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# WATERBORNE

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# COMMERCE

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# OF THE

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# UNITED STATES

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Calendar Year 1998

Part 5—  
National Summaries

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Compiled under the supervision of  
the Water Resources Support Center  
U.S. Army Corps of Engineers  
Fort Belvoir, Virginia

District Engineer, U.S. Army Engineer District, New Orleans,  
P.O. Box 60267, New Orleans, Louisiana 70160

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# Introduction

## General

*Waterborne Commerce of the United States, WCUS, Part 5 is one of a series of publications which provides statistics on the foreign and domestic waterborne commerce moved on the United States waters. WCUS, Parts 1-4 present detailed data on the movements of vessels and commodities at the ports and harbors and on the waterways and canals of the United States, and its territories. WCUS, Part 5 provides a condensation of this detailed information thereby providing the decision makers a broad perspective of commerce served by the U.S. waterways and ports.*

**WCUS, Part 5** provides extensive graphic and tabular displays of both current waterborne traffic and historic levels. Statistics are aggregated by region, state, port and waterway for comparative purposes.

**Data on foreign commerce are supplied to the Corps of Engineers by the Bureau of Census. Data for the compilation of the domestic statistics are collected by the Corps of Engineers, Department of the Army.**

The publication numbers and the geographical areas covered in **WCUS, Parts 1-5** are detailed below:

**WCUS, Part 1 Atlantic Coast**

**WCUS, Part 2 Gulf Coast, Mississippi River System and Antilles**

**WCUS, Part 3 Great Lakes**

**WCUS, Part 4 Pacific Coast, Alaska and Hawaii**

**WCUS, Part 5 National Summaries**

## Legal Authority

The legal authority for the collection, compilation and publication of waterborne commerce statistics by the Army Corps of Engineers is Section 11 of the Rivers and Harbors Appropriations Act of 1922 (42 Stat. 1043), as amended, and codified in 33 U.S.C. 555 and provides the following:

Owners, agents, masters, and clerks of vessels and other craft plying upon the navigable waters of the United States, and

all individuals and corporations engaged in transporting their own goods upon the navigable waters of the United States, shall furnish such statements relative to vessels, passengers, freight, and tonnage as may be required by the Secretary of the Army: Provided, That this provision shall not apply to those rafting logs except upon a direct request upon the owner to furnish specific information.

Every person or persons offending against the provisions of this section shall, for each and every offense, be liable to a fine of not more than \$5,000 or imprisonment not exceeding two months, to be enforced in any district court of the United States within whose territorial jurisdiction such offense may have been committed. In addition, the Secretary may assess a civil penalty of up to \$2,500 per violation, against any person or entity that fails to provide timely, accurate statements required to be submitted pursuant to this section by the Secretary.

The vessel and commodity movement information collected and compiled is designed to meet the data requirements of the Department of the Army in connection with the duties assigned by Congress. These data also provide valuable information for other governmental departments, commercial and shipping concerns and others interested in the U.S. transportation industry.

## Domestic Commerce

Contiguous and non-contiguous states and territories constitute the geographical space upon which domestic commerce may be transported. This includes Hawaii, Alaska, the 48 contiguous states, Puerto Rico and the Virgin Islands, Guam, American Samoa, Wake Island and the U.S. Trust Territories.

The waterborne traffic movements are reported to the Corps of Engineers by all vessel operators of record on ENG Forms 3925 and 3925b (or equivalent) approved by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3510(a)). The reports are generally submitted on the basis of individual vessel movements completed. For movements with cargo, the point of loading and the point of unloading of each individual commodity must be delineated. Cargo moved for the military agencies in commercial vessels is reported as ordinary commercial cargo; military cargo moved in Department of Defense vessels is not collected.

In summarizing the domestic commerce certain movements are excluded: Cargo carried on general ferries; coal and petroleum products loaded from shore facilities directly into bunkers of vessels for fuel; and insignificant amounts of government materials (less than 100 tons) moved on government owned equipment in support of Corps projects.

Beginning in 1996, fish are excluded from internal and intraport domestic traffic. The fish landing data is furnished by the National Marine Fisheries Service.

In tables containing domestic tonnage totals for the U.S., the commodity "Waterway Improvement Materials" is not included. "Waterway Improvement Materials" tonnage is included in domestic ports, waterways and waterway systems. This is the same procedure that has been used in years prior to 1990; therefore, the tonnages for years 1990 and later are comparable to tonnages in years prior to 1990.

### Foreign Commerce

Foreign commerce is waterborne import, export, and in-transit traffic between the United States, Puerto Rico and the Virgin Islands and any foreign country. These statistics do not include traffic between Guam, Wake Island and American Samoa and any other foreign country.

Foreign waterborne import and export statistics are derived primarily from data furnished to the Corps of Engineers by the Bureau of the Census and the U.S. Customs Service. In-transit statistics are derived primarily from data purchased from the Port Import Export

Reporting Service, Inc. and supplemented by data provided by Customs and Census.

The Republic of Panama is considered a foreign country. However, individual vessel movements with origin and destination at United States ports traveling via the Panama Canal are considered domestic traffic. Alaskan crude oil (origin at Valdez, AK) shipped via the Panama pipeline (west to east) and destined for gulf and east coast ports is also considered domestic commerce.

Import and export shipments for use of the United States Armed Forces abroad are not reported to the Waterborne Commerce Statistics Center (WCSC). Beginning with calendar year 1989 shipments under the military assistance program of the Department of Defense are included in the statistics under the appropriate commodity code. In prior years these cargoes were given as commodity code 9999.

### Commodity Descriptions

The first two digits of the WCSC publication codes correspond with the Lock Performance Monitoring System (LPMS) commodity codes. Both LPMS AND WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, REV. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as, with commodity movements of other countries.

### Tonnage

The tonnage figures provided throughout the **WCUS, Parts 1-5** represent short tons (2000 pounds). Tonnage figures are rounded to the nearest 1000 tons.

A zero represents less than 500 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

Some freight tables have "Total" and "Grand Total". The "Total" means that in some cases it is the total for domestic or foreign and Canadian traffic. The "Grand Total" specifically represents the sum total of all the different traffics, including all domestic and foreign traffic. If a particular

column or traffic type has only dashes and zeroes in the tonnage fields for that entire freight table then that column (traffic type) will not print.

**Ton-Miles**

For domestic movements, ton-miles equal the cargo tonnage times the distance between the point of loading on the water and the point of

unloading on the water. For U.S. - Canada movements on the Great Lakes, ton-miles equal the tonnage times the distance between the U.S. and Canadian locations. For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels. Ton-miles are rounded to the nearest million ton-miles.

# Terminology

## Types of Traffic

### *Foreign*

#### **Imports**

**Overseas:** Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in foreign countries other than Canada.

**Canadian:** Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in Canada.

#### **Exports**

**Overseas:** Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for foreign countries other than Canada.

**Canadian:** Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for Canada.

**In-transit Merchandise:** Merchandise coming into the United States from a foreign country and shipped to a foreign country without having been entered as an import. In-transit merchandise is treated as an **Import**, (inbound) when unloaded from a vessel and as an **Export**, (outbound) when loaded onto a vessel.

### *Domestic*

**Coastwise:** Domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, (e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, Alaska to Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed **Coastwise**.

**Lakewise:** Waterborne traffic between the United States ports on the Great Lakes System. The Great Lakes System is treated as a separate waterway system rather than as a part of the inland waterway system. In comparing historical data for the Great Lakes System, one should note that prior to calendar year 1990, marine products, sand and gravel being moved from the Great Lakes to Great Lake destinations were classified as local traffic. From 1990 on, these activities are classified as lakewise traffic.

**Internal:** 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. The term "internal traffic" is also applied to these vessel movements: those which involve carriage 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.

**Intraport:** Movement of freight within the confines of a port whether the port has one or several arms or channels included in the port definition. This traffic type will not include car-ferries and general ferries moving within a port.

**Through:** Movements transiting a waterway, or stretch thereof, as defined in the project description of individual tables, and having origins and destinations outside of the defined area.



**Intra-waterway:** Shipments and receipts within the limits of a river, waterway or canal. This traffic will not include car-ferries and general ferries moving within a waterway or Corps project.

**Intra-territory:** Traffic between ports in Puerto Rico and the Virgin Islands, which are considered a single unit.

## Traffic Direction

### Waterways

**Upbound:** Traffic that moves in an upstream direction. For waterways without a characteristic monodirectional flow (e.g. the Gulf Intracoastal Waterway), "upbound" means in a northerly or easterly direction.

**Downbound:** Traffic that moves in a downstream direction. For waterways without a characteristic monodirectional flow, "downbound" means in a southerly or westwardly direction.

**Inbound:** Traffic moving from one waterway into another where the destination is on the subject waterway.

**Outbound:** Traffic moving from one waterway into another where the origin is on the subject waterway.

### Ports

**Receipts:** Traffic moving from one location to another where the destination is within the limits of the subject port.

**Shipments:** Traffic moving from one location to another where the origin is within the limits of the subject port.

**Commodity Descriptions:** The first two digits of the Waterborne Commerce Statistics Center (WCSC) publication codes correspond with the Lock Performance Monitoring System, (LPMS), commodity codes. Both LPMS and WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, Rev. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as with commodity movements of other countries.

**Tons:** The tonnage figures provided throughout the *Waterborne Commerce of the United States, WCUS, Parts 1-5* represent short tons (2000 pounds). Where noted, tonnage figures are rounded to the nearest million. A zero represents less than 500,000 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

**Ton-miles:** Water carriage ton-miles were first compiled and published in calendar year 1962. The distances used are statute miles. Domestic ton-miles are calculated by multiplying the tons of commerce being moved by the number of miles actually moved on the water (e.g. 50 short tons moving 200 miles on a particular waterway would yield 10,000 ton-miles for that waterway). The ton-mile parameter measures the total performance of a waterway. Ton-miles are not computed for ports.

For coastwise traffic this represents the mileage on the shortest route that safe navigation permits between the point of origin and destination. The source of this distance information for coastwise traffic is the publication, *Distance Between United States Ports*, published by the National Oceanic and Atmospheric Administration (1987).

For rivers and inland waterways the distances were computed from waterway survey maps and records of the Corps of Engineers.

For the Great Lakes system the ton-miles are computed for movements of cargo west of the

international boundary of St. Regis, Quebec, Canada to head of Lake Superior at Duluth, MN and Superior, WI.

For Canadian imports and exports, foreign ton-miles are computed as the tonnage times the distance between the U.S. and Canadian ports.

For lakewise domestic movements, ton-miles equal the cargo tonnage times the distance between the U.S. Great Lakes ports.

For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels.

Ton-miles are rounded to the nearest million.

**Trans-Shipments:** Ports and offshore anchorages where cargo is moved from one vessel to another.

These are: St. Lucia, Virgin Islands; Heald Bank off the Louisiana and Texas coasts; Chirqui Grande, Panama; Puerto Armuelles, Panama; and Hondo Platform-Pacific Ocean.

## Commodity Classification List

<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group Pub Name</u>	<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group Pub Name</u>
00	Units				3281 Radioactive Material
		0200 Vehicles			3282 Pigments & Paints
		0300 Passengers			3283 Coloring Mat. NEC
10	Coal				3284 Medicines
		1100 Coal			3285 Perfumes & Cleansers
		1200 Coal Coke			3286 Plastics
20	Petroleum & Petroleum Products				3291 Pesticides
	21 Crude Petroleum				3292 Starches,Gluten,Glue
		2100 Crude Petroleum			3293 Explosives
	22-29 Petroleum Products				3297 Chemical Additives
		2211 Gasoline	40	Crude Materials, Inedible Except Fuels	3298 Wood & Resin Chem.
		2221 Kerosene			3299 Chem. Products NEC
		2330 Distillate Fuel Oil	41	Forest Products, Wood and Chips	
		2340 Residual Fuel Oil			4110 Rubber & Gums
		2350 Lube Oil & Greases			4150 Fuel Wood
		2410 Petro. Jelly & Waxes			4161 Wood Chips
		2429 Naphtha & Solvents			4170 Wood in the Rough
		2430 Asphalt, Tar & Pitch			4189 Lumber
		2540 Petroleum Coke			4190 Forest Products NEC
		2640 Liquid Natural Gas	42	Pulp and Waste Paper	
		2990 Petro. Products NEC			4225 Pulp & Waste Paper
30	Chemicals and Related Products		43	Soil, Sand, Gravel, Rock and Stone	
	31 Fertilizers				4310 Building Stone
		3110 Nitrogenous Fert.			4322 Limestone
		3120 Phosphatic Fert.			4323 Gypsum
		3130 Potassic Fert.			4327 Phosphate Rock
		3190 Fert. & Mixes NEC			4331 Sand & Gravel
	32 Other Chemicals and Related Products				4333 Dredged Material
		3211 Acyclic Hydrocarbons			4335 Waterway Improv. Mat
		3212 Benzene & Toluene			4338 Soil & Fill Dirt
		3219 Other Hydrocarbons	44	Iron Ore and Scrap	
		3220 Alcohols			4410 Iron Ore
		3230 Carboxylic Acids			4420 Iron & Steel Scrap
		3240 Nitrogen Func. Comp.	45	Marine Shells	
		3250 Organo-Inorganic Comp.			4515 Marine Shells
		3260 Organic Comp. NEC	46	Non-Ferrous Ores and Scrap	
		3271 Sulphur (Liquid)			4630 Copper Ore
		3272 Sulphuric Acid			4650 Aluminum Ore
		3273 Ammonia			4670 Manganese Ore
		3274 Sodium Hydroxide			4680 Non-Ferrous Scrap
		3275 Inorg. Elem.,Oxides, & Halogen Salts			4690 Non-Ferrous Ores NEC
		3276 Metallic Salts	47	Sulphur, Clay and Salt	
		3279 Inorganic Chem. NEC			4741 Sulphur, (Dry)
					4782 Clay & Refrac. Mat.
					4783 Salt
			48	Slag	
					4860 Slag

**Commodity Classification List (continued)**

Major Grouping

Minor Grouping

Pub Group Pub Name

- 49 Other Non-Metal. Min.
  - 4900 Non-Metal. Min. NEC
- 50 Primary Manufactured Goods
  - 51 Paper Products
    - 5110 Newsprint
    - 5120 Paper & Paperboard
    - 5190 Paper Products NEC
  - 52 Lime, Cement and Glass
    - 5210 Lime
    - 5220 Cement & Concrete
    - 5240 Glass & Glass Prod.
    - 5290 Misc. Mineral Prod.
  - 53 Primary Iron and Steel Products
    - 5312 Pig Iron
    - 5315 Ferro Alloys
    - 5320 I&S Primary Forms
    - 5330 I&S Plates & Sheets
    - 5360 I&S Bars & Shapes
    - 5370 I&S Pipe & Tube
    - 5390 Primary I&S NEC
  - 54 Primary Non-Ferrous Metal Products
    - 5421 Copper
    - 5422 Aluminum
    - 5429 Smelted Prod. NEC
    - 5480 Fab. Metal Products
  - 55 Primary Wood Products; Veneer
    - 5540 Primary Wood Prod.
- 60 Food and Farm Products
  - 61 Fish
    - 6134 Fish (Not Shellfish)
    - 6136 Shellfish
  - 62-64 Grain
    - 6241 Wheat
    - 6344 Corn
    - 6442 Rice
    - 6443 Barley & Rye
    - 6445 Oats
    - 6447 Sorghum Grains
  - 65 Oilseeds
    - 6521 Peanuts
    - 6522 Soybeans
    - 6534 Flaxseed
    - 6590 Oilseeds NEC
  - 66 Vegetable Products
    - 6653 Vegetable Oils
    - 6654 Vegetables & Prod.
  - 67 Processed Grain and Animal Feed
    - 6746 Wheat Flour
    - 6747 Grain Mill Products

Major Grouping

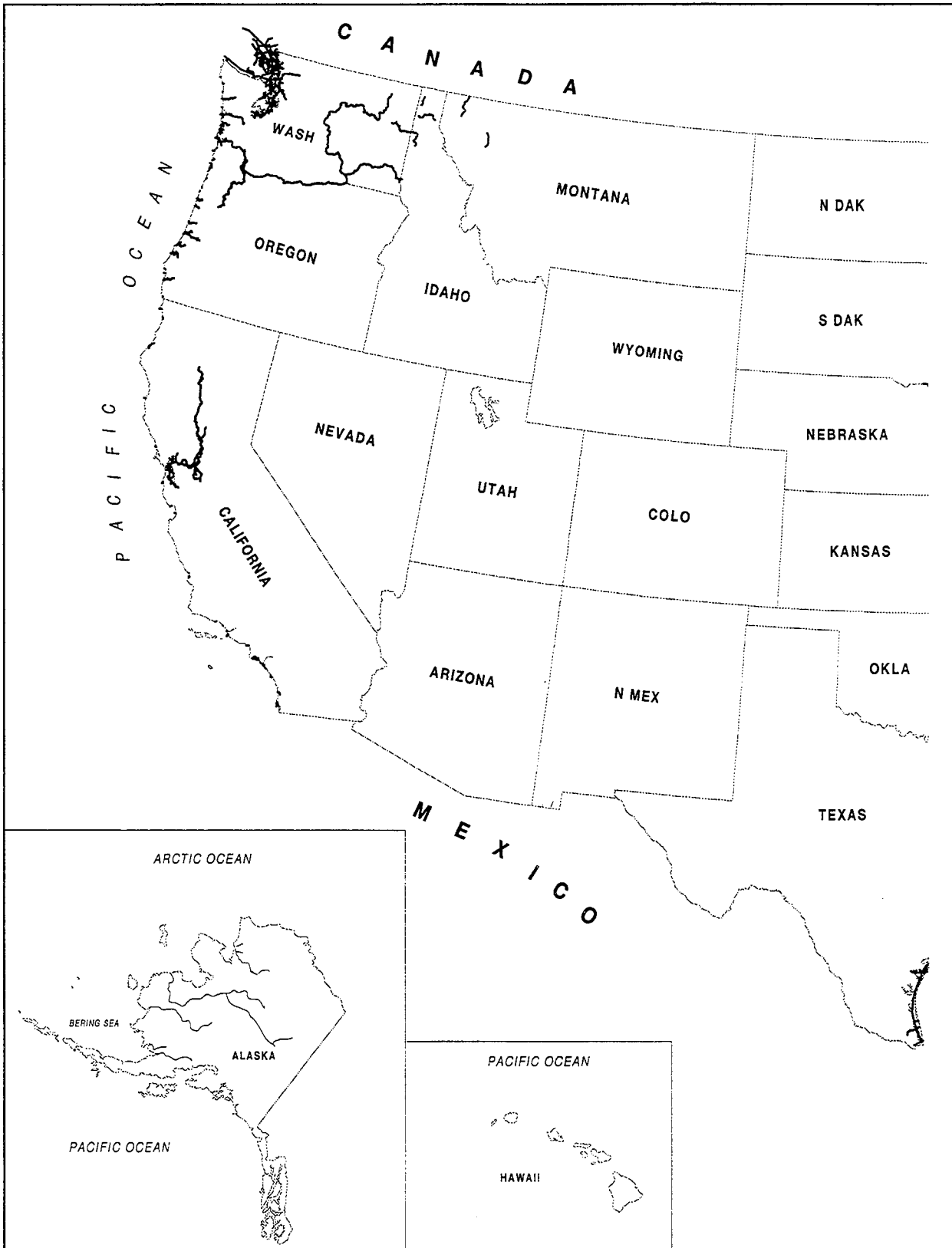
Minor Grouping

Pub Group Pub Name

- 6781 Hay & Fodder
- 6782 Animal Feed, Prep.
- 68 Other Agricultural Products
  - 6811 Meat, Fresh, Frozen
  - 6817 Meat, Prepared
  - 6822 Dairy Products
  - 6835 Fish, Prepared
  - 6838 Tallow, Animal Oils
  - 6839 Animals & Prod. NEC
  - 6856 Bananas & Plantains
  - 6857 Fruit & Nuts NEC
  - 6858 Fruit Juices
  - 6861 Sugar
  - 6865 Molasses
  - 6871 Coffee
  - 6872 Cocoa Beans
  - 6885 Alcoholic Beverages
  - 6887 Groceries
  - 6888 Water & Ice
  - 6889 Food Products NEC
  - 6891 Tobacco & Products
  - 6893 Cotton
  - 6894 Natural Fibers NEC
  - 6899 Farm Products NEC
- 70 All Manufactured Equipment, Machinery and Products
  - 7110 Machinery (Not Elec)
  - 7120 Electrical Machinery
  - 7210 Vehicles & Parts
  - 7220 Aircraft & Parts
  - 7230 Ships & Boats
  - 7300 Ordnance & Access.
  - 7400 Manufac. Wood Prod.
  - 7500 Textile Products
  - 7600 Rubber & Plastic Pr.
  - 7800 Empty Containers
  - 7900 Manufac. Prod. NEC
- 80 Waste and Scrap NEC
  - 8900 Waste and Scrap NEC
- 90 Unknown or Not Elsewhere Classified
  - 99 Unknown or Not Elsewhere Clsfd
  - 9900 Unknown or NEC

**Section 1**  
**National Summaries**

Figure 1-1: MAJOR WATERWAYS



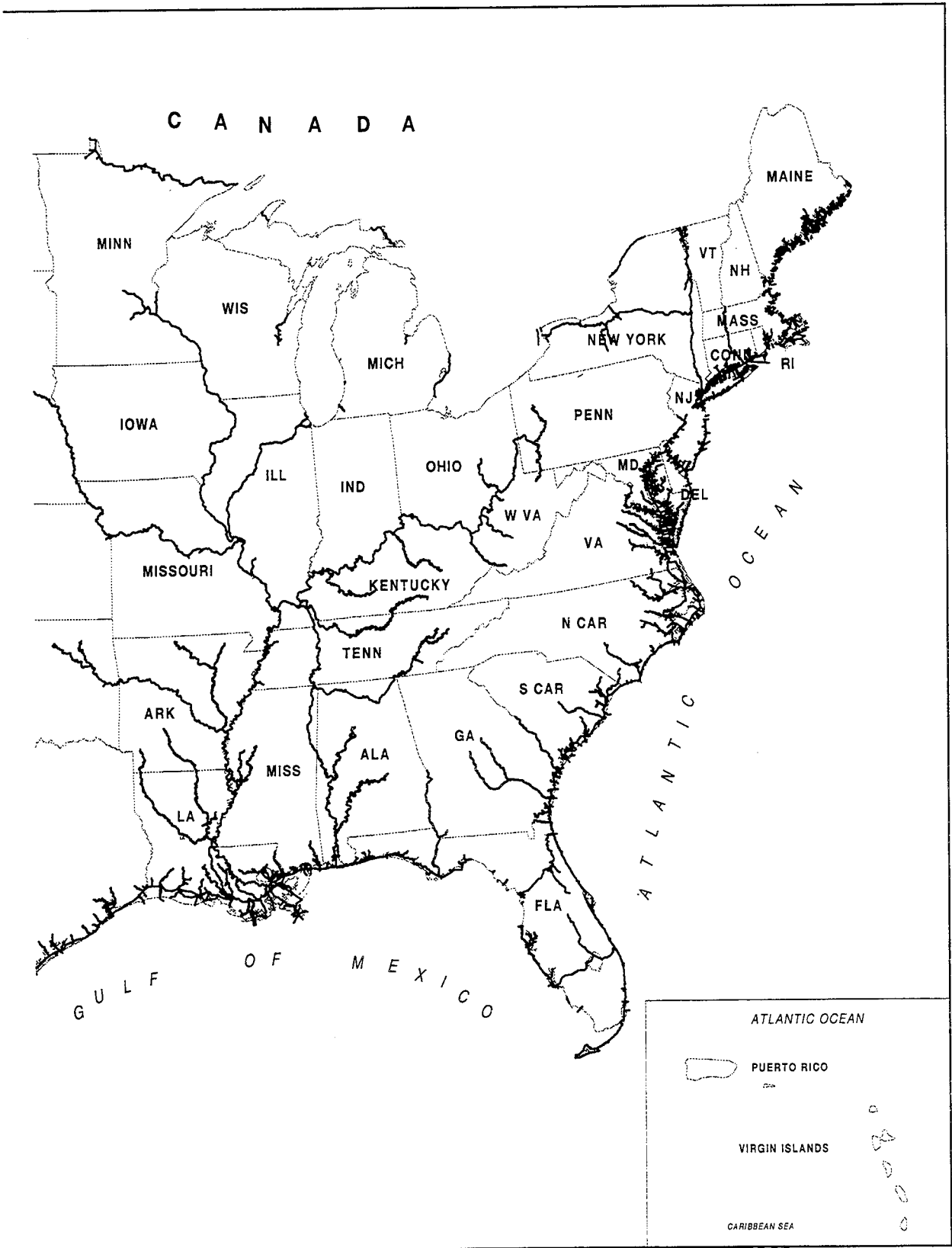


Figure 1-2  
 TOTAL WATERBORNE COMMERCE OF THE U.S., 1959-1998  
 (million short tons)

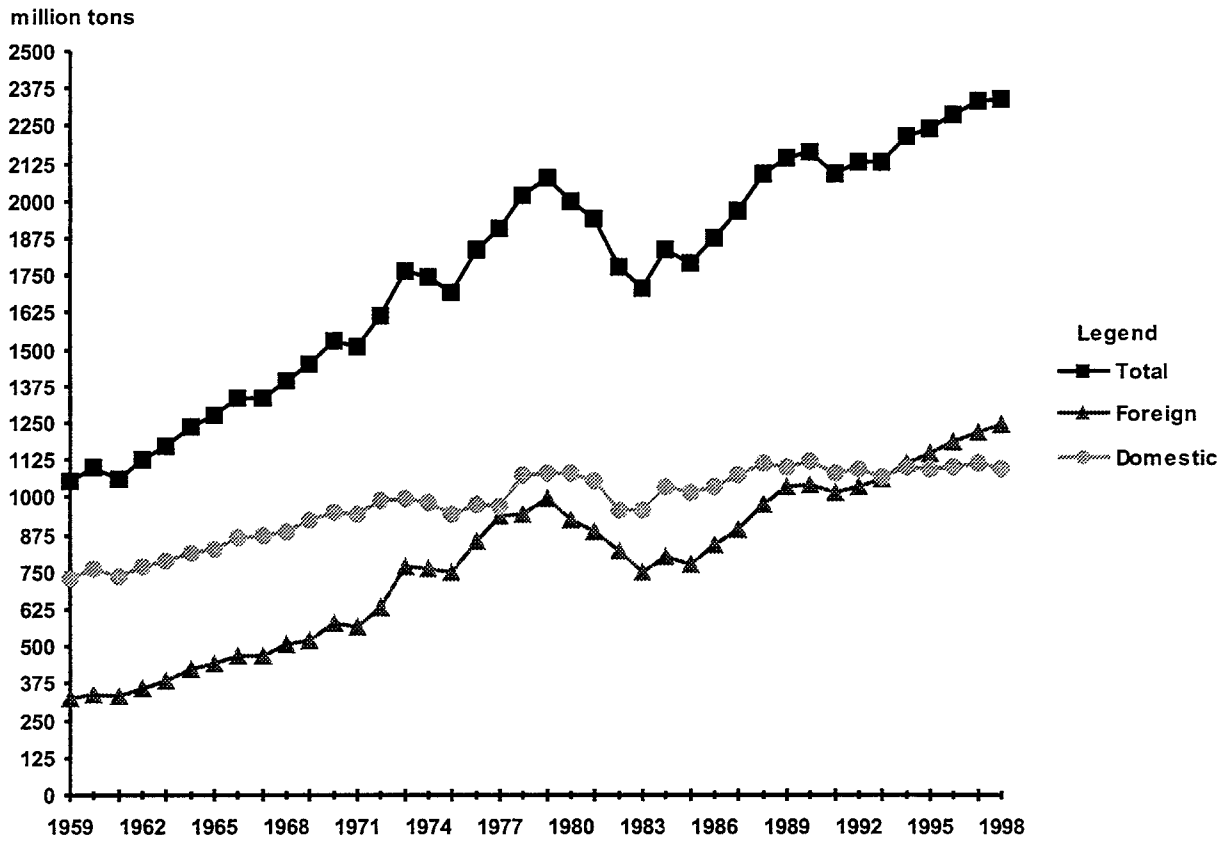




Table 1-1: TOTAL WATERBORNE COMMERCE OF THE U.S., 1959-1998  
(in short tons of 2000 pounds)

Year	Total	Foreign	Domestic
1959	1,052,402,102	325,669,939	726,732,163
1960	1,099,850,431	339,277,275	760,573,156
1961	1,062,155,182	329,329,818	732,825,364
1962	1,129,404,375	358,599,030	770,805,345
1963	1,173,766,964	385,658,999	788,107,965
1964	1,238,093,573	421,925,133	816,168,440
1965	1,272,896,243	443,726,809	829,169,434
1966	1,334,116,078	471,391,083	862,724,995
1967	1,336,606,078	465,972,238	870,633,840
1968	1,395,839,450	507,950,002	887,889,448
1969	1,448,711,541	521,312,362	927,399,179
1970	1,531,696,507	580,969,133	950,727,374
1971	1,512,583,690	565,985,584	946,598,106
1972	1,616,792,605	629,980,844	986,811,761
1973	1,761,552,010	767,393,903	994,158,107
1974	1,746,788,544	764,088,905	982,699,639
1975	1,695,034,366	748,707,407	946,326,959
1976	1,835,006,819	855,963,909	979,042,910
1977	1,908,223,619	935,256,813	972,966,806
1978	2,021,349,754	946,057,889	1,075,291,865
1979	2,073,757,628	993,444,963	1,080,312,665
1980	1,998,887,402	921,404,000	1,077,483,402
1981	1,941,558,947	887,102,150	1,054,456,797
1982	1,776,740,579	819,730,983	957,009,596
1983	1,707,661,011	751,140,194	956,520,817
1984	1,836,020,619	803,338,133	1,032,682,486
1985	1,788,434,822	774,323,283	1,014,111,539
1986	1,874,416,280	837,223,503	1,037,192,777
1987	1,967,458,261	890,980,045	1,076,478,216
1988	2,087,993,484	976,220,985	1,111,772,499
1989	2,140,442,372	1,037,910,213	1,102,532,159
1990	2,163,854,373	1,041,555,740	1,122,298,633
1991	2,092,108,462	1,013,557,036	1,078,551,426
1992	2,132,095,154	1,037,466,130	1,094,629,024
1993	2,128,221,188	1,060,041,217	1,068,179,971
1994	2,214,754,086	1,115,742,828	1,099,011,258
1995	2,240,393,059	1,147,357,782	1,093,035,277
1996	2,284,065,249	1,183,386,621	*1,100,678,628
1997	2,333,142,046	1,220,615,132	1,112,526,914
<b>1998</b>	<b>2,339,500,081</b>	<b>1,245,388,049</b>	<b>1,094,112,032</b>

\*Beginning in 1996, fish was excluded for internal and intraport domestic traffic.

