U.S. Department of Transportation

BUDGET ESTIMATES

FISCAL YEAR 2009

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

SUBMITTED FOR USE OF
THE COMMITTEE ON APPROPRIATIONS

U.S. DEPARTMENT OF TRANSPORTATION

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

FY 2009 BUDGET REQUEST

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Overview

Saint Lawrence Seaway Development Corporation
FY 2009 Budget Request to the Congress
Administrator's Overview

The locks, channels, and accompanying infrastructure of the St. Lawrence Seaway are "perpetual" transportation assets that require periodic and regular capital reinvestment in order to continue to operate safely, reliably, and efficiently. After 50 years of continuous operation, the Seaway's infrastructure is approaching the end of its original "design" life. As a result, large-scale capital reinvestment in this transportation asset is now required.

The Saint Lawrence Seaway Development Corporation's (SLSDC) total program budget request for Fiscal Year (FY) 2009 is $33,742,000 to fund general agency operations ($16,207,000) as well as 17 capital and maintenance projects/equipment included in the first year of the SLSDC's new U.S. Seaway Asset Renewal Program (ARP) ($17,535,000). Funding for the SLSDC request is proposed to be derived from an appropriation from the Harbor Maintenance Trust Fund (HMTF) ($31,842,000), coupled with the Corporation's annual non-federal revenues (estimated at $900,000) and a $1,000,000 withdrawal from its reserve fund.

The FY 2009 total program budget request is $15,450,000 above the FY 2008 enacted level of $18,292,000 ($17,392,000 appropriation from the HMTF and $900,000 in non-federal revenues). Of that increased amount, there are $625,000 in net baseline changes and $14,825,000 in net program changes associated with the ARP projects and equipment (net changes include a $2,810,000 capital budget reduction from the FY 2008 base budget). Baseline changes include a $542,000 increase in net personnel compensation and benefits; $80,000 increase in inflationary adjustments; and a $3,000 increase in DOT Working Capital Fund projections.

The SLSDC FY 2009 budget request directly supports three Departmental strategic goals: (1) Global Connectivity, (2) Security, Preparedness and Response, and (3) Organizational Excellence. In addition, ARP funding will directly support both the Department's Global Connectivity strategic goal related to Seaway availability and the Secretary's priority of system performance and reliability.

Operated and maintained by the SLSDC and the Canadian St. Lawrence Seaway Management Corporation (SLSMC), the St. Lawrence Seaway is a unique binational transportation asset, which directly serves an eight-state, two-province region that accounts for 29 percent of the U.S. gross domestic product (GDP), 60 percent of Canada's GDP, 55 percent of North America's manufacturing and services industries, and is home to 110 million people or one quarter of the continent's population. In fact, maritime commerce on the Great Lakes St. Lawrence Seaway System impacts 150,000 U.S. jobs, $12 million per day in wages, $9 million per day in business revenues by firms engaged in trade, and provides approximately $2.7 billion in annual transportation cost savings compared to competing rail and highway routes.

To continue providing these economic benefits to both nations as well as serving as a viable option to help mitigate highway and rail congestion in the region, the binational St. Lawrence Seaway, which will celebrate its 50th anniversary in 2009, must remain available, efficient, and competitive for commercial transportation. To achieve these goals, the Seaway's infrastructure, which is approaching the end of its original "design" life, must be renewed through a large-scale capital reinvestment on both sides of the international border.

A perpetual infrastructure asset, such as a lock, bridge, or tunnel, needs a capital investment equivalent to its original cost over its projected design life, which is approximately 50 years, in order to sustain itself. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of $130 million. Only $47 million in capital expenditures have been invested in the U.S. Seaway locks since it opened in 1959.

Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway is in jeopardy. Although the Seaway has enjoyed a 99 percent reliability rate over its history, similar results in the future are uncertain with an aging infrastructure that has not been adequately renewed.

Unlike many of the other lock-based waterway systems in the world, which have twinned locks to ensure continued operations in the event of a lock failure, the St. Lawrence Seaway is a single-lock system. A delay or shutdown to any one of the 15 U.S. or Canadian Seaway locks would cause system-wide delays. In 1985, a lock failure at the Welland Canal caused 53 commercial vessels to be trapped in the Seaway System for 24 days at a cost to the shippers of more than $24 million. A recent analysis concluded that the economic impact of a shutdown of either of the two U.S. locks would range from $1.3-$2.3 million per day, depending on the length of the delay.

To address its infrastructure renewal needs, the SLSDC has identified 50 necessary capital and maintenance investments for the two U.S. Seaway locks, the Seaway International Bridge connecting Ontario and New York, maintenance dredging, operational systems, and Corporation facilities and equipment *(see Tab 5 – "U.S. Seaway Asset Renewal Program Capital Investment Plan")*. None of these investments will result in increases to the authorized depth or width of the navigation channel or to the size of the two existing U.S. locks.

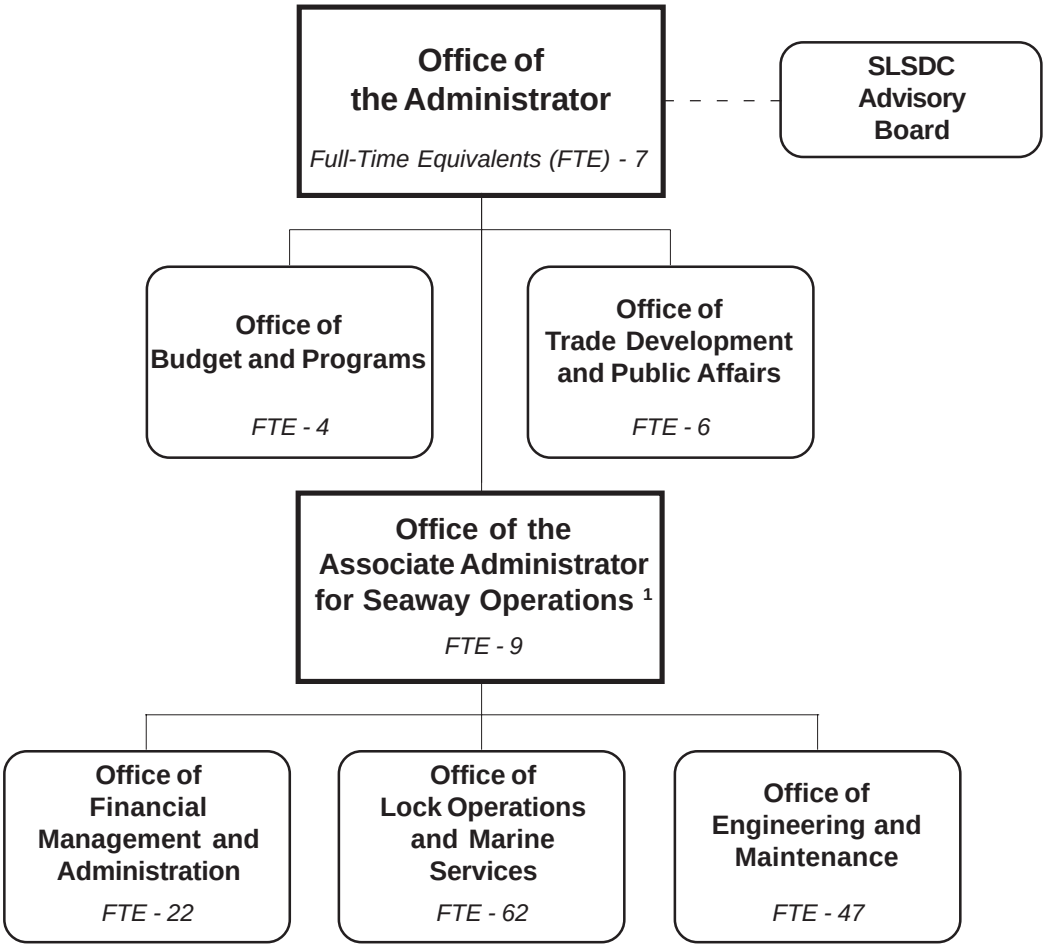
The SLSDC ARP will support the engineering considerations highlighted in the November 2007 binational *Great Lakes St. Lawrence Seaway Study*. The Study, which was completed with the support of the U.S. Army Corps of Engineers, Transport Canada, and the U.S. Department of Transportation's Office of the Secretary, SLSDC, and the Maritime Administration, evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC will work closely with the U.S. Army Corps of Engineers to leverage its expertise.

Over the past decade, the Canadian government has started to address the asset renewal needs of its13 Seaway locks, eight of which are 75 years old (located at the Welland Canal). With its ARP, the SLSDC is now following this example. Today, Canadian Seaway commercial tolls are used almost exclusively for the agency's general operations and maintenance expenses, while the Canadian government has been providing general Canadian Treasury funds to the SLSMC for its capital improvement projects. Over the past few years, the Canadian government has taken an even more aggressive approach to "reinvesting" in the Canadian Seaway assets by more than doubling SLSMC capital and maintenance funding. Increasing Canadian asset renewal funding by one-third is expected over the next three years. With such an increase, the level of annual capital funding for Canadian Seaway asset renewal projects will equal the amount of the SLSMC's annual general operating expenses.

SLSDC FY 2009 Budget Request to the Congress	
FY 2009 Enacted Appropriation from the HMTF (69-8003)	$17,392,000
SLSDC Non-Federal Revenues *(estimated)*	900,000
FY 2008 SLSDC Total Program Budget (69x4089):	**$18,292,000**
FY 2009 Net Baseline Increases	$ 625,000
FY 2009 Net Program Increases	14,825,000
FY 2009 SLSDC Total Program Budget (69x4089):	**$33,742,000**
Appropriations Request from the HMTF (69-8003)	$31,842,000
SLSDC Reserve Fund Withdrawal	1,000,000
SLSDC Non-Federal Revenues *(estimated)*	900,000
FY 2009 SLSDC Total Budget Resources (69x4089):	**$33,742,000**

Exhibit I

Saint Lawrence Seaway Development Corporation
Organization Chart
FY 2008-2009



[1] All FTEs/FTPs are associated with the "Global Connectivity " performance measure of Seaway system availability, except for one FTE/FTP in the office of the Associate Administrator for Seaway Operations, which is directly attributable to the "Security, Preparedness and Response" performance measure.

Budget
Summary Tables

EXHIBIT II-1

COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY

Saint Lawrence Seaway Development Corporation

Appropriations

(in thousands of dollars)

ACCOUNT NAME	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Operations and Maintenance - HMTF	$16,223	$17,392	$31,842
TOTAL SLSDC APPROPRIATIONS (69-8003):	**$16,223**	**$17,392**	**$31,842**
SLSDC Reserve Fund	$788	$0	$1,000
Non-federal revenues [1]	$900	$900	$900
TOTAL SLSDC PROGRAM BUDGET (69x4089):	**$17,911**	**$18,292**	**$33,742**

[1] Each year, the SLSDC, as a government corporation, generates non-federal income from such sources as interest on investments, rental payments, pleasure craft tolls, tug services, and duty free store revenues.

EXHIBIT II-2

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT

Saint Lawrence Seaway Development Corporation

Appropriations

(in thousands of dollars)

ACCOUNT NAME	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Appropriations Request			
1. Operations and Maintenance (69-8003)	$16,223	$17,392	$31,842
Total Program Budget			
1. SLSDC Fund (69x4089) [1]			
a. Agency Operations	$17,911	$18,292	$16,207
b. Asset Renewal Program	$0	$0	$17,535
SLSDC TOTALS:	**$17,911**	**$18,292**	**$33,742**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-3

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE

Saint Lawrence Seaway Development Corporation

Appropriations

(in thousands of dollars)

APPROPRIATION/PROGRAM ACTIVITY/PERFORMANCE GOAL	SAFETY	REDUCED CONGESTION	GLOBAL CONN.	ENVIRON. STEWARD.	SECURITY	ORG. EXCELL.	TOTAL
SLSDC Fund (69x4089) [1]	**$0**	**$0**	**$33,402**	**$0**	**$180**	**$60**	**$33,642**
Agency Operations and Maintenance							
Increase the Efficiency of Freight Movement: Percent of days in the shipping season that the U.S. portion of the St. Lawrence Seaway is available	$0	$0	$15,867	$0	$0	$0	**$15,867**
Expert Transportation Sector Intelligence: Preparedness for response to emergencies affecting the transportation sector (draft measure)	$0	$0	$0	$0	$100	$0	**$100**
Expand Business Opportunities: Percent of total dollar value of DOT direct contracts awarded to women-owned businesses *(non-add values reflect estimated total contracts to women-owned businesses)*	*[$0]*	*[$0]*	*[$130]*	*[$0]*	*[$0]*	*[$0]*	*[$130]*
Expand Business Opportunities: Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses *(non-add values reflect estimated total contracts to small disadvantaged businesses)*	*[$0]*	*[$0]*	*[$92]*	*[$0]*	*[$0]*	*[$0]*	*[$92]*
Expert Transportation Sector Intelligence: Preparedness for response to emergencies affecting the transportation sector (draft measure)	$0	$0	$0	$0	$180	$0	**$180**
Fulfill the President's Management Agenda: Achieve financial performance goals, including unqualified annual audit	$0	$0	$0	$0	$0	$60	**$60**
Program Activity Subtotal	$0	$0	$15,867	$0	$180	$60	**$16,207**
Asset Renewal Plan							
Increase the Efficiency of Freight Movement: Percent of days in the shipping season that the U.S. portion of the St. Lawrence Seaway is available	$0	$0	$17,535	$0	$0	$0	**$17,535**
Program Activity Subtotal	$0	$0	$17,535	$0	$0	$0	**$17,535**
TOTAL:	**$0**	**$0**	**$33,402**	**$0**	**$180**	**$60**	**$33,742**
FTE (direct funded only):	**0**	**0**	**156**	**0**	**1**	**0**	**157**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-4

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT

Saint Lawrence Seaway Development Corporation

Budget Authority

(in thousands of dollars)

ACCOUNT NAME	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Appropriations Request			
1. Operations and Maintenance (69-8003)	$16,223	$17,392	$31,842
Total Program Budget			
1. SLSDC Fund (69x4089) [1]			
a. Agency Operations	$17,911	$18,292	$16,207
b. Asset Renewal Program	$0	$0	$17,535
SLSDC TOTALS:	**$17,911**	**$18,292**	**$33,742**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-5

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT

Saint Lawrence Seaway Development Corporation

Outlays

(in thousands of dollars)

ACCOUNT NAME	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Appropriations Request			
1. Operations and Maintenance (69-8003)	$16,223	$17,392	$31,842
Total Program Budget			
1. SLSDC Fund (69x4089) [1]			
a. Agency Operations	$17,911	$18,292	$16,207
b. Asset Renewal Program	$0	$0	$17,535
SLSDC TOTALS:	**$17,911**	**$18,292**	**$33,742**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
Saint Lawrence Seaway Development Corporation
Appropriations
SLSDC Fund (69x4089) [1]
(in thousands of dollars)

		Baseline Changes											
	FY 2008 Request	2008 PC&B By Program	2008 # FTE Per Program	2008 Contracts Expenses	Annualization of 2008 Pay Raises	2009 PC&B [2]	WCF Inc./ Dec.	Inflation/ Deflation	FY 2008 Adjusted Base	Program Inc./Dec.	2009 PC&B Program Increase	2009 # FTE Per Program Increase	2009 Contract Expense Program Increases	FY 2009 Request
		Note Non-Add									Note Non-Add			
PERSONNEL RESOURCES	**157**													
Direct FTEs	157								0					157
FINANCIAL RESOURCES														
Administrative Expenses														
Salaries & Benefits	$3,289				$62	$89			$3,440					$3,440
Travel	$66							$3	$69					$69
Transportation	$2								$2					$2
GSA Rent	$152								$152					$152
Comms & Utilities	$33							$6	$39					$39
Printing	$2								$2					$2
Other Services:														
WCF [3]	$188						$3		$191					$191
Other	$523							$14	$537					$537
Supplies	$36							$1	$37					$37
Admin. Sub-Total	**$4,291**				**$62**	**$89**	**$3**	**$24**	**$4,469**					**$4,469**
PROGRAMS														
Agency Operations	$11,191				$30	$361		$56	$11,638					$11,738
U.S. Seaway Asset Renewal Program	$2,810								$2,810	$14,825				$17,535
GRAND TOTAL	**$18,292**				**$92**	**$450**	**$3**	**$80**	**$18,917**	**$14,825**				**$33,742**

[1] The SLSDC's revolving fund (69x4089) is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

[2] FY 2008 PC&B includes $303,000 for GS and WG pay increases, $185,000 for benefits increases, and ($38,000) for one less compensable day.

[3] Total agency WCF estimates for FY 2009 are $330,727. The $191,000 shown above reflects only those administrative-related functions within the WCF.

EXHIBIT II-6A

WORKING CAPITAL FUND

Saint Lawrence Seaway Development Corporation

Appropriations

(in thousands of dollars)

ACCOUNT NAME	FY 2008 ENACTED	FY 2009 REQUEST	CHANGE [1]
DIRECT:			
SLSDC Fund (69x4089) [2]	$327	$331	$4
SLSDC TOTALS:	**$327**	**$331**	**$4**

[1] Rounding of actual amounts may affect figures and calculations in this Exhibit.

[2] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-7

Saint Lawrence Seaway Development Corporation

PERSONNEL RESOURCE -- SUMMARY

TOTAL FULL-TIME EQUIVALENTS

ACCOUNT(S)	FY 2007 ACTUAL	FY 2008 PRES. BUD.	FY 2009 REQUEST
SLSDC Fund (69x4089) [1]	144	157	157
TOTAL FTEs:	**144**	**157**	**157**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

EXHIBIT II-8

Saint Lawrence Seaway Development Corporation

RESOURCE SUMMARY -- STAFFING

FULL-TIME PERMANENT POSITIONS

ACCOUNT(S)	FY 2007 ACTUAL	FY 2008 PRES. BUD.	FY 2009 REQUEST
SLSDC Fund (69x4089) [1]	144	157	157
TOTAL POSITIONS:	**144**	**157**	**157**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

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Justification by
Approp Account

Operations and Maintenance (69-8003)

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DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

TRUST FUNDS

OPERATIONS AND MAINTENANCE

(Harbor Maintenance Trust Fund)

For necessary expenses for operations, maintenance, and capital asset renewal of those portions of the St. Lawrence Seaway owned, operated, and maintained by the Saint Lawrence Seaway Development Corporation, $31,842,000, to be derived from the Harbor Maintenance Trust Fund, pursuant to Public Law 99-662. *(Department of Transportation Appropriations Act, 2008.)*

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DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
OPERATIONS AND MAINTENANCE
Program and Financing
(in thousands of dollars)

Identification code 69-8003-0-7-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
Obligations by program activity:			
10.00 Total new obligations (object class 25.2)	16,223	17,392	31,842
Budgetary resources available for obligation:			
22.00 New budget authority (gross)	16,223	17,392	31,842
23.95 Total new obligations (-)	(16,223)	(17,392)	(31,842)
New budget authority (gross), detail:			
Discretionary			
40.26 Appropriation (trust fund, definite)	16,223	17,392	31,842
40.75 Reduction	…	…	…
43.00 Appropriation (total discretionary)	16,223	17,392	31,842
Change in unpaid obligations:			
73.10 Total new obligations	16,223	17,392	31,842
73.20 Total outlays (gross) (-)	(16,223)	(17,392)	(31,842)
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	16,223	17,392	31,842
New budget authority and outlays:			
89.00 Budget authority	16,223	17,392	31,842
90.00 Outlays	16,223	17,392	31,842

The Water Resources Development Act of 1986 authorizes use of the Harbor Maintenance Trust Fund as the major source of funding for the Corporation's operations and maintenance activities.

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
History of Appropriations
Operations and Maintenance (69-8003)
(Harbor Maintenance Trust Fund)

YEAR	REQUEST		YEAR	ENACTED	
2000	0	/1	2000	$11,971,000	/2
2001	0	/1	2001	$12,975,391	/3
2002	$13,345,000		2002	$13,305,000	/4
2003	$14,086,000		2003	$13,974,000	/5
2004	$14,400,000		2004	$14,273,000	/6
2005	$15,900,000		2005	$15,707,000	/7
2006	$ 8,000,000	/8	2006	$16,121,000	/9
2007	$ 7,920,000	/10	2007	$16,223,160	/11
2008	$17,392,000		2008	$17,392,000	
2009	$31,842,000				

1/ Proposed as a performance-based organization using mandatory (permanent) budget authority.

2/ Reflects reduction of $25,000 pursuant to P.L. 106-69 for TASC (Sec. 319) and $46,000 (.38%) government-wide reduction pursuant to P.L. 106-113.

3/ Reflects reduction of $28,609 (.22%) pursuant to P.L. 106-554 (Sec. 1403).

4/ Reflects reductions of $11,000 pursuant to P.L. 107-87 (Sec. 349) for TASC, $10,000 pursuant to P.L. 107-117 (Sec. 1106) for TASC, and $19,000 pursuant to P.L. 107-206 (Sec. 1403).

5/ Reflects reductions of $91,559 pursuant to P.L. 108-7 (Sec. 601) and $20,000 pursuant to P.L. 108-7 (Sec. 362).

6/ Reflects reductions of $84,960 (0.59%) pursuant to P.L. 108-199 (Division H, Sec. 168(b)) and $42,006 pursuant to P.L. 108-199 (Division F, Sec. 517).

7/ Reflects reductions of $127,200 (0.80%) pursuant to P.L. 108-447 (Div. J, Sec. 122(a)) and $66,000 pursuant to P.L. 108-447 (Division H, Title I, Sec. 197)

8/ Total program request of $16,284,000 consists of an appropriation of $8,000,000 from the Harbor Maintenance Trust Fund (69-8003) and $8,284,000 in proposed U.S. commercial toll receipts.

9/ Reflects reductions of $162,840 (1.00%) pursuant to P.L. 109-148 (Sec. 3801).

