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Mexico Transport Cost Indicator Report

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Surajudeen Olowolayemo, Coordinator/ Ocean Bulk Shipments

Jesse Gastelle, Rail/Fruit and Vegetables Analyst

Alexis Heyman, Fruit and Vegetables Analyst

Austin Hunt, Rail Analyst



Transportation Costs to Mexico Rose From Third to Fourth Quarter 2023

Low transportation and landed costs for U.S.-Mexico routes are vital to the competitiveness of U.S. grain in Mexico (a top importer of U.S. grain) and globally. U.S. grain is transported to Mexico either by cross-border land movements or by sea movements to Mexican ports for inland distribution. This article examines the costs of transporting U.S. grain to Mexico over land to Guadalajara (land routes) and by sea to Veracruz (water routes), tracking changes over time (table 1).

Quarter-to-quarter transportation costs. From third quarter 2023 to fourth quarter 2023 (quarter to quarter), total transportation costs increased for U.S. corn, soybeans, and wheat, shipped both by water and land routes. For both water and land routes, rising transportation costs reflected rising costs of all modes of transportation. Truck rates rose partly because of a strong demand for trucking and a slight increase in diesel prices. Barge rates rose because of continuing navigation challenges posed by the Mississippi River System's low water levels (GTR, October 19, 2023). However, barge rates did not rise as high as they had risen from third to fourth quarter 2022.

Rail rates (public tariff, plus fuel surcharge) rose partly because of an increase in fuel surcharges. Likewise, responding to higher demand for shipping bulk items such as iron ore, coal, and grain, ocean freight rates rose quarter to quarter. The drought-induced transit restrictions in the Panama Canal also drove ocean freight rates higher by rerouting vessels to the Suez Canal, which increased ton-miles (GTR, February 1, 2024).

Year-to-year transportation costs. From fourth guarter 2022 to fourth guarter 2023 (year to year), the total cost of shipping U.S. corn and soybeans to Mexico by all routes fell because of falling rail, barge, and ocean rates. However, by the water routes, the cost of shipping wheat to Mexico rose because of higher truck and rail tariff rates. The cost of shipping wheat by the land routes remained stable.

¹ Water routes typically involve truck transportation to barge to oceangoing vessel, or truck to rail to oceangoing vessel.





Quarter-to-quarter landed costs. Quarter to quarter, landed costs fell for all grains shipped by the water and land routes. The lower landed costs reflected a decline in farm values that exceeded the increase in transportation costs (table 1 and figs. 1 and 2). The share of landed costs comprising transportation ranged from 12 percent to 25 percent for the water routes and from 20 percent to 38 percent for the land routes.

Year-to-year landed costs. Year to year, landed costs decreased for both waterborne and land-route corn and soybeans, because of both lower transportation costs and lower farm values. For waterborne and land-route wheat, the decrease in farm values outweighed the increase in transportation costs, causing landed costs to fall.

U.S. Inspections for Exports to Mexico: According to USDA's Federal Grain Inspection Service, the United States inspected 4.7 million metric tons (mmt) of corn, 1.5 mmt of soybeans, and 0.7 mmt of wheat for export to Mexico in fourth quarter 2023. Quarter to quarter, U.S. inspections for export to Mexico were up 40 percent for corn and up 89 percent for soybeans, but down 25 percent for wheat. Year to year, U.S. inspections destined to Mexico rose 64 percent for corn, fell 5 percent for soybeans, and rose 2 percent for wheat. Lower landed costs for corn and soybeans are consistent with quarter-to-quarter increases in corn and soybean shipments to Mexico.

Ocean Freight Rates: Ocean freight rates for shipping bulk grains to Mexico rose quarter to quarter, fell year to year, and rose from the prior 4-year average. In the fourth quarter—via 25,000 ton-capacity vessels—the cost of shipping a metric ton (mt) of grain from the U.S. Gulf to Veracruz, Mexico, averaged \$22.49 per mt. This was up 6 percent quarter to quarter, down 8 percent year to year, and up 3 percent from the prior-4-year average. The cost of shipping by the same route in 35,000-40,000 ton-capacity vessels averaged \$19.74 per mt. This amounted to a 7-percent increase quarter to quarter, 5-percent decrease year to year, and 4-percent increase from the 4-year average. During the fourth quarter, ocean freight rates rose in response to a strong global demand for bulk shipments.

Railroad: According to USDA's Foreign Agricultural Service, in fourth quarter 2023, 5.18 mmt of grain and oilseeds were exported to Mexico by land. Exports by land to Mexico are overwhelmingly rail shipments. Land-based exports to Mexico were up 28 percent quarter to quarter and year to year, and up 25 percent from the prior-3-year average. Fuel surcharges per railcar averaged \$806 (table 2), up 43 percent quarter to quarter and down 22 percent year to year, but up 67 percent from the prior-3-year average.

