



November 2017

## Union Pacific Corporation

## Cautionary Information



This presentation and related materials contain statements about the Company's future that are not statements of historical fact, including specifically the statements regarding the Company's expectations with respect to economic conditions; its ability to generate financial returns, improve resource productivity and use innovation to enhance customer experience; implementing corporate strategies; and providing excellent service to its customers and returns to its shareholders. These statements are, or will be, forward-looking statements as defined by the Securities Act of 1933 and the Securities Exchange Act of 1934. Forward-looking statements also generally include, without limitation, information or statements regarding: projections, predictions, expectations, estimates or forecasts as to the Company's and its subsidiaries' business, financial, and operational results, and future economic performance; and management's beliefs, expectations, goals, and objectives and other similar expressions concerning matters that are not historical facts.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times that, or by which, such performance or results will be achieved. Forward-looking information, including expectations regarding operational and financial improvements and the Company's future performance or results are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statement. Important factors, including risk factors, could affect the Company's and its subsidiaries' future results and could cause those results or other outcomes to differ materially from those expressed or implied in the forward-looking statements. Information regarding risk factors and other cautionary information are available in the Company's Annual Report on Form 10-K for 2016, which was filed with the SEC on February 3, 2017. The Company updates information regarding risk factors if circumstances require such updates in its periodic reports on Form 10-Q and its subsequent Annual Reports on Form 10-K (or such other reports that may be filed with the SEC).

Forward-looking statements speak only as of, and are based only upon information available on, the date the statements were made. The Company assumes no obligation to update forward-looking information to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References to our website are provided for convenience and, therefore, information on or available through the website is not, and should not be deemed to be, incorporated by reference herein.



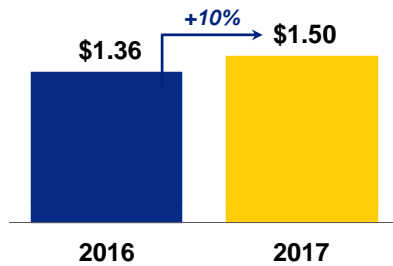
November 2017

## Current Overview / Business Update

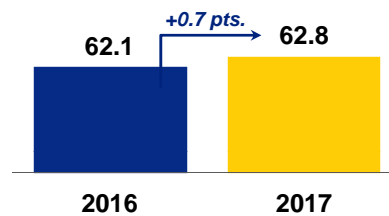
## Third Quarter 2017 Results



### Earnings Per Share Third Quarter



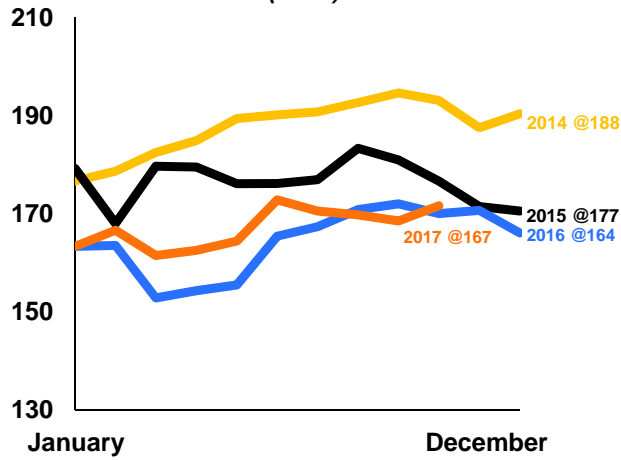
### Operating Ratio Third Quarter



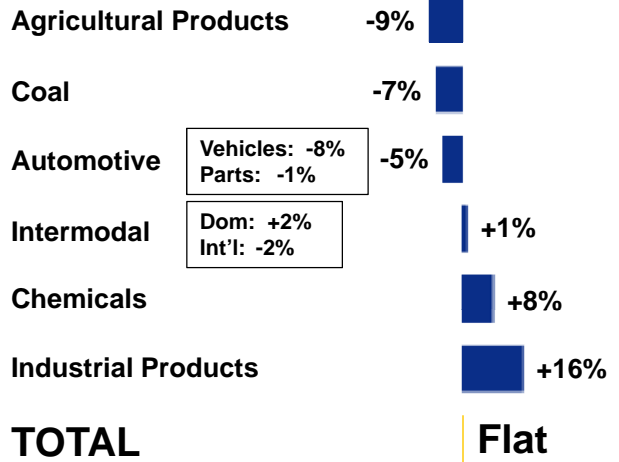
# 2017 Business Trends



## 7-Day Monthly Carloadings (000s)



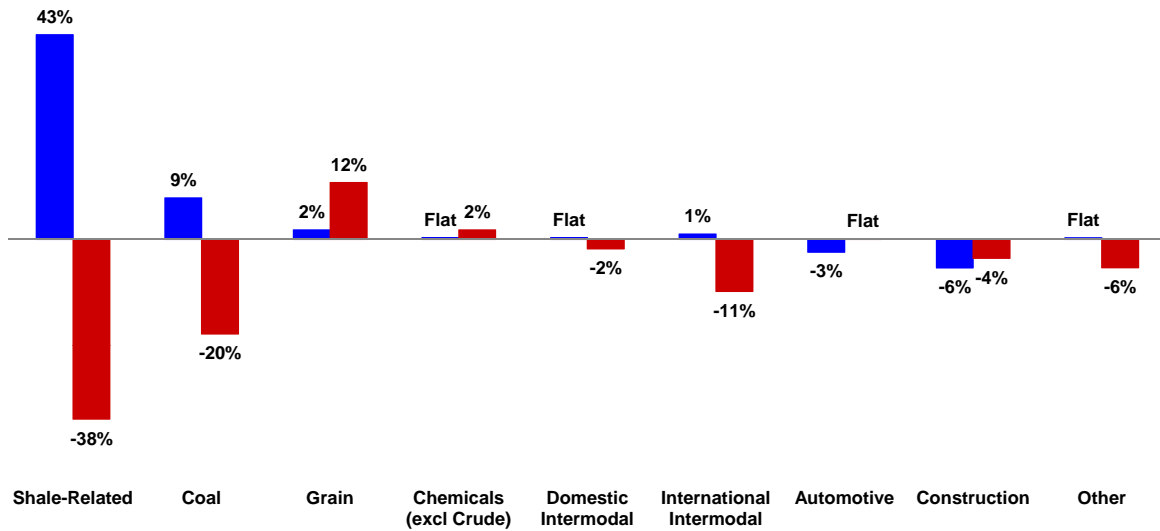
## 2017 4QTD Volumes\* (vs 2016)



\*Through November 4, 2017

# Volume Drivers

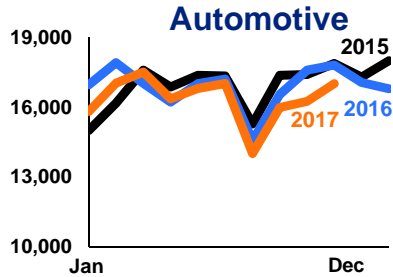
2017 YTD vs. 2016 YTD\* compared to 2016 vs. 2015 (carloads)



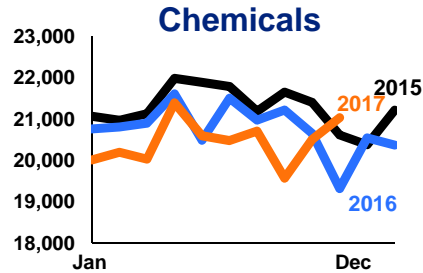
\*Through September 30

## 7-Day Volume Trends

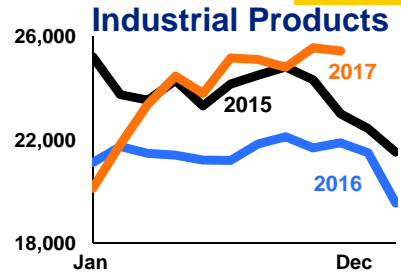
Through October 31, 2017



2017 YTD down 3%



2017 YTD down 2%



2017 YTD up 11%

- Interest Rates & Gasoline Prices
- North American Production & Sales
- Over-the-Road Parts Conversions

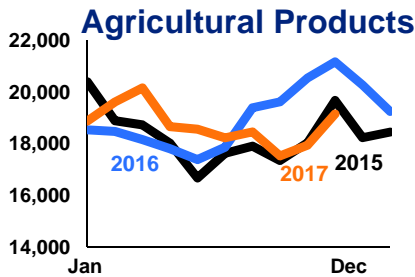
- Base Chemicals Remain Solid
- Natural Gas Prices
- Crude Oil Prices & Spreads
- Plastics Demand

- Frac Sand Demand
- Construction-Related Materials
- Housing Activity
- U.S. Dollar Impact

