



Soybean Oil and Biodiesel Usage Projections & Balance Sheet

Updated 12/21/2015

Year: (production/marketing)^{1/}
Oil Yield, lbs./ bu. of soybeans^{2/}

Mil. Harvested Acres of U.S. Soybeans
U.S. Soybean Production, mil. bu.
U.S. Soybean Yield, per acre
U.S. Domestic Soybean Crush

SB Oil Supplies (Mil. Lbs.):

Production
Beginning carryover
Imports

Total Supply

Usage (Mil. Lbs.):

Margarine^{3/}
Salad & cooking oils
Baking, frying fats & oils^{3/}
Other food & industrial^{3/}
Total food & non-biodiesel industria
Soy oil used for biodiesel (methyl ester)^{3/}
Non-soy biodiesel^{3/}
Total domestic soy oil use
Exports

Total Usage

Soybean oil use, % of 2007 biodiesel mandates

Biodiesel Usage:

Use for biodiesel, bushel equivalent
Mil. acres used for biodiesel
% of U.S. soybean acres used for biodiesel
Soybean oil for biodiesel:
% of oil from crop
% of oil from crush
% of domestic food & non-biodiesel use
% of soy oil exports

Soy + non-soy oil for biodiesel, % of mandates & increased biodiesel mandate^{5/}

Ending Carryover: (mil. lbs.)
Carryover as percent of supply
Carryover as percent of use
Weeks of use in carryover stocks

Prices:

Soy oil, \$ per cwt., marketing year avg.

	Historic			Est. 2014-15	Prelim. 2015-16	Proj. 2016-17		
	2011-12	2012-13	2013-14			Low	Med.	High
Oil Yield, lbs./ bu. of soybeans ^{2/}	11.6	11.7	11.7	11.4	11.5	11.6	11.6	11.6
Mil. Harvested Acres of U.S. Soybeans	73.8	76.1	76.3	82.6	82.4	82.8	82.8	82.8
U.S. Soybean Production, mil. bu.	3,094	3,042	3,358	3,927	3,981	3,643	3,933	4,016
U.S. Soybean Yield, per acre	41.9	40.0	44.0	47.5	48.3	44.0	47.5	48.5
U.S. Domestic Soybean Crush	1,703	1,689	1,734	1,873	1,915	1,915	1,925	1,935
SB Oil Supplies (Mil. Lbs.):								
Production	19,740	19,820	20,130	21,399	22,023	22,214	22,330	22,446
Beginning carryover	2,425	2,540	1,655	1,165	1,165	1,763	1,763	1,763
Imports	149	196	165	264	225	175	175	175
Total Supply	22,314	22,556	21,950	22,828	23,413	24,152	24,268	24,384
Usage (Mil. Lbs.):								
Margarine ^{3/}	740					No Longer Available		
Salad & cooking oils	9,090							
Baking, frying fats & oils ^{3/}	3,570							
Other food & industrial ^{3/}	669							
Total food & non-biodiesel industria	14,069	13,998	13,998	13,998	14,150	14,350	14,350	14,350
Soy oil used for biodiesel (methyl ester)^{3/}	4,689	4,689	5,010	5,037	5,500	5,800	5,850	5,875
Non-soy biodiesel ^{3/}	3,392	3,800	3,800	3,800	4,500	4,600	4,600	4,600
Total domestic soy oil use	18,310	18,687	18,908	18,994	19,450	19,850	19,850	19,850
Exports	1,464	2,164	1,877	2,014	2,200	2,300	2,300	2,300
Total Usage	19,774	20,852	20,785	21,008	21,650	22,150	22,150	22,150
Soybean oil use, % of 2007 biodiesel mandates	63.6%	62.5%	66.8%	48.8%	40.7%	43.0%	43.3%	43.5%
Biodiesel Usage:								
Use for biodiesel, bushel equivalent	404	403	430	441	478	500	504	506
Mil. acres used for biodiesel	9.64	10.07	9.77	9.27	9.90	11.36	10.62	10.44
% of U.S. soybean acres used for biodiesel	13.1%	13.2%	12.8%	11.2%	12.0%	13.7%	12.8%	12.6%
Soybean oil for biodiesel:								
% of oil from crop	13.1%	13.2%	12.8%	11.2%	12.0%	13.7%	12.8%	12.6%
% of oil from crush	23.8%	23.7%	24.9%	23.5%	25.0%	26.1%	26.2%	26.2%
% of domestic food & non-biodiesel use	33.3%	33.5%	35.8%	36.0%	38.9%	40.4%	40.8%	40.9%
% of soy oil exports	320.3%	216.7%	266.9%	250.1%	250.0%	252.2%	254.3%	255.4%
Soy + non-soy oil for biodiesel, % of mandates & increased biodiesel mandate^{5/}	110%	113%	117%	86%	74%	70%	71%	71%
Ending Carryover: (mil. lbs.)	2,540	1,704	1,165	1,820	1,763	2,002	2,118	2,234
Carryover as percent of supply	11.4%	7.6%	5.3%	8.0%	7.5%	8.3%	8.7%	9.2%
Carryover as percent of use	12.8%	8.2%	5.6%	8.7%	8.1%	9.0%	9.6%	10.1%
Weeks of use in carryover stocks	6.7	4.2	2.9	4.5	4.2	4.7	5.0	5.2
Prices:								
Soy oil, \$ per cwt., marketing year avg.	\$51.90	\$47.13	\$38.23	\$31.60	\$29.00	\$30.00	\$29.75	\$29.25

