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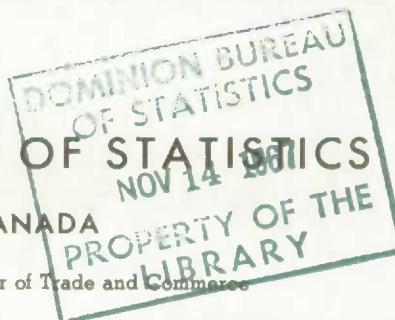
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## SUMMARY OF CANAL STATISTICS

JUNE 1967

An analysis of June canal data revealed several important changes and developments:

During the month the volume of cargo transported through the St. Lawrence Canals totalled 6,407,763 tons, an increase of 18.0 per cent over the 5,432,448 tons handled in June of the previous year. Vessel passages numbered 1,007 compared to 967 in June 1966, while the increase in the registered net tonnage of these vessels was more than proportionate, to 4,458,409 tons from 3,596,604 tons.

Freight traffic through the Welland Canal rose appreciably by 9.9 per cent to 7,438,088 tons from 6,767,754 tons in June 1966. A total of 1,042 vessel passages were reported, down slightly from the 1,063 recorded in 1966; however, the registered net tonnage of these craft rose to 5,447,313 tons from 4,924,568 tons, which reflects the economic advantages to be realized through the use of large, modern vessels.

Cargo movements through the Canadian lock at Sault Ste. Marie amounted to 187,126 tons, compared to 154,538 tons in June 1966. This is the first month of the current year that the 1966 volume has been surpassed; the cumulative tonnage of freight, at 354,057 tons, is 14.4 per cent lower than the previous year.

Movements of corn through the canal systems improved slightly during June, with increases being reported for both the St. Lawrence and Welland canal networks; however, the cumulative volume for this commodity is only somewhat over one half of that shipped at this time in 1966. The cumulative total for wheat shipments through the Welland and St. Lawrence Canals, at 3,441,624 tons and 3,493,740 tons, still remain below the 1966 levels (3,858,393 tons and 3,615,094 tons respectively), but the difference between current and previous year totals has been narrowing since the beginning of the navigation season.

The month of June marked the start of an extensive excavation project of approximately \$110 million for a new section of the Welland Canal. Slated for replacement by a new eight-mile channel is that narrow, winding part of the waterway bisecting the city of Welland. The new section, with a width of 350 feet compared to 192 feet in the present channel, is scheduled for completion within six years.

The total volume of cargo cleared through all Canadian canals during June increased by 13.3 per cent to 14,189,829 tons from 12,523,208 tons in 1966.

Transportation and Public Utilities Division  
Transportation Section

October 1967  
8702-517

TABLE 1. Vessel Passages, Registered Net Tonnage, and Tonnage of Freight for All Canals

Canal	June 1967			Tonnage of freight June 1966	Cumulative tonnage of freight	
	Number of vessel passages	Registered net tonnage of vessels	Tonnage of freight		1967	1966
Canso Canal .....	157	147,858	151,661	163,804	236,408	382,229
St. Lawrence Canals .....	1,007	4,458,409	6,407,763	5,432,448	16,779,036	15,836,111
Welland Canal .....	1,042	5,447,313	7,438,088	6,767,754	20,015,161	19,611,842
Sault Ste. Marie Canal - Can. lock ..	478	524,970	187,126	154,538	354,057	413,845
All other canals .....	251	15,250	5,191	4,664	11,650	9,204
<b>Totals .....</b>	<b>2,935</b>	<b>10,593,800</b>	<b>14,189,829</b>	<b>12,523,208</b>	<b>37,396,312</b>	<b>36,253,231</b>
Sault St. Marie Canal - U.S. locks ...	1,916	..	13,437,148	13,663,912	32,004,498	35,194,812

.. Figures not available.

