



Soybean Oil and Biodiesel Usage Projections & Balance Sheet

Updated: 1/16/2012

	Historic			Prelim.	Proj.	Projected 2012-2013		
	2007-08	2008-09	2009-10	2010-11	2011-12	Low	Med.	High
Year: (production/marketing) ^{1/}								
Oil Yield, lbs./ bu. of soybeans ^{2/}	11.5	11.3	11.2	11.6	11.5	11.2	11.4	11.5
Mil. Harvested Acres of U.S. Soybeans	64.1	74.7	76.4	76.6	73.6	76.4	76.7	76.7
U.S. Soybean Production, mil. bu.	2,676	2,967	3,359	3,329	3,056	3,132	3,336	3,490
U.S. Soybean Yield, per acre	41.7	39.7	44.0	43.5	41.5	41.0	43.5	45.5
U.S. Domestic Soybean Crush	1,803	1,662	1,752	1,648	1,615	1,600	1,650	1,675
SB Oil Supplies (Mil. Lbs.):								
Production	20,580	18,745	19,615	18,888	18,492	17,920	18,810	19,263
Beginning carryover	3,085	2,485	2,861	3,406	2,425	2,202	2,202	2,202
Imports	65	90	103	159	185	210	190	190
Total Supply	23,730	21,320	22,578	22,453	21,102	20,332	21,202	21,654
Usage (Mil. Lbs.):								
Margarine ^{3/}	902	770	760	775	770	700	715	715
Salad & cooking oils	9,612	10,321	9,339	9,330	9,270	8,950	9,100	9,100
Baking, frying fats & oils ^{3/}	5,271	4,445	3,883	3,885	3,925	3,800	3,820	3,850
Other food & industrial ^{3/}	(694)	(1,292)	151	239	135	150	200	220
Total food & non-biodiesel industria	15,091	14,244	14,134	14,229	14,100	13,600	13,835	13,885
Soy oil biodiesel (methyl ester)	3,245	2,021	1,680	2,550	3,600	3,650	3,800	3,850
Non-soy biodiesel ^{4/}	503	2,166	3,654	4,716	4,410	5,350	5,200	5,150
Total domestic soy oil use	18,335	16,265	15,814	16,779	17,700	17,250	17,635	17,735
Exports	2,911	2,193	3,359	3,233	1,200	1,150	1,200	1,200
Total Usage	21,246	18,458	19,173	20,012	18,900	18,400	18,835	18,935
Soybean oil use, % of biodiesel mandate:	Not Applicable		23.9%	37.1%	44.9%	40.6%	42.2%	42.8%
Biodiesel Usage:								
Use for biodiesel, bushel equivalent	281	179	150	221	314	326	333	335
Mil. acres used for biodiesel	6.74	4.51	3.42	5.08	7.58	7.95	7.66	7.36
% of U.S. soybean acres used for biodiesel	10.5%	6.0%	4.5%	6.6%	10.3%	10.4%	10.0%	9.6%
Soybean oil for biodiesel:								
% of oil from crop	10.5%	6.0%	4.5%	6.6%	10.3%	10.4%	10.0%	9.6%
% of oil from crush	15.8%	10.8%	8.6%	13.5%	19.5%	20.4%	20.2%	20.0%
% of domestic food & non-biodiesel use	21.5%	14.2%	11.9%	17.9%	25.5%	26.8%	27.5%	27.7%
% of soy oil exports	111.5%	92.2%	50.0%	78.9%	300.0%	317.4%	316.7%	320.8%
Soy + non-soy oil for biodiesel, % of mandates		88%	93%	104%	106%	100%	100%	100%
Ending Carryover: (mil. lbs.)	2,485	2,861	3,406	2,425	2,202	1,932	2,367	2,719
Carryover as percent of supply	10.5%	13.4%	15.1%	10.8%	10.4%	9.5%	11.2%	12.6%
Carryover as percent of use	11.7%	15.5%	17.8%	12.1%	11.6%	10.5%	12.6%	14.4%
Weeks of use in carryover stocks	6.1	8.1	9.2	6.3	6.1	5.5	6.5	7.5
Prices:								
Soy oil, \$ per cwt., marketing year avg.	\$52.03	\$32.16	\$35.95	\$53.20	\$4.00	\$6.00	\$5.00	\$4.00