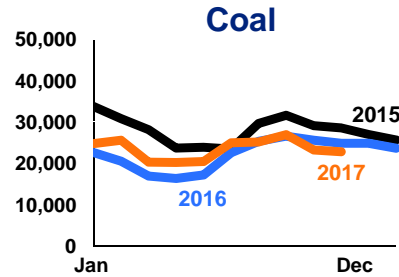
7

## 7-Day Volume Trends (cont)

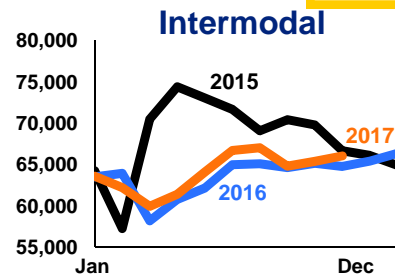
Through October 31, 2017



2017 YTD down 1%



2017 YTD up 7%



2017 YTD up 1%

- Grain Inventories
- Export Market Fundamentals
- Food & Refrigerated Shipment Demand

- Natural Gas Prices
- Inventory Management
- Weather & Economy

- Domestic Highway Conversions
- Retail Inventory Levels & Retail Sales
- Transpacific Market Challenges

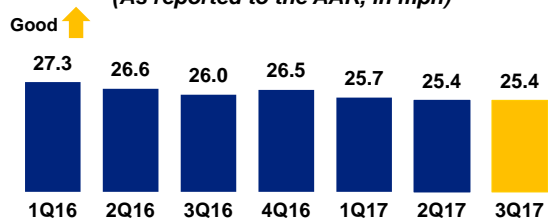
8

# Network Performance



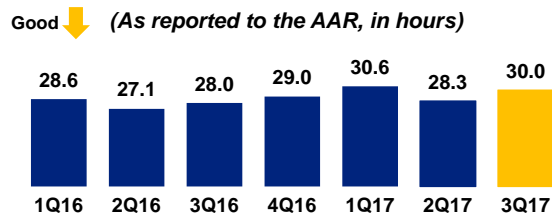
## UP Velocity

(As reported to the AAR, in mph)



## UP Terminal Dwell

(As reported to the AAR, in hours)



- Hurricane Harvey
- PTC Implementation & Testing
- Transportation Plan Opportunities

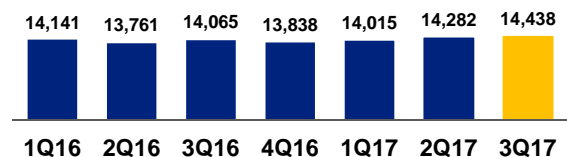
# Volume and Performance Drive Resources

Remaining Agile in a Dynamic Environment

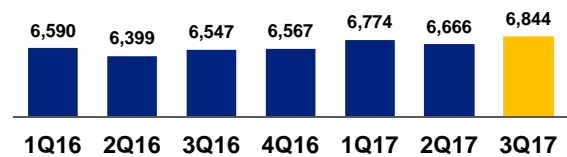


- TE&Y Workforce
  - 3Q17 Up 3% vs 3Q16
- Mechanical & Engineering Workforce
  - 3Q17 Down 4% vs 3Q16
- Locomotives
  - 3Q17 Up 5% vs 3Q16

## Total TE&Y\*



## Active Locomotive Fleet

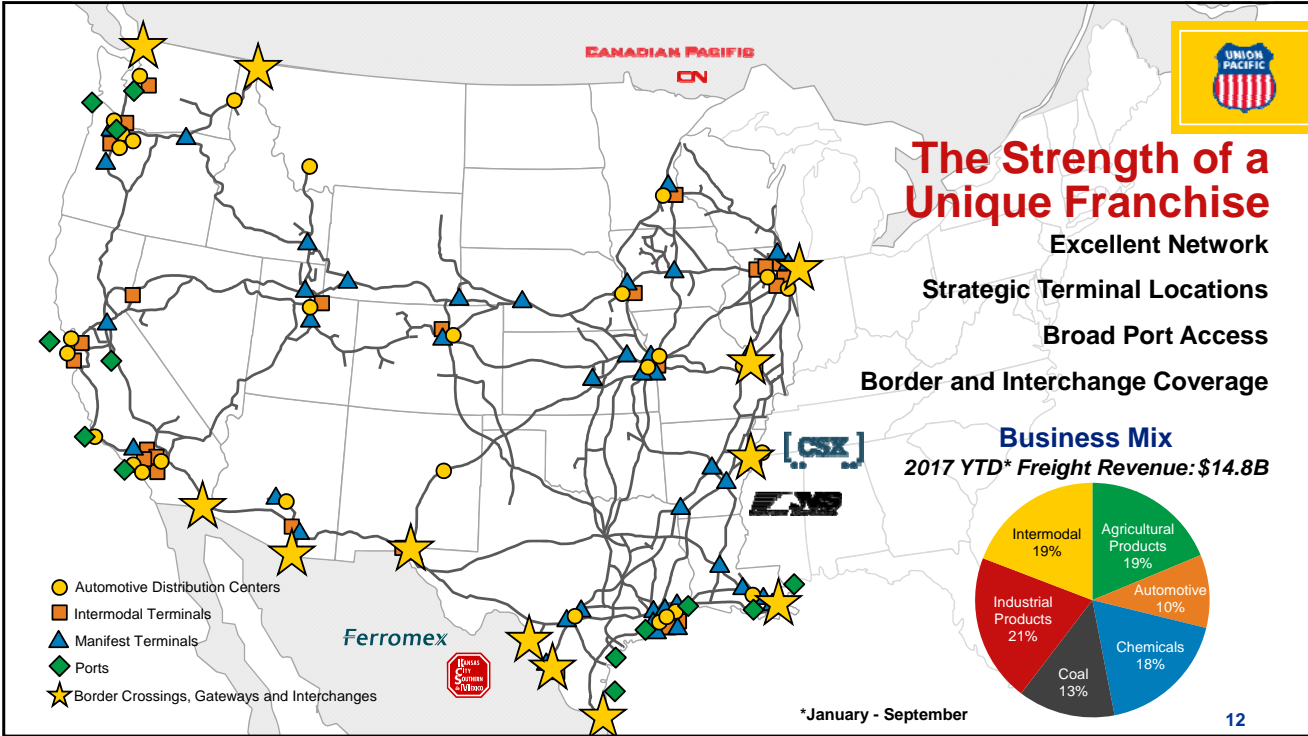


\* Full-time Equivalent



November 2017

# Business Team Review



# Economic Outlook



Metric	2013	2014	2015	2016	2017-2020 Forecast
Gross Domestic Product (%)	1.7	2.4	2.6	1.5	2.3 (avg)
Industrial Production (%)	2.0	3.1	-0.7	-1.2	2.4 (avg)
Light Vehicle Sales (Millions)	15.5	16.5	17.4	17.5	17.0 (avg)
Housing Starts (Millions)	0.93	1.00	1.11	1.18	1.33 (avg)
Imports (%) <i>incl Petroleum</i>	1.1	4.4	4.6	1.3	4.1 (avg)
Exports (%)	3.5	4.3	0.4	-0.3	3.9 (avg)
Unemployment (%)	7.4	6.2	5.3	4.9	4.3 (avg)

Source: October 2017 IHS Global Insight forecast

# 2017 Volume Outlook



**Agricultural Products**  
 + Food and Refrigerated  
 - Grain



**Coal**  
 + Exports  
 ? Natural Gas Prices



**Automotive**  
 + Over-the-Road Conversions  
 ? Consumer Demand



**Industrial Products**  
 + Frac Sand  
 - Construction Products



**Chemicals**  
 + Plastics  
 + Fertilizer

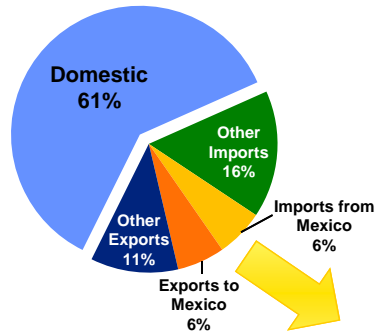


**Intermodal**  
 + Over-the-Road Conversions  
 ? International Intermodal

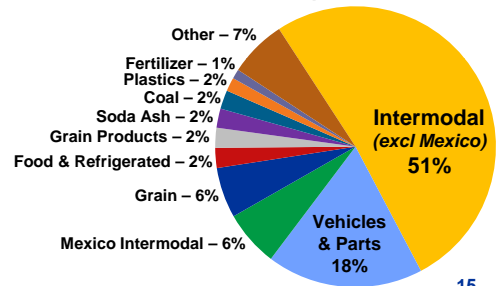
# International Trade

- Diverse Franchise Creates Opportunity
- Off-shoring/Near-shoring of U.S. Manufacturing
- Demand for Grain and Food
- Low Natural Gas Prices Favor U.S. Plastics Production
- Impacts from a Strong U.S. Dollar
  - Negative: Steel, Grain, Coal
  - Positive: International Intermodal

