



# **RAILCAR OEM OUTLOOK: THE OUTLOOK FOR 2018 AND BEYOND**

## **MISSISSIPPI VALLEY TRADE & TRANSPORT COUNCIL**

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# Introduction



*Railroad shippers, who represent over \$13 billion of annual transportation spending are bullish on their businesses and expect 2.7% growth over the next twelve months.*

**- Cowen Equity Research**

06-Feb-2018



# Our Company



- Founded in 1912, celebrating over 100 years of car building excellence
- Serving the North American and International railcar markets
- Largest, single-site railcar manufacturing plant in North America, employing 2,000 team members
- Manufactures all kind of freight cars: 12 different car types / over 76 models
- Capacity to produce over 15,000 railcars annually
- 5 flexible production lines, 3 state of the art blast/paint/finishing lines
- Ongoing plant modernization with the most robust robotic welding and overall automation capabilities in the industry
- Certified to AAR M-1003
- The only car builder certified to ISO 9001-2015 in North America



# Topics of Discussion



- Trends of railcar demand
- Order, Delivery, and Backlog
- Commodity Growth
- Demand Factors

# Planning Ahead?



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BOBT11  
www.alamy.com



# Trends of railcar demand:



- Highly cyclical in nature
- Lead times for production space
- Lead times for components
- Escalation, Surcharges, and Interest Rates



