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#### Contents

What Happened?	1
Quarterly Bulk Grain and Soybeans	5
Fruit and Vegetable	9
Subscription Information	13
Data Sets	13

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#### SUMMARY: WHAT HAPPENED?

## Grain Transportation Costs to Mexico In Fourth Quarter 2019

Mexico is the largest importer of U.S. grain (corn, soybeans, and wheat). Based on the past 3-year average, Mexico is the leading importer of U.S. corn and the second largest importer of U.S. wheat and soybeans. Grain can be transported to Mexico by land or shipped by water to an appropriate port for inland distribution. In this report, we examine the costs of transporting U.S. grain to Mexico by land and water and track how those costs change from third quarter to fourth quarter 2019 (quarter to quarter) and from fourth quarter 2018 to fourth quarter 2019 (year to year).

**Transportation costs:** Quarter to quarter, the transportation costs of shipping grain to Mexico by water declined, while the costs of shipping by land remained steady (see March 5, 2020, Grain Transportation Report (GTR)). The decline in waterborne shipping costs resulted partly from the drop in ocean freight rates for bulk commodities, including grain. Ocean freight rates dropped in response to weak trade of iron ore and coal (see January 16, 2020 GTR). Lower barge and ocean freight rates pushed down the transportation costs of waterborne corn and soybeans. Lower truck and ocean freight rates pushed down the transportation cost of shipping wheat by water. The transportation costs of shipping corn and soybeans to Mexico by land remained relatively unchanged from quarter to quarter, while the costs of shipping corn by land fell by less than 1 percent. Tariff rail rates remained fairly steady during the quarter.

Restoration of barge service. Quarter to quarter, the decline in barge rates likely resulted from a higher-than-average empty barge supply in the Mississippi River System in the fourth quarter. More grain barges were unloaded in New Orleans in the fourth quarter than in the third quarter. This pattern, in turn, sent 258 more empty barges (4 percent) returning upriver in the fourth quarter than in the third quarter. In addition, the navigational difficulties that had plagued the river through most of the summer cleared up by the fourth quarter, making travel easier. A lower risk of delays made carriers more willing to sell their services, as there was less



risk of unanticipated cost overruns. Better navigation also made shippers to more willing to ship their commodities because deliveries to export elevators became more reliable. In the fourth quarter, 9.16 million tons of grain were shipped downriver, versus 6.35 million tons in the third quarter.

Landed Costs. Lower quarter-to-quarter landed costs for corn (over both water and land) reflected reduced transportation costs and farm values. However, quarter-to-quarter soybean landed costs increased—mostly from the increase in the farm values—while the landed costs for wheat were unchanged. Fourth-quarter landed costs for all grains via the water route ranged from \$192 per metric ton (mt) to \$375 per mt (see table and fig. 1). Landed costs via the land route ranged from \$230 per mt to \$407 per mt (see table and fig. 2). The share of landed costs for transportation ranged from 12 percent to 31 percent for the water route and from 25 percent to 41 percent for the land route (see table). Higher farm values pushed up the year-to-year landed costs for corn and soybeans, while lower year-to-year landed costs for wheat reflected farm values that were lower than in fourth quarter 2018.

**Export volumes**. Although, quarter to quarter, Mexico imported slightly less grain from the United States, year to year, it imported more. According to USDA's grain inspection data, in fourth quarter 2019, Mexico imported 3.07 million metric tons (mmt) of corn, 1.30 mmt of soybeans, and 0.86 mmt of wheat—down 3 percent, 0 percent, and 8 percent quarter to quarter, respectively. However, year to year, U.S. inspections for export to Mexico rose 10 percent for soybeans and 33 percent for wheat, while corn inspections fell 14 percent. The recently signed trade agreement among the United States, Mexico, and Canada could boost U.S. grain export to Mexico.