## 2016 Freight Volumes

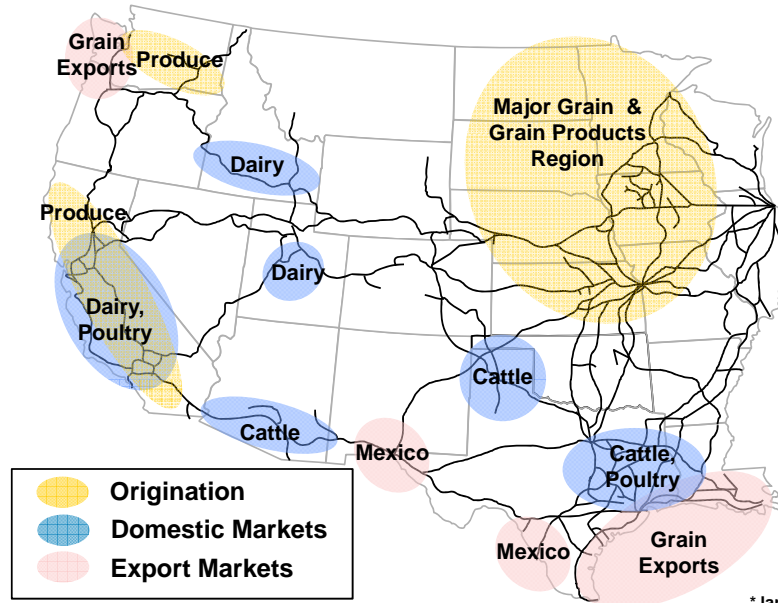


## International Volumes (3.3M carloads)

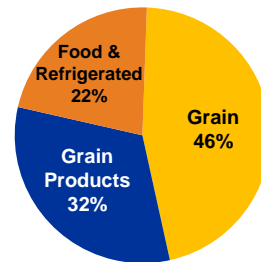


# Agricultural Products

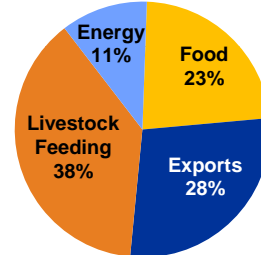
2016 Revenue: \$3.6 Billion



## 2017 YTD\* Volume Mix



## Key End-Use Markets (% of 2016 Volumes)



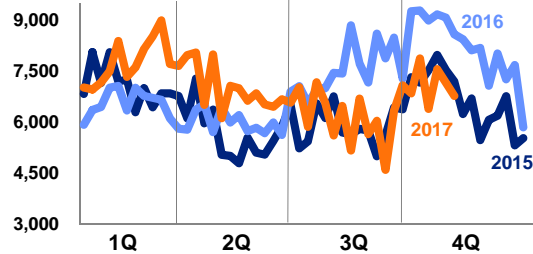
\*January - September



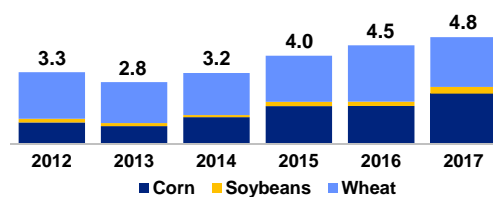
# Agricultural Products

- Grain Inventory Management
- Export Market Fundamentals
- Food & Refrigerated Shipment Demand

**UNP Weekly Grain Carloads\***  
(As reported to the AAR)



**U.S. Grain Stocks\*\***  
(Bushels in Billions)

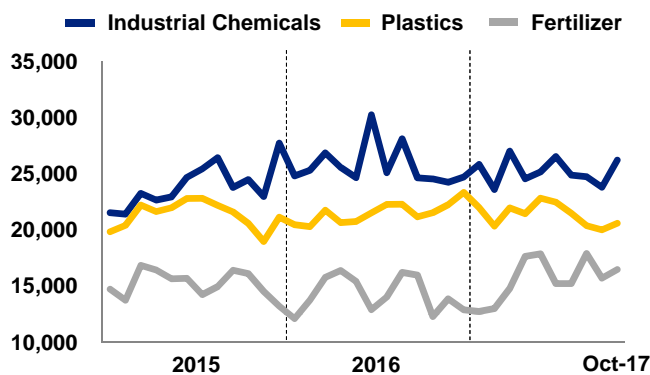


\*Through November 4, 2017

\*\*Source: USDA; As of Sep 1<sup>st</sup>

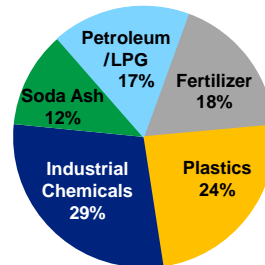
# Chemicals

**UNP Monthly Volumes**

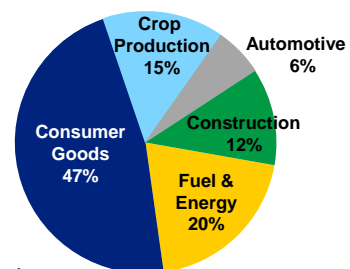


- Solid Base Chemicals
- Anticipated Strength in Plastics

**2017 YTD\***  
Volume Mix



**Key End-Use Markets**  
(% of 2016 Volume)



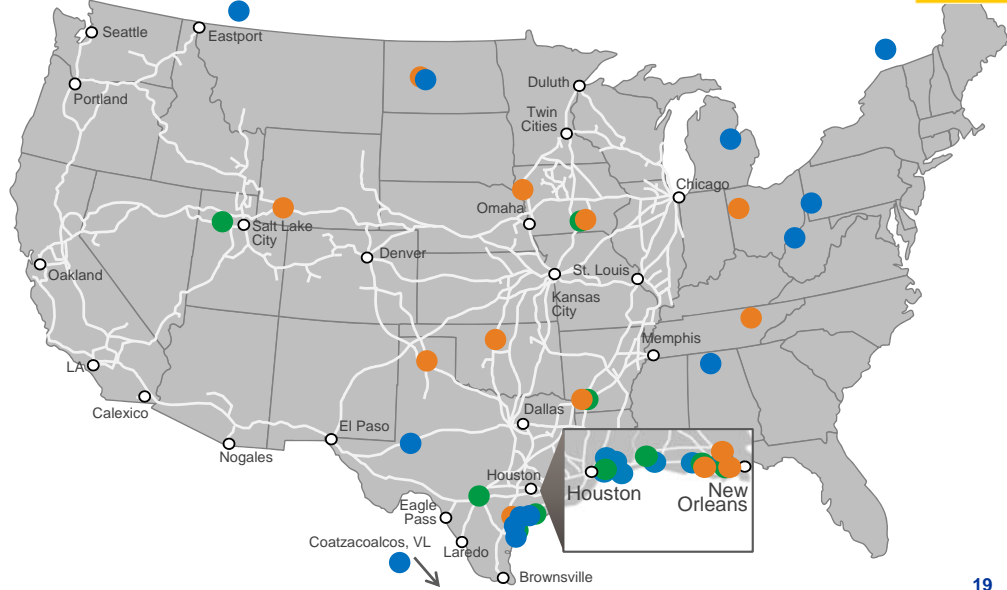
\*January - September

# Chemical Opportunities

## North America Announced Expansions



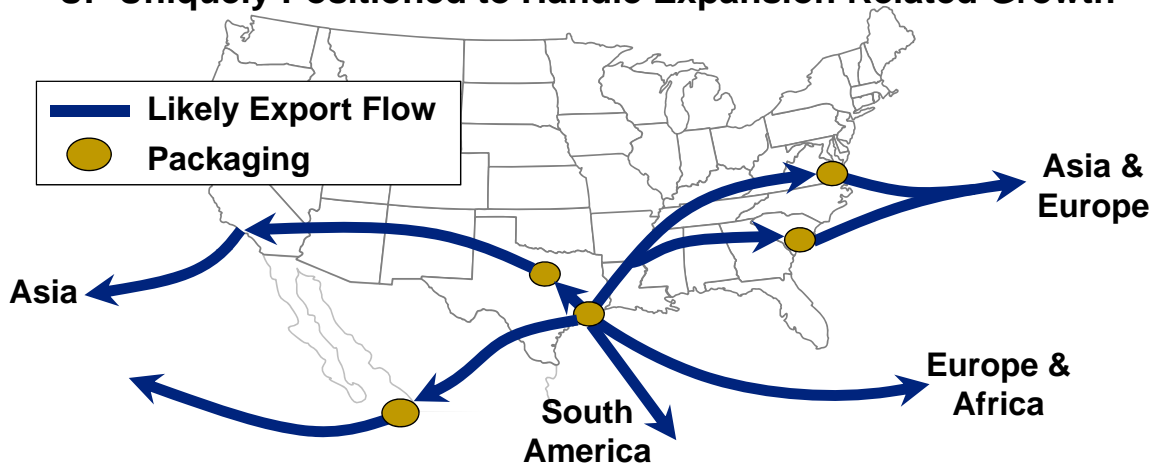
**2015 – 2020**  
 ● Ind. Chemicals - 14  
 ● Fertilizer - 13  
 ● Plastics - 21



