A New Strategy for Freight Rail

Prepared for:

RAILWAY AGE PRESENTS
NEXTGEN
FREIGHT RAIL

Prepared by:

TandLA
Transportation and Logistics Advisors, LLC

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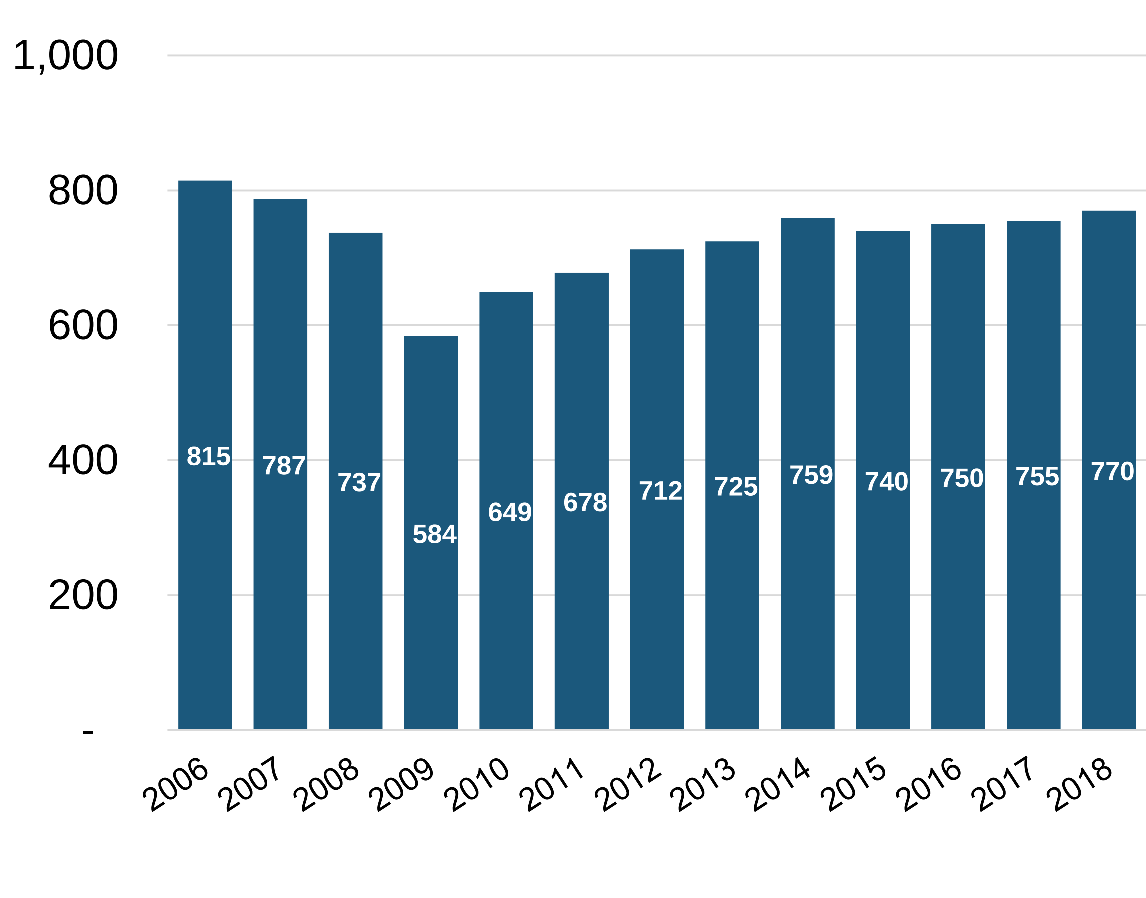
Agenda

- **Historic Carload Volume Growth**
- Strategies to Grow Carload

Rail carload volume (excluding coal and intermodal) was relatively flat over the last several years, and is below 2006 levels

Monthly Rail Carloads (excluding Coal, Intermodal) (thousands)