By Dr. Robert Wisner, biofuels economist, 1-515-294-4275, rwwisner@iastate.edu

Notes:

- ^{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 2011-12 is near the 2001-06 average, with a slight increase for assumed good crop growing conditions. Actual oil yield varies with weather.
- ^{3/} Estimated, since published data are not available after 2007-08. Other industrial includes possible statistical errors.
- ^{4/} Non-soy biodiesel is estimated from U.S. Department of Energy, Energy Information Administration monthly data for 2006-07 through 2008-09. Data for later years are tentative projections by Robert Wisner. The DOE monthly data are available at http://www.eia.doe.gov/mer/pdf/pages/sec10_8.pdf.

Key Balance Sheet Assumptions:

1. No changes in Conservation Reserve Program.
2. Crude oil (petroleum) price stays in \$95-\$105/barrel range for the rest of 2011, then gradually increases in the next two years.
3. U.S. Ethanol & biodiesel mandates are unchanged & enforced.
4. U.S. & World economies have slowing growth through 2011, then accelerate slightly in 2012 & 2013.
5. U.S. dollar gradually decreases relative to foreign currencies through 2013.

Data Sources:

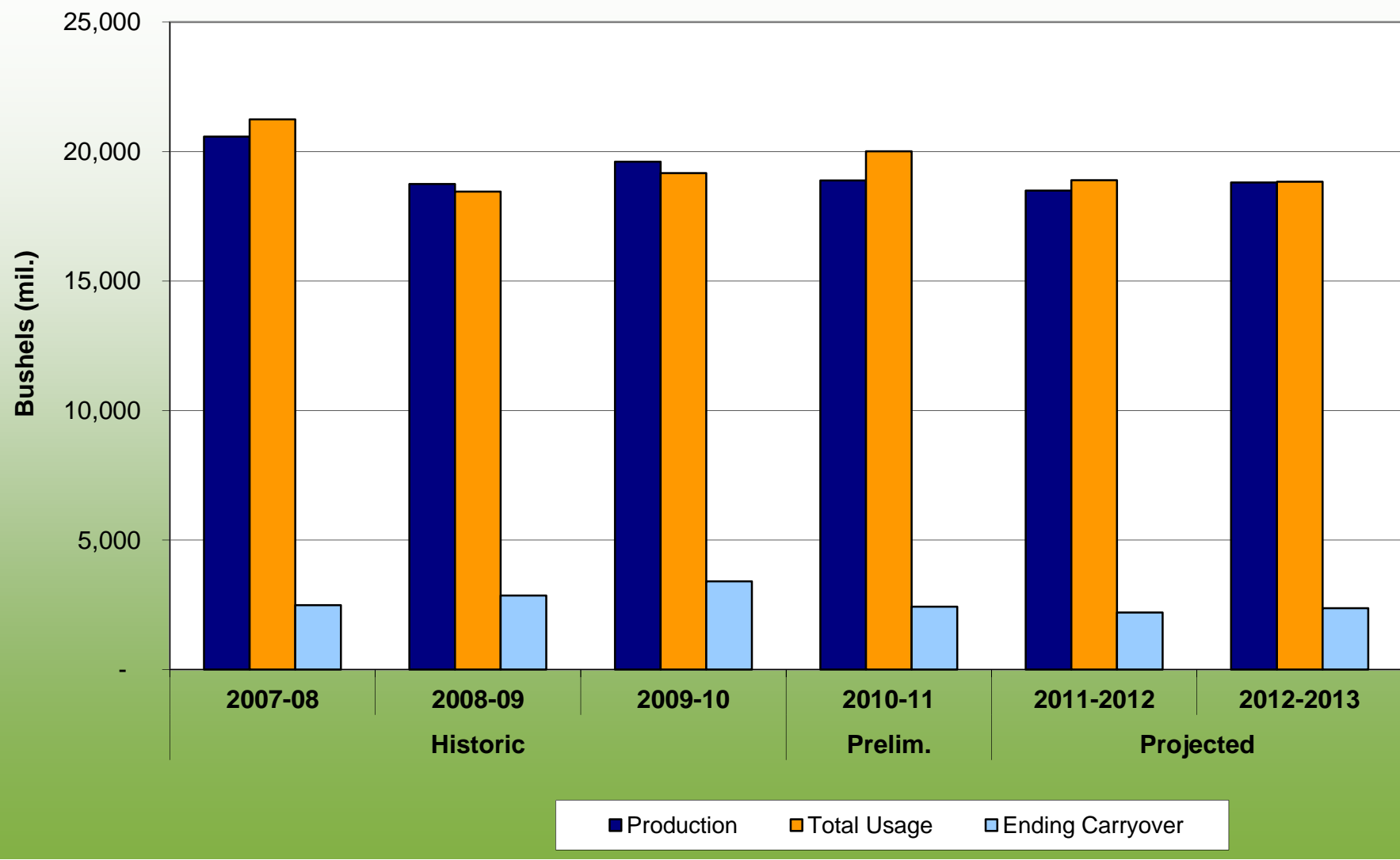
USDA, Economic Research Service, *Oil Crops Yearbook: Data Set* that is available at <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1290>
 U.S. Census Bureau, *Census of Manufacturing*: http://www.census.gov/manufacturing/cir/historical_data/m311k/index.html
 and the *World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

