

Mexico Transport Cost Indicator Report

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SUMMARY: WHAT HAPPENED?

Transportation and Landed Costs of Grain to Mexico in Fourth Quarter 2022

Mexico is a leading importer of U.S. corn, soybeans, and wheat (*Grain Transportation Report (GTR), March 9, 2023,* tables 12, 13 and 14). Low transportation and landed costs are vital to the competitiveness of U.S. grain to Mexico 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 report 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). Also examined are quarterly and yearly changes in rail carloads of grain and oilseeds to Mexico and in fruit and vegetables shipments to Mexico.

Quarter-to-quarter transportation costs. From third quarter 2022 to fourth quarter 2022 (quarter to quarter), total transportation costs increased for U.S. corn and soybeans by all routes (i.e., water and land). Transportation costs of shipping wheat increased by the land routes, but decreased by the water routes. Rising water-route shipping costs reflected higher barge rates.¹ Land-route shipping costs increased with rising rail rates (public tariff, plus fuel surcharge). Barge rates rose because of record-low water levels in the Mississippi River System that led to reductions in flow, tow size, and draft size. (*GTR*, January 26, 2023). Truck rates fell partly because of lower diesel fuel prices (*GTR* fig. 12). Responding to lower demand for shipping bulk items during end-of-year holidays, ocean freight rates fell (*GTR*, February 9, 2023).

Year-to-year transportation costs. From fourth quarter 2021 to fourth quarter 2022 (year to year), total costs of shipping all grain (U.S. corn, soybeans, and wheat) to Mexico by the land routes rose because of higher truck rates and higher fuel surcharges. Total costs of shipping corn and soybeans to Mexico by the water routes rose because of higher truck and barge rates. However, the cost of shipping wheat to Mexico by the water routes fell because of ocean rate decreases that more than offset the increases in truck and rail tariff rates.

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



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Quarter-to-quarter landed costs. Quarter to quarter, landed costs fell for soybeans shipped via all routes, but increased for wheat shipped by all routes. Landed costs increased for corn shipped to Mexico via the water routes and decreased for corn shipped by the land routes. In the cases of soybeans shipped by all routes and corn shipped by the land routes, falling landed costs reflected declines in farm values that exceeded the rise in transportation costs (table 1 and figs. 1 and 2). In the cases of wheat shipped via the water and land routes and corn shipped by the water routes, landed costs rose in response to rising farm values, transportation costs, or both. The share of landed costs comprising transportation ranged from 17 percent to 30 percent for the water routes and from 19 percent to 32 percent for the land routes.

Year-to-year landed costs. Year to year, landed costs rose for all waterborne and land-route grains. For most of these, the increase reflected both higher transportation costs and higher farm values. The only exception was waterborne wheat for which transportation costs fell (but were still more than offset by an increase in farm values).

U.S. Exports to Mexico: According to USDA's Federal Grain Inspection Service, in fourth quarter 2022, the United States exported to Mexico 2.90 million metric tons (mmt) of corn, 1.62 mmt of soybeans, and 0.64 mmt of wheat. Quarter to quarter, U.S. inspections for export to Mexico were down 9 percent for corn, up 28 percent for soybeans, and down 48 percent for wheat. Year to year, U.S. inspections destined to Mexico fell 32 percent for corn, rose 5 percent for soybeans, and fell 16 percent for wheat. The quarter-to-quarter and year-to-year increases in soybean shipments to Mexico were partly driven by lower landed costs for soybeans.

Ocean Freight Rates: Ocean freight rates for shipping bulk grains to Mexico fell quarter to quarter and year to year, but rose from the 4-year average. In the second 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 \$24.42 per mt. This was down 10 percent quarter to quarter, down 112 percent year to year, and up 21 percent from the prior-4-year average. The cost of shipping by the same route in 35,000-40,000 ton-capacity vessels averaged \$20.73 per mt. This amounted to an 11-percent decrease quarter to quarter, 18-percent decrease year to year, and 18-percent increase from the prior-4-year average. During the fourth quarter, ocean freight rates fell worldwide in response to continued easing of congestion at ports, and low market activity during end-of-year holidays. (*GTR*, February 9, 2023).