10/ Total request of $17,345,000 consists of an appropriation of $7,920,000 from the Harbor Maintenance Trust Fund (69-8003) and $9,425,000 in proposed U.S. commercial toll receipts.

11/ Reflects reductions of $1,121,840, pursuant to P.L. 110-5 (Division B, Title I, Sec. 101(a) and Sec. 111(a)(1)).

SLSDC Fund

(69x4089)

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DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

FEDERAL FUNDS

Public enterprise funds:

Saint Lawrence Seaway Development Corporation

The Saint Lawrence Seaway Development Corporation is hereby authorized to make such expenditures, within the limits of funds and borrowing authority available to the Corporation, and in accord with law, and to make such contracts and commitments without regard to fiscal year limitations as provided by section 104 of the Government Corporation Control Act, as amended, as may be necessary in carrying out the programs set forth in the Corporation's budget for the current fiscal year. *(Department of Transportation Appropriations Act, 2008.)*

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EXHIBIT III-1

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Summary by Program Activity
Appropriations
(in thousands of dollars)

	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST	CHANGE FY 2008-09
Appropriations Request				
Operations and Maintenance (69-8003)	**$16,223**	**$17,392**	**$31,842**	**$14,450**
Total Program Budget				
SLSDC Fund (69x4089) [1]				
Agency Operations	$17,911	$18,292	$16,207	($ 2,085)
Asset Renewal Program	0	0	17,535	17,535
Total:	**$17,911**	**$18,292**	**$33,742**	**$15,450**
FTEs (69x4089):	**144**	**157**	**157**	

1 The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

Program and Performance Statement

The SLSDC's total program budget request for FY 2009 is $33,742,000 to fund general agency operations ($16,207,000) as well as 17 capital and non-capital equipment/projects included in the first year of the SLSDC's ARP ($17,535,000). Funding for the SLSDC request is proposed to be derived from an appropriation from the Harbor Maintenance Trust Fund (HMTF) ($31,842,000), coupled with the Corporation's annual non-federal revenues (estimated at $900,000) and a $1,000,000 withdrawal from its reserve fund.

The SLSDC FY 2009 budget request directly supports three Departmental strategic goals: (1) Global Connectivity, (2) Security, Preparedness and Response, and (3) Organizational Excellence. In addition, ARP funding will directly support both the Department's Global Connectivity strategic goal related to Seaway availability and the Secretary's policy priority of system performance and reliability.

To address its infrastructure renewal needs, the SLSDC has identified 50 necessary capital and maintenance investments for the two U.S. Seaway locks, the Seaway International Bridge connecting Ontario and New York, maintenance dredging, operational systems, and Corporation facilities and equipment *(see Tab 5 – "U.S. Seaway Asset Renewal Program Capital Investment Plan")*. None of these investments will result in increases to the authorized depth or width of the navigation channel or to the size of the two existing U.S. locks.

EXHIBIT III-2

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
SLSDC FUND (69x4089)

SUMMARY ANALYSIS OF CHANGES FROM FY 2008 TO FY 2009
(in thousands of dollars)

Item	Change from FY 2008 to FY 2009	FY 2009 PC&B by Program	FY 2009 FTEs by Program	FY 2009 Contract Expenses	Total
FY 2008 Base (Enacted)		**Note: Columns are Non-Add**			
SLSDC Fund (69x4089)					**$18,292**
Adjustments to Base					
Salaries and Benefits	580				
GSA Rent	---				
One Less Compensable Day	(38)				
Working Capital Fund	3				
Inflationary Increases	80				
Subtotal, Adjustments to Base					**$625**
New or Expanded Programs					
Expired Capital and Maintenance Programs	(2,810)				
New Capital and Maintenance Programs	17,635				
Subtotal, New or Expanded Programs					**$14,825**
Total FY 2009 Request (SLSDC Fund - 69x4089)			**157**		**$33,742**

DETAILED JUSTIFICATION
PROGRAM ACTIVITY NO. 1 – AGENCY OPERATIONS

Agency Operations	**FY 2009 Request: $16,207,000**

Overview:

Activities financed by this program include functions described below. Corporation objectives are to continue to operate the system in a safe, secure, reliable, and efficient manner while interfacing with a multitude of diverse interests that share the common goal of expanding commerce on the Great Lakes St. Lawrence Seaway System.

Lock Operations – Lock Operations and vessel traffic control on the St. Lawrence Seaway are conducted on a 24-hour day, 7-day week basis throughout the shipping season (typically late March to late December).

Maintenance, Marine, and Engineering – The Corporation facilities must be maintained in efficient operating condition. Facilities include: locks and guidewalls; roads; an international bridge; a highway tunnel; channels; public use facilities, such as the Eisenhower Lock Visitors' Center; navigation aids; buildings, grounds, and utilities; and permanent operating equipment. Major maintenance on existing facilities will continue to be performed during the non-navigation winter months. Marine operations consist of commissioning and decommissioning aids to navigation, channel dredging and maintenance, tugboat and other floating equipment services.

Trade Development – The Corporation engages in activities designed to increase public awareness of the Seaway. This includes costs associated with initiatives aimed at identifying new markets for, and increasing use of, the Great Lakes St. Lawrence Seaway System.

Security and Infrastructure Protection – The Corporation continues to perform its security program focused on protecting the U.S. sections of the St. Lawrence Seaway, including the two U.S. locks and other assets in Massena, New York, and its employees.

Administrative – Executive management and administration of the Corporation includes legal, civil rights, accounting, procurement, computer, personnel administration, public relations, and other related administrative support services.

FY 2008 Base:

The FY 2008 enacted level for these operations and maintenance activities is $18,292,000 from the SLSDC's revolving fund account (69x4089), which includes $11,191,000 in operations and maintenance activities, $4,291,000 in administrative expenses, and $2,810,000 in capital and non-capital asset renewal-related projects.

Anticipated FY 2008 Accomplishments:

In FY 2008, the SLSDC will:

- Provide a safe, secure, and efficient commercial trade route with a reliability rate in the U.S. sector of the system of 99 percent or greater through vessel traffic control operations and infrastructure maintenance.
- Continue close coordination and involvement with its Canadian counterpart agency in all aspects of Seaway operations and trade development to ensure consistent practices and greater economies of scale. The two agencies will continue to work cooperatively on the vessel inspection procedures of foreign-flagged vessels, invasive species activities affecting the Great Lakes Seaway System, and binational trade development initiatives including the Highway H_20 program and Short Sea Shipping activities.
- Perform safety inspections and ballast water exams of all foreign-flag vessels entering the St. Lawrence Seaway in Montreal, Quebec, prior to entering U.S. waters and work closely with the Canadian SLSMC on full implementation of existing ballast water measures.
- Utilize and enhance AIS/GPS technologies to more efficiently manage vessel traffic control and lock transits, including conducting a pilot program for three-dimensional navigational technology on board equipped commercial vessels. In 2003, the St. Lawrence Seaway became the first inland waterway in the western hemisphere to implement an operational AIS vessel traffic services system.
- Maintain and expand its improved physical security systems and equipment, such as intrusion detection and electronic access control systems.
- Participate in various President's Management Agenda and Department-wide activities, including E-Payroll, E-Training, Grants.gov, Integrated Acquisition, Disaster Management Initiative, and Automated Staffing.

FY 2009 Budget Request:

The FY 2009 request for agency operations is $625,000 above the FY 2008 President's Budget request level – all related to baseline increases:

- $542,000 increase in net personnel compensation and benefits, including the annualization of the FY 2007 Pay Act increase and one less compensable day;
- $80,000 increase in inflationary adjustments; and a
- $3,000 increase in Working Capital Fund projections.

In FY 2009, the SLSDC will continue its core programs including lock operations, waterway management and trade development. To maximize its funding for capital and other asset renewal projects, the SLSDC constantly works toward attaining its OMB efficiency goal and internal performance measure of lowering agency administrative expenses as a percentage of

all operating costs to 25 percent (administrative cost ratio). This level of overhead expenses, well below baseline federal and state government levels, was established based on an analysis of private-sector goals for companies of similar size. During FY 2007, the SLSDC's administrative cost percentage was 25 percent.

The SLSDC uses this efficiency measure to ensure that core mission expenses are given priority over administrative costs, whenever possible. As the SLSDC operates and manages an infrastructure that is almost 50 years old, it is even more critical that the SLSDC focus its funding priorities on asset renewal and general O&M activities and programs.

The Administrator and SLSDC senior staff are provided with detailed monthly and "ad hoc" expenditure reports that detail various financial goals, including the administrative cost ratio. The goal has aided the SLSDC's leadership in remaining focused on core mission-related projects, programs, and expenses, especially during periods of budget constraints. The goal is included in the SLSDC's strategic plan, as well as the Administrator's annual accountability contract with the Secretary of Transportation.

Administrative expenses include executive management and administration of the Corporation. These programs include legal, policy, civil rights, accounting, procurement, human resources, information technology, and related administrative support services. The SLSDC has implemented a number of activities to achieve the administrative cost ratio goal, including prioritizing operational vacancies over administrative-related vacancies; eliminating administrative-related positions through attrition; reducing supplies and materials, contractual services, and working capital fund services; and investigating new technologies to reduce administrative overhead costs.

The SLSDC's FY 2009 budget request also includes $292,000 in Information Technology initiatives. These initiatives are the Seaway Global Positioning System (GPS) / Automatic Identification System (AIS) project ($100,000 – included in the Asset Renewal Program), the SLSDC financial management system ($20,000), its common IT services provided by the Department ($157,000 – included in the DOT Working Capital Fund estimates), and Homeland Security Presidential Directive 12 (HSPD-12) activities ($15,000), as part of the Department's efforts to implement a common identification card with smart card technologies. In addition, the FY 2009 request includes $1,773 for the SLSDC's support of various federal e-Gov initiatives.

As highlighted in its OMB PART assessment, the Corporation has an "effective" program for its operations and maintenance activities related to the St. Lawrence Seaway. The FY 2009 request will allow Corporation officials to continue its efficient and effective programs and initiatives and to meet its performance goals. The SLSDC will continue to work towards achieving its goal of 99 percent system availability by providing a safe, secure, reliable, and efficient waterway and lock system. A reduction in the Seaway's availability rate could result in commercial users seeking alternative transportation routes and modes to and from North America, negatively affecting Great Lakes St. Lawrence Seaway System economic benefits while increasing road congestion, fuel use, and air emissions.

DETAILED JUSTIFICATION
PROGRAM ACTIVITY NO. 2 – ASSET RENEWAL PROGRAM

Asset Renewal Program	**FY 2009 Request: $17,535,000**

Overview:

As the St. Lawrence Seaway celebrates its 50th anniversary in 2009, the Department has an historic opportunity to address the long-term infrastructure renewal needs of the U.S. section of the waterway. The Seaway is comprised of perpetual assets (locks, channels, an international bridge, highway tunnel, vessel traffic control system, and accompanying facilities and equipment), which requires periodic capital reinvestment in order to continue to operate safely, reliably, and efficiently. Yet, the U.S. Seaway infrastructure is approaching the end of its original "design" life, and without sufficient investment in these perpetual assets, it will become increasingly difficult to maintain the future availability and reliability of the Seaway.

The proposed 10-year U.S. Seaway Asset Renewal Program (ARP) will ensure the long-term structural integrity of the Seaway infrastructure. In addition to supporting the SLSDC's performance goals, this ARP will also advance several key Department priorities, specifically, system performance and reliability and congestion mitigation. The locks, channels, tunnel, and bridge owned by the SLSDC are transportation infrastructure that are directly operated and maintained by the Department. The Seaway infrastructure has been a model of performance and reliability – achieving a 99 percent or better reliability rate in four out of the last five navigation seasons. After almost 50 years of continuous operation in often harsh weather conditions, the Seaway infrastructure needs to be rehabilitated if its exceptional record of performance and reliability is to be maintained for the next half century.

The ARP will support the engineering considerations highlighted in the November 2007 binational *Great Lakes St. Lawrence Seaway Study*. The Study, which was completed with the support of the U.S. Army Corps of Engineers, Transport Canada, and the U.S. Department of Transportation's Office of the Secretary, SLSDC, and the Maritime Administration, evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC will work closely with the U.S. Army Corps of Engineers to leverage its expertise.

The St. Lawrence Seaway is a binational waterway, and the Canadian locks along the St. Lawrence River are identical in age and design to those owned by the U.S. The Canadian Government has recently addressed the same need for capital reinvestment in its Seaway assets. Five years ago, the Canadians (as represented by Transport Canada) instituted a long-term capital renewal program for its Seaway infrastructure. As a binational waterway, the Seaway has been a model of international partnership between the United States and Canada for half a century. The Canadian Government is addressing its Seaway infrastructure renewal challenge effectively, and the U.S. Government is prepared to join Canada in this effort.

FY 2008 Base:

The FY 2008 enacted level for asset renewal-related capital and maintenance is $2,810,000, from the SLSDC's revolving fund account (69x4089). Projects include: $1,500,000 for fourth and final-year funding for concrete rehabilitation; $570,000 for maintenance dredging; $470,000 in capital projects; and $300,000 in capital equipment.

Anticipated FY 2008 Accomplishments:

In January 2006, the SLSDC began the first year of work on a four-year, $6 million concrete replacement project at the two U.S. Seaway locks. The $1.5 million enacted for concrete replacement in FY 2008 is included in the agency's non-capital maintenance base level funding and will fund work to be completed in January – March 2009, following the completion of the 2008 navigation season. The SLSDC is using contractors for the concrete project with SLSDC personnel providing lock covering work and stairway construction. The replacement of deteriorated concrete has historically been one of the SLSDC's most expensive maintenance projects dating back to the Seaway's opening in 1959. The majority of the concrete replacement has occurred at the U.S. Eisenhower Lock, which has a history of concrete-related problems.

The other major maintenance project for FY 2008 is to spot dredge approximately 750 cubic yards of river bottom material from high spots in the navigation channel in U.S. waters east of Snell Lock near Massena, N.Y. ($570,000). These high spots could impact the drafts of vessels transiting the Seaway during periods of low water. The Corporation has been working with the U.S. Army Corps of Engineers and the N.Y. State Department of Environmental Conservation (NYSDEC) to secure permits to complete this work. The required sampling and testing of the river bottom materials to be dredged has been completed. Testing revealed contaminants in the material to be dredged; therefore, this material will be hauled off-site and disposed of at a landfill in accordance with Environmental Protection Agency (EPA) and NYSDEC regulations.

The SLSDC's FY 2008 enacted budget also includes capital projects totaling $740,000, a decrease of $1.1 million below the FY 2007 request level. Major FY 2008 capital expenses include: replacement of a 20-ton capacity hydraulic crane utilized for lock and facility maintenance activities that include handling both materials and personnel ($250,000) and repair of paved areas along the approach walls at the locks that are used by personnel and vessel crew members for tying up vessels during transits ($100,000).

FY 2009 Budget Request:

For FY 2009, the SLSDC is proposing to fund 17 capital and maintenance infrastructure projects included in Year One of the Seaway's Asset Renewal Program (ARP) at a cost of $17,535,000. The ARP projects and equipment will address various needs for the two U.S. Seaway locks, the Seaway International Bridge connecting Ontario and New York, maintenance dredging, operational systems, and Corporation facilities and equipment.

The Seaway's ARP was developed to address the long-term asset renewal needs of the U.S. Seaway infrastructure. During its work on the Great Lakes St. Lawrence Seaway Study with the U.S. Army Corps of Engineers, the SLSDC measured its infrastructure assets using a Corps-based lock criticality index to better identify and prioritize maintenance and replacement needs. The results of the initial index were used to develop the ARP.

FY 2009 U.S. Seaway Asset Renewal Program Projects

Project Number	Project	FY 2009 Estimate
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	$ 300,000
2	Both Locks - Rehabilitate Downstream Miter Gates	1,500,000
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete along Guidewalls and Guardwalls	250,000
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	2,000,000
5	Both Locks - Rehabilitate and Insulate Winter Maintenance Lock Covers	250,000
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	2,000,000
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	600,000
8	Floating Navigational Aids - Replace	60,000
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	1,750,000
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	75,000
11	Fixed Navigational Aids - Rehabilitate	100,000
12	Corporation Equipment - Upgrade/Replace Floating Plant	2,000,000
13	Corporation Facilities - Replace Roofs	50,000
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	950,000
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	250,000
16	Seaway System - Upgrade GPS/AIS/TMS Technologies	100,000
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	5,000,000
---	Engineering Design, Construction Inspection, and Contracting Support	300,000
	***ARP Total (17 projects)*:**	**$17,535,000**

FY 2009 ARP Project Descriptions:

The SLSDC's ARP includes capitalized projects and equipment as well as non-capitalized, maintenance-related projects. Capital projects and equipment are defined as those of a durable nature that may be expected to have a period of service of more than a year without material impairment of its physical conditioning and includes equipment, improvements and modifications to existing structures. Non-capital/maintenance projects include those that do not materially add to the value of the property nor appreciably prolong the life of the infrastructure but merely keeps it in an ordinarily efficient operating condition. Expenditures for these maintenance projects are recognized as operating costs.

Project No. 1: Snell Lock – Replace Fendering Downstream Guidewall Extension (Capital Project) ($300,000) – This project is to replace the composite fendering on the downstream guidewall extension at Snell Lock. The existing composite fenders were a trial design installed nearly 20 years ago which have become very difficult/expensive to maintain and are in need of replacement to insure that vessels using this approach wall are not damaged due to the condition of the existing fendering.

Project No. 2: Eisenhower Lock – Rehabilitate Downstream Miter Gates (Non-Capital Maintenance Project) ($1,500,000) – This project is to completely rehabilitate the miter gates at the downstream end of Eisenhower Lock. It includes replacing worn and/or damaged components including the miter and quoin contact blocks, pintles, gate anchorages and diagonals to insure proper functioning of the miter gates.

Project No. 3: Eisenhower Lock – Rehabilitate Mooring Buttons, Pins and Concrete along Guidewalls and Guardwalls (Non-Capital Maintenance Project) ($250,000) – This project is to rehabilitate the upstream and downstream approach walls at Eisenhower Lock. These are mass concrete monolithic structures with vessel mooring buttons located behind them for transiting vessels to tie to. Since they were constructed, the concrete lifts/blocks have been dislodged and concrete damaged by vessel impact and the mooring buttons have settled such that they collect water/ice, making them difficult to use. The rehabilitation work would include pinning dislodged lifts, repairing damaged concrete and raising mooring buttons that have settled to improve the serviceability of the approach walls.

Project No. 4: Eisenhower Lock – Culvert Valve Machinery – Upgrade to Hydraulic Operation (Capital Project) ($2,000,000) – This project is for replacing the operating machinery for the culvert valves at Eisenhower Lock which are utilized for filling and emptying the locks. This machinery is nearly 50 years old and the open gearing is exhibiting macropitting. This equipment needs to be upgraded to insure its continued reliability. Failure of this equipment will cause delays to shipping while repairs are made. Due to the fact that this machinery was custom made and spare parts are limited, repairs to multiple pieces of machinery using the spare parts that are on-hand would not be possible. The upgrade will include new hydraulic operating machinery to match the upgrades made at the Canadian Seaway locks and the other locks in the United States.

Project No. 5: Both Locks – Rehabilitate and Insulate Winter Maintenance Lock Covers (Capital Project) ($250,000) – This project is for rehabilitating and insulating the roof cover modules utilized to cover Eisenhower and Snell Locks when major winter maintenance projects are planned. These covers are over 40 years old and insulating them would save on funds used to heat work areas when required for such temperature sensitive projects as placing concrete and painting steel structures.

Project No. 6: Seaway International Bridge – Perform Structural Rehabilitation and Corrosion Prevention (Non-Capital Maintenance Project) ($2,000,000) – This project is for rehabilitation of the structural components of the south span of the bridge between Rooseveltown, N.Y., and Cornwall Island, which crosses the Seaway navigation channel. The bridge, which accommodated more than 2.6 million vehicles in 2006, was opened to traffic in 1962 and is in need for significant rehabilitation. This project, scheduled for completion after four years of work, is designed to stop the corrosion currently experienced on many portions of the bridge structure and prevent the need for large-scale structural or even bridge replacement in the future. The SLSDC owns 68 percent of the south span of the bridge and the budget request reflects the U.S. prorated amount for the project. The Canadian Federal Bridge Corporation owns the remaining 32 percent of the south span.

Project No. 7: Eisenhower Lock – Culvert Valves – Replace with Single Skin Valves (Capital Project) ($600,000) – This project is for replacing the double skin culvert valves utilized for filling and emptying Eisenhower Lock with single skin valves. Cracking of major structural members have occurred and with the double skin construction, the structural members are not accessible for inspection, blast cleaning and painting. The culvert valves are nearly 50 years old and are corroding from the inside. The new single skin valves will provide access to the structural members for inspection and maintenance. The failure of a culvert valve would cause a delay to shipping while the damaged valve was removed and replaced. Dependant on the type of failure, other lock operating components/ equipment could be damaged causing the lock to be out of service for a longer time.

Project No. 8: Floating Navigational Aids – Upgrade/Replace (Capital Project) ($60,000) – This is an ongoing program to replace floating navigational aids/buoys and winter markers that have been damaged over the years, on an as required basis. The Corporation is responsible for approximately 100 buoys and 50 winter markers.

Project No. 9: Corporation Equipment – Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment (Capital Equipment) ($1,750,000) – This is an ongoing program to replace heavy and light equipment, vehicles and shop equipment as it becomes worn out and unserviceable. Heavy and light equipment includes such items as a crane, dump truck, snow plow, backhoe, grader, front end loader and shop equipment such as a lathe, milling machine and drill press. In FY 2009, plans are to replace a 75-ton capacity cable crane which will be 33 years old. This crane is utilized for repairing and replacing culvert valves and wire rope fenders and for installing and removing the lock roof cover modules used each winter shutdown period. This crane will be replaced with a higher capacity unit due to the fact that some of the required picks are at or near the current crane's capacity.

