Mexico Transport Cost Indicator Report

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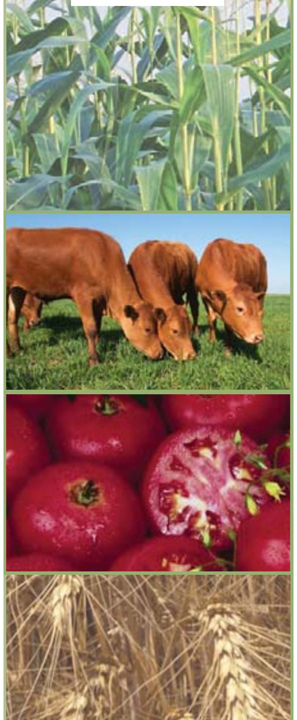


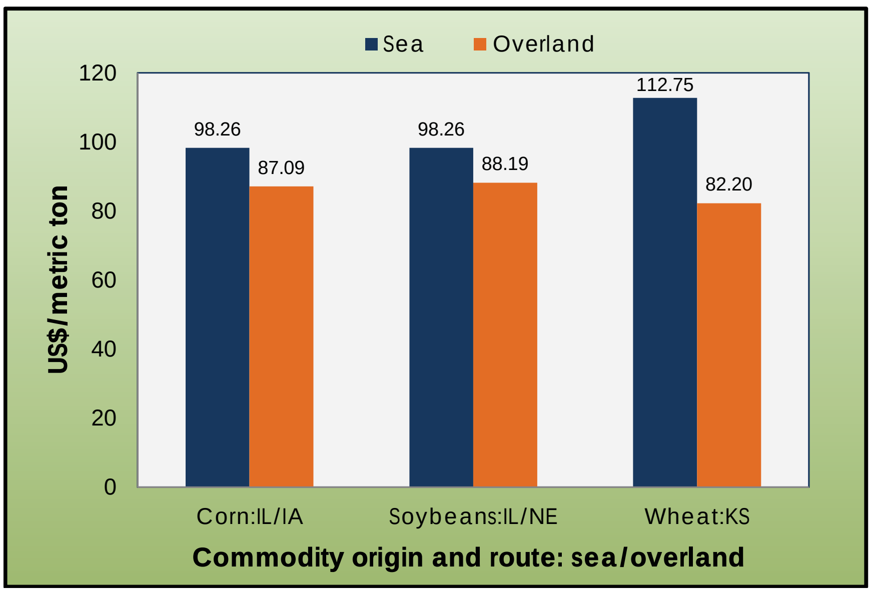
August 29, 2011

Contents

Grain and Soybeans

Unusual U.S. Floods Increased Transportation Cost to Mexico. During the 2nd quarter 2011, grain and soybean shipping costs to Guadalajara increased due to floods in the Upper Mississippi River that disrupted the U.S. transportation system. The flooding increased barge operators' cost and lowered barge traffic, resulting in a 13 percent increase in total transportation cost by sea (GTR, 07/14/11). Rail rates rose based upon expected long-term projections of competing truck and barge costs. During the first 5 months of 2011, corn, sorghum, and soybean exports to Mexico dropped 14, 23, and 20 percent, respectively, from the same time last year (FAS/GATS); wheat exports increased by one third. Ocean rates from the U.S. Gulf to the Port of Veracruz also dropped compared with 2nd quarter 2010, but not enough to offset higher barge and rail rates.

Figure 1. Average cost of shipping U.S. corn, wheat, and soybeans to Guadalajara, Mexico, by route, April-June 2011



Source: Agricultural Marketing Service (AMS), United States Department of Agriculture (USDA)

- **Rail Traffic Up.** During the 2nd quarter 2011, U.S. grain rail rates to selected Mexico destinations rose 9.6 percent to $69.66 per metric ton (mt) from $63.55 per mt at the same time last year. Tariff rail rates increased 10.9 percent and fuel surcharges, which are directly related to diesel price, decreased by 1.3 percent. U.S. grain rail car deliveries to Mexico increased nearly 14 percent as shippers switched from barge to rail due to the flood.

  Table 4 now reports on the cost of shipping distillers dried grains (DDGS) by railroad from U.S. origins to final Mexican destinations. Prior to this quarter, the report included rail tariffs and fuel surcharges from the U.S. origins to the U.S.-Mexico border because that was the only data publicly available.

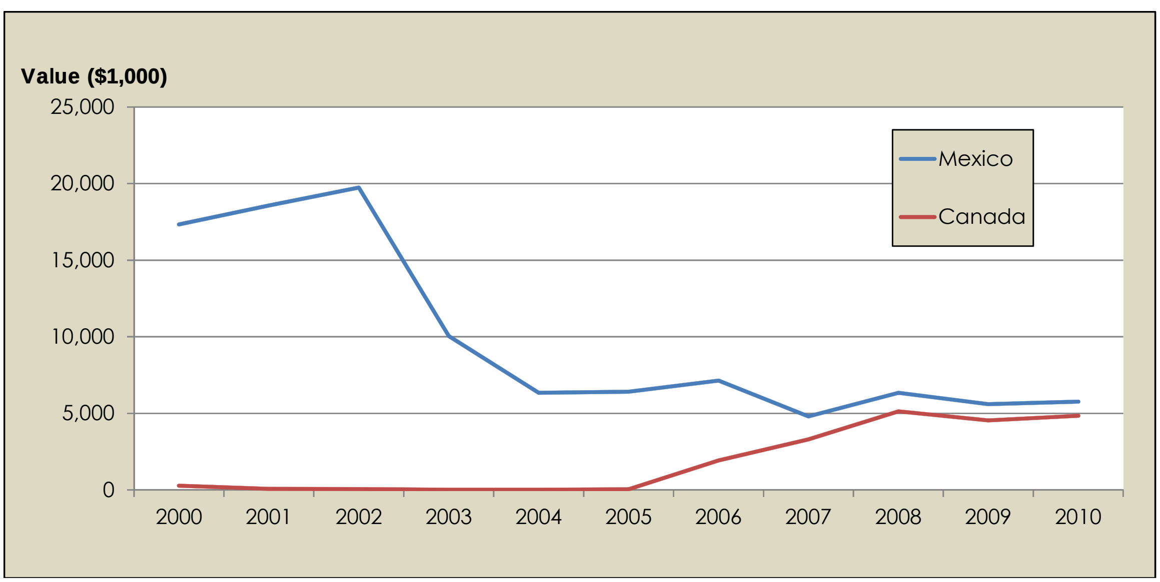
- **Ocean.** Ocean freight rates for shipping bulk grains remained relatively low during the second quarter as persistent disruptions and political and economic turmoil in parts of the world continued to hinder the dry bulk trade (GTR, 7/28/11). In addition to the continued unrest in the Middle East, economic problems occurred in Eurozone and natural disasters occurred in Australia and Japan; all posing risks to the dry bulk trade, keeping bulk ocean freight rates low. The cost of shipping a metric ton of grain from the U.S. Gulf to Mexico in a 25,000-mt capacity vessel was $21.13—13 percent less than the same period a year ago. In a 35-40,000 mt vessel, it costs $18.86 to ship a metric ton of grain from the U.S. Gulf to Mexico—16 percent less than the same period a year ago.