TABLE 2. Tonnage of Freight Transported through the St. Lawrence Canals, by Commodity, and by Direction

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
tons						
Meat, fresh, chilled or frozen .....	105	5,590	5,695	10,533	12,969	17,625
Milk powder .....	155	27,689	27,844	11,040	45,952	18,173
Barley .....	-	220,721	220,721	230,960	581,690	639,124
Dorn .....	-	342,122	342,122	318,545	602,960	1,137,047
Oats .....	-	62,364	62,364	90,557	155,017	248,831
Rye .....	-	15,909	15,909	12,702	72,240	113,015
Wheat .....	-	1,222,562	1,222,562	1,154,842	3,493,740	3,615,094
Cereals, unmilled, n.e.s. ....	17	167	184	22	259	419
Corn meal and flour .....	-	10,792	10,792	15,117	26,857	23,124
Malt and malt flour .....	-	7,327	7,327	8,697	27,308	17,918
Wheat flour .....	-	16,185	16,185	27,615	30,888	51,096
Cereals, milled, n.e.s. ....	22	10,803	10,825	8,541	17,661	10,568
Fruits, preserved, not canned, n.e.s. ....	2,021	25	2,046	642	10,755	5,760
Fruits and preparations, canned (except infant foods) .....	1,848	95	1,943	3,830	6,504	8,765
Vegetables, dried .....	2	14,631	14,633	14,783	76,170	57,486
Vegetables and vegetable preparations, n.e.s. ....	963	741	1,704	2,773	12,218	10,453
Raw sugar .....	9,971	-	9,971	16,372	31,889	57,697
Molasses, crude .....	22,536	-	22,536	10,979	41,698	38,976
Cocoa and chocolate .....	8,717	65	8,782	4,246	19,106	11,497
Lard .....	-	7,450	7,450	7,434	21,984	14,357
Miscellaneous foods, food materials and food preparations, n.e.s. ....	768	3,499	4,267	1,734	7,188	4,989
Hulls, screenings, chaff and scourings .....	-	6,920	6,920	17,486	24,913	40,113
Concentrated and complete feeds .....	70	2,948	3,018	1,728	31,039	7,346
Soyabean oil meal and cake, n.e.s. ....	-	67,959	67,959	65,588	175,829	124,006
Oil seed meals and cake, n.e.s. ....	-	5,294	5,294	17,662	9,156	25,977
Brewers' and distillers' grains and solubles .....	-	167	167	826	2,458	1,158
Feeds of vegetable origin, n.e.s. ....	28	35,473	35,501	73,964	87,833	105,062
Ale, beer, stout and porter .....	1,750	141	1,891	1,247	4,733	3,977
Wines .....	3,057	-	3,057	4,227	11,572	16,624
Distilled alcoholic beverages .....	3,508	95	3,603	4,516	13,409	16,421
Raw hides and skins and undressed fur skins .....	119	11,448	11,567	15,498	29,846	28,684
Flaxseed .....	-	46,970	46,970	62,491	150,931	161,146
Rapeseed .....	-	-	-	-	13,752	10,595
Soyabeans .....	-	121,234	121,234	106,567	267,604	391,994
Rubber and allied gums, natural, and natural gums and resins .....	7,075	-	7,075	13,936	22,346	33,960
Logs .....	-	2,984	2,984	13,532	11,682	18,144
Pulpwood .....	62,609	-	62,609	32,816	84,832	52,626
Crude wood materials, n.e.s. ....	-	-	-	330	5	330
Alumina and bauxite ore .....	16,267	-	16,267	-	44,971	28,723
Iron ore, crude, and concentrates, calcined, roasted or treated .....	2,348,558	-	2,348,558	1,637,624	6,183,522	4,848,120

TABLE 2. Tonnage of Freight Transported through the St. Lawrence Canals, by Commodity, and by Direction - Continued

