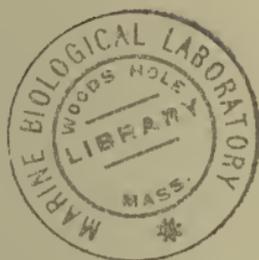


# Indexes of Transportation Rates For Fishery Products



23

**Fish and Wildlife Service**  
**United States Department of the Interior**



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## Indexes of Transportation Rates For Fishery Products

The cost of transporting fish from landing place to consumer's table is of concern to many segments of the fishery industries, and especially to producers of fresh and frozen fish and shellfish. Generally speaking, what the commercial fisherman can get for his catch is what is left after marketing costs are deducted from the retail price, or what the consumer is willing to pay. Transportation charges are a sizable item in the marketing costs for most fishery products; they are the largest marketing-cost item for many kinds of fresh and frozen fish. In 1948, the fishery industry's transportation bill was about \$75,000,000 (an estimation that excludes the cost of trucks and other delivery methods operated by the industry itself). This transportation bill was 7½ percent of the total estimated retail expenditure for fishery products. In the present competitive food market, fish and shellfish producers and distributors keep a close watch on transportation charges, well aware that they can mean the difference between profit and loss.

Fishery products are transported principally by rail freight, rail express (Railway Express Agency), and motor carriers. Air transportation and water transportation are relatively small factors except for the coastal-vessel movement of

Alaskan production, which is redistributed primarily from Seattle, Wash.

In the period after World War II, rising operating expenses caused railroads, the Railway Express Agency, and motor carriers to seek increases in rates and charges, and several increases were authorized by the Interstate Commerce Commission for the railroads and the Railway Express Agency. Motor carriers also obtained some increases. Rate increases have dried up to some extent the distribution of certain fishery items, notably small shipments and gift packages. Further increases might put some fish producers and distributors out of business, particularly distributors of low-priced or rough species.

Rates have increased considerably in this postwar period for all types of transportation, but the proportion of increase has varied for the different types. (See table 7.) The transportation-rate indexes presented here show the changes, from month to month, over the period covered, in the fishery-products rates of the three principal types of carriers, rail freight, rail express, and motor carriers.

This report supplies information on the trends of rates charged by the various carriers for the transportation of fishery products. It

does not attempt to explain the "why" of particular trends. Just knowing whether transportation rates for fishery products are on the average higher or lower than in the past, and whether one group of carriers increased rates more than other groups, will help legislators, regulatory agencies, and the fishing industry, when deciding upon a particular course of action with respect to fishery transportation rates.

### **Construction of the indexes**

The indexes were constructed from published rates on file with the Interstate Commerce Commission and from rates furnished by the fishery and transportation industries. Representative origin points were selected in the principal producing areas. Separate indexes were constructed for each of the three principal modes of transporting fishery products: rail freight, railway express, and motor carriers. The year 1947, considered the first normal postwar year, was selected as the base for the indexes. When a rate change became effective before the 15th of the month, the new rate was computed as though in effect for the whole month.

For the three indexes, there are variations in the representative routes selected, but for each index the same routes are used for the whole period, so that the index measures changes in rates without reflecting other variations such as length of haul and regional distribution changes. It is usual to weight the routes selected in relation to the revenue and amount of

traffic carried over each. It was impracticable to develop a refined system of weights for any of these indexes, because of the lack of traffic data; therefore, choice of routes and number of routes constituted the weighting used. The very simplicity of this method of weighting is an advantage. Tables 1, 2, and 3 list the routes used.

The nature of the traffic was considered in the construction of the indexes. The rail-freight and motor-carrier indexes are subdivided according to type of fishery product. The railway-express index covers fresh- and frozen-fish traffic only, because that agency does not transport other fishery products in significant quantities; for that index, a regional breakdown is shown.

