SREs and RFS Mandates

% standard = 100 X [RVO/(petroleum gasoline + diesel use – SREs)]

2017 Final EPA Conventional Standard:

8.32% = 100 X [(15BG)/(180.13BG – 0)]

2017 Actual Conventional RVO

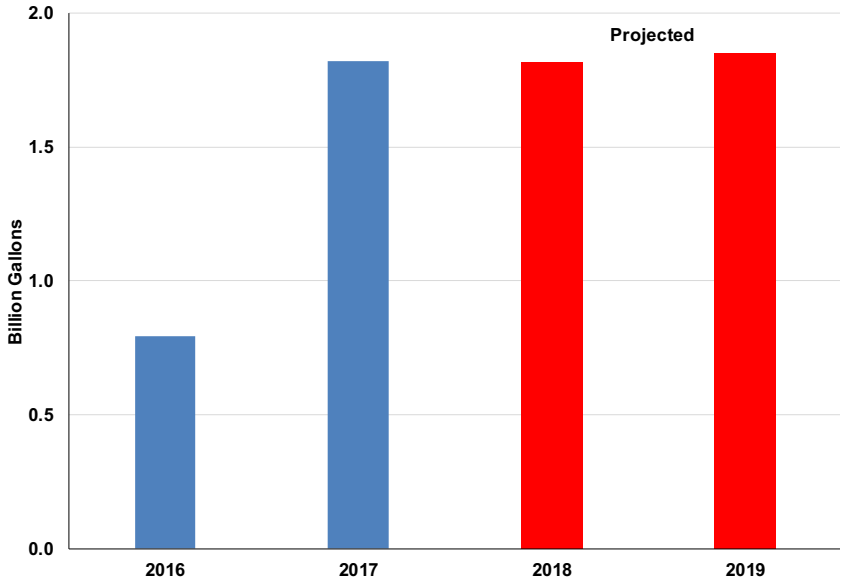
13.887BG = (8.32%/100) X (166.9BG)

Why13.9BG instead of 15BG?

Fix the % standard and then drop the base of gasoline and diesel use retroactively

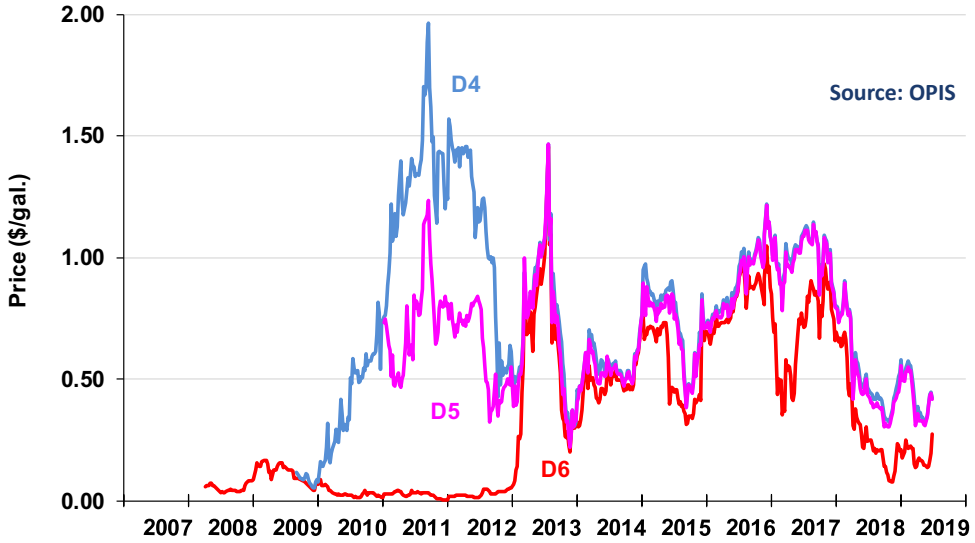
ILLINOIS farmdoc WEBINARS

Total Reduction in RFS Mandates due to SREs



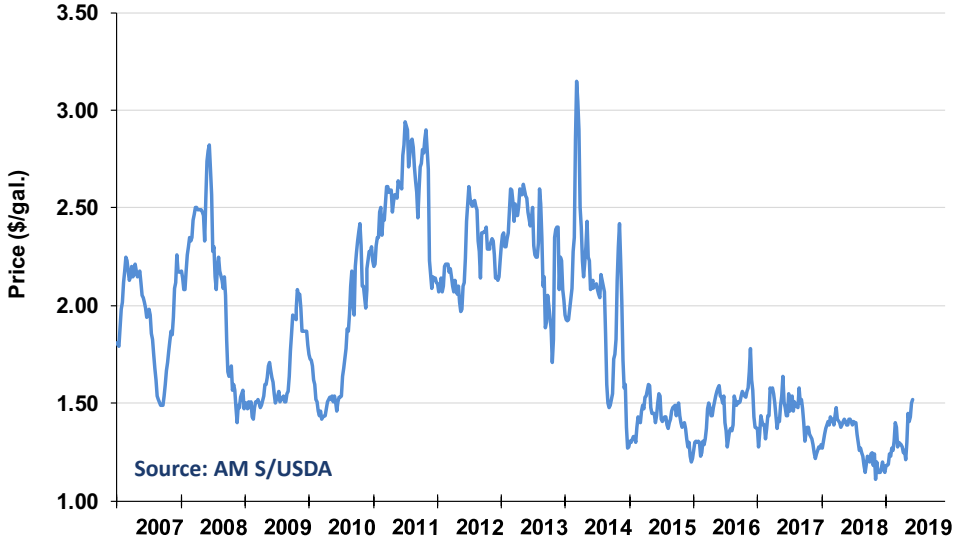
ILLINOIS farmdoc WEBINARS

Weekly (Thursday) D4 Biodiesel, D5 Advanced, and D6 Ethanol RINs Price, 01/25/2007 – 06/27/2019



