USDA Agricultural Marketing Service
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Mexico Transport Cost Indicator Report

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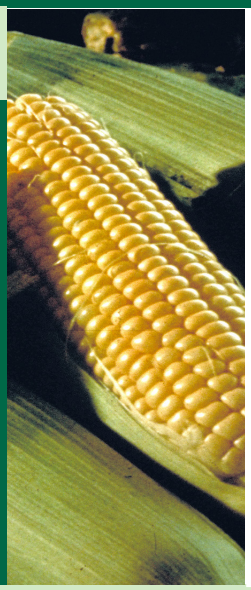

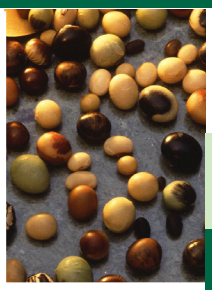

Third Quarter 2022
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Contact Information

Surajudeen Olowolayemo, Coordinator/ Ocean Bulk Shipments

Jesse Gastelle, Rail/Fruit and Vegetables Analyst

Kranti Mulik, Container Shipments/ Fruit and Vegetables Analyst

Summary: What Happened?

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

The competitiveness of U.S. grain exports to Mexico and elsewhere depends on low transportation and landed costs for U.S.- Mexico routes. Mexico—a long-time major U.S. grain importer (*Grain Transportation Report, (GTR)* November 24, 2022, tables 12, 13, and 14)—receives U.S. grain either by cross-border land movements or by sea movements to Mexican ports for inland distribution. This article tracks over time the costs of transporting U.S. grain to Mexico over land to Guadalajara (land routes) and by sea to Veracruz (water routes) (table 1).

Quarter-to-quarter transportation costs. Reflecting falling truck and ocean freight rates, total costs to transport U.S. corn, soybeans, and wheat by the water routes decreased from second quarter 2022 to third quarter 2022 (quarter to quarter).[1] Land-route shipping costs increased, as rising rail rates (public tariff, plus fuel surcharge) more than offset falling truck rates. In addition to the typical harvest rush, rising barge rates reflected other challenges, including severely low water levels on the Lower Mississippi River (*GTR*), October 20, 2022). Ocean freight rates fell, responding to weak demand for shipping bulk items. Truck rates also dropped, as the average diesel price fell to $5.15 from its peak of $5.49 per gallon in the second quarter.

Year-to-year transportation costs. From third quarter 2021 to third quarter 2022 (year to year), total costs of shipping all grain (U.S. corn, soybeans, and wheat) to Mexico by the water routes rose because of higher rail, truck, and barge rates. Likewise, by the land routes, total costs of shipping all grain to Mexico rose because of higher truck and rail tariff rates.

Quarter-to-quarter landed costs. Quarter to quarter, landed costs to Mexico via the water and land routes fell for all grain except corn shipped by the Iowa land route. Decreased landed costs reflected both lower farm values and lower transport costs for grain shipped via the water route (table 1, figs. 1 and 2). Falling farm values pushed down soybean and wheat landed costs shipped via the land route. The share of landed costs comprising transportation ranged from 11 percent to 21 percent for the water routes and from 18 percent to 28 percent for the land routes (see table 1).

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

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

U.S. Exports to Mexico: According to *USDA's Federal Grain Inspection Service*, the United States exported 3.22 million metric tons (mmt) of corn, 1.27 mmt of soybeans, and 1.24 mmt of wheat to Mexico in third quarter 2022. Quarter to quarter, U.S. inspections for export to Mexico were down 21 percent for corn, down 1 percent for soybeans, and up 38 percent for wheat. Year to year, U.S. inspections destined to Mexico fell 11 percent for corn, rose 40 percent for soybeans, and rose 1 percent for wheat. Despite the increases in year-to-year landed costs, total U.S. grain shipments to Mexico have been strong, as soybeans and wheat shipments have increased year to year.