# Export Opportunities



- North American Production Will Exceed Domestic Demand
- Surplus U.S. Production Targeted for Export
- UP Uniquely Positioned to Handle Expansion Related Growth



# Shale-Related Volumes

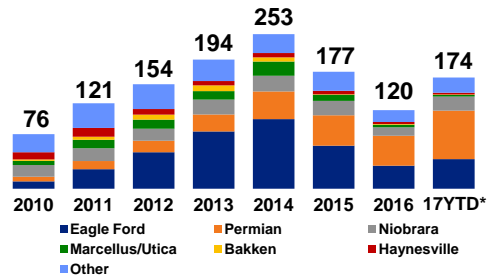
3.0% of 2017 YTD\* Total Volume

2017 YTD*	Volume (000s)	% Incr (vs '16)	% of Total UP Volume
Frac Sand**	174	102%	2.7%
Pipe	13	56%	0.2%
Crude	6	-84%	0.1%
Total Shale	193	43%	3.0%

## • Frac Sand Drivers

- Energy Prices
- Rig Counts
- Enhanced Fracking Technology
- White / Brown Sand Mix

## Frac Sand Volume\*\* (By Shale, 000s)



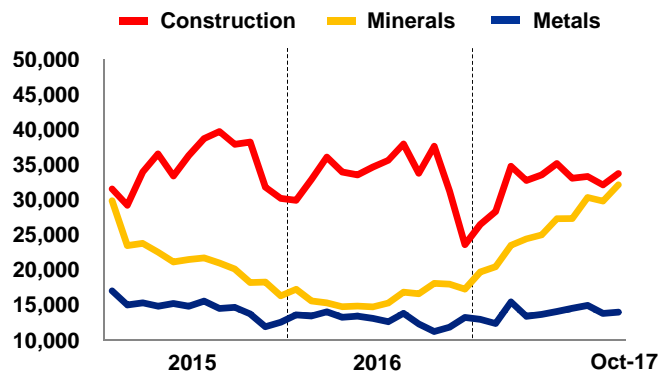
## Frac Sand Volume\*\*

Volume (000s)	1Q	2Q	3Q	YTD* Total
2017	46	59	70	174
2014 (Peak)	55	62	67	184
'17 vs '14	-16%	-5%	+4%	-5%

\*January - September \*\*Includes Barites

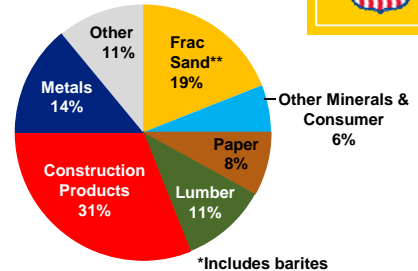
# Industrial Products

## UNP Monthly Volumes

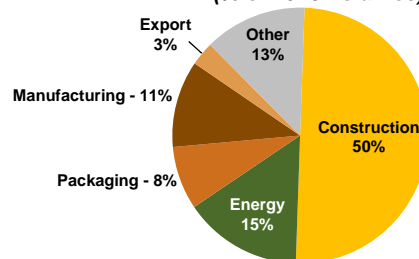


- Construction Product Demand
- Increased Drilling Activity & Frac Sand Demand

## 2017 YTD\* Volume Mix



## Key End-Use Markets (% of 2016 Volumes)



\*January - September \*\*Includes barites

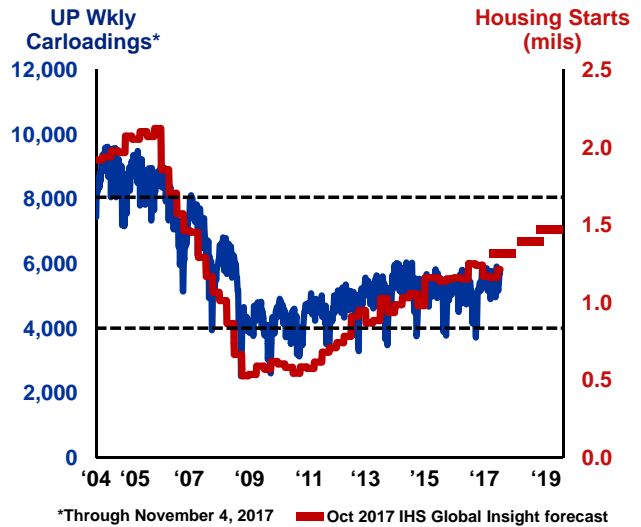
## Housing Trends

- Housing Market still well Below Historical Averages
- UP Lumber, Stone & Glass Business Correlates with Housing Starts
- Housing also Drives Appliances, Roofing, Rebar, Aggregates, and Cement Demand

Housing related Shipments Represent ~ 5-10% of Current UP Volumes

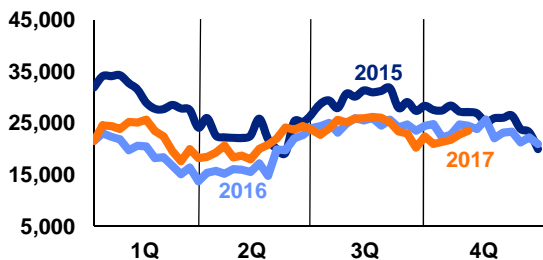


### Lumber, Stone & Glass



## Coal Trends

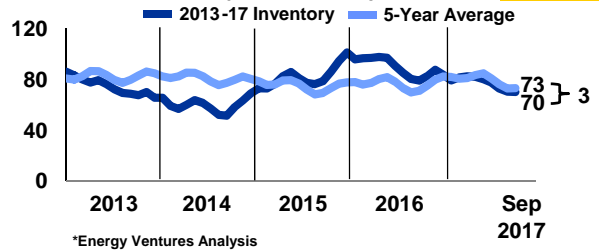
### UNP Weekly Coal Carloads\* (As reported to the AAR)



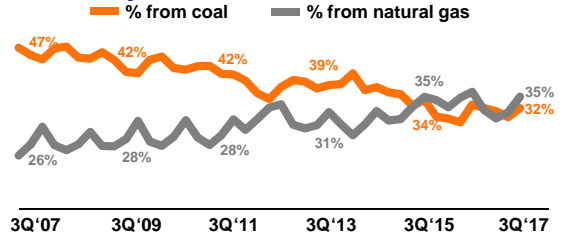
- Weather Impacts Demand
- Natural Gas Prices
- Coal Inventory Levels

\*Through November 4, 2017

### Powder River Basin Coal Stockpiles\* (Tons in MM)



### Electricity Generation Market Share\*\*



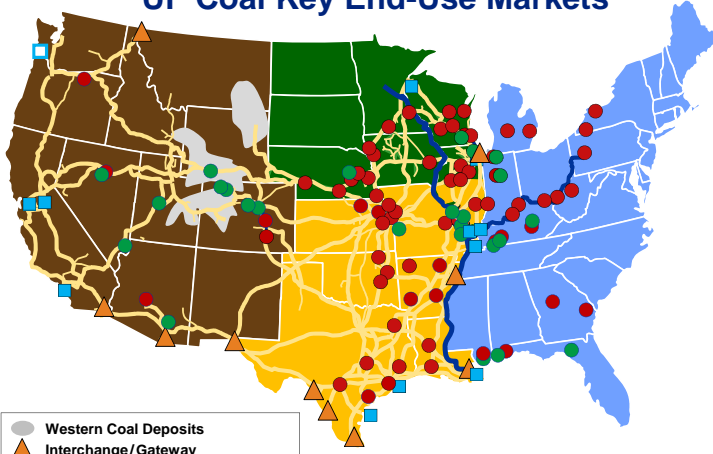
\*\*U.S. Energy Information Administration (EIA)

# Coal

2016 Revenue: \$2.4 Billion

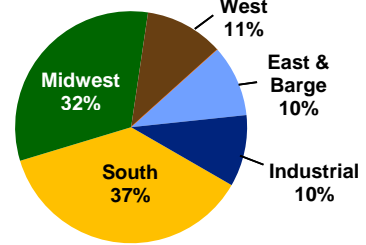


## UP Coal Key End-Use Markets

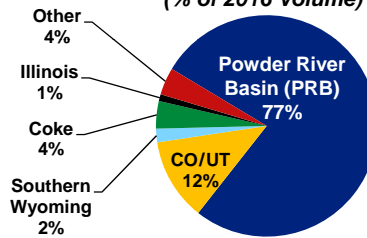


- Western Coal Deposits
  - ▲ Interchange/Gateway
  - Water Terminal
  - Water Terminal Under Development
  - PRB Coal Utility Plant\*
  - Other Coal Utility Plant\*
- \*Directly or indirectly served by UP

