scene of distress is a key performance factor that may influence the response outcome. The Coast Guard's performance benchmark is to arrive on-scene within two hours of notification 100% of the time. In FY 2019, Coast Guard search and rescue assets met this standard 94% of the time. This year's results were consistent with the 93% average achieved in FY 2018 and the 93.1% average over the past five years. Factors beyond the Coast Guard's control influence its ability to arrive within the benchmark timeframe, including adverse weather conditions, unfavorable geographical proximity, and limited asset availability. The Coast Guard is continually looking at ways to improve this performance, with focus on where search and rescue assets are strategically located.

Saving lives is always the Coast Guard priority; recovery of property is a secondary consideration and undertaken only if it can be done with minimal risk and without degrading search and rescue effectiveness. Prospects for property recovery are always case dependent and vary widely. In many instances, such as when a vessel sinks before a Coast Guard asset arrives on-scene, there is no opportunity for recovery. In FY 2019, the Coast Guard was able to save 49.2% of property in danger of loss. The Coast Guard continues to work closely with partners in the salvage industry to strengthen marine property recovery capabilities to improve these results.

Beginning in FY 2020, the Coast Guard will modify its reporting of the percentage of people in imminent danger in the maritime environment saved by the Coast Guard to include only those cases where lives were at risk at the time of Coast Guard notification.

MARINE ENVIRONMENTAL PROTECTION—*RESPONSE ACTIVITIES*

The Coast Guard is the lead federal agency for directing the removal and mitigation of oil and hazardous substances from spills and releases in the waters and shorelines of the coastal zone. The Coast Guard achieves the marine environmental response and preparedness mission through strategically distributed Marine Environmental Response elements at the national, regional, and local level. The Coast Guard conducts review, approval and monitoring activities to ensure regulated and non-regulated vessels and facilities comply with required pollution response plans and safeguards in the event of an actual or potential discharge. The Coast Guard enforces standards by conducting civil and criminal investigations of environmental and International Maritime Organization standards and regulations with strategically distributed Marine Environmental Response Program elements at the national, regional, and local level. Strategic program management and policy support is provided at Coast Guard Headquarters and National Contingency Plan Special Teams, which include the Coast Guard National Strike Force and District Response Advisory Teams, Federal On-Scene Coordinators (FOSCs), FOSC Representatives, and Pollution Responders at Sectors, Marine Safety Units, and Marine Safety Detachments.



Coast Guard personnel responding to displaced vessels in Florida Keys resulting from Hurricane Irma. (Coast Guard Photo)

FY 2019 Performance Results

Marine Environmental Response Compliance

Year-to-Year Trend						2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2019 Target	2020 Target
2014	2015	2016	2017	2018	2019	75.7%	75.0%	80.4%	84.3%	86.5%	90.5%	≥90.0%	≥90.0%

Explanation of Results

In FY 2019, the Coast Guard responded to 2,602 actual or threatened discharges of oil or releases of hazardous substances into the navigable waters of the U.S., a 3.9% decrease from FY 2018 and a 9.2% decrease from the five-year average of 2,864 pollution events per year. Part of the Coast Guard's pollution response mission is compelling compliance through mariner and industry education and compliance through the enforcement of violations of applicable laws and regulations. The Marine Environmental Response Compliance measure examines the number of pollution events where an enforcement action was taken. In FY 2019, 90.5% of pollution events resulted in some form of enforcement action, when all elements of a violation of the Federal Water Pollution Control Act were established. The steady increase in recent years can be attributed to the revision of internal policies and field guidance to operational commanders that has improved the execution of these missions.

EMERGENCY MANAGEMENT AND DISASTER RESPONSE

Coast Guard Emergency Management and Disaster Response provides strategic level policies to harmonize emergency management programs, functions, and activities to prevent, protect, mitigate, respond, and recover from all hazards events. It establishes processes and procedures to ensure effective employment of all Coast Guard resources in coordination with partner responders during significant incidents. Through active outreach to mission program managers, Coast Guard Emergency Management and Disaster Response assesses, maintains, and improves the knowledge, skills, and abilities necessary to ensure consistency within the Service, agency interoperability, and support to the National Preparedness and Planning Systems as established by Presidential Policy Directive-8. Program efforts ensure response readiness for all threats and all hazards, and include exercises and real-world events that cut across all Coast Guard missions and support programs.

Discussion of Results

In advance of Hurricanes Michael and Dorian, the Coast Guard deployed qualified Incident Command System personnel as well as Liaison Officers to coordinate and mobilize resources. Additionally, the Coast Guard leveraged coordination in the form of mission assignments to support state, local, tribal and territorial governments as well as intergovernmental agreements to provide humanitarian assistance to the Bahamas.

The Coast Guard and FEMA signed a policy memo to streamline the administration of pollution response actions under a Stafford Act declaration. The Penn-Tulis memo clarifies the Coast Guard's role under Emergency Support Function (ESF) 10 (Oil and Hazardous Materials Response). Rather than going through the Environmental Protection Agency, FEMA will now issue mission assignments directly to the Coast Guard for ESF-10 actions. Furthermore, the Coast Guard collaborated with the salvage industry to improve coordination following an event that results in displaced and abandoned vessels adjudicated under ESF-10.

The Coast Guard and other federal agencies that comprise the National Response Team participate in a recurring exercise to prepare for response to a Spill of National Significance (SONS). The Deepwater Horizon incident was the first spill that was declared a SONS, as provided for in the National Contingency Plan (40 CFR 300). In applying the lessons learned from that response, the SONS agenda has evolved from full scale field exercises to national level decision-maker interactions. To coordinate the whole of government response and better prepare agency leaders for their role in a SONS, the Coast Guard produced and published the Spill of National Significance Executive Reference Guide and the Spill of National Significance Public Affairs Reference to provide senior leaders with a quick guide to various legal requirements, planning frameworks, and public affairs tips.



A ESF-10 team of Coast Guard and Florida Fish and Wildlife Conservation Commission personnel assess a vessel for damage and possible pollution in Massalima Bayou, October 31, 2018. (Coast Guard photo)

DEFENSE OPERATIONS

Coast Guard forces utilize provided authorities, capabilities, capacity and partnerships to carry out homeland security and homeland defense operations, either under Coast Guard control or under the control of a Department of Defense (DoD) Geographic Combatant Commander (GCC). As an armed service, the Coast Guard provides uniquely trained, equipped and mission-matched forces in support of GCC initiatives, as outlined in the 2008 DoD-DHS Memorandum of Agreement. Coast Guard Defense

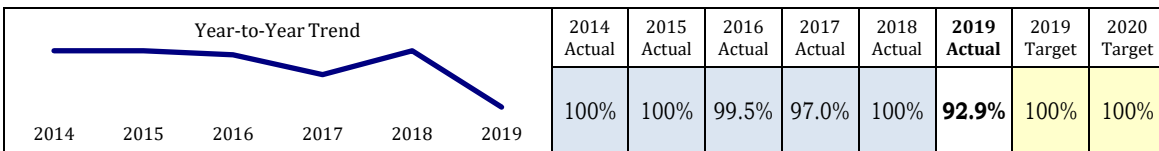


USCGC STRATTON and USS MCCAMPBELL maneuver into formation during combined exercise Talisman Sabre 2019. (Navy photo)

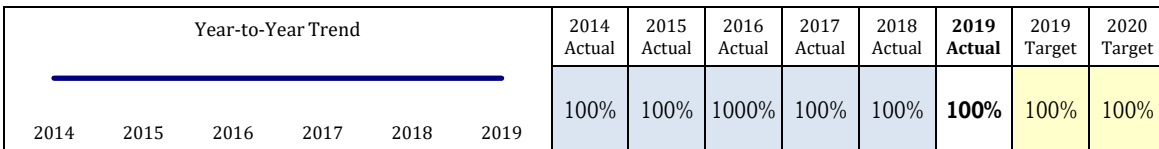
Operations missions include: Maritime Interception/Interdiction Operations (MIO); Military Environmental Response; Port Operations, Security and Defense (including maintaining a Title 10 Reserve force and providing Aids to Navigation support for battle-space preparation); Theater Security Cooperation (TSC); Coastal Sea Control (including providing DoD with the only assured access in ice-covered and ice-diminished waters); Rotary Wing Air Intercept (RWAI); Combating Terrorism; and Maritime Operational Threat Response (MOTR) support.

FY 2019 Performance Results

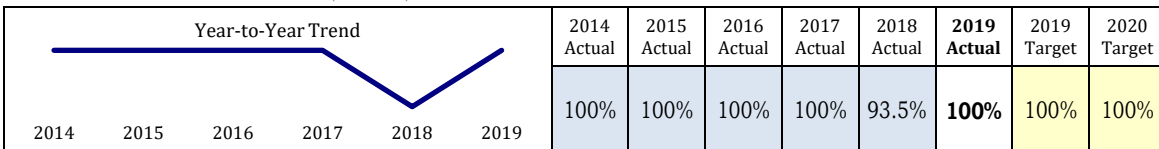
Defense Readiness of Major Cutters for DoD Contingency Planning



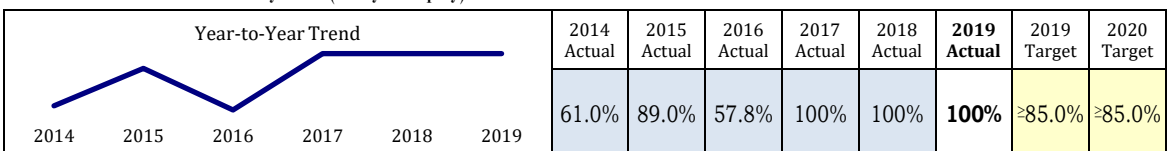
Defense Readiness of Patrol Boats for DoD Contingency Planning



Defense Readiness of Port Security Units (Deployed)



Defense Readiness of Port Security Units (Ready to Deploy)



Explanation of Results

The Coast Guard returned to 100% Defense readiness for Port Security Units in FY 2019. As a result, the Coast Guard maintained continuous deployment of Port Security Units in support to DoD mission requirements at U.S. Naval Station Guantanamo Bay.

The drop in Defense Readiness of major cutters was primarily due to cutters losing 345 cutter days while undergoing scheduled major dockside maintenance/repairs or shipyard modifications, with new equipment being added. The Cutter readiness measure looks at a worse case situation where the Coast Guard is called upon to respond to a global event per the DoD apportionment table. If this had happened in FY 2019, we might have been delayed in meeting our commitments 7.9% of the time.