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Notes:

Attention: with Census halt of oilseed crushing data, USDA stopped publishing domestic soy oil use by individual food types. Data here for are rough approximations to show general impacts of increased biodiesel use & reduced soybean crushings.

^{1/} Marketing year starts at October 1 of the production year and ends September 30 of the following year, one month later than the soybean marketing year.

^{2/} Oil yield for medium-yield soybean crop in 2013-14 is near the 2001-06 average. Actual oil yield varies with weather.

^{3/} Estimated for 2008-11. Published data are not available after 2007-08. Other industrial includes possible statistical errors.

^{4/} Soy and non-soy biodiesel are estimated from U.S. Department of Energy, Energy Information Administration monthly data for 2006-07 through 2011-12. Data for later years are not available for some non-soy feedstocks. Soybean oil use for biodiesel is available at:
<http://www.eia.gov/totalenergy/data/monthly/index.cfm#renewable>

^{5/} Reflects only Biodiesel Mandate. Does not reflect biodiesel contributions to additional advanced biofuel mandates.

Key Balance Sheet Assumptions:

1. No changes in Conservation Reserve Program.
2. Crude oil (petroleum) price for the next 18 months is in the \$45-\$60/barrel range.
3. U.S. Ethanol & biodiesel mandates are enforced as established by EPA.
4. U.S. & World economies accelerate slightly in 2015 and 2016.
5. U.S. dollar remains strong relative to foreign currencies through 2016.

Data Sources:

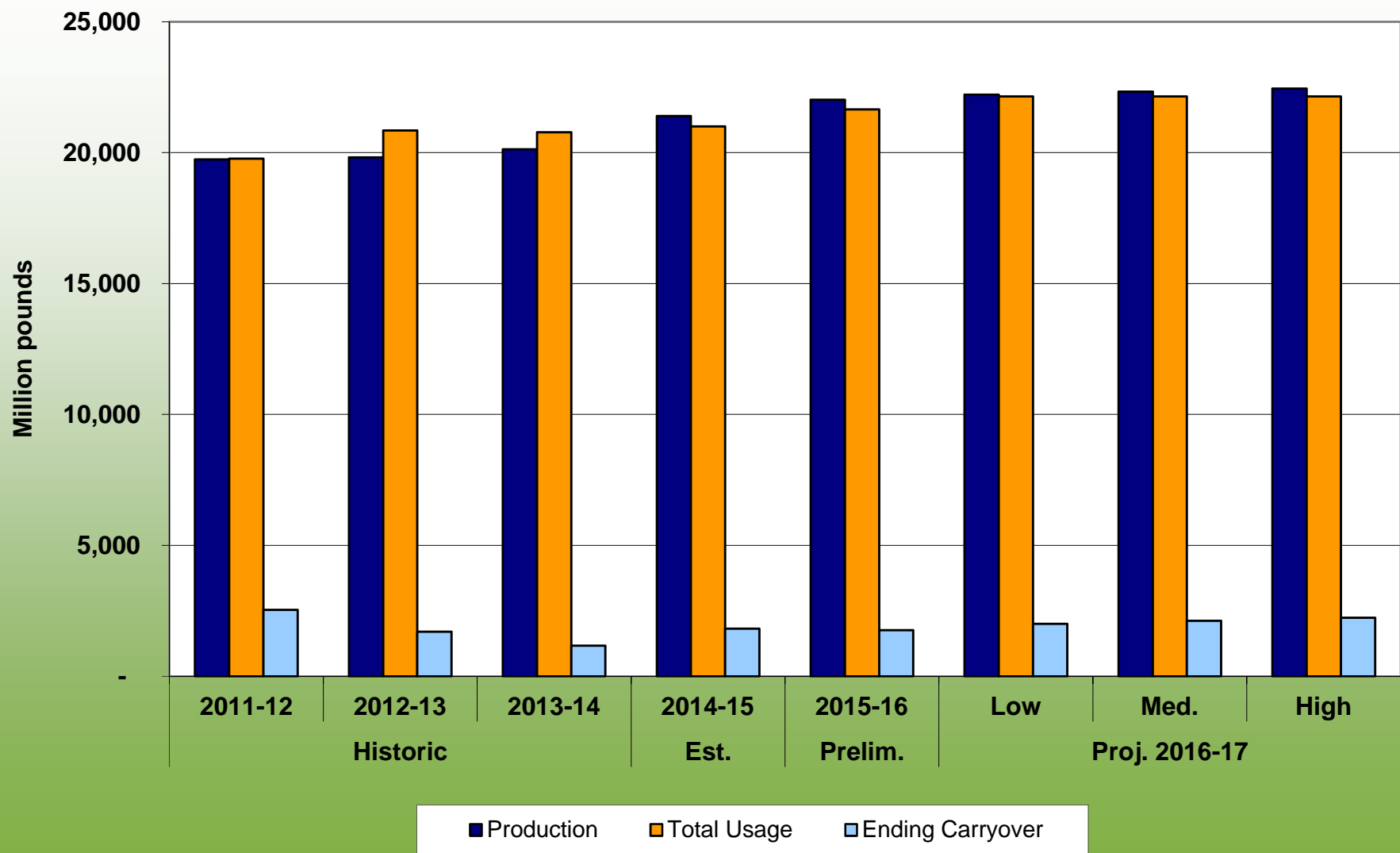
USDA, Economic Research Service, *Oil Crops Yearbook: Data Set* that is available at <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1290>
U.S. Census Bureau, *Census of Manufacturing*: http://www.census.gov/manufacturing/cir/historical_data/m311k/index.html
and the *World Agriculture Supply Demand Reports* that are available at <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1194>
<http://www.eia.gov/totalenergy/data/monthly/index.cfm#renewable>
Projections are by Wisner

