



# Rail Energy Transportation Advisory Committee

Rail Fleet Update  
April 13, 2015

# Agenda

Macro & Freight Environment

Freight Car Deliveries & Build Forecast

Covered Hopper Outlook

Coal

Tank Car Outlook

Regulatory Update

# Macro & Freight Environment

- Improved economic outlook and rail traffic expected during 2015, and return to more stable long term growth rates
- Real GDP growth est. ~ 3% for 2015 and slightly below thereafter
- Industrial production to grow 4% in 2015
- Housing starts in 2015 est. at 1.1MM
- Gas prices at historical lows, having positive impact on consumer spending
- Growth in rail traffic expected to continue with new car builds, demand and replacements
- Freight car builders delivered over 67k cars in 2014, with current forecasts at over 90k cars in 2015; ~36% increase

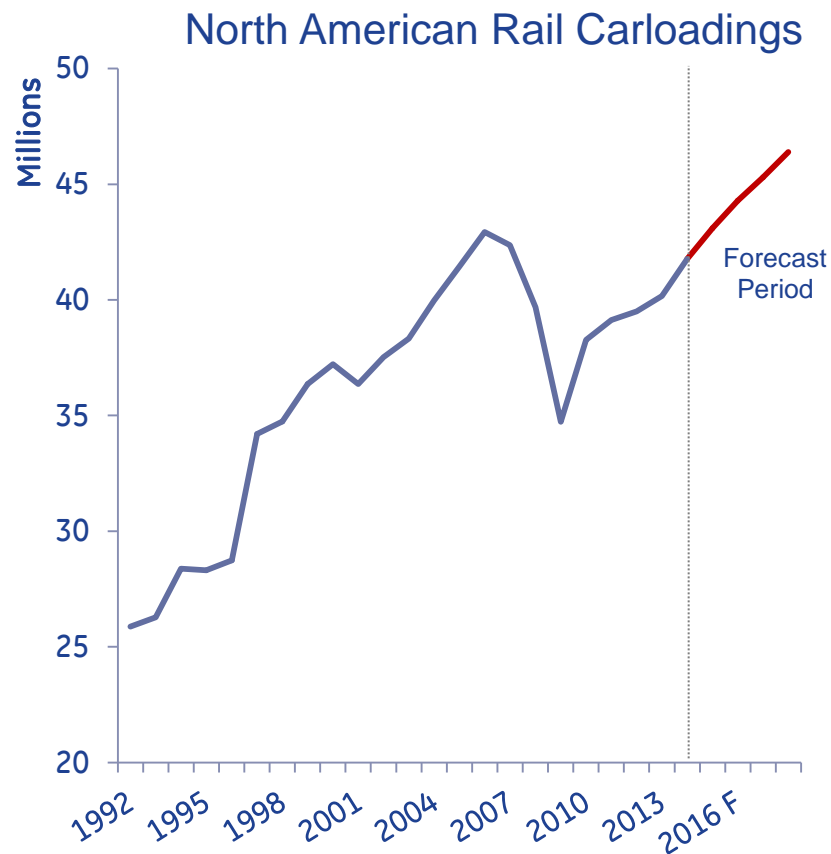
Source: FTR Associates , Oxford Economics

Rail traffic growth continues in petroleum, grain and chemical markets

# Railcar Demand Drivers

- NA Carloads est. 3.2% growth in 2015 and ~ 2.5% per year beyond
- 2015/16 corn production 13.5 Billion bushels; yields at 171bushels/acre (USDA)
- Farm products carloads grew over 12% in 2014
- Growth continues in Chemicals, Sand and Ag sectors
- New chemical capacity expected to come online in 2016-17
- Rail traffic remains strong, steady growth for US GDP & IP

