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UNITED STATES TRANSPORTATION COMMAND
508 SCOTT DRIVE
SCOTT AIR FORCE BASE, ILLINOIS 62225-5357

JAN 28 2010

USTRANSCOM FOIA 10-22

This is a final response to your Freedom of Information Act Request (FOIA), 7 November 2009, requesting "a copy of each report produced for Congress by the United States Transportation Command (USTRANSCOM) during the past three years, and which are not posted on the Command's public internet website." Your request has been processed in accordance with Department of Defense (DOD) Regulation 5400.7, DOD FOIA Program.

We are releasing in full one responsive report submitted to members of the Committees on Armed Services of the House of Representatives and Senate in accordance with the National Defense Authorization Act for FY 2008, Conference Report 110-477, consisting of four cover Memos, dated 17 December 2008, with three attachments: (1) Port Look 08 Implementation Plan, (2) Stakeholder Comments, and (3) Volume I, Port Look Study 2008, totaling 70 pages.

In accordance with DODR 5400.7, Chapter 6, paragraph C6.1.4.2., processing fees are less than $15.00 and therefore not assessed.

Since this completes our action on your request, we are closing your file in this agency. If further assistance is required, please contact our FOIA Officer, Ms. JoLynn Bien, at (618) 229-4063 or e-mail: jolynn.bien@ustranscom.mil.

Sincerely

WILLIAM H. JOHNSON
Major General, U.S. Army
Chief of Staff

Attachment
USTRANSCOM/TCCC Memos (4) Addressed to
Committees on Armed Services, 17 Dec 08,
w/3 Attachments (Full Release, 70 Pages)

cc: OSD/DFOIPO

UNITED STATES TRANSPORTATION COMMAND
508 SCOTT DRIVE
SCOTT AIR FORCE BASE ILLINOIS 62225-5357

17 December 2008

The Honorable Duncan Hunter
United States House of Representatives
Committee on Armed Services
2120 Rayburn House Office Building
Washington DC 20515-6035

Dear Congressman Hunter

The National Defense Authorization Act for FY 2008, Conference Report 110-477, directs the military Surface Deployment and Distribution Command, a component command of the United States Transportation Command, to submit to the Committees on Armed Services of the House of Representatives and the Senate a plan to optimize the use of strategic ports. Attached is the plan to optimize the use of strategic ports, stakeholder comments, and Volume I of the Port Look Study 2008.

A similar letter was sent to the Honorable Ike Skelton, Chairman, House Armed Services Committee. Please feel free to call my Legislative Affairs Office at (618) 229-1886 if you need any further assistance.

Sincerely

DUNCAN J. McNABB
General, USAF
Commander

3 Attachments:
1. Port Look 08 Implementation Plan
2. Stakeholder Comments
3. Volume I, Port Look Study 2008

cc:
OCJCS/J4
OCJCS/LA

UNITED STATES TRANSPORTATION COMMAND
508 SCOTT DRIVE
SCOTT AIR FORCE BASE, ILLINOIS 62225-5357

17 December 2008

The Honorable John McCain
United States Senate
Committee on Armed Services
228 Russell Senate Office Building
Washington DC 20510-6050

Dear Senator McCain

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UNITED STATES TRANSPORTATION COMMAND
508 SCOTT DRIVE
SCOTT AIR FORCE BASE, ILLINOIS 62225-5357

17 December 2008

The Honorable Ike Skelton
United States House of Representatives
Committee on Armed Services
2120 Rayburn House Office Building
Washington DC 20515-6035

Dear Chairman Skelton

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General, USAF
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UNITED STATES TRANSPORTATION COMMAND
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SCOTT AIR FORCE BASE, ILLINOIS 62225-5357

17 December 2008

The Honorable Carl Levin
United States Senate
Committee on Armed Services
228 Russell Senate Office Building
Washington DC 20510-6050

Dear Chairman Levin

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Sincerely

Duncan J. McNabb

DUNCAN J. McNABB
General, USAF
Commander

3 Attachments:
1. Port Look 08 Implementation Plan
2. Stakeholder Comments
3. Volume I, Port Look Study 2008

cc:
OCJCS/J4
OCJCS/LA

Port Look 2008: Strategic Seaports Implementation Plan

October 2008

1. Reference the Congressional mandate to develop and implement a plan to optimize the use of strategic seaports. This memorandum transmits the *Port Look 2008 Study* report and serves as the SDDC Strategic Seaport Implementation Plan.

2. SDDC contracted LMI to provide research and analytical services encompassing strategic seaport selection and optimization in response to the tasking included in House Resolution 1585, part of the legislative history of the National Defense Authorization Act for Fiscal Year 2008. *Port Look 2008* included an analysis of DoD required capabilities and an assessment of port capabilities focusing on two time periods: 2008 and 2015. The scope of the study included 15 commercial and 4 military seaports designated as current strategic seaports. At the outset of the study, we stipulated that at least one seaport must remain on each geographic U.S. Coast—East, Gulf, West, and Alaskan.

3. The *Port Look 2008 Study* included a number of ideas to optimize the use of our strategic seaports. The study was reviewed by key stakeholders to identify the best ideas and to develop a plan for implementation. This memorandum documents those considerations and our planned way ahead. Collectively, the action of all stakeholders will improve seaport readiness, resource utilization, and communication and coordination between port authorities and Federal agencies.

4. After reviewing the study report and considering the recommendations, SDDC will implement the following measures to optimize the use of strategic seaports:

a. Retain the commercial and military seaports currently designated as strategic. Under separate memorandum, designate Charleston Naval Weapons Station and the commercial Port of Charleston as two discrete strategic seaports. This action adjusts the total accessible seaports in the Strategic Seaport Program from 19 to 20 (15 commercial and 5 military).

b. Ensure that a procurement vehicle, such as a Basic Ordering Agreement, is in place at each of the commercial ports and that an inter-service support agreement, where required, is in place for each of the military seaports.

c. Establish a strategic seaport selection team to ensure the DoD has sufficient throughput capacity for future operations and a viable plan for redundancy. Their first order of business will identify locations on the Gulf Coast and in Alaska that can provide the future capacity DoD requires. This may result in an expansion of the current Port Planning Order (PPO) capacity at the existing seaports or the designation of additional strategic ports. The team will brief their recommendations not later than July 2009.

d. It is clear that seaport requirements data and a projection for workload can be derived from a number of sources and that there are variations in conceivable operational requirements. Consequently, SDDC will reexamine port workload requirements at the conclusion of the OSD-led Mobility Capabilities and Requirements Study 2016 (MCRS-2016) scheduled for completion in May 2009. SDDC will partner with the Military Sealift Command to conduct a follow-on

study using MCRS-2016 results to assess "end-to-end" deployment requirements that include inland infrastructure and vessel readiness requirements. Finally, institutionalize the *Port Look Study* on a recurring basis following the release of the Quadrennial Defense Review.

e. Begin an examination of additional ports to provide better alternatives to those currently designated as strategic seaports. For consideration of critical infrastructure and vulnerabilities, this additional ports review will involve consultation with the Department of Homeland Security (DHS), U.S. Coast Guard (USCG) and Joint Munitions Command (for consideration of ammunition shipping requirements).

f. Recognizing the value that Naval Magazine Indian Island offers as potential for West Coast unit equipment shipments, SDDC Transportation Engineering Agency (TEA) will conduct a Ports for National Defense strategic seaport study to assess the seaport in that role—not exclusively for ammunition shipments. This study will be conducted over the course of the next two years - primarily due to the completion date of the MCRS – 2016 and QDR release.

g. Negotiate arrangements with the Port of Jacksonville to maintain our presence there and with the Port of Tacoma to examine the feasibility of establishing a location on the port for full-time SDDC staffing. Update the Battlebooks, our "operating manuals", for each strategic seaport. This action will be completed by March 2009.

h. To address near-term potential West Coast manning shortfalls, we will open or operate strategic seaports there as needed. For the long term, following the establishment of officially recognized seaport requirements in MCRS-2016, initiate a personnel requirements analysis to amend authorizations in the unit Tables of Distribution and Allowances, if necessary.

i. Identify ways to improve the current documented process to select ports—both as strategic seaports and for day-to-day operations. Current processes clearly need to describe how cost influences port selection and how external stakeholders provide input to the processes. Further, expand our "process map" for strategic seaport selection and designation with a wider set of screening criteria similar to those used in *Port Look 2008.*

5. During FY 2009, SDDC will partner with the Maritime Administration (MARAD) to improve Strategic Seaport Program management as follows:

a. Develop a new metric for the readiness of strategic seaports that include phasing in port capacity and capability over time.

b. Revise the monthly strategic seaports readiness report to reflect time required for ports to make partial and full PPO capacity available to DoD following notification.

c. Revitalize the governance structure of the National Port Readiness Network (NPRN) by activating vacant membership positions and inviting membership with: U.S. Joint Forces Command, Army Installation Management Command, NORTHCOM, and U.S. Marine Corps.

d. Increase PPO specificity; name desired facilities within each port.

e. Develop a PPO schedule to synchronize results of our port studies.

f. Update the NPRN password-protected website to post minutes of Port Readiness Committee (PRC) meetings and after action reports on military outloads or exercises.

6. MARAD, as the NPRN Chair, has agreed to accept the following agenda items for meetings of the NPRN Working Group and NPRN Steering Group in FY 2009.

a. Revising the definition of a strategic seaport and publishing it in a revision to the NPRN Memorandum of Understanding (MOU). Concurrently, SDDC will work with USTRANSCOM to institutionalize that revised Joint doctrine definition.

b. Conferring over the NPRN MOU provision that allows the PRC to serve as a subcommittee to the Area Maritime Security Committee, overseen by the USCG and DHS. The Department of Transportation (DOT) and MARAD, where administrative responsibility for the Strategic Seaport Program resides, should retain PRC oversight.

c. Developing strategic seaports strategies to ensure DoD access when needed.

d. Participating in the USCG port security exercise program involving designated strategic seaports.

e. Discussing legal ramifications and potential DoD costs if a port must terminate a commercial long-term lease to accommodate a DoD deployment operation.

f. Pursuing legislative change to amend the Code of Federal Regulation codifying the Strategic Seaport Program.

7. To improve communication with our strategic seaport partners, the NPRN Steering Group and SDDC will co-host a FY09 forum with the port authorities. This meeting will describe DoD requirements and share our current port selection process maps. MARAD will provide the group an update on NPRN actions. The ports can present any issues they have or foresee with providing port facilities or services. If the meeting proves mutually beneficial, establish a routine for periodic reengagement.

Stakeholder Comments

SDDC considered the recommendations in the LMI report and comments from both internal and external staffing. SDDC agreed with many, but not all, of the recommendations and comments. Decisions are reflected in the Port Look 2008 Implementation Plan.

Key stakeholders had the opportunity to review the *Port Look 2008, Strategic Seaports, Volume 1, Executive Report* (SDD80T1/October 2008). Stakeholders included:

- Maritime Administration (MARAD)
- Department of Homeland Security (DHS)
- U.S. Coast Guard (USCG)
- U.S. Transportation Command (USTRANSCOM)
- Military Sealift Command (MSC)
- U.S. Army Forces Command (FORSCOM)
- SDDC elements, to include the 597th Transportation Terminal Group and the Transportation Engineering Agency

USTRANSCOM, MSC, and FORSCOM reviewed and responded with no comments. Feedback from MARAD, DHS, the USCG, and within SDDC is synopsized below.

MARAD

MARAD looks forward to continuing work with SDDC, the commercial Strategic Ports and the National Port Readiness Network (NPRN) agencies on improving the U.S. military's future ability to deploy through the commercial transportation system.

The report identifies a number of adjustments that can be made to improve the readiness of the 15 commercial Strategic Ports and further optimize the use of these ports by the military. Perfect optimization will not significantly reduce or eliminate future conflicts between military and commercial needs because the source of the conflict is cargo congestion and lack of port and intermodal infrastructure. Port and intermodal infrastructure capacity (including rail and highway connectors) was outside the scope of this report but this issue is a major challenge for the Nation and a major concern of MARAD and the commercial Strategic Ports as we plan for the future.

DHS

DHS provides the following for consideration as requested.

- The TSA port security exercises are conducted to practice commercial preparedness in each USCG sector every 18 months. However, DoD does not participate in these exercises. We recommend that DoD work with other members of the NPRN to participate in all security

exercises that involve designated strategic seaports.

- The NPRN should continue to consider the PRC a standing committee of the NPRN under the management of MARAD, not a subcommittee of the Area Maritime Security Committee (AMSC) overseen by the USCG and DHS.

USCG

It is not clear that the study considered or included in its analysis the additional cost impacts to the Coast Guard associated with:

- Designation of U.S. ports as strategic seaports
- The associated Port Readiness preparedness program, (chair the Port Readiness Committee, military outload (MOL) plan development, MOL exercise and improvement process, and remedial action program), headed by that port's Coast Guard Captain of the Port (COTP) in coordination with local NPRN membership, (per NPRN MOU on Port Readiness, Rev 6), and
- Coast Guard maritime security operations associated with actual MOL operations.

In mobilization or other national emergency level (like the present) circumstances, Coast Guard requests and receives DOD supplemental funding to support CG Reserve Force Title X augmentation of local Coast Guard forces to conduct MOL maritime security measures. Any expansion or spreading of SDDC MOL operations beyond the currently most active strategic seaports (Charleston, Jacksonville, Beaumont, San Diego, and Tacoma), will generate additional supplemental manning requirements for the Coast Guard, and thus, will require additional DOD authority and funding for USCG security operations in support of MOLs.

The Coast Guard supported this study at the port, regional, and national level. Members of SDDC's contractor LMI met with Coast Guard Headquarters members, were subsequently provided with copies of the CY-07 State of the Port Reports from Coast Guard COTPs at the NPRN Strategic Seaports, and provided feedback regarding the definition of strategic ports.

SDDC

597th Transportation Terminal Group

The 597th TTG and subordinate terminal battalions' review of the LMI Port Look 2008 Strategic Seaport Study was favorable overall, but revealed a number of areas we believe require a closer examination to ensure there is no distortion between how we currently operate and the report recommendations.

SDDCTEA

SDDCTEA recommends that:

- SDDC adopt the LMI definition of a strategic port.
- For the short falls listed in the Gulf Coast and Alaska, alternate strategic ports be considered first and the Ports for National Defense (PND) reports be considered to determine the best capability prior to selection.
- If the criteria for determining a strategic port is reworked or better defined, it should include that the PND reports will be used to determine the port's capability and throughput and this will be part of the criteria to determine if a port should be strategic.

