



---

# Surface Transportation Board

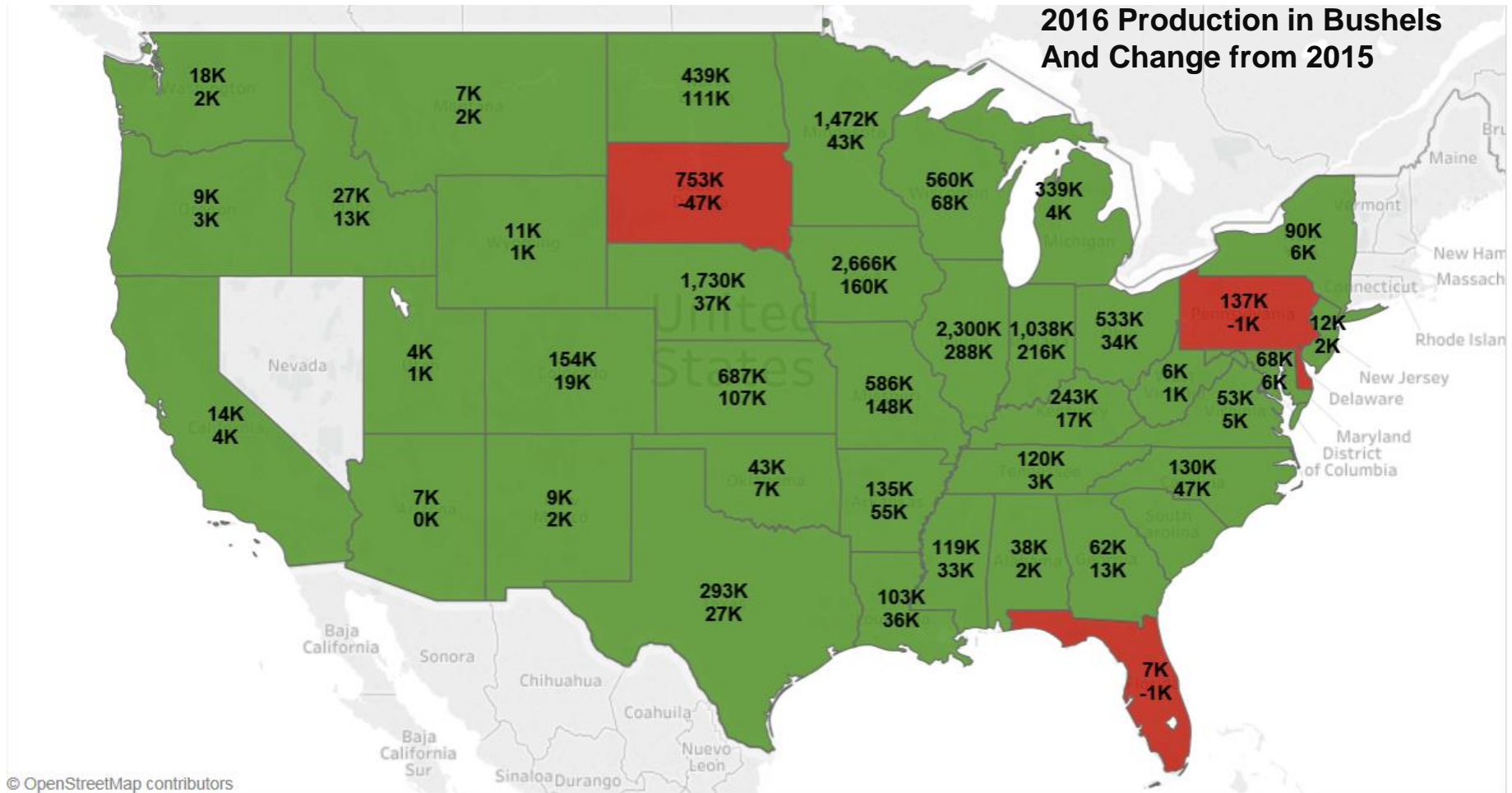
## Rail Energy Transportation Advisory Committee Meeting