... and justice for all

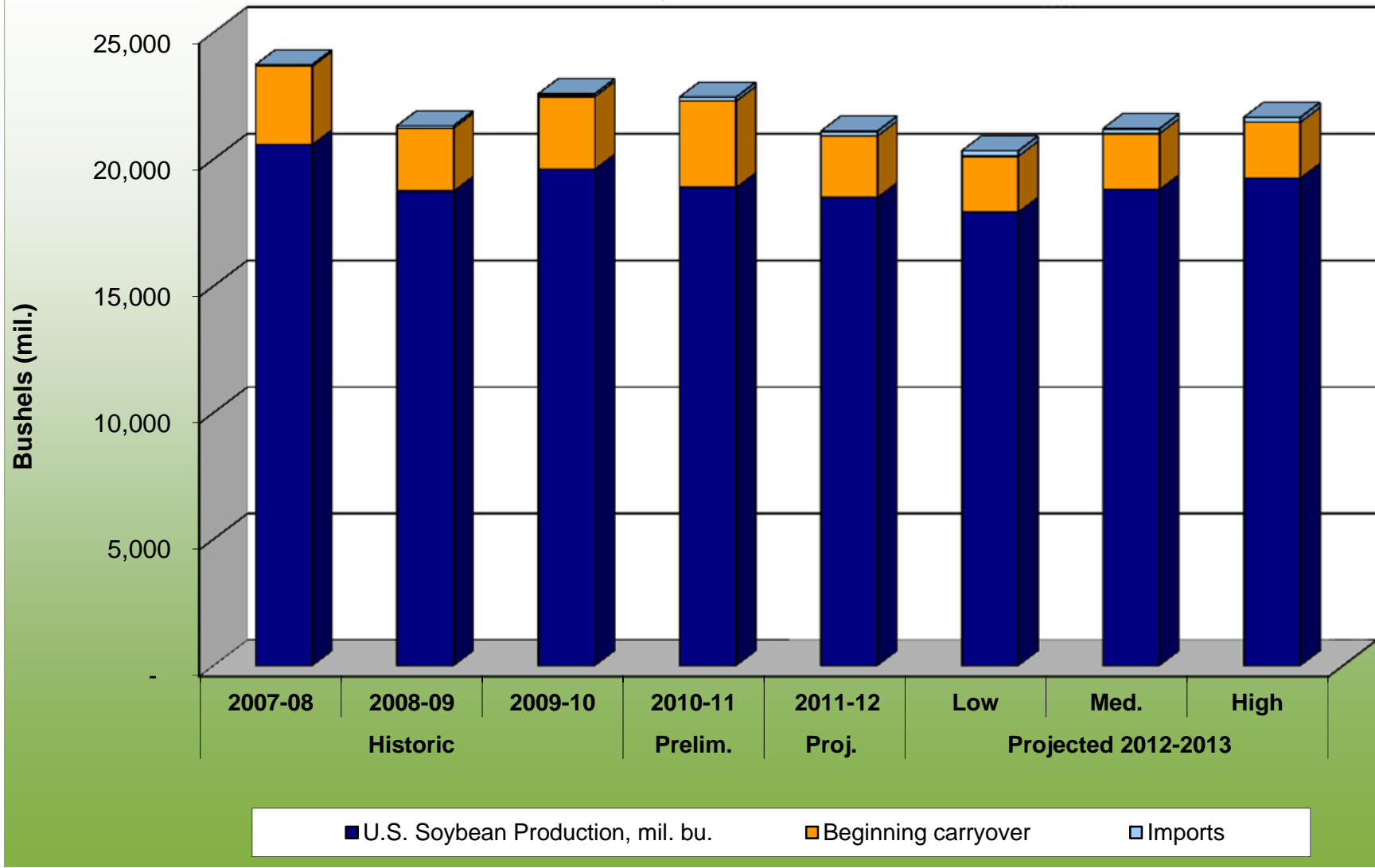
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