Project No. 10: Both Locks – Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities (Non-Capital Maintenance Project) ($75,000) – This project is for upgrading the infrastructure that supplies power to Eisenhower and Snell Locks and to the Corporation's Maintenance Facility. The power is furnished directly from the Moses-Saunders Power Dam over infrastructure that is nearly 50 years old. The loss of power from the Moses-Saunders Power Dam makes it necessary to utilize diesel generators, which are expensive to operate, to continue operation of Eisenhower and Snell Locks and the Maintenance Facility.

Project No. 11: Fixed Navigational Aids – Rehabilitate (Non-Capital Maintenance Project) ($100,000) – This project is for rehabilitating fixed navigational aids in the Seaway for which the Corporation is responsible. Many of the structures are nearing 50 years old and are in need of more than routine repairs. Many of these structures have concrete bases which are eroding and cracking. The inspection of these structures will have to be done by divers and the majority of the repairs will require divers and the use of a tug and barge with crane to complete. Failure of a fixed aid would likely make it necessary to replace it which would cost significantly more than repairing the existing structure.

Project No. 12: Corporation Equipment – Upgrade/Replace Floating Plant (Capital Project) ($2,000,000) – This is an ongoing program to rehabilitate and/or replace the Corporation's floating plant which is utilized for maintaining the locks and navigation channels as it becomes unreliable and/or unserviceable. In FY 2009, plans are to upgrade the hydrographic surveying equipment on the workboat and to purchase a deck barge to be used for emergency/spot dredging and for repair of fixed aids to navigation and mooring/dock structures. This multiyear project also includes replacing the tug and buoy tender barge; purchasing a smaller tug which would be more efficient for many operations where the capabilities of the larger tug are not required, a small boat for emergency response and a small scow for transporting dredged spoil from emergency/spot dredging; and for rehabilitating the crane barge/gatelifter which would have to be utilized if a miter gate was damaged and had to be replaced.

Project No. 13: Corporation Facilities – Replace Roofs (Capital Project) ($50,000) – This project is for replacing the roofs on the Corporation's various buildings and facilities in Massena, N.Y., as required. Most of the roofs are currently insulated ethylene propylene diene monomer (EPDM) roofs with a service life of 15-20 years and have reached the end of that timeframe. In FY 2009, roofs on a lock control house and on a building which houses air compressors and electrical transformers will be replaced.

Project No. 14: Corporation Facilities – Replace Paving and Drainage Infrastructure (Capital Project) ($950,000) – This project is for improving the pavement and drainage along lock approach walls, Corporation roadways and public parking and work areas at all Corporation facilities. In Upstate New York, the damage to pavements caused by winter conditions is significant and if repairs are not made before the damage is too severe, complete replacement of the pavement down to and often including the base materials is required at a much higher cost.

<u>Project No. 15</u>: Eisenhower Lock Highway Tunnel – Rehabilitate (Non-Capital Maintenance Project) ($250,000) – This is an ongoing project to maintain the highway tunnel which goes through the upper sill area of Eisenhower Lock to provide the only access to the north sides of both Eisenhower and Snell Locks, to the New York Power Authority's Robert Moses Power Project and to the New York State Park on Barnhart Island. This project includes grouting to limit the water leaking into the tunnel, replacing damaged/missing tiles from the walls and ceiling, replacing deteriorated/damaged gratings and railings, stabilizing/repairing wingwalls at the tunnel approaches and clearing tunnel drains which are becoming plugged with concrete leachate products. Due to the fact that this tunnel is the only means of access to the facilities noted above, any problems that would make it necessary to close the tunnel for repair would have very significant impacts.

<u>Project No. 16</u>: Seaway System – Upgrade GPS/AIS/TMS Technologies (Capital Project) ($100,000) – This project is to expand the use of the Seaway's Global Positioning System (GPS)/ Automatic Identification System (AIS) navigation technologies, which are incorporated into the Seaway's binational Traffic Management System (TMS). Future upgrades will further improve the safety for vessels transiting the Seaway. Plans are to use these technologies to enable vessels to better identify hazards at times of limited visibility.

<u>Project No. 17</u>: Navigation Channels – Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments (Non-Capital Maintenance Project) ($5,000,000) – This project is for dredging of the navigation channel to remove sediments to maintain the design grade for the channel bottom. The Corporation no longer has the resources to do dredging in-house; therefore, dredging must be completed by contractors. The most recent river bottom sampling that was completed by the Corporation as part of the permitting process revealed that the sediments to be dredged are contaminated. This significantly increases the costs because of the requirement for environmental dredging and for the disposal of contaminated sediments. If the navigation channel bottom is not maintained at the design grade, the maximum permissible draft in the Seaway would have to be reduced making it necessary for vessels to carry less cargo thereby impacting the competitiveness of the Seaway System.

Engineering Design, Construction Inspection, and Contracting Support (Capital Project) ($300,000) – To accomplish all of the ARP projects, the SLSDC will require additional engineering design support, construction inspectors to monitor and insure the quality of the work, and contracting specialists to handle the increase in contract work.

EXPLANATION OF FUNDING CHANGES
PROGRAM ACTIVITY NO. 1 – AGENCY OPERATIONS

Operations and Maintenance Activities	**$625,000**
Overview: Increases to SLSDC general agency operations budget request are entirely baseline adjustments, principally to personnel compensation and benefits.	
Salaries and Benefits: Net increase includes FY 2009 general schedule Pay Act increase (3 percent) ($127,000), annualization of FY 2008 Pay Act increase ($92,000), FY 2009 SLSDC union wage board pay increase (4 percent) ($176,000), employee benefits increase ($185,000), and a decrease for one less compensable day compared to FY 2008 (-$38,000).	$542,000
Inflationary Increases: Net increase for inflation is provided for non-pay object classes (2.3 percent).	80,000
Goods/Services from Government Accounts: Net increase in DOT Working Capital Fund projections	3,000

EXPLANATION OF FUNDING CHANGES
PROGRAM ACTIVITY NO. 2 – ASSET RENEWAL PROGRAM

Asset Renewal Plan	**$14,825,000**
Overview: Funding to complete 17 projects included in the SLSDC's proposed 10-year Asset Renewal Program will increase the SLSDC's capital and maintenance-related budget by $14,825,000. The total cost of ARP projects in FY 2009 is $17,535,000 *(net changes include a $2,810,000 capital budget reduction from the FY 2008 base budget).*	
Asset Renewal Plan: As part of the Secretary's policy priority of "System Reliability and Availability", the SLSDC developed the proposed ARP to address the long-term asset renewal needs of the U.S. Seaway infrastructure. A perpetual infrastructure asset, such as a lock, bridge, or tunnel, needs a capital investment equivalent to its original cost over its design life, which is approximately 50 years, in order to sustain itself. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of $130 million. Only $47 million in capital expenditures have been invested in the U.S. Seaway locks since it opened in 1959. Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway is in jeopardy. Although the Seaway has enjoyed a 99 percent reliability rate over its history, similar results in the future are uncertain with an aging infrastructure that has not been adequately renewed. Unlike many of the other lock-based waterway systems in the world, which have twinned locks to ensure continued operations in the event of a lock failure, the St. Lawrence Seaway is a single-lock system. A delay or shutdown to any one of the 15 U.S. or Canadian Seaway locks would cause system-wide delays. In 1985, a lock failure at the Welland Canal caused 53 commercial vessels to be trapped in the Seaway System for 24 days at a cost to the shippers of more than $24 million. A recent analysis concluded that the economic impact of a shutdown of either of the two U.S. locks would range from $1.3-$2.3 million per day, depending on the length of the delay.	$14,825,000

PERFORMANCE OVERVIEW

The SLSDC integrates performance results into its budget request to demonstrate alignment with the Department of Transportation's Strategic Plan. The agency tracks the following DOT level performance measure to demonstrate program results:

DOT Strategic Objective: Global Connectivity

Measure: Percent of days in the shipping season that the U.S. portion of the St. Lawrence Seaway System is available.

Increase the Efficiency of Freight Movement *(Seaway System Availability)*	**FY 2005**	**FY 2006**	**FY 2007**	**FY 2008**	**FY 2009**
Target:	99.0%	99.0%	99.0%	99.0%	99.0%
Actual:	99.7%	99.0%	99.4%	---	---

Detailed performance budget information can be found in Tab 4 of the budget submission.

PROGRAM ASSESSMENT RATING TOOL (PART)

PART was developed by the Office of Management and Budget to provide a standardized way to assess the effectiveness of the Federal Government's portfolio of programs. The structured framework of PART provides a means through which programs can assess their activities differently than through traditional reviews. The following SLSDC program was assessed through the PART process:

Program	PART Cycle	Score	OMB Assessment
Operations and Maintenance	FY 2007	90	Effective

PART Finding No. 1: This program is effective in ensuring that program resources reach the intended beneficiaries. The agency's efficiency measure of keeping administrative overhead costs to 25 percent or lower makes certain that operations and maintenance programs receive the highest level of funding possible. Annual customer surveys also assist management in determining program effectiveness and priorities.

PART Finding No. 2: This program effectively addresses any management deficiencies prior to impacting operations. The agency's Quality Management System, the core to its International Standards Organization (ISO) certification, requires constant review and updates to ensure that all management practices and deficiencies, if found, are addressed and remedied. Business practices are audited externally every two years.

PART Finding No. 3: This program consistently meets its short and long-term goals. The Seaway's principal annual goal of maintaining system availability at 99 percent is either met or narrowly missed every year. Additionally, annual operational and management accountability goals are met, including 44 consecutive annual clean financial audits without material weaknesses or reportable conditions.

PART Recommendation: Develop a performance rating system/index related to the U.S. Seaway infrastructure to assist in determining structural conditions.

Actions Taken in FY 2007: During FY 2007, the SLSDC worked with the U.S. Army Corps of Engineers and the Canadian St. Lawrence Seaway Management Corporation to adopt a Corps-based lock criticality index to better prioritize infrastructure maintenance and replacement needs. Index measurements for the two U.S. locks were taken initially in 2006 as part of the Corps' Great Lakes St. Lawrence Seaway Study, which was released to the public in November 2007. The study examined the lock infrastructure needs at all 15 U.S. and Canadian Seaway locks and the Corps' Soo Locks connecting Lake Superior to Lakes Michigan and Huron. The study included the results of the lock criticality index measurements.

SLSDC engineering and maintenance teams will follow up on the work completed as part of the Great Lakes St. Lawrence Seaway Study and update the index each year following winter work inspections. The results of the initial index were instrumental in developing the SLSDC's Asset Renewal Program.

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Program and Financing
(in thousands of dollars)

	Identification code 69-4089-0-3-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
	Obligations by program activity:			
00.01	Operations and maintenance	17,061	17,552	25,282
00.02	Replacements and improvements	850	740	8,460
10.00	Total new obligations	17,911	18,292	33,742
	Budgetary resources available for obligation:			
	Unobligated balance carried forward, start of year:			
21.47	Authority to borrow	3,200	3,200	3,200
21.90	Fund balance	11,080	11,009	11,009
21.40	Unobligated balance carried forward, start of year	14,280	14,209	14,209
22.00	New budget authority (gross)	17,655	18,292	33,742
22.10	Resources available from recoveries of prior year obligations	186	…	…
23.90	Total budgetary resources available for obligation	32,120	32,501	47,951
23.95	Total new obligations (-)	(17,911)	(18,292)	(33,742)
	Unobligated balance carried forward, end of year:			
24.47	Authority to borrow	3,200	3,200	3,200
24.90	Fund balance	11,009	11,009	11,009
24.40	Unobligated balance carried forward, end of year	14,209	14,209	14,209
	New budget authority (gross), detail:			
	Mandatory: Spending authority from offsetting collections:			
69.00	Offsetting collections (cash)	17,619	18,292	33,742
69.10	Change in uncollected payments from Federal sources	36	…	…
69.90	Spending authority from offsetting collections (total)	17,655	18,292	33,742
	Change in obligated balances:			
72.40	Obligated balance, start of year	5,279	5,400	5,400
73.10	Total new obligations	17,911	18,292	33,742
73.20	Total outlays (gross) (-)	(17,567)	(18,292)	(33,742)
73.45	Recoveries of prior year obligations (-)	(186)	…	…
74.00	Change in uncollected payments from Federal sources	(36)	…	…
74.40	Obligated balance, end of year	5,400	5,400	5,400
	Outlays (gross), detail:			
86.97	Outlays from new mandatory authority	17,567	18,292	33,742
	Offsets:			
	Against gross budget authority and outlays:			
	Offsetting collections (cash) from:			
88.00	Federal sources	16,223	17,392	31,842
88.40	Non-Federal sources	1,396	900	1,900
88.90	Total offsetting collections (cash)	17,619	18,292	33,742
	Against gross budget authority only:			
88.95	Change in uncollected payments from Federal sources	36	…	…
	Net budget authority and outlays:			
89.00	Budget authority (net)	…	…	…
90.00	Outlays (net)	(51)	…	…

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Balance Sheet
(in thousands of dollars)

Identification code 69-4089-0-3-403	2006 ACTUAL	2007 ACTUAL
Assets:		
Federal assets:		
1101 Fund balance with Treasury	5,473	5,255
1106 Receivables, net	…	…
1107 Advances and prepayments	…	…
Non-Federal assets:		
1201 Investments in non-Federal securities	7	7
1206 Receivables, net	82	115
1207 Advances and prepayments	…	…
Other Federal assets:		
1801 Cash and other monetary assets	11,651	11,999
1803 Property, plant and equipment, net	76,073	74,579
1901 Other assets	3,089	3,484
1999 Total assets	**96,375**	**95,439**
Liabilities:		
Federal liabilities:		
2101 Accounts payable	...	...
Non-Federal liabilities:		
2201 Accounts payable	3,034	2,577
2206 Pension and other actuarial liabilities	3,086	3,478
2207 Other	…	…
2999 Total liabilities	**6,120**	**6,055**
Net Position:		
3200 Invested capital	91,065	89,617
3300 Cumulative results of operations	(810)	(233)
3999 Total net position	**90,255**	**89,384**
4999 Total liabilities and net position	**96,375**	**95,439**

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Object Classification
(in thousands of dollars)

	Identification code 69-4089-0-3-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
Personnel compensation:				
11.1	Full-time permanent	9,004	9,600	9,924
11.3	Other than full-time permanent	210	255	264
11.5	Other personnel compensation	487	618	638
11.9	**Total personnel compensation**	**9,701**	**10,473**	**10,826**
12.1	**Civilian personnel benefits**	**2,864**	**3,077**	**3,262**
	Personnel compensation and benefits	**12,565**	**13,550**	**14,088**
21.0	**Travel and transportation of persons**	**141**	**161**	**164**
22.0	**Transportation of things**	**10**	**5**	**5**
23.1	Rental payments to GSA	260	238	243
23.2	Rental payments to others	5	8	8
23.3	Communications, utilities, & misc.	240	245	250
23.0	**Total rent, communications, and utilities**	**505**	**491**	**501**
24.0	**Printing and reproduction**	**33**	**5**	**5**
25.1	Advisory and assistance services	71	**-**	-
25.2	Other services	881	318	324
25.3	Purchases of goods/services from Government accts.	429	408	423
25.4	Operation and maintenance of facilities (includes ARP)	1,705	2,141	9,290
25.6	Medical care	9	12	12
25.7	Operation and maintenance of equipment	120	27	27
25.0	**Total other contractual services**	**3,214**	**2,906**	**10,076**
26.0	**Supplies and materials**	**868**	**434**	**443**
31.0	**Equipment (includes ARP)**	**382**	**440**	**1,750**
32.0	**Land and structures (includes ARP)**	**193**	**300**	**6,710**
	Total other-than-personnel	**5,346**	**4,742**	**19,654**
99.9	**Total obligations**	**17,911**	**18,292**	**33,742**

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Summary of Expenses by Activity
(in thousands of dollars)

Identification code 69-4089-0-3-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
Operations and Maintenance:			
1. Lock and Marine Operations	3,264	3,358	3,478
2. Maintenance and Engineering	5,399	5,554	12,857
3. General and Development	4,294	4,418	4,575
4. Administrative	4,104	4,222	4,372
Total Operations and Maintenance	**17,061**	**17,552**	**25,282**
Replacements and Improvements:			
1. Equipment	255	440	1,750
2. Capital Projects	595	300	6,710
Total Replacements and Improvements	**850**	**740**	**8,460**
Total Obligations	**17,911**	**18,292**	**33,742**
Authorized Positions by Activity:			
1. Lock and Marine Operations	62	62	62
2. Maintenance and Engineering	47	47	47
3. General and Development	17	17	17
4. Administrative	31	31	31
Total Positions	**157**	**157**	**157**

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Summary of Travel and Transportation of Persons
(in thousands of dollars)

Identification code 69-4089-0-3-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
Field Offices:			
Business travel			
Operations	27	32	34
Administrative	1	1	1
Travel associated with training	22	24	24
Travel to and from Washington, D.C.	3	3	3
Travel to and from Massena, N.Y.	0	0	0
Foreign travel	0	0	0
Canadian travel	10	11	12
Subtotal	**63**	**71**	**74**
DC Office:			
Business travel			
Operations	5	6	6
Administrative	31	33	33
Travel associated with training	1	1	1
Travel to and from Washington, D.C.	0	0	0
Travel to and from Massena, N.Y.	17	18	18
Foreign travel	1	8	8
Canadian travel	23	24	24
Subtotal	**78**	**90**	**90**
Grand Total	**141**	**161**	**164**

DEPARTMENT OF TRANSPORTATION
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
Personnel Summary

Identification code 69-4089-0-3-403	2007 ACTUAL	2008 ENACTED	2009 REQUEST
Total compensable work years:			
5001 Full-time equivalent employment	144	157	157
5005 Full-time equivalent of overtime and holiday hours	3	6	6

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

Summary of Baseline and Program Changes

FY 2009 President's Budget Request vs. FY 2008 Enacted

(in thousands of dollars)

BASELINE CHANGES

Annualization of FY 2008 Pay Act Increase	**$**	**92**
This annualizes the January 2008 pay act increase by providing funding for the fourth quarter.		
FY 2009 Pay Act Increase		**127**
This will provide three-quarter year funding for the proposed pay act increase, estimated at 3 percent, effective in January 2009.		
FY 2009 Wage Board Increase		**176**
This will provide full year funding for a 4 percent pay increase, effective in October 2008, for SLSDC wage grade personnel, as established in the Collective Bargaining Agreement dated 5/24/2007.		
Increase in Personnel Benefits		**185**
This increase is for personnel benefits provided to employees (Health, Workers' Compensation, TSP, FERS).		
261 Compensable Days in FY 2009		**(38)**
Personnel compensation for one less day compared to FY 2008.		
DOT Working Capital Fund		**3**
Based on latest estimates from OST comparing FY 2009 request amount versus FY 2008 OPPLAN1 level.		
Non-Pay Inflationary Increases		**80**
Net increases for inflation are provided for non-pay object classes (2.3 percent).		
SLSDC Baseline Changes	**$**	**625**

PROGRAM CHANGES

Net Increase in Capital Plan Projects and Equipment	**$**	**7,720**
FY 2009 proposed capital projects and equipment less FY 2008 enacted level.		
Net Increase in Maintenance Special Projects		**7,105**
FY 2009 proposed maintenance projects less FY 2008 enacted level.		
SLSDC Program Changes	**$**	**14,825**
TOTAL CHANGES (FY 2009 Pres. Budget vs. FY 2008 Enacted) (69x4089)	**$**	**15,450**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

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Performance
Budget Section

Summary Table

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EXHIBIT IV-1

FY 2009 BUDGET REQUEST BY STRATEGIC OBJECTIVE AND PERFORMANCE GOAL

Saint Lawrence Seaway Development Corporation

Appropriations

(in thousands of dollars)

STRATEGIC & PERFORMANCE GOALS BY PROGRAM ACTIVITIES	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
1. GLOBAL CONNECTIVITY			
A. Increase the Efficiency of Freight Movement			
(1) Percent of days in the shipping season that the U.S. portion of the St. Lawrence Seaway is available	$17,601	$18,022	$33,402
Performance Goal Subtotal:	$17,601	$18,022	$33,402
B. Expand Business Opportunities			
(1) Percent of total dollar value of DOT direct contracts awarded to women-owned businesses *(non-add -- value of contracts)*	*[$130]*	*[$130]*	*[$130]*
(2) Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses *(non-add -- value of contracts)*	*[$ 92]*	*[$ 92]*	*[$ 92]*
Performance Goal Subtotal:	*[$222]*	*[$222]*	*[$222]*
Total - Global Connectivity Strategic Goal:	**$17,601**	**$18,022**	**$33,402**
2. SECURITY			
A. Expert Transportation Sector Intelligence			
(1) Preparedness for response to emergencies affecting the transportation sector *(draft measure)*	$250	$210	$280
Performance Goal Subtotal:	$250	$210	$280
Total - Security Strategic Goal:	**$250**	**$210**	**$280**
3. ORGANIZATIONAL EXCELLENCE			
A. Fulfill the President's Management Agenda			
(1) Achieve financial performance goals, including unqualified annual audit	$60	$60	$60
Performance Goal Subtotal:	$60	$60	$60
Total - Organizational Excellence Strategic Goal:	**$60**	**$60**	**$60**
GRAND TOTAL (69x4089):	**$17,911**	**$18,292**	**$33,742**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

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Global Connectivity

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GLOBAL CONNECTIVITY
Performance Goal: Increase the Efficiency of Freight Movement

The SLSDC FY 2009 funding request contributes to the DOT Global Connectivity strategic goal and to the performance outcome goals of: (1) increasing the efficiency of freight movement; and (2) expanding opportunities for women-owned and disadvantaged businesses. Independent economic analyses have concluded that the efficient movement of maritime commerce through the waterway has a sizable economic benefit to the nation and the Great Lakes region. In fact, Seaway commerce impacts 150,000 jobs, $12 million per day in wages, and $9 million per day in business revenues by firms engaged in trade in the U.S. alone. Commercial transportation on the Great Lakes St. Lawrence Seaway System serves as competition to other maritime trade routes as well as other transportation modes, which benefits the nation in lower consumer prices of finished goods and raw materials, and helps to reduce roadway and railway congestion – each Seaway-size vessel carries roughly 25,000 metric tons, the equivalent of 870 semi-trucks.