Ocean freight rates: Ocean freight rates for shipping bulk grains to Mexico decreased quarter to quarter, varied year to year, and were up from the 4-year average. The fourth-quarter cost of shipping a metric ton of grain, via 25,000 ton-capacity vessels from the U.S. Gulf to Veracruz, Mexico, averaged \$17.98 per mt. This was down 2 percent quarter to quarter, unchanged from year to year, and 13 percent more than the 4-year average. The cost of shipping in a 35,000-40,000 ton-capacity vessel averaged \$15.23 per mt. This was down 2 percent quarter to quarter, down 3 percent year to year, and up 10 percent from the 4-year average. Weak movements of coal and iron ore pushed down the rates for shipping bulk commodities, including grain in the fourth quarter (see <u>January 16, 2020 GTR</u>).

**Railroad:** In fourth quarter 2019, railroads transported 41,664 carloads of grain and oilseeds to Mexico, up 4 percent quarter to quarter but down 4 percent year to year. Tariff rail rates per grain car averaged \$7,701, up 1 percent quarter to quarter, up 2 percent year to year, and up 4 percent from the prior-3-year average. Fuel surcharges per railcar averaged \$239, down 2 percent quarter to quarter, up 11 percent year to year, and up 79 percent from the prior-3-year average. Overall, rail transportation costs (tariff rates plus fuel surcharges) were up 1 percent quarter to quarter, up 3 percent year to year, and up 5 percent from the prior-3-year average.

### Fruit and Vegetables

In fourth quarter 2019, total reported truck shipments of fruits and vegetables from Mexico were 2.35 million tons, up 5 percent year to year. The top five commodities summed to 983,000 tons, up 2 percent year to year. Avocados had the largest shipments to the United States, with 293,000 tons, up 18 percent year to year.

**Truck rates**. In fourth quarter 2019, truck rates for shipments between 501 miles and 1,500 miles from Arizona border crossings averaged \$2.21 per mile, down 12 percent quarter to quarter and down 11 percent year to year. Rates for shipments between 501 miles and 1,500 miles from Texas border crossings averaged \$2.23 per mile, up 9 percent quarter to quarter, but down 5 percent year to year.

**Fuel prices**. Diesel fuel prices for border crossings from Arizona averaged \$3.33 per gallon, increasing 5 percent quarter to quarter but decreasing 4 percent year to year. Diesel fuel prices for border crossings from Texas averaged \$2.79 per gallon, up 0.2 percent quarter to quarter, but down 8-percent year to year.

**Truck availability**. Shippers reported adequate truck availability for crossing the Arizona border in October through mid-November; at the end of November, conditions changed to slight shortage. In the beginning of December, truck availability was reported as adequate, then shifted to shortage by the end of the month. At Texas border-crossing locations, shippers reported adequate truck availability throughout fourth quarter 2019.



