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Mexico Transport Cost Indicator Report

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SUMMARY: WHAT HAPPENED?

Transportation Costs Varied, But Landed Costs of Grain to Mexico Rose in Second Quarter 2022

Mexico is a major importer of U.S. grain (<u>Grain Transportation Report (GTR)</u> August 25, 2022), <u>tables 13</u>, <u>14</u>, and <u>15</u>. Low transportation and landed costs for U.S.-Mexico routes are vital to the competitiveness of U.S. grain (corn, soybeans, and wheat) in 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 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 first quarter 2022 to second quarter 2022 (quarter to quarter), total transportation costs decreased for corn and soybeans shipped through the water routes, but increased for waterborne wheat. Total transportation costs increased for U.S. corn, soybeans, and wheat through the land routes. Falling water-route shipping costs for corn and soybeans mainly reflected lower barge rates.¹ Land-route shipping costs increased with rising truck and rail rates (public tariff, plus fuel surcharge). Truck rates rose partly because of a quarter-to-quarter rise in diesel fuel prices (*GTR*, fig. 13, August 25, 2022). Rail rates rose in response to the increase in fuel surcharges amid higher fuel prices. Reflecting extreme weather and fears of economic downturn, soft demand for barges led to falling barge rates. (*GTR*, July 28, 2022).

Year-to-year transportation costs. From second quarter 2021 to second quarter 2022 (year to year), total costs of shipping all grain to Mexico by the water routes rose because of higher truck, barge, and ocean freight rates. A rise in total costs of shipping all grain to Mexico by the land routes reflected higher truck and rail rates.

Quarter-to-quarter landed costs. Quarter to quarter, landed costs rose for all grain shipped via the water and land routes. For seaborne corn and soybeans, higher landed costs reflected rising farm values. For seaborne wheat and all grain shipped through the land routes, landed costs rose because of increases in both transportation costs and

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





farm values (table 1 and figs. 1 and 2). The share of landed costs comprising transportation ranged from 11 percent to 21 percent for the water routes and from 16 percent to 28 percent for the land routes. Transportation's share of the landed costs declined with rising farm values.

Year-to-year landed costs. Year to year, landed costs increased for all waterborne and land-route grain, because of both higher transportation costs and higher farm values.

U.S. Exports to Mexico: According to <u>USDA's Federal Grain Inspection Service</u>, the United States exported 4.06 million metric tons (mmt) of corn, 1.28 mmt of soybeans, and 0.90 mmt of wheat to Mexico in second quarter 2022. In first quarter 2022, the United States exported 4.00 mmt of corn, 1.28 mmt of soybeans, and 0.98 mmt of wheat to Mexico. Quarter to quarter, U.S. inspections for export to Mexico increased 1 percent for corn, remained the same for soybeans, and decreased 8 percent for wheat. Year to year, U.S. inspections destined to Mexico showed declines of 8 percent for corn and 10 percent for wheat, while soybean inspections rose 39 percent.

Ocean Freight Rates: Ocean freight rates for shipping bulk grains to Mexico increased quarter to quarter, year to year, and 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 \$30.00 per mt. This was up 16 percent quarter to quarter, up 11 percent year to year, and up 59 percent from the prior-4-year average. The cost of shipping by the same route in 35,000-40,000 ton-capacity vessels averaged \$26.27 per mt. This amounted to a 17-percent increase quarter to quarter, 11-percent increase year to year, and 64-percent increase from the prior-4-year average. During the second quarter, ocean freight rates rose worldwide in response to the Russia-Ukraine conflict, fluctuating Chinese demand, and rising global inflation (GTR, July 21, 2022).

Railroad: In second quarter 2022, railroads transported 45,127 carloads of grain and oilseeds to Mexico, up 4 percent quarter to quarter, down 4 percent year to year, and up 9 percent from the prior-3-year average. Fuel surcharges per railcar averaged \$878, up 90 percent quarter to quarter, up 243 percent year to year, and up 322 percent from the prior-3-year average. At the end of 2021, the railroads started reporting only rates to the Mexican 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 second quarter 2022. Based on this assumption, total rail transportation costs (tariff rates plus fuel surcharges) rose 9 percent year to year and rose 10 percent from the prior-3-year average.