Similar to the disruptions of September 2023, grain rail exports to Mexico were again disrupted in December 2023. On December 1, Ferromex (FXE), one of Mexico's two railroads with interchanges to the United States, issued an embargo on all agricultural commodities shipped via rail at both Eagle Pass and El Paso, TX, border crossings. This initial embargo limited agricultural shipments through a permit system. FXE cited "immigrant situation in the network" as the reason for the embargo.

On December 17, U.S. Customs and Border Protection (CBP) announced it would suspend operations the next day (December 18) at the border crossings in Eagle Pass and El Paso, in order to redirect CBP personnel to assist with processing migrants at the U.S. southern border.² Union Pacific Railroad and BNSF Railway subsequently issued embargoes for border crossings at these locations. All rail traffic was suspended until CBP resumed rail traffic at El Paso and Eagle Pass on December 22.

At the end of 2021, the railroads started reporting only rates to the Mexico border, rather than reporting rates for full routes. Using the correlation between rail tariff rate changes for U.S. domestic shipments and Mexico shipments, estimated rail tariff rates per grain car in second quarter 2023 averaged \$8,087, up 1 percent quarter to quarter, up 1 percent year to year, and up 3 percent from the prior-3-year average. Estimated total rail transportation costs (tariff rates plus fuel surcharges) were up 4 percent quarter to quarter and down 2 percent year to year, but up 6 percent from the prior-3-year average.

² U.S. Customs and Border Protection. "Statement from CBP on Suspension of Rail Operations in Eagle Pass and El Paso, Texas." December 17, 2023. Accessed March 5, 2024: https://www.cbp.gov/newsroom/national-media-re-lease/statement-cbp-suspension-rail-operations-eagle-pass-and-el-paso.





Fruit and Vegetables

In fourth quarter 2023, total reported shipments of fruits and vegetables by refrigerated truck from Mexico were 2.66 million tons, down 6 percent from year to year. The sum of the top five commodities increased by 3,000 tons, less than a 1 percent increase from year to year. At 320,000 tons—up 1 percent year to year—avocados were the largest refrigerated-truck import from Mexico by volume.

For shipments crossing the Arizona border from Mexico and traveling 501-1,500 miles, truck rates averaged \$2.47 per mile—down 6 percent quarter to quarter and down 16 percent year to year. For shipments crossing the Texas-Mexico border and traveling 501-1,500 miles, rates averaged \$2.79 per mile—flat quarter to quarter and down 9 percent year to year.

Diesel fuel prices for Texas-Mexico border crossings averaged \$3.92 per gallon. Diesel fuel prices for Arizona-Mexico border crossings averaged \$4.67 per gallon. The Texas-Mexico border crossing had surplus truck availability throughout the fourth quarter. The Arizona-Mexico border crossing had adequate truck availability in October and November, and had a slight shortage of trucks in December.





Table 1. Quarterly costs of transporting U.S. grain and soybeans to Mexico

					20	23							
		Water ro	oute (to \	/eracruz)		L	and rout	e (to Gu	adalajara	1)			
	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.			
		USS	/metric	ton			USS	/metric	ton				
					Co	rn							
Origin			IL					IA					
Truck	14.75	14.19	14.75	16.75	15.11	5.42	5.82	5.82	6.34	5.85			
Rail ¹	-	-	-		-	105.98	104.90	105.99	109.98	108.28			
Barge	30.28	17.24	26.60	27.06	25.30	-	-	-	-	-			
Ocean ²	18.75	19.14	18.48	19.74	19.03	-	-	-	-	-			
Total transportation cost	63.78	50.57	59.83	63.55	59.43	111.40	110.72	111.81	116.32	114.13			
Farm price ³	257.99	254.32	220.07	187.79	230.04	266.00	261.01	227.28	191.72	236.50			
Landed cost ⁴	321.77	304.89	279.90	251.34	289.48	377.40	371.73	339.09	308.04	350.63			
Transport % of landed cost	19.8	16.6	21.4	25.3	20.5	29.5	29.8	33.0	37.8	32.5			
					Soyb	eans							
Origin			IL					NE					
Truck	14.75	14.19	14.75	16.75	15.11	5.42	5.82	5.82	6.34	5.85			
Rail ¹	-	-	-		-	105.21	104.07	105.00	107.74	106.98			
Barge	30.28	17.24	26.60	27.06	25.30	-	-	-	-	-			
Ocean ²	18.75	19.14	18.48	19.74	19.03	-	-	-	-	-			
Total transportation cost	63.78	50.57	59.83	63.55	59.43	110.63	109.89	110.82	114.08	112.83			
Farm price ³	543.81	536.46	515.64	480.12	519.01	546.26	520.54	507.06	467.87	510.43			
Landed cost ⁴	607.59	587.03	575.47	543.67	578.44	656.89	630.43	617.88	581.95	623.26			
Transport % of landed cost	10.5	8.6	10.4	11.7	10.3	16.8	17.4	17.9	19.6	18.1			
					Wh	eat							
Origin			KS					KS		108.28 114.13 236.50 350.63 32.5 5.85 106.98 112.83 510.43 623.26 18.1			
Truck	5.42	5.82	5.82	6.34	5.85	5.42	5.82	5.82	6.34	5.85			
Rail ¹	45.58	45.55	46.86	47.92	46.48	87.53	87.00	88.73	91.40	90.23			
Ocean ²	18.75	19.14	18.48	19.74	19.03	-	-	-	-	-			
Total transportation cost	69.75	70.51	71.16	74.00	71.36	92.95	92.82	94.55	97.74	96.08			
Farm price ³	309.99	304.48	279.62	231.36	281.36	309.99	304.48	279.62	231.36	281.36			
Landed cost⁴	379.74	374.99	350.78	305.36	352.72	402.94	397.30	374.17	329.10	377.44			
Transport % of landed cost	18.4	18.8	20.3	24.2	20.4	23.1	23.4	25.3	29.7	25.6			

