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# Sugar and Sweeteners Outlook

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## U.S. Sugar Ending Stocks Reduced due to Lower Expected Supplies

U.S. sugar markets are projected to operate at a 12.7 percent stocks-to-use ratio, down from the current estimate of 16.2 percent for 2017/18. The lower ratio is due to lower domestic production and beginning stocks more than offsetting an increase in imports, along with an unchanged outlook for use. A reduction in forecast sugarbeet production reduces beet sugar production for 2018/19, which is partially offset by higher cane sugar production in Louisiana.

The outlook for Mexico is relatively large supplies for both 2017/18 and 2018/19. The only change in the October *World Agricultural Supply and Demand Estimates* (WASDE) from the previous month is fewer exports in 2017/18, which will be carried over into 2018/19 and exported early in the new marketing year.

# U.S. Domestic Outlook

## Lower Forecast Sugarbeet Production Lowers Beet Sugar Production

The October *World Agricultural Supply and Demand Estimates* (WASDE) show a relatively tighter market compared with the previous month. Total sugar supplies in the United States for 2018/19 are projected to be 14.077 million short tons, raw value (STRV), a 100,000-STRV reduction from the September report. Lower expected beginning stocks and production are partially offset by higher expected imports. With no changes in projected use, ending stocks and the projected stocks-to-use ratio are lower than the previous month.

**Table 1: U.S. sugar: supply and use, by fiscal year (Oct./Sept.), October 2018**

Items	2016/17			2017/18			2018/19		
	2016/17	(estimate)	(forecast)	2016/17	(estimate)	(forecast)	2016/17	(estimate)	(forecast)
	1,000 Short tons, raw value			1,000 Metric tons, raw value					
Beginning stocks	2,054	1,876	2,014	1,863	1,702	1,827			
Total production	8,969	9,248	9,262	8,137	8,390	8,402			
Beet sugar	5,103	5,245	5,236	4,629	4,758	4,750			
Cane sugar	3,866	4,004	4,026	3,507	3,632	3,652			
Florida	2,055	1,983	2,050	1,864	1,799	1,860			
Louisiana	1,628	1,852	1,826	1,477	1,680	1,656			
Texas	140	169	150	127	153	136			
Hawaii	43	0	0	39	0	0			
Total imports	3,244	3,315	2,801	2,943	3,007	2,541			
Tariff-rate quota imports	1,611	1,664	1,564	1,462	1,510	1,419			
Other program imports	419	326	350	380	296	318			
Non-program imports	1,213	1,324	887	1,101	1,202	805			
Mexico	1,201	1,269	842	1,090	1,152	764			
Total supply	14,267	14,439	14,077	12,943	13,099	12,770			
Total exports	95	170	85	86	154	77			
Miscellaneous	38	0	0	35	0	0			
Deliveries for domestic use	12,258	12,255	12,405	11,121	11,118	11,254			
Transfer to sugar-containing products for exports under re-export program	127	120	120	115	109	109			
Transfer to polyhydric alcohol, feed, other alcohol	29	35	35	27	32	32			
Commodity Credit Corporation (CCC) sale for ethanol, other	0	0	0	0	0	0			
Deliveries for domestic food and beverage use	12,102	12,100	12,250	10,979	10,977	11,113			
Total use	12,391	12,425	12,490	11,241	11,272	11,331			
Ending stocks	1,876	2,014	1,587	1,702	1,827	1,440			
Private	1,876	2,014	1,587	1,702	1,827	1,440			
Commodity Credit Corporation (CCC)	0	0	0	0	0	0			
Stocks-to-use ratio	15.14	16.21	12.71	15.14	16.21	12.71			

Source: U.S. Dept. of Agriculture, Economic Research Service, Sugar and Sweetener Outlook.

The harvest season is coming into full swing for most sugarcane- and sugarbeet-producing regions. Domestic production is projected to be 9.262 million STRV, a 66,000-STRV decrease

from the previous month. The net decrease is the sum of an increase in projected cane sugar production and a larger decrease in beet sugar production, based on the October *Crop Production* report published by the USDA National Agricultural Statistics Service (NASS).

A reduction in sugarbeet production reduces the projected beet sugar production figure in the October WASDE. Beet sugar production is projected to total 5.236 million STRV, a 107,000-STRV decrease from the previous month. The remaining storage and processing factors of beet sugar production estimates remain unchanged from the September projection.

**Table 2: Beet sugar production projection calculation, 2017/18 and 2018/19**

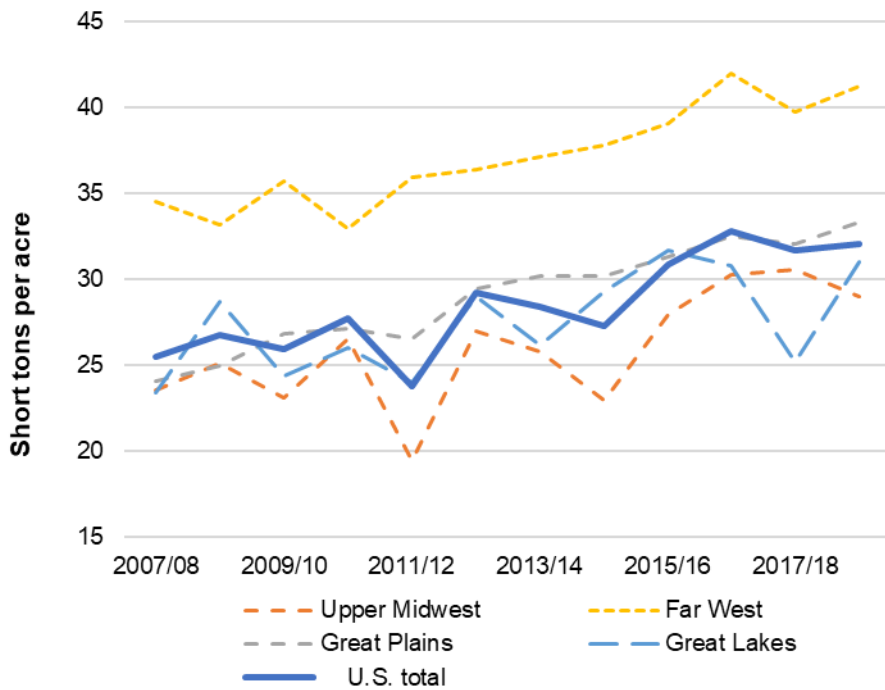
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18 September	2017/18 October	2018/19 September	2018/19 October
Sugarbeet production (1,000 short tons) 1/	35,224	32,789	31,285	35,371	36,881	35,325	35,325	35,999	35,215
Sugarbeet shrink 2/	4.8%	6.8%	5.4%	6.5%	8.3%	7.3%	7.3%	6.9%	6.9%
Sugarbeet sliced (1,000 short tons)	33,532	30,545	29,595	33,066	33,834	32,742	32,742	33,515	32,785
Sugar extraction rate from slice	15.3%	14.3%	14.6%	14.6%	13.7%	15.2%	15.2%	14.7%	14.7%
Sugar from beets slice (1,000 STRV)	5,142	4,325	4,325	4,820	4,643	4,970	4,970	4,938	4,831
Sugar from molasses (1,000 STRV) 2/	327	324	341	380	352	368	368	368	368
Crop-year sugar production (1,000 STRV) 3/	5,469	4,648	4,667	5,201	4,995	5,338	5,338	5,306	5,199
August-September sugar production (1,000 STRV)	708	315	461	688	606	715	715	621	621
August-September sugar production forecast (1,000 STRV)	315	461	688	606	715	621	621	618	618
Sugar from imported beets (1,000 STRV) 4/	--	--	--	--	--	--	--	40	40
Fiscal year sugar production (1,000 STRV)	5,076	4,794	4,893	5,119	5,103	5,245	5,245	5,343	5,236