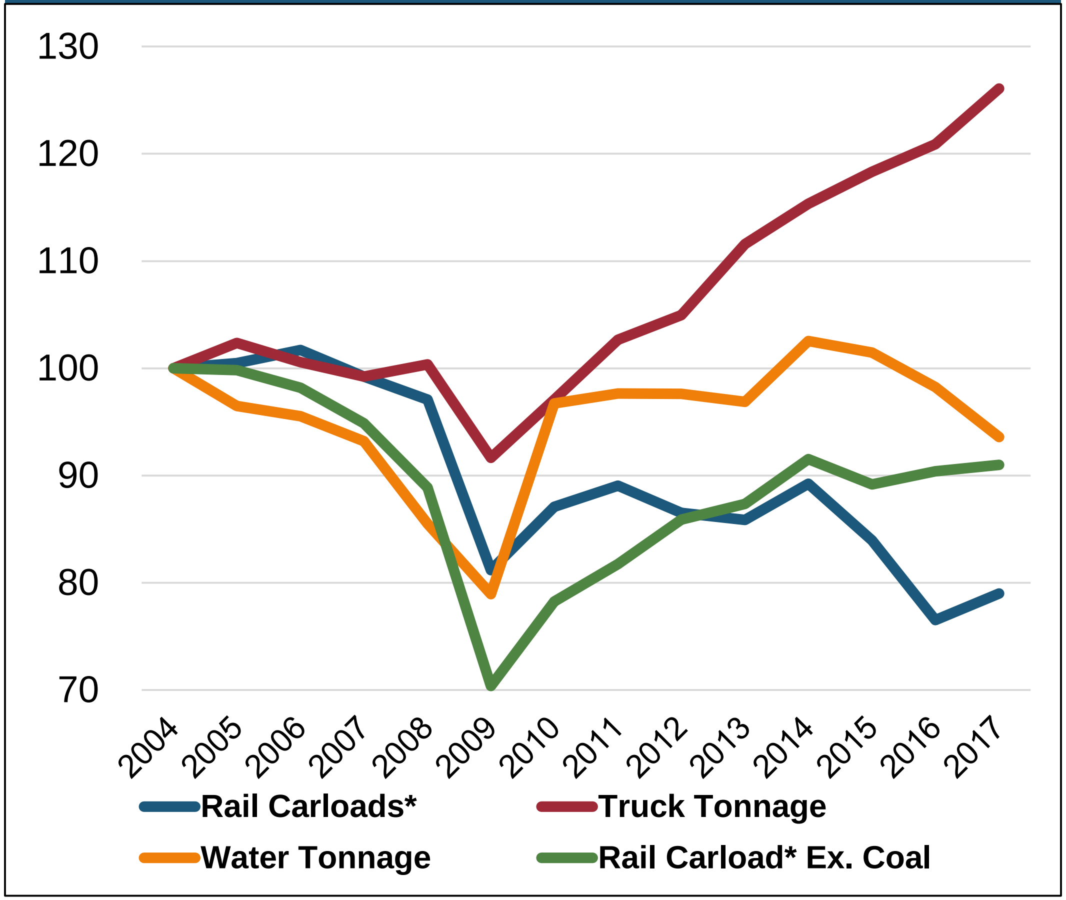


- 2018 carloads excluding coal and intermodal down 5.5% from 2006 to 2018
- 2018 growth 2.0% over 2017
  - Economic growth up 3.3% through 3Q, 2018
  - Truck monthly tonnage up an average of 7.1% through 10/2018
- 2014 to 2018 average annual carload growth of 0.4%/year

Sources: St. Louis Federal Reserve; Bureau of Transportation Statistics; AAR Commodity database; AAR weekly rail volume; Trading Economics; TandLA analysis and estimates

Rail's share loss to truck has been accelerating since the Great Recession. It has also lost share to barge