Table 1. Quarterly costs of transporting U.S. grain and soybeans to Mexico, 2019

		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			USS	/metric	ton		
					Co	rn					
Origin			IL					IA			
Truck	8.78	10.98	9.18	11.46	10.10	4.37	4.38	4.72	4.19	4.42	
Rail <sup>1</sup>						91.00	91.96	95.44	96.23	93.66	
Barge	24.50	21.74	23.89	18.46	22.15						
Ocean <sup>2</sup>	13.89	14.01	15.50	15.23	14.66						
Total transportation cost	47.17	46.73	48.57	45.15	46.91	95.37	96.34	100.16	100.42	98.07	
Farm price <sup>3</sup>	141.20	145.79	155.50	146.45	147.24	139.49	145.01	154.06	146.06	146.16	
Landed cost⁴	188.37	192.52	204.07	191.60	194.14	234.86	241.35	254.22	246.48	244.23	
Transport % of landed cost	25.0	24.3	23.8	23.6	24.2	40.6	39.9	39.4	40.7	40.2	
					Soyb	eans					
Origin			IL			NE					
Truck	8.78	10.98	9.18	11.46	10.10	4.37	4.38	4.72	4.19	4.42	
Rail						94.21	95.11	97.91	98.86	96.52	
Barge	24.50	21.74	23.89	18.46	22.15						
Ocean	13.89	14.01	15.50	15.23	14.66						
Total transportation cost	47.17	46.73	48.57	45.15	46.91	98.58	99.49	102.63	103.05	100.94	
Farm price <sup>3</sup>	321.87	308.77	317.10	329.96	319.43	302.89	291.26	293.83	304.12	298.03	
Landed cost⁴	369.04	355.50	365.67	375.11	366.33	401.47	390.75	396.46	407.17	398.96	
Transport % of landed cost	12.8	13.1	13.3	12.0	12.8	24.6	25.5	25.9	25.3	25.3	
					Wh	eat					
Origin			KS					KS			
Truck	4.37	4.38	4.72	4.19	4.42	4.37	4.38	4.72	4.19	4.42	
Rail	42.66	42.88	43.31	43.31	43.04	79.65	80.31	83.12	83.13	81.55	
Ocean	13.89	14.01	15.50	15.23	14.66						
Total transportation cost	60.92	61.27	63.53	62.73	62.11	84.02	84.69	87.84	87.32	85.97	
Farm price	181.39	167.67	141.10	142.57	158.18	181.39	167.67	141.10	142.57	158.18	
Landed cost	242.31	228.94	204.63	205.30	220.30	265.41	252.36	228.94	229.89	244.15	
Transport % of landed cost	25.1	26.8	31.0	30.6	28.4	31.7	33.6	38.4	38.0	35.4	

<sup>&</sup>lt;sup>1</sup>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.

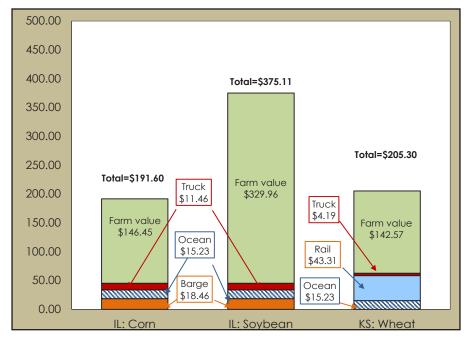
<sup>&</sup>lt;sup>2</sup>Source: O'Neil Commodity Consulting, Inc.

<sup>&</sup>lt;sup>3</sup>Source: USDA/NASS

<sup>&</sup>lt;sup>4</sup>Landed cost is total transportation cost plus the farm price.

