



U.S. Department of Transportation
Maritime Administration

U.S. Water Transportation Statistical Snapshot



May 2008

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May 2008

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**Office of
Policy and Plans**

**Office of
Congressional and Public Affairs**

Maritime Administration

**U.S. Department of
Transportation**



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It is the mission of the Maritime Administration to strengthen the U.S. water transportation system, including infrastructure, industry, and labor, to meet the economic and security needs of the Nation.

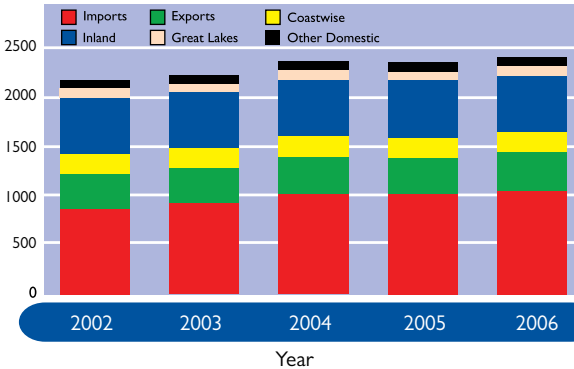
The U.S. water transportation industry serves the needs of both foreign and domestic commerce. It comprises companies that carry freight or passengers on the open seas or inland waterways, offer towing services, charter vessels, and operate canals and terminals.

The U.S. water transportation industry is in a period of renewal and expansion with major changes in trades, fleets, gross output and employment. The following snapshot highlights the major changes that have occurred over the last five years.

In 2006, U.S. waterborne trades amounted to 2.3 billion metric tons. Foreign trades accounted for 60 percent of the total, up from 56 percent five years earlier. The change in composition was due largely to a 13 percent rise in petroleum imports and a 5 percent decline in coastwise petroleum trades (next page).

U.S. Waterborne Trades, 2002-2006

(Million Metric Tons)



U.S. Waterborne Trades, 2002-2006

(Million Metric Tons)

Trade	2002	2003	2004	2005	2006	% Ch. 2002-06
Foreign	1,196.9	1,250.2	1,365.2	1,359.6	1,419.6	18.6
Container	154.3	166.1	187.2	205.2	217.4	40.9
Imports	848.2	911.5	988.0	995.1	1,025.9	21.0
Container	91.9	98.1	112.9	123.6	133.5	45.3
Exports	348.7	338.7	377.2	364.5	393.6	12.9
Container	62.3	68.0	74.4	81.7	83.9	34.7
Domestic	926.3	921.9	949.9	933.4	928.6	0.1
Coastwise	196.3	202.8	200.1	193.8	183.2	-6.7
Container	15.7	17.8	18.3	18.6	19.6	24.8
Inland	551.6	553.0	568.1	566.1	569.3	3.2
Lakes	92.1	81.5	93.9	87.3	87.9	-4.6
Other	86.3	84.6	87.8	86.2	88.2	2.2
Total	2,123.2	2,172.1	2,315.1	2,293.0	2,348.2	10.6

Note: Other includes intra-port and intra-territory trades.

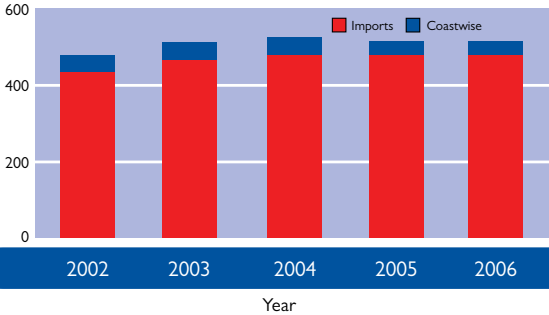
Sources: U.S. Army Corps of Engineers, Waterborne Commerce of the United States. Detailed data available at www.usace.army.mil/ndc. Foreign Container-PIERS, www.piers.com.

Trade Indicators

The 2002-2006 decline in coastwise crude oil trades was due largely to a 25 percent decline in Alaskan crude oil production which moved on tankers from the Trans-Alaskan Pipeline terminal in Valdez to the U.S. West Coast.

U.S. Crude Oil Trades, 2002-2006

(Million Metric Tons)



U.S. Waterborne Petroleum Trades, 2002-2006

(Million Metric Tons)

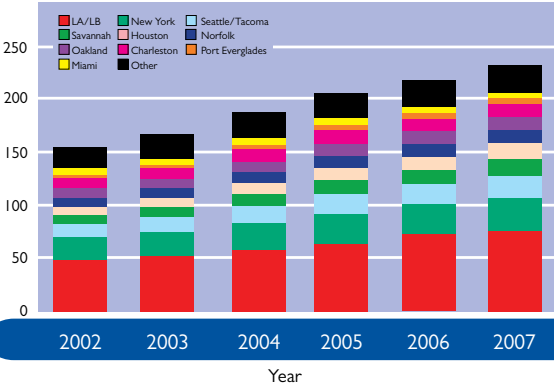
Trade/Vessel Type	2002	2003	2004	2005	2006	% Ch. 2002-06
Domestic	316.3	327.3	331.5	329.1	326.4	3.2
Crude	77.6	79.4	76.6	72.1	63.8	-17.8
Product	238.7	247.9	254.9	257.0	262.6	10.0
Coastwise	140.0	146.4	148.0	142.4	132.4	-5.4
Crude	46.5	46.2	43.5	40.7	33.4	-28.2
Alaska/ West Coast	45.4	44.9	42.1	40.0	32.4	-28.6
Product	93.5	100.2	103.1	101.6	99.0	5.9
Foreign	607.1	652.9	691.0	679.2	691.7	13.9
Imports	552.7	600.1	633.1	621.7	622.4	12.6
Crude	434.8	467.8	482.3	474.3	476.0	9.5
Product	117.9	132.3	150.8	147.4	146.4	24.2
Exports	54.4	52.8	57.9	57.5	69.3	27.4
Alaska Crude Oil Prod. (Mil. Bbls.)	359.3	355.6	332.5	315.4	270.5	-24.7

Note: Domestic includes coastwise, inland, intra-port and intra-territory trades. Product figures include natural gas liquids.