Livestock

Livestock border crossing exports to Mexico are down 36.6 percent in the 2nd quarter of 2011 compared to the 2nd quarter of 2010. While there were slight quarter-over-quarter increases or decreases in most categories, the major changes occurred in hogs and sheep. Hogs for breeding increased 127 percent but was not enough to offset the 77 percent decrease in sheep for slaughter. Increasing pork demand in Mexico through the past decade has encouraged greater domestic production. However, imports into Mexico have been necessary to fill the gap between production and consumption. The majority of Mexican hog imports are from the United States. Since 2003, most of these hogs have been for slaughter (ERS Hogs: Briefing Room). As U.S. farrows topped the 10-per-litter rate for the first time ever in March/May, Mexican producers may be looking to increase their own pig herds through U.S. imports (NASS Quarterly Hogs and Pigs).

During the first half of 2011, the value of live sheep exports to Canada surpassed the value of exports to Mexico, $1,458,000 vs. $681,000. If this trend continues, then Canada could surpass Mexico as the top importer of live sheep from the United States by the end of 2011. Canadian imports of live sheep have approached the levels of Mexican imports within the past several years. Mexican demand substantially declined since the early part of the decade but it stabilized at much lower levels since 2006 (see Figure 2). Demographic changes in Canada through immigration could be part of the reason behind the growing demand for sheep. The population of people identifying themselves as Arab, West Asian, or southern European (including the Balkans and Greece) has increased from 3.5 percent at the 2001 Canadian census to 4.1 percent at the 2006 census (Statistics Canada). People from these regions eat lamb and sheep in higher quantities for religious and cultural reasons than do other Canadians.

Figure 2. U.S. live sheep exports



Source: USDA, Foreign Agricultural Service, Global Agricultural Trade System

Fruit and Vegetables

Mexican fruit and vegetable imports to the U.S. were down 4 percent from the second quarter of 2010. Most of the difference is accounted for by the top two imports. Tomatoes were down 20 percent and watermelons were down 14 percent.

During the 2nd quarter, truck rates increased 12 percent through the Nogales, AZ, border crossing with Mexico compared with the same time last year, corresponding with a truck shortage from mid-May through mid-June. Last year at this time, truck availability at Nogales was adequate throughout the quarter with only a slight shortage in the beginning of June. In contrast, truck rates through Pharr, TX, rose only 9 percent from 2nd quarter last year. There was no major difference in availability between this quarter and last year as both had 7 weeks of truck shortages.

Agricultural Container

Agricultural Ocean Container Shipments to Mexico Surge. Containerized U.S. agricultural exports to Mexico significantly increased in the 1st quarter 2011 from the same time last year. Lower ocean rates and the extensive drought in Mexico might have encouraged additional imports of high-valued agricultural exports from the United States. Mexico is a unique market that it is served by overland —truck and rail—and maritime transportation. Mexican importers' preferred mode of transportation is determined by relative costs and timeliness (U.S. Grain and Soybean Exports to Mexico: A Modal Share Analysis, 2007-2010). During the first quarter, containerized U.S. agricultural exports increased by 97 percent compared with the same quarter last year and 103 percent compared with the previous quarter. Commodities that experienced the greatest increases included coffee, wine and other alcoholic beverages, tobacco products, edible nuts, bulbs, seeds, and prepared foods. Vegetables remained the leading containerized U.S. agricultural export to Mexico with more than 6,000 metric tons of product moved. Manzanillo and Altamira were the top receiving ports, accounting for 61 percent of U.S. containerized agricultural exports. Merida jumped to third place, receiving more than 3,500 metric tons (13 percent) after receiving just 2,180 metric tons during all of 2010 to satisfy the tourism industry demand. The high season tourism demand typically runs from the middle of December through April.

Quarterly Bulk Grain and Soybeans

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

	2011									
	Water route					Land route				
	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	11.34	11.34			11.34	3.50	3.88			3.69
Rail[1]	43.99	45.54			44.77	80.58	83.21			81.90
Ocean[2]	18.75	18.86			18.81					
Barge	26.24	22.52			24.38					
Total transportation cost	100.32	98.26			99.29	84.08	87.09			85.59
Farm price	216.92	261.01			238.97	209.83	245.66			227.75
Landed cost	317.24	359.27			338.26	293.91	332.75			313.33
Transport % of landed cost	31.6	27.3			29.5	28.6	26.2			27.4
	Soybeans									
Origin	**IL**					**NE**				
Truck	11.34	11.34			11.34	3.50	3.88			3.69
Rail[1]	43.99	45.54			44.77	80.51	84.31			82.41
Ocean[2]	18.75	18.86			18.81					
Barge	26.24	22.52			24.38					
Total transportation cost	100.32	98.26			99.29	84.01	88.19			86.10
Farm price	461.75	493.59			477.67	445.82	477.67			461.75
Landed cost	562.07	591.85			576.96	529.83	565.86			547.84
Transport % of landed cost	17.8	16.6			17.2	15.9	15.6			15.7
	Wheat									
Origin	**KS**					**KS**				
Truck	25.71	33.78			29.75	3.50	3.88			3.69
Rail[1]	43.99	45.54			44.77	78.19	78.32			78.26
Ocean[2]	18.75	18.86			18.81					
Barge	18.40	14.57			16.49					
Total transportation cost	106.85	112.75			109.80	81.69	82.20			81.95
Farm price	280.72	288.68			284.70	280.72	288.68			284.70
Landed cost	387.57	401.43			394.50	362.41	370.88			366.65
Transport % of landed cost	27.6	28.1			27.8	22.5	22.2			22.4