### Biofuels Segment Update

---

September 22, 2016

# US CORN PRODUCTION 2016 VS 2015



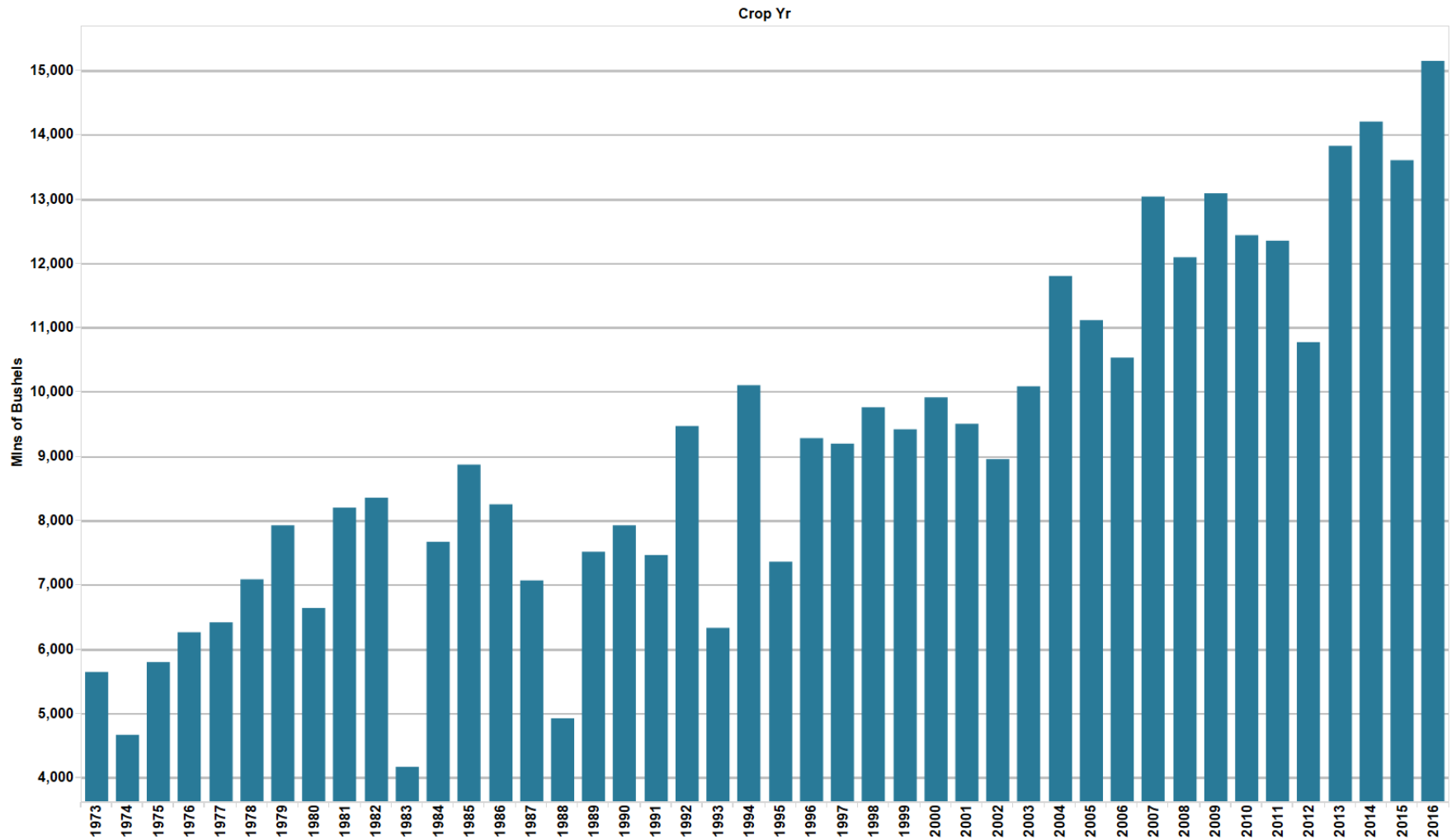
Source: Cargill

More corn almost everywhere. A lot more in some places. <sup>2</sup>



# U.S. CORN PRODUCTION

US Corn Production



A record crop of over 15 Billion Bushels

# U.S. CORN S & D

|                            | <u>'14/15</u>      | <u>15/16*</u>      | <u>16/17*</u>      |
|----------------------------|--------------------|--------------------|--------------------|
| <b>Planted (mln acres)</b> | <b>90.6</b>        | <b>88.0</b>        | <b>94.1</b>        |
| <b>Harvested</b>           | <b>83.1</b>        | <b>80.7</b>        | <b>86.6</b>        |
| <b>Yield (Bu/Acre)</b>     | <b>171.0</b>       | <b>168.4</b>       | <b>174.4</b>       |
|                            |                    |                    |                    |
| <b>Carry-In (mln Bu)</b>   | <b>1232</b>        | <b>1731</b>        | <b>1716</b>        |
| <b>Production</b>          | <b>14216</b>       | <b>13601</b>       | <b>15093</b>       |
| <b>Imports</b>             | <b><u>32</u></b>   | <b><u>65</u></b>   | <b><u>50</u></b>   |
| <b>Total Supply</b>        | <b>15479</b>       | <b>15397</b>       | <b>16859</b>       |
|                            |                    |                    |                    |
| <b>Food/Industrial</b>     | <b>6567</b>        | <b>6567</b>        | <b>6650</b>        |
| <b>Feed / Residual</b>     | <b>5314</b>        | <b>5200</b>        | <b>5650</b>        |
| <b>Exports</b>             | <b><u>1867</u></b> | <b><u>1915</u></b> | <b><u>2175</u></b> |
| <b>Total Use</b>           | <b>137482</b>      | <b>13682</b>       | <b>14475</b>       |
|                            |                    |                    |                    |
| <b>Carry-out</b>           | <b>1731</b>        | <b>1716</b>        | <b>2384</b>        |