PORT LOOK 2008

STRATEGIC SEAPORTS

VOLUME 1 EXECUTIVE REPORT

REPORT SDD80T1

Donna J. Simkins
Terry D. Basham
Virginia M. Closs
Zbigniew M. Majchrzak
Michael McManus
Darrell L. Roll
Mark R. Ulrich
William G. Dinnison

LMI
GOVERNMENT CONSULTING

OCTOBER 2008

~~FOR OFFICIAL USE ONLY~~

NOTICE:

THE VIEWS, OPINIONS, AND FINDINGS CONTAINED IN THIS REPORT ARE THOSE OF LMI AND SHOULD NOT BE CONSTRUED AS AN OFFICIAL AGENCY POSITION, POLICY, OR DECISION, UNLESS SO DESIGNATED BY OTHER OFFICIAL DOCUMENTATION.

LMI

Port Look 2008: Strategic Seaports
Volume 1 Executive Report
SDD80T1/OCTOBER 2008

Executive Summary

Expressing concern about the potential for future conflicts between military and commercial needs at strategic seaport facilities, the House Armed Services Committee, through House Resolution (H.R.) 1585, "National Defense Authorization Act for Fiscal Year 2008," directed the Secretary of Defense to develop and implement a plan to optimize the use of strategic seaports. Section 353 of the bill stated that the plan would:

- Address cost effectiveness, manning requirements, location, and maximization of utilization of resources for each strategic port.
- Include an analysis of how each Surface Deployment and Distribution Command (SDDC) strategic port is chosen.
- Include provisions for consultation with the local port authority for any strategic port at which there is no permanent SDDC presence.

The Commander, SDDC, asked LMI to conduct a study that would serve as the basis for a plan to optimize the use of strategic seaports in response to the tasking in H.R. 1585. Specifically, SDDC requested LMI to provide research and analytical services regarding strategic seaport selection for unit deployment cargo:

- Determine the optimum number of commercial and military seaports
- Identify the optimum strategic seaport locations
- Propose full-time SDDC manning targets
- Validate the 48-hour Port Planning Order (PPO) availability timeline
- Identify process improvements for port selection.

We carried out this study in four phases: preparation for analysis, analysis of required capabilities, assessment of capabilities, and development of recommendations. Our approach included conducting interviews with key stakeholders and

visiting all of the designated strategic seaports and military ports, except for the Port of Anchorage, Alaska. We limited the study to 19 SDDC-designated commercial and military strategic seaports, focusing on unit deployment requirements in 2008 and 2015. We were directed to include in our list of optimum seaports at least one seaport on each geographic U.S. Coast: East, Gulf, West, and Alaskan.

The results from these interviews and visits formed the basis for the detailed findings and recommendations described in our report. Our high-level findings and recommendations are summarized below.

Optimum number of commercial and military seaports. In addressing this objective, we found that the biggest challenge was projecting the correct workload throughput requirements. Those requirements can be derived from various operation plans, Office of the Secretary of Defense-approved scenarios for study purposes, and current operational data. We chose a blend of the three as the basis for the projected workload requirements. We also found that given the variations in conceivable operational requirements, DoD must retain redundant port capability to ensure that access is available during a contingency or catastrophic event. Based on the results of our analysis, we recommend that SDDC:

- Use the data in this study as the baseline for responding to H. R. 1585, but revise our results, as necessary, based on the final port capacity requirements defined in the Mobility Capabilities and Requirements Study 2016 (MCRS-2016), which is scheduled for release in May 2009.

- Separate, in cooperation with MARAD, Charleston Naval Weapons Station (CNWS) from the Charleston commercial seaport for designation purposes. This action would increase the number of accessible strategic seaports in the Strategic Seaport Program from 19 to 20 (15 commercial and 5 military).

- Retain the 15 commercial and 5 military strategic seaports as the optimum number to ensure adequate regional access and provide redundant capacity in the event of an undefined future contingency response requirement.

- Consider selecting additional ports or adjusting PPOs to increase throughput capability on the Gulf and Alaskan Coasts.

Optimum strategic seaport locations. We found that it was more effective to analyze the commercial and military strategic seaports by region rather than individually. We developed scoring criteria to evaluate the merits of each seaport by region and created an order of merit list of the optimum locations within each region. Based on the results of our analysis, we recommend that SDDC:

- Retain all of the currently designated strategic seaports, but explore alternative locations to determine if they should be used in addition to or in lieu of the existing strategic seaports.

Full-time SDDC manning targets. We concluded that each of the ports at the top of the regional order of merit lists (Jacksonville, Beaumont, Tacoma, and Anchorage) should have a permanent SDDC presence. We also found that projected workload when compared to SDDC manning by region was inconsistent. The historical and current operational data indicate that the Gulf Coast region is undermanned. Based on the results of our analysis, we recommend that SDDC:

- Shift the necessary personnel authorizations from the East Coast to the Gulf Coast to ensure workload requirements and manning capacity are consistent across regions.

- Negotiate with the recommended ports for a full-time presence. This action should include renewing manning arrangements with Jacksonville and Anchorage, establishing agreements with Tacoma, and establishing agreements with Corpus Christi if that port is selected as the location for the needed increase in Gulf Coast throughput capability.

- Continue manning the military seaports (Concord, Sunny Point, and CNWS).

We also recommend that SDDC periodically meet with representatives from ports with no SDDC presence to ensure an effective Strategic Seaport Program.

48-hour PPO availability timeline. We found that although the PPO requires facilities be made available 48 hours after receipt of a written National Shipping Authority Service Priority Order (NSPO) from MARAD, an NSPO has never been issued. We further found that the timeline is not generally understood by the deployment community; it does not match the timelines used by units for pre-deployment activities; it does not measure advance notice; and it does not clearly articulate the seaport capability that DoD requires. We also found that the monthly readiness reports prepared by the strategic seaports and submitted to MARAD do not clearly indicate how long it would take the ports to prepare the PPO facilities for DoD use. This finding questions the utility of the readiness report in its current form. Based on the results of our analysis, we recommend that SDDC:

- Work with MARAD to develop a new metric for the readiness of strategic seaports and consider phasing in capacity and capability over time.

- Work with MARAD to revise the monthly readiness reports from the strategic seaports to include how long it would take for the port to make capacity available in the event of a short-notice contingency, and the time it would take for the port to make a portion of the required capacity available.

Process improvements for port selection. We found that the commercial strategic seaport selection and designation process is well organized and well defined. Although the process includes orderly and logical steps, and readily identifiable process owners, it does not consider cost or mandate periodic requirements reviews. The process also fails to balance unit cargoes across the ports

and periodically selects "non-strategic" seaports. We found that the current definition of strategic seaport is not well understood and does not differentiate between a strategic seaport and any other type of seaport. The current definition uses ambiguous language and is not codified in joint doctrine. We further noted some flaws in the governance of the Strategic Seaport Program and an absence of legislative language that could give the program the focus it needs to ensure the commercial ports give adequate attention to DoD needs. Based on the results of our analysis, we recommend the following actions:

- The National Port Readiness Network (NPRN) include our proposed definition in a revision to its memorandum of understanding and SDDC work with the U.S. Transportation Command to codify the revised definition in joint doctrine.

- MARAD revitalize the governance structure of the NPRN by activating vacant membership positions, inviting the U.S. Joint Forces Command and the U.S. Army Installation Management Command to join, and also assessing the interest of the U.S. Marine Corps in joining.

- SDDC revise the seaport selection processes to include cost considerations and require periodic revalidations.

- The NPRN consider pursuing legislative change to amend the Code of Federal Regulation to codify the Strategic Seaport Program.

We are documenting the results of our study in two separate reports. Volume 1 is the Executive Report and Volume 2 presents our full report.

Contents

Figures

Tables

Chapter 1
Introduction

BACKGROUND

The Strategic Seaport Program is designed to facilitate the movement of military forces securely through U.S. seaports with minimal disruptions to commerce. The exponential growth of commercial cargo over the past 20 years, however, has generated concern over the potential for conflict between military and commercial needs and about the future adequacy of the strategic seaport infrastructure to meet national security requirements. Many ports are operating at or near capacity and the existing infrastructure may not be readily available when required by DoD.

Accordingly, the House Armed Services Committee, through House Resolution (H.R.) 1585, directed the Secretary of Defense to develop and implement a plan to optimize the use of strategic ports by the Commander, Surface Deployment and Distribution Command (SDDC). Section 353 of the bill stated that the plan should:

- Address cost effectiveness, manning requirements, location, and maximization of utilization of resources for each strategic port.
- Include an analysis of how each SDDC strategic port is chosen.
- Include provisions for consultation with the local port authority for any strategic port at which there is no permanent SDDC presence.

A subsequent Conference Report to Accompany H.R. 1585 stated that:

> The conferees are encouraged that the SDDC has initiated a study to address many of the concerns raised in section 353. The conferees direct that the SDDC shall...submit to the Committees on Armed Services of the House of Representatives and the Senate a plan to optimize the use of strategic ports.

Although H.R. 1585 was not enacted, the language became part of the legislative history of the National Defense Authorization Act, and the interest in strategic ports became the impetus for this study.

STUDY OVERVIEW

The Commander, SDDC, asked LMI to conduct a study that would serve as the basis for a plan to optimize the use of strategic seaports. In the following subsections, we outline our approach to conducting this study.

Objectives

We had four major study objectives:

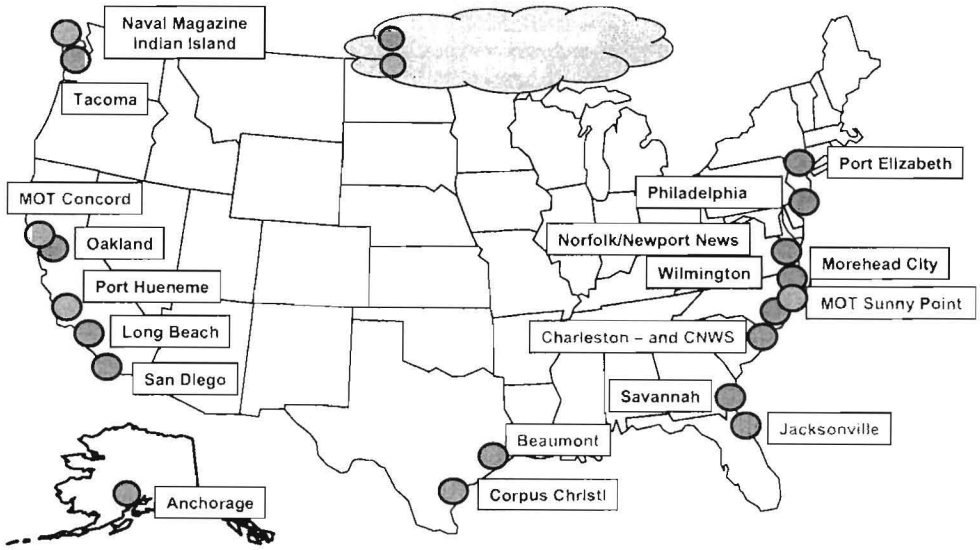
- Determine the optimum number of commercial and military seaports
- Identify the optimum strategic seaport locations
- Propose full-time SDDC manning targets
- Validate the 48-hour Port Planning Order (PPO) availability timeline.

As a secondary objective, we were asked us to identify potential process improvements for port selection.

Scope

Our study was limited to 19 designated commercial and military strategic seaports as identified by SDDC.[1] These seaports are shown in Figure 1-1.

Figure 1-1. Strategic Seaports



The seaports with the white labels have full-time, battalion-size SDDC manning. The other ports may be operated by SDDC active duty teams on travel orders, or Army Reserve units.

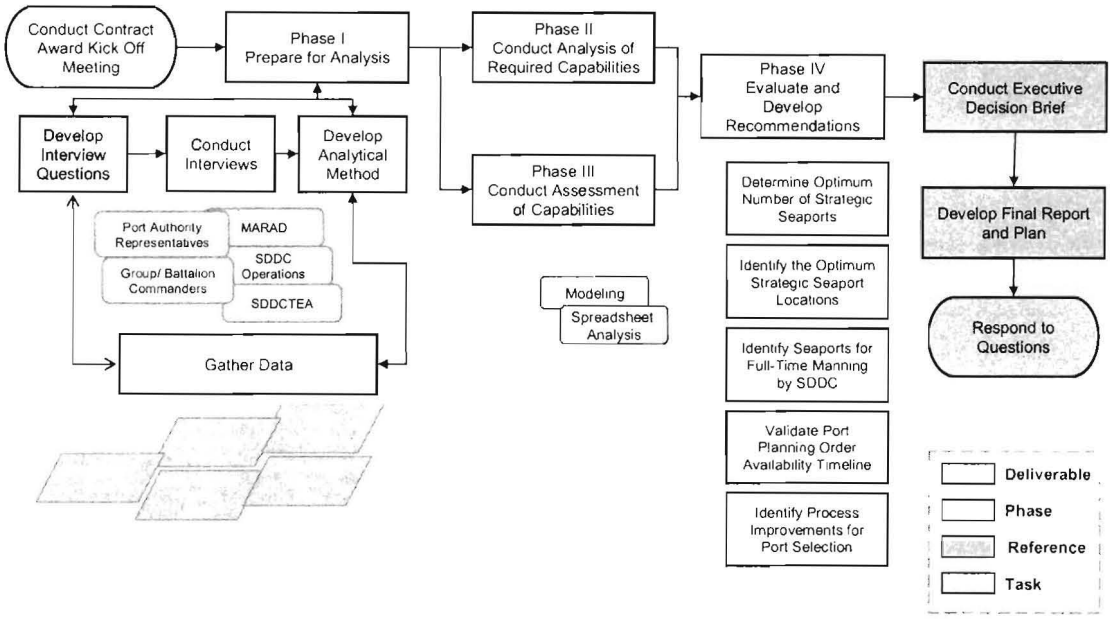
[1] "National Port Readiness Network Memorandum of Understanding on Port Readiness," Revision 6.

We were asked to examine the requirements for these ports in two time periods: 2008 and 2015. We focused on the seaport requirements associated with unit deployments during the earliest phases of a military operation, and did not consider shipments of personnel, personal property, or supplies unless they were part of a unit deployment. Finally, we included, as directed, at least one seaport on each geographic U.S. Coast (East, Gulf, West, and Alaskan) in our list of optimum seaports.

Method

We conducted our study in four phases: preparation for analysis, analysis of required capabilities, assessment of capabilities, and development of recommendations. Figure 1-2 shows these phases in the grey boxes in our method diagram.