Table 1-2: FOREIGN WATERBORNE COMMERCE OF THE U.S., 1959-1998  
(in short tons of 2000 pounds)

Year	Imports				Exports			
	Total	Coastal	Great Lakes		Total	Coastal	Great Lakes	
			Canadian	Overseas			Canadian	Overseas
1959	213,485,323	198,607,603	13,794,435	1,083,285	*112,184,616	91,629,487	17,700,427	2,833,118
1960	211,316,497	198,465,746	11,973,635	877,116	127,960,778	104,810,455	19,168,514	3,981,809
1961	200,165,652	188,179,228	11,007,197	979,227	129,164,166	105,959,031	18,801,857	4,403,278
1962	222,689,941	207,040,920	14,487,847	1,161,174	135,909,089	110,492,248	20,484,581	4,932,260
1963	227,375,671	209,369,531	16,495,342	1,510,798	158,283,328	129,781,571	24,455,139	4,046,618
1964	248,585,715	224,433,206	22,118,397	2,034,112	173,339,418	142,874,452	24,866,892	5,598,074
1965	269,834,819	244,874,087	21,059,701	3,901,031	173,891,990	142,121,011	25,692,770	6,078,209
1966	283,847,300	257,173,478	22,585,271	4,088,551	187,543,783	155,759,371	24,905,662	6,878,750
1967	275,965,191	248,245,275	23,269,404	4,450,512	190,007,047	162,443,124	21,896,595	5,667,328
1968	310,936,331	278,826,933	25,658,847	6,450,551	197,013,671	166,579,691	24,444,154	5,989,826
1969	320,293,084	295,647,991	19,770,247	4,874,846	201,019,278	168,944,254	25,235,730	6,839,294
1970	339,339,772	312,933,583	21,820,193	4,585,996	241,629,361	205,697,712	29,146,465	6,785,184
1971	359,745,840	333,776,713	19,104,708	6,864,419	206,239,744	172,758,807	24,757,317	8,723,620
1972	397,565,612	372,417,770	18,861,084	6,286,758	232,415,232	197,430,445	25,352,496	9,632,291
1973	490,088,015	461,828,145	22,988,904	5,270,966	277,305,888	238,807,467	28,435,708	10,062,713
1974	497,282,811	473,940,012	19,027,376	4,315,423	266,806,094	238,686,754	23,342,970	4,776,370
1975	476,572,426	455,117,218	18,121,866	3,333,342	272,134,891	236,707,996	28,707,321	6,719,574
1976	570,318,893	539,674,048	25,845,506	4,799,339	285,645,016	250,632,668	28,050,680	6,961,668
1977	658,136,893	625,308,679	25,416,264	7,411,950	277,119,920	240,784,157	27,741,857	8,593,906
1978	643,186,863	616,140,827	19,916,819	7,129,217	302,871,026	259,316,657	30,961,456	12,592,913
1979	632,995,657	607,898,526	19,450,918	5,646,213	360,449,306	311,786,293	37,964,841	10,698,172
1980	517,521,121	502,005,866	13,414,205	2,101,050	403,882,879	358,805,981	37,216,588	7,860,310
1981	477,191,504	457,467,479	16,794,705	2,929,320	409,910,646	366,424,418	36,976,771	6,509,457
1982	416,621,434	402,511,218	11,541,473	2,568,743	403,109,549	366,825,117	29,701,691	6,582,741
1983	387,847,325	371,773,135	13,080,460	2,993,730	363,292,869	330,955,677	26,794,890	5,542,302
1984	427,139,571	409,295,162	12,922,699	4,921,710	376,198,562	335,269,229	32,286,050	8,643,283
1985	412,687,350	395,577,007	11,916,969	5,193,374	361,635,933	327,425,824	27,727,141	6,482,968
1986	486,073,464	472,230,980	9,597,544	4,244,940	351,150,039	319,163,161	25,248,144	6,738,734
1987	507,704,274	493,828,182	10,040,313	3,835,779	383,275,771	351,226,492	26,766,116	5,283,163
1988	549,897,111	534,043,106	11,720,685	4,133,320	426,323,874	389,686,249	31,651,401	4,986,224
1989	589,504,121	571,732,624	13,535,132	4,236,365	448,406,092	411,338,444	31,936,141	5,131,507
1990	599,969,567	582,411,718	14,534,942	3,022,907	441,586,173	408,688,047	29,561,192	3,336,934
1991	555,354,134	541,066,623	12,078,748	2,208,763	458,202,902	430,654,747	25,178,669	2,369,486
1992	586,708,302	571,286,921	11,965,503	3,455,878	450,757,828	420,666,674	27,978,689	2,112,465
1993	648,783,131	630,700,438	13,680,579	4,402,114	411,258,086	385,697,690	22,914,344	2,646,052
1994	719,497,159	696,468,970	17,045,105	5,983,084	396,245,669	369,138,035	23,844,491	3,263,143
1995	672,657,412	653,760,004	15,635,613	3,261,795	474,700,370	441,732,416	29,182,948	3,785,006
1996	732,592,335	708,089,695	19,081,763	5,420,877	450,794,286	418,939,647	28,335,088	3,519,551
1997	788,302,568	763,770,891	19,984,130	4,547,547	432,312,564	399,103,578	29,718,807	3,490,179
<b>1998</b>	<b>840,680,379</b>	<b>815,122,429</b>	<b>19,645,061</b>	<b>5,912,889</b>	<b>404,707,670</b>	<b>367,831,224</b>	<b>32,290,468</b>	<b>4,585,978</b>

\*Includes tonnage for Department of Defense controlled cargo and special category commodities for which breakdown by Canadian and Overseas traffic was:  
1959 - 21,584 tons;

Table 1-3: DOMESTIC WATERBORNE COMMERCE OF THE U.S., 1959-1998  
(in short tons of 2000 pounds)

Year	Total	Coastwise	Lakewise	Internal	Intraport	Intra-territory
1959	726,732,163	205,509,011	131,220,380	282,268,792	106,746,596	** 987,384
1960	760,573,156	209,196,823	155,109,237	291,056,655	104,193,446	1,016,995
1961	732,825,364	206,899,377	136,841,146	294,052,123	93,929,070	1,103,648
1962	770,805,345	215,460,882	135,743,781	316,061,877	102,277,229	1,261,576
1963	788,107,965	213,853,293	141,741,152	331,902,484	98,980,624	1,630,412
1964	816,168,440	205,687,985	151,404,618	357,916,216	99,579,422	1,580,199
1965	829,169,434	201,508,107	153,695,242	369,615,461	102,865,022	1,485,602
1966	862,724,995	208,374,966	164,036,995	389,851,631	99,214,579	1,246,824
1967	870,633,840	214,646,527	153,596,684	398,592,679	102,320,054	1,477,896
1968	887,889,448	214,250,535	151,115,936	430,174,303	90,730,336	1,618,338
1969	927,399,179	216,707,773	160,843,835	460,944,875	87,536,483	1,366,213
1970	950,727,374	238,440,385	157,058,867	472,123,417	81,474,805	1,629,900
1971	946,598,106	242,916,056	140,954,956	479,217,765	81,252,652	2,256,677
1972	986,811,761	242,660,087	145,013,420	506,989,242	90,266,095	1,882,917
1973	994,158,107	236,794,660	156,620,831	503,236,890	93,222,623	4,283,103
1974	982,699,639	233,358,124	146,067,270	511,021,978	88,197,576	4,054,691
1975	946,326,959	231,932,437	129,331,161	503,932,258	78,279,224	2,851,879
1976	979,042,910	236,278,624	132,112,775	523,972,573	83,731,092	2,947,846
1977	972,966,806	248,083,336	109,079,945	528,704,658	83,444,472	3,654,395
1978	1,075,291,865	305,342,824	142,662,552	534,508,943	89,506,584	3,270,962
1979	1,080,312,665	304,665,522	143,563,644	534,969,167	93,113,665	4,000,667
1980	1,077,483,402	329,608,613	115,124,231	534,979,027	94,183,696	3,587,835
1981	1,054,456,797	321,989,988	115,418,165	520,668,720	93,249,873	3,130,051
1982	957,009,596	311,058,264	72,084,986	495,453,486	75,601,691	2,811,169
1983	956,520,817	309,636,759	83,446,847	487,132,248	73,144,961	3,160,002
1984	1,032,682,486	307,652,127	98,010,499	542,502,695	81,110,880	3,406,285
1985	1,014,111,539	309,801,605	91,987,003	534,658,233	74,263,246	3,401,452
1986	1,037,192,777	308,024,669	87,352,525	560,499,024	77,357,617	3,958,942
1987	1,076,478,216	323,518,318	96,483,652	569,826,970	81,951,080	4,698,196
1988	1,111,772,499	325,176,859	109,664,111	588,118,666	83,689,494	5,123,369
1989	1,102,532,159	302,026,859	109,086,425	606,005,956	80,207,745	5,205,174
1990	1,122,298,633	298,636,988	110,159,406	622,595,330	86,377,845	4,529,064
1991	1,078,551,426	294,542,786	103,426,933	600,386,004	75,634,960	4,558,743
1992	1,094,629,024	285,130,765	107,398,037	621,037,417	76,817,429	4,245,376
1993	1,068,179,971	271,717,424	109,853,847	607,253,349	74,390,472	4,964,879
1994	1,099,011,258	277,029,286	114,777,289	618,408,708	82,870,326	5,925,649
1995	1,093,035,277	266,612,137	116,126,515	620,324,217	83,104,283	6,868,125
1996	1,100,678,628	267,388,864	114,870,355	*622,081,474	*89,010,522	7,327,413
1997	1,112,526,914	263,145,835	122,734,048	630,558,223	89,816,062	6,272,746
<b>1998</b>	<b>1,094,112,032</b>	<b>249,633,315</b>	<b>122,156,449</b>	<b>625,028,190</b>	<b>90,076,701</b>	<b>7,217,377</b>

\* Beginning in 1996, fish was excluded.

\*\* Beginning in 1959, excludes traffic within the states of Alaska and Hawaii. Such traffic is included in other domestic traffic categories in accordance with definitions applicable to continental United States.

Table 1-4: TOTAL WATERBORNE COMMERCE, 1979-1998  
TON-MILES, SHORT TONS AND AVERAGE HAUL BY TYPE OF TRAFFIC

Year	Grand Total	Foreign			Domestic				
		Total	Great Lakes Ports	Coastal Ports	Total	Coastwise	Lakewise	Internal	Intraport
Ton-Miles*** (millions)									
1979	931,846.4	103,086.9	*43,146.4	**59,940.5	828,759.5	532,290.3	77,968.8	217,090.2	1,410.2
1980	1,016,085.2	94,249.4	*33,679.6	**60,569.8	921,835.8	631,149.2	61,747.1	227,343.0	1,596.4
1981	1,023,636.5	94,223.1	*35,294.0	**58,929.2	929,413.4	634,765.3	62,148.4	231,184.1	1,315.6
1982	964,896.9	78,428.2	*27,165.5	**51,262.7	886,468.7	632,707.1	35,623.3	217,026.7	1,111.7
1983	989,161.6	69,596.0	*24,309.4	**45,286.7	919,565.6	649,749.5	43,088.2	225,628.3	1,099.7
1984	966,478.2	78,758.2	*32,249.4	**46,508.8	887,720.0	593,923.1	49,784.4	242,855.4	1,157.1
1985	964,911.2	71,941.2	*27,171.8	**44,769.4	892,970.0	610,976.5	48,184.0	232,707.5	1,102.0
1986	944,910.5	71,509.4	*24,235.3	**47,274.2	873,401.0	580,888.7	43,198.2	248,116.9	1,197.3
1987	968,403.7	72,988.2	*22,003.3	**50,985.0	895,415.5	586,818.4	50,076.7	257,336.4	1,183.9
1988	970,685.0	80,656.6	*24,448.4	**56,208.2	890,028.4	561,594.9	58,159.5	269,035.7	1,238.4
1989	911,232.2	95,682.3	*27,118.9	**68,563.4	815,549.9	483,888.6	58,307.6	272,157.4	1,196.3
1990	+932,151.4	+98,607.6	*24,330.8	**74,276.9	833,543.8	479,133.6	60,929.9	292,393.3	1,087.0
1991	+938,671.3	+90,272.3	*17,102.6	**73,169.7	848,399.0	502,133.0	55,339.1	289,959.0	968.0
1992	+949,344.7	+92,660.1	*21,027.6	**71,632.5	856,684.6	502,311.0	55,784.6	297,638.7	950.3
1993	+882,605.8	+92,947.9	*26,106.8	**66,841.1	789,657.9	448,404.2	56,438.1	283,893.6	921.9
1994	909,405.0	94,485.8	*28,299.6	**66,186.2	814,919.2	457,600.7	58,263.4	297,762.4	1,292.7
1995	914,362.5	106,634.9	*31,656.5	**74,978.4	807,727.7	440,345.1	59,703.8	306,329.1	1,349.6
1996	870,193.4	105,506.9	*34,259.9	**71,247.0	764,686.5	408,086.1	58,335.3	296,790.6	1,474.5
1997	813,800.1	106,390.2	*32,535.9	**73,854.3	707,409.9	349,843.0	62,165.9	294,023.0	1,378.1
<b>1998</b>	<b>780,449.8</b>	<b>107,704.5</b>	<b>*34,136.7</b>	<b>**73,567.8</b>	<b>672,795.3</b>	<b>314,863.9</b>	<b>61,654.3</b>	<b>294,896.4</b>	<b>1,380.7</b>
Tons*** (millions)									
1979	2,069.8	993.4	73.8	919.7	1,076.3	304.7	143.6	535.0	93.1
1980	1,995.3	921.4	60.6	860.8	1,073.9	329.6	115.1	535.0	94.2
1981	1,938.4	887.1	63.2	823.9	1,051.3	322.0	115.4	520.7	93.2
1982	1,773.9	819.7	50.4	769.3	954.2	311.1	72.1	495.5	75.6
1983	1,704.5	751.1	48.4	702.7	953.4	309.6	83.4	487.1	73.1
1984	1,832.6	803.3	58.8	744.6	1,029.3	307.7	98.0	542.5	81.1
1985	1,785.0	774.3	51.3	723.0	1,010.7	309.8	92.0	534.7	74.3
1986	1,870.5	837.2	45.8	791.4	1,033.2	308.0	87.4	560.5	77.4
1987	1,962.8	891.0	45.9	845.1	1,071.8	323.5	96.5	569.8	82.0
1988	2,082.9	976.2	52.5	923.7	1,106.6	325.2	109.7	588.1	83.7
1989	2,135.2	1,037.9	54.8	983.1	1,097.3	302.0	109.1	606.0	80.2
1990	2,159.3	1,041.6	50.5	991.1	1,117.8	298.6	110.2	622.5	86.4
1991	2,087.6	1,013.6	41.8	971.8	1,074.0	294.5	103.4	600.4	75.6
1992	2,127.9	1,037.5	45.5	992.0	1,090.4	285.1	107.4	621.0	76.8
1993	2,123.3	1,060.0	43.6	1,016.4	1,063.2	271.7	109.8	607.3	74.4
1994	2,208.8	1,115.7	50.1	1,065.6	1,093.1	277.0	114.8	618.4	82.9
1995	2,233.5	1,147.4	51.9	1,095.5	1,086.2	266.6	116.1	620.3	83.1
1996	2,276.7	1,183.4	56.4	1,127.0	1,093.4	267.4	114.9	++622.1	++89.0
1997	2,326.9	1,220.6	57.7	1,162.9	1,106.3	263.1	122.7	630.6	89.8
<b>1998</b>	<b>2,332.3</b>	<b>1,245.4</b>	<b>62.4</b>	<b>1,183.0</b>	<b>1,086.9</b>	<b>249.6</b>	<b>122.2</b>	<b>625.0</b>	<b>90.1</b>

\* Based on distance transported on Great Lakes and St. Lawrence River to International Boundary at St. Regis, Quebec, Canada

\*\* Based on distance transported on United States Waterways from entrance channels to ports and waterways.

\*\*\* Excludes intra-territory traffic for which ton-miles were not compiled.

+ An error in the routing network caused the coastal port foreign ton-mile totals to be slightly inflated for calendar years 1990-1993. The corrections are reflected in these revised totals. Ton-miles for individual ports were not affected.

++ Beginning in 1996, fish was excluded.

Table 1-4: TOTAL WATERBORNE COMMERCE, 1979-1998  
 TON-MILES, SHORT TONS AND AVERAGE HAUL BY TYPE OF TRAFFIC  
 (continued)

Year	Grand Total	Foreign			Domestic				
		Total	Great Lakes Ports	Coastal Ports	Total	Coastwise	Lakewise	Internal	Intraport
Average Haul*** (miles)									
1979	450.2	103.8	585.0	65.2	770.0	1,747.1	543.1	405.8	15.1
1980	509.2	102.3	555.8	70.4	858.4	1,914.8	536.4	405.0	16.9
1981	528.1	106.2	558.4	71.5	884.0	1,971.4	538.5	444.0	14.1
1982	543.9	95.7	539.1	66.6	929.0	2,034.0	494.2	438.0	14.7
1983	580.3	92.7	502.1	64.4	964.6	2,098.4	516.4	463.2	15.0
1984	527.4	98.4	548.7	62.5	862.5	1,930.5	508.0	448.0	14.3
1985	540.5	92.9	529.5	61.9	883.5	1,972.2	523.8	435.2	14.8
1986	505.2	85.4	528.8	59.7	845.3	1,885.9	494.5	442.7	15.5
1987	493.3	81.9	479.1	60.3	835.4	1,813.9	519.0	451.6	14.4
1988	464.9	82.6	465.8	60.8	804.3	1,727.0	530.3	457.5	14.8
1989	426.8	92.3	494.5	69.7	743.2	1,602.1	534.5	449.1	14.9
1990	+431.7	+94.7	482.2	+74.9	745.7	1,604.4	553.1	469.7	12.6
1991	+449.6	+89.1	409.2	+75.3	789.9	1,704.8	535.0	483.0	12.8
1992	+446.1	+89.3	462.2	+72.2	785.7	1,761.7	519.4	479.3	12.4
1993	+415.7	+87.7	598.2	+65.8	742.7	1,650.3	513.8	467.5	12.4
1994	411.7	84.7	564.5	62.1	745.5	1,651.8	507.6	481.5	15.6
1995	409.4	92.9	610.4	68.4	743.6	1,651.6	514.1	493.8	16.2
1996	382.2	89.2	607.9	63.2	699.4	1,526.2	507.8	477.1	16.6
1997	349.7	87.2	563.5	63.5	639.5	1,329.5	506.5	466.3	15.3
<b>1998</b>	<b>334.7</b>	<b>86.5</b>	<b>546.8</b>	<b>62.2</b>	<b>619.0</b>	<b>1,261.3</b>	<b>504.7</b>	<b>471.8</b>	<b>15.3</b>

+ An error in the routing network caused the coastal port foreign ton-mile totals to be slightly inflated for calendar years 1990-1993. The corrections are reflected in these revised totals. Ton-miles for individual ports were not affected.

\*\*\* Excludes intra-territory traffic for which ton-miles were not compiled.

Figure 1-3  
TOTAL WATERBORNE COMMERCE, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

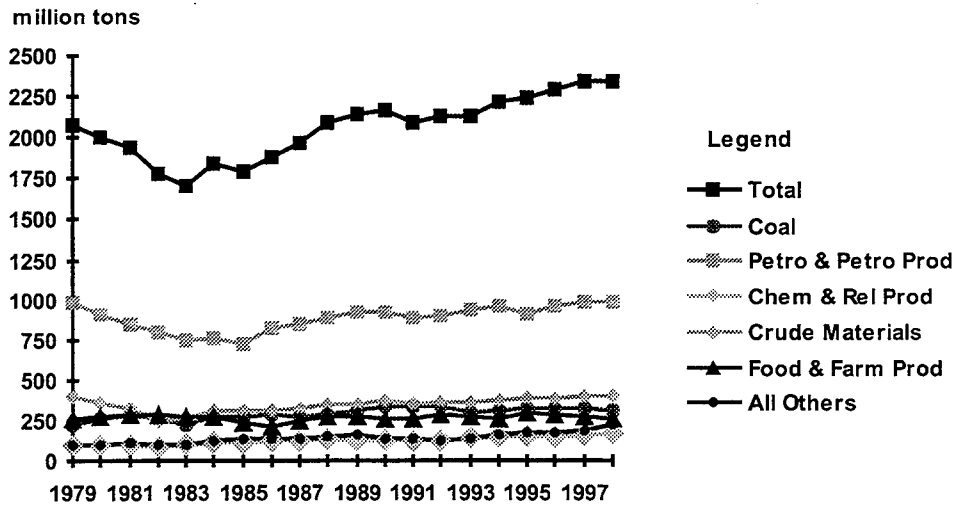


Table 1-5: TOTAL WATERBORNE COMMERCE, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>2,073.8</b>	<b>1,998.9</b>	<b>1,941.6</b>	<b>1,776.7</b>	<b>1,707.7</b>	<b>1,836.0</b>	<b>1,788.4</b>	<b>1,874.4</b>	<b>1,967.5</b>	<b>2,088.0</b>
Coal	227.4	256.4	284.6	263.1	229.8	271.8	273.9	283.9	271.3	292.2
Petro & Petro Prod	980.8	903.2	842.4	799.6	748.5	753.5	726.4	815.6	847.7	887.7
Chem & Rel Prod	99.4	101.3	94.8	84.7	96.7	115.1	114.3	118.6	129.0	138.8
Crude Materials	403.5	356.9	325.2	249.2	260.0	307.1	307.1	308.4	327.1	352.0
Primary Manuf Goods	64.0	58.5	61.2	51.3	56.4	69.3	76.9	76.0	76.5	79.5
Food & Farm Prod	257.0	278.3	285.6	279.9	270.3	268.3	231.0	215.2	254.1	273.4
All Manuf Equip	22.7	23.6	23.7	21.2	23.9	25.1	29.8	31.4	33.6	33.8
Other	18.9	20.7	24.0	27.7	22.1	25.8	29.1	25.5	28.2	30.5

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>2,140.4</b>	<b>2,163.9</b>	<b>2,092.1</b>	<b>2,132.1</b>	<b>2,128.2</b>	<b>2,214.8</b>	<b>2,240.4</b>	<b>2,284.1</b>	<b>2,333.1</b>	<b>2,339.5</b>
Coal	304.8	339.9	336.8	332.2	300.4	314.1	324.5	328.7	326.0	316.1
Petro & Petro Prod	922.7	923.5	886.0	899.6	930.6	961.3	907.1	954.4	988.2	987.4
Chem & Rel Prod	127.8	123.8	125.1	128.7	131.6	146.9	152.9	152.3	156.6	156.5
Crude Materials	353.2	374.9	348.9	364.0	360.6	369.3	381.7	388.7	400.9	394.3
Primary Manuf Goods	77.8	76.0	71.8	70.1	76.8	105.0	106.3	108.9	117.0	141.0
Food & Farm Prod	276.0	267.5	263.9	280.4	269.3	225.8	303.2	*284.9	271.7	265.7
All Manuf Equip	38.4	42.2	43.6	49.0	51.1	54.9	57.8	59.0	66.1	71.8
Other	39.7	16.5	16.0	8.0	7.9	7.3	6.9	7.2	6.6	6.6

\* Beginning in 1996, fish was excluded for internal and intraport domestic traffic.

Figure 1-4  
 FOREIGN WATERBORNE COMMERCE, 1979-1998  
 IMPORTS AND EXPORTS  
 (million short tons)

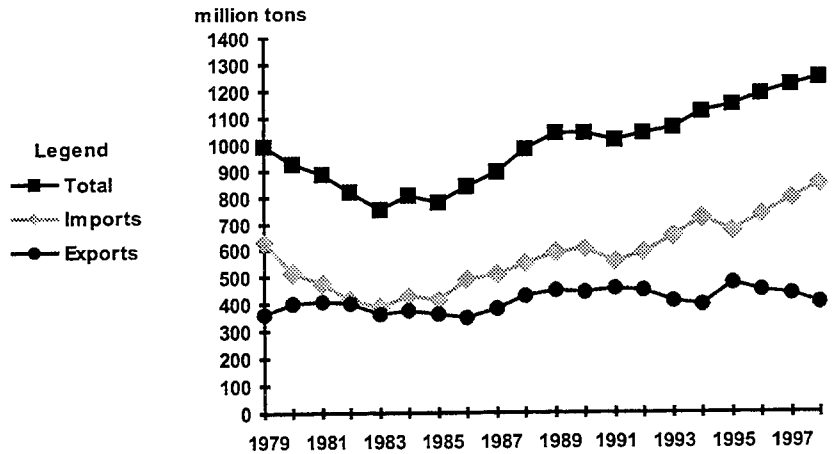


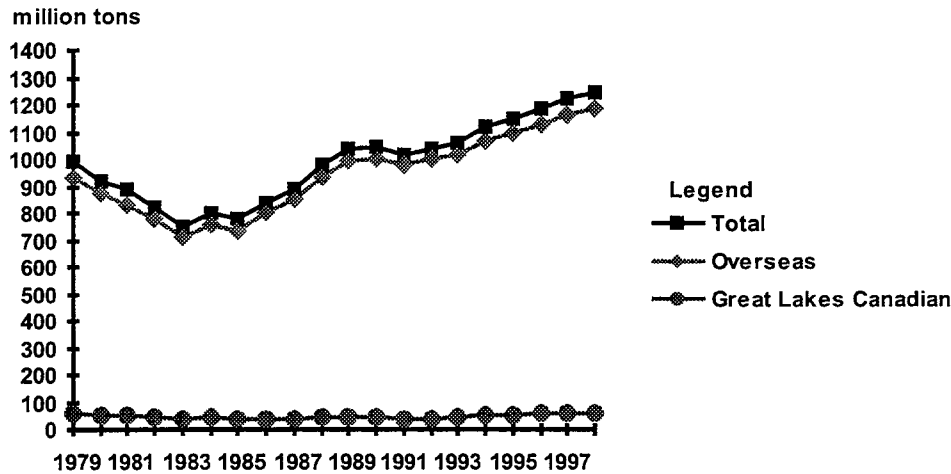
Table 1-6: FOREIGN WATERBORNE COMMERCE, 1979-1998  
 IMPORTS AND EXPORTS  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>993.4</b>	<b>921.4</b>	<b>887.1</b>	<b>819.7</b>	<b>751.1</b>	<b>803.3</b>	<b>774.3</b>	<b>837.2</b>	<b>891.0</b>	<b>976.2</b>
Imports	633.0	517.5	477.2	416.6	387.8	427.1	412.7	486.1	507.7	549.9
Exports	360.4	403.9	409.9	403.1	363.3	376.2	361.6	351.2	383.3	426.3

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>1,037.9</b>	<b>1,041.6</b>	<b>1,013.6</b>	<b>1,037.5</b>	<b>1,060.0</b>	<b>1,115.7</b>	<b>1,147.4</b>	<b>1,183.4</b>	<b>1,220.6</b>	<b>1,245.4</b>
Imports	589.5	600.0	555.4	586.7	648.8	719.5	672.7	732.6	788.3	840.7
Exports	448.4	441.6	458.2	450.8	411.3	396.2	474.7	450.8	432.3	404.7

*Figure 1-5*  
**FOREIGN WATERBORNE COMMERCE, 1979-1998**  
**TOTAL, OVERSEAS AND GREAT LAKES CANADIAN TRAFFIC**  
 (million short tons)



*Table 1-7: FOREIGN WATERBORNE COMMERCE, 1979-1998*  
**TOTAL, OVERSEAS AND GREAT LAKES CANADIAN TRAFFIC**  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>993.4</b>	<b>921.4</b>	<b>887.1</b>	<b>819.7</b>	<b>751.1</b>	<b>803.3</b>	<b>774.3</b>	<b>837.2</b>	<b>891.0</b>	<b>976.2</b>
Overseas	936.0	870.8	833.3	778.5	711.3	758.1	734.7	802.4	854.2	932.8
Great Lakes Canadian	57.4	50.6	53.8	41.2	39.9	45.2	39.6	34.8	36.8	43.4

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>1,037.9</b>	<b>1,041.6</b>	<b>1,013.6</b>	<b>1,037.5</b>	<b>1,060.0</b>	<b>1,115.7</b>	<b>1,147.4</b>	<b>1,183.4</b>	<b>1,220.6</b>	<b>1,245.4</b>
Overseas	992.4	997.5	976.3	997.5	1,016.4	1,065.6	1,095.5	1,127.0	1,162.9	1,183.0
Great Lakes Canadian	45.5	44.1	37.3	39.9	43.6	50.1	51.9	56.4	57.7	62.4



Figure 1-6  
 DOMESTIC WATERBORNE COMMERCE,  
 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

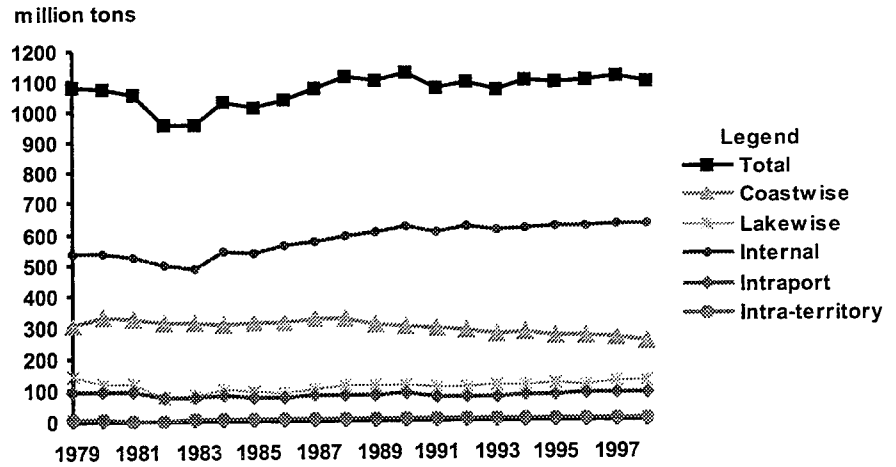


Table 1-8: DOMESTIC WATERBORNE COMMERCE, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>1,080.3</b>	<b>1,077.5</b>	<b>1,054.5</b>	<b>957.0</b>	<b>956.5</b>	<b>1,032.7</b>	<b>1,014.1</b>	<b>1,037.2</b>	<b>1,076.5</b>	<b>1,111.8</b>
Coastwise	304.7	329.6	322.0	311.1	309.6	307.7	309.8	308.0	323.5	325.2
Lakewise	143.6	115.1	115.4	72.1	83.4	98.0	92.0	87.4	96.5	109.7
Internal	535.0	535.0	520.7	495.5	487.1	542.5	534.7	560.5	569.8	588.1
Inraport	93.1	94.2	93.2	75.6	73.1	81.1	74.3	77.4	82.0	83.7
Intra-territory	4.0	3.6	3.1	2.8	3.2	3.4	3.4	4.0	4.7	5.1

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>1,102.5</b>	<b>1,122.3</b>	<b>1,078.6</b>	<b>1,094.6</b>	<b>1,068.2</b>	<b>1,099.0</b>	<b>1,093.0</b>	<b>1,100.7</b>	<b>1,112.5</b>	<b>1,094.1</b>
Coastwise	302.0	298.6	294.5	285.1	271.7	277.0	266.6	267.4	263.1	249.6
Lakewise	109.1	110.2	103.4	107.4	109.9	114.8	116.1	114.9	122.7	122.2
Internal	606.0	622.6	600.4	621.0	607.3	618.4	620.3	*622.1	630.6	625.0
Inraport	80.2	86.4	75.6	76.8	74.4	82.9	83.1	*89.0	89.8	90.1
Intra-territory	5.2	4.5	4.6	4.2	5.0	5.9	6.9	7.3	6.3	7.2

\* Beginning in 1996, fish was excluded.

*Figure 1-7*  
**DOMESTIC WATERBORNE COMMERCE, 1979-1998**  
**TON-MILES BY TYPE OF TRAFFIC**  
 (billion short ton-miles)

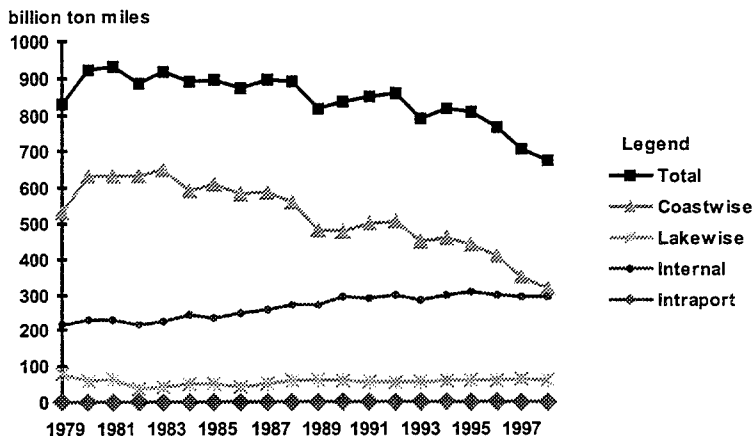


Table 1-9: DOMESTIC WATERBORNE COMMERCE, 1979-1998  
**TON-MILES BY TYPE OF TRAFFIC**  
 (billion short ton-miles)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>828.8</b>	<b>921.8</b>	<b>929.4</b>	<b>886.5</b>	<b>919.6</b>	<b>887.7</b>	<b>893.0</b>	<b>873.4</b>	<b>895.4</b>	<b>890.0</b>
Coastwise	532.3	631.1	634.8	632.7	649.7	593.9	611.0	580.9	586.8	561.6
Lakewise	78.0	61.7	62.1	35.6	43.1	49.8	48.2	43.2	50.1	58.2
Internal	217.1	227.3	231.2	217.0	225.6	242.9	232.7	248.1	257.3	269.0
Intraport	1.4	1.6	1.3	1.1	1.1	1.2	1.1	1.2	1.2	1.2

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>815.5</b>	<b>833.5</b>	<b>848.4</b>	<b>856.7</b>	<b>789.7</b>	<b>814.9</b>	<b>807.7</b>	<b>764.7</b>	<b>707.4</b>	<b>672.8</b>
Coastwise	483.9	479.1	502.1	502.3	448.4	457.6	440.3	408.1	349.8	314.9
Lakewise	58.3	60.9	55.3	55.8	56.4	58.3	59.7	58.3	62.2	61.7
Internal	272.2	292.4	290.0	297.6	283.9	297.8	306.3	296.8	294.0	294.9
Intraport	1.2	1.1	1.0	1.0	0.9	1.3	1.3	1.5	1.4	1.4

Figure 1-8  
 DOMESTIC WATERBORNE COMMERCE, 1979-1998  
 AVERAGE HAUL BY TYPE OF TRAFFIC  
 (miles per short ton)

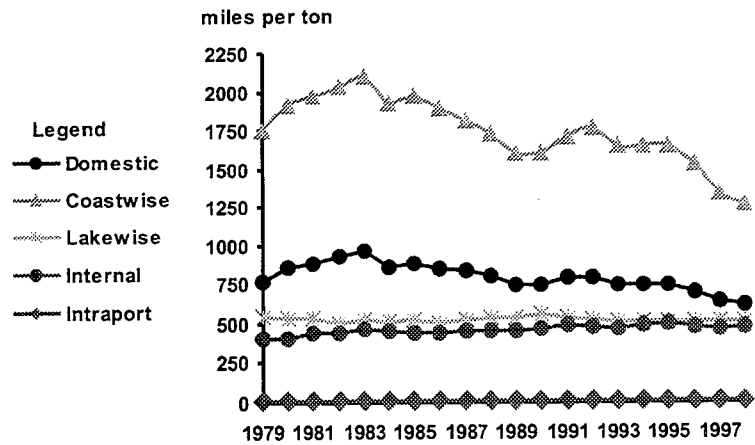


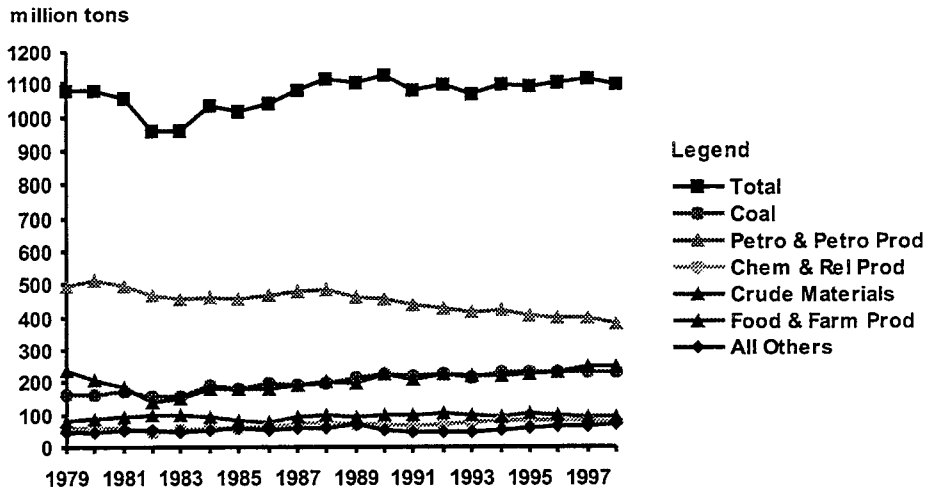
Table 1-10: DOMESTIC WATERBORNE COMMERCE, 1979-1998  
 AVERAGE HAUL BY TYPE OF TRAFFIC  
 (miles per short ton)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Domestic	770.0	858.4	884.0	929.0	964.6	862.5	883.5	845.3	835.4	804.3
Coastwise	1,747.1	1,914.8	1,971.4	2,034.0	2,098.4	1,930.5	1,972.2	1,885.9	1,813.9	1,727.0
Lakewise	543.1	536.4	538.5	494.2	516.4	508.0	523.8	494.5	519.0	530.3
Internal	405.8	405.0	444.0	438.0	463.2	448.0	435.2	442.7	451.6	457.5
Intraport	15.1	16.9	14.1	14.7	15.0	14.3	14.8	15.5	14.4	14.8

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Domestic	743.2	745.7	789.9	785.7	742.7	745.5	743.6	699.4	639.5	619.0
Coastwise	1,602.1	1,604.4	1,704.8	1,761.7	1,650.4	1,651.8	1,651.6	1,526.2	1,329.5	1,261.3
Lakewise	534.5	553.1	535.0	519.4	514.0	507.6	514.1	507.8	506.5	504.7
Internal	449.1	469.6	483.0	479.3	467.5	481.5	493.8	477.1	466.3	471.8
Intraport	14.9	12.6	12.8	12.4	12.4	15.6	16.2	16.6	15.3	15.3

*Figure 1-9*  
**DOMESTIC WATERBORNE COMMERCE, 1979-1998**  
**BY COMMODITY GROUP**  
(million short tons)



*Table 1-11: DOMESTIC WATERBORNE COMMERCE, 1979-1998*  
**BY COMMODITY GROUP**  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>1,080.3</b>	<b>1,077.5</b>	<b>1,054.5</b>	<b>957.0</b>	<b>956.5</b>	<b>1,032.7</b>	<b>1,014.1</b>	<b>1,037.2</b>	<b>1,076.5</b>	<b>1,111.8</b>
Coal	160.5	164.1	171.5	156.5	155.5	189.5	179.8	196.7	190.6	196.8
Petro & Petro Prod	495.4	513.4	495.2	469.2	458.0	460.6	453.5	466.8	480.3	487.2
Chem & Rel Prod	60.6	59.5	56.3	47.5	52.8	60.1	59.7	63.7	70.3	73.3
Crude Materials	238.8	205.4	187.4	136.3	149.9	180.5	181.4	179.5	189.2	200.5
Primary Manuf Goods	24.1	22.4	23.4	18.8	20.1	22.9	25.2	24.8	24.3	24.6
Food & Farm Prod	78.5	88.7	93.3	98.3	95.9	91.2	82.1	77.8	90.2	95.3
All Manuf Equip	4.3	4.3	4.1	3.4	3.0	3.1	4.3	3.4	4.4	5.3
Other	22.5	24.1	23.2	27.0	21.3	24.9	28.1	24.5	27.1	28.9

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>1,102.5</b>	<b>1,122.3</b>	<b>1,078.6</b>	<b>1,094.6</b>	<b>1,068.2</b>	<b>1,099.0</b>	<b>1,093.0</b>	<b>1,100.7</b>	<b>1,112.5</b>	<b>1,094.1</b>
Coal	210.9	227.1	219.8	223.5	214.7	231.3	223.5	229.9	232.3	229.4
Petro & Petro Prod	463.5	457.7	440.7	429.4	416.9	420.8	403.6	398.5	396.7	382.5
Chem & Rel Prod	68.6	67.4	65.4	70.1	72.8	78.5	79.4	80.2	81.0	77.7
Crude Materials	196.2	222.4	206.7	223.0	218.6	220.9	226.4	233.2	246.5	245.7
Primary Manuf Goods	24.9	25.5	25.4	25.8	28.5	35.7	36.8	37.7	37.2	41.2
Food & Farm Prod	94.7	98.6	98.2	105.3	98.3	93.3	103.4	*98.0	93.7	91.5
All Manuf Equip	5.3	8.1	8.1	10.6	11.6	12.5	14.6	17.2	19.5	20.8
Other	38.4	15.5	14.4	6.9	6.8	5.8	5.5	6.0	5.6	5.3

\* Beginning in 1996, fish was excluded for internal and intraport domestic traffic.