The SLSDC's principal performance goal is to provide a safe, secure, reliable, and efficient U.S. portion of the St. Lawrence Seaway to its commercial users. The annual goal is 99 percent availability of the U.S. section of the Seaway, including the two U.S. locks, during the navigation season (late March to late December). During FY 2007, the SLSDC met its goal with a 99.4 percent system availability rate for the U.S. portion of the Seaway.

Percentage of days in the shipping season that the U.S. portion of the St. Lawrence Seaway System is available. (FY)

	2003	2004	2005	2006	2007	2008	2009
Target:	99.0	99.0	99.0	99.0	99.0	99.0	99.0
Actual:	98.9	99.1	99.7	99.0	99.4		

The SLSDC's FY 2009 appropriations request for Global Connectivity is $33,402,000, an increase of $15,380,000 above the FY 2008 enacted level. This increase includes: $615,000 to fund baseline estimated costs for Global Connectivity (pay, benefits, inflation, and DOT Working Capital Fund increases), and $14,765,000 in net program increases related to Year One funding of the SLSDC's proposed 10-year Asset Renewal Program (ARP).

This request for Global Connectivity activities would allow the SLSDC to fund both the necessary day-to-day operations of the agency required for continued commercial transportation on the St. Lawrence Seaway, including personnel compensation and benefits for 156 FTEs. The Global Connectivity request also includes funding for Year One projects included in the SLSDC's proposed ARP. The Seaway ARP is a long-term plan to address the SLSDC's pressing infrastructure needs *(see Tab 5)*.

The ARP will support the engineering considerations highlighted in the November 2007 binational *Great Lakes St. Lawrence Seaway Study*. The Study evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC will work closely with the U.S. Army Corps of Engineers to leverage its expertise.

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

SLSDC Fund (69x4089) [1]

(in thousands of dollars)

STRATEGIC & PERFORMANCE GOALS BY PROGRAM ACTIVITIES	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
A. Increase the Efficiency of Freight Movement			
(1) Percent of days in the shipping season that the U.S. portion of the St. Lawrence Seaway is available	$16,813	$18,022	$33,402
Performance Goal Subtotal:	$16,813	$18,022	$33,402
B. Expand Business Opportunities			
(1) Percent of total dollar value of DOT direct contracts awarded to women-owned businesses *(non-add – value of contracts)*	*[$130]*	*[$130]*	*[$130]*
(2) Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses *(non-add – value of contracts)*	*[$92]*	*[$92]*	*[$92]*
Performance Goal Subtotal:	*[$222]*	*[$222]*	*[$222]*
Total – Global Connectivity Goal:	**$16,813**	**$18,022**	**$33,402**
FTE (this segment):	**156**	**156**	**156**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

PERFORMANCE ISSUE

All SLSDC programs and activities related to the DOT Global Connectivity performance measure and the Secretary's Efficient Movement of Freight priority are focused on meeting the 99 percent or better goal for U.S. Seaway sector availability. The SLSDC is directly responsible for ensuring the safe, efficient, and secure passage of commercial vessels through the binational St. Lawrence Seaway and it has maintained a 99 percent availability rate throughout the waterway's history, beginning in 1959. As highlighted in its OMB PART review completed as part of the FY 2007 President's Budget, "the Corporation has an effective program for its overall operations and maintenance activities related to the St. Lawrence Seaway."

During FY 2007, the availability of the U.S. sectors of the Seaway, including the two U.S. locks maintained and operated by the SLSDC, was 99.4 percent, surpassing the annual goal of 99 percent. The primary causes for delays were weather and vessel incidents. Of the remaining factors that cause system non-availability, the Corporation has the most control over the proper functioning of its lock equipment. During FY 2007, lock equipment malfunction delays totaled 44 minutes, representing 1/100 of 1 percent of the total navigation time during the year.

MARGINAL COST OF PERFORMANCE

Appropriations Account	FY 2009 BASELINE ESTIMATE ($000)	FTEs	FY 2009 PROGRAM CHANGES ($000)	FTEs	FY 2009 TOTAL REQUEST ($000)	FTEs
SLSDC Fund (69x4089)	$18,917	157	$14,825	0	$33,742	157

Agency Output or Outcome Measure Associated with this Program Increase:

Increase the Efficiency of Freight Movement – Seaway Availability

Performance Measure:

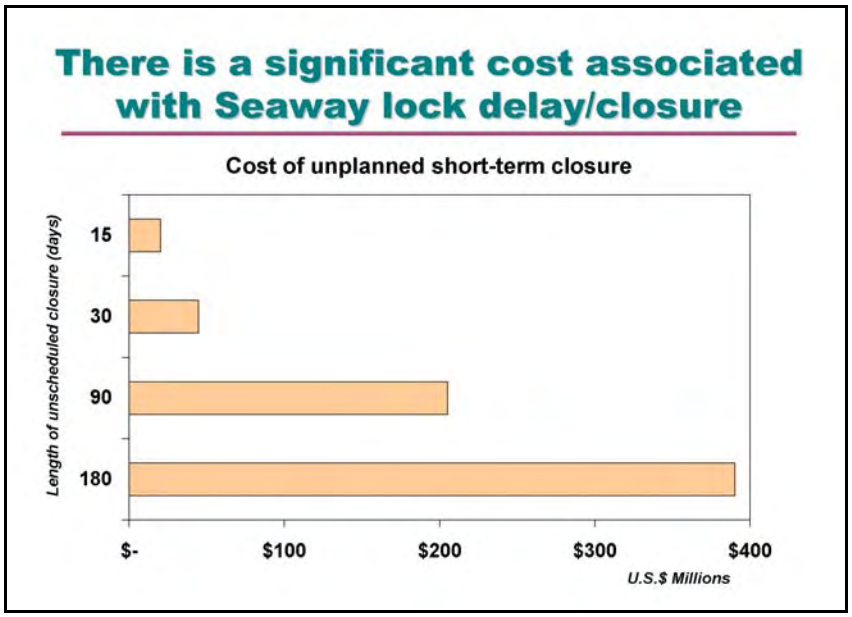
Percentage of days in the shipping season that the U.S. portion of the St. Lawrence Seaway is available

Baseline Performance Level	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%
Actual	99.1%	99.7%	99.0%	99.4%	---	---

ARP Mission Objective:	Lock Operation Upgrade and Maintenance	Waterway Management	Tunnel and Bridge Maintenance
ARP Project Sampled:	Culvert Valve Machinery Upgrade	Dredging U.S. Sectors to Maintain Design Grade	Eisenhower Lock Highway Tunnel Rehabilitation
Estimated FY 2009 Performance Impact **Without** Program Changes	(4.2%)	(16.4%)	(21.8%)
(Total) FY 2009 Performance **Without** Program Changes	94.8%	82.6%	77.2%
(Total) FY 2009 Performance **With** Program Changes	99.0%	99.0%	99.0%

Background: For FY 2009, the SLSDC is proposing to begin the first year of a 10-year Asset Renewal Program to rehabilitate the Seaway's U.S. infrastructure and facilities. The proposed FY 2009 plan includes 19 ARP projects totaling $17,535,000. The ARP projects are bundled under one of four SLSDC mission objectives: (1) lock operation upgrade and maintenance; (2) waterway management; (3) tunnel and bridge maintenance; and (4) facility upgrade and maintenance. For this exercise, the SLSDC highlighted a performance impact scenario for each of the first three mission objectives based on a sampled project (some out-year ARP projects under the "facility upgrade and maintenance" objective will be measurable against system availability). It is important to note that not all ARP projects will produce the same impact results and the impacts highlighted used conservative downtime estimates, which were based on research and discussions with other waterway engineering and maintenance officials. In addition to system availability impacts, there are secondary negative impacts affecting the commercial shipping and trade communities.

An individual system delay or series of delays/shutdowns would seriously jeopardize the Great Lakes Seaway System's global competitiveness for the movement of agricultural and steel-related products. In the competitive global market for commercial transportation, a system delay could force current and prospective Seaway customers to seek alternative maritime routes and other transportation modes. A recent economic analysis concluded that the economic impact of a shutdown of either of the two U.S. locks would range from $1.3-$2.3 million per day, depending on the length of the delay *(see graphic below)*.



Impact on Lock Operation Upgrade and Maintenance: For this example, the SLSDC estimated the impact of not upgrading the culvert valve machinery from mechanical to hydraulic equipment at the Eisenhower Lock, which could result in lock valve failure. Such a failure would, at a minimum, double lockage times in order to raise and lower ships through the chambers using only one set of lock valves. Although a minor failure could be repaired during the shipping season, this example estimates the impact of a major or multi-valve equipment failure, which could not be replaced during the navigation season -- causing a doubling of lockage times throughout an entire navigation season. Such a delay would result in an additional 7.5 minutes per commercial transit, causing 275 hours of non-availability/delays throughout an estimated average 6,600 hour navigation season. This equates to a negative impact of 4.2 percent on the availability measure, bringing the seasonal availability rate, if there were no other delays beyond 1 percent, down to 94.8 percent.

Impact on Waterway Management: In this example, the SLSDC estimated the impact of not completing the dredging proposed in FY 2009 for the U.S. section of the Seaway to maintain a 26-foot, 6-inch sailing draft. Without proper dredging in this section of the waterway, significant delays and even a short-term waterway shutdown could result. In the event that the waterway would have to be shut down for emergency dredging during the season, the SLSDC estimates needing at least 45 days to complete the emergency dredging (excluding time for permitting and contracting). This equates to a negative system availability impact of 11.4 percent, reducing the annual rate to 87.6 percent, if there were no other delays beyond 1 percent.

Impact on Tunnel and Bridge Maintenance: For this example, the SLSDC estimated the impact on system availability of a non-catastrophic shutdown of the Eisenhower Lock Highway Tunnel. The highway that passes through the tunnel is used by SLSDC and New York State Power Authority employees to get to and from facilities on the north side of the tunnel as well as visitors to the Robert Moses New York State Park. In the event that the tunnel becomes impassible, the SLSDC would need to erect a temporary bridge to cross over the Eisenhower Lock and operate the bridge on a regular basis until the tunnel was repaired and reopened. Navigation would be stopped in the U.S. section of the Seaway during the bridge hours of operation. Estimating a tunnel shutdown of six months and the bridge operating for a total of eight hours a day to accommodate roadway traffic, system availability would be impacted by 1,440 delay hours or 21.8 percent. This impact would reduce seasonal availability to 77.2 percent, if there were no additional delays beyond 1 percent.

ANTICIPATED FY 2008 ACCOMPLISHMENTS

The FY 2008 enacted level of $18,022,000 for Global Connectivity programs is expected to provide the SLSDC with an adequate level to meet the agency's general operations and maintenance objectives and system availability targets. The FY 2008 enacted budget will allow the SLSDC to:

(1) Operate and maintain a safe, secure, and efficient commercial trade route with a reliability rate in the U.S. sector of the system of 99 percent or greater through effective lock operations, waterway management and a proactive infrastructure maintenance program.

(2) Begin the third year of work on a four-year, $6 million concrete replacement project at the two U.S. Seaway locks *(fourth and final year of funding was included in the FY 2008 base request)*. The SLSDC hired contractors in FYs 2006 and 2007 to perform the concrete replacement with SLSDC personnel providing lock covering work and stairway construction. Contractors will be utilized again in the final two years of the project. The replacement of deteriorated concrete has historically been one of the SLSDC's most expensive maintenance projects dating back to the Seaway's opening in 1959. The majority of the concrete replacement has occurred at the U.S. Eisenhower Lock, which has had a history of concrete problems.

(4) Continue close coordination and involvement with the Canadian St. Lawrence Seaway Management Corporation to ensure consistent practices and greater economies of scale. The two agencies will continue to work cooperatively on the vessel inspection procedures of foreign-flagged vessels, research and development of lockage and transit-related technologies; invasive species activities affecting the Great Lakes Seaway System, and binational trade development initiatives including the binational web site, Highway H_20 marketing program and Short Sea Shipping activities.

(5) Participate in various President's Management Agenda and Department-wide activities, including E-Payroll, E-Training, Grants.gov, Business Gateway, Integrated Acquisition, Disaster Management Initiative, and Automated Staffing.

FY 2009 PERFORMANCE BUDGET REQUEST

The SLSDC's FY 2009 request of $33,402,000 for Global Connectivity includes all SLSDC operational expenses (except for security and financial management-related costs), and $17,535,000 in first year funding for 17 projects proposed in the SLSDC's 10-year Asset Renewal Program (ARP) *(see Tab 5)*. None of these investments will result in increases to the authorized depth or width of the navigation channel or to the size of the two existing U.S. locks.

FY 2009 U.S. Seaway Asset Renewal Program Projects

Project Number	Project	FY 2009 Estimate
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	$ 300,000
2	Both Locks - Rehabilitate Downstream Miter Gates	1,500,000
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete along Guidewalls and Guardwalls	250,000
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	2,000,000
5	Both Locks - Rehabilitate and Insulate Winter Maintenance Lock Covers	250,000
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	2,000,000
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	600,000
8	Floating Navigational Aids - Replace	60,000
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	1,750,000
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	75,000
11	Fixed Navigational Aids - Rehabilitate	100,000
12	Corporation Equipment - Upgrade/Replace Floating Plant	2,000,000
13	Corporation Facilities - Replace Roofs	50,000
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	950,000
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	250,000
16	Seaway System - Upgrade GPS/AIS/TMS Technologies	100,000
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	5,000,000
---	Engineering Design, Construction Inspection, and Contracting Support	300,000
	***ARP Total (17 projects)*:**	**$17,535,000**

FY 2009 ARP Project Descriptions:

The SLSDC's ARP includes capitalized projects and equipment as well as non-capitalized, maintenance-related projects. Capital projects and equipment are defined as those of a durable nature that may be expected to have a period of service of more than a year without material impairment of its physical conditioning and includes equipment, improvements and modifications to existing structures. Non-capital/maintenance projects include those that do not materially add to the value of the property nor appreciably prolong the life of the infrastructure but merely keeps it in an ordinarily efficient operating condition. Expenditures for these maintenance projects are recognized as operating costs.

Project No. 1: Snell Lock – Replace Fendering Downstream Guidewall Extension (Capital Project) ($300,000) – This project is to replace the composite fendering on the downstream guidewall extension at Snell Lock. The existing composite fenders were a trial design installed nearly 20 years ago which have become very difficult/expensive to maintain and are in need of replacement to insure that vessels using this approach wall are not damaged due to the condition of the existing fendering.

Project No. 2: Eisenhower Lock – Rehabilitate Downstream Miter Gates (Non-Capital Maintenance Project) ($1,500,000) – This project is to completely rehabilitate the miter gates at the downstream end of Eisenhower Lock. It includes replacing worn and/or damaged components including the miter and quoin contact blocks, pintles, gate anchorages and diagonals to insure proper functioning of the miter gates.

Project No. 3: Eisenhower Lock – Rehabilitate Mooring Buttons, Pins and Concrete along Guidewalls and Guardwalls (Non-Capital Maintenance Project) ($250,000) – This project is to rehabilitate the upstream and downstream approach walls at Eisenhower Lock. These are mass concrete monolithic structures with vessel mooring buttons located behind them for transiting vessels to tie to. Since they were constructed, the concrete lifts/blocks have been dislodged and concrete damaged by vessel impact and the mooring buttons have settled such that they collect water/ice, making them difficult to use. The rehabilitation work would include pinning dislodged lifts, repairing damaged concrete and raising mooring buttons that have settled to improve the serviceability of the approach walls.

Project No. 4: Eisenhower Lock – Culvert Valve Machinery – Upgrade to Hydraulic Operation (Capital Project) ($2,000,000) – This project is for replacing the operating machinery for the culvert valves at Eisenhower Lock which are utilized for filling and emptying the locks. This machinery is nearly 50 years old and the open gearing is exhibiting macropitting. This equipment needs to be upgraded to insure its continued reliability. Failure of this equipment will cause delays to shipping while repairs are made. Due to the fact that this machinery was custom made and spare parts are limited, repairs to multiple pieces of machinery using the spare parts that are on-hand would not be possible. The upgrade will include new hydraulic operating machinery to match the upgrades made at the Canadian Seaway locks and the other locks in the United States.

Project No. 5: Both Locks – Rehabilitate and Insulate Winter Maintenance Lock Covers (Capital Project) ($250,000) – This project is for rehabilitating and insulating the roof cover modules utilized to cover Eisenhower and Snell Locks when major winter maintenance projects are planned. These covers are over 40 years old and insulating them would save on funds used to heat work areas when required for such temperature sensitive projects as placing concrete and painting steel structures.

Project No. 6: Seaway International Bridge – Perform Structural Rehabilitation and Corrosion Prevention (Non-Capital Maintenance Project) ($2,000,000) – This project is for rehabilitation of the structural components of the south span of the bridge between Rooseveltown, N.Y., and Cornwall Island, which crosses the Seaway navigation channel. The bridge, which accommodated more than 2.6 million vehicles in 2006, was opened to traffic in 1962 and is in need for significant rehabilitation. This project, scheduled for completion after four years of work, is designed to stop the corrosion currently experienced on many portions of the bridge structure and prevent the need for large-scale structural or even bridge replacement in the future. The SLSDC owns 68 percent of the south span of the bridge and the budget request reflects the U.S. prorated amount for the project. The Canadian Federal Bridge Corporation owns the remaining 32 percent of the south span.

Project No. 7: Eisenhower Lock – Culvert Valves – Replace with Single Skin Valves (Capital Project) ($600,000) – This project is for replacing the double skin culvert valves utilized for filling and emptying Eisenhower Lock with single skin valves. Cracking of major structural members have occurred and with the double skin construction, the structural members are not accessible for inspection, blast cleaning and painting. The culvert valves are nearly 50 years old and are corroding from the inside. The new single skin valves will provide access to the structural members for inspection and maintenance. The failure of a culvert valve would cause a delay to shipping while the damaged valve was removed and replaced. Dependant on the type of failure, other lock operating components/ equipment could be damaged causing the lock to be out of service for a longer time.

Project No. 8: Floating Navigational Aids – Upgrade/Replace (Capital Project) ($60,000) – This is an ongoing program to replace floating navigational aids/buoys and winter markers that have been damaged over the years, on an as required basis. The Corporation is responsible for approximately 100 buoys and 50 winter markers.

Project No. 9: Corporation Equipment – Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment (Capital Equipment) ($1,750,000) – This is an ongoing program to replace heavy and light equipment, vehicles and shop equipment as it becomes worn out and unserviceable. Heavy and light equipment includes such items as a crane, dump truck, snow plow, backhoe, grader, front end loader and shop equipment such as a lathe, milling machine and drill press. In FY 2009, plans are to replace a 75-ton capacity cable crane which will be 33 years old. This crane is utilized for repairing and replacing culvert valves and wire rope fenders and for installing and removing the lock roof cover modules used each winter shutdown period. This crane will be replaced with a higher capacity unit due to the fact that some of the required picks are at or near the current crane's capacity.

<u>Project No. 10</u>: Both Locks – Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities (Non-Capital Maintenance Project) ($75,000) – This project is for upgrading the infrastructure that supplies power to Eisenhower and Snell Locks and to the Corporation's Maintenance Facility. The power is furnished directly from the Moses-Saunders Power Dam over infrastructure that is nearly 50 years old. The loss of power from the Moses-Saunders Power Dam makes it necessary to utilize diesel generators, which are expensive to operate, to continue operation of Eisenhower and Snell Locks and the Maintenance Facility.

<u>Project No. 11</u>: Fixed Navigational Aids – Rehabilitate (Non-Capital Maintenance Project) ($100,000) – This project is for rehabilitating fixed navigational aids in the Seaway for which the Corporation is responsible. Many of the structures are nearing 50 years old and are in need of more than routine repairs. Many of these structures have concrete bases which are eroding and cracking. The inspection of these structures will have to be done by divers and the majority of the repairs will require divers and the use of a tug and barge with crane to complete. Failure of a fixed aid would likely make it necessary to replace it which would cost significantly more than repairing the existing structure.

<u>Project No. 12</u>: Corporation Equipment – Upgrade/Replace Floating Plant (Capital Project) ($2,000,000) – This is an ongoing program to rehabilitate and/or replace the Corporation's floating plant which is utilized for maintaining the locks and navigation channels as it becomes unreliable and/or unserviceable. In FY 2009, plans are to upgrade the hydrographic surveying equipment on the workboat and to purchase a deck barge to be used for emergency/ spot dredging and for repair of fixed aids to navigation and mooring/dock structures. This multiyear project also includes replacing the tug and buoy tender barge; purchasing a smaller tug which would be more efficient for many operations where the capabilities of the larger tug are not required, a small boat for emergency response and a small scow for transporting dredged spoil from emergency/spot dredging; and for rehabilitating the crane barge/gatelifter which would have to be utilized if a miter gate was damaged and had to be replaced.

<u>Project No. 13</u>: Corporation Facilities – Replace Roofs (Capital Project) ($50,000) – This project is for replacing the roofs on the Corporation's various buildings and facilities in Massena, N.Y., as required. Most of the roofs are currently insulated ethylene propylene diene monomer (EPDM) roofs with a service life of 15-20 years and have reached the end of that timeframe. In FY 2009, roofs on a lock control house and on a building which houses air compressors and electrical transformers will be replaced.