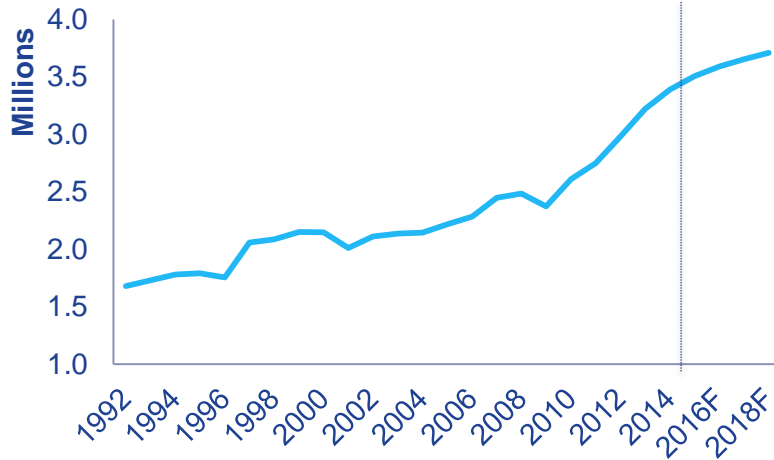
Source: FTR Associates



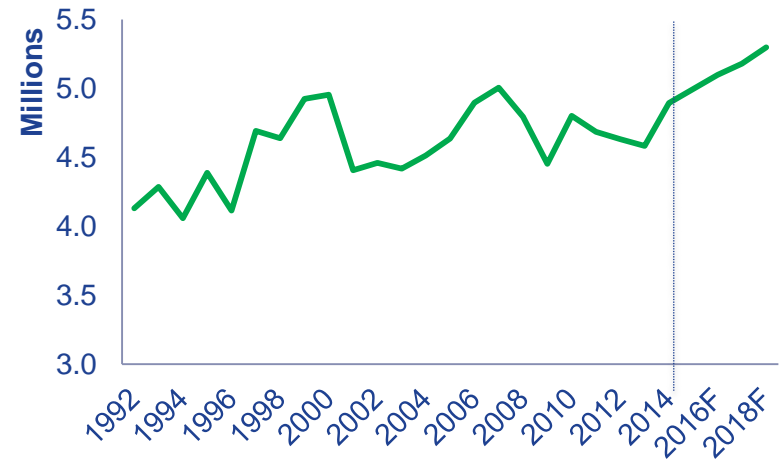
Source: FTR Associates

# N.A. Railcar Loadings by Car type

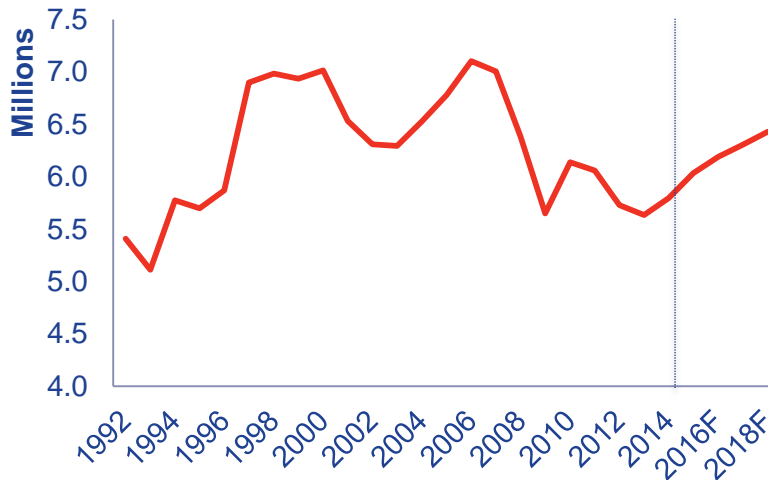
## Tank Carloadings



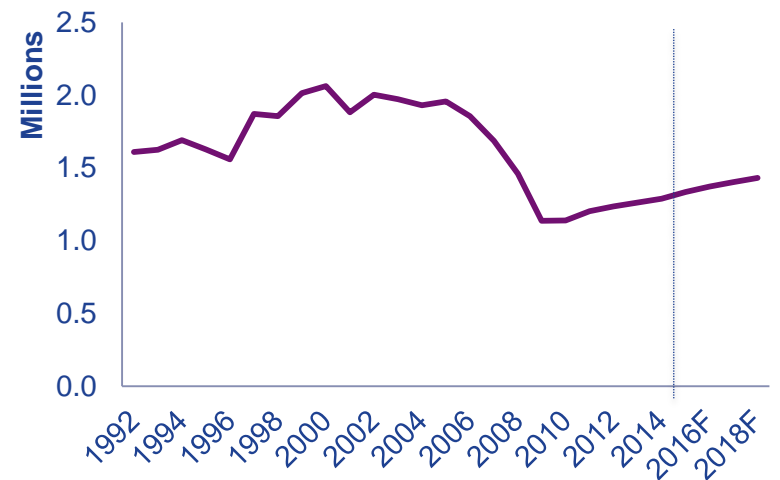
## Covered Hopper Carloadings



## OT Hopper Carloadings



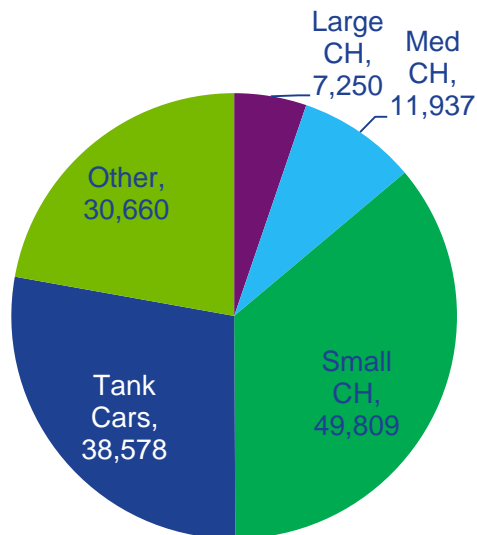