Notes: 1/ National Agricultural Statistics Service, U.S. Dept. of Agriculture. 2/Projections based on processor forecasts published by U.S. Dept. of Agriculture, Farm Service Agency. 3/ August-July basis. 4/ Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded. They are incorporated into total production in historical data.

Source: U.S. Dept. of Agriculture, Economic Research Service and World Agricultural Outlook Board.

Sugarbeet production forecasts from NASS are reduced from 35.999 million short tons in September to 35.215 million short tons in October. Area-harvested forecasts increased slightly from September—from 1.096 million acres to 1.099 million. The national yield forecast was reduced, however, from 32.8 to 32.0 short tons per acre—including a 1.9 short ton per acre decrease for the largest sugarbeet-producing State of Minnesota. The current 2018/19 U.S. yield forecast remains higher than the previous year's crop of 31.7 short tons per acre but no longer equals the 2016/17 crop record.

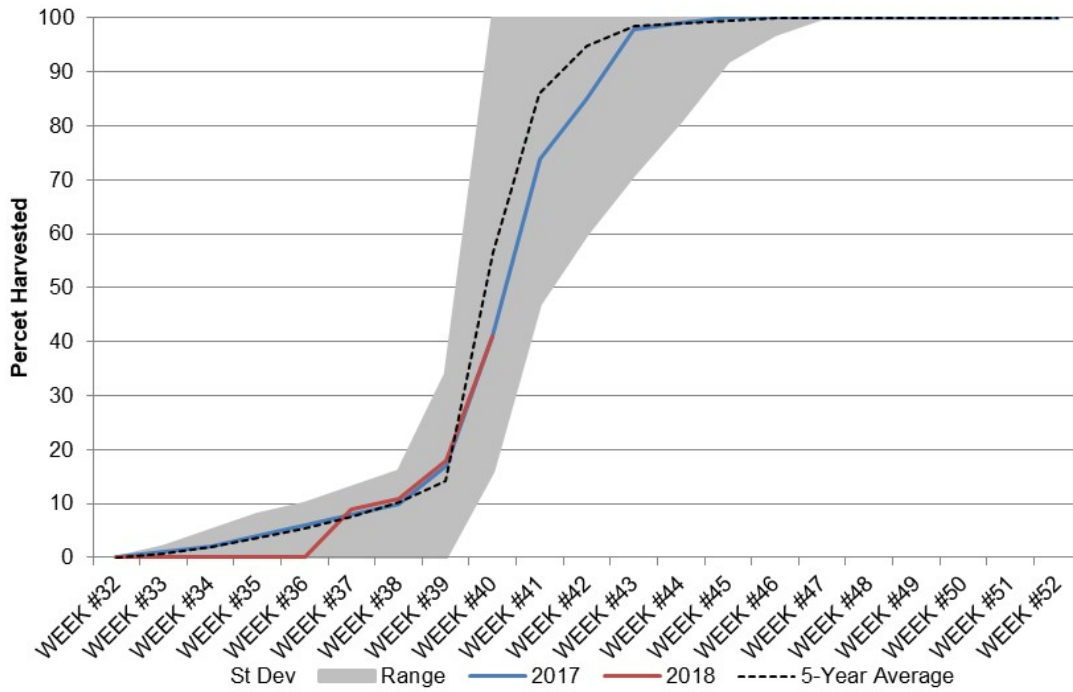
Figure 1  
 Yields, sugarbeets, by region, 2007/08 to 2017/18



Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

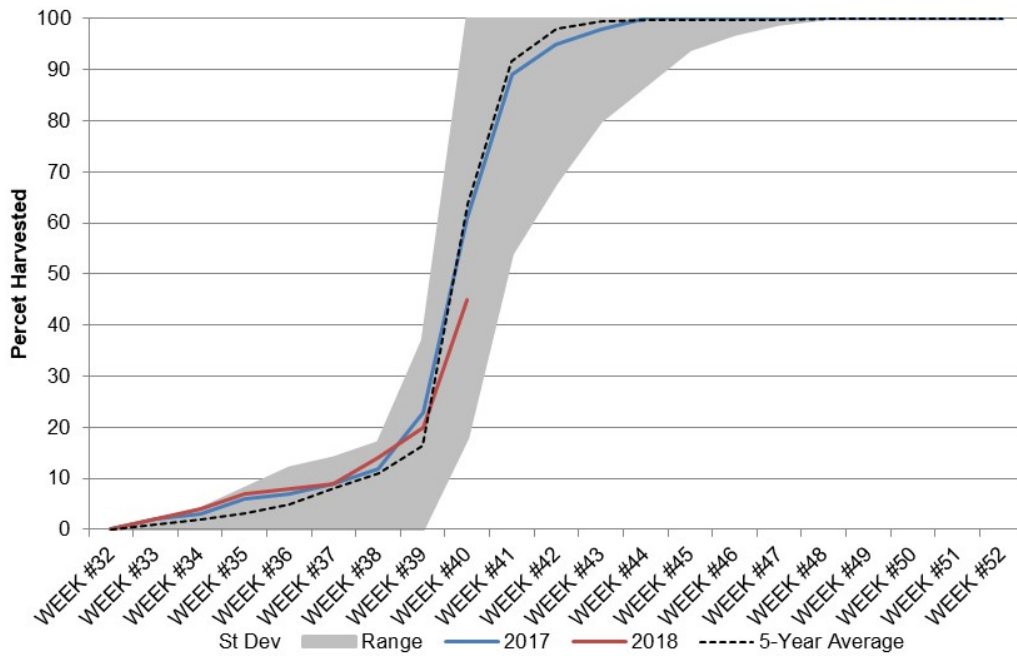
Early-season harvesting—also referred to as the pre-pile production season—completed with the beginning of the 2018/19 fiscal year on October 1. The pace of harvesting has accelerated throughout the country as growers and processors begin to store sugarbeets to be used for the duration of the slicing campaign through the upcoming winter and spring. The harvesting pace of Minnesota and North Dakota was in line with the 5-year average through the early-harvest season—although Minnesota growers appeared to have gotten a late start to the harvest before catching up in recent weeks. The pace in Idaho and Michigan, however, showed an early-season harvest more in line with recent highs—indicating a higher volume of sugarbeets processed in the early season for those regions. If weather conditions cooperate, growers should conclude the majority of their harvest in the coming weeks in October and November. Once the sugarbeets are harvested and piled, cool temperatures should facilitate good storage conditions for the winter slicing campaign.

