Biodiesel Usage Projections & Soybean Balance Sheet (mil. bu.)

Updated: 7/16/2015

Year: (production/marketing) [1]	Historic 2010-11	Historic 2011-12	Historic 2012-13	Prelim. 2013-14	Est. 2014-15	Proj. 2015-16 Low	Proj. 2015-16 Med.	Proj. 2015-16 High
Yield (bu. per acre)	**43.5**	**41.9**	**40.0**	**44.0**	**47.8**	**40.5**	**44.0**	**45.5**
Long-term historical yield probability:					17%	18%	64%	18%
Soybean Supplies:								
Planted acres (million)	77.4	75.0	77.2	76.8	83.7	84.5	84.5	84.5
Harvested acres (million)	76.6	73.8	76.1	76.3	83.1	83.3	83.4	83.5
Production (mil. bu.)	3,329	3,094	3,042	3,358	3,969	3,374	3,670	3,799
Beginning carryover (mil. bu.)	151	215	169	141	92	235	235	235
Imports	15	16	41	72	30	63	30	30
Total Supply	**3,495**	**3,325**	**3,252**	**3,571**	**4,091**	**3,672**	**3,935**	**4,064**
Total Soybean Usage:								
Crush (mil. bu.)	1,648	1,703	1,689	1,734	1,835	1,780	1,840	1,845
Seed & residual (mil. bu.)	131	88	105	97	190	126	125	109
Exports (mil. bu.)	1,501	1,365	1,317	1,647	1,830	1,675	1,780	1,790
Total Usage	**3,280**	**3,156**	**3,111**	**3,478**	**3,855**	**3,581**	**3,745**	**3,744**
Oil Yield, lbs./ bu. of soybeans [2]	**11.6**	**11.6**	**11.7**	**11.7**	**11.5**	**11.6**	**11.6**	**11.6**
Biodiesel Usage:								
Soybean oil use for biodiesel, mil. lbs.	2,737	4,870	4,689	4,800	5,000	5,450	5,800	5,800
Use for biodiesel, bushel equivalent	237	420	402	412	435	470	500	500
Soybean oil for biodiesel, % of oil from crop	7.1%	13.6%	13.2%	12.3%	11.0%	13.9%	13.6%	13.2%
Soybean oil for biodiesel, % of oil from crush	14.4%	24.6%	23.8%	23.8%	23.7%	26.4%	27.2%	27.1%
Ending Soybean Carryover: (mil. bu.)	**215**	**169**	**141**	**92**	**235**	**91**	**190**	**320**
Carryover as percent of supply	6.2%	5.1%	4.3%	2.6%	5.7%	2.5%	4.8%	7.9%
Carryover, weeks of total use	3.4	2.8	2.4	1.4	3.2	1.3	2.6	4.4
Prices:								
U.S. weighted avg. farm price	$11.30	$12.50	$14.40	$13.00	$10.05	$13.75	$10.20	$9.85
Iowa weighted avg. farm price	$11.25	$12.40	$14.30	$12.90	$9.95	$13.65	$10.10	$9.75
Harvest price (central Iowa)	$10.50	$11.40	$12.20	$12.20	$9.40	$13.15	$9.60	$9.25
Nov. futures price (harvest avg.)	$11.30	$12.10	$12.80	$12.75	$9.95	$13.70	$10.15	$9.80
Soy meal, Decatur, $/T 48% protein	**$346**	**$394**	**$468**	**$490**	**$365**	**$490**	**$355**	**$345**
Soy oil, $ per cwt., marketing year avg.	**$53.20**	**$51.90**	**$47.13**	**$38.23**	**$33.00**	**$37.00**	**$34.75**	**$34.50**
Year-to-Year Change in Mil. Bu. soybean use:								
Crush	-104	55	-14	45	101	-55	5	10
Seed & residual	21	-43	17	-8	93	-64	-65	-81
Exports	2	-137	-48	330	183	-155	-50	-40
Total Usage	**-81**	**-124**	**-45**	**367**	**377**	**-274**	**-110**	**-111**

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Notes:

[1] Marketing year - starts at Sept. 1 of the production year and ends August 31 of the following year. For example, the 2011 crop is marketed from Sept. 1, 2011 to August 31, 2012.