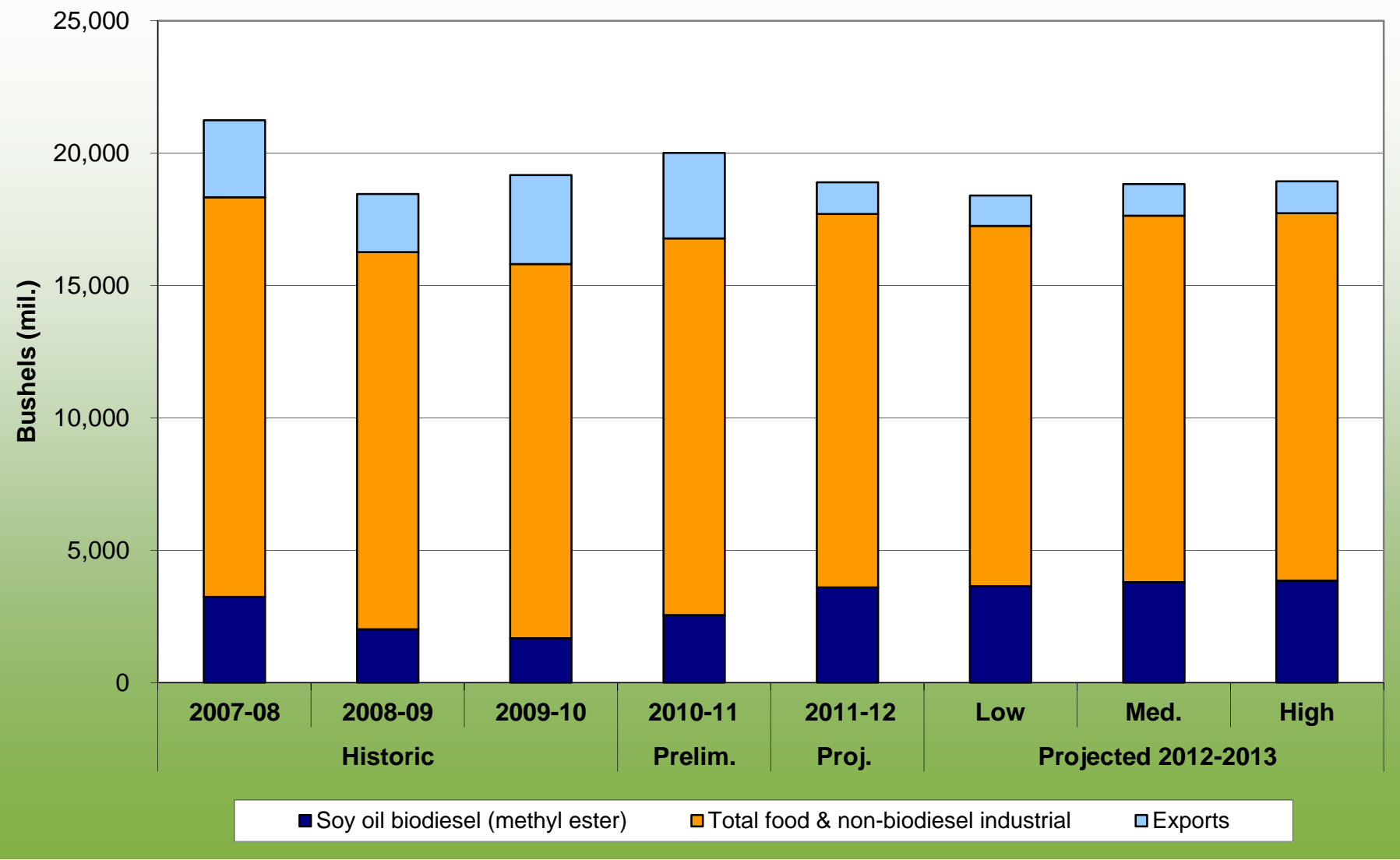
Soybean Oil Production, Usage, and Carryover