<u>Project No. 14</u>: Corporation Facilities – Replace Paving and Drainage Infrastructure (Capital Project) ($950,000) – This project is for improving the pavement and drainage along lock approach walls, Corporation roadways and public parking and work areas at all Corporation facilities. In Upstate New York, the damage to pavements caused by winter conditions is significant and if repairs are not made before the damage is too severe, complete replacement of the pavement down to and often including the base materials is required at a much higher cost.

Project No. 15: Eisenhower Lock Highway Tunnel – Rehabilitate (Non-Capital Maintenance Project) ($250,000) – This is an ongoing project to maintain the highway tunnel which goes through the upper sill area of Eisenhower Lock to provide the only access to the north sides of both Eisenhower and Snell Locks, to the New York Power Authority's Robert Moses Power Project and to the New York State Park on Barnhart Island. This project includes grouting to limit the water leaking into the tunnel, replacing damaged/missing tiles from the walls and ceiling, replacing deteriorated/damaged gratings and railings, stabilizing/repairing wingwalls at the tunnel approaches and clearing tunnel drains which are becoming plugged with concrete leachate products. Due to the fact that this tunnel is the only means of access to the facilities noted above, any problems that would make it necessary to close the tunnel for repair would have very significant impacts.

Project No. 16: Seaway System – Upgrade GPS/AIS/TMS Technologies (Capital Project) ($100,000) – This project is to expand the use of the Seaway's Global Positioning System (GPS)/ Automatic Identification System (AIS) navigation technologies, which are incorporated into the Seaway's binational Traffic Management System (TMS). Future upgrades will further improve the safety for vessels transiting the Seaway. Plans are to use these technologies to enable vessels to better identify hazards at times of limited visibility.

Project No. 17: Navigation Channels – Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments (Non-Capital Maintenance Project) ($5,000,000) – This project is for dredging of the navigation channel to remove sediments to maintain the design grade for the channel bottom. The Corporation no longer has the resources to do dredging in-house; therefore, dredging must be completed by contractors. The most recent river bottom sampling that was completed by the Corporation as part of the permitting process revealed that the sediments to be dredged are contaminated. This significantly increases the costs because of the requirement for environmental dredging and for the disposal of contaminated sediments. If the navigation channel bottom is not maintained at the design grade, the maximum permissible draft in the Seaway would have to be reduced making it necessary for vessels to carry less cargo thereby impacting the competitiveness of the Seaway System.

Engineering Design, Construction Inspection, and Contracting Support (Capital Project) ($300,000) – To accomplish all of the ARP projects, the SLSDC will require additional engineering design support, construction inspectors to monitor and insure the quality of the work, and contracting specialists to handle the increase in contract work.

The Global Connectivity request is $15,380,000 above the FY 2008 enacted level – $615,000 in net baseline-related increases, and $14,765,000 in net program increases related to first-year Global Connectivity-related projects included in the SLSDC's proposed ARP (less FY 2008 capital and maintenance projects).

As part of the Secretary's policy priority of "System Reliability and Availability", the SLSDC developed the ARP to address the long-term asset renewal needs of the U.S. Seaway infrastructure. A perpetual infrastructure asset, such as a lock, needs a capital investment equivalent to its original cost over its design life, which is approximately 50 years, in order to

sustain itself. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of $130 million. To date, capital expenditures for the U.S. Seaway locks since it opened in 1959 were $47 million.

The 10-year ARP will support the engineering considerations highlighted in the November 2007 binational Great Lakes St. Lawrence Seaway Study. The Study, which was completed with the support of the U.S. Army Corps of Engineers, Transport Canada, and the U.S. Department of Transportation's Office of the Secretary, SLSDC, and the Maritime Administration, evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC will work closely with the Corps of Engineers to leverage its expertise. During its work on the study, the SLSDC measured its infrastructure assets using a Corps-based lock criticality index to better identify and prioritize maintenance and replacement needs. The results of the initial index were used to develop the ARP. In addition, the ARP will follow the asset renewal program underway in Canada.

A perpetual infrastructure asset, such as a lock, bridge, or tunnel, needs a capital investment equivalent to its original cost over its design life, which is approximately 50 years, in order to sustain itself. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of $130 million. Only $47 million in capital expenditures have been invested in the U.S. Seaway locks since it opened in 1959.

Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway is in jeopardy. The Seaway has enjoyed a 99 percent reliability rate over its history, but similar results in the future are uncertain with an aging infrastructure quickly approaching the end of its original design life. Adequate capital reinvestment in the Seaway infrastructure is critical to maintaining its exceptional reliability record.

Unlike many of the other lock-based waterway systems in the world, which have twinned locks to ensure continued operations in the event of a lock failure, the St. Lawrence Seaway is a single-lock system. A delay or shutdown to any one of the 15 U.S. or Canadian Seaway locks would cause system-wide delays. In 1985, a lock failure at the Canadian Welland Canal caused 53 commercial vessels to be trapped in the Seaway System for 24 days at a cost to the shippers of more than $24 million.

The SLSDC's Global Connectivity budget also includes $257,000 in Information Technology initiatives. These initiatives include the Seaway Global Positioning System (GPS) / Automatic Identification System (AIS) project and the SLSDC's common IT services provided by the Department.

To maximize its existing funding levels for Global Connectivity, the SLSDC constantly works toward attaining its OMB efficiency goal and internal performance measure of lowering agency administrative expenses as a percentage of all operating costs to 25 percent (administrative cost

ratio). This level of overhead expenses, well below baseline federal and state government levels, was established based on an analysis of private-sector goals for companies of similar size. In FY 2007, the SLSDC's administrative cost percentage was 25 percent.

The SLSDC uses this efficiency measure to ensure that core mission expenses are given priority over administrative costs, whenever possible. As the SLSDC operates and manages an infrastructure that is almost 50 years old, it is even more critical that the SLSDC focus its funding priorities on asset renewal and general O&M activities and programs.

The Administrator and SLSDC senior staff are provided with detailed monthly and "ad hoc" expenditure reports that detail various financial goals, including the administrative cost ratio. The goal has aided the SLSDC's leadership in remaining focused on core mission-related projects, programs, and expenses, especially during periods of budget constraints. The goal is included in the SLSDC's strategic plan, as well as the Administrator's annual performance and accountability contract with the Secretary of Transportation.

Administrative expenses include executive management and administration of the Corporation. These programs include legal, policy, civil rights, accounting, procurement, human resources, information technology, and related administrative support services. The SLSDC has implemented a number of activities to achieve the administrative cost ratio goal, including prioritizing operational vacancies over administrative-related vacancies; eliminating administrative-related positions through attrition; reducing supplies and materials, contractual services, and working capital fund services; and investigating new technologies to reduce administrative overhead costs (e.g., the Seaway's binational web site has greatly reduced the costs and labor associated with mailing of materials).

SLSDC senior officials with Global Connectivity-related responsibilities and activities are:

Administrator – Collister Johnson, Jr.
Deputy Administrator – Craig Middlebrook
Associate Administrator for Seaway Operations – Sal Pisani
Deputy Associate Administrator for Seaway Operations – Carol Fenton
Chief of Staff – Anita Blackman
Chief Counsel – Carrie Mann
Director, Office of Lock Operations and Marine Services – Lori Curran
Director, Office of Engineering and Maintenance – Tom Lavigne
Chief Financial Officer – Edward Margosian
Director, Office of Budget and Programs – Kevin O'Malley
Director, Office of Trade Development and Public Affairs – Rebecca McGill

In addition to the Global Connectivity measure related to system availability and the efficiency measure for administrative expenses, the SLSDC also strives to meet its DOT Organizational Assessment goals related to contracting with women-owned and small disadvantaged businesses. In FY 2007, the SLSDC earned a perfect score of "100" – the only DOT Operating Administration to achieve this level for meeting all agency and DOT performance goals, including measures related to contracting.

The SLSDC will continue to work towards achieving its goal of 99 percent system availability by providing a safe, secure, reliable, and efficient waterway and lock system through efficient lock operations and waterway management. To prepare the St. Lawrence Seaway to meet the reliability challenges of an aging infrastructure, it is vital to begin a long-term and systematic capital investment program in the U.S. Seaway assets. These locks, channels, and accompanying infrastructure are perpetual transportation assets that require periodic and regular capital reinvestment. After almost 50 years of continuous operation, the Seaway's infrastructure is approaching the end of its original design life. As a result, large-scale capital reinvestment in this vital transportation asset is now required.

The St. Lawrence Seaway is expected to become an even more important commercial transportation route over the next decade as the U.S. and Canadian governments seek to ease highway and rail congestion, especially along North America's East and West Coasts and Midwest region. Over the past few years, the St. Lawrence Seaway has enjoyed significant growth in new business as the waterway has become a viable alternative for shippers looking to avoid port, highway, and rail congestion. As congestion-related initiatives such as Short Sea Shipping continue to develop, the St. Lawrence Seaway will further improve its position as a competitive alternative for shipments to and from the Midwest region of North America. A reduction in the Seaway's availability rate could result in commercial users seeking alternative transportation routes and modes to and from North America, negatively affecting Seaway System economic benefits.

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Security, Preparedness and Response

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SECURITY, PREPAREDNESS AND RESPONSE
Performance Goal: Expert Transportation Sector Intelligence

This funding request supplements the DOT Security, Preparedness and Response strategic goal and the performance measure of preparedness for response to emergencies affecting the transportation sector currently under development.

The SLSDC continues performing its post-September 11 security program focused on improving its readiness in the event of a security-related event and protecting the U.S. sections of the St. Lawrence Seaway, including the two U.S. locks in Massena, N.Y., and its employees. A shutdown, due to a security-related event or a lock malfunction to any one of the Seaway's 15 U.S. and Canadian locks between Montreal and Lake Erie, would stop operations in the entire Seaway System, which serves as a critical transportation link to and from the agricultural and industrial heartland of North America. The economic impact of a Seaway shutdown would be detrimental to the waterway's core customer base and harm the binational waterway's reputation as a safe and reliable transportation route. A recent economic analysis concluded that the economic impact of a shutdown of either of the two U.S. locks would range from $1.3-$2.3 million per day, depending on the length of the delay.

DOT has classified the SLSDC's principal physical infrastructure, the two U.S. Seaway locks, as critical to the Nation's transportation system. The SLSDC has managed an internal security program in its Massena offices since the 1980s. However, the events of September 11, 2001, heightened the awareness of possible terrorist attacks on transportation systems, including the St. Lawrence Seaway and its lock system.

The resources requested to achieve this goal are:

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

SLSDC Fund (69x4089) [1]

(in thousands of dollars)

STRATEGIC & PERFORMANCE GOALS BY PROGRAM ACTIVITIES	**FY 2007 ACTUAL**	**FY 2008 ENACTED**	**FY 2009 REQUEST**
A. Expert Transportation Sector Intelligence			
(1) Preparedness for response to emergencies affecting the transportation sector *(draft measure)*	$250	$210	$280
Performance Goal Subtotal:	$250	$210	$280
Total – Security, Preparedness and Response Goal:	**$250**	**$210**	**$280**
FTE (this segment):	**1**	**1**	**1**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

PERFORMANCE ISSUE

The SLSDC's security program represents a critical component to ensuring that the binational St. Lawrence Seaway continues to operate efficiently while remaining open for commerce. A shutdown, due to a security-related event or any type of lock malfunction or failure, to any one of the Seaway's 15 U.S. and Canadian locks between Montreal and Lake Erie would stop operations through the St. Lawrence Seaway System and severely disrupt international traffic throughout the entire Great Lakes. The Great Lakes St. Lawrence Seaway System serves as a critical transportation link to and from the agricultural and industrial heartland of North America. The economic impact of a Seaway shutdown would be detrimental to the waterway's core customer base and harm the binational waterway's reputation as a safe and reliable transportation route.

Following the September 11, 2001 terrorist attacks, the SLSDC immediately increased its level of security along its portion of the St. Lawrence Seaway and coordinated its activities with various law enforcement and security-related agencies. The SLSDC already maintained close relationships with federal, state, local, and Canadian agencies involved in law enforcement and emergency issues. Those relationships have become closer and additional ties have been formed with the Transportation Security Administration and the Department of Homeland Security.

ANTICIPATED FY 2008 ACCOMPLISHMENTS

The FY 2008 enacted level of $210,000 will allow the SLSDC to continue its post-September 11 security program to ensure that SLSDC workplace assets, including the two U.S. Seaway locks, and its employees are protected. The FY 2008 funding will allow the SLSDC to:

(1) Continue to perform its security-related activities, including participating on various security working groups, coordinating security policies with U.S. and Canadian agencies, and ensuring that off-site COOP locations are in a "ready state" in the event of activation.

(2) Improve its physical security systems and equipment, such as intrusion detection and electronic access control systems.

(3) Continue to implement Homeland Security Presidential Directive 12 (HSPD-12) requirements based on federal and departmental guidance and timelines.

(4) Fund personnel compensation and benefits for its one FTE assigned to security responsibilities.

(5) Provide temporary security guards at the Eisenhower Lock Visitors' Center during the summer months.

In addition, the SLSDC will continue to work cooperatively with security and intelligence officials at both the Departments of Transportation and Homeland Security to ensure that the St. Lawrence Seaway infrastructure is protected to the maximum extent possible. The SLSDC's lock infrastructure has been recognized as critical by the Department of Transportation. The SLSDC ensures the infrastructure's physical security, conducts vessel inspections on foreign flag vessels before they enter into U.S. waters, and employs GPS-based vessel tracking technologies

to increase both efficiency and security while carrying out its responsibility of controlling vessel traffic over approximately 450 nautical miles. The SLSDC will continue to be an active participant in DOT, Federal, and New York State tests and exercises.

FY 2009 PERFORMANCE BUDGET REQUEST

The SLSDC's FY 2009 request level of $280,000 for security activities includes all SLSDC expenses specifically related to its security programs, initiatives, and staffing (one FTE directly assigned to this performance measure). This level is broken down as follows: (1) $143,000 in personnel related costs; (2) $100,000 for two security-related capital projects; (3) $22,000 in personnel costs for temporary security guards required at the Eisenhower Lock Visitors' Center during the summer months; and (4) $15,000 for costs associated with the Department's HSPD-12 common identification card initiative.

The request is $70,000 above the FY 2008 enacted level, broken down by $10,000 in baseline increases and $100,000 in net program increases related to the two new capital projects and the reduction of $40,000 in FY 2008 security-related capital projects.

In FY 2009, the SLSDC plans to continue utilizing five part-time security guards during the summer months at the Eisenhower Lock Visitors' Center as well as guards during the winter months to survey the lock facilities when navigation is closed. The summer guards serve as support for the SLSDC's Chief of Security to look for suspicious activity at the Visitors' Center and to perform screenings of visitors, while the winter guards look for suspicious activity around the two U.S. Seaway locks.

Security funding levels insufficient to meet these costs would result in increased security vulnerabilities to the Seaway's infrastructure and could result in the closing of the Eisenhower Lock Visitors' Center during the summer of 2008. Each year, more than 50,000 visitors primarily from the U.S. and Canada visit the Center to view commercial vessels transiting the lock. There is strong support with the local tourism and political communities to keep the Visitors' Center open for business between Memorial Day and Labor Day.

The FY 2009 SLSDC security request includes two multi-year capital projects related to upgrading security technologies ($75,000) and lighting ($25,000). The security technology upgrade will include installation of additional security cameras with motion detection capabilities and installation of smart card readers and interface equipment. This initiative is a continuation of the SLSDC's efforts over the past several years to improve the physical security of its assets.

Without funding for this multi-year security-related capital project, the SLSDC's long-term security timeline will be delayed until funding is made available. This equipment upgrade is a critical component to the already-upgraded communications link (fiber optic) between the three SLSDC Massena facilities. The equipment will also support vessel traffic controllers with improved video of vessels transiting the locks that are monitored and taped to insure that vessels that damage the facilities are held accountable for repairs.

The second project relates to improving security lighting in various SLSDC property areas. Nearly all lighting fixtures in operation today are from the original construction in the 1950s and do not satisfy the current security monitoring needs. Proposed areas for new lighting include the Eisenhower Lock highway tunnel, along the lock and approach walls, in lock galleries, and around Corporation facilities.

In addition to these two security-related capital projects, SLSDC staff will continue to be trained and tested on the agency's contingency measures in the event of a security or terrorist-related incident. SLSDC staff will also continue to aggressively pursue the objectives of its security program, which includes greater protection of SLSDC facilities, improved measures for employee and visitor entry into facilities, and planned contingencies for facilities/infrastructure in the event of a heightened security alert. Finally, SLSDC staff will continue to work collaboratively with federal and state security and intelligence agencies as situations arise.

To better measure its security performance, the SLSDC will work with the Department in establishing the new metric related to emergency response preparedness. The goal is expected to be developed and implemented by October 1, 2008.

The SLSDC senior official with direct responsibility for security activities is William Warburton, SLSDC Chief of Security.

Organizational Excellence

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ORGANIZATIONAL EXCELLENCE
Performance Goal: Fulfill the President's Management Agenda

This funding request supports the DOT Organizational Excellence strategic goal of fulfilling the President's Management Agenda related to achieving financial management excellence.

The SLSDC has been a leader in the Department in the area of financial management since its inception. The Corporation has received 44 consecutive "clean" or unqualified audits without reportable conditions or material weaknesses and constantly meets or exceeds financial management-related performance standards set forth by the Department and Administration.

As a government corporation, the SLSDC manages an independent financial management system for its accounting and reporting requirements. Additionally, the SLSDC implements effective internal control policies that have been vital to properly managing its financial resources and assets, reporting timely and accurate budget and expenditure data to agency officials, and maintaining an unqualified audit position.

The resources requested to achieve this goal are:

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

SLSDC Fund (69x4089) [1]

(in thousands of dollars)

STRATEGIC & PERFORMANCE GOALS BY PROGRAM ACTIVITIES	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
A. Fulfill the President's Management Agenda			
(1) Achieve financial performance goals, including an unqualified annual financial audit	$ 60	$ 60	$ 60
Performance Goal Subtotal:	$ 60	$ 60	$ 60
Total – Organizational Excellence Goal:	**$ 60**	**$ 60**	**$ 60**
FTE (this segment):	**0**	**0**	**0**

[1] The SLSDC Fund (69x4089) for FY 2009 is proposed to include $31,842,000 in an appropriation from the Harbor Maintenance Trust Fund (69-8003), $900,000 in estimated SLSDC non-federal revenues, and a $1,000,000 withdrawal from the SLSDC reserve fund.

PERFORMANCE ISSUE

The SLSDC's financial management program is a vital component to the overall operations of the agency. In addition to the performance measure of achieving an unqualified audit, the SLSDC has also been successful in regularly achieving two additional internal measures: (1) maintaining a year-end reserve fund balance above $10 million (achieved with $11.0 million at the end of FY 2007); and (2) maintaining the percentage of SLSDC administrative overhead expenses as a percentage of total operating expenses, excluding depreciation and imputed expenses, at 25 percent or lower (achieved with 25 percent in FY 2007). The second internal measure was adopted by OMB as the SLSDC's efficiency measure.

The SLSDC uses the administrative expense ratio measure to ensure that core mission expenses are given priority over administrative costs, whenever possible. As the SLSDC operates and manages an infrastructure more than 50 years old, it is even more critical that the SLSDC focus its funding priorities on asset renewal and general O&M activities and programs.

The Administrator and SLSDC senior staff are provided with detailed monthly and "ad hoc" expenditure reports that detail various financial goals, including the administrative cost ratio. The goal has aided the SLSDC's leadership in remaining focused on core mission-related projects, programs, and expenses, especially during periods of budget constraints. The goal is included in the SLSDC's strategic plan, as well as the Administrator's annual performance and accountability contract with the Secretary of Transportation.

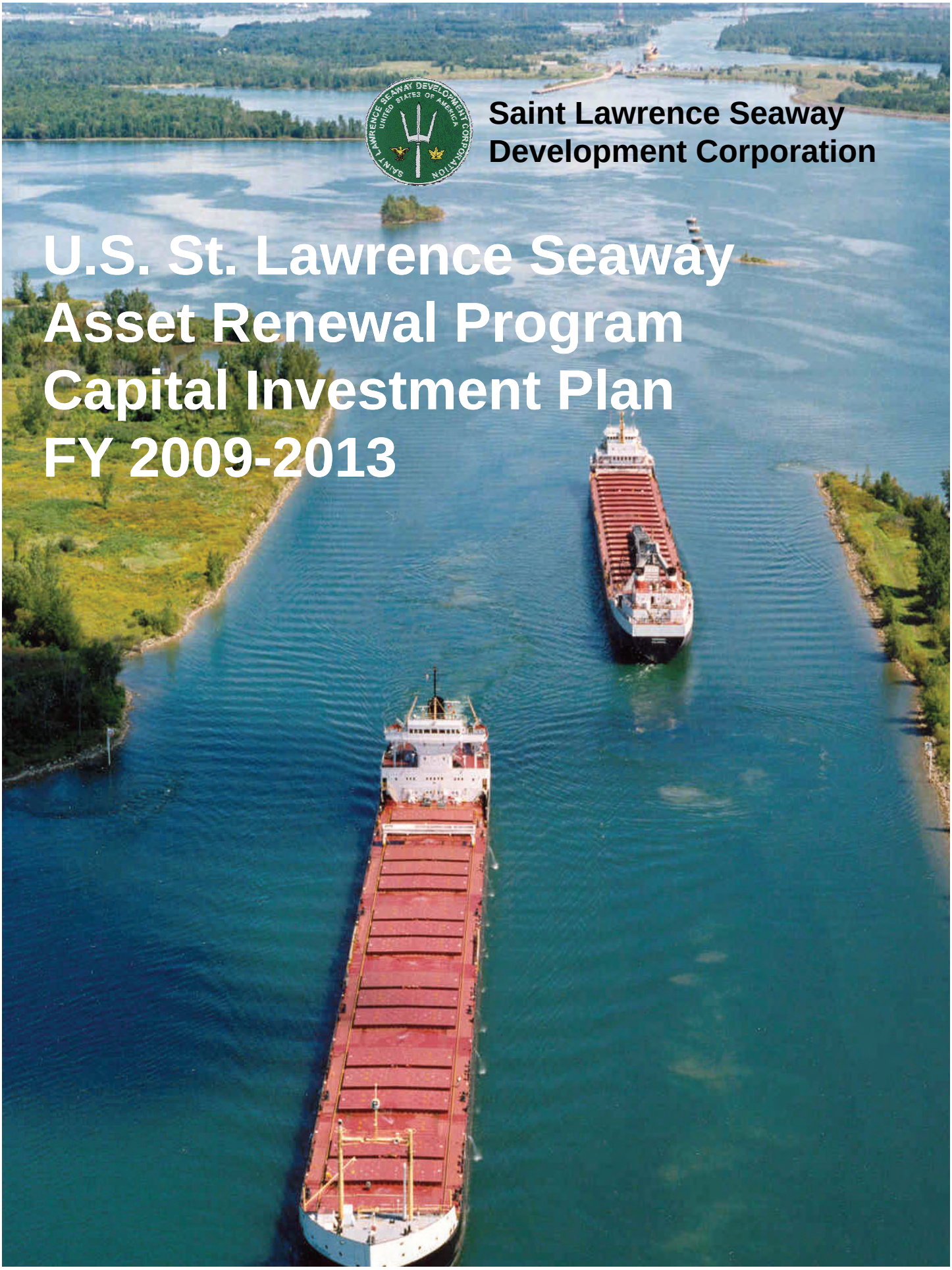
ANTICIPATED FY 2008 ACCOMPLISHMENTS

The FY 2008 enacted level of $60,000 will allow the SLSDC to continue operating its independent financial management system ($20,000) and fund its annual independent financial audit ($40,000). Without either funding or personnel disruptions to the current financial management program, the SLSDC expects to meet its target objectives.