Figure 1-2. Study Method



REPORT ORGANIZATION

Chapter 2 discusses our results from identifying the optimum strategic seaport locations, while Chapter 3 describes our results from quantifying the optimum number of commercial and military seaports. Chapter 4 addresses our third objective—identifying target locations for full-time SDDC manning. Chapter 5 presents our definition of a strategic seaport, discusses the strategic port selection process, and shows our recommendations for improving the process and upgrading the 48-hour PPO timeline. We summarize our conclusions and recommendations in Chapter 6.

Chapter 2
Determining Optimum Seaport Locations

As briefly described in Chapter 1, one of our study objectives was to determine the optimum strategic seaport locations. Limited in scope to 15 commercial seaports and 4 military seaports, we interpreted the expression "optimum location" to mean a rank ordering of these ports, which we describe as an order of merit list (OML). Given SDDC's intent to maintain capability on all four U.S. coasts—Alaskan, West, Gulf, and East—we further interpreted the objective as an OML for each coast.

ANALYSIS METHOD

Determining the optimum location of strategic ports for DoD is a complex undertaking. SDDC provided several factors as evaluation criteria in our analysis. Those factors are listed below:

- Seaport facilities and resources are available during a surge, in close proximity to available piers, and in operable condition.
- Seaports are near power projection platforms (PPPs).
- Seaport use creates minimal disruption to commerce.
- SDDC incurs minimal costs to establish and maintain a full-time presence; conduct terminal and vessel operations; and close, relocate, or reestablish a manned presence.

Analysis Categories

We recognized that these and many other factors—some quantifiable and some fairly subjective—should be included in our analysis. Building upon the SDDC factors, and others, we developed seven categories for describing an optimum seaport:

1. Right facilities—access and capability
2. Right attitude—stakeholder perspective
3. Right time—availability
4. Right price—cost of terminal operations and workforce
5. Right background—history of use

6. Right location—proximity of seaport to DoD shippers

7. Right resources—personnel.

Evaluation Criteria

We then considered the relative importance of each of the seven categories, and concluded that Categories 1 and 3—those that would give DoD access to the right facilities at the right time—were the most important. We further concluded, with input from many of the organizations or activities that we visited, the topics of attitude toward the seaport, history of seaport use, proximity of the seaport to DoD shippers, and personnel resource factors such as manning or training, were of secondary importance. The least important category was cost.

With an eye toward "scoring" the seaports within the seven categories, we assigned weights with a high of "3" to the most important and a low of "1" to the least important. We then expanded the SDDC criteria with our own measures and mapped them to the original seven categories. In total, we identified 29 separate evaluation criteria and an associated scoring measure for each. Those scoring measures ranged from "0" to "3," with "3" being the highest. We show the criteria within the seven categories in Table 2-1.

Table 2-1. Criteria Mapping

Category	Evaluation criteria
Right facilities—access and capability	Intermodal access
	Infrastructure
	Capability to handle ammunition
	Physical security
	Department of Homeland Security (DHS) tiering (risk assessment)
Right attitude—stakeholder perspective	Port desire for full-time manning
	Port willingness to accept DoD cargo
	SDDC port preference
	Deploying installation port preference
	Port Readiness Committee (PRC) meetings
Right time—availability of facilities	Landlord versus common-user ports
	Accuracy and detail in PPO
	Percentage of total port capacity consumed by PPO
	In-place contract vehicles
	Projected commercial workload growth
	Planned capital improvement programs
	Ability to respond to 48-hour timeline

Table 2-1. Criteria Mapping

Category	Evaluation criteria
Right price—cost of terminal operations and workforce	Cost of conducting operations at the port
	Costs to temporarily man the port during contingencies
Right background—history of use	Global War on Terror (GWOT) actual port workloads depicting an 18-month steady-state operation
	Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) data depicting a surge for combat
	Selected operations plan (OPLAN) data for future engagement
	Planned data set for the 2012 timeframe, the Mobility Capabilities Study (MCS)
Right location—proximity of seaport to DoD shippers	Distance between seaports and force generation platforms
	Density of force generation platforms within 400 miles
	Surge sealift layberth locations
	Distance between seaports and SDDC battalion headquarters
Right resources—personnel	SDDC or other DoD full-time presence
	Port/labor proficiency with DoD deployments

Scoring Process

Using our analysis and scoring matrix, we evaluated each of the commercial seaports against the criteria. To preclude the potential for bias during the evaluation process, we could not alter the matrix in any way or review the scores for the ports. To the extent possible, we also applied the scoring to the military ports. Many of the criteria, such as the PPO accuracy, did not apply to military ports. Since DoD owns these ports, we considered them "optimal locations." We further concluded there was no value comparing military and commercial seaports in the determination of optimal locations.

OPTIMUM LOCATION OF SEAPORTS

After considering and rating 29 different analysis criteria and then grouping the seaports into seven categories, we obtained a numerical ranking of the commercial ports from top to bottom. We then divided them into the four U.S. regions in an OML to show the optimum locations. We summarize our results in Figure 2-1.

Figure 2-1. Results: Optimum Locations

When we completed our analysis, we performed a sensitivity analysis to assess the impact of different weights. For example, when we changed the weight of cost from "1" to "3," we experienced no change in the results. In fact, unless we changed the weight of a category significantly (such as a "2" to a "5"), the top and bottom of the OML did not change.

Note: We arrived at these OMLs by considering only the currently designated strategic seaports. It is conceivable that there are better alternatives to these ports.

We did not include the military seaports in the OMLs because we could not apply the criteria consistently across the seaports. We believe, however, if the lists could be integrated, the military ports would appear at or near the top of each OML, since assured access outweighs all other criteria.

CONCLUSION

We believe our approach succeeded in allowing for meaningful comparisons of the strategic seaports. It enabled us to assess both objective and subjective criteria in a framework that precluded bias toward any one measure or port. The OMLs also provided the underpinnings for our analysis of the optimum number of seaports, which we address in the following chapter.

Chapter 3
Determining the Optimum Number of Seaports

In this chapter, we describe our method for establishing the ports' throughput capabilities, present a picture of potential current and future throughput requirements, and conclude with a description of the optimum number of ports based on the combination of requirements and the OMLs discussed in Chapter 2.

THROUGHPUT CAPABILITY

We used two sources to determine the daily throughput capability of the commercial strategic seaports:

- Ports for National Defense (PND) strategic seaport analysis reports, which SDDC's Transportation Engineering Agency (TEA) produced using the Port Simulation Model (PORTSIM).
- Model results from our use of the Ports Operational Performance Simulator (POPS) tool.

Throughput Capability Data

The throughput capability detailed in this section includes only the commercial strategic seaports. We did not include the capabilities of military ports. For example, the Charleston throughput is for the Port of Charleston, as detailed in the PPO, and does not include the capability of the Charleston Naval Weapons Station. (Note: We discuss military port capability when we contrast capabilities and requirements to determine the optimum number of ports.)

We show the results of both our POPS model runs and the PORTSIM likely range of daily throughput from the PND reports in Table 3-1.

Table 3-1. Modeled Daily Throughput (in square feet)

Port	PND report likely range		POPS results
Anchorage	25,000	35,000	52,026
Charleston	100,000	125,000	134,734
Hampton Roads	120,000	140,000	129,904
Jacksonville	120,000	140,000	128,869
Morehead City	90,000	110,000	40,411
New York/New Jersey	119,000	140,000	153,134

Table 3-1. Modeled Daily Throughput (in square feet)

Port	PND report likely range		POPS results
Philadelphia	80,000	94,000	125,879
Savannah	110,000	130,000	131,652
Wilmington	130,000	150,000	150,006
Beaumont	110,000	130,000	209,231
Corpus Christi	110,000	120,000	121,440
Long Beach	70,000	90,000	166,750
Oakland	150,000	175,000	155,503
San Diego	90,000	90,000	119,738
Tacoma	120,000	140,000	155,434

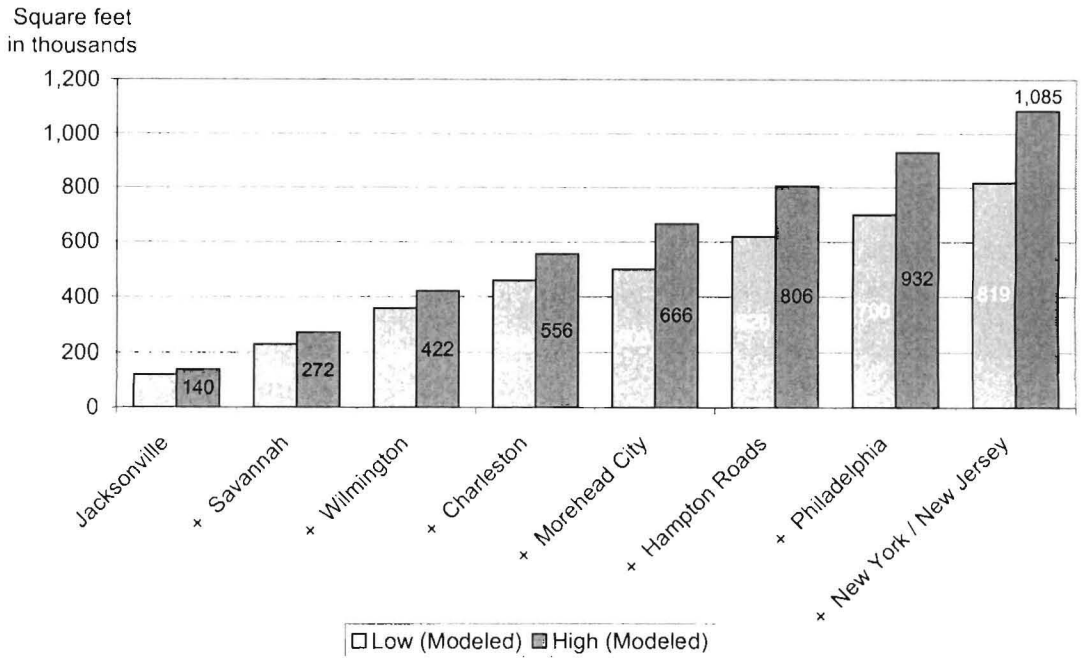
The PND reports provided the lowest daily throughput capability, except at Morehead City. Although the specific reason for this difference is difficult to determine, we believe it is due to the PORTSIM's use of 27 acres of staging area versus our limit of 7 acres of staging as stated in the PPO.

We elected to use the lowest and highest throughput numbers from these three sets of data to offer a band of capabilities. We then summed the cumulative throughput capability as ports were added from our optimum location OMLs. We show a low and high cumulative total for each coast in the following subsections.

EAST COAST THROUGHPUT CAPABILITY

In Figure 3-1, we array the East Coast cumulative daily throughput capabilities from left to right, with the left-most column indicating the top of the OML.

Figure 3-1. East Coast Daily Cumulative Throughput Capability

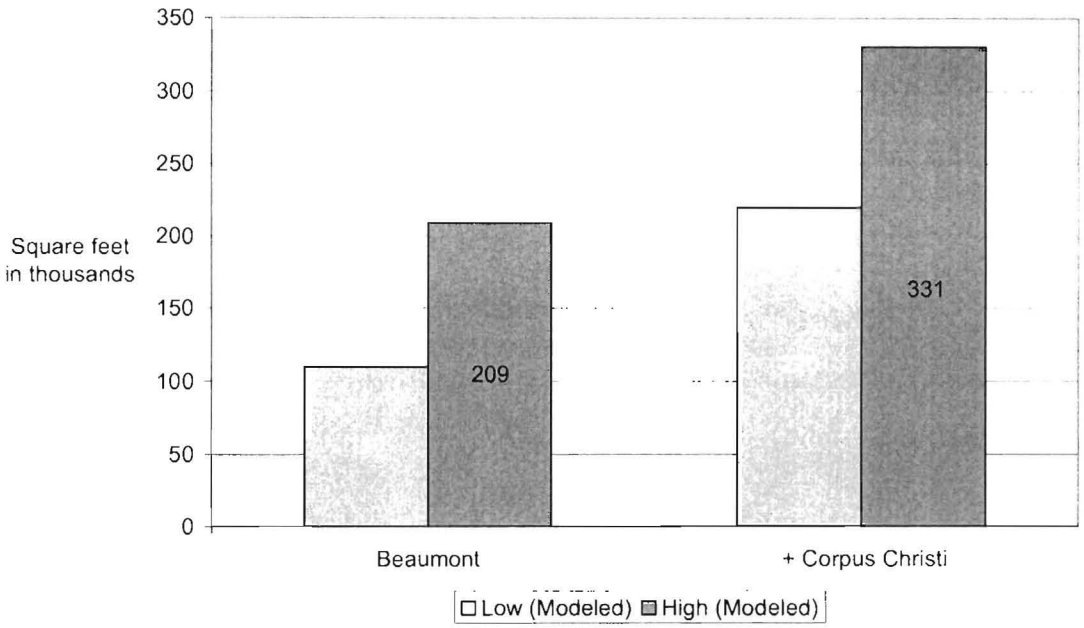


This figure shows that the Port of Jacksonville, the first on our OML, offers a daily throughput of 120,000 to 140,000 square feet. When Savannah, the second port, is added, the daily throughput increases to 230,000 to 272,000 square feet. If all eight commercial seaports were used as described in the PPOs, the East Coast throughput capability would be between 819,000 and 1,085,000 square feet per day.

GULF COAST THROUGHPUT CAPABILITY

In Figure 3-2, we show the Gulf Coast daily throughput ranges.

Figure 3-2. Gulf Coast Daily Cumulative Throughput Capability versus Requirements

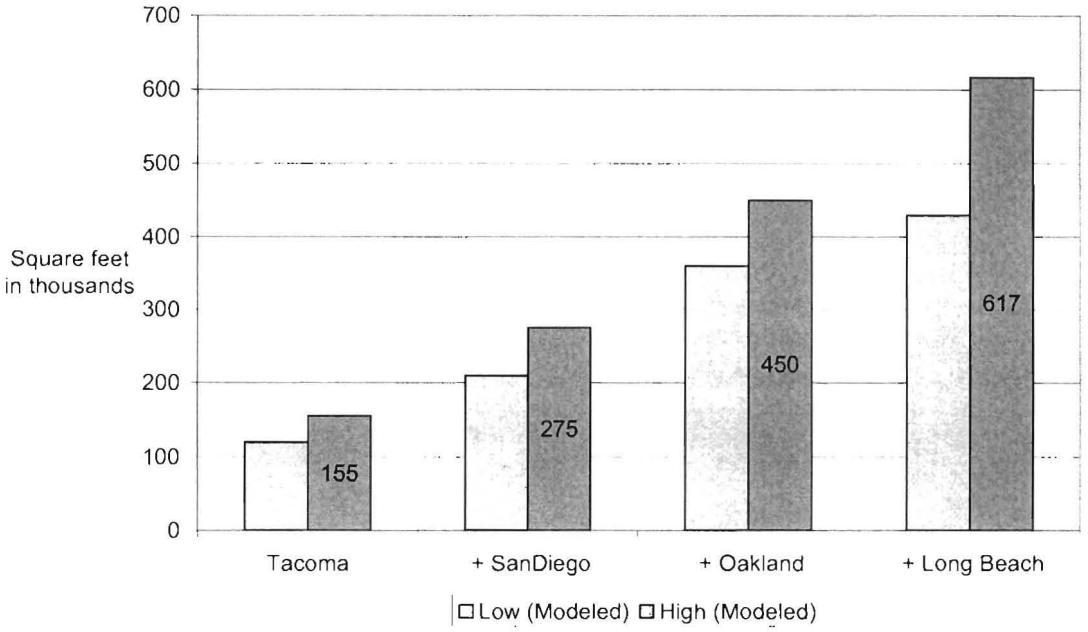


With just Beaumont, the top port on the OML, the daily throughput is between 110,000 and 209,000 square feet. With both designated strategic ports, the throughput increases to 220,000 to 331,000 square feet per day.