In FY 2019 the Coast Guard actually met all actual DoD requirements, including unprecedented deployments in the Pacific. For example, on August 7, 2019, the USCGC STRATTON wrapped up its participation in the 25th annual Cooperation Afloat Readiness and Training (CARAT) Indonesia. The CARAT exercise series is designed to address shared maritime security concerns and strengthen partnerships. Indonesia has been a participant since the series began in 1995. It included integrated visit, board, search and seizure (VBSS) drills involving VBSS teams and ships from the U.S. Navy, U.S. Coast Guard and Indonesian Navy.

Additionally, the Coast Guard furthered its partner building efforts using cutters as the preferred platforms to work with island nations. For instance, also in August 2019, the Coast Guard deployed the Juniper class buoy tender USCGC WALNUT and the Fast Response Cutter USCGC JOSEPH GERCZAK to Samoa and American Samoa. Sailing 2,400 miles from Hawaii, the cutters demonstrated the Coast Guard's expeditionary capabilities by executing Operation Aiga which was multilateral in the approach. In addition to conducting fisheries law enforcement, the WALNUT conducted maritime exercises with the Royal New Zealand Navy ship HMNZS OTAGO and Royal Australian Navy ship HMAS CHOULES during the deployment, and the GERCZAK crew also worked with OTAGO in partner building efforts.

COAST GUARD INTELLIGENCE



Today's evolving and complex operating environment presents unprecedented challenges. In this resource-constrained environment, intelligence is crucial to ensure the most effective employment of assets to accomplish Coast Guard, DHS, and national security missions. Effectively integrating intelligence means leveraging all Coast Guard Intelligence capabilities to support planning, mission execution, cyber security, international engagement, force protection, and other activities.

Coast Guard Intelligence produces and disseminates timely, actionable, and relevant intelligence that provides mission support to Coast Guard tactical and operational commanders; Coast Guard senior leaders in their strategic management and policy-making roles; DHS for homeland security missions; and the DoD, and other national intelligence and federal law enforcement agencies in support of national security objectives. In these roles, Coast Guard Intelligence provides decision advantage, knowledge about adversaries, threats, and the surrounding environment. The Coast Guard collects and reports information of intelligence value for Coast Guard, DHS, and national objectives using its federal law enforcement and regulatory authorities. In addition, the Coast Guard is a member of the Intelligence Community (IC), a group of departments and agencies that conducts intelligence activities necessary to protect National Security as laid out in Executive Order 12333.

HIGHLIGHTS

- Shore-based intelligence contributed to interdiction of over 157 metric tons of cocaine valued at \$6 billion and the detention or arrest of 447 suspected narcotics traffickers.
- Helped secure U.S. maritime borders by identifying and warning of the pending arrival to the U.S. of 5,430 travelers of concern, including 38 known or suspected terrorists.
- Screened, vetted and cleared 114,441 commercial vessels, 12,103,796 crew members, and more than 27 million legal travelers.
- 100% screening of 136,952 vessel Notice of Arrivals; identified 122 High Interest Vessels and 10,224 Vessels of Interest.

SUCCESS STORIES

Intelligence Cues UN Security Council Resolution Sanctions Enforcement

Coast Guard Intelligence created an Advanced Targeting Concepts cell, which has developed sophisticated counter-network exploitation techniques that brings Coast Guard Intelligence to the forefront of United Nations Security Council Resolution sanctions enforcement.



Screen shot of the location of vessels worldwide. (Coast Guard image)

The Advanced Targeting Concepts cell created cutting-edge computer models that identified 23 vessel networks and 50 illicit ship-to-ship transfers by 15 foreign-flagged vessels in direct violation of United Nations Security Council Resolutions. These targeting models and counter-network techniques changed the way the Intelligence Community targets adversaries. They now are in use throughout the U.S. Intelligence Community, and led to Department of Treasury prosecution of six vessels.

Intelligence Support for Hurricane Dorian Response

Hurricane Dorian, the first major storm of the 2019 Hurricane season, stalled over the Bahamas and devastated the island nation with over 140 knot winds for nearly 50 hours. In the aftermath of the storm, Coast Guard Intelligence assisted with response efforts for 13 days, coordinating with FEMA, DHS, the National Geospatial Intelligence Agency, Customs and Border Protection (CBP), and Commander, Coast Guard Atlantic Area.



Coast Guard MH-60 Jayhawk helicopter crew lands to offer assistance to people affected by Hurricane Dorian in the Bahamas, September 6, 2019. (Coast Guard photo)

Coast Guard Intelligence posted over 144 unclassified, publicly releasable imagery products to a public-facing website, which supported both U.S. and Bahamian government response efforts. They provided timely intelligence products to field level operators and senior leadership at all echelons, which allowed effective utilization of collection resources, including Coast Guard airborne collection and commercial satellite imagery.

Discussion of Results

Coast Guard Intelligence produced and disseminated a Field Intelligence Officer Cyber Resource guide to assist field intelligence officers with engaging maritime industry partners regarding cyber

security concerns at the port level and for responding to cyber incidents in the Marine Transportation System (MTS). These included Area Maritime Security Committees and Cybersecurity subcommittees.

Coast Guard Intelligence produced a strategic assessment of cyber threats posed to the maritime domain. Just as intelligence drives operations, intelligence likewise enables operations to defend Coast Guard cyberspace and protect the nation's MTS from cyber threats. Coast Guard Intelligence fostered productive relationships with the maritime industry; continued to partner with a community of federal, state, tribal, and local partners to help ensure all elements of the MTS stay efficient, effective, and responsive; and supported universal best practices to strengthen maritime cybersecurity preparedness, response, and recovery.

Coast Guard Intelligence leveraged Coast Guard authorities to support National Defense Strategy objectives. This included synchronizing engagement, operations, and capacity building efforts to strengthen maritime governance around the world; leveraging DoD to field interoperable equipment and reduce redundancies in the acquisition of new capabilities; and targeting interoperability with the U.S. Navy and other maritime services.

In addition to the aforementioned support of enforcement of United Nations Security Council Resolutions, Coast Guard Tactical Cryptology Afloat personnel provided Indications and Warning support and, along with Coast Guard Counterintelligence Service personnel, provided force protection support to operational commanders during 12 National Security Cutter deployments, including two separate six-month Western Pacific patrols. Coast Guard Intelligence deployed personnel for over 2,200 days to support operations in the Eastern Pacific, the Oceania Maritime Security Initiative, and Operation North Pacific Guard. They enabled Coast Guard drug seizures; combated Illegal, Unreported, Unregulated Fishing; and supported 17 Pacific Island Nations and Quadrilateral partners.

The Coast Guard Foreign Disclosure Program adjudicated over 3,100 requests to disclose information to U.S. Partner Nations in support of bilateral and multilateral initiatives. These included the 2019 South East Asia Cooperation and Training Exercise, the Japan United States Maritime Domain Awareness Dialogue, and the Japan United States Coast Guard Antiterrorist Subject Matter Expert Exchange.

The Coast Guard Foreign Disclosure Program enabled personnel-exchange agreements between the Coast Guard and the Royal New Zealand Navy, the United Kingdom Ministry of Defense, and the Australia Federal Police, as well as approvals for ship-riders from the governments of New Zealand, Mexico, and Canada to deploy aboard National Security Cutters. The program supported the successful transfer of Coast Guard Excess Defense Articles and services to the governments of Saudi Arabia, Egypt, and Ireland. These efforts strengthened ties with new and long standing maritime partners, enhancing the Coast Guard's international standing as a Premier Maritime Service.

Using analytical techniques to target potential extremists or personnel with potential extremist group affiliations, the Coast Guard Insider Threat Program developed information resulting in two significant investigations, as well as refining the Coast Guard's understanding of potential insider threats. These techniques allow the Coast Guard to detect, track, and measure insider threat indicators using machine learning algorithms to expedite threat detection and assist in determining level of risk.

The Coast Guard Counterintelligence Service fully embedded personnel into the Coast Guard Acquisitions Directorate (CG-9) to provide direct support and engagement on major acquisition programs, including the Offshore Patrol Cutter and the Polar Security Cutter acquisitions. Coast Guard Intelligence also developed the Program Protection Plan for the HC-27J Aircraft Minotaur Program, a critical element for protecting sensitive technology from foreign intelligence entities.



HC-27J medium range surveillance aircraft assigned to U.S. Coast Guard Air Station Sacramento. (Coast Guard photo)

INTERNATIONAL ENGAGEMENT

The U.S. Coast Guard is a unique instrument of national power that promotes rules-based global maritime governance in support of U.S. national security, homeland security, and foreign policy. The Coast Guard pursues meaningful international engagements to advance national strategic objectives and support operations, and employs an array of tools and methods to accomplish this, including a robust foreign visits program; key leader engagements with senior maritime and government officials from around the world; and subject-matter expert exchanges with partner nations. In addition, the Coast Guard conducts maritime assessments for partner nations; provides a diverse set of training and technical services; and assists in strengthening their maritime service capacity and professionalism through resident training programs and exportable Mobile Training Teams. Through The Excess Defense Article and Foreign Military Sales Program, the Coast Guard transfers and sells assets; and provides partner-nations with necessary training and assistance in the sustainment of these assets while supporting maritime missions.

HIGHLIGHTS

- Hosted 278 international students from 64 countries, including from the Saudi Maritime Infrastructure Protection Force and the Ukraine Maritime Border Guard.
- Coordinated 52 Mobile Training Team missions to 31 countries.
- Processed over 4,200 passports and 1,800 for Coast Guard personnel traveling overseas.
- Supported 22 overseas personnel in the United Kingdom, Germany, Saudi Arabia, Mexico, Honduras, El Salvador, Costa Rica, Philippines, Vietnam, Fiji, and Liberia.
- Processed 146 Interagency Agreements and funding orders.

SUCCESS STORIES

Coast Guard Assists Saudi Arabia in Professionalizing its Maritime Infrastructure Protection Force



The Special Missions Training Center graduates 15 Saudi Maritime Protection Force personnel enrolled in the first All-Saudi Tactical Coxswain Course (Coast Guard photo)

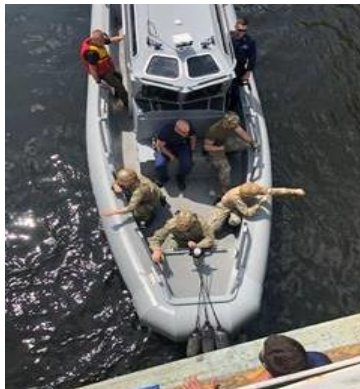
The Coast Guard Special Missions Training Center graduated 15 soldiers from Saudi Arabia's Maritime Infrastructure Protection Force on September 27, 2019. This was the first All-Saudi Tactical Coxswain Course to be completed in the U.S.