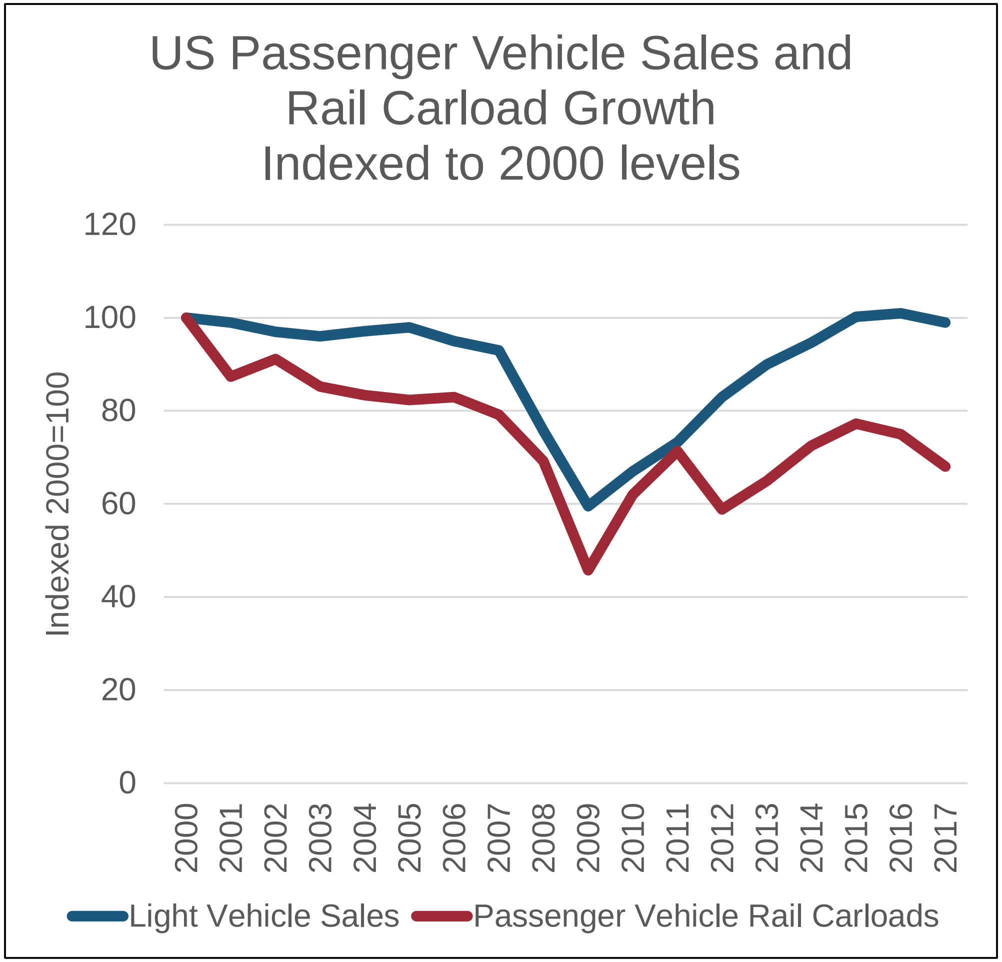
Indexed Volume Growth by Mode
2004 Indexed to 100



- Mid-2000's: Carloads tracked truck and outperformed barge
  - Driven by coal growth
  - Non-coal in slow decline
- Great Recession: Carloads took worst hit and never recovered
- 2014+: Carload decline accelerated
  - More than just coal

*Excludes intermodal
Sources: St. Louis Federal Reserve; Bureau of Transportation Statistics; AAR Commodity database; AAR weekly rail volume; Trading Economics; TandLA analysis and estimates