## Box Carloadings



Source: FTR Associates

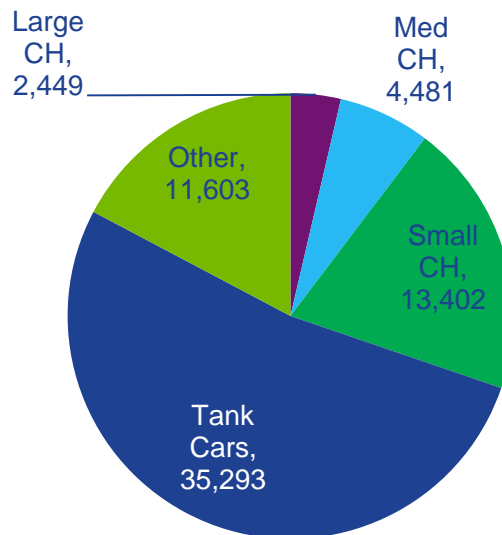
# Freight Car Builds

## 2014 Orders



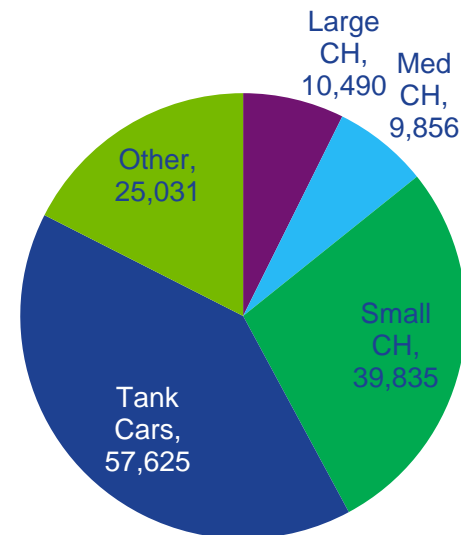
- Large CH > 5500 c/f
- Med CH 3500-5500 c/f
- Small CH < 3500 cf
- Tank Cars
- Other

## 2014 Deliveries



- Large CH > 5500 c/f
- Med CH 3500-5500 c/f
- Small CH < 3500 cf
- Tank Cars
- Other