## Key End-Use Markets (% of 2016 Volume)



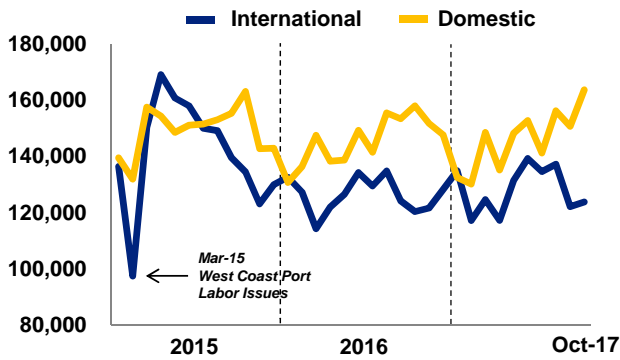
## Origin Mix (% of 2016 Volume)



# Intermodal

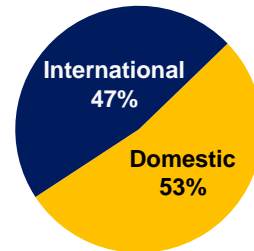


## UNP Monthly Intermodal Volume



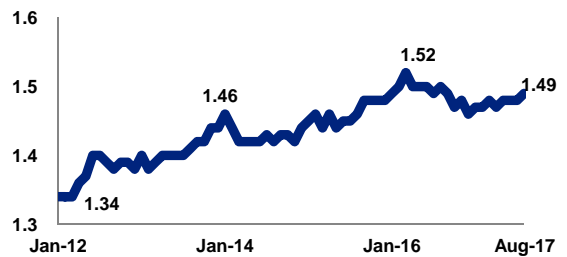
- Trans Pacific Market Challenges
- Truck Capacity & Economic Outlook

## 2017 YTD\* Volume Mix



## Retail Inventory-to-Sales Ratio

Source: U.S. Bureau of Economic Analysis



\*January - September

# Domestic Intermodal Growth

## Comprehensive Network

- Significant Domestic Truck-Load Conversion Opportunity
- Truckload Opportunity Originating from Mexico

## Strong Value Proposition

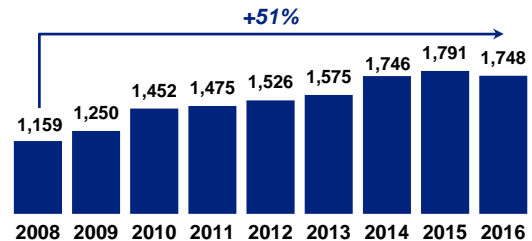
- Competitive Service at an Affordable Price
- Environmental Friendliness

## Truck's Traditional Advantage is Eroding

- Regulations & Rising Costs
- Highway Congestion & Infrastructure

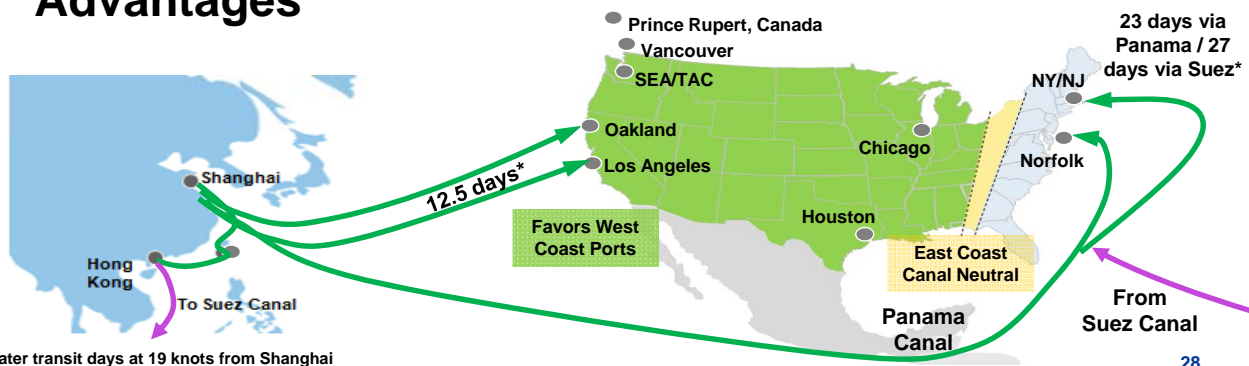
## Domestic Volumes

(Units in 000's)



# International Intermodal

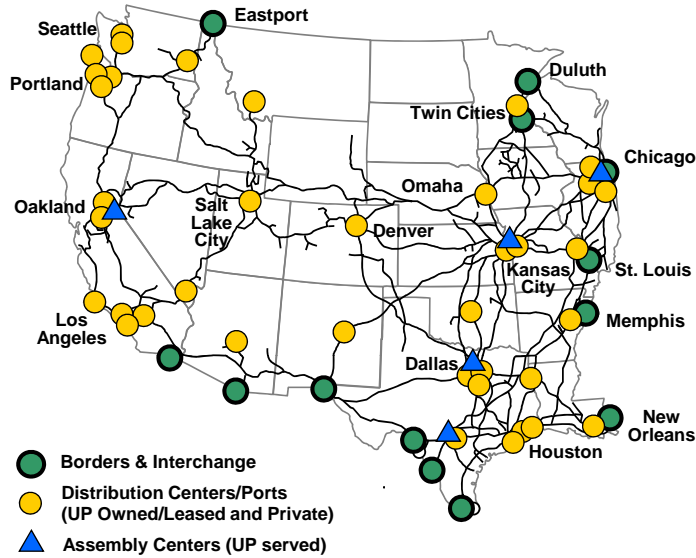
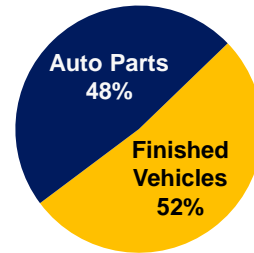
- Transpacific Market Challenges
- Retail Inventories
- West Coast Port Advantages



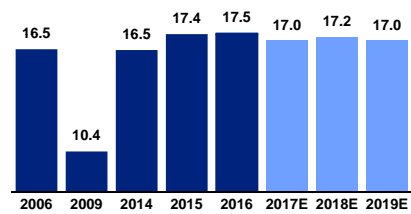
\*Water transit days at 19 knots from Shanghai

# U.S. Vehicle Sales and Drivers

2017 YTD\*  
Volume Mix



U.S. Light Vehicle SAAR\*\*



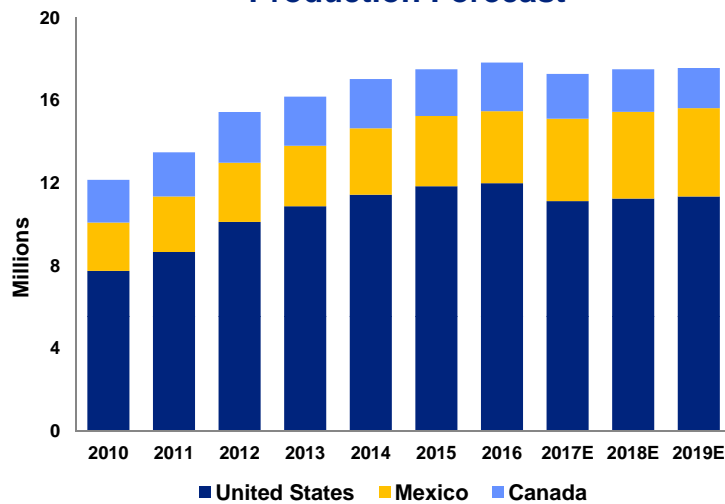
\*January - September

\*\*Source: October 2017 IHS Global Insight forecast

# North American Auto Production



North American Light Vehicle  
Production Forecast\*



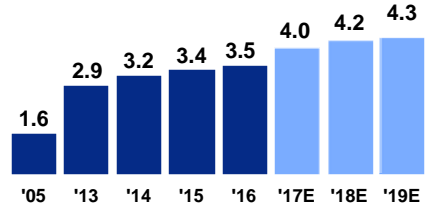
\*Source: IHS Global Insight October 2017

# Mexican Automotive Production Growth



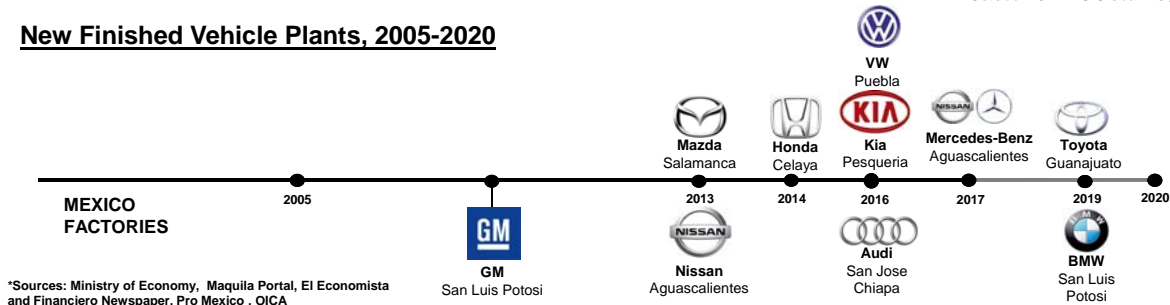
- 7<sup>th</sup> Largest Automotive Manufacturer
- 4<sup>th</sup> Largest Automotive Exporter
  - No. 2 Supplier of Vehicles to U.S.