Example – <u>Passenger Vehicles</u>: Down 32% in flat market

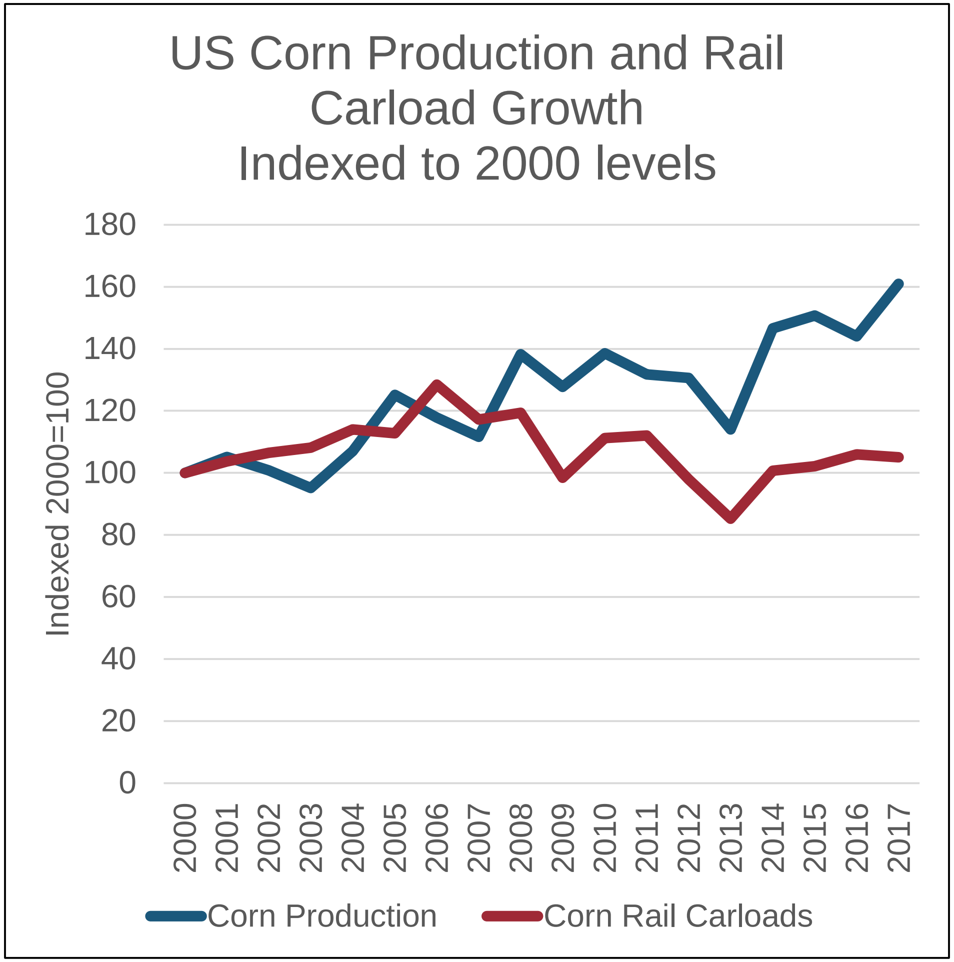


- Early 2000's: Rail lost share
- 2012: Volume declined 18% in an improving market
- Shift to haul-away trucking?
- Shift to water Mexico to East Coast?

If rail held share – 233,000 addition carloads or $1.5 B

Source: Bureau of Economic Analysis; AAR Commodity database; TandLA analysis and estimates