Figure 2  
**Minnesota sugarbeet harvest progress, 2017, 2018, and 5-year average**



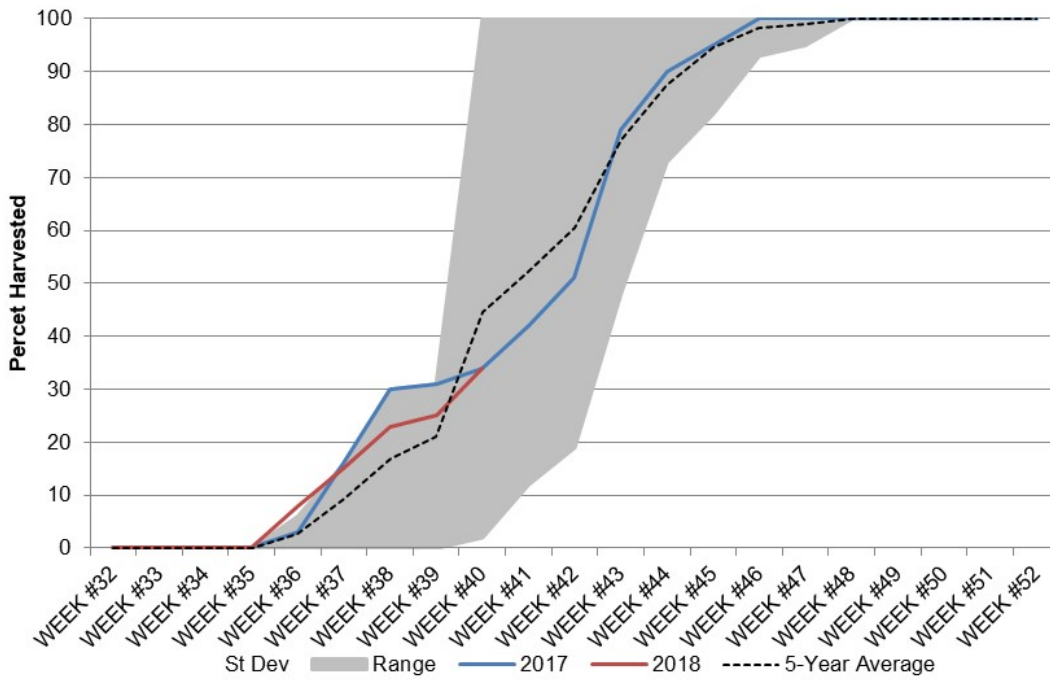
Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

Figure 3  
**North Dakota sugarbeet harvest progress, 2017, 2018, and 5-year average**



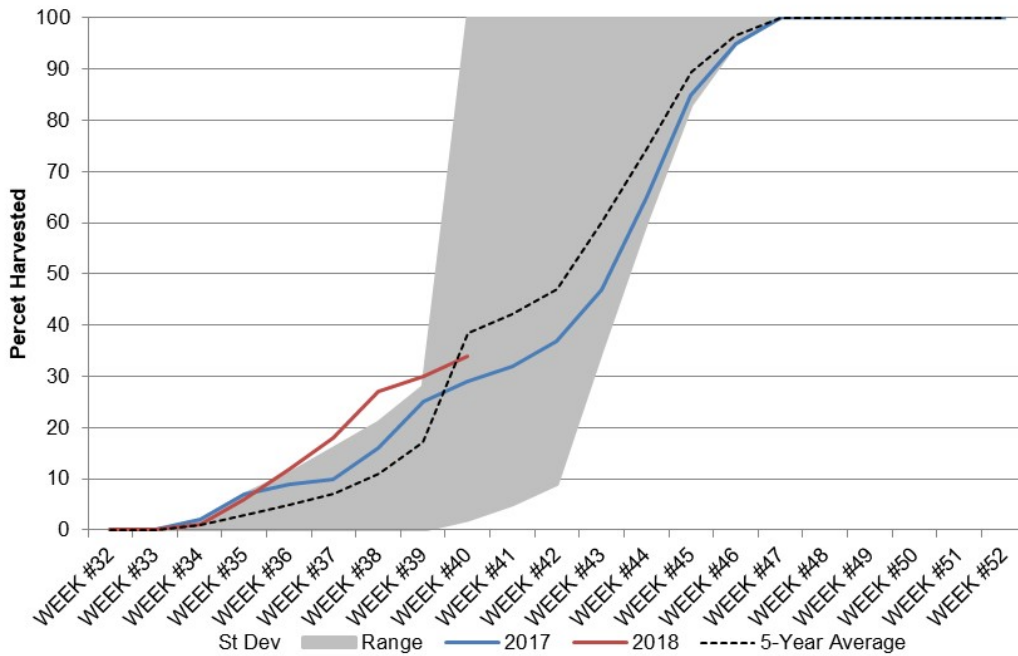
Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

Figure 4  
**Idaho sugarbeet harvest progress, 2017, 2018, and 5-year average**



Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

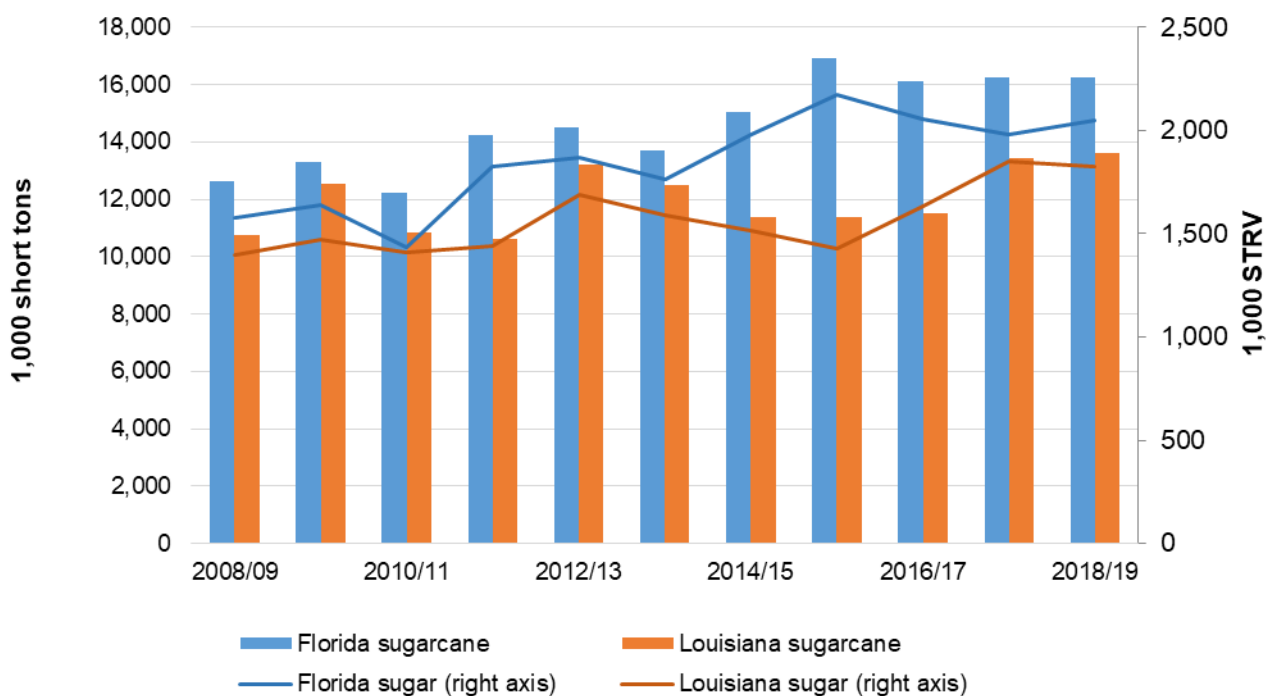
Figure 5  
**Michigan sugarbeet harvest progress, 2017, 2018, and 5-year average**



Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

Higher sugarcane production forecast for 2018/19 is the reason for higher projected production from the domestic cane sector. Cane sugar production is projected to total 4.026 million STRV, a 41,000-STRV increase from the September report. The increase is entirely due to higher production in Louisiana for 2018/19, totaling 1.826 million STRV for 2018/19. Florida cane sugar remains unchanged at 2.050 million STRV, as NASS forecasts made minor, mostly offsetting changes to the 2018/19 Florida sugarcane crop. Florida's sugarcane harvest typically doesn't begin until the month of October.

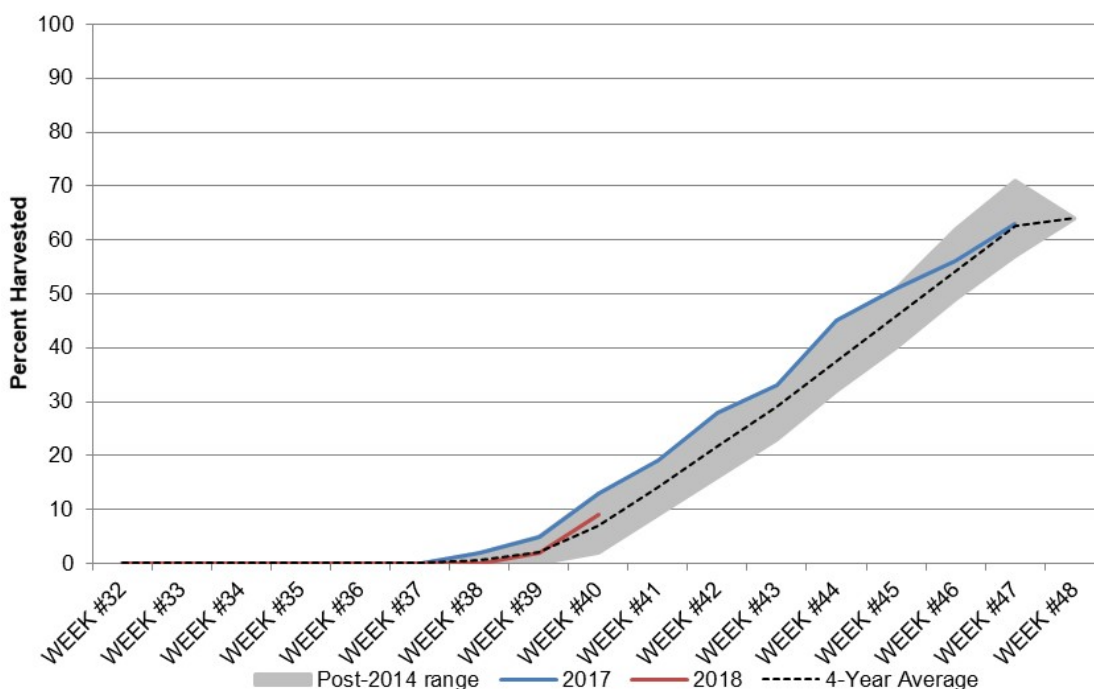
Figure 6  
Sugarcane and Sugar Production, Florida and Louisiana, 2007/08 to 2017/18



Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

The current 2018/19 Louisiana cane sugar projection is just a 1.4-percent decline from the record-setting 2017/18 production figure; which was reduced 7,000 STRV in October to 1.852 million based on lower expected early-season September 2018 production. The reduction in early-season expectations is due to provisional industry reports, which corroborate the slower pace of the cane harvest recorded thus far in the year. If realized, however, these 2 years of production would mark a substantial step up from historical production levels—largely due to the higher harvested area over the past few years, combined with favorable weather and crop management—at least for the duration of the 2017/18 harvest season and thus far into the 2018/19 season and for the immediate outlook.

Figure 7  
**Sugarcane harvest progress, Louisiana 2017, 2018, and 4-year average**



Source: National Agricultural Statistics Service, USDA.

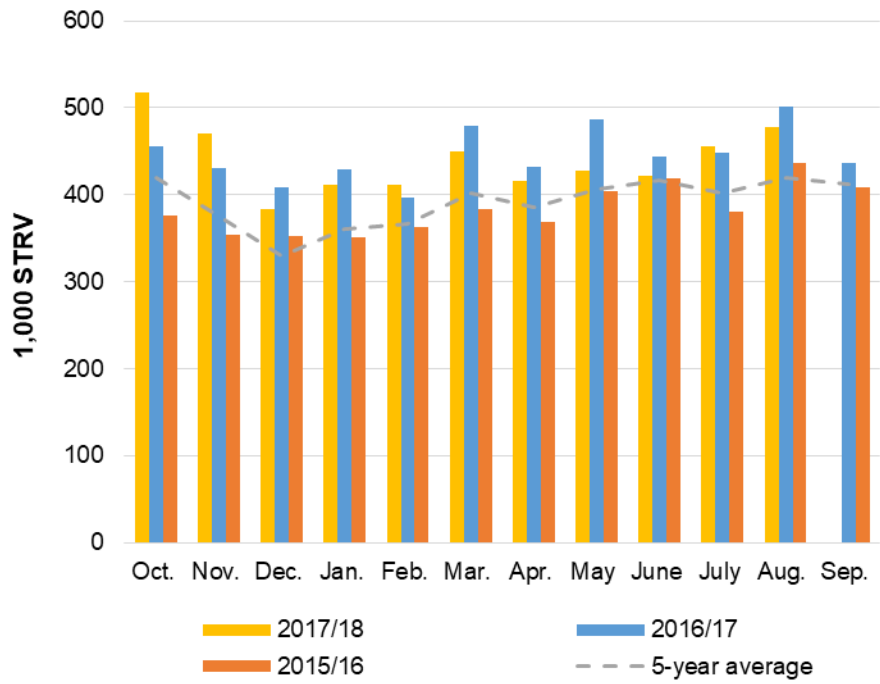
## Deliveries Unchanged from the Previous Month's Projection

Drivers affecting U.S. sugar use have remained relatively steady in recent weeks as the market has transitioned from 2017/18 to 2018/19, leading to little change in the U.S. sugar-use outlook. Total U.S. sugar use in 2018/19 is projected to be 12.425 million STRV, unchanged from the previous month. Food and beverage deliveries are projected to be 12.250 million STRV, also unchanged from the previous month and representing a 1.2-percent increase from the current 2017/18 estimate of 12.100 million STRV.

