



Report on the Strategic Plan of the National Recreational Boating Safety Program 2017-2021

United States Coast Guard
Office of Auxiliary & Boating Safety (CG-BSX)

EXECUTIVE SUMMARY

This Report on the Strategic Plan of the National Recreational Boating Safety Program, for 2017-2021, supports the mission of the National RBS Program. It identifies progress achieved and efforts that are working and should be continued into future plans. It serves as the primary framework to support reporting requirements to the Department of Homeland Security. These efforts are the results of significant stakeholder input, especially from the National Boating Safety Advisory Committee (NBSAC). The Coast Guard would like to thank NBSAC, the fifty-six states and territories, and the national nonprofit public service organizations for all the work they do to keep recreational boaters safe.

Mission Statement

The mission of the National RBS Program is to ensure the public has a safe, secure, and enjoyable recreational boating experience by implementing programs designed to minimize the loss of life, personal injury, and property damage while cooperating with environmental and national security efforts.



Performance Initiatives

This plan included three performance initiatives. They are:

- a) Improve and expand recreational boating education, training, and outreach;*
- b) Update, leverage, and enforce policies, regulations, and standards; and*
- c) Improve upon and expand recreational boating data collection.*

There is no order, priority, or sequence associated with these three initiatives. They were inter-related and intended to be implemented in conjunction with each other.

Initiative 1: Improve and expand recreational boating education, training, and outreach

The following CoAs comprised this initiative:

CoA 1 focused on increasing the number of boaters who have the boating education, skills, and training needed to meet federal regulatory requirements and work toward universal adoption of national best practices and standards. It emphasized data collection and the development and implementation of boating education programs for adults, youth, and targeted populations as determined by an evidence-based model of policy development. It also addressed basic and advanced boater competency recognition programs.

CoA 2 focused on advancing campaigns designed to promote positive boater behaviors including life jacket wear by individuals on smaller boats. Boating statistics indicate that approximately 83% of boaters who drowned were aboard boats under 21 feet in length (6.4 meters). To better connect across generations, boating safety messages are conveyed through multiple forms of media. For example, digital communication can be used to reach today's tech-savvy boating population more effectively.

CoA 3 focused on taking a systemic approach to aligning and maintaining national recreational boating standards and best practices. This system includes guidance on-water boating skills-based standards to benefit course providers, instructors, and the boating public.

Courses of Action (CoA):

CoA 1 Increase the number of boaters that meet national best practices for knowledge and skills standards

This CoA captured needed data, promotes boating education, addresses instructor qualifications, and promoted programs for youth under 18 years of age and other targeted groups.

#	Milestones	Progress
1	Incorporate questions regarding completion of a boating education course that meets nation-wide best practices and standards into the National Recreational Boating Safety Survey.	Questions will be incorporated into the next Survey.
2	Implement evidence-based/effective boating safety programs for youth and other high-frequency groups.	Knowledge and Skills-based standards have meticulously incorporated the most pertinent requirements to reduce boating incidents.
3	Implement a plan to recognize basic and advanced boater knowledge and skills training earned from courses meeting	NASBLA has successfully obtained ANSI approval of knowledge-based standards.

	national standards and employ best practices to foster wide-spread training to national standards adoption.	On-water skills standards have obtained ANSI approval.
4	Identify and strive to implement a new model that satisfies Operator of Uninspected Passenger Vessel (OUPV) licensing requirements for on-water instructors receiving compensation.	CG-BSX is collaborating with CG-CVC to develop Coast Guard policy to support this matter.

CoA 2 Advance campaigns that target adoption of positive boater behaviors

This CoA targets highest frequency populations by implementing media campaigns designed to increase safe boating behaviors.

#	Milestones	Progress
5	Design a targeted life jacket campaign for boaters in high-frequency populations.	Multiple nonprofit grant recipients and states continue to message increased life jacket wear rates and support the “Wear It!” Campaign. These include American Canoe Assn, American Whitewater, Army Corps Foundation, Future Angler Foundation, NASBLA, National Safe Boating Council, Sea Tow Foundation, Spirit of America, U.S. Power Squadrons, Water Solutions Group, Water Sports Foundation. Over 600 million media impressions were executed.
6	Implement an evidence-based/effective campaign(s) targeting the highest-frequency casualties and the highest frequency group(s) for each desired behavioral change.	Operation Drywater continues to serve as the nation’s primary campaign to address boating under the influence. The “Wear-It” campaign targets life jacket wear rates. The Sea Tow Foundation continued their Sober Skipper Campaign, reaching all 50 states.