Example – <u>Corn</u>: Flat since 2000 in a growth market

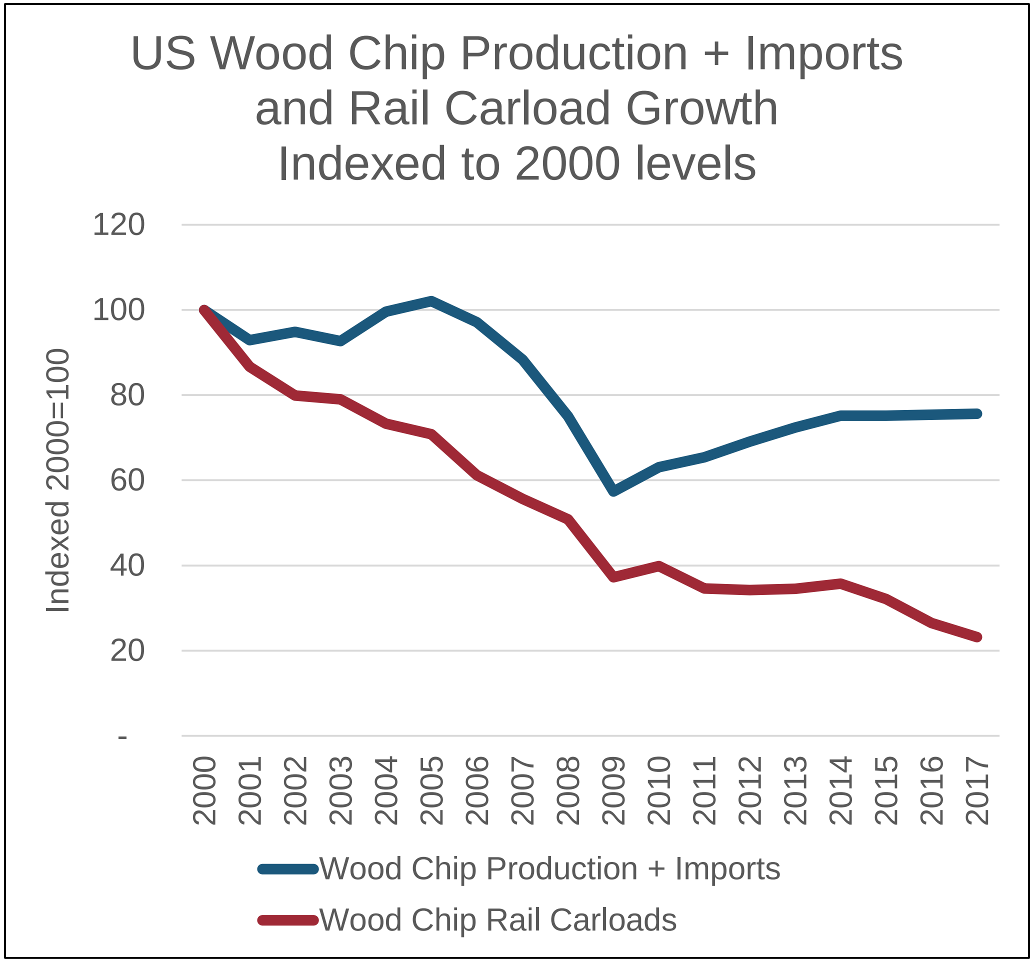


- 2000-2007: Rail held share
- Since 2007
  - Production up 44%
  - Carloads down 10%
- Loss of share to truck in domestic consumption markets?

If rail held share – 355,000 addition carloads or $1.3 B

Source: USDA; AAR Commodity database; US Grains Council; TandLA analysis and estimates

