



# Rail Energy Transportation Advisory Committee

## Rail Fleet Update

December 1, 2015

# Agenda

Macro & Freight Environment

North American Carloadings

Freight Car Deliveries & Build Forecast

Commodities Outlook

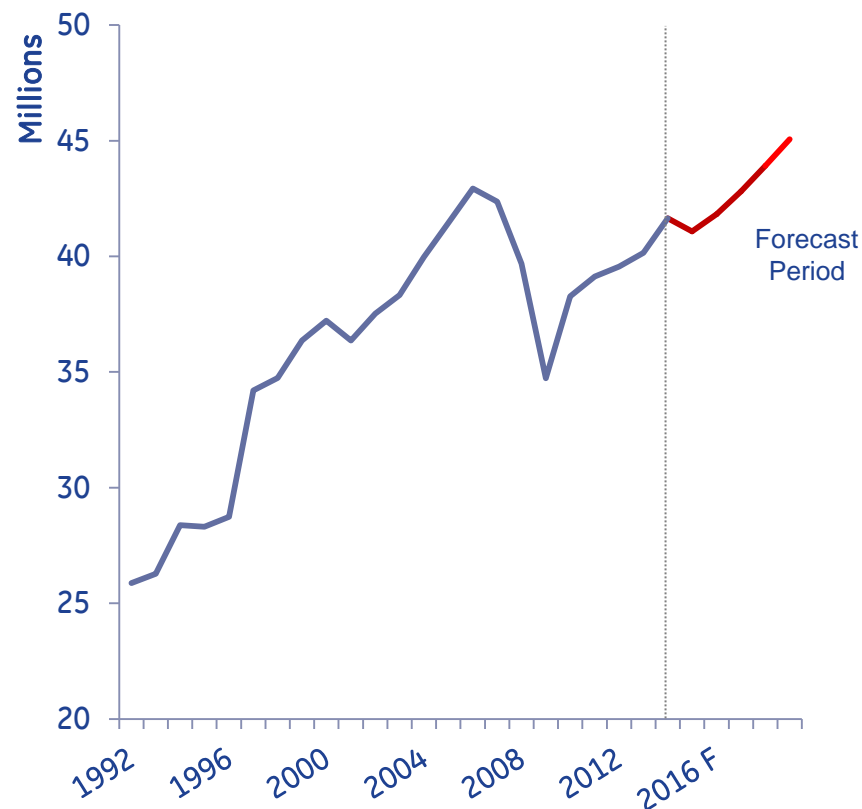
# Macro & Freight Environment

- Real GDP grew by 1.5% in Q3'15 and is expected to grow 2.5% in Q4'15.
- Industrial production to grow 2% in 2015, down from 4% in 2014
- Housing starts est. at 1.1MM in 2015 and 1.3MM in 2016.
- Manufacturing facing headwinds due to the strong dollar, weak global growth and falling energy investment
- Gas prices at historical lows, having a positive impact on consumer spending
- Rail volumes have declined or remained flat across the board, with coal leading the downward push.
- Freight car builders delivered over 67k cars in 2014, with current forecasts at ~86k cars in 2015; ~28% increase