Fruit and Vegetables

In second quarter 2022, total reported shipments of fruits and vegetables by refrigerated truck from Mexico were 3.37 million tons, a 4-percent decrease from year to year. The sum of the top five commodities decreased by 91,000 tons, or 7 percent from year to year. At 347,000 tons—a decrease of 8 percent from year to year—seedless watermelon, 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 \$3.44 per mile, down 6 percent quarter to quarter and down 12 percent year to year. Rates for shipments crossing the Texas-Mexico border and traveling 501-1,500 miles averaged \$3.50 per mile, down 7 percent quarter to quarter and up 10 percent year to year.

Diesel fuel prices for Texas-Mexico border crossings averaged \$5.18 per gallon for the quarter. Diesel fuel prices for Arizona-Mexico border crossings averaged \$5.66 per gallon. Truck availability for Texas-Mexico border crossings was adequate in April and May and surplus in June. The Arizona-Mexico border crossings had adequate availability throughout the quarter.





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

		2022								
		Water ro	oute (to \	/eracruz)		L	and rout	e (to Gua	adalajara)
	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.
		USŞ	/metric	ton			USS	/metric	ton	
					Co	rn				
Origin			IL					IA		
Truck	16.67	23.40			20.04	5.58	7.13			6.36
Rail ¹	-	-			-	100.08	102.35			101.22
Barge	39.23	27.98			33.61	-	-			-
Ocean ²	22.51	26.27			24.39	-	-			-
Total transportation cost	78.41	77.65			78.03	105.66	109.48			107.57
Farm price ³	241.59	290.14			265.87	241.46	287.91			264.69
Landed cost ⁴	320.00	367.79			343.90	347.12	397.39			372.26
Transport % of landed cost	24.5	21.1			22.7	30.4	27.5			28.9
					Soyb	eans				
Origin			IL					NE		
Truck	16.67	23.40			20.04	5.58	7.13			6.36
Rail ¹	-	-			-	100.95	103.32			102.14
Barge	39.23	27.98			33.61	-	-			-
Ocean ²	22.51	26.27			24.39	-	-			-
Total transportation cost	78.41	77.65			78.03	106.53	110.45			108.49
Farm price ³	527.88	601.37			564.63	526.66	579.33			553.00
Landed cost ⁴	606.29	679.02			642.66	633.19	689.78			661.49
Transport % of landed cost	12.9	11.4			12.2	16.8	16.0			16.4
					Wh	eat				
Origin			KS					KS		
Truck	5.58	7.13			6.36	5.58	7.13			6.36
Rail ¹	43.80	44.47			44.14	85.63	87.24			86.44
Ocean ²	22.51	26.27			24.39	-	-			-
Total transportation cost	71.89	77.87			74.88	91.21	94.37			92.79
Farm price ³	319.79	370.01			344.90	319.79	370.01			344.90
Landed cost ⁴	391.68	447.88			419.78	411.00	464.38			437.69
Transport % of landed cost	18.4	17.4			17.9	22.2	20.3			21.3

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.

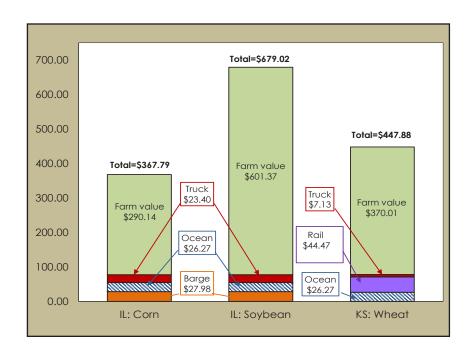
³Source: USDA/NASS.