FY 2009 PERFORMANCE BUDGET REQUEST

For FY 2009, the SLSDC requests $60,000 to continue its financial management activities. Without either funding or personnel disruptions to the current financial management program, the SLSDC expects to meet its target objectives. The SLSDC senior official with direct responsibility for financial management activities is Edward Margosian, SLSDC Chief Financial Officer.

U.S. Seaway Asset Renewal Program
Capital Investment Plan



Saint Lawrence Seaway
Development Corporation

U.S. St. Lawrence Seaway Asset Renewal Program Capital Investment Plan FY 2009-2013

The U.S. Saint Lawrence Seaway Development Corporation (SLSDC), a wholly owned government corporation and an Operating Administration of U.S. Department of Transportation (DOT), is responsible for the operations and maintenance of the U.S. portion of the St. Lawrence Seaway between Montreal and Lake Erie. This responsibility includes managing vessel traffic control in areas of the St. Lawrence River and Lake Ontario, as well as maintaining and operating the two U.S. Seaway locks located in Massena, N.Y.

The SLSDC coordinates its activities with its Canadian counterpart, the St. Lawrence Seaway Management Corporation, to ensure that the U.S. portion of the St. Lawrence Seaway, including the two U.S. locks, are available for commercial transit 99 percent of the time during the navigation season (usually late March to late December of each year). Additionally, the SLSDC performs trade development activities designed to enhance the utilization of the Great Lakes St. Lawrence Seaway System.

For more information on the SLSDC, visit http://www.greatlakes-seaway.com.

Saint Lawrence Seaway Development Corporation
U.S. Seaway Asset Renewal Program
Capital Investment Plan
FY 2009-2013

Background:

In 2009, the U.S./Canadian binational St. Lawrence Seaway will celebrate its 50th year of serving global commerce with a safe, secure, efficient, reliable, and cost competitive transportation route connecting the five Great Lakes to the world. Over those first 50 years, more than 2.5 billion metric tons of cargo has moved through the 15-lock waterway valued at more than $400 billion. Additionally, maritime commerce on the Great Lakes Seaway System provides shippers $2.7 billion in annual transportation cost savings compared to competing rail and highway routes.

Operated and maintained by the U.S. Saint Lawrence Seaway Development Corporation (SLSDC) and the Canadian St. Lawrence Seaway Management Corporation (SLSMC), the St. Lawrence Seaway is a unique binational transportation asset, which directly serves an eight-state, two-province region that accounts for 29 percent of the U.S. gross domestic product (GDP), 60 percent of the Canadian GDP, 55 percent of North America's manufacturing and services industries, and is home to 110 million people or one quarter of the continent's population. In fact, maritime commerce on the Great Lakes Seaway System impacts 150,000 jobs, $12 million per day in wages, and $9 million per day in business revenues by firms engaged in trade in the U.S. alone.

To continue providing these economic benefits to both nations as well as serving as a viable option to help mitigate highway and rail congestion in the region, the binational St. Lawrence Seaway must remain available, efficient, and competitive for commercial transportation. To achieve these goals, the Seaway's infrastructure, which is approaching the end of its original "design" life, must be renewed through a large-scale capital reinvestment on both sides of the border.

SLSDC's U.S. Eisenhower Lock in Massena, N.Y.

To address its infrastructure renewal needs, the SLSDC has developed a 10-year U.S. Seaway Asset Renewal Program (ARP) Capital Investment Plan (CIP) for its navigation infrastructure and facilities. The 50 ARP projects and equipment will address various needs for the two U.S. Seaway locks, the Seaway International Bridge connecting Ontario and New York, maintenance dredging, operational systems, and Corporation facilities and equipment. None of these investments will result in increases to the authorized depth or width of the navigation channel or to the size of the two existing U.S. locks.

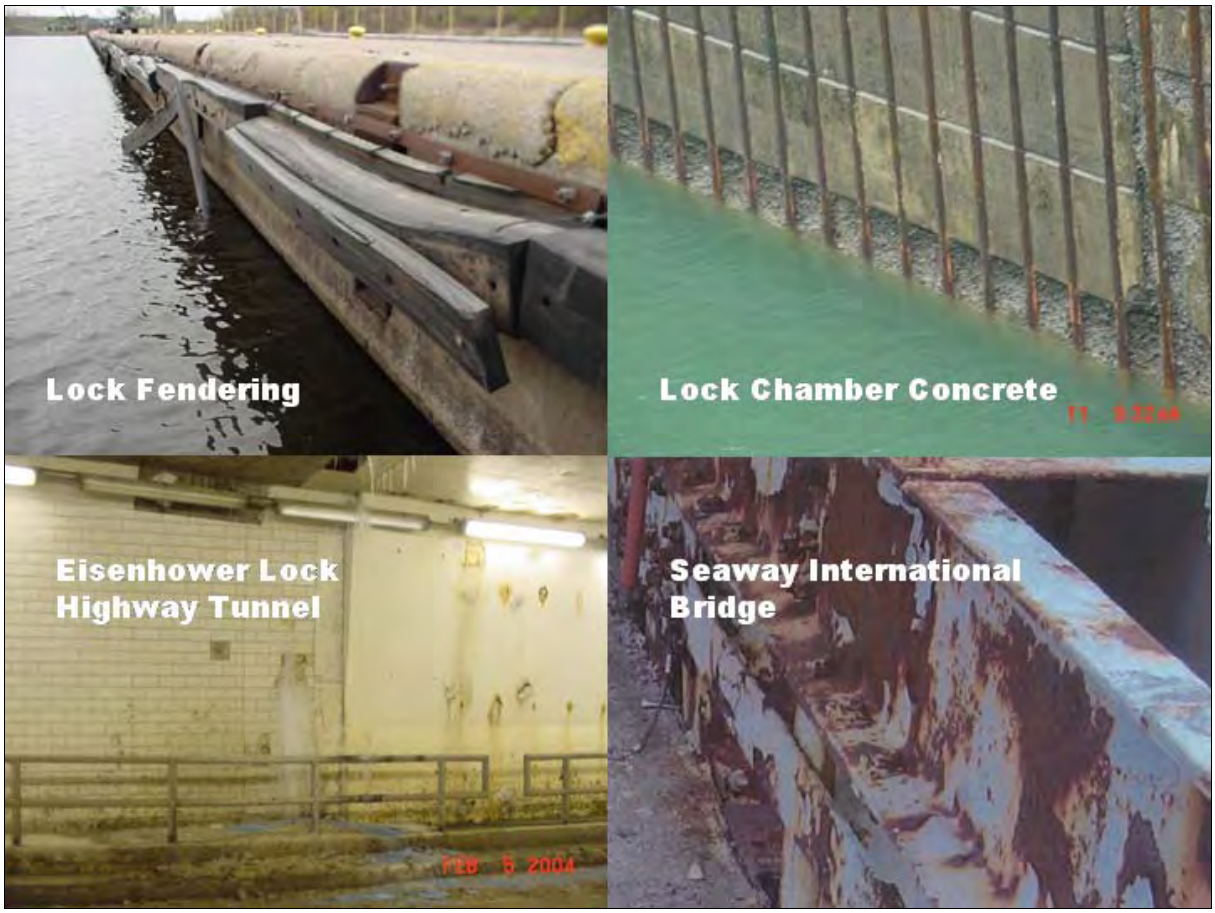
For the FY 2009-2013 timeframe, the ARP/CIP includes 43 projects and equipment estimated at $86 million, with total funding for each year of the plan constrained to funding targets for those years as estimated and approved by the Office of Management and Budget (OMB). It is also important to note that dollar amounts for ARP projects beyond FY 2009 are "project feasibility" estimates and have an industry-recognized contingency of 20-30 percent.

A perpetual infrastructure asset, such as a lock, bridge, or tunnel, needs a capital investment equivalent to its original cost over its design life, which is approximately 50 years, in order to sustain itself. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of $130 million. Only $47 million in capital expenditures have been invested in the U.S. Seaway locks since it opened in 1959.

Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway is in jeopardy. Although the Seaway has enjoyed a 99 percent reliability rate over its history, similar results in the future are uncertain with an aging infrastructure that has not been adequately renewed.

Unlike many of the other lock-based waterway systems in the world, which have twinned locks to ensure continued operations in the event of a lock failure, the St. Lawrence Seaway is a single-lock system. A delay or shutdown to any one of the 15 U.S. or Canadian Seaway locks would cause system-wide delays. In 1985, a lock failure at the Canadian Welland Canal caused 53 commercial vessels to be trapped in the Seaway System for 24 days at a cost to shippers of more than $24 million. A recent analysis concluded that the economic impact of a shutdown of either of the two U.S. locks would range from $1.3-$2.3 million per day, depending on the length of the delay.

The ARP will support the engineering considerations highlighted in the November 2007 binational Great Lakes St. Lawrence Seaway Study. The Study, which was completed with the support of the U.S. Army Corps of Engineers, Transport Canada, and the U.S. Department of Transportation's Office of the Secretary, SLSDC, and the Maritime Administration, evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC will work closely with the U.S. Army Corps of Engineers to leverage its expertise.



Current Condition of U.S. Seaway Infrastructure

Over the past decade, the Canadian government has started to address the asset renewal needs of its13 Seaway locks, eight of which are 75 years old (located at the Welland Canal). With its ARP, the SLSDC is now following this example. Today, Canadian Seaway commercial tolls are used almost exclusively for the agency's general operations and maintenance expenses, while the Canadian government has been providing general Canadian Treasury funds to the SLSMC for its capital improvement projects. Over the past few years, the Canadian government has taken an even more aggressive approach to "reinvesting" in the Canadian Seaway assets by more than doubling SLSMC capital and maintenance funding. Increasing Canadian asset renewal funding by one-third is expected over the next three years. With such an increase, the level of annual capital funding for Canadian Seaway asset renewal projects will equal the amount of the SLSMC's annual general operating expenses.

SLSDC Strategic and Performance Goals:

The projects included in the SLSDC's ARP/CIP specifically target the Corporation's core strategic goals related to "Safety, Security and the Environment" and "Reliability and Availability" as well as the U.S. Department of Transportation's strategic goals of "Global Connectivity" and "Security, Preparedness and Response".

The SLSDC's principal performance measure of U.S. St. Lawrence Seaway System Availability is highlighted in U.S. Department of Transportation's annual Performance and Accountability Report. The annual goal for providing availability of the U.S. portion of the St. Lawrence Seaway, including the two U.S. Seaway locks, to its commercial users is 99 percent.

In measuring system downtime, the SLSDC includes minutes/hours of delay for weather (visibility, fog, snow, ice); vessel incidents (human error, electrical and/or mechanical failure); water level and rate of flow regulation; and lock equipment malfunction.

During FY 2007, the availability of the U.S. sectors of the Seaway was 99.4 percent, surpassing the annual goal of 99 percent. The primary causes for delays were weather and vessel incidents. Of the remaining factors that cause system non-availability, the Corporation has the most control over the proper functioning of its lock equipment. During FY 2007, lock equipment malfunction delays totaled 44 minutes, representing 1/100 of 1 percent of the total navigation time during the year.

Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway is in jeopardy. Although the Seaway has enjoyed a 99 percent reliability rate over its history, similar results in the future are uncertain with an aging infrastructure that has not been adequately renewed.

SLSDC Mission Statement

The Saint Lawrence Seaway Development Corporation operates and maintains the U.S. infrastructure and waters of the St. Lawrence Seaway, while performing trade development activities focused on economic development for the Great Lakes St. Lawrence Seaway System. Our mission is to serve the marine transportation industries by providing a safe, secure, reliable, efficient, and competitive deep draft international waterway, in cooperation with the Canadian St. Lawrence Seaway Management Corporation.

SLSDC Vision Statement

The Saint Lawrence Seaway Development Corporation will be a model federal agency, leading the Great Lakes Seaway System as the safest and most efficient, competitive, technologically advanced, and environmentally responsible marine transportation system in the world.

SLSDC Organizational Core Values

Accountability, Competitiveness, Customer focus, Dedication, Diversity, Excellence, Integrity, Operational Efficiency, Relevance, Service, and Quality.

Recent St. Lawrence Seaway Infrastructure Related Policy Initiatives:

Binational Great Lakes St. Lawrence Seaway Study – On November 26, 2007, the U.S. and Canadian governments released its binational Great Lakes St. Lawrence Seaway Study – a joint project to assess the ongoing maintenance and long-term capital requirements of the commercial maritime navigation infrastructure of the Great Lakes St. Lawrence Seaway System. In particular, this infrastructure includes the 15 locks of the St. Lawrence Seaway as well as the Soo locks operated and maintained by the U.S. Army Corps of Engineers.

The U.S. Department of Transportation has been partnering with the Corps on this project for the last seven years and Transport Canada for the last five years. The Study report consists of eight chapters totaling over 100 pages as well as lengthy appendices. The Study is available to the public electronically on the Study's website (www.glsls-study.com).

Seven Canadian and U.S. departments and agencies were involved in the multi-year study: Transport Canada, U.S. Department of Transportation, U.S. Army Corps of Engineers, SLSMC, SLSDC, Environment Canada, and the U.S. Fish and Wildlife Service. Their representatives formed a Steering Committee responsible for the Study's overall strategic direction. Study tasks and analysis were overseen by a Management Team consisting of one representative from Transport Canada and one from the Corps.

The three objectives of the Study were to:

- Evaluate the condition and reliability of the Great Lakes Seaway System, including the relative benefits and costs of continuing to maintain the existing transportation infrastructure on which it depends;
- Assess the engineering, economic, and environmental factors associated with current and future needs of the Great Lakes St. Lawrence Seaway System; and
- Identify factors and trends affecting the domestic and international marine transportation industries serving the System, including evolving intermodal linkages and transportation technologies.

The final report included a detailed engineering analysis of the System's current infrastructure *(see page 22 for a summary from the Study of the U.S. Seaway locks)*. This infrastructure is divided into four groups: the USACE's Soo locks in Sault Ste. Marie, Mich.; the eight Canadian locks at the Welland Canal that allow marine circumvention of Niagara Falls; the five Canadian locks in the St. Lawrence River; and the two U.S. St. Lawrence River locks owned and operated by the SLSDC.

The Study also includes an economic analysis of the costs and benefits associated with maintaining the System's infrastructure at its current state of reliability. The final report identifies factors and trends affecting the domestic and international marine transportation industries serving the System, including evolving intermodal linkages and transportation technologies. In addition, with the active participation and the endorsement of Environment Canada and the U.S. Fish and Wildlife Service, the Study is a unique commercial navigation assessment in that it incorporates an environmental analysis.

Among the Study's important findings are:

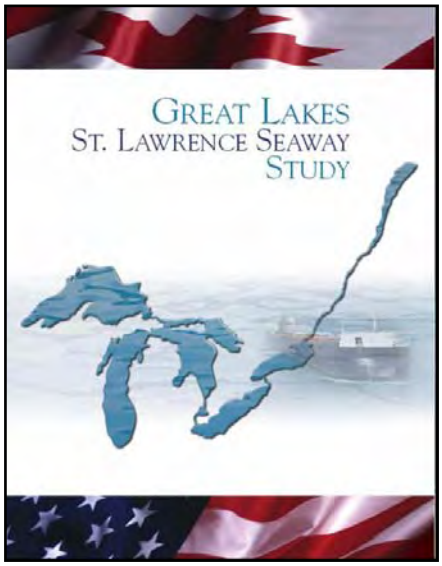
- The Great Lakes St. Lawrence Seaway System continues to play a decisive role in the economic life of North America. The waterway offers shippers significant savings: surveys suggest that the System saves shippers $2.7 billion a year in transportation costs. These savings are especially felt in strategic sectors such as steelmaking and energy, the competitiveness of which is vital to the health of the North American economy.

- The System also offers shippers considerable spare capacity. This is becoming increasingly significant as highways and rail lines in the region experience growing congestion. The Great Lakes Seaway System can play an important role in relieving some of these pressures by offering complementary transportation routes through less busy ports and by moving goods directly across lakes rather than around them.

- The commercial maritime lock infrastructure of the System has reached or exceeded its original design life and will require capital investment in order for the System to remain reliable and competitive.

The Study provided specific considerations and conclusions:

1) The System has the potential to alleviate congestion on the road and rail transportation networks as well as at border crossings in the Great Lakes basin and St. Lawrence River region.



2) A stronger focus on short sea shipping would allow the System to be more closely integrated with the road and rail transportation systems, while providing shippers with a cost-effective, timely and reliable means to transport goods.

3) The existing infrastructure of the Great Lakes St. Lawrence Seaway System must be maintained in good operating condition in order to ensure the continued safety, efficiency, reliability and competitiveness of the system.

4) The long-term health and success of the System will depend in part on its sustainability, including the further reduction of negative ecological impacts caused by commercial navigation.

The Study concludes that the success of any initiative to improve the System depends on a commitment by government and industry in both Canada and the U.S. to clear objectives and to the continuous monitoring of progress. Canada and the U.S. should maintain their collaborative efforts to plan the future of commercial navigation on the System through a binational body of department and agency representatives. The role of this body would be to monitor the progress achieved in the areas identified as priorities in the Study. The two countries would work in partnership to pursue an appropriate policy framework, promote the opportunities represented by the system to other parts of

government and ensure an integrated approach to the distinct imperatives of the economy, the environment and engineering. Ultimately, the sustainability of the System depends on achieving a viable balance of these three perspectives.

The understanding gained from the expertise of those who contributed to the Study can be used to inform Canadian and U.S. decision makers. The Study has identified observations and key considerations in order to optimize the operations and maintenance of the Great Lakes St. Lawrence Seaway System and ensure it continues to serve North America's economy over the next 50 years.

Water Resources Development Act of 2007 (P.L. 110-114) – On November 9, 2007, President Bush signed into law the Water Resources Development Act (WRDA) of 2007, authorizing more than 900 water supply, flood control, navigation, and environmental restoration projects around the country for more than $23 billion.