According to the Farm Service Agency's (FSA) *Sweetener Market Data* (SMD), through August, 2017/18 food and beverage deliveries were 1.0 percent behind the same period in 2016/17. Delivery levels have been generally higher thus far in the July-to-September quarter relative to historical levels and compared with the notably low April-to-June quarter. Deliveries from beet processors through August are 1.4-percent lower than the previous year's record-setting total. The sector is poised to far exceed 5.0 million STRV of fiscal year deliveries for the second consecutive year, with the previous high-water mark at 4.894 million STRV. Deliveries from cane sugar refiners are now 1.4 percent higher than 2017/18 through August, as the sector has seen monthly figures increase year over year for 5 consecutive months.

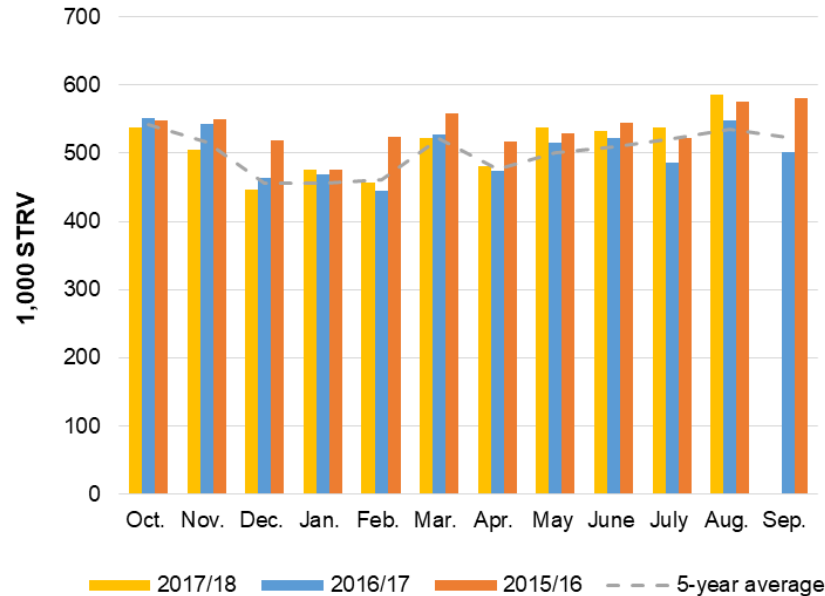


Figure 8  
**Beet sugar deliveries, monthly, 2015/16 through 2017/18**



Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 9  
Cane sugar deliveries, monthly, 2015/16 through 2017/18

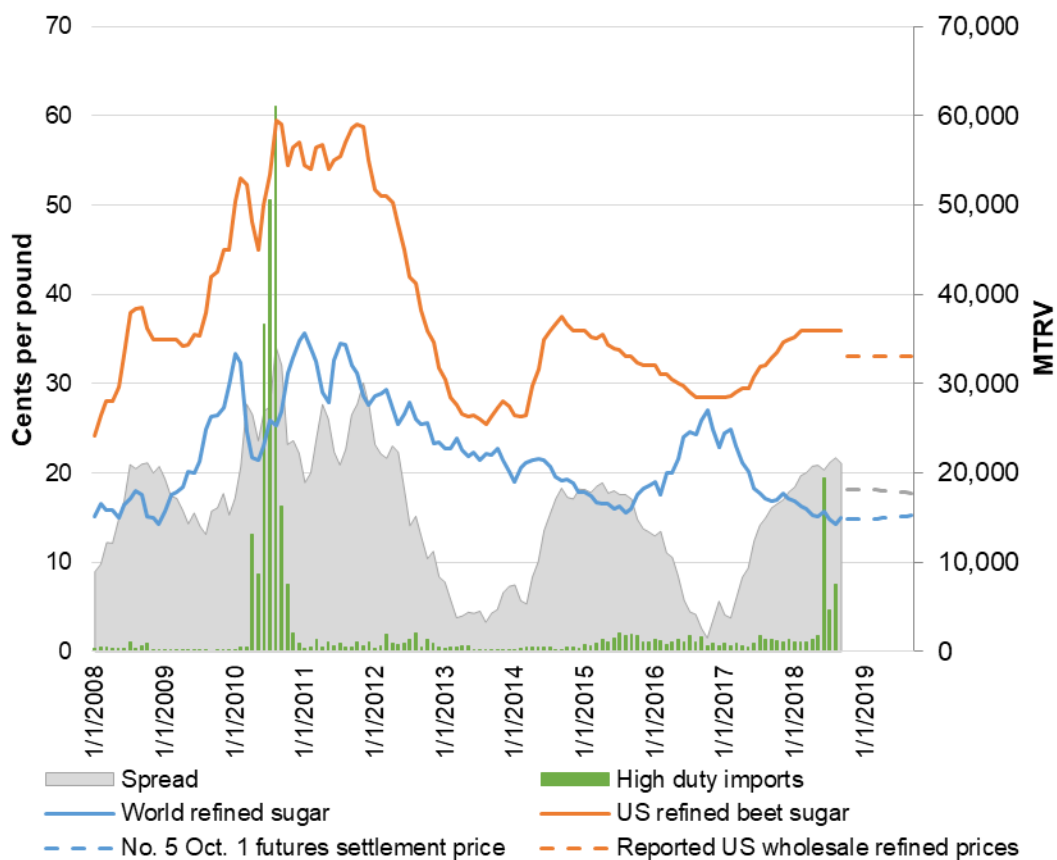


Source: U.S. Department of Agriculture, Farm Service Agency.

## Imports Raised as FTA Shipments Pushed into 2018/19

With the conclusion of 2017/18 on September 30, estimated imports have been lowered 51,000 STRV, totaling 3.315 million STRV. Imports under quota programs are reduced 63,000 STRV, to 1.664 million STRV. Imports under the WTO raw sugar TRQ are reduced 42,000-STRV due to higher shortfall than previously anticipated as the fiscal year quota period ended. Imports under Free Trade Agreements (FTAs)—which are allocated on a calendar-year basis—are also reduced 21,000 STRV, mainly due to lower shipments from the CAFTA/DR, Colombia, and Panama agreements. These reductions are partially offset by a 10,000-STRV increase in high-tier tariffs that incur higher duty rates when entering the United States. Estimated high-duty imports are 55,000 STRV for 2017/18 compared with 12,000 STRV the previous year. The pace of high-duty imports has increased during the latter period of 2017/18, as the high price differential between U.S. and world markets for refined sugar was sustained. Monthly entries are still considerably lower than during 2009/10, which was the last time large amounts of high-duty imports increased substantially, but totals remain higher than the minimum levels that typically enter the market.