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





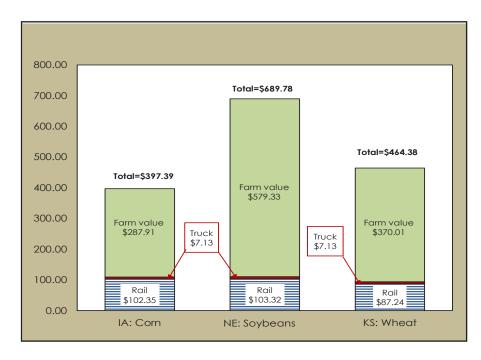
Figure 1. Second-quarter 2022 water-route shipment costs (\$/mt) to Veracruz, Mexico



Note: IL = Illinois; KS = Kansas.

Source: USDA, Agricultural Marketing Service.

Figure 2. Second-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 sur	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	7,699	7,699			7,699	0	611			397
M/b a a b	ОК	Cuautitlan, EM	6,900	6,900			6,900	225	745			541
Wheat	KS	Guadalajara, JA	7,619	7,619			7,619	762	1,240			1,054
	TX	Salinas Victoria, NL	4,420	4,420			4,420	138	323			244
	IA	Guadalajara, JA	9,102	9,102			9,102	693	1,281			1,050
	SD	Celaya, GJ	8,300	8,300			8,300	0	800			519
Corn	NE	Queretaro, QA	8,322	8,322			8,322	474	1,042			795
Corn	SD	Salinas Victoria, NL	6,905	6,905			6,905	0	608			394
	МО	Tlalnepantla, EM	7,687	7,687			7,687	462	1,015			775
	SD	Torreon, CU	7,825	7,825			7,825	0	670			435
	МО	Bojay (Tula), HG	8,647	8,647			8,647	643	1,150			950
Coultanne	NE	Guadalajara, JA	9,207	9,207			9,207	673	1,254			1,024
Soybeans	IA	El Castillo, JA	9,510	9,510			9,510	0	795			516
	KS	Torreon, CU	8,109	8,109			8,109	482	883			720
	NE	Celaya, GJ	7,932	7,932			7,932	622	1,153			942
Canaham	KS	Queretaro, QA	8,108	8,108			8,108	281	695			522
Sorghum	NE	Salinas Victoria, NL	6,713	6,713			6,713	226	642			474
	NE	Torreon, CU	7,225	7,225			7,225	450	902			721

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.

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

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.





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

						Tariff ^{1,3}	plus fue	l surcha	rge per:	er:								
Commodity	Origin	Doctination		US\$	/metric	ton			US	\$\$/bush	el²							
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			82.72	2.14	2.31			2.25						
Wheat	ОК	Cuautitlan, EM	72.80	78.12			76.03	1.98	2.12			2.07						
vviieat	KS	Guadalajara, JA	85.63	90.51			88.61	2.33	2.46			2.41						
	TX	Salinas Victoria, NL	46.58	48.47			47.66	1.27	1.32			1.30						
	IA	Guadalajara, JA	100.08	106.09			103.73	2.54	2.69			2.63						
	SD	Celaya, GJ	84.81	92.98			90.11	2.15	2.36			2.29						
Corn	NE	Queretaro, QA	89.87	95.67			93.15	2.28	2.43			2.36						
Com	SD	Salinas Victoria, NL	70.55	76.76			74.58	1.79	1.95			1.89						
	МО	Tlalnepantla, EM	83.27	88.91			86.46	2.11	2.26			2.19						
	SD	Torreon, CU	79.95	86.79			84.39	2.03	2.20			2.14						
	МО	Bojay (Tula), HG	94.92	100.10			98.05	2.58	2.72			2.67						
Souhoons	NE	Guadalajara, JA	100.95	106.88			104.53	2.74	2.91			2.84						
Soybeans	IA	El Castillo, JA	97.17	105.29			102.44	2.64	2.86			2.79						
	KS	Torreon, CU	87.78	91.87			90.21	2.39	2.50			2.45						
	NE	Celaya, GJ	87.40	92.83			90.67	2.22	2.36			2.30						
Coughum	KS	Queretaro, QA	85.71	89.94			88.17	2.18	2.28			2.24						
Sorghum	NE	Salinas Victoria, NL	70.89	75.14			73.43	1.80	1.91			1.86						
	NE	Torreon, CU	78.42	83.04			81.18	1.99	2.11			2.06						

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.