## 4Q'14 Backlog

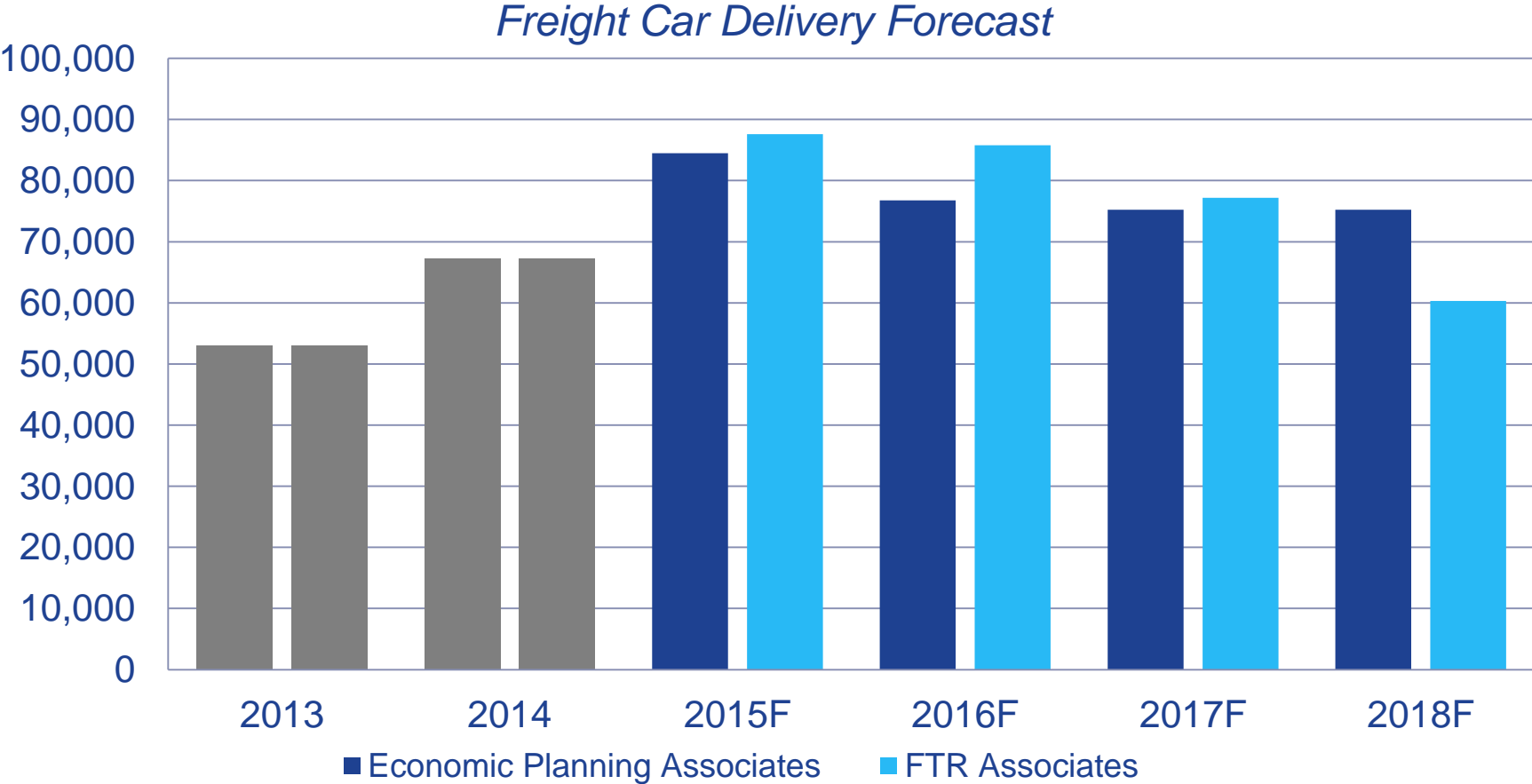


- Large CH > 5500 c/f
- Med CH 3500-5500 c/f
- Small CH < 3500 cf
- Tank Cars
- Other