[2] Long-term probabilities reflect historical frequencies of deviations of indicated yield plus or minus a few bushels from long-run trend yields. Yields sharply below the long-run trend occurred only in about 18% of the years since the late 1930s.

Key Balance Sheet Assumptions:

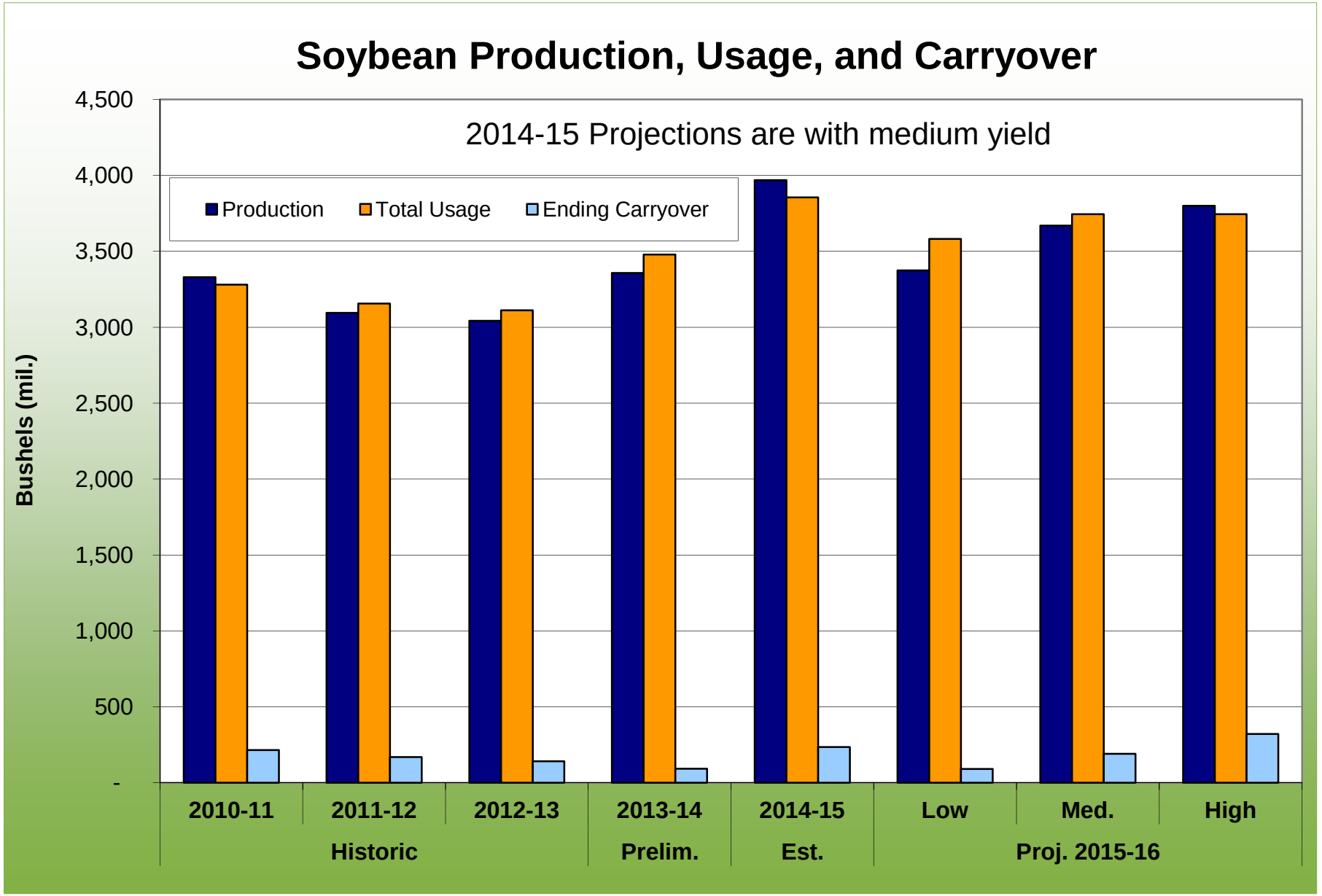
1. No changes in Conservation Reserve Program.
2. **Crude oil (petroleum) price for the next 18 months is in the $45-$60/barrel range.**
3. **U.S. Ethanol & biodiesel mandates are enforced as established by EPA.**
4. U.S. & World economies accelerate slightly in 2014 and 2015.
5. U.S. dollar remains strong relative to foreign currencies through 2016.