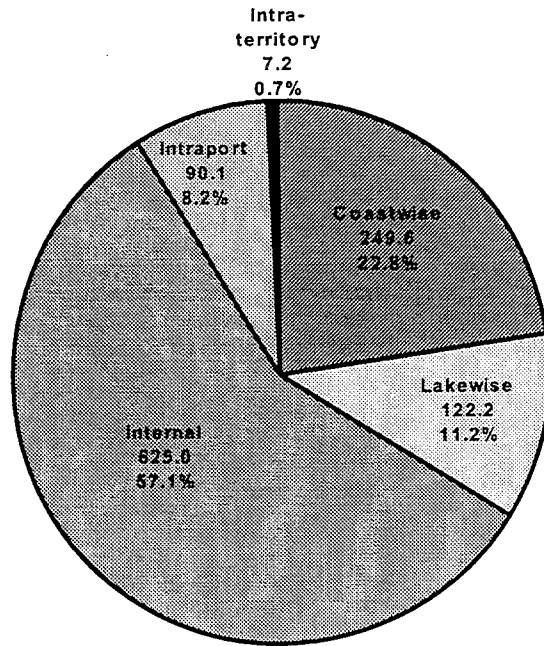
*Table 1-12: DOMESTIC COMMERCE, 1997-1998  
 COMPARED BY TYPE OF TRAFFIC  
 BARGE AND SELF-PROPELLED VESSELS  
 (million short tons)*

	1997	1998	% Change
<b>Domestic Traffic</b>	<b>1,112.5</b>	<b>1,094.1</b>	<b>-1.7</b>
Coastwise	263.1	249.6	-5.1
Lakewise	122.7	122.2	-0.5
Internal	630.6	625.0	-0.9
Inraport	89.8	90.1	0.3
Intra-territory	6.3	7.2	15.1
<b>Barge Traffic</b>	<b>820.4</b>	<b>816.8</b>	<b>-0.4</b>
Coastwise	113.8	114.7	0.8
Lakewise	10.8	13.5	25.7
Internal	605.8	597.8	-1.3
Inraport	85.2	86.5	1.5
Intra-territory	4.9	4.3	-12.1
<b>Self-Propelled Traffic</b>	<b>292.1</b>	<b>277.3</b>	<b>-5.1</b>
Coastwise	149.4	134.9	-9.7
Lakewise	112.0	108.6	-3.0
Internal	24.8	27.3	10.1
Inraport	4.6	3.6	-22.4
Intra-territory	1.4	2.9	112.2

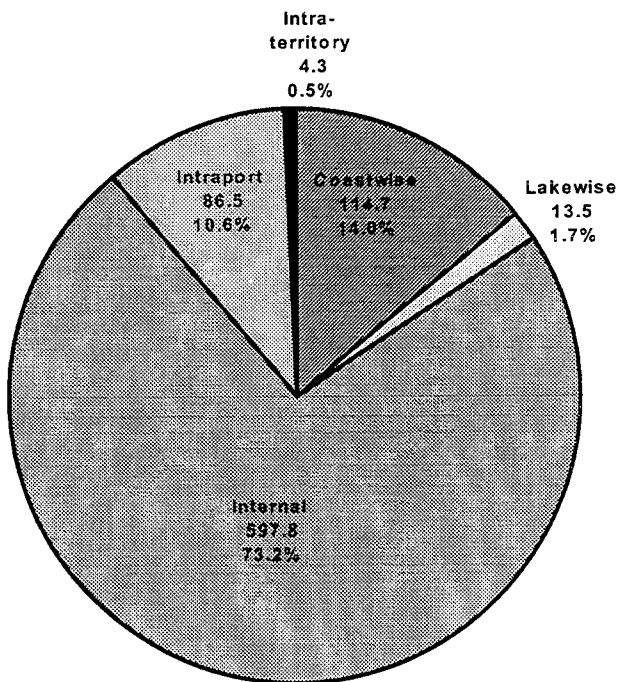
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Figure 1-10  
 DOMESTIC COMMERCE, 1998  
 COMPARED BY TYPE OF TRAFFIC, BARGE AND SELF-PROPELLED VESSELS  
 (million short tons and percentage of short tons)

**Domestic Traffic**



**Barge Traffic**



**Self-Propelled Traffic**

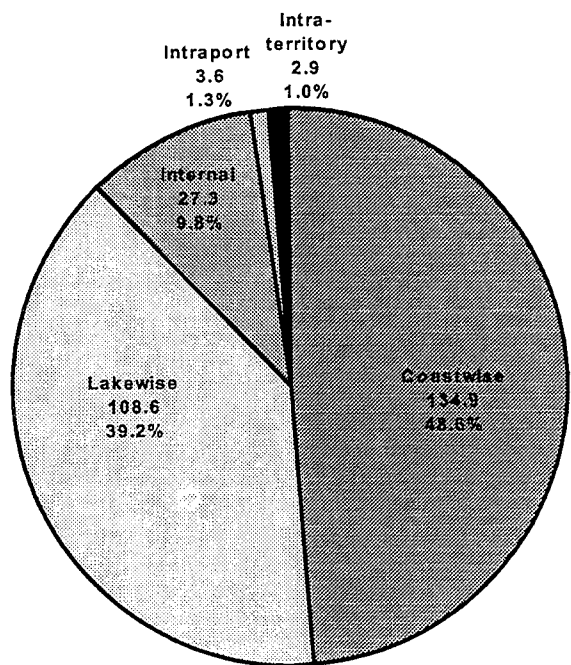


TABLE 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1998  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
<b>Total, all commodities</b>	<b>61,051,118</b>	<b>7.3</b>	<b>41,585,425</b>	<b>10.3</b>	<b>90,513,380</b>	<b>10.8</b>	<b>21,060,272</b>	<b>5.2</b>
<b>Total coal</b>	<b>704,778</b>	<b>5.9</b>	<b>19,472,414</b>	<b>26.1</b>	—	—	<b>42,838</b>	<b>0.1</b>
1100 coal lignite	571,594	7.0	19,219,182	25.9	—	—	9,248	0.0
1200 coal coke	133,184	3.4	253,232	61.4	—	—	33,590	8.2
<b>Total petroleum and petroleum products</b>	<b>20,328,737</b>	<b>3.7</b>	<b>3,911,484</b>	<b>7.4</b>	<b>75,306,232</b>	<b>13.6</b>	<b>8,638,064</b>	<b>16.3</b>
<b>Subtotal crude petroleum</b>	<b>8,539,901</b>	<b>2.0</b>	<b>59,725</b>	<b>1.9</b>	<b>72,438,571</b>	<b>16.7</b>	—	—
2100 crude petroleum	8,539,901	2.0	59,725	1.9	72,438,571	16.7	—	—
<b>Subtotal petroleum products</b>	<b>11,788,836</b>	<b>9.9</b>	<b>3,851,759</b>	<b>7.7</b>	<b>2,867,661</b>	<b>2.4</b>	<b>8,638,064</b>	<b>17.4</b>
2211 gasoline	4,428,670	25.5	227,796	4.7	23,534	0.1	3,067,237	63.5
2221 kerosene	136,939	2.2	246,762	27.6	239,626	3.9	25,624	2.9
2330 distillate fuel oil	4,025,310	17.3	405,205	8.8	448,846	1.9	1,074,769	23.4
2340 residual fuel oil	1,491,255	4.2	679,463	7.3	344,168	1.0	3,360,404	36.2
2350 lube oil & greases	289,017	2.3	118,549	8.4	37	0.0	41,924	3.0
2410 petro. jelly & waxes	694	0.5	9	0.0	—	—	362	0.5
2429 naphtha & solvents	494,441	3.6	900,244	23.2	1,335,780	9.8	416,844	10.8
2430 asphalt, tar & pitch	112,368	19.3	48,846	1.5	—	—	204,213	6.1
2540 petroleum coke	799,732	19.2	1,186,292	6.1	428,502	10.3	160,380	0.8
2640 liquid natural gas	10,410	0.2	38,593	1.8	47,168	0.9	286,307	13.4
<b>Total chemicals and related products</b>	<b>2,677,406</b>	<b>9.8</b>	<b>1,006,619</b>	<b>2.0</b>	<b>749,486</b>	<b>2.7</b>	<b>2,982,002</b>	<b>5.8</b>
<b>Subtotal fertilizers</b>	<b>537,483</b>	<b>10.6</b>	<b>219,974</b>	<b>1.2</b>	<b>201,513</b>	<b>4.0</b>	<b>516,172</b>	<b>2.9</b>
3110 nitrogenous fert.	45,730	1.5	22,042	1.1	193,164	6.2	214,159	10.8
3120 phosphatic fert.	—	—	—	—	—	—	—	—
3130 potassic fert.	488,828	38.3	23	0.0	116	0.0	48,623	1.8
3190 fert. & mixes nec	2,925	0.5	197,909	1.6	8,233	1.5	253,390	2.0
<b>Subtotal other chemicals and related products</b>	<b>2,139,923</b>	<b>9.6</b>	<b>786,645</b>	<b>2.3</b>	<b>547,973</b>	<b>2.4</b>	<b>2,465,830</b>	<b>7.4</b>
3211 acyclic hydrocarbons	650	0.1	2,319	0.3	—	—	297,266	33.6
3212 benzene & toluene	101,720	19.8	95,721	59.0	—	—	36,196	22.3
3219 other hydrocarbons	208,783	38.7	10,262	0.2	820	0.2	945,229	20.8
3220 alcohols	365,124	9.6	22,547	1.1	64,732	1.7	161,820	7.6
3230 carboxylic acids	1,573	0.2	1	0.0	87,776	12.5	102,071	4.9
3240 nitrogen func. comp.	2,374	0.6	108	0.0	8,287	2.2	21,188	1.4
3250 organo - inorg. comp.	35	0.0	6,326	1.0	64	0.0	1,301	0.2
3260 organic comp. nec	763,095	16.1	20,211	1.0	57,596	1.2	601,673	29.8
3271 sulphur (liquid)	—	—	—	—	—	—	—	—
3272 sulphuric acid	348,881	41.5	—	—	54,699	6.5	—	—
3273 ammonia	189,138	5.4	—	—	159,435	4.5	—	—
3274 sodium hydroxide	64,254	8.8	487,360	15.7	27,093	3.7	103,164	3.3
3275 inorg. elem., oxides, & halogen salts	11,693	1.4	25,127	2.2	8,188	1.0	44,472	3.8
3276 metallic salts	40,346	4.0	107,837	2.4	31,464	3.1	2,610	0.1
3279 inorganic chem. nec	1,561	0.4	—	—	293	0.1	4,985	10.3
3281 radioactive material	4	0.0	—	—	—	—	—	—
3282 pigments & paints	3,681	1.6	244	0.0	998	0.4	7,581	1.3
3283 coloring mat. nec	64	0.0	26	0.0	2,248	1.7	780	1.0
3284 medicines	1,338	1.3	103	0.1	300	0.3	357	0.2
3285 perfumes & cleansers	742	0.3	795	0.1	9,559	3.6	2,899	0.4
3286 plastics	11,263	0.6	4,958	0.1	23,571	1.3	33,050	0.6
3291 pesticides	7	0.0	16	0.0	179	0.2	632	0.3
3292 starches, gluten, glue	376	0.1	415	0.1	1,751	0.5	827	0.3
3293 explosives	400	0.5	2	0.0	1	0.0	1	0.0
3297 chemical additives	24	0.0	93	0.0	28	0.0	880	0.1
3298 wood & resin chem.	12,142	18.6	28	0.0	63	0.1	2,205	0.7
3299 chem. products nec	10,655	2.7	2,146	0.2	8,828	2.2	94,643	10.4
<b>Total crude materials, inedible except fuels</b>	<b>30,922,044</b>	<b>32.5</b>	<b>13,753,673</b>	<b>25.7</b>	<b>11,196,988</b>	<b>11.8</b>	<b>635,744</b>	<b>1.2</b>
<b>Subtotal forest products, wood and chips</b>	<b>1,256,466</b>	<b>28.3</b>	<b>551,452</b>	<b>3.3</b>	<b>12,370</b>	<b>0.3</b>	<b>10,045</b>	<b>0.1</b>
4110 rubber & gums	670	0.0	—	—	—	—	291	3.3
4150 fuel wood	3,480	12.3	—	—	24	0.1	134	0.2
4161 wood chips	116,230	64.9	319,380	3.8	—	—	—	—
4170 wood in the rough	329,887	82.8	231,105	4.0	37	0.0	5,501	0.1
4189 lumber	805,357	37.4	963	0.0	3,995	0.2	3,578	0.1
4190 forest products nec	842	0.3	4	0.0	8,314	3.1	541	1.0
<b>Subtotal pulp and waste paper</b>	<b>54,729</b>	<b>4.7</b>	<b>51,572</b>	<b>0.5</b>	<b>22</b>	<b>0.0</b>	<b>6,525</b>	<b>0.1</b>
4225 pulp & waste paper	54,729	4.7	51,572	0.5	22	0.0	6,525	0.1
<b>Subtotal soil, sand, gravel, rock and stone</b>	<b>13,069,974</b>	<b>48.0</b>	<b>4,524,197</b>	<b>74.8</b>	<b>8,921,146</b>	<b>32.8</b>	<b>334</b>	<b>0.0</b>
4310 building stone	6,601	4.5	24	0.0	862	0.6	264	0.2
4322 limestone	3,136,001	70.0	3,574,055	99.4	105	0.0	—	—
4323 gypsum	5,809,575	61.3	42,595	17.2	2,262,765	23.9	7	0.0
4327 phosphate rock	—	—	96,077	20.4	—	—	—	—
4331 sand & gravel	4,117,797	33.7	811,446	50.9	6,657,414	54.4	63	0.0
<b>Subtotal iron ore and scrap</b>	<b>10,296,721</b>	<b>50.7</b>	<b>6,348,172</b>	<b>61.7</b>	<b>24</b>	<b>0.0</b>	<b>419,173</b>	<b>4.1</b>
4410 iron ore	9,904,021	52.4	6,263,787	99.8	—	—	—	—
4420 iron & steel scrap	392,700	28.0	84,385	2.1	24	0.0	419,173	10.5
<b>Subtotal marine shells</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>63</b>	<b>2.0</b>	<b>11</b>	<b>0.7</b>
4515 marine shells	—	—	—	—	63	2.0	11	0.7
<b>Subtotal non-ferrous ores and scrap</b>	<b>211,903</b>	<b>1.0</b>	<b>1,322,831</b>	<b>35.8</b>	<b>63,014</b>	<b>0.3</b>	<b>150,183</b>	<b>4.1</b>
4630 copper ore	—	—	—	—	—	—	—	—
4650 aluminum ore	39,847	0.2	1,203,193	67.4	—	—	145,205	8.1



Table 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1998 (continued)  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
4670 manganese ore	—	—	—	—	39,880	10.3	2,664	2.4
4680 non-ferrous scrap	133,522	14.5	26	0.0	1,537	0.2	324	0.1
4690 non-ferrous ores nec	38,534	2.5	119,612	9.5	21,597	1.4	1,990	0.2
<b>Subtotal sulphur, clay and salt</b>	<b>1,136,307</b>	<b>43.0</b>	<b>347,030</b>	<b>6.4</b>	<b>578,105</b>	<b>21.9</b>	<b>48,516</b>	<b>0.9</b>
4741 sulphur, (dry)	—	—	—	—	575,787	71.4	42,442	4.4
4782 clay & refrac. mat.	1,136,307	61.9	347,030	7.8	2,318	0.1	6,074	0.1
<b>Subtotal slag</b>	<b>210,766</b>	<b>17.1</b>	<b>30,515</b>	<b>79.5</b>	<b>91,344</b>	<b>7.4</b>	—	—
4860 slag	210,766	17.1	30,515	79.5	91,344	7.4	—	—
<b>Subtotal other non-metal. min.</b>	<b>4,685,178</b>	<b>29.2</b>	<b>577,904</b>	<b>48.1</b>	<b>1,530,900</b>	<b>9.6</b>	<b>957</b>	<b>0.1</b>
4900 non-metal. min. nec	4,685,178	29.2	577,904	48.1	1,530,900	9.6	957	0.1
<b>Total primary manufactured goods</b>	<b>5,466,162</b>	<b>6.3</b>	<b>365,924</b>	<b>2.8</b>	<b>1,991,157</b>	<b>2.3</b>	<b>228,338</b>	<b>1.7</b>
<b>Subtotal paper products</b>	<b>1,031,018</b>	<b>23.0</b>	<b>6,849</b>	<b>0.1</b>	<b>8,893</b>	<b>0.2</b>	<b>92,731</b>	<b>1.2</b>
5110 newsprint	920,892	63.4	—	—	163	0.0	5,477	0.7
5120 paper & paperboard	107,622	4.0	6,148	0.1	3,517	0.1	85,126	1.3
5190 paper products nec	2,504	0.7	701	0.1	5,213	1.4	2,128	0.4
<b>Subtotal lime, cement and glass</b>	<b>3,753,833</b>	<b>13.4</b>	<b>225,893</b>	<b>14.1</b>	<b>38,637</b>	<b>0.1</b>	<b>18,807</b>	<b>1.2</b>
5210 lime	7,041	29.7	—	—	20	0.1	—	—
5220 cement & concrete	3,738,296	16.6	224,680	61.3	6,973	0.0	4,708	1.3
5240 glass & glass prod.	578	0.1	297	0.1	13,712	1.4	8,442	1.8
5290 misc. mineral prod.	7,918	0.2	916	0.1	17,932	0.4	5,657	0.7
<b>Subtotal primary iron and steel products</b>	<b>381,648</b>	<b>0.8</b>	<b>129,926</b>	<b>8.8</b>	<b>1,923,834</b>	<b>4.3</b>	<b>93,206</b>	<b>6.3</b>
5312 pig iron	368,396	5.4	5	0.0	—	—	8,075	13.3
5315 ferro alloys	66	0.0	6	0.0	78,399	5.1	41	0.2
5320 i&s primary forms	230	0.0	27,366	39.1	1,646,237	24.1	935	1.3
5330 i&s plates & sheets	6,178	0.0	72,086	14.4	38,598	0.2	30,645	6.1
5360 i&s bars & shapes	5,815	0.1	479	0.3	71,062	1.0	8,397	5.6
5370 i&s pipe & tube	450	0.0	29,953	4.7	83,866	3.1	44,322	7.0
5390 primary i&s nec	513	0.1	31	0.1	5,672	0.6	791	2.4
<b>Subtotal primary non-ferrous metal products</b>	<b>48,834</b>	<b>0.7</b>	<b>3,002</b>	<b>0.2</b>	<b>19,418</b>	<b>0.3</b>	<b>19,563</b>	<b>1.3</b>
5421 copper	286	0.0	52	0.0	1,139	0.2	46	0.0
5422 aluminum	37,430	2.3	701	0.1	725	0.0	7,318	1.5
5429 smelted prod. nec	527	0.1	1,626	1.2	3,117	0.5	707	0.5
5480 fab. metal products	10,591	0.3	623	0.1	14,437	0.4	11,492	1.6
<b>Subtotal primary wood products</b>	<b>250,829</b>	<b>12.6</b>	<b>254</b>	<b>0.0</b>	<b>375</b>	<b>0.0</b>	<b>4,031</b>	<b>0.6</b>
5540 primary wood prod.	250,829	12.6	254	0.0	375	0.0	4,031	0.6
<b>Total food and farm products</b>	<b>843,370</b>	<b>2.9</b>	<b>2,878,374</b>	<b>2.0</b>	<b>641,814</b>	<b>2.2</b>	<b>8,278,565</b>	<b>5.7</b>
<b>Subtotal fish</b>	<b>16,261</b>	<b>1.4</b>	<b>39,707</b>	<b>5.6</b>	<b>44,262</b>	<b>3.8</b>	<b>1,404</b>	<b>0.2</b>
6134 fish (not shellfish)	13,871	2.1	38,879	6.1	35,395	5.2	910	0.1
6136 shellfish	2,390	0.5	828	1.1	8,867	1.8	494	0.7
<b>Subtotal grain</b>	<b>679,105</b>	<b>37.4</b>	<b>1,659,672</b>	<b>2.1</b>	<b>205</b>	<b>0.0</b>	<b>6,331,992</b>	<b>7.8</b>
6241 wheat	306,353	99.5	410,322	1.4	78	0.0	1,204,411	4.1
6344 corn	—	—	1,248,955	2.9	77	0.1	3,570,021	8.2
6442 rice	—	—	395	0.0	50	0.0	150,845	4.1
6443 barley & rye	264,389	85.4	—	—	—	—	64	0.5
6445 oats	108,363	13.0	—	—	—	—	1,406,651	41.4
6447 sorghum grains	—	—	—	—	—	—	—	—
<b>Subtotal oilseeds</b>	<b>900</b>	<b>0.3</b>	<b>1,120,236</b>	<b>5.2</b>	<b>1,923</b>	<b>0.7</b>	<b>1,293,363</b>	<b>6.0</b>
6521 peanuts	—	—	—	—	88	0.1	360	0.4
6522 soybeans	474	2.1	1,120,173	5.5	—	—	1,292,709	6.3
6534 flaxseed	46	24.1	—	—	—	—	—	—
6590 oilseeds nec	380	0.2	63	0.0	1,835	1.0	294	0.0
<b>Subtotal vegetable products</b>	<b>89,347</b>	<b>3.1</b>	<b>2,073</b>	<b>0.0</b>	<b>16,664</b>	<b>0.6</b>	<b>329,549</b>	<b>6.0</b>
6653 vegetable oils	12,720	0.9	340	0.0	1,779	0.1	325,410	10.7
6654 vegetables & prod.	76,627	4.9	1,733	0.1	14,885	1.0	4,139	0.2
<b>Subtotal processed grain and animal feed</b>	<b>10,251</b>	<b>1.1</b>	<b>2,977</b>	<b>0.0</b>	<b>13,384</b>	<b>1.5</b>	<b>31,940</b>	<b>0.1</b>
6746 wheat flour	2,461	20.3	19	0.0	86	0.7	18,591	3.1
6747 grain mill products	5,515	1.1	1,008	0.2	10,034	2.0	1,450	0.2
6781 hay & fodder	1,384	11.2	—	—	—	—	—	—
6782 animal feed, prep.	891	0.2	1,950	0.0	3,264	0.9	11,899	0.1
<b>Subtotal other agricultural products</b>	<b>47,506</b>	<b>0.2</b>	<b>53,709</b>	<b>0.4</b>	<b>565,376</b>	<b>2.6</b>	<b>290,317</b>	<b>1.9</b>
6811 meat, fresh, frozen	6,041	0.7	541	0.0	17,852	2.0	3,256	0.1
6817 meat, prepared	1,056	0.7	46	0.0	194	0.1	740	0.3
6822 dairy products	1,947	0.5	1,483	0.5	1,087	0.3	7,907	2.5
6835 fish, prepared	10,190	2.4	29	0.0	1,553	0.4	656	0.8
6838 tallow, animal oils	214	1.6	3,307	0.2	31	0.2	188,486	13.7
6839 animals & prod. nec	1,114	0.6	625	0.1	475	0.2	1,197	0.2
6856 bananas & plantains	2,332	0.0	10	0.2	13,760	0.3	—	—
6857 fruit & nuts nec	757	0.0	937	0.0	9,667	0.5	3,132	0.1
6858 fruit juices	3,786	0.2	1,295	0.2	16,329	1.0	916	0.1
6861 sugar	98	0.0	3,726	3.8	63,867	2.9	17	0.0
6865 molasses	—	—	23,379	11.9	301,517	20.7	—	—
6871 coffee	27	0.0	3,040	3.1	60,196	4.4	1,298	1.3
6872 cocoa beans	734	0.1	—	—	4,443	0.6	2,534	15.3
6885 alcoholic beverages	3,936	0.1	3,484	0.4	45,906	1.6	1,832	0.2
6888 water & ice	243	0.0	1,927	5.5	37	0.0	294	0.8
6889 food products nec	2,402	0.2	1,006	0.1	17,184	1.6	8,549	0.5
6891 tobacco & products	203	0.1	67	0.0	9,236	2.9	258	0.0
6893 cotton	—	—	8,271	0.6	732	2.5	68,811	4.7

Table 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1998 (continued)  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
6894 natural fibers nec	—	—	—	—	410	1.3	286	8.3
6899 farm products nec	12,426	9.9	536	0.2	900	0.7	148	0.1
<b>Total all manufactured equipment, machinery and products</b>	<b>64,060</b>	<b>0.2</b>	<b>196,147</b>	<b>1.5</b>	<b>618,572</b>	<b>1.6</b>	<b>245,201</b>	<b>1.9</b>
7110 machinery (not elec)	12,196	0.2	21,593	0.6	11,628	0.2	43,294	1.2
7120 electrical machinery	8,070	0.1	137,446	7.9	26,498	0.5	23,541	1.4
7210 vehicles & parts	20,229	0.3	649	0.0	462,918	7.0	92,067	4.4
7220 aircraft & parts	38	0.2	44	0.1	8	0.0	33	0.1
7230 ships & boats	1,601	2.0	27,512	12.6	185	0.2	2,096	1.0
7300 ordnance & access.	61	0.2	—	—	—	—	453	0.5
7400 manufac. wood prod.	7,980	1.3	203	0.1	2,113	0.3	696	0.2
7500 textile products	5,500	0.1	479	0.0	67,407	1.2	51,225	2.5
7600 rubber & plastic pr.	2,863	0.1	3,865	0.3	7,147	0.2	7,330	0.5
7900 manufac. prod. nec	5,522	0.1	4,356	0.3	40,668	0.4	24,466	1.6
<b>Total unknown or not elsewhere classified</b>	<b>44,561</b>	<b>7.3</b>	<b>790</b>	<b>0.1</b>	<b>9,131</b>	<b>1.5</b>	<b>9,520</b>	<b>1.4</b>
9900 unknown or nec	44,561	7.3	790	0.1	9,131	1.5	9,520	1.4

## Section 2

### Commodities



Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
BY TYPE OF TRAFFIC AND COMMODITY

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,140,442	1992	2,133,310	1995	2,240,393	1998	2,339,500
1990	2,163,854	1993	2,128,221	1996	2,284,065		
1991	2,092,108	1994	2,214,754	1997	2,333,142		

Freight Traffic, 1998  
(thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
<b>Total, all commodities</b>	<b>2,339,500</b>	<b>840,680</b>	<b>404,708</b>	<b>1,094,112</b>	<b>249,633</b>	<b>122,156</b>	<b>625,028</b>	<b>90,077</b>	<b>7,217</b>
<b>Total coal</b>	<b>316,118</b>	<b>12,035</b>	<b>74,708</b>	<b>229,374</b>	<b>15,326</b>	<b>21,881</b>	<b>175,361</b>	<b>16,807</b>	---
1100 coal lignite	307,577	8,115	74,296	225,167	15,294	21,536	171,660	16,676	---
1200 coal coke	8,540	3,920	412	4,208	31	345	3,701	131	---
<b>Total petroleum and petroleum products</b>	<b>987,445</b>	<b>552,093</b>	<b>52,882</b>	<b>382,470</b>	<b>177,405</b>	<b>2,141</b>	<b>152,530</b>	<b>43,504</b>	<b>6,891</b>
<b>Subtotal crude petroleum</b>	<b>539,740</b>	<b>433,427</b>	<b>3,143</b>	<b>103,170</b>	<b>63,720</b>	---	<b>37,965</b>	<b>1,485</b>	---
2100 crude petroleum	539,740	433,427	3,143	103,170	63,720	---	37,965	1,485	---
<b>Subtotal petroleum products</b>	<b>447,706</b>	<b>118,666</b>	<b>49,740</b>	<b>279,300</b>	<b>113,685</b>	<b>2,141</b>	<b>114,565</b>	<b>42,020</b>	<b>6,891</b>
2211 gasoline	108,982	17,381	4,828	86,772	49,150	507	27,553	7,204	2,357
2221 kerosene	9,177	6,134	893	2,151	701	7	802	325	316
2330 distillate fuel oil	94,186	23,291	4,591	66,304	27,730	140	25,956	10,665	1,813
2340 residual fuel oil	127,202	35,327	9,282	82,593	27,490	252	32,454	20,002	2,395
2350 lube oil & greases	19,712	12,736	1,410	5,566	1,938	1	3,272	354	---
2410 petro. jelly & waxes	439	153	77	209	97	---	109	3	---
2429 naphtha & solvents	22,826	13,592	3,877	5,357	606	---	3,383	1,367	---
2430 asphalt, tar & pitch	18,237	582	3,340	14,314	3,837	1,158	8,523	796	---
2540 petroleum coke	33,051	4,163	19,298	9,591	926	74	7,701	889	---
2640 liquid natural gas	9,821	5,306	2,144	2,372	443	1	1,877	51	---
2990 petro. products nec	4,072	---	---	4,072	767	---	2,934	363	8
<b>Total chemicals and related products</b>	<b>156,536</b>	<b>27,443</b>	<b>51,345</b>	<b>77,748</b>	<b>15,177</b>	<b>177</b>	<b>51,578</b>	<b>10,626</b>	<b>191</b>
<b>Subtotal fertilizers</b>	<b>36,789</b>	<b>5,062</b>	<b>17,818</b>	<b>13,909</b>	<b>1,517</b>	<b>0</b>	<b>12,318</b>	<b>74</b>	---
3110 nitrogenous fert.	11,832	3,122	1,980	6,730	295	0	6,389	46	---
3120 phosphatic fert.	3,246	133	689	2,424	261	---	2,144	19	---
3130 potassic fert.	5,195	1,275	2,645	1,275	46	---	1,225	4	---
3190 fert. & mixes nec	16,516	532	12,504	3,480	915	---	2,561	4	---
<b>Subtotal other chemicals and related products</b>	<b>119,746</b>	<b>22,381</b>	<b>33,527</b>	<b>63,839</b>	<b>13,660</b>	<b>177</b>	<b>39,260</b>	<b>10,552</b>	<b>191</b>
3211 acyclic hydrocarbons	3,472	440	885	2,147	38	---	1,880	229	---
3212 benzene & toluene	7,160	513	162	6,485	221	---	4,027	2,195	42
3219 other hydrocarbons	18,470	540	4,554	13,376	2,752	---	8,676	1,799	149
3220 alcohols	13,291	3,806	2,143	7,342	779	---	5,055	1,508	---
3230 carboxylic acids	4,635	703	2,102	1,830	170	---	1,002	658	---
3240 nitrogen func. comp.	3,576	374	1,538	1,663	11	---	1,643	10	---
3250 organo - inorg. comp.	1,005	360	618	27	4	---	16	7	---
3260 organic comp. nec	8,092	4,733	2,019	1,340	230	---	1,018	92	---
3271 sulphur (liquid)	7,650	0	75	7,575	3,749	---	3,677	149	---
3272 sulphuric acid	2,636	841	27	1,767	13	---	1,275	480	---
3273 ammonia	6,736	3,517	821	2,398	106	---	2,275	18	---
3274 sodium hydroxide	11,045	731	3,102	7,212	1,912	---	4,692	608	---
3275 inorg. elem., oxides, & halogen salts	3,941	838	1,158	1,945	42	0	1,045	858	---
3276 metallic salts	6,775	1,010	4,468	1,298	54	177	938	130	---

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
 BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued  
 (thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
3279 inorganic chem. nec	669	368	49	253	2	—	251	—	—
3281 radioactive material	44	31	12	1	1	—	—	—	—
3282 pigments & paints	860	224	582	54	50	—	4	—	—
3283 coloring mat. nec	207	130	75	2	2	—	—	—	—
3284 medicines	374	101	151	122	122	—	—	—	—
3285 perfumes & cleansers	1,054	266	644	144	140	—	3	—	—
3286 plastics	7,674	1,776	5,774	123	120	—	2	1	—
3291 pesticides	307	75	193	39	38	—	—	1	—
3292 starches, gluten, glue	665	360	285	20	20	—	—	—	—
3293 explosives	94	76	14	5	4	—	1	—	—
3297 chemical additives	6,774	101	831	5,842	2,762	—	1,348	1,732	—
3298 wood & resin chem.	754	65	332	356	160	—	197	—	—
3299 chem. products nec	1,787	402	911	474	160	0	236	78	—
<b>Total crude materials, inedible except fuels*</b>	<b>394,285</b>	<b>95,054</b>	<b>53,579</b>	<b>245,652</b>	<b>18,778</b>	<b>94,163</b>	<b>119,187</b>	<b>13,519</b>	<b>4</b>
<b>Subtotal forest products, wood and chips</b>	<b>39,099</b>	<b>4,447</b>	<b>16,923</b>	<b>17,729</b>	<b>2,030</b>	<b>1</b>	<b>14,007</b>	<b>1,691</b>	<b>—</b>
4110 rubber & gums	1,431	1,417	9	5	5	—	0	—	—
4150 fuel wood	192	28	65	98	13	—	86	—	—
4161 wood chips	15,506	179	8,442	6,885	573	0	6,305	7	—
4170 wood in the rough	15,921	399	5,805	9,718	655	1	7,379	1,684	—
4189 lumber	5,570	2,154	2,547	869	756	0	112	0	—
4190 forest products nec	480	270	56	154	28	—	125	—	—
<b>Subtotal pulp and waste paper</b>	<b>11,340</b>	<b>1,169</b>	<b>9,982</b>	<b>189</b>	<b>80</b>	<b>—</b>	<b>109</b>	<b>—</b>	<b>—</b>
4225 pulp & waste paper	11,340	1,169	9,982	189	80	—	109	—	—
<b>Subtotal soil, sand, gravel, rock and stone*</b>	<b>173,080</b>	<b>27,225</b>	<b>6,045</b>	<b>139,809</b>	<b>15,111</b>	<b>32,655</b>	<b>81,939</b>	<b>10,100</b>	<b>4</b>
4310 building stone	356	145	137	74	0	—	74	—	—
4322 limestone	64,867	4,483	2,078	58,306	1,634	30,747	25,882	43	—
4323 gypsum	11,902	9,475	247	2,180	1	1,209	969	—	—
4327 phosphate rock	8,103	895	471	6,737	6,734	—	3	—	—
4331 sand & gravel	87,815	12,227	3,113	72,475	6,715	699	55,004	10,053	4
4338 soil & fill dirt	37	—	—	37	27	0	6	4	—
<b>Subtotal iron ore and scrap</b>	<b>101,421</b>	<b>20,300</b>	<b>10,286</b>	<b>70,835</b>	<b>1,061</b>	<b>59,507</b>	<b>8,746</b>	<b>1,521</b>	<b>—</b>
4410 iron ore	89,689	18,896	6,278	64,515	0	59,224	4,117	1,173	—
4420 iron & steel scrap	11,732	1,404	4,007	6,320	1,061	283	4,629	348	—
<b>Subtotal marine shells</b>	<b>248</b>	<b>3</b>	<b>2</b>	<b>243</b>	<b>0</b>	<b>—</b>	<b>230</b>	<b>13</b>	<b>—</b>
4515 marine shells	248	3	2	243	0	—	230	13	—
<b>Subtotal non-ferrous ores and scrap</b>	<b>29,869</b>	<b>22,015</b>	<b>3,695</b>	<b>4,159</b>	<b>8</b>	<b>—</b>	<b>4,115</b>	<b>36</b>	<b>—</b>
4630 copper ore	144	121	15	8	1	—	7	—	—
4650 aluminum ore	24,017	19,022	1,785	3,211	2	—	3,175	34	—
4670 manganese ore	957	388	109	459	—	—	459	0	—
4680 non-ferrous scrap	1,478	921	525	32	5	—	27	—	—
4690 non-ferrous ores nec	3,272	1,563	1,261	448	0	—	447	1	—
<b>Subtotal sulphur, clay and salt</b>	<b>9,730</b>	<b>2,642</b>	<b>5,405</b>	<b>1,683</b>	<b>107</b>	<b>—</b>	<b>1,486</b>	<b>90</b>	<b>—</b>
4741 sulphur, (dry)	1,782	806	974	2	0	—	2	—	—
4782 clay & refrac. mat.	7,948	1,836	4,431	1,681	107	—	1,484	90	—
<b>Subtotal slag</b>	<b>2,923</b>	<b>1,230</b>	<b>38</b>	<b>1,655</b>	<b>63</b>	<b>713</b>	<b>874</b>	<b>5</b>	<b>—</b>
4860 slag	2,923	1,230	38	1,655	63	713	874	5	—

\* Does not include 6.2 million short tons of waterway improvement material.