Sources: Trade—U.S. Army Corps of Engineers, Waterborne Commerce of the United States. Detailed data available at www.usace.army.mil/ndc. Alaska production—Energy Information Agency, Petroleum Supply Annual. Detailed data available at www.eia.doe.gov.

U.S. foreign container trades increased by 51 percent over the last five years. In 2007, the top ten ports accounted for 89 percent of U.S. container trades.

U.S. Foreign Container Trades by U.S. Port, 2002-2007 (Million Metric Tons)



U.S. Foreign Container Trades by U.S. Port, 2002-2007 (Million Metric Tons)

Port	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
LA/LB	48.7	52.1	58.2	64.0	72.8	76.0	56.1
New York	21.3	22.8	25.6	27.5	29.3	31.1	46.0
Seattle/Tacoma	12.7	13.8	15.6	19.5	18.1	19.7	55.1
Savannah	8.3	9.4	10.9	12.6	13.4	17.1	106.0
Houston	8.3	9.1	10.9	12.2	12.4	14.2	71.1
Norfolk	7.9	8.7	9.7	10.7	11.6	13.2	67.1
Oakland	8.2	8.9	10.1	11.8	11.9	12.3	50.0
Charleston	10.3	10.1	11.7	12.6	12.3	11.7	13.6
Port Everglades	2.8	3.1	3.7	4.5	4.9	5.4	92.9
Miami	6.2	6.3	6.6	6.4	6.2	5.3	-14.5
Top 5	99.4	107.1	121.3	135.9	146.1	158.2	59.2
Top 10	134.8	144.2	163.1	181.9	193.0	206.1	52.9
Total	154.3	166.1	187.2	205.2	217.4	232.5	50.7

Source: Port Import/Export Reporting System (PIERS). Detailed data available at www.piers.com.

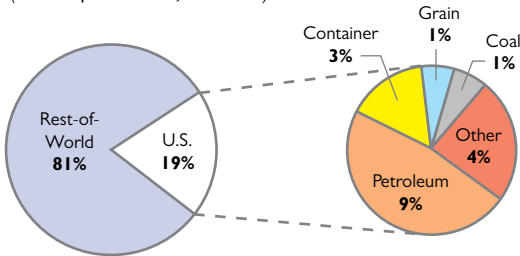
Trade Indicators

In 2006, U.S. foreign trade (1.4 billion metric tons) accounted for about 19 percent of global waterborne trade. U.S. petroleum trades accounted for about 9 percent of global trade (all products), and about 24 percent of global petroleum trades.

Over the last five years, global trade increased by 23 percent, the highest 5-year growth rate of the last 20 years. The surge in global trade has been driven largely by growth in global container trades and China's demand for primary products—petroleum, iron ore, coal and grains.

U.S. and Global Waterborne Trades, 2006

(Percent of Global Trade, Metric Tons)



U.S. and Global Waterborne Trades, 2006

(Million Metric Tons)

Trade	2002	2003	2004	2005	2006	% Ch. 2002-06
Global Trade	6,209.0	6,553.0	6,954.0	7,258.0	7,615.0	22.6
Coal	406.0	448.0	483.0	507.0	544.0	34.0
Iron Ore	481.0	516.0	588.0	661.0	721.0	49.9
Petroleum	2,359.0	2,513.0	2,640.0	2,737.0	2,860.0	21.2
LNG	113.0	125.0	132.0	144.0	160.0	41.6
Grain	271.0	264.0	275.0	272.0	292.0	7.7
Container	718.0	805.0	918.0	1020.0	1,131.0	57.5
U.S. Trade	1,196.9	1,250.2	1,365.2	1,359.6	1,419.6	18.6
Coal	54.4	61.4	75.4	73.8	80.1	47.2
Iron Ore	18.8	18.6	20.5	20.2	19.3	2.7
Petroleum	607.1	652.9	690.9	679.2	691.7	13.9
LNG	9.5	16.2	22.2	16.7	17.3	82.1
Grain	101.7	97.1	103.6	94.1	107.1	5.3
Container	154.2	166.1	187.3	205.3	216.6	40.5

Sources: Global Trade—Clarkson Research Studies; U.S. Trade—U.S. Army Corps of Engineers, Waterborne Commerce of the United States. Detailed data available at www.usace.army.mil/ndc. Container—PIERS, www.piers.com.