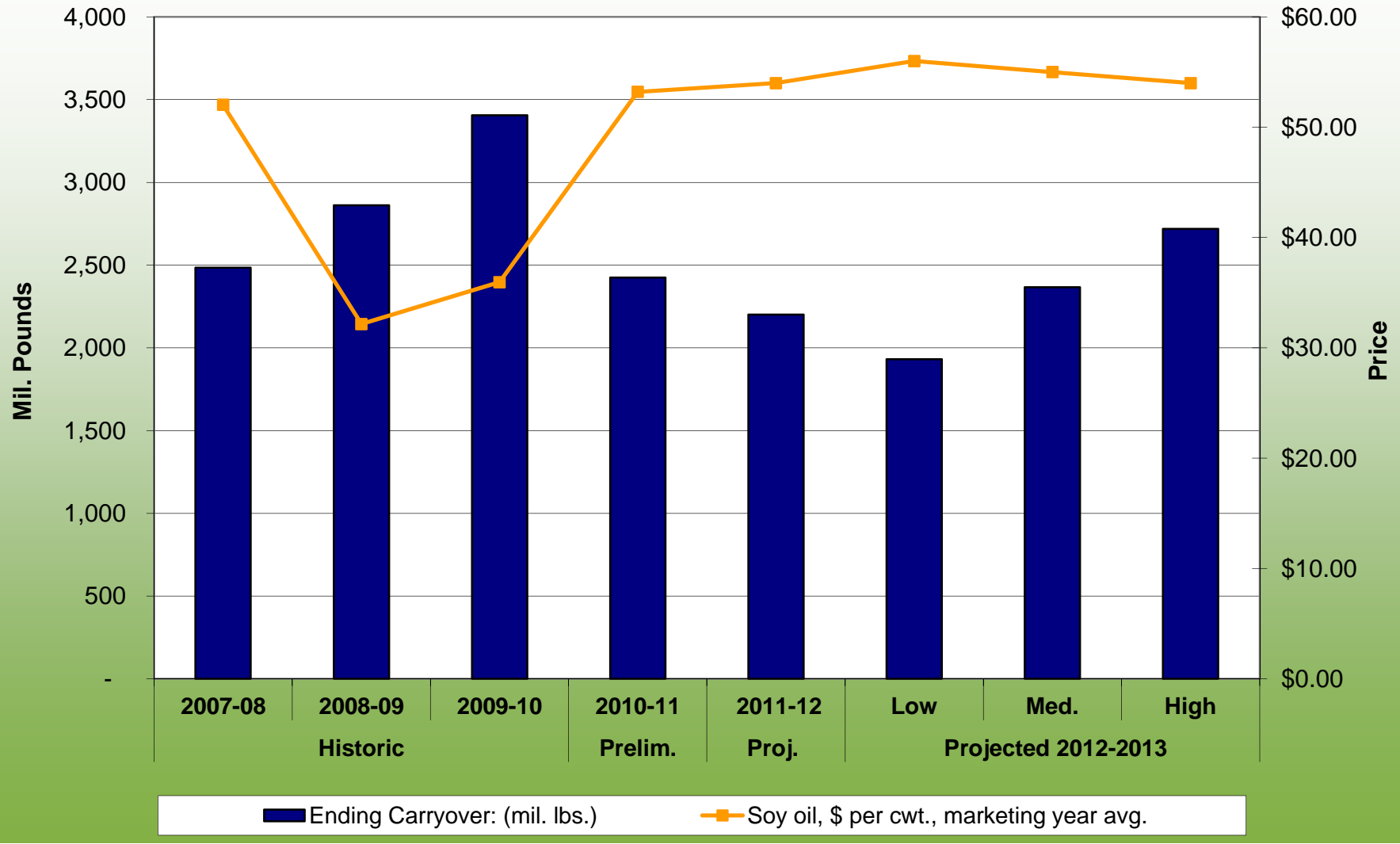
Yearly Production and Beginning Carryover for Soybean Oil