Railroad: In fourth quarter 2022, railroads transported 41,125 carloads of grain and oilseeds to Mexico—down 9 percent quarter to quarter, down 9 percent year to year, and down 1 percent from the prior-3-year average. Fuel surcharges per railcar averaged \$990—down 6 percent quarter to quarter, up 25 percent year to year, and up 160 percent from the prior-3-year average. At the end of 2021, the railroads started reporting only rates to the Mexico border, rather than reporting rates for full routes. Rail tariff rates per grain car in fourth quarter 2021 averaged \$7,789. Because comparable data was not available, USDA analysis assumed rail tariff rates to be unchanged through fourth quarter 2022. Based on this assumption, total rail transportation costs (tariff rates plus fuel surcharges) rose 2 percent year to year and rose 8 percent from the prior-3-year average.

Fruit and Vegetables

In fourth quarter 2022, total reported shipments of fruits and vegetables by refrigerated truck from Mexico were 2.82 million tons, up 3 percent from year to year. The sum of the top five commodities decreased by 10,000 tons, or 1 percent, from year to year. At 318,000 tons—an increase of 5 percent from year to year—avocados accounted for the largest reported refrigerated-truck import from Mexico by volume.

Truck rates for shipments crossing the Arizona border from Mexico and traveling 501-1,500 miles averaged \$2.92 per mile—up 2 percent quarter to quarter and down 11 percent year to year. Rates for shipments crossing the Texas-Mexico border and traveling 501-1,500 miles averaged \$3.08 per mile—up 2 percent quarter to quarter and down 11 percent year to year.

Diesel fuel prices for Texas-Mexico border crossings averaged \$4.67 per gallon for the quarter. Diesel fuel prices for Arizona-Mexico border crossings averaged \$5.26 per gallon. The Texas-Mexico border crossing had slight surplus availability in October, surplus in November and adequate availability in December. The Arizona-Mexico border crossing had adequate availability throughout the quarter.





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

					20	22			•	
		Water ro	oute (to \	/eracruz)		L	and rout	e (to Gu	adalajara)
	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.
		US	\$/metric	ton			US	\$/metric	ton	
					Co	orn				
Origin			IL					IA		
Truck	16.67	23.40	19.07	16.31	18.86	5.58	7.13	6.27	5.82	6.20
Rail ¹	-	-	-	-	-	100.08	102.35	109.83	116.30	107.14
Barge	39.23	27.98	29.97	70.23	41.85	-	-	-	-	-
Ocean ²	22.51	26.27	23.33	20.73	23.21	-	-	-	-	-
Total transportation cost	78.41	77.65	72.37	107.27	83.93	105.66	109.48	116.10	122.12	113.34
Farm price ³	241.59	290.14	277.81	250.51	265.01	241.46	287.91	292.11	258.78	270.07
Landed cost⁴	320.00	367.79	350.18	357.78	348.94	347.12	397.39	408.21	380.90	383.41
Transport % of landed cost	24.5	21.1	20.7	30.0	24.1	30.4	27.5	28.4	32.1	29.6
					Soyb	eans				
Origin			IL					NE		
Truck	16.67	23.40	19.07	16.31	18.86	5.58	7.13	6.27	5.82	6.20
Rail ¹	-	-	-	-	-	100.95	103.32	110.60	116.43	107.83
Barge	39.23	27.98	29.97	70.23	41.85	-	-	-	-	-
Ocean ²	22.51	26.27	23.33	20.73	23.21	-	-	-	-	-
Total transportation cost	78.41	77.65	72.37	107.27	83.93	106.53	110.45	116.87	122.25	114.03
Farm price ³	527.88	601.37	564.63	510.74	551.16	526.66	579.33	542.58	514.41	540.75
Landed cost ⁴	606.29	679.02	637.00	618.01	635.08	633.19	689.78	659.45	636.66	654.77
Transport % of landed cost	12.9	11.4	11.4	17.4	13.3	16.8	16.0	17.7	19.2	17.4
					Wh	eat				
Origin			KS					KS		
Truck	5.58	7.13	6.27	5.82	6.20	5.58	7.13	6.27	5.82	6.20
Rail ¹	43.80	44.47	49.83	45.96	46.02	85.63	87.24	93.49	105.05	92.85
Ocean ²	22.51	26.27	23.33	20.73	23.21	-	-	-	-	-
Total transportation cost	71.89	77.87	79.43	72.51	75.43	91.21	94.37	99.76	110.87	99.05
Farm price ³	319.79	370.01	315.51	332.65	334.49	319.79	370.01	315.51	332.65	334.49
Landed cost⁴	391.68	447.88	394.94	405.16	409.92	411.00	464.38	415.27	443.52	433.54
Transport % of landed cost	18.4	17.4	20.1	17.9	18.4	22.2	20.3	24.0	25.0	22.9

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. ²Source: O'Neil Commodity Consulting, Inc.