Example – <u>Wood Chips</u>: Declined faster than production + imports



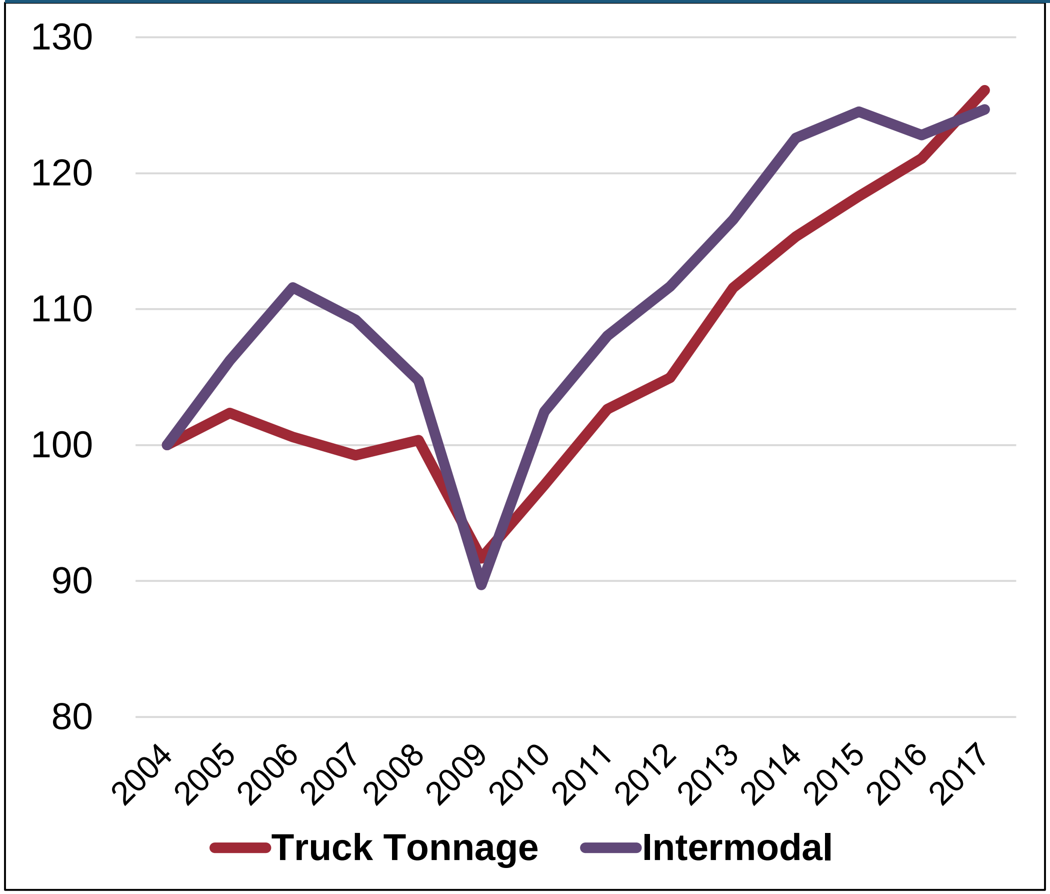
- 2000-2005
  - Production up 2%
  - Carloads down 29%
- 2009+
  - Production up 32%
  - Carloads down 38%
- Loss of share to truck?

If rail held share – 102,800 additional carloads or $140 M

Source: United Nations Food and Agriculture Organization; AAR Rail Commodity Data; TandLA analysis and estimates

Intermodal is not the savior - intermodal growth slightly outpaced truck 2004-2016, but gave back all share gains in 2016 and 2017