WEST COAST THROUGHPUT CAPABILITY

Figure 3-3 arrays the four West Coast ports from top to bottom of the OML with the cumulative bands of daily throughput.

Figure 3-3. West Coast Daily Cumulative Throughput Capability versus Requirements



Using just the Port of Tacoma, the daily throughput is no higher than 155,000 square feet. The range of throughput per day using all four ports is between 430,000 and 617,000 square feet.

Alaskan Coast Throughput Capability

With just one designated strategic port on the Alaska Coast, the daily throughput range is that of the Port of Anchorage—between 25,000 and 52,000 square feet of unit cargo per day.[1]

Requirements

In establishing a set of "requirements" for the ports, we considered the following:

- 2006 Quadrennial Defense Review (QDR), which describes the strategic environment and establishes a force-sizing construct
- DoD Analytic Agenda, which establishes the baseline data for strategic studies.

[1] The throughput range in the PND report for Anchorage was not based on PORTSIM or POPS model results. The analysts who authored the report believed that there were too many factors, including weather, preferred berthing agreements, and tidal variations, that would make model results unreliable. Instead the analysts based their measure of throughput on past military operations.

Although this section shows a band of seaport throughput requirements, we caution that requirements are normally set in requirements studies. The last Mobility Requirements Study, completed in 2000, was set against a 2005 scenario backdrop. The 2005 Mobility Capabilities Study, set in the 2012 timeframe, was a major DoD mobility study, but it did not generate a firm statement of seaport requirements. The ongoing Mobility Capabilities and Requirements Study (MCRS) uses 2016 scenarios, is expected to be complete in May 2009, and should generate a definitive statement of requirements. The classified data sets (Time-Phased Force and Deployment Data, or TPFDD) for MCRS-2016 are currently in development and will not be completed before the end of calendar year 2008.

QDR and the Strategic Environment

To determine the number of simultaneous military deployments to consider in our analysis for this study, we used the force-sizing construct outlined in the QDR. It provided specific guidance on the following:

- Homeland Defense surge requirements
- War on terror/irregular warfare surge
- Conventional campaign surge.

The force-sizing construct suggests that the largest surge requirement for DoD forces would be either two near simultaneous conventional campaigns or one conventional campaign, while engaged in a large-scale, long-term irregular campaign. Based on available scenarios and associated data, we concluded that we would establish current (2008 timeframe) and future (2015 timeframe) requirements for a long, irregular conflict and a concurrently occurring conventional campaign.

DoD Analytic Agenda

The DoD Analytic Agenda is a department-wide agreement to create a consistent, responsive analytic framework complete with ready data sets. It was directed in the Defense Planning Guidance in 2002 and is included in the Guidance for the Development of the Force today.[2]

The National Security Strategy and strategic guidance influence OPLANs and the Defense Planning Scenarios (DPS) to create data sets for use in studies requiring analytical baselines. For our study, we interpreted the DoD Analytic Agenda to mean that we must use OPLAN data for the 2008 timeframe and DPS-related data for the 2015 timeframe.

[2] The DoD Analytic Agenda is implemented through DoD Instruction, 8260.1, *Support for Strategic Analysis*, January 11, 2007.

We selected a 2006 OPLAN to represent one conventional campaign and paired it with current operational data to represent a long-duration irregular campaign for the current requirement. For 2015, we chose one DPS scenario that was used during MCS 2006 as the conventional campaign, and the same operational data to simulate the irregular campaign.

Requirements Data

The highlights of our current and future requirements are shown in Table 3-2.

Table 3-2. Daily Throughput Requirements by Coast (square feet)

Coast	Requirement	Current	Future
East	Average daily	84,681	140,281
	Maximum (smoothed)	473,503	923,639
	Maximum (peak)	1,637,748	1,637,748
Gulf	Average daily	51,100	55,276
	Maximum (smoothed)	231,618	343,238
	Maximum (peak)	479,902	861,544
West	Average daily	143,907	281,186
	Maximum (smoothed)	359,973	569,559
	Maximum (peak)	631,670	1,030,321
Alaskan	Average daily	11,088	11,458
	Maximum (smoothed)	33,610	80,646
	Maximum (peak)	116,210	255,267

This table shows the throughput requirements by average daily requirement, maximum daily smoothed requirement, and maximum daily peak (without smoothing) for each coast. We used a 5-day moving average to smooth the data; we believe this approach eliminates artificial peaks in workload.

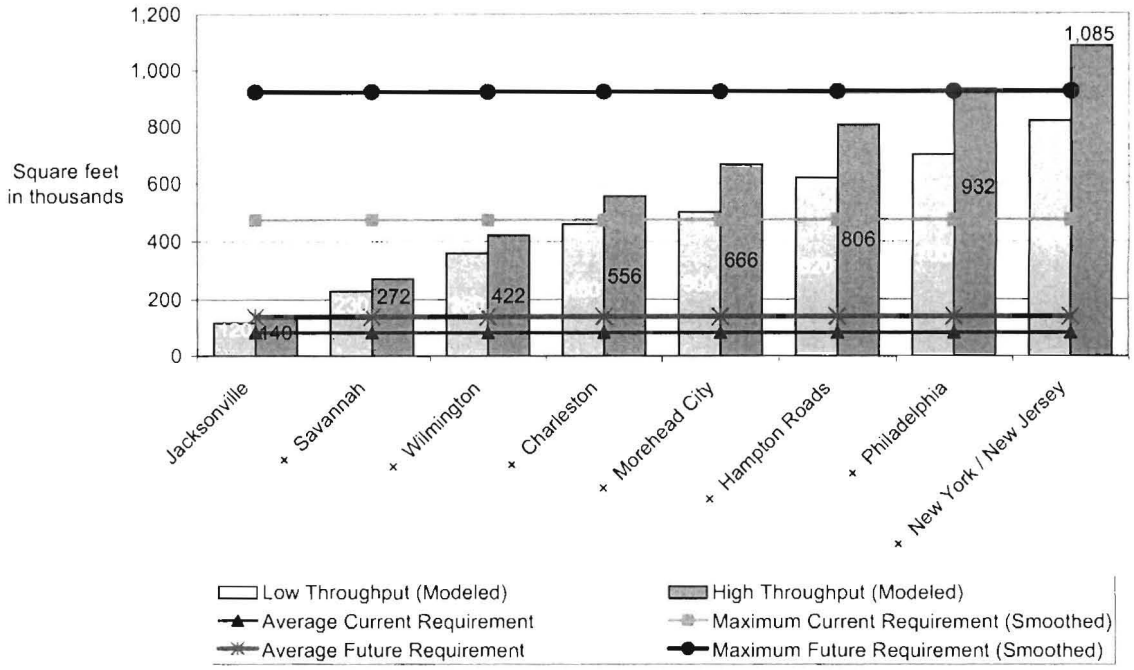
THROUGHPUT CAPABILITY VERSUS REQUIREMENTS

In this section, we compare the throughput capability on each coast, based on the currently designated commercial seaports, to the current and future seaport throughput requirements. This comparison clearly establishes the number of strategic seaports, sequenced per our OMLs, that would be required to meet the current and future 60-day average requirements and the current and future smoothed moving peak requirements.

East Coast Comparison

Figure 3-4 shows the East Coast daily throughput capability versus the different levels of requirements.

Figure 3-4. East Coast Daily Cumulative Throughput Capability versus Requirements



The average current requirement, depicted by the dark blue line, could be satisfied by just the Port of Jacksonville. But the average daily future requirement, represented by the purple line, is barely met using the most positive throughput capacity for Jacksonville.

The average requirement, however, does not account for the episodic needs supporting unit deployments. We believe a better measure would be the maximum requirement smoothed over a 5-day span. That smoothed requirement in the current time period is represented by the green line. It shows that the current surge requirement could be satisfied by four ports—Jacksonville, Savannah, Wilmington, and Charleston—on the optimistic side, or five ports (including Morehead City) for a more conservative estimate.

But this picture changes dramatically for the 2015 timeframe. The maximum future smoothed requirement could be optimistically satisfied by seven ports—the previous five plus Hampton Roads and Philadelphia—and more comfortably satisfied by all eight (adding New York/New Jersey). The occasional one-day peaks within that smoothed requirement could not be satisfied without additional port capacity.

In our discussions with SDDC, Department of Homeland Security (DHS), Transportation Security Agency (TSA), and U.S. Coast Guard (USCG) representatives, we were cautioned to recognize the importance of redundant port capability. The loss of a strategic seaport to a catastrophic event would affect not only DoD de-

ployment cargo, but also commercial operations as well, further heightening the competition for access to U.S. ports.

If we assumed that one port succumbed to a catastrophic event, it would reduce the East Coast's daily cargo capability by 100,000 to 150,000 square feet. On the East Coast, this shortfall could be absorbed by one of the following actions:

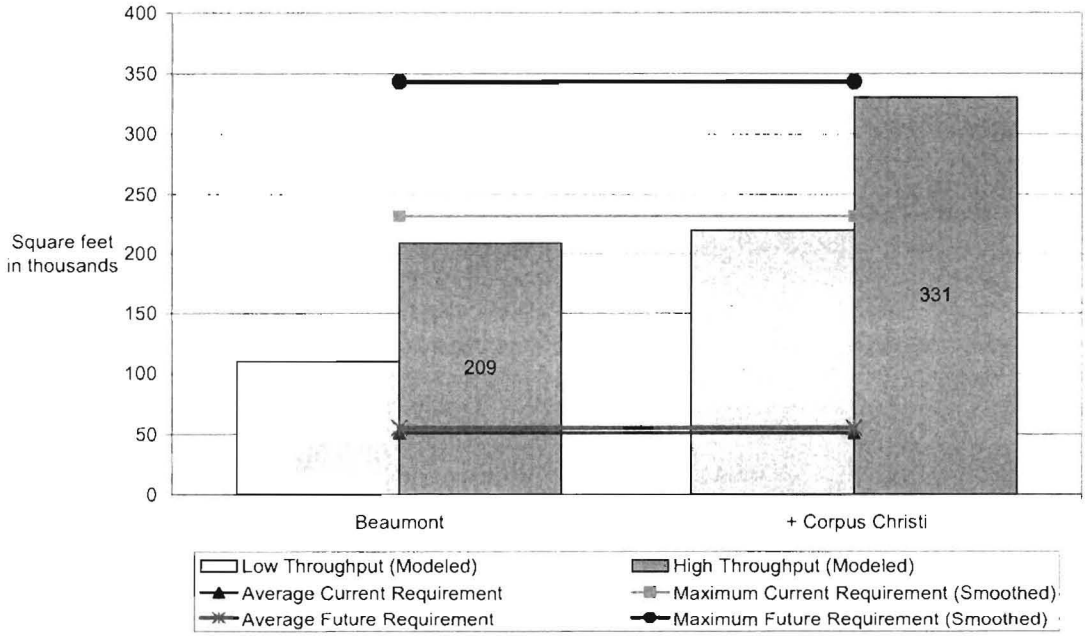
- The use of all remaining commercial East Coast ports operated at their most optimistic throughput expectations.
- The use of two berths at the Charleston Naval Weapons Station, not included in our throughput capability, which offer approximately 100,000 square feet of capability.
- The use of alternative East Coast ports that were considered militarily useful as indicated in the National Port Readiness Network (NPRN) memorandum of understanding (MOU) with SDDC.

Without the benefit of a security or vulnerability assessment, these alternatives appear to offer sufficient redundant capacity.

Gulf Coast Comparison

In Figure 3-5, we compare the daily throughput capability of the two Gulf Coast strategic seaports to current and future requirements.

Figure 3-5. Gulf Coast Daily Cumulative Throughput Capability versus Requirements



The most realistic measure of current workload—the maximum smoothed requirement, shown in the green line—could be satisfied with all of the capacity offered in the PPOs for the Ports of Beaumont and Corpus Christi. However, when we consider the future requirements and the need for redundancy, we have some concerns. This figure shows that it would be difficult for the two ports to satisfy the maximum smoothed future requirement, shown in the uppermost red line, using the most optimistic estimates for throughput capability. We estimate the best-case shortfall at 12,000 square feet or worse-case at 120,000 square feet each day. In addition, extreme weather or other catastrophes could create an enormous challenge for operations in the future on the Gulf Coast.

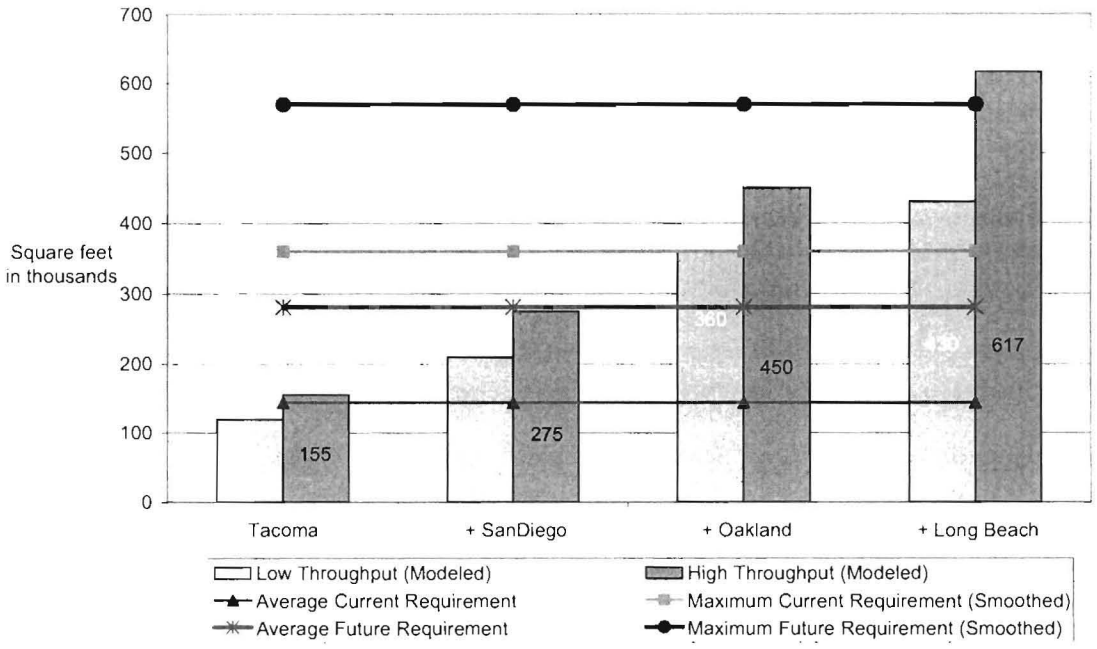
Sixteen other ports along the Gulf Coast have been deemed militarily useful, and SDDC's Transportation Engineering Agency (SDDCTEA) has studied 12 of those ports and labeled them as alternate ports. These ports could offer the needed additional capacity or redundancy.