CoA 3 Systemic approach to align and maintain federal regulatory requirements with national best practices and standards

This CoA formalizes a standards alignment process to facilitate national boating standards work to benefit course providers, instructors, and the boating public.

#	Milestones	Progress
7	Publish and distribute American National Standards Institute (ANSI) accredited standards for boating knowledge and skills for all recreational boating domains.	14 on-water skills-based courses were verified by a 3rd party under a NASBLA grant. 7 power, 5 human-propelled craft, 2 sailing. Details here: www.USNOWS.org and https://www.nasbla.org/education/national-ed-standards
8	Align and implement the (ANSI) standards and other nation-wide standards for boating knowledge and skills within the National System of Standards for Recreational Boat Operation.	Accomplished. Details here: www.USNOWS.org and https://www.nasbla.org/education/national-ed-standards

Initiative 2: Update, leverage, and enforce policies, regulations, and standards

The following CoAs comprised this initiative:

CoA 4 used an evidence-based approach to identify human factors, designed interventions to address them, and evaluated the results. Follow-on programs will be modified to incorporate the insights and best practices.

CoA 5 focused on regulatory actions. These actions focused on updating boat accident reporting criteria, revised carriage requirements to reflect improved technology, and promoting life jacket wear for high-frequency boating.

CoA 6 unified and strengthened the relationship between Driving under the Influence (DUI), Boating under the Influence of Alcohol (BUI) and Boating under the Influence-Drug (BUI-D) initiatives and improved officer training. This includes cooperation with National Highway Transportation Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP). An expanded training program for officers will promote consistent enforcement and uniformity between the States.

CoA 7 addressed the need to better quantify manufacturer compliance with the requirements outlined in 33 CFR 181 & 183 based on "real world" data feedback of safety discrepancies and inspection and testing of products offered into the stream of commerce. It enhanced regulations and policy to facilitate new technology and enhance safety information outreach program to manufacturers.

Courses of Action:

CoA 4 Increase operator compliance with NAVRULES

This CoA will reduce accidents related to NAVRULES violations as a result of recreational boat operator actions. This CoA involves coordination with key stakeholders to identify causal factors most correlated with recreational boating accidents.

#	Milestones	Progress
9	Develop, test and report interventions (education, outreach, and enforcement actions) at high-frequency location(s).	ABYC Grant complete. Analyzed four collision-prone areas. ABYC submitted report. Shared with all BLAs.
10	Implement most effective or adjusted interventions at same high-frequency locations.	Study per Milestone 9 shared with BLAs for their consideration and action.
11	Implement interventions on a large scale and community level.	Study per Milestone 9 shared with BLAs for their consideration and action.

CoA 5 Adopt comprehensive regulatory reform

This CoA addresses opportunities in new technologies that can benefit safer boating and updated regulatory and policy criteria that can improve decision making.

#	Milestones	Progress
12	Expand navigation light visibility requirements for boats under 12m (39.4 ft) to 2 nm to improve navigation light recognition while on the water, if accident data or technological improvements in current navigation lights warrant it.	Efforts made to support this Milestone, though data insufficient to support moving forward. NMMA conducted poll of navigation light manufacturers. All stated there will be "some" impact and 70% stated there would be a "major" impact.
13	Evaluate boat accident reporting laws and policies. Revise as necessary to improve accuracy and applicability of the data acquired.	CG-BSX/ NASBLA/ ERAC collaborating to develop a policy letter to update & clarify reporting laws and policies. NASBLA passed resolution supporting this effort at Annual meeting in Sept. 2020.
14	Review and revise current carriage requirements to allow options to adopt improved technology.	Enacted equivalency policy letter for CG-ENG 03.18 eVDSD SOS light. CG-ENG established working group: Distress Signal Policy Council (DISPOCO). Congress passed legislation that requires installed ECOS to be worn. Harmonized ANSI/UL/CAN Level 70 PFD standards.
15	Promote jacket wear for high-frequency boaters.	Efforts underway to allow inflatables for children and "Level 50" flotation devices. L50 devices must be worn to meet carriage requirements.

CoA 6 Improve enforcement of BUI and BUI-D laws

From 2010-2015, alcohol use was listed as the leading causal factor in fatal boating accidents in 21% of recreational boating accidents. This CoA addresses the need to recognize BUI and BUI-D programs (seated field sobriety testing) and increase States' implementation. This strengthens alignment between highway and marine law enforcement agencies.