# Railcar Demand Drivers

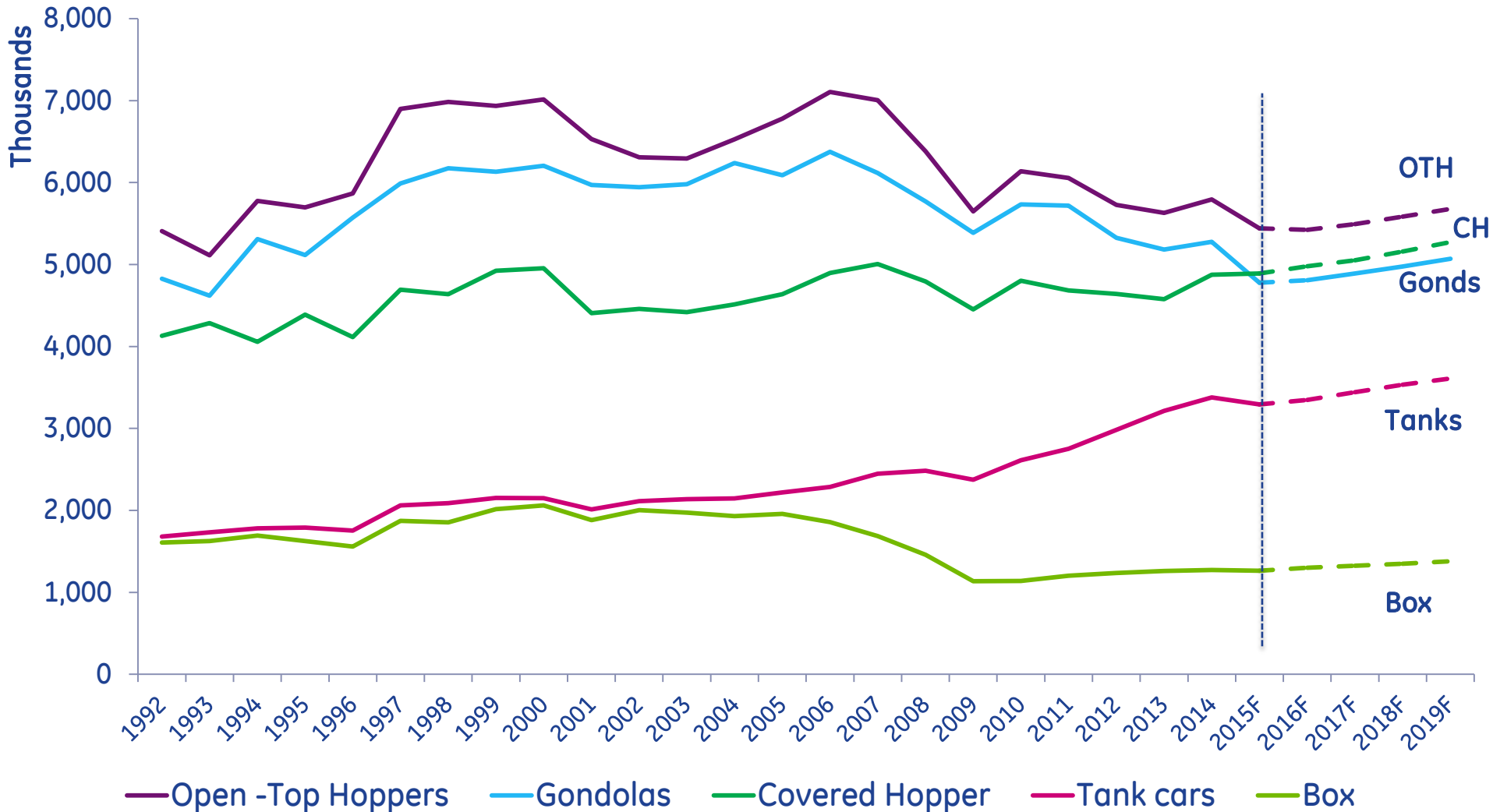
- NA Carloads est. flat growth in 2015 and ~ 2.5% per year beyond
- Fleet Utilization projected to fall 9.5 points y/y to 81.6% with declines across all car types
- Corn production grew 2.8% in the '14/'15 season; expected to decrease 4.4% next year
- Natural gas prices are extremely low (\$2.89MM/Btu in 2015) putting pressure on the outlook for coal.
- New chemical capacity expected to come online in 2016-17
- Lower freight volumes and rail network improvements will push up the # of surplus cars.