### **Rail-freight rates**

The railroads lead in transporting canned fish, fish oil, and fish meal. They haul significant quantities of fresh and frozen fish on the longer routes, but this traffic on the shorter hauls has been largely taken over by motor carriers. Increases in the postwar years accelerated the upward movement of rail-freight rates; in April 1952, the tenth general increase since the end of World War II was authorized by the Interstate Commerce Commission.

The rail-freight index (table 4) was developed from 36 representative routes (table 1) for the following categories: canned fish; fish, fresh or frozen; fish meal; and fish oil. An index for each category was computed separately, and the indexes were averaged to give an index for all fishery products and byproducts.

The rail-freight index for all fishery products and byproducts registered 52.3 percent higher in 1952 than in the base year 1947. The fish meal category shows the greatest percentage increase, with the index for 1952 at 159.6. Fish oil ranks slightly lower, with an index of 158.7. The most valuable of the product groups, canned fish, advanced to 144.1.

### **Rail-express rates**

Rail express has been important in the transportation of fresh and frozen fishery products since the turn of the century, but in recent years the motor carrier has supplanted express as the leading transporter of fresh and frozen fish. Canned fish and other preserved fish products have never been carried in large quantities by express. Generally speaking, rail-express rates on fishery products changed little from 1922 until 1939. The increase effective April 15, 1939, is the starting point for the index. Since that date, several rate changes have been made.

The rail-express index (table 5) was developed from 30 representative routes for fresh and frozen fish and shellfish traffic (table 2). The routes were selected on the basis of experience. The index is divided into five regions. The Great Lakes region, from which more express fish traffic originates than from any other region, was allotted 10 routes. Each of the other four regions was apportioned routes according to the volume of express traffic estimated to originate in the region. The destination points of the routes used are often outside the region where

the shipments originated. This occurs because of the necessity for reflecting shipments to large consuming centers outside the region.

The rail-express index is based on 100-pounds-net-weight rates for any-quantity shipments, in addition to rates for quantity shipments (on a net weight of 100 pounds of fish, the charge is for 125 pounds gross; for most shellfish, the billing weight allowed is 150 pounds). For example, 100-pounds-net-weight rates for shipments ranging from 1,000 to 2,000 pounds in weight and for shipments over 2,000 pounds were included for certain routes. In some cases where rates on the basis of 200-pounds-minimum shipments were given, these also were included.

There are marked variations in the increases, with a range in 1952 of index numbers from 132.3 for the Great Lakes, to 167.0 for New England. Apparently, the Railway Express Agency rates were lower in the Great Lakes area. Average indexes in other regions for 1952 were: Middle Atlantic, 145.2; Pacific Coast, 144.1; South Atlantic and Gulf, 144.7.

### **Motor-carrier rates**

Modern refrigerated equipment and lower rates have enabled motor-carrier operators to become the leaders in transporting fresh and frozen fishery products. Their lower rates have carried them into new markets and have diverted a considerable amount of traffic from rail freight and rail express.

Truckers of fishery products are not required to file rates with the Interstate Commerce Commission;

consequently, it was difficult to obtain historical data as in the rail-freight and rail-express indexes. Sufficient information was gathered to develop indexes for 15 representative rates on fresh, frozen, and canned fish.

The motor-carrier index (table 6) includes a separate index for each of 15 routes (table 3), and the average for all of them. The base year of 1947 was as far back as data were available for this index. The index for 1952 shows an average increase of 35.6 percent over 1947.

To understand particular aspects of motor-carrier rates recorded in the index, we must classify the types of truckers engaged in public transportation of fishery products. There are first the large common carriers operating fleets of trucks; with good equipment and insurance, they dominate the field and their rates are the standard for the industry. Another type of carrier organization results when small truckers combine less-than-truckload shipments, for economy. Then there are the owner-operator truckers who operate independently.

These owner-operators carry fresh and frozen fish and other commodities that are exempt from certain provisions of the Interstate Commerce Act, over various routes as opportunity offers. Many of them haul produce from the South to the North, and return with a load of frozen fish. To obtain return loads, they sometimes cut rates to cover only their fuel costs, rather than go home empty. These rates are not included in this index, but trade sources estimate that regular rates are cut 10 to 50 percent. The rates

of the larger carriers which are available for use in the index are affected considerably by the rates of the one-truck operators. The unregulated state of fresh and frozen fishery products truck transportation has helped keep down the rate levels.