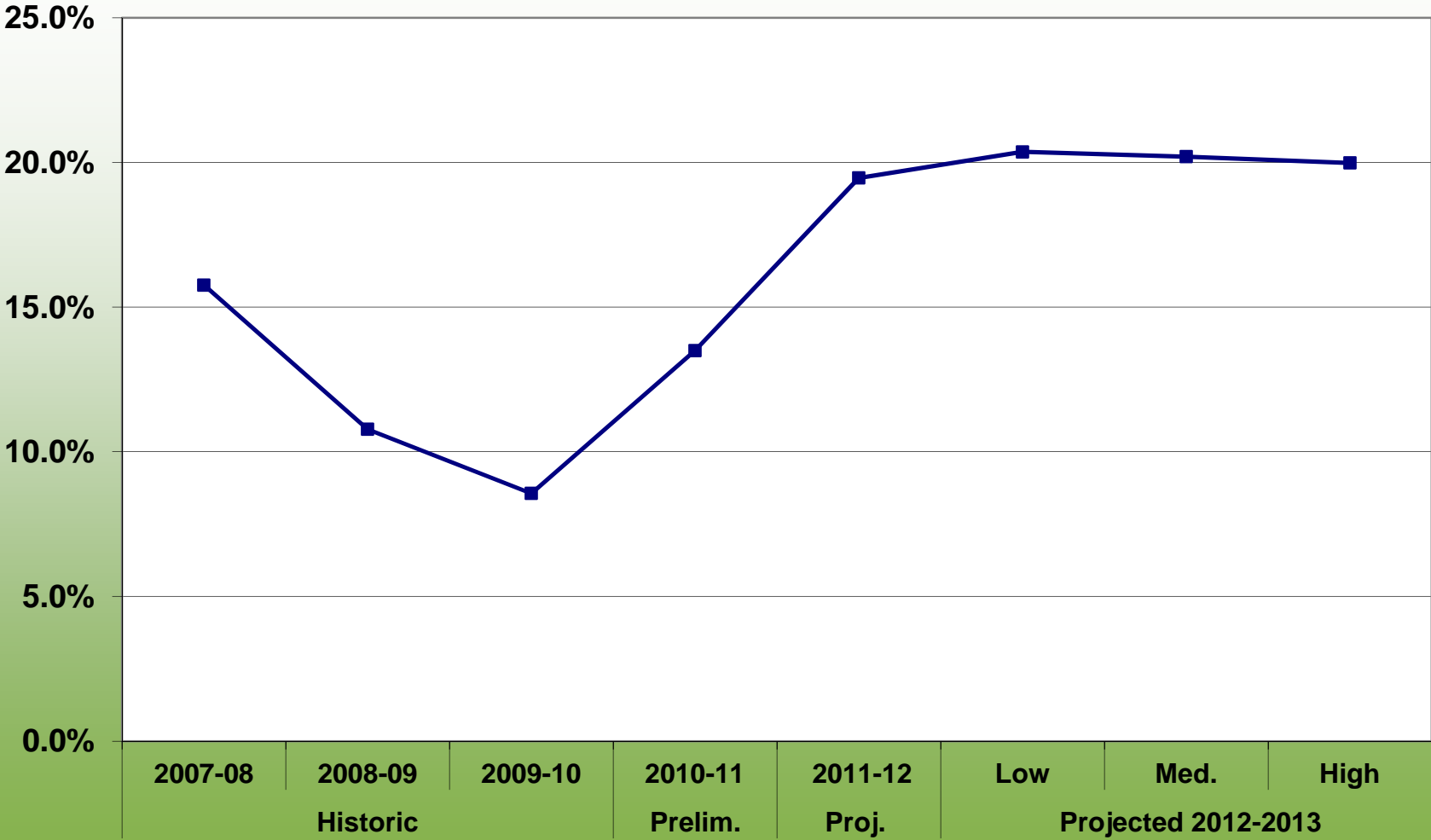
Usage of Soybean Oil and Biodiesel



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