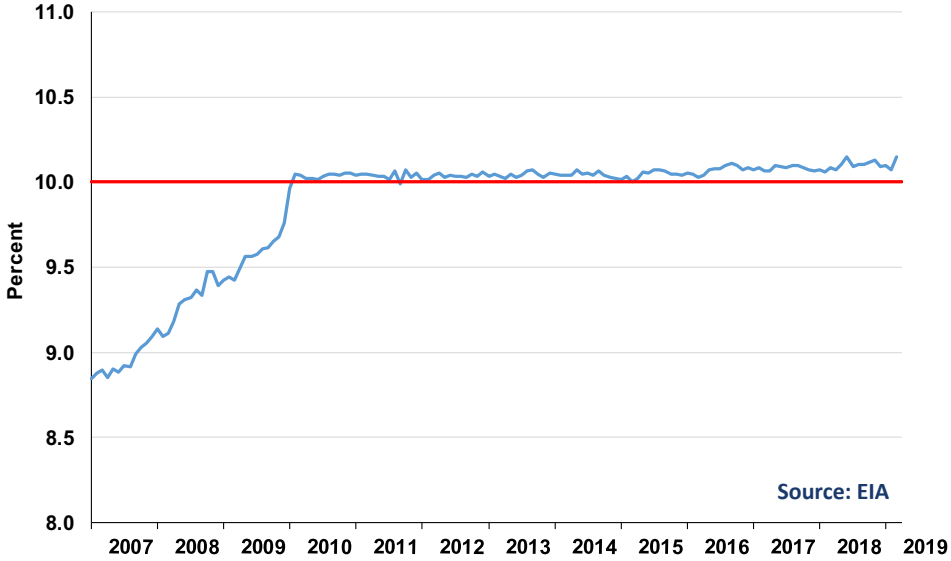
ILLINOIS farmdoc WEBINARS

Weekly (Friday) Ethanol Price at Iowa Plants, 01/26/2007 – 06/28/2019



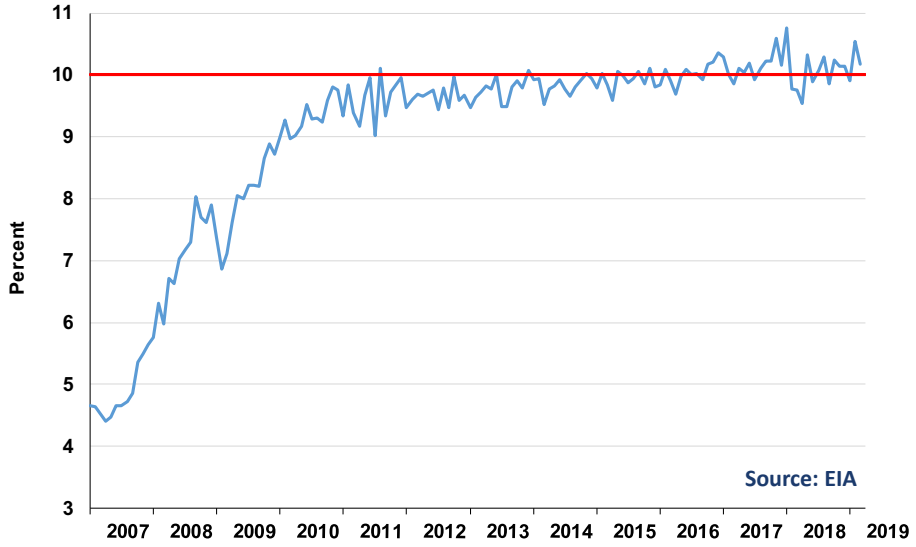
ILLINOIS farmdoc WEBINARS

Monthly Refinery and Blender Net Input of Ethanol as a Percent of Net U.S. Production of Conventional & Reformulated Motor Gasoline Blended with Ethanol, January 2007 – April 2019



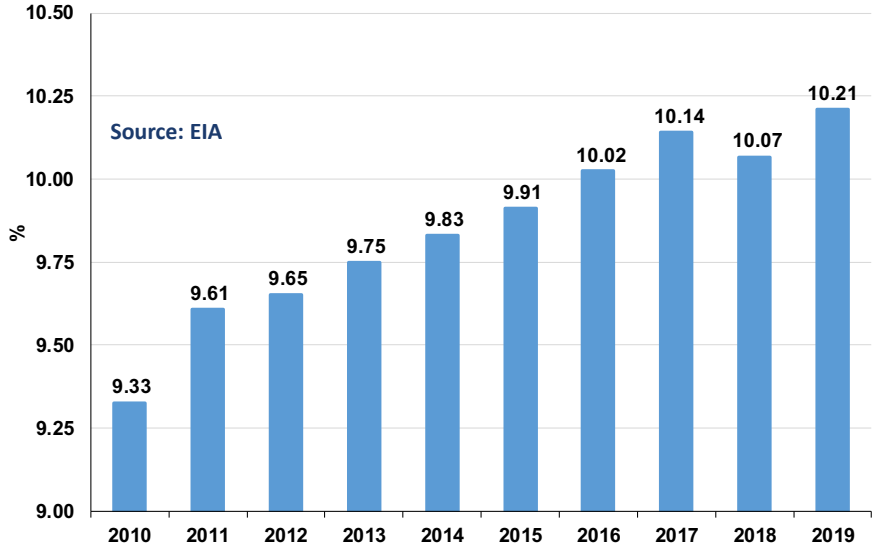
ILLINOIS farmdoc WEBINARS

Monthly Implied Domestic Consumption of Ethanol as a Percent of U.S. Finished Motor Gasoline Supplied, January 2007 – April 2019