³Source: USDA/NASS.

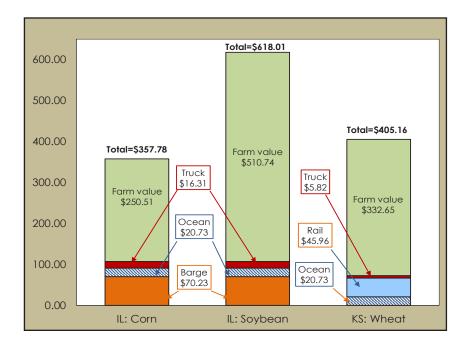
⁴Landed cost is total transportation cost plus the farm price.

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

Source: Compiled by the USDA, Agricultural Marketing Service.

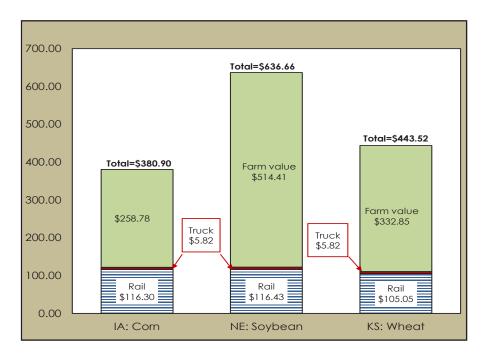


Figure 1. Fourth-quarter 2022 water-route shipment costs (\$/mt) to Veracruz, Mexico



Note: IL = Illinois; KS = Kansas. Source: USDA, Agricultural Marketing Service.

Figure 2. Fourth-quarter 2022 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), 2022

	Origin			Tari	ff rate/c	ar ^{1,3}			Fuel su	charge	per car ²	
Commodity	State	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
	MT	Chihuahua, Cl	7,699	7,699	7,699	7,699	7,699	0	611	0	0	0
	ОК	Cuautitlan, EM	6,900	6,900	6,900	6,900	6,900	225	745	606	513	464
Wheat	KS	Guadalajara, JA	7,619	7,619	7,619	7,619	7,619	762	1,240	2,700	2,663	2,642
	ТХ	Salinas Victoria, NL	4,420	4,420	4,420	4,420	4,420	138	323	330	285	257
	IA	Guadalajara, JA	9,102	9,102	9,102	9,102	9,102	693	1,281	2,356	2,280	2,239
	SD	Celaya, GJ	8,300	8,300	8,300	8,300	8,300	0	800	0	0	0
Corn	NE	Queretaro, QA	8,322	8,322	8,322	8,322	8,322	474	1,042	994	881	794
Corn	SD	Salinas Victoria, NL	6,905	6,905	6,905	6,905	6,905	0	608	0	0	0
	MO	Tlalnepantla, EM	7,687	7,687	7,687	7,687	7,687	462	1,015	962	854	770
	SD	Torreon, CU	7,825	7,825	7,825	7,825	7,825	0	670	0	0	0
	MO	Bojay (Tula), HG	8,647	8,647	8,647	8,647	8,647	643	1,150	2,193	2,125	2,089
Cashaana	NE	Guadalajara, JA	9,207	9,207	9,207	9,207	9,207	673	1,254	2,271	2,188	2,144
Soybeans	IA	El Castillo, JA	9,510	9,510	9,510	9,510	9,510	0	795	0	0	0
	KS	Torreon, CU	8,109	8,109	8,109	8,109	8,109	482	883	1,585	1,508	1,467
	NE	Celaya, GJ	7,932	7,932	7,932	7,932	7,932	622	1,153	2,081	1,999	1,954
Combury	KS	Queretaro, QA	8,108	8,108	8,108	8,108	8,108	281	695	757	641	579
Sorghum	NE	Salinas Victoria, NL	6,713	6,713	6,713	6,713	6,713	226	642	608	515	465
	NE	Torreon, CU	7,225	7,225	7,225	7,225	7,225	450	902	1,455	1,373	1,328

¹Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified shipments of 75-110 cars that meet railroad efficiency requirements. The cost of obtaining empty grain cars in the Secondary Grain Car markets, which in times of high demand may exceed the tariff rate plus fuel surcharge, is not included.

²Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu.

³Due 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. Because comparable data were not available, it was assumed rail rates did not change from fourth quarter 2021 to first quarter 2022, but fuel surcharges were still updated.

Sources: <u>www.bnsf.com</u>; <u>www.uprr.com</u>; <u>www.kcsouthern.com</u>.





Table 3. Quarterly tariff rail rates plus fuel surcharges for U.S. bulk grain shipmentsto Mexico, 2022

						Tariff ^{1,3}	olus fue	l surcha	rge per										
Commodity	Origin	Destination		US\$	/metric	ton		US\$/bushel ²											
commounty	State	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg							
	MT	Chihuahua, Cl	78.67	84.91	78.67	78.67	78.67	2.14	2.31	2.14	2.14	2.14							
Wheat	ОК	Cuautitlan, EM	72.80	78.12	76.70	75.75	75.24	1.98	2.12	2.09	2.06	2.05							
wheat	KS	Guadalajara, JA	85.63	90.51	105.43	105.05	104.84	2.33	2.46	2.87	2.86	2.85							
	ΤХ	Salinas Victoria, NL	46.58	48.47	48.54	48.08	47.80	1.27	1.32	1.32	1.31	1.30							
	IA	Guadalajara, JA	100.08	106.09	117.07	116.30	115.88	2.54	2.69	2.97	2.95	2.94							
	SD	Celaya, GJ	84.81	92.98	84.81	84.81	84.81	2.15	2.36	2.15	2.15	2.15							
Corn	NE	Queretaro, QA	89.87	95.67	95.19	94.03	93.14	2.28	2.43	2.42	2.39	2.36							
Corn	SD	Salinas Victoria, NL	70.55	76.76	70.55	70.55	70.55	1.79	1.95	1.79	1.79	1.79							
	MO	Tlalnepantla, EM	83.27	88.91	88.37	87.27	86.41	2.11	2.26	2.24	2.21	2.19							
	SD	Torreon, CU	79.95	86.79	79.95	79.95	79.95	2.03	2.20	2.03	2.03	2.03							
	MO	Bojay (Tula), HG	94.92	100.10	110.76	110.06	109.69	2.58	2.72	3.01	2.99	2.98							
Souhoone	NE	Guadalajara, JA	100.95	106.88	117.27	116.43	115.98	2.74	2.91	3.19	3.17	3.15							
Soybeans	IA	El Castillo, JA	97.17	105.29	97.17	97.17	97.17	2.64	2.86	2.64	2.64	2.64							
	KS	Torreon, CU	87.78	91.87	99.04	98.26	97.84	2.39	2.50	2.69	2.67	2.66							
	NE	Celaya, GJ	87.40	92.83	102.31	101.47	101.02	2.22	2.36	2.60	2.57	2.56							
Corabum	KS	Queretaro, QA	85.71	89.94	90.57	89.39	88.75	2.18	2.28	2.30	2.27	2.25							
Sorghum	NE	Salinas Victoria, NL	70.89	75.14	74.80	73.84	73.33	1.80	1.91	1.90	1.87	1.86							
	NE	Torreon, CU	78.42	83.04	88.68	87.84	87.39	1.99	2.11	2.25	2.23	2.22							

¹Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified shipments of 75-110 cars that meet railroad efficiency requirements. The cost of obtaining empty grain cars in the Secondary Grain Car markets, which in times of high demand may exceed the tariff rate plus fuel surcharge, is not included.

²Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu.

³Due 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. Because comparable data were not available, it was assumed rail rates did not change from fourth quarter 2021 to first quarter 2022, but fuel surcharges were still updated.