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
Manganese ore .....	35,716	-	35,716	42,956	95,815	97,568
Ores, concentrates and precipitates, n.e.s. ....	500	107	607	-	3,176	12
Iron and steel scrap .....	22	109,214	109,236	5,602	168,258	5,602
Non-ferrous and precious metal scrap .....	32	5,348	5,380	11,709	11,776	19,010
Slags, drosses and other by-products .....	-	549	549	5,781	5,857	10,875
Coal, bituminous, sub-bituminous, and lignite .....	149,243	56,237	205,480	181,349	430,959	451,278
Crude petroleum, petroleum tops and natural gasoline .....	15,585	-	15,585	-	46,729	27,924
Bentonite .....	-	14,690	14,690	9,535	46,121	19,145
China clay .....	3,371	-	3,371	1,865	12,297	6,370
Clay and other crude refractory materials, n.e.s. ....	537	128	665	7,276	2,012	20,374
Stone, crude, n.e.s. ....	652	-	652	3,323	1,703	4,765
Fluorspar .....	9,428	-	9,428	20,406	41,601	49,099
Gypsum .....	12,125	20	12,145	19	19,027	11,803
Phosphate rock .....	36,690	-	36,690	12,671	36,690	12,671
Salt .....	-	17,195	17,195	14,255	88,658	67,409
Crude non-metallic minerals (except coal and petroleum), n.e.s. ....	1,842	188	2,030	16,990	17,762	19,633
Cotton and textile rags and waste .....	236	1,010	1,246	2,401	3,214	8,980
Lumber and timber .....	1,127	1,692	2,819	4,153	6,797	6,491
Veneer, plywood and wood building boards .....	4,085	33	4,118	9,504	11,662	21,411
Pulp .....	10,621	55	10,676	3,540	17,146	11,726
Newsprint paper .....	49,430	3,734	53,164	40,716	149,453	159,547
Building paper and building board (except wood, plastic and gypsum board) .....	1,468	11	1,479	1,289	3,088	3,431
Cordage, twine and rope (except braided cords and threads) .....	2,446	-	2,446	4,250	35,502	25,727
Animal oils and fats (except marine) Fish and marine animal oils .....	-	22,944	22,944	10,233	56,959	52,491
Soyabean oil .....	43	-	43	2,257	2,955	2,389
Vegetable oils and fats, except essential oils, n.e.s. ....	7,938	15	7,953	5,448	26,965	14,924
Oils, fats, waxes, extracts and derivatives, animal and vegetable, n.e.s. ....	1,403	262	1,665	157	3,641	7,308
Metallic salts and peroxysalts, of inorganic acids .....	945	4,320	5,265	2,758	12,249	15,073
Inorganic chemicals, n.e.s. ....	1,770	2,675	4,445	11,567	8,192	24,480
Glycol .....	-	3,031	3,031	581	8,449	5,358
Organic chemicals, n.e.s. ....	1,184	11,283	12,467	8,447	42,914	22,836
Fertilizers and fertilizer materials, n.e.s. ....	116	46	162	124	13,582	306
Synthetic rubber (including rubber compounds and reclaimed rubber) .....	240	7,120	7,360	12,315	16,304	24,317
Plastic materials, not shaped, and plastics basic shapes and forms .....	1,032	3,892	4,924	11,928	19,340	19,395
Dyestuffs (except dyeing extracts); pigments, lakes and toners (ex- cluding those in chemicals); and paints and related products .....	362	236	598	750	1,522	2,845
Chemical specialties, industrial, n.e.s. ....	839	2,761	3,600	4,005	6,963	8,489
Gasoline .....	55,769	-	55,769	5,447	150,954	55,106
Fuel oil .....	278,820	6,697	285,517	315,901	645,504	686,584
Lubricating oils and greases .....	16,152	1,115	17,267	8,597	81,942	90,425
Coke of petroleum and coal .....	-	36,649	36,649	24,438	119,401	67,790
Coal tar and coal pitch .....	-	-	-	102	5,545	5,380
Petroleum and coal products, n.e.s. ....	22,226	11,200	33,426	1,536	49,899	25,421
Ferro-alloys .....	9,851	-	9,851	4,474	32,246	16,197
Pig iron .....	10,599	-	10,599	11,853	94,792	72,370
Primary iron and steel, n.e.s. ....	1,119	73	1,192	1,732	6,583	39,316
Castings and forgings (excluding pipes and fittings) .....	1,180	48	1,228	7,584	3,994	14,078
Bars and rods, steel .....	42,998	1,443	44,441	34,361	155,495	89,991
Plate, sheet and strip, steel .....	185,403	32,721	218,124	217,563	634,692	531,165
Structural shapes and sheet piling ...	60,728	983	61,711	75,253	231,352	193,364