Other category includes Box, Flat, Gondolas, OT Hoppers, Intermodal

Source: Railway Supply Institute, ARCI 4Q-2014

# Freight Car Builds

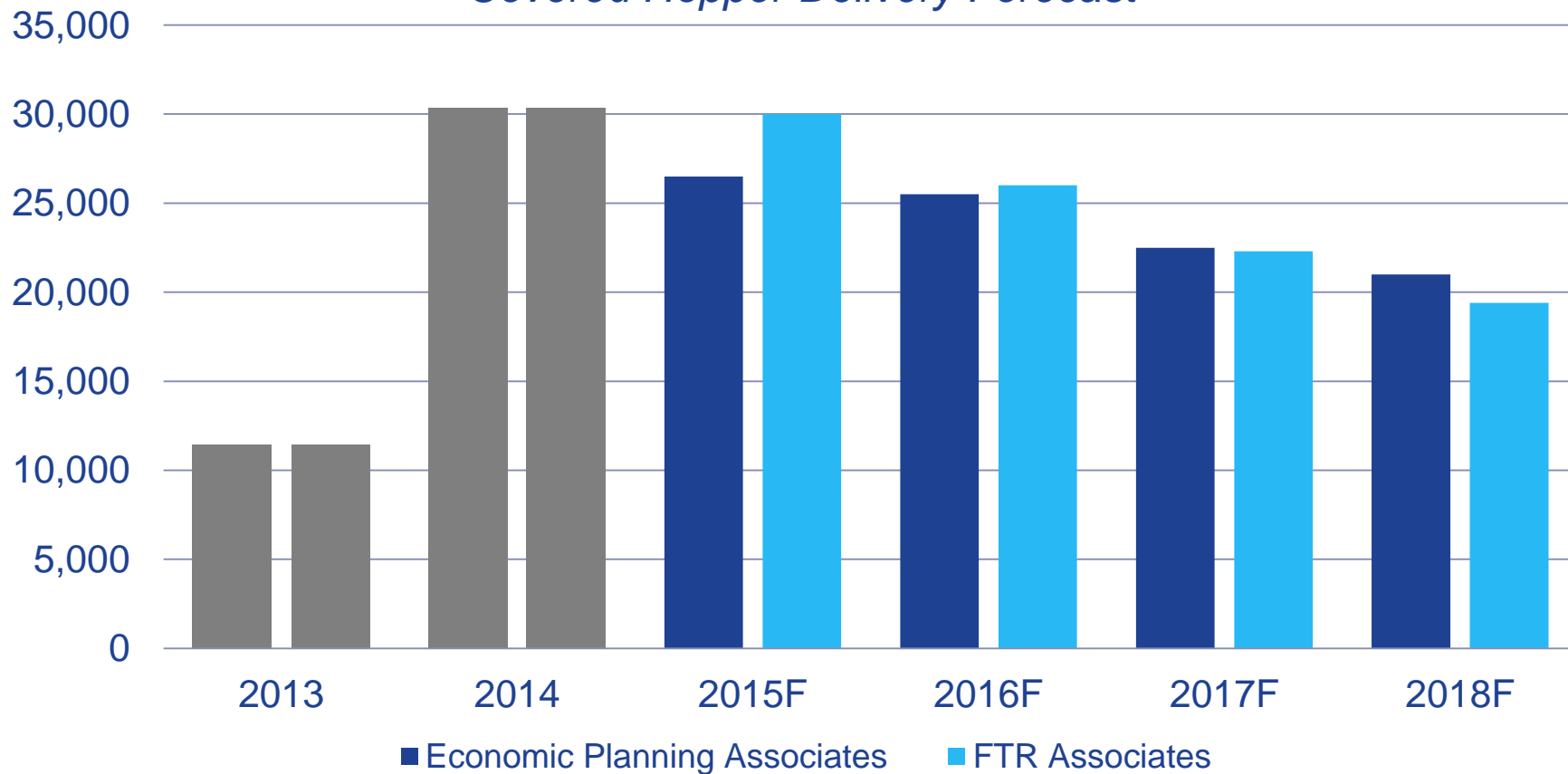


Significant growth in total freight car deliveries expected in 2015

Source: Economic Planning Associates, FTR Associates

# Covered Hopper Car Builds

*Covered Hopper Delivery Forecast*



2015 Covered Hopper deliveries driven over 50% by Small cube builds

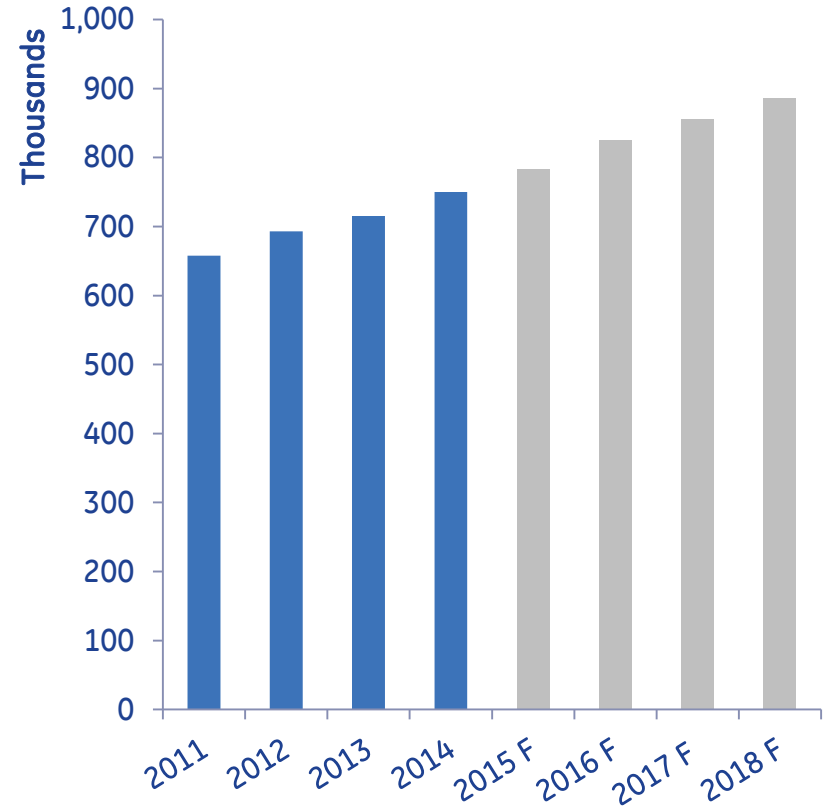


# Sand & Cement

- Stone, sand & gravel ~ 7% of U.S. rail carloadings
- Est. ~2.5% growth in U.S. sand carloadings due to inc sand use and cement growth
- Housing and construction continues to recover; est. 4% growth in 2015 and higher
- US cement volume is expected to rise to 101.4MM tons by YE 2018 from 87.8MM in 2014
- Cement consumption CAGR ~4.3% during the period 2013–18