### **Protective-service charges**

All shipments of fresh and frozen fishery products require some form of refrigeration. By rail freight, there are additional charges for necessary protective services. Most refrigerated motor carriers do not make any additional charge at the present time. The Interstate Commerce Commission in December 1951 authorized the Railway Express Agency to charge for re-icing shipments of fishery products. Unless the shipment is marked "Do Not Re-Ice for Account of Shipper," packages will be re-iced when necessary and the charge will be 20 cents, 25 cents, or 30 cents per zone, depending on the size of the package.

In the past decade the railroads have been granted three increases in their protective-service charge. This charge is based mainly on the cost of ice and salt placed in car bunkers. Labor costs, switching charges, and other operating expenses contribute to the cost of the protective service. Increases in the protective-service charge of the railroads since 1940 have been an increase of 15 percent effective January 1, 1947, and a 10-percent interim increase authorized April 13, 1948, which was modified to a 15-percent increase on July 27, 1948.

The protective-charge increases, which are not included in the rail-freight rate index, amount to 32¼ percent. They apply only on fresh and frozen carload shipments, which constitute a small proportion of the rail transportation of fishery products.

## Discussion

### *Combined index*

In table 7 is shown a combined index giving fishery products transportation rate indexes for rail freight, rail express, and motor carriers, and an index for all carriers combined. This index points up differences in the rate of change of transportation rates by the principal carriers. The comparative cost of the means of transporting fishery products usually governs selection of the carrier. The slow growth in the use of air freight by the fishery industries exemplifies the importance of the cost factor. Rail-freight and rail-express rates have increased to a greater degree than motor-carrier rates. The weighted index for transporting all fishery products averaged 146.7 in 1952, as compared to 100.0 for the base year of 1947.

### *Cautions on use of the indexes*

A caution should be mentioned on the use of these indexes. If the quality of the transportation service declines or improves, it is tantamount to a change in rates. Such a condition is not covered in the indexes. Although there have been some improvements in the transportation service to the fishing industry, particularly in truck

transportation, these changes do not affect the reliability of the indexes as now constructed.

Another qualification is that the data cover a limited number of routes over which fishery products are transported; they do not represent the actual average of transportation rates and charges for the United States. The selection is based on data from Market News Service offices and on the experience of the Fish and Wildlife Service in this field, and is designed to be as nearly representative of the national fishery-transportation pattern as possible. If any material changes occur, it will be necessary to revise the indexes.

The present study measures only the changes of rates for transporting fishery products by the principal means of transportation. What effect rate changes have on volume of shipments and on prices is difficult to isolate from the many influences on supply and demand in the fishing industry, but it is reasonably safe to make some observations. Motor-carrier rates have increased less in proportion than rail-freight and rail-express rates, with a consequent widening differential in transportation cost that undoubtedly has accelerated the shift to truck transport. By reference to table 8, it can be seen that, although the volume of shipments varies from year to year, the motor carriers' share of traffic rises steadily. An additional indication of the shift in methods of transportation is provided by a comparison of the distribution, by type of transportation, of receipts of fresh and frozen seafoods at New York City

in 1940 and in 1950. The distributions, in percentages, for the 2 years were as follows:

Received by—	1940	1950
Rail freight.....	19.5	4.0
Rail express.....	13.5	11.6
Motor carrier.....	54.8	75.1
Vessel (landings at wharves).....	12.2	9.3
	100.0	100.0

The modern refrigerated truck has gained the bulk of the fresh and frozen fish traffic, with the exception of long-haul carload shipments from the Pacific coast. Rail freight retains such shipments, most of the shipments of canned fish and of bulky commodities such as fish meal, and relatively small shipments of fresh and frozen fish.