# Trends of railcar demand: Freight Cars In Service

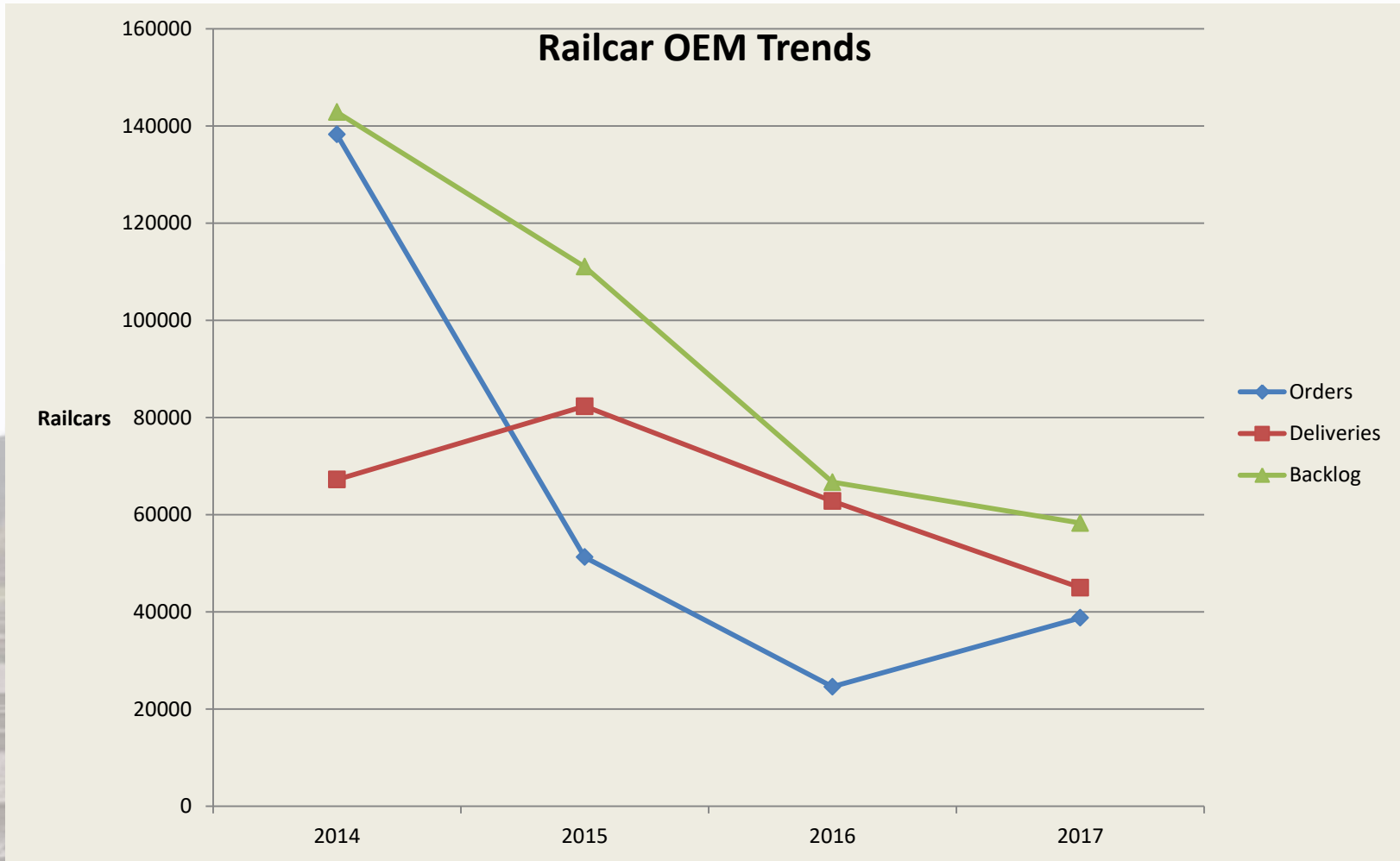


Year	# Freight Cars (mil)	Aggregate Capacity (mil tons)	Average Capacity (tons per car)
2002	1.54	151.2	98.2
2003	1.52	150.2	98.9
2004	1.50	149.2	99.3
2005	1.51	150.7	99.7
2006	1.54	154.7	100.5
2007	1.58	160.2	101.4
2008	1.60	163.1	102.1
2009	1.60	164.7	102.6
2010	1.57	161.4	103.1
2011	1.50	155.5	103.4
2012	1.49	154.6	104.0
2013	1.50	156.9	104.4
2014	1.52	158.3	104.4
2015	1.56	162.6	104.5
2016	1.61	168.1	104.5

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# Railcar OEM Activity: Order, Delivery, and Backlog