In 2007, 6,867 oceangoing-vessels made 63,804 calls at U.S. ports. Vessel calls were up 13 percent from 5 years earlier. Of the 2007 calls, 34 percent were by tankers, 31 percent were by containerships, 17 percent were by dry bulk vessels, and 10 percent were by Roll on-Roll offs (Ro-Ro). In 2007, 88 percent of the tanker calls were by double-hull tankers, up from 58 percent 5 years before. Liquefied Natural Gas (LNG) carriers accounted for less than 1 percent of the calls, but were the fastest growing segment over the last 5 years.

Vessel Calls at U.S. Ports, 2002-2007

Type	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Tanker	17,320	18,503	19,316	20,118	21,231	21,724	25.4
D/Hull	10,045	11,905	14,055	15,869	17,747	19,026	89.4
Product	10,949	10,998	11,572	12,217	13,282	13,277	21.3
D/Hull	5,770	6,578	7,712	8,799	10,252	10,811	87.4
Crude	6,371	7,505	7,744	7,901	7,949	8,447	32.6
D/Hull	4,275	5,327	6,343	7,070	7,495	8,215	92.2
Container	17,138	17,287	18,279	18,542	19,591	19,863	15.9
Dry Bulk	11,112	10,271	11,631	11,406	12,508	11,040	-0.6
Ro-Ro	5,632	5,191	5,317	5,663	6,318	6,077	7.9
Vehicle	3,605	3,113	3,065	3,652	4,182	4,084	13.3
Gas	739	926	916	969	961	917	24.1
LNG	89	164	173	203	213	202	127.0
Combo	761	666	459	414	334	235	-69.1
General	3,894	3,915	3,967	3,935	4,054	3,948	1.4
All Types	56,596	56,759	59,885	61,047	64,997	63,804	12.7

Note: See glossary for vessel type descriptions.

Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

Trade Indicators

The average size (DWT) of vessels calling at U.S. ports increased by 8 percent over the last five years. Containerships were 13 percent larger in terms of DWT, but 19 percent larger in terms of TEU's. Similarly, gas carriers were 26 percent larger in terms of DWT, but 36 percent larger in terms of cubic meters.

Average Vessel Size Per Call, 2002-2007

(DWT unless otherwise specified)

Type	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Tanker	69,412	72,387	70,690	72,056	71,831	72,222	4.0
D/Hull	74,887	76,452	74,717	76,240	75,891	76,408	2.0
Product	37,050	37,790	37,684	37,956	37,669	36,699	-0.9
D/Hull	36,128	37,104	37,163	37,799	37,934	36,994	2.4
Crude	125,028	123,085	120,010	124,784	128,913	128,058	2.4
D/Hull	127,200	125,040	120,376	124,083	127,811	128,278	0.8
Container	42,158	43,168	43,610	44,593	46,598	47,720	13.2
(TEU)	3,021	3,145	3,235	3,314	3,502	3,597	19.1
Dry Bulk	42,876	42,685	42,972	43,276	44,746	45,270	5.6
Ro-Ro	20,376	20,270	20,191	19,838	19,751	19,635	-3.6
Vehicle	17,528	17,496	16,708	18,506	18,801	18,585	6.0
Gas	32,099	37,818	39,145	41,411	40,738	40,462	26.1
(CM)	43,774	55,024	57,465	61,410	60,037	59,369	35.6
LNG	56,290	68,564	70,458	70,374	70,962	73,703	30.9
(CM)	104,879	125,768	129,429	128,504	130,006	134,832	28.6
Combo	84,459	84,016	84,699	87,151	86,344	93,617	10.8
General	23,496	23,655	24,542	25,101	25,446	25,572	8.8
All Types	47,625	49,557	49,125	50,083	50,672	51,658	8.5

Note: See glossary for vessel type descriptions.

Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

Trade Indicators

Over the last five years, calls by containerships of 5,000 TEU or greater, which are largely post-panamax class, increased by 251 percent. The number of 5,000+ TEU containerships deployed in U.S. trades increased by 164 percent and calls per vessel increased by 33 percent.

Containership Calls at U.S. Ports by Size, 2002-2007

Vessel Size, TEU's	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Calls							
< 1,000	566	626	443	394	332	372	-34.3
1,000-1,999	4,097	3,492	3,463	3,600	3,814	3,532	-13.8
2,000-2,999	4,032	4,032	4,541	4,410	3,986	4,048	0.4
3,000-3,999	4,129	4,050	3,888	3,624	3,333	2,917	-29.4
4,000-4,999	3,186	3,945	4,210	4,226	4,782	5,033	58.0
> 4,999	1,128	1,142	1,734	2,288	3,344	3,961	251.2
Total	17,138	17,287	18,279	18,542	19,591	19,863	15.9
Vessels							
< 1,000	34	28	30	24	23	28	-17.6
1,000-1,999	261	234	185	183	189	168	-35.6
2,000-2,999	267	258	266	259	257	229	-14.2
3,000-3,999	194	201	191	189	177	167	-13.9
4,000-4,999	165	197	207	234	258	271	64.2
> 4,999	105	107	160	193	260	277	163.8
Total	1,026	1,025	1,039	1,082	1,164	1,140	11.1
Calls/Vessel							
< 1,000	16.6	22.4	14.8	16.4	14.4	13.3	-20.2
1,000-1,999	15.7	14.9	18.7	19.7	20.2	21.0	33.9
2,000-2,999	15.1	15.6	17.1	17.0	15.5	17.7	17.1
3,000-3,999	21.3	20.1	20.4	19.2	18.8	17.5	-17.9
4,000-4,999	19.3	20.0	20.3	18.1	18.5	18.6	-3.8
> 4,999	10.7	10.7	10.8	11.9	12.9	14.3	33.1
Total	16.7	16.9	17.6	17.1	16.8	17.4	4.3

Notes: Panamax refers to the maximum dimensions of a vessel that can pass through the locks of the Panama Canal: length—965 feet, beam—106 feet, and draft—39.5 feet. Percent changes calculated on unrounded numbers.

