



Rail Energy Transportation Advisory Committee

Rail Fleet Update
September 19, 2013

Agenda

Railcar Demand Drivers

Freight Car Orders

North American Railcar Fleet

Tank Car Regulatory / Industry Standard Developments

Energy Segments

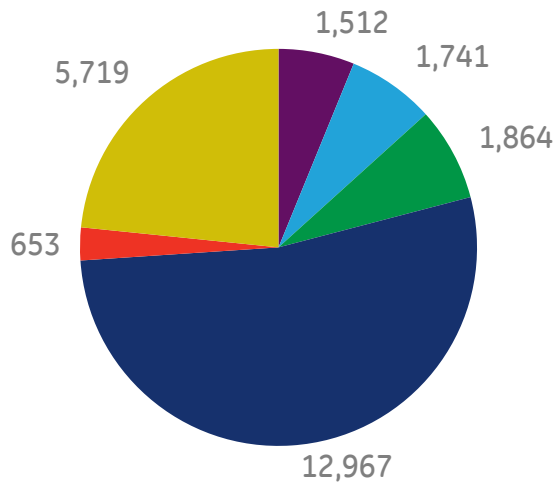
Railcar Demand Drivers

- *Key drivers of rail traffic:* GDP, industrial output, commodity carloads, Intermodal
- NAFTA GDP growth is forecasted at 1.9% in 2013 and 2.9% in 2014
- Industrial production growth is forecasted at 2.8% in 2013 and 3.2% in 2014
- Housing starts to reach 1.01 million in 2013 (+29%) and 1.10 million in 2014
- 2012 Weak grain and coal environments offset by strong growth in petroleum, motor vehicles, aggregates, and lumber.
- USDA is projecting strong production and exports for a variety of grains in the 2013/2014 marketing year, boosting demand for grain and fertilizer cars
- Chemicals growth projected in North America as shale gas boom creates investment opportunity for U.S. manufacturing
- 2013 Commodity carloads +0.8% and Rail traffic +1.8%

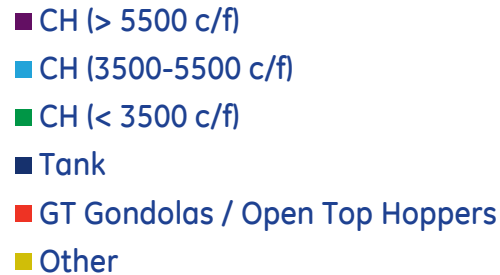
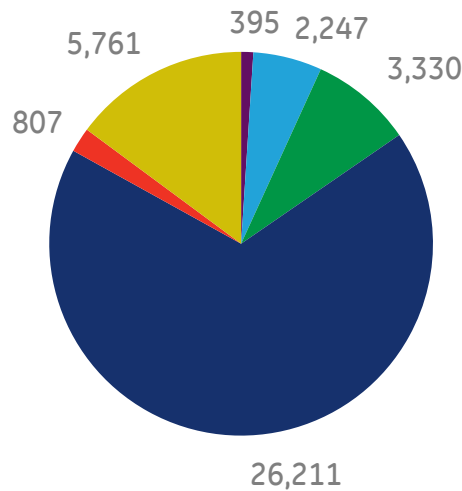
Overall growth suggests a favorable outlook for rail traffic and new equipment investments.

ARCI Freight Car Builds

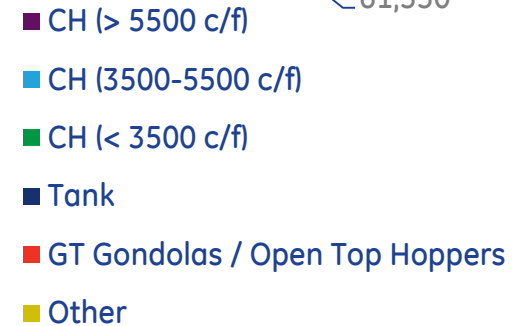
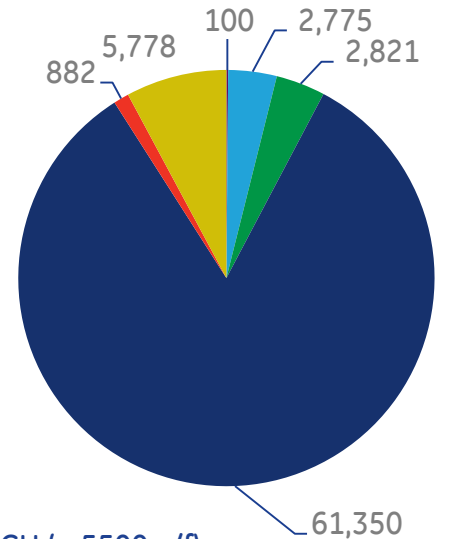
YTD Deliveries