¹Rail rates include U.S. and Mexico portions of the movement. Mexico rail rates are estimated based on actual quoted market rates. BNSF and Union Pacific quoted rail tariff rates are through rates for shuttle trains. Rail rates include fuel surcharges, but do not include the cost of purchasing empty rail cars in the secondary market, which could exceed the rail tariff rate plus the fuel surcharge shown in the table.

Note: "-" indicates data not required or applicable. Total may not add exactly because of rounding.

Source: Compiled by the USDA, Agricultural Marketing Service.

²Source: O'Neil Commodity Consulting, Inc.

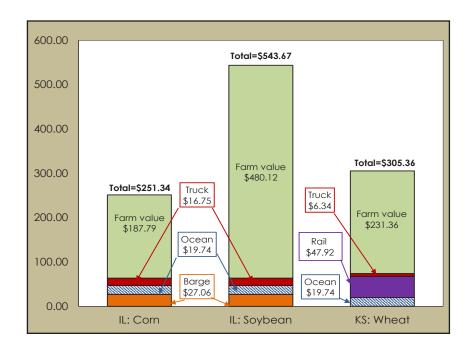
³Source: USDA/NASS.

⁴Landed cost is total transportation cost plus the farm price.





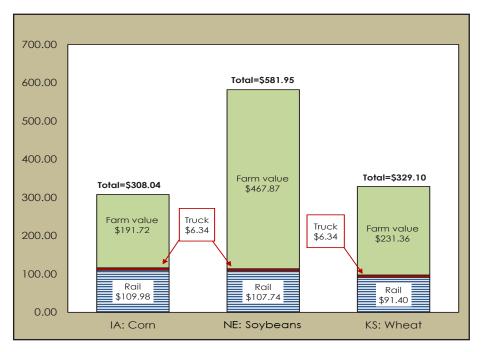
Figure 1. Fourth-quarter 2023 water-route shipment costs (\$/mt) to Veracruz, Mexico



Note: IL = Illinois; KS = Kansas.

Source: USDA, Agricultural Marketing Service.

Figure 2. Fourth-quarter 2023 land-route shipment costs (\$/mt) to Guadalajara, Mexico



Note: IA = Iowa; NE = Nebraska; KS = Kansas. Source: USDA, Agricultural Marketing Service.