8

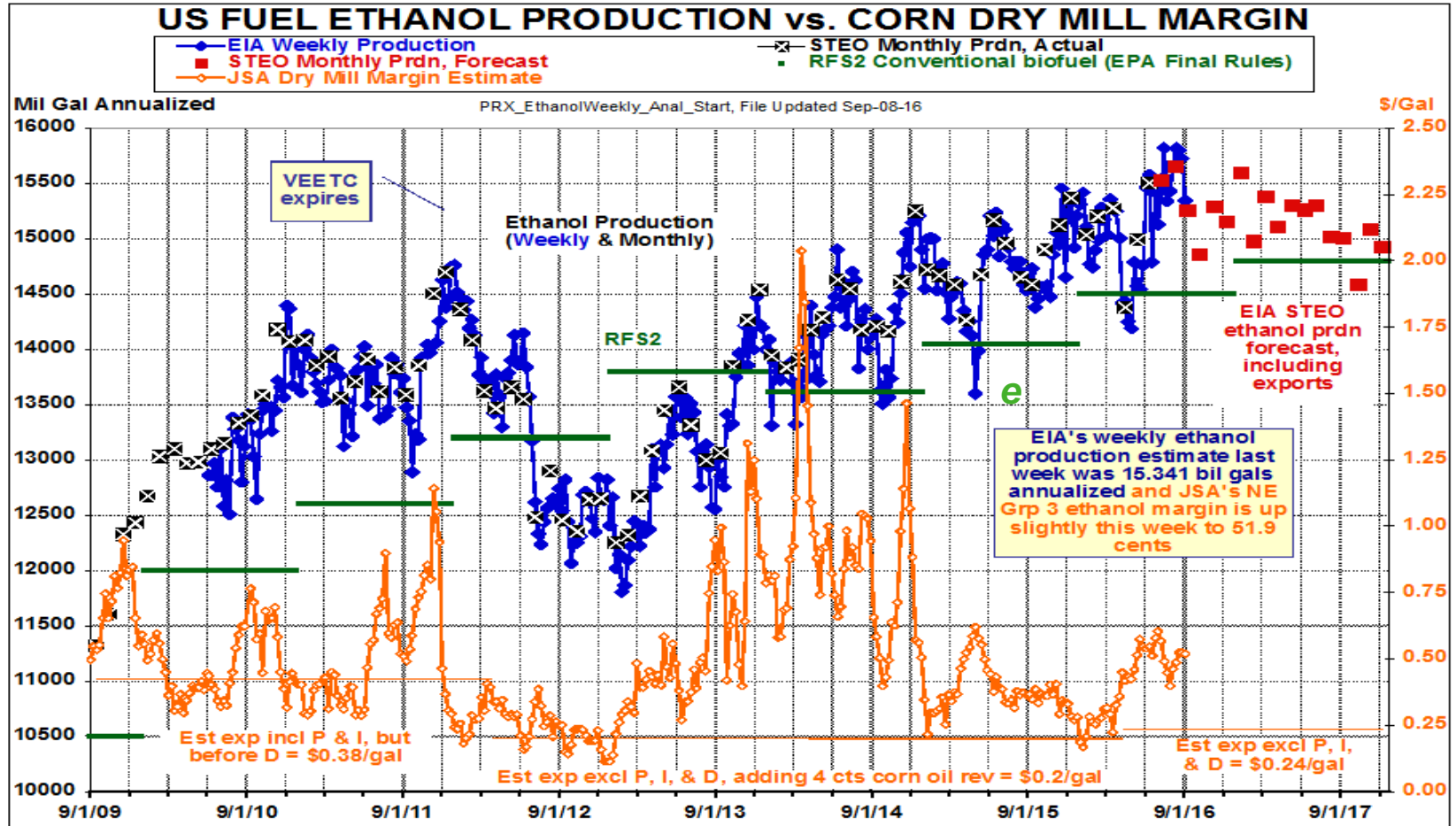
- Huge increase in planted acres has us on track for a record crop
- Smaller corn crop in Brazil has moved export demand back to the US
- Carryout is expected to grow