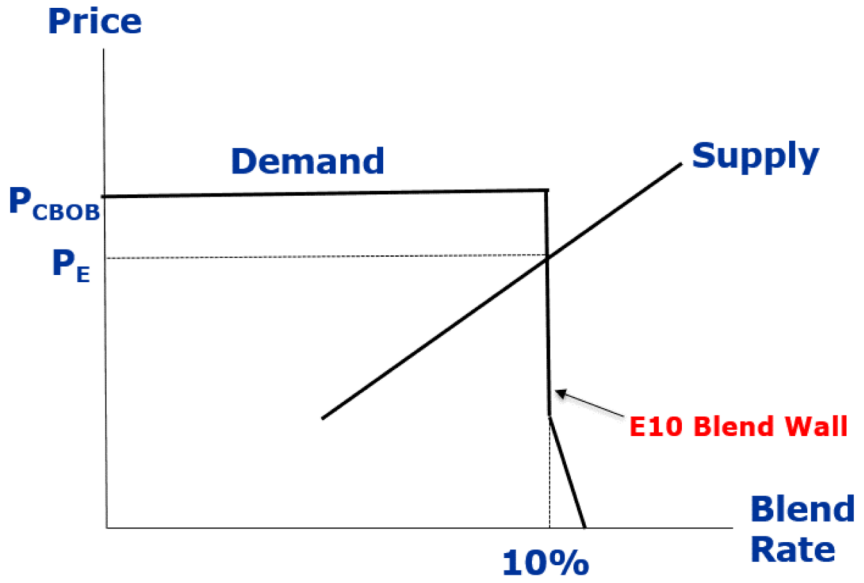
ILLINOIS farmdoc WEBINARS

Annual U.S. Implied Domestic Consumption of Ethanol as a Percent of U.S. Finished Motor Gasoline Supplied, 2010 – 2019*