North American Rail Carloadings



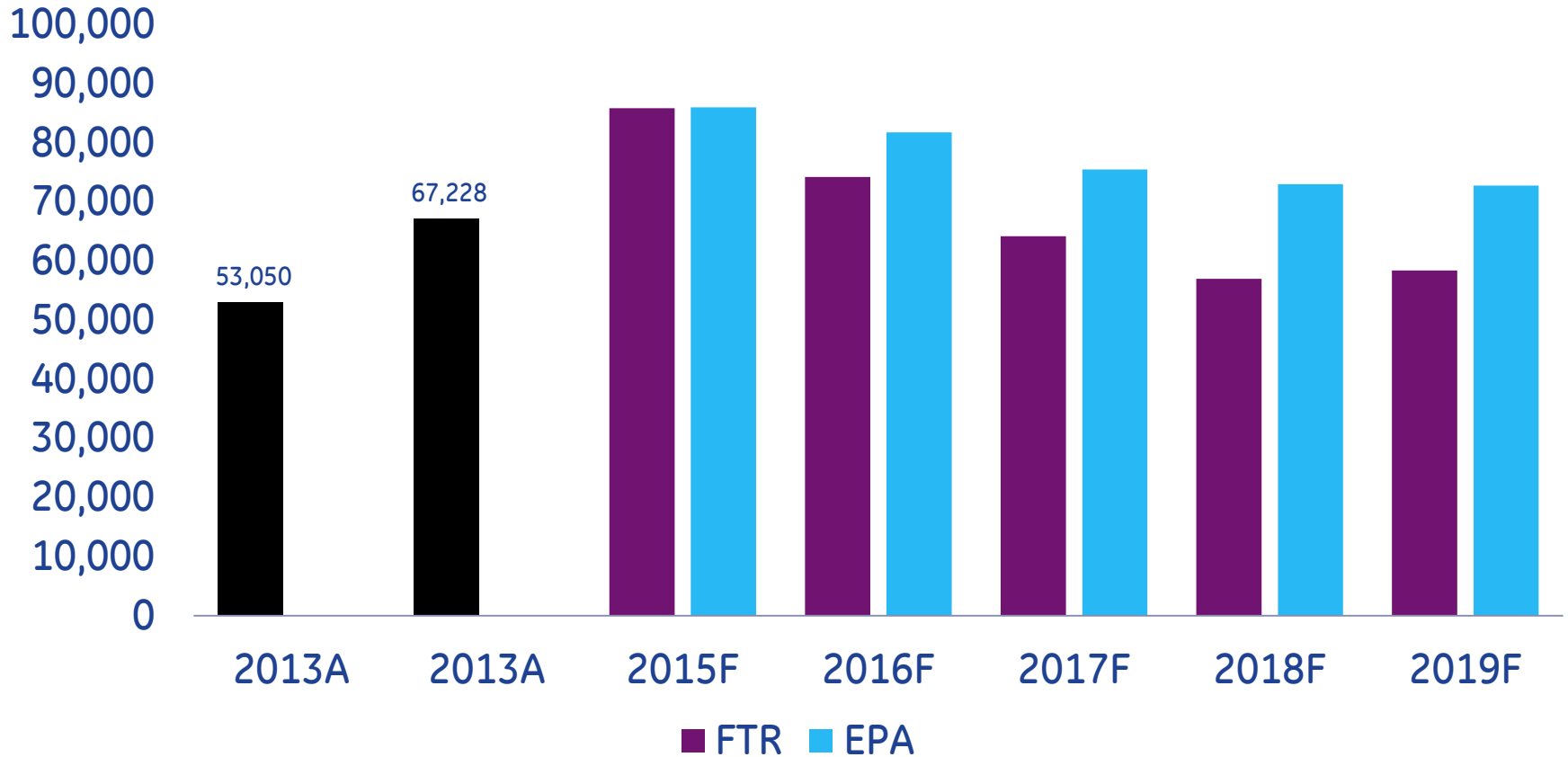
Source: FTR Rail Equipment Q3'15 [www.ftrintel.com](http://www.ftrintel.com)