The course was taught in Arabic using translators, which alleviated the need for the students to receive passing English language scores. The training enabled the students to become highly capable boat drivers in tactical operations. All 15 students will serve as instructors who will train Saudi forces responsible for protecting critical maritime infrastructure in the Arabian Gulf.

Coast Guard Provides Support to Ukraine Maritime Border Guard

The Coast Guard strengthened its relationship with the Ukraine Maritime Border Guard and provided considerable support for Ukraine's efforts to preserve its maritime sovereignty.

Coast Guard support to Ukraine was initiated at the request of the Department of State Export Control and Related Border Security Program, and the Service conducted a formal assessment of the Ukraine Maritime Border Guard in 2017, identifying 10 areas for analysis. This past year, the Coast Guard provided expert advice, specialized training, and subject matter expert exchanges; and conducted a legislative review of Ukraine Maritime Border Guard maritime authorities.



Ukraine Maritime Border Guard personnel undergo training (Coast Guard photo)

The Coast Guard also provided assistance in the development of Ukraine Small Rapid Response Units, including hosting two study tours to Coast Guard Sectors and small boat stations to aid understanding of organizational responsibilities and maintenance; and transferred two 110' patrol boats to the Ukraine Navy via the Excess Defense Article process.

Coast Guard Leverages Bilateral Partnerships in the Western Hemisphere Transit Zone

Leveraging the U.S.—Costa Rica Counter Drug Bilateral Agreement aided Coast Guard drug interdiction efforts. Operation CRESTED EAGLE, a joint ship-rider operation with Costa Rica, resulted in the seizure of over 15,000 pounds of cocaine and apprehension of nearly 30 suspects.

The Operation spanned multiple joint activities between December 2018 and August 2019. Costa Rica Maritime Interdiction Units were supported and enhanced by U.S.

Coast Guard Deployable Specialized Forces. Collaboration proved particularly beneficial with deployment of the newly acquired Libertadors, a former U.S. Coast Guard 110-foot patrol boats transferred to the Costa Rican Coast Guard.



Former U.S. Coast Guard Island Class cutter transferred to the Costa Rican Coast Guard. (Costa Rican Coast Guard photo)

The operational knowledge and skills shared U.S. Coast Guard law enforcement personnel help build partner nation capabilities, which provides a powerful force multiplier in the Western Hemisphere Transit Zone.

Discussion of Results

The Coast Guard had a banner year in international relations, cementing its position as an integral part of the whole of government approach to international relations. It supported over 40 Key Leader Engagements, including high level engagements between the Commandant and his counterpart from the Indonesia Maritime Security Agency, and the Vice Commandant and the Deputy Chief of the Royal Canadian Navy.

Coast Guard Attachés represented the Coast Guard and the Department of Defense in 16 embassies, protecting and promoting U.S. interests abroad. With specialized training in foreign country operations, diplomatic duties, and language skills, they observed and reported on developments in their countries, such as heightened political and civil unrest in Haiti and Ecuador. For example, attachés supported the high-profile USNS COMFORT deployment in the Caribbean and Central America, providing medical assistance and training to key regional partners. In Brazil, the attaché facilitated information sharing to identify the responsible party for a major oil spill along the coast.



The hospital ship USNS COMFORT anchored off the coast of Callao, Peru on July 8, 2019. (U.S. Navy photo)

COAST GUARD CYBER COMMAND



The Coast Guard Cyber Command (CGCYBER) identifies, protects against, and counters electromagnetic threats to the maritime interests of the U.S.; provides cyber capabilities that foster excellence in the execution of Coast Guard operations; supports DHS cyber missions, defends Coast Guard systems, and serves as the Service Component Command to the U.S. Cyber Command.

HIGHLIGHTS

- Resolved over 140,000 tickets for Information Technology issues.
- Detected emerging cyber threats through more than 1,500 hours of analysis made up of 7% malware, 89% false positives, and 5% phishing/spam.
- Completed over 1,550 hours of operational defense for 26 cases including 27% malware, 19% root causes, 15% misconfigurations, 11% false positives, 11% end user compliance issues, 8% assessments, and 8% phishing/spam.
- Scanned 62,000 IP addresses weekly achieving 95% authentication.

SUCCESS STORIES

1790 Cyber Protection Team deploys

The 1790 Cyber Protection Team deployed to the Western Pacific with the crew of USCGC STRATTON to provide monitoring of internal network traffic and detect any vulnerabilities that might compromise key cyber terrain. STRATTON crew and the CGCYBER Team worked hand-in-hand to ensure cybersecurity, and no malicious activity was detected throughout the deployment.



USCGC STRATTON. (Coast Guard photo)

Monitoring focused on all unclassified network traffic; including onboard engine controls, workstations, and information technology servers. This was enabled by installing, configuring and tuning a Network Intrusion Detection System that monitored internal network traffic for abnormal or malicious activity.

CGCYBER Supports Critical Alaska Communications



Rescue 21 tower in Alaska. (Coast Guard photo)

In June 2019, CGCYBER's Centralized Service Desk stood up a 24/7 incident support desk for Rescue 21-Alaska, serving as a single point of contact to report and initiate response efforts to casualties affecting radio communications throughout District 17. By using CGFixIT to manage and track incidents, senior leaders are now provided with "real time" total asset visibility and comprehensive metrics that deliver operational availability calculations and historical records for trend analysis. Further efforts are currently underway to incorporate the management of "Work Orders" in this support model to provide a means of accurately tracking Preventative Maintenance on R21-AK system components. This effort directly facilitates better communications in the vast Alaska region, critical to the saving of lives.

Discussion of Results

Starting August 2019, CGCYBER began operationalizing cybersecurity in the Marine Transportation System (MTS) by conducting industry outreach visits to Maritime Transportation Security Act regulated facilities in conjunction with their regularly scheduled annual exam with Coast Guard facility inspectors. During these visits, Marine Safety Technicians from CGCYBER educated both facility and Coast Guard personnel on how cybersecurity is integrated into both safety and security through computer networks and industrial control systems. They also discussed free tools and services available from the Department of Homeland Security Cybersecurity and Infrastructure Security Agency that can help assess and strengthen the facilities cybersecurity posture. This is the first time the Coast Guard has engaged with MTS stakeholders at the deck plate level on the topic of cybersecurity. The lessons learned from these engagements will help shape both training and future operational efforts on both Prevention and Response of cybersecurity incidents in the MTS.

The 1790 Cyber Protection Team achieved the initial operating capability requirements set by U.S. Cyber Command. This first significant milestone was achieved by having 19 CGCYBER members complete the DoD cyber training curriculum and standards. Additionally, the team successfully purchased Deployable Mission Support System kits that were designed and developed by the U.S. Army. These kits will enable CGCYBER to execute Hunt and Incident response operations in the MTS in support of Sector Commanders.

Appendix – PERFORMANCE MEASURE DEFINITIONS

MARITIME PREVENTION

Annual MTSA facility compliance rate with transportation worker ID credential regulations	A-2
Annual Number of Breaches at High Risk Maritime Facilities	A-3
3-yr average number of serious marine incidents	A-4
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3-yr average number of commercial mariner deaths and critical, serious & severe injuries	A-6
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3-yr average number of recreational boating deaths	A-10
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Percent reduction of all maritime security risk subject to USCG influence (to be retired after 2019)	A-19
Percent reduction of maritime security risk—USCG consequence management (to be retired after 2019)	A-20
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MARITIME LAW ENFORCEMENT

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Percent of people in imminent danger saved in the maritime environment	A-35
Percent of time rescue assets are on-scene within 2 hours	A-36
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DEFENSE OPERATIONS

Defense readiness of major cutters for DoD contingency planning	A-39
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Defense readiness of port security units (deployed)	A-41
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Annual MTSA Facility Compliance Rate with Transportation Worker ID Credential Regulations

MEASURE DESCRIPTION	The percentage of the more than 3,400 maritime facilities subject to Maritime Transportation Security Act regulation, which are determined to be in compliance with Transportation Worker Identification Card regulations.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Ports, Waterways and Coastal Security—Prevention Activities
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.1 - Safeguard Key Nodes, Conveyances and Pathways
SCOPE	This measure reports results of Coast Guard inspections of maritime facilities subject to the Maritime Transportation Security Act (MTSA), where a notice of violation or civil penalty is recorded for Transportation Worker Identification Card (TWIC) infractions—workers subject to the regulation who do not have and display a valid TWIC card. More than 3,400 MTSA regulated facilities constitute a subset of all waterfront facilities. They are facilities that handle certain dangerous cargoes, liquid natural gas or transfer oil or hazardous materials in bulk; or receive foreign cargo vessels greater than 100 gross tons, U.S. cargo vessels greater than 100 gross tons carrying certain dangerous cargoes, or vessels carrying more than 150 passengers.
DATA SOURCE	The Security and Accountability for Every (SAFE) Port Act requires the Coast Guard to conduct at least two security inspections each year of maritime facilities subject to the Maritime Transportation Security Act (MTSA); one announced and one unannounced. Inspections include random sampling of workers subject to the TWIC regulation. These inspections, and any notices of violation or civil penalties issued, are documented in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the number of MTSA facilities that have not received notices of violation or civil penalties for Transportation Worker Identification Card (TWIC) infractions in the reporting period, expressed as a percentage of the total number of MTSA regulated facilities.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by the Office of Investigations and Casualty Analysis (CG-INV) and Coast Guard Program managers. To ensure random sampling of workers subject to the TWIC regulation, statistical guidelines based on the size of the facility have been developed to aid inspectors.
LIMITATIONS	The measure is a proxy indicator of maritime security risk; it provides insight into the level of adherence to the TWIC requirement. It does not encompass facilities that have a waiver or exemption, including shipyards, public access facilities, military facilities and facilities that do not store minimum established amounts of dangerous cargoes. It is based on random sampling and the observed TWIC compliance or non-compliance at that point in time; some non-compliance may be unobserved or may emerge and be resolved in between scheduled inspections or unscheduled spot checks. Some infractions can be corrected on the spot, and issuance of a notice of violation or civil penalty will depend on inspector or Captain of the Port judgment of violation severity.