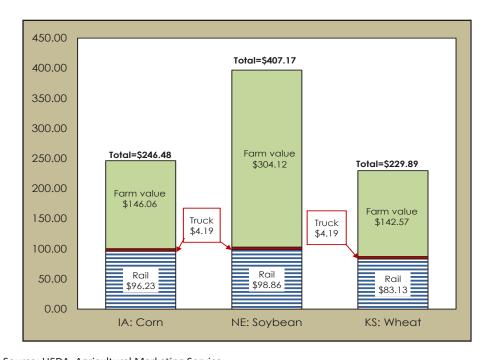


Figure 1. Water route shipment costs (\$/mt) to Veracruz, Mexico



Source: USDA, Agricultural Marketing Service

Figure 2. Land route shipment costs (\$/mt) to Guadalajara, Mexico



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), 2019

				Tari	iff rate/	car¹			Fuel sur	charge	per car²	
Commodity	Origin State	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
	MT	Chihuahua, Cl	7,284	7,284	7,434	7,509	7,378	0	0	0	0	0
Wheat	ОК	Cuautitlan, EM	6,743	6,710	6,775	6,775	6,751	149	137	142	135	141
vviieat	KS	Guadalajara, JA	7,371	7,371	7,534	7,534	7,452	424	489	601	603	529
	TX	Salinas Victoria, NL	4,329	4,329	4,329	4,329	4,329	91	84	86	81	86
	IA	Guadalajara, JA	8,528	8,578	8,828	378	422	378	422	512	517	457
	SD	Celaya, GJ	7,880	7,880	8,140	0	0	0	0	0	0	0
Comp	NE	Queretaro, QA	8,207	8,207	8,207	311	287	311	287	295	275	292
Corn	SD	Salinas Victoria, NL	6,905	6,905	6,905	0	0	0	0	0	0	0
	МО	Tlalnepantla, EM	7,573	7,573	7,573	303	279	303	279	288	268	285
	SD	Torreon, CU	7,480	7,480	7,690	0	0	0	0	0	0	0
	МО	Bojay (Tula), HG	8,284	8,355	8,497	8,547	8,420	350	395	485	482	428
Coulbasins	NE	Guadalajara, JA	8,842	8,888	9,075	9,172	8,994	379	420	508	504	453
Soybeans	IA	El Castillo, JA	9,110	9,110	9,297	9,490	9,252	0	0	0	0	0
	KS	Torreon, CU	7,714	7,747	7,880	7,964	7,826	277	299	353	349	319
	NE	Celaya, GJ	7,527	7,570	7,787	7,772	7,664	346	380	457	457	410
Canabana	KS	Queretaro, QA	8,000	8,000	8,000	8,108	8,027	186	171	177	168	175
Sorghum	NE	Salinas Victoria, NL	6,633	6,633	6,633	6,713	6,653	149	137	142	135	141
	NE	Torreon, CU	6,962	6,997	7,172	7,157	7,072	262	279	326	324	298

<sup>&</sup>lt;sup>1</sup>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.

<sup>&</sup>lt;sup>2</sup>Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu 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, 2019

						Tariff¹ p	lus fuel	surcha	rge per:			
				US\$	/metric	ton			US	\$/bush	el²	
Commodity	Origin State	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
	MT	Chihuahua, Cl	74.43	74.43	75.96	76.72	75.38	2.02	2.02	2.07	2.09	2.05
Wheat	ОК	Cuautitlan, EM	70.42	69.96	70.67	70.60	70.41	1.91	1.90	1.92	1.92	1.91
vviieat	KS	Guadalajara, JA	79.65	80.31	83.12	83.13	81.55	2.17	2.18	2.26	2.26	2.22
	TX	Salinas Victoria, NL	45.16	45.08	45.11	45.06	45.10	1.23	1.23	1.23	1.23	1.23
	IA	Guadalajara, JA	91.00	91.96	95.44	96.23	93.66	2.31	2.33	2.42	2.44	2.38
	SD	Celaya, GJ	80.51	80.51	83.17	83.17	81.84	2.04	2.04	2.11	2.11	2.08
Corn	NE	Queretaro, QA	87.03	86.78	86.87	87.40	87.02	2.21	2.20	2.20	2.22	2.21
Corn	SD	Salinas Victoria, NL	70.55	70.55	70.55	70.55	70.55	1.79	1.79	1.79	1.79	1.79
	МО	Tlalnepantla, EM	80.48	80.23	80.32	80.83	80.47	2.04	2.04	2.04	2.05	2.04
	SD	Torreon, CU	76.43	76.43	78.57	78.57	77.50	1.94	1.94	1.99	1.99	1.97
	МО	Bojay (Tula), HG	88.22	89.40	91.77	92.25	90.41	2.40	2.43	2.49	2.51	2.46
Coulbaana	NE	Guadalajara, JA	94.21	95.11	97.91	98.86	96.53	2.56	2.59	2.66	2.69	2.62
Soybeans	IA	El Castillo, JA	93.08	93.08	94.99	96.97	94.53	2.53	2.53	2.58	2.64	2.57
	KS	Torreon, CU	81.64	82.21	84.13	84.94	83.23	2.22	2.24	2.29	2.31	2.26
	NE	Celaya, GJ	80.44	81.24	84.23	84.08	82.50	2.04	2.06	2.14	2.13	2.09
Corabii	KS	Queretaro, QA	83.64	83.49	83.55	84.56	83.81	2.12	2.12	2.12	2.15	2.13
Sorghum	NE	Salinas Victoria, NL	69.29	69.17	69.22	69.97	69.41	1.76	1.76	1.76	1.78	1.76
	NE	Torreon, CU	73.81	74.34	76.61	76.44	75.30	1.87	1.89	1.94	1.94	1.91

<sup>&</sup>lt;sup>1</sup>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.