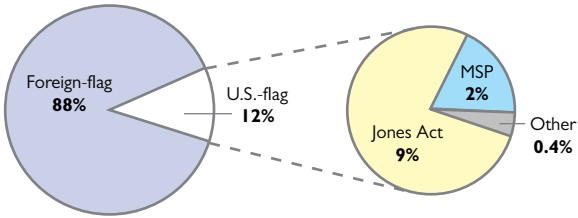
Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

Trade Indicators

In 2007, U.S.-flag oceangoing vessels accounted for 12 percent of the calls at U.S. ports. Jones Act vessels accounted 78 percent of U.S.-flag calls and 9 percent of overall calls. Maritime Security Program (MSP) vessels accounted for 2 percent of overall calls.

U.S.-flag vessels averaged 36 calls per vessel while foreign-flag vessels averaged only 8 calls per vessel. Jones Act vessels call primarily at U.S. ports, while foreign-flag and non-Jones Act U.S.-flag vessels spend significant time in foreign ports.

Vessel Calls at U.S. Ports by Flag, 2007



U.S.-flag Vessel Calls at U.S. Ports by Segment, 2007

	Jones Act	MSP	Other	Total
Tanker	3,448	36	0	3,484
D/Hull	2,633	36	0	2,669
Product	2,421	36	0	2,457
D/Hull	1,629	36	0	1,665
Crude	1,027	0	0	1,027
D/Hull	1,004	0	0	1,004
Container	1,417	977	163	2,557
Dry Bulk	63	0	36	99
Ro-Ro	842	344	57	1,243
Vehicle	120	344	20	484
General	14	0	23	37
All Types	5,784	1,357	279	7,420

Note: Jones Act Fleet—Vessels built in the U.S. and registered under U.S.-flag; or vessels reconstructed in the U.S. and registered under U.S.-flag; or foreign-built vessels forfeited for violation of U.S. law and registered under U.S.-flag. These vessels have unrestricted coastwise trading privileges.

Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

Over the last five years, the South Atlantic had the highest growth (20 percent) in vessel calls among the six U.S. coastal regions.

In 2007, ninety-one percent of the container calls were at Atlantic and Pacific ports, up from 89 percent in 2002.

Vessel Calls by U.S. Coast, 2002 and 2007

Type	N. Atl.	S. Atl.	PNW	PSW	P.R.	U.S.G.	Total
2002							
Tanker	3,122	1,297	1,793	2,069	241	8,798	17,320
Container	3,043	5,444	1,787	5,034	568	1,262	17,138
Dry Bulk	1,388	1,156	2,111	1,389	85	4,983	11,112
Ro-Ro	1,804	1,555	792	883	167	431	5,632
Gas	73	26	43	50	33	514	739
Combo	234	69	0	26	14	418	761
General	789	828	171	570	269	1,267	3,894
All Types	10,453	10,375	6,697	10,021	1,377	17,673	56,596
2007							
Tanker	4,037	1,705	1,850	2,519	215	11,398	21,724
Container	3,644	7,057	1,788	5,570	498	1,306	19,863
Dry Bulk	1,294	1,106	2,406	1,204	42	4,988	11,040
Ro-Ro	1,612	1,811	709	1,332	227	386	6,077
Gas	181	32	25	43	8	628	917
Combo	28	63	0	8	1	135	235
General	743	678	379	598	188	1,362	3,948
All Types	11,539	12,452	7,157	11,274	1,179	20,203	63,804
% Ch. 2002-07							
Tanker	29.3	31.5	3.2	21.7	-10.8	29.6	25.4
Container	19.8	29.6	0.1	10.6	-12.3	3.5	15.9
Dry Bulk	-6.8	-4.3	14.0	-13.3	-50.6	0.1	-0.6
Ro-Ro	-10.6	16.5	-10.5	50.8	35.9	-10.4	7.9
Gas	147.9	23.1	-41.9	-14.0	-75.8	22.2	24.1
Combo	-88.0	-8.7	0.0	-69.2	-92.9	-67.7	-69.1
General	-5.8	-18.1	121.6	4.9	-30.1	7.5	1.4
All Types	10.4	20.0	6.9	12.5	-14.4	14.3	12.7

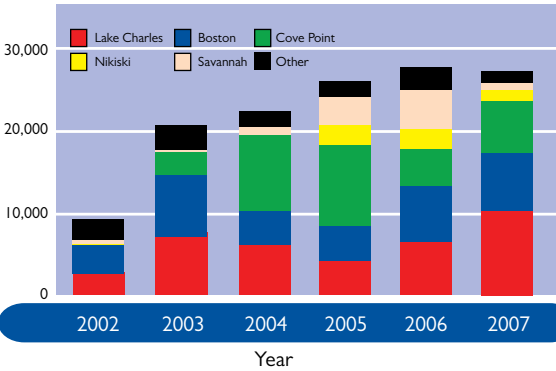
Note: See glossary for coast descriptions.

Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

Trade Indicators

Liquefied Natural Gas (LNG) carrier capacity calling at U.S. ports increased by 192 percent over the last five years. In 2007, five ports accounted for 95 percent of the capacity calling at the U.S.

LNG Vessel Capacity Calling at U.S. Ports, 2002-2007 (Thousand Cubic Meters)



LNG Vessel Capacity Calling at U.S. Ports, 2002-2007 (Thousand Cubic Meters)

Port	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Lake Charles	2,616	7,112	6,237	4,237	6,551	10,267	292.4
Boston	3,577	7,595	4,086	4,194	6,798	7,107	98.7
Cove Point	0	2,722	9,247	10,018	4,451	6,431	na
Nikiski	90	0	0	2,337	2,517	1,247	1,285.6
Savannah	517	353	900	3,392	4,700	803	55.3
Top 5	6,800	17,781	20,470	24,177	25,016	25,855	280.2
Other	2,534	2,845	1,921	1,909	2,675	1,381	-45.5
Total	9,334	20,626	22,391	26,086	27,691	27,236	191.8

Note: Capacity calling is the sum of calls weighted by vessel cubic meter capacity, or calls (p.5) x average vessel size (p. 6).

Source: Maritime Administration, Vessel Calls at U.S. Ports. Detailed data available at www.marad.dot.gov/marad_statistics.

The top ten departure ports for cruise passengers accounted for 77 percent of the North American departures during 2007, down from 86 percent four years earlier. Cruise lines have been expanding the number of home ports for their fleets, reducing congestion, and eliminating air fares to major cruise ports.

North America Cruise Passengers by Departure Port, 2003-2007

(Thousands)

Trade	2003	2004	2005	2006	2007	% Ch. 2003-07
Miami	1,867	1,683	1,771	1,890	1,890	1.2
Port Canaveral	1,114	1,230	1,234	1,396	1,298	16.6
Fort Lauderdale	1,100	1,237	1,199	1,145	1,289	17.1
Los Angeles	516	434	615	583	624	20.9
New York	432	548	370	536	575	33.0
San Juan	579	677	581	555	534	-7.8
Galveston	377	433	531	616	529	40.4
Vancouver, CA	466	436	434	402	462	-0.8
Seattle	165	291	337	382	386	133.9
Honolulu	173	170	236	316	382	120.9
Long Beach	171	401	363	380	370	116.2
Tampa	419	399	408	461	368	-12.2
San Diego	93	173	234	180	341	266.5
New Orleans	297	396	308	75	258	-13.2
Mobile	0	29	88	99	130	na
Jacksonville	6	114	137	128	130	2,069.3
Whittier	0	88	96	109	113	na
Seward	152	75	68	69	76	-49.7
Cape Liberty	0	0	147	123	65	na
Baltimore	57	105	67	60	62	8.0
Boston	69	73	80	62	52	-24.5
Charleston	32	39	41	47	44	38.7
San Francisco	52	85	89	91	42	-20.1
Oakland	0	2	0	0	33	na
Norfolk	15	48	45	25	31	104.2
Philadelphia	25	30	50	52	30	19.6
Houston	13	91	99	60	27	111.1
Other Ports	159	131	119	129	148	-6.9
Total	8,349	9,418	9,747	9,971	10,289	23.2

Source: Maritime Administration, North American Cruise Statistics. Detailed data available at www.marad.dot/marad_statistics.

Fleet Indicators

As of year-end 2007, about 40,000 U.S. privately-owned vessels were available for operation in U.S. foreign and domestic trades. Over the last five years, the largest growth has been in the dry bulk, container, general cargo, offshore supply vessel (serving offshore oil exploration) and double-hull tank vessel fleets.

U.S. Privately-Owned Fleets, 2002-2007

(Vessels)

Fleet	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Ocean/Lakes	634	651	665	688	680	662	4.4
Tanker	271	287	290	275	272	233	-14.0
DH	138	173	187	193	202	175	26.8
Dry Bulk	174	163	175	201	210	214	23.0
Lakers	51	50	49	48	47	47	-7.8
Container	80	82	85	86	83	99	23.8
Ro-Ro	53	54	53	58	55	57	7.5
Gas	17	17	17	18	17	19	11.8
Combo	13	15	11	12	4	2	-84.6
General	26	33	34	38	39	38	46.2
Offshore Supply	479	490	518	532	629	652	36.1
Coastal & Waterways	38,124	37,082	37,209	37,936	38,842	38,936	2.1
Tugs	5,180	5,172	5,314	5,290	5,555	5,608	8.3
Dry barges	28,281	27,272	27,197	27,876	28,291	28,335	0.2
Tank Barges	4,068	4,031	4,069	4,151	4,376	4,381	7.7
DH	2,820	2,809	2,895	3,014	3,403	3,484	23.5
Ferries	595	607	629	619	620	612	2.9
Total	39,237	38,223	38,392	39,156	40,151	40,250	2.6

Notes: DH—double-hull. Ocean/Lakes—Vessels of 10,000 DWT or greater.

Sources: Ocean and Offshore—Clarkson Research Service, Vessel Registers. Detailed data available at www.clarkson.net. Coastal and Waterways—U.S. Army Corps of Engineers, Vessel Detail Files. Detailed data available at www.usace.army.mil/ndc.

The U.S. offshore fleet is the youngest of the major segments with 40 percent built over the last ten years. The coastal and waterways fleet is the oldest with only 24 percent built since 1997.