Figure 10  
**U.S. and World refined sugar prices, monthly, January 2008 to October 2019**



Source: U.S. Department of Agriculture, Economic Research Service.

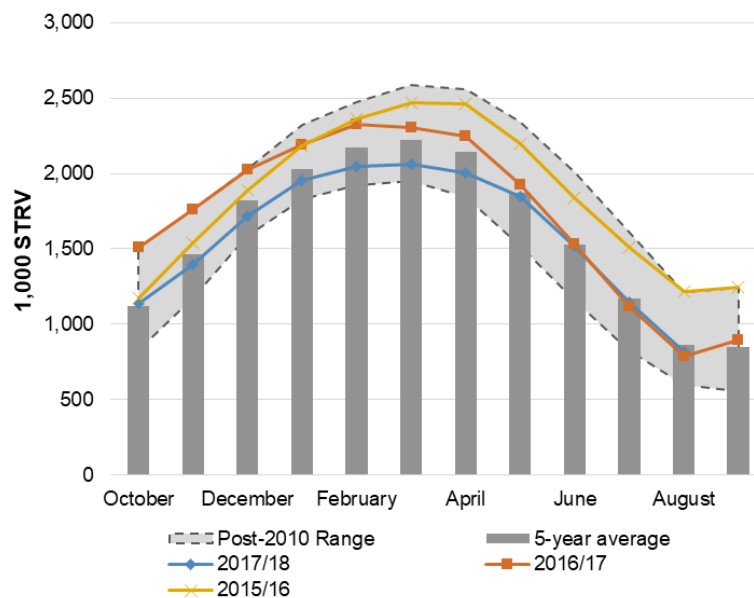
Projected imports for 2018/19 are 18.4 percent lower than the 2017/18 estimates, primarily from fewer projected shipments from Mexico— due to the reduced U.S. Needs as announced by the U.S. Department of Commerce (USDOC) subsequent to the September WASDE release, as specified in the Suspension Agreements between the USDOC and the Government of Mexico. Imports for 2018/19 are projected to total 2.801 million STRV, a 25,000-STRV increase from the previous period. The increase is due to higher imports under quota programs. Specifically, imports under the CAFTA/DR, Colombia, and Panama FTAs, are increased 25,000 STRV, as 2018 shipments not entered during 2017/18 are expected to be pushed into the October-to-December quarter. High-duty import projections are unchanged from the September report, totaling 45,000 STRV, as the conditions that have spurred the higher rate in late 2017/18 are expected to continue at least through the early months of 2018/19.

# Tight Refined, Large Raw Sugar Inventories Reflected In U.S. Sugar-Market Pricing

Ending stocks for 2018/19 are projected to total 1.587 million STRV, with a projected stocks-to-use ratio of 12.7 percent. The reduction in supplies relative to the September reports results in a 100,000-STRV decrease in ending stocks and the reduction of the previous month's stocks-to-use ratio from 13.5 percent. The 2018/19 projection marks a substantially lower level than the estimate for 2017/18 of 2.014 million STRV, which was also reduced this month due to lower supplies. The stocks-to-use ratio for 2017/18 is currently estimated at 16.2 percent.

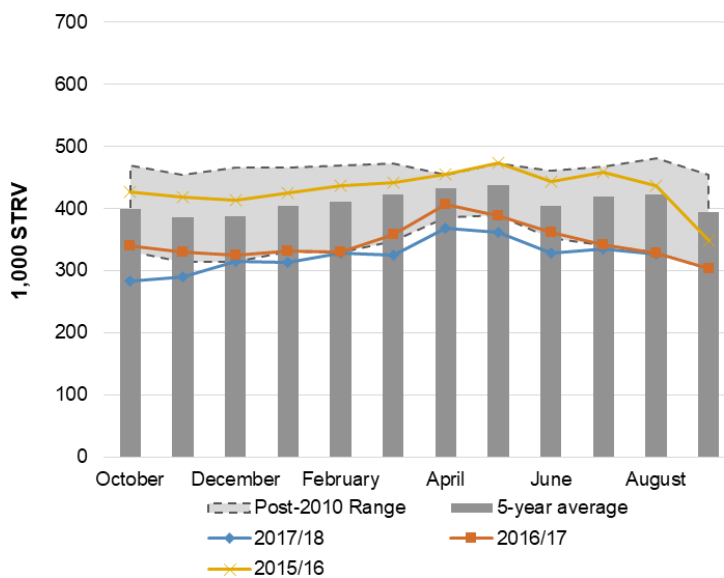
Through August, refined sugar inventories held by beet processors and cane refiners were 2.4 percent higher than the same period last year, totaling 1.140 million STRV. Beet processors held 814,000 STRV of refined sugar in August, or 3.5 percent more than the previous year. Due to early-season production, the sectors' inventories are at their seasonal low in August. The levels of the current year compared to last year indicate that the beet sector has been able to move the year's record-large production to markets.

Figure 11  
**Sugarbeet processors' total sugar inventories, monthly, 2015/16 to 2017/18**



Source: U.S. Department of Agriculture, Farm Service Agency.

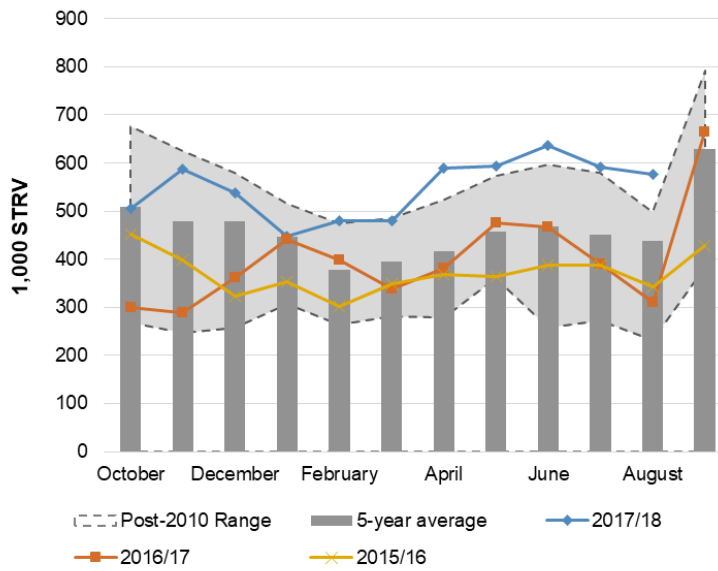
Figure 12  
Sugarcane refiners' refined sugar inventories, monthly, 2010/11 to 2017/18



Source: U.S. Department of Agriculture, Farm Service Agency.