... and justice for all

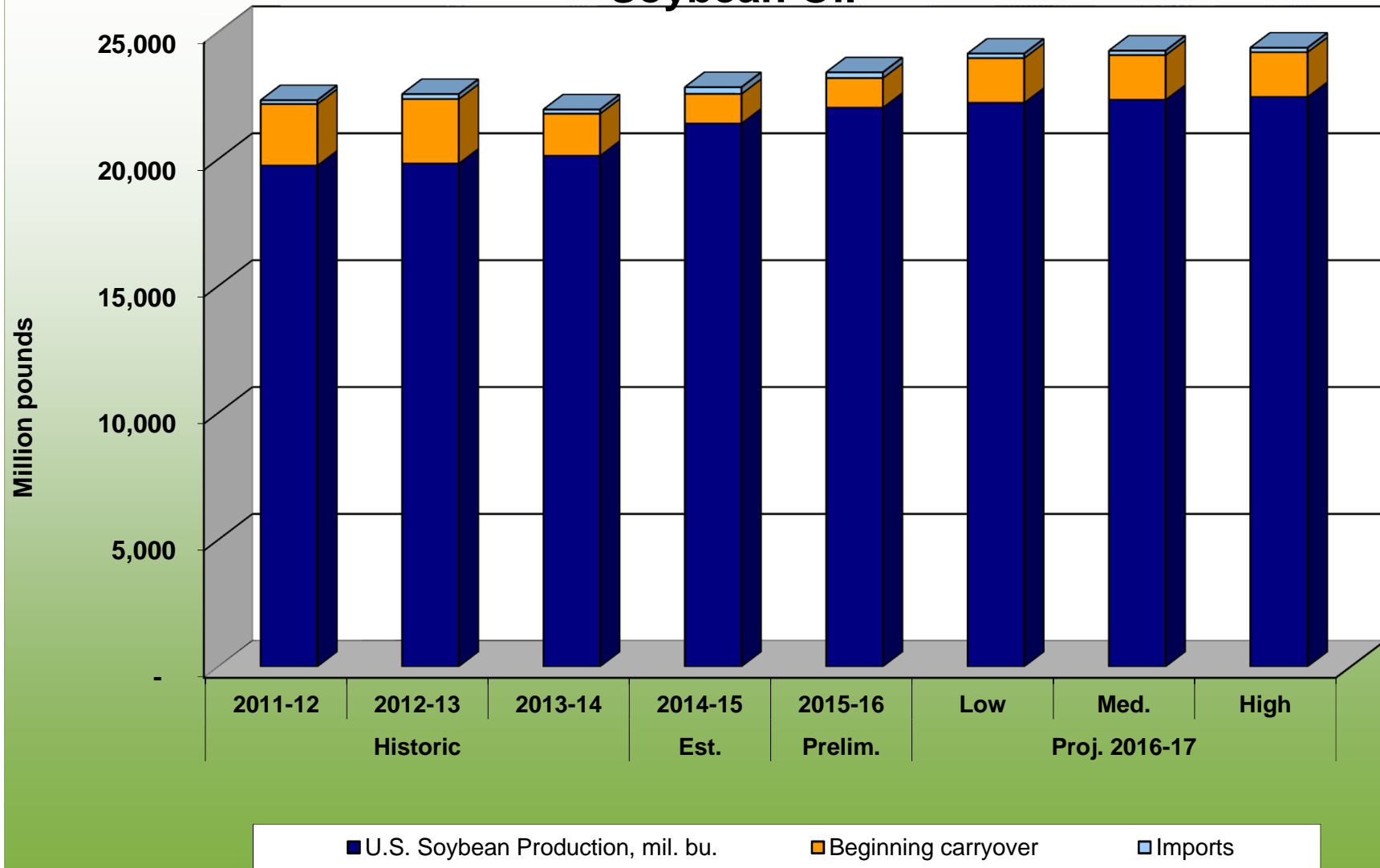
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