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

Quarterly Bulk Grain and Soybeans

Table 2. Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US$/car), 2011

			Tariff rate/car[1]					Fuel surcharge per car[2]				
Commodity	Origin state	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
Wheat	MT	Chihuahua, CI	6,854	6,854			6,854	649	557			603
	OK	Cuautitlan, EM	6,191	6,209			6,200	554	584			569
	KS	Guadalajara, JA	6,825	6,843			6,834	828	822			825
	TX	Salinas Victoria, NL	3,458	3,308			3,383	199	233			216
Corn	IA	Guadalajara, JA	7,056	7,296			7,176	831	848			840
	SD	Penjamo, GJ	6,619	6,922			6,771	849	729			789
	NE	Queretaro, QA	6,240	6,629			6,435	609	753			681
	SD	Salinas Victoria, NL	4,785	5,337			5,061	645	554			600
	MO	Tlalnepantla, EM	5,428	5,797			5,613	593	733			663
	SD	Torreon, CU	5,681	5,977			5,829	711	611			661
Soybeans	MO	Bojay (Tula), HG	6,256	6,592			6,424	713	737			725
	NE	Guadalajara, JA	7,069	7,413			7,241	810	839			825
	IA	El Castillo, JA	7,157	7,643			7,400	843	725			784
	KS	Torreon, CU	5,717	5,958			5,838	534	575			555
Sorghum	OK	Cuautitlan, EM	4,729	5,307			5,018	644	554			599
	TX	Guadalajara, JA	5,781	6,199			5,990	552	475			514
	NE	Penjamo, GJ	6,407	6,795			6,601	736	774			755
	KS	Queretaro, QA	5,641	5,990			5,816	445	518			482
	NE	Salinas Victoria, NL	4,500	4,787			4,644	446	493			470
	NE	Torreon, CU	5,546	5,773			5,660	581	616			599

[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.
[2]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

Quarterly Bulk Grain and Soybeans

Table 3. Quarterly tariff plus fuel surcharge rail rates for U.S. bulk grain shipments to Mexico, 2011

			US$/metric ton					US$/bushel[2]				
Commodity	Origin state	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
Wheat	MT	Chihuahua, CI	76.66	75.73			76.20	2.08	2.06			2.07
	OK	Cuautitlan, EM	68.92	69.41			69.17	1.87	1.89			1.88
	KS	Guadalajara, JA	78.19	78.32			78.26	2.13	2.13			2.13
	TX	Salinas Victoria, NL	37.36	36.18			36.77	1.02	0.98			1.00
Corn	IA	Guadalajara, JA	80.58	83.21			81.90	2.04	2.11			2.08
	SD	Penjamo, GJ	76.30	78.18			77.24	1.94	1.98			1.96
	NE	Queretaro, QA	69.98	75.42			72.70	1.78	1.91			1.85
	SD	Salinas Victoria, NL	55.48	60.19			57.84	1.41	1.53			1.47
	MO	Tlalnepantla, EM	61.53	66.72			64.13	1.56	1.69			1.63
	SD	Torreon, CU	65.31	67.31			66.31	1.66	1.71			1.69
Soybeans	MO	Bojay (Tula), HG	71.21	74.89			73.05	1.94	2.04			1.99
	NE	Guadalajara, JA	80.51	84.31			82.41	2.19	2.29			2.24
	IA	Penjamo (Celaya), GJ	81.75	85.50			83.63	2.22	2.32			2.27
	KS	Torreon, CU	63.87	66.75			65.31	1.74	1.81			1.78
Sorghum	OK	Cuautitlan, EM	54.90	59.88			57.39	1.39	1.52			1.46
	TX	Guadalajara, JA	64.71	68.19			66.45	1.64	1.73			1.69
	NE	Penjamo, GJ	72.99	77.34			75.17	1.85	1.96			1.91
	KS	Queretaro, QA	62.18	66.50			64.34	1.58	1.69			1.64
	NE	Salinas Victoria, NL	50.53	53.94			52.24	1.28	1.37			1.33
	NE	Torreon, CU	62.60	65.28			63.94	1.59	1.66			1.63

[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.
[2]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. Tariff rail rates for U.S. Distillers' Dried Grains (DDGS) shipments to Mexico Destinations (US$/metric ton), 2011

			Tariff rate/metric ton[1]					Fuel surcharge/metric ton				
Origin BEA[2]	Border Crossing	Destination	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg	1st qtr	2nd qtr	3rd qtr	4th qtr	Avg
Des Moines, IA	Eagle Pass	Guadalajara, JA	n/a	94.27				n/a	12.20			
	El Paso	Guadalajara, JA	n/a	89.33				n/a	10.20			
	Eagle Pass	Aguascalientes, AGS	n/a	86.56				n/a	10.84			
	El Paso	Aguascalientes, AGS	n/a	102.56				n/a	13.58			
	Eagle Pass	Yurecuaro, MIC	n/a	102.62				n/a	13.18			
	El Paso	Yurecuaro, MIC	n/a	93.75				n/a	12.03			
	Eagle Pass	Torreon, COA	n/a	94.20				n/a	11.69			
	El Paso	Torreon, COA	n/a	96.27				n/a	12.47			
Minneapolis, MN	Eagle Pass	Guadalajara, JA	n/a	102.56				n/a	13.58			
	El Paso	Guadalajara, JA	n/a	102.62				n/a	13.18			
	Eagle Pass	Aguascalientes, AGS	n/a	93.75				n/a	12.03			
	El Paso	Aguascalientes, AGS	n/a	94.20				n/a	11.69			
	Eagle Pass	Yurecuaro, MIC	n/a	96.27				n/a	12.47			
	El Paso	Yurecuaro, MIC	n/a	96.76				n/a	12.14			
	Eagle Pass	Torreon, COA	n/a	88.66				n/a	11.13			
	El Paso	Torreon, COA	n/a	89.05				n/a	10.78			
Sioux Falls, SD	Eagle Pass	Guadalajara, JA	n/a	101.18				n/a	12.75			
	El Paso	Guadalajara, JA	n/a	104.60				n/a	12.27			
	Eagle Pass	Aguascalientes, AGS	n/a	92.37				n/a	11.20			
	El Paso	Aguascalientes, AGS	n/a	96.18				n/a	10.79			
	Eagle Pass	Yurecuaro, MIC	n/a	94.89				n/a	11.64			
	El Paso	Yurecuaro, MIC	n/a	98.74				n/a	11.24			
	Eagle Pass	Torreon, COA	n/a	87.28				n/a	10.30			
	El Paso	Torreon, COA	n/a	91.03				n/a	9.88			

[1] 1 to 24 railcars per shipment. C-114 heavy axle load railcars loaded to 90 metric tons per railcar.
[2] Business Economic Areas (BEA) as defined by the Department of Commerce.
Sources: Gavilon de Mexico S.A. de C.V. for the Mexican portion of the rates and BNSF Railway and Union Pacific Railroad for the U.S. portion of the rates.