#	Milestones	Progress
16	Align national BUI and BUI-D policy with DUI.	CG-BSX collaborating with NASBLA-discussing a model act. Some USCG Districts have updated MOAs w states. NASBLA leveraged grants to enhance Boating Under the Influence Detection & Enforcement Courses and Effectively Prosecuting Boating Under the Influence Cases: Enhanced Training for Courtroom Prep.
17	Enhance the national model for marine law enforcement officer BUI and BUI-D training.	NASBLA reports 41 states are using the Seated Field Sobriety Test. Working to add more states. NASBLA leveraged grants to enhance Boating Under the Influence Detection & Enforcement Courses and Effectively Prosecuting Boating Under the Influence Cases: Enhanced Training for Courtroom Prep.

CoA 7 Ensure that boats and associated equipment are manufactured in compliance with USCG regulations

Modifications of current factory inspection programs offer an opportunity for the USCG to gather information on manufacturer compliance to set targets for safety improvements. This CoA targets outreach opportunities for the USCG aimed at existing Manufacturer Identification Code (MIC) holders.

#	Milestones	Progress
18	Re-establish, at a minimum, semi-annual outreach to manufacturers.	CG-BSX now consistently producing Boating Safety Circulars: https://www.uscgboating.org/c

		ontent/boating-safety-circulars.php
19	Research the potential to broaden the manufacturing inspection program to utilize other available certification entities and implement such in future years if a viable option is warranted.	Planning collaboration with Transport Canada, ABYC & NMMA.
20	Produce a report of manufacturer non-compliance and safety discrepancies. Set targets for improvement.	Attempting to develop new database. Working with factory inspectors to align checklists to support metrics.
21	Incorporate by reference applicable American National Standards in place of Title 33 CFR part 183.	Attempting to achieve per regulatory effort. Will be addressed via ABYC grant.

Initiative 3: Improve upon and expand recreational boating data collection and research

The following CoAs comprised this initiative:

CoA 8 focuses on building an expanded database of recreational boating information that professionals can use to develop interventions to increase the public's safe boating behaviors.

CoA 9 provides centralized portal access to the newly expanded database of recreational boating information so that stakeholders can make informed decisions.

CoA 10 adopts an evidence-based approach to include a process for continuous improvement. This would help the USCG Office of Auxiliary and Boating Safety implement programs that advance safe boating messages and cultivate safer boating behaviors.

Courses of Action:

CoA 8 Develop a central recreational boating database

Recreational boating data (beyond accident report data) is limited, not readily accessible, or not centrally captured. This CoA addresses building a central database system to include recreational boating data from stakeholders and other sources to fill this gap.

#	Milestones	Progress
22	Develop an expanded database aggregating available recreational boating data into a central database system (Data Fusion).	NASBLA displaying boating safety dashboard per USCG grant funding via www.nasbla.org . NRBSS data will be available via MSU/RTI upon completion of survey. USCG staff are investigating whether software, such as Tableau, can be used to publish external dashboards.

CoA 9 Develop a central recreational boating database portal

Current recreational boating research focuses on BARD, select State data and estimates generated by the NRBSS. This CoA provides a central recreational boating database to enable stakeholders to expand recreational boating research and analysis.

#	Milestones	Progress
23	Develop a portal to extract recreational boating data for analysis from a new central database system.	CG-BSX reaching out to managers of MISLE for better integration. BSX-working with CG-INV to request a self-sufficient means of extracting filtered data from MISLE. Future tools may include NASBLA Dashboards and content on uscgboating.org .

CoA 10 Develop an evidence-based model, such as the Public Health Approach, that can be applied to the RBS program

This CoA establishes a process to increase the level of effectiveness of injury prevention programs by using a widely-accepted evidence-based model.

#	Milestones	Progress
24	Develop and evaluate an evidence-based model of policy development with one non-profit organization grant program award during the FY 2017-2018 funding cycle.	NASBLA & Safe States Alliance developed a live webinar series -- Applying the Public Health Approach to Recreational Boating Injury Prevention. Available via NASBLA's eLearning Center. CG-BSX conducting study of insurance data to gauge underreporting based on comparison of accident to claims data.
25	Implement the evidence-based model in future non-profit organization grants.	States and nonprofits encouraged to utilize evidence-based models. Future NOFOs will reflect increased emphasis on measurements.