TABLE 2. Tonnage of Freight Transported through the St. Lawrence Canals, by Commodity, and by Direction - Continued

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
tons						
Pipes and tubes, iron and steel (except fittings and finished electrical conduit and tubing) .....	4,770	1,041	5,811	6,878	15,355	17,163
Wire (including wire rope) .....	14,476	755	15,231	16,717	40,037	41,026
Aluminum (including alloys) .....	2,617	647	3,264	5,176	12,698	14,407
Zinc and alloys .....	7,404	-	7,404	10	9,933	4,216
Non-ferrous metals, n.e.s. .....	554	-	554	1,857	1,415	5,305
Metal fabricated basic products .....	17,848	663	18,511	15,877	47,886	59,987
Glass basic products .....	6,619	15	6,634	8,923	20,319	23,842
Cement .....	8,187	-	8,187	9,736	16,438	10,658
Non-metallic mineral basic products, n.e.s. .....	2,394	798	3,192	5,394	10,926	14,649
Bricks, tiles (clay) and refractories, n.e.s. .....	435	238	673	2,615	4,999	3,048
Miscellaneous fabricated materials ...	1,928	90	2,018	638	3,274	1,305
Tractors .....	5,252	2,380	7,632	5,842	18,940	21,418
Machinery, n.e.s. .....	10,279	7,063	17,342	17,172	50,670	37,981
Passenger automobiles and chassis ....	9,667	7,306	16,973	15,159	31,872	39,524
Motor vehicle engines, accessories, parts and assemblies .....	2,405	2,283	4,688	4,301	12,486	13,763
Equipment .....	1,532	1,579	3,111	3,667	8,588	9,134
Personal and household goods .....	6,041	755	6,796	2,216	16,702	8,949
Domestic package freight .....	19,577	38,631	58,208	44,867	121,619	171,580
Other .....	34,580	28,134	62,714	55,661	176,356	157,463
Total freight carried .....	3,682,604	2,725,159	6,407,763	5,432,448	16,779,036	15,836,111

TABLE 3. Tonnage of Freight Transported through the Welland Canal, by Commodity, and by Direction

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
tons						
Meat, fresh, chilled or frozen .....	27	5,284	5,311	9,650	11,714	15,539
Milk powder .....	2	26,598	26,600	10,983	44,207	18,083
Barley .....	-	236,092	236,092	273,795	632,494	707,596
Corn .....	-	358,085	358,085	332,949	654,605	1,201,056
Oats .....	-	66,356	66,356	96,222	176,810	260,456
Rye .....	-	15,909	15,909	12,092	74,651	119,029
Wheat .....	-	1,279,397	1,279,397	1,181,117	3,441,624	3,858,393
Cereals, unmilled, n.e.s. ....	-	167	167	22	211	417
Corn meal and flour .....	-	10,792	10,792	15,091	26,846	23,096
Malt and malt flour .....	-	7,327	7,327	8,697	27,304	30,517
Wheat flour .....	-	16,185	16,185	27,595	30,882	51,074
Cereals, milled, n.e.s. ....	6	10,803	10,809	8,541	17,634	10,540
Fruits, preserved, not canned, n.e.s. ....	1,364	-	1,364	340	5,639	3,663
Fruits and preparations, canned (except infant foods) .....	1,422	-	1,422	1,740	4,066	4,482
Vegetables, dried .....	2	13,362	13,364	14,292	67,244	55,125
Vegetables and vegetable preparations, n.e.s. ....	266	524	790	1,733	7,526	5,989
Raw sugar .....	-	-	-	4,767	-	18,284
Sugar, n.e.s. ....	11,822	544	12,366	-	21,113	-
Molasses, crude .....	21,199	2,517	23,716	15,756	39,069	21,356
Syrup .....	-	-	-	2,675	3	3,714
Cocoa and chocolate .....	7,271	56	7,327	2,218	9,366	8,535
Lard .....	-	7,450	7,450	7,421	21,984	14,344
Hulls, screenings, chaff and scourings .....	-	6,920	6,920	17,486	24,913	41,078
Soyabean oil meal and cake .....	-	47,540	47,540	51,054	109,204	81,427
Oil seed meals and cake, n.e.s. ....	-	5,294	5,294	16,856	8,569	24,362
Brewers' and distillers' grains and solubles .....	-	167	167	826	2,458	1,158