. . . and justice for all

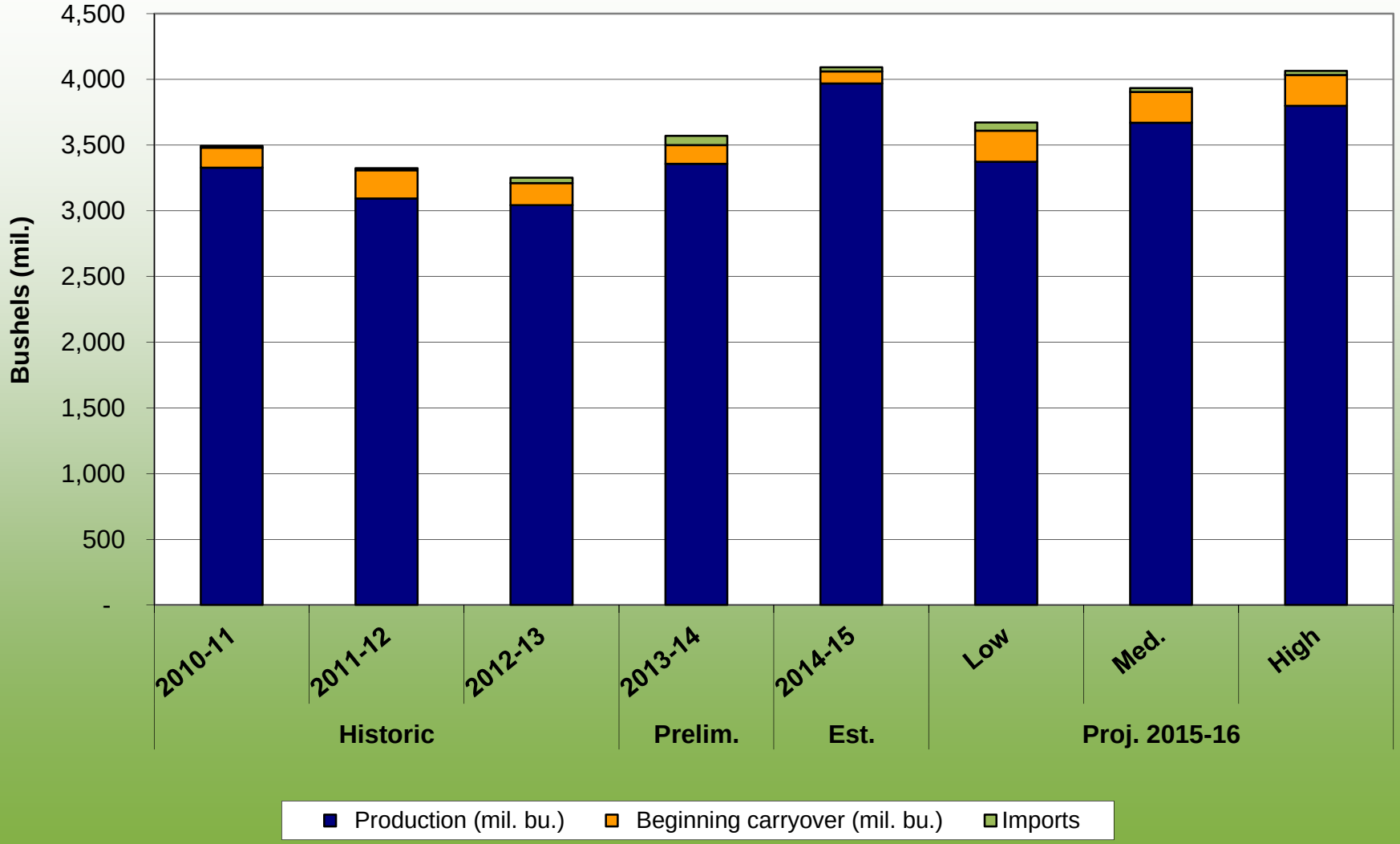
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