

CONTENTS

Executive Summary	vii
I. Introduction	1
THE VALUE OF THE U.S. MARINE TRANSPORTATION SYSTEM	1
Economic Value	2
National Security Value	3
Environmental Value	3
Recreational Value	4
The Challenge.....	4
II. The Marine Transportation System	5
PRINCIPAL COMPONENTS	5
Waterways.....	6
The Ports	7
Intermodal Connections.....	11
Vessels and Vehicles	11
MTS Users	12
MTS FUNCTIONS	13
Global Gateway.....	13
Domestic Movement.....	15
Recreation	16
Other Commercial Use.....	16
SUPPORT SYSTEMS.....	18
Information Systems	18
Management Systems.....	20
MTS SERVICE PROVIDERS	23
III. Trends and Competitive Pressures.....	25
GROWING LEVELS OF DEMAND.....	25
Trade.....	26
International Cargo Movements.....	26
Domestic Movements	27
Passenger Movements	28
Recreational Use.....	28
SHIFTING USER REQUIREMENTS	28
Changes in Business Practices.....	28
Changes in Freight Transportation Requirements	29
Changes in the Intermodal Transportation Industry.....	30
CHANGING INFRASTRUCTURE NEEDS AND MTS COMPETITIVENESS	31
Advances in MTS Technologies	31
Competing Water Uses.....	33
Increasing Dredging Requirements.....	33
Increasing Demands on Locks and Dams	34
Competing Land Uses.....	34
Enhancing Intermodal Connections	35

INCREASING NATIONAL SECURITY NEEDS	35
Crime	35
Terrorism	36
Deployment	36
GROWING AWARENESS OF THE ENVIRONMENT	37
 IV. Critical Issues.....	39
COORDINATION	39
SAFETY	41
Vessel Operations	41
Infrastructure.....	43
COMPETITIVENESS	45
Current Approach to MTS Competitiveness	45
MTS Technologies	45
Labor.....	46
NATIONAL SECURITY	47
Crime and Terrorism	47
Deployment	48
INFRASTRUCTURE.....	49
Capacity Issues	49
Funding	52
Regulatory Framework.....	53
ENVIRONMENTAL	53
Ship Operations and Vessel Movements.....	54
Port Development and Terminal Operations.....	55
Dredging.....	57
 V. The Desired State of the U.S. Marine Transportation System in 2020.....	63
VISION STATEMENT.....	63
GUIDING PRINCIPLES.....	63
PRINCIPAL COMPONENTS	64
Primary Functions	65
Support Systems.....	66
MTS Systemwide Attributes.....	67
 VI. Strategic Areas of Action	71
COORDINATION	72
Coordinating Framework.....	73
FUNDING THE MARINE TRANSPORTATION SYSTEM	77
MTS COMPETITIVENESS AND MOBILITY.....	78
Vessel Clearance Information Exchange and One-Stop Shopping.....	79
Landside Access to Ports	80
National Cooperative MTS Research Program	81
Systemwide Traffic Forecasts.....	82

IMPROVING AWARENESS OF THE MTS.....	82
INFORMATION MANAGEMENT AND INFRASTRUCTURE.....	83
Hydrographic and Weather Information	84
Tracking Cargo, Passengers, and Vessels	85
Waterways Traffic Management Information.....	86
SECURITY.....	88
Improve Security Awareness	88
Identify Vulnerabilities and Improve Transparency.....	89
Ensure Qualified Operators	90
Forge Stronger Public/Private Partnerships	90
Strengthen International Cooperation.....	91
SAFETY AND ENVIRONMENTAL PROTECTION.....	91
Systematic Approach to MTS Safety and Environmental Protection	92
Specific Strategic Areas of Action	93
ENDNOTES	99
ACRONYMS	100
MTS TASK FORCE MEMBERS	101
MTS TASK FORCE TEAMS	102
Current Status/Assessment	102
Future State/Implementing Mechanism	102
Strategic Planning	103
Legislation	103
Communications	103

FIGURES

II-1. Location of Major U.S. Seaport Facilities.....	7
IV-1. Causes of Recreational Boating Accidents.....	41
VI-1. Marine Transportation System Coordinating Structure	73
VI-2. Marine Transportation System Coordinating Structure: Regional and Local Levels	75

TABLES

II-1. U.S. Ports Handling More Than 10 Million Tons in 1997.....	8
II-2. Top 25 U.S. Ports and Their Number of Cargo Vessel Calls	9
II-3. U.S. Shallow-Draft Terminal Facilities by State.....	10
II-4. Major U.S. Shipbuilding and Repair Base as of October 1998.....	17
III-1. U.S. Foreign Trade Annual Compound Rates in Percent	26
III-2. World Trade Growth Compared to Fleet Growth 1998-2002.....	26
III-3. U.S. Inland Waterway Projections by Commodity Groups	27