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
 BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued  
 (thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
<b>Subtotal other non-metal. min.</b>	<b>26,575</b>	<b>16,023</b>	<b>1,203</b>	<b>9,350</b>	<b>317</b>	<b>1,286</b>	<b>7,682</b>	<b>65</b>	<b>—</b>
4900 non-metal. min. nec	26,575	16,023	1,203	9,350	317	1,286	7,682	65	—
<b>Total primary manufactured goods</b>	<b>141,013</b>	<b>86,699</b>	<b>13,093</b>	<b>41,221</b>	<b>7,354</b>	<b>3,445</b>	<b>29,651</b>	<b>771</b>	<b>—</b>
<b>Subtotal paper products</b>	<b>13,299</b>	<b>4,485</b>	<b>7,883</b>	<b>931</b>	<b>487</b>	<b>—</b>	<b>441</b>	<b>3</b>	<b>—</b>
5110 newsprint	2,274	1,453	767	53	20	—	33	—	—
5120 paper & paperboard	9,748	2,659	6,558	530	266	—	262	3	—
5190 paper products nec	1,277	373	557	347	200	—	147	0	—
<b>Subtotal lime, cement and glass</b>	<b>46,084</b>	<b>27,993</b>	<b>1,604</b>	<b>16,487</b>	<b>2,931</b>	<b>3,147</b>	<b>9,830</b>	<b>579</b>	<b>—</b>
5210 lime	2,909	24	6	2,879	0	—	2,879	—	—
5220 cement & concrete	35,985	22,508	367	13,111	2,622	3,147	6,766	576	—
5240 glass & glass prod.	1,528	953	472	102	75	—	27	—	—
5290 misc. mineral prod.	5,662	4,507	759	396	234	0	158	3	—
<b>Subtotal primary iron and steel products</b>	<b>63,524</b>	<b>45,259</b>	<b>1,472</b>	<b>16,793</b>	<b>176</b>	<b>298</b>	<b>16,152</b>	<b>168</b>	<b>—</b>
5312 pig iron	11,761	6,871	61	4,828	2	25	4,796	6	—
5315 ferro alloys	2,638	1,537	23	1,078	0	—	1,067	12	—
5320 i&s primary forms	8,072	6,844	70	1,158	6	—	1,135	17	—
5330 i&s plates & sheets	25,131	19,370	500	5,261	5	270	4,903	83	—
5360 i&s bars & shapes	8,616	7,006	149	1,462	46	—	1,403	13	—
5370 i&s pipe & tube	4,374	2,746	637	992	39	—	924	29	—
5390 primary i&s nec	2,932	884	34	2,014	79	3	1,924	9	—
<b>Subtotal primary non-ferrous metal products</b>	<b>15,317</b>	<b>6,965</b>	<b>1,498</b>	<b>6,853</b>	<b>3,656</b>	<b>0</b>	<b>3,177</b>	<b>20</b>	<b>—</b>
5421 copper	777	598	161	18	13	—	5	0	—
5422 aluminum	2,446	1,598	475	372	14	—	358	—	—
5429 smelted prod. nec	1,995	652	134	1,209	12	—	1,195	2	—
5480 fab. metal products	10,099	4,117	728	5,254	3,617	0	1,619	18	—
<b>Subtotal primary wood products</b>	<b>2,789</b>	<b>1,997</b>	<b>636</b>	<b>156</b>	<b>104</b>	<b>—</b>	<b>51</b>	<b>1</b>	<b>—</b>
5540 primary wood prod.	2,789	1,997	636	156	104	—	51	1	—
<b>Total food and farm products*</b>	<b>265,730</b>	<b>26,767</b>	<b>145,449</b>	<b>91,514</b>	<b>6,988</b>	<b>308</b>	<b>83,779</b>	<b>430</b>	<b>9</b>
<b>Subtotal fish*</b>	<b>1,973</b>	<b>1,164</b>	<b>713</b>	<b>95</b>	<b>95</b>	<b>0</b>	<b>—</b>	<b>—</b>	<b>—</b>
6134 fish (not shellfish)	1,394	675	640	80	80	0	—	—	—
6136 shellfish	579	489	74	16	16	—	—	—	—
<b>Subtotal grain</b>	<b>132,349</b>	<b>1,816</b>	<b>80,907</b>	<b>49,626</b>	<b>593</b>	<b>307</b>	<b>48,623</b>	<b>103</b>	<b>—</b>
6241 wheat	41,254	308	29,656	11,290	215	307	10,727	40	—
6344 corn	78,144	58	43,654	34,431	258	—	34,130	44	—
6442 rice	6,182	309	3,708	2,164	113	—	2,041	10	—
6443 barley & rye	1,067	310	481	277	0	—	276	—	—
6445 oats	1,101	831	13	257	7	—	245	4	—
6447 sorghum grains	4,602	0	3,394	1,208	0	—	1,203	4	—
<b>Subtotal oilseeds</b>	<b>45,617</b>	<b>278</b>	<b>21,643</b>	<b>23,696</b>	<b>74</b>	<b>—</b>	<b>23,583</b>	<b>39</b>	<b>—</b>
6521 peanuts	163	64	98	0	0	—	—	—	—
6522 soybeans	38,605	23	20,510	18,072	1	—	18,043	27	—
6534 flaxseed	9	0	9	—	—	—	—	—	—
6590 oilseeds nec	6,840	191	1,025	5,624	73	—	5,540	12	—
<b>Subtotal vegetable products</b>	<b>10,360</b>	<b>2,917</b>	<b>5,512</b>	<b>1,931</b>	<b>392</b>	<b>—</b>	<b>1,515</b>	<b>24</b>	<b>0</b>
6653 vegetable oils	5,978	1,365	3,050	1,563	73	—	1,467	23	—
6654 vegetables & prod.	4,382	1,552	2,462	368	319	—	48	0	0
<b>Subtotal processed grain and animal feed</b>	<b>30,432</b>	<b>915</b>	<b>21,434</b>	<b>8,084</b>	<b>635</b>	<b>0</b>	<b>7,290</b>	<b>159</b>	<b>—</b>
6746 wheat flour	671	12	606	52	34	—	18	—	—

\* Does not include 1.2 million short tons of internal and intraport fish.

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
 BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued  
 (thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Inraport	Intra-Territory
6747 grain mill products	1,886	511	657	719	319	0	400	—	—
6781 hay & fodder	3,061	12	2,992	56	10	—	46	—	—
6782 animal feed, prep.	24,814	379	17,178	7,257	271	—	6,826	159	—
<b>Subtotal other agricultural products</b>	<b>45,000</b>	<b>21,677</b>	<b>15,241</b>	<b>8,082</b>	<b>5,199</b>	<b>1</b>	<b>2,769</b>	<b>104</b>	<b>9</b>
6811 meat, fresh, frozen	4,981	876	3,866	240	240	—	0	—	—
6817 meat, prepared	438	148	232	58	58	—	—	—	—
6822 dairy products	802	378	311	112	108	—	4	—	—
6835 fish, prepared	593	419	84	90	71	—	18	—	—
6838 tallow, animal oils	1,407	14	1,376	18	6	—	—	12	—
6839 animals & prod. nec	1,221	197	725	300	289	—	11	—	—
6856 bananas & plantains	5,132	5,120	5	7	7	—	—	—	0
6857 fruit & nuts nec	4,698	2,142	2,383	173	173	0	—	—	—
6858 fruit juices	2,677	1,591	781	305	304	—	0	—	—
6861 sugar	4,051	2,239	97	1,714	1,093	—	621	—	—
6865 molasses	2,326	1,458	196	671	219	—	413	30	9
6871 coffee	1,504	1,367	99	38	38	—	—	—	—
6872 cocoa beans	789	723	17	50	26	—	0	23	—
6885 alcoholic beverages	4,703	2,959	956	788	702	—	86	—	—
6887 groceries	742	—	—	742	686	0	47	10	—
6888 water & ice	1,992	495	35	1,461	53	—	1,378	29	—
6889 food products nec	3,906	1,051	1,658	1,197	1,042	0	155	0	—
6891 tobacco & products	1,067	316	731	20	20	—	—	—	—
6893 cotton	1,500	30	1,468	3	2	—	1	—	—
6894 natural fibers nec	34	30	3	0	0	—	—	—	—
6899 farm products nec	436	125	215	95	61	—	34	—	—
<b>Total all manufactured equipment, machinery and products</b>	<b>71,755</b>	<b>37,980</b>	<b>12,973</b>	<b>20,801</b>	<b>8,544</b>	<b>29</b>	<b>11,657</b>	<b>453</b>	<b>118</b>
7110 machinery (not elec)	18,797	5,947	3,501	9,349	351	0	8,961	16	22
7120 electrical machinery	7,572	5,669	1,739	164	150	0	12	2	—
7210 vehicles & parts	9,937	6,619	2,098	1,221	1,190	0	31	0	—
7220 aircraft & parts	57	25	30	2	1	—	0	—	—
7230 ships & boats	312	81	219	12	4	0	9	—	—
7300 ordnance & access.	122	25	86	11	2	—	9	—	—
7400 manufac. wood prod.	1,088	627	287	174	78	0	95	2	—
7500 textile products	7,722	5,394	2,067	262	206	—	56	—	—
7600 rubber & plastic pr.	4,777	3,135	1,378	265	95	—	167	2	—
7800 empty containers	217	—	—	217	1	—	215	—	—
7900 manufac. prod. nec	21,153	10,460	1,569	9,124	6,466	28	2,102	431	97
<b>Total waste and scrap nec</b>	<b>5,252</b>	<b>—</b>	<b>—</b>	<b>5,252</b>	<b>3</b>	<b>0</b>	<b>1,283</b>	<b>3,967</b>	<b>—</b>
8900 waste and scrap nec	5,252	—	—	5,252	3	0	1,283	3,967	—
<b>Total unknown or not elsewhere classified</b>	<b>1,367</b>	<b>610</b>	<b>678</b>	<b>79</b>	<b>60</b>	<b>13</b>	<b>3</b>	<b>—</b>	<b>4</b>
9900 unknown or nec	1,367	610	678	79	60	13	3	—	4



Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES  
BY TYPE OF TRAFFIC AND COMMODITY

Comparative Statement of Traffic (million short ton-miles)

Year	Total	Year	Total	Year	Total	Year	Total
1989	815,549	1992	856,684	1995	807,727	1998	672,795
1990	833,543	1993	789,657	1996	764,686		
1991	848,399	1994	814,919	1997	707,409		

Freight Traffic, 1998  
(million short ton-miles)

Commodity	Grand Total	Coastwise	Lakewise	Internal	Intraport
<b>Total, all commodities</b>	<b>672,795</b>	<b>314,863</b>	<b>61,654</b>	<b>294,896</b>	<b>1,380</b>
<b>Total coal</b>	<b>91,761</b>	<b>10,105</b>	<b>11,494</b>	<b>69,734</b>	<b>426</b>
1100 coal lignite	88,170	10,076	11,337	66,335	419
1200 coal coke	3,590	28	156	3,398	7
<b>Total petroleum and petroleum products</b>	<b>270,549</b>	<b>230,690</b>	<b>654</b>	<b>38,703</b>	<b>501</b>
<b>Subtotal crude petroleum</b>	<b>117,854</b>	<b>113,291</b>	<b>—</b>	<b>4,543</b>	<b>20</b>
2100 crude petroleum	117,854	113,291	—	4,543	20
<b>Subtotal petroleum products</b>	<b>152,695</b>	<b>117,398</b>	<b>654</b>	<b>34,160</b>	<b>481</b>
2211 gasoline	61,545	53,445	167	7,826	106
2221 kerosene	594	437	0	152	4
2330 distillate fuel oil	34,476	28,041	33	6,253	148
2340 residual fuel oil	28,287	22,143	30	5,958	155
2350 lube oil & greases	7,452	4,813	0	2,635	2
2410 petro. jelly & waxes	299	229	—	69	0
2429 naphtha & solvents	2,451	1,315	—	1,124	11
2430 asphalt, tar & pitch	9,446	4,375	391	4,668	11
2540 petroleum coke	5,548	1,322	31	4,157	36
2640 liquid natural gas	976	460	0	515	0
2990 petro. products nec	1,616	814	—	798	3
<b>Total chemicals and related products</b>	<b>62,009</b>	<b>31,325</b>	<b>57</b>	<b>30,488</b>	<b>138</b>
<b>Subtotal fertilizers</b>	<b>11,590</b>	<b>1,622</b>	<b>0</b>	<b>9,967</b>	<b>0</b>
3110 nitrogenous fert.	5,569	493	0	5,076	0
3120 phosphatic fert.	1,297	211	—	1,086	0
3130 potassic fert.	843	50	—	792	0
3190 fert. & mixes nec	3,879	867	—	3,011	0
<b>Subtotal other chemicals and related products</b>	<b>50,419</b>	<b>29,702</b>	<b>57</b>	<b>20,521</b>	<b>137</b>
3211 acyclic hydrocarbons	697	208	—	488	1
3212 benzene & toluene	2,066	1,061	—	965	39
3219 other hydrocarbons	12,386	6,028	—	6,342	16
3220 alcohols	5,443	1,902	—	3,519	22
3230 carboxylic acids	970	417	—	547	5
3240 nitrogen func. comp.	1,046	26	—	1,020	0
3250 organo - inorg. comp.	8	7	—	0	0
3260 organic comp. nec	1,251	579	—	671	0
3271 sulphur (liquid)	4,035	3,707	—	325	2
3272 sulphuric acid	222	5	—	207	8
3273 ammonia	1,637	198	—	1,438	0
3274 sodium hydroxide	6,981	3,746	—	3,225	9
3275 inorg. elem., oxides, & halogen salts	628	64	0	553	10
3276 metallic salts	589	51	57	480	0
3279 inorganic chem. nec	355	2	—	352	—
3281 radioactive material	2	2	—	—	—
3282 pigments & paints	107	103	—	4	—
3283 coloring mat. nec	3	3	—	—	—
3284 medicines	194	194	—	—	—
3285 perfumes & cleansers	269	269	—	0	—
3286 plastics	218	215	—	3	0
3291 pesticides	52	52	—	—	0
3292 starches, gluten, glue	26	26	—	—	—
3293 explosives	9	9	—	0	—
3297 chemical additives	10,261	10,003	—	238	19
3298 wood & resin chem.	568	563	—	4	—
3299 chem. products nec	381	250	0	130	0
<b>Total crude materials, inedible except fuels*</b>	<b>105,880</b>	<b>11,611</b>	<b>48,144</b>	<b>45,916</b>	<b>206</b>
<b>Subtotal forest products, wood and chips</b>	<b>5,356</b>	<b>1,797</b>	<b>0</b>	<b>3,532</b>	<b>26</b>
4110 rubber & gums	6	6	—	0	—
4150 fuel wood	39	11	—	27	—
4161 wood chips	2,636	269	0	2,367	0
4170 wood in the rough	1,314	356	0	931	26
4189 lumber	1,209	1,114	0	95	0
4190 forest products nec	149	39	—	110	—
<b>Subtotal pulp and waste paper</b>	<b>125</b>	<b>100</b>	<b>—</b>	<b>25</b>	<b>—</b>
4225 pulp & waste paper	125	100	—	25	—
<b>Subtotal soil, sand, gravel, rock and stone*</b>	<b>39,243</b>	<b>7,894</b>	<b>9,795</b>	<b>21,408</b>	<b>144</b>
4310 building stone	61	0	—	61	—
4322 limestone	21,974	708	9,257	12,009	0
4323 gypsum	1,203	1	407	794	—
4327 phosphate rock	6,141	6,137	—	4	—

\* Ton-miles not computed for 6.2 million short tons of waterway improvement material.

Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES  
 BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued

Commodity	Grand Total	Coastwise	Lakewise	Internal	Intraport
4331 sand & gravel	9,840	1,026	129	8,540	144
4338 soil & fill dirt	20	20	0	0	0
<b>Subtotal iron ore and scrap</b>	<b>45,305</b>	<b>1,468</b>	<b>37,739</b>	<b>6,066</b>	<b>30</b>
4410 iron ore	40,681	0	37,513	3,142	25
4420 iron & steel scrap	4,623	1,468	226	2,924	5
<b>Subtotal marine shells</b>	<b>43</b>	<b>0</b>	<b>—</b>	<b>43</b>	<b>0</b>
4515 marine shells	43	0	—	43	0
<b>Subtotal non-ferrous ores and scrap</b>	<b>5,133</b>	<b>11</b>	<b>—</b>	<b>5,122</b>	<b>0</b>
4630 copper ore	12	1	—	11	—
4650 aluminum ore	4,036	2	—	4,033	0
4670 manganese ore	585	—	—	585	0
4680 non-ferrous scrap	32	6	—	26	—
4690 non-ferrous ores nec	466	0	—	466	0
<b>Subtotal sulphur, clay and salt</b>	<b>509</b>	<b>30</b>	<b>—</b>	<b>476</b>	<b>2</b>
4741 sulphur, (dry)	3	0	—	3	—
4782 clay & refrac. mat.	506	30	—	473	2
<b>Subtotal slag</b>	<b>1,081</b>	<b>47</b>	<b>273</b>	<b>760</b>	<b>0</b>
4860 slag	1,081	47	273	760	0
<b>Subtotal other non-metal. min.</b>	<b>9,080</b>	<b>261</b>	<b>336</b>	<b>8,480</b>	<b>2</b>
4900 non-metal. min. nec	9,080	261	336	8,480	2
<b>Total primary manufactured goods</b>	<b>31,338</b>	<b>5,003</b>	<b>1,016</b>	<b>25,301</b>	<b>17</b>
<b>Subtotal paper products</b>	<b>1,096</b>	<b>895</b>	<b>—</b>	<b>200</b>	<b>0</b>
5110 newsprint	78	28	—	49	—
5120 paper & paperboard	569	482	—	87	0
5190 paper products nec	448	384	—	63	0
<b>Subtotal lime, cement and glass</b>	<b>8,081</b>	<b>2,018</b>	<b>1,001</b>	<b>5,045</b>	<b>15</b>
5210 lime	1,196	0	—	1,196	—
5220 cement & concrete	6,179	1,371	1,001	3,790	15
5240 glass & glass prod.	138	111	—	26	—
5290 misc. mineral prod.	567	535	0	32	0
<b>Subtotal primary iron and steel products</b>	<b>18,080</b>	<b>230</b>	<b>14</b>	<b>17,833</b>	<b>1</b>
5312 pig iron	5,385	2	7	5,375	0
5315 ferro alloys	1,503	0	—	1,502	0
5320 i&s primary forms	1,422	5	—	1,416	0
5330 i&s plates & sheets	5,332	7	7	5,317	0
5360 i&s bars & shapes	1,757	89	—	1,668	0
5370 i&s pipe & tube	624	51	—	572	0
5390 primary i&s nec	2,054	73	0	1,980	0
<b>Subtotal primary non-ferrous metal products</b>	<b>3,778</b>	<b>1,582</b>	<b>0</b>	<b>2,196</b>	<b>0</b>
5421 copper	21	16	—	4	0
5422 aluminum	428	19	—	409	—
5429 smelted prod. nec	272	18	—	253	0
5480 fab. metal products	3,056	1,527	0	1,529	0
<b>Subtotal primary wood products</b>	<b>301</b>	<b>276</b>	<b>—</b>	<b>25</b>	<b>0</b>
5540 primary wood prod.	301	276	—	25	0
<b>Total food and farm products*</b>	<b>95,503</b>	<b>11,855</b>	<b>286</b>	<b>83,357</b>	<b>4</b>
<b>Subtotal fish*</b>	<b>205</b>	<b>205</b>	<b>0</b>	<b>—</b>	<b>—</b>
6134 fish (not shellfish)	167	167	0	—	—
6136 shellfish	38	38	—	—	—
<b>Subtotal grain</b>	<b>51,116</b>	<b>1,132</b>	<b>286</b>	<b>49,695</b>	<b>1</b>
6241 wheat	6,836	309	286	6,240	0
6344 corn	41,607	519	—	41,087	0
6442 rice	1,329	289	—	1,040	0
6443 barley & rye	112	0	—	112	—
6445 oats	247	14	—	233	0
6447 sorghum grains	982	0	—	982	0
<b>Subtotal oilseeds</b>	<b>23,697</b>	<b>132</b>	<b>—</b>	<b>23,563</b>	<b>0</b>
6521 peanuts	0	0	—	—	—
6522 soybeans	18,248	1	—	18,246	0
6590 oilseeds nec	5,448	130	—	5,317	0
<b>Subtotal vegetable products</b>	<b>2,164</b>	<b>820</b>	<b>—</b>	<b>1,343</b>	<b>0</b>
6653 vegetable oils	1,451	127	—	1,323	0
6654 vegetables & prod.	712	692	—	20	0
<b>Subtotal processed grain and animal feed</b>	<b>9,027</b>	<b>1,222</b>	<b>0</b>	<b>7,804</b>	<b>0</b>
6746 wheat flour	82	72	—	9	—
6747 grain mill products	1,041	581	0	459	—
6781 hay & fodder	31	20	—	10	—
6782 animal feed, prep.	7,872	546	—	7,325	0
<b>Subtotal other agricultural products</b>	<b>9,292</b>	<b>8,341</b>	<b>0</b>	<b>949</b>	<b>0</b>
6811 meat, fresh, frozen	486	486	—	0	—
6817 meat, prepared	110	110	—	—	—
6822 dairy products	210	210	—	0	—
6835 fish, prepared	138	123	—	14	—
6838 tallow, animal oils	10	10	—	—	0
6839 animals & prod. nec	490	485	—	5	—
6856 bananas & plantains	21	21	—	—	—
6857 fruit & nuts nec	437	437	0	—	—
6858 fruit juices	549	549	—	0	—
6861 sugar	1,302	1,051	—	250	—
6865 molasses	674	328	—	345	0

\* Ton-miles not computed for 1.2 million short tons of internal and intraport fish.

Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES  
 BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued

Commodity		Grand Total	Coastwise	Lakewise	Internal	Intraport
6871	coffee	57	57	—	—	—
6872	cocoa beans	21	20	—	0	0
6885	alcoholic beverages	1,181	1,078	—	103	—
6887	groceries	1,344	1,314	0	30	0
6888	water & ice	114	63	—	51	0
6889	food products nec	1,958	1,851	0	106	0
6891	tobacco & products	35	35	—	—	—
6893	cotton	4	2	—	2	—
6894	natural fibers nec	0	0	—	—	—
6899	farm products nec	139	99	—	39	—
<b>Total all manufactured equipment, machinery and products</b>		<b>15,268</b>	<b>14,142</b>	<b>0</b>	<b>1,123</b>	<b>2</b>
7110	machinery (not elec)	1,018	764	0	253	0
7120	electrical machinery	266	258	0	8	0
7210	vehicles & parts	1,494	1,474	0	20	0
7220	aircraft & parts	1	1	—	0	—
7230	ships & boats	11	7	0	4	—
7300	ordnance & access.	19	8	—	11	—
7400	manufac. wood prod.	214	157	0	55	0
7500	textile products	525	464	—	60	—
7600	rubber & plastic pr.	269	161	—	107	0
7800	empty containers	40	1	—	38	—
7900	manufac. prod. nec	11,406	10,840	0	563	1
<b>Total waste and scrap nec</b>		<b>355</b>	<b>2</b>	<b>0</b>	<b>269</b>	<b>84</b>
8900	waste and scrap nec	355	2	0	269	84
<b>Total unknown or not elsewhere classified</b>		<b>128</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>—</b>
9900	unknown or nec	128	128	0	0	—

Table 2-3: DOMESTIC BARGE TRAFFIC  
BY TYPE OF TRAFFIC AND COMMODITY

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	743,196	1992	762,540	1995	786,560	1998	816,843
1990	776,146	1993	753,287	1996	802,275		
1991	749,654	1994	782,014	1997	820,432		

Freight Traffic, 1998  
(thousand short tons)

Commodity	Barge-Traffic						Domestic	
	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
<b>Total, all commodities</b>	<b>816,843</b>	<b>114,733</b>	<b>13,538</b>	<b>597,771</b>	<b>86,493</b>	<b>4,308</b>	<b>74.7</b>	<b>1,094,112</b>
<b>Total coal</b>	<b>204,799</b>	<b>12,153</b>	<b>478</b>	<b>175,361</b>	<b>16,807</b>	<b>—</b>	<b>89.3</b>	<b>229,374</b>
1100 coal lignite	200,903	12,122	446	171,660	16,676	—	89.2	225,167
1200 coal coke	3,895	31	32	3,701	131	—	92.6	4,208
<b>Total petroleum and petroleum products</b>	<b>255,890</b>	<b>64,442</b>	<b>2,014</b>	<b>143,047</b>	<b>42,092</b>	<b>4,294</b>	<b>66.9</b>	<b>382,470</b>
<b>Subtotal crude petroleum</b>	<b>32,314</b>	<b>865</b>	<b>—</b>	<b>29,963</b>	<b>1,485</b>	<b>—</b>	<b>31.3</b>	<b>103,170</b>
2100 crude petroleum	32,314	865	—	29,963	1,485	—	31.3	103,170
<b>Subtotal petroleum products</b>	<b>223,577</b>	<b>63,577</b>	<b>2,014</b>	<b>113,084</b>	<b>40,608</b>	<b>4,294</b>	<b>80.0</b>	<b>279,300</b>
2211 gasoline	56,960	22,308	464	27,434	6,565	189	65.6	86,772
2221 kerosene	2,004	564	7	802	315	316	93.2	2,151
2330 distillate fuel oil	52,229	15,769	101	24,643	10,330	1,386	78.8	66,304
2340 residual fuel oil	74,355	19,676	237	32,415	19,631	2,395	90.0	82,593
2350 lube oil & greases	3,884	301	1	3,262	320	—	69.8	5,566
2410 petro. jelly & waxes	175	63	—	109	3	—	84.0	209
2429 naphtha & solvents	4,921	192	—	3,383	1,346	—	91.9	5,357
2430 asphalt, tar & pitch	13,616	3,139	1,158	8,523	796	—	95.1	14,314
2540 petroleum coke	9,444	807	46	7,701	889	—	98.5	9,591
2640 liquid natural gas	2,206	278	—	1,877	51	—	93.0	2,372
2990 petro. products nec	3,784	480	—	2,934	362	8	92.9	4,072
<b>Total chemicals and related products</b>	<b>66,452</b>	<b>5,804</b>	<b>163</b>	<b>49,958</b>	<b>10,528</b>	<b>—</b>	<b>85.5</b>	<b>77,748</b>
<b>Subtotal fertilizers</b>	<b>13,840</b>	<b>1,449</b>	<b>—</b>	<b>12,317</b>	<b>74</b>	<b>—</b>	<b>99.5</b>	<b>13,909</b>
3110 nitrogenous fert.	6,730	295	—	6,389	46	—	100.0	6,730
3120 phosphatic fert.	2,424	261	—	2,144	19	—	100.0	2,424
3130 potassic fert.	1,274	45	—	1,224	4	—	99.9	1,275
3190 fert. & mixes nec	3,412	848	—	2,560	4	—	98.1	3,480
<b>Subtotal other chemicals and related products</b>	<b>52,612</b>	<b>4,355</b>	<b>163</b>	<b>37,641</b>	<b>10,454</b>	<b>—</b>	<b>82.4</b>	<b>63,839</b>
3211 acyclic hydrocarbons	2,110	0	—	1,880	229	—	98.3	2,147
3212 benzene & toluene	6,224	11	—	4,027	2,186	—	96.0	6,485
3219 other hydrocarbons	11,409	944	—	8,676	1,789	—	85.3	13,376
3220 alcohols	6,721	169	—	5,044	1,508	—	91.5	7,342
3230 carboxylic acids	1,664	4	—	1,002	658	—	91.0	1,830
3240 nitrogen func. comp.	1,652	0	—	1,643	10	—	99.4	1,663
3250 organo - inorg. comp.	23	0	—	16	7	—	85.3	27
3260 organic comp. nec	1,129	19	—	1,018	92	—	84.3	1,340
3271 sulphur (liquid)	3,521	1,262	—	2,109	149	—	46.5	7,575
3272 sulphuric acid	1,767	12	—	1,275	480	—	100.0	1,767
3273 ammonia	2,308	15	—	2,275	18	—	96.2	2,398
3274 sodium hydroxide	6,852	1,552	—	4,692	608	—	95.0	7,212
3275 inorg. elem., oxides, & halogen salts	1,917	26	—	1,033	858	—	98.5	1,945
3276 metallic salts	1,263	50	163	921	129	—	97.3	1,298
3279 inorganic chem. nec	252	1	—	251	—	—	99.7	253
3281 radioactive material	0	0	—	—	—	—	1.4	1
3282 pigments & paints	24	20	—	4	—	—	44.2	54
3283 coloring mat. nec	0	0	—	—	—	—	17.3	2
3284 medicines	9	9	—	—	—	—	7.2	122
3285 perfumes & cleansers	37	34	—	3	—	—	26.0	144
3286 plastics	35	32	—	2	1	—	28.6	123
3291 pesticides	4	3	—	—	1	—	10.7	39
3292 starches, gluten, glue	6	6	—	—	—	—	30.7	20
3293 explosives	3	2	—	1	—	—	66.1	5
3297 chemical additives	3,111	110	—	1,348	1,654	—	53.3	5,842
3298 wood & resin chem.	221	24	—	197	—	—	62.0	356
3299 chem. products nec	351	48	0	225	78	—	73.9	474
<b>Total crude materials, inedible except fuels</b>	<b>152,438</b>	<b>18,385</b>	<b>9,263</b>	<b>113,315</b>	<b>11,470</b>	<b>4</b>	<b>62.1</b>	<b>245,652</b>
<b>Subtotal forest products, wood and chips</b>	<b>11,207</b>	<b>1,799</b>	<b>0</b>	<b>9,379</b>	<b>29</b>	<b>—</b>	<b>63.2</b>	<b>17,729</b>
4110 rubber & gums	4	4	—	0	—	—	83.9	5
4150 fuel wood	98	12	—	86	—	—	99.7	98
4161 wood chips	6,885	573	—	6,305	7	—	100.0	6,885
4170 wood in the rough	3,400	600	—	2,779	22	—	35.0	9,718
4189 lumber	715	605	0	110	0	—	82.4	869

Table 2-3: DOMESTIC BARGE TRAFFIC BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued  
 (thousand short tons)