The St. Lawrence Seaway was included in WRDA 2007 with an authorization for $134,650,000 to address some of the waterway's long-term asset renewal needs:

> *Section 5015. SAINT LAWRENCE SEAWAY.*
>
> *(a) In General. The Secretary (of the Army) is authorized, using amounts contributed by the SLSDC, to carry out projects for operations, maintenance, repair, and rehabilitation, including associated maintenance dredging, of the Eisenhower and Snell lock facilities and related navigational infrastructure for the St. Lawrence Seaway, at a total cost of $134.650 million.*
>
> *(b) Source of Funds. The Secretary is authorized to accept funds from the SLSDC to carry out projects under this section. Some funds may include amounts made available to the Corporation from the HMTF and the general fund of the U.S. Treasury.*
>
> *(c) Limitation on Statutory Construction. Nothing in this section authorizes the construction of any project to increase the depth or width of the navigation channel to a level greater that that previously authorized or to increase the dimensions of the Eisenhower and Snell lock facilities.*

U.S. Seaway Asset Renewal Program Capital Investment Plan FY 2009-2013

Project No.	Project Title	Type of Project (1)	Mission Objective (2)	Time Work Completed (3)	FY 2009 Request	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Five Year Total
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	CP	L	Other	$300,000					**$300,000**
2	Both Locks - Rehabilitate Downstream Miter Gates	MP	L	Winter	$1,500,000	$1,500,000				**$3,000,000**
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	MP	L	Other	$250,000	$250,000	$250,000			**$750,000**
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	CP	L	Winter	$2,000,000		$2,000,000			**$4,000,000**
5	Both Locks - Rehabilitate and Insulate Winter Maintenance Lock Covers	CP	L	Other	$250,000		$250,000			**$500,000**
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	MP	T/B	Other	$2,000,000	$5,600,000	$3,000,000			**$10,600,000**
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	CP	L	Other	$600,000	$600,000	$600,000	$600,000		**$2,400,000**
8	Floating Navigational Aids - Replace	CP	W	Other	$60,000	$60,000	$60,000	$60,000	$60,000	**$300,000**
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	CE	L, W	Other	$1,750,000	$250,000	$250,000	$250,000	$250,000	**$2,750,000**
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	MP	L	Other	$75,000	$75,000	$75,000	$20,000	$20,000	**$265,000**
11	Fixed Navigational Aids - Rehabilitate	MP	W	Other	$100,000	$200,000	$200,000	$200,000	$200,000	**$900,000**
12	Corporation Equipment - Upgrade/Replace Floating Plant	CP	L, W	Other	$2,000,000	$500,000	$500,000	$1,500,000		**$4,500,000**
13	Corporation Facilities - Replace Roofs	CP	F	Other	$50,000		$90,000	$100,000	$120,000	**$360,000**
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	CP	L, F	Other	$950,000		$1,500,000		$1,500,000	**$3,950,000**
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	MP	T/B	Other	$250,000		$250,000		$250,000	**$750,000**
16	Seaway System - Upgrade GPS/AIS/TMS Technologies	CP	W	Other	$100,000		$100,000		$100,000	**$300,000**
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	MP	W	Other	$5,000,000					**$5,000,000**
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	MP	L	Winter		$500,000				**$500,000**
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	CP	L, F	Other		$150,000	$150,000			**$300,000**
20	Both Locks - Upgrade Lock Status/Controls	CP	L	Other		$150,000	$150,000			**$300,000**
21	Both Locks - Compressed Air Systems - Upgrade/Replace	CP	L	Other		$1,500,000	$1,500,000			**$3,000,000**
22	Both Locks - Install Vessel Self Spotting Equipment	CP	L	Other		$250,000	$250,000			**$500,000**
23	Both Locks - Install Vessel Vacuum Mooring Systems	CP	L	Winter		$1,650,000	$1,650,000			**$3,300,000**
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	MP	L	Other		$200,000		$200,000		**$400,000**
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	CP	F	Other		$100,000		$100,000		**$200,000**
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	CP	L, F	Other		$200,000		$200,000		**$400,000**
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	MP	F	Other		$200,000		$200,000		**$400,000**
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	MP	L	Winter			$2,000,000		$2,000,000	**$4,000,000**
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	MP	L	Winter		$2,000,000		$2,000,000		**$4,000,000**
30	Eisenhower Lock - Ice Flushing System - Upgrade	CP	L	Other			$200,000			**$200,000**
31	Both Locks - Rehabilitate Upstream Miter Gates	MP	L	Winter			$1,000,000	$1,000,000		**$2,000,000**

U.S. Seaway Asset Renewal Program Capital Investment Plan FY 2009-2013

Project No.	Project Title	Type of Project (1)	Mission Objective (2)	Time Work Completed (3)	FY 2009 Request	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Five Year Total
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	MP	L	Other			$250,000	$250,000	$250,000	**$750,000**
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	CP	L	Other			$150,000	$150,000	$150,000	**$450,000**
34	Both Locks - Improve Ice Control	CP	L	Winter			$100,000	$225,000	$225,000	**$550,000**
35	Vessel Mooring Cells - Rehabilitate and Extend	CP	W	Other			$1,000,000			**$1,000,000**
36	Eisenhower Lock - Diffusers - Replace	MP	L	Winter				$3,000,000		**$3,000,000**
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	CP	L, W	Winter				$750,000		**$750,000**
38	Both Locks - Upgrade/Replace Emergency Generators	CP	L	Winter				$500,000	$500,000	**$1,000,000**
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	CP	L	Other				$200,000	$200,000	**$400,000**
40	Both Locks - Extend Guidewalls in Pool	CP	L	Other				$1,500,000	$1,500,000	**$3,000,000**
41	Snell Lock - Install Ice Flushing System Technologies	CP	L	Winter				$5,000,000	$5,000,000	**$10,000,000**
42	Both Locks - Miter Gates - Structural Rehabilitation	MP	L	Winter				$750,000	$750,000	**$1,500,000**
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	CP	L	Winter					$1,600,000	**$1,600,000**
---	Engineering Design, Construction Inspection, and Contracting Support	CP	ALL	Other	$300,000	$300,000	$300,000	$300,000	$300,000	**$1,500,000**
	Total				**$17,535,000**	**$16,235,000**	**$17,825,000**	**$19,055,000**	**$14,975,000**	**$85,625,000**

(1) CP=Capital Project; CE=Capital Equipment; MP=Non-Capital Maintenance Project

(2) L=Lock Operation Upgrade and Maintenance; W=Waterway Management; T/B=Tunnel and Bridge Maintenance; F=Facility Upgrade and Maintenance

(3) Winter=During Non-Navigation Season; Other=Other Than Non-Navigation Season

Note: Dollar amounts for ARP projects beyond FY 2009 are "project feasibility" estimates and have an industry-recognized contingency of 20-30 percent

SLSDC U.S. SEAWAY ASSET RENEWAL PROGRAM
CAPITAL INVESTMENT PLAN
FYs 2009-2013

SUMMARY OF CAPITAL AND MAINTENANCE PROJECTS TOTALING $85,625,000

The SLSDC's ARP includes capitalized projects and equipment as well as non-capitalized, maintenance-related projects. Capital projects and equipment are defined as those of a durable nature that may be expected to have a period of service of more than a year without material impairment of its physical conditioning and includes equipment, improvements and modifications to existing structures. Non-capital/maintenance projects include those that do not materially add to the value of the property nor appreciably prolong the life of the infrastructure but merely keeps it in an ordinarily efficient operating condition. Expenditures for these maintenance projects are recognized as operating costs.

It is also important to note that dollar amounts for ARP projects beyond FY 2009 are "project feasibility" estimates and have an industry-recognized contingency of 20-30 percent. Funding for each year of the ARP is constrained to funding targets for those years as estimated and approved by the Office of Management and Budget (OMB).

Project No. 1: Snell Lock – Replace Fendering Downstream Guidewall Extension (Capital Project) ($300,000) (FY 2009) – This project is to replace the composite fendering on the downstream guidewall extension at Snell Lock. The existing composite fenders were a trial design installed nearly 20 years ago which have become very difficult/expensive to maintain and are in need of replacement to insure that vessels using this approach wall are not damaged due to the condition of the existing fendering.

Project No. 2: Both Locks – Rehabilitate Downstream Miter Gates (Non-Capital Maintenance Project) ($3,000,000) (FYs 2009 and 2010) – This project is to completely rehabilitate the miter gates at the downstream end of both Eisenhower and Snell Locks. It includes replacing worn and/or damaged components including the miter and quoin contact blocks, pintles, gate anchorages and diagonals to insure proper functioning of the miter gates.

Project No. 3: Both Locks – Rehabilitate Mooring Buttons, Pins and Concrete along Guidewalls and Guardwalls (Non-Capital Maintenance Project) ($750,000) (FYs 2009, 2010, and 2011) – This project is to rehabilitate the upstream and downstream approach walls at both Eisenhower and Snell Locks. These are mass concrete monolithic structures with vessel mooring buttons located behind them for transiting vessels to tie to. Since they were constructed, the concrete lifts/blocks have been dislodged and concrete damaged by vessel impact and the mooring buttons have settled such that they collect water/ice, making them difficult to use. The rehabilitation work would include pinning dislodged lifts, repairing damaged concrete and raising mooring buttons that have settled to improve the serviceability of the approach walls.

<u>Project No. 4</u>: Both Locks – Culvert Valve Machinery – Upgrade to Hydraulic Operation (Capital Project) ($4,000,000) (FYs 2009 and 2011) – This project is for replacing the operating machinery for the culvert valves at both Eisenhower and Snell Locks which are utilized for filling and emptying the locks. This machinery is nearly 50 years old and the open gearing is exhibiting macropitting. This equipment needs to be upgraded to insure its continued reliability. Failure of this equipment will cause delays to shipping while repairs are made. Due to the fact that this machinery was custom made and spare parts are limited, repairs to multiple pieces of machinery using the spare parts that are on-hand would not be possible. The upgrade will include new hydraulic operating machinery to match the upgrades made at the Canadian Seaway locks and the other locks in the United States.

<u>Project No. 5</u>: Both Locks – Rehabilitate and Insulate Winter Maintenance Lock Covers (Capital Project) ($500,000) (FYs 2009 and 2011) – This project is for rehabilitating and insulating the roof cover modules utilized to cover Eisenhower and Snell Locks when major winter maintenance projects are planned. These covers are over 40 years old and insulating them would save on funds used to heat work areas when required for such temperature sensitive projects as placing concrete and painting steel structures.

<u>Project No. 6</u>: Seaway International Bridge – Perform Structural Rehabilitation and Corrosion Prevention (Non-Capital Maintenance Project) ($10,600,000) (FYs 2009, 2010, and 2011) – This project is for rehabilitation of the structural components of the south span of the bridge between Rooseveltown, N.Y., and Cornwall Island, which crosses the Seaway navigation channel. The bridge, which accommodated more than 2.6 million vehicles in 2006, was opened to traffic in 1962 and is in need for significant rehabilitation. This project, scheduled for completion after four years of work, is designed to stop the corrosion currently experienced on many portions of the bridge structure and prevent the need for large-scale structural or even bridge replacement in the future. The SLSDC owns 68 percent of the south span of the bridge and the budget request reflects the U.S. prorated amount for the project. The Canadian Federal Bridge Corporation owns the remaining 32 percent of the south span.

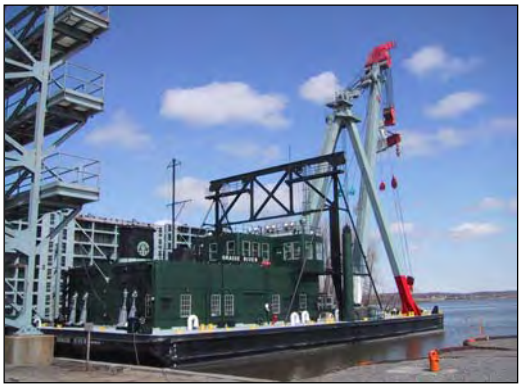
<u>Project No. 7</u>: Both Locks – Culvert Valves – Replace with Single Skin Valves (Capital Project) ($2,400,000) (FYs 2009, 2010, 2011, and 2012) – This project is for replacing the double skin culvert valves utilized for filling and emptying both Eisenhower and Snell Locks with single skin valves. Cracking of major structural members have occurred and with the double skin construction, the structural members are not accessible for inspection, blast cleaning and painting. The culvert valves are nearly 50 years old and are corroding from the inside. The new single skin valves will provide access to the structural members for inspection and maintenance. The failure of a culvert valve would cause a delay to shipping while the damaged valve was removed and replaced. Dependant on the type of failure, other lock operating components/ equipment could be damaged causing the lock to be out of service for a longer time.

<u>Project No. 8</u>: Floating Navigational Aids – Upgrade/Replace (Capital Project) ($300,000) (FYs 2009, 2010, 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This is an ongoing program to replace floating navigational aids/buoys and winter markers that have been damaged over the years, on an as required basis. The Corporation is responsible for approximately 100 buoys and 50 winter markers.

<u>Project No. 9</u>: Corporation Equipment – Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment (Capital Equipment) ($2,750,000) (FYs 2009, 2010, 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This is an ongoing program to replace heavy and light equipment, vehicles and shop equipment as it becomes worn out and unserviceable. Heavy and light equipment includes such items as a crane, dump truck, snow plow, backhoe, grader, front end loader and shop equipment such as a lathe, milling machine and drill press. In FY 2009, plans are to replace a 75-ton capacity cable crane which will be 33 years old. This crane is utilized for repairing and replacing culvert valves and wire rope fenders and for installing and removing the lock roof cover modules used each winter shutdown period. This crane will be replaced with a higher capacity unit due to the fact that some of the required picks are at or near the current crane's capacity.

<u>Project No. 10</u>: Both Locks – Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities (Non-Capital Maintenance Project) ($265,000) (FYs 2009, 2010, 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This project is for upgrading the infrastructure that supplies power to Eisenhower and Snell Locks and to the Corporation's Maintenance Facility. The power is furnished directly from the Moses-Saunders Power Dam over infrastructure that is nearly 50 years old. The loss of power from the Moses-Saunders Power Dam makes it necessary to utilize diesel generators, which are expensive to operate, to continue operation of Eisenhower and Snell Locks and the Maintenance Facility.

<u>Project No. 11</u>: Fixed Navigational Aids – Rehabilitate (Non-Capital Maintenance Project) ($900,000) (FYs 2009, 2010, 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This project is for rehabilitating fixed navigational aids in the Seaway for which the Corporation is responsible. Many of the structures are nearing 50 years old and are in need of more than routine repairs. Many of these structures have concrete bases which are eroding and cracking. The inspection of these structures will have to be done by divers and the majority of the repairs will require divers and the use of a tug and barge with crane to complete. Failure of a fixed aid would likely make it necessary to replace it which would cost significantly more than repairing the existing structure.



<u>Project No. 12</u>: Corporation Equipment – Upgrade/Replace Floating Plant (Capital Project) ($4,500,000) (FYs 2009, 2010, 2011, and 2012) (Additional costs anticipated beyond FY 2013) – This is an ongoing program to rehabilitate and/or replace the Corporation's floating plant which is utilized for maintaining the locks and navigation channels as it becomes unreliable and/or unserviceable. In FY 2009, plans are to upgrade the hydrographic surveying equipment on the workboat and to purchase a deck barge to be used for emergency/spot dredging and for repair of fixed aids to navigation and mooring/dock structures. This multiyear project also includes replacing the tug and buoy tender barge; purchasing a smaller tug which would be more efficient for many operations where the capabilities of the larger tug are not required, a small boat for emergency response and a small scow for transporting dredged spoil from emergency/spot dredging; and for rehabilitating the crane barge/gatelifter which would have to be utilized if a miter gate was damaged and had to be replaced.

<u>Project No. 13</u>: Corporation Facilities – Replace Roofs (Capital Project) ($360,000) (FYs 2009, 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This project is for replacing the roofs on the Corporation's various buildings and facilities in Massena, N.Y., as required. Most of the roofs are currently insulated ethylene propylene diene monomer (EPDM) roofs with a service life of 15-20 years and have reached the end of that timeframe. In FY 2009, roofs on a lock control house and on a building which houses air compressors and electrical transformers will be replaced.

<u>Project No. 14</u>: Corporation Facilities – Replace Paving and Drainage Infrastructure (Capital Project) ($3,950,000) (FYs 2009, 2011, and 2013) (Additional costs anticipated beyond FY 2013) – This project is for improving the pavement and drainage along lock approach walls, Corporation roadways and public parking and work areas at all Corporation facilities. In Upstate New York, the damage to pavements caused by winter conditions is significant and if repairs are not made before the damage is too severe, complete replacement of the pavement down to and often including the base materials is required at a much higher cost.

<u>Project No. 15</u>: Eisenhower Lock Highway Tunnel – Rehabilitate (Non-Capital Maintenance Project) ($750,000) (FYs 2009, 2011, and 2013) (Additional costs anticipated beyond FY 2013) – This is an ongoing project to maintain the highway tunnel which goes through the upper sill area of Eisenhower Lock to provide the only access to the north sides of both Eisenhower and Snell Locks, to the New York Power Authority's Robert Moses Power Project and to the New York State Park on Barnhart Island. This project includes grouting to limit the water leaking into the tunnel, replacing damaged/missing tiles from the walls and ceiling, replacing deteriorated/ damaged gratings and railings, stabilizing/repairing wingwalls at the tunnel approaches and clearing tunnel drains which are becoming plugged with concrete leachate products. Due to the fact that this tunnel is the only means of access to the facilities noted above, any problems that would make it necessary to close the tunnel for repair would have very significant impacts.

<u>Project No. 16</u>: Seaway System – Upgrade GPS/AIS/TMS Technologies (Capital Project) ($300,000) (FYs 2009, 2011, and 2013) (Additional costs anticipated beyond FY 2013) – This project is to expand the use of the Seaway's Global Positioning System (GPS)/ Automatic Identification System (AIS) navigation technologies, which are incorporated into the Seaway's binational Traffic Management System (TMS). Future upgrades will further improve the safety for vessels transiting the Seaway. Plans are to use these technologies to enable vessels to better identify hazards at times of limited visibility.

<u>Project No. 17</u>: Navigation Channels – Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments (Non-Capital Maintenance Project) ($5,000,000) (FY 2009) (Additional costs anticipated beyond FY 2013) – This project is for dredging of the navigation channel to remove sediments to maintain the design grade for the channel bottom. The Corporation no longer has the resources to do dredging in-house; therefore, dredging must be completed by contractors. The most recent river bottom sampling that was completed by the Corporation as part of the permitting process revealed that the sediments to be dredged are contaminated. This significantly increases the costs because of the requirement for environmental dredging and for the disposal of contaminated sediments. If the navigation channel bottom is not maintained at the design grade, the maximum permissible draft in the Seaway would have to be reduced making it necessary for vessels to carry less cargo thereby impacting the competitiveness of the Seaway System.

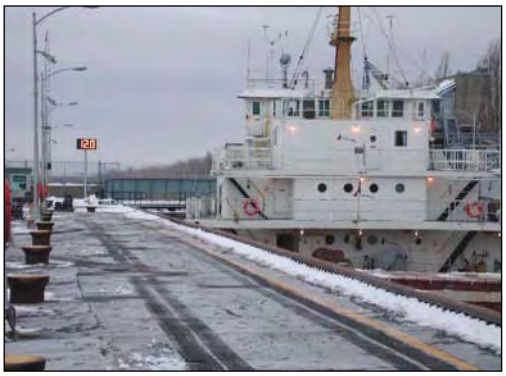
<u>Project No. 18</u>: Eisenhower Lock – Vertical Lift Gate – Replace Wire Ropes (Non-Capital Maintenance Project) ($500,000) (FY 2010) – This project is for replacing the wire rope cables that serve to raise and lower the vertical lift gate at Eisenhower Lock. These cables were last replaced in 1979 and are exhibiting some strand breakage and corrosion. The vertical lift gate is an emergency closure designed to hold back the power pool if a miter gate is compromised.

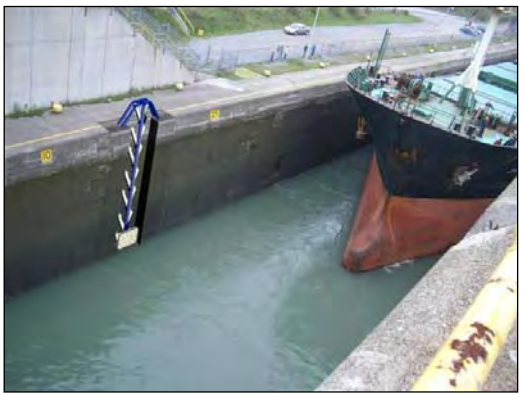
<u>Project No. 19</u>: Corporation Facilities – Upgrade Electrical Distribution Equipment (Capital Project) ($300,000) (FYs 2010 and 2011) – This project is for upgrading electrical distribution equipment at both Eisenhower and Snell Locks and at the Maintenance Facility to insure continued reliability. The majority of this equipment is nearly 50 years old.

<u>Project No. 20</u>: Both Locks – Upgrade Lock Status/Controls (Capital Project) ($300,000) (FYs 2010 and 2011) – This project is for upgrading the lock/equipment status systems and the lock operating controls at both Eisenhower and Snell Locks. At present only the most critical components are monitored and controlled by the new computerized system. Adding control of some of the less critical components and more in depth monitoring of the status of all components will improve the effectiveness of preventive maintenance activities and result in increased reliability.

<u>Project No. 21</u>: Both Locks – Compressed Air Systems – Upgrade/Replace (Capital Project) ($3,000,000) (FYs 2010 and 2011) – This project is for replacing the compressors and corroded piping at both Eisenhower and Snell Locks which provides compressed air for various systems at the locks, for maintenance work and for air curtains and bubblers utilized to control ice in and around the locks during the opening and closing of the navigation seasons. The ability of the existing compressed air systems to provide the required volumes and/or pressures reliably is becoming a problem.

<u>Project No. 22</u>: Both Locks – Install Vessel Self Spotting Equipment ($500,000) (Capital Project) (FYs 2010 and 2011) – This project is for installing equipment at both Eisenhower and Snell Locks such that transiting vessels can spot/locate themselves in the lock. This new technology, once fully implemented, will reduce labor costs for locking vessels. The Canadian Seaway agency has been testing this new technology at one of their locks.





<u>Project No. 23</u>: Both Locks – Install Vessel Vacuum Mooring Systems (Capital Project) ($3,300,000) (FYs 2010 and 2011) - This project is for installing vessel vacuum mooring equipment at both Eisenhower and Snell Locks to hold vessels in place while they are in the lock. This new technology, once fully implemented, will reduce labor costs for locking vessels. The Canadian Seaway agency commenced testing this new technology at the Welland Canal at the beginning of the 2007 navigation season.

<u>Project No. 24</u>: Both Locks – Structural Repair – Grout Leaks in Galleries and Recesses (Non-Capital Maintenance Project) ($400,000) (FYs 2010 and 2012) – This project is for grouting cracks/joints in the concrete in the galleries and recesses at both Eisenhower and Snell Locks to reduce the infiltration of water into these areas. Water leaking into these areas accelerates the corrosion of the components/ machinery and makes it difficult to perform maintenance on these items.

<u>Project No. 25</u>: Corporation Facilities – Upgrade/Replace Fire Alarm/Protection Systems (Capital Project) ($200,000) (FYs 2010 and 2012) – This project if for replacing antiquated fire alarm and fire protection systems at Corporation facilities.

<u>Project No. 26</u>: Corporation Facilities – Upgrade Storage for Lock Spare Parts (Capital Project) ($400,000) (FYs 2010 and 2011) (Additional costs anticipated beyond FY 2013) – This project is for constructing shelters for storage of lock spare parts to prevent them from corroding prior to their use. Many of these items are not stored under cover and/or are stored in old storage sheds that are in need of repair or replacement.