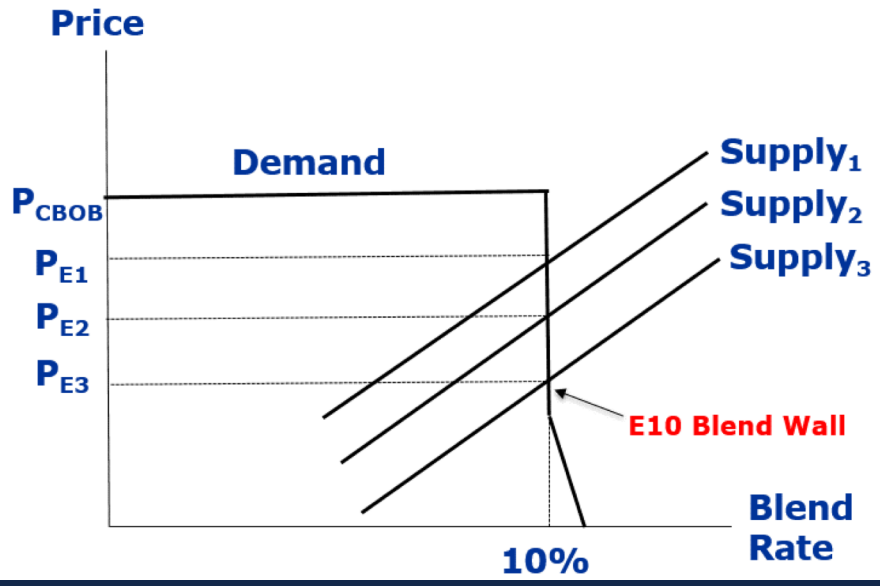
ILLINOIS farmdoc WEBINARS

Competitive Ethanol Prices in E10 Gasoline and the Blend Wall

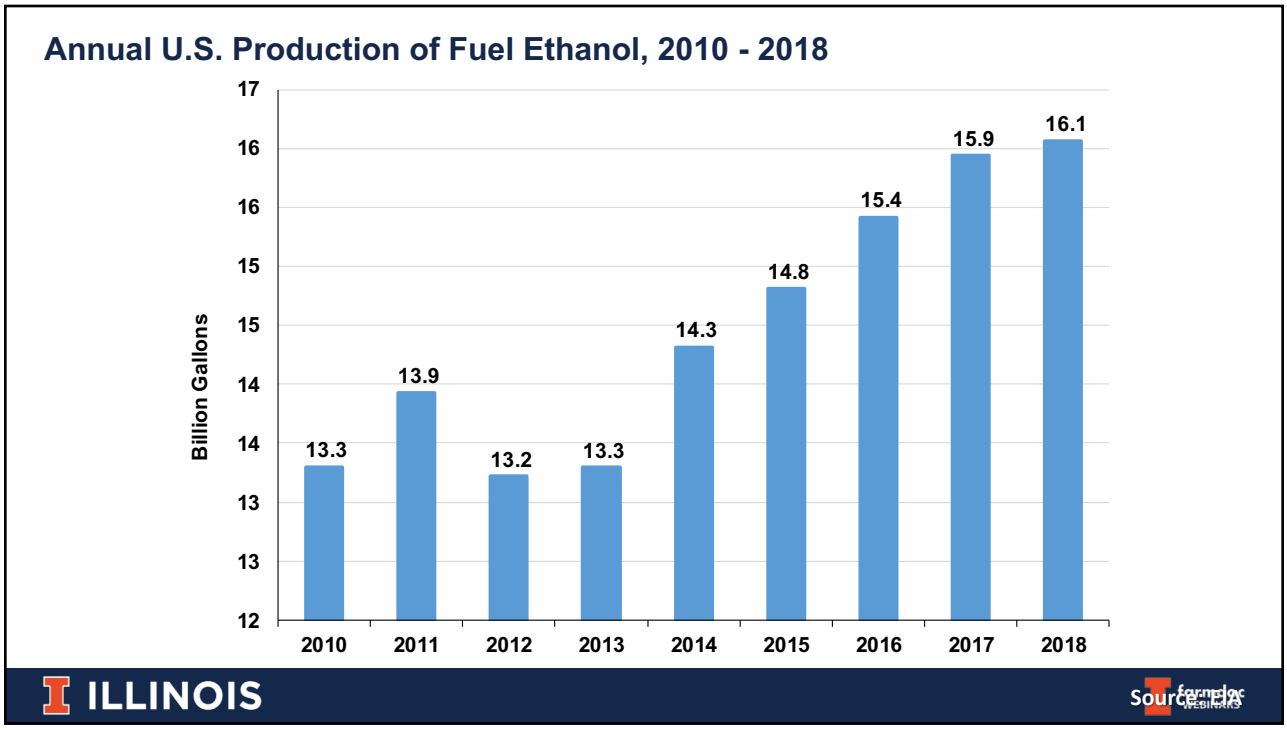