Annual Number of Breaches at High Risk Maritime Facilities

MEASURE DESCRIPTION	The annual number of breaches of security at any of the more than 3,400 maritime facilities subject to Maritime Transportation Security Act regulation, which are investigated and confirmed incidents where no Transportation Security Incident has occurred, but established security measures have been circumvented, eluded or violated.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Ports, Waterways and Coastal Security—Prevention Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to Critical Infrastructure, Key Leadership and Events Sub-Goal 1.3.1 - Enhance Security for Critical Infrastructure from Terrorism & Criminal Activity
SCOPE	This measure reports breach of security incidents at facilities subject to the Maritime Transportation Security Act (MTSA) where no Transportation Security Incident has occurred, but established security measures have been circumvented, eluded or violated. MTSA facilities that discover such security incidents must report them to the National Response Center. More than 3,400 MTSA regulated facilities constitute subset of all waterfront facilities. They are facilities that handle certain dangerous cargoes, liquid natural gas or transfer oil or hazardous materials in bulk; or receive foreign cargo vessels greater than 100 gross tons, U.S. cargo vessels greater than 100 gross tons carrying certain dangerous cargoes, or vessels carrying more than 150 passengers.
DATA SOURCE	Qualified Coast Guard Inspectors investigate incidents reported to the National Response Center by MTSA regulated facilities where security measures have been circumvented, eluded or violated. Verified incidents are documented in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database as a Breach of Security Investigation.
METHODOLOGY	Results for a given year are the total number of confirmed breaches of security that occurred over the past 12-months at any of the more than 3,400 MTSA regulated facilities.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by the Office of Investigations and Casualty Analysis (CG-INV) and Coast Guard Program managers.
LIMITATIONS	The measure is a proxy indicator of maritime security risk, which Coast Guard inspectors and facility owners use to collaboratively assess and strengthen security regimes. Reporting requirements are not applicable to facilities that have a waiver or exemption, including shipyards, public access facilities, military facilities and facilities that do not store minimum established amounts of dangerous cargoes. Some reportable incidents may not be reported and some reports are delayed in reaching the Coast Guard; current results are therefore likely to be understated and revised upwards in the future, with the greatest impact affecting recent quarters.

3-yr Average Number of Serious Marine Incidents

MEASURE DESCRIPTION	The 3-year average number of Serious Marine Incidents, which are defined by 46 CFR 4.03-2 as any marine casualties or accidents that include death, injury requiring professional treatment beyond first aid, reportable property damage greater than \$100,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Safety
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the 3-year average number of serious marine incidents. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any serious marine incidents. These are defined in 46 CFR 4.03-2 as any marine casualty or accident that includes death, injury requiring professional treatment beyond first aid, reportable property damage greater than \$100,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance.
DATA SOURCE	Reports of Serious Marine Incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the annualized average of total serious marine incidents for the most recent three years.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is affected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. Deaths and injuries include crewmembers or employees aboard U.S. commercial vessels, but not those aboard foreign flag vessels; and commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Deaths, disappearances or injuries determined to be the result of natural causes or intentional acts—such as heart attack, altercation, or the like—are excluded. Passenger casualties associated with diving are excluded as well. Serious marine incidents arising from recreational craft, government vessels, fixed platforms, pipelines or other non-Coast Guard regulated facilities are also excluded. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

Annual Number of Commercial Mariner Deaths and Critical, Serious and Severe Injuries

MEASURE DESCRIPTION	The annual number of commercial mariner fatalities and critical, serious or severe injuries.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Safety
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual number of commercial mariner fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are casualties of crewmembers or employees aboard U.S. commercial vessels. Casualties of commercial passengers, crewmembers or employees aboard foreign vessels, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded.
DATA SOURCE	Notices of mariner casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the sum total of all applicable commercial mariner deaths, disappearances and critical, serious and severe injuries for the previous four quarters.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

3-yr Average Number of Commercial Mariner Deaths and Critical, Serious and Severe Injuries

MEASURE DESCRIPTION The 3-year average annual number of commercial mariner fatalities and critical, serious or severe injuries.

USCG PROGRAM Maritime Prevention

USCG MISSION Marine Safety

DHS ALIGNMENT Mission Area 5 - Strengthen National Preparedness and Resilience
Goal 5.2 - Mitigate Hazards and Vulnerabilities
Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance

SCOPE The measure reports the 3-year average annual number of commercial mariner fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are casualties of crewmembers or employees aboard U.S. commercial vessels. Casualties of commercial passengers, crewmembers or employees aboard foreign vessels, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded.

DATA SOURCE Notices of mariner casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

METHODOLOGY Results for a given year are the annualized average number of applicable commercial mariner deaths, disappearances, and critical, serious, and severe injuries for the most recent three years.

VERIFICATION & VALIDATION To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.

LIMITATIONS Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

Annual Number of Commercial Passenger Deaths and Critical, Serious and Severe Injuries

MEASURE DESCRIPTION	The annual number of commercial passenger fatalities and critical, serious or severe injuries.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Safety
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual number of commercial passenger fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Casualties of crewmembers or employees, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded. Passenger casualties associated with diving are excluded as well.
DATA SOURCE	Notices of passenger casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the sum total of all applicable commercial passenger deaths, disappearances and critical, serious and severe injuries for the previous four quarters.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

3-yr Average Number of Commercial Passenger Deaths and Critical, Serious and Severe Injuries

MEASURE DESCRIPTION The 3-year average annual number of commercial passenger fatalities and critical, serious or severe injuries.

USCG PROGRAM Maritime Prevention

USCG MISSION Marine Safety

DHS ALIGNMENT Mission Area 5 - Strengthen National Preparedness and Resilience
Goal 5.2 - Mitigate Hazards and Vulnerabilities
Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance

SCOPE The measure reports the 3-year average annual number of commercial passenger fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Casualties of crewmembers or employees, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded. Passenger casualties associated with diving are excluded as well.

DATA SOURCE Notices of passenger casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

METHODOLOGY Results for a given year are the annualized average number of applicable commercial passenger deaths, disappearances and critical, serious and severe injuries for the most recent three years.

VERIFICATION & VALIDATION To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.

LIMITATIONS Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

Annual Number of Recreational Boating Deaths

MEASURE DESCRIPTION	The annual number of recreational boating fatalities.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Safety
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual number of recreational boating deaths. 33 CFR 173.55 requires operators of vessels used for recreational purposes to file a Boating Accident Report when a person dies, is injured and requires medical treatment beyond first aid or disappears under circumstances that indicate death or injury. Included are deaths caused by or attributed to a vessel, its equipment or appendages. Also included are swimming deaths due to carbon monoxide exposure; electrocution due to improper connection to shore power; a swimmer unable to get back to a drifting vessel not properly anchored, moored or docked; and persons struck by a vessel or associated equipment. Deaths or disappearances determined to be the result of natural causes or intentional acts are excluded as well.
DATA SOURCE	Boating Accident Reports are recorded in the Coast Guard's Boating Accident Report Database (BARD).
METHODOLOGY	Results for a given fiscal year are the sum total of all applicable recreational boating deaths for the previous four quarters. Only deaths recorded in BARD are counted. A one percent correction is added to compensate for under-reporting.
VERIFICATION & VALIDATION	To ensure boating casualties are accurately captured, the Coast Guard Office of Auxiliary and Boating Safety (CG-BSX) crosschecks BARD with incidents reported in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and recreational boating casualties reported in media announcements and articles provided by a news clipping service.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

3-yr Average Number of Recreational Boating Deaths

MEASURE DESCRIPTION	The 3-year average annual number of recreational boating fatalities.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Safety
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the 3-year average annual number of recreational boating deaths. 33 CFR 173.55 requires operators of vessels used for recreational purposes to file a Boating Accident Report when a person dies, is injured and requires medical treatment beyond first aid or disappears under circumstances that indicate death or injury. Included are deaths caused by or attributed to a vessel, its equipment or appendages. Also included are swimming deaths due to carbon monoxide exposure; electrocution due to improper connection to shore power; a swimmer unable to get back to a drifting vessel not properly anchored, moored or docked; and persons struck by a vessel or associated equipment. Deaths or disappearances determined to be the result of natural causes or intentional acts are excluded as well.
DATA SOURCE	Boating Accident Reports are recorded in the Coast Guard's Boating Accident Report Database (BARD).
METHODOLOGY	Results for a given fiscal year are the average number of all applicable recreational boating deaths and injuries for the most recent three years. Only casualties recorded in BARD are counted. A one percent correction is added to compensate for under-reporting.
VERIFICATION & VALIDATION	To ensure boating casualties are accurately captured, the Coast Guard Office of Auxiliary and Boating Safety (CG-BSX) crosschecks BARD with incidents reported in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and recreational boating casualties reported in media announcements and articles provided by a news clipping service.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

Annual Number of Chemical Discharge Incidents

MEASURE DESCRIPTION	The annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Environmental Protection—Prevention Activities
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into U.S. navigable waters. 40 CFR 300 requires vessel or facility operators to report discharges of any hazardous substance that equals or exceeds reportable quantities listed in 40 CFR 302. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
DATA SOURCE	Notices of chemical discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given fiscal year are the sum total of all applicable chemical discharge incidents for the previous four quarters where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

3-yr Average Number of Chemical Discharge Incidents per 100 Million Tons Shipped

MEASURE DESCRIPTION	The 3-year average annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States per 100 million short tons of Chemical and Chemical Products shipped in U.S. waters.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Environmental Protection—Prevention Activities
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the 3-year average annual number of chemical discharge incidents, where a reportable quantity of a hazardous substance is discharged into U.S. navigable waters, per 100 million short tons of Chemical and Chemical Products shipped. 40 CFR 300 requires vessel or facility operators to report discharges of any hazardous substance that equals or exceeds reportable quantities listed in 40 CFR 302. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
DATA SOURCE	Notices of chemical discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database. Data on chemical and chemical products shipped in U.S. waters is obtained from the Army Corps of Engineers, Waterborne Commerce of the United States. Shipping statistics for a given year are not generally available until December of the following year; the measure uses a simple least-squares projection of the most recent three years of data.
METHODOLOGY	Results for a given fiscal year are the average over the most recent three years of the number of chemical discharge incidents per 100 million short tons of Chemical and Chemical Products shipped.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard's Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent. Current year shipping statistics are derived from a simple least-squares projection of recent past data and likely differs from actual levels. The number of chemical discharge incidents is reported as proportionate to chemical and chemical product shipping, but not all chemical discharges are transit related.