Our analysis showed that the currently designated Gulf Coast seaports do not offer enough capacity to support future requirements or provide sufficient redundancy.

West Coast Comparison

Figure 3-6 compares the daily throughput capability and maximum throughput requirements for the four West Coast strategic commercial seaports.

Figure 3-6. West Coast Daily Cumulative Throughput Capability versus Requirements



The average current requirement of 143,907 square feet daily could be satisfied by the first seaport on the OML—Tacoma. The optimum number of ports today, which we based on the maximum smoothed current requirement and represented by the green line in Figure 3-6, is three seaports. This finding indicates that the last port on the OML, Long Beach, is not needed.

However, the future requirements place a much heavier burden on the West Coast ports. This figure illustrates that all four currently designated strategic commercial seaports and their full complement of PPO facilities would be needed to satisfy future throughput demands. It further indicates that there would be little redundancy to meet catastrophic events.

Figure 3-6 does not include three military ports on the West Coast—Military Ocean Terminal, Concord (MOTCO); Port Hueneme Naval Base Ventura County (NBVC); and Naval Magazine Indian Island (NMII). These ports offer the following capabilities:

- Although the primary mission of MOTCO is ammunition shipping in support of the Army, it has some capacity that could be used for military unit equipment outload. Based on a one-berth operation, MOTCO could add an additional 46,000 square feet of cargo capability per day.[3]

- NBVC is a multi-use naval base. With the use of its three vessel-loading positions, NVBC could add 100,000 square feet of cargo capability per day.[4]

- NMII, which occupies a Navy-owned island, has an ammunition throughput capability. Although past SDDCTEA analysis of NMII's capability focused on ammunition container throughput, [5] we found during our visit that unit cargo has shipped through the port and it is capable of berthing an LMSR. However, rail access issues suggest that it would only be acceptable for unit equipment deploying via road from nearby installations, such as Fort Lewis.

Several other ports are regularly used for the outload of unit equipment on the West Coast, and they may offer redundant capability to the military and commercial ports currently identified as strategic ports. We believe that these alternate ports should be evaluated for their value in supplementing or replacing some of the current, heavily burdened West Coast capability.

Alaskan Coast Comparison

In Figure 3-7, we compare the daily throughput capability and the requirements for the single designated strategic seaport on the Alaskan Coast—the Port of Anchorage.

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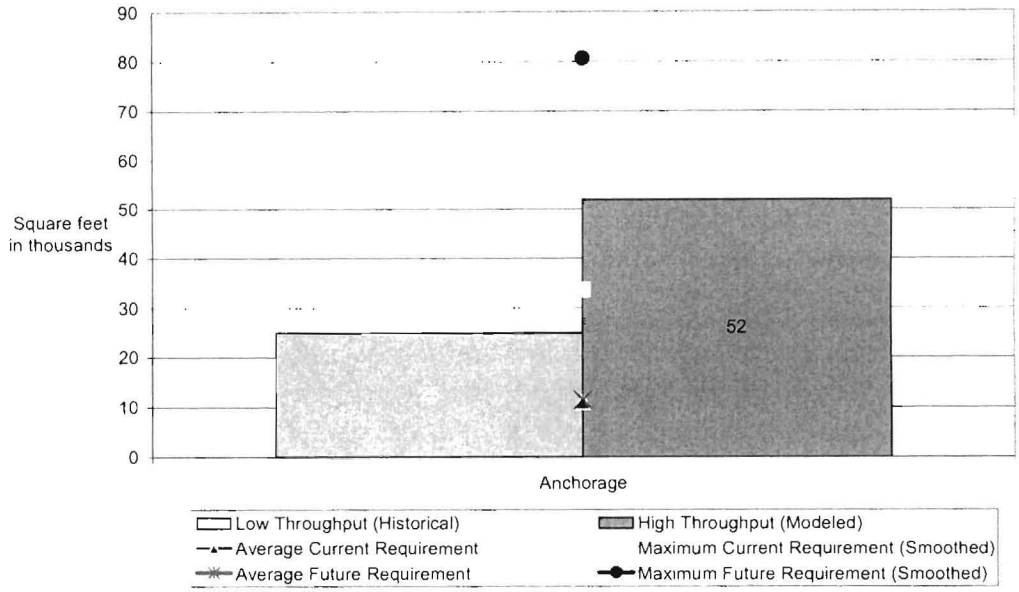
[3] *Ports for National Defense Strategic Seaport Analysis*, Military Ocean Terminal Concord, CA, February 2008.

[4] *Ports for National Defense Feasibility Study of NBVC,* Port Hueneme, April 2007.

[5] Naval Magazine Indian Island/Subase Bangor, WA, *Container Throughput Analysis*, Military Traffic Management Command Transportation Engineering Agency, July 2002.

Figure 3-7. Alaskan Coast Daily Cumulative Throughput Capability versus Requirements



The average daily requirement of about 11,000 square feet of unit cargo today and in the future is easily achievable. But weather and tidal changes could make meeting the maximum smoothed current requirement of nearly 34,000 square feet daily very challenging. With a future requirement of 81,000 square feet as a maximum daily throughput, the port's capability would be far exceeded.

This shortfall is further amplified by the fact that there are no additional seaports designated and no PPOs in place for the alternatives in the event of bad weather or catastrophic events. We estimate that an additional 56,000 square feet of throughput capability along the Alaskan Coast would be needed to mitigate this shortfall and an additional port may be needed to provide the desired redundancy.

CONCLUSION

We found there is no one "optimum number of ports." The needed throughput capability could be satisfied with any number of ports along the four coasts. As a consequence, we concluded that the optimum number of ports was the aggregate number that provided the throughput needed to meet the needs of the warfighter and offer the required flexibility and redundancy.

The currently designated commercial strategic and military seaports do not provide the optimum number of ports, particularly on the Gulf and Alaskan Coasts. Both of those coasts require additional throughput capacity to satisfy the anticipated future requirements. Moreover, we found that all four coasts require more redundancy to meet catastrophic events.

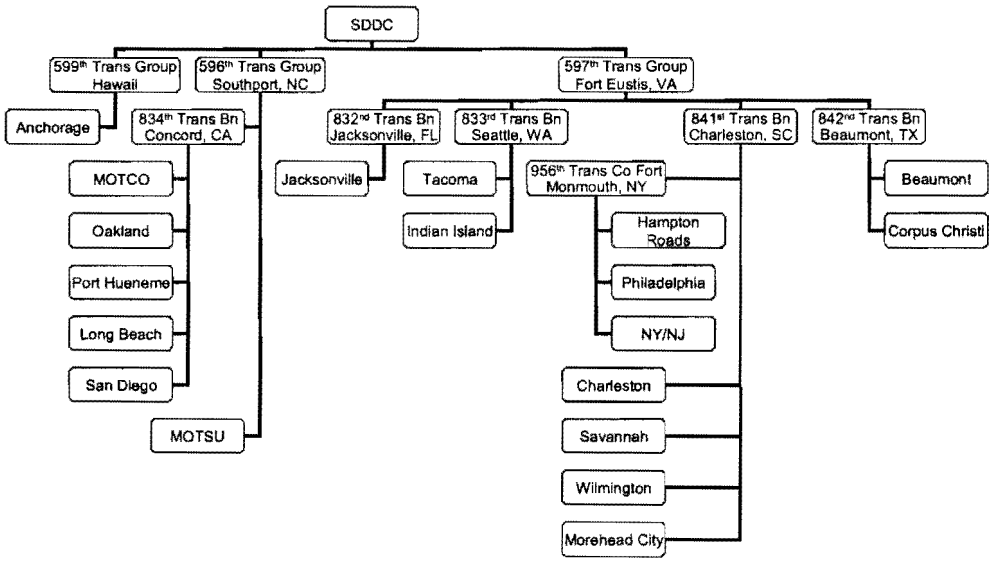
Chapter 4
Manning the Strategic Seaports

Our Statement of Objective called for an assessment of SDDC manning for efficient deployment operations at the strategic seaports. In performing this assessment, we took a regional approach. We considered the East, Gulf, West, and Alaskan Coasts as four distinct regions in our analysis of manning requirements.

ORGANIZATION TODAY

The SDDC organizational structure includes Transportation Groups that execute both functional and regional transportation missions through their subordinate battalions, companies, and detachments; they also provide oversight of or conduct actual operations in the seaports. Figure 4-1 shows the current command and control structure that SDDC uses to operate at the strategic seaports in the continental United States (CONUS) and Alaska.

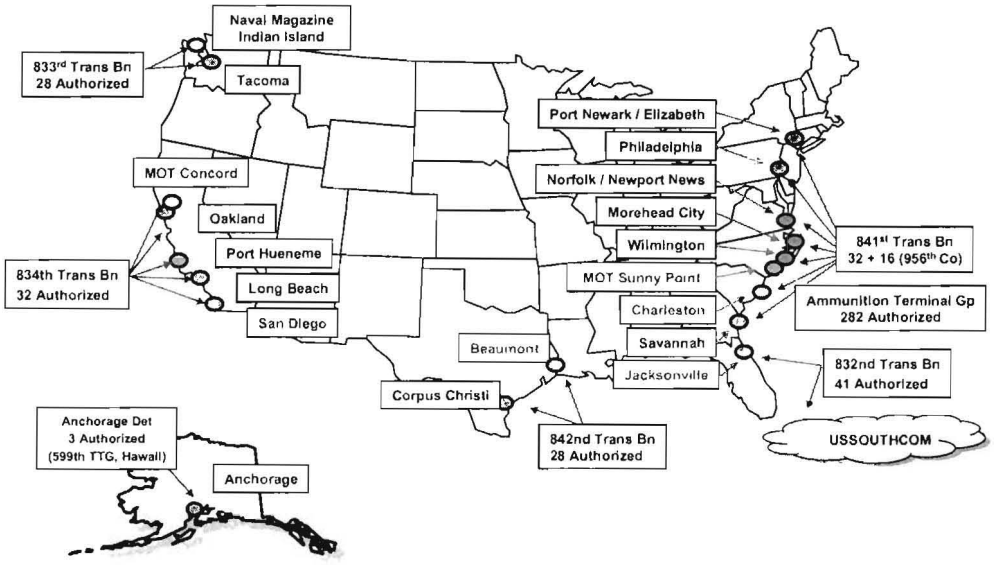
Figure 4-1. SDDC and Strategic Port Alignment



SDDC has organizational units outside CONUS (OCONUS) that are not depicted in Figure 4-1. We show the 599th Transportation Group in this figure, an OCONUS organization, because its mission includes oversight of the Port of Anchorage (SDDC also has organizational units in Europe, Southwest Asia, and the Far East).

Each SDDC transportation battalion, company, or detachment conducts force projection operations at strategic seaports in its regions. We show this regional oversight in Figure 4-2.

Figure 4-2. Current SDDC Manning



This figure shows the locations of the SDDC units with their authorized strength, and their relationships to the strategic seaports. The groups are described below:

- 596th Transportation Terminal Group (Ammunition) (Provisional) is located at MOTSU in Southport, North Carolina. Its mission is to provide ammunition terminal services. In addition to its authorizations at MOTSU, it has a subordinate unit, the 834th Transportation Battalion, at MOTCO in California.

- 599th Transportation Terminal Group is located in Hawaii. In addition to supporting the U.S. Pacific Command, it provides oversight of the Port of Anchorage and Alaskan seaport deployment operations.

- 597th Transportation Terminal Group, located at Fort Eustis, Virginia, has the mission of providing end-to-end worldwide force deployment and expeditionary theater distribution support. Its subordinate units are listed below:

  - 841st Transportation Battalion, located at the Naval Weapons Station in Charleston, South Carolina, conducts surface deployment, command and control, and distribution operations for DoD through terminals and facilities in Charleston, Savannah, and the U.S. Northeast Coast. The battalion had one subordinate command, the 956th Transportation Company, which was located at Fort Monmouth, New Jersey.

- 832nd Transportation Battalion, located at the Port of Jacksonville, conducts surface deployment operations at terminals and facilities in Florida, Latin America, and the Caribbean.
- 833rd Transportation Battalion, located in Seattle, Washington, conducts deployment and sustainment surface transportation operations through terminals and facilities in the Pacific Northwest and deploys personnel to other areas of responsibility.
- 842nd Transportation Battalion, located at the Port of Beaumont, conducts surface deployment distribution and water terminal port operations in the Gulf Coast.

OPTIMUM MANNING

In our analysis of optimum port locations and number of seaports, coupled with SDDC's desire to maintain full-time presence on each coast, we considered locations and authorizations to optimize manning. We assumed that additional personnel authorizations were not likely, so our assessment was based on known, existing authorizations and locations.

Locations for Full-Time Presence

In our estimation, full-time SDDC manning should be located on each coast at the commercial seaport that we considered the optimal location. That is, SDDC should have a full-time workforce at the ports of Jacksonville, Beaumont, Tacoma, and Anchorage.

We further concluded that SDDC should man the military seaports of MOTCO, MOTSU, and Charleston Naval Weapons Station and rely on the Navy to continue to man Port Hueneme and Indian Island—with the understanding that augmentation with a tiger team or reserve unit may be needed at these ports or at the commercial ports where there is no full-time SDDC presence.

We identified two issues associated with the manning of the optimum locations:

- One, the manning for the Port of Tacoma is located in Seattle, 30 miles from the port.
- Two, the Port of Jacksonville does not want to continue hosting an SDDC battalion.