# N.A. Railcar loadings by car type



# Total Freight car Builds

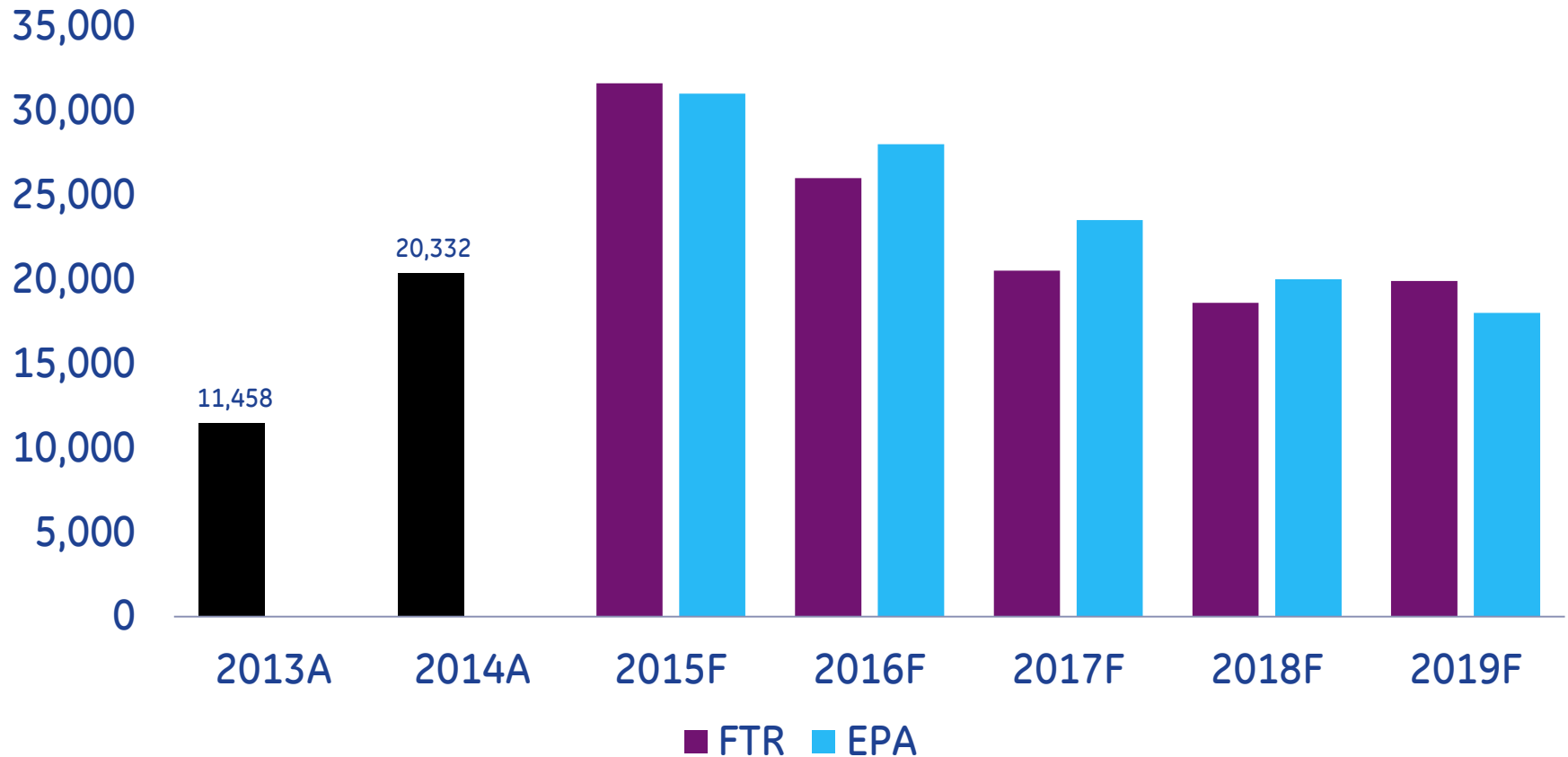
Delivery Forecast



2015 Deliveries driven by Tank, Covered Hoppers and Flat cars

# Covered Hopper Builds

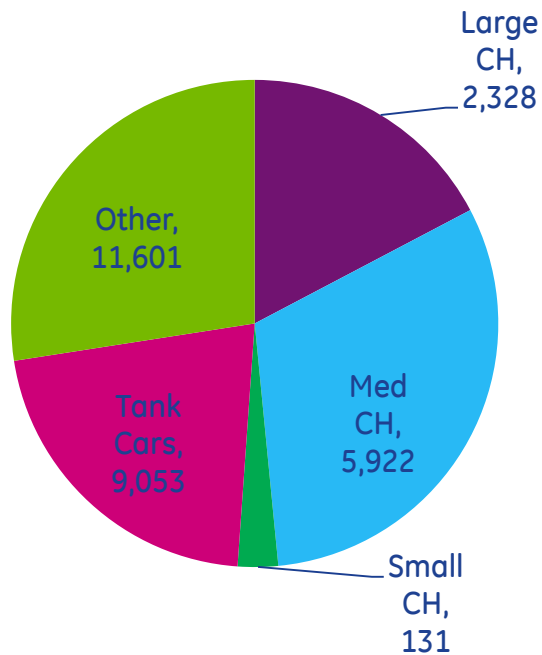
Delivery Forecast



Grain and plastic pellet cars are trending upwards

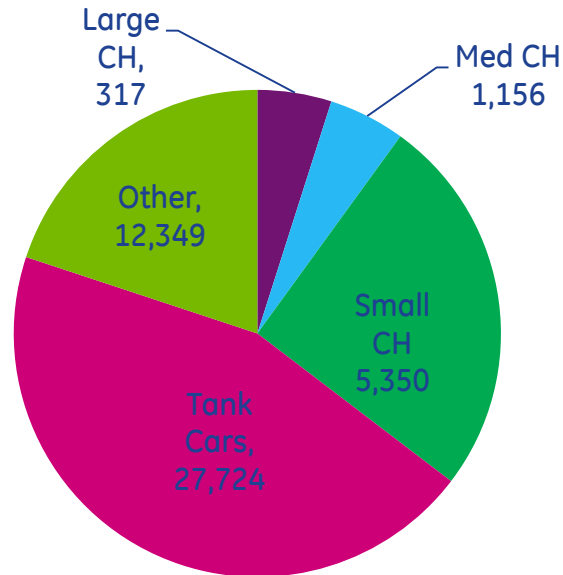
# Freight Car Builds

## 2015 YTD Orders



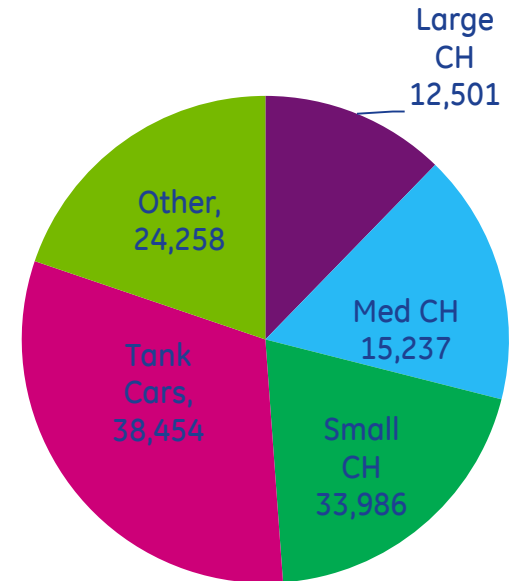
- Large CH >5500c/f
- Med CH 3500-5500c/f
- Small CH <3500c/f
- Tank Cars
- Other

## 2015 YTD Deliveries



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