<u>Project No. 27</u>: Corporation Facilities – Replace Windows and Doors and Repair Building Facades (Non-Capital Maintenance Project) ($400,000) (FYs 2010 and 2012) (Additional costs anticipated beyond FY 2013) – This project is for replacing corroded/worn windows and doors with more energy efficient units and for repairing the brick and stone facades which are in need of repair.

<u>Project No. 28</u>: Snell Lock – Walls, Sills and Culverts – Rehabilitate Concrete (Non-Capital Maintenance Project) ($4,000,000) (FYs 2011 and 2013) (Additional costs anticipated beyond FY 2013) – This project is to replace deteriorated/damaged concrete at Snell Lock in all areas except the diffusers. This includes concrete that has been damaged by freeze-thaw cycles and by vessel impacts. It is resurfacing the mass concrete that forms the locks walls, filling and emptying culverts and the gate sills by replacing deteriorated/damaged concrete.

<u>Project No. 29</u>: Eisenhower Lock – Walls, Sills and Culverts – Rehabilitate Concrete (Non-Capital Maintenance Project) ($4,000,000) (FYs 2010 and 2012) (Additional costs anticipated beyond FY 2013) – This project is to replace deteriorated/ damaged concrete at Eisenhower Lock in all areas except the diffusers. This includes concrete that was of poor quality when placed during original construction and concrete that has been damaged by freeze-thaw cycles and by vessel impacts. It is resurfacing the mass concrete that forms the locks walls, filling and emptying culverts and the gate sills by replacing concrete to depths ranging between approximately 8 inches and 24 inches.

<u>Project No. 30</u>: Eisenhower Lock – Ice Flushing System – Upgrade (Capital Project) ($200,000) (FY 2011) – This project is for making improvements to the ice flushing system at Eisenhower Lock. This system was installed in the early 1980's and is utilized for flushing ice from the lock chamber to make room for a vessel and to prevent/minimize damage to the vessel and the lock structures/ components.

<u>Project No. 31</u>: Both Locks – Rehabilitate Upstream Miter Gates (Non-Capital Maintenance Project) ($2,000,000) (FYs 2011 and 2012) – This project is to completely rehabilitate the miter gates at the upstream end of both Eisenhower and Snell Locks. This includes replacing worn and/or damaged components including the miter and quoin contact blocks, pintles, gate anchorages and diagonals to insure proper functioning of the miter gates.

<u>Project No. 32</u>: Snug Harbor – Rehabilitate Spare Gate Storage and Assembly Area (Non-Capital Maintenance Project) ($750,000) (FYs 2011, 2012, and 2013) – This project is for rehabilitating the spare miter gate storage and assembly area at Snug Harbor. The work will include repair of the spare gate assembly pads and their supporting piles and blast cleaning and painting of the spare miter gates and gate assembly towers.

<u>Project No. 33</u>: Both Locks – Upgrade Drainage Infrastructure in Galleries and Recesses (Capital Project) ($450,000) (FYs 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This project is to open existing drains or to drill new ones in the galleries and machinery recesses at both Eisenhower and Snell Locks. The drains are being filled up with concrete leachate products which slow and/or stop the drains causing flooding of the galleries and machinery recesses.

<u>Project No. 34</u>: Both Locks – Improve Ice Control (Capital Project) ($550,000) (FYs 2011, 2012, and 2013) (Additional costs anticipated beyond FY 2013) – This project is to improve the methods/equipment utilized to control ice in and around Eisenhower and Snell Locks during the opening and closing of each navigation season. Currently air curtains and bubblers are utilized to minimize the ice entering a lock chamber and to move it away from the miter gates and backhoes are used for removing ice from the lock walls, which reduces the width available for transiting vessels. Improvements to existing systems/equipment as well as utilizing new technologies would make operations during times when there is ice in the water more efficient and would minimize damages to the lock components and transiting vessels.

<u>Project No. 35</u>: Vessel Mooring Cells – Rehabilitate and Extend (Capital Project) ($1,000,000) (FY 2011) (Additional costs anticipated beyond FY 2013) – This project is for rehabilitating and extending the vessel mooring cells upstream of Eisenhower Lock and in the Intermediate Pool between the locks. These mooring cells are available for vessels with problems to tie to until the problems can be corrected and/or for vessels to tie to for inspections. The existing cells are almost 50 years old, are in a state of disrepair and are too short for current Seaway length vessels.

<u>Project No. 36</u>: Eisenhower Lock – Diffusers – Replace (Non-Capital Maintenance Project) ($3,000,000) (FY 2012) – This project is to replace deteriorated/damaged concrete in the diffusers at Eisenhower Lock. This includes concrete that was of poor quality when placed during original construction and concrete that was damaged by freeze-thaw cycles. The diffusers are the outlet structures used to dampen the flow of water when the lock is emptied and this project would be for removal and replacement of these structures.

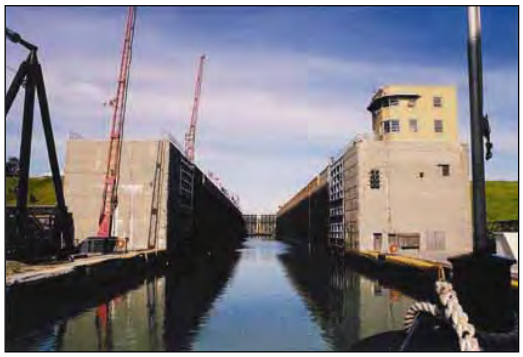
<u>Project No. 37</u>: Eisenhower Lock – Construct Drydock for Vessel Maintenance (Capital Project) ($750,000) (FY 2012) – This project is for constructing a drydock in Eisenhower Lock so that repairs to the Corporation's floating plant can be made on site. Because a lock is dewatered in the winter, it could serve as a drydock by installing a floor and some pedestals/blocking in a section of the lock to accommodate the Corporation's vessels. This would save the cost of transporting vessels to a drydock typically located in the Great Lakes and the daily rate for having a vessel in that drydock.

<u>Project No. 38</u>: Both Locks – Upgrade/Replace Emergency Generators (Capital Project) ($1,000,000) (FYs 2012 and 2013) – This project is for replacing the emergency generators at both Eisenhower and Snell Locks and for installing one of those removed from the locks at the Maintenance Facility. The generators at the locks are over 20 years old and will not carry the total load. It is sometimes necessary to eliminate some of the load to insure that the generators will run. Also, installing one of these units at the Maintenance Facility with an automatic

transfer switch will insure that if the power goes out, water lines will not freeze and break and it will enable maintenance activities to continue.

<u>Project No. 39</u>: Both Locks – Dewatering Pumps – Upgrade Outdated Equipment (Capital Project) ($400,000) (FYs 2012 and 2013) – This project is for replacing the pumps used for dewatering both Eisenhower and Snell Locks for maintenance of their underwater components. These pumps are nearly 50 years old and parts for these units are no longer available.

<u>Project No. 40</u>: Both Locks – Extend Guidewalls in Pool (Capital Project) ($3,000,000) (FYs 2012 and 2013) – This project is for extending the downstream guidewall at Eisenhower Lock and the upstream guidewall at Snell Lock. These approach walls were part of the original construction and are too short for mooring maximum Seaway length vessels.



<u>Project No. 41</u>: Snell Lock – Install Ice Flushing System Technologies (Capital Project) ($10,000,000) (FYs 2012 and 2013) – This project is for installation of an ice flushing system at Snell Lock similar to the one at Eisenhower Lock. An ice flushing system is utilized to remove floating ice from the lock chamber to make room for transiting vessels and to prevent/minimize damage to the vessels and/or lock structures. Without an ice flushing system, it is necessary to flush ice utilizing the filling valves which is less efficient and effective and significantly increases the stresses on these valves and causes damage to them.

<u>Project No. 42</u>: Both Locks – Miter Gates – Structural Rehabilitation (Non-Capital Maintenance Project) ($1,500,000) (FYs 2012 and 2013) (Additional costs anticipated beyond FY 2013) – This project is to blast clean and treat the upstream and downstream miter gates at both Eisenhower and Snell Locks to prevent further corrosion of these structures. They were last treated over 20 years ago.

<u>Project No. 43</u>: Both Locks – Miter Gate Machinery – Upgrade/ Replace (Capital Project) ($1,600,000) (FY 2013) (Additional costs anticipated beyond FY 2013) – This project is for replacing the operating machinery for the miter gates at both Eisenhower and Snell Locks. This machinery is nearly 50 years old and needs to be upgraded to insure its continued reliability. The upgrade will include new hydraulic operating equipment to match the upgrades made at the Canadian Seaway locks and the other locks in the United States.

Engineering Design, Construction Inspection, and Contracting Support (Capital Project) ($300,000) (FYs 2009, 2010, 2011, 2012, and 2013) – To accomplish all of the ARP projects, the SLSDC will require additional engineering design support, construction inspectors to monitor and insure the quality of the work, and contracting specialists to handle the increase in contract work.

Beyond FY 2013, an additional seven ARP projects are planned *(estimates not included)*:

Project No. 44: Both Locks – Ship Arrestor Machinery – Upgrade/Replace (Capital Project) (Two years) – This project is for replacing the operating machinery for the ship arrestors at both Eisenhower and Snell Locks. The ship arrestors protect the miter gates from damage that would be caused if a vessel had a malfunction such that it was unable to stop and struck a miter gate. This operating machinery is nearly 50 years old and needs to be upgraded to insure its continued reliability.

Project No. 45: Flow Control Dikes – Rehabilitate (Non-Capital Maintenance Project) (One year)– This project is for placing additional stone on the dikes downstream of Snell Lock to return them to their original cross-section. These dikes were constructed to deflect the outflow from the Moses-Saunders Power Dam, which enters the Seaway navigation channel downstream of Snell Lock, so that it doesn't cause problems for vessels transiting that area. Over time, stones from which these dikes were constructed are moved by the forces of the water and ice and work needs to be done to restore the dikes to their as-constructed condition.

Project No. 46: Both Locks – Guidewall Extensions – Rehabilitate (Non-Capital Maintenance Project) (Two years) – This project is to repair damage to the guidewall extensions located at the upstream end of Eisenhower Lock and at the downstream end of Snell Lock. These structures were constructed after original construction of the locks to lengthen the approach walls to assist vessels entering the locks. These structures are comprised of sheet pile cells, with bridge spans and are not as stable as the original guidewalls which are mass concrete structures. They have been damaged by vessel impacts over the years and require rehabilitation to maintain their serviceability.

Project No. 47: Eisenhower Lock – Vertical Lift Gate – Structural Rehabilitation (Non-Capital Maintenance Project) (One year) – This project is for blast cleaning and treating the vertical lift gate at Eisenhower Lock to prevent corrosion. The vertical lift gate is an emergency closure designed to be raised in the event of a miter gate failure to prevent loss of the power pool. This gate has not been treated in over 20 years.

Project No. 48: Both Locks – Stiffleg Derricks – Replace (Capital Project) (Two years) – This project is for replacing the structural components of the stiffleg derricks at both Eisenhower and Snell Locks. There is a stiffleg derrick located at each end of each lock. These are hoisting devices utilized to place the stoplogs which are the temporary closure structures required for dewatering a lock for inspection and/or repair of the underwater components. These units are of

riveted construction, are nearly 50 years old and are beginning to experience crevice corrosion. Upgrading/ replacement of the operating machinery for all four units was completed in 2002.

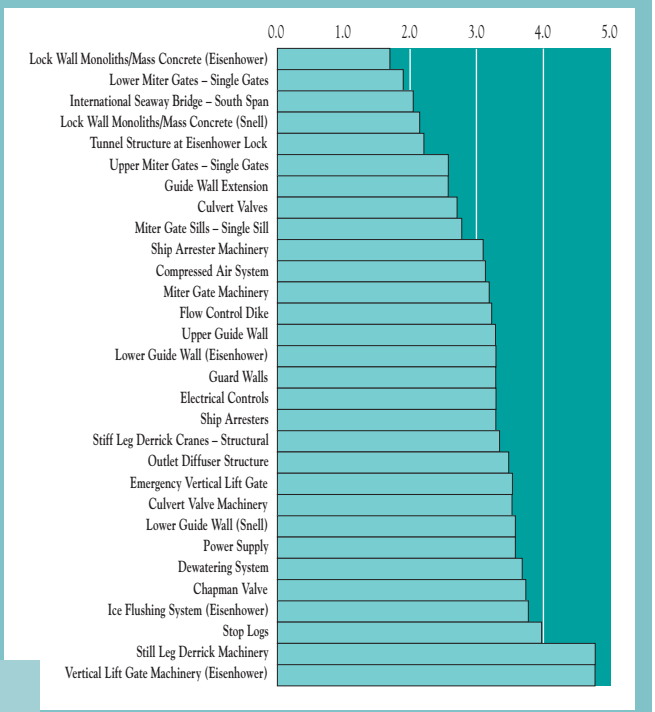
Project No. 49: Seaway International Bridge – Replace Deck (Capital Project) (One year) – This project is for replacing the deck on the south span of the bridge between Rooseveltown, N.Y., and Cornwall Island, which crosses the Seaway navigation channel. The bridge, which accommodated more than 2.6 million vehicles in 2006, was opened to traffic in 1962 and is in need for significant rehabilitation. Problems with the deck are repaired on a continuing basis; however, it is anticipated that by 2018, a complete replacement will be required to insure its structural integrity and continued serviceability. The SLSDC owns 68 percent of the south span of the bridge and the budget request reflects the U.S. prorated amount for the project. The Canadian Federal Bridge Corporation owns the remaining 32 percent of the south span.

Project No. 50: Snell Lock – Diffusers – Replace (Non-Capital Maintenance Project) (One year) – This project is to replace deteriorated/damaged concrete in the diffusers at Snell Lock. This is primarily concrete that was damaged by freeze-thaw cycles. The diffusers are the outlet structures used to dampen the flow of water when the lock is emptied and this project would be for removal and replacement of these structures.

MLO Section – U.S. Components

The U.S. portion of the St. Lawrence Seaway consists of the Snell and Eisenhower Locks, which are virtually identical in design but which manifest significant differences in their condition. The Eisenhower Lock suffers from poor concrete quality, which has led to advanced concrete degradation of the lock walls and seepage around a road tunnel that provides access to the Moses-Saunders hydroelectric dam.

Mass concrete	While concrete at the Snell Lock is in relatively good shape, the concrete at the Eisenhower Lock has deteriorated significantly. Up to 1.2 m (4 ft) of concrete has to be removed to get to sound underlying concrete. The service tunnel through the lock sill has experienced cracking, leakage, and ice build-up in winter. Grouting has been used repeatedly but the problem continues to worsen.
Approach walls	The approach walls and guide walls at both the Snell and Eisenhower Locks have suffered considerable wear and tear from ship impacts. They maintain their integrity, though regular maintenance is required.
Gates	The upper miter gates are in good operating condition at both locks. The pintles, quoin blocks and miter blocks are subject to significant wear and are replaced on a 'fix-as-fails' basis. The lower gates at both Snell and Eisenhower show considerable cracking. Cracking in the Snell gates is about three times as extensive as in the Eisenhower gates and is a major cause for concern.
Stoplogs	The Snell and Eisenhower locks have complete sets of stoplogs for dewatering. They are installed using stiff-leg derrick cranes. The Eisenhower Lock also has an emergency vertical lift gate that protects the upstream pool level in the event of a catastrophic failure of the miter gates.
Ship arrestors	The ship arrestors at the Eisenhower and Snell Locks date from the original construction and are in need of modernization.
Machinery & controls	Programmable logic controllers are used to control both the Snell and Eisenhower Locks. The latter houses the control room for SLSDC's new vessel tracking system, which monitors ship movements throughout the Seaway. The SLSDC will need new ship positioning, hydraulics and ship mooring technology to harmonize lock operations with the SLSMC.



At the SLSDC facilities on the St. Lawrence River, the most critical areas are associated with concrete quality at the Eisenhower Lock, the condition of the lower miter gates at both locks, the south span of the Seaway International Bridge, and the Eisenhower Lock highway tunnel.

SEAWAY LOCKS: **A 600-FOOT CLIMB IN 16 STEPS**

A ship traveling from Montreal to a port in Lake Superior has to navigate seven lock chambers in the St. Lawrence River, another set of eight locks through the Welland Canal and a final lock at Sault Ste. Marie. The ascent crosses more than 2,200 miles to Lake Superior, which sits 600 feet above sea level.

SEAWAY FACTS

■ Opened in 1959. The Seaway was considered crucial to the Great Lakes because it is the region's only outlet to the East Coast.

■ **INFRASTRUCTURE:** Dams and dikes, locks, channels and bridges.

■ **ELEVATION:** A ship in the St. Lawrence River has to go up seven locks – or 225 feet – to get to Lake Ontario.

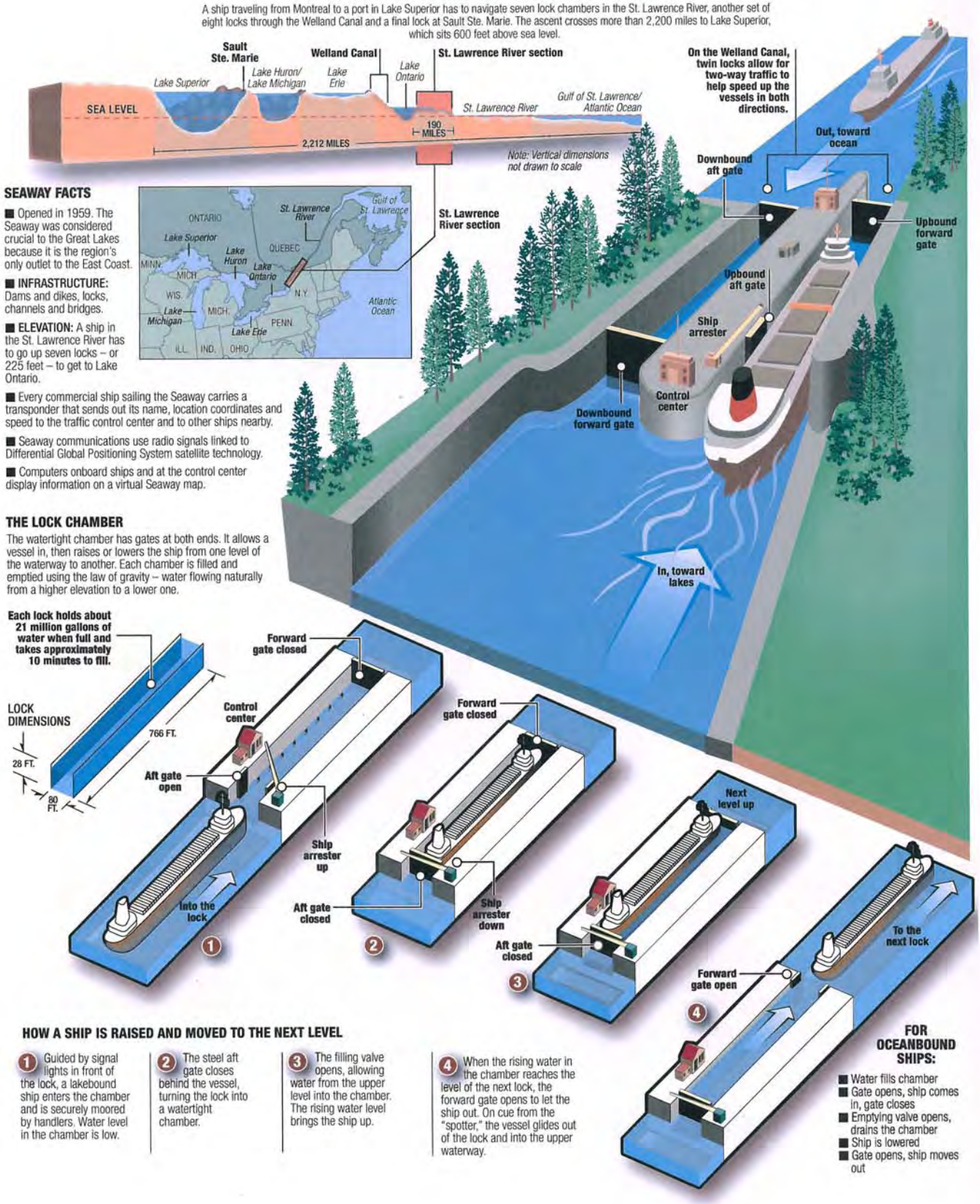
■ Every commercial ship sailing the Seaway carries a transponder that sends out its name, location coordinates and speed to the traffic control center and to other ships nearby.

■ Seaway communications use radio signals linked to Differential Global Positioning System satellite technology.

■ Computers onboard ships and at the control center display information on a virtual Seaway map.

THE LOCK CHAMBER

The watertight chamber has gates at both ends. It allows a vessel in, then raises or lowers the ship from one level of the waterway to another. Each chamber is filled and emptied using the law of gravity – water flowing naturally from a higher elevation to a lower one.



HOW A SHIP IS RAISED AND MOVED TO THE NEXT LEVEL

1. Guided by signal lights in front of the lock, a lakebound ship enters the chamber and is securely moored by handlers. Water level in the chamber is low.

2. The steel aft gate closes behind the vessel, turning the lock into a watertight chamber.

3. The filling valve opens, allowing water from the upper level into the chamber. The rising water level brings the ship up.

4. When the rising water in the chamber reaches the level of the next lock, the forward gate opens to let the ship out. On cue from the "spotter," the vessel glides out of the lock and into the upper waterway.

FOR OCEANBOUND SHIPS:

■ Water fills chamber
■ Gate opens, ship comes in, gate closes
■ Emptying valve opens, drains the chamber
■ Ship is lowered
■ Gate opens, ship moves out

U.S. Saint Lawrence Seaway Development Corporation

http://www.greatlakes-seaway.com