QUARTERLY BULK GRAIN AND SOYBEANS

Table 2. Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US\$/car), 2023

	Origin			Tari	ff rate/c	ar ^{1,3}			Fuel sui	rcharge	per car²	
Commodity	State	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
	MT	Chihuahua, Cl	7,658	7,674	7,753	7,777	7,715	654	413	252	504	456
NA/Ib and	ОК	Cuautitlan, EM	6,863	6,877	6,948	6,970	6,915	785	553	404	643	596
Wheat	KS	Guadalajara, JA	7,578	7,593	7,672	7,695	7,635	1,338	1,137	1,059	1,250	1,196
	TX	Salinas Victoria, NL	4,397	4,406	4,451	4,465	4,430	338	248	192	283	265
	IA	Guadalajara, JA	9,380	9,380	9,380	9,521	9,415	1,373	1,118	993	1,243	1,182
	SD	Celaya, GJ	8,553	8,553	8,553	8,682	8,585	856	540	330	659	596
Comp	NE	Queretaro, QA	8,576	8,576	8,576	8,705	8,608	1,085	804	630	916	859
Corn	SD	Salinas Victoria, NL	7,116	7,116	7,116	7,223	7,142	650	410	251	501	453
	МО	Tlalnepantla, EM	7,921	7,921	7,921	8,040	7,951	1,058	783	614	893	837
	SD	Torreon, CU	8,064	8,064	8,064	8,185	8,094	717	452	276	552	499
	МО	Bojay (Tula), HG	8,747	8,747	8,747	8,765	8,757	1,233	1,012	908	1,123	1,069
Souhoons	NE	Guadalajara, JA	9,314	9,314	9,314	9,332	9,324	1,342	1,088	962	1,212	1,151
Soybeans	IA	El Castillo, JA	8,203	8,203	8,203	8,219	8,212	942	761	669	847	805
	KS	Torreon, CU	9,621	9,621	9,621	9,640	9,631	850	537	328	655	592

¹Rail tariff rates to Mexico are only estimated values. Due to tax changes in Mexico, all three Class I railroads that ship from the U.S. to Mexico (BNSF, Union Pacific, and Kansas City Southern) are only reporting rates to the border for interchange, called Rule 11 rates. Due to lack of data, Mexico tariff rate changes were estimated using the historical correlation between changes in US tariff rates (GTR Table 6) and Mexico tariff rates. The estimated total includes the estimated tariff through-rate for shuttle train service to Mexico and the reported fuel surcharge. The estimated rate does not include any additional costs for shuttle car service.

Sources: www.bnsf.com; www.uprr.com; www.kcsouthern.com.

²Corrections were made to previously reported rail fuel surcharge calcuations.

³Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu.





Table 3. Quarterly tariff rail rates plus fuel surcharges for U.S. bulk grain shipments to Mexico, 2023

						Tariff ^{1,2}	plus fue	l surcha	rge per:				
Commodity	Origin	Destination		US\$	/metric	ton		US\$/bushel³					
Commodity	State	ce	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	
	MT	Chihuahua, Cl	84.93	82.62	81.79	84.61	83.49	2.31	2.25	2.23	2.30	2.27	
Wheat	ОК	Cuautitlan, EM	78.15	75.92	75.12	77.78	76.74	2.13	2.07	2.04	2.12	2.09	
wneat	KS	Guadalajara, JA	91.10	89.21	89.21	91.40	90.23	2.48	2.43	2.43	2.49	2.46	
	TX	Salinas Victoria, NL	48.37	47.55	47.44	48.52	47.97	1.23	1.21	1.21	1.23	1.22	
	IA	Guadalajara, JA	109.87	107.26	105.99	109.98	108.28	2.79	2.72	2.69	2.79	2.75	
	SD	Celaya, GJ	96.14	92.91	90.76	95.44	93.81	2.44	2.36	2.31	2.42	2.38	
60.00	NE	Queretaro, QA	98.72	95.84	94.06	98.30	96.73	2.51	2.43	2.39	2.50	2.46	
Corn	SD	Salinas Victoria, NL	79.35	76.90	75.27	78.92	77.61	2.02	1.95	1.91	2.00	1.97	
	МО	Tlalnepantla, EM	91.75	88.94	87.21	91.27	89.79	2.33	2.26	2.22	2.32	2.28	
	SD	Torreon, CU	89.71	87.01	85.21	89.27	87.80	2.28	2.21	2.16	2.27	2.23	
	МО	Bojay (Tula), HG	101.98	99.72	98.65	101.03	100.40	2.78	2.71	2.68	2.75	2.73	
Coulbooks	NE	Guadalajara, JA	108.88	106.29	105.00	107.74	107.03	2.96	2.89	2.86	2.93	2.91	
Soybeans	IA	El Castillo, JA	93.44	91.59	90.65	92.64	92.13	2.54	2.49	2.47	2.52	2.51	
	KS	Torreon, CU	106.99	103.79	101.65	105.19	104.46	2.91	2.82	2.77	2.86	2.84	

¹Rail tariff rates to Mexico are only estimated values. Due to tax changes in Mexico, all three Class I railroads that ship from the U.S. to Mexico (BNSF, Union Pacific, and Kansas City Southern) are only reporting rates to the border for interchange, called Rule 11 rates. Due to lack of data, Mexico tariff rate changes were estimated using the historical correlation between changes in US tariff rates (GTR Table 6) and Mexico tariff rates. The estimated total includes the estimated tariff through-rate for shuttle train service to Mexico and the reported fuel surcharge. The estimated rate does not include any additional costs for shuttle car service.