## 2015 Backlog



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

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

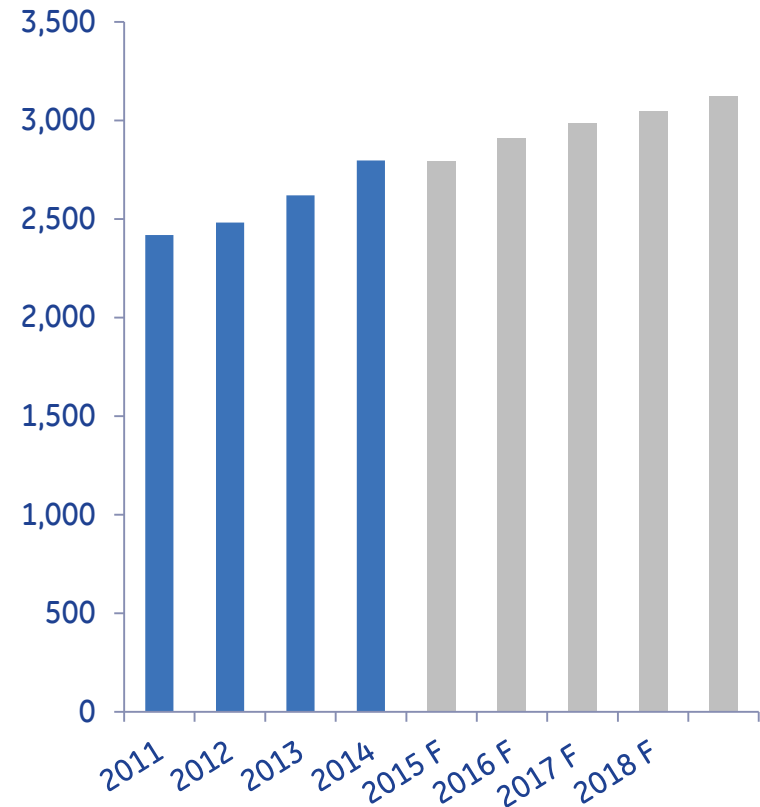
Source: Railway Supply Institute, ARCI 3Q-2015



# Sand & Cement

- Stone, sand & concrete ~ 7% of U.S. rail carloadings
- Sand loadings in 2015 expected to be flat vs 2014.
- Sand demand expected to grow from 42.5MM Tons in 2015 to 54.5MM tons in 2017
- Construction spending expected to grow 7.9% this year
- US cement consumption is expected to grow 5.0% in 2015 and 6.5% in 2016