Throughout CONUS, SDDC battalions are located at operational port facilities, except the 833rd Transportation Battalion, which is located in a commercial office building 30 miles from the Port of Tacoma. We believe that those battalion personnel should be relocated to the Port of Tacoma at the conclusion of the current lease in Seattle and execute new arrangements directly on the Port of Tacoma.

Office of Personnel Management standards allow for no-cost personnel relocations within a 50-mile radius. Port of Tacoma authorities have indicated a willingness to host the 833rd Transportation Battalion. Furthermore, such a move would help cement the relationship between unit manning and port selection.

While many of the strategic ports would welcome a full-time SDDC presence, some ports are experiencing difficulty providing support because of increasing commercial cargo growth. That growth reduces the space and availability of facilities for full-time manning, and inhibits the potential for supporting deployment cargo. The Port of Jacksonville is in this position.

During our visit, Port of Jacksonville representatives expressed a desire to support SDDC for DoD operations and stated that they would make every effort to ensure deployments are successful. Nevertheless, they further suggested that they would prefer SDDC operate at a different port, such as Savannah.

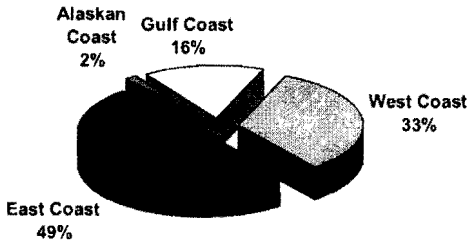
While Savannah, ranked second in our OML on the East Coast, expressed interest in a full-time presence, we maintain that SDDC should continue, to the extent possible, to locate manning at the top port on the OML. We believe that Jacksonville offers, at least in the short term, the optimal location for operations and for manning. However, we recognize that this situation could change in the future because of Jacksonville's burgeoning growth.

Comparison of Operating Units

In this section, we compare the battalions by Table of Distribution Allowances (TDA) personnel authorizations and by regional workload for key periods of time. This approach allowed us to determine if current SDDC full-time manning is balanced across the operating regions.

We began by considering the current TDAs for the SDDC units responsible for the commercial seaports in CONUS and Alaska. We show the full-time manning as a percentage of total authorizations in Figure 4-3.

Figure 4-3. Regional Comparison of TDA Authorizations

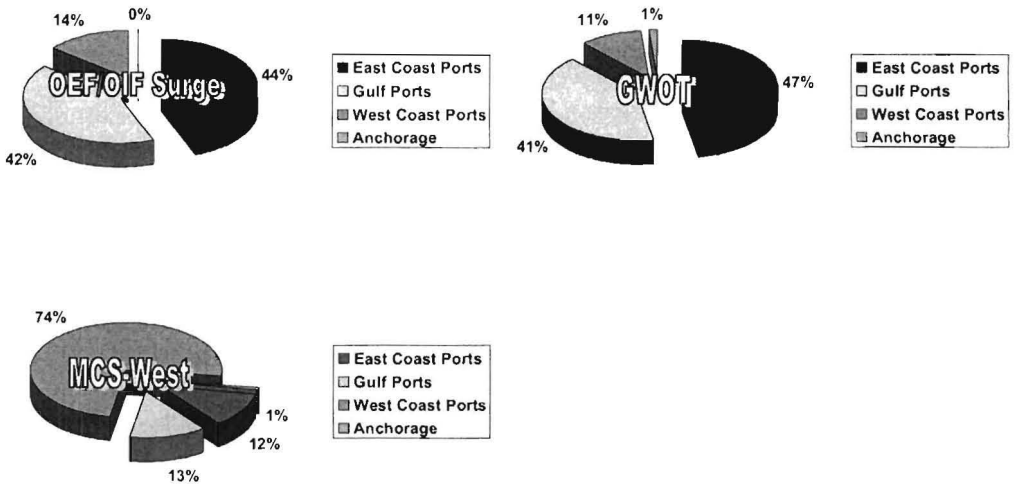


- East Coast – 49%
  - Includes 832nd and 841st (with 956th Trans Co) Trans Bns
  - Does not include the 282 TDA authorizations at MOTSU
- Gulf Coast – 16%
  - Includes 842nd Trans Bn
- West Coast – 33%
  - Includes 833rd and 834th Trans Bns
- Alaskan Coast – 2%

This figure shows that nearly half of the TDA authorizations are dedicated to commercial seaport operations on the East Coast, about one-third to the West Coast, and the balance is supporting operations on the Gulf or Alaskan Coasts.

We then used workload data from three key scenarios to provide a snapshot comparison; those comparisons are shown by scenario in Figure 4-4.

Figure 4-4. Scenario Workload Comparisons



Taken together, Figures 4-3 and 4-4 provide considerable insight into the authorizations to meet the historical operational requirements (the initial OEF/OIF surge); the rotations for the current Global War on Terror (GWOT); and a future Defense Planning Scenario (the last Mobility Capabilities Study, or MCS). The East, West, and Gulf Coasts each have approximately 33 percent of the workload averaged over the three scenarios. But the scenarios should be considered separately because they address significantly different operational orientations. In addition, the four coasts have widely different capabilities and potential workloads, as outlined below:

- The East Coast has the preponderance of CONUS full-time manning (49 percent). Its maximum potential workload is 46 percent of the overall workload in any one scenario.

- The Gulf Coast has 16 percent of the CONUS full-time manning. During GWOT, its maximum workload was 41 percent of the total.

- The West Coast has 33 percent of the CONUS full-time manning. Its highest level workload is 74 percent of total throughput for the MCS scenario.

The Anchorage Detachment provides adequate throughput for the forces in Alaska and does not present an issue for manning. With just under 2 percent of the TDA authorizations, it has sufficient resources for the 1 percent of the workload requirements in the three scenarios.

Our review of personnel authorizations and past and forecasted workloads suggested that SDDC full-time manning in the strategic seaports may require some adjustment. We address that apparent imbalance of workload and full-time authorizations below:

- *Gulf Coast.* A single battalion, the 842nd in Beaumont, accomplished 44 percent of the recent GWOT rotation and redeployment throughput with only 16 percent of the SDDC full-time manning authorizations. This battalion is also SDDC's second smallest battalion in size.

- *West Coast.* The 834th and 833rd Transportation Battalions in Concord and Seattle accounted for only 11 percent of the current GWOT throughput requirements. But, when the West Coast-oriented MCS scenario is considered, the battalions were responsible for 74 percent of the total throughput requirement and the West Coast personnel authorizations appear to be significantly short of the workload requirement.

These findings suggest that the following manning adjustments are warranted:.

- The Gulf Coast has a need for more manning.

- The West Coast needs additional manning to cover the significant shortfalls when supporting the MCS scenario.

In addition, the Base Realignment and Closure (BRAC) of Fort Monmouth, New Jersey during 2009 also affects SDDC's full-time manning situation. That closure will result in the 956th Transportation Company's authorizations being reallocated within the command. The 597th Transportation Group will use those personnel authorizations to create a detachment that will support operations as a tiger team to provide operational support, wherever needed.

As SDDC considers its alternatives, we recommend an increase to the manning on the Gulf Coast. The workload demonstrated in the three scenarios indicates that full-time manning at two Gulf Coast strategic seaports would be appropriate. This action would result in full-time manning of two ports on each of the East, Gulf, and West Coasts.

Further, we suggest that personnel should be stationed at the Port of Corpus Christi as a subordinate unit to the 842nd Transportation Battalion. The Ingleside Navy Base complex is scheduled for closure under BRAC and its facilities will be turned over to the Port of Corpus Christi. The Port of Corpus Christi has indicated a willingness to host full-time SDDC presence at that location. Alternatively, if another Gulf Coast port is selected as a strategic port to address the throughput capacity shortfall, manning could be located there.

A solution for the West Coast shortfall is less obvious. We could not identify any apparent personnel resources available to address this shortfall. We base

this observation on a quick review of the CONUS battalion TDAs, not on SDDC's total manning documents.

One short-term solution for the West Coast could be the use of tiger teams formed from the other regions and Army Reserve units as the operational situation allows. A long-term solution would involve a detailed requirements analysis to identify firm requirement authorizations followed by resourcing decisions.

CONCLUSION

In this chapter, we provided the results of a high-level analysis of the manning posture compared to historical, current, and potential future workloads. We discussed the apparent manning imbalance that exists in all regions and presented possible solutions to correct that imbalance. We believe the stationing arrangements and workload balance that we suggested could go far in improving coordination with the strategic ports and enhancing DoD readiness.

Chapter 5
Readiness, Selection, and Management

The importance of the 48-hour availability timeline, related readiness reporting, and strategic seaport selection process are addressed in this chapter. We also describe two Strategic Seaport Program management topics: governance and definition of a strategic port.

THE 48-HOUR AVAILABILITY TIMELINE

The PPO is a non-binding letter of intent that provides each port with advance notification of defense requirements. Each PPO contains language to warn the port that:

> If there is a deployment of the Armed Forces or other requirement for the nation's defense occurs, and if the specified port facilities and services are not obtainable through established transportation procurement practices,...the port must grant priority of use of agreed to facilities to SDDC.

The PPO further advises the port that DoD will require specific facilities and services within 48-hours of delivery of an NSPO. Within 48 hours of receipt of the written NSPO, the port would clear commercial cargo and vessels to accommodate DoD's priority needs.

Since inception of the Strategic Seaport Program, DoD has always secured access to commercial strategic seaports through normal procurement practices—not through the issuance of an NSPO. The National Shipping Authority (NSA), the organization responsible for emergency shipping operations of MARAD, has never issued an NSPO. We believe that this fact is a testament to the value of the Strategic Seaport Program.

On-Site Assessment

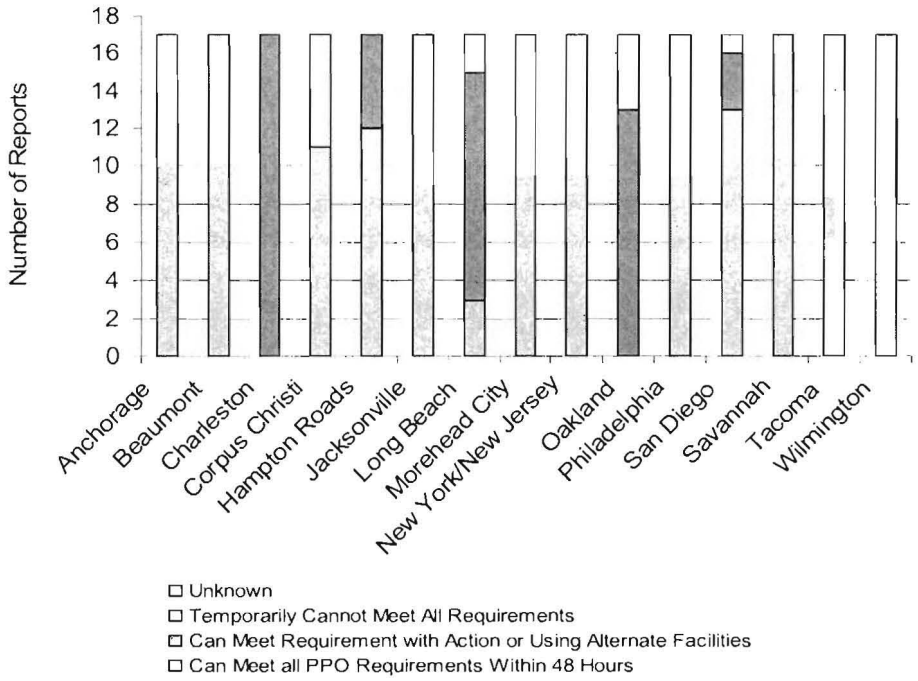
During our visits to 14 of the commercial ports, we asked about the ports' ability to make the PPO facilities available to DoD. From those discussions and from our observations within the ports, we assessed the achievability of the 48-hour timeline for each port. Most ports cannot meet the 48-hour requirement without serious disruption of their current operations. In our judgment, only Morehead City, Wilmington, Savannah, and Tacoma could actually respond to DoD's requirements within 48 hours.

It is important to note that the ports we assessed with a "cannot meet" still indicated that they would strive to meet DoD requirements. Some suggested that the facilities outlined in the PPOs would not be available through "established transportation procurement practices" and would require an NSPO in the future. However, all of the ports could provide some capability within 48 hours.

MARAD Monthly Readiness Reports

MARAD, which administers the Strategic Seaport Program, requires the commercial strategic ports to report their ability to meet the 48-hour availability timeline in a monthly readiness report. Figure 5-1 summarizes recent input from the ports on availability.

Figure 5-1. 48-Hour Availability Reports in Monthly Readiness Reports



This figure shows a 48-hour availability picture somewhat different from our on-site assessment. For example, Jacksonville has reported that it could meet all of the PPO requirements within 48 hours. San Diego reported one instance in 17, where it temporarily could not meet the timeline, but it could meet the requirement of the PPO or could offer alternate facilities in the other instances.

We do not question the validity of the reports, but we do question their utility. They serve as a snapshot of a port's current status, not a true reporting tool. We believe a report that states a port "can or cannot meet" the 48-hour availability requirement does not provide enough information to MARAD and, in turn, SDDC. Monthly readiness reports that require the ports to estimate how long they

would need to make the specific PPO facilities available after notification of the requirement would be more effective. The report should also provide a list of alternate facilities and associated availability timelines if the specified facilities are not available.

Improved Metrics

We believe that the 48-hour availability timeline does serve a purpose. It provides:

- A recourse to DoD if normal procurement practices are not workable
- A general planning framework for the port.

However, we question whether the metric provides either a truly viable avenue of recourse or a good planning factor. It measures actions at a port that are not likely to occur—disposing of commercial cargoes and vessels to accommodate the priority movement of DoD cargo after receipt of an NSPO. Although some of the seaports have stated that they would expect an NSPO in the future to make all PPO facilities available, we do not expect that the need will exist.

Typically for a military deployment, SDDC battalion commanders contact the ports to arrange for use of all or part of specific port facilities, or to negotiate for alternative facilities. Commercial port authority officials stated that they first learn of an actual pending DoD movement through communications with the local SDDC battalions. They further indicated that this coordination normally occurred 5 or more days before the facilities were needed to be made available for a military operation. They also noted that SDDC operated in a cooperative manner, with full consideration of the impact on commercial movements in the identification of the facilities needed.

We believe this type of communication and coordination will continue to provide SDDC with either the specified or alternate port facilities—through established transportation procurement practices—without the need for an NSPO.