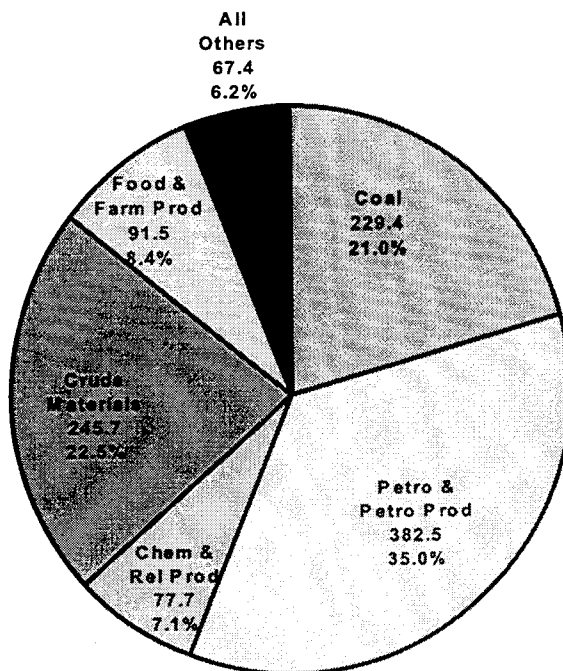
Commodity	Barge-Traffic						Domestic	
	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
4190 forest products nec	104	5	—	99	—	—	67.9	154
Subtotal pulp and waste paper	139	30	—	109	—	—	73.5	189
4225 pulp & waste paper	139	30	—	109	—	—	73.5	189
Subtotal soil, sand, gravel, rock and stone	111,641	15,099	4,593	81,870	10,074	4	79.9	139,809
4310 building stone	74	—	—	74	—	—	100.0	74
4322 limestone	31,944	1,632	4,420	25,875	17	—	54.8	58,306
4323 gypsum	972	0	2	969	—	—	44.6	2,180
4327 phosphate rock	6,737	6,734	—	3	—	—	100.0	6,737
4331 sand & gravel	71,882	6,711	171	54,943	10,053	4	99.2	72,475
4338 soil & fill dirt	31	21	—	6	4	—	85.0	37
Subtotal iron ore and scrap	15,392	1,003	4,470	8,745	1,174	—	21.7	70,835
4410 iron ore	9,256	—	4,313	4,117	826	—	14.3	64,515
4420 iron & steel scrap	6,136	1,003	157	4,628	348	—	97.1	6,320
Subtotal marine shells	216	—	—	216	—	—	89.0	243
4515 marine shells	216	—	—	216	—	—	89.0	243
Subtotal non-ferrous ores and scrap	4,152	2	—	4,115	36	—	99.9	4,159
4630 copper ore	7	—	—	7	—	—	87.6	8
4650 aluminum ore	3,211	2	—	3,175	34	—	100.0	3,211
4670 manganese ore	459	—	—	459	0	—	100.0	459
4680 non-ferrous scrap	27	0	—	27	—	—	84.9	32
4690 non-ferrous ores nec	448	—	—	447	1	—	100.0	448
Subtotal sulphur, clay and salt	819	105	—	626	88	—	48.7	1,683
4741 sulphur, (dry)	2	0	—	2	—	—	99.4	2
4782 clay & refrac. mat.	818	105	—	624	88	—	48.6	1,681
Subtotal slag	1,137	59	199	874	5	—	68.7	1,655
4860 slag	1,137	59	199	874	5	—	68.7	1,655
Subtotal other non-metal. min.	7,734	289	—	7,381	65	—	82.7	9,350
4900 non-metal. min. nec	7,734	289	—	7,381	65	—	82.7	9,350
<b>Total primary manufactured goods</b>	<b>38,261</b>	<b>6,481</b>	<b>1,621</b>	<b>29,388</b>	<b>770</b>	<b>—</b>	<b>92.8</b>	<b>41,221</b>
Subtotal paper products	540	122	—	414	3	—	58.0	931
5110 newsprint	38	5	—	33	—	—	72.0	53
5120 paper & paperboard	274	9	—	262	3	—	51.6	530
5190 paper products nec	227	108	—	120	—	—	65.5	347
Subtotal lime, cement and glass	14,404	2,746	1,322	9,757	579	—	87.4	16,487
5210 lime	2,878	0	—	2,878	—	—	100.0	2,879
5220 cement & concrete	11,194	2,601	1,322	6,695	576	—	85.4	13,111
5240 glass & glass prod.	70	43	—	27	—	—	69.0	102
5290 misc. mineral prod.	262	101	0	157	3	—	66.2	396
Subtotal primary iron and steel products	16,622	138	298	16,019	168	—	99.0	16,793
5312 pig iron	4,827	0	25	4,796	6	—	100.0	4,828
5315 ferro alloys	1,078	—	—	1,067	12	—	100.0	1,078
5320 i&s primary forms	1,157	5	—	1,135	17	—	99.9	1,158
5330 i&s plates & sheets	5,258	1	270	4,903	83	—	99.9	5,261
5360 i&s bars & shapes	1,438	23	—	1,403	13	—	98.4	1,462
5370 i&s pipe & tube	853	33	—	791	29	—	86.0	992
5390 primary i&s nec	2,012	76	3	1,924	9	—	99.9	2,014
Subtotal primary non-ferrous metal products	6,583	3,416	—	3,147	20	—	96.1	6,853
5421 copper	7	2	—	5	0	—	38.6	18
5422 aluminum	363	5	—	358	—	—	97.6	372
5429 smelted prod. nec	1,201	4	—	1,195	2	—	99.4	1,209
5480 fab. metal products	5,012	3,404	—	1,589	18	—	95.4	5,254
Subtotal primary wood products	111	60	—	51	1	—	71.4	156
5540 primary wood prod.	111	60	—	51	1	—	71.4	156
<b>Total food and farm products</b>	<b>86,545</b>	<b>3,527</b>	<b>—</b>	<b>82,590</b>	<b>419</b>	<b>9</b>	<b>94.6</b>	<b>91,514</b>
Subtotal fish	11	11	—	—	—	—	11.4	95
6134 fish (not shellfish)	2	2	—	—	—	—	2.5	80
6136 shellfish	9	9	—	—	—	—	56.6	16
Subtotal grain	49,251	525	—	48,623	103	—	99.2	49,626
6241 wheat	10,982	215	—	10,727	40	—	97.3	11,290
6344 corn	34,431	257	—	34,130	44	—	100.0	34,431
6442 rice	2,097	46	—	2,041	10	—	96.9	2,164
6443 barley & rye	276	—	—	276	—	—	100.0	277
6445 oats	257	7	—	245	4	—	100.0	257
6447 sorghum grains	1,207	—	—	1,203	4	—	100.0	1,208
Subtotal oilseeds	23,684	62	—	23,583	39	—	99.9	23,696
6521 peanuts	0	0	—	—	—	—	13.1	0

Table 2-3: DOMESTIC BARGE TRAFFIC BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1998 - continued  
 (thousand short tons)

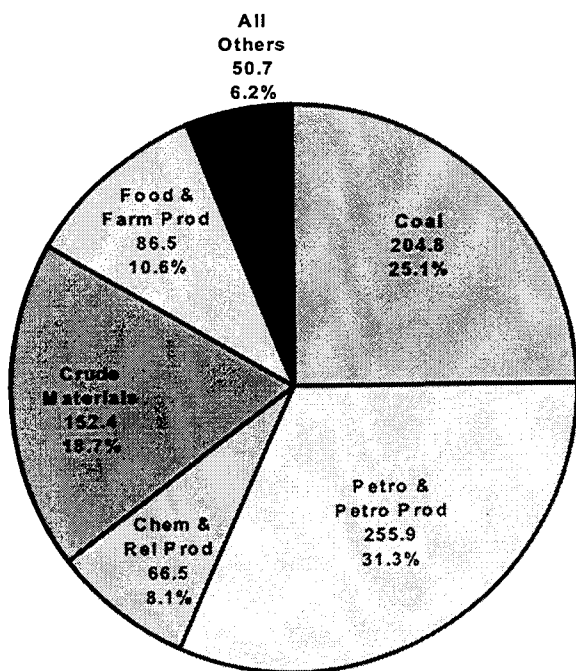
Commodity	Barge-Traffic						Domestic	
	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
6522 soybeans	18,072	1	—	18,043	27	—	100.0	18,072
6590 oilseeds nec	5,612	60	—	5,540	12	—	99.8	5,624
<b>Subtotal vegetable products</b>	<b>1,660</b>	<b>122</b>	<b>—</b>	<b>1,515</b>	<b>24</b>	<b>—</b>	<b>86.0</b>	<b>1,931</b>
6653 vegetable oils	1,554	64	—	1,467	23	—	99.4	1,563
6654 vegetables & prod.	107	58	—	48	0	—	29.0	368
<b>Subtotal processed grain and animal feed</b>	<b>7,920</b>	<b>471</b>	<b>—</b>	<b>7,289</b>	<b>159</b>	<b>—</b>	<b>98.0</b>	<b>8,084</b>
6746 wheat flour	26	7	—	18	—	—	49.1	52
6747 grain mill products	696	296	—	400	—	—	96.8	719
6781 hay & fodder	51	5	—	46	—	—	90.6	56
6782 animal feed, prep.	7,147	162	—	6,825	159	—	98.5	7,257
<b>Subtotal other agricultural products</b>	<b>4,020</b>	<b>2,337</b>	<b>—</b>	<b>1,581</b>	<b>94</b>	<b>9</b>	<b>49.7</b>	<b>8,082</b>
6811 meat, fresh, frozen	48	48	—	0	—	—	20.1	240
6817 meat, prepared	5	5	—	—	—	—	8.3	58
6822 dairy products	50	46	—	4	—	—	44.7	112
6835 fish, prepared	42	24	—	18	—	—	46.7	90
6838 tallow, animal oils	17	5	—	—	12	—	96.8	18
6839 animals & prod. nec	43	32	—	11	—	—	14.4	300
6857 fruit & nuts nec	3	3	—	—	—	—	1.5	173
6858 fruit juices	121	121	—	0	—	—	39.9	305
6861 sugar	1,702	1,081	—	621	—	—	99.3	1,714
6865 molasses	588	136	—	413	30	9	87.5	671
6871 coffee	3	3	—	—	—	—	8.1	38
6872 cocoa beans	23	—	—	—	23	—	47.3	50
6885 alcoholic beverages	200	114	—	86	—	—	25.3	788
6887 groceries	250	213	—	36	1	—	33.7	742
6888 water & ice	252	23	—	202	28	—	17.3	1,461
6889 food products nec	618	464	—	154	—	—	51.6	1,197
6891 tobacco & products	8	8	—	—	—	—	41.9	20
6893 cotton	2	1	—	1	—	—	66.3	3
6894 natural fibers nec	0	0	—	—	—	—	22.4	0
6899 farm products nec	45	11	—	34	—	—	46.9	95
<b>Total all manufactured equipment, machinery and products</b>	<b>7,224</b>	<b>3,937</b>	<b>0</b>	<b>2,847</b>	<b>440</b>	<b>—</b>	<b>34.7</b>	<b>20,801</b>
7110 machinery (not elec)	392	131	0	252	9	—	4.2	9,349
7120 electrical machinery	57	45	—	10	2	—	34.9	164
7210 vehicles & parts	838	809	—	29	0	—	68.7	1,221
7220 aircraft & parts	0	0	—	0	—	—	8.2	2
7230 ships & boats	10	2	—	8	—	—	85.2	12
7300 ordnance & access.	9	0	—	9	—	—	82.4	11
7400 manufac. wood prod.	90	25	0	63	2	—	51.5	174
7500 textile products	60	15	—	46	—	—	23.0	262
7600 rubber & plastic pr.	198	28	—	167	2	—	74.8	265
7800 empty containers	215	—	—	215	—	—	99.4	217
7900 manufac. prod. nec	5,353	2,881	—	2,047	425	—	58.7	9,124
<b>Total waste and scrap nec</b>	<b>5,233</b>	<b>2</b>	<b>0</b>	<b>1,265</b>	<b>3,967</b>	<b>—</b>	<b>99.6</b>	<b>5,252</b>
8900 waste and scrap nec	5,233	2	0	1,265	3,967	—	99.6	5,252
<b>Total unknown or not elsewhere classified</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1.6</b>	<b>79</b>
9900 unknown or nec	1	1	—	—	—	—	1.6	79

Figure 2-1  
 DOMESTIC COMMERCE, 1998  
 COMPARED BY MAJOR COMMODITY GROUPS  
 BARGE AND SELF-PROPELLED VESSEL TRAFFIC  
 (million short tons and percentage of short tons)

Domestic Traffic



Barge Traffic



Self-Propelled Traffic

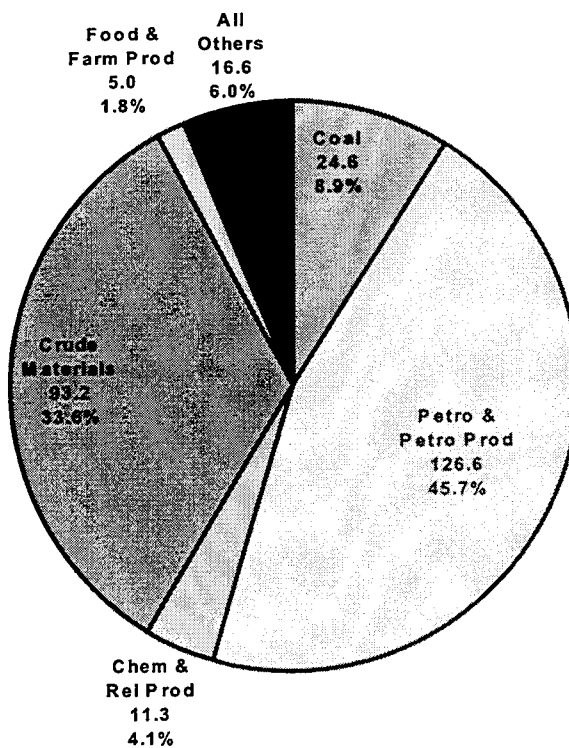
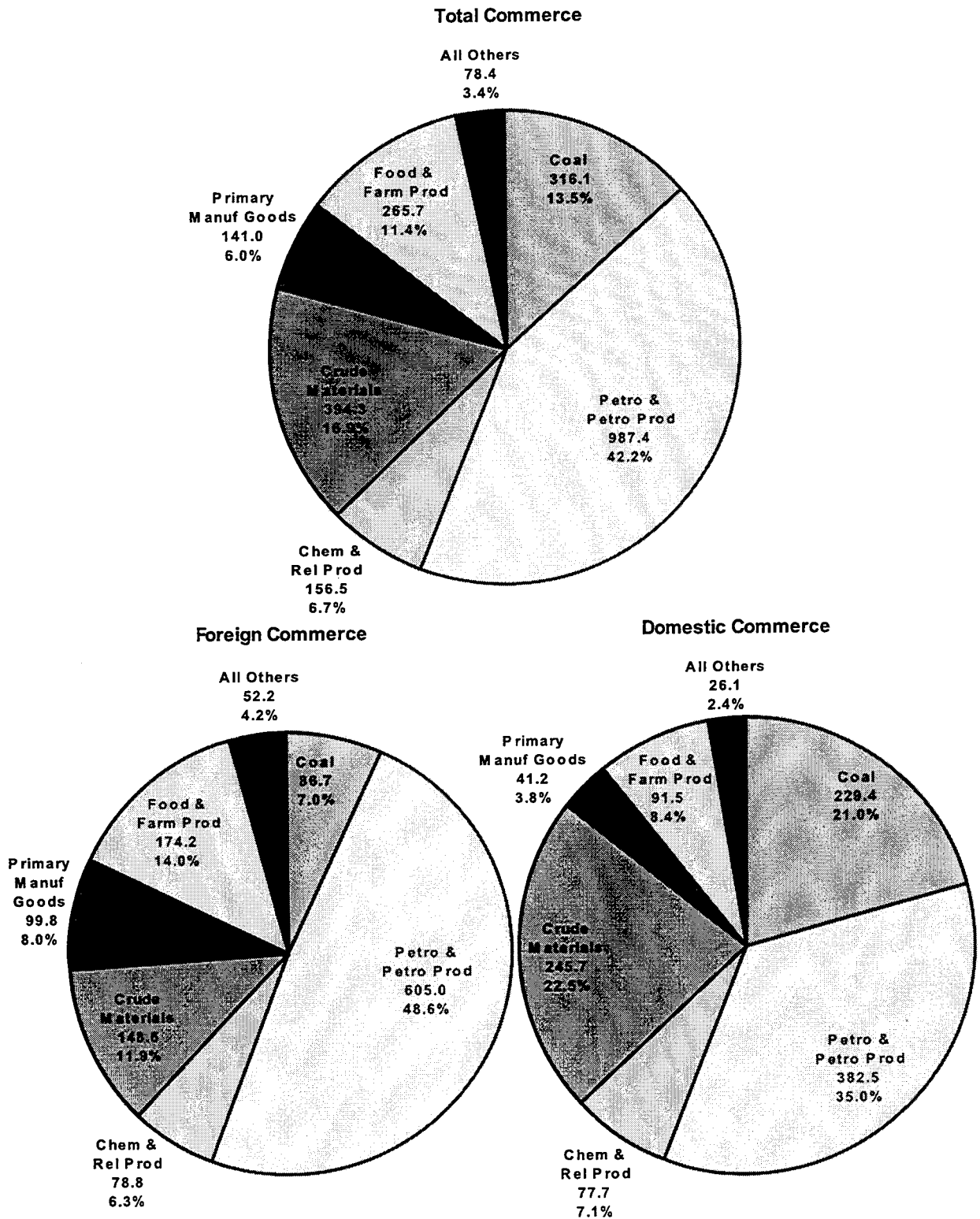


Table 2-4: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
(million short tons)

	1997	1998	%Change
<b>Total Commerce</b>	<b>2,333.1</b>	<b>2,339.5</b>	<b>0.3</b>
Coal	326.0	316.1	-3.0
Petro & Petro Prod	988.2	987.4	-0.1
Chem & Rel Prod	156.6	156.5	-0.1
Crude Materials	400.9	394.3	-1.7
Primary Manuf Goods	117.0	141.0	20.6
Food and Farm Prod	271.7	265.7	-2.2
All Manuf Equip	66.1	71.8	8.6
Other	6.6	6.6	0.8
<b>Foreign Commerce</b>	<b>1,220.6</b>	<b>1,245.4</b>	<b>2.0</b>
Coal	93.7	86.7	-7.4
Petro & Petro Prod	591.5	605.0	2.3
Chem & Rel Prod	75.6	78.8	4.2
Crude Materials	155.0	148.6	-4.1
Primary Manuf Goods	79.8	99.8	25.1
Food and Farm Prod	178.1	174.2	-2.2
All Manuf Equip	46.6	51.0	9.4
Other	0.9	1.3	37.3
<b>Domestic Commerce</b>	<b>1,112.5</b>	<b>1,094.1</b>	<b>-1.7</b>
Coal	232.3	229.4	-1.3
Petro & Petro Prod	396.7	382.5	-3.6
Chem & Rel Prod	81.0	77.7	-4.0
Crude Materials	246.5	245.7	-0.3
Primary Manuf Goods	37.2	41.2	10.9
Food and Farm Prod	93.7	91.5	-2.3
All Manuf Equip	19.5	20.8	6.7
Other	5.6	5.3	-5.3



*Figure 2-2*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
 (million short tons and percentage of short tons)





## Section 3 Waterways



Figure 3-1  
MISSISSIPPI RIVER SYSTEM, 1979-1998  
BY TYPE OF TRAFFIC  
(million short tons)

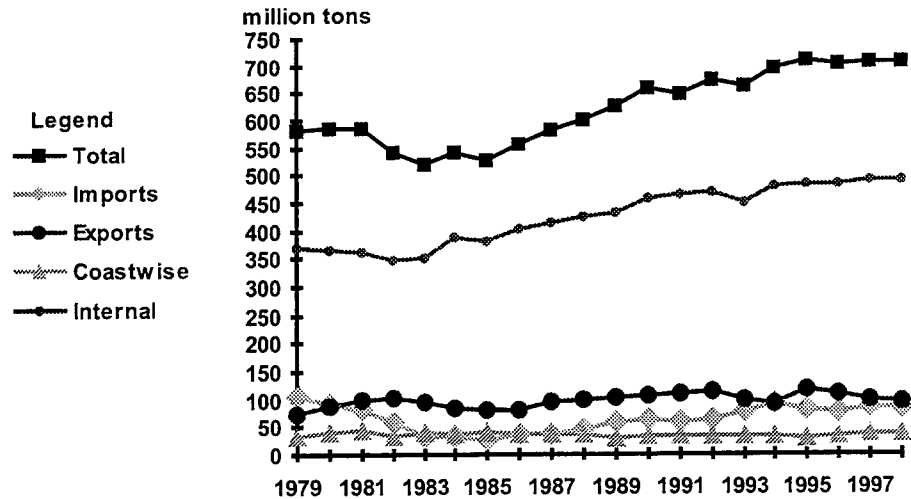


Table 3-1: MISSISSIPPI RIVER SYSTEM, 1979-1998  
BY TYPE OF TRAFFIC\*  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>582.9</b>	<b>584.2</b>	<b>586.0</b>	<b>539.6</b>	<b>519.1</b>	<b>543.5</b>	<b>527.8</b>	<b>556.4</b>	<b>583.4</b>	<b>601.6</b>
Imports	105.9	90.8	80.1	56.7	32.3	34.1	27.0	35.1	38.1	45.3
Exports	73.3	86.3	98.3	100.8	95.8	85.9	81.0	81.1	93.7	97.5
Coastwise	33.1	41.6	44.7	34.7	39.1	36.7	40.9	37.4	37.4	35.8
Internal	370.8	365.6	362.9	347.5	352.0	386.6	378.9	402.8	414.2	423.0

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>626.4</b>	<b>659.1</b>	<b>646.6</b>	<b>673.1</b>	<b>660.4</b>	<b>693.3</b>	<b>707.2</b>	<b>701.8</b>	<b>707.1</b>	<b>707.4</b>
Imports	59.9	63.1	60.1	63.0	76.9	89.8	81.5	77.3	83.5	85.2
Exports	104.0	106.0	109.9	112.3	100.0	92.4	115.8	108.7	98.5	94.7
Coastwise	31.1	32.6	31.3	32.3	31.8	32.4	30.6	33.0	36.3	36.7
Internal	431.5	457.5	445.1	465.4	451.7	478.7	479.4	482.8	488.9	490.7

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

Figure 3-2  
MISSISSIPPI RIVER SYSTEM, 1979-1998  
ALL TRAFFIC BY COMMODITY GROUP  
(million short tons)

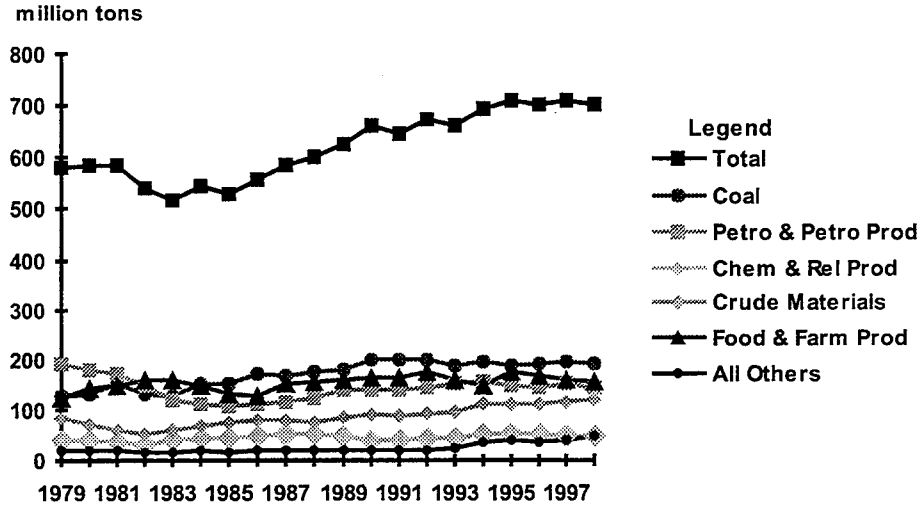


Table 3-2: MISSISSIPPI RIVER SYSTEM, 1979-1998  
ALL TRAFFIC BY COMMODITY GROUP  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>582.9</b>	<b>584.2</b>	<b>586.0</b>	<b>539.6</b>	<b>519.1</b>	<b>543.5</b>	<b>527.8</b>	<b>556.4</b>	<b>583.4</b>	<b>601.6</b>
Coal	127.9	131.8	149.6	133.1	129.0	153.0	152.0	171.1	167.9	173.8
Petro & Petro Prod	191.0	179.6	169.8	146.4	118.7	110.5	107.6	112.1	116.9	124.4
Chem & Rel Prod	39.1	40.3	37.3	32.7	37.8	45.7	44.4	48.6	50.6	50.8
Crude Materials	83.4	72.0	61.0	52.4	58.3	68.2	75.6	80.0	79.5	78.6
Primary Manuf Goods	17.4	15.8	17.2	13.4	14.2	18.6	16.5	17.5	17.1	18.3
Food & Farm Prod	122.5	141.6	147.9	159.4	159.8	146.5	130.6	125.8	150.4	156.4
All Manuf Equip	1.1	1.1	1.2	0.8	0.7	0.6	0.7	0.8	0.6	0.8
Other	0.5	2.0	2.1	1.5	0.7	0.4	0.4	0.3	0.4	0.4

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>626.4</b>	<b>659.1</b>	<b>646.6</b>	<b>673.1</b>	<b>660.4</b>	<b>693.3</b>	<b>707.2</b>	<b>701.8</b>	<b>707.1</b>	<b>707.4</b>
Coal	180.3	200.8	197.5	199.7	186.1	194.2	188.1	192.3	194.2	191.5
Petro & Petro Prod	138.2	140.9	137.9	144.6	153.0	153.6	146.2	143.0	150.3	141.6
Chem & Rel Prod	45.8	41.8	40.0	42.0	43.5	50.3	51.4	49.9	48.9	47.4
Crude Materials	82.6	92.8	89.0	91.1	95.4	109.7	108.3	111.0	116.6	120.5
Primary Manuf Goods	18.1	18.3	19.4	18.9	21.6	36.5	37.3	34.6	36.7	46.5
Food & Farm Prod	160.1	163.4	161.9	175.7	159.6	147.7	174.5	168.3	157.6	157.0
All Manuf Equip	1.1	1.0	0.8	0.9	1.1	1.1	1.2	2.5	2.5	2.6
Other	0.4	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Figure 3-3  
MISSISSIPPI RIVER SYSTEM, 1979-1998  
INTERNAL TRAFFIC BY COMMODITY GROUP  
(million short tons)

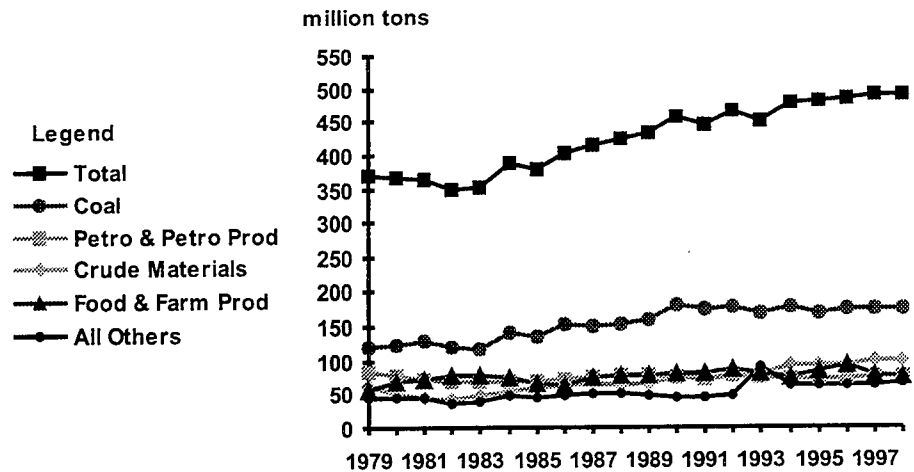


Table 3-3: MISSISSIPPI RIVER SYSTEM, 1979-1998  
INTERNAL TRAFFIC BY COMMODITY GROUP  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>370.8</b>	<b>365.6</b>	<b>362.9</b>	<b>347.5</b>	<b>352.0</b>	<b>386.6</b>	<b>378.9</b>	<b>402.8</b>	<b>414.2</b>	<b>423.0</b>
Coal	121.4	123.0	130.6	121.2	117.0	141.3	135.8	153.6	151.1	153.3
Petro & Petro Prod	82.8	77.3	72.3	69.1	69.1	70.0	70.1	72.7	73.8	78.2
Chem & Rel Prod	30.5	30.3	28.6	24.4	28.5	34.3	33.4	35.7	36.7	37.7
Crude Materials	64.2	52.6	44.9	42.3	46.7	52.9	60.7	63.7	65.0	62.3
Primary Manuf Goods	12.7	11.3	12.6	9.8	10.8	13.7	12.4	13.0	13.1	13.6
Food & Farm Prod	58.3	68.6	71.2	78.9	78.9	73.7	65.9	63.2	73.9	77.1
All Manuf Equip	0.5	0.5	0.6	0.4	0.3	0.4	0.3	0.5	0.3	0.5
Other	0.4	2.0	2.1	1.4	0.6	0.3	0.3	0.3	0.3	0.3

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>431.5</b>	<b>457.5</b>	<b>445.1</b>	<b>465.4</b>	<b>451.7</b>	<b>478.7</b>	<b>479.4</b>	<b>482.8</b>	<b>488.9</b>	<b>490.7</b>
Coal	159.4	180.1	174.3	178.4	167.8	176.7	169.4	173.3	174.9	174.8
Petro & Petro Prod	79.0	74.1	72.0	76.7	73.7	72.6	71.7	71.9	74.0	74.8
Chem & Rel Prod	34.6	31.1	30.7	33.2	34.4	38.7	39.0	37.8	38.1	36.7
Crude Materials	65.7	75.2	72.5	74.2	79.1	92.4	90.5	93.4	98.2	98.4
Primary Manuf Goods	13.9	14.3	14.8	14.5	15.5	22.9	23.8	22.3	23.4	27.2
Food & Farm Prod	77.9	82.0	80.3	87.7	80.4	74.5	84.1	81.7	77.9	76.5
All Manuf Equip	0.7	0.6	0.5	0.5	0.7	0.7	0.8	2.1	2.2	2.2
Other	0.3	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2

Table 3-4: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
 FOR THE MISSISSIPPI RIVER SYSTEM  
 (million short tons)

	1997	1998	%Change
<b>Foreign Commerce</b>	<b>181.9</b>	<b>179.9</b>	<b>-1.1</b>
Coal	9.3	7.0	-24.9
Petro & Petro Prod	60.8	50.2	-17.3
Chem & Rel Prod	6.8	7.7	12.9
Crude Materials	12.6	15.7	24.9
Primary Manuf Goods	13.3	19.3	45.3
Food & Farm Prod	78.8	79.7	1.0
Other	0.4	0.4	5.4
<b>Coastwise Traffic</b>	<b>36.3</b>	<b>36.7</b>	<b>1.2</b>
Coal	10.0	9.8	-2.1
Petro & Petro Prod	15.5	16.6	7.1
Chem & Rel Prod	4.0	3.1	-21.7
Crude Materials	5.9	6.4	9.4
Primary Manuf Goods	0.1	0.0	-64.9
Food & Farm Prod	0.9	0.8	-8.2
Other	0.0	0.0	-63.6
<b>Internal Traffic</b>	<b>488.9</b>	<b>490.7</b>	<b>0.4</b>
Coal	174.9	174.8	-0.1
Petro & Petro Prod	74.0	74.8	1.0
Chem & Rel Prod	38.1	36.7	-3.8
Crude Materials	98.2	98.4	0.2
Primary Manuf Goods	23.0	27.2	16.3
Food & Farm Prod	77.9	76.5	-1.7
Other	2.4	2.5	2.9



Figure 3-4  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998  
 FOR THE MISSISSIPPI RIVER SYSTEM  
 (million short tons and percentage of short tons)

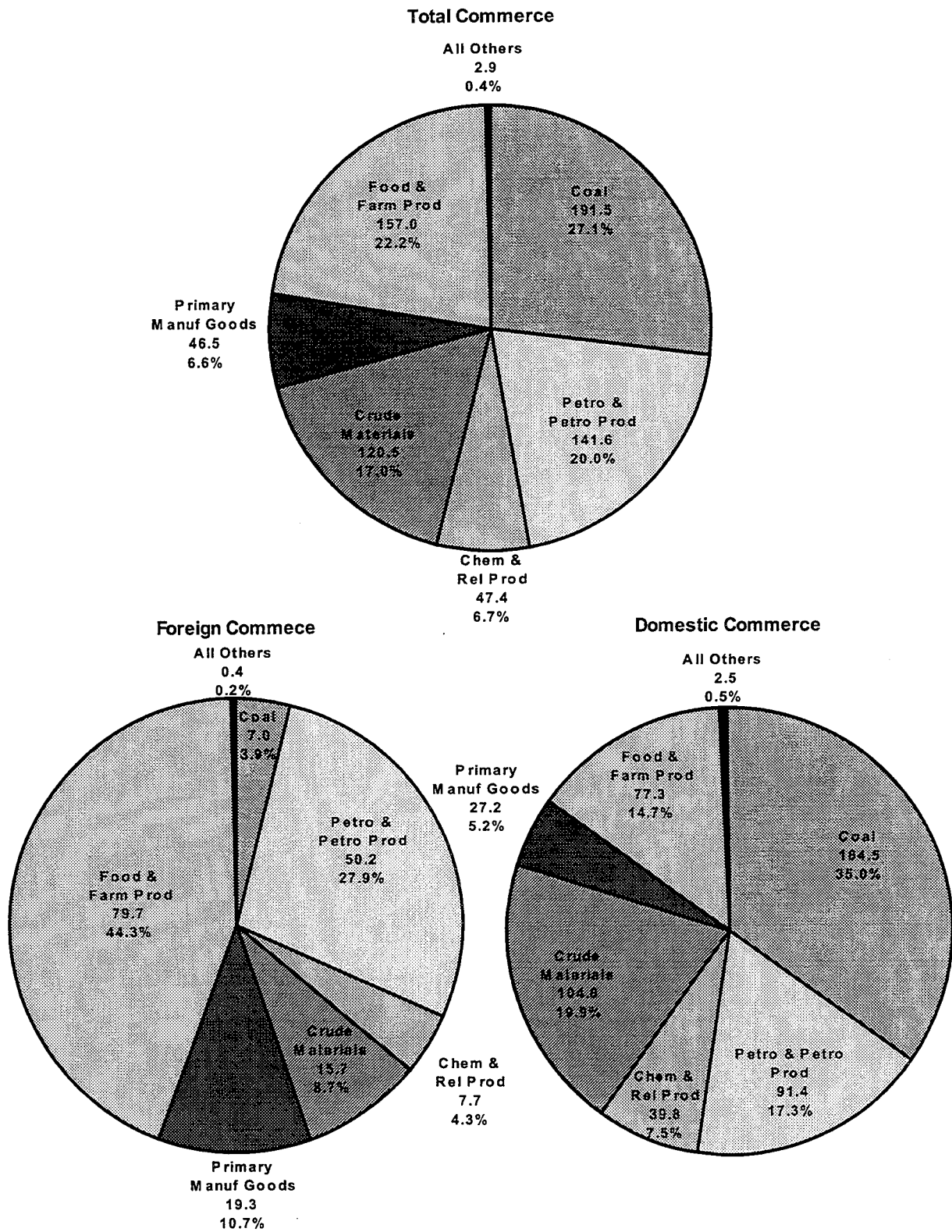


Figure 3-5  
 MISSISSIPPI RIVER MAIN STEM, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

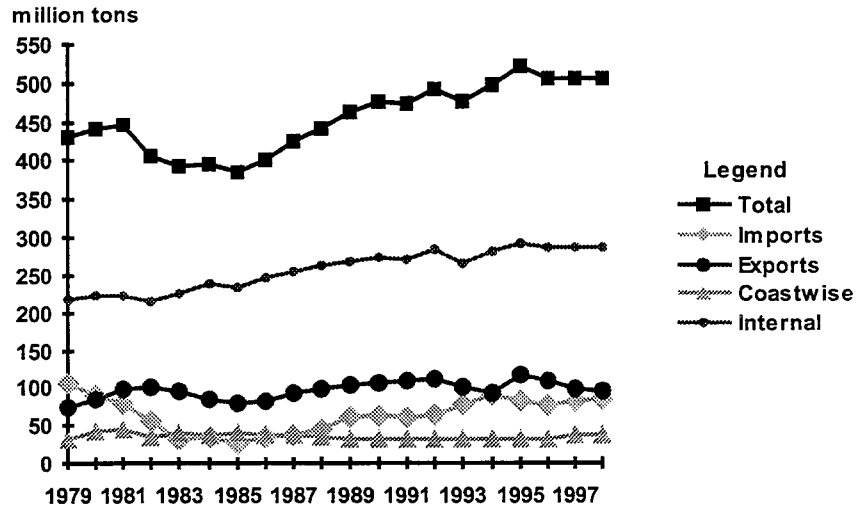


Table 3-5: MISSISSIPPI RIVER MAIN STEM, 1979-1998  
 BY TYPE OF TRAFFIC\*  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>430.2</b>	<b>441.5</b>	<b>446.4</b>	<b>407.6</b>	<b>392.1</b>	<b>397.3</b>	<b>384.0</b>	<b>399.9</b>	<b>425.0</b>	<b>441.5</b>
Imports	105.9	90.8	80.1	56.7	32.3	34.1	27.0	35.1	38.1	45.3
Exports	73.3	86.3	98.3	100.8	95.8	85.9	81.0	81.1	93.7	97.5
Coastwise	33.1	41.6	44.7	34.7	39.1	36.9	40.9	37.4	37.4	35.8
Internal	218.0	222.9	223.3	215.4	225.0	240.4	235.0	246.3	255.8	262.9

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>462.7</b>	<b>475.3</b>	<b>471.7</b>	<b>491.0</b>	<b>475.1</b>	<b>496.8</b>	<b>520.3</b>	<b>505.6</b>	<b>504.7</b>	<b>503.9</b>
Imports	59.9	63.1	60.1	63.0	76.9	89.8	81.5	77.3	83.5	85.2
Exports	104.0	106.0	109.9	112.3	100.0	92.4	115.8	108.7	98.5	94.7
Coastwise	31.1	32.6	31.3	32.4	31.8	32.4	30.6	33.0	36.3	36.7
Internal	267.8	273.6	270.3	283.3	266.5	282.2	292.4	286.5	286.5	287.3

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

Figure 3-6  
MISSISSIPPI RIVER MAIN STEM, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