More important than the shift between carriers is the impact of rate increases on the prices received for fishery products. When transportation costs go up, how much of the increase can be shifted to the consumer through increases in retail prices, and how much must be borne by the producer through reduction in net income, depend

largely on the elasticity of the demand for the product affected. The less elastic the demand for a commodity, the more likely it is that increases in transportation costs can be shifted to the consumer without a significant decline in sales. Since the elasticity of demand for fishery products has not been fully determined, it is only by experience that one can judge how much of the increased costs can be shifted to the consumer. At first, the whole burden of rate increases is generally borne by the fisherman and distributors.

The statistics developed in this report cover recent changes in the cost to the fishing industry of transportation for their products as reflected by changes in rates for the different modes of transportation. The rate indexes show that the three principal agencies transporting fishery products have increased their rates in the period studied by disparate amounts. These indexes will be kept current by supplements published in the Commercial Fisheries Review of the Fish and Wildlife Service.

TABLE 1.—Rail-freight rate index: Routes used in sample

Origin	Destination	Origin	Destination
On canned fish:		On fish, fresh or frozen—Continued	
Rockland, Maine.....	New York, N. Y.	Jacksonville, Fla.....	New York, N. Y.
Eastport, Maine.....	Atlanta, Ga.	Alpena, Mich.....	Chicago, Ill.
New York, N. Y.....	Chicago, Ill.	Do.....	New York, N. Y.
Biloxi, Miss.....	New York, N. Y.	Cheboygan, Mich.....	Do.
Seattle, Wash.....	Los Angeles, Calif.	Seattle, Wash.....	Do.
Do.....	Chicago, Ill.	Do.....	Chicago, Ill.
San Pedro, Calif.....	New York, N. Y.	On fish meal:	
Do.....	Do.	Baltimore, Md.....	Do.
San Diego, Calif.....	Chicago, Ill.	Lewes, Del.....	New York, N. Y.
Monterey, Calif.....	New York, N. Y.	Beaufort, N. C.....	Chicago, Ill.
Do.....	Chicago, Ill.	Biloxi, Miss.....	Do.
On fish, fresh or frozen:		Pascagoula, Miss.....	Do.
Boston, Mass.....	Cleveland, Ohio.	Seattle, Wash.....	Do.
Do.....	Chicago, Ill.	On fish oil:	
Do.....	Pittsburgh, Pa.	Baltimore, Md.....	Do.
Norfolk, Va.....	New York, N. Y.	Lewes, Del.....	New York, N. Y.
Galveston, Tex.....	Chicago, Ill.	Beaufort, N. C.....	Chicago, Ill.
New Orleans, La.....	New York, N. Y.	Pascagoula, Miss.....	Do.
Do.....	Chicago, Ill.	Seattle, Wash.....	Do.

TABLE 2.—Rail-express rate index: Routes used in sample

Origin	Destination	Origin	Destination
New England origins:		South Atlantic and Gulf origins—Continued	
Boston, Mass.....	Chicago, Ill.	Galveston, Tex.....	Chicago, Ill.
Do.....	Cleveland, Ohio.	New Orleans, La.....	Atlanta, Ga.
Do.....	Pittsburgh, Pa.	Pacific Coast origins:	
Rockland, Maine.....	New York, N. Y.	Seattle, Wash.....	San Francisco, Calif.
Eastport, Maine.....	Boston, Mass.	Do.....	Los Angeles, Calif.
Middle Atlantic origins:		Do.....	Great Falls, Mont.
New York, N. Y.....	Chicago, Ill.	Great Lakes origins:	
Do.....	Cleveland, Ohio.	Warroad, Minn.....	New York, N. Y.
Norfolk, Va.....	Toledo, Ohio.	Port Clinton, Ohio.....	Do.
Do.....	Detroit, Mich.	Bayfield, Wis.....	Do.
Do.....	Chicago, Ill.	Warroad, Minn.....	Chicago, Ill.
Beaufort, N. C.....	New York, N. Y.	Cheboygan, Mich.....	Do.
South Atlantic and Gulf origins:		Port Huron, Mich.....	Do.
Biloxi, Miss.....	Do.	Lansing, Mich.....	Do.
Jacksonville, Fla.....	Do.	Erie, Pa.....	New York, N. Y.
Miami, Fla.....	Do.	Chicago, Ill.....	Cincinnati, Ohio.
Lake Charles, La.....	Do.	Do.....	Detroit, Mich.