Mexico Auto Production\* (In Millions)

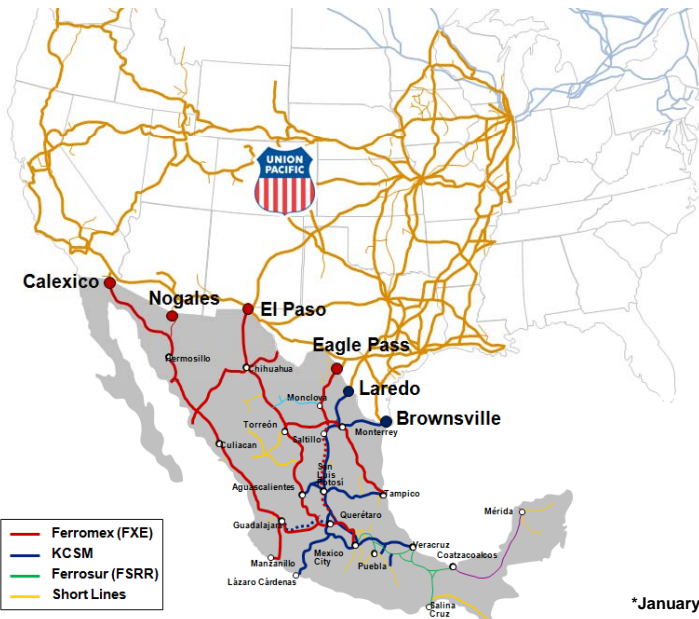


\* October 2017 IHS Global Insight

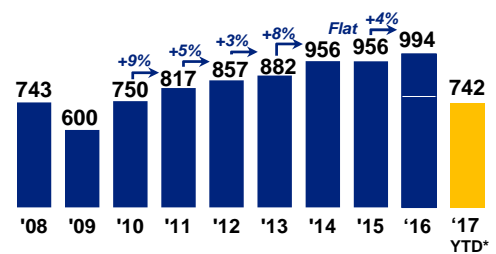
## New Finished Vehicle Plants, 2005-2020



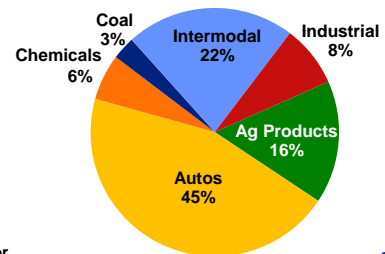
# UP Positioned for Mexico Growth



Volume Growth (Carloads in Thousands)



2017 YTD\* Volume Mix (In Carloads)



\*January - September





November 2017

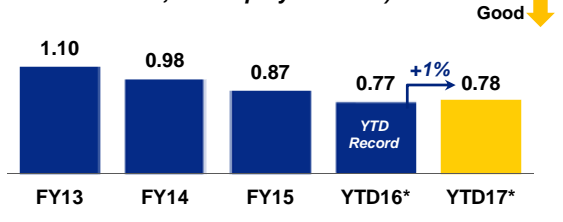
# Operating Overview

## Safety



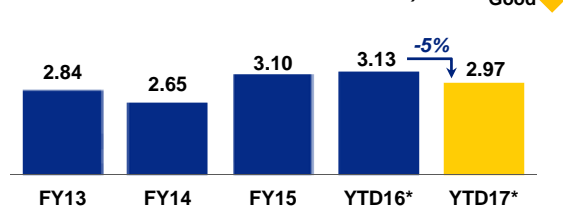
### Employee

(Reportable Personal Injury Incidents Per 200,000 Employee-Hours)



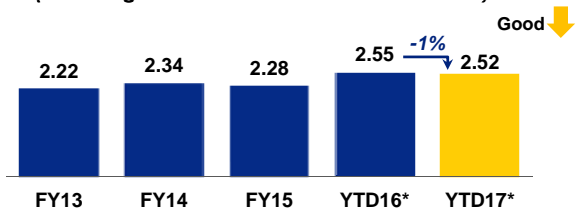
### Rail Equipment

(Reportable Derailment Incidents Per Million Train Miles\*)



### Public

(Crossing Accidents Per Million Train Miles)



- Goal of Zero Incidents
- Improving Crossings with the Most Public Safety Impact

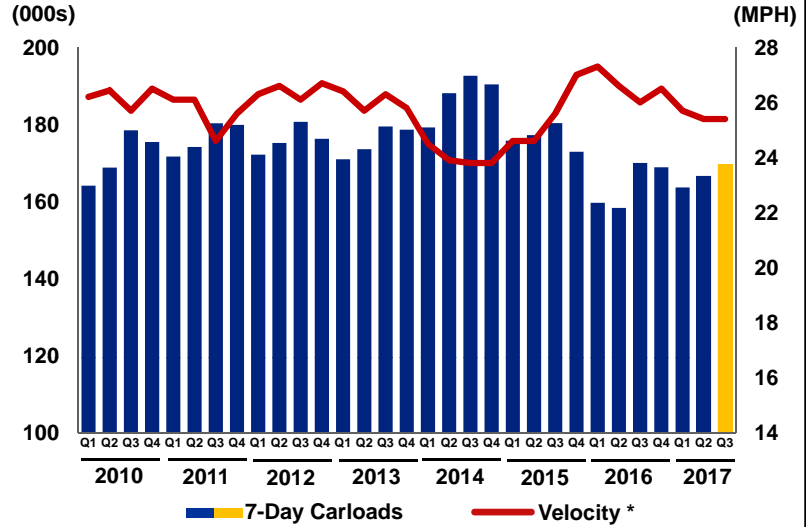
\*January - September

\*Starting in August 2016, crossing collisions were excluded from rail equipment incidents per FRA methodology. Prior periods have been adjusted to reflect the change.<sup>34</sup>

# Network Performance



- Dynamic Environment
- Strategic Investments
- Balancing Resources with Demand
- Focus on Further Improving Service & Costs

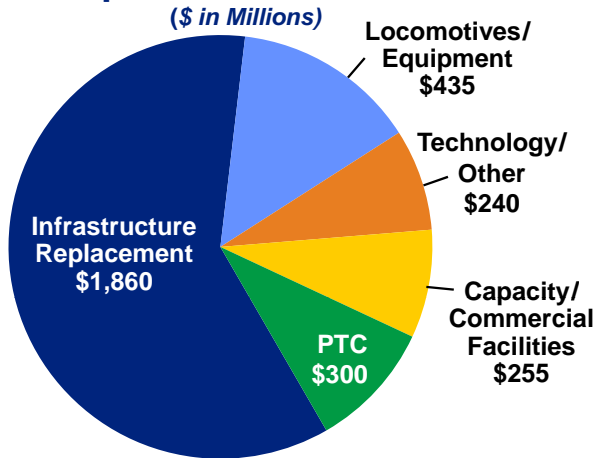


\*As reported to the AAR

# Strengthening the Franchise



## 2017 Capital Plan: ~\$3.1 Billion\*



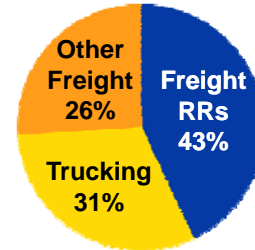
\*Includes cash capital, leases and other non-cash capital.