Sources: www.bnsf.com; www.uprr.com; www.kcsouthern.com.

²Corrections were made to previously reported rail fuel surcharge calcuations.

³Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu.





Table 4. Quarterly exports of U.S. distillers' dried grains with soluble (DDGS) to Mexico*

V		ī	Thousand metric tons								
Year	1st qtr	2nd qtr	3rd qtr	4th qtr	Total						
2010	439	399	424	383	1,645						
2011	506	430	476	369	1,781						
2012	426	388	352	332	1,498						
2013	284	329	290	381	1,285						
2014	356	420	366	435	1,577						
2015	497	276	413	463	1,649						
2016	483	467	470	490	1,910						
2017	604	475	551	551	2,181						
2018	516	516	514	467	2,013						
2019	410	574	475	491	1,950						
2020	526	344	396	476	1,742						
2021	481	647	611	644	2,383						
2022	584	513	604	530	2,231						
2023	534	510	621	530	2,195						

^{*}Data are for brewers' and distillers' dregs and waste, of which Distillers' Dried Grains with Soluble is a principal component. Source: USDA, Economic Research Service (ERS), Feed grains database.





Table 5. Quarterly ocean freight rate for bulk grain shipments from the U.S. Gulf to Veracruz, Mexico

		US\$/me	etric ton		
Vessel capacity (metric ton)	1st qtr 2017	2nd qtr 2017	3rd qtr 2017	4th qtr 2017	Average
25,000	16.03	14.85	15.16	16.69	15.68
35-40,000	14.27	12.95	12.98	14.26	13.62
Vessel capacity (metric ton)	1st qtr 2018	2nd qtr 2018	3rd qtr 2018	4th qtr 2018	Average
25,000	16.11	16.20	16.68	17.94	16.73
35-40,000	13.97	14.07	14.68	15.63	14.59
Vessel capacity (metric ton)	1st qtr 2019	2nd qtr 2019	3rd qtr 2019	4th qtr 2019	Average
25,000	16.37	16.65	18.27	17.98	17.32
35-40,000	13.89	14.01	15.50	15.23	14.66
Vessel capacity (metric ton)	1st qtr 2020	2nd qtr 2020	3rd qtr 2020	4th qtr 2020	Average
25,000	16.37	15.31	17.20	17.40	16.57
35-40,000	13.64	12.41	14.39	14.43	13.72
Vessel capacity (metric ton)	1st qtr 2021	2nd qtr 2021	3rd qtr 2021	4th qtr 2021	Average
25,000	22.56	27.14	30.33	27.66	26.92
35-40,000	19.19	23.75	27.68	25.23	23.96
Vessel capacity (metric ton)	1st qtr 2022	2nd qtr 2022	3rd qtr 2022	4th qtr 2022	Average
25,000	25.81	30.00	27.12	24.42	26.84
35-40,000	22.51	26.27	23.33	20.73	23.21
Vessel capacity (metric ton)	1st qtr 2023	2nd qtr 2023	3rd qtr 2023	4th qtr 2023	Average
25,000	22.39	22.53	21.19	22.49	22.15
35-40,000	18.75	19.14	18.48	19.74	19.03

Source: O'Neil Commodity Consulting.





FRUIT AND VEGETABLE

Table 6. Fruit and vegetable truck rates for shipments between 501 to 1,500 miles crossing the U.S.-Mexico border