\*Railway Supply Institute ARCI 2014-2017 Reporting Statistics



# Uneven growth?



# Commodity Growth:

- Plastics
- Sand
- Waste
- Scrap Steel
- Grain
- Coal
- Crude Oil



# Demand Factors: Impact of Velocity

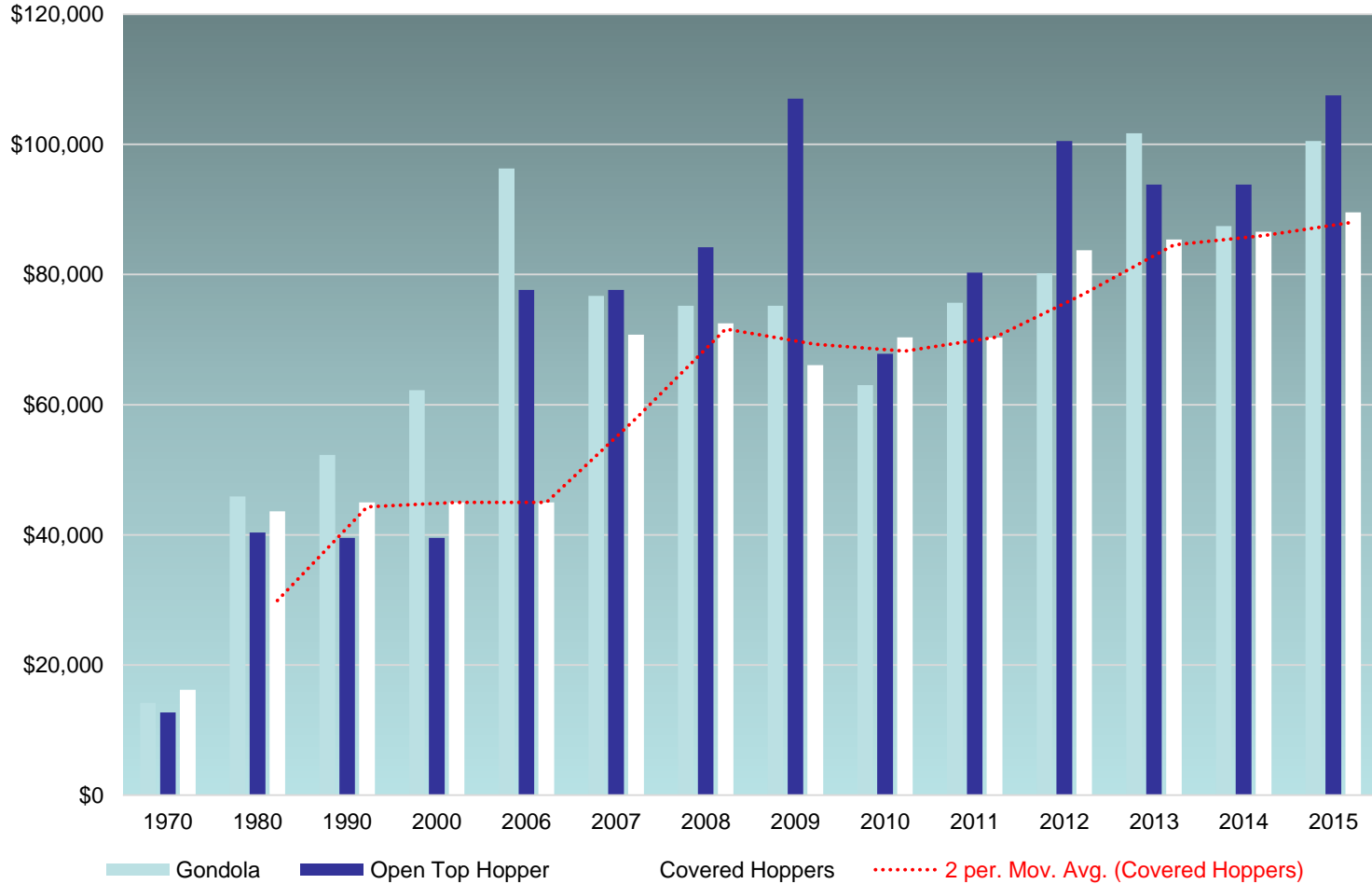


- Delta of 50,000 railcars per 1 mile an hour velocity for the North American Fleet
- Assuming 1.59 million cars = 3.1% variation in fleet size per 1 mile an hour change
- For every 1,500 cars in the fleet 1 mph decrease may add 45-50 cars
- Velocity had increased from 22 mph in 2014 to 27 mph in 2016 and is currently trending down.



# Demand Factors: Railcar Cost Growth

Cost of New Freight Cars



North American Freight RAILINC



# Demand Factors: Car Capacity for Freight Cars in General

	1993	2003	2014
Avg. Content	64.4 (base)	62.3	61.0
% Change	-	-3%	-5%
Average Car Capacity (tons)	88.6	101.1	103
% of Capacity Used (tons)	73%	62%	59%