Source: FTR Associates, Market line

## Stone, Sand, Glass, Clay and Gravel Carloadings



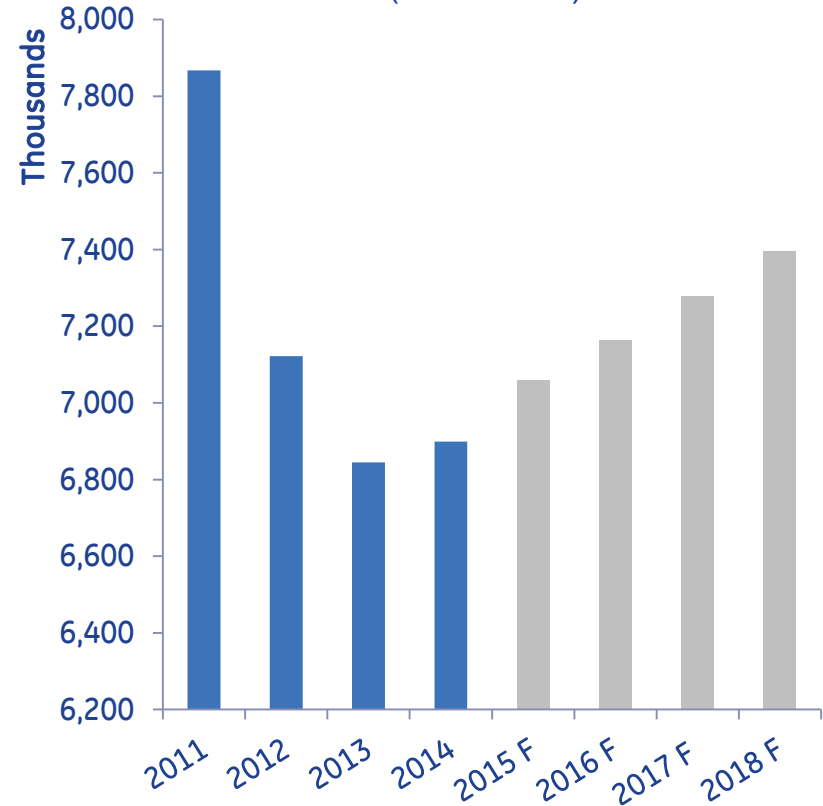
Source: FTR Associates / Rail Equipment 1Q'15

# Coal

- Coal ~ 38% of U.S. carloadings; will continue to be a significant share of total volume
- 2014 Coal production grew 1% in 2014, but expected to decline in 2015-16 (EIA)
- Coal consumption was roughly flat in 2014
- Carload volumes held relatively steady for the first half of Q1-15 but have now dropped below 2014 levels
- 2015 demand expected to decline as natural gas prices remain low and retirements of coal power plants continue

Source: FTR Associates, AAR

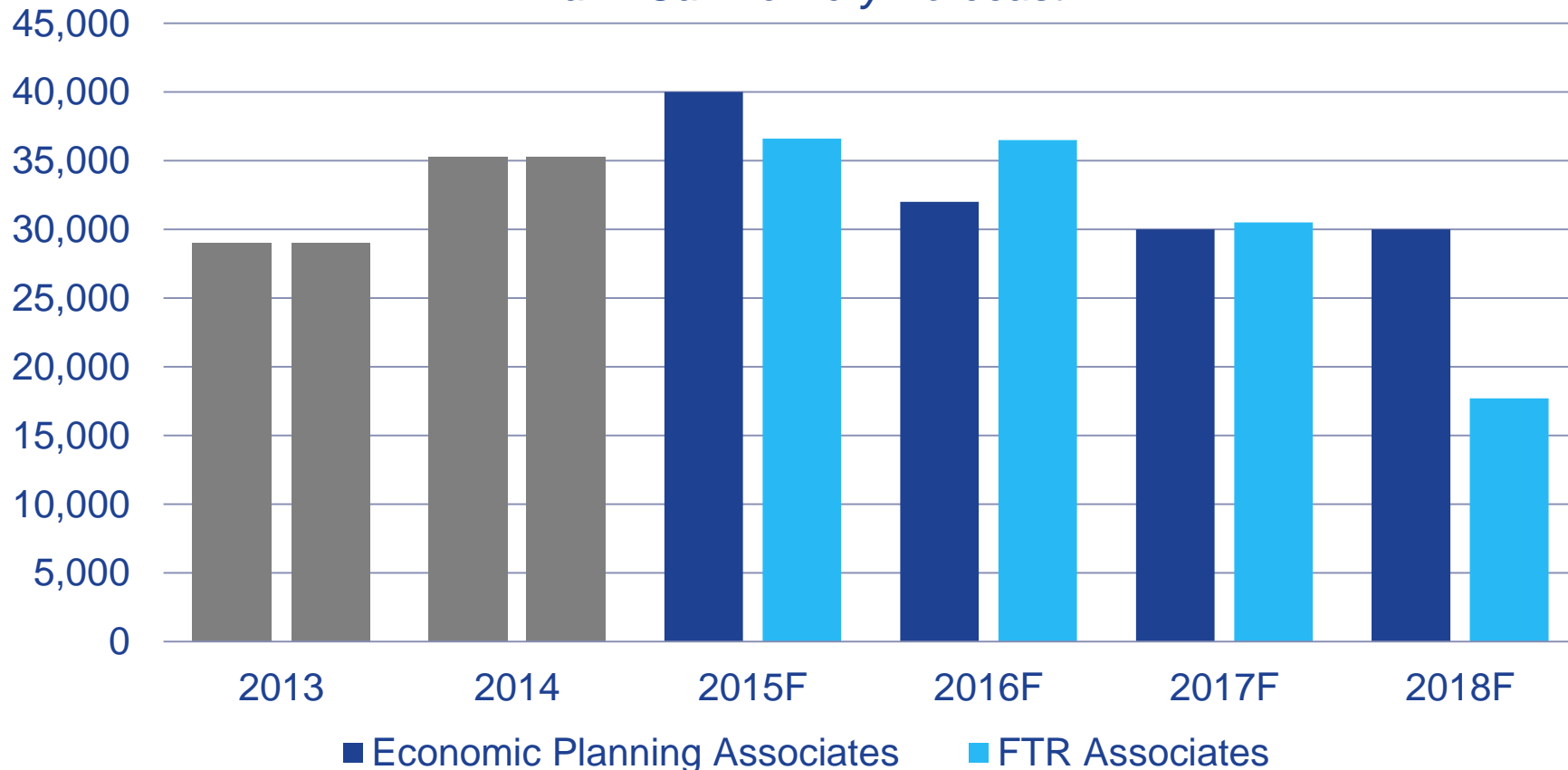
**Coal Loadings**  
(thousands)