Indexed Volume Growth by Mode
2004 Indexed to 100

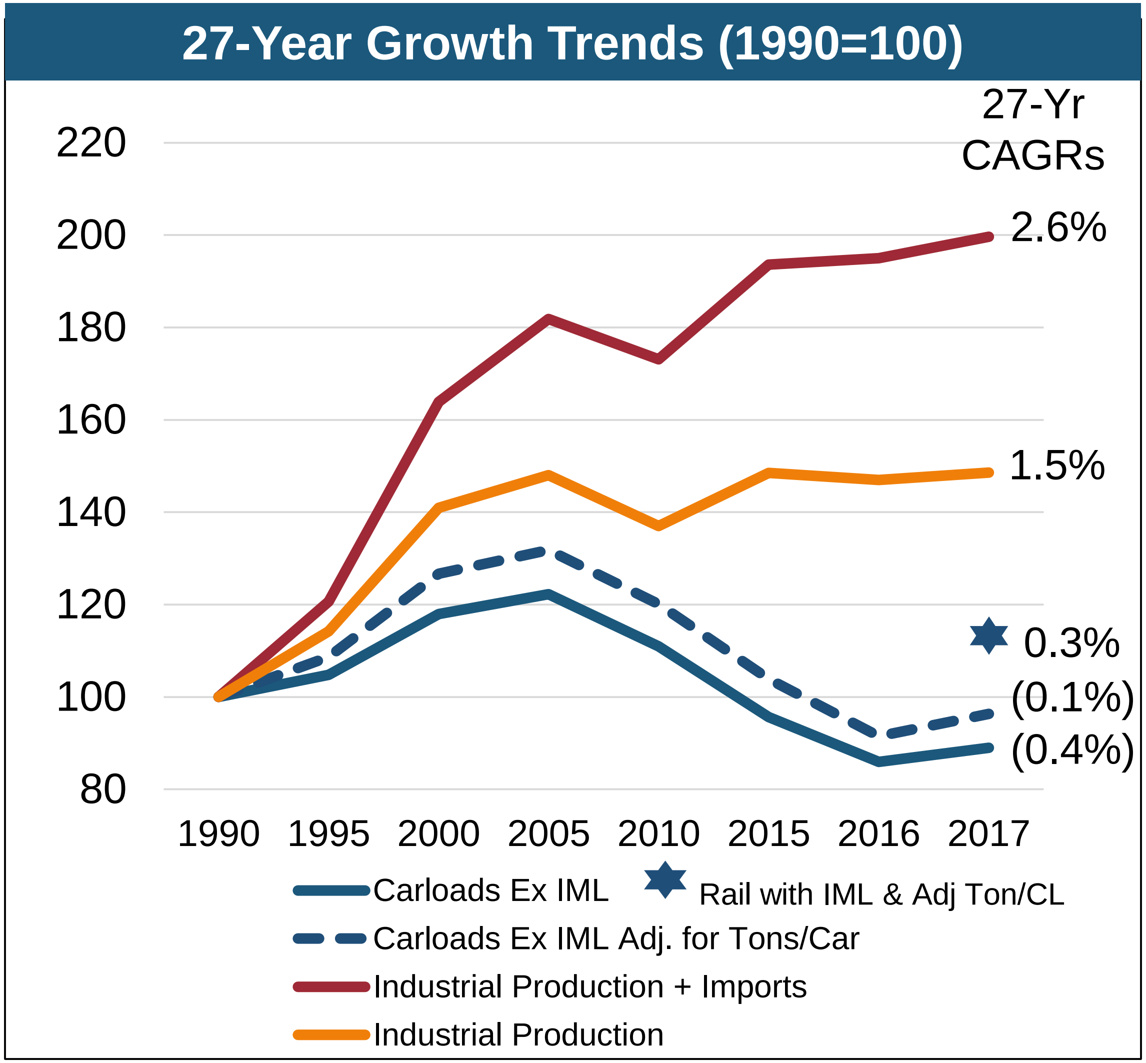


CAGRs		
	IML	Truck
2004-2014	2.1%	1.4%
2014-2016	0.1%	2.5%
2016-2017	1.5%	4.1%

- Intermodal gave back share in the Great Recession
- Intermodal regained share in recovery, but…
- Gave back all share gains again in 2016
- 2017: Intermodal up 1.5%, truck up 4.1%

Sources: St. Louis Federal Reserve; Bureau of Transportation Statistics; AAR Commodity database; AAR weekly rail volume; American Trucking Association, TandLA analysis and estimates

Regaining lost share would be huge for rail



- Carloads excluding intermodal down from 1990
- Tons/carload up 9% since 2000 – does not explain gap
  - 1990 tons/carload*: 81
  - 2000 tons/carload*: 87
  - 2015 tons/carload*: 88
- Intermodal growth is not enough:
  - With intermodal growth, rail still grew at under 0.5% CAGR
  - Still down measurably since 2005

*Excluding intermodal

Sources: U.S. BEA; AAR Analysis of Class I Data 1986– 2015; IANA data; TandLA analysis and estimates

Agenda

- Historic Carload Volume Growth
- **Strategies to Grow Carload**

What can rail do to address the declines in market share?