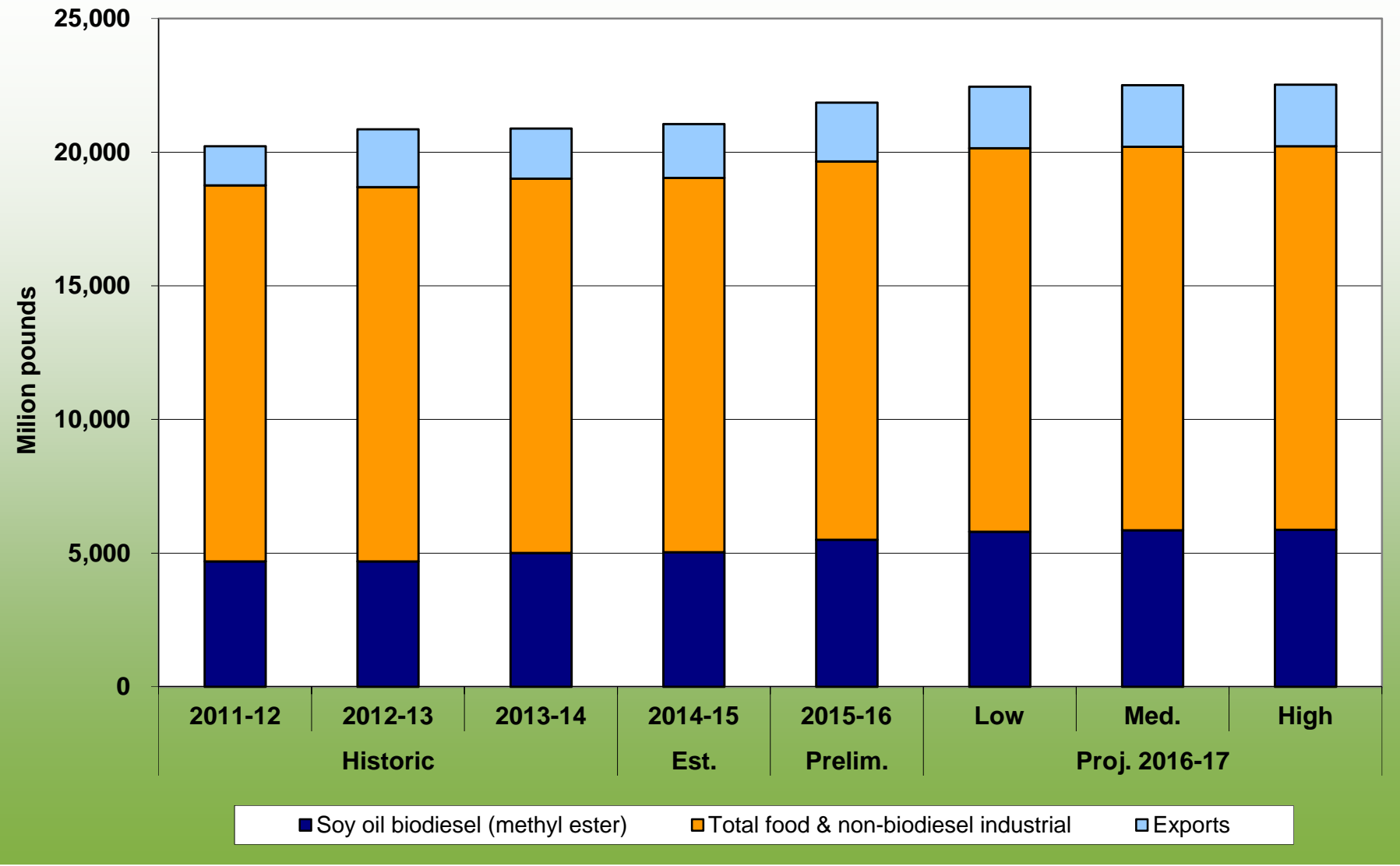
Soybean Oil Production, Usage, and Carryover