Annual Number of Oil Spills >100 Gallons

MEASURE DESCRIPTION	The annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Environmental Protection—Prevention Activities
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual number of oil spills greater than 100 gallons discharged into U.S. navigable waters. 40 CFR 300 requires vessel or facility operators to report any discharge of oil or oil products that cause a sheen, discoloration, sludge, or emulsion. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
DATA SOURCE	Notices of reportable oil discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given fiscal year are the sum total of all applicable oil spills for the previous four quarters where more than 100 gallons is discharged into navigable waters of the United States.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the U.S. Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

3-yr Average Number of Oil Spills per 100 Million Short Tons Shipped

MEASURE DESCRIPTION	The 3-year average annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States per 100 million short tons of Oil and Oil Products shipped in U.S. waters.
USCG PROGRAM	Maritime Prevention
USCG MISSION	Marine Environmental Protection—Prevention Activities
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the 3-year average annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States per 100 million short tons of Oil and Oil Products shipped in U.S. waters. 40 CFR 300 requires vessel or facility operators to report any discharge of oil or oil products that cause a sheen, discoloration, sludge, or emulsion. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
DATA SOURCE	Notices of reportable oil spills received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database. Data on oil and oil products shipped in U.S. waters is obtained from the Army Corps of Engineers, Waterborne Commerce of the United States. Shipping statistics for a given year are not generally available until December of the following year; the measure uses a simple least-squares projection of the most recent three years of data.
METHODOLOGY	Results for a given fiscal year are the average over the most recent three years of the number of oil spills greater than 100 gallons per 100 million short tons of Oil and Oil Products shipped.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent. Current year shipping statistics are derived from a simple least-squares projection of recent past data and likely differs from actual levels. The number of oil spills greater than 100 gallons is reported as proportionate to oil and oil product shipping, but not all oil spills are transit related.

Availability of Maritime Navigation Aids

MEASURE DESCRIPTION	The percentage of time Federal Short-Range Aids to Navigation were available and performing their specified functions, where an aid to navigation is counted as not being available from the initial time a discrepancy is reported until the time the discrepancy is corrected.
USCG PROGRAM	Marine Transportation System Management
USCG MISSION	Aids to Navigation
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
SCOPE	The measure reports the hours Federal Short Range Aids to Navigation were available as a percent of total hours they were expected to be available. Short-range aids to navigation are those intended for use within the visual, audible or radar range of the mariner; which term encompasses lighted and unlighted beacons, ranges, leading lights, buoys, and their associated sound signals. The measure includes all short-range aids to navigation in the Coast Guard inventory on the day a report is run.
DATA SOURCE	The Integrated Aids to Navigation Information System (I-ATONIS) is the official system used by the Coast Guard for information relating to short-range aids to navigation.
METHODOLOGY	Results for a given year are the total hours that all Federal Short Range Aids to Navigation were available, expressed as a percentage of total hours they were expected to be available. Expected availability is the total number of federal aids deployed on the day a report is run times the number of days in the reporting period, multiplied by 24 hours. Availability is determined by subtracting from expected hours, the total time any of these Aids were recorded as not available, which is the time between the initial reporting of a discrepancy until the time the discrepancy is corrected.
VERIFICATION & VALIDATION	To ensure consistency and integrity, data entry in the I-ATONIS system is limited to specially trained personnel in each District. I-ATONIS data is also subject to review by Unit and District personnel, and by Coast Guard and National Ocean Service managers in the process of generating local Notices to Mariners.
LIMITATIONS	This measure provides an overall assessment of availability across the entire system of Federal Short-Range Aids to Navigation; it does not distinguish any lack of availability by significance. An individual Aid to Navigation can be distinguished by its navigational significance, which is influenced by factors such as its position and function in a waterway, the waterway importance, traffic density, climate and the mix and coverage of other aids in the system. A temporary change to a short-range aid to navigation is not considered a discrepancy.

Percent of Time High-Priority Waterways in Great Lakes and Eastern Seaboard Open During Ice Season

MEASURE DESCRIPTION	The percent of time Tier One Waterways, in the Great Lakes and along the eastern seaboard, are open to vessel transits during the icebreaking season. Tier One waterways are those connecting waterways of the Marine Transportation System determined to be the highest-priority due to their geographical location or importance of cargo to public health and safety.
USCG PROGRAM	Marine Transportation System Management
USCG MISSION	Ice Operations
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
SCOPE	The measure reports the percentage of time Tier One waterways in the Great Lakes and along the eastern seaboard are not closed to vessel transits due to ice-related conditions during the icebreaking season. Icebreaking operations in the Great Lakes and waterways along the eastern seaboard are generally conducted during a January to April season. Tier One waterways are those identified and categorized as such due to their geographical location or importance of cargo to public health and safety. A closure is defined as an event or condition preventing vessels from transiting a waterway, including ice-related waterway restrictions or Captain of the Port limitations.
DATA SOURCE	Data is obtained from end-of-season reports submitted to Coast Guard Headquarters by 01 July each year.
METHODOLOGY	Results for a given year are total hours Tier One Waterways are not closed due to ice-related conditions during the icebreaking season, expressed as a percentage of total waterway hours. Total waterway hours are determined by multiplying the number of Tier One Waterways by ice season days times 24 hours. Total hours Tier One Waterways were closed is ice-related closures reported in days times 24, plus ice-related waterway closures reported in hours, plus ice-related waterway restrictions or Captain of the Port limitations in hours.
VERIFICATION & VALIDATION	Icebreaking and waterway closure data provided in end-of-season reports are reviewed for accuracy and consistency by Unit and District staff and by the Office of Waterways and Ocean Policy (CG-WWM) at Coast Guard Headquarters.
LIMITATIONS	The measure is a proxy gauge of navigational mobility on the Great Lakes and along the eastern seaboard during the winter icebreaking season; it records closures due to ice only for Tier One Waterways. Results are sensitive to the severity of winter weather, and do not necessarily reflect Coast Guard performance; an exceptionally severe winter may produce more closures despite impressive Coast Guard icebreaking performance.

Annual Number of Navigational Accidents

MEASURE DESCRIPTION	The annual number of distinct collision, allision and grounding events involving a commercial vessel, which includes marine casualties where two or more vessels collide, a vessel strikes a stationary vessel or object, or a vessel runs onto a shore, reef or bottom of a body of water.
USCG PROGRAM	Marine Transportation System Management
USCG MISSION	Aids to Navigation
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
SCOPE	46 CFR 4.05-10 requires the owner, agent, master, operator, or person in charge to notify the Coast Guard of any occurrence involving a vessel that results in a Collision, Allision or Grounding. Only distinct incidents involving a commercial vessel are counted; incidents that involve only non-commercial or recreational vessels are excluded. A vessel striking one or more other vessels, at least one of which is a commercial vessel, is counted as a distinct Collision event. A commercial vessel striking one or more stationary vessels or a stationary object is counted as a distinct Allision event. A distinct Grounding event might include a tug and a perhaps several barges in tow running onto a shore, reef or bottom of a body of water.
DATA SOURCE	Marine casualties are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the annualized total number of distinct Collision, Allision and Grounding events.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard’s Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. The number of collisions, allisions and groundings is a proxy indicator of adverse impacts to maritime mobility; they can result in waterway closures and disruptions to maritime commerce. They may also result in personnel casualties, pollution incidents and property losses. Minimizing their occurrence is an objective of the Coast Guard Marine Transportation System Management Program, though their cause is often not related to a navigation or waterways management concern.

5-yr Average Number of Navigational Accidents

MEASURE DESCRIPTION	The 5-year average annual number of distinct Collision, Allision and Grounding events involving a commercial vessel, which includes marine casualties where two or more vessels collide, a vessel strikes a stationary vessel or object, or a vessel runs onto a shore, reef or bottom of a body of water.
USCG PROGRAM	Marine Transportation System Management
USCG MISSION	Aids to Navigation
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
SCOPE	46 CFR 4.05-10 requires the owner, agent, master, operator, or person in charge to notify the Coast Guard of any occurrence involving a vessel that results in a Collision, Allision or Grounding. Only distinct incidents involving a commercial vessel are counted; incidents that involve only non-commercial or recreational vessels are excluded. A vessel striking one or more other vessels, at least one of which is a commercial vessel, is counted as a distinct Collision event. A commercial vessel striking one or more stationary vessels or a stationary object is counted as a distinct Allision event. A distinct Grounding event might include a tug and a perhaps several barges in tow running onto a shore, reef or bottom of a body of water.
DATA SOURCE	Marine casualties are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the annualized average number of distinct Collision, Allision and Grounding events for the most recent five years.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Casualty Analysis.
LIMITATIONS	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. The number of Collisions, Allisions and Groundings is a proxy indicator of adverse impacts to maritime mobility; they can result in waterway closures and disruptions to maritime commerce. They may also result in personnel casualties, pollution incidents and property losses. Minimizing their occurrence is an objective of the Coast Guard Marine Transportation System Management Program, though their cause is often not related to a navigation or waterways management concern. A 5-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

Percent Reduction of All Maritime Security Risk Subject to USCG Influence

MEASURE DESCRIPTION	A proxy measure of Coast Guard effectiveness in reducing maritime security risk, where residual risk after Coast Guard intervention is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios, and the expected impact of all relevant Coast Guard maritime security efforts.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
SCOPE	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard maritime security efforts.
DATA SOURCE	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attack scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
METHODOLOGY	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard maritime security efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
VERIFICATION & VALIDATION	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
LIMITATIONS	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses performance of multiple Coast Guard programs; it reflects the risk reduction impacts of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

Percent Reduction of Maritime Security Risk—USCG Consequence Management

MEASURE DESCRIPTION	A proxy measure of Coast Guard effectiveness in reducing maritime security risk through consequence mitigation, where residual risk after Coast Guard mitigation efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios, and the expected impact of all relevant Coast Guard consequence mitigation efforts.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
SCOPE	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard maritime security consequence mitigation.
DATA SOURCE	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attach scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
METHODOLOGY	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security consequence mitigation. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard maritime security consequence mitigation are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
VERIFICATION & VALIDATION	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
LIMITATIONS	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses consequence mitigation performance of multiple Coast Guard programs; it reflects the consequence mitigation impacts of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

Percent Reduction of Maritime Security Risk—USCG Terrorist Entry Prevention

MEASURE DESCRIPTION	A proxy measure of Coast Guard effectiveness in reducing maritime security risk by stopping terrorist entry into the U.S. by maritime means, where residual risk after considering Coast Guard entry prevention efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios and expected risk reduction impact of all relevant Coast Guard entry prevention efforts.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
SCOPE	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard efforts to prevent terrorist entry into the U.S. by maritime means.
DATA SOURCE	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attack scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
METHODOLOGY	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts to prevent terrorist entry into the U.S. by maritime means. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard entry prevention efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
VERIFICATION & VALIDATION	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
LIMITATIONS	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses terrorist entry prevention performance of multiple Coast Guard programs; it reflects the entry prevention impact of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