	U	IS\$/mile			
Origin/border crossing	1st qtr 2015	2nd qtr 2015	3rd qtr 2015	4th qtr 2015	Average
Nogales, Arizona	2.41	2.5	1.4	1.94	2.06
Pharr, Texas	2.26	2.24	1.93	1.97	2.1
Origin/border crossing	1st qtr 2016	2nd qtr 2016	3rd qtr 2016	4th qtr 2016	Average
Nogales, Arizona	2.14	2.19	1.27	1.76	1.84
Pharr, Texas	2.03	2.03	1.82	1.89	1.94
Origin/border crossing	1st qtr 2017	2nd qtr 2017	3rd qtr 2017	4th qtr 2017	Average
Nogales, Ari66zona	2.05	2.32	2.45	2.38	2.3
Pharr, Texas	2.19	2.21	2	2.36	2.19
Origin/border crossing	1st qtr 2018	2nd qtr 2018	3rd qtr 2018	4th qtr 2018	Average
Nogales, Arizona	2.92	3.21	2.75	2.47	2.84
Pharr, Texas	2.95	3.13	2.27	2.34	2.67
Origin/border crossing	1st qtr 2019	2nd qtr 2019	3rd qtr 2019	4th qtr 2019	Average
Nogales, Arizona	2.52	2.7	2.52	2.21	2.49
Pharr, Texas	2.45	2.28	2.04	2.23	2.25
Origin/border crossing	1st qtr 2020	2nd qtr 2020	3rd qtr 2020	4th qtr 2020	Average
Nogales, Arizona	2.53	2.55	2.16	2.81	2.51
Pharr, Texas	2.49	2.25	2.35	2.88	2.49
Origin/border crossing	1st qtr 2021	2nd qtr 2021	3rd qtr 2021	4th qtr 2021	Average
Nogales, Arizona	3.16	3.9	2.1	3.28	3.11
Pharr, Texas	2.93	3.19	2.9	3.44	3.11
Origin/border crossing	1st qtr 2022	2nd qtr 2022	3rd qtr 2022	4th qtr 2022	Average
Nogales, Arizona	3.66	3.44	2.86	2.92	3.22
Pharr, Texas	3.77	3.5	3.01	3.08	3.34
Origin/border crossing	1st qtr 2023	2nd qtr 2023	3rd qtr 2023	4th qtr 2023	Average
Nogales, Arizona	2.87	2.92	2.62	2.47	2.72
Pharr, Texas	3.1	2.9	2.81	2.79	2.9

Source: USDA, Agricultural Marketing Service (AMS), Specialty Crops Program, Market News Division.

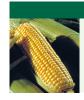




Table 7. Quarterly U.S.-Mexico border crossing fresh fruit and vegetables truck availability

	4th quarter 2023													
Legend:	1 =Surplus	2 = Sli	ght su	rplus	3 =	Adeq	luate	4 =	4 = Slight short		tage 5 = Shorta		ge	
	Truck availability													
Mexico borde	r crossings/month		C	Octobe	er			Nove	mber			Dece	mber	
Week ending		10/3	10/10	10/17	10/24	10/31	11/7	11/14	11/21	11/28	12/5	12/12	12/19	12/26
Through Nogales, AZ	Cantalopes, Squash, Cucumbers, Mangoes, Honeydew, Watermelons	3	NA	3	2	2	2	2	3	3	3	3	4	4
Through TX	Oranges, Grapefruit, Limes, Mangoes, Papaya, Peppers, Cucumbers, Vegetables	3	1	1	1	1	1	1	1	1	1	2	2	2

Note: NA = not available.

Source: USDA, Agricultural Marketing Service (AMS), Specialty Crop Program, Market News Division, Fruit and Vegetable Truck Rate Report.

Table 8. Top ten commodities shipped by truck to the U.S. from Mexico, 2023 (1,000 metric tons)

Commodity	4th qtr 2023	Rank
Avocados	320	1
Cucumbers	217	2
Tomatoes, plum type	212	3
Watermelons, seedless	200	4
Tomatoes	173	5
Peppers, other	165	6
Limes	163	7
Squash	131	8
Peppers, bell type	115	9
Misc tropical	90	10





Table 9. Top five commodities shipped by truck to the U.S. from Mexico (10,000 lbs)