YTD Orders



Backlog



Source: Railway Supply Institute, ARCI 2013 2Q Report

Total Freight Car Demand

Production Forecast	2012 A	2013 F	2014 F	2015 F	2016 F	2017
Economic Planning Associates	58,904	52,500	60,250	64,250	63,750	64,750
Global Insight	58,904	51,793	64,139	67,917	56,232	51,476
FTR Associates	58,904	49,726	58,500	58,000	57,600	60,200

Total Railcar Backlog = 73,706 cars

YTD Orders = 38,751 cars

YTD Deliveries = 24,456 cars

Source: ARCI 2Q-2013

Tank Car Demand

Production Forecast	2012 A	2013 F	2014 F	2015 F	2016 F	2017 F
Economic Planning Associates	17,666	28,500	32,000	28,000	24,000	22,000
Global Insight	17,666	26,306	26,070	21,706	12,147	11,381
FTR Associates	17,666	27,467	28,900	22,700	16,100	16,400

Tank Backlog = 61,350 cars

YTD Orders = 26,211 cars

YTD Deliveries = 6,887 cars

Source: ARCI 2Q-2013

Total Covered Hopper Car Demand

Production Forecast	2012 A	2013 F	2014 F	2015 F	2016 F	2017 F
Economic Planning Associates	20,691	10,500	11,500	15,500	16,000	16,500
Global Insight	20,691	11,253	15,303	18,086	16,138	13,177
FTR Associates	20,691	9,617	15,300	18,000	20,900	20,600

Covered Hopper Backlog = 5,696 cars

YTD Orders = 5,972 cars

YTD Deliveries = 5,117 cars

Source: ARCI 2Q-2013

Covered Hopper Car Demand

(<3500 c/f) Sand, Cement

Production Forecast	2012 A	2013	2014	2015	2016	2017
Economic Planning Associates	13,781	4,000	5,000	7,000	6,000	6,000
Global Insight	13,781	4,692	4,667	3,979	2,824	2,372
FTR Associates	13,781	1,832	2,830	2,710	2,800	2,480