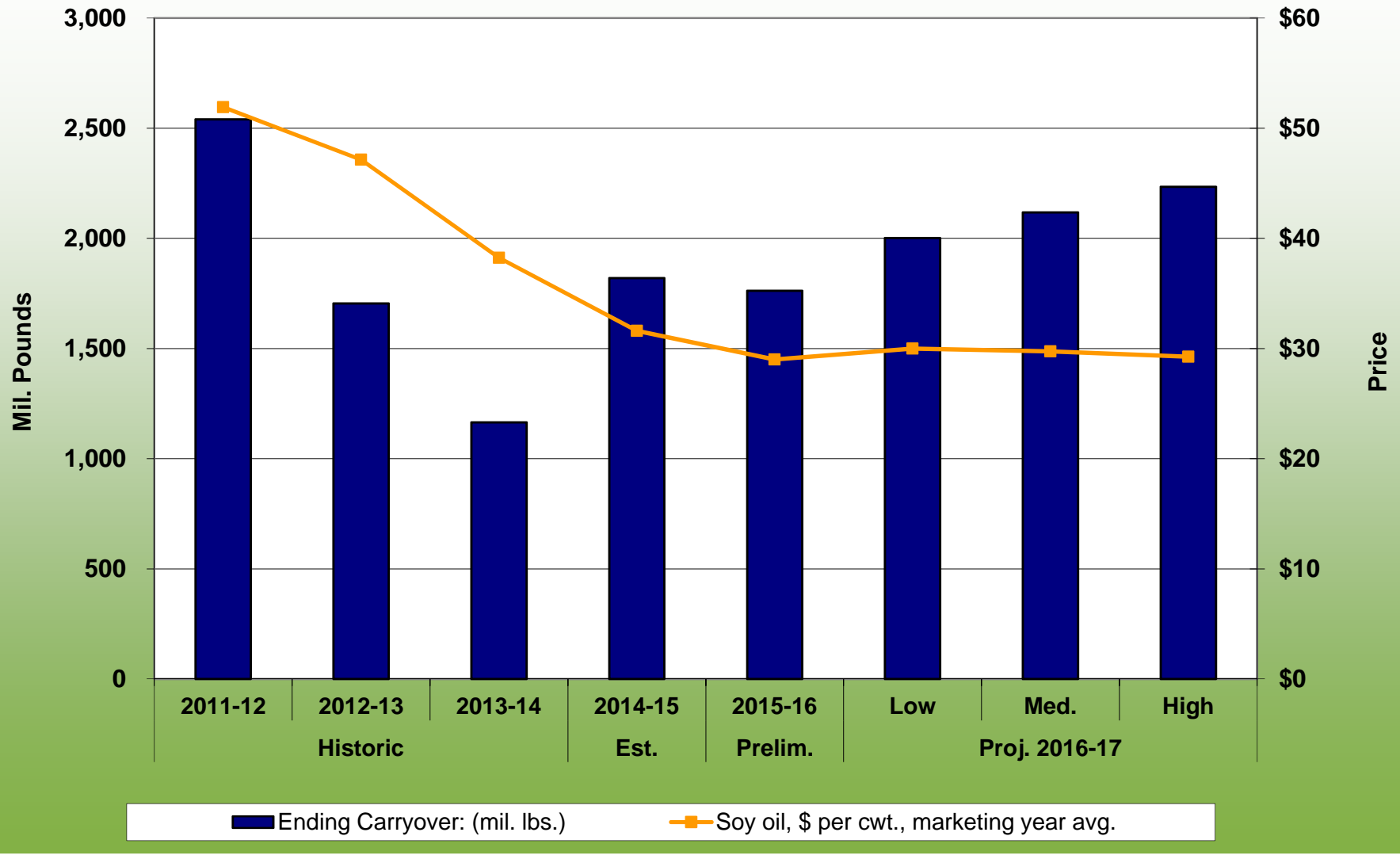
Yearly Production and Beginning Carryover for Soybean Oil