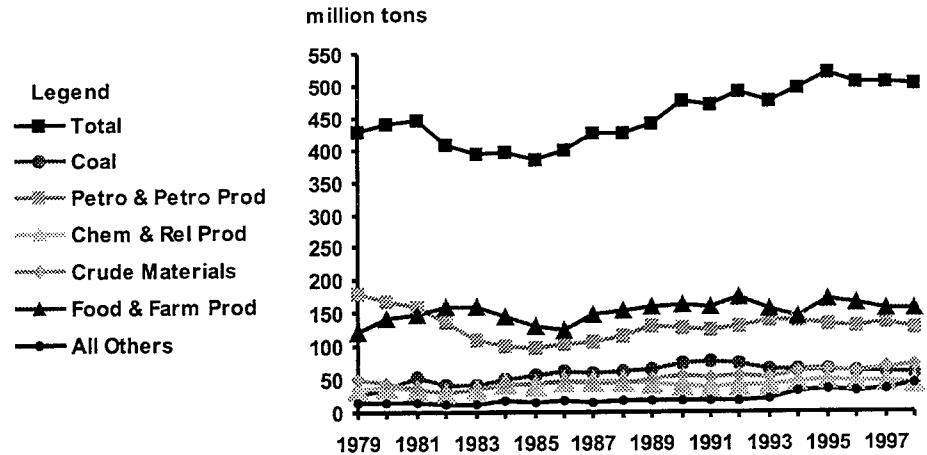


Table 3-6: MISSISSIPPI RIVER MAIN STEM, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>430.2</b>	<b>441.5</b>	<b>446.4</b>	<b>407.6</b>	<b>392.1</b>	<b>397.3</b>	<b>384.0</b>	<b>399.9</b>	<b>425.0</b>	<b>441.5</b>
Coal	26.1	35.2	53.9	41.1	41.2	49.7	56.8	62.9	59.3	62.3
Petro & Petro Prod	180.5	168.3	158.2	135.4	108.8	99.2	96.7	102.6	107.3	115.3
Chem & Rel Prod	36.1	37.3	34.8	30.9	36.0	43.0	41.1	46.2	47.9	48.3
Crude Materials	49.3	44.7	36.4	29.2	34.2	42.7	44.9	47.4	45.7	43.7
Primary Manuf Goods	14.8	13.5	14.4	11.5	12.1	16.3	14.3	15.3	14.8	15.8
Food & Farm Prod	122.2	141.2	147.3	158.6	158.8	145.6	129.1	124.4	149.0	155.1
All Manuf Equip	1.0	1.0	1.1	0.7	0.6	0.6	0.7	0.8	0.6	0.8
Other	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>462.7</b>	<b>475.3</b>	<b>471.7</b>	<b>491.0</b>	<b>475.1</b>	<b>496.8</b>	<b>520.3</b>	<b>505.6</b>	<b>504.7</b>	<b>503.9</b>
Coal	63.7	73.7	77.2	73.1	64.1	65.4	64.6	63.3	61.7	59.2
Petro & Petro Prod	128.8	127.7	124.4	130.8	138.4	139.4	133.0	130.2	136.6	127.7
Chem & Rel Prod	44.0	40.3	38.4	40.4	41.6	48.6	49.7	48.4	47.2	45.7
Crude Materials	50.4	55.1	53.8	55.5	54.3	63.5	65.0	63.5	66.8	69.7
Primary Manuf Goods	15.4	15.3	16.4	15.7	18.3	32.9	34.0	31.0	33.5	43.1
Food & Farm Prod	158.8	162.1	160.6	174.4	157.4	145.9	172.8	167.0	156.5	155.9
All Manuf Equip	1.1	1.0	0.8	0.9	1.0	0.9	1.0	2.0	2.2	2.3
Other	0.4	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Table 3-7: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
FOR THE MISSISSIPPI RIVER MAIN STEM  
(million short tons)

	1997	1998	%Change
<b>Total Commerce</b>	<b>504.7</b>	<b>503.9</b>	<b>-0.2</b>
Coal	61.7	59.2	-4.0
Petro & Petro Prod	136.6	127.7	-6.5
Chem & Rel Prod	47.2	45.7	-3.2
Crude Materials	66.8	69.7	4.4
Primary Manuf Goods	33.5	43.1	28.7
Food & Farm Prod	156.5	155.9	-0.4
Other	2.5	2.6	4.7
<b>Foreign Commerce</b>	<b>181.9</b>	<b>179.9</b>	<b>-1.1</b>
Coal	9.3	7.0	-24.9
Petro & Petro Prod	60.8	50.2	-17.3
Chem & Rel Prod	6.8	7.7	12.9
Crude Materials	12.6	15.7	24.9
Primary Manuf Goods	13.3	19.3	45.3
Food & Farm Prod	78.8	79.7	1.0
Other	0.4	0.4	5.4
<b>Domestic Commerce</b>	<b>322.8</b>	<b>324.0</b>	<b>0.4</b>
Coal	52.4	52.2	-0.2
Petro & Petro Prod	75.8	77.4	2.2
Chem & Rel Prod	40.5	38.1	-5.9
Crude Materials	54.2	54.0	-0.3
Primary Manuf Goods	20.2	23.9	17.9
Food & Farm Prod	77.7	76.2	-1.9
Other	2.1	2.2	4.6

*Figure 3-7*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
**FOR THE MISSISSIPPI RIVER MAIN STEM**  
 (million short tons and percentage of short tons)

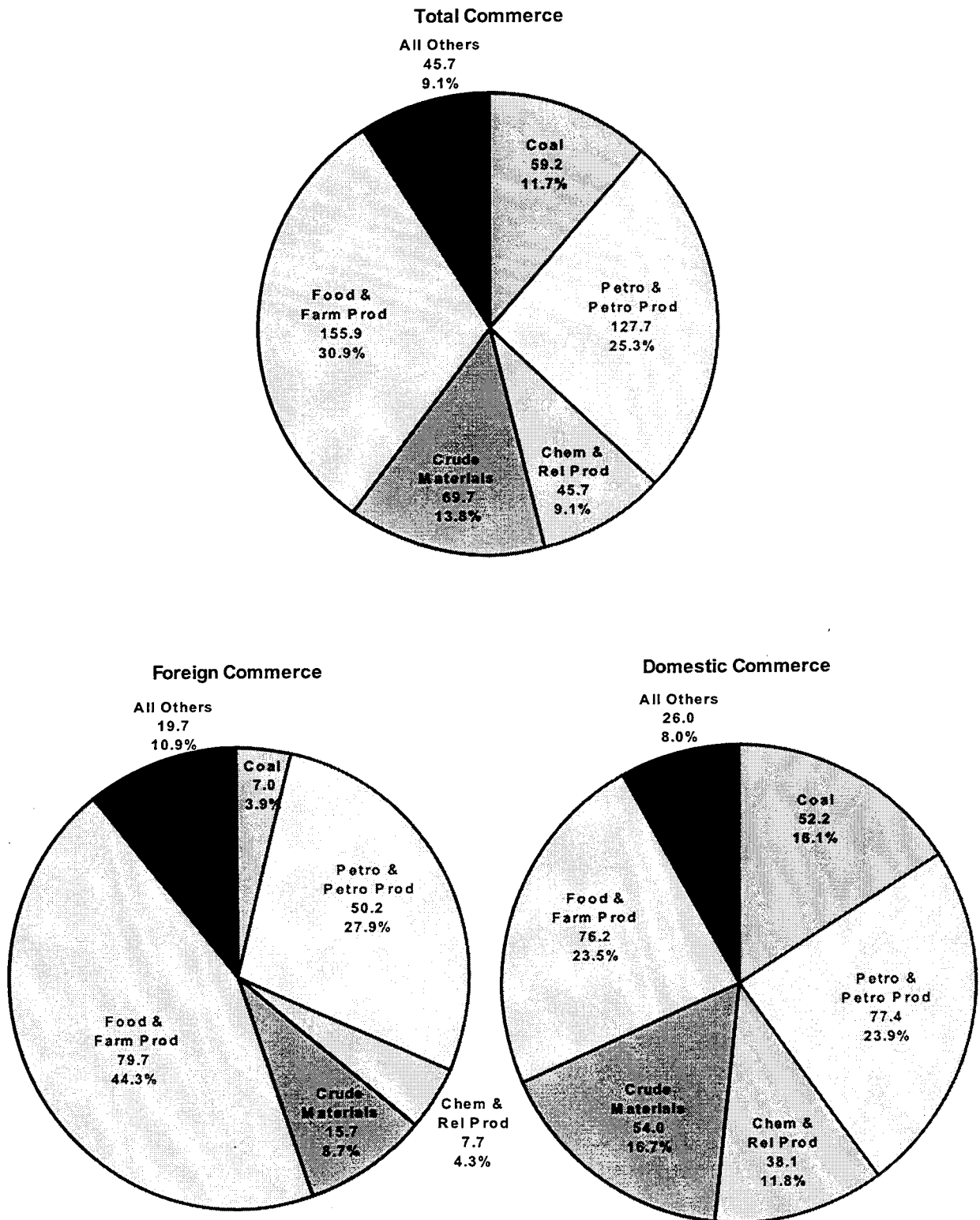


Figure 3-8  
OHIO RIVER SYSTEM, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

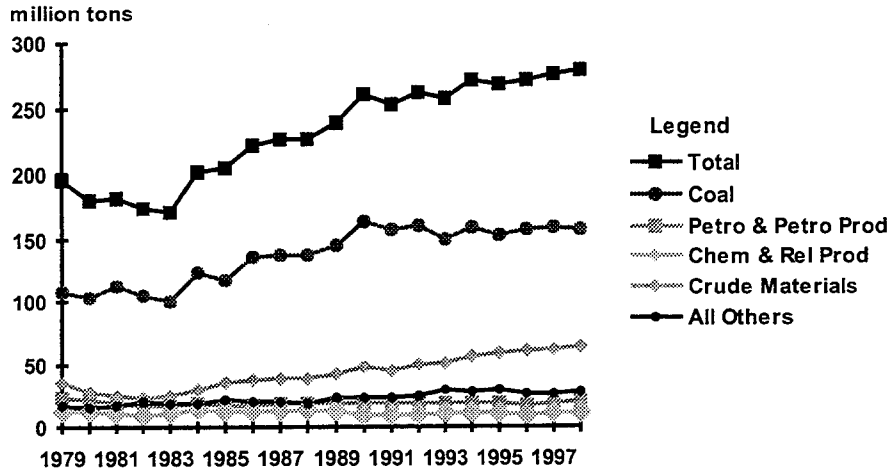


Table 3-8: OHIO RIVER SYSTEM, 1979-1998  
BY COMMODITY GROUP  
(million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>194.8</b>	<b>179.3</b>	<b>181.9</b>	<b>174.0</b>	<b>171.2</b>	<b>202.2</b>	<b>203.9</b>	<b>222.2</b>	<b>226.7</b>	<b>225.9</b>
Coal	108.0	103.8	111.6	104.6	100.7	122.5	117.3	135.9	137.3	136.7
Petro & Petro Prod	22.4	21.1	17.9	17.1	16.5	17.9	17.1	17.6	18.2	18.6
Chem & Rel Prod	12.5	11.9	11.1	9.3	10.9	13.2	12.9	12.4	12.6	13.3
Crude Materials	35.7	27.5	24.7	23.4	24.8	29.4	34.9	36.4	39.0	38.1
Primary Manuf Goods	6.8	5.4	6.1	4.7	5.3	6.6	6.2	6.1	6.1	6.5
Food & Farm Prod	9.3	9.4	10.3	14.8	13.0	12.5	15.4	13.8	13.5	12.5
Other	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>238.4</b>	<b>260.0</b>	<b>251.9</b>	<b>261.4</b>	<b>257.3</b>	<b>270.5</b>	<b>267.6</b>	<b>270.9</b>	<b>274.9</b>	<b>277.9</b>
Coal	144.6	163.0	156.8	159.8	149.0	157.9	151.7	156.5	158.4	156.9
Petro & Petro Prod	18.8	18.3	17.8	18.0	18.1	18.9	18.2	17.7	18.3	20.7
Chem & Rel Prod	11.7	9.1	9.4	10.0	10.4	10.6	10.7	9.8	10.1	10.3
Crude Materials	41.0	47.0	45.3	49.1	51.1	55.3	57.9	60.0	61.5	62.6
Primary Manuf Goods	7.0	7.2	7.4	7.5	8.6	11.2	11.6	11.7	11.1	12.7
Food & Farm Prod	15.2	15.3	15.0	16.9	20.0	16.6	17.4	15.0	15.3	14.7
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1

*Figure 3-9*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
**FOR THE OHIO RIVER SYSTEM**  
(million short tons and percentage of short tons)

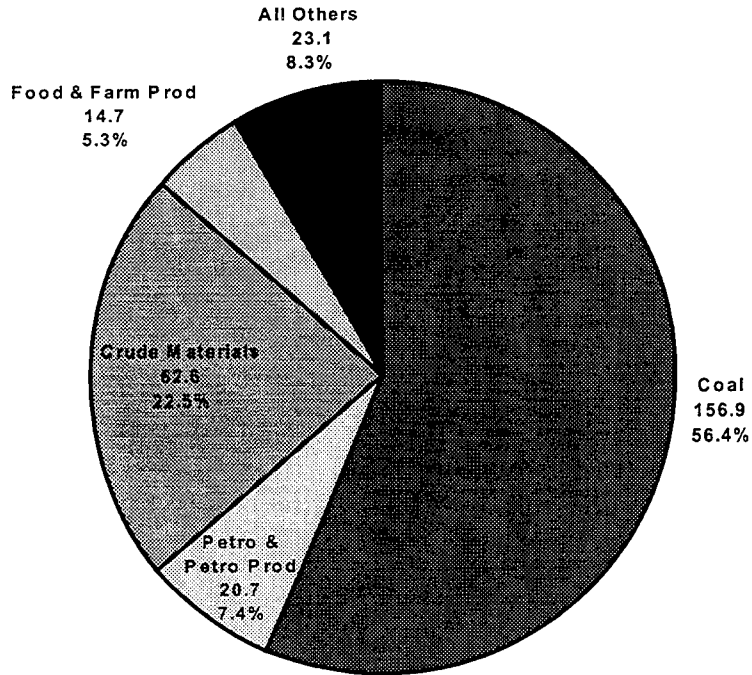


Table 3-9: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
FOR THE OHIO RIVER SYSTEM  
(million short tons)

	1997	1998	%Change
<b>Total Commerce</b>	<b>274.9</b>	<b>277.9</b>	<b>1.1</b>
Coal	158.4	156.9	-1.0
Petroleum & Petroleum Products	18.3	20.7	13.4
Chemicals & Related Products	10.1	10.3	1.8
Crude Materials	61.5	62.6	1.7
Primary Manufactured Goods	11.1	12.7	13.7
Food & Farm Products	15.3	14.7	-4.0
Other	0.0	0.1	36.9

Figure 3-10  
 GREAT LAKES, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

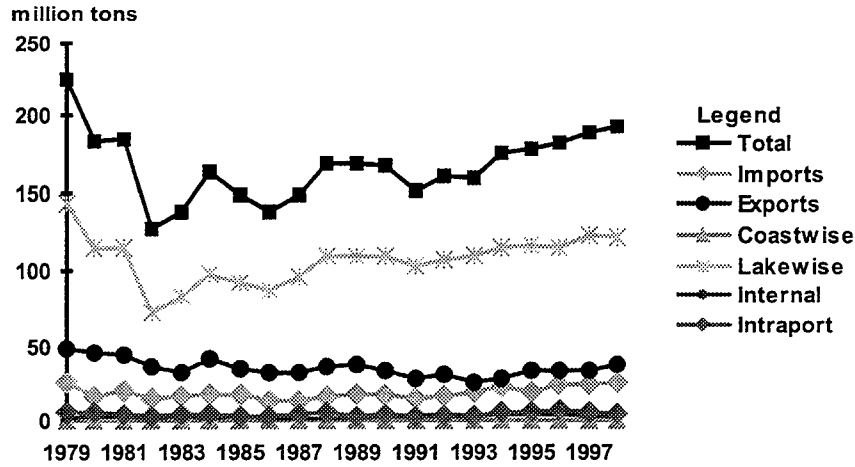


Table 3-10: GREAT LAKES, 1979-1998  
 BY TYPE OF TRAFFIC\*  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>225.0</b>	<b>183.5</b>	<b>185.1</b>	<b>127.4</b>	<b>138.2</b>	<b>162.8</b>	<b>148.1</b>	<b>137.9</b>	<b>148.1</b>	<b>168.8</b>
Imports	25.1	15.5	19.7	14.1	16.1	17.8	17.1	13.8	13.9	15.9
Exports	48.7	45.1	43.5	36.3	32.3	40.9	34.2	32.0	32.1	36.6
Coastwise	0.1	0.1	0.0	-	-	0.0	0.0	-	0.0	-
Lakewise	143.6	115.1	115.4	72.1	83.5	98.0	92.0	87.4	96.5	109.7
Internal	1.6	2.3	2.8	1.9	2.5	1.8	2.2	1.7	1.4	1.6
Intraport	5.9	5.4	3.7	3.0	3.8	4.2	2.7	3.0	4.3	5.0

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>168.9</b>	<b>167.1</b>	<b>151.1</b>	<b>159.9</b>	<b>159.6</b>	<b>175.3</b>	<b>177.8</b>	<b>181.8</b>	<b>188.6</b>	<b>192.2</b>
Imports	17.8	17.6	14.2	15.4	18.1	23.1	18.9	24.5	24.5	25.6
Exports	37.1	32.9	27.5	30.4	25.8	27.8	33.5	32.8	33.7	37.9
Coastwise	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-
Lakewise	109.1	110.2	103.4	107.4	109.9	114.8	116.2	115.0	122.8	122.2
Internal	1.7	3.1	3.2	3.4	3.1	4.6	3.6	3.3	2.3	2.3
Intraport	3.3	3.4	2.7	3.3	2.8	5.0	5.5	6.2	5.2	4.3

\* Exports include Great Lakes Thru Foreign Traffic.



Figure 3-11  
 GREAT LAKES, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

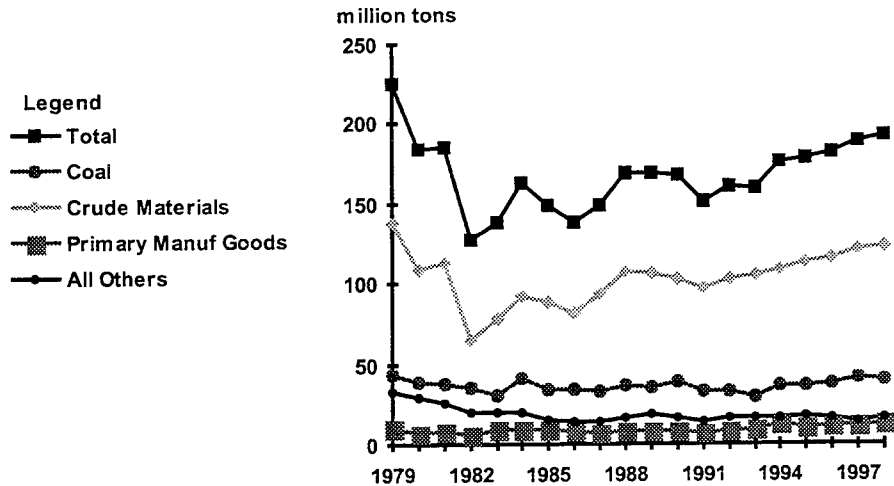


Table 3-11: GREAT LAKES, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>225.0</b>	<b>183.5</b>	<b>185.1</b>	<b>127.4</b>	<b>138.2</b>	<b>162.8</b>	<b>148.1</b>	<b>137.9</b>	<b>148.1</b>	<b>168.8</b>
Coal	43.7	38.7	38.1	35.4	31.0	41.6	34.8	34.1	33.6	36.7
Petro & Petro Prod	11.7	8.9	7.5	5.9	5.3	5.5	5.1	5.3	4.9	6.5
Chem & Rel Prod	2.3	2.4	2.9	2.6	2.2	2.6	2.7	2.4	2.3	2.4
Crude Materials	137.4	108.1	112.8	65.3	77.5	92.2	88.2	81.3	93.1	107.5
Primary Manuf Goods	10.4	7.6	8.3	6.1	9.5	9.1	9.5	7.8	7.6	8.1
Food & Farm Prod	18.8	17.4	15.2	11.8	9.8	11.6	7.6	6.8	6.4	7.1
All Manuf Equip	0.6	0.4	0.4	0.3	2.8	0.2	0.2	0.2	0.2	0.4
Other	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>168.9</b>	<b>167.1</b>	<b>151.1</b>	<b>159.9</b>	<b>159.6</b>	<b>175.3</b>	<b>177.8</b>	<b>181.8</b>	<b>188.6</b>	<b>192.2</b>
Coal	35.7	39.4	32.8	33.4	29.2	36.7	36.3	37.8	40.9	40.4
Petro & Petro Prod	6.3	6.4	5.5	5.8	5.2	5.9	5.5	6.2	5.6	6.5
Chem & Rel Prod	2.5	2.7	2.2	1.9	1.7	1.6	1.6	1.5	1.4	1.3
Crude Materials	106.2	103.1	96.5	102.2	104.5	108.4	113.1	115.9	121.8	122.3
Primary Manuf Goods	8.7	8.4	7.6	8.3	9.7	13.1	11.1	12.1	12.2	13.4
Food & Farm Prod	8.6	6.2	5.2	6.9	7.6	8.6	10.0	8.1	6.5	8.1
All Manuf Equip	0.8	1.0	1.1	1.3	1.4	0.8	0.2	0.2	0.2	0.2
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0

Table 3-12: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
 FOR THE GREAT LAKES  
 (million short tons)

	1997	1998	%Change
<b>Total Commerce</b>	<b>188.6</b>	<b>192.2</b>	<b>1.9</b>
Coal	40.9	40.4	-1.3
Petro & Petro Prod	5.6	6.5	15.8
Chem & Rel Prod	1.4	1.3	-1.3
Crude Materials	121.8	122.3	0.4
Primary Manuf Goods	12.2	13.4	10.1
Food and Farm Prod	6.5	8.1	24.7
Other	0.2	0.2	6.7
<b>Foreign Commerce</b>	<b>58.2</b>	<b>63.5</b>	<b>9.0</b>
Coal	15.8	18.0	13.5
Petro & Petro Prod	1.5	2.6	74.9
Chem & Rel Prod	0.9	0.8	-6.6
Crude Materials	26.3	25.2	-4.2
Primary Manuf Goods	7.7	9.3	21.0
Food and Farm Prod	5.9	7.5	26.1
Other	0.2	0.2	0.6
<b>Domestic Commerce</b>	<b>130.3</b>	<b>128.8</b>	<b>-1.2</b>
Coal	25.1	22.4	-10.6
Petro & Petro Prod	4.1	3.9	-5.5
Chem & Rel Prod	0.5	0.5	8.0
Crude Materials	95.5	97.0	1.7
Primary Manuf Goods	4.6	4.2	-8.4
Food and Farm Prod	0.6	0.6	9.9
Other	0.0	0.0	9.3

Figure 3-12  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998  
 FOR THE GREAT LAKES  
 (million short tons and percentage of tons)

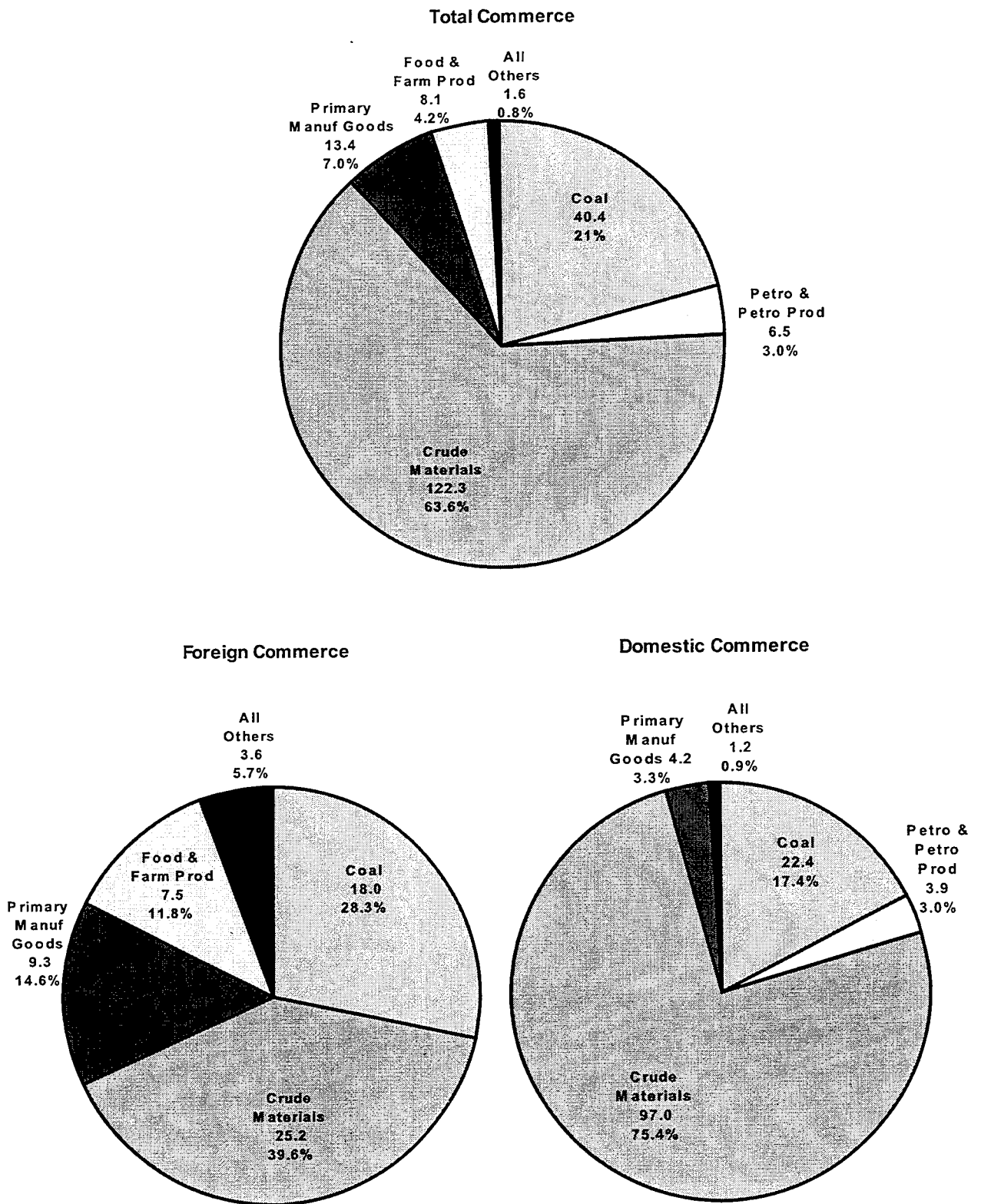


Figure 3-13  
 GULF INTRACOASTAL WATERWAY, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

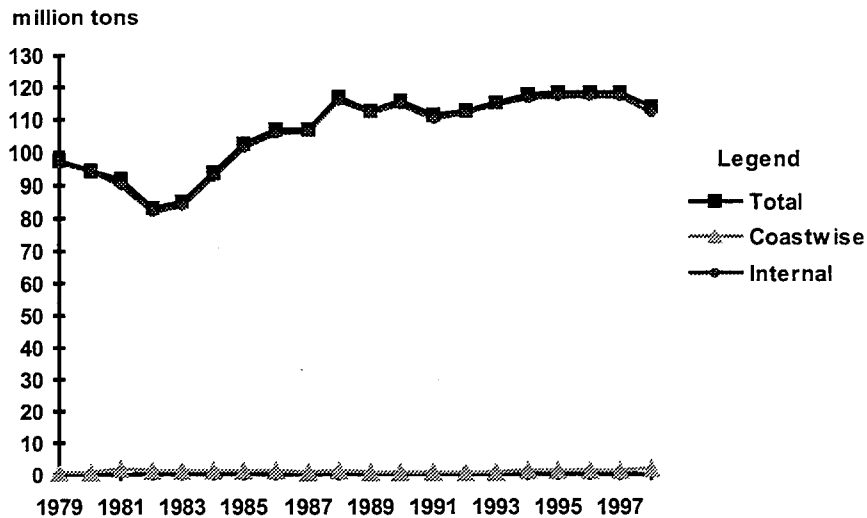


Table 3-13: GULF INTRACOASTAL WATERWAY, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>97.3</b>	<b>94.5</b>	<b>91.6</b>	<b>83.0</b>	<b>85.1</b>	<b>93.4</b>	<b>102.5</b>	<b>107.0</b>	<b>107.0</b>	<b>117.7</b>
Imports	-	-	-	-	-	-	0.0	0.0	0.0	0.4
Exports	-	-	-	-	-	0.0	0.0	0.1	0.0	0.2
Coastwise	0.6	0.4	1.7	1.1	1.3	1.0	1.1	1.2	0.9	1.2
Internal	96.7	94.1	89.9	81.9	83.8	92.4	101.3	105.7	106.1	115.9

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>112.7</b>	<b>115.4</b>	<b>111.0</b>	<b>112.3</b>	<b>114.9</b>	<b>117.6</b>	<b>118.0</b>	<b>118.0</b>	<b>118.1</b>	<b>113.6</b>
Imports	0.3	-	-	-	-	-	-	-	-	-
Exports	0.1	-	-	-	-	-	-	-	-	-
Coastwise	0.8	0.7	0.7	0.7	0.9	1.3	1.2	1.1	1.3	1.9
Internal	111.6	114.6	110.3	111.6	114.1	116.3	116.8	116.9	116.8	111.6

Figure 3-14  
 GULF INTRACOASTAL WATERWAY, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

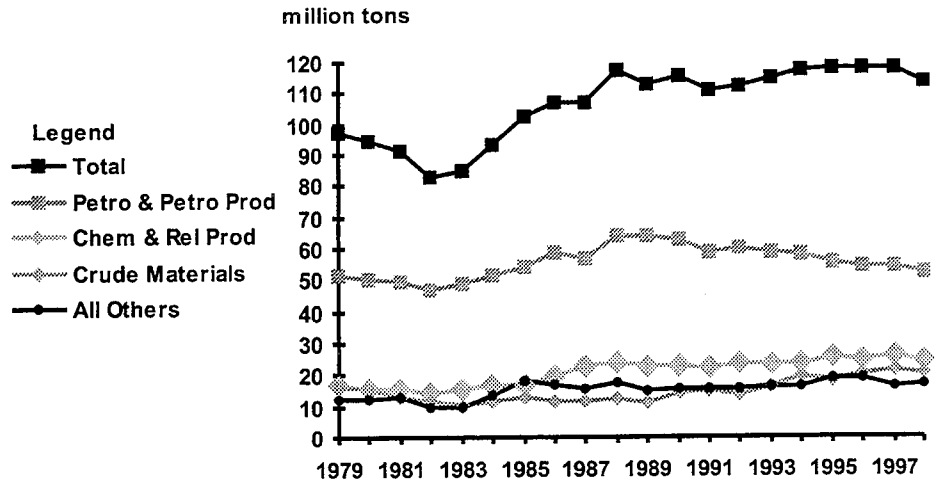


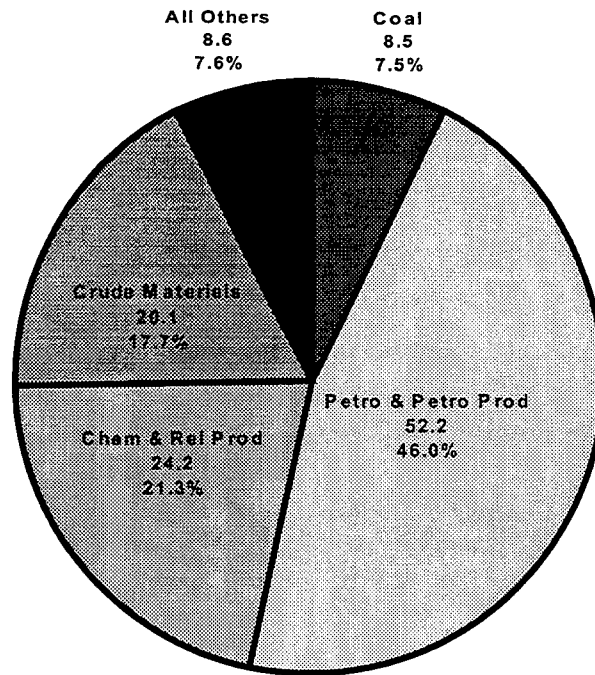
Table 3-14: GULF INTRACOASTAL WATERWAY, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>97.3</b>	<b>94.5</b>	<b>91.6</b>	<b>83.0</b>	<b>85.1</b>	<b>93.4</b>	<b>102.5</b>	<b>107.0</b>	<b>107.0</b>	<b>117.7</b>
Coal	5.0	5.1	4.6	4.0	3.9	6.8	7.2	8.8	8.0	8.0
Petrol & Petrol Prod	51.8	50.4	49.7	46.9	49.0	51.2	54.2	58.4	57.0	63.8
Chem & Rel Prod	17.2	15.7	15.6	14.5	15.8	17.3	17.1	19.8	22.9	24.4
Crude Materials	16.0	15.9	13.2	11.5	10.6	11.6	13.1	12.1	11.5	12.2
Primary Manuf Goods	3.1	3.4	4.3	2.6	2.6	3.2	4.5	3.3	3.2	3.9
Food & Farm Prod	2.6	2.3	2.3	1.9	1.7	1.9	3.2	3.0	2.7	3.3
All Manuf Equip	0.6	0.6	0.7	0.4	0.4	0.4	1.6	0.7	0.7	1.0
Other	1.0	1.1	1.2	1.3	1.2	1.2	1.5	1.0	1.1	1.2

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>112.7</b>	<b>115.4</b>	<b>111.0</b>	<b>112.3</b>	<b>114.9</b>	<b>117.6</b>	<b>118.0</b>	<b>118.0</b>	<b>118.1</b>	<b>113.6</b>
Coal	7.5	9.2	8.4	8.4	8.4	8.3	8.0	8.3	7.4	8.5
Petrol & Petrol Prod	63.8	62.4	58.4	60.0	58.9	58.1	55.7	54.2	54.2	52.2
Chem & Rel Prod	22.8	22.9	22.2	23.2	23.4	23.6	25.3	24.9	26.2	24.2
Crude Materials	11.4	14.4	14.8	13.9	16.0	19.6	18.3	20.1	21.4	20.1
Primary Manuf Goods	2.7	3.0	3.6	2.9	3.2	3.4	3.9	4.9	4.3	3.8
Food & Farm Prod	2.9	2.2	2.2	2.1	2.6	2.4	1.8	1.9	1.6	1.8
All Manuf Equip	0.5	0.4	0.3	0.5	0.8	0.8	4.1	3.0	2.0	1.9
Other	1.2	0.8	1.1	1.3	1.6	1.4	0.8	0.9	0.9	1.0

*Figure 3-15*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
**FOR THE GULF INTRACOASTAL WATERWAY**  
(million short tons and percentage of short tons)



*Table 3-15: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998*  
**FOR THE GULF INTRACOASTAL WATERWAY**  
(million short tons)

	1997	1998	% Change
<b>Total Commerce</b>	<b>118.1</b>	<b>113.6</b>	<b>-3.9</b>
Coal	7.4	8.5	13.8
Petroleum & Petroleum Products	54.2	52.2	-3.7
Chemicals & Related Products	26.2	24.2	-7.3
Crude Materials	21.4	20.1	-6.4
Primary Manufactured Goods	4.3	3.8	-11.7
Food & Farm Products	1.6	1.8	12.0
All Manuf Equip	2.0	1.9	-7.1
Other	0.9	1.0	16.0