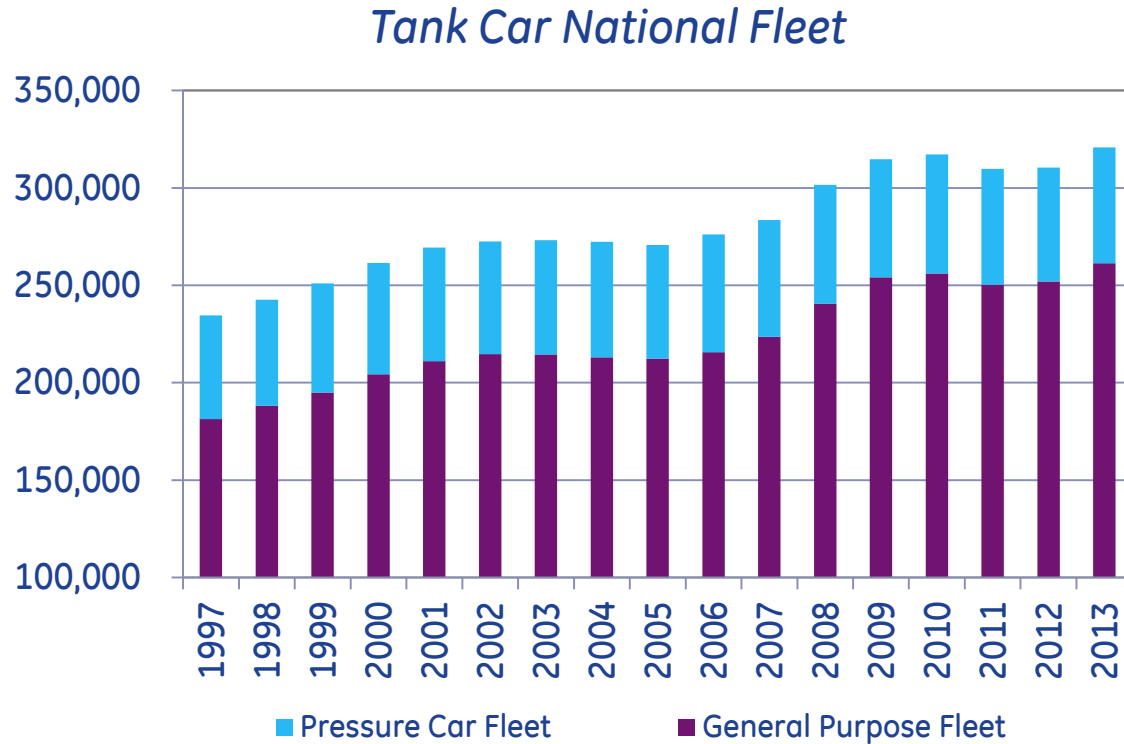
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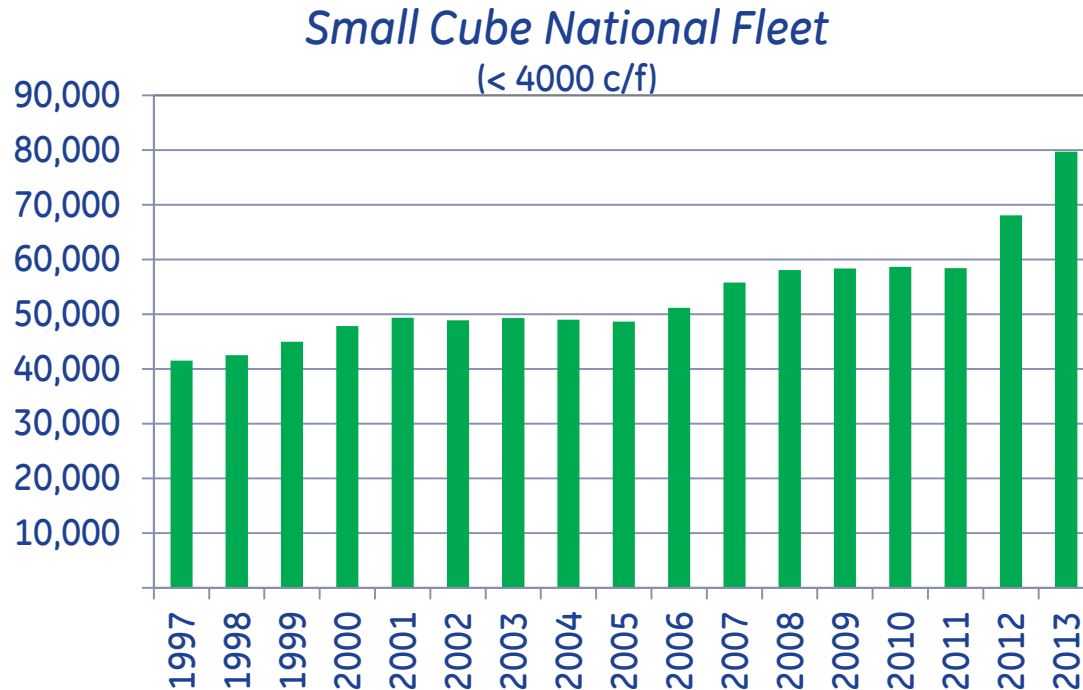
Source: ARCI 2Q-2013

Tank Car Fleet



- Overall growth the tank car fleet, up 3.4% over 2012.
- General Purpose fleet (261k cars) increased 2% (2010-2013)
- Average age of tank fleet = 16 years (IHS)
- 2013 Tank car demand = 35% replacement and 65% new demand (IHS)

Small Cube Fleet



- Majority of fleet today in Cement/Sand Service
- 25.8k cars built between 2011-12, roughly 20% of National Fleet
- National fleet grew by 11k+ units in 2013 due to 13.8k new builds, however forecast for small cube new builds projected to be significantly less (2013-17)
- Average age Covered Hoppers < 4000 c/f = 13.2 yrs. (IHS)