TABLE 3.—Motor-carrier rate index: Routes used in sample

Origin	Destination	Origin	Destination
On frozen fish:		On frozen fish—Continued	
Boston, Mass.....	Cleveland, Ohio.	Crisfield, Md.....	Philadelphia, Pa.
Do.....	Chicago, Ill.	Seattle, Wash.....	Los Angeles, Calif.
Do.....	Buffalo, N. Y.	Do.....	San Francisco, Calif.
Do.....	Pittsburgh, Pa.	On fresh fish:	
Do.....	Philadelphia, Pa.	Washington Island, Wis..	Chicago, Ill.
Do.....	New York, N. Y.	On canned fish:	
Chicago, Ill.....	Indianapolis, Ind.	Terminal Island, Calif...	San Francisco, Calif.
Do.....	Louisville, Ky.	Crisfield, Md.....	New York, N. Y.
Do.....	New York, N. Y.		

TABLE 4.—Rail freight: Indexes of rates on various categories of fishery products, by months, April 1939–December 1952

[1947 average=100. Dashes denote continuation of rate last shown]

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
ALL FISHERY PRODUCTS													
1939					80.4								
1940	80.4	80.4											
1941	80.4	80.4											
1942	83.8	80.4			84.9								
1943	82.2	84.9					80.3						
1944	80.3	80.3											
1945	80.3	80.3											
1946	83.5	80.3						86.5				87.0	
1947	100.0	100.0											
1948	123.0	118.4				125.2				125.3			
1949	134.4	132.3		132.2		133.5				137.3			
1950	136.3	137.3			136.2				135.7				
1951	140.2	135.7			139.4					144.8			
1952	152.3	144.8				154.2	156.4						
CANNED FISH PRODUCTS													
1939					82.7								
1940	82.7	82.7											
1941	82.7	82.7											
1942	86.4	82.7			87.6								
1943	84.7	87.6					82.7						
1944	82.7	82.7											
1945	82.7	82.7											
1946	85.6	82.7						83.5					
1947	100.0	100.0											
1948	126.1	122.2				123.0							
1949	136.3	134.7								139.5			
1950	135.3	139.5			135.2				132.9				
1951	136.4	132.9			135.6					139.9			
1952	144.1	139.9				146.9	146.1						
FISH MEAL													
1939					78.8								
1940	78.8	78.8											
1941	78.8	78.8											
1942	81.8	78.8			82.8								
1943	80.5	82.8					78.8						
1944	78.8	78.8											
1945	78.8	78.8											
1946	81.5	78.8						84.1					
1947	100.0	100.0											
1948	122.5	117.5				125.0							
1949	133.8	132.2								137.1			
1950	137.1	137.1											
1951	141.8	137.1			140.8					146.8			
1952	159.6	146.8				157.7	167.1						
FISH OIL—NOT EDIBLE NOR MEDICINAL													
1939					80.2								
1940	80.2	80.2											
1941	80.2	80.2											
1942	83.8	80.2			85.0								
1943	82.2	85.0					80.2						
1944	80.2	80.2											
1945	80.2	80.2											
1946	83.6	80.2						86.5				83.5	
1947	100.0	100.0											
1948	121.3	116.8				123.6							
1949	135.9	130.9				135.8				141.1			
1950	141.1	141.1											
1951	146.2	141.1			145.3					151.4			
1952	158.7	151.4				162.3							

TABLE 4.—Rail freight: Indexes of rates on various categories of fishery products, by months, April 1939–December 1952—Continued