Percent Reduction of Maritime Security Risk—USCG WMD Entry Prevention

MEASURE DESCRIPTION	A proxy measure of Coast Guard effectiveness in reducing maritime security risk by stopping entry of a Weapon of Mass Destruction (WMD) into the U.S. by maritime means, where residual risk after Coast Guard WMD entry prevention efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios and expected risk reduction impact of all relevant Coast Guard WMD entry prevention efforts.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.2 – Prevent/Protect Against Unauthorized Acquisition or Use of CBRN Materials & Capabilities Sub-Goal 1.2.2 – Identify/Interdict Unlawful Acquisition & Movement of CBRN Precursors & Materials
SCOPE	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard efforts to prevent entry of a WMD into the U.S. by maritime means.
DATA SOURCE	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attack scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) data systems.
METHODOLOGY	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts to prevent WMD entry into the U.S. by maritime means. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard WMD entry prevention efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
VERIFICATION & VALIDATION	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and MISLE information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
LIMITATIONS	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses WMD entry prevention performance of multiple Coast Guard programs; it reflects the WMD entry prevention impact of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

Percent Risk Impact of Maritime Security Operations

MEASURE DESCRIPTION	The estimated annual maritime security risk impact achieved as a percentage of the risk impact assessed as achievable with unconstrained availability of Coast Guard resources performing Maritime Security Operations activities.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security
SCOPE	This measure reports estimated risk impact achieved by maritime security operations across all 37 Captain of the Port-level sectors and units as a percentage of the risk impact assessed as achievable with unconstrained availability of Coast Guard resources performing Maritime Security Operations activities. It includes risk reduction benefits of Coast Guard and Other Government Agency performed security boardings, patrols, fixed security zone enforcements, and vessel escorts.
DATA SOURCE	Annual risk reduction impact values are generated by the Coast Guard's Risk-Based Maritime Security and Response Operations (RBMSRO) tool, which relies on activity data imported from the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and Other Government Agency sources, and associated annual risk-reduction parameters determined and validated using the Coast Guard's Maritime Security Risk Analysis Model (MSRAM).
METHODOLOGY	Results for a given period are the annualized risk impact achieved divided by the risk impact assessed as achievable with unconstrained availability of Coast Guard resources performing Maritime Security Operations activities—expressed as a percentage. Risk impact achieved is the risk reduction values associated with each activity conducted through the end of the period—aggregated for all 37 Captain of the Port-level sectors and units; the risk impact assessed as achievable is determined from the activity levels that would have been appropriate absent any resource constraints.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by District, Area, and Headquarters staffs. Annual risk exposure and activity risk reduction parameters are determined and annually validated using the Coast Guard's Maritime Security Risk Analysis Model (MSRAM).
LIMITATIONS	The measure estimates risk for a select range of potential maritime security events, which are inferences determined in the absence of actually occurring incidents. Potential likelihood and consequences are also estimated. The projected risk impact does not include the deterrence benefits of maritime security operations, which are difficult to quantify; also not included are the impacts of Maritime Prevention Program security regimes.

Maritime Security Operations Efficiency

MEASURE DESCRIPTION	The estimated annual risk impact achieved by Coast Guard maritime security operations, as a percentage of what would have been expected with optimal utilization of available resources.
USCG PROGRAM	Maritime Security Operations
USCG MISSION	Ports, Waterways and Coastal Security—Response Activities
DHS ALIGNMENT	Mission Area 1 - Prevent Terrorism and Enhance Security
SCOPE	This measure reports estimated risk impact achieved by actual maritime security operations across all 37 Captain of the Port-level sectors and units as a percentage of the risk impact that otherwise could have been achieved with optimal use of available resources. It includes risk reduction benefits of Coast Guard and Other Government Agency performed security boardings, patrols, fixed security zone enforcements, and vessel escorts.
DATA SOURCE	Annual risk impact values are generated by the Coast Guard’s Risk-Based Maritime Security and Response Operations (RBMSRO) tool, which relies on activity data imported from the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and Other Government Agency sources, and associated annual risk-reduction parameters determined and validated using the Coast Guard’s Maritime Security Risk Analysis Model (MSRAM).
METHODOLOGY	Results for a given period are the annualized risk impact achieved divided by the impact that would have been achieved by optimal employment of available resources—expressed as a percentage. Risk impact achieved is the risk reduction values associated with each activity conducted through the end of the period—aggregated for all 37 Captain of the Port-level sectors and units; the optimized expectation is derived from activity levels prescribed in plans generated by the Risk-Based Maritime Security and Response Operations (RBMSRO) tool.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by District, Area, and Headquarters staffs. Annual risk exposure and activity risk reduction parameters are determined and annually validated using the Coast Guard’s Maritime Security Risk Analysis Model (MSRAM).
LIMITATIONS	The measure estimates risk for a select range of potential maritime security events, which are inferences determined in the absence of actually occurring incidents. Potential likelihood and consequences are also estimated. The projected risk impact does not include the deterrence benefits of maritime security operations, which are difficult to quantify; also not included are the impacts of Maritime Prevention Program security regimes.

Number of Undocumented Migrants Attempting To Enter U.S. By Maritime Routes

MEASURE DESCRIPTION	The number of known undocumented migrants attempting to enter the U.S. by maritime means, which is comprised of those interdicted by the Coast Guard, plus those interdicted by other agencies or foreign entities in partnership with the Coast Guard, plus those who self-report their entry by maritime means or are apprehended by CBP after so entering.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Migrant Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard. The measure also includes those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
DATA SOURCE	Coast Guard migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
METHODOLOGY	Results for a given year are a compilation of all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions. It is the sum of interdictions during that period by the Coast Guard, plus any notifications of interdictions provided by other law enforcement agencies or foreign entities, plus self-reported entries or apprehensions reported by CBP of undocumented migrants entering by maritime means.
VERIFICATION & VALIDATION	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
LIMITATIONS	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of known undocumented migrants attempting to enter the U.S. by maritime means is not likely all who attempt entry—the total flow of undocumented migrants is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

Number of Undocumented Migrants Attempting To Enter U.S. By Maritime Routes Interdicted

MEASURE DESCRIPTION	The number of undocumented migrants attempting to enter the U.S. by maritime means interdicted by the Coast Guard and other partners before reaching the U.S. land border—including maritime interdictions by Customs and Border Protection and other agencies or foreign entities in partnership with the Coast Guard for migrant interdiction operations.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Migrant Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard.
DATA SOURCE	Coast Guard migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
METHODOLOGY	Results for a given year are a compilation of all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions who are interdicted. It is the sum of interdictions during that period by the Coast Guard, plus apprehensions reported by CBP, plus any notifications of interdictions received from other law enforcement agencies or foreign entities.
VERIFICATION & VALIDATION	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
LIMITATIONS	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of the flow of such migrants who are attempting to enter the U.S. by maritime means.

Migrant Interdiction Effectiveness in the Maritime Environment

MEASURE DESCRIPTION	The percentage of known undocumented migrants attempting to enter the U.S. by maritime means who are interdicted by the Coast Guard and other partners before reaching the land border, where the number of known migrants attempting entry is comprised of those interdicted by the Coast Guard and its partners plus undocumented migrants who self-report their entry by maritime means or are apprehended by CBP after so entering.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Migrant Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard. The determination of known flow includes undocumented migrants interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard plus those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
DATA SOURCE	Coast Guard migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
METHODOLOGY	Results for a given year are the sum of Coast Guard and partner interdictions divided by the known flow of undocumented migrants attempting to enter the U.S. by maritime means, expressed as a percentage. It is Coast Guard interdictions plus maritime apprehensions by CBP plus notifications of interdictions by other agencies or foreign entities, divided by and expressed as a percentage of these interdictions plus any entries by maritime means that are self-reported or afterwards apprehended and reported by CBP.
VERIFICATION & VALIDATION	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
LIMITATIONS	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of migrant flow; but the number of known undocumented migrants is not likely all who make the attempt—the total flow is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

Percent Undocumented Migrants Attempting To Enter U.S. By Maritime Routes Interdicted by USCG

MEASURE DESCRIPTION	The percentage of known undocumented migrants attempting to enter the U.S. by maritime means who are interdicted by the Coast Guard, where the number of known migrants attempting entry is comprised of those interdicted by the Coast Guard and its partners plus undocumented migrants who self-report their entry by maritime means or are apprehended by CBP after so entering.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Migrant Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard. The determination of known flow includes undocumented migrants interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard plus those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
DATA SOURCE	Coast Guard migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
METHODOLOGY	Results for a given year are Coast Guard interdictions divided by the known flow of undocumented migrants attempting to enter the U.S. by maritime means, expressed as a percentage. It is Coast Guard interdictions for the period, divided by and expressed as a percentage of the sum of these interdictions plus maritime apprehensions by CBP plus notifications of interdictions by other agencies or foreign entities plus any entries by maritime means that are self-reported or afterwards apprehended and reported by CBP.
VERIFICATION & VALIDATION	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
LIMITATIONS	Notifications provided by other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of migrant flow; but the number of known undocumented migrants is not likely all who make the attempt—the total flow is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

Metric Tons of Cocaine Removed

MEASURE DESCRIPTION	Metric tons of cocaine removed by the Coast Guard from non-commercial vessels in the maritime domain, which includes cocaine seized by the Service plus the estimated amount of unrecovered cocaine jettisoned or destroyed as a result of Coast Guard law enforcement efforts.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Drug Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes the amount of cocaine physically seized by the Coast Guard from non-commercial vessels in the maritime domain, which is weighed and assigned a Federal Drug Identification Number. Also included is cocaine not physically recovered by the Service that is jettisoned or destroyed during interdiction operations, which is typically determined from pursuit video or other intelligence-analysis.
DATA SOURCE	Cocaine removal data is from the consolidated counter-drug database (CCDB) maintained by the United States Interdiction Coordinator, Office of National Drug Control Policy. CCDB source data includes interdiction reports of Coast Guard and other Joint Interagency Task Force South (JIATF-S) members, intelligence reports from Coast Guard LANT and PAC Maritime Intelligence Fusion Centers, and other authoritative sources for cocaine production, trafficking and consumption information.
METHODOLOGY	Results for a given year are the sum total metric tons of cocaine seized by the Service plus the amount of cocaine observed, reported or determined as having been jettisoned or destroyed by smugglers to avoid seizure by the Coast Guard.
VERIFICATION & VALIDATION	Both the physically seized and jettisoned or destroyed components of this measure are tracked, collected, and analyzed by the Coast Guard Office of Law Enforcement Policy (CG-MLE). Consolidated Counter-drug Database (CCDB) source data is verified and validated quarterly by representatives from the agencies involved in transit zone interdiction, who meet and review the data for each source event and resolve any discrepancies. Coast Guard seizure data is also tracked and verified by Federal Drug Identification Numbers.
LIMITATIONS	This measure reflects Coast Guard efforts, and is focused on cocaine removed from non-commercial vessels in the maritime domain. The amount of cocaine jettisoned or destroyed is a good estimate based on empirical evidence; it is not an absolutely certain quantity. The amount of cocaine removed is best understood in the context of total flow; but even the most authoritative transit information available from the CCDB remains an estimate.