Commodity	1st qtr 2016	2nd qtr 2016	3rd qtr 2016	4th qtr 2016	Total 201
Tomatoes (all varieties)	131,455	89,313	51,983	66,534	339,285
Peppers (all varieties)	61,450	40,970	33,631	65,270	201,321
Avocados	60,241	37,679	34,993	40,457	173,370
Watermelons	21,726	85,723	7,560	33,670	148,679
Cucumbers	48,999	32,842	14,670	39,803	136,314
Subtotal	323,871	286,527	142,837	245,734	998,969
Other	270,078	265,393	157,375	201,602	894,448
Total	593,949	551,920	300,212	447,336	1,893,417
Commodity	1st qtr 2017	2nd qtr 2017	3rd qtr 2017	4th qtr 2017	Total 2017
Tomatoes (all varieties)	107,852	82,194	49,088	73,166	312,300
Peppers (all varieties)	67,566	38,714	31,137	59,172	196,589
Avocados	49,565	36,996	32,133	47,015	165,709
Cucumbers	47,336	32,892	16,064	44,415	140,707
Watermelons	31,890	68,086	5,264	33,293	138,533
Subtotal	304,209	258,882	133,686	257,061	953,838
Other	291,177	291,747	170,323	205,516	958,763
Total	595,386	550,629	304,009	462,577	1,912,601
Commodity	1st qtr 2018	2nd qtr 2018	3rd qtr 2018	4th qtr 2018	Total 2018
Commodity Tomatoes (all varieties)	1st qtr 2018 105,364	2nd qtr 2018 79,851	3rd qtr 2018 49,278	4th qtr 2018 62,478	Total 2018 296,971
·					
Tomatoes (all varieties)	105,364	79,851	49,278	62,478	296,971
Tomatoes (all varieties) Avocados	105,364 74,252	79,851 46,390	49,278 35,103	62,478 57,726	296,971 213,471
Tomatoes (all varieties) Avocados Peppers	105,364 74,252 55,189	79,851 46,390 49,914	49,278 35,103 35,246	62,478 57,726 49,781	296,971 213,471 190,130
Tomatoes (all varieties) Avocados Peppers Watermelons	105,364 74,252 55,189 51,964	79,851 46,390 49,914 36,452	49,278 35,103 35,246 14,131	62,478 57,726 49,781 43,288	296,971 213,471 190,130 145,835
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers	105,364 74,252 55,189 51,964 28,829	79,851 46,390 49,914 36,452 75,429	49,278 35,103 35,246 14,131 6,062	62,478 57,726 49,781 43,288 27,782	296,971 213,471 190,130 145,835 138,102
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal	105,364 74,252 55,189 51,964 28,829 315,598	79,851 46,390 49,914 36,452 75,429 288,036	49,278 35,103 35,246 14,131 6,062 139,820	62,478 57,726 49,781 43,288 27,782 241,055	296,971 213,471 190,130 145,835 138,102 984,509
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other	105,364 74,252 55,189 51,964 28,829 315,598 296,266	79,851 46,390 49,914 36,452 75,429 288,036 281,580	49,278 35,103 35,246 14,131 6,062 139,820 156,781	62,478 57,726 49,781 43,288 27,782 241,055 205,426	296,971 213,471 190,130 145,835 138,102 984,509 940,053
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties)	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019 95,760	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019 78,123	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019 55,836	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019 69,366	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019 299,085
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019 95,760 65,865	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019 78,123 45,479	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019 55,836 38,006	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019 69,366 56,847	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019 299,085 206,197
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019 95,760 65,865 57,162	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019 78,123 45,479 25,622	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019 55,836 38,006 42,135	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019 69,366 56,847 58,520	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019 299,085 206,197 183,439
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019 95,760 65,865 57,162 24,868	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019 78,123 45,479 25,622 88,165	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019 55,836 38,006 42,135 11,138	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019 69,366 56,847 58,520 30,506	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019 299,085 206,197 183,439 154,677
Tomatoes (all varieties) Avocados Peppers Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons	105,364 74,252 55,189 51,964 28,829 315,598 296,266 611,864 1st qtr 2019 95,760 65,865 57,162 24,868 48,614	79,851 46,390 49,914 36,452 75,429 288,036 281,580 569,616 2nd qtr 2019 78,123 45,479 25,622 88,165 34,729	49,278 35,103 35,246 14,131 6,062 139,820 156,781 296,601 3rd qtr 2019 55,836 38,006 42,135 11,138 18,919	62,478 57,726 49,781 43,288 27,782 241,055 205,426 446,481 4th qtr 2019 69,366 56,847 58,520 30,506 41,334	296,971 213,471 190,130 145,835 138,102 984,509 940,053 1,924,562 Total 2019 299,085 206,197 183,439 154,677 143,596

Source: Data is obtained from the Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) through USDA, AMS, Market News.