Another point in the discussion of the utility of the 48-hour timeline is its inconsistency with the pre-deployment activities at installations and the movement to the strategic seaport. The current metric is not aligned with the generally accepted timelines associated with unit activities. In fact, it is more stringent than needed to match the unit deployment timeline. This point is best illustrated in an examination of planned workload requirements. Considering the OPLAN workload in the data we selected for analysis, the earliest relatively significant volume of cargo would be available for loading at the seaport is on day 4 or 5. Looking at future scenarios for the 2015 timeframe, the same timeline holds true.[1] Naturally, these forecasts apply only to the surge expected for conventional campaigns and not the

[1] We considered cargo to be ready at the port for loading based on its Available to Load Date in the TPFDDs.

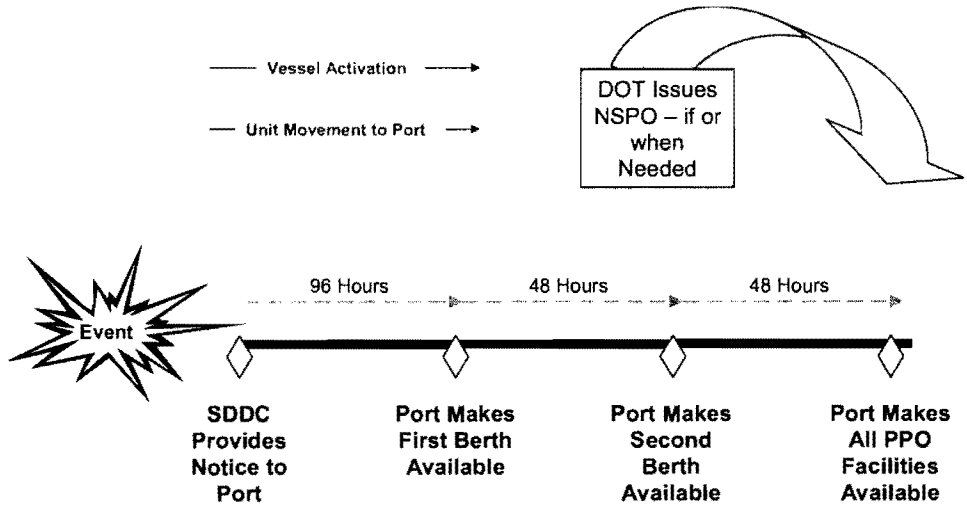
steady-state cargo associated with redeployments or planned rotations. In those cases, we expect the timeline to be far longer.

The current 48-hour availability timeline also applies to all strategic seaports and all PPO capabilities. It does not account for the phased nature of a deployment. We contend that not all of the PPO facilities would be needed at the 48-hour mark and support the concept of a phased metric.

Finally, the 48-hour availability timeline does not match the surge sealift fleet vessel ROS status and location. If, for example, SDDC notifies the strategic seaport that berth space is needed, and MARAD concurrently activates a vessel at ROS-10, the berth could be open and available long before the vessel arrived in port.[2]

We believe that both the ports and SDDC would benefit by additional metrics that phase in port capability following informal notice that a port is needed. We show the metrics notionally in Figure 5-2.

Figure 5-2. Notional Metrics for Port Readiness



The figure shows that SDDC would notify the port that its facilities may be needed, but not all facilities simultaneously or immediately upon receipt of the notice. Instead, as vessels are activated and unit equipment moves to the port, facilities would be made available incrementally, until the full required capability was achieved. If, over this notional timeline, SDDC and the port were unable to agree on specific facilities and services, MARAD would then issue an NSPO and the 48-hour timeline would come into effect.

We concluded that the 48-hour availability timeline is not a useful, measureable metric. As currently constructed and reported, it does not allow either the ports or

[2] ROS-10 allows 10 days to make the ship ready to sail with a full crew and completely operational.

DoD to plan effectively. We believe that a revised metric, an effective reporting system, and additional direct communication would significantly improve the relationships between DoD and its commercial partners at the strategic seaports.

STRATEGIC PORT SELECTION AND DESIGNATION

Although not a primary objective of this study, SDDC asked us to identify all opportunities to improve the processes associated with strategic seaport selection. We saw two components in this task:

- Strategic port selection and designation (planning)
- Port selection for day-to-day operations (execution).

Our examination included how the processes were initiated, which organizations had specific responsibilities, and what criteria they used to make the selections. We also considered the associated benefits to the seaports that are designated as strategic seaports.

We found several disconnects between the strategic seaport designation process and the operating port selection process for day-to-day operations. In planning, seaport infrastructure seems most important. In execution of current operations, though, actual seaport availability and the location of SDDC manning drives the selection process. We further found that cost was not one of the factors that SDDC included on its list of considerations in either the designation process or the selection process for day-to-day operations. We believe that cost should be a consideration in the process for selecting a port as a strategic seaport and in the decision to use the port for an operation.

Although the port selection process appears sound, it has no clearly identifiable single impetus to begin. The military and commercial strategic seaports were baselined in a comprehensive Military Traffic Management Command (now SDDC) *Port Look Study* in 1995-1996.[3] Since that time, numerous changes have occurred, including two QDRs, a Global War on Terror, countless military deployments in support of other contingencies, additional BRAC decisions, forces have been relocated, and a host of other changes that necessitated a holistic review of seaport requirements and capabilities.

[3] Sixteen strategic ports were identified. They were Bayonne, Beaumont, Charleston, Concord, Galveston, Hampton Roads, Jacksonville, Long Beach, Morehead City, New York/New Jersey, Oakland, Port Hueneme, Savannah, Sunny Point, Tacoma, and Wilmington. Six of these were identified for full-time SDDC presence: Beaumont, Charleston, New York/New Jersey, Concord, Sunny Point, and Tacoma.

Recent history, though, suggests selection, designation, and revalidation of strategic seaports does not necessarily hinge on a comprehensive study. Two examples support this position:

- During the first Gulf War, the Ports of Houston and Beaumont were the strategic ports on the Gulf Coast. Deployment traffic during the war significantly interfered with commerce at the Port of Houston. At the time, several other ports on the Gulf Coast sought designation as strategic seaports and Houston was willing to give up the designation. A subsequent review of the facilities and capabilities of other ports resulted in the Commander, SDDC, designating Corpus Christi a strategic port in lieu of the Port of Houston.

- With closure of the military seaport of Bayonne, New Jersey, DoD needed a strategic port capability for the deployment of the 10th Mountain Division from Fort Drum, New York. The only strategic seaport in the northeast was the Port of New York/New Jersey. The port authority for the Port of Philadelphia approached the Commander, SDDC, with a request that the port be designated a strategic seaport. SDDC formed a team to evaluate the port's facilities and capabilities, and the Commander, SDDC, approved the designation of the Port of Philadelphia as a strategic seaport in 2002.

These examples illustrate the dynamic nature of strategic seaport designations. However, we found no deliberate, systematic review of OPLAN and future requirements that is routinely conducted to determine if the capability of designated strategic seaports meets or exceeds DoD's current or future needs. We believe that SDDC, with the counsel of the NPRN, should establish a process to revalidate strategic seaports and set that process to a schedule that accounts for major shifts in strategic guidance and DoD posture.

Each port's PPO expires and is renewed annually by MARAD—but the renewal process seems perfunctory and without consideration of the port authority's interests. We see considerable value in synchronizing MARAD's PPO renewals with SDDC's strategic seaport requirements reviews. We do not advocate an annual process, but we suggest that PPOs should be issued for a longer period of time to effect that synchronization.

We found that designation as a strategic seaport offers little reward or value to the port—with "marketing value" as the single most often described benefit. While it does appear that priority is given to strategic seaports for deploying unit cargo (89 percent has gone through strategic ports), the use of non-strategic seaports for unit equipment is not as "rare and infrequent" as purported. SDDC should develop an operational port selection process that gives all deployment cargo to designated strategic ports, except in the most unusual exigencies.

The overriding opinion of the strategic commercial seaport officials is that any DoD or MARAD guaranteed access program must be tied to a guarantee of

funding, revenues, long-term leases, or investment in infrastructure improvements. We concluded that SDDC should examine using incentives to make the strategic port designation more attractive to the ports.

MANAGEMENT TOPICS

Our review of the Strategic Seaport Program uncovered two management issues: definition of the strategic seaports and governance of the program.

Strategic Seaport Definition

In our Statement of Objective for this study, SDDC defined a strategic port as:

> A commercial seaport selected by DoD and issued a Port Planning Order by MARAD which identifies facilities and services that DoD may require during a surge deployment.

The current NPRN MOU defines a strategic seaport as:

> Those military ports and commercial ports with port planning orders and/or Basic Ordering Agreements (BOA) that are projected to be used for the deployment of forces and shipment of ammunition or sustainment supplies in support of military operations. Port Readiness Committees are required for each strategic commercial seaport.

Together, the two definitions are ambiguous as to whether the strategic seaport designation is intended to include both military and commercial ports; mandate a BOA or a procurement vehicle; require a PPO; apply only to the surge deployments of forces; or encompass all DoD cargo.

Additionally, neither the NPRN nor the SDDC definition is included in Joint or Military Service doctrine. For example, Joint Publication 1-02, *DoD Dictionary of Military and Associated Terms*, defines a seaport, and a port of embarkation or debarkation, but not a strategic seaport. Consequently, there is no comprehensive, readily understood definition within the military.

We propose the following definition as a starting point to address this shortcoming:

> A strategic seaport is a U.S. port selected by DoD and designated by SDDC as a seaport to support a surge deployment of U.S. Armed Forces or other DoD contingencies. A strategic seaport may be military or commercial. A military seaport offers DoD assured access, but requires a common-user agreement between the Services, such as a memorandum of agreement. A commercial strategic seaport must have a Port Planning Order, Port Readiness Committee, and a standing labor procurement vehicle, such as a basic ordering agreement. Major units are typically aligned with specific strategic ports to facilitate training and coordination.

We conclude that the strategic seaport definition should be addressed by the NPRN to clarify it and to standardize its usage throughout the distribution community. Following NPRN agreement on a common definition, SDDC should work to ensure it is published in Joint doctrine, such as Joint Publication 4-01.2 *Sealift Support to Joint Operations.*

Strategic Seaport Governance

SDDC, as the port operator, shares responsibility for the deployment of our military forces through U.S. seaports and the intermodal system with multiple federal agencies. The Strategic Seaport Program, through the NPRN, is designed to coordinate the actions of key stakeholders to facilitate the movement of military forces securely through U.S. ports with minimal disruption to commerce.

Acts and Orders

Over the years, U.S. Presidents have issued executive orders and Congress has enacted legislation to allocate seaport services and facilities for the national defense. Some of those key acts and orders include the following:

- Defense Production Act (1950) authorizes MARAD to identify staging areas and berths in specific strategic ports to ensure that a defense agency may use these facilities in the deployment of military forces.
- Executive Order 12656 (1988) delegates the authority to develop national emergency plans and preparedness programs for ocean shipping, ports, and facilities to MARAD.
- Executive Order 12919 (1994) delegates to the Secretary, Department of Transportation, the power to require all priority performance of contracts or orders to promote the national defense over performance of any other contracts or orders.
- Code of Federal Regulation (CFR), Title 46–Shipping, Part 340, establishes procedures for assigning priority of use or allocating space for use on commercial port facilities by defense agencies.

Following September 11, 2001, the Maritime Transportation Security Act (MTSA) of 2002 broadened the scope of the USCG's responsibilities at U.S. seaports.[4] Clearly, and appropriately, this legislation focused on seaport security as opposed to seaport readiness to meet DoD's needs. MTSA also directs a National Maritime Security Advisory Committee, and describes an Area Maritime Security Committee (AMSC), including meeting frequency, minimum membership, and provisions for compensation to participate in meetings.

[4] Public Law 107-295, November 25, 2002.

The Strategic Seaport Program has no similar legislative language. It is governed wholly by an MOU developed and signed by federal agencies that established the NPRN to manage the program.

National Port Readiness Network

The NPRN is the group of organizations that are signatories to the Port Readiness MOU. Today, those organizations include MARAD, Transportation Security Administration, USTRANSCOM, U.S. Northern Command (USNORTHCOM), USCG, U.S. Army Forces Command (FORSCOM), and U.S. Army Corps of Engineers (USACE). SDDC and the Military Sealift Command are also members, but they did not sign the MOU.

FORSCOM represents the interests of deploying Army units, while the U.S. Marine Corps (USMC), which also deploys through strategic seaports, is not represented. The U.S. Joint Forces Command (USJFCOM)—the combatant command designated as the joint deployment process owner and the joint force provider—and U.S. Army Installation Management Command (IMCOM)—the Army organization responsible to provide support to expeditionary operations—are not represented in the NPRN.

The NPRN has three levels of coordination:

- The NPRN Steering Group (NPRNSG), which sets policies and directs the NPRN.
- The NPRN Working Group (NPRNWG), which implements the policies set by the NPRNSG.
- The Port Readiness Committees, which are established at the ports to coordinate, evaluate, and test military outload plans, along with force and cargo protection plans.

As a result of this study, we concluded that the NPRNSG and NPRNWG were relatively dormant bodies. We found that the PRCs were the most critical and, fortunately, most active committees in the NPRN.

However, we found three ports that have not conducted their PRC meetings twice annually as stipulated by the NPRN MOU. In some cases, when we asked whether the PRC was active as required, the responses differed among stakeholders at the same port. For example, a representative from the Port of New York/New Jersey indicated that a PRC had not met since 2001, but another stakeholder at the same port responded that PRC meetings were held regularly. The USCG State of the Port Report for the same port stated that no PRC meetings were held in the past year.

Although we found some evidence that PRC meetings were generally held and port readiness exercises were typically conducted, we were unable to determine if

the reports, minutes, and after-action reports for those events were systematically collected and analyzed at the NPRN level. We also reviewed the NPRN password-protected website, which is designed to serve as a repository for the NPRN mandated reports. No report has been posted. We believe that the website, if populated, could serve as an effective means to communicate across the boundaries of the seaports.

Serving as the chair for both the PRC and the AMSC, the USCG Captain of the Port (COTP) prepares an annual State of the Port Report. In one report, the COTP stated that he would:

> Consider revising the appropriateness, purpose and scope of the PRC to ensure continued alignment with the MTSA Act of 2002 and Homeland Security (HLS) requirements.

Although the NPRN MOU permits the PRC to be treated as a subcommittee of the AMSC, we believe the two committees have interrelated, yet dramatically different purposes. Their interests are sufficiently different to warrant NPRN emphasis of the PRC as a standing committee of the NPRN under the management of MARAD—and not a subcommittee of the AMSC overseen by the USCG and the Department of Homeland Security (DHS).

We believe that the NPRN should

- be "reactivated" by appointing new member organizations,
- pursue legislative change to amend the CFR Title 46: *Shipping*, to codify the Strategic Seaport Program, and
- ensure the efficacy of the PRC as a committee that directly reports to the NPRNWG.