USCG Removal Rate for Cocaine from Non-Commercial Vessels in Maritime Transit Zone

MEASURE DESCRIPTION	Percentage of cocaine removed by the Coast Guard, where the amount removed includes cocaine seized plus the estimated amount jettisoned or destroyed in the course of interdiction efforts, expressed as a percentage of 3-year average annual maritime flow of cocaine on non-commercial vessels.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Drug Interdiction
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
SCOPE	The measure includes the amount of cocaine physically seized by the Coast Guard from non-commercial vessels in the maritime domain, which is weighed and assigned a Federal Drug Identification Number. Also included is cocaine not physically recovered that is jettisoned or destroyed during interdiction operations, which is typically determined from pursuit video or other intelligence analysis. The amount of cocaine removed is expressed as a percentage of the 3-year average annual maritime flow of cocaine on non-commercial vessels over the previous 12 quarters.
DATA SOURCE	Cocaine flow and removal data is from the consolidated counter-drug database (CCDB) maintained by the United States Interdiction Coordinator, Office of National Drug Control Policy. CCDB source data includes interdiction reports provided by the Coast Guard—as well as other Joint Interagency Task Force South (JIATF-S) members, intelligence reports from Coast Guard LANT and PAC Maritime Intelligence Fusion Centers, and other authoritative sources for cocaine production, trafficking and consumption information.
METHODOLOGY	Results are the sum total metric tons of cocaine seized during the current 12-month period by the Coast Guard plus the amount of cocaine observed, reported, or determined as having been jettisoned or destroyed by smugglers to avoid seizure; and this is expressed as a percentage of the unweighted 3-year average annual maritime flow of cocaine on non-commercial vessels over the previous 12 quarters.
VERIFICATION & VALIDATION	Both the physically seized and jettisoned or destroyed components of this measure are tracked, collected, and analyzed by the Coast Guard Office of Law Enforcement Policy (CG-MLE). Consolidated Counter-drug Database (CCDB) source data is verified and validated quarterly by representatives from the agencies involved in transit zone interdiction, who meet and review the data for each source event and resolve any discrepancies. Seizure data is also tracked and verified by Federal Drug Identification Numbers.
LIMITATIONS	This measure is focused on cocaine removed from non-commercial vessels in the maritime domain. The amount of cocaine jettisoned or destroyed is a good estimate based on empirical evidence; it is not an absolutely certain quantity. The amount of cocaine removed is best understood in the context of total flow; but even the most authoritative transit information available from the CCDB remains an estimate.

Fishing Regulation Compliance Rate

MEASURE DESCRIPTION	Percent of those fishing vessels boarded and inspected at sea by the Coast Guard, which had no documented violations of domestic fisheries regulations.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Living Marine Resources Law Enforcement
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
SCOPE	The measure includes boardings and inspections of U.S. commercial and recreational fishing vessels inside the portion of state waters that extend from three to nine nautical miles seaward of the state boundary line; U.S. commercial and recreational fishing vessels in the U.S. Exclusive Economic Zone (EEZ); foreign fishing vessels permitted inside the U.S. EEZ; and U.S. commercial and recreational fishing vessels outside the U.S. EEZ. Violations are of domestic fisheries regulations, which are documented by Coast Guard Boarding Forms and entered into the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
DATA SOURCE	Boardings and violations of domestic fisheries regulations are documented by Coast Guard Boarding Forms and entered into the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the number of boarded fishing vessels with no documented violations of domestic fisheries regulations divided by the number of fishing vessels boarded and inspected at sea by the Coast Guard, expressed as a percentage.
VERIFICATION & VALIDATION	MISLE data consistency and integrity is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Reliability is further ensured by comprehensive training and user guides, and the application itself has embedded Help screens. District, Area and Headquarters staffs review, validate and assess the data on a quarterly basis as part of the Coast Guard's Standard Operational Planning Process; and Program managers review and compare MISLE data to after-action reports, message traffic and other sources of information.
LIMITATIONS	Fishing regulation compliance is relevant in terms of Coast Guard enforcement of other-agency established regulations; it is an intermediate outcome and not the ultimate fishery health outcome these regulations are intended to influence. Observed compliance rates are determined from that portion of fishing vessels boarded and inspected; these may not be representative of the total population of fishers. It is also an average across all fisheries that is not indicative of compliance within a specific fishery.

Percent of Federal Fisheries Found in Compliance with Laws and Regulations

MEASURE DESCRIPTION	The percentage of federal fisheries where an acceptable Level of Effective Enforcement was attained, where individual fishery components are considered acceptable if their observed compliance rates—discounted by their ratio of actual versus targeted enforcement effort—is 97% or better.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Other Law Enforcement
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
SCOPE	A List of Fisheries is compiled annually, designating each as high or low precedence based upon relevant economic, biological, environmental or other factors. The number of active fishing vessels is determined for each fishery component and targets established for boarding 20% of these in high-precedence fisheries and 10% in low-precedence fisheries. Actual boardings are determined and enforcement effort expressed as the ratio of actual to target boardings. Associated compliance rates are determined, which are the percentage of boardings where no significant violations were found. Significant violations are those that result in significant damage or impact to a resource or fishery management plan, result in significant monetary advantage over competitors, and/or have high regional or national interest.
DATA SOURCE	A List of Fisheries and associated tally of Active Fishing Vessels is compiled by the Coast Guard Office of Law Enforcement Policy (CG-MLE), based on annual Coast Guard District submissions. Boardings and violations are documented by Coast Guard Report of Boarding Forms and entered into the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the number of fisheries that attain an acceptable level of enforcement, expressed as a percentage of the total List of Fisheries. Individual fisheries are considered acceptable if they attain a Level of Effective Enforcement that is 97% or better. The Level of Effective Enforcement is the Observed Compliance Rate discounted by the ratio of actual versus targeted enforcement effort. It is the number of boardings where no significant violations were found expressed as a percentage of the total conducted, multiplied by the ratio of actual versus targeted boardings for that fishery.
VERIFICATION & VALIDATION	MISLE data consistency and integrity is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Reliability is further ensured by comprehensive training and user guides, and the application itself has embedded Help screens. District, Area and Headquarters staffs review, validate and assess the data on a quarterly basis as part of the Coast Guard's Standard Operational Planning Process; and Program managers review and compare MISLE data to after-action reports, message traffic and other sources of information.
LIMITATIONS	Fishing regulation compliance is relevant in terms of Coast Guard enforcement of other-agency established regulations; it is an intermediate outcome and not the ultimate fishery health outcome these regulations are intended to influence. Observed compliance rates are determined from that portion of fishing vessels boarded and inspected; these may not be representative of the total population of fishers. The percent of fisheries found in compliance is an assessment across all fisheries, which is not indicative of compliance within a specific fishery. It is also important to note that ' <i>significant violations</i> ' is a qualitative standard that requires uniform application to ensure consistent results.

Number of Detected Incursions of Foreign Fishing Vessels Violating U.S. Waters

MEASURE DESCRIPTION	The number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Other Law Enforcement
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
SCOPE	The measure includes foreign vessels illegally fishing inside the U.S. Exclusive economic Zone (EEZ) detected by the Coast Guard and incursions by foreign fishing vessels reported by other sources, which reports or intelligence are judged by Coast Guard operational commanders as valid enough to order a response. The Magnuson-Stevens Act, Title 16 of the U.S. Code defines terms necessary for identifying an incursion—such as fishing, fishing vessel, foreign fishing, etc.—and establishes an exemption for recreational fishing.
DATA SOURCE	Source data is collected from Living Marine Resource Enforcement Summary Reports and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the total number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. The LMR Enforcement Summary Report purpose, format and submission requirements, and guidance on the use of MISLE, are provided in the Maritime Law Enforcement Manual. Comprehensive training and these user guides help ensure reliability, and the application itself contains embedded Help screens. Additionally, District summaries of EEZ cases are reviewed monthly by Areas and submitted to the Coast Guard Office of Law Enforcement Policy (CG-MLE), and these and other sources of information are used to assess the reliability of the MISLE database.
LIMITATIONS	The number of vessels detected is dependent on actual sightings by Coast Guard assets and other reports of incursions or intelligence judged by operational commanders as being of sufficient validity to order available resources to respond. Standard rules of evidence do not apply; an incursion is counted if it is reasonably believed to have occurred. The result is a generally consistent sub-sample of EEZ foreign fishing violations, which is not presumed to be the total number that actually occurred. The measure is useful in assessing if such incursions are increasing or remain sufficiently deterred. Different types of incursions are not distinguished by this measure—whether large fishing factory ship or small lancha, one-time incursion or repeat offender.

Interdiction Rate of Foreign Fishing Vessels Violating U.S. Waters

MEASURE DESCRIPTION	The percentage of detected incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels that are interdicted by the Coast Guard.
USCG PROGRAM	Maritime Law Enforcement
USCG MISSION	Other Law Enforcement
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
SCOPE	The measure includes foreign vessels illegally fishing inside the U.S. Exclusive economic Zone (EEZ) detected by the Coast Guard and incursions by foreign fishing vessels reported by other sources, which reports or intelligence are judged by Coast Guard operational commanders as valid enough to order a response. The Magnuson-Stevens Act, Title 16 of the U.S. Code defines terms necessary for identifying an incursion—such as fishing, fishing vessel, foreign fishing, etc.—and establishes an exemption for recreational fishing.
DATA SOURCE	Source data is collected from Living Marine Resource Enforcement Summary Reports and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given year are the number of Coast Guard interdictions of foreign fishing vessels expressed as a percentage of the total number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. The LMR Enforcement Summary Report purpose, format and submission requirements, and guidance on the use of MISLE, are provided in the Maritime Law Enforcement Manual. Comprehensive training and these user guides help ensure reliability, and the application itself contains embedded Help screens. Additionally, District summaries of EEZ cases are reviewed monthly by Areas and submitted to the Coast Guard Office of Law Enforcement Policy (CG-MLE), and these and other sources of information are used to assess the reliability of the MISLE database.
LIMITATIONS	The number of vessels detected is dependent on actual sightings by Coast Guard assets and other reports of incursions or intelligence judged by operational commanders as being of sufficient validity to order available resources to respond. Standard rules of evidence do not apply; an incursion is counted if it is reasonably believed to have occurred. The measure is useful in assessing relative level of effort devoted to EEZ enforcement, as the number of interdictions is dependent on Coast Guard asset availability and employment. Different types of incursions and subsequent interdictions are not distinguished by this measure—whether large fishing factory ship or small lancha, one-time incursion or repeat offender.