Age Profile of U.S. Privately-Owned Fleets, 2007 (Vessels)

Fleet	Year Built					
	Before 1983	1983 - 1987	1988 - 1992	1993 - 1997	1998 - 2002	After 2002
Ocean/Lakes	187	112	60	79	125	99
Tanker	35	24	28	39	56	51
DH	8	9	12	39	56	51
Dry Bulk	78	36	7	20	45	28
Lakers	47	0	0	0	0	0
Container	18	23	17	13	15	13
Ro-Ro	21	17	2	5	7	5
Gas	13	0	0	2	2	2
Combo	2	0	0	0	0	0
General	20	12	6	0	0	0
Offshore Supply	309	48	15	21	159	100
Coastal & Waterways	19,454	1,387	3,409	5,304	5,565	3,817
Tugs	4,374	215	159	228	367	265
Dry Cargo barges	12,334	1,041	2,915	4,608	4,613	2,824
Tank Barges	2,476	69	263	398	499	676
DH	1,629	46	247	387	499	676
Ferries	270	62	72	70	86	52
Total	19,950	1,547	3,484	5,404	5,849	4,016

Notes: DH—double-hull. Ocean/Lakes—Vessels of 10,000 DWT or greater.

Sources: Ocean and Offshore—Clarkson Research Service, Vessel Registers. Detailed data available at www.clarkson.net. Coastal and Waterways—U.S. Army Corps of Engineers, Vessel Detail Files. Detailed data available at www.usace.army.mil/ndc.

Fleet Indicators

As of year-end 2007, 236 U.S.-flag, privately-owned ocean and Great Lakes vessels were available for operation in U.S. foreign and domestic trades. Of these, 146 were Jones Act vessels—unrestricted coastwise trading privileges.

Over the last five years, the U.S.-flag fleet has declined by 8 percent, due largely to a 31 percent decline in the Jones Act tanker fleet.

U.S.-Flag Privately-Owned Ocean and Lakes Fleets, 2002-2007 (Vessels)

Fleet	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
U.S.-Flag	257	251	249	249	236	236	-8.2
Tanker	77	68	60	60	59	55	-28.6
DH	28	29	27	31	35	36	28.6
Dry Bulk	65	64	64	61	60	61	-6.2
Lakers	51	50	49	48	47	47	-7.8
Container	75	74	81	79	70	76	1.3
Ro-Ro	33	36	36	41	39	37	12.1
General	7	9	8	8	8	7	0.0
Jones Act	173	164	157	154	151	146	-15.6
Tanker	74	65	59	56	55	51	-31.1
DH	27	28	26	27	31	32	18.5
Dry Bulk	55	54	53	52	51	51	-7.3
Lakers	51	50	49	48	47	47	-7.8
Container	29	28	28	29	28	27	-6.9
Ro-Ro	13	15	15	15	15	15	15.4
General	2	2	2	2	2	2	0.0

Notes: DH—double-hull. Ocean/Lakes—Vessels of 10,000 DWT or greater. Jones Act Fleet—Vessels built in the U.S. and registered under U.S.-flag; or vessels reconstructed in the U.S. and registered under U.S.-flag; or foreign-built vessels forfeited for violation of U.S. law and registered under U.S.-flag. These vessels have unrestricted coastwise trading privileges.

Source: Clarkson Research Service. Detailed data available at www.clarkson.net.

As of year-end 2007, only 21 percent of the U.S.-flag ocean and Lakes fleet were built since 1997. For the Jones Act segment, only 16 percent were built over the last 10 years. In contrast, 34 percent of the U.S. owned fleet were built since 1997 (See p. 13).

Age Profile of U.S.-Flag Privately-Owned Ocean and Lake Fleets, 2007
(Vessels)

Fleet	Year Built					
	Before 1983	1983 - 1987	1988 - 1992	1993 - 1997	1998 - 2002	After 2002
U.S.-Flag	110	44	10	22	23	27
Tanker	18	9	1	6	11	10
DH	8	1	0	6	11	10
Dry Bulk	52	5	0	0	2	1
Lakers	47	0	0	0	0	0
Container	19	20	6	11	7	12
Ro-Ro	16	9	2	5	3	4
General	5	1	1	0	0	0
Jones Act	96	18	2	6	7	17
Tanker	18	9	1	6	7	10
DH	8	1	0	6	7	10
Dry Bulk	50	1	0	0	0	0
Lakers	47	0	0	0	0	0
Container	17	5	1	0	0	4
Ro-Ro	9	3	0	0	0	3
General	2	0	0	0	0	0

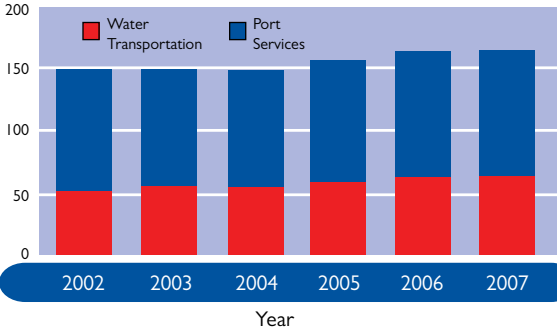
Notes: DH—double-hull. Ocean/Lakes—Vessels of 10,000 DWT or greater. Jones Act Fleet—Vessels built in the U.S. and registered under U.S.-flag; or vessels reconstructed in the U.S. and registered under U.S.-flag; or foreign-built vessels forfeited for violation of U.S. law and registered under U.S.-flag. These vessels have unrestricted coastwise trading privileges.