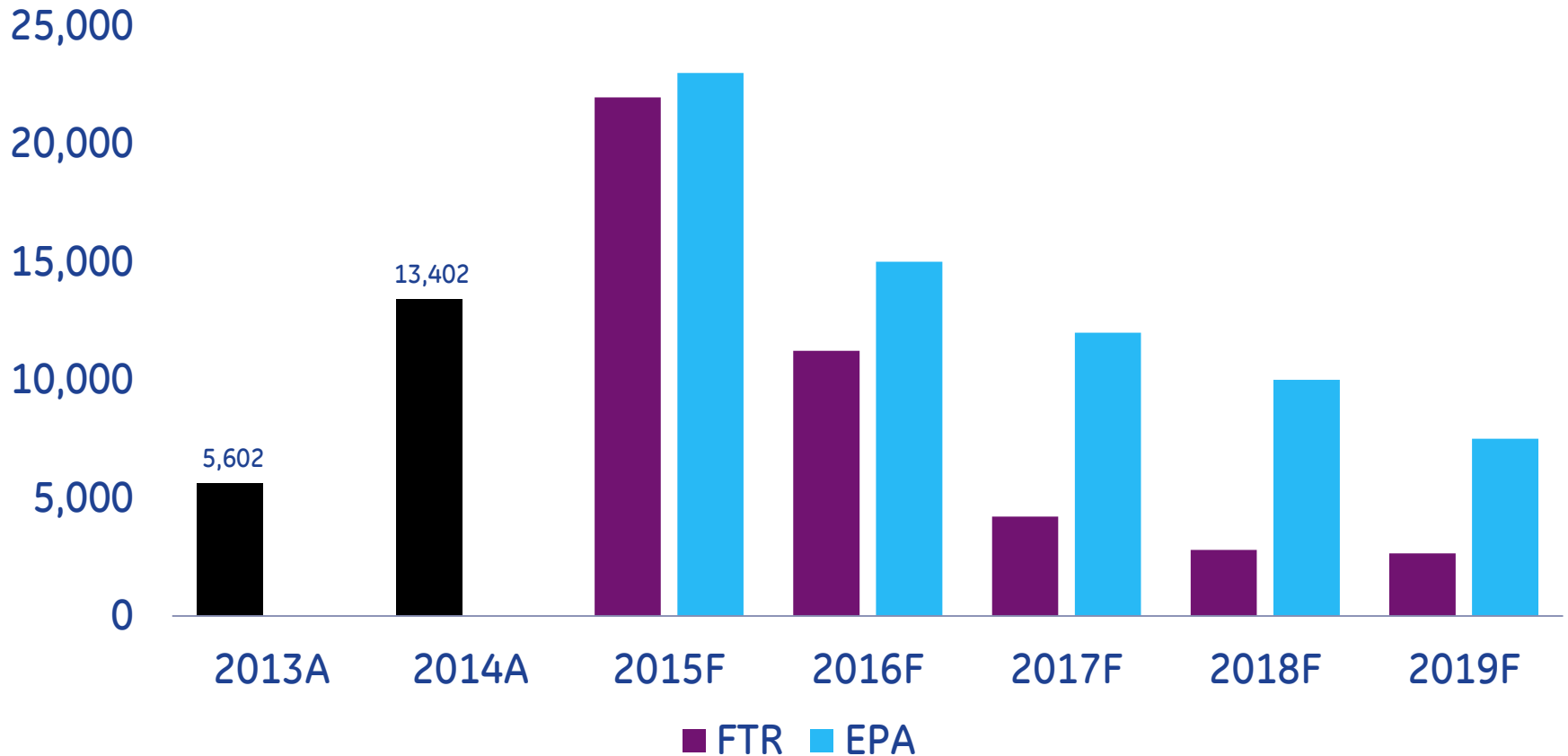
**North American Sand, Stone,  
Glass and Concrete Loadings**  
(thousands)



# Small Cube Hopper Builds

(< 3500 c/f)