Percent of People in Imminent Danger Saved in the Maritime Environment

MEASURE DESCRIPTION	Lives saved by the Coast Guard on the oceans and other waterways expressed as a percentage of all people in imminent danger at the time the Service received notification. The measure excludes persons lost prior to notification and single incidents with eleven or more people, which if included might skew results and impede trend analysis.
USCG PROGRAM	Maritime Response
USCG MISSION	Search and Rescue
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.3 - Provide Timely and Appropriate Disaster Assistance
SCOPE	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response. The measure includes lives recorded as saved, lost after notification, or unaccounted. Single incidents with eleven or more people saved, lost, or unaccounted are excluded so as not to skew results or impede trend analysis.
DATA SOURCE	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given fiscal year are the total number of lives recorded as saved in the period expressed as a percentage of the total number of lives recorded as saved, lost after notification, or unaccounted. Single incidents with eleven or more people saved, lost, or unaccounted are excluded from the calculation.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
LIMITATIONS	Some distress incidents may not be reported to the Coast Guard, and some reported incidents might not be judged by Coast Guard operational commanders as valid enough to order a response. Imminent danger is not always obvious; the determination that a life was saved and not merely assisted can be subjective. Factors beyond Coast Guard control can lead to tragic outcomes regardless of life saving efforts. Single incidents with eleven or more people saved, lost or unaccounted are excluded so as not to skew measure results or impede trend analysis.

Percent of Time Rescue Assets are On Scene within 2 Hours

MEASURE DESCRIPTION	The percent of all maritime distress incidents reported to the Coast Guard where a Search and Rescue Unit arrives on scene within two hours.
USCG PROGRAM	Maritime Response
USCG MISSION	Search and Rescue
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.3 - Provide Timely and Appropriate Disaster Assistance
SCOPE	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by operational commanders as valid enough to order a response. Time on scene is the earliest time a Search and Rescue Unit is requested to proceed until the earliest time of an arrival on scene. It includes preparation time required for engine warm-up, underway checklist, risk management evaluation, mission planning, etc.; and transit time from underway to on scene.
DATA SOURCE	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given fiscal year are the number of distress incidents where the First Sortie On Scene Time minus the First Resource Requested Time is less than or equal to two hours, expressed as a percentage all maritime distress incidents reported to the Coast Guard, which are judged by operational commanders as valid enough to order a response.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
LIMITATIONS	The time it takes to reach the scene of a distress call is a key performance factor. The 2-hour standard was established in the 1970's and revalidated in 1992 based on survival expectations in weighted-average water temperatures, which consider the varying number of incidents occurring regionally. The standard may not be a realistic benchmark for every circumstance. Adverse weather conditions, geographical proximity and asset availability may preclude arrival within the standard timeframe.

Percent of Property “in Danger of Loss” Saved

MEASURE DESCRIPTION	Property saved by the Coast Guard expressed as a percentage of all property in danger of loss, which consists of saved, lost or unaccounted property associated with notifications the Service receives of people in imminent danger on the oceans and other waterways. The measure excludes single incidents with property valuations in excess of \$2 million, which if included might skew results and impede trend analysis.
USCG PROGRAM	Maritime Response
USCG MISSION	Search and Rescue
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.2 – Conduct Effective and Unified Incident Response Operations
SCOPE	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response. The measure includes property recorded as saved, lost and unaccounted for. Single incidents with property valuations in excess of \$2 million are excluded, so as not to skew results or impede trend analysis.
DATA SOURCE	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
METHODOLOGY	Results for a given fiscal year are the total value of property recorded as saved in the period expressed as a percentage of the total value of property recorded as saved, lost and unaccounted. Single incidents with property valuations in excess of \$2 million are excluded from the calculation.
VERIFICATION & VALIDATION	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
LIMITATIONS	Some distress incidents may not be reported to the Coast Guard, and some reported incidents might not be judged by Coast Guard operational commanders as valid enough to order a response. Imminent danger is not always obvious; the determination that property was saved and not merely rendered assistance can be subjective. Factors beyond Coast Guard control such as weather, capabilities of responding units, and the priority necessarily given to saving lives can significantly impact the Service’s ability to save property. Single incidents with property valuations in excess of \$2 million are excluded so as not to skew measure results or impede trend analysis.

Marine Environmental Response Compliance

MEASURE DESCRIPTION	The percentage of reported pollution events where a Federal Water Pollution Control Act enforcement action was taken.
USCG PROGRAM	Maritime Response
USCG MISSION	Marine Environmental Protection – Response Activities
DHS ALIGNMENT	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
SCOPE	The measure reports the annual percentage of oil spills discharged into U.S. navigable waters that are investigated where all elements of a Federal Water Pollution Control Act violation are established and some level of enforcement action is taken. 40 CFR 300 requires Vessel or facility operators to report any discharge of oil or oil products that cause a sheen, discoloration, sludge, or emulsion. Excluded from the measure are discharges onto land, into the air, or into enclosed spaces; discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment; discharges from U.S. Navy and other public vessels; discharges from fixed platforms and pipeline; and discharges from unspecified, unclassified and unknown sources.
DATA SOURCE	Notices of reportable oil discharge incidents received by the Coast Guard managed National Response Center (NRC) are assigned an incident number and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database. Incidents taken for action by Coast Guard units are then opened as a MISLE Case with the NRC incident number as a reference; and any Coast Guard enforcement actions taken recorded in the MISLE Case record.
METHODOLOGY	Results for a given fiscal year are the sum total of all responses by the Coast Guard to discharges of oil into the navigable waters of the United States where at least one enforcement action is taken over the number of notifications of all applicable oil spills reported to Coast Guard for the previous four quarters.
VERIFICATION & VALIDATION	Results for a given fiscal year are the sum total of all responses by the Coast Guard to discharges of oil into the navigable waters of the United States where at least one enforcement action is taken over the number of notifications of all applicable oil spills reported to Coast Guard for the previous four quarters.
LIMITATIONS	Some incidents are never reported and some are delayed in reaching the Coast Guard. Thus, previously published data is subject to revision, with the greatest impact affecting recent quarters. Additionally, some cases may be investigated by the Coast Guard and included in reported results, but later determined that jurisdiction resides with another entity such as the Environmental Protection Agency and results for that period revised accordingly.

Defense Readiness of Major Cutters for DoD Contingency Planning

MEASURE DESCRIPTION	The percentage of reporting period days designated Coast Guard Cutters are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security.
USCG PROGRAM	Defense Operations
USCG MISSION	Defense Readiness
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches
SCOPE	The measure encompasses all Major Coast Guard Cutters capable of meeting commitments established in Department of Defense Global Force Management Implementation Guidance. The war fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for Major Cutters.
DATA SOURCE	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Resource and Capabilities Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
METHODOLOGY	Results for a given fiscal year are the number of days designated Coast Guard Cutters are fully mission-capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance, expressed as a percentage of total period days.
VERIFICATION & VALIDATION	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
LIMITATIONS	The measure reports Coast Guard Major Cutter readiness to meet specific Service commitments to support established Department of Defense Global Force Management Implementation Guidance. It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service's overall operational readiness or capability to perform any specific Coast Guard mission.

Defense Readiness of Patrol Boats for DoD Contingency Planning

MEASURE DESCRIPTION	The percentage of reporting period days Coast Guard Patrol Boats are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security.
USCG PROGRAM	Defense Operations
USCG MISSION	Defense Readiness
DHS ALIGNMENT	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches
SCOPE	The measure encompasses all Coast Guard Patrol Boats capable of meeting commitments established in Department of Defense Global Force Management Implementation Guidance. The war fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for patrol boats.
DATA SOURCE	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Resource and Capabilities Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
METHODOLOGY	Results for a given fiscal year are the number of days designated Coast Guard Patrol Boats are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance, expressed as a percentage of total period days.
VERIFICATION & VALIDATION	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
LIMITATIONS	The measure reports Coast Guard Patrol Boat readiness to meet specific Service commitments to support established Department of Defense Global Force Management Implementation Guidance. It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service's overall operational readiness or capability to perform any specific Coast Guard mission.

Defense Readiness of Port Security Units (deployed)

MEASURE DESCRIPTION	The percentage of reporting period days currently deployed Coast Guard Port Security Units are fully mission capable to meet Service commitments to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security in support of the current DoD Global Force Management Allocation Plan (GFMAP).
USCG PROGRAM	Defense Operations
USCG MISSION	Defense Readiness
DHS ALIGNMENT	Mission Area 1 – Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to the Nation’s Critical Infrastructure, Key Leadership and Events
SCOPE	The measure encompasses Coast Guard Port Security Units currently deployed in support of the DoD Global Force Management Allocation Plan (GFMAP). War fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military commitments for Deployed Port Security Units.
DATA SOURCE	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Resource and Capabilities Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
METHODOLOGY	Results for a given fiscal year are the number of days Deployed Coast Guard Port Security Units are fully mission-capable of meeting Service commitments established in the current Department of Defense Global Force Management Allocation Plan (GFMAP), expressed as a percentage of total period days.
VERIFICATION & VALIDATION	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
LIMITATIONS	The measure reports the readiness of deployed Coast Guard Port Security Units to meet specific Service commitments in support of the current DoD Global Force Management Allocation Plan (GFMAP). It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service’s overall operational readiness or capability to perform any specific Coast Guard mission.

Defense Readiness of Port Security Units (Ready to Deploy)

MEASURE DESCRIPTION	The percentage of reporting period days designated Coast Guard Port Security Units are fully mission capable of deploying and meeting Service commitments to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security in support of the current DoD Global Force Management Allocation Plan (GFMAP).
USCG PROGRAM	Defense Operations
USCG MISSION	Defense Readiness
DHS ALIGNMENT	Mission Area 1 – Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to the Nation’s Critical Infrastructure, Key Leadership and Events
SCOPE	The measure encompasses all Coast Guard Port Security Units capable of deploying in support of the DoD Global Force Management Allocation Plan (GFMAP). War fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for deploying Port Security Units.
DATA SOURCE	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Resource and Capabilities Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
METHODOLOGY	Results for a given fiscal year are the number of days designated Coast Guard Port Security Units are fully mission-capable of deploying to meet Service commitments established in the current Department of Defense Global Force Management Allocation Plan (GFMAP), expressed as a percentage of total period days.
VERIFICATION & VALIDATION	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
LIMITATIONS	The measure reports Coast Guard Port Security Unit readiness to meet specific Service commitments in support of the current DoD Global Force Management Allocation Plan (GFMAP). It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service’s overall operational readiness or capability to perform any specific Coast Guard mission.