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
FISH, FRESH OR FROZEN													
1939					79.8								
1940	79.8	79.8											
1941	79.8	79.8											
1942	83.0	79.8			84.0								
1943	81.4	84.0					79.6						
1944	79.6	79.6											
1945	79.6	79.6											
1946	83.2	79.6						86.7					
1947	100.0	100.0											
1948	122.0	117.0				124.3				124.7			
1949	131.8	131.5		132.1						131.5			
1950	131.5	131.5											
1951	136.4	131.5			135.7					141.0			
1952	146.9	141.0				149.9							

TABLE 5.—Rail express: Indexes of rates on fresh and frozen fish from various regions, by months, April 1939–December 1952

[1947 average=100. Dashes denote continuation of rate last shown]

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
ALL REGIONS COMBINED													
1939						90.9							
1940	90.9	90.9											
1941	90.9	90.9											
1942	90.9	90.9											
1943	91.0	90.9		91.1									
1944	91.1	91.1											
1945	91.1	91.1											
1946	91.6	91.1											96.7
1947	100.0	96.7	98.6	98.9		99.3		100.6	100.8		101.0	103.0	
1948	110.2	103.0				106.4		112.5	113.8	117.7	117.9		
1949	120.0	117.9		119.7						120.7	121.2		122.6
1950	129.2	123.1			125.6	127.7	132.6						
1951	133.8	132.6											146.7
1952	146.7	146.7											
FROM NEW ENGLAND ORIGINS													
1939				86.5									
1940	86.5	86.5											
1941	86.5	86.5											
1942	86.5	86.5											
1943	86.5	86.5											
1944	86.5	86.5											
1945	86.5	86.5											
1946	87.3	86.5											96.0
1947	100.0	96.0				96.9		103.0	103.8				
1948	117.0	103.8				112.7		127.2					
1949	127.2	127.2											
1950	141.3	127.2					151.4						
1951	152.7	151.4											167.0
1952	167.0	167.0											

TABLE 5.—Rail express: *Indexes of rates on fresh and frozen fish from various regions, by months, April 1939–December 1952—Continued*

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
FROM MIDDLE ATLANTIC ORIGINS													
1939						90.1							
1940	90.1	90.1											
1941	90.1	90.1											
1942	90.1	90.1											
1943	91.1	90.1		91.3									
1944	91.3	91.3											
1945	91.3	91.3											
1946	91.9	91.3											
1947	100.0	95.0	96.6	98.1		99.6						109.3	95.0
1948	111.4	109.3						112.1		114.2			
1949	116.4	114.2								119.0			125.9
1950	125.9	125.9											
1951	126.9	125.9											145.2
1952	145.2	145.2											
FROM SOUTH ATLANTIC AND GULF ORIGINS													
1939						93.6							
1940	93.6	93.6											
1941	93.6	93.6											
1942	93.6	93.6											
1943	93.6	93.6											
1944	93.6	93.6											
1945	93.6	93.6											
1946	94.0	93.6											
1947	100.0	98.5	99.9										98.5
1948	110.0	101.3	104.1			107.4		112.6	114.7	116.1	100.0	101.3	
1949	123.9	116.1		125.4									
1950	134.9	125.4			138.0								
1951	138.4	137.8											144.7
1952	144.7	144.7											
FROM GREAT LAKES ORIGINS													
1939						88.7							
1940	88.7	88.7											
1941	88.7	88.7											
1942	88.7	88.7											
1943	88.7	88.7											
1944	88.7	88.7											
1945	88.7	88.7											
1946	89.1	88.7											
1947	100.0	93.8	100.5										93.8
1948	107.9	100.5				102.7		110.5	115.0		116.0		
1949	116.5	116.0									118.7		
1950	117.7	117.7											
1951	118.9	117.7											132.3
1952	132.3	132.3											
FROM PACIFIC COAST ORIGINS													
1939						95.6							
1940	95.6	95.6											
1941	95.6	95.6											
1942	95.6	95.6											
1943	98.0	95.6											97.8
1944	97.8	97.8											
1945	97.8	97.8											
1946	98.0	97.8											100.0
1947	100.0	100.0											
1948	105.3	100.0								115.8			
1949	115.8	115.8											
1950	128.4	119.1				129.8							
1951	130.5	130.9											144.1
1952	144.1	144.1											