<sup>&</sup>lt;sup>2</sup>Approximate load per car = 97.87 mt: corn & sorghum 56 lbs/bu, wheat & soybeans 60 lbs/bu 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\*

		7	housand metric ton	s	
Year	1st qtr	2nd qtr	3rd qtr	4th qtr	Total
2009	316	377	371	395	1,459
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

<sup>\*</sup>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 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Average
25,000	21.71	21.13	21.96	23.29	22.02
35-40,000	18.75	18.86	19.89	21.21	19.68
Vessel capacity (metric ton)	1st qtr 2012	2nd qtr 2012	3rd qtr 2012	4th qtr 2012	Average
25,000	20.28	20.79	20.68	18.73	20.12
35-40,000	18.37	18.62	18.53	16.73	18.06
Vessel capacity (metric ton)	1st qtr 2013	2nd qtr 2013	3rd qtr 2013	4th qtr 2013	Average
25,000	20.19	19.59	20.47	20.01	20.07
35-40,000	17.89	17.58	17.85	17.13	17.61
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

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 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Average
Nogales, Arizona	1.87	2.38	1.85	1.80	1.97
Pharr, Texas	1.84	2.12	1.77	1.87	1.90
Origin/border crossing	1st qtr 2012	2nd qtr 2012	3rd qtr 2012	4th qtr 2012	Average
Nogales, Arizona	2.00	2.57	1.84	1.92	2.08
Pharr, Texas	1.97	2.26	1.89	2.09	2.05
Origin/border crossing	1st qtr 2013	2nd qtr 2013	3rd qtr 2013	4th qtr 2013	Average
Nogales, Arizona	2.34	2.59	1.63	2.33	2.22
Pharr, Texas	2.15	2.33	2.02	2.01	2.13
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

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

			4	Ith qu	uarte	r 201	9								
Legend:	1 =Surplus	2 = Slight surplus			3 =	3 = Adequate		4 =	4 = Slight shortage		age	5 = Shortage			
Truck availability															
Mexico borde	r crossings/month		(	Octobe	r			Nove	mber			De	ecemb	er	
Week ending		10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	12/31
Through Nogales, AZ	Tomatoes, Squash, Cucumbers, Mangoes, Honeydew, Watermelons, Mixed Fruits, Vegetables		3	3	3	3	3	3	4	4	3	2	3	5	5
Through TX	Vegetables, Limes, Mangoes, Onions, Tomatoes, Broccoli, Mixed Fruits	3	3	3	3	3	3	3	3	3	3	3	3	3	3

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, 2019 (10,000 lbs)

Commodity	4th qtr 2019	Rank
Avocados	293	1
Cucumbers	207	2
Tomatoes	168	3
Peppers, other	159	4
Squash	157	5
Tomatoes, plum type	152	6
Limes	143	7
Peppers, bell type	126	8
Watermelon, seedless	105	9
Broccoli	80	10