Ocean Freight Rates: Ocean freight rates for shipping bulk grains to Mexico decreased quarter to quarter and year to year, but increased 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 $27.12 per mt. This was down 10 percent quarter to quarter, down 11 percent year to year, and up 32 percent from the prior-4-year average. The cost of shipping by the same route in 35,000-40,000 ton-capacity vessels averaged $23.33 per mt. This amounted to an 11-percent decrease quarter to quarter, 16-percent decrease year to year, and 29-percent increase from the prior-4-year average. During the third quarter, ocean freight rates fell worldwide in response to many factors in the United States and abroad, including lackluster economic activity and declining bulk trade (*GTR, November 10, 2022*).

Railroad: In third 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 $1,050, up 10 percent quarter to quarter, up 38 percent year to year, and up 245 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 third quarter 2022. Based on this assumption, total rail transportation costs (tariff rates plus fuel surcharges) rose 4 percent year to year and rose 11 percent from the prior-3-year average.

Fruit and Vegetables

In third quarter 2022, total reported shipments of fruits and vegetables by refrigerated truck from Mexico were 2.21 million tons, unchanged from year to year. The sum of the top five commodities increased by 14,000 tons, or 1 percent from year to year. At 230,000 tons—an increase of 6 percent from year to year—tomatoes, plum type 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 $2.86 per mile, down 17 percent quarter to quarter and up 36 percent year to year. Rates for shipments crossing the Texas-Mexico border and traveling 501-1,500 miles averaged $3.01 per mile, down 14 percent quarter to quarter and up 4 percent year to year.

Diesel fuel prices for Texas-Mexico border crossings averaged $4.85 per gallon for the quarter. Diesel fuel prices for Arizona-Mexico border crossings averaged $5.42 per gallon. Both the Texas-Mexico border crossing and the Arizona-Mexico border crossing had surplus availability throughout the quarter.

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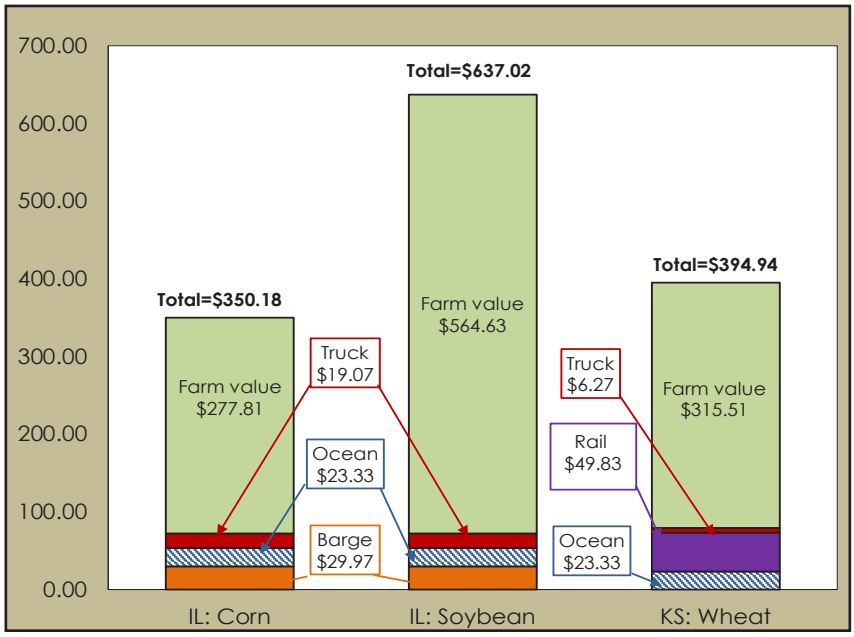
Table 1. Quarterly costs of transporting U.S. grain and soybeans to Mexico