- Safe & Resilient Infrastructure
- Capacity Investments
  - Southern Region
  - Network Strategies
- Equipment Acquisitions
  - ~60 New Locomotives
  - 430 Freight Cars
- Positive Train Control

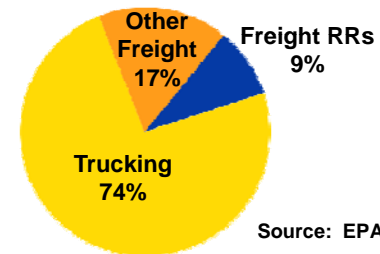
## Rail – The “Green” Alternative

- Each train can take up to 300 trucks off highways
- Three times cleaner than trucks on a ton-mile basis
  - Conversion of 10% long-haul truck freight would eliminate more than 10 million tons of greenhouse gas emissions annually
- Energy Consumption
  - Four times more fuel efficient than trucks
  - Can haul one ton of freight 456 miles on one gallon of fuel

Intercity Freight Transportation  
(Based on Ton Miles)



Transportation Greenhouse Gas Emissions



Source: EPA, AAR

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## Positive Train Control (PTC) Status Overview

- Approximately \$2.3 Billion Invested through December 2016
- Total Estimated Investment ~ \$2.9 Billion
- Field Testing since October 2013
- New Deadline: December 31, 2018
  - DOT Secretary has Option to Further Extend Deadline an Additional 2 Years
- Anticipate PTC Depreciation Expense to Increase from \$130 Million in 2017, to \$150 Million in Out Years, Post Implementation
- Remaining OE Line Items Expected to Increase ~\$150 - \$200 Million Once Fully Implemented



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# Pioneering Innovation

## Big “I”, Little “i”, The Internet of Things



### Mobile Work Order

- Real-Time Work Event Reporting
- Provides More Shipment Visibility and Improves Local Service



### UP GO

- Mobile Technology to Pre-Validate Gate Information
- Reduces Driver Gate Time
- Improves Ramp Inventory Location Accuracy



### Hand Held Ultrasound

- Detects Subsurface Cracks in Wheel Tread Using Ultrasound



### Machine Vision

- High Resolution Images and Alert Generation
- 50,000 Images per Second vs 4 Hour Manual Inspection Process

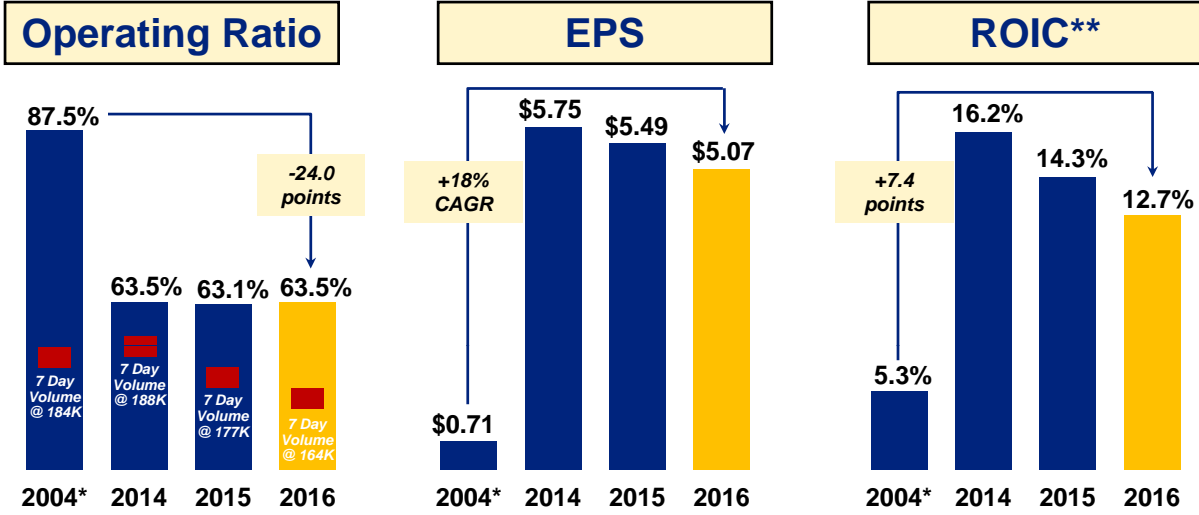


November 2017

## Financial Review

# Financial Performance

A Challenging Two Years After a Decade of Solid Improvement



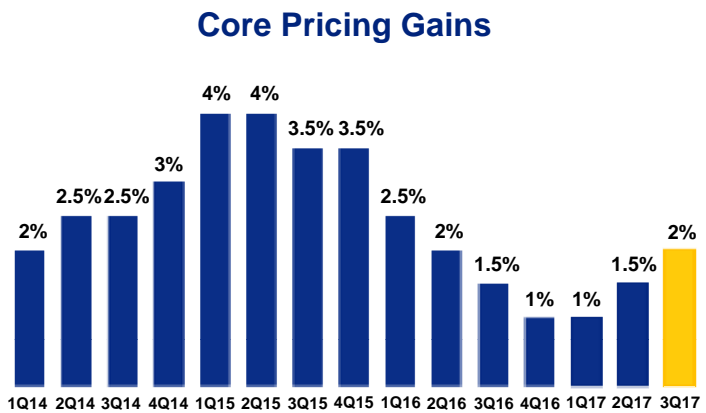
\* 2004 adjusted for asbestos pre-tax charge of \$247.4 million.

\*\* See Union Pacific website under Investors for a reconciliation to GAAP.

# Core Pricing Trends



- Positive Core Pricing
- Challenging Environment in Some Markets
- Pricing to a Strong Value Proposition
- Committed to Returns

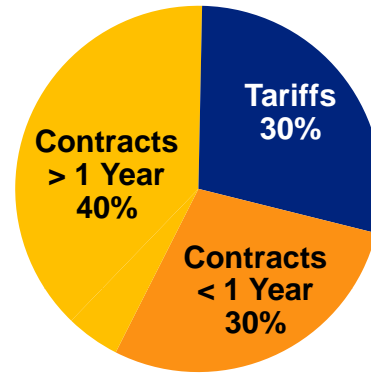


# Pricing Fundamentals



- Value is the Key to Future Price Improvement
- Balanced Portfolio Provides Flexibility for Repricing as Value Grows
- Solid Core Pricing

Balanced Revenue Portfolio



# Productivity

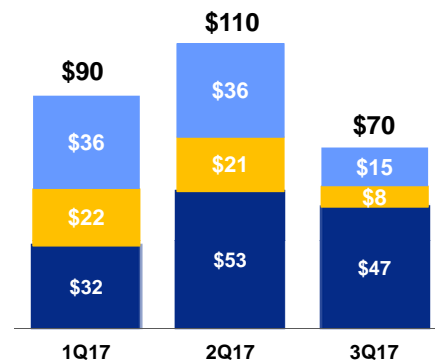


## Initiatives:

Network and Train Ops	<i>TE&amp;Y / Train length / Intermodal &amp; Premium Ops / Joint facility</i>
Equipment (Loco and Car)	<i>Active fleet / Car repair / Equip rental costs</i>
Other Ops, Support, Sourcing and Safety	<i>Engineering / Fuel conservation / Admin / Supply Chain / Sourcing / Safety performance</i>

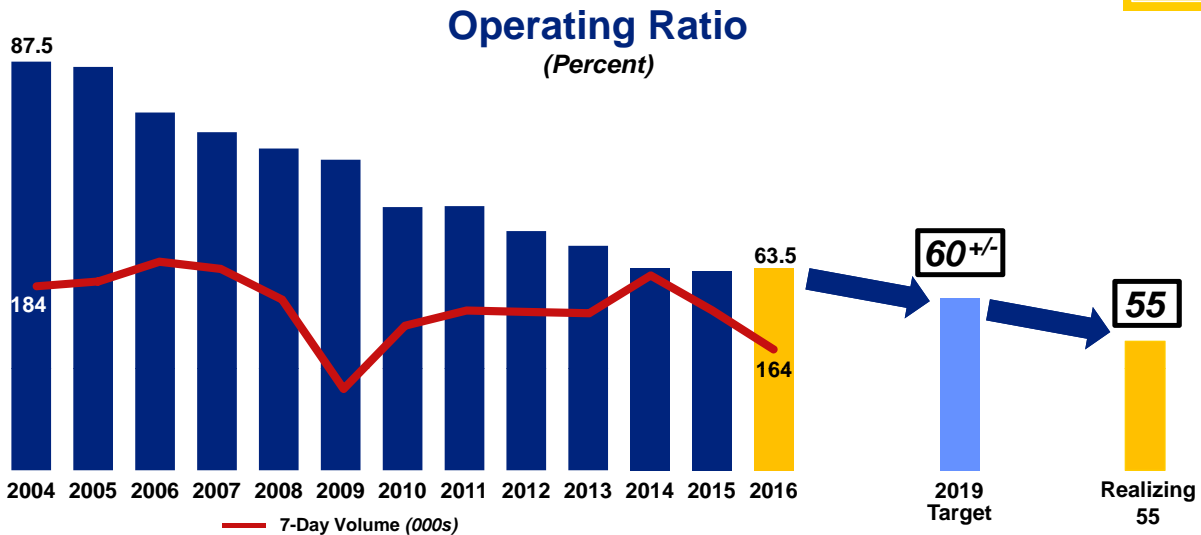
## 2017 YTD Results

(\$ in millions)