Quarterly Bulk Grain and Soybeans

Table 5. Quarterly exports of U.S. Distillers' Dried Grains with Soluble (DDGS) to Mexico*					
	Thousand metric tons				
Year	1st qtr	2nd qtr	3rd qtr	4th qtr	Total
2007	164	170	184	190	708
2008	247	284	332	325	1,188
2009	316	377	371	395	1,459
2010	439	399	424	383	1,645
2011	506	430			

*Data are for brewers' and distillers' dregs and waste of which Distillers' Dried Grains with Soluble is a principal component.
On November 2, 2010, data was revised.
Source: USDA, Economic Research Service (ERS), Feed grains database

Table 6. Quarterly ocean freight rate for bulk shipments from the U.S. Gulf to Veracruz, Mexico (US$/metric ton)					
Vessel capacity (metric ton)	1st qtr 2008	2nd qtr 2008	3rd qtr 2008	4th qtr 2008	Average
25,000	30.79	36.77	31.55	14.08	28.3
35-40,000	26.7	33.3	28.3	11.58	24.97
Vessel capacity (metric ton)	1st qtr 2009	2nd qtr 2009	3rd qtr 2009	4th qtr 2009	Average
25,000	13.58	17.53	19.86	22.65	18.41
35-40,000	11.46	15.46	17.78	20.22	16.23
Vessel capacity (metric ton)	1st qtr 2010	2nd qtr 2010	3rd qtr 2010	4th qtr 2010	Average
25,000	23.04	23.83	24.33	21.89	23.27
35-40,000	20.75	22.34	21.64	19.83	21.14
Vessel capacity (metric ton)	1st qtr 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Average
25,000	21.71	21.13			21.42
35-40,000	18.75	18.86			18.81

Source: O'Neil Commodity Consulting

Table 7. U.S. livestock exports to Mexico by border crossings*, April-June, 2011 (head)					
Category					
Border Crossing	**TX**	**NM**	**AZ**	**CA**	**Total**
Beef cattle					
Slaughter	0	0	0	0	0
Breeding males	143	57	49	0	249
Breeding females	239	27	20	0	286
Total beef	382	84	69	0	535
Hogs					
Slaughter	0	0	0	0	0
Breeding males	302	0	0	0	302
Breeding females	1,545	0	322	0	1,867
Total hogs	1,847	0	322	0	2,169
Sheep					
Slaughter lambs	0	0	0	0	0
Slaughter ewes	5,989	0	0	0	5,989
Breeding males	21	0	0	0	21
Breeding females	7	0	0	0	7
Total sheep	6,017	0	0	0	6,017
Dairy cattle					
Breeding males	8	0	0	0	8
Breeding females	2,878	819	293	0	3,990
Total dairy	2,886	819	293	0	3,998
Goats					
Angora	0	0	0	0	0
Spanish	0	0	0	0	0
Other	0	0	0	0	0
Total goats	0	0	0	0	0
Horses					
Slaughter	13,328	2,571	0	0	15,899
Breeding males	346	264	146	0	756
Breeding females	511	327	201	0	1,039
Geldings	76	62	20	0	158
Burro/mule/pony	17	0	10	0	27
Total horses	14,278	3,224	377	0	17,879
Exotics**	129	0	0	0	129
Grand total	**25,539**	**4,127**	**1,061**	**0**	**30,727**

*Weekly AMS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Refer to animals that are not included in other categories such as zebras, deer, elephants, and yaks.
Source: Agricultural Marketing Service (AMS), Livestock and Seed Programs

Table 8. Quarterly U.S. livestock exports to Mexico through Texas border crossing* (head)

Category	1st qtr 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Total
Beef cattle					
Slaughter	0	0			0
Breeding males	107	143			250
Breeding females	86	239			325
Total beef	193	382			575
Hogs					
Slaughter	0	0			0
Breeding males	300	302			602
Breeding females	1,143	1,545			2,688
Total hogs	1,443	1,847			3,290
Sheep					
Slaughter lambs	0	0			0
Slaughter ewes	3,263	5,989			9,252
Breeding males	0	21			21
Breeding females	0	7			7
Total sheep	3,263	6,017			9,280
Dairy cattle					
Breeding males	10	8			18
Breeding females	2,165	2,878			5,043
Total dairy	2,175	2,886			5,061
Goats					
Angora	0	0			0
Spanish	0	0			0
Other	0	0			0
Total goats	0	0			0
Horses					
Slaughter	10,164	13,328			23,492
Breeding males	462	346			808
Breeding females	748	511			1,259
Geldings	116	76			192
Burro/mule/pony	10	17			27
Total horses	11,500	14,278			25,778
Exotics**	49	129			178
Grand total	**18,623**	**25,539**			**44,162**

*Weekly AMS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Refer to animals that are not included in other categories such as zebras, deer, elephants, and yaks.
Source: USDA, Agricultural Marketing Service (AMS), Livestock and Seed Programs

Table 9. Quarterly U.S. livestock exports to Mexico through New Mexico border crossing* (head)