Source: Clarkson Research Service. Detailed data available at www.clarkson.net.

Macroeconomic Indicators

Since 2002, 16,300 jobs have been added in the water transportation and port service industries. In 2007, transportation accounted for about 39 percent of the combined employment, up from 36 percent in 2002.

Employment in Water Transportation and Port Services, 2002-2007
(Thousand Jobs)



Employment in Water Transportation and Port Services, 2002-2007
(Thousand Jobs)

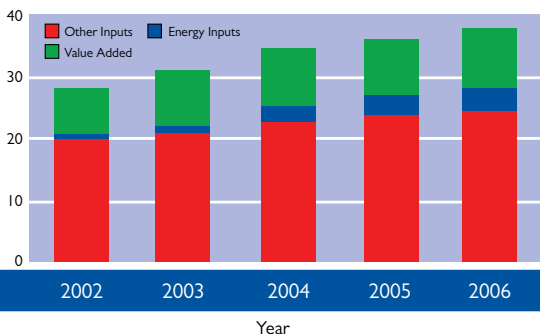
Segment	2002	2003	2004	2005	2006	2007	% Ch. 2002-07
Transportation	52.6	54.5	56.4	60.6	62.7	64.3	22.2
Ocean, Coastal and Lakes	32.3	33.7	35.2	37.3	39.1	40.0	23.8
Inland	20.3	20.8	21.2	23.3	23.6	24.3	19.7
Port Services	95.2	93.8	91.5	93.9	99.3	99.8	4.8
Cargo Handling	39.6	40.8	40.8	42.8	45.6	45.2	14.1
Other	55.6	53.0	50.7	51.1	53.7	54.6	-1.8
Total	147.8	148.3	147.9	154.5	162.0	164.1	11.0

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics Survey, Detailed Data Files. Detailed data available at www.bls.gov.

From 2002 to 2006, value added (gross output less the cost of intermediate inputs) for water transportation increased by 41 percent despite a 209 percent increase in the cost of energy inputs. Over the same period, the Industry's gross operating surplus (income) increased by 63 percent.

Water Transportation Gross Output, 2002-2006

(Billion Dollars)



Water Transportation Gross Output, 2002-2006

(Billion Dollars)

Components	2002	2003	2004	2005	2006	% Ch. 2002-06
Gross Output (GO)	28.1	31.3	36.3	37.3	37.9	34.9
Intermediate Inputs	21.1	22.6	26.8	28.0	28.0	32.7
Energy	1.1	1.5	2.4	3.5	3.4	209.1
Materials	1.4	1.5	1.8	1.8	2.0	42.9
Services	18.6	19.7	22.6	22.8	22.6	21.5
Value Added	7.0	8.7	9.5	9.2	9.9	41.4
Labor	3.8	3.8	4.3	4.6	5.0	31.6
Taxes less subsidies	0.2	0.3	-0.2	0.2	0.1	-50.0
Operating Surplus	3.0	4.6	5.5	4.4	4.9	63.3

Notes: Gross Output is the market value of goods and services produced by labor and property in the United States. Value added is a measure of the contribution of each private industry and of government to the nation's GDP. It is defined as gross output minus intermediate inputs.

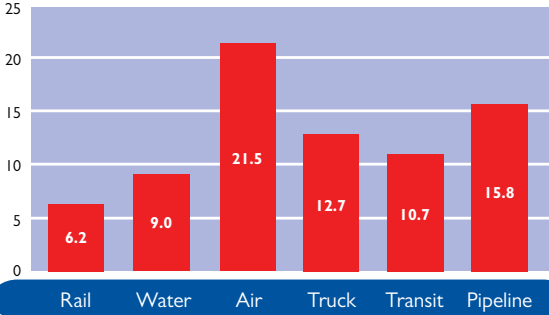
Source: U.S. Bureau of Economic Analysis, Gross Domestic Product by Industry Accounts. Detailed data available at www.bea.gov.

Macroeconomic Indicators

Water transportation ranks second among modes in energy efficiency (energy costs per dollar of gross output).

However, energy costs for water transportation have risen faster than those for the other modes.

Energy Inputs as a Percent of Gross Output by Mode, 2006
(Percent)



Energy Inputs by Mode, 2002-2006

Mode	2002	2003	2004	2005	2006	% Ch. 2002-06
Billion Dollars						
Rail	44.2	46.7	50.8	57.1	64.6	46.2
Water	1.1	1.5	2.4	3.5	3.4	209.1
Air	12.3	13.9	19.6	28.5	31.4	155.3
Truck	17.1	17.7	21.9	30.8	33.7	97.1
Transit	1.9	2.1	2.2	3.1	3.3	73.7
Pipeline	4.1	4.1	4.3	5.4	5.3	29.3
All Modes	43.8	47.1	58.6	85.4	90.7	107.1
% of Gross Output						
Rail	3.2	3.4	4.5	6.0	6.2	93.8
Water	3.9	4.8	6.6	9.4	9.0	131.8
Air	11.8	12.0	15.5	21.0	21.5	82.2
Truck	8.3	8.7	9.7	12.3	12.7	53.0
Transit	7.4	7.8	7.9	10.7	10.7	44.6
Pipeline	12.9	13.0	13.1	16.5	15.8	22.5
All Modes	7.6	7.9	9.0	12.1	12.0	57.9

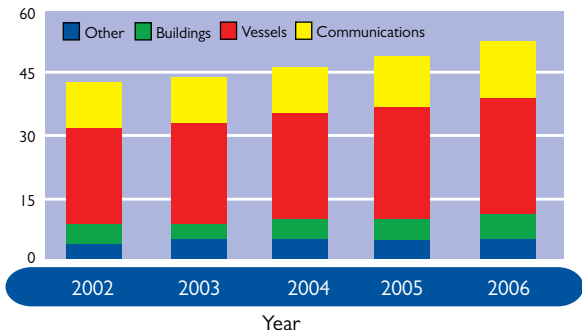
Note: Gross Output is the market value of goods and services produced by labor and property in the United States.