	2022									
	Water route (to Veracruz)					Land route (to Guadalajara)				
	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg.
	US$/metric ton					US$/metric ton				
	Corn									
Origin	IL					IA				
Truck	16.67	23.40	19.07		19.71	5.58	7.13	6.27		6.33
Rail[1]	-	-	-		-	100.08	102.35	109.83		104.09
Barge	39.23	27.98	29.97		32.39	-	-	-		-
Ocean[2]	22.51	26.27	23.33		24.04	-	-	-		-
Total transportation cost	78.41	77.65	72.37		76.14	105.66	109.48	116.10		110.41
Farm price[3]	241.59	290.14	277.81		269.85	241.46	287.91	292.11		273.83
Landed cost[4]	320.00	367.79	350.18		345.99	347.12	397.39	408.21		384.24
Transport % of landed cost	24.5	21.1	20.7		22.0	30.4	27.5	28.4		28.7
	Soybeans									
Origin	IL					NE				
Truck	16.67	23.40	19.07		19.71	5.58	7.13	6.27		6.33
Rail[1]	-	-	-		-	100.95	103.32	110.60		104.96
Barge	39.23	27.98	29.97		32.39	-	-	-		-
Ocean[2]	22.51	26.27	23.33		24.04	-	-	-		-
Total transportation cost	78.41	77.65	72.37		76.14	106.53	110.45	116.87		111.28
Farm price[3]	527.88	601.37	564.63		564.63	526.66	579.33	542.58		549.52
Landed cost[4]	606.29	679.02	637.00		640.77	633.19	689.78	659.45		660.81
Transport % of landed cost	12.9	11.4	11.4		11.9	16.8	16.0	17.7		16.9
	Wheat									
Origin	KS					KS				
Truck	5.58	7.13	6.27		6.33	5.58	7.13	6.27		6.33
Rail[1]	43.80	44.47	49.83		46.03	85.63	87.24	93.49		88.79
Ocean[2]	22.51	26.27	23.33		24.04	-	-	-		-
Total transportation cost	71.89	77.87	79.43		76.40	91.21	94.37	99.76		95.11
Farm price[3]	319.79	370.01	315.51		335.10	319.79	370.01	315.51		335.10
Landed cost[4]	391.68	447.88	394.94		411.50	411.00	464.38	415.27		430.22
Transport % of landed cost	18.4	17.4	20.1		18.6	22.2	20.3	24.0		22.2

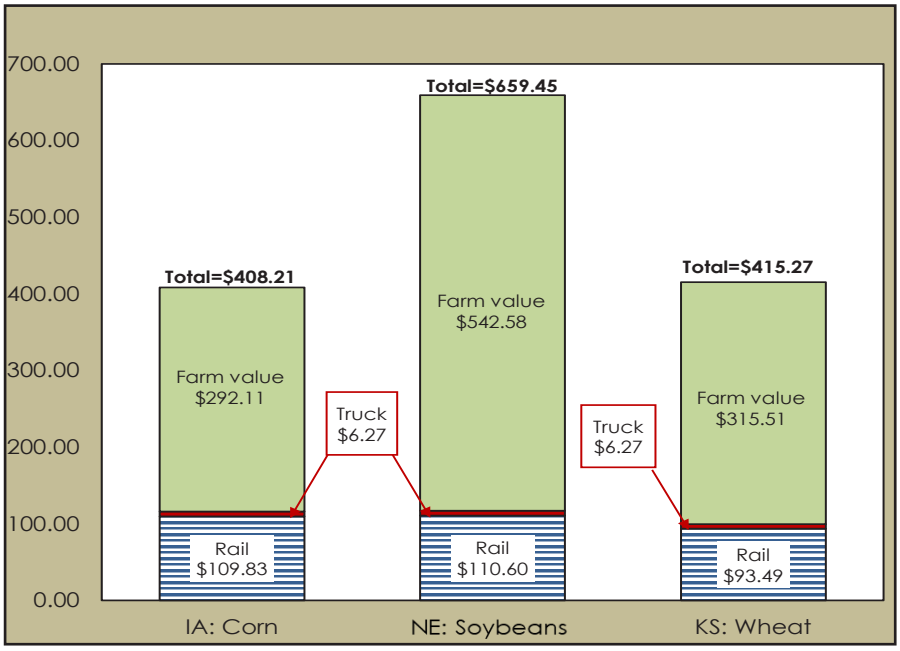
[1]Rail rates include U.S. and Mexico portions of the movement. Mexico rail rates are estimated based on actual quoted market rates. BNSF and Union Pacific quoted rail tariff rates are through rates for shuttle trains. Rail rates include fuel surcharges, but do not include the cost of purchasing empty rail cars in the secondary market, which could exceed the rail tariff rate plus the fuel surcharge shown in the table.
[2]Source: O'Neil Commodity Consulting, Inc.
[3]Source: USDA/NASS.
[4]Landed 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. Third-quarter 2022 water-route shipment costs ($/mt) to Veracruz, Mexico