# ETHANOL PRODUCTION AND MARGINS

9/8/16

PRX The ProExporter Network®

PRX Ethanol Weekly, Page 4

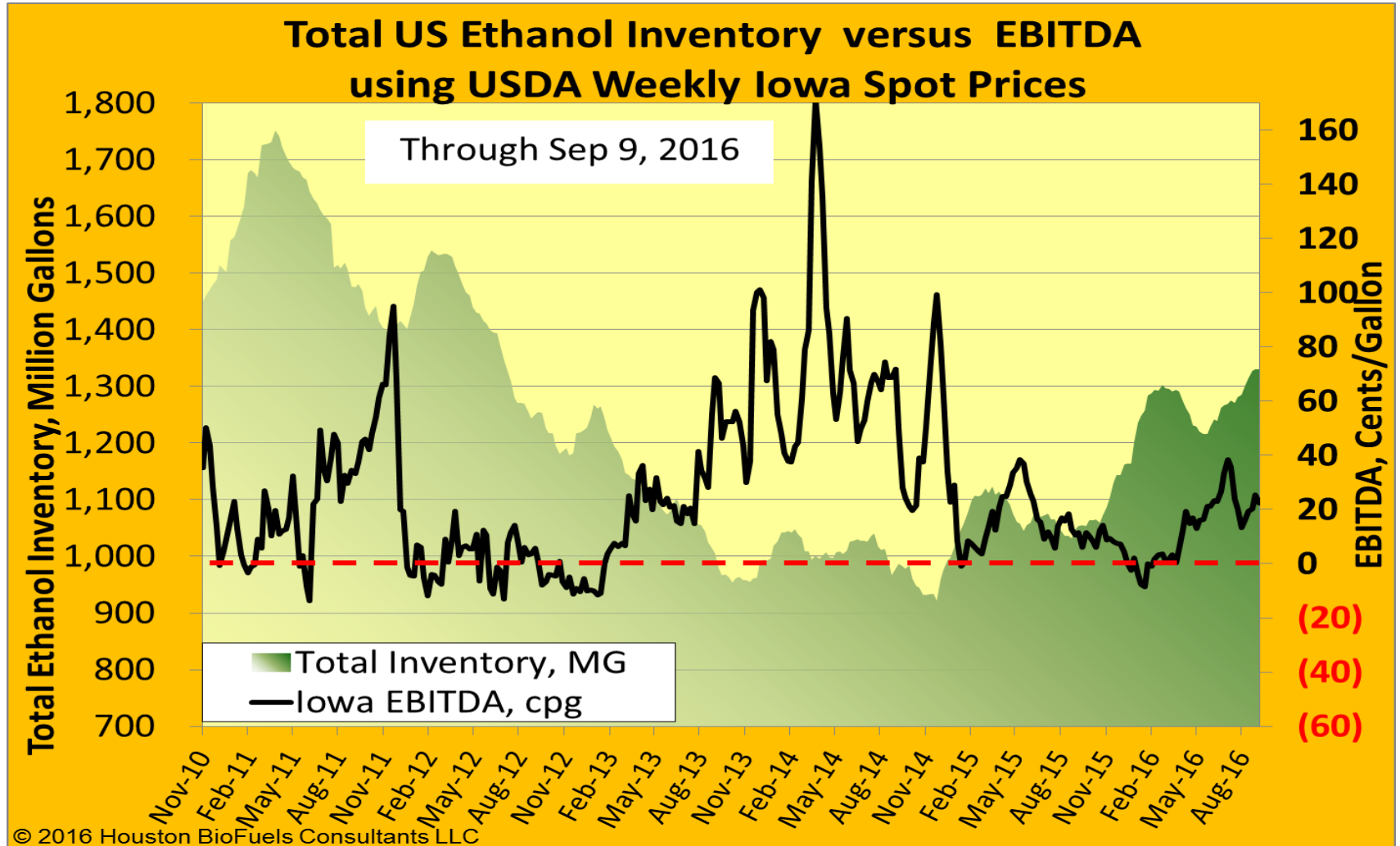


©2016 The ProExporter Network®. The analysis above is not intended as a trade recommendation. The analysis and forecasts are based on available public data and on the best judgment of PRX, but cannot be guaranteed to conform to future reality.