Category	1st qtr 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Total
Beef cattle					
Slaughter	0	0			0
Breeding males	0	57			57
Breeding females	39	27			66
Total beef	39	84			123
Hogs					
Slaughter	0	0			0
Breeding males	0	0			0
Breeding females	0	0			0
Total hogs	0	0			0
Sheep					
Slaughter lambs	0	0			0
Slaughter ewes	0	0			0
Breeding males	0	0			0
Breeding females	0	0			0
Total sheep	0	0			0
Dairy cattle					
Breeding males	0	0			0
Breeding females	747	819			1,566
Total dairy	747	819			1,566
Goats					
Angora	0	0			0
Spanish	0	0			0
Other	0	0			0
Total goats	0	0			0
Horses					
Slaughter	3,226	2,571			5,797
Breeding males	257	264			521
Breeding females	294	327			621
Geldings	77	62			139
Burro/mule/pony	0	0			0
Total horses	3,854	3,224			7,078
Exotics**	0	0			0
Grand total	**4,640**	**4,127**			**8,767**

*Weekly AMS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Refer to animals that are not included in other categories such as zebras, deer, elephants, and yaks.
Source: USDA, Agricultural Marketing Service (AMS), Livestock and Seed Programs

Table 10. Quarterly U.S. livestock exports to Mexico through Arizona border crossing* (head)

Category	1st qtr 2011	2nd qtr 2011	3rd qtr 2011	4th qtr 2011	Total
Beef cattle					
Slaughter	0	0			0
Breeding males	0	49			49
Breeding females	52	20			72
Total beef	52	69			121
Hogs					
Slaughter	0	0			0
Breeding males	38	0			38
Breeding females	472	322			794
Total hogs	510	322			832
Sheep					
Slaughter lambs	0	0			0
Slaughter ewes	0	0			0
Breeding males	0	0			0
Breeding females	0	0			0
Total sheep	0	0			0
Dairy cattle					
Breeding males	0	0			0
Breeding females	279	293			572
Total dairy	279	293			572
Goats					
Angora	0	0			0
Spanish	0	0			0
Other	0	0			0
Total goats	0	0			0
Horses					
Slaughter	0	0			0
Breeding males	127	146			273
Breeding females	153	201			354
Geldings	28	20			48
Burro/mule/pony	1	10			11
Total horses	309	377			686
Exotics**	0	0			0
Grand total	**1,150**	**1,061**			**2,211**

*Weekly AMS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Refer to animals that are not included in other categories such as zebras, deer, elephants, and yaks.
Source: USDA, Agricultural Marketing Service (AMS), Livestock and Seed Programs

Table 11. Fruit and vegetable truck rates for selected U.S.-Mexico border crossing* (US$/mile)

Origin/border crossing	1st qtr 2006	2nd qtr 2006	3rd qtr 2006	4th qtr 2006	Average
Nogales, Arizona	1.70	1.77	2.22	1.78	1.87
Pharr, Texas	1.75	1.80	1.64	1.63	1.71
Origin/border crossing	**1st qtr 2007**	**2nd qtr 2007**	**3rd qtr 2007**	**4th qtr 2007**	**Average**
Nogales, Arizona	1.90	1.89	2.05	2.00	1.96
Pharr, Texas	1.65	1.83	1.86	1.74	1.77
Origin/border crossing	**1st qtr 2008**	**2nd qtr 2008**	**3rd qtr 2008**	**4th qtr 2008**	**Average**
Nogales, Arizona	1.96	2.24	2.80	1.97	2.24
Pharr, Texas	1.93	2.19	2.12	1.87	2.03
Origin/border crossing	**1st qtr 2009**	**2nd qtr 2009**	**3rd qtr 2009**	**4th qtr 2009**	**Average**
Nogales, Arizona	1.72	2.01	2.15	1.79	1.92
Pharr, Texas	1.70	1.71	1.59	1.58	1.65
Origin/border crossing	**1st qtr 2010**	**2nd qtr 2010**	**3rd qtr 2010**	**4th qtr 2010**	**Average**
Nogales, Arizona	1.97	2.25	2.26	2.23	2.17
Pharr, Texas	1.70	2.02	1.67	1.69	1.77
Origin/border crossing	**1st qtr 2011**	**2nd qtr 2011**	**3rd qtr 2011**	**4th qtr 2011**	**Average**
Nogales, Arizona	1.88	2.52			
Pharr, Texas	1.97	2.20			

*Voluntarily reported to AMS, Market News
Source: Agricultural Marketing Service (AMS), Fruit and Vegetable Programs

Table 12. Quarterly U.S.-Mexico border crossing fresh fruit and vegetables truck availability, 2nd quarter, 2011

Legend: 1 = Surplus; 2 = Slight Surplus; 3 = Adequate; 4 = Slight Shortage; 5 = Shortage

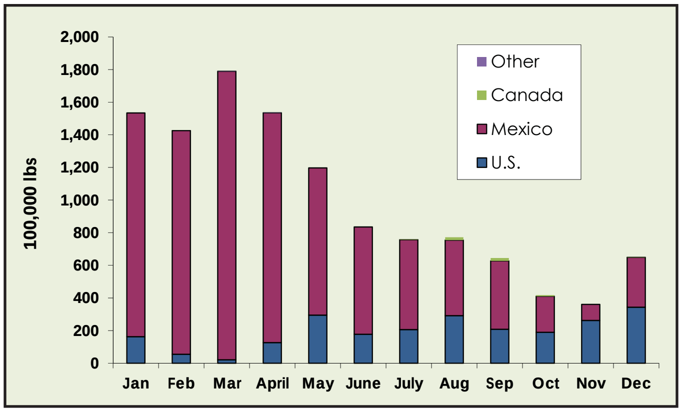
		Truck availability												
Mexico border crossings/month		April				May					June			
Week		4/5	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	6/28
Through Pharr, TX	Citrus, Tomatoes	4	5	5	5	4	5							
	Mixed Fruits and Vegetables	4	5	5	5	4	5	5	5	5	4	4	4	3
	Watermelons	4	5	5	5	4								
	Onions	4	5	5	5									
	Mangoes	4	5	5	5	4	5	5	5	5	4	4	4	3
	Limes							5	5	5	4	4	4	3
Through Nogales, AZ	Tomatoes, Mixed Vegetables	3	3	5	4	4	4	5	5	5	5	5	3	2
	Mangoes, Melons	3	3	5	4	4	4	5	5	5	5	5	3	2
	Grapes							5	5	5	5	5	3	2

Source: USDA, Agricultural Marketing Service, Fruit and Vegetable Programs, Market News Branch, *Fruit and Vegetable Truck Rate Report*