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





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

Maar		Т	housand metric ton	S	5				
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				

*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 shipmentsfrom the U.S. Gulf to Veracruz, Mexico

		US\$/me	etric ton		
Vessel capacity (metric ton)	1st qtr 2014	2nd qtr 2014	3rd qtr 2014	4th qtr 2014	Average
25,000	20.08	17.48	15.75	16.32	17.41
35-40,000	17.53	15.48	13.56	13.96	15.13
Vessel capacity (metric ton)	1st qtr 2015	2nd qtr 2015	3rd qtr 2015	4th qtr 2015	Average
25,000	13.67	14.23	14.59	13.95	14.11
35-40,000	11.63	11.89	12.85	12.12	12.12
Vessel capacity (metric ton)	1st qtr 2016	2nd qtr 2016	3rd qtr 2016	4th qtr 2016	Average
25,000	12.34	13.47	15.00	14.85	13.92
35-40,000	10.44	11.65	13.20	13.26	12.14
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



FRUIT AND VEGETABLE

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

	ι	JS\$/mile			
Origin/border crossing	1st qtr 2014	2nd qtr 2014	3rd qtr 2014	4th qtr 2014	Average
Nogales, Arizona	2.46	2.69	1.74	2.31	2.30
Pharr, Texas	2.32	2.53	2.12	2.13	2.28
Origin/border crossing	1st qtr 2015	2nd qtr 2015	3rd qtr 2015	4th qtr 2015	Average
Nogales, Arizona	2.41	2.49	2.71	2.51	2.53
Pharr, Texas	2.26	2.23	2.50	2.27	2.32
Origin/border crossing	1st qtr 2016	2nd qtr 2016	3rd qtr 2016	4th qtr 2016	Average
Nogales, Arizona	2.31	2.43	2.53	2.65	2.48
Pharr, Texas	2.98	2.17	2.24	2.34	2.43
Origin/border crossing	1st qtr 2017	2nd qtr 2017	3rd qtr 2017	4th qtr 2017	Average
Nogales, Arizona	2.05	2.32	2.45	2.38	2.30
Pharr, Texas	2.16	2.21	2.00	2.36	2.18
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	3.90	2.10	3.28	3.11
Pharr, Texas	2.93	3.19	2.90	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	3.50	3.01	3.08	3.34

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	quar	ter 20)22								
Legend:	1 =Surplus	2 = Slight surplus		3 =	Adeo	quate	4 =	Slight	t short	age	5 = Shortage		ge	
			Tru	ck ava	ailabi	lity								
Mexico borde	r crossings/month		Octo	ober			No	ovemb	ber			Decei	nber	
Week ending		10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	11/29	12/6	12/13	12/20	12/27
Through Nogales, AZ	Cantalopes, Squash, Cucumbers, Mangoes, Honeydew, Watermelons	2	2	3	3	3	3	3	3	3	3	3	3	4
Through TX	Oranges, Grapefruit, Limes, Mangoes, Papaya, Peppers, Cucumbers, Vegetable	1	2	3	1	1	1	1	1	3	2	2	2	4

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, 2022 (1,000 metric tons)

Commodity	4th qtr 2022	Rank
AVOCADOS	318	1
CUCUMBERS	228	2
TOMATOES, PLUM TYPE	215	3
WATERMELONS, SEEDLESS	181	4
TOMATOES	177	5
LIMES	172	6
SQUASH	146	7
PEPPERS, OTHER	138	8
PEPPERS, BELL TYPE	137	9
BROCCOLI	94	10

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





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

Commodity	1st qtr 2015	2nd qtr 2015	3rd qtr 2015	4th qtr 2015	Total 2015
Tomatoes (all varieties)	97,953	71,449	45,992	65,381	280,775
Avocados	44,215	37,154	43,044	49,722	174,135
Peppers	59,876	33,752	30,679	47,396	171,703
Watermelons	23,537	95,273	7,213	23,195	149,218
Cucumbers	49,684	33,603	15,717	37,875	136,879
Subtotal	275,265	271,231	142,645	223,569	912,710
Other	232,251	250,443	138,828	185,012	806,534
Total	507,516	521,674	281,473	408,581	1,719,244
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
Tomatoes (all varieties)	105,364	79,851	49,278	62,478	296,971
	<u>}</u>				040.474
Peppers (all varieties)	74,252	46,390	35,103	57,726	213,471
Peppers (all varieties) Avocados	74,252 55,189	46,390 49,914	35,103 35,246	57,726 49,781	213,471 190,130
Avocados	55,189	49,914	35,246	49,781	190,130
Avocados Cucumbers	55,189 51,964	49,914 36,452	35,246 14,131	49,781 43,288	190,130 145,835
Avocados Cucumbers Watermelons	55,189 51,964 28,829	49,914 36,452 75,429	35,246 14,131 6,062	49,781 43,288 27,782	190,130 145,835 138,102