**The average car carrying capacity increased  
16.25% over 20 years**

Source: AAR Railroad Facts 2014 Edition

# Should you optimize your car size?





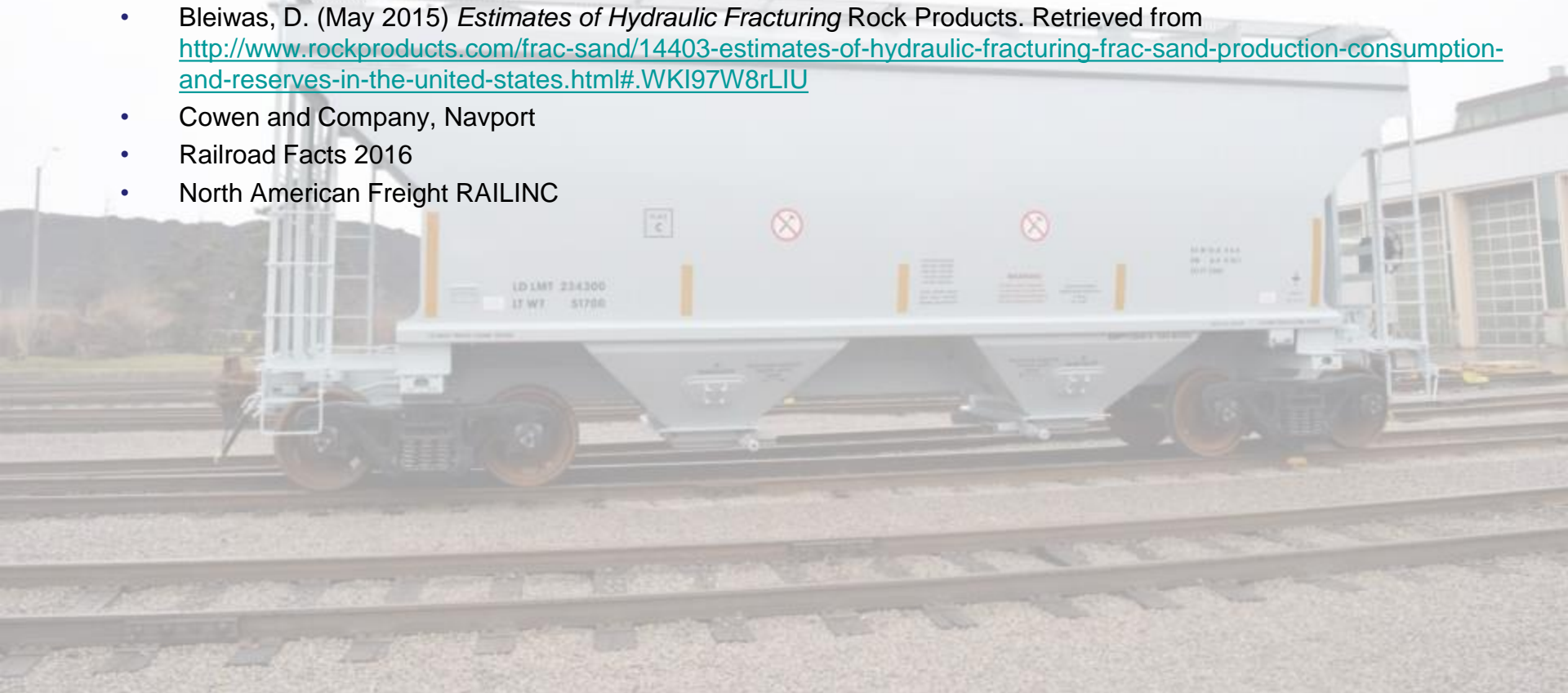
# Demand Factors: Car Optimization



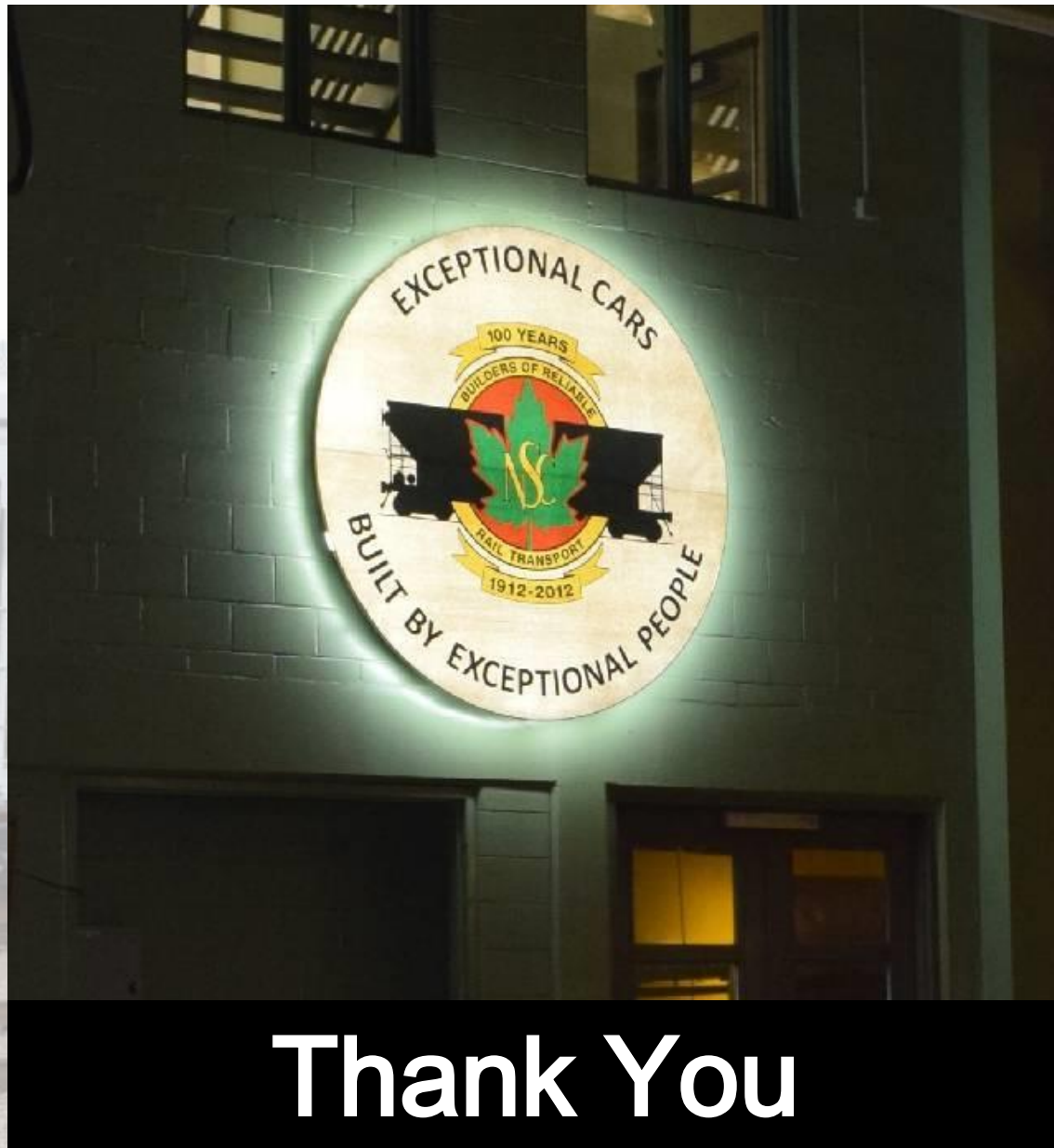
- Annual Estimated Savings vs. 3280 cf Hopper
  - 4750 286 GRL Covered Hopper per 100 cars
    - 128 Less loads per year
    - @ \$150 lease differential = \$204,615
    - @ \$50 lease differential = \$324,615
    - @ \$0 lease differential = \$384,615
  - 4750 263 GRL Covered Hopper per 100 cars
    - 364 Less loads per year
    - @ \$275 lease differential = \$582,308
    - @ \$150 lease differential = \$912,308
    - @ \$50 lease differential = \$1,032,615
    - @ \$0 lease differential = \$1,092,615

# References

- Alamy Photo Stock. Retrieved from <http://www.alamy.com>
- Bleiwas, D. (May 2015) *Estimates of Hydraulic Fracturing Rock Products*. Retrieved from <http://www.rockproducts.com/frac-sand/14403-estimates-of-hydraulic-fracturing-frac-sand-production-consumption-and-reserves-in-the-united-states.html#.WKI97W8rLIU>
- Cowen and Company, Navport
- Railroad Facts 2016
- North American Freight RAILINC







**Thank You**