TABLE 3. Tonnage of Freight Transported through the Welland Canal, by Commodity, and by Direction - Continued

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
tons						
Feeds of vegetable origin, n.e.s. ....	28	35,473	35,501	86,049	87,833	117,116
Concentrated and complete feeds .....	-	2,810	2,810	956	30,421	4,665
Ale, beer, stout and porter .....	1,452	141	1,593	1,089	4,180	3,347
Wines .....	2,232	-	2,232	2,780	8,256	11,387
Distilled alcoholic beverages .....	2,720	95	2,815	3,938	10,597	13,260
Raw hides and skins and undressed fur skins .....	113	6,680	6,793	11,916	19,216	19,720
Flaxseed .....	-	49,996	49,996	64,477	162,323	175,881
Rapeseed .....	-	-	-	-	13,752	10,595
Soyabeans .....	-	157,889	157,889	150,901	425,246	514,980
Rubber and allied gums, natural, and natural gums and resins .....	6,259	-	6,259	10,190	18,876	26,558
Logs .....	-	2,896	2,896	13,232	6,578	17,273
Pulpwood .....	57,335	-	57,335	32,816	79,558	51,936
Crude wood materials, n.e.s. ....	-	-	-	330	1	330
Alumina and bauxite ore .....	16,267	-	16,267	-	44,971	28,723
Iron ore, crude, and concentrates, calcined, roasted or treated .....	2,033,556	382,395	2,415,951	2,081,805	6,414,579	5,820,418
Manganese ore .....	35,716	-	35,716	53,092	95,815	107,704
Ores, concentrates and precipitates, n.e.s. ....	500	107	607	-	3,176	12
Iron and steel scrap .....	-	91,921	91,921	9,111	148,243	9,259
Non-ferrous and precious metal scrap	16	3,766	3,782	10,452	8,596	14,418
Coal, bituminous, sub-bituminous, and lignite .....	-	1,144,771	1,144,771	985,494	3,453,924	2,800,367
Natural gas and other crude bituminous substances .....	-	357	357	5,559	962	6,524
Beautonite .....	-	14,690	14,690	9,535	46,121	19,145
China clay .....	3,360	-	3,360	3	8,542	2,643
Clay and other crude refractory materials, n.e.s. ....	452	128	580	12,233	11,300	36,035
Sand and gravel .....	2,211	11,462	13,673	15,091	23,286	75,166
Limestone .....	-	-	-	6,196	-	6,196
Crushed stone, including stone refuse	5,364	5,364 <del>116,806</del>	-	-	5,364 <del>116,806</del>	-
Dolomite .....	111,442	-	111,442	112,824	323,147 <del>202,387</del>	419,996
Stone, crude, n.e.s. ....	610	6,975	7,585	13,252	21,523	22,997
Fluorspar .....	9,428	-	9,428	25,247	36,382	47,968
Salt .....	-	67,179	67,179	12,810	192,871	75,642
Crude non-metallic minerals (except coal and petroleum), n.e.s. ....	633	188	821	16,852	16,341	23,002
Cotton and textile rags and waste .....	93	899	992	1,913	2,348	4,481
Veneer, plywood and wood building boards .....	2,502	30	2,532	7,246	7,214	16,512
Pulp .....	8,757	55	8,812	3,470	14,132	11,533
Newsprint paper .....	55,674	3,734	59,408	58,420	177,587	198,034
Cordage, twine and rope (except braided cords and threads) .....	1,891	-	1,891	1,394	25,347	20,696
Animal oils and fats (except marine)	-	21,505	21,505	9,529	54,273	50,970
Soyabean oil .....	-	890	890	5,045	899	9,303
Vegetable oils and fats, except essential oils, n.e.s. ....	2,243	4	2,247	2,350	14,496	6,243
Oils, fats, waxes, extracts and derivatives, animal and vegetable, n.e.s. ....	1,139	100	1,239	157	2,897	7,254
Metallic salts and peroxy salts, of inorganic acids .....	303	10,149	10,452	430	15,601	14,884
Inorganic chemicals, n.e.s. ....	956	20,756	21,712	21,240	39,964	45,365
Glycol .....	-	3,031	3,031	581	12,358	9,604
Organic chemicals, n.e.s. ....	3,151	13,586	16,737	8,743	52,281	25,912
Fertilizers and fertilizer materials, n.e.s. ....	44	46	90	34	153	211
Synthetic rubber (including rubber compounds and reclaimed rubber) ....	48	6,907	6,955	11,411	15,277	22,016
Plastic materials, not shaped, and plastics basic shapes and forms ....	49	3,166	3,215	10,009	15,487	15,900
Chemical specialties, industrial, n.e.s. ....	456	2,608	3,064	2,896	5,783	5,581
Gasoline .....	20,265	10,221	30,486	29,231	98,644	106,218
Fuel oil .....	68,501	43,213	111,714	160,007	304,289	327,871
Lubricating oils and greases .....	12,166	1,113	13,279	12,832	50,500	59,595
Coke of petroleum and coal .....	-	36,649	36,649	30,214	126,251	73,566
Asphalts and road oils .....	-	10,474	10,474	75	11,008	7,425