Production exceeds RFS Mandate, but there is some margin 5

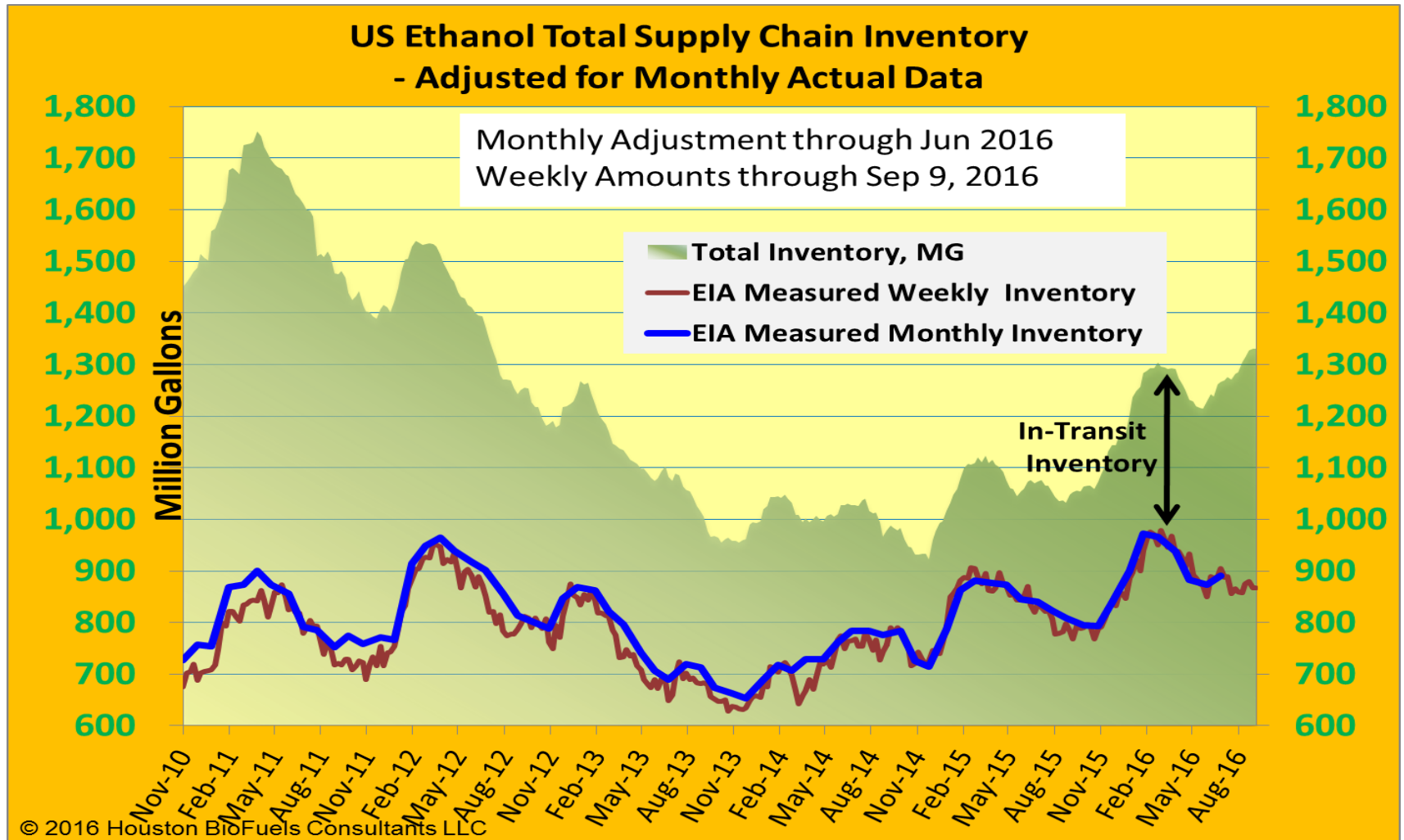


# US ETHANOL INVENTORY VS. EBITDA



Inventories are back up, but some margin exists

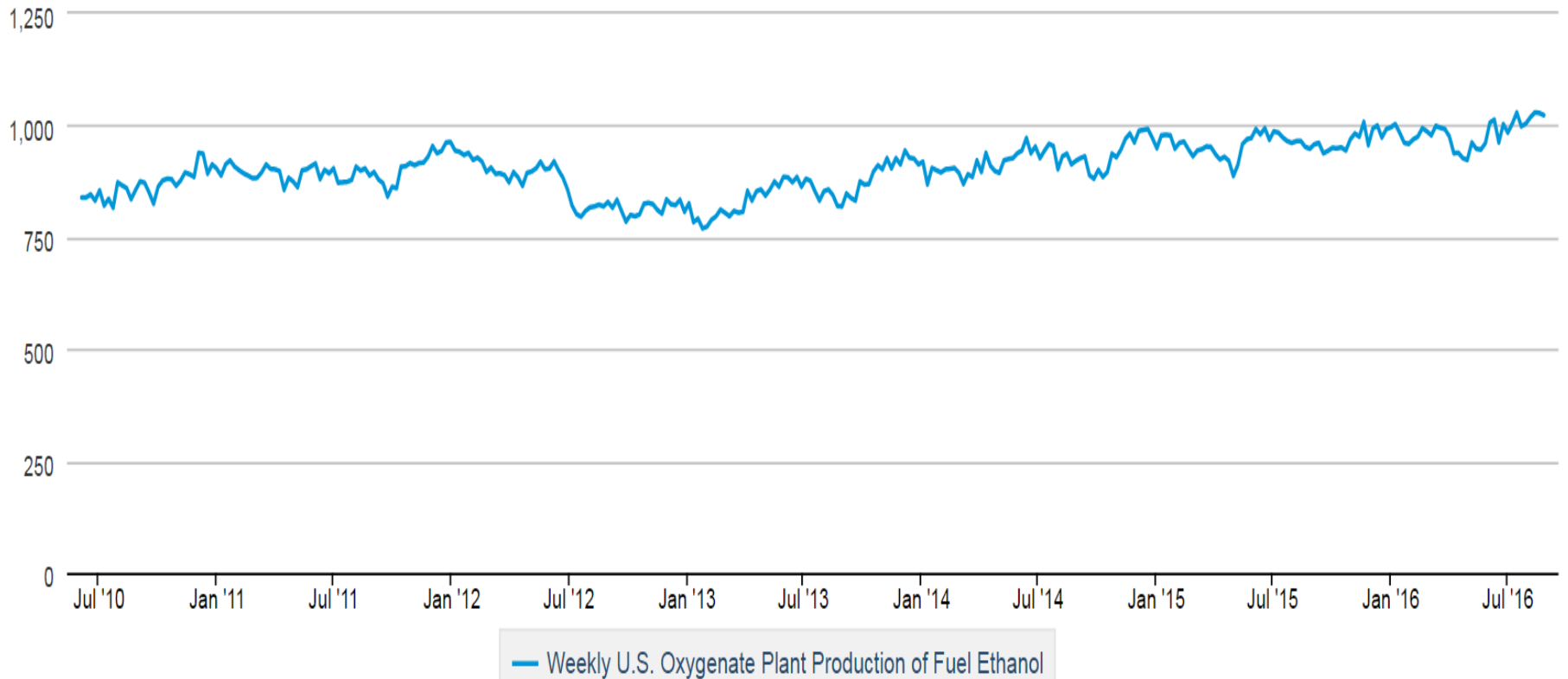
# US TOTAL SUPPLY CHAIN INVENTORY



In-Transit Inventory has increased due in part to slower speeds 7

# US FUEL ETHANOL PRODUCTION

Thousand Barrels per Day