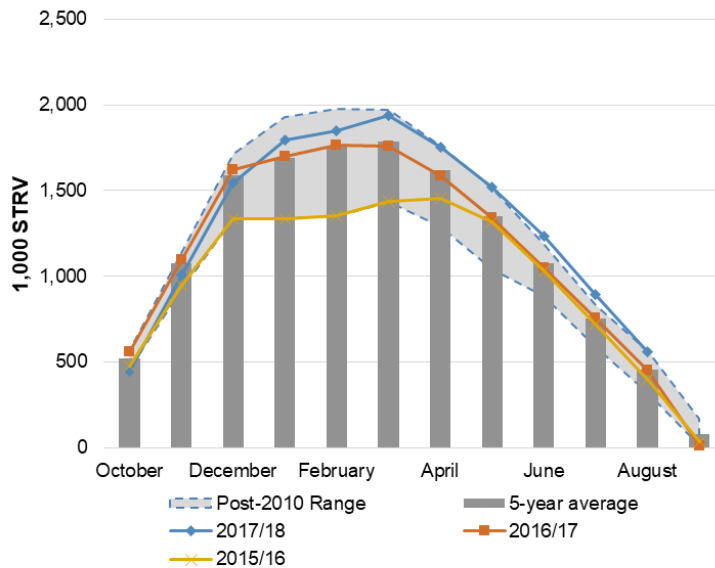
Refined sugar inventories for cane refiners were down a slight 0.4-percent over the previous year at 327,000 STRV. The cane sector does not have the same seasonal patterns as the beet sector, but refined sugar inventory levels in the sector have remained very low by recent historical standards. Conversely, raw sugar supplies with refiners have remained relatively large; large domestic sugar production in Louisiana in 2017/18 has resulted in sugarcane processors also carrying large raw sugar supplies—14.6-percent above the 2016/17 relatively low levels and 1.0 percent higher than the 5-year average.

Figure 13  
**Sugarcane refiners raw sugar inventories, monthly, 2010/11 to 2017/18**



Source: U.S. Department of Agriculture, Farm Service Agency.

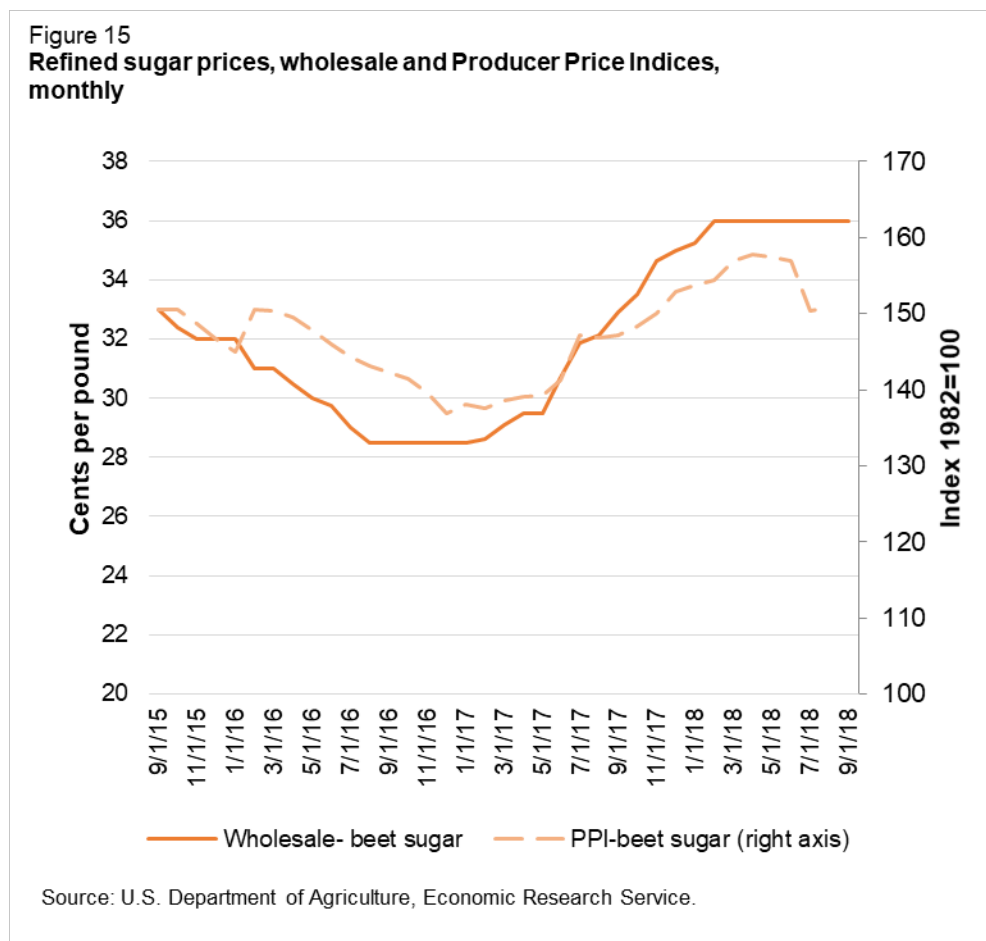
Figure 14  
**Sugarcane processors inventories, monthly, 2010/11 to 2017/18**



Source: U.S. Department of Agriculture, Farm Service Agency.

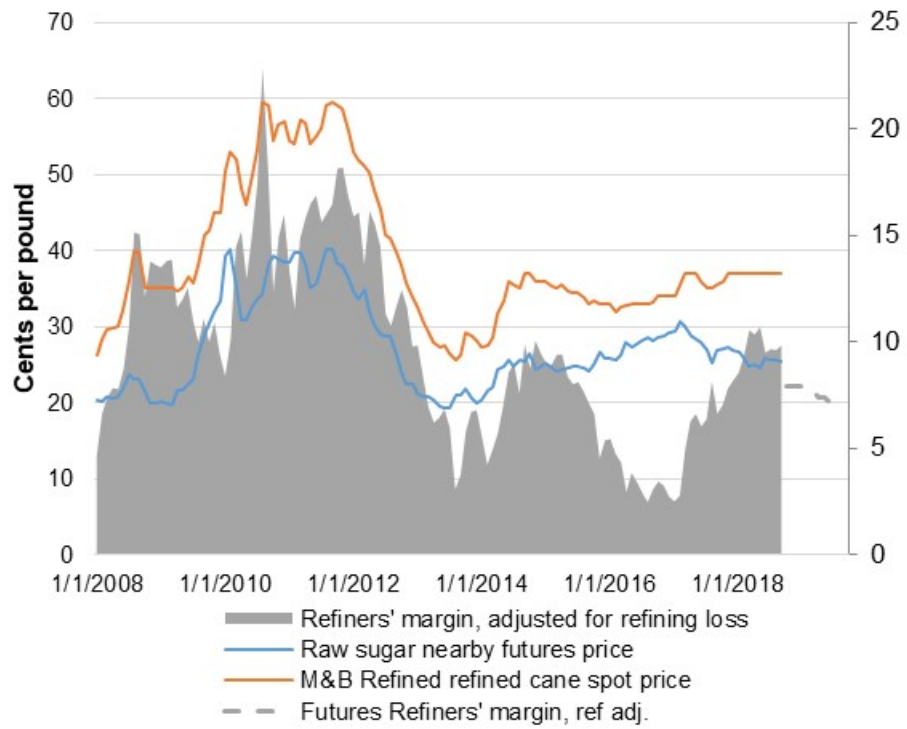
The structure of the U.S. market's inventories is likely a key influence in the current pricing structure. Wholesale refined beet sugar spot prices have been at 33.0 cents per pound the first