TABLE 3. Tonnage of Freight Transported through the Welland Canal, by Commodity, and by Direction - Continued

Commodity	June 1967			Total June 1966	Cumulative total	
	Upbound	Downbound	Total		1967	1966
tons						
Coal tar and coal pitch .....	2,488	12,485	14,973	7,532	35,898	26,402
Petroleum and coal products, n.e.s. .....	11,745	28,937	40,682	3,899	72,534	30,676
Ferro-alloys .....	8,816	-	8,816	3,153	30,927	14,663
Pig iron .....	9,486	-	9,486	16,012	89,257	72,049
Primary iron and steel, n.e.s. .....	1,071	73	1,144	1,680	1,826	58,829
Castings and forgings (excluding pipes and fittings) .....	1,168	42	1,210	3,886	3,820	10,262
Bars and rods, steel .....	41,920	248	42,168	32,684	138,615	80,113
Plate, sheet and strip, steel .....	179,382	1,896	181,278	201,235	561,357	508,306
Structural shapes and sheet piling .....	48,720	309	49,029	62,037	193,606	157,980
Pipes and tubes, iron and steel (except fittings and finished electrical conduit and tubing) .....	3,643	436	4,079	4,689	10,134	11,107
Wire (including wire rope) .....	13,478	459	13,937	14,314	34,962	35,530
Aluminum (including alloys) .....	2,228	226	2,454	2,871	10,422	11,242
Zinc and alloys .....	7,404	-	7,404	-	9,893	4,206
Non-ferrous metals, n.e.s. .....	464	-	464	1,536	1,194	4,542
Metal fabricated basic products .....	15,518	531	16,049	13,154	39,872	51,124
Glass basic products .....	5,314	12	5,326	5,722	16,675	18,243
Cement .....	10,785	84,783	95,568	19,905	132,331	44,506
Non-metallic mineral basic products, n.e.s. .....	1,988	593	2,581	4,138	8,691	9,847
Tractors .....	4,696	2,349	7,045	4,969	16,499	18,290
Machinery, n.e.s. .....	6,681	6,478	13,159	13,504	34,270	26,403
Passenger automobiles and chassis .....	7,816	7,141	14,957	13,488	25,811	32,222
Motor vehicle engines, accessories, parts and assemblies .....	1,808	1,911	3,719	3,470	9,297	10,212
Equipment .....	548	885	1,433	1,630	3,521	3,965
Domestic package freight .....	30,401	20,011	50,412	50,350	112,399	163,053
Other .....	25,354	27,624	52,978	42,521	141,843	106,320
<b>Total freight carried .....</b>	<b>2,948,871</b>	<b>4,489,217</b>	<b>7,438,088</b>	<b>6,767,754</b>	<b>20,015,161</b>	<b>19,611,842</b>