Source: FTR Associates / Rail Equipment 1Q'15

# Tank Car Builds

*Tank Car Delivery Forecast*



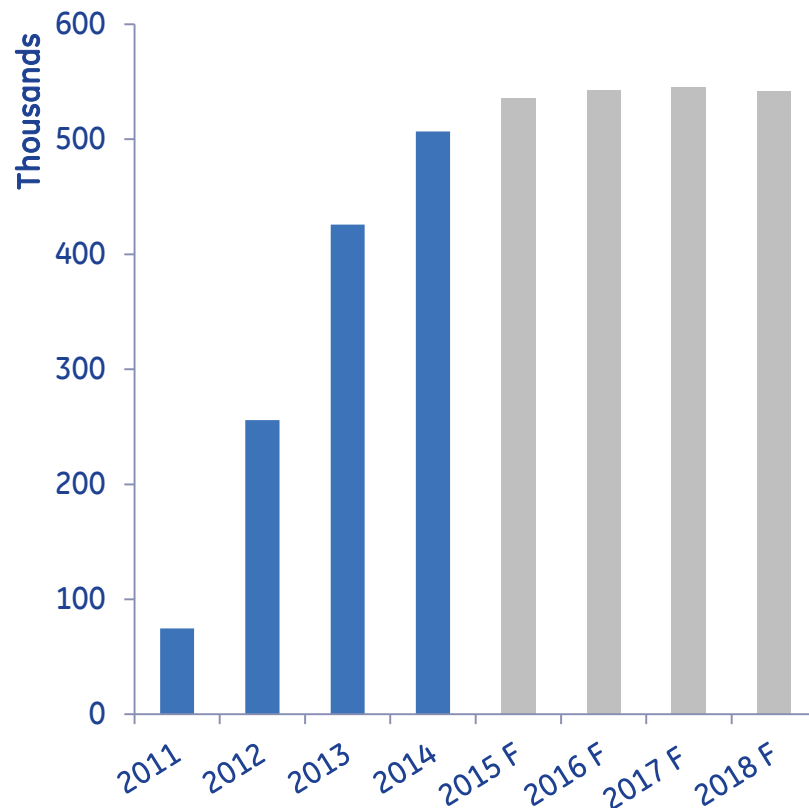
Tank builds to be driven by CBR, replacements and regulatory changes.

# Petroleum, Crude Oil & Natural Gas

- Petroleum, crude, & natural gas products make up 4% of North American Car Loadings
- U.S. crude oil production record levels, EIA est. 9.3MM b/d in 2015
- U.S. Petroleum Carloads still expected to grow in 2015
- Canadian oil sands production est. to grow 2.5x, up to 4.8 million b/d by 2030; railcar loadings growth of 7-9% thru 2017
- EIA forecast WTI price ~ \$55/bbl in 2015 and \$71/bbl in 2016
- Oil price impact on investment, however east-west moves remain core to CBR traffic; further delays in pipeline projects