Source: USDA, 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 2012	2nd qtr 2012	3rd qtr 2012	4th qtr 2012	Total 2012
Tomatoes (all varieties)	99,264	69,282	41,120	57,099	266,765
Peppers (all varieties)	56,506	33,399	25,990	33,073	148,968
Cucumbers	42,668	25,798	11,919	30,383	110,768
Onions (dry and green)	29,949	20,020	8,122	8,744	66,835
Squash	26,776	16,033	3,401	19,556	65,766
Subtotal	255,163	164,532	90,552	148,855	659,102
Other	200,550	256,945	122,889	190,616	771,000
Total	455,713	421,477	213,441	339,471	1,430,102
Commodity	1st qtr 2013	2nd qtr 2013	3rd qtr 2013	4th qtr 2013	Total 2013
Tomatoes (all varieties)	88,753	75,505	43,373	52,154	259,785
Peppers (all varieties)	55,952	35,111	27,341	51,481	169,885
Avocados	38,933	26,387	15,049	30,766	111,135
Cucumbers	38,877	30,555	11,592	31,523	112,547
Onions (dry and green)	24,818	22,138	7,584	8,070	62,610
Subtotal	247,333	189,696	104,939	173,994	715,962
Other	206,944	271,688	126,051	168,680	773,363
Total	454,277	461,384	230,990	342,674	1,489,325
Commodity	1st qtr 2014	2nd qtr 2014	3rd qtr 2014	4th qtr 2014	Total 2014
Commodity Tomatoes (all varieties)	1st qtr 2014 102,175	2nd qtr 2014 77,596	3rd qtr 2014 40,598	4th qtr 2014 56,783	Total 2014 277,152
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Tomatoes (all varieties)	102,175	77,596	40,598	56,783	277,152
Tomatoes (all varieties) Peppers (all varieties)	102,175 62,356	77,596 33,083	40,598 27,349	56,783 48,167	277,152 170,955
Tomatoes (all varieties) Peppers (all varieties) Cucumbers	102,175 62,356 47,565	77,596 33,083 30,978	40,598 27,349 12,150	56,783 48,167 35,905	277,152 170,955 126,598
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados	102,175 62,356 47,565 37,085	77,596 33,083 30,978 26,363	40,598 27,349 12,150 26,044	56,783 48,167 35,905 39,140	277,152 170,955 126,598 128,632
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash	102,175 62,356 47,565 37,085 29,622	77,596 33,083 30,978 26,363 16,334	40,598 27,349 12,150 26,044 3,814	56,783 48,167 35,905 39,140 22,495	277,152 170,955 126,598 128,632 72,265
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal	102,175 62,356 47,565 37,085 29,622 278,803	77,596 33,083 30,978 26,363 16,334 184,354	40,598 27,349 12,150 26,044 3,814 <b>109,955</b>	56,783 48,167 35,905 39,140 22,495 <b>202,490</b>	277,152 170,955 126,598 128,632 72,265 <b>775,602</b>
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other	102,175 62,356 47,565 37,085 29,622 278,803 214,020	77,596 33,083 30,978 26,363 16,334 184,354 306,544	40,598 27,349 12,150 26,044 3,814 109,955 126,219	56,783 48,167 35,905 39,140 22,495 <b>202,490</b> 160,627	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total	102,175 62,356 47,565 37,085 29,622 <b>278,803</b> 214,020 <b>492,823</b>	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898	40,598 27,349 12,150 26,044 3,814 <b>109,955</b> 126,219 <b>236,174</b>	56,783 48,167 35,905 39,140 22,495 <b>202,490</b> 160,627 <b>363,117</b>	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b>
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015	56,783 48,167 35,905 39,140 22,495 <b>202,490</b> 160,627 <b>363,117</b> <b>4th qtr 2015</b>	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b>
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties)	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015 99,053	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015 73,537	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015 42,002	56,783 48,167 35,905 39,140 22,495 <b>202,490</b> 160,627 <b>363,117</b> <b>4th qtr 2015</b> 61,571	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b> 276,163
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties)	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015 99,053 61,334	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015 73,537 34,579	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015 42,002 28,060	56,783  48,167  35,905  39,140  22,495  202,490  160,627  363,117  4th qtr 2015  61,571  46,690	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b> 276,163 170,663
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015 99,053 61,334 50,114	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015 73,537 34,579 34,601	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015 42,002 28,060 14,335	56,783 48,167 35,905 39,140 22,495 202,490 160,627 363,117 4th qtr 2015 61,571 46,690 35,947	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b> 276,163 170,663 134,997
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015 99,053 61,334 50,114 44,510	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015 73,537 34,579 34,601 37,667	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015 42,002 28,060 14,335 39,582	56,783 48,167 35,905 39,140 22,495 202,490 160,627 363,117 4th qtr 2015 61,571 46,690 35,947 49,063	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b> 276,163 170,663 134,997 170,822
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash	102,175 62,356 47,565 37,085 29,622 278,803 214,020 492,823 1st qtr 2015 99,053 61,334 50,114 44,510 29,026	77,596 33,083 30,978 26,363 16,334 184,354 306,544 490,898 2nd qtr 2015 73,537 34,579 34,601 37,667 18,088	40,598 27,349 12,150 26,044 3,814 109,955 126,219 236,174 3rd qtr 2015 42,002 28,060 14,335 39,582 3,527	56,783 48,167 35,905 39,140 22,495 202,490 160,627 363,117 4th qtr 2015 61,571 46,690 35,947 49,063 23,863	277,152 170,955 126,598 128,632 72,265 <b>775,602</b> 807,410 <b>1,583,012</b> <b>Total 2015</b> 276,163 170,663 134,997 170,822 74,504