Source: IHS Global Insight, Railinc, GERS

*Note Annual data is represented as of first of the year

Tank Car Regulatory / Industry Standard Developments

- Transport Canada Emergency Directive No. H096/13, Unattended hazmat train requirements
- AAR Circular Letter CPC-1257, pressure relief valve requirements
- FRA Emergency Order No. 28, Notice No. 1, Hazmat train definition and unattended hazmat train requirements
- AAR Circular No. OT-55-N, Operating practices for hazmat trains
- Reactivation of AAR TCC Docket T87.6 Task Force, Industry standards for ethanol and crude oil tank cars
- FRA/PHMSA Public Meeting, Potential edits, corrections and deletions to (CFR) Parts 171 and 174
- Rail Safety Advisory Committee (RSAC) Public Meeting, Hazmat train operations
- PHMSA Advanced Notice of Proposed Rulemaking (HM-251), Rail Petitions and recommendations to improve the safety of railroad tank car transportation of hazardous materials

Energy Segments

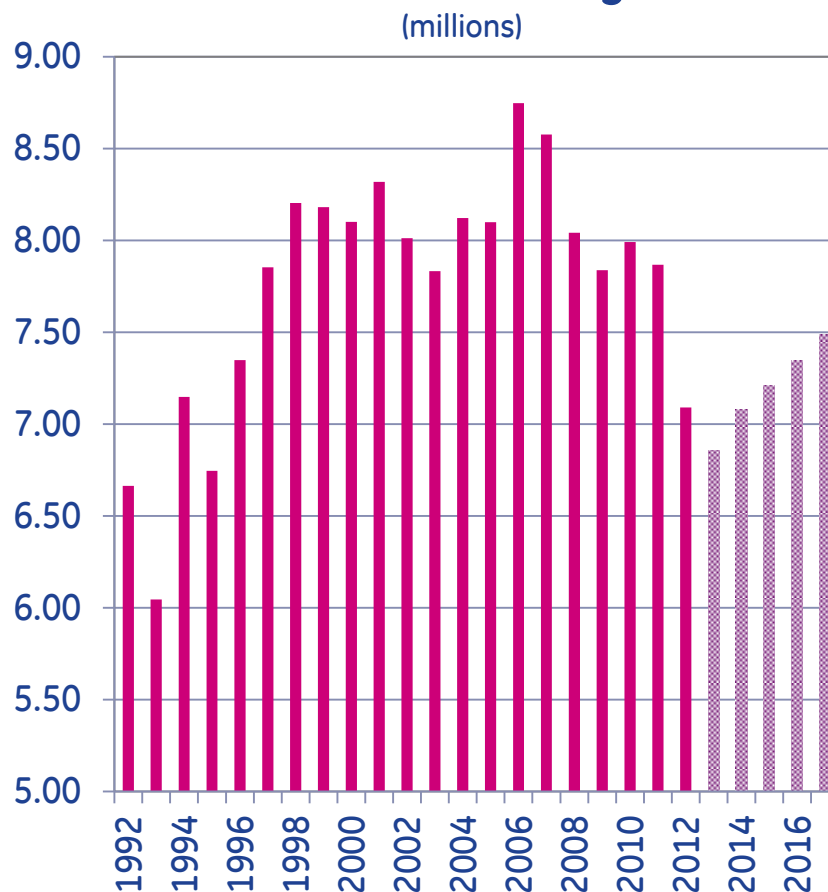
- Coal
- Renewable Fuels
- Petroleum Products
- Frac Sand

Coal

- Power sector consumption of coal projected to recover by 9% (in tonnage terms) in 2013
- Coal movements improved slightly in 2Q 2013, and projected to continue at a modest growth rate 2014-17.
- Impacted by low natural gas prices and weak electricity demand
- Strong Coal exports in the first quarter, however full year 2013 projected -10% vs. last year.
- Longer-term average consumption growth 0.5% (EIA forecast 2013-2040) resulting in loss of coal share in U.S. power gen mix
- Approx. 258,000 coal cars in the North American Fleet