Figure 3-16  
 COLUMBIA RIVER, 1979-1998  
 BY TYPE OF TRAFFIC  
 (million short tons)

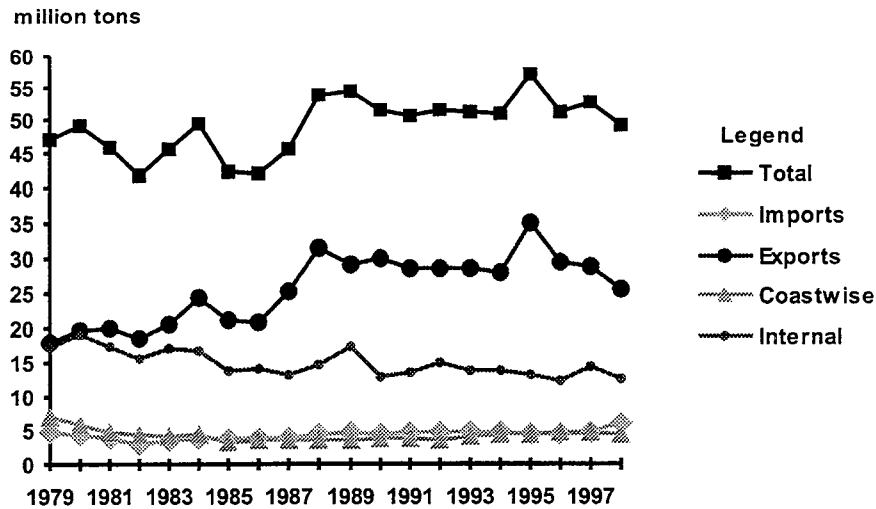


Table 3-16: COLUMBIA RIVER, 1979-1998  
 BY TYPE OF TRAFFIC\*  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Total</b>	<b>47.1</b>	<b>49.2</b>	<b>45.9</b>	<b>41.7</b>	<b>45.6</b>	<b>49.4</b>	<b>42.4</b>	<b>42.2</b>	<b>45.7</b>	<b>53.8</b>
Imports	4.8	4.5	3.8	3.1	3.7	4.0	3.9	3.8	3.8	4.3
Exports	17.9	19.7	20.0	18.6	20.7	24.5	21.3	20.7	25.3	31.3
Coastwise	7.0	6.0	4.8	4.3	4.1	4.3	3.2	3.6	3.4	3.5
Internal	17.4	19.1	17.4	15.7	17.1	16.6	14.0	14.1	13.2	14.8
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Total</b>	<b>54.5</b>	<b>51.4</b>	<b>50.4</b>	<b>51.6</b>	<b>51.2</b>	<b>50.9</b>	<b>57.1</b>	<b>51.2</b>	<b>52.7</b>	<b>49.1</b>
Imports	4.7	4.5	4.8	4.6	4.7	4.8	4.4	4.5	4.7	6.3
Exports	29.1	30.0	28.4	28.5	28.5	27.9	35.1	29.5	28.9	25.6
Coastwise	3.5	3.9	3.8	3.6	4.2	4.3	4.5	4.8	4.8	4.5
Internal	17.2	13.0	13.5	14.9	13.8	13.9	13.1	12.4	14.3	12.7

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

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Figure 3-17  
 COLUMBIA RIVER, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

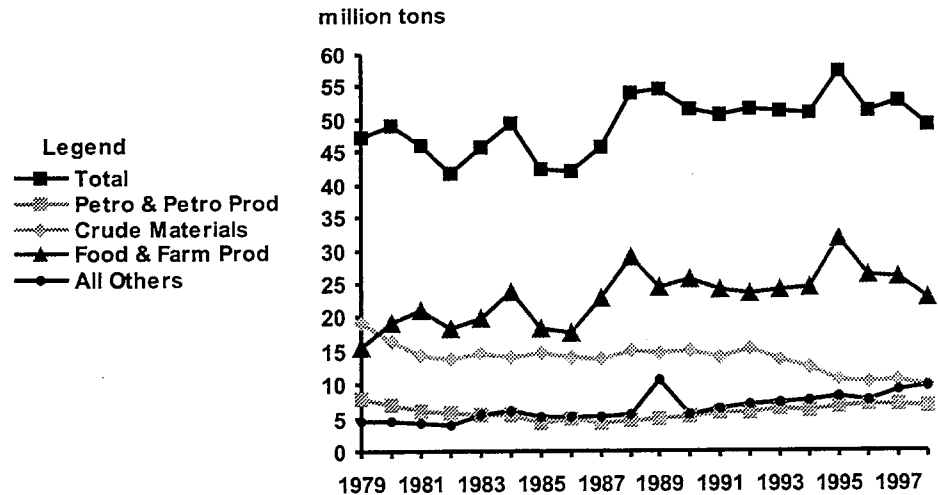


Table 3-17: COLUMBIA RIVER, 1979-1998  
 BY COMMODITY GROUP  
 (million short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	47.1	49.2	45.9	41.7	45.6	49.4	42.4	42.2	45.7	53.8
Coal	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.4	0.5	0.5
Petro & Petro Prod	7.9	7.1	6.1	5.8	5.5	5.4	4.4	5.0	4.3	4.4
Chem & Rel Prod	1.5	1.6	1.4	0.9	1.4	1.7	1.9	1.9	2.1	2.0
Crude Materials	19.0	16.5	14.4	13.8	14.6	14.1	14.6	14.1	13.6	14.9
Primary Manuf Goods	2.3	2.1	2.1	1.7	2.1	2.3	2.3	2.2	1.9	2.1
Food & Farm Prod	15.4	19.3	21.1	18.2	19.9	23.9	18.2	17.8	22.8	29.0
All Manuf Equip	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.4	0.8
Other	0.4	0.3	0.3	0.8	1.5	1.1	0.2	0.0	0.1	0.0

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	54.5	51.4	50.4	51.6	51.2	50.9	57.1	51.2	52.7	49.1
Coal	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petro & Petro Prod	4.8	5.1	5.8	5.7	6.2	6.0	6.8	7.1	7.0	6.7
Chem & Rel Prod	2.3	2.7	3.1	3.7	4.0	4.1	4.4	3.9	4.9	5.5
Crude Materials	14.6	15.0	14.1	15.3	13.6	12.6	10.5	10.4	10.7	9.8
Primary Manuf Goods	2.1	2.3	2.3	2.5	2.5	2.8	2.9	2.6	2.9	2.9
Food & Farm Prod	24.4	25.7	24.2	23.6	24.0	24.4	31.6	26.2	25.9	22.8
All Manuf Equip	0.7	0.6	0.7	0.7	0.7	0.8	0.8	0.8	1.1	1.0
Other	5.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 3-18: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998  
FOR THE COLUMBIA RIVER  
(million short tons)

	1997	1998	%Change
<b>Total Commerce</b>	<b>52.7</b>	<b>49.1</b>	<b>-6.9</b>
Coal	0.0	0.0	-50.9
Petro & Petro Prod	7.0	6.7	-3.8
Chem & Rel Prod	4.9	5.5	13.3
Crude Materials	10.7	9.8	-8.3
Primary Manuf Goods	2.9	2.9	0.5
Food & Farm Prod	25.9	22.8	-11.8
All Manuf Equip	1.1	1.0	-6.5
Other	0.2	0.2	-9.9
<b>Foreign Commerce</b>	<b>33.6</b>	<b>31.9</b>	<b>-5.2</b>
Coal	0.0	0.0	-50.9
Petro & Petro Prod	1.3	1.3	4.5
Chem & Rel Prod	4.1	5.0	20.3
Crude Materials	5.4	5.1	-5.3
Primary Manuf Goods	2.2	2.6	22.3
Food & Farm Prod	19.9	17.0	-14.5
All Manuf Equip	0.7	0.7	6.0
Other	0.0	0.0	76.2
<b>Domestic Commerce</b>	<b>19.1</b>	<b>17.2</b>	<b>-9.9</b>
Coal	-	-	-
Petro & Petro Prod	5.7	5.4	-5.6
Chem & Rel Prod	0.7	0.5	-26.0
Crude Materials	5.3	4.7	-11.3
Primary Manuf Goods	0.7	0.3	-64.3
Food & Farm Prod	6.0	5.8	-2.8
All Manuf Equip	0.4	0.3	-27.5
Other	0.2	0.2	-13.4

*Figure 3-18*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
**FOR THE COLUMBIA RIVER**  
 (million short tons and percentage of short tons)

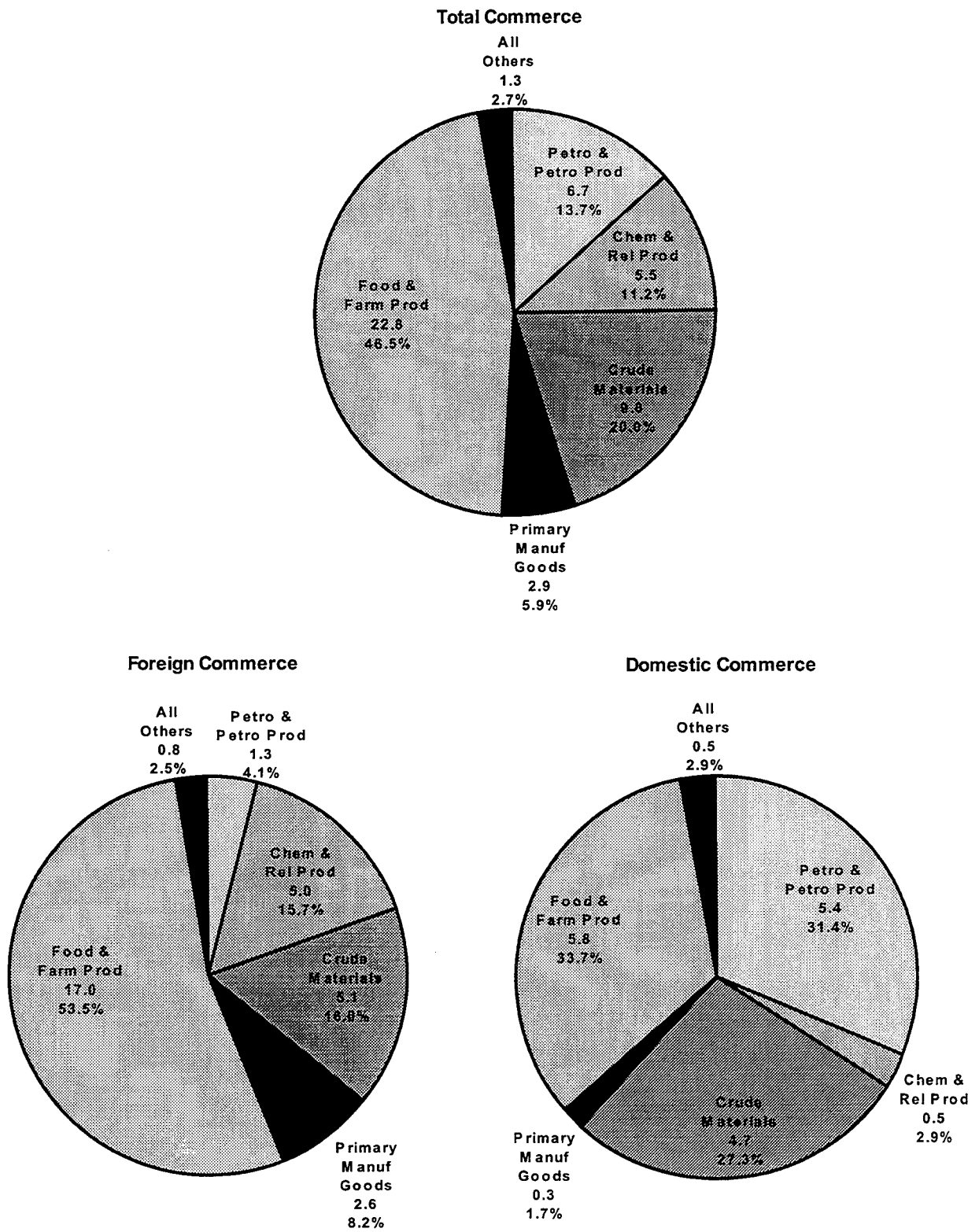


Figure 3-19  
SNAKE RIVER, 1979-1998  
BY COMMODITY GROUP  
(thousand short tons)

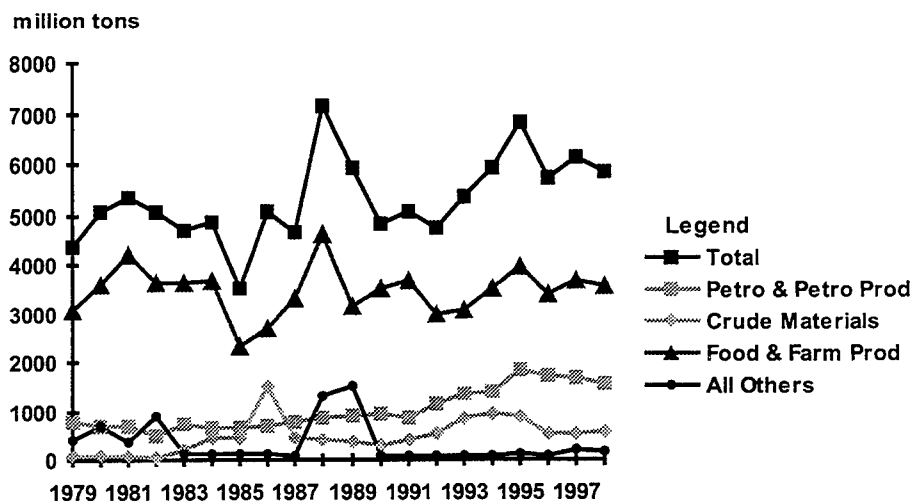


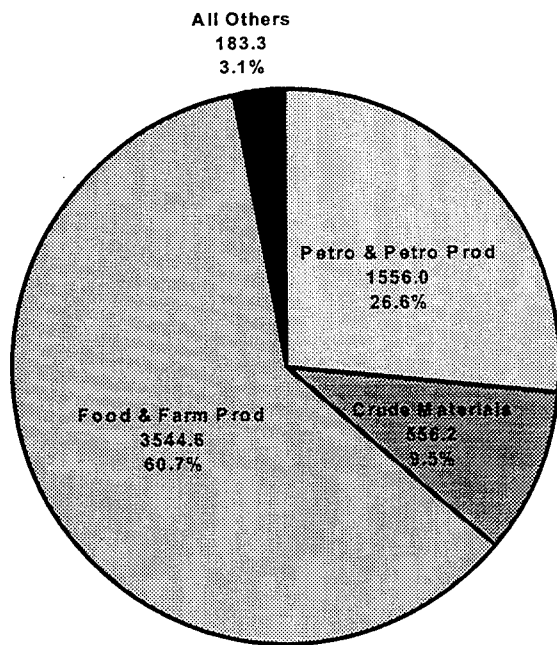
Table 3-19: SNAKE RIVER, 1979-1998  
BY COMMODITY GROUP  
(thousand short tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	<b>4,356.7</b>	<b>5,063.6</b>	<b>5,053.2</b>	<b>5,065.3</b>	<b>4,679.1</b>	<b>4,852.0</b>	<b>3,518.8</b>	<b>5,042.6</b>	<b>4,644.9</b>	<b>7,125.1</b>
Petro & Petro Prod	791.5	687.2	702.7	501.8	724.8	654.0	652.7	694.8	789.5	839.1
Chem & Rel Prod	45.1	56.8	41.4	51.0	25.7	26.3	27.2	45.2	36.2	22.9
Crude Materials	100.3	81.1	94.1	47.1	202.7	429.8	434.5	1,512.8	461.3	390.3
Primary Manuf Goods	76.6	37.7	34.0	35.5	85.2	71.7	74.4	45.9	45.6	52.2
Food & Farm Prod	3,065.8	3,583.6	4,187.4	3,629.9	3,625.3	3,653.5	2,316.8	2,704.4	3,301.3	4,601.1
All Manuf Equip	1.8	5.8	6.2	8.0	15.5	16.7	13.2	38.5	10.0	57.2
Waste & Scrap	264.5	611.4	269.4	792.0	-	-	-	0.9	1.0	1,162.2
Other	11.2	-	-	-	-	-	-	-	-	-

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	<b>5,930.3</b>	<b>4,804.0</b>	<b>5,053.2</b>	<b>4,719.3</b>	<b>5,339.1</b>	<b>5,929.1</b>	<b>6,803.9</b>	<b>5,707.4</b>	<b>6,102.5</b>	<b>5,840.0</b>
Petro & Petro Prod	908.4	920.0	875.1	1,140.4	1,328.9	1,391.3	1,847.6	1,708.8	1,683.2	1,556.0
Chem & Rel Prod	33.1	14.8	41.3	35.4	50.9	43.4	41.3	52.0	30.5	53.2
Crude Materials	347.2	304.8	404.1	533.6	858.6	925.9	878.9	548.5	540.2	556.2
Primary Manuf Goods	45.3	53.8	45.0	43.2	40.0	46.0	64.5	18.0	69.8	66.6
Food & Farm Prod	3,148.8	3,503.2	3,682.4	2,961.4	3,055.8	3,510.7	3,963.6	3,369.1	3,677.6	3,544.6
All Manuf Equip	9.9	7.3	5.3	5.3	4.9	11.8	8.0	10.8	101.3	63.5
Waste & Scrap	1,437.5	-	-	-	-	-	-	0.2	-	-
Other	-	-	-	-	-	-	-	-	-	-

*Figure 3-20*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1998**  
**FOR THE SNAKE RIVER**  
 (thousand short tons and percentage of short tons)



*Table 3-20: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1997-1998*  
**FOR THE SNAKE RIVER**  
 (thousand short tons)

	1997	1998	% Change
<b>Total Commerce</b>	<b>6,102.5</b>	<b>5,840.0</b>	-4.3
Petroleum & Petroleum Products	1,683.2	1,556.0	-7.6
Chemicals & Related Products	30.5	53.2	74.6
Crude Materials	540.2	556.2	3.0
Primary Manufactured Goods	69.8	66.6	-4.7
Food & Farm Products	3,677.6	3,544.6	-3.6
All Manufactured Equipment	101.3	63.5	-37.3
Waste & Scrap	-	-	-



## Section 4 States





Table 4-1: WATERBORNE COMMERCE BY STATES, 1998  
(thousand short tons)

State	Total*	Shipping		Receiving		Intrastate
		Domestic	Foreign	Domestic	Foreign	
<b>Total</b>	<b>2,339,500</b>	<b>768,945</b>	<b>404,708</b>	<b>768,945</b>	<b>840,680</b>	<b>325,167</b>
Alabama	73,222	10,154	10,003	20,825	15,133	17,108
Alaska	79,629	60,585	9,352	2,765	901	6,027
Arkansas	13,448	5,559	-	5,329	-	2,560
California	170,197	6,129	39,491	38,374	70,157	16,045
Connecticut	18,809	1,002	114	12,216	3,934	1,542
Delaware	25,530	14,420	615	1,919	7,291	1,285
District of Columbia	607	-	-	607	-	-
Florida	133,763	14,952	19,450	64,989	29,621	4,752
Georgia	20,488	785	7,254	2,569	9,658	221
Guam	410	35	-	375	-	-
Hawaii	20,644	682	804	5,941	6,341	6,875
Idaho	1,993	1,351	-	17	-	625
Illinois	114,067	80,200	540	20,338	4,677	8,311
Indiana	77,560	19,344	271	53,952	358	3,636
Iowa	14,404	9,180	-	4,122	-	1,102
Kansas	368	303	-	64	-	-
Kentucky	89,605	51,587	-	27,258	-	10,760
Louisiana	492,743	107,976	100,087	126,311	115,361	43,009
Maine	18,451	44	307	2,784	15,246	69
Maryland	46,043	5,745	10,521	9,215	16,229	4,333
Massachusetts	208,004	1,086	713	11,288	12,771	2,146
Michigan	84,603	28,788	6,128	23,066	9,283	17,339
Minnesota	55,014	39,984	5,135	6,999	760	2,135
Mississippi	44,992	11,997	3,235	11,621	17,008	1,131
Missouri	31,703	15,198	-	8,131	-	8,374
Nebraska	345	213	-	132	-	-
New Hampshire	4,194	1	42	781	3,370	-
New Jersey	95,625	28,300	5,555	25,110	31,798	4,863
New York	107,858	22,032	3,106	22,413	43,034	17,272
North Carolina	13,708	205	3,368	2,988	3,917	3,229
Ohio	136,176	26,361	18,165	65,417	7,212	19,021
Oklahoma	4,454	2,365	-	2,071	-	18
Oregon	36,292	2,776	16,323	8,360	4,286	4,547
Other	52,871	8,480	-	8,582	35,579	231
Pacific Islands	61	36	-	25	-	-
Pennsylvania	127,086	18,569	1,104	39,435	46,813	21,164
Puerto Rico	29,157	2,191	1,092	9,101	13,485	3,288
Rhode Island	8,141	158	50	4,324	3,597	12
South Carolina	20,612	346	6,482	5,015	8,671	97
Tennessee	47,180	6,626	-	36,464	-	4,090
Texas	427,296	46,761	56,837	20,002	250,376	53,320
Trans-shipment**	332	260	-	72	-	-
Vermont	-	-	-	-	-	-
Virgin Islands	44,523	19,573	662	237	23,575	476
Virginia	76,998	12,196	42,560	4,975	11,013	6,254
Washington	102,466	12,925	28,881	28,600	17,643	14,417
West Virginia	76,275	47,080	-	16,148	-	13,047
Wisconsin	40,499	24,404	6,457	7,620	1,580	438

\* Excludes duplication.

\*\* Ports and offshore anchorages where cargo is moved from one vessel to another. These are St. Lucia, Virgin Islands, Heald Bank off LA-TX coast, Cherique Grande, Panama, Puerto Amuelles, Panama and Hondo Platform-Pacific Ocean.

Table 4-2: WATERBORNE COMMERCE BY STATES, 1998, RANKED BY TOTAL TONS  
(thousand short tons)

State	Total*	Shipping		Receiving		Intrastate
		Domestic	Foreign	Domestic	Foreign	
<b>Total</b>	<b>2,339,500</b>	<b>768,945</b>	<b>404,708</b>	<b>768,945</b>	<b>840,680</b>	<b>325,167</b>
Louisiana	492,743	107,976	100,087	126,311	115,361	43,009
Texas	427,296	46,761	56,837	20,002	250,376	53,320
California	170,197	6,129	39,491	38,374	70,157	16,045
Ohio	136,176	26,361	18,165	65,417	7,212	19,021
Florida	133,763	14,952	19,450	64,989	29,621	4,752
Pennsylvania	127,086	18,569	1,104	39,435	46,813	21,164
Illinois	114,067	80,200	540	20,338	4,677	8,311
New York	107,858	22,032	3,106	22,413	43,034	17,272
Washington	102,466	12,925	28,881	28,600	17,643	14,417
New Jersey	95,625	28,300	5,555	25,110	31,798	4,863
Kentucky	89,605	51,587	-	27,258	-	10,760
Michigan	84,603	28,788	6,128	23,066	9,283	17,339
Alaska	79,629	60,585	9,352	2,765	901	6,027
Indiana	77,560	19,344	271	53,952	358	3,636
Virginia	76,998	12,196	42,560	4,975	11,013	6,254
West Virginia	76,275	47,080	-	16,148	-	13,047
Alabama	73,222	10,154	10,003	20,825	15,133	17,108
Minnesota	55,014	39,984	5,135	6,999	760	2,135
Other	52,871	8,480	-	8,582	35,579	231
Tennessee	47,180	6,626	-	36,464	-	4,090
Maryland	46,043	5,745	10,521	9,215	16,229	4,333
Mississippi	44,992	11,997	3,235	11,621	17,008	1,131
Virgin Islands	44,523	19,573	662	237	23,575	476
Wisconsin	40,499	24,404	6,457	7,620	1,580	438
Oregon	36,292	2,776	16,323	8,360	4,286	4,547
Missouri	31,703	15,198	-	8,131	-	8,374
Puerto Rico	29,157	2,191	1,092	9,101	13,485	3,288
Massachusetts	28,004	1,086	713	11,288	12,771	2,146
Delaware	25,530	14,420	615	1,919	7,291	1,285
Hawaii	20,644	682	804	5,941	6,341	6,875
South Carolina	20,612	346	6,482	5,015	8,671	97
Georgia	20,488	785	7,254	2,569	9,658	221
Connecticut	18,809	1,002	114	12,216	3,934	1,542
Maine	18,451	44	307	2,784	15,246	69
Iowa	14,404	9,180	-	4,122	-	1,102
North Carolina	13,708	205	3,368	2,988	3,917	3,229
Arkansas	13,448	5,559	-	5,329	-	2,560
Rhode Island	8,141	158	50	4,324	3,597	12
Oklahoma	4,454	2,365	-	2,071	-	18
New Hampshire	4,194	1	42	781	3,370	-
Idaho	1,993	1,351	-	17	-	625
District of Columbia	607	-	-	607	-	-
Guam	410	35	-	375	-	-
Kansas	368	303	-	64	-	-
Nebraska	345	213	-	132	-	-
Trans-Shipments**	332	260	-	72	-	-
Pacific Islands	61	36	-	25	-	-
Vermont	-	-	-	-	-	-

\* Excludes duplication.

\*\* Ports and offshore anchorages where cargo is moved from one vessel to another. These are St. Lucia, Virgin Islands, Heald Bank off LA-TX coast, Cherique Grande, Panama, Puerto Amuelles, Panama and Hondo Platform-Pacific Ocean.

Table 4-3: U.S. COMMERCIAL LANDINGS OF FISH, BY STATES, 1997 AND 1998\*  
(thousand pounds)

State	1997	1998	% Change	Year	Record Landing
<b>Total</b>	<b>9,845,685</b>	<b>9,193,967</b>	-6.6	-	-
Alabama	23,076	30,081	30.4	1973	36,744
Alaska	4,765,002	4,858,052	2.0	1993	5,905,638
California	648,715	336,106	-48.2	1936	1,760,193
Connecticut	19,396	17,625	-9.1	1930	88,012
Delaware	8,649	7,898	-8.7	1953	367,500
Florida	114,727	114,440	-0.3	1938	241,443
Georgia	14,511	13,017	-10.3	1927	47,607
Hawaii	36,568	36,426	-0.4	1993	34,582
Illinois	154	98	-36.4	-	**
Indiana	158	-	-100	-	**
Louisiana	1,426,495	1,119,500	-21.5	1984	1,931,027
Maine	244,059	183,905	-24.6	1950	356,266
Maryland	76,627	61,468	-19.8	1890	141,607
Massachusetts	229,991	252,518	9.8	1948	649,696
Michigan	15,874	14,831	-6.6	1930	35,580
Minnesota	472	427	-9.5	-	**
Mississippi	177,782	210,775	18.6	1984	476,997
New Hampshire	10,919	10,143	-7.1	-	**
New Jersey	168,289	195,918	16.4	1956	540,060
New York	60,013	57,533	-4.1	1880	335,000
North Carolina	229,729	182,161	-20.7	1981	432,006
Ohio	3,970	4,733	19.2	1936	31,083
Oregon	273,503	230,125	-15.9	1997	273,503
Pennsylvania	13	373	***	-	**
Rhode Island	138,693	131,420	-5.2	1957	142,080
South Carolina	17,023	17,304	1.7	1965	26,611
Texas	85,650	89,217	4.2	1960	237,684
Virginia	611,515	591,897	-3.2	1990	786,794
Washington	438,567	418,985	-4.5	1994	527,804
Wisconsin	5,545	6,991	26.1	-	**

Source: U.S. Department of Commerce, National Marine Fisheries Service.

\* Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available.

\*\* Data not available.

\*\*\* Greater than 500%.



## Section 5

### Ports



Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1998  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
70	Albany, NY	6,723,116	1,208,464	1,130,186	78,278	5,514,652
101	Alpena, MI	3,077,744	197,634	12,233	185,401	2,880,110
51	Anacortes, WA	11,947,777	1,939,552	1,116,066	823,486	10,008,225
94	Anchorage, AK	3,588,629	1,379,103	531,629	847,474	2,209,526
42	Ashtabula, OH	15,601,745	7,278,750	1,523,938	5,754,812	8,322,995
20	Baltimore, MD	40,114,301	25,758,911	15,937,952	9,820,959	14,355,390
71	Barbers Point, Oahu, HI	6,658,061	3,078,850	2,759,750	319,100	3,579,211
6	Baton Rouge, LA	66,835,290	22,525,850	15,349,494	7,176,356	44,309,440
9	Beaumont, TX	60,051,844	43,413,721	38,693,075	4,720,646	16,638,123
145	Bellingham, WA	1,244,375	529,013	274,269	254,744	715,362
107	Biloxi, MS	2,782,702	1,112	-	1,112	2,781,590
32	Boston, MA	21,221,634	11,435,880	10,727,069	708,811	9,785,754
84	Bridgeport, CT	4,626,030	1,265,194	1,250,713	14,481	3,360,836
106	Brownsville, TX	2,798,665	1,397,856	1,356,939	40,917	1,400,809
112	Brunswick, GA	2,614,796	2,337,410	1,379,598	957,812	277,386
117	Buffalo, NY	2,341,027	1,036,085	913,964	122,121	1,304,942
124	Buffington, IN	1,823,250	28,245	-	28,245	1,795,005
59	Burns Waterway Harbor, IN	9,006,079	482,530	275,192	207,338	8,523,549
55	Calcite, MI	9,388,736	1,956,099	121,805	1,834,294	7,432,637
75	Camden-Gloucester, NJ	5,492,206	2,815,145	2,531,218	283,927	2,677,061
37	Charleston, SC	18,689,079	13,269,794	6,889,578	6,380,216	5,419,285
144	Charlevoix, MI	1,280,675	67,766	-	67,766	1,212,909
126	Charlotte, FL	1,749,123	-	-	-	1,749,123
109	Chattanooga, TN	2,743,034	-	-	-	2,743,034
96	Chester, PA	3,388,372	2,901,735	2,743,985	157,750	486,637
26	Chicago, IL	25,957,888	5,217,923	4,677,446	540,477	20,739,965
50	Cincinnati, OH	11,987,060	-	-	-	11,987,060
38	Cleveland, OH	17,864,667	4,306,436	3,942,808	363,628	13,558,231
66	Conneaut, OH	7,785,565	2,790,926	5,318	2,785,608	4,994,639
108	Coos Bay, OR	2,772,824	2,265,222	15,691	2,249,531	507,602
5	Corpus Christi, TX	86,179,780	60,230,570	52,595,352	7,635,218	25,949,210
34	Detroit, MI	19,453,754	6,911,472	6,386,885	524,587	12,542,282
132	Drummond Island, MI	1,582,209	180,379	14,330	166,049	1,401,830
19	Duluth-Superior, MN and WI	42,442,971	11,945,586	766,877	11,178,709	30,497,385
142	Erie, PA	1,296,024	95,532	83,515	12,017	1,200,492
62	Escanaba, MI	8,529,848	-	-	-	8,529,848
97	Everett, WA	3,320,729	828,423	431,770	396,653	2,492,306
103	Fairport Harbor, OH	2,879,552	176,845	-	176,845	2,702,707
93	Fall River, MA	3,776,000	616,404	613,506	2,898	3,159,596
24	Freeport, TX	29,013,797	23,962,575	21,948,236	2,014,339	5,051,222
53	Galveston, TX	11,049,013	7,413,233	4,900,126	2,513,107	3,635,780
58	Gary, IN	9,083,070	-	-	-	9,083,070
130	Georgetown, SC	1,630,728	1,586,009	1,508,317	77,692	44,719
134	Grays Harbor, WA	1,488,271	1,083,990	344,295	739,695	404,281
116	Green Bay, WI	2,352,925	394,660	376,887	17,773	1,958,265
98	Greenville, MS	3,254,825	-	-	-	3,254,825
118	Gulfport, MS	2,206,931	2,127,337	1,155,753	971,584	79,594
102	Guntersville, AL	2,920,505	-	-	-	2,920,505
120	Helena, AR	2,033,325	-	-	-	2,033,325
150	Hempstead, NY	1,112,952	-	-	-	1,112,952

Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1998 (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
131	Hilo, HI	1,630,148	111,071	103,153	7,918	1,519,077
47	Honolulu, HI	13,722,717	3,951,046	3,473,674	477,372	9,771,671
148	Hopewell, VA	1,182,861	476,808	14,153	462,655	706,053
2	Houston, TX	169,070,334	108,549,772	75,118,513	33,431,259	60,520,562
27	Huntington, WV	24,738,617	-	-	-	24,738,617
147	Huron, OH	1,192,192	5,153	5,108	45	1,187,039
45	Indiana Harbor, IN	14,909,598	118,236	82,809	35,427	14,791,362
33	Jacksonville, FL	21,189,504	10,245,745	8,717,307	1,528,438	10,943,759
104	Kahului, Maui, HI	2,851,405	2,643	2,585	58	2,848,762
83	Kalama, WA	4,716,916	3,686,039	293,909	3,392,130	1,030,877
95	Kansas City, MO	3,451,378	-	-	-	3,451,378
149	Kelleys Island, OH	1,173,182	-	-	-	1,173,182
125	Kivilina, AK	1,800,261	687,945	-	687,945	1,112,316
135	Klawock, AK	1,474,147	64,621	-	64,621	1,409,526
11	Lake Charles, LA	53,568,060	32,338,608	28,372,581	3,966,027	21,229,452
10	Long Beach, CA	57,745,093	39,524,489	25,322,180	14,202,309	18,220,604
86	Longview, WA	4,279,140	3,420,553	398,366	3,022,187	858,587
46	Lorain, OH	14,166,459	106,619	106,619	-	14,059,840
18	Los Angeles, CA	44,144,241	34,661,696	22,439,312	12,222,384	9,482,545
61	Louisville, KY	8,616,878	-	-	-	8,616,878
91	Marblehead, OH	3,975,324	644,768	-	644,768	3,330,556
29	Marcus Hook, PA	22,743,087	11,071,597	10,979,579	92,018	11,671,490
87	Marine City, MI	4,251,951	-	-	-	4,251,951
143	Marysville, MI	1,282,338	261,810	251,908	9,902	1,020,528
63	Matagorda Ship Channel, TX	8,040,410	5,738,562	5,404,371	334,191	2,301,848
41	Memphis, TN	17,210,885	-	-	-	17,210,885
68	Miami, FL	7,391,938	5,695,755	3,108,064	2,587,691	1,696,183
100	Milwaukee, WI	3,108,428	1,401,974	1,082,303	319,671	1,706,454
129	Minneapolis, MN	1,660,628	-	-	-	1,660,628
15	Mobile, AL	49,229,731	25,121,681	15,131,990	9,989,691	24,108,050
122	Monroe, MI	1,929,494	227,019	212,388	14,631	1,702,475
79	Morehead City, NC	5,259,844	3,093,496	920,396	2,173,100	2,166,348
73	Mount Vernon, IN	5,577,100	-	-	-	5,577,100
121	Muskegon, MI	1,935,952	147,257	147,257	-	1,788,695
90	Nashville, TN	4,019,135	-	-	-	4,019,135
77	New Castle, DE	5,340,138	820,241	815,311	4,930	4,519,897
56	New Haven, CT	9,192,721	2,664,458	2,569,187	95,271	6,528,263
4	New Orleans, LA	88,768,246	48,115,147	26,383,831	21,731,316	40,653,099
3	New York, NY and NJ	137,543,784	61,546,606	53,518,545	8,028,061	75,997,178
35	Newport News, VA	19,075,074	13,325,666	1,674,035	11,651,631	5,749,408
69	Nikishka, AK	6,938,522	2,675,391	73,864	2,601,527	4,263,131
16	Norfolk Harbor, VA	47,748,758	36,975,865	6,885,575	30,090,290	10,772,893
52	Oakland, CA	11,148,294	8,739,936	3,451,102	5,288,834	2,408,358
136	Olympia, WA	1,423,424	102,271	11,030	91,241	1,321,153
99	Palm Beach, FL	3,149,274	990,777	314,674	676,103	2,158,497
110	Panama City, FL	2,683,473	637,005	212,973	424,032	2,046,468
25	Pascagoula, MS	26,403,862	18,056,990	15,830,773	2,226,217	8,346,872
28	Paulsboro, NJ	23,504,197	12,983,368	12,928,963	54,405	10,520,829
128	Penn Manor, PA	1,686,230	1,504,191	1,432,920	71,271	182,039
133	Pensacola, FL	1,580,465	297,772	65,900	231,872	1,282,693



Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1998 (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
17	Philadelphia, PA	47,465,958	32,425,279	31,653,864	771,415	15,040,679
13	Pittsburgh, PA	52,904,388	-	-	-	52,904,388
7	Plaquemines, LA, Port of	65,805,601	23,781,007	14,070,160	9,710,847	42,024,594
111	Ponce, PR	2,676,608	2,653,723	2,535,681	118,042	22,885
114	Port Angeles, WA	2,417,136	954,927	372,526	582,401	1,462,209
23	Port Arthur, TX	29,557,282	22,652,922	20,489,844	2,163,078	6,904,360
92	Port Canaveral, FL	3,794,726	2,215,893	1,943,619	272,274	1,578,833
89	Port Dolomite, MI	4,094,673	261,413	26,519	234,894	3,833,260
31	Port Everglades, FL	21,782,375	9,115,070	7,125,001	1,990,069	12,667,305
140	Port Hueneme, CA	1,328,037	1,166,034	1,030,690	135,344	162,003
76	Port Inland, MI	5,488,819	333,318	-	333,318	5,155,501
105	Port Jefferson, NY	2,841,676	-	-	-	2,841,676
113	Port Manatee, FL	2,418,987	1,153,274	1,090,265	63,009	1,265,713
44	Portland, ME	15,063,835	13,420,644	13,335,990	84,654	1,643,191
22	Portland, OR	29,973,660	17,746,422	4,234,584	13,511,838	12,227,238
88	Portsmouth, NH	4,193,692	3,412,312	3,370,479	41,833	781,380
54	Presque Isle, MI	10,482,586	1,935,423	51,751	1,883,672	8,547,163
64	Providence, RI	8,027,544	3,600,965	3,550,737	50,228	4,426,579
36	Richmond, CA	19,019,855	6,110,644	4,102,650	2,007,994	12,909,211
146	Sabine Pass, TX	1,200,000	126,038	90,496	35,542	1,073,962
127	Salem, MA	1,691,858	942,774	942,301	473	749,084
123	San Diego, CA	1,873,334	1,324,163	676,447	647,716	549,171
138	San Francisco, CA	1,330,186	784,482	544,165	240,317	545,704
43	San Juan, PR	15,278,621	5,798,298	5,278,284	520,014	9,480,323
85	Sandusky, OH	4,333,530	3,284,704	90,419	3,194,285	1,048,826
39	Savannah, GA	17,710,606	14,574,907	8,278,552	6,296,355	3,135,699
139	Searsport, ME	1,328,790	959,126	929,891	29,235	369,664
30	Seattle, WA	22,593,656	15,467,403	8,568,552	6,898,851	7,126,253
80	Silver Bay, MN	5,181,865	71,025	-	71,025	5,110,840
1	South Louisiana, LA, Port of	196,645,563	88,021,320	30,602,117	57,419,203	108,624,243
74	St. Clair, MI	5,532,649	8,720	8,720	-	5,523,929
21	St. Louis, MO and IL	31,757,671	-	-	-	31,757,671
81	St. Paul, MN	5,014,235	-	-	-	5,014,235
137	Stockton, CA	1,338,576	1,196,067	700,004	496,063	142,509
57	Stoneport, MI	9,113,958	367,191	-	367,191	8,746,767
40	Tacoma, WA	17,400,196	9,932,631	3,874,073	6,058,558	7,467,565
60	Taconite, MN	8,760,586	-	-	-	8,760,586
12	Tampa, FL	53,223,253	18,216,421	6,882,276	11,334,145	35,006,832
14	Texas City, TX	49,477,401	31,372,000	28,494,653	2,877,347	18,105,401
48	Toledo, OH	13,228,591	6,783,330	1,538,238	5,245,092	6,445,261
141	Trenton, NJ	1,307,438	-	-	-	1,307,438
115	Tulsa, Port of Catoosa, OK	2,367,486	-	-	-	2,367,486
49	Two Harbors, MN	13,222,545	-	-	-	13,222,545
8	Valdez, AK	61,946,136	3,081,534	1,925	3,079,609	58,864,602
65	Vancouver, WA	7,849,489	5,367,637	903,770	4,463,867	2,481,852
72	Vicksburg, MS	5,824,652	-	-	-	5,824,652
78	Victoria, TX	5,297,710	-	-	-	5,297,710
119	Weedon Island, FL	2,091,902	-	-	-	2,091,902
82	Wilmington, DE	4,997,547	3,609,153	3,018,123	591,030	1,388,394
67	Wilmington, NC	7,409,749	3,946,808	2,753,974	1,192,834	3,462,941

Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1998, RANKED BY TOTAL TONS  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
1	South Louisiana, LA, Port of	196,645,563	88,021,320	30,602,117	57,419,203	108,624,243
2	Houston, TX	169,070,334	108,549,772	75,118,513	33,431,259	60,520,562
3	New York, NY and NJ	137,543,784	61,546,606	53,518,545	8,028,061	75,997,178
4	New Orleans, LA	88,768,246	48,115,147	26,383,831	21,731,316	40,653,099
5	Corpus Christi, TX	86,179,780	60,230,570	52,595,352	7,635,218	25,949,210
6	Baton Rouge, LA	66,835,290	22,525,850	15,349,494	7,176,356	44,309,440
7	Plaquemines, LA, Port of	65,805,601	23,781,007	14,070,160	9,710,847	42,024,594
8	Valdez, AK	61,946,136	3,081,534	1,925	3,079,609	58,864,602
9	Beaumont, TX	60,051,844	43,413,721	38,693,075	4,720,646	16,638,123
10	Long Beach, CA	57,745,093	39,524,489	25,322,180	14,202,309	18,220,604
11	Lake Charles, LA	53,568,060	32,338,608	28,372,581	3,966,027	21,229,452
12	Tampa, FL	53,223,253	18,216,421	6,882,276	11,334,145	35,006,832
13	Pittsburgh, PA	52,904,388	-	-	-	52,904,388
14	Texas City, TX	49,477,401	31,372,000	28,494,653	2,877,347	18,105,401
15	Mobile, AL	49,229,731	25,121,681	15,131,990	9,989,691	24,108,050
16	Norfolk Harbor, VA	47,748,758	36,975,865	6,885,575	30,090,290	10,772,893
17	Philadelphia, PA	47,465,958	32,425,279	31,653,864	771,415	15,040,679
18	Los Angeles, CA	44,144,241	34,661,696	22,439,312	12,222,384	9,482,545
19	Duluth-Superior, MN and WI	42,442,971	11,945,586	766,877	11,178,709	30,497,385
20	Baltimore, MD	40,114,301	25,758,911	15,937,952	9,820,959	14,355,390
21	St. Louis, MO and IL	31,757,671	-	-	-	31,757,671
22	Portland, OR	29,973,660	17,746,422	4,234,584	13,511,838	12,227,238
23	Port Arthur, TX	29,557,282	22,652,922	20,489,844	2,163,078	6,904,360
24	Freeport, TX	29,013,797	23,962,575	21,948,236	2,014,339	5,051,222
25	Pascagoula, MS	26,403,862	18,056,990	15,830,773	2,226,217	8,346,872
26	Chicago, IL	25,957,888	5,217,923	4,677,446	540,477	20,739,965
27	Huntington, WV	24,738,617	-	-	-	24,738,617
28	Paulsboro, NJ	23,504,197	12,983,368	12,928,963	54,405	10,520,829
29	Marcus Hook, PA	22,743,087	11,071,597	10,979,579	92,018	11,671,490
30	Seattle, WA	22,593,656	15,467,403	8,568,552	6,898,851	7,126,253
31	Port Everglades, FL	21,782,375	9,115,070	7,125,001	1,990,069	12,667,305
32	Boston, MA	21,221,634	11,435,880	10,727,069	708,811	9,785,754
33	Jacksonville, FL	21,189,504	10,245,745	8,717,307	1,528,438	10,943,759
34	Detroit, MI	19,453,754	6,911,472	6,386,885	524,587	12,542,282
35	Newport News, VA	19,075,074	13,325,666	1,674,035	11,651,631	5,749,408
36	Richmond, CA	19,019,855	6,110,644	4,102,650	2,007,994	12,909,211
37	Charleston, SC	18,689,079	13,269,794	6,889,578	6,380,216	5,419,285
38	Cleveland, OH	17,864,667	4,306,436	3,942,808	363,628	13,558,231
39	Savannah, GA	17,710,606	14,574,907	8,278,552	6,296,355	3,135,699
40	Tacoma, WA	17,400,196	9,932,631	3,874,073	6,058,558	7,467,565
41	Memphis, TN	17,210,885	-	-	-	17,210,885
42	Ashtabula, OH	15,601,745	7,278,750	1,523,938	5,754,812	8,322,995
43	San Juan, PR	15,278,621	5,798,298	5,278,284	520,014	9,480,323
44	Portland, ME	15,063,835	13,420,644	13,335,990	84,654	1,643,191
45	Indiana Harbor, IN	14,909,598	118,236	82,809	35,427	14,791,362
46	Lorain, OH	14,166,459	106,619	106,619	-	14,059,840
47	Honolulu, HI	13,722,717	3,951,046	3,473,674	477,372	9,771,671
48	Toledo, OH	13,228,591	6,783,330	1,538,238	5,245,092	6,445,261
49	Two Harbors, MN	13,222,545	-	-	-	13,222,545
50	Cincinnati, OH	11,987,060	-	-	-	11,987,060

Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1998, RANKED BY TOTAL TONS (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
51	Anacortes, WA	11,947,777	1,939,552	1,116,066	823,486	10,008,225
52	Oakland, CA	11,148,294	8,739,936	3,451,102	5,288,834	2,408,358
53	Galveston, TX	11,049,013	7,413,233	4,900,126	2,513,107	3,635,780
54	Presque Isle, MI	10,482,586	1,935,423	51,751	1,883,672	8,547,163
55	Calcite, MI	9,388,736	1,956,099	121,805	1,834,294	7,432,637
56	New Haven, CT	9,192,721	2,664,458	2,569,187	95,271	6,528,263
57	Stoneport, MI	9,113,958	367,191	-	367,191	8,746,767
58	Gary, IN	9,083,070	-	-	-	9,083,070
59	Burns Waterway Harbor, IN	9,006,079	482,530	275,192	207,338	8,523,549
60	Taconite, MN	8,760,586	-	-	-	8,760,586
61	Louisville, KY	8,616,878	-	-	-	8,616,878
62	Escanaba, MI	8,529,848	-	-	-	8,529,848
63	Matagorda Ship Channel, TX	8,040,410	5,738,562	5,404,371	334,191	2,301,848
64	Providence, RI	8,027,544	3,600,965	3,550,737	50,228	4,426,579
65	Vancouver, WA	7,849,489	5,367,637	903,770	4,463,867	2,481,852
66	Conneaut, OH	7,785,565	2,790,926	5,318	2,785,608	4,994,639
67	Wilmington, NC	7,409,749	3,946,808	2,753,974	1,192,834	3,462,941
68	Miami, FL	7,391,938	5,695,755	3,108,064	2,587,691	1,696,183
69	Nikishka, AK	6,938,522	2,675,391	73,864	2,601,527	4,263,131
70	Albany, NY	6,723,116	1,208,464	1,130,186	78,278	5,514,652
71	Barbers Point, Oahu, HI	6,658,061	3,078,850	2,759,750	319,100	3,579,211
72	Vicksburg, MS	5,824,652	-	-	-	5,824,652
73	Mount Vernon, IN	5,577,100	-	-	-	5,577,100
74	St. Clair, MI	5,532,649	8,720	8,720	-	5,523,929
75	Camden-Gloucester, NJ	5,492,206	2,815,145	2,531,218	283,927	2,677,061
76	Port Inland, MI	5,488,819	333,318	-	333,318	5,155,501
77	New Castle, DE	5,340,138	820,241	815,311	4,930	4,519,897
78	Victoria, TX	5,297,710	-	-	-	5,297,710
79	Morehead City, NC	5,259,844	3,093,496	920,396	2,173,100	2,166,348
80	Silver Bay, MN	5,181,865	71,025	-	71,025	5,110,840
81	St. Paul, MN	5,014,235	-	-	-	5,014,235
82	Wilmington, DE	4,997,547	3,609,153	3,018,123	591,030	1,388,394
83	Kalama, WA	4,716,916	3,686,039	293,909	3,392,130	1,030,877
84	Bridgeport, CT	4,626,030	1,265,194	1,250,713	14,481	3,360,836
85	Sandusky, OH	4,333,530	3,284,704	90,419	3,194,285	1,048,826
86	Longview, WA	4,279,140	3,420,553	398,366	3,022,187	858,587
87	Marine City, MI	4,251,951	-	-	-	4,251,951
88	Portsmouth, NH	4,193,692	3,412,312	3,370,479	41,833	781,380
89	Port Dolomite, MI	4,094,673	261,413	26,519	234,894	3,833,260
90	Nashville, TN	4,019,135	-	-	-	4,019,135
91	Marblehead, OH	3,975,324	644,768	-	644,768	3,330,556
92	Port Canaveral, FL	3,794,726	2,215,893	1,943,619	272,274	1,578,833
93	Fall River, MA	3,776,000	616,404	613,506	2,898	3,159,596
94	Anchorage, AK	3,588,629	1,379,103	531,629	847,474	2,209,526
95	Kansas City, MO	3,451,378	-	-	-	3,451,378
96	Chester, PA	3,388,372	2,901,735	2,743,985	157,750	486,637
97	Everett, WA	3,320,729	828,423	431,770	396,653	2,492,306
98	Greenville, MS	3,254,825	-	-	-	3,254,825
99	Palm Beach, FL	3,149,274	990,777	314,674	676,103	2,158,497
100	Milwaukee, WI	3,108,428	1,401,974	1,082,303	319,671	1,706,454

Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1998, RANKED BY TOTAL TONS (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
101	Alpena, MI	3,077,744	197,634	12,233	185,401	2,880,110
102	Guntersville, AL	2,920,505	-	-	-	2,920,505
103	Fairport Harbor, OH	2,879,552	176,845	-	176,845	2,702,707
104	Kahului, Maui, HI	2,851,405	2,643	2,585	58	2,848,762
105	Port Jefferson, NY	2,841,676	-	-	-	2,841,676
106	Brownsville, TX	2,798,665	1,397,856	1,356,939	40,917	1,400,809
107	Biloxi, MS	2,782,702	1,112	0	1,112	2,781,590
108	Coos Bay, OR	2,772,824	2,265,222	15,691	2,249,531	507,602
109	Chattanooga, TN	2,743,034	-	-	-	2,743,034
110	Panama City, FL	2,683,473	637,005	212,973	424,032	2,046,468
111	Ponce, PR	2,676,608	2,653,723	2,535,681	118,042	22,885
112	Brunswick, GA	2,614,796	2,337,410	1,379,598	957,812	277,386
113	Port Manatee, FL	2,418,987	1,153,274	1,090,265	63,009	1,265,713
114	Port Angeles, WA	2,417,136	954,927	372,526	582,401	1,462,209
115	Tulsa, Port of Catoosa, OK	2,367,486	-	-	-	2,367,486
116	Green Bay, WI	2,352,925	394,660	376,887	17,773	1,958,265
117	Buffalo, NY	2,341,027	1,036,085	913,964	122,121	1,304,942
118	Gulfport, MS	2,206,931	2,127,337	1,155,753	971,584	79,594
119	Weedon Island, FL	2,091,902	-	-	-	2,091,902
120	Helena, AR	2,033,325	-	-	-	2,033,325
121	Muskegon, MI	1,935,952	147,257	147,257	-	1,788,695
122	Monroe, MI	1,929,494	227,019	212,388	14,631	1,702,475
123	San Diego, CA	1,873,334	1,324,163	676,447	647,716	549,171
124	Buffington, IN	1,823,250	28,245	-	28,245	1,795,005
125	Kivilina, AK	1,800,261	687,945	-	687,945	1,112,316
126	Charlotte, FL	1,749,123	-	-	-	1,749,123
127	Salem, MA	1,691,858	942,774	942,301	473	749,084
128	Penn Manor, PA	1,686,230	1,504,191	1,432,920	71,271	182,039
129	Minneapolis, MN	1,660,628	-	-	-	1,660,628
130	Georgetown, SC	1,630,728	1,586,009	1,508,317	77,692	44,719
131	Hilo, HI	1,630,148	111,071	103,153	7,918	1,519,077
132	Drummond Island, MI	1,582,209	180,379	14,330	166,049	1,401,830
133	Pensacola, FL	1,580,465	297,772	65,900	231,872	1,282,693
134	Grays Harbor, WA	1,488,271	1,083,990	344,295	739,695	404,281
135	Klawock, AK	1,474,147	64,621	-	64,621	1,409,526
136	Olympia, WA	1,423,424	102,271	11,030	91,241	1,321,153
137	Stockton, CA	1,338,576	1,196,067	700,004	496,063	142,509
138	San Francisco, CA	1,330,186	784,482	544,165	240,317	545,704
139	Searsport, ME	1,328,790	959,126	929,891	29,235	369,664
140	Port Hueneme, CA	1,328,037	1,166,034	1,030,690	135,344	162,003
141	Trenton, NJ	1,307,438	-	-	-	1,307,438
142	Erie, PA	1,296,024	95,532	83,515	12,017	1,200,492
143	Marysville, MI	1,282,338	261,810	251,908	9,902	1,020,528
144	Charlevoix, MI	1,280,675	67,766	-	67,766	1,212,909
145	Bellingham, WA	1,244,375	529,013	274,269	254,744	715,362
146	Sabine Pass, TX	1,200,000	126,038	90,496	35,542	1,073,962
147	Huron, OH	1,192,192	5,153	5,108	45	1,187,039
148	Hopewell, VA	1,182,861	476,808	14,153	462,655	706,053
149	Kelleys Island, OH	1,173,182	-	-	-	1,173,182
150	Hempstead, NY	1,112,952	-	-	-	1,112,952

## Appendix



# ORDERING GUIDE FOR THE NAVIGATION DATA CENTER REPORTS

## Waterborne Commerce, Vessel and Locks Statistics

<u>Title</u>	<u>Sales Price*</u>
Waterborne Commerce of the United States (WCUS)	
Part 1 WCUS, Waterways and Harbors on the Atlantic Coast . . . . .	\$ 13.00
1st Class Postage . . . . .	6.00
Manuscript Data on diskette . . . . .	5.00
Part 2 WCUS, Waterways and Harbors on the Gulf Coast, Mississippi River System and Antilles . . . . .	15.00
1st Class Postage. . . . .	6.00
Manuscript Data on diskette . . . . .	5.00
Part 3 WCUS, Waterways and Harbors of the Great Lakes. . . . .	6.00
1st Class Postage. . . . .	3.00
Manuscript Data on diskette . . . . .	5.00
Part 4 WCUS, Waterways and Harbors on the Pacific Coast, Alaska and Hawaii . . .	9.00
1st Class Postage. . . . .	5.00
Manuscript Data on diskette . . . . .	5.00
Part 5 WCUS, National Summaries . . . . .	4.00
1st Class Postage. . . . .	3.00
Public Domain Database (Area to Area or State to State)	
Hardcopy . . . . .	15.00
Diskette . . . . .	5.00
Waterborne Transportation Lines of the United States (WTLUS)	
Volume 1 National Summaries . . . . .	2.00
1st Class Postage. . . . .	2.00
Volume 2 Vessel Company Summary . . . . .	4.00
1st Class Postage. . . . .	3.00
Vessel Company Information on diskette (decompressing utility included). . . .	5.00
Volume 3 Vessel Characteristics . . . . .	20.00
1st Class Postage. . . . .	6.00
Vessel Characteristics on diskette (decompressing utility included) . . . . .	5.00

### Complimentary Copies

- The U.S. Waterway System - FACTS
- Tonnage for Selected United States Ports
- State Tonnage Report (Total waterborne commerce by state)
- Estimated Waterborne Commerce Statistics, National Totals and Selected Inland Waterways
- Summary of United States Flag Vessels
- Summary of Lock Statistics (Contact: Bob Baldwin, (703) 428-8047)

\* Effective with the calendar year 1994 publications.

Material may be ordered from Waterborne Commerce Statistics Center, U.S. Army Corps of Engineers, P.O. Box 61280, New Orleans, LA 70161-1280. Checks or money orders should be made out to FAO-B2. Point of contact is Ms. Peggy Galliano (504) 862-1424, FAX (504) 862-1423.

## Ordering Guide for Port Series Reports

PS NO	Description	Date of Publication	Sales Price
1	Portland and Searsport, ME, and Portsmouth, NH	1985	\$ 8.00
3	Boston, MA	1994	\$16.00
4	Ports of Southern New England (Bridgeport, CT; New Haven, CT; Connecticut River; New London, CT; Providence, RI; Fall River and New Bedford, MA; Fairhaven, MA)	1994	\$20.00
5	New York, NY, and NJ, and Ports on Long Island, NY	1999	\$46.00
6	Albany and Ports on Hudson River, NY	1996	\$14.00
8	Philadelphia, PA; Camden, NJ; Wilmington, DE; and Ports on Delaware River	1998	\$21.00
10	Baltimore, MD	1991	\$9.00
11	Ports of Hampton Roads, and Ports on the James and York Rivers, VA	1993	\$30.00
12	Wilmington and Morehead City, NC	1997	\$20.00
13	Charleston and Georgetown, SC	1997	\$13.00
14	Savannah and Brunswick, GA	1990	\$8.50
15	Jacksonville and Fernandina Beach, FL	1997	\$13.00
16	Miami, Port Everglades, Palm Beach, and Port Canaveral, FL	1999	\$33.00
17	The Ports of Tampa and Port Manatee, FL	1996	\$17.00
18	Mobile, AL	1998	\$9.00
19	Panama City and Penscola, FL; Pascagoula and Gulfport, MS; and Ports on the Apalachicola, Chattahoochee, and Flint Rivers	1998	\$21.00
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20A	Mississippi River Ports Below and Above New Orleans, LA	1991	\$12.00
21	Baton Rouge and Lake Charles, LA	1990	\$13.00
22	Port Arthur, Beaumont, and Orange, TX	1988	\$9.00
23	Galveston and Texas City, TX	1996	\$17.00
24	Houston, TX	1999	\$33.00
25	Corpus Christi, TX	1993	\$12.00
26	Freeport, Point Comfort/Port Lavaca, Brownsville, and Ports along Gulf Intracoastal Waterway, TX	1991	\$12.00
27	San Diego, CA	1998	\$23.00
28	The Ports of Long Beach, Los Angeles and Port Hueneme, CA	1996	\$23.00
30	San Francisco, Redwood City, and Humboldt Bay, CA	1991	\$9.00
31	Oakland, Alameda, Richmond, and Ports on Carquinez Strait, CA	1991	\$9.00
32	Sacramento, Stockton, Pittsburg and Antioch, Ca	1996	\$22.00
33	Coos Bay, OR	1986	\$13.00
34	Port of Portland, OR and Ports on Columbia-Snake River System , (Astoria, The Dalles, Boardman, and Umatilla, OR; Longview, Kalama, Vancouver, Pasco/ Kennewick, Wilma, and Clarkston, WA; and Lewiston, ID)	1996	\$36.00
35	The Ports of Tacoma, Olympia and Grays Harbor, WA	1993	\$15.00
36	Seattle, WA	1993	\$22.00
37	Port Angeles, Port Townsend, Everett, Anacortes, and Bellingham, WA.	1998	\$10.00
38	Ports of Southeast Alaska (Metlakatla, Ketchikan, Hollis, Thome Bay, Hydaburg, Craig, Klawock, Wrangell, Petersburg, Kake, Juneau, Angoon, Haines, Skagway, Sitka, Pelican, Gustavus, Hoonah, and Yakutat)	1995	\$23.00
39	Ports of Southwest and Western Alaska (1ST EDITION)	1994	\$23.00
41	Buffalo, Rochester, Oswego, and Ogdensburg, NY	1990	\$7.50
42	U.S. Ports on Lake Erie (Erie, PA; Conneaut, Ashtabula, Fairport Harbor, Lorain, Huron, and Sandusky, OH)	1990	\$10.00
43	Cleveland, OH	1989	\$8.00
44	Toledo, OH	1989	\$7.00
45	Detroit and Ports on the Saginaw River, MI	1996	\$25.00
46	Chicago, IL	1995	\$23.00
48	The Port of Milwaukee, WI and Ports on Lake Michigan	1995	\$26.00
49	Duluth, MN; Superior, WI; Taconite Harbor, Silver Bay, and Two Harbors, MN; and Ashland, WI.	1987	\$7.50
50	Ports of Hawaii (Honolulu, Kahului, Nawiliwili, Port Allen, Kuanakakai, Kaunapau, Hilo, and Kawaihae)	1999	\$15.00
60	Pittsburgh, PA, and Ports on the Ohio, Monogahela, and Allegheny Rivers, PA.	1992	\$14.00
61	Huntington, WV, Ports on Ohio River (Miles 40-317), and Kanawha River, WV	1992	\$14.00
62	Cincinnati, OH, and Ports on Ohio River (Miles 317-560)	1991	\$10.00
63	Louisville, KY, Ports on Ohio River (Miles 560-980), and Cumberland and Green Rivers	1992	\$12.00
64	Ports on Tennessee River, Tennessee-Tombigbee and Black Warrior-Tombigbee Waterways, and Alabama River	1998	\$38.00
65	Illinois Waterway, IL.	1994	\$14.00
68	Ports on the Missouri, Arkansas, Verdigris, White, and Ouachita Rivers	1987	\$12.00
69	Minneapolis-St. Paul, MN, and Ports on Upper Mississippi River (Miles 300-860 AOR)	1994	\$38.00
70	St. Louis, MO, and Ports on Upper Mississippi River (Miles 0-300 AOR)	1992	\$11.00
71	Memphis, TN; Helena, AR; and Ports on Lower Mississippi River (Miles 620-954 AHP)	1993	\$12.00
72	Natchez, Vicksburg, and Greenville, MS, and Ports on Lower Mississippi River (Miles 255-620 AHP)	1991	\$9.00

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Port Series reports may be ordered from the Navigation Data Center (CEWRC-NDC-P), 7701 Telegraph Road, Casey Building, Alexandria, VA 22315-3868. Federal law requires advance payment for all purchases. Check or money order (in U.S. funds) should be made payable to the Superintendent of Documents. Telephone/telex orders are accepted and can be charged to Visa, Master Card, Discover/Novus. Publications are mailed postpaid (4th Class Mail) on the same day that order is received unless a prepaid alternate delivery method is specified. Prices are subject to change without notice.

**Contact:** Donna Norbutt - voice (703) 428-8059 FAX: (703) 428-6047 or 428-8171.

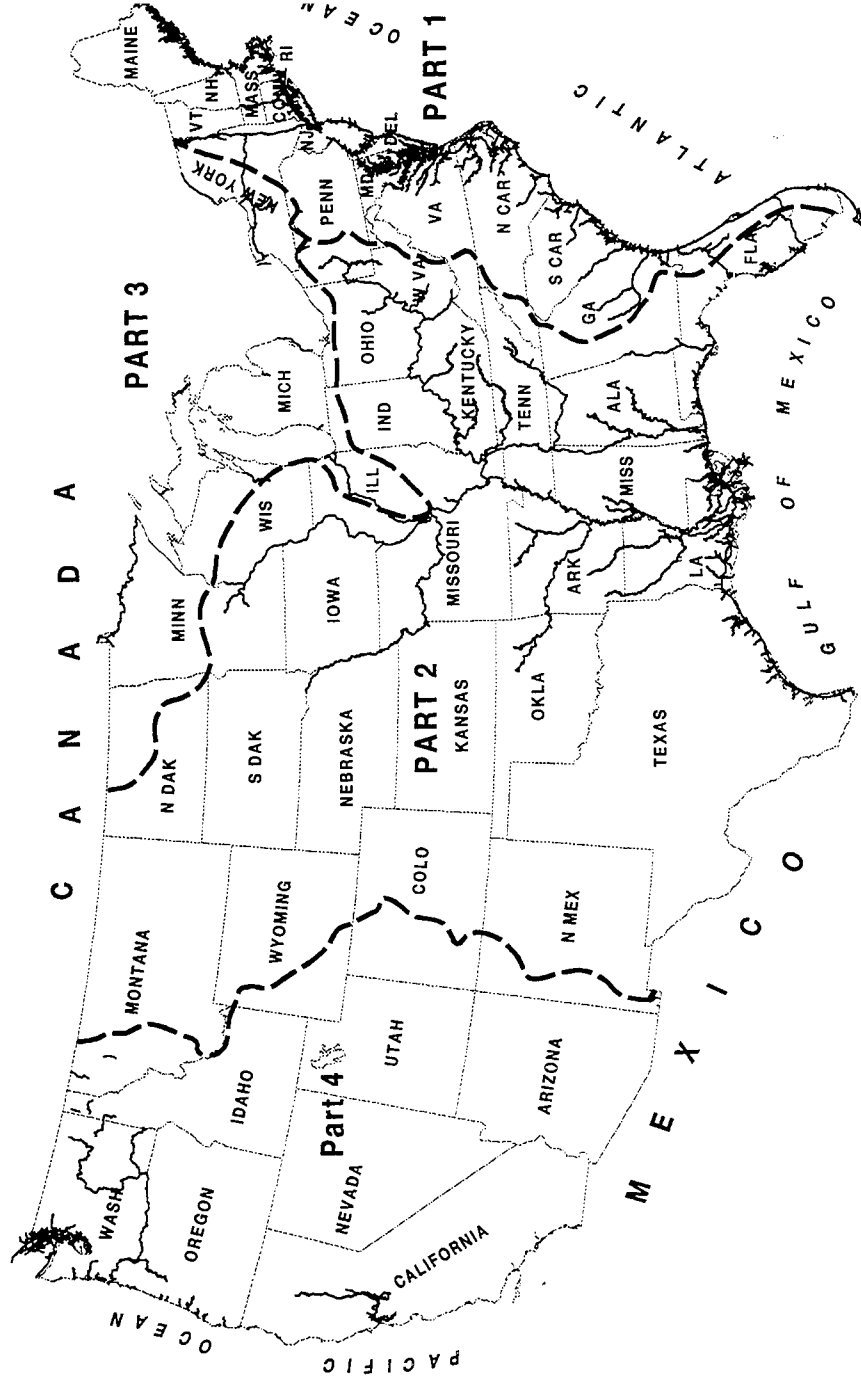
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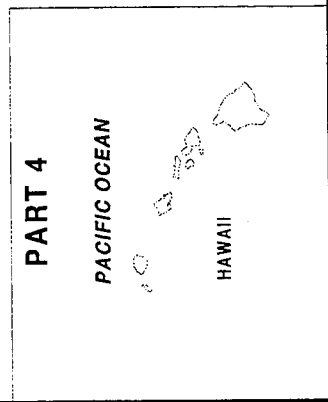
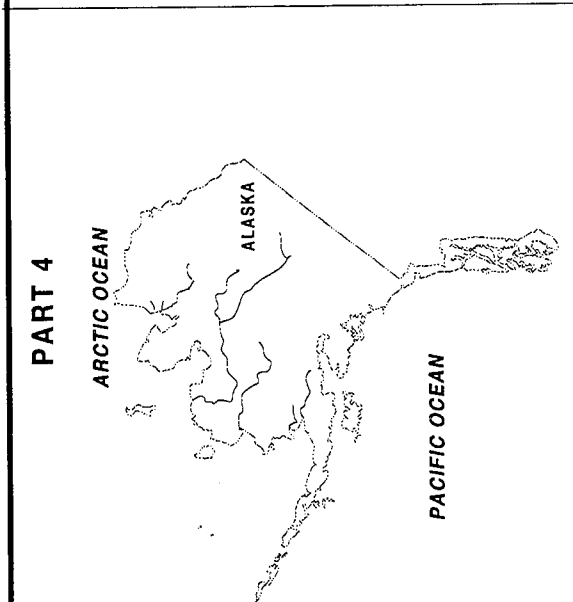
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**WATERBORNE COMMERCE OF THE UNITED STATES**

- Part 1 - Atlantic Coast
- Part 2 - Gulf Coast, Mississippi River System and Antilles
- Part 3 - Great Lakes
- Part 4 - Pacific Coast, Alaska and Hawaii
- Part 5 - Waterborne Commerce of the United States (National Summary)



**PART 5**



# REPORT DOCUMENTATION PAGE

*Form Approved*  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY <i>(Leave blank)</i>	2. REPORT DATE <b>March 2000</b>	3. REPORT TYPE AND DATES COVERED <b>Annual 1/1/98 - 12/31/98</b>	
4. TITLE AND SUBTITLE <b>Waterborne Commerce of the United States Calendar Year - 1998 Part 5, Waterways and Harbors, National Summaries</b>		5. FUNDING NUMBERS	
6. AUTHOR(S) <b>Department of the Army Corps of Engineers</b>		8. PERFORMING ORGANIZATION REPORT NUMBER  <b>WRSC-WCUS-98-5</b>	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>U.S. Army Corps of Engineers Waterborne Commerce Statistics Center P.O. Box 61280 New Orleans, LA 70161-1280</b>		10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) <b>U.S. Army Corps of Engineers Headquarters Pulaski Building 20 Massachusetts Ave., N.W. Washington D.C. 20314-1000</b>		11. SUPPLEMENTARY NOTES <b>Available From: National Technical Information Services (NTIS) 5285 Port Royal Road Springfield, VA 22161</b>	
12a. DISTRIBUTION / AVAILABILITY STATEMENT <b>Unclassified/Unlimited</b>		12b. DISTRIBUTION CODE	
13. ABSTRACT <i>(Maximum 200 words)</i> <b>Waterborne Commerce of the United States (WCUS), Part 5, Calendar Year 1998, is one of a series of five (5) publications containing statistics on the commercial movement of foreign and domestic cargo. WCUS, Part 5, presents a national summary of tons and ton-mile contained in the WCUS Publications 1 - 4.</b>			
14. SUBJECT TERMS <b>Waterborne Commerce Statistics, Domestic Commerce, Water Transportation, Freight Traffic, Commodity Flows.</b>		15. NUMBER OF PAGES <b>104</b>	
17. SECURITY CLASSIFICATION OF REPORT <b>Unclassified</b>		16. PRICE CODE	
18. SECURITY CLASSIFICATION OF THIS PAGE <b>Unclassified</b>		19. SECURITY CLASSIFICATION OF ABSTRACT <b>Unclassified</b>	
20. LIMITATION OF ABSTRACT <b>Unlimited</b>			