eia Source: U.S. Energy Information Administration

Production has increased since 2010, to over 1 million barrels/day <sup>8</sup>





# ETHANOL EXPORTS VS. IMPORTS

## NET EXPORTS IN KBD THROUGH JUNE 2016

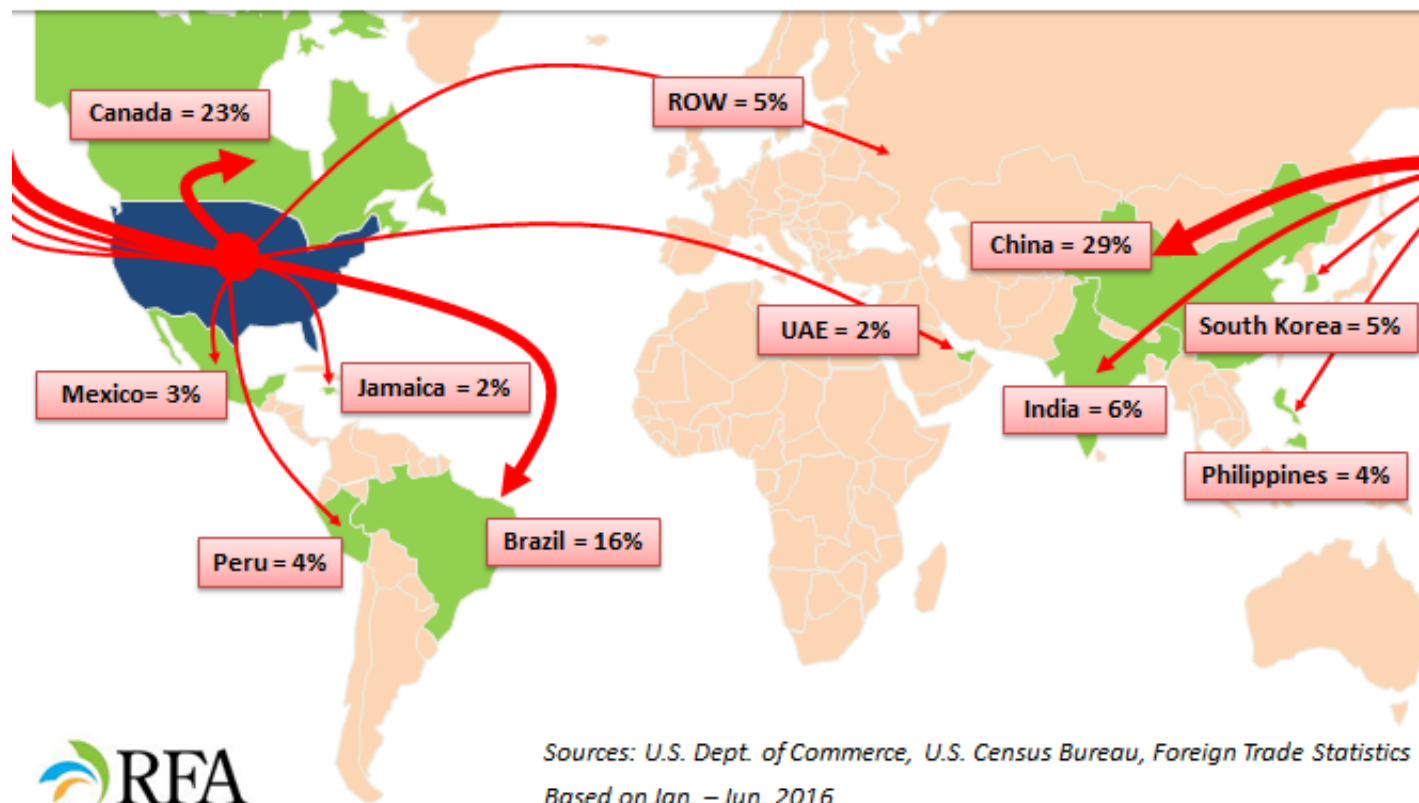


eia Source: U.S. Energy Information Administration

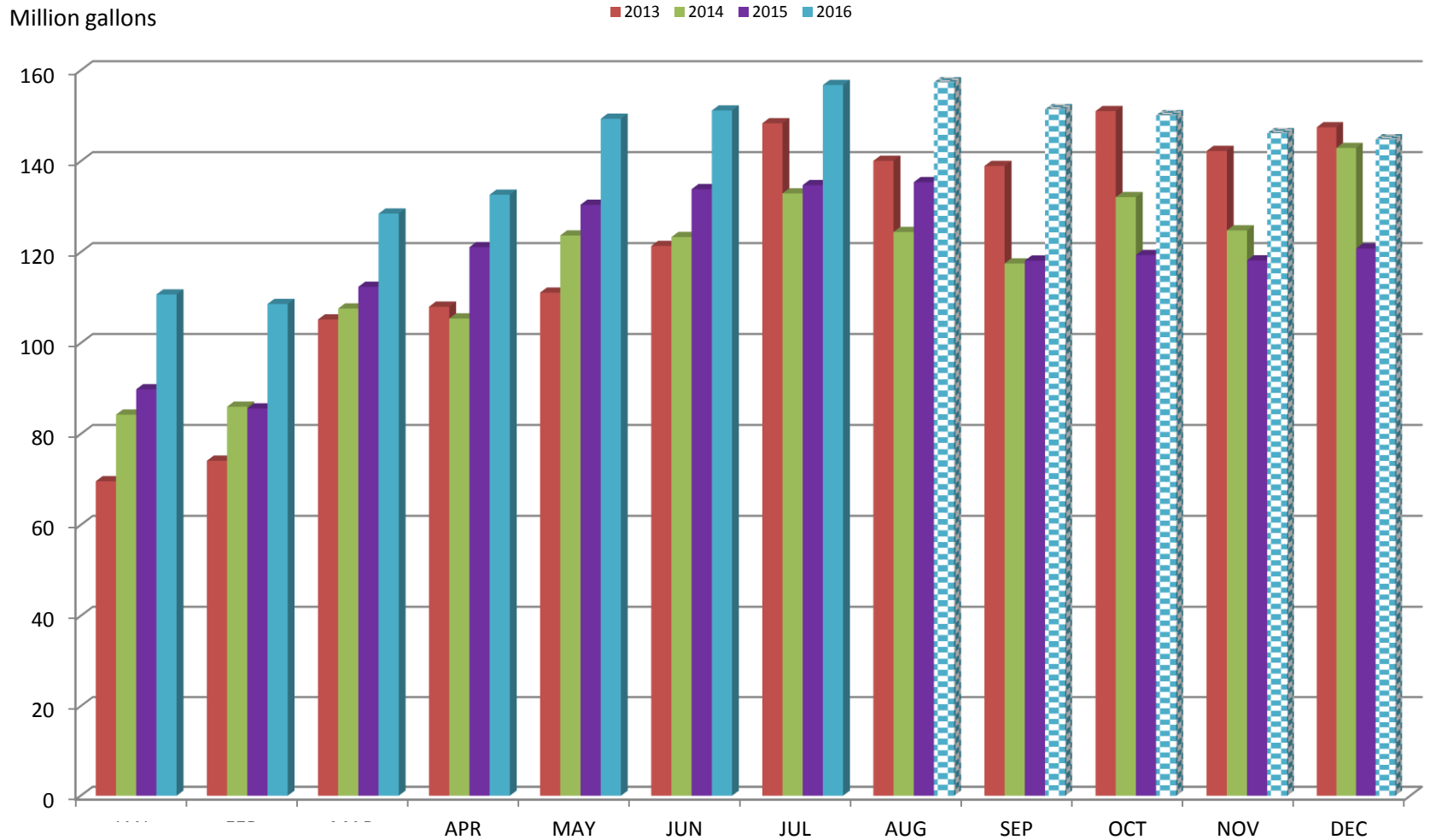
Very little Importing lately and Exports have Increased