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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Commodity	1st qtr 2019	2nd qtr 2019	3rd qtr 2019	4th qtr 2019	Total 2019
Tomatoes (all varieties)	95,760	78,123	55,836	69,366	299,085
Peppers (all varieties)	65,865	45,479	38,006	56,847	206,197
Avocados	57,162	25,622	42,135	58,520	183,439
Watermelons	24,868	88,165	11,138	30,506	154,677
Cucumbers	48,614	34,729	18,919	41,334	143,596
Subtotal	292,269	272,118	166,034	256,573	986,994
Other	272,760	262,948	182,481	213,013	931,202
Total	565,029	535,066	348,515	469,586	1,918,196
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
	000)=10	551,462	070,000	333,240	2)102)373
Commodity	1st qtr 2021	2nd qtr 2021	3rd qtr 2021	4th qtr 2021	Total 2021
Commodity	1st qtr 2021	2nd qtr 2021	3rd qtr 2021	4th qtr 2021	Total 2021
Commodity Tomatoes (all varieties)	1st qtr 2021 119,801	2nd qtr 2021 90,736	3rd qtr 2021 77,009	4th qtr 2021 87,045	Total 2021 374,591
Commodity Tomatoes (all varieties) Peppers (all varieties)	1st qtr 2021 119,801 85,890	2nd qtr 2021 90,736 57,801	3rd qtr 2021 77,009 42,944	4th qtr 2021 87,045 67,413	Total 2021 374,591 254,048
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados	1st qtr 2021 119,801 85,890 74,254	2nd qtr 2021 90,736 57,801 58,525	3rd qtr 2021 77,009 42,944 44,100	4th qtr 2021 87,045 67,413 60,319	Total 2021 374,591 254,048 237,198
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	1st qtr 2021 119,801 85,890 74,254 54,355	2nd qtr 2021 90,736 57,801 58,525 81,417	3rd qtr 2021 77,009 42,944 44,100 31,188	4th qtr 2021 87,045 67,413 60,319 51,131	Total 2021 374,591 254,048 237,198 184,903
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons	1st qtr 2021 119,801 85,890 74,254 54,355 38,041	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332	4th qtr 2021 87,045 67,413 60,319 51,131 34,991	Total 2021 374,591 254,048 237,198 184,903 15,607
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 4th qtr 2022	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties)	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,847	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022 84,287	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 4th qtr 2022 92,668	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 379,297
Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,847 79,451	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022 84,287 39,669	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 92,668 54,831	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 379,297 227,201
CommodityTomatoes (all varieties)Peppers (all varieties)AvocadosCucumbersWatermelonsSubtotalOtherTotalCommodityTomatoes (all varieties)Peppers (all varieties)Avocados	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,847 79,451 58,684	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 39,754	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022 84,287 39,669 43,174	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 4th qtr 2022 92,668 54,831 63,620	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 379,297 227,201 205,232
CommodityTomatoes (all varieties)Peppers (all varieties)AvocadosCucumbersWatermelonsSubtotalOtherTotalCommodityTomatoes (all varieties)Peppers (all varieties)AvocadosCucumbers	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,847 79,451 58,684 55,289	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 39,754 48,494	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022 84,287 39,669 43,174 30,653	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 4th qtr 2022 92,668 54,831 63,620 45,636	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 379,297 227,201 205,232 180,072
CommodityTomatoes (all varieties)Peppers (all varieties)AvocadosCucumbersWatermelonsSubtotalOtherTotalCommodityTomatoes (all varieties)Peppers (all varieties)AvocadosCucumbersWatermelons	1st qtr 2021 119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,847 79,451 58,684 55,289 26,762	2nd qtr 2021 90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 39,754 48,494 70,132	3rd qtr 2021 77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736 3rd qtr 2022 84,287 39,669 43,174 30,653 8,979	4th qtr 2021 87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762 4th qtr 2022 92,668 54,831 63,620 45,636 36,822	Total 2021 374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 379,297 227,201 205,232 180,072 142,695

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
- <u>Agricultural Refrigerated Truck Quarterly</u>

Data Sets (all XLS files):

- Figure 1: Fourth-quarter 2022 water-route shipment costs (\$/mt) to Veracruz, Mexico
- Figure 2: Fourth-quarter 2022 land-route shipment costs (\$/mt) to Guadalajara, Mexico
- <u>Table 1: Quarterly costs of transporting U.S. grain and soybeans to Mexico</u>
- Table 2: Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US\$/car), 2022
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