Source: FTR Associates, EIA, CAPP

**North American Petroleum,  
Crude and Natural Gas Loadings**  
(Thousands)



Source: FTR Associates / Rail Equipment 1Q'15

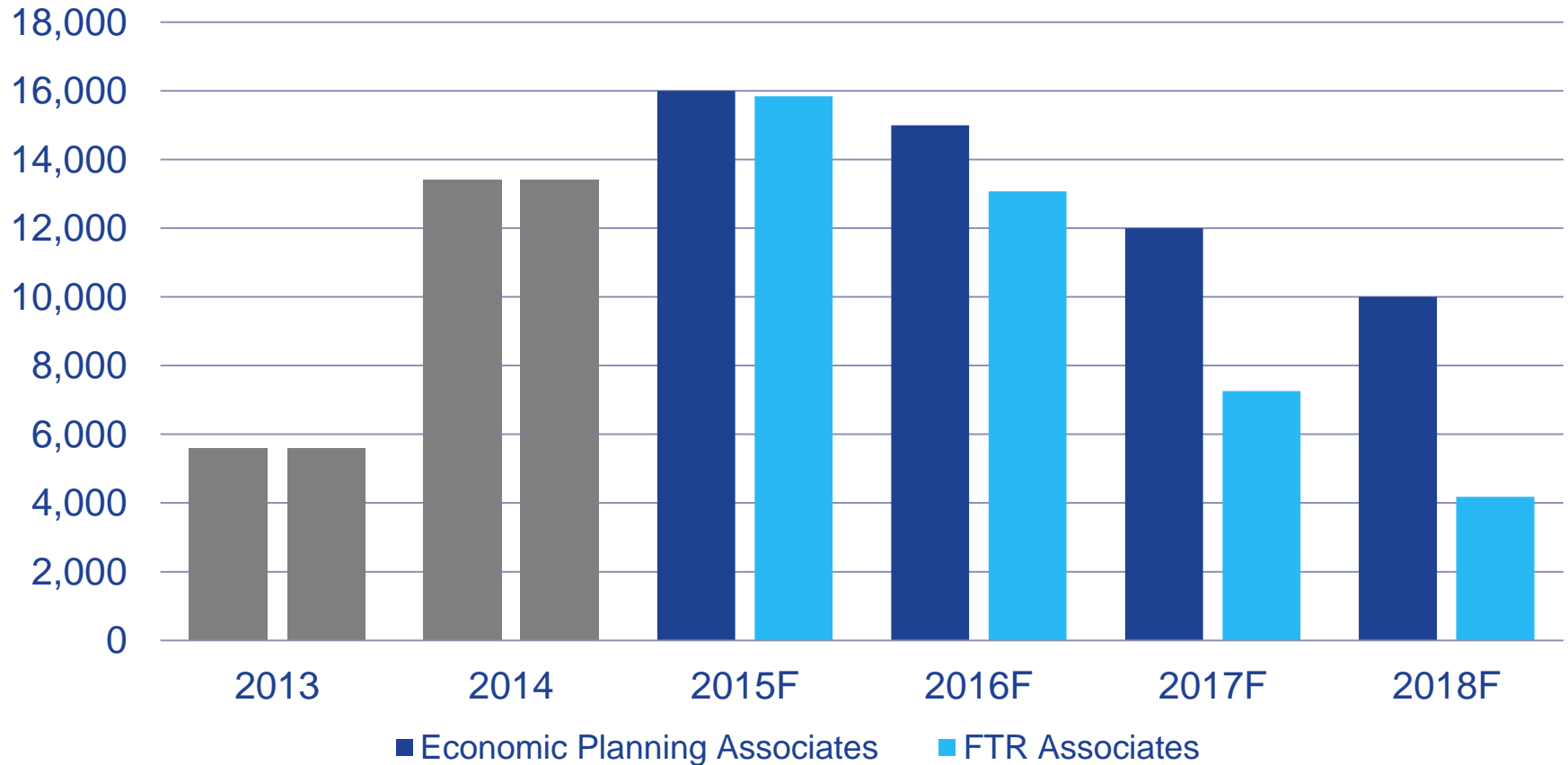
# Tank Car Regulatory Update

- DOT/PHMSA Proposed Rulemaking (HM-251) filed with OIRA, May 2015 Final Rule release noted on DOT regulatory schedule update
- Transport Canada Consultation efforts continues. Gazette 1 (NPRM) or possibly Gazette II (Final Rule) expected Spring 2015
- Interested trade associations: AAR, RSI, API, AFPM, Growth Energy, RFA, ACC, CAPP
- Holistic approach to safe rail transportation of flammable liquids remains critical.
- Harmonization efforts conducted between US DOT and TC
- Scope of regulations and prioritization of modifications requires clarity, commodity based or train operations under consideration
- Prescribed sets of standards for new and existing tank cars sought, performance standard available as option
- Harmonized modification timeline sought, compliance driven by scope and anticipated modification capacity
- Economic impact of proposals to be reviewed in US and Canada

# Appendix

# Small Cube Hopper Car Builds

*Small Cube Hopper Delivery  
Forecast (< 3500 c/f)*



Small cube builds still expected significant growth in 2015 due to sand and cement.