Table 13. Top ten commodities shipped to the U.S. from Mexico (10,000 lbs)		
Commodity	**2nd qtr 2011**	**Ranking**
Watermelon	66,908	1
Tomatoes	61,825	2
Cucumbers	27,481	3
Mangoes	27,461	4
Peppers	27,150	5
Grapes	25,639	6
Limes	21,880	7
Onions	20,994	8
Squash	15,442	9
Avocadoes	15,163	10

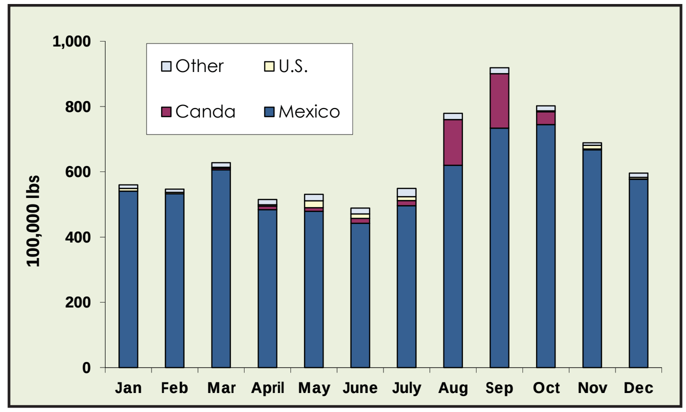
Source: Data is obtained from the Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) through USDA, AMS, Market News

Figure 3. Monthly U.S. shipments of domestic and imported plum tomatoes, 2010



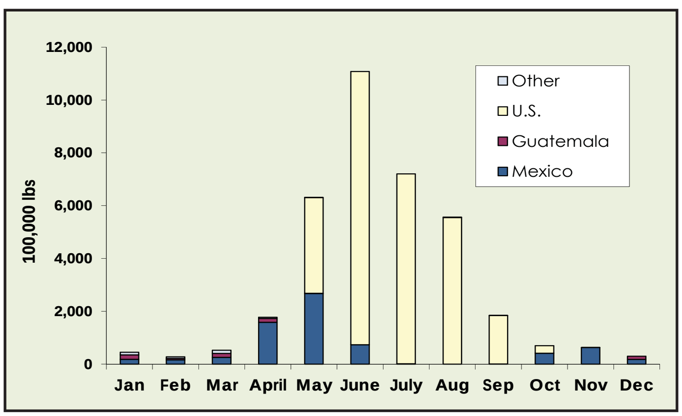
Source: Agricultural Marketing Service (AMS), USDA

Figure 4. Monthly U.S. shipments of domestic and imported peppers, 2010



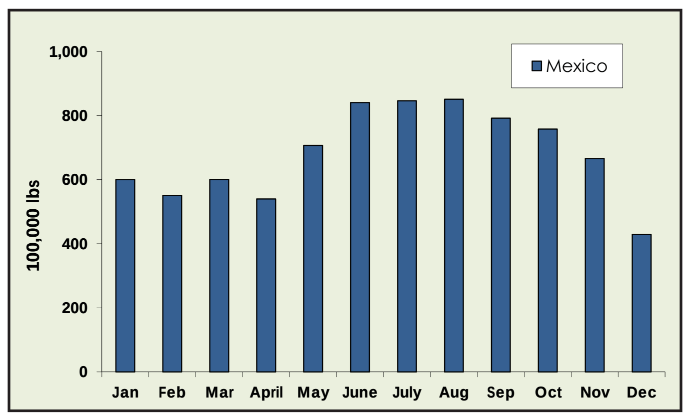
Source: Agricultural Marketing Service (AMS), USDA

Figure 5. Monthly U.S. shipments of domestic and imported seedless watermelons, 2010



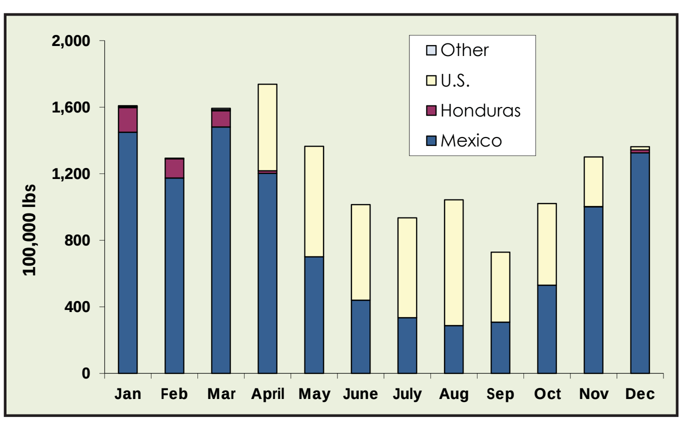
Source: Agricultural Marketing Service (AMS), USDA

Figure 6. Monthly U.S. shipments of domestic and imported limes, 2010



Source: Agricultural Marketing Service (AMS), USDA

Figure 7. Monthly U.S. shipments of domestic and imported cucumbers, 2010



Source: Agricultural Marketing Service (AMS), USDA

Table 14. Top five commodities shipped to the U.S. from Mexico (10,000 lbs.)					
Commodity	**1st qtr 2007**	**2nd qtr 2007**	**3rd qtr 2007**	**4th qtr 2007**	**Total 2007**
Tomatoes, Plum	81,569	49,510	16,541	26,462	174,082
Peppers	39,988	21,882	16,609	30,259	108,738
Watermelon, Seedless	19,736	60,559	306	18,214	98,815
Limes	15,931	20,420	21,860	19,090	77,301
Cucumbers	31,681	17,622	4,709	22,438	76,450
Other	151,494	159,783	77,029	108,830	497,136
Subtotal border crossing	188,905	169,993	60,025	116,463	535,386
Total quarterly	**340,399**	**329,776**	**137,054**	**225,293**	**1,032,522**
Commodity	**1st qtr 2008**	**2nd qtr 2008**	**3rd qtr 2008**	**4th qtr 2008**	**Total 2008**
Tomatoes, Plum	66,049	53,659	15,156	26,271	161,135
Peppers	43,219	38,961	17,356	27,565	127,101
Watermelon, Seedless	26,601	73,261	2,202	18,531	120,595
Limes	15,557	26,505	20,834	18,705	81,601
Cucumbers	31,017	29,092	5,415	21,587	87,111
Other	156,348	207,080	74,194	113,146	550,768
Subtotal border crossing	182,443	221,478	60,963	112,659	577,543
Total quarterly	**338,791**	**428,558**	**135,157**	**225,805**	**1,128,311**
Commodity	**1st qtr 2009**	**2nd qtr 2009**	**3rd qtr 2009**	**4th qtr 2009**	**Total 2009**
Tomatoes, Plum	62,337	64,976	21,173	44,530	193,016
Peppers	43,303	23,396	21,903	33,946	122,548
Watermelon, Seedless	21,643	64,976	1,949	21,428	109,996
Limes	17,499	21,253	23,706	19,829	82,287
Cucumbers	32,819	20,464	8,059	29,719	91,061
Other	181,069	143,027	80,567	129,714	534,377
Subtotal border crossing	177,601	195,065	76,790	149,452	598,908
Total quarterly	**358,670**	**338,092**	**157,357**	**279,166**	**1,133,285**

