

**TRANSPORTATION UPDATE  
CHALLENGES IN THE RENEWABLE  
FUELS INDUSTRY**

APRIL 2014

# WHAT A YEAR!!

- **RFS Challenge**
  - Awaiting final decision but read has turned more positive
- **Bumper crop harvested**
  - <14B bushels
- **Solid ethanol production numbers / Economics**
  - 2<sup>nd</sup> most profitable year since 2007
  - EIA predicting 910k bbls day in 14' up from Feb prediction of 208k and 13' of 895k
  - Jan 14' exports 86M gallons highest # since Dec 2011
- **Prices from \$1.69 > \$2.75**
  - March just under \$4!!
- **Cont'd crude oil growth and infrastructure demands from traditional energy business**
- **TRANSPORTATION ISSUES**
  - Truck and Rail

# WHAT'S GOING ON ?

## Perfect Storm from a Logistics POV

- Strong business volumes across many industries, strained assets, and infrastructure, Weather challenges.....SLOW TURNS!

Slow railcar turns across the industry in turn create liquidation issues and a domino affect

- Certain geographies worse than others
  - SE/NE been the worst....weather
- Initially site specific and affecting some plants more than others but has expanded
- “Right sizing”/Opportunistic fleet management Up to 20% of ethanol cars still employed in Crude and NGL

Overall Rail activity up significantly in many sectors, not only Energy, other industries are impeding

Agriculture/Grains

Manufacturing

# JUST WHAT WE DON'T NEED.....

## Service Advisory



To: BNSF Customers

March 31, 2014

### Early Spring Snow Storm Expected to Impact Service

Early Spring  
Expected to

A fast-moving storm system is bringing snow, high winds and sub-zero temperatures to the Northern Plains and Upper Midwest through Tuesday. Snowfall rates as high as two inches per hour combined with 45 mph wind gusts are expected across much of the Northern Plains. The states most impacted include Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin and Wyoming.

To quickly mitigate the potential negative effects from the storm, BNSF has taken pro-active measures to leverage our network and utilize alternative routes to reduce the total train volume expected in the immediate path of the storm. Further, we have redeployed many of our Winter Action Plans from the last several months to pre-position snow removal equipment and supplement key manpower to improve storm-required responsiveness in the affected areas. For select unit trains, BNSF is activating alternate gateways to avoid forecasted storm areas and mitigate potential traffic delays.

As the storm develops, BNSF will continue to modify its Transportation Service Plan (TSP) to route traffic away from congested locations and to coordinate and re-route shipments with eastern carriers through alternate interchange gateways as conditions warrant.

Customers tracing their freight may notice nonstandard routings, locations and interchanges. Some traffic re-routing could lead to longer overall transit times by several days compared to normal conditions.

If you have questions, please contact BNSF Customer Support at 1-888-428-2673 (select option 4, then option 3).

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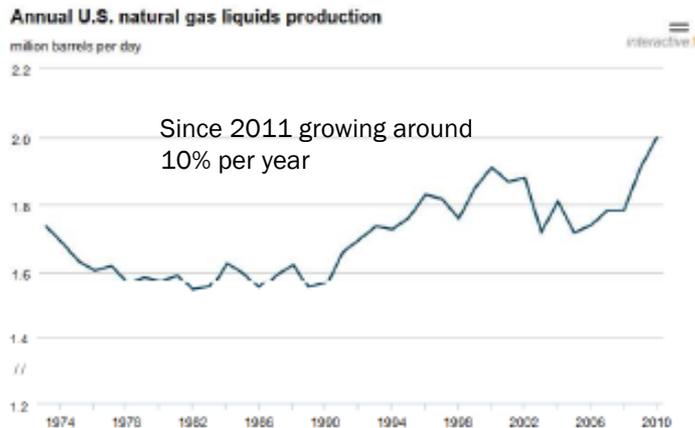
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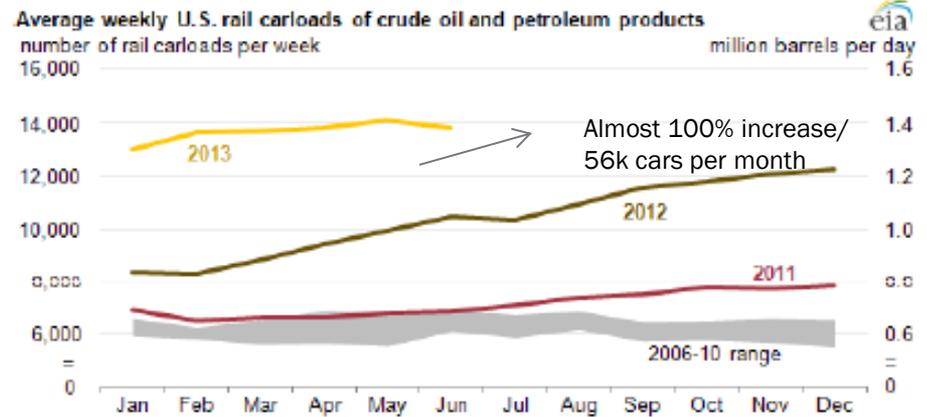
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# ENERGY IMPACT

## Growing Markets



Source: U.S. Energy Information Administration



- Increased demand creating longer lead times to serve incremental demand.
- Expertise required to manage rail is also tightening.

# ANCILLARY IMPACTS

## New Crude Requirements

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### Requirements

- Designation as key trains – 20 or more cars of crude/ethanol.
  - One or more cars of the older DOT-111 design.
- Maximum speed – 50 MPH, 40 MPH in High-Threat Urban Areas.
- Increased track inspection along routes.
- Additional braking systems.
- Application of the Rail Corridor Risk Management System.
- Increased track-side technology.
- Increased emergency response.
- Additional product testing requirements.

### Potential Implications

- New, longer routing.
- Longer transit times.
- Additional costs.
- Compliance management.

# CONT'D

- **Fleet upgrades and maintenance associated with new safety regulations**
  - Recent crude oil incidents have driven companies to review all hazardous materials and railcars employed in service
  - Transitioning/Upgrading of fleets:
    - Head shields
- **“Domino Affect”**
  - Car limitations create pressure on trucking industry
  - Price driven opportunities and supply needs weigh in
    - Create long haul opportunities which further stretch truck assets and availability
  - Average haul on a mileage basis is up around 150-200 miles over the last several months, which means a truck can make 1 turn day vs. 2.
  - New trucking demand for energy related opportunities:
    - Frac sand and other NGL activity is growing

# REFINED FUELS VS. ETHANOL

- Refined Fuels business
  - 95% + carried by pipe
  - 20-25 Days of inventory typical in pipeline systems
  - Not directly affected by weather
- Ethanol
  - 0% carried by pipe
  - Days of inventory: Average 7-10 days at plant level
    - Many terminals have less than 10 days of supply ~ JIT inventory in some areas
  - Directly affected by weather

# WHAT'S IN STORE NEAR TERM?

## When/How does this get better

- Railroads are employing add' assets...some of this is a long term solution
- Weather improving
- Pipeline solutions will impact
  - Recent developments from Bakken to Midcontinent on NGLs
  - Expansion of pipe from Cushing to Gulf Coast (EPP-Enbridge) taking some pressure off Crude shipments
  - Keystone??
- Next couple months should see some improvement. Long term will be driven by economic and asset employment

## Will we see this again

- Yes.....supply-demand peaks, uncontrollable weather, international demand surging that will continue to create challenges and opportunity!