few weeks of 2018/19. This is lower than the corresponding price of 36.0 cents per pound at the end of 2017/18—for the “old crop” production- but still strong by historical standards. Beet sugar prices made a strong recovery during 2017/18, averaging 35.53 cents per pound—or 19.0 percent higher than the 2016/17 average of 29.86 cents. An alternative price indicator, the Bureau of Labor Statistics (BLS) PPI for beet sugar, mirrored the spot price’s recovery, although it showed a marked drop in July and August 2018 (the last 2 reported months). The index’s sudden decline could be a prelude to lower pricing expected for 2018/19 or could also be in response to the increase in high-duty imports that coincided during these months. Overall, whole refined sugar prices are expected to be lower than 2017/18 levels but still firm by recent historical standards.



Average U.S. raw sugar futures prices during 2017/18 fell 8.8 percent relative to the previous year, as tight raw sugar supplies during 2016/18 were alleviated by increased imports and strong domestic cane sugar production during 2017/18. Falling raw sugar prices and firm refined sugar prices would have the impact of improving refining margins, which are expected to remain at comparable levels based on recent futures and reported contract prices.

Figure 16  
**U.S. refiner margins, monthly, January 2008 to September 2019**



Source: U.S. Department of Agriculture, Economic Research Service.



# Mexico Outlook

## Larger Carryover from 2017/18 to 2018/19 To Be Facilitated as Early-Season Exports

The Mexico market outlook is changed only with regards to trade in October relative to the September WASDE. Production for 2018/19 is projected to be 6.025 million metric tons, actual value (MT), although Mexico's Conadesuca had not released any official estimates for the 2018/19 crop at the time of the October WASDE release. This would represent a 0.3-percent increase from the 2017/18 estimates.

**Table 3: Mexico sugar supply and use, 2016/17 - 2017/18 and projected 2018/19, September 2018**

Items	2016/17	2017/18 (estimate)	2018/19 (forecast)
	1,000 metric tons, actual weight		
Beginning stocks	1,037	1,002	1,268
Production	5,957	6,010	6,025
Imports	93	190	115
Imports for consumption	48	140	65
Imports for sugar-containing product exports, IMMEX 1/, other	45	50	50
Total supply	7,087	7,202	7,408
Disappearance			
Human consumption	4,515	4,337	4,562
For sugar-containing product exports (IMMEX)	397	390	390
Other deliveries and end-of-year statistical adjustment	-61	0	0
Total	4,851	4,727	4,952
Exports	1,234	1,207	995
Exports to the United States & Puerto Rico	1,028	1,086	721
Exports to other countries	205	121	274
Total use	6,085	5,934	5,947
Ending stocks	1,002	1,268	1,461
	1,000 metric tons, raw value		
Beginning stocks	1,099	1,062	1,344
Production	6,315	6,370	6,387
Imports	98	201	122
Imports for consumption	51	148	69
Imports for sugar-containing product exports (IMMEX)	47	53	53
Total supply	7,512	7,634	7,852
Disappearance			
Human consumption	4,786	4,597	4,835
For sugar-containing product exports (IMMEX)	420	413	413
Other deliveries and end-of-year statistical adjustment	-64	0	0
Total	5,142	5,010	5,249
Exports	1,308	1,280	1,055
Exports to the United States & Puerto Rico	1,090	1,152	764
Exports to other countries	218	128	291
Total use	6,450	6,290	6,303
Ending stocks	1,062	1,344	1,549
Stocks-to-human consumption (percent)	22.2	29.2	32.0
Stocks-to-use (percent)	16.5	21.4	24.6
High fructose corn syrup (HFCS) consumption (dry weight)	1,522	1,608	1,608

1/ IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

Source: USDA, *World Agricultural Supply and Demand Estimates* and Economic Research Service, Sugar and Sweeteners Outlook; Conadesuca.

Domestic deliveries are also unchanged from the previous month's projections, at 4.952 million MT. This would represent a 4.8-percent increase from the current 2017/18 estimates of 4.726 million MT. Deliveries for human consumption in 2017/18 are estimated to decline 4.0 percent from the previous year. Projections for 2018/19 are predicated on per capita sweetener deliveries returning to historical levels rather than the lower levels estimated for 2018/19. Whether 2017/18 is a reflection point for a new pattern of deliveries or a statistical outlier driven by a high rate of price increases during the period will only be determined with additional reporting.

Exports to the United States are unchanged from the previous month, set predominantly by the terms of the Suspension Agreements between the USDOC and Government of Mexico. Shipments to the United States are estimated to be 1.086 million MT for 2017/18 and 721,000 MT for 2018/19—both forecasts assuming Mexico meets its full expected Export Limit volumes.

Exports to other countries are adjusted for both 2017/18 and 2018/19, primarily due to the developments in Mexico's FIMAE program. The program, initiated in August 2018, allows processors to convert supplies into credits for export under a trust, which must be shipped outside of Mexico by the end of the 2018 calendar year—and thus before the 2018/19 harvest season reaches its peak production. These transactions will be incorporated into the sugarcane grower payments for 2017/18, in compliance with Conadesuca policies.

Exports to non-U.S. destinations are projected to be 360,000 MT, including the 350,000 MT that Conadesuca has recognized as being put into the FIMAE program. This is an 86,000-MT increase from the previous month's report due to the updated participation information published by Conadesuca. Exports to non-U.S. destinations for 2017/18 are estimated to be 61,000 MT, a 60,000-MT reduction from the September estimate, based on reported shipments from Conadesuca through the last week of September. These adjustments reflect that the Mexico sugar sector is expected to effectively carry more supplies in inventory into the new fiscal year and export them in early 2018/19.

Ending stocks for 2017/18 are projected to be 1.328 million MT, a 60,000-MT increase reflecting lower estimated exports. Ending stocks for 2018/19 are projected to be 1.435 million MT, a 26,000-MT increase from the September projection. The stocks-to-consumption ratio is forecast to be 30.7 percent in 2017/18 and 31.5 percent in 2018/19. This reflects that, even with the actions of FIMAE, supplies generated in 2018/19 will lead to relatively large inventories, given the current usage forecasts.

## Suggested Citation

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