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

Figure 2. Third-quarter 2022 land-route shipment costs ($/mt) to Guadalajara, Mexico



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

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Quarterly Bulk Grain and Soybeans

Table 2. Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US$/car), 2022

Commodity	Origin State	Destination	Tariff rate/car[1,3]					Fuel surcharge per car[2]				
			1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
Wheat	MT	Chihuahua, CI	7,699	7,699	7,699		7,699	0	611	0		0
	OK	Cuautitlan, EM	6,900	6,900	6,900		6,900	225	745	606		447
	KS	Guadalajara, JA	7,619	7,619	7,619		7,619	762	1,240	2,700		2,636
	TX	Salinas Victoria, NL	4,420	4,420	4,420		4,420	138	323	330		248
Corn	IA	Guadalajara, JA	9,102	9,102	9,102		9,102	693	1,281	2,356		2,225
	SD	Celaya, GJ	8,300	8,300	8,300		8,300	0	800	0		0
	NE	Queretaro, QA	8,322	8,322	8,322		8,322	474	1,042	994		765
	SD	Salinas Victoria, NL	6,905	6,905	6,905		6,905	0	608	0		0
	MO	Tlalnepantla, EM	7,687	7,687	7,687		7,687	462	1,015	962		742
	SD	Torreon, CU	7,825	7,825	7,825		7,825	0	670	0		0
Soybeans	MO	Bojay (Tula), HG	8,647	8,647	8,647		8,647	643	1,150	2,193		2,077
	NE	Guadalajara, JA	9,207	9,207	9,207		9,207	673	1,254	2,271		2,129
	IA	El Castillo, JA	9,510	9,510	9,510		9,510	0	795	0		0
	KS	Torreon, CU	8,109	8,109	8,109		8,109	482	883	1,585		1,454
Sorghum	NE	Celaya, GJ	7,932	7,932	7,932		7,932	622	1,153	2,081		1,940
	KS	Queretaro, QA	8,108	8,108	8,108		8,108	281	695	757		558
	NE	Salinas Victoria, NL	6,713	6,713	6,713		6,713	226	642	608		448
	NE	Torreon, CU	7,225	7,225	7,225		7,225	450	902	1,455		1,314

[1]Rates 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.