—Continued on next page—

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

Table 14. Top five commodities shipped to the U.S. from Mexico (10,000 lbs.) —Continued—

Commodity	1st qtr 2010	2nd qtr 2010	3rd qtr 2010	4th qtr 2010	Total 2010
Tomatoes, Plum	113,379	77,048	34,226	43,291	267,944
Peppers	52,381	29,135	18,481	33,718	133,715
Cucumbers	39,925	23,695	9,314	30,169	103,103
Squash	24,242	12,827	2,852	19,740	59,661
Avocados	20,065	15,120	8,696	17,242	61,123
Other	178,749	264,046	116,397	133,112	692,304
Subtotal border crossing	249,992	157,825	73,569	144,160	625,546
Total quarterly	**428,741**	**421,871**	**189,966**	**277,272**	**1,317,850**
Commodity	**1st qtr 2011**	**2nd qtr 2011**	**3rd qtr 2011**	**4th qtr 2011**	**Total 2011**
Tomatoes	93,831	61,825			155,656
Peppers	49,137	27,150			76,287
Cucumbers	31,749	27,481			59,230
Onions	30,159	20,994			51,153
Watermelon	25,181	66,908			92,089
Other	181,726	199,587			381,313
Subtotal border crossing	230,057	204,358			434,415
Total quarterly	**411,783**	**403,954**			**815,737**

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

Table 15. Top ten U.S. containerized agricultural exports to Mexico*, 2011					
1st qtr	**Commodity**	**Quantity (mt)**	**# of TEUs****	**Percentage share**	**Rank**
	Vegetables	6,323	363	21	1
	Tobacco products	4,788	458	16	2
	Dextrose, glucose	3,392	153	11	3
	Coffee	2,374	143	8	4
	Dairy products	2,158	163	7	5
	Wine	1,384	84	5	6
	Beer, ale	1,372	152	5	7
	Grocery items	1,342	137	4	8
	Bulbs & seeds	960	103	3	9
	Edible nuts	919	89	3	10
Subtotal		**25,011**	**1,845**	**83**	
Other		5,126	445	17	
Total Exports		**30,137**	**2,290**	**100**	
2nd qtr	**Commodity**	**Quantity (mt)**	**# of TEUs****	**Percentage share**	**Rank**
Subtotal					
Other					
Total Exports					

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*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2011

Table 15. Top ten U.S. containerized agricultural exports to Mexico*, 2011 —Continued—

3rd qtr	Commodity	Quantity (mt)	# of TEUs**	Percentage share	Rank
Subtotal					
Other					
Total Exports					
4th qtr	**Commodity**	**Quantity (mt)**	**# of TEUs****	**Percentage share**	**Rank**
Subtotal					
Other					
Total Exports					

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2011

Table 16. Top five U.S. bulk agricultural exports to Mexico*, 2009-2010

Commodity	2009	2010	Percentage share	Rank
	Quantity (mt)			
Bulk grains	3,262,754	4,034,836	47%	1
Bread, cereal, flour	1,397,970	89,023	20%	2
Soybeans	1,303,882	1,364,463	19%	3
Rice	509,612	446,206	7%	4
Grocery items	208,509	29	3%	5
Subtotal	**6,682,727**	**5,934,557**	**95%**	
Other	317,469	1,338,216	5%	
Total Exports	**7,000,196**	**7,272,773**	**100%**	

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
Source: Port Import Export Reporting Services (PIERS), Journal of Commerce, 2010

Table 17. Top ten U.S. agricultural container exports to Mexico*, 2009-2010

Commodity	2009	2010	Percentage share	Rank
	# of TEUs**			
Vegetables	623	1,019	20%	1
Dairy products	1,075	588	11%	2
Fruit	699	426	8%	3
Coffee	8	403	8%	4
Tobacco products	615	362	7%	5
Dextrose, glucose	0	355	7%	6
Grocery items	401	353	7%	7
Beer, ale	276	214	4%	8
Tomatoes, prepared	330	156	3%	9
Frozen fish	130	120	2%	10
Subtotal	**4,156**	**3,996**	**78%**	
Other	1,763	1,136	22%	
Total Exports	**5,919**	**5,132**	**100%**	

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2010

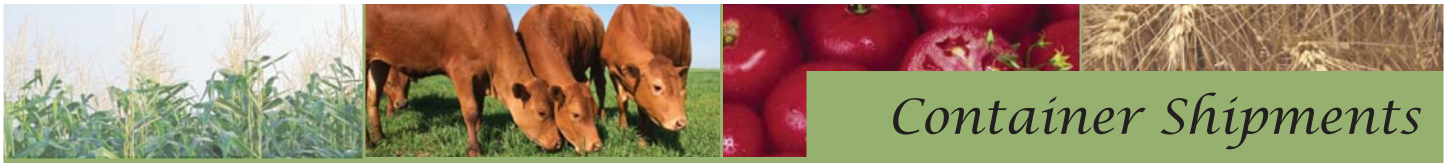

Table 18. Top three Mexican bulk agricultural exports to the U.S.*, 2010			
Commodity	**Quantity (mt)**	**Percentage share**	**Rank**
Sugar	406,839	54%	1
Rum	238,658	32%	2
Molasses, treacle	78,879	10%	3
Subtotal	**724,376**	**96%**	
Other	30,840	4%	
Total	**755,216**	**100%**	

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
Source: Port Import Export Reporting Services (PIERS), 2010