**2017 Full Year Productivity Target: \$350 - \$400 M**

## Growing the Margins “60 +/-” OR

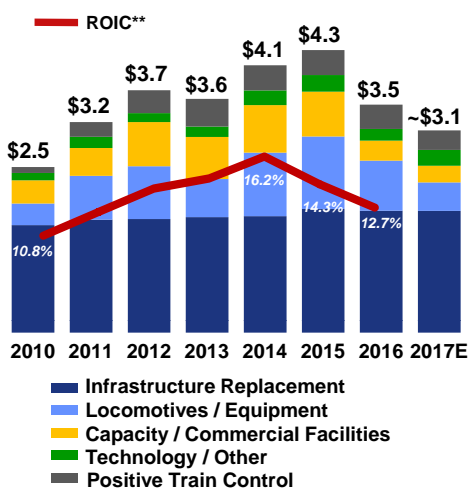


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## Capital Program Supported by Returns



### Capital Program\* & Returns\*\* (Capital in Billions)



- Profitability Drives Cash Flow
- Supports Investments *that must meet high return hurdles*
- Supports Core Pricing *that Drives Continued Investment*

\* Includes cash capital, leases and other non-cash capital.

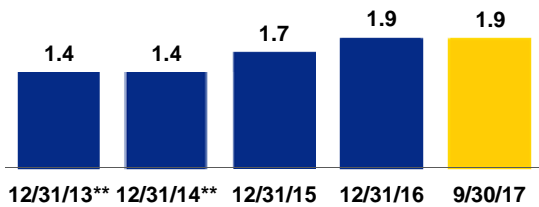
\*\* See Union Pacific website under Investors for a reconciliation to GAAP.

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# Optimizing the Balance Sheet

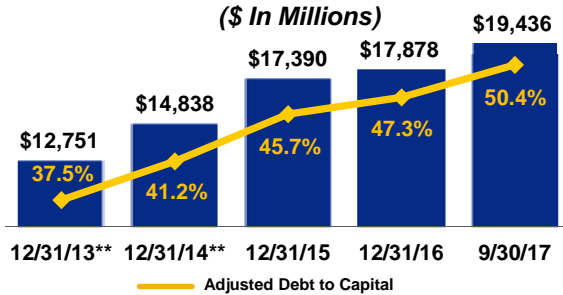


## Adjusted Debt / EBITDA\*



## Adjusted Debt

(\$ In Millions)



- Investment Grade Credit Rating

- Increased Adj. Debt ~\$6.7 Billion since 2013

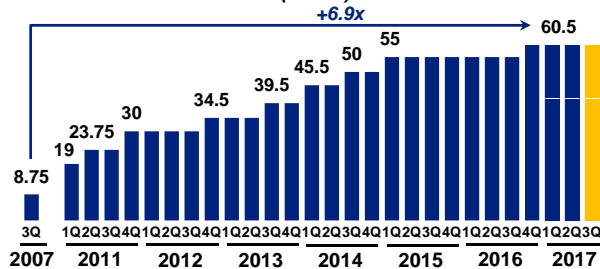
\*See Union Pacific website under Investors for a reconciliation to GAAP.  
 \*\* Prior periods have been adjusted for the retrospective adoption of Accounting Standard Update 2015-03.

# Delivering Value to Shareholders



## Declared Dividend Per Share

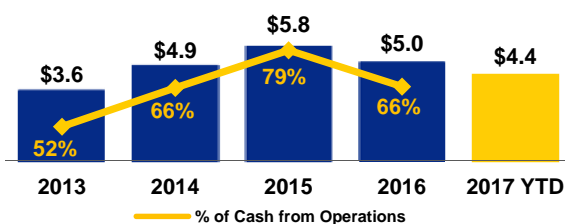
(cents)



- Dividend Payout Target of 40% to 45%
- 10% Dividend Increase Announced in November 2016

## Cash Returned to Shareholders\*

(Share Repurchases & Dividends, \$ In Billions)



- Returned ~\$23.6 Billion of Cash to Shareholders since 2013

- Averaged 68% of Total Cash From Operations

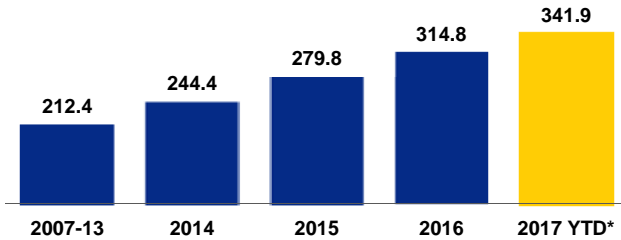
\*As of September 30, 2017



# Share Repurchases

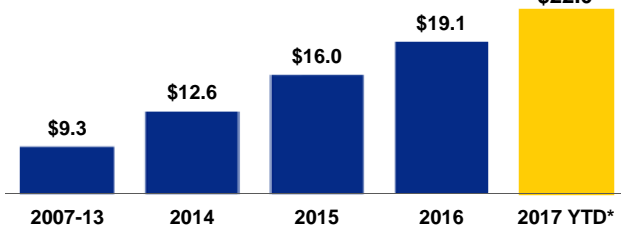


**Cumulative Share Repurchases**  
(In Millions)



- Repurchased ~32% of Shares since 2007
- Continue Opportunistic Approach

**Cumulative Share Repurchases**  
(\$ In Billions)



- Share Repurchase Program
  - Four Years Beginning January 1, 2017
  - 120 Million Shares
  - Prior Program Expired December 31, 2016

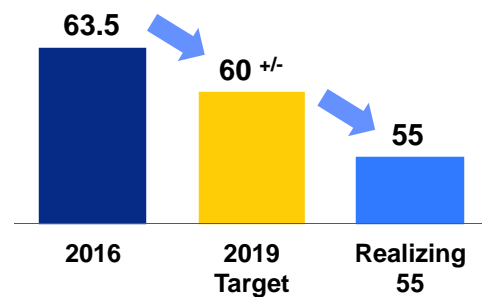
\*As of September 30, 2017

# Closing Out 2017



- 4Q Volume Slightly Positive
- Full Year Volume Up Low Single Digits
- Continued Focus on “G55 + 0” Initiatives

**Operating Ratio**  
(%)



*Improved OR in 2017*

## Growing Shareholder Value



KEY DRIVERS	2017 → 2019
Moderate Economy Diverse Franchise Opportunities	★ Positive Volume Growth
Strong Value Proposition - Reinvestability	★ Real Core Price Gains
Volume + Pricing + Productivity	★ Operating Ratio 60% <sup>+/-</sup>
Replacement & Productivity Growth with High Returns	★ CapEx likely closer to 15% of revenue
Increasing Cash Generation Adjusted Debt / EBITDA < 2X Strong Investment Grade	★ Dividend Payout Target of 40% - 45% ★ Opportunistic Share Repurchases

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## Cautionary Information



This presentation and related materials contain statements about the Company's future that are not statements of historical fact, including specifically the statements regarding the Company's expectations with respect to economic conditions; its ability to generate financial returns, improve resource productivity and use innovation to enhance customer experience; implementing corporate strategies; and providing excellent service to its customers and returns to its shareholders. These statements are, or will be, forward-looking statements as defined by the Securities Act of 1933 and the Securities Exchange Act of 1934. Forward-looking statements also generally include, without limitation, information or statements regarding: projections, predictions, expectations, estimates or forecasts as to the Company's and its subsidiaries' business, financial, and operational results, and future economic performance; and management's beliefs, expectations, goals, and objectives and other similar expressions concerning matters that are not historical facts.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times that, or by which, such performance or results will be achieved. Forward-looking information, including expectations regarding operational and financial improvements and the Company's future performance or results are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statement. Important factors, including risk factors, could affect the Company's and its subsidiaries' future results and could cause those results or other outcomes to differ materially from those expressed or implied in the forward-looking statements. Information regarding risk factors and other cautionary information are available in the Company's Annual Report on Form 10-K for 2016, which was filed with the SEC on February 3, 2017. The Company updates information regarding risk factors if circumstances require such updates in its periodic reports on Form 10-Q and its subsequent Annual Reports on Form 10-K (or such other reports that may be filed with the SEC).

Forward-looking statements speak only as of, and are based only upon information available on, the date the statements were made. The Company assumes no obligation to update forward-looking information to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References to our website are provided for convenience and, therefore, information on or available through the website is not, and should not be deemed to be, incorporated by reference herein.

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