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

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

Commodity	Origin State	Destination	Tariff[1,3] plus fuel surcharge per:									
			US$/metric ton					US$/bushel[2]				
			1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
Wheat	MT	Chihuahua, CI	78.67	84.91	78.67		78.67	2.14	2.31	2.14		2.14
	OK	Cuautitlan, EM	72.80	78.12	76.70		75.07	1.98	2.12	2.09		2.04
	KS	Guadalajara, JA	85.63	90.51	105.43		104.77	2.33	2.46	2.87		2.85
	TX	Salinas Victoria, NL	46.58	48.47	48.54		47.70	1.27	1.32	1.32		1.30
Corn	IA	Guadalajara, JA	100.08	106.09	117.07		115.74	2.54	2.69	2.97		2.94
	SD	Celaya, GJ	84.81	92.98	84.81		84.81	2.15	2.36	2.15		2.15
	NE	Queretaro, QA	89.87	95.67	95.19		92.85	2.28	2.43	2.42		2.36
	SD	Salinas Victoria, NL	70.55	76.76	70.55		70.55	1.79	1.95	1.79		1.79
	MO	Tlalnepantla, EM	83.27	88.91	88.37		86.12	2.11	2.26	2.24		2.19
	SD	Torreon, CU	79.95	86.79	79.95		79.95	2.03	2.20	2.03		2.03
Soybeans	MO	Bojay (Tula), HG	94.92	100.10	110.76		109.57	2.58	2.72	3.01		2.98
	NE	Guadalajara, JA	100.95	106.88	117.27		115.82	2.74	2.91	3.19		3.15
	IA	El Castillo, JA	97.17	105.29	97.17		97.17	2.64	2.86	2.64		2.64
	KS	Torreon, CU	87.78	91.87	99.04		97.70	2.39	2.50	2.69		2.66
Sorghum	NE	Celaya, GJ	87.40	92.83	102.31		100.86	2.22	2.36	2.60		2.56
	KS	Queretaro, QA	85.71	89.94	90.57		88.54	2.18	2.28	2.30		2.25
	NE	Salinas Victoria, NL	70.89	75.14	74.80		73.16	1.80	1.91	1.90		1.86
	NE	Torreon, CU	78.42	83.04	88.68		87.24	1.99	2.11	2.25		2.21

[1]Rates 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.

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

[3]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. 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*

Year	Thousand metric tons				
	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		

*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$/metric 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		27.64
35-40,000	22.51	26.27	23.33		24.04

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

US$/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		3.32
Pharr, Texas	3.77	3.50	3.01		3.42

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

3rd quarter 2022													
Legend:	1 =Surplus	2 = Slight surplus	3 = Adequate	4 = Slight shortage	5 = Shortage								
Truck availability													
Mexico border crossings/month		July				August					September		
Week ending		7/5	7/12	7/19	7/26	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27
Through Nogales, AZ	Tomatoes, Squash, Cucumbers, Mangoes, Honeydew, Watermelons, Mixed Fruits, Vegetables,	1	1	3	NA	1	1	1	1	1	1	1	1	2
Through TX	Vegetables, Limes, Mangoes, Onions, Tomatoes, Broccoli, Mixed Fruits	1	1	1	1	1	1	1	1	1	1	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	3rd qtr 2022	Rank
Tomatoes, Plum Type	230	1
Avocados	216	2
Limes	197	3
Mangoes	184	4
Cucumbers	153	5
Tomatoes	146	6
Peppers, Other	118	7
Misc Tropical	97	8
Peppers, Bell Type	80	9
Lettuce- Other	69	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
Peppers (all varieties)	74,252	46,390	35,103	57,726	213,471
Avocados	55,189	49,914	35,246	49,781	190,130
Cucumbers	51,964	36,452	14,131	43,288	145,835
Watermelons	28,829	75,429	6,062	27,782	138,102
Subtotal	**315,598**	**288,036**	**139,820**	**241,055**	**984,509**
Other	296,266	281,580	156,781	205,426	940,053
Total	**611,864**	**569,616**	**296,601**	**446,481**	**1,924,562**

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**
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**
Tomatoes (all varieties)	107,848	94,495	84,287		286,630
Peppers (all varieties)	79,478	53,250	39,666		172,394
Avocados	58,696	48,494	43,174		141,624
Limes			39,345		39,345
Mangoes			36,706		36,706
Cucumbers	55,901	39,754			104,395
Watermelons	35,189	70,293			105,321
Subtotal	**337,112**	**306,286**	**243,178**		**886,415**
Other	337,009	367,027	198,741		902,748
Total	**674,121**	**673,313**	**441,919**		**1,789,163**

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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Related Websites:

- 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: Third-quarter 2022 water-route shipment costs ($/mt) to Veracruz, Mexico
- Figure 2: Third-quarter 2022 land-route shipment costs ($/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
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