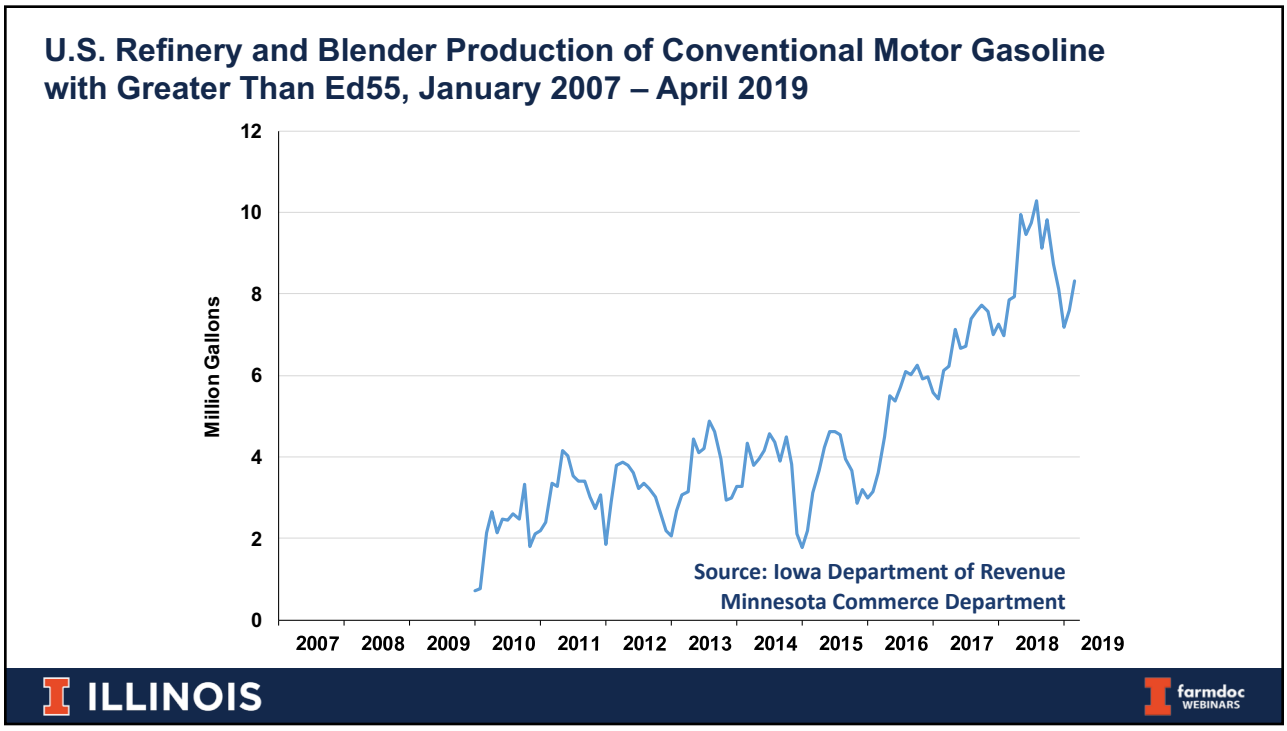
ILLINOIS farmdoc WEBINARS

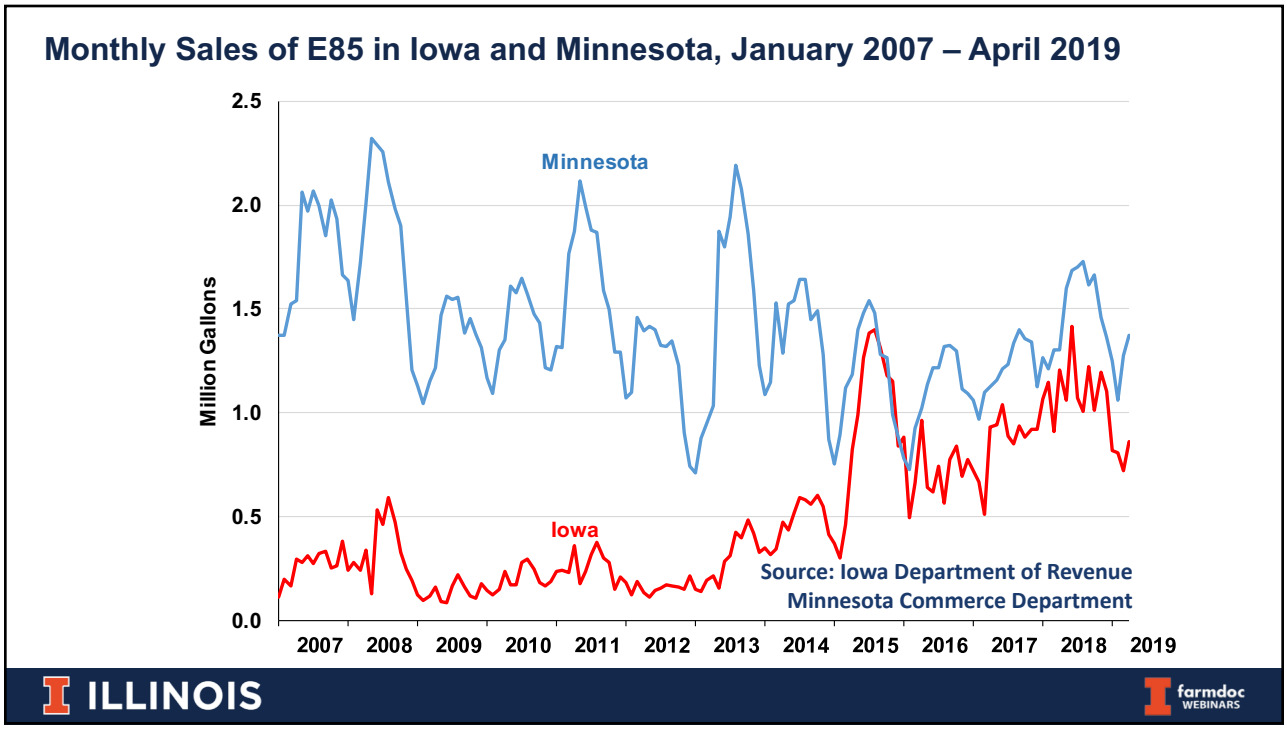
Ethanol Market with Increasing Supply and Falling Prices