TABLE 4. Tonnage of Freight Transported through the Sault Ste. Marie Canals, by Commodity, and by Direction June 1967

Commodity	Upbound		Downbound		Total	
	Canadian lock	Canadian and U.S. locks	Canadian lock	Canadian and U.S. locks	Canadian lock	Canadian and U.S. locks
tons						
Paper and woodpulp .....	15	15	33,465	38,341	33,480	38,356
Pulpwood, lumber and logs .....	975	975	7,048	26,271	8,023	27,246
Wheat .....	-	-	-	1,672,543	-	1,672,543
Barley .....	-	-	10,065	291,722	10,065	291,722
Oats .....	-	-	250	106,027	250	106,027
Corn .....	-	-	-	228,281	-	228,281
Rye .....	-	-	-	25,222	-	25,222
Flaxseed .....	-	-	-	51,139	-	51,139
Soyabeans .....	-	-	-	21,184	-	21,184
Flour .....	-	-	-	10,970	-	10,970
Mill products, screenings .....	-	-	6,212	64,937	6,212	64,937
Iron ore .....	-	-	-	9,337,489	-	9,337,489
Manufactured iron and steel .....	214	24,002	5,625	19,382	5,839	43,384
Pig iron .....	-	-	-	7,047	-	7,047
Scrap iron .....	-	-	-	17,065	-	17,065
Stone, broken, sand and gravel .....	-	189,844	18,600	18,600	18,600	208,444
Cement .....	-	23,483	-	-	-	23,483
Coal, bituminous .....	-	1,097,919	-	-	-	1,097,919
Coal, anthracite .....	-	10,788	-	-	-	10,788
Coke .....	-	-	-	-	-	-
Non-metallic minerals, mfrs. ....	3,113	39,433	-	-	3,113	39,433
Gasoline .....	7,485	26,639	4,535	11,999	12,020	38,638
Fuel oil .....	10,379	49,431	-	3,194	10,379	52,635
Other petroleum products .....	-	-	-	-	-	-
Motor vehicles .....	-	-	-	-	-	-
Miscellaneous merchandise .....	3,691	3,691	-	87,581	3,691	91,272
Domestic package freight .....	49,992	47,297	25,462	25,462	75,454	72,759
<b>Total freight carried .....</b>	<b>75,864</b>	<b>1,513,517</b>	<b>111,262</b>	<b>12,064,456</b>	<b>187,126</b>	<b>13,577,973</b>

the first two dimensions of the model. The third dimension, which is the relationship between the individual and the organization, was not addressed in this study. This dimension is important because it is the relationship between the individual and the organization that motivates the individual to change his or her behavior. In addition, the relationship between the individual and the organization can affect the individual's motivation to change his or her behavior. Therefore, the third dimension of the model should be considered in future research.

The results of this study indicate that the model can be used to predict the behavior of individuals who are exposed to ergonomic risks in their work environment.

However, the results of this study should be interpreted with caution because the sample size was small and the participants were not representative of the general population.

In conclusion, the results of this study support the validity of the model proposed by Hwang et al. (2002).

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