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 2016	2nd qtr 2016	3rd qtr 2016	4th qtr 2016	<b>Total 2016</b>
Tomatoes (all varieties)	122,571	105,099	49,289	66,534	343,493
Peppers (all varieties)	57,984	46,626	33,631	65,270	203,511
Cucumbers	45,829	37,791	14,670	39,803	138,093
Avocados	57,605	40,197	34,993	40,457	173,252
Squash	31,051	26,672	5,322	30,711	93,756
Subtotal	315,040	256,385	137,905	242,775	952,105
Other	242,834	350,555	162,307	204,561	960,257
Total	557,874	606,940	300,212	447,336	1,912,362
Commodity	1st qtr 2017	2nd qtr 2017	3rd qtr 2017	4th qtr 2017	<b>Total 2017</b>
Tomatoes (all varieties)	107,194	82,449	48,893	73,581	312,117
Peppers (all varieties)	67,337	38,757	30,928	59,131	196,153
Cucumbers	47,202	32,892	16,021	44,297	140,412
Avocados	49,557	36,996	31,683	47,011	165,247
Squash	31,937	20,737	5,099	33,126	90,899
Subtotal	303,227	211,831	132,624	257,146	904,828
Other	289,814	339,353	170,127	206,746	1,006,040
Total	593,041	551,184	302,751	463,892	1,910,868
Commodity	1st qtr 2018	2nd qtr 2018	3rd qtr 2018	4th qtr 2018	Total 2018
Commodity Tomatoes (all varieties)	1st qtr 2018 105,274	<b>2nd qtr 2018</b> 80,008	<b>3rd qtr 2018</b> 49,400	4th qtr 2018 62,553	Total 2018 297,235
			· · · · · · · · · · · · · · · · · · ·		
Tomatoes (all varieties)	105,274	80,008	49,400	62,553	297,235
Tomatoes (all varieties) Peppers (all varieties)	105,274 73,682	80,008 46,268	49,400 35,266	62,553 57,763	297,235 212,979
Tomatoes (all varieties) Peppers (all varieties) Cucumbers	105,274 73,682 44,297	80,008 46,268 36,450	49,400 35,266 36,046	62,553 57,763 50,126	297,235 212,979 190,506
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados	105,274 73,682 44,297 47,011	80,008 46,268 36,450 49,914	49,400 35,266 36,046 14,131	62,553 57,763 50,126 43,301	297,235 212,979 190,506 145,721
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash	105,274 73,682 44,297 47,011 33,126	80,008 46,268 36,450 49,914 22,075	49,400 35,266 36,046 14,131 6,150	62,553 57,763 50,126 43,301 27,782	297,235 212,979 190,506 145,721 137,900
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal	105,274 73,682 44,297 47,011 33,126 303,390	80,008 46,268 36,450 49,914 22,075 234,715	49,400 35,266 36,046 14,131 6,150 140,993	62,553 57,763 50,126 43,301 27,782 <b>241,525</b>	297,235 212,979 190,506 145,721 137,900 984,341
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other	105,274 73,682 44,297 47,011 33,126 303,390 304,695	80,008 46,268 36,450 49,914 22,075 234,715 335,630	49,400 35,266 36,046 14,131 6,150 140,993 156,881	62,553 57,763 50,126 43,301 27,782 <b>241,525</b> 205,849	297,235 212,979 190,506 145,721 137,900 <b>984,341</b> 939,337
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085	80,008 46,268 36,450 49,914 22,075 234,715 335,630 570,345	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874	62,553 57,763 50,126 43,301 27,782 <b>241,525</b> 205,849 <b>447,374</b>	297,235 212,979 190,506 145,721 137,900 <b>984,341</b> 939,337 <b>1,923,678</b>
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019	80,008 46,268 36,450 49,914 22,075 234,715 335,630 570,345 2nd qtr 2019	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019	62,553 57,763 50,126 43,301 27,782 <b>241,525</b> 205,849 <b>447,374</b> <b>4th qtr 2019</b>	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total Commodity Tomatoes (all varieties)	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019 98,631	80,008 46,268 36,450 49,914 22,075 <b>234,715</b> 335,630 <b>570,345</b> <b>2nd qtr 2019</b> 81,296	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019 55,836	62,553 57,763 50,126 43,301 27,782 241,525 205,849 447,374 4th qtr 2019 69,366	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019 29,9085