Source: IHS Global Insight, FTR Associates, Railinc/GERS

Coal Carloadings



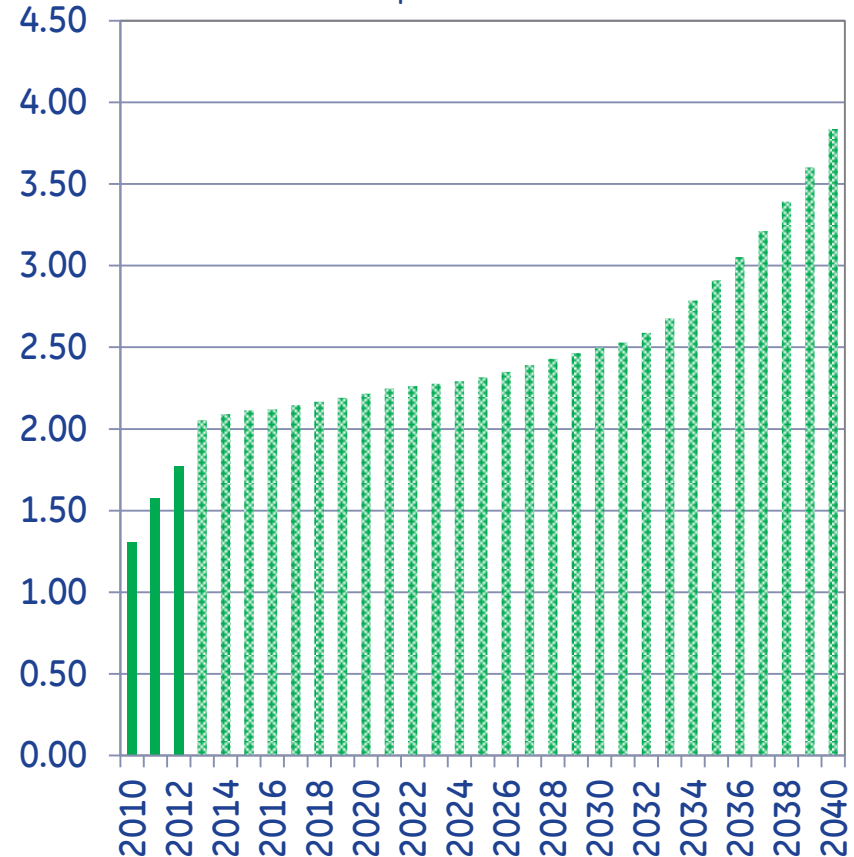
Source: FTR Associates, 2Q 2013

Renewable Fuels

- Renewable Energy production projected to grow 87% over the EIA forecast period (2013-2040)
- U.S. biofuel mandate remains in line with the previous forecast as cellulosic production is expected to remain muted
- Adverse conditions for ethanol demand in 2012 due to drought, record corn prices, and drop in gasoline demand.
- Ethanol production projected to increase 10% in 2013 and 7% in 2014 (IHS)
- Flexibility of assets in/out of Crude market