# WHERE THE EXPORTS GO

## TOP DESTINATIONS FOR U.S. ETHANOL EXPORTS IN 2016



# US BIODIESEL PRODUCTION

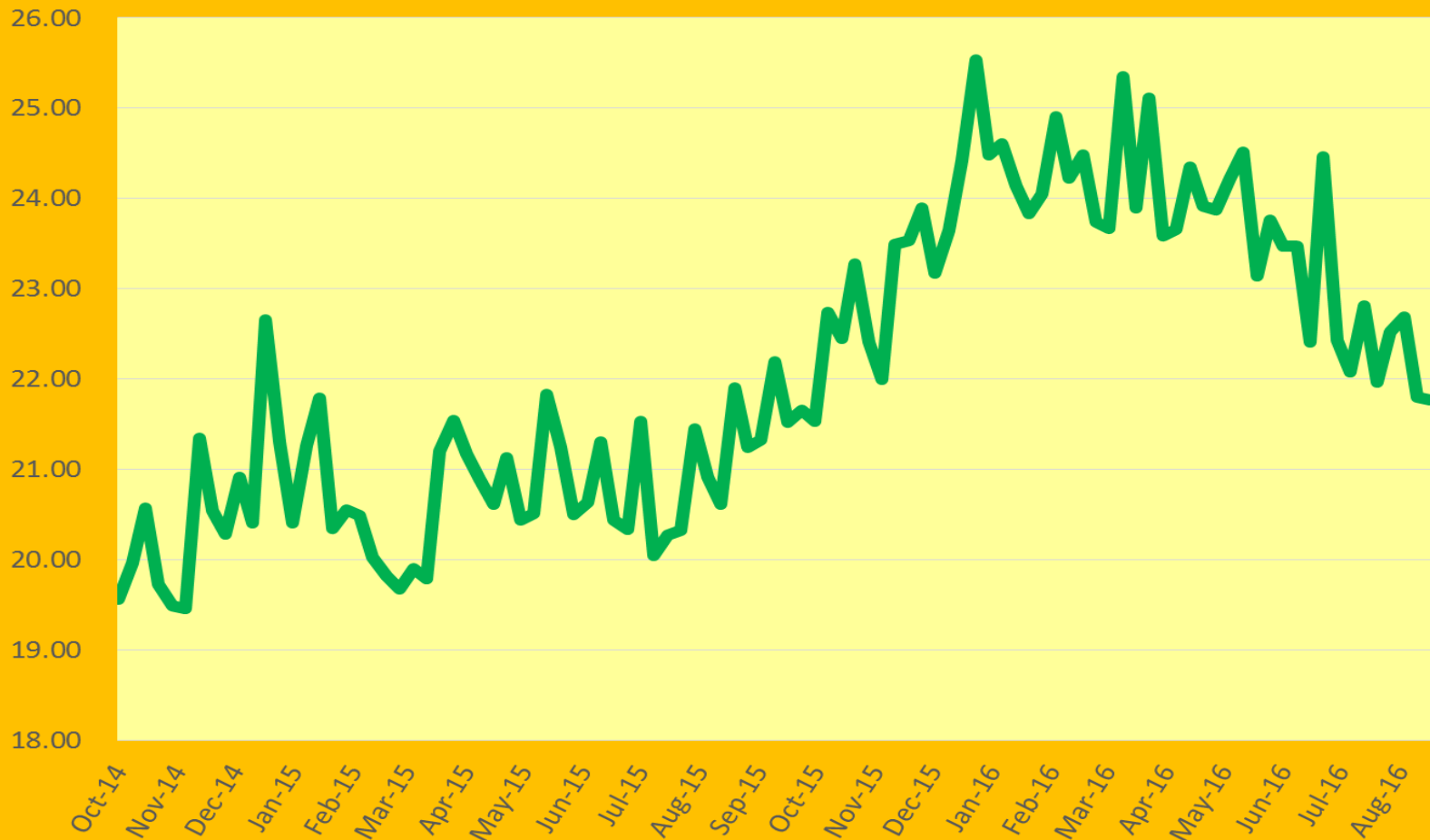


# BIO DIESEL HIGHLIGHTS

- 2016 Production estimated 1.69 Billion Gallons (domestic only)
- 2016 Mandated usage level of 1.9 Billion Gallons (biodiesel only, 500 Million Gallon of advanced biofuel mandates in addition)
- Biodiesel components: Soyoil 46%, Canola 6%, Corn Oil 9%, Other (animal fat) etc. 34%
- There are blend credits in place for 2016. These are blender credits. Congress is looking at blend credits for the producer for 2017 but most likely will not happen in 2016
- Things to watch for: EPA finalizing 2016 Mandates  
Outcome of Tax Credit debate (2017)