Delivery Forecast

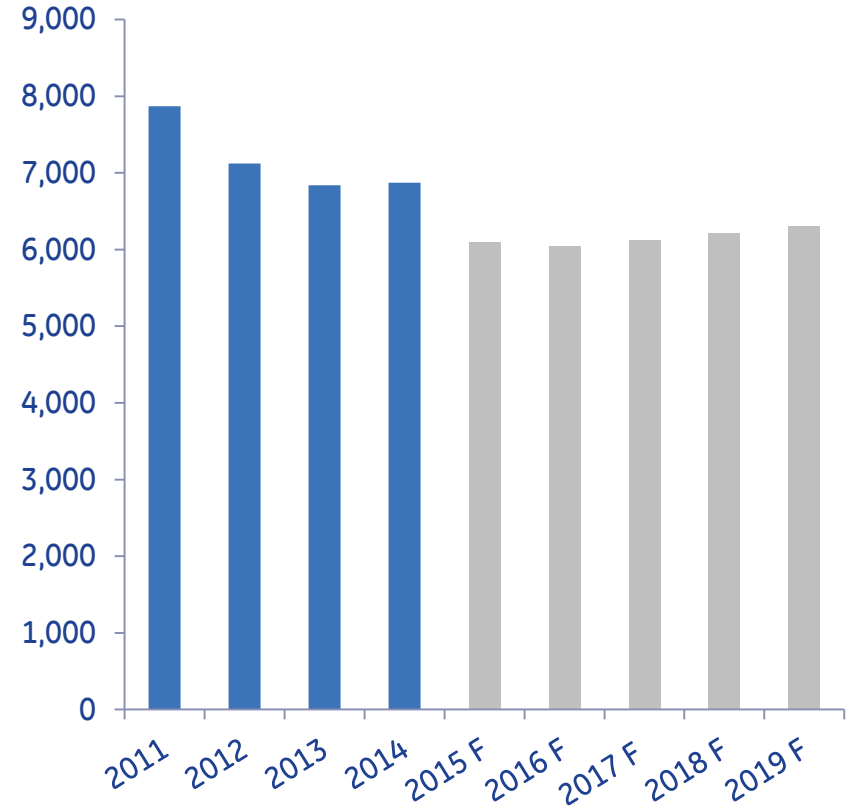


Demand for sand cars the main driver

# Coal

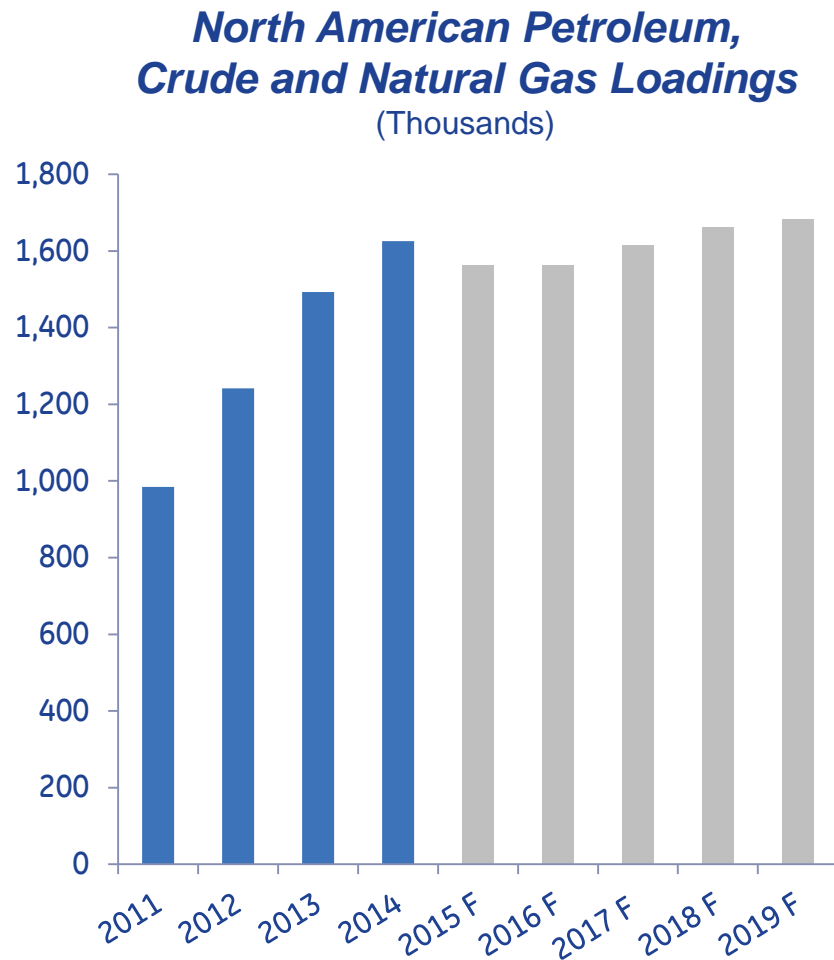
- Coal ~ 38% of US car loadings; expected to remain relatively unchanged through 2019
- 2014 Coal production grew 1% in 2014, but expected to decline 9% in 2015
- YTD Coal car loadings have declined 9.8%
- Coal consumption is expected to decrease by 7% in 2015
- 2015 demand expected to decline as natural gas prices remain low and retirements of coal power plants continue