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total  Commodity Tomatoes (all varieties) Peppers (all varieties)	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019 98,631 68,655	80,008 46,268 36,450 49,914 22,075 <b>234,715</b> 335,630 <b>570,345</b> <b>2nd qtr 2019</b> 81,296 50,059	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019 55,836 38,006	62,553 57,763 50,126 43,301 27,782 241,525 205,849 447,374 4th qtr 2019 69,366 56,847	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019 29,9085 206,197
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total  Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019 98,631 68,655 66,751	80,008 46,268 36,450 49,914 22,075 <b>234,715</b> 335,630 <b>570,345</b> <b>2nd qtr 2019</b> 81,296 50,059 88,960	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019 55,836 38,006 42,135	62,553 57,763 50,126 43,301 27,782 241,525 205,849 447,374 4th qtr 2019 69,366 56,847 5,8520	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019 29,9085 206,197 183,439
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total  Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019 98,631 68,655 66,751 50,934	80,008 46,268 36,450 49,914 22,075 234,715 335,630 570,345 2nd qtr 2019 81,296 50,059 88,960 41,293	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019 55,836 38,006 42,135 11,138	62,553 57,763 50,126 43,301 27,782 241,525 205,849 447,374 4th qtr 2019 69,366 56,847 5,8520 30,506	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019 29,9085 206,197 183,439 154,677
Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash Subtotal Other Total  Commodity Tomatoes (all varieties) Peppers (all varieties) Cucumbers Avocados Squash	105,274 73,682 44,297 47,011 33,126 303,390 304,695 608,085 1st qtr 2019 98,631 68,655 66,751 50,934 36,760	80,008 46,268 36,450 49,914 22,075 234,715 335,630 570,345 2nd qtr 2019 81,296 50,059 88,960 41,293 39,066	49,400 35,266 36,046 14,131 6,150 140,993 156,881 297,874 3rd qtr 2019 55,836 38,006 42,135 11,138 18,919	62,553 57,763 50,126 43,301 27,782 241,525 205,849 447,374 4th qtr 2019 69,366 56,847 5,8520 30,506 4,1334	297,235 212,979 190,506 145,721 137,900 984,341 939,337 1,923,678 Total 2019 29,9085 206,197 183,439 154,677 143,596

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



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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: Water route shipment costs (\$/mt) to Veracruz, Mexico
- Figure 2: Land route shipment costs (\$/mt) to Guadalajara, Mexico
- Table 1: Quarterly costs of transporting U.S. grain and soybeans to Mexico, 2019
- Table 2: Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US\$/car), 2019
- Table 3: Quarterly tariff rail rates plus fuel surcharge for U.S. bulk grain shipments to Mexico, 2019
- 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.-</u> <u>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, 2019 (10,000 lbs)
- Table 9: Top five commodities shipped by truck to the U.S. from Mexico (10,000 lbs)

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