# STB WEEKLY SERVICE REPORTS

Weighted Average Train Speed for Ethanol, MPH

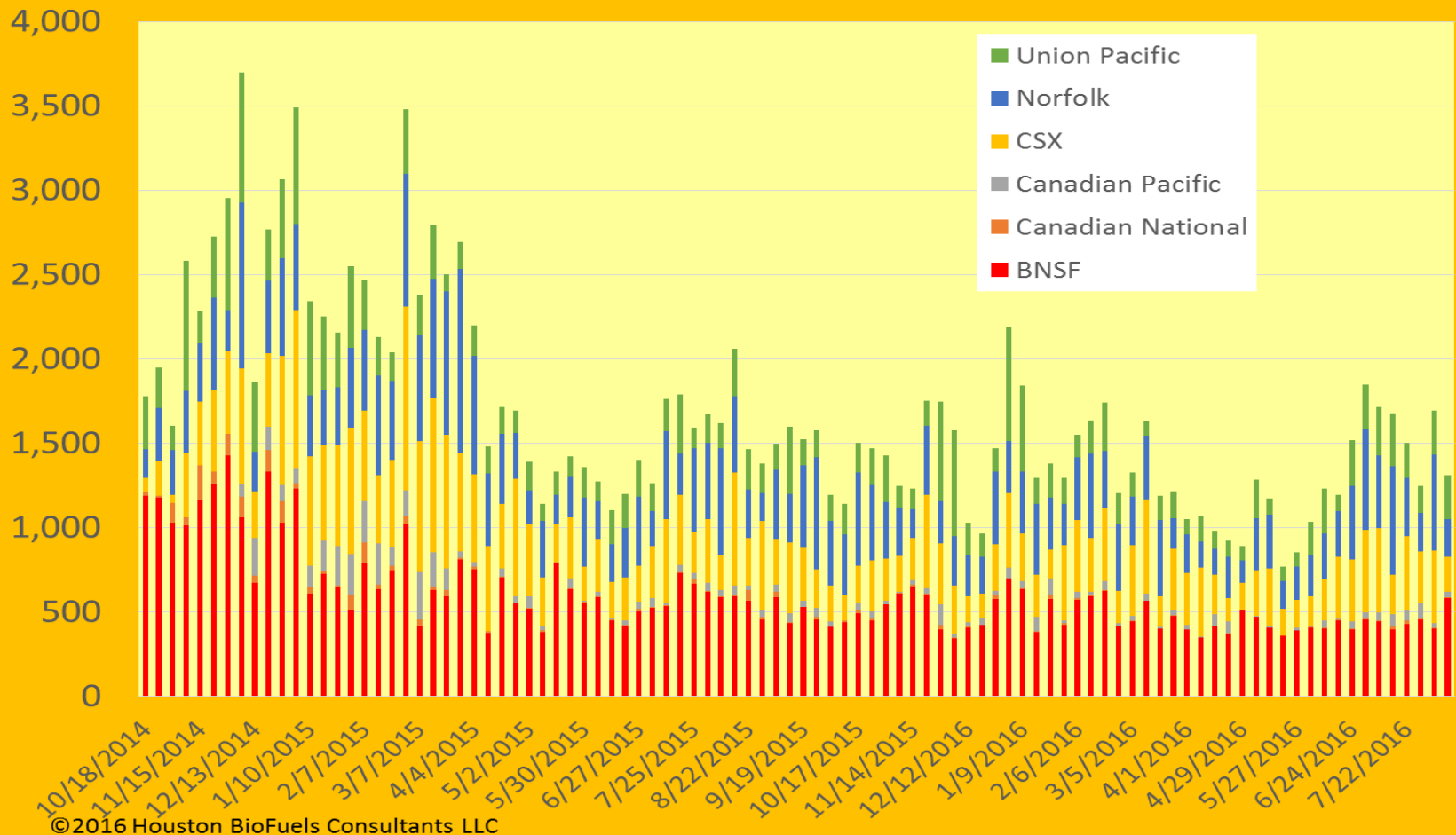


©2016 Houston BioFuels Consultants LLC

Recent 15% drop in speed impacts efficiency and utilization

# STB WEEKLY SERVICE REPORTS

## Total Loaded Ethanol Cars not Moved in Greater than 48 Hours



Delays have increased over the summer

# ETHANOL MARKET & RAIL COMMENTS

## Ethanol Market

- E-15 demand is benefitting from USDA infrastructure grants
- Exports must clear record weekly production to balance S/D
- Record production/cheap corn will encourage high run rates
- Increase in total gas consumption in the US is helping drive demand for ethanol
- Improved Plant efficiency is contributing to excess supply
- A drop in DDG exports to China is hurting price

## Rail Comments

- Given the lower overall traffic, service continues to be good
- Locomotives have been parked and crews furloughed causing worries if there is large harvest and early winter
- Ever increasing rail rates are forcing volumes to truck & barge
- River starting to take bigger market share as barge rates drop
- Export infrastructure developing EC, GC, PNW, CAN & MEX
- RR's need to cooperate on access & ROW's for export infrastructure

# TANK CAR ISSUES

- Dramatic increase of FRA bad order cars is concerning
- Bent washers on manway bolts are reeking havoc
- Concerns about ever longer trains due to infrastructure constraints at destinations
- Tank car regulations, HM 251, may be circumvented by rail carriers that move sooner
- ECB regulations are being challenged. When is this decided?
- Heavy tank car requalification's over the next 2 years
- Repair facility capacity remains tight
- Tank car lease prices are under pressure as more tanks get built than needed





Farmer-owned with  
global connections