**North American Coal Loadings**  
(thousands)



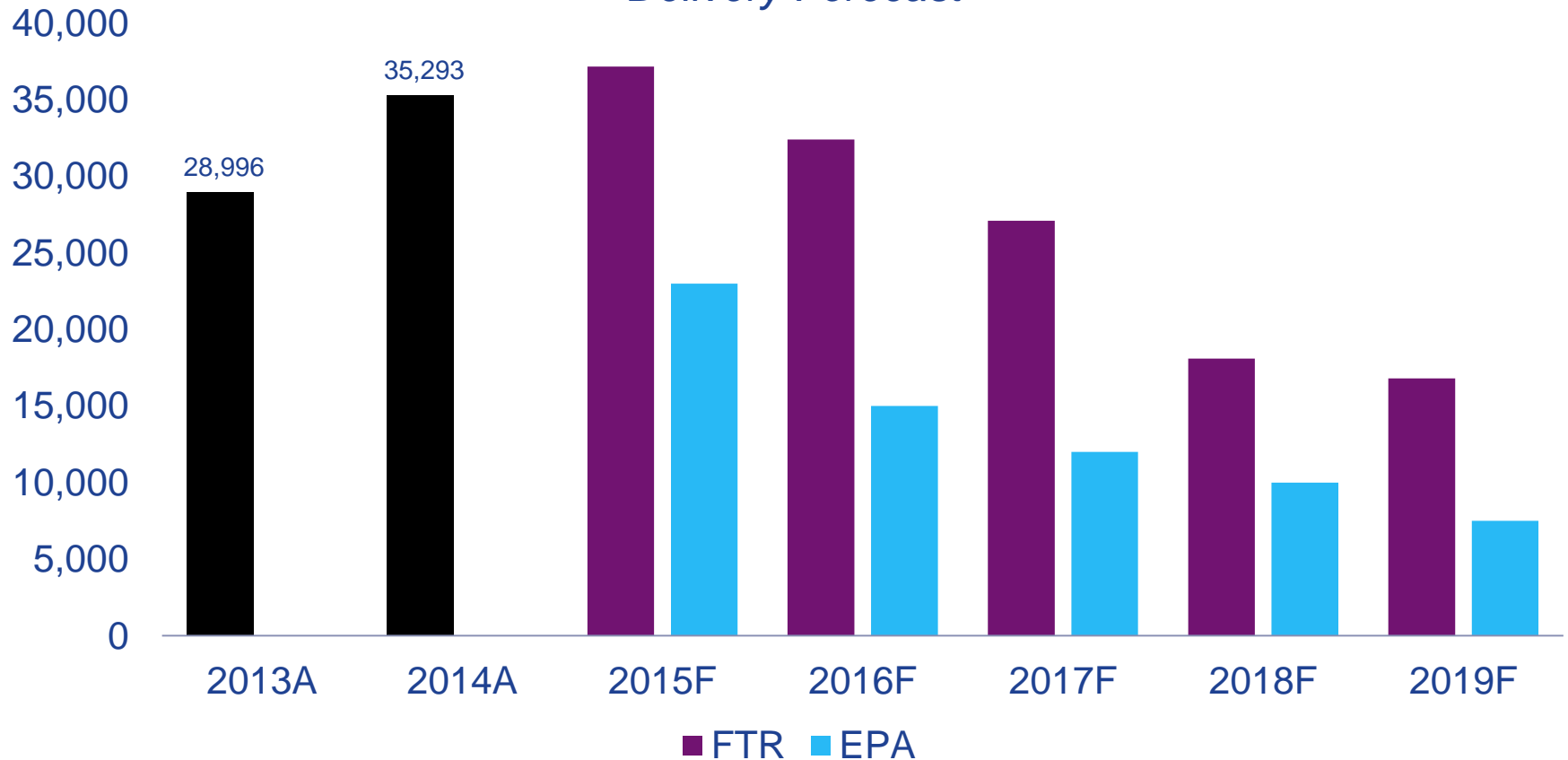
# Petroleum, Crude Oil & Natural Gas

- Petroleum, crude, & natural gas products make up 4% of North American Car Loadings
- N.A. Petroleum and Crude Carloads expected to decrease 4% in 2015
- U.S. crude oil production record levels, EIA est. 9.2MM b/d in 2015, falling to 8.9MMb/d in 2016
- Canadian crude oil production est. to grow 1.4x, up to 5.3 million b/d by 2030; Canadian CBR expected to grow 150,000 b/d by 2017
- EIA forecast WTI price ~ \$50/bbl in 2015 and \$54/bbl in 2016



# Tank Car Builds

## *Delivery Forecast*



Tank builds to be driven by replacements and regulatory changes.

# Tank Car Regulatory Update

- DOT/PHMSA, Transport Canada (TC) Final Rules 5/1/15
- DOT 117, 117R, TC 117, 117R, 10/1/15 Compliance New Tank Cars
- Class 3 Flammable Liquids
- PHMSA High Hazard Flammable Train Scope vs. TC 100% Compliance
- Comparable Compliance Schedules, PHMSA PG Driven vs. TC Commodity Driven
- Prescribed Standards, Performance Standard Option
- Petitions, Appeals, Legislative Activity Underway
- AAR Proposing Industry Standards
- Scope, Compliance Schedules, ECP Brakes, Fittings Protection and Thermal Protection Topics of Discussion