Commodity	1st qtr 2020	2nd qtr 2020	3rd qtr 2020	4th qtr 2020	Total 2020
Tomatoes (all varieties)	105,181	82,796	66,804	83,797	334,784
Peppers (all varieties)	72,764	47,080	39,078	60,235	217,633
Avocados	58,796	48,461	45,480	63,907	217,195
Cucumbers	51,075	71,858	12,878	47,328	154,587
Watermelons	33,236	3,6687	20,722	38,603	150,683
Subtotal	32,1052	28,6882	184,962	293,870	1,074,882
Other	287,121	304,600	191,721	241,370	1,028,093
Total	608,173	591,482	376,683	535,240	2,102,975
Commodity	1st qtr 2021	2nd qtr 2021	3rd qtr 2021	4th qtr 2021	Total 2021
Tomatoes (all varieties)	119,801	90,736	77,009	87,045	374,591
Peppers (all varieties)	85,890	57,801	42,944	67,413	254,048
Avocados	74,254	58,525	44,100	60,319	237,198
Cucumbers	54,355	81,417	31,188	51,131	184,903
Watermelons	38,041	48,229	14,332	34,991	15,607
Subtotal	372,341	336,708	209,573	300,899	1,208,347
Other	338,366	364,523	232,163	247,863	1,181,488
Total	710,707	701,231	441,736	548,762	2,389,835
			·		
Commodity	1st qtr 2022	2nd qtr 2022	3rd qtr 2022	4th qtr 2022	Total 2022
Commodity Tomatoes (all varieties)	1st qtr 2022 107,847	2nd qtr 2022 94,495	3rd qtr 2022 84,287	4th qtr 2022 92,668	Total 2022 379,297
·					
Tomatoes (all varieties)	107,847	94,495	84,287	92,668	379,297
Tomatoes (all varieties) Peppers (all varieties)	107,847 79,451	94,495 53,250	84,287 39,669	92,668 54,831	379,297 227,201
Tomatoes (all varieties) Peppers (all varieties) Avocados	107,847 79,451 58,684	94,495 53,250 39,754	84,287 39,669 43,174	92,668 54,831 63,620	379,297 227,201 205,232
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons	107,847 79,451 58,684 55,289	94,495 53,250 39,754 48,494	84,287 39,669 43,174 30,653	92,668 54,831 63,620 45,636	379,297 227,201 205,232 180,072
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers	107,847 79,451 58,684 55,289 26,762	94,495 53,250 39,754 48,494 70,132	84,287 39,669 43,174 30,653 8,979	92,668 54,831 63,620 45,636 36,822	379,297 227,201 205,232 180,072 142,695
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123	84,287 39,669 43,174 30,653 8,979 206,762	92,668 54,831 63,620 45,636 36,822 293,577	379,297 227,201 205,232 180,072 142,695 1,134,497
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other	107,847 79,451 58,684 55,289 26,762 328,033 345,147	94,495 53,250 39,754 48,494 70,132 306,125 366,998	84,287 39,669 43,174 30,653 8,979 206,762 234,550	92,668 54,831 63,620 45,636 36,822 293,577 271,000	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties)	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023 114,171	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023 105,170	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023 81,005	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023 87,735	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023 388,081
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023 114,171 80,619	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023 105,170 64,589	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023 81,005 38,182	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023 87,735 64,021	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023 388,081 246,738
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023 114,171 80,619 75,768	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023 105,170 64,589 64,800	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023 81,005 38,182 42,149	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023 87,735 64,021 56,031	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023 388,081 246,738 239,421
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023 114,171 80,619 75,768 62.605	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023 105,170 64,589 64,800 53,187	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023 81,005 38,182 42,149 33,333	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023 87,735 64,021 56,031 43,433	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023 388,081 246,738 239,421 192,558
Tomatoes (all varieties) Peppers (all varieties) Avocados Watermelons Cucumbers Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Squash	107,847 79,451 58,684 55,289 26,762 328,033 345,147 673,180 1st qtr 2023 114,171 80,619 75,768 62.605 35,477	94,495 53,250 39,754 48,494 70,132 306,125 366,998 673,123 2nd qtr 2023 105,170 64,589 64,800 53,187 74,173	84,287 39,669 43,174 30,653 8,979 206,762 234,550 441,312 3rd qtr 2023 81,005 38,182 42,149 33,333 12,111	92,668 54,831 63,620 45,636 36,822 293,577 271,000 564,577 4th qtr 2023 87,735 64,021 56,031 43,433 41,186	379,297 227,201 205,232 180,072 142,695 1,134,497 1,217,695 2,352,192 Total 2023 388,081 246,738 239,421 192,558 161,543

Source: Data is obtained from the Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) through USDA, AMS, Market News.





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- Grain Transportation Report
- Agricultural Refrigerated Truck Quarterly

Data Sets (all XLS files):

- Figure 1: Fourth-quarter 2023 water-route shipment costs (\$/mt) to Veracruz, Mexico
- Figure 2: Fourth-quarter 2023 land-route shipment costs (\$/mt) to Guadalajara, Mexico
- Table 1: Quarterly costs of transporting U.S. grain and soybeans to Mexico
- Table 2: Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US\$/car), 2023
- Table 3: Quarterly tariff rail rates plus fuel surcharge for U.S. bulk grain shipments to Mexico, 2023
- Table 4: Quarterly exports of U.S. Distillers' Dried Grains with Soluble (DDGS) to Mexico
- Table 5: Quarterly ocean freight rate for bulk shipments from the U.S. Gulf to Veracruz, Mexico
- <u>Table 6: Fruit and vegetable truck rates for shipments between 501 and 1,500 miles crossing the U.S.-Mexico border</u>
- Table 7: Quarterly U.S.-Mexico border crossing fresh fruit and vegetables truck availability
- Table 8: Top ten commodities shipped by truck to the U.S. from Mexico, 2023 (1,000 metric tons)
- Table 9: Top five commodities shipped by truck to the U.S. from Mexico (10,000 lbs)

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