PERFORMANCE INITIATIVE MEASURES

RBS Performance Goals

The performance goal of the Strategic Plan of the National RBS Program is to reduce recreational boating deaths and injuries. For FY 2017 through FY 2022, the following annual goals were established.

3-Year Average Goals				
Fiscal Year	Number of Deaths	Number of Injuries	Total Casualties (Deaths & Injuries)	Actuals
2017	608	2729	3337	3379
2018	605	2701	3306	3178
2019	602	2674	3276	3125
2020	599	2648	3247	3870
2021	596	2621	3217	3375
2022	593	2595	3188	2931

Method

FY 2017 goals were based on the latest, validated 3-year average data (FY 2012-2014). Starting with the FY 2017 goals:

- Deaths were calculated by subtracting 3 from the previous year.
- Injuries were calculated by subtracting 1% from the previous year.

Notes

1. *Injuries, deaths, and casualties vary from year to year. To smooth out random variations, 3-year moving averages were used. For example, the goal for injuries in FY 2017 was calculated by summing the number of injuries recorded in the years FY 2012 through FY 2014 and dividing by 3.*
2. *These goals were determined by a combination of mathematical extrapolation of prior time-series data and judgment. Substantial improvements would require new laws or regulations (e.g., life jacket wear for a broader segment of the boating public, promote boating safety education, and/or innovations that significantly prevent boating casualties).*
3. *Historically, estimates of injuries are believed to have been understated because not all recreational boating accidents (particularly those involving injuries not requiring hospital admission) are reported. No specific allowance for increased reporting is reflected in the injury goals given in these tables. Therefore, periodic revisions may need to be made.*