TABLE 6.—Motor carriers: *Indexes of rates on various categories of fishery products over selected routes, by months, January 1947–December 1952*

[1947 average=100. Dashes denote continuation of rate last shown]

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
<b>ALL ROUTES AVERAGED</b>													
1947	100.0	95.6			97.9	98.7		100.7		104.6			
1948	109.5	106.0			107.1			111.6				113.4	113.7
1949	116.8	113.7	114.5	116.9				117.3					118.4
1950	121.0	118.4		117.6	118.0	120.7		122.8					123.3
1951	127.3	123.3			128.6								129.6
1952	135.6	132.3			136.2		136.3			136.7			
<b>FROZEN FISH</b>													
<b>Boston-Cleveland:</b>													
1947	100.0	100.0											
1948	108.1	100.0						116.1					
1949	116.1	116.1											
1950	116.1	116.1											
1951	116.1	116.1											
1952	116.1	116.1											
<b>Boston-Chicago:</b>													
1947	100.0	100.0											
1948	108.4	100.0						117.0					
1949	117.0	117.0											
1950	117.0	117.0											
1951	117.0	117.0											
1952	117.0	117.0											
<b>Boston-Buffalo:</b>													
1947	100.0	100.0											
1948	108.5	100.0						116.9					
1949	116.9	116.9											
1950	116.9	116.9											
1951	116.9	116.9											
1952	116.9	116.9											
<b>Boston-Pittsburgh:</b>													
1947	100.0	100.0											
1948	108.4	100.0						116.7					
1949	116.7	116.7											
1950	116.7	116.7											
1951	116.7	116.7											
1952	116.7	116.7											
<b>Boston-Philadelphia:</b>													
1947	100.0	95.6								109.1			
1948	111.3	109.1								115.8			
1949	115.8	115.8											
1950	119.6	115.8			120.8								
1951	120.8	120.8											
1952	120.8	120.8											
<b>Boston-New York:</b>													
1947	100.0	100.0											
1948	100.4	100.0											104.7
1949	115.3	104.7	116.3										
1950	106.6	116.3		104.7									
1951	104.7	104.7											
1952	104.7	104.7											
<b>Chicago-Indianapolis:</b>													
1947	100.0	91.4	91.4			102.9							
1948	114.3	112.4										123.8	
1949	123.8	123.8											
1950	123.8	123.8											
1951	126.5	123.8		125.7									130.0
1952	147.6	139.0			130.5								

TABLE 6.—Motor carriers: Indexes of rates on various categories of fishery products over selected routes, by months, January 1947–December 1952—Continued