- To start with, the rail industry has a lot to work with
  - A growing cost gap versus truck
    - And it's getting greater every day!
    - ELDs, driver shortage, more expensive trucks/engines
  - The cost gap versus barge getting more attractive
    - The truck portion of a barge move is one driver
    - Distributed power and the potential to have loop track for loading and unloading
  - The financial resources have never been greater, at least not in my lifetime
    - Solid D/E ratios
    - Good bond ratings
    - Free cash flow
- And now with PSR, railroads the ability to have a viable base level of service reliability

Rail carload volume growth requires a new paradigm

- But having a cost advantage, financial resources, and service consistency is not enough to on its own deliver consistent growth in today’s world
- We are living in an “Amazon World” – they have redefined what “service” means
- The rules have changed, the buyers have changed, the competitors have changed
  - The rules
    - From the transportation buyers perspective more and more the low cost supply chain is losing out to a higher cost supply chain that adds value
    - The winning supply chain strategy is one that adds competitive differentiation
  - The buyers
    - Use to knowing choice for price and service instantly
    - Expect on-time delivery every time
  - The competitors
    - Asset light competitors
    - Blends of assets and technology

Amazon is an example, but not the only one

- Now the approach is to use the supply chain as a strategic weapon
- Amazon has for years increased its supply chain costs faster than its revenues – by choice
  - The reason is that by adding and committing to new higher service levels they offer services that their customers value
    - These new service levels cost more than the recovery charge for the service
      - Guaranteed 2 day delivery
      - Same-day
  - Why are they doing it – because their scale allows them to do so at one level of added costs, while for all of their competitors the cost to match it is prohibitive
- Other examples as well
  - Hello Fresh and Blue Apron offering home meal kit delivery – a very expensive model to get food to homes
  - Grocery home delivery growing quickly
- Supply chain is becoming integral to the corporate strategy, it is no longer just find the lowest cost way to deliver that is made

The buyers have changed – they have grown up in a different culture

- They are used to knowing all of the choices for price and timing instantly
- On-time delivery is assumed
- They expect to know every aspect of their transaction in real time and be able to access it at any time from wherever they are, on any device
- Send it wherever I want, whenever I want, and change the destination to wherever I want it to go at any time

The competitors have changed

- Many of the highest growth and highest financial return competitors have no assets, others blend assets and technology to make new offerings
  - They add value in different ways – all technology based
  - They create and offer both “productized” offerings (like truck brokerage and transportation management) and also customized offering tailored for a customer
- They also are creating new offerings that are industry specific
  - Examples? There are a lot of them!
    - World Courier for clinical trials
    - Acertus for automobiles

To win, rail has to utilize the assets and resources it has to develop new products that add value to today's customers and that has to be more than make a low cost supply chain

- This will require innovation and new product development
- So where can rail look to growth with new services?
  - Anyplace
    - Rail carload market share has been declining in many if not most markets
    - Intermodal's market share has not grown either
  - What is needed is to pick a market segment and understand their needs (beyond low cost) and develop a product for them that adds value for them
- What are the rewards?
  - Growth for one thing – there is so much opportunity
  - Higher margins, as these new service products will not be low cost driven
  - Arrest of the share erosion before rail becomes irrelevant and eliminated in market segments

What might it require or include?

An End to End Solution	Going Beyond Normal Boundaries
• Multi-modal • Incorporates technology • Likely to include partners • Seamless to customer, including tracking • Behave more like a 3PL, less like a transportation provider	• Manage customer's inventory? • Provide full supply chain management? • Become a distributor? • Solutions may be different by segment
Be Something Customers Can Buy	**CapEx May Be Required**
• Carload is difficult to price out – no published rates, doesn't fit in supply chain planning tools • Improve reliability, order to delivery • Re-think order quantities – can rail go smaller? • Sell through new channels?	• May require automated loading/ unloading, loop tracks, new railcars, destination storage • Get railcar utilization up • Technology is a must • Determine who should own assets later – there is $ out there

TandLA

Transportation and Logistics Advisors, LLC

Steven Fox

Principal

773.580.6115

1910 First Street
Suite 300
Highland Park, IL
60035

TandLA.net