

# GAO Highlights

Highlights of [GAO-17-413](#), a report to congressional committees

## Why GAO Did This Study

In 2001, the Navy began reducing crew sizes on surface ships through an initiative called optimal manning, which was intended to achieve workload efficiencies and reduce personnel costs. In 2010, the Navy concluded that this initiative had adversely affected ship readiness and began restoring crew sizes on its ships.

The conference report accompanying the National Defense Authorization Act for Fiscal Year 2016 included a provision that GAO review the Navy's reduced manning initiatives in the surface fleet. This report examines (1) any trends in ship operating and support costs and maintenance backlogs, (2) the extent to which the Navy's manpower requirements process accounts for ship workload, and (3) any manning challenges and implications for the future.

GAO analyzed and reviewed data from fiscal years 2000 through 2015 (the most current available) on crew sizes, operating and support costs, material readiness, and the Navy's manpower requirements determination process. GAO also interviewed Department of Defense (DOD) officials and ship crews to discuss workload, manning levels, enablers of smaller crew size, and implications for the future.

## What GAO Recommends

GAO is making four recommendations that the Navy (1) reassess the standard workweek, (2) require examination of in-port workload, (3) require reassessment of the factors used to develop manpower requirements, and (4) identify the personnel costs needed to man a larger fleet. DOD concurred with each recommendation.

View [GAO-17-413](#). For more information, contact John Pendleton at (202) 512-3489 or [pendletonj@gao.gov](mailto:pendletonj@gao.gov).

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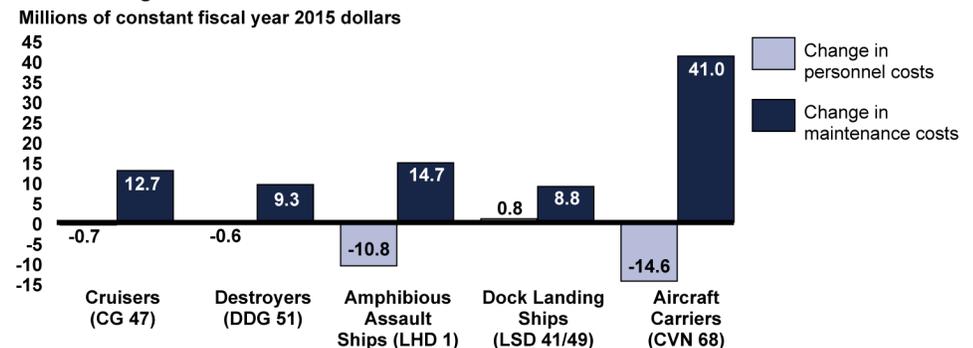
## NAVY FORCE STRUCTURE

### Actions Needed to Ensure Proper Size and Composition of Ship Crews

## What GAO Found

Total ship operating and support costs—which include personnel and maintenance costs—and maintenance backlogs increased during the optimal manning period (2003–2012) and have continued to increase for most ship classes since the initiative ended. Since the implementation of optimal manning, the Navy reduced crew sizes, which decreased the associated personnel costs for most ship classes, even as crews were partially restored. However, increased maintenance costs offset the reductions in personnel costs, as shown below. Navy officials attributed maintenance cost increases to reduced crews, longer deployments, and other factors. GAO's analysis did not isolate the relative effects of reduced crews from these other factors. Maintenance backlogs also increased during the optimal manning period and have continued to grow.

**Changes in Average Annual Personnel and Maintenance Costs from Start of Optimal Manning Period through Fiscal Year 2015**



Source: GAO analysis of Navy data. | GAO-17-413

The Navy's process to determine manpower requirements—the number and skill mix of sailors needed for its ships—does not fully account for all ship workload. The Navy continues to use an outdated standard workweek that may overstate the amount of sailor time available for productive work. Although the Navy has updated some of its manpower factors, its instruction does not require reassessing factors to ensure they remain valid or require measuring workload while ships are in port. Current and analytically based manpower requirements are essential to ensuring that crews can maintain readiness and prevent overwork that can affect safety, morale, and retention. Until the Navy makes needed changes to its factors and instruction used in determining manpower requirements, its ships may not have the right number and skill mix of sailors to maintain readiness and prevent overworking its sailors.

Moving forward, the Navy will likely face manning challenges as it seeks to increase the size of its fleet. The fleet is projected to grow from its current 274 ships to as many as 355 ships, but the Navy has not determined how many personnel will need to be added to man those ships. In addition, as the Navy has gained experience operating its new ship classes, their crew sizes have grown and may continue to do so. Without updating its manpower factors and requirements and identifying the personnel cost implications of fleet size increases, the Navy cannot articulate its resource needs to decision makers.