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

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.





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

V	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								

^{*}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.

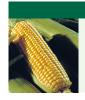




Table 5. Quarterly ocean freight rate for bulk grain shipments from the U.S. Gulf to Veracruz, Mexico

		US\$/me	etric ton		
Vessel capacity (metric ton)	1st qtr 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			27.91
35-40,000	22.51	26.27			24.39

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	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			3.55
Pharr, Texas	3.77	3.50			3.63

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

			2nd	quar	ter 20	022								
Legend:	1 =Surplus	2 = Sliį	ght su	t surplus 3 = Adequate 4 = Slight shorta		age	5 = Shortage							
	Truck availability													
Mexico borde	r crossings/month		Ap	oril				May				Jui	ne	
Week ending		4/5	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	6/28
Through Nogales, AZ	Tomatoes, Squash, Cucumbers, Mangoes, Honeydew, Watermelons, Mixed Fruits, Vegetables,	3	3	3	3	3	3	3	3	3	3	3	3	3
Through TX	Vegetables, Limes, Mangoes, Onions, Tomatoes, Broccoli, Mixed Fruits	3	3	3	3	3	2	3	3	3	2	1	1	1

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	2nd qtr 2022	Rank
Watermelons, Seedless	347	1
Tomatoes, Plum Type	260	2
Cucumbers	242	3
Avocados	199	4
Grapes	192	5
Tomatoes	175	6
Mangoes	168	7
Limes	161	8
Peppers, Bell Type	138	9
Peppers, Other	128	10





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
Commodity Tomatoes (all varieties)	1st qtr 2017 107,852	2nd qtr 2017 82,194	3rd qtr 2017 49,088	4th qtr 2017 73,166	Total 2017 312,300
•		·			
Tomatoes (all varieties)	107,852	82,194	49,088	73,166	312,300
Tomatoes (all varieties) Peppers (all varieties)	107,852 67,566	82,194 38,714	49,088 31,137	73,166 59,172	312,300 196,589
Tomatoes (all varieties) Peppers (all varieties) Avocados	107,852 67,566 49,565	82,194 38,714 36,996	49,088 31,137 32,133	73,166 59,172 47,015	312,300 196,589 165,709
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	107,852 67,566 49,565 47,336	82,194 38,714 36,996 32,892	49,088 31,137 32,133 16,064	73,166 59,172 47,015 44,415	312,300 196,589 165,709 140,707
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons	107,852 67,566 49,565 47,336 31,890	82,194 38,714 36,996 32,892 68,086	49,088 31,137 32,133 16,064 5,264	73,166 59,172 47,015 44,415 33,293	312,300 196,589 165,709 140,707 138,533
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal	107,852 67,566 49,565 47,336 31,890 304,209	82,194 38,714 36,996 32,892 68,086 258,882	49,088 31,137 32,133 16,064 5,264 133,686	73,166 59,172 47,015 44,415 33,293 257,061	312,300 196,589 165,709 140,707 138,533 953,838
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other	107,852 67,566 49,565 47,336 31,890 304,209 291,177	82,194 38,714 36,996 32,892 68,086 258,882 291,747	49,088 31,137 32,133 16,064 5,264 133,686 170,323	73,166 59,172 47,015 44,415 33,293 257,061 205,516	312,300 196,589 165,709 140,707 138,533 953,838 958,763
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties)	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018 105,364	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018 79,851	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018 49,278	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018 62,478	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018 296,971
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018 105,364 74,252	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018 79,851 46,390	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018 49,278 35,103	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018 62,478 57,726	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018 296,971 213,471
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018 105,364 74,252 55,189	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018 79,851 46,390 49,914	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018 49,278 35,103 35,246	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018 62,478 57,726 49,781	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018 296,971 213,471 190,130
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018 105,364 74,252 55,189 51,964	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018 79,851 46,390 49,914 36,452	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018 49,278 35,103 35,246 14,131	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018 62,478 57,726 49,781 43,288	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018 296,971 213,471 190,130 145,835
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons	107,852 67,566 49,565 47,336 31,890 304,209 291,177 595,386 1st qtr 2018 105,364 74,252 55,189 51,964 28,829	82,194 38,714 36,996 32,892 68,086 258,882 291,747 550,629 2nd qtr 2018 79,851 46,390 49,914 36,452 75,429	49,088 31,137 32,133 16,064 5,264 133,686 170,323 304,009 3rd qtr 2018 49,278 35,103 35,246 14,131 6,062	73,166 59,172 47,015 44,415 33,293 257,061 205,516 462,577 4th qtr 2018 62,478 57,726 49,781 43,288 27,782	312,300 196,589 165,709 140,707 138,533 953,838 958,763 1,912,601 Total 2018 296,971 213,471 190,130 145,835 138,102