Table 19. Top ten Mexican agricultural container exports to the U.S.*, 2010			
Commodity	**# of TEUs****	**Percentage share**	**Rank**
Bananas	6,259	25%	1
Beer, ale	6,082	24%	2
Coffee	2,510	10%	3
Bitters, brandy, liquor	1,716	7%	4
Vegetables	1,666	7%	5
Bread, cereal, flour	1,335	5%	6
Sugar	679	3%	7
Fruit	490	2%	8
Grocery items	398	2%	9
Pineapple	343	1%	10
Subtotal	**21,479**	**84%**	
Other	4,024	16%	
Total Exports	**25,503**	**100%**	

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2010

Table 20. U.S. agricultural container shipments to Mexico by port*, 2009-2010

U.S. region**	Mexican port	2009	2010
		Number of TEUs***	
U.S. Gulf	Manzanillo	2	17
Pacific Northwest		690	1184
West Coast		1,520	652
East Coast		67	100
TOTAL		**2,279**	**1,953**
U.S. Gulf	Lazaro Cardenas	-	-
Pacific Northwest		325	193
West Coast		1200	753
East Coast		-	-
TOTAL		**1,524**	**946**
U.S. Gulf	Veracruz	47	307
Pacific Northwest		-	-
West Coast		1	1
East Coast		257	242
TOTAL		**305**	**550**
U.S. Gulf	Progreso	208	486
Pacific Northwest		-	-
West Coast		-	-
East Coast		2	-
TOTAL		**210**	**486**
U.S. Gulf	Altamira	-	-
Pacific Northwest		-	-
West Coast		-	-
East Coast		655	393
TOTAL		**655**	**393**

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**U.S. Gulf includes Houston, New Orleans, Port Everglades
Pacific Northwest includes Seattle, Portland
West Coast includes Oakland, Long Beach, Los Angeles
East Coast includes New York, Baltimore, Norfolk, Charleston, Savannah, Jacksonville, West Palm Beach, Miami
*** Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2010

Mexican port	2009	2010	Percentage share	Rank
	# of TEUs**			
Manzanillo	2,279	1,953	38%	1
Lazaro Cardenas	1,528	952	19%	2
Veracruz	341	565	11%	3
Progreso	210	486	9%	4
Altamira	657	396	8%	5
Subtotal	**5,015**	**4,352**	**85%**	
Other	904	780	15%	
Total Exports	**5,919**	**5,132**	**100%**	

Table 21. U.S. agricultural container exports to Mexico by port*, 2009-2010

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
** Twenty Foot Equivalent Unit (TEU) is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2010

Table 22. U.S. agricultural container exports to Mexico by port*, 2010-2011

Mexican port	1st quarter 2010	2nd quarter 2010	% change	Jan-March 2010	Jan-March 2011	% change
	# of TEUs**					
Manzanillo	575	930	62	575	930	62
Altamira	164	459	180	164	459	180
Merida	6	168	2,701	6	168	2,701
Vera Cruz	18	257	1,332	18	257	1,332
Lazaro Carden	279	156	(44)	279	156	(44)
Subtotal	**1,041**	**1,969**	**89**	**1,041**	**1,969**	**89**
Other	177	321	81	177	321	81
Total Exports	**1,219**	**2,290**	**88**	**1,219**	**2,290**	**88**

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
**Twenty Foot Equivalent Unit is a 20-foot shipping container
Source: Port Import Export Reporting Services (PIERS), 2010 and 2011

Table 23. U.S. bulk agricultural exports to Mexico by receiving port*, 2009-2010

Mexican port	2009	2010	Percentage share	Rank
	Quantity (mt)			
Veracruz	5,124,123	4,847,113	70%	1
Progreso	971,322	1,151,637	13%	2
Coatzacoalcos	570,641	656,708	8%	3
Tuxpan	406,120	338,249	6%	4
Guaymas	-	5,242	0%	5
Subtotal	**7,072,205**	**6,998,950**	**97%**	
Other	200,568	1,246	3%	
Total Exports	**7,272,773**	**7,000,196**	**100%**	

*PIERS data will not necessarily sum to the total U.S. Dept. of Commerce, Bureau of Census data
Source: Port Import Export Reporting Services (PIERS), 2010

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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:

- Figure 1: Average cost of shipping U.S. corn, wheat, and soybeans to Guadalajara, Mexico, by route, April-June 2010
- Figure 2: U.S. live sheep exports
- Figure 3: Monthly U.S. shipments of domestic and imported plum tomatoes, 2010
- Figure 4: Monthly U.S. shipments of domestic and imported peppers, 2010
- Figure 5: Monthly U.S. shipments of domestic and imported seedless watermelons, 2010
- Figure 6: Monthly U.S. shipments of domestic and imported limes, 2010
- Figure 7: Monthly U.S. shipments of domestic and imported cucumbers, 2010

- Table 1: Quarterly costs of transporting U.S. grain and soybeans to Guadalajara, Mexico
- Table 2: Quarterly tariff rail rates for U.S. bulk grain shipments to Mexico (US$/car), 2011
- Table 3: Quarterly tariff plus fuel surcharge rail rates for U.S. bulk grain shipments to Mexico, 2011
- Table 4: Tariff rail rates for U.S. Distillers' Dried Grains (DDGS) shipments to Mexico Destinations
- (US$/metric ton), 2011
- Table 5: Quarterly exports of U.S. Distillers' Dried Grains with Soluble (DDGS) to Mexico
- Table 6: Quarterly ocean freight rate for bulk shipments from the U.S. Gulf to Veracruz, Mexico (US$/metric ton)
- Table 7: U.S. livestock exports to Mexico by border crossings, April-June, 2011 (head)
- Table 8: Quarterly U.S. livestock exports to Mexico through Texas border crossing (head)
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- Table 11: Fruit and vegetable truck rates for selected U.S.-Mexico border crossing (US$/mile)
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- Table 13: Top ten commodities shipped to the U.S. from Mexico (10,000 lbs.)
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- Table 18: Top three Mexican bulk agricultural exports to the U.S., 2010
- Table 19: Top ten Mexican agricultural container exports to the U.S., 2010
- Table 20: U.S. agricultural container shipments to Mexico by port, 2009-2010
- Table 21: U.S. agricultural container exports to Mexico by port, 2009-2010
- Table 22: U.S. agricultural container exports to Mexico by port*, 2010-2011
- Table 23: U.S. bulk agricultural exports to Mexico by receiving port*, 2009-2010