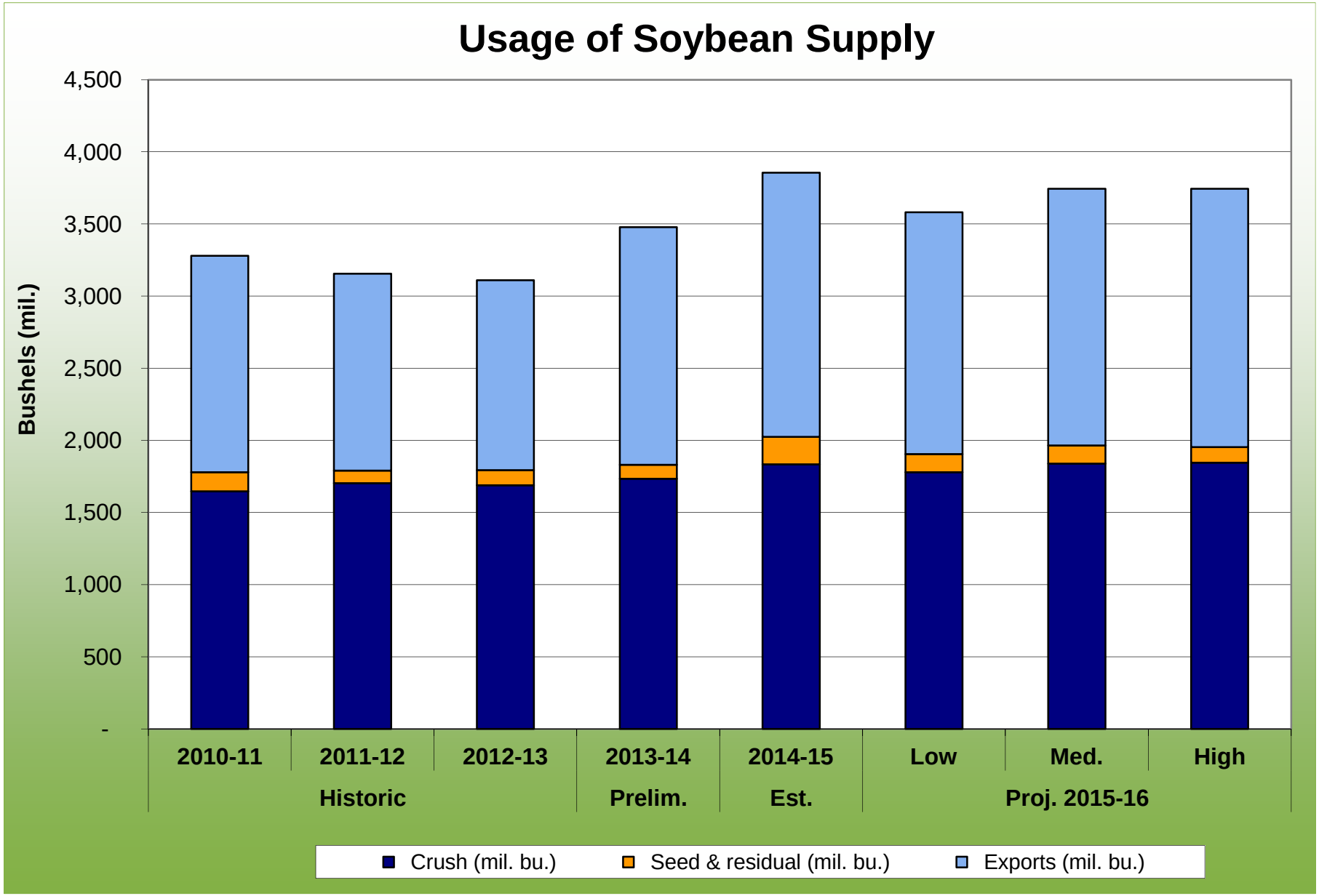
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Soybean Production, Usage, and Carryover