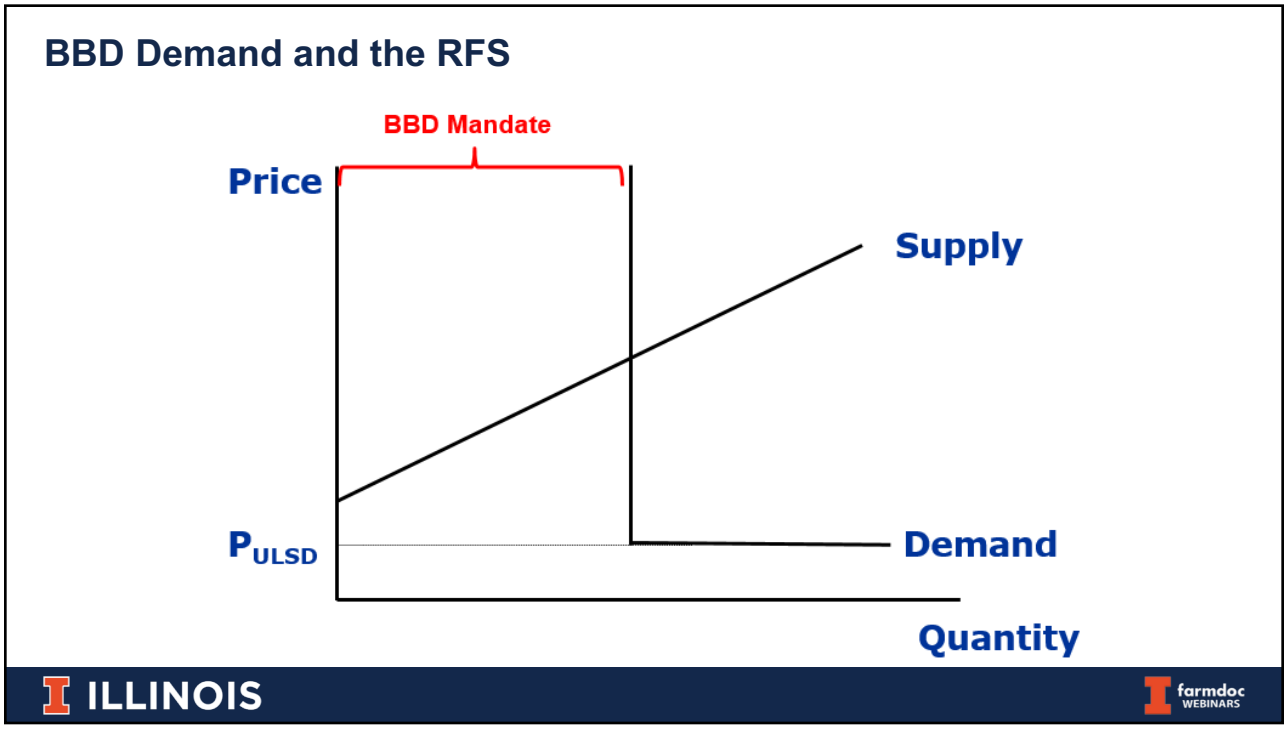


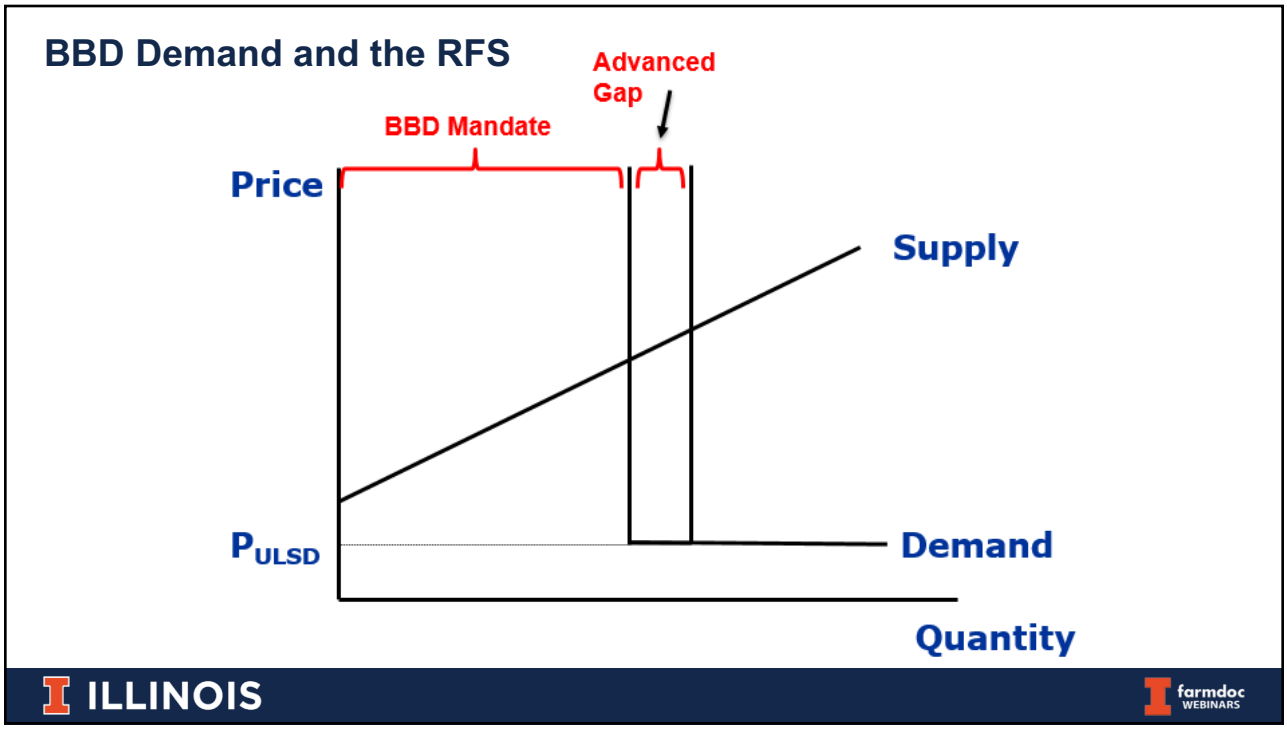
ILLINOIS farmdoc WEBINARS

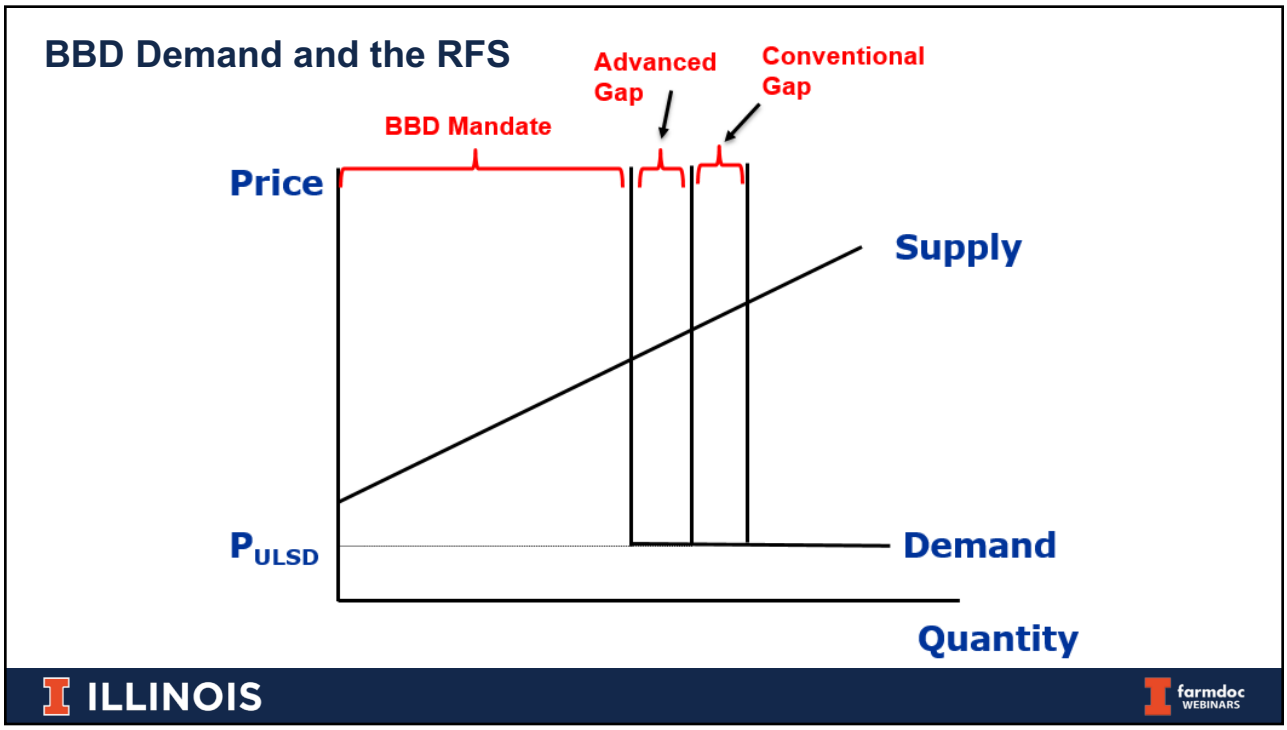

Annual U.S. Production of Fuel Ethanol, 2010 - 2018
Billion Gallons
17
16
16
15
15
14
14
13
13
12
13.3
13.9
13.2
13.3
14.3
14.8
15.4
15.9
16.1
2010
2011
2012
2013
2014
2015
2016
2017
2018
ILLINOIS
Source: EIA