Source: U.S. Bureau of Economic Analysis, Gross Domestic Product by Industry Accounts. Detailed data available at www.bea.gov.

From 2002 to 2006, water transportation fixed assets increased by 24 percent. Vessel assets increased by 21 percent, the highest 5 year growth in 25 years. The increase in fixed assets has been spurred by a 63 percent rise in the Industry's operating surplus and a 32 percent increase in return on assets.

Water Transportation Fixed Assets, 2002-2006

(Billion Dollars)



Water Transportation Fixed Assets, 2002-2006

(Billion Dollars)

Type	2002	2003	2004	2005	2006	% Ch. 2002-06
Vessels	23.4	24.6	25.7	26.8	28.2	20.5
Communications	10.2	10.9	11.6	12.2	13.2	29.4
Buildings	4.5	4.6	5.0	5.6	6.1	35.6
Other	4.2	4.4	4.5	4.6	4.8	14.3
Total	42.3	44.5	46.8	49.2	52.4	23.9
Operating Surplus	3.0	4.6	5.5	4.4	4.9	63.3
Surplus/Assets (%)	7.1	10.3	11.8	8.9	9.4	32.4

Note: Fixed Assets are produced assets that are used repeatedly or continuously in the process of production for an extended period of time. They include equipment, software, and structures.

Source: U.S. Bureau of Economic Analysis, Fixed Asset Accounts. Detailed data available at www.bea.gov.

Glossary

Coastwise – Domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, and traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean.

Combination Carrier – Ore/bulk/oil carriers, bulk/oil carriers.

Containership – Full containerships and refrigerated container carriers.

Deadweight Ton (DWT) – The total weight (metric tons) of cargo, fuel, fresh water, stores and crew which a ship can carry when immersed to its load line.

Dry Bulk – Bulk Vessels, bulk containerships, cement carriers, ore carriers, wood-chip carriers.

Fixed assets – Produced assets that are used repeatedly or continuously in the process of production of goods and/or services for an extended period of time.

Foreign trade – Waterborne import, export and in-transit traffic between the United States, Puerto Rico and the Virgin Islands and any foreign country.

Gas Carrier – LNG carriers, LNG/LPG carriers, LPG carriers.

General Cargo – General cargo carriers, partial containerships, refrigerated ships, barge carriers, livestock carriers.

Gross output – The market value of goods and services produced by labor and property in the United States.

Inland – Vessel movements (origin and destination) which take place solely on inland waterways. An inland waterway is one geographically located within the boundaries of the contiguous 48 states or within the boundaries of the State of Alaska. It also includes vessel movements on both inland waterways and the Great Lakes; those occurring between offshore areas and inland waterways (e.g., oil rig supplies and fish); and those taking place within Delaware Bay, Chesapeake Bay, Puget Sound, and the San Francisco Bay, which are considered internal bodies of water rather than arms of the ocean.

Glossary

Jones Act Fleet – Vessels built in the U.S. and registered under U.S. flag; or vessels reconstructed in the U.S. and registered under U.S. flag; or foreign-built vessels forfeited for violation of U.S. law and registered under U.S. flag. These vessels have unrestricted coastwise trading privileges.

Lakes – Waterborne traffic between United States ports on the Great Lakes System.

North Atlantic (N. Atl.) – All ports from Eastport, ME to Baltimore MD.

Pacific Northwest (PNW) – All U.S. ports from Barrow, AK to Coos Bay, OR.

Pacific Southwest (PSW) – All ports from Crockett, CA to San Diego, CA and all Hawaiian ports.

South Atlantic (S. Atl.) – All ports from Alexandria, VA to Miami, FL.

Panamax – The maximum dimensions (feet) allowed for a ship transiting Panama Canal locks:

Length	965
Beam	106
Draft	39.5

Ro-Ro – Roll on-Roll off vessel, containership, or vehicle carrier.

Tanker – A Ship designed to transport liquids in bulk.

Twenty-Foot Equivalent Unit (TEU) – A nominal unit of measure equivalent to a 20' x 8' x 8' shipping container.

Trans Alaska Pipeline – An 800-mile long Pipeline System that stretches from Prudhoe Bay on Alaska's North Slope, to Valdez, the northernmost ice-free port in North America.

U.S. Gulf (U.S.G.) – All ports from Key West, FL to Brownsville, TX.

Value Added – A measure of the contribution of each private industry and of government to the nation's gross domestic product. It is defined as gross output minus intermediate inputs.

Statistics published in this *U.S. Waterborne Statistical Snapshot* come from many different sources. Some statistics may be subject to omissions and errors in reporting, recording, and processing.

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