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





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
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
-					
Tomatoes (all varieties)	119,801	90,736	77,009	87,045	374,591
Tomatoes (all varieties) Peppers (all varieties)	119,801 85,890	90,736 57,801	77,009 42,944	87,045 67,413	374,591 254,048
Tomatoes (all varieties) Peppers (all varieties) Avocados	119,801 85,890 74,254	90,736 57,801 58,525	77,009 42,944 44,100	87,045 67,413 60,319	374,591 254,048 237,198
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	119,801 85,890 74,254 54,355	90,736 57,801 58,525 81,417	77,009 42,944 44,100 31,188	87,045 67,413 60,319 51,131	374,591 254,048 237,198 184,903
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons	119,801 85,890 74,254 54,355 38,041	90,736 57,801 58,525 81,417 48,229	77,009 42,944 44,100 31,188 14,332	87,045 67,413 60,319 51,131 34,991	374,591 254,048 237,198 184,903 15,607
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal	119,801 85,890 74,254 54,355 38,041 372,341	90,736 57,801 58,525 81,417 48,229 336,708	77,009 42,944 44,100 31,188 14,332 209,573	87,045 67,413 60,319 51,131 34,991 300,899	374,591 254,048 237,198 184,903 15,607 1,208,347
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other	119,801 85,890 74,254 54,355 38,041 372,341 338,366	90,736 57,801 58,525 81,417 48,229 336,708 364,523	77,009 42,944 44,100 31,188 14,332 209,573 232,163	87,045 67,413 60,319 51,131 34,991 300,899 247,863	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties)	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,848	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 202,343
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,848 79,478	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 202,343 132,728
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,848 79,478 58,696	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 48,494	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 202,343 132,728 104,395
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,848 79,478 58,696 55,901	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 48,494 39,754	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 202,343 132,728 104,395 98,450
Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Watermelons Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Avocados Cucumbers Squash	119,801 85,890 74,254 54,355 38,041 372,341 338,366 710,707 1st qtr 2022 107,848 79,478 58,696 55,901 35,189	90,736 57,801 58,525 81,417 48,229 336,708 364,523 701,231 2nd qtr 2022 94,495 53,250 48,494 39,754 70,293	77,009 42,944 44,100 31,188 14,332 209,573 232,163 441,736	87,045 67,413 60,319 51,131 34,991 300,899 247,863 548,762	374,591 254,048 237,198 184,903 15,607 1,208,347 1,181,488 2,389,835 Total 2022 202,343 132,728 104,395 98,450 97,056

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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- U.S. Grain and Soybean Exports to Mexico A Modal Share Transportation Analysis (PDF)
- Grain Transportation Report
- Agricultural Refrigerated Truck Quarterly

Data Sets (all XLS files):

- Figure 1: Second-quarter 2022 water-route shipment costs (\$/mt) to Veracruz, Mexico
- Figure 2: Second-quarter 2022 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), 2022
- Table 3: Quarterly tariff rail rates plus fuel surcharge for U.S. bulk grain shipments to Mexico, 2022
- 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, 2022 (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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