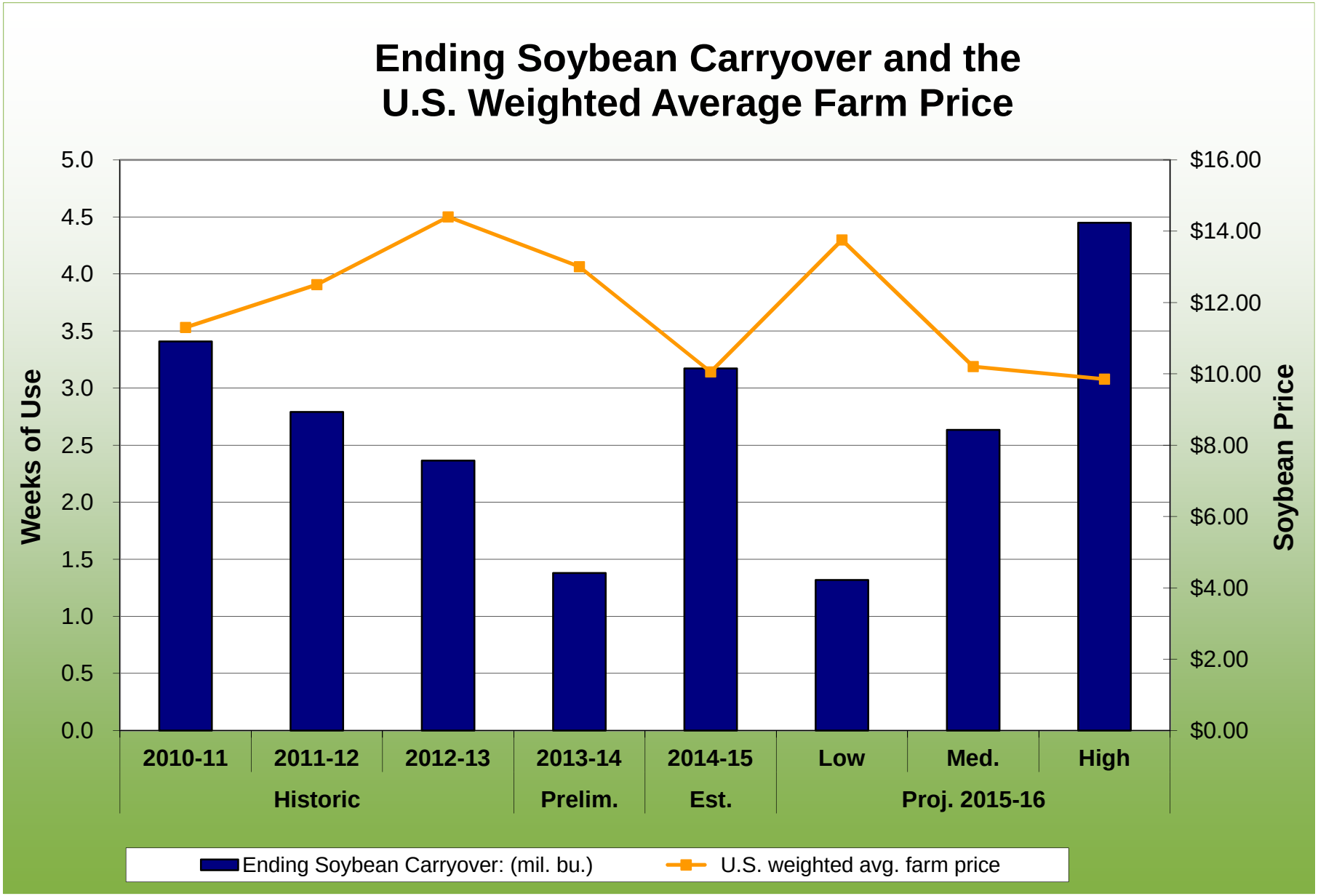


Total Soybean Supply
(beginning carryover, production, imports)