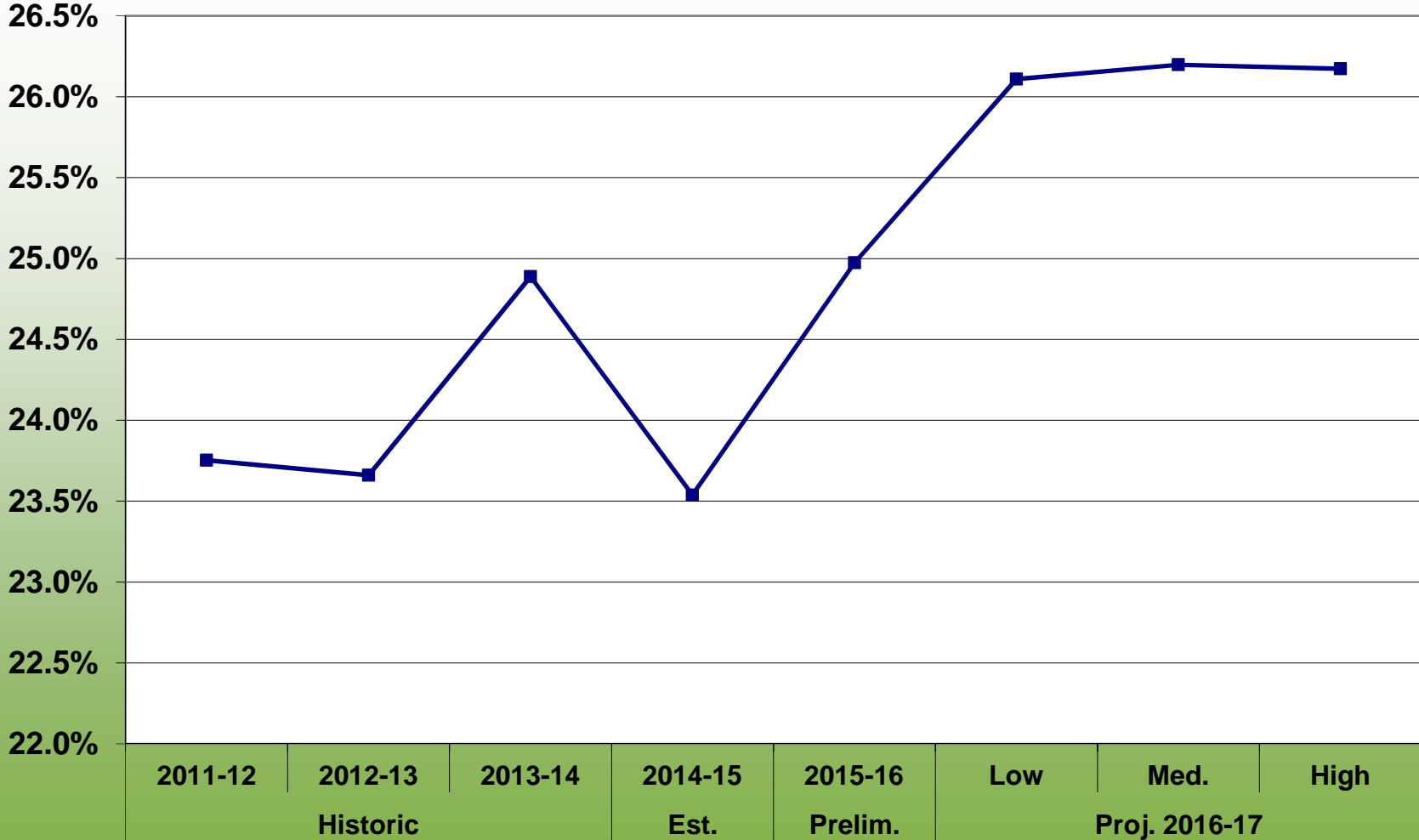
Usage of Soybean Oil and Biodiesel



Ending Soybean Oil Carryover and Price



Soybean Oil for Biodiesel, Percent of Crush



Mil. Lbs. Soybean Oil Requirements for Biodiesel in the December 2007 U.S. Energy Bill with 50% of Biodiesel Feedstock from Soy Oil

■ Mil. Lbs. SBO Equivalent
■ Mil. Bu. Equivalent

Mandates begin in 2010. The 2006-07 to 2008-09 bars are actual production. 2009-10 increases sharply because 2009 and 2010 mandates were combined. 2013 mandate is above biodiesel mandate in 2007 Energy Act. 2014 & later are Energy Act Mandates but may be increased by EPA.