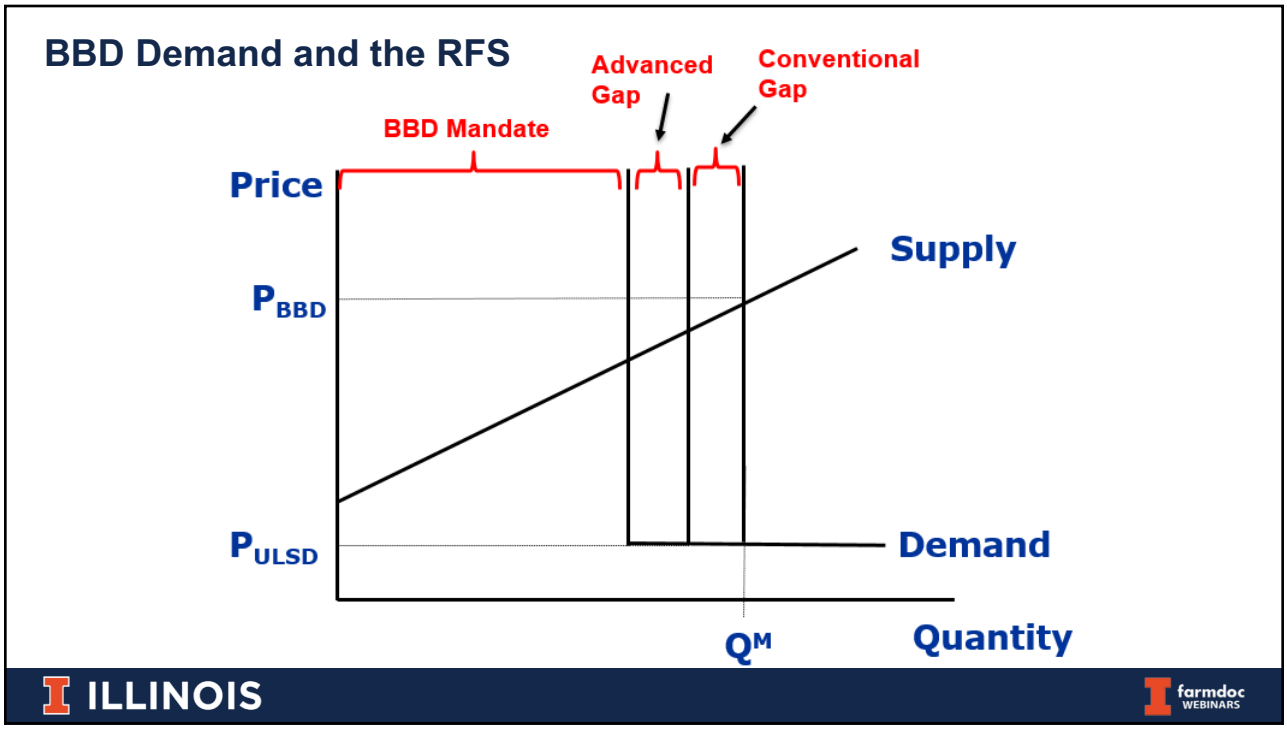

U.S. Refinery and Blender Production of Conventional Motor Gasoline with Greater Than Ed55, January 2007 – April 2019
Million Gallons
12
10
8
6
4
2
0
Source: Iowa Department of Revenue
Minnesota Commerce Department
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
ILLINOIS
farmdoc WEBINARS

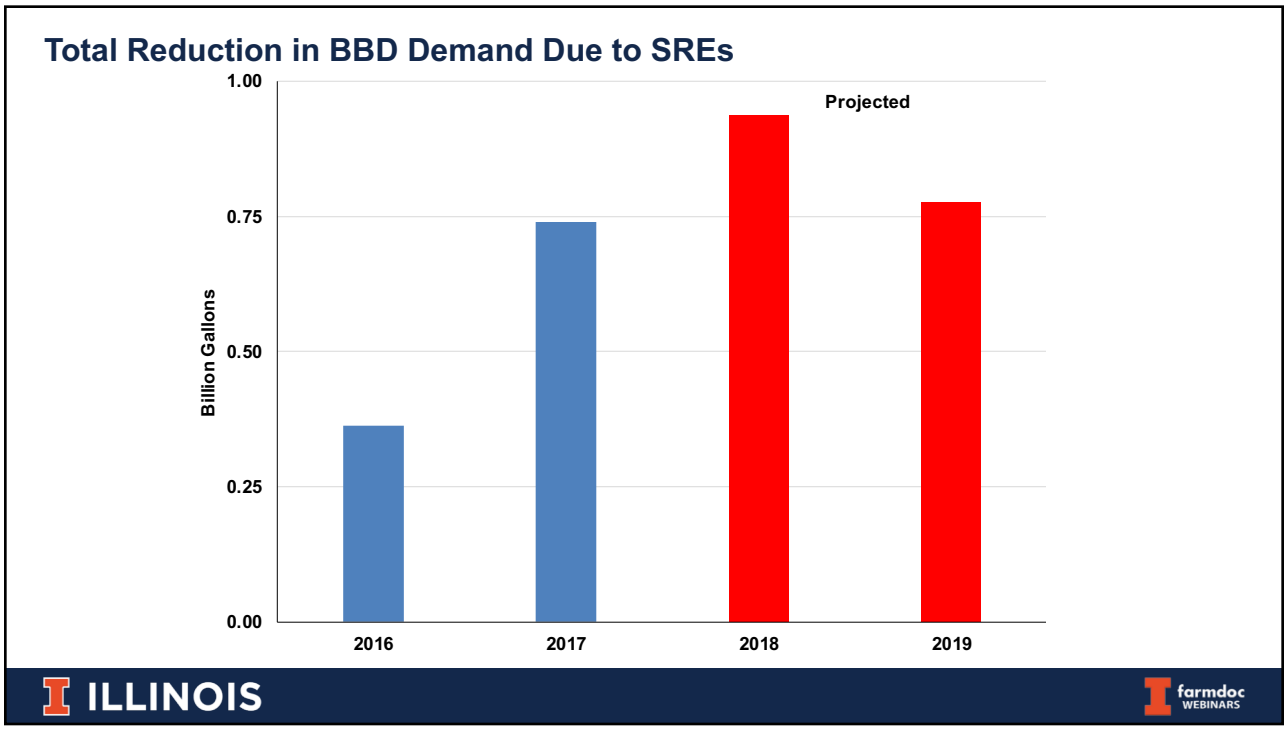

Monthly Sales of E85 in Iowa and Minnesota, January 2007 – April 2019
Million Gallons
2.5
2.0
1.5
1.0
0.5
0.0
Minnesota
Iowa
Source: Iowa Department of Revenue
Minnesota Commerce Department
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
ILLINOIS
farmdoc WEBINARS