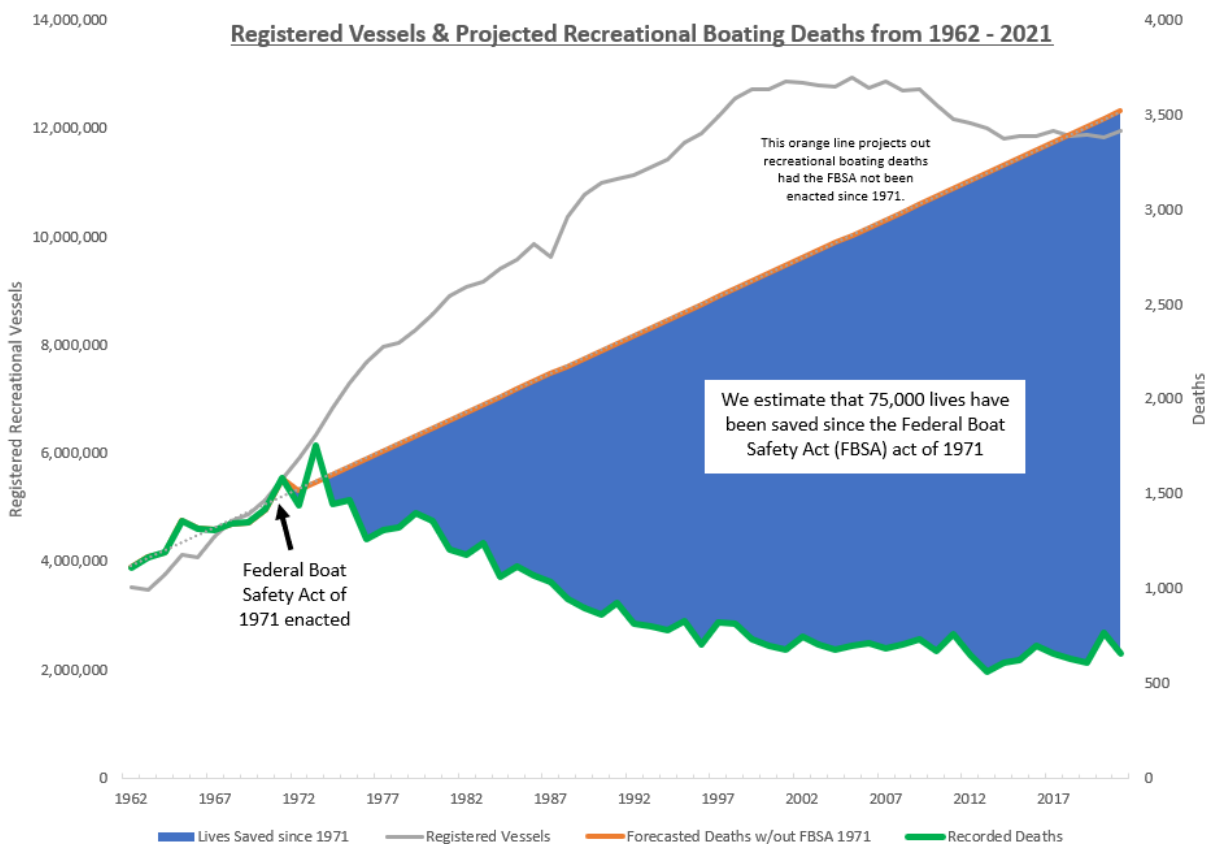
DHS Measurement- Going Forward

During the implementation of this Plan, our colleagues at DHS requested that we streamline our performance goals to *only* reflect deaths, (not deaths *and* injuries). So while we list both in this report, going forward, our Program will only report deaths as our official performance goal to DHS. Interested colleagues can find additional data, including injury data, in the Coast Guard's annual report *Boating Statistics*, which can be found at uscgboating.org.

Summary

Like most strategic plans, many of the Milestones attempted within this plan were aspirational. The team understood some efforts were experimental and perhaps longshots, though worth trying. We did our best to influence the variables we could with available funding. We made progress in many safety areas and will continue to do so. The next strategic plan will build on successes and will also include experiments.

As modeled by the chart below, thanks to all our partners, the National Recreational Boating Safety Program has been an historic success. We will continue to seek input from all boating safety stakeholders on how we can help all recreational boaters enjoy safe experiences on America's Waterways. We appreciate all who support this effort.



Appendix: Acronyms and Definitions

1. ANS	American National Standard
2. ANSI	American National Standards Institute
3. BARD	Boating Accident Report Database
4. BUI	Boating Under the Influence of Alcohol [also Operating Under the Influence (OUI) and Boating While Intoxicated (BWI)]
5. BUI-D	Boating Under the Influence-Drugs
6. CFR	Code of Federal Regulations
7. CoA	Course of Action
8. CSR	Central System Repository
9. Data Fusion	The process of synthesizing raw data from several sources to generate more meaningful information that can be of greater value than single source data
10. DUI	Driving Under the Influence
11. Evidence-based Approach	Refers to any concept, strategy, or approach derived from or informed by “objective evidence” resulting from metrics, research, performance, or any combination thereof
12. HCD	Human Centered Design
13. Human-Propelled	Human energy is the source of propulsion
14. IACP	International Association of Chiefs of Police
15. LED	Light Emitting Diode
16. MIC	Manufacturer Identification Code
17. Milestone	A date by which a task is complete
18. MISLE	Marine Information for Safety and Law Enforcement
19. NAVRULES	Navigation rules of the USCG
20. NASA	National Aeronautics and Space Administration
21. National System	National System of Standards for Recreational Boat Operation is high-level framework that organizes <i>standards</i> associated with <i>learning</i> safe recreational boat operation into a comprehensive and integrated system of learning that applies across the nation
22. NBSAC	National Boating Safety Advisory Council
23. NGO	Non-Governmental Organization
24. NHTSA	National Highway Traffic Safety Administration
25. NOAA	National Oceanic and Atmospheric Administration
26. NRBSS	National Recreational Boating Safety Survey
27. OUPV	Operator of Uninspected Passenger Vessel

28. PHA

PHA refers to “The Public Health Approach” is the science and art of preventing disease, prolonging life, and promoting health through organized efforts of society.

Adapted for the field of Injury Prevention, PHA is a four-step process:

- a. Collection and analysis of evidence to define and prioritize a problem, define the target population, and determine any risk and protective factors that could be addressed.
- b. Following a written set of goals and objectives, develop potential interventions in one or more of the areas of Engineering/Environment, Enactment/Enforcement of public policy, and Education. Build in performance measurements, and test on the target population(s).
- c. Implement promising interventions and widely replicate them at the community “grass roots” level.
- d. Evaluate activities, outcomes, and any public health impacts against goals and objectives and then replace, modify, or continue interventions, and continue to monitor over time.

Within the context of this document, PHA exemplifies what is implied by an “evidence-based approach”.

29. PI

Performance Initiative

30. PRP II

Performance Report Part II

31. RBS

Recreational Boating Safety

32. USCG

United States Coast Guard

33. USACE

United States Army Corps of Engineers

34. VSC

Vessel Safety Check