CONCLUSION

In this chapter, we described our findings relative to the 48-hour PPO availability timeline, the strategic seaport selection processes, and topics related to the management of the Strategic Seaport Program. We offered several ideas for improving these areas. We detail our recommendations for that improvement in the following chapter.

Chapter 6
Conclusion

We were asked by SDDC to conduct a study that would serve as a basis for a plan to optimize the use of strategic seaports. Specifically, SDDC requested that we address the following major objectives in the study:

- Determine the optimum number of commercial and military seaports
- Identify the optimum strategic seaport locations
- Propose full-time SDDC manning targets
- Validate the 48-hour PPO availability timeline.

As a secondary objective, SDDC asked us to identify process improvements for port selection.

This chapter summarizes our findings and recommendations. For clarity, we have organized this chapter around these objectives.

Optimum Number of Strategic Seaports

There is no one data set that establishes the requirement for strategic seaports. We recommend that SDDC reexamine the optimum number of strategic seaports following the establishment of requirements at the conclusion of MCRS-2016 in 2009.

Our analysis of requirements for strategic seaports indicated strong support for retaining all of the current military and commercial seaports. We recommend that SDDC work with MARAD to renew all of the PPOs during the revalidation process.

We identified throughput capacity shortfalls on the Gulf and Alaskan Coasts. To resolve these issues, we recommend that SDDC:

- Add approximately 120,000 square feet a day in throughput capability along the Gulf Coast:
  - Consider altering the existing PPOs for Beaumont or Corpus Christi to add needed throughput capability. Both ports are eager to accept additional DoD cargo and are not stymied by unrestrained commercial cargo growth.
  - Consider adding needed throughput capability by assessing and designating other Gulf Coast ports.

- Assess alternative ports in Alaska to provide DoD with an additional throughput capability of approximately 56,000 square feet per day. Create PPOs for the added capability.

We recognize that Naval Magazine Indian Island, on the West Coast, offers potential for unit equipment shipments—not only ammunition. However, the rail access to this port is a limiting consideration. We recommend that SDDCTEA evaluate the port's capability for deployments in a *Ports for National Defense* strategic seaport study and the feasibility of extending rail from Bangor to NMII.

In consideration of the need for redundant capability on the chance a catastrophic event degrades or neutralizes a port's capabilities on any of the U.S. coasts, we recommend SDDC work with the Office of the Secretary of Defense, DHS, and USCG to prioritize the ports that SDDCTEA has identified as alternate seaports.

Optimum Location of Strategic Seaports

Based on 29 criteria that we used to describe an optimum location, we developed an OML for the designated strategic seaports. The ports at the top of our OML for each coast were Jacksonville, Beaumont, Tacoma, and Anchorage.

Although our scope restricted us to looking at the currently designated strategic seaports, other ports may provide better options. There are attractive alternative ports. In the short term, we recommend that SDDC consider alternate ports to replace the PPO capacity of Long Beach and Oakland with less-burdened and more-desirable ports. For the longer term, we recommend SDDC consider an expanded study to determine if alternative seaports should be chosen as strategic seaports in lieu of or in addition to the currently designated seaports.

Full-Time Manning Targets

Our targets for manning were largely determined by our analysis of optimum port locations and the optimum number of seaports, coupled with SDDC's desire to maintain a full-time presence on each coast. We concluded that full-time manning should be located at the Ports of Jacksonville, Beaumont, Tacoma, and Anchorage—the optimum port locations. With the exception of Tacoma, each has an SDDC full-time presence today.

The 833rd Transportation Battalion is currently located in an office building in Seattle, not at the Port of Tacoma. We believe that the SDDC full-time presence should be located at the optimal port location on the West Coast and recommend that SDDC relocate its full-time manning from Seattle to the Port of Tacoma.

Our analysis indicates that the optimal location for manning on the East Coast is Jacksonville. However, port representatives have stated that they want to support SDDC, but suggest an alternate location for full-time manning. We recommend

that SDDC retain its full-time presence at Jacksonville, and negotiate options for continued manning. In the event those negotiations are not fruitful for a long-term assurance of full-time presence, SDDC should consider manning at Savannah.

We recommend continued SDDC presence at the military seaports of Concord, Sunny Point, and CNWS.

We conducted a quick analysis of unit workload in addition to the identification of work force location. Given the results of our analysis, we consider the current manning between regions inequitable. Manning shortfalls exist on the Gulf and West Coasts, and the percentage of authorizations on the East Coast is disproportionally high. To correct this situation, we recommend that SDDC:

- Reallocate authorizations to Corpus Christi on the Gulf Coast, or to another port on the Gulf Coast that is selected to meet future throughput shortfalls.
- Initiate a thorough personnel requirements analysis following the MCRS-2016.
- Institute, pending a complete requirements review, a plan to use Tiger Teams to address the West Coast manning shortfalls, as needed.

48-HOUR TIMELINE

We found that the 48-hour availability timeline:

- Measures only the period of time after the NSPO is issued—which is not the single most important measure of readiness.
- Does not measure or credit the advance notice and communication that is currently experienced or expected.
- Does not match the planned arrival and phasing of unit equipment at the seaport.
- Does not link to other measurable events, such as the time needed for unit equipment or vessels to reach the seaports.

We recommend that SDDC pursue two initiatives to remedy these issues:

- Coordinate with MARAD, other NPRN members, and strategic seaports to replace the universal 48-hour availability timeline requirement with a tailored, phased time metric for each port.
- Partner with the Military Sealift Command to conduct a follow-on study to assess "end-to-end" deployment requirements with the objective of synchronizing metrics. This holistic study should be conducted using

MCRS-2016 results to evaluate inland infrastructure to and from the ports, unit cargos moved, and vessel readiness requirements.

In our examination of the 48-hour metric, we identified several additional readiness topics that SDDC should consider.

- The monthly readiness report prepared by MARAD from strategic seaport input does not provide SDDC with the details needed to determine which facilities are available or the timeline that would be needed to make them available. We recommend that SDDC work with MARAD to redesign the monthly reports to make them useful to both organizations.

- A regular forum with port authorities as strategic partners would improve communications and address readiness issues that could be important to all strategic seaports. SDDC headquarters should schedule routine meetings with port authority representatives from the strategic seaports to discuss items of mutual interest.

- The TSA port security exercises are conducted to practice commercial preparedness in each USCG sector every 18 months. However, DoD does not participate in these exercises. We recommend that DoD work with other members of the NPRN to participate in all security exercises that involve designated strategic seaports.

- The Port of New York/New Jersey has no contract vehicle in place. SDDC should establish either a BOA or an SRTS contract at the port of New York/New Jersey.

PROCESS IMPROVEMENTS

As a secondary objective, SDDC asked us to identify process improvements for port selection.

We believe that the commercial strategic seaport selection and designation process is well organized and well defined. The process includes orderly and logical steps and readily identifiable process owners. However, we did identify some process improvements:

- We noted that labor, port operating, and intermodal transit costs are not considerations in the criteria for selecting strategic seaports. We recommend that SDDC develop and provide specific criteria to the candidate port evaluation team—with cost as a specific area for evaluation.

- We recognize that DoD has focused its interest in selecting large, modern ports as strategic ports. These ports, though, tend to be container ports, and most impacted by the growth in commerce. We recommend that

SDDCTEA revise its infrastructure screening criteria to allow for the consideration of older, breakbulk ports as potential strategic seaports.

- We further noted the absence of a regular, comprehensive analysis process to recommend adjustments to or revalidation of strategic seaport designations. We recommend that SDDC, with the counsel of the NPRN, establish a process to revalidate strategic seaports and set that process to a schedule that accounts for major shifts in strategic guidance and DoD posture.

- We discovered that the current PPO renewal is a mechanical process. We were told by many that the process was virtually automatic and did not necessarily include detailed reviews or discussions with the ports or other key stakeholders. We recommend that SDDC encourage MARAD to employ a more collaborative process in establishing requirements and revalidating PPOs when they are renewed.

- We also noted that there was no deliberate, systematic review of OPLAN and future requirements or a holistic study that is routinely conducted to determine if the capability of designated strategic seaports meet or exceed DoD's needs. The basis for the current port selections was the 1995–1996 *Port Look Study*. We recommend that SDDC conduct more frequent requirements updates and link those results to MARAD's renewal of PPOs. MARAD should consider extending PPOs beyond 1 year to synchronize with the SDDC schedule of periodic analysis.

- Many of the current PPOs do not identify specific berths and staging areas. Instead, they are written as statements of need for acreage and berth space in linear feet. The lack of specificity makes planning and practice difficult. We recommend that SDDC work with MARAD and the ports to clearly identify those facilities within the port that DoD requires.

With respect to operational port selection, we found that:

- Unit cargo is not balanced across the strategic ports and is periodically shipped through "non-strategic" ports—giving port authorities reason to question the selection process.

- Cost is not an obvious factor in the selection of ports for operational missions.

We recommend that SDDC:

- Develop an operational port selection process that gives priority of routine port operations for unit equipment to designated strategic ports and includes cost as a consideration.

- Make the selection process transparent so that port authorities have a broad understanding of the logic.

ADDITIONAL ISSUES

During the course of study, we identified several issues not directly related to our primary or secondary objectives.

One, we recognized vagueness and ambiguity in the current definition of a strategic seaport. It does not differentiate a strategic seaport from any other type of seaport, does not distinguish between military and commercial seaports, does not prescribe a requirement for a standing procurement vehicle, and is not included in military doctrine. We offer a revised definition that addresses these shortcomings. We recommend that the NPRN consider our proposed definition and publish it in a revision to its MOU. We further recommend that, following NPRN agreement on the definition, SDDC provide input to USTRANSCOM for incorporation in the Joint doctrinal publications currently under review.

Two, we considered the commercial Port of Charleston and Charleston Naval Weapons Station as separate seaports and believe they should be viewed as two strategic seaports. We recommend that SDDC formally designate CNWS a strategic port and document this agreement with the Navy.

Three, we were presented with numerous ideas for making the strategic seaport designation attractive or more palatable to the port, and to ensure that DoD has ready access to the ports without the need for an NSPO. We found the common opinion that any guaranteed access program must be tied to a guarantee of funding, revenues, long-term leases, and investment. The ideas ranged from direct DoD funding of port infrastructure to offering strategic seaports MSC or MARAD vessel homeporting opportunities. We suggest SDDC analyze and pursue the best ideas as separate projects to optimize the Strategic Seaport Program.

Finally, we identified several additional issues and developed potential remedies, including the following:

- According to MARAD, SDDC would incur legal cost obligations if leases with commercial entities were revoked to provide PPO facilities for DoD deployment operations. SDDC should conduct a legal review to determine its cost obligations. If those costs are prohibitive, SDDC should consider either alternative ports or entering into long-term leases with ports.

- The recent establishment of the AMSC has created some overlap with the PRC. While the chairmanship and the membership of the AMSC and the PRC are similar, their interests are sufficiently different. The NPRN should continue to consider the PRC a standing committee of the NPRN under the management of MARAD, not a subcommittee of the AMSC overseen by the USCG and DHS.

- The AMSC is supported by the Maritime Transportation Security Act of 2002, which provides legislative authority. The PRC, on the other hand, is

directed solely by an interagency MOU. We recommend that the NPRNSG consider pursuing legislative change to amend the CFR Title 46: Shipping, to codify the Strategic Seaport Program and the NPRN.

- Although there was some evidence to suggest that PRC meetings were generally held and port readiness exercises were typically conducted, we were unable to determine if the reports, minutes, and after-action reports for these events were systematically collected and analyzed at the NPRN level. MARAD should collect and assess the reports stipulated by the MOU and share the results with all stakeholders via the website and in upcoming meetings of the NPRNWG.

- The NPRN includes membership that is appointed but not active. Further, it does not include several key stakeholders in the unit deployment process. We recommend that MARAD revitalize the NPRN by activating vacant membership positions, inviting USJFCOM and IMCOM membership, and investigating USMC interest in joining the NPRN.

SUMMARY

This study was intended to assist SDDC in the development of an implementation plan to optimize the use of strategic seaports. By examining five key areas—locations of ports, numbers of ports, manning, the readiness timeline, and port selection—we developed recommendations that, if implemented, would make the Strategic Seaport Program more effective. Those actions would improve port readiness, resource utilization, understanding of strategic seaports and their selection, and communication between port authorities and federal agencies.

Appendix
Abbreviations

AMS	Area Maritime Security
AMSC	Area Maritime Security Committee
ARFORGEN	Army Force Generation
BOA	basic ordering agreement
BRAC	Base Realignment and Closure
CFR	Code of Federal Regulation
CNWS	Charleston Naval Weapons Station
CONUS	Continental United States
COTP	Captain of the Port
DHS	Department of Homeland Security
DoD	Department of Defense
DOT	Department of Transportation
DPS	Defense Planning Scenario
FORSCOM	U.S. Army Forces Command
GWOT	Global War on Terrorism
IMCOM	U.S. Army Installation Management Command
LMSR	large medium-speed roll-on/roll-off
MARAD	Maritime Administration
MCRS	Mobility Capabilities and Requirements Study
MCS	Mobility Capabilities Study
MOT	military ocean terminal
MOU	memorandum of understanding
MTSA	Maritime Transportation Security Act
NBVC	Naval Base Ventura County
NMII	Naval Magazine Indian Island
NPRN	National Port Readiness Network
NPRNSG	National Port Readiness Network Steering Group
NPRNWG	National Port Readiness Network Working Group

NSA	National Shipping Authority
NSPO	National Shipping Authority Service Priority Order
NWS	Naval Weapons Station
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OML	order of merit list
OPLAN	operations plan
PND	Ports for National Defense
POPS	Ports Operational Performance Simulator
PORTSIM	Port Simulation Model
PPO	Port Planning Order
PPP	power projection platforms
PRC	Port Readiness Committee
PSA	port support activity
QDR	Quadrennial Defense Review
RORO	roll-on/roll-off
ROS	reduced operating status
RRF	Ready Reserve Force
SDDC	Military Surface Deployment and Distribution Command
SDDCTEA	SDDC Transportation Engineering Agency
SOUTHCOM	U.S. Southern Command
SQFT	square feet
SRTS	Stevedoring and Related Terminal Services
TDA	table of distribution and allowances
TDY	temporary duty
TPFDD	Time-Phased Force and Deployment Data
TSA	Transportation Security Agency
UBL	unit basic load
USACE	U.S. Army Corps of Engineers
USC	Universal Services Contract
USCG	U.S. Coast Guard
USJFCOM	U.S. Joint Forces Command

USMC	U.S. Marine Corps
USNORTHCOM	U.S. Northern Command
USTRANSCOM	U.S. Transportation Command
WPS	Worldwide Port System