BBD Demand and the RFS
BBD Mandate
Price
Supply
P_{ULSD}
Demand
Quantity
ILLINOIS
farmdoc WEBINARS

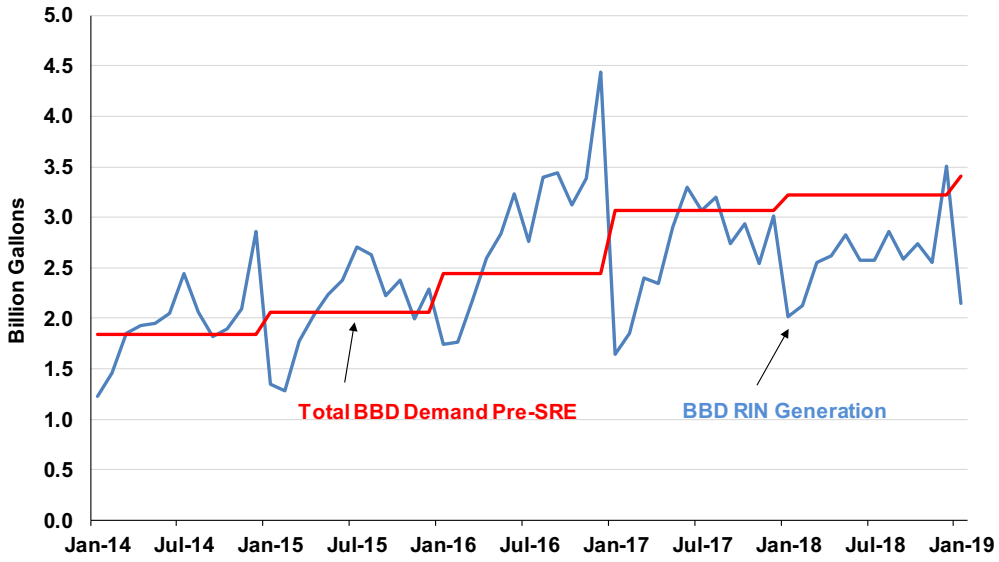

BBD Demand and the RFS
Advanced Gap
BBD Mandate
Price
Supply
P_{ULSD}
Demand
Quantity
ILLINOIS
farmdoc WEBINARS


BBD Demand and the RFS
Advanced Gap
Conventional Gap
BBD Mandate
Price
Supply
P_{ULSD}
Demand
Quantity
ILLINOIS
farmdoc WEBINARS


BBD Demand and the RFS
Advanced Gap
Conventional Gap
BBD Mandate
Price
Supply
P_{BBD}
P_{ULSD}
Demand
Q^M
Quantity
ILLINOIS
farmdoc WEBINARS


Total Reduction in BBD Demand Due to SREs
1.00
0.75
0.50
0.25
0.00
Billion Gallons
Projected
2016
2017
2018
2019
ILLINOIS
farmdoc WEBINARS

Estimated Monthly Biomass-Based Diesel RIN Generation (annualized) Compared to Total Biomass-Based Diesel (BBD) Demand Pre-SRE, January 2014 – January 2019



ILLINOIS farmdoc WEBINARS

Estimates of the Economic Magnitude of Declines in U.S. BBD Demand Due to SREs

Item	2016	2017	2018	2019	Total or Average
(1) Total BBD Demand Decline Due to SREs (billion gallons)	0.362	0.739	0.937	0.778	2.817
(2) Average Iowa Plant Price of Biodiesel ($/gallon)	3.23	3.16	3.09	3.16	3.16
(3) Economic Magnitude of BBD Demand Decline ($)	1.17	2.34	2.89	2.46	8.86

Note: 2018 and 2019 are projected.

ILLINOIS farmdoc WEBINARS

U.S. Appeals Court in Americans for Clean Energy July 28, 2017

By requiring upstream market participants such as refiners and importers to introduce increasing volumes of renewable fuel into the transportation fuel supply, Congress intended the Renewable Fuel Program to be a **"market forcing policy"** that would create **"demand pressure"** to increase consumption of renewable fuel. (pp. 20-21)

ILLINOIS farmdoc WEBINARS

Thank you for attending

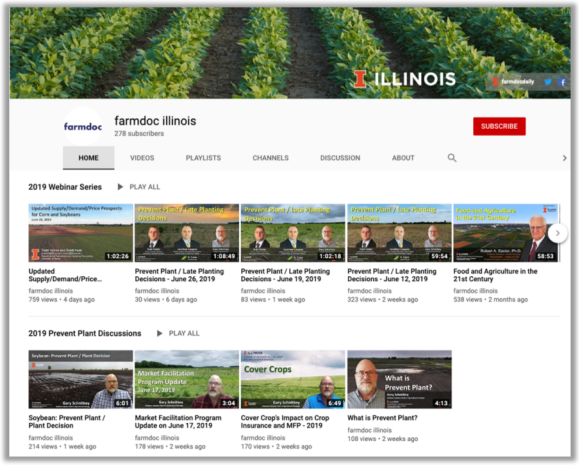
Please submit questions

Scott Irwin
sirwin@Illinois.edu
@ScottIrwinUI

farmdoc
DECISION OUTREACH CENTRAL

ILLINOIS
Agricultural & Consumer Economics
COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES

For latest webinar archives and videos subscribe to us on YouTube at
https://www.youtube.com/user/farmdocvideo



farmdoc
farmdocDAILY .Illinois.edu