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
FROZEN FISH													
<b>Chicago-Louisville:</b>													
1947.....	100.0	91.6	-----	-----	-----	104.3	-----	-----	-----	-----	-----	-----	-----
1948.....	116.9	115.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	124.8	-----
1949.....	124.8	124.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	124.8	124.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1951.....	127.0	124.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	151.7
1952.....	151.7	151.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Chicago-New York:</b>													
1947.....	100.0	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1948.....	112.8	100.0	-----	-----	117.0	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	117.0	117.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	117.0	117.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1951.....	117.0	117.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1952.....	117.0	117.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Crisfield-Philadelphia:</b>													
1947.....	100.0	89.2	-----	-----	-----	-----	-----	-----	-----	120.2	-----	-----	-----
1948.....	120.2	120.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	120.2	120.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	147.6	120.2	-----	-----	-----	160.6	-----	-----	-----	-----	-----	-----	-----
1951.....	160.6	160.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1952.....	160.6	160.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Seattle-Los Angeles:</b>													
1947.....	100.0	94.9	-----	-----	-----	-----	-----	110.7	-----	-----	-----	-----	-----
1948.....	110.7	110.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	123.4	110.7	-----	125.9	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	125.9	125.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1951.....	150.3	125.9	-----	-----	158.4	-----	-----	-----	-----	-----	-----	-----	-----
1952.....	158.4	158.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Seattle-San Francisco:</b>													
1947.....	100.0	93.3	-----	-----	-----	-----	-----	106.7	-----	-----	-----	-----	-----
1948.....	106.7	106.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	124.5	106.7	-----	128.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	128.0	128.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1951.....	152.0	128.0	-----	-----	160.0	-----	-----	-----	-----	-----	-----	-----	-----
1952.....	160.0	160.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
FRESH FISH													
<b>Washington Island-Chicago:</b>													
1947.....	100.0	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1948.....	100.0	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	100.0	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1950.....	116.3	100.0	-----	-----	-----	-----	-----	132.6	-----	-----	-----	-----	-----
1951.....	139.2	132.6	-----	-----	140.6	-----	-----	-----	-----	-----	-----	-----	147.8
1952.....	181.4	147.8	-----	-----	184.1	-----	185.5	-----	-----	202.2	-----	-----	-----
CANNED FISH													
<b>Terminal Island-San Francisco:</b>													
1947.....	100.0	83.2	-----	-----	105.6	-----	-----	-----	-----	-----	-----	-----	-----
1948.....	105.6	105.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	106.9	105.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	121.6
1950.....	121.6	121.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1951.....	121.6	121.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1952.....	128.7	128.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Crisfield-New York:</b>													
1947.....	100.0	94.8	-----	-----	-----	-----	-----	-----	110.1	-----	-----	-----	-----
1948.....	110.1	110.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1949.....	113.6	110.1	-----	-----	-----	-----	-----	116.1	-----	-----	-----	-----	-----
1950.....	116.7	116.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	122.3
1951.....	123.5	122.3	-----	-----	-----	-----	-----	-----	128.4	-----	-----	-----	-----
1952.....	137.6	128.4	-----	-----	140.6	-----	-----	-----	-----	-----	-----	-----	-----

TABLE 7.—All carriers: *Indexes of rates on fishery products, by years, 1947-52*  
[1947=100]

Year	Rail freight	Rail express	Motor carriers	Average all traffic <sup>1</sup>	Year	Rail freight	Rail express	Motor carriers	Average all traffic <sup>1</sup>
1947.....	100.0	100.0	100.0	100.0	1950.....	136.3	129.2	121.0	131.0
1948.....	123.0	110.2	109.5	117.7	1951.....	140.2	133.8	127.3	135.7
1949.....	134.4	120.0	116.8	127.7	1952.....	152.3	146.7	135.6	146.7

<sup>1</sup> Weighted average. Relative weights: Rail freight 60 percent, rail express 10 percent, motor carriers 30 percent.

TABLE 8.—*Fishery products transported by 3 principal types of transportation, 1935-52*  
[Estimated. In millions of pounds]

Year	By rail freight	By rail express	By motor carrier	Total	Year	By rail freight	By rail express	By motor carrier	Total
1935.....	2,471	245	989	3,705	1944.....	3,102	283	1,241	4,626
1936.....	2,937	264	1,175	4,376	1945.....	3,073	326	1,229	4,628
1937.....	2,849	405	1,139	4,393	1946.....	3,120	333	1,248	4,701
1938.....	2,562	292	1,025	3,879	1947.....	3,054	342	1,223	4,619
1939.....	2,775	206	1,110	4,091	1948.....	2,911	345	1,467	4,723
1940.....	2,363	216	945	3,524	1949.....	3,056	340	1,540	4,936
1941.....	2,802	230	1,121	4,153	1950.....	3,127	330	1,582	5,039
1942.....	2,682	199	1,073	3,954	1951.....	2,814	300	1,612	4,726
1943.....	2,982	314	1,193	4,489	1952.....	2,681	310	1,615	4,606

Source: Fish and Wildlife Service.



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