Source: IHS Global Insight, EIA, Informa Economics,

**Renewable Energy
Production Forecast***
(quadrillion Btu)



Source: EIA, Annual Energy Outlook 2013

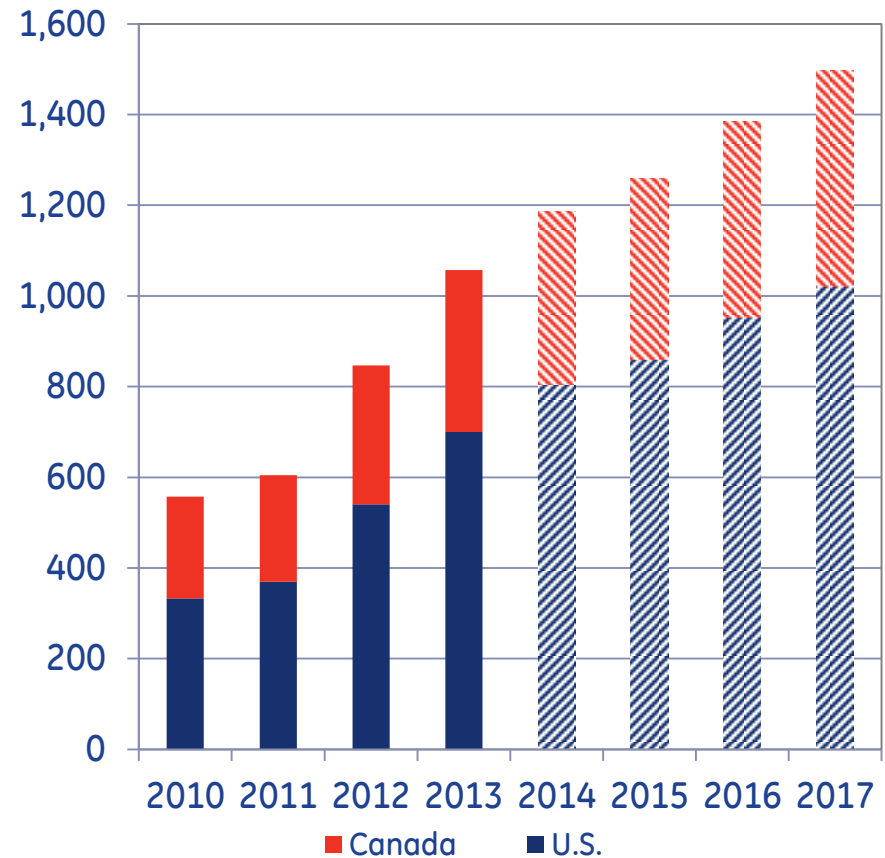
*Excludes Biomass and Hydropower

Petroleum

- U.S. production of oil and gas increased 9.6% in 2012 and is forecasted to grow 5.1% in 2013.
- Petroleum demand projected to increase 3.4% in 2013.
- U.S. Petroleum Carloads projected to increase 29% in 2013 and 14% in 2014. Canadian up 17% in 2013 and 7% in 2014.
- Crude oil and lease condensate production forecasted to grow 5% in 2014.
- Total Canadian crude oil production is forecasted to increase 22% (2012-2015) to 3.9 million b/d by 2015, up to 6.7 million b/d by 2030.
- Brent-WTI price spreads have dropped in 2013 and projected to narrow over the long term forecast period

Source: IHS Global Insight, EIA, CAAP

Petroleum & Pdts. Loadings
(thousands)

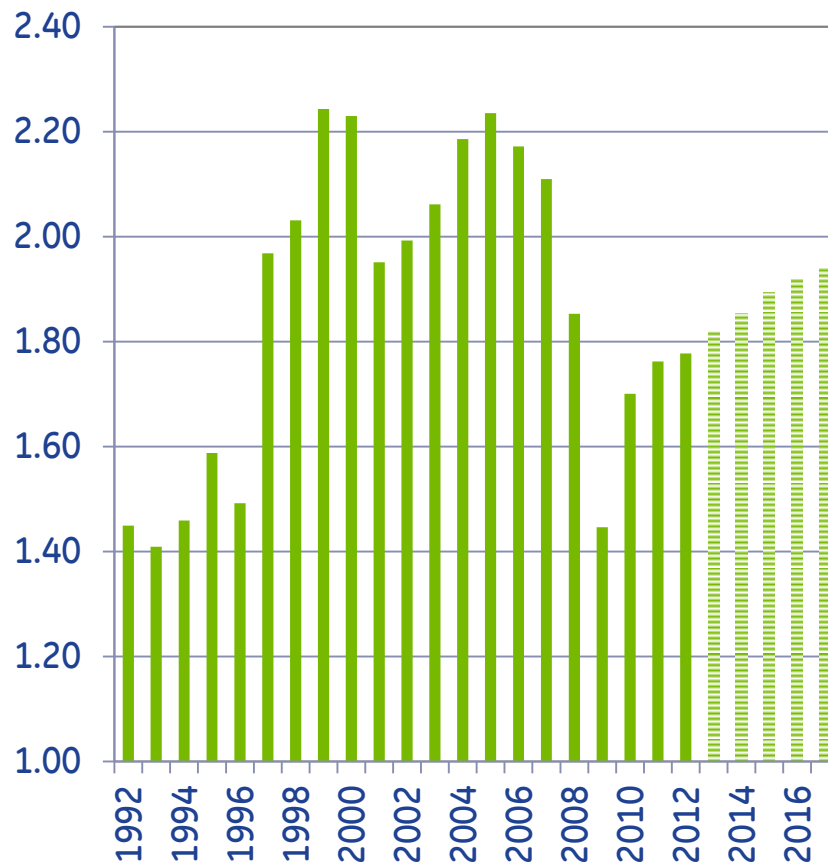


Source: IHS Global Insight, May 2013

Frac Sand

- Construction is driving nonmetallic mineral demand (6% increase in 2013)
- Forecast for construction activity to expand 6.0% in 2013 up to 9.5% in 2014.
- Nonmetallic mineral production growth is forecasted at 3.7% in 2013, 2.6% in 2014
- Growth in nonmetallic mineral carloadings projected at 2% per year (2013-2015)

Nonmetallic Minerals Carloadings
(millions)



Source: IHS Global Insight, EIA, FTR Associates

Source: FTR Associates, Q2 2103
*Nonmetallic Minerals, Except Fuels