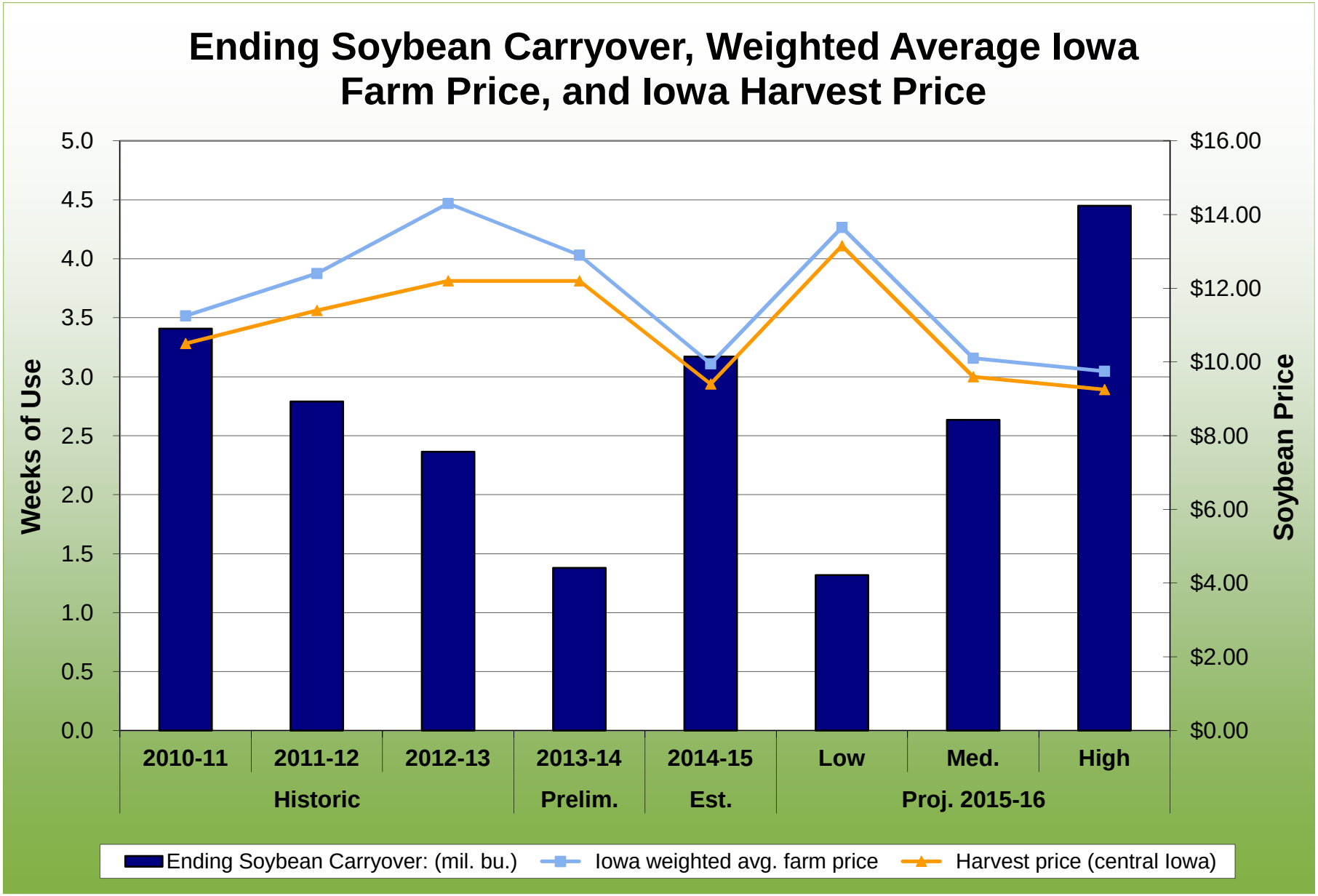


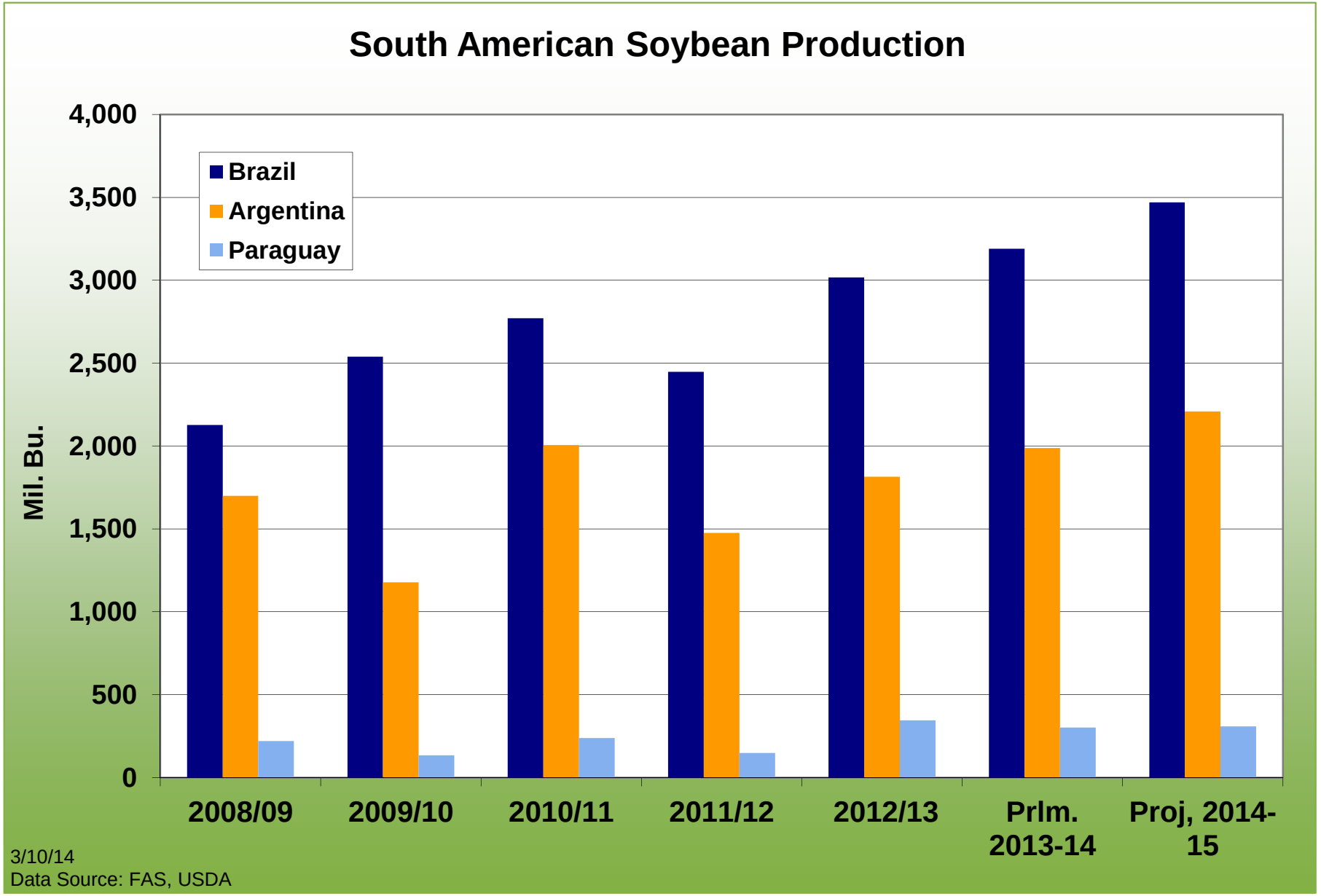

Usage of Soybean Supply
Bushels (mil.)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
2010-11
2011-12
2012-13
2013-14
2014-15
Low
Med.
High
Historic
Prelim.
Est.
Proj. 2015-16
Crush (mil. bu.)
Seed & residual (mil. bu.)
Exports (mil. bu.)

Ending Soybean Carryover and the U.S. Weighted Average Farm Price



Ending Soybean Carryover, Weighted Average Iowa Farm Price, and Iowa Harvest Price




South American Soybean Production
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Mil. Bu.
Brazil
Argentina
Paraguay
2008/09
2009/10
2010/11
2011/12
2012/13
Prlm. 2013-14
Proj, 2014-15
3/10/14
Data Source: FAS, USDA