# Truckload Freight Update

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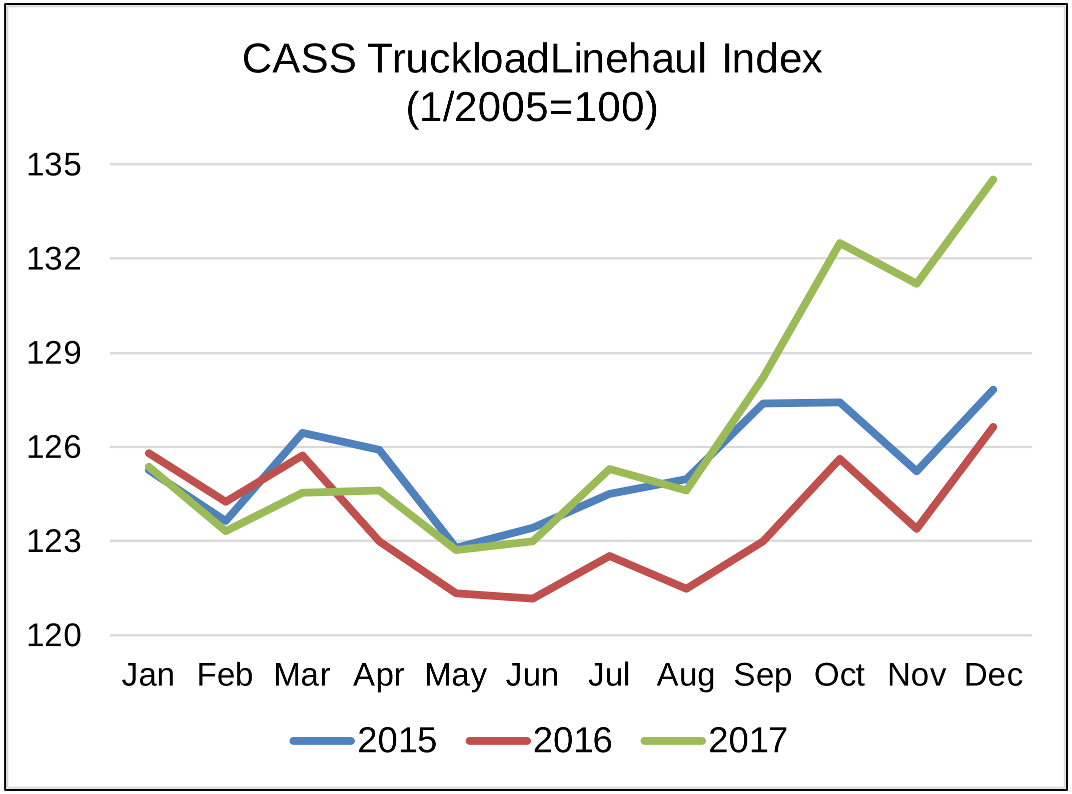
# Agenda

- **Current State of Truckload**
- Productivity Issues
- Outlook Going Forward
- Options for Changing the Game

# Beginning in the second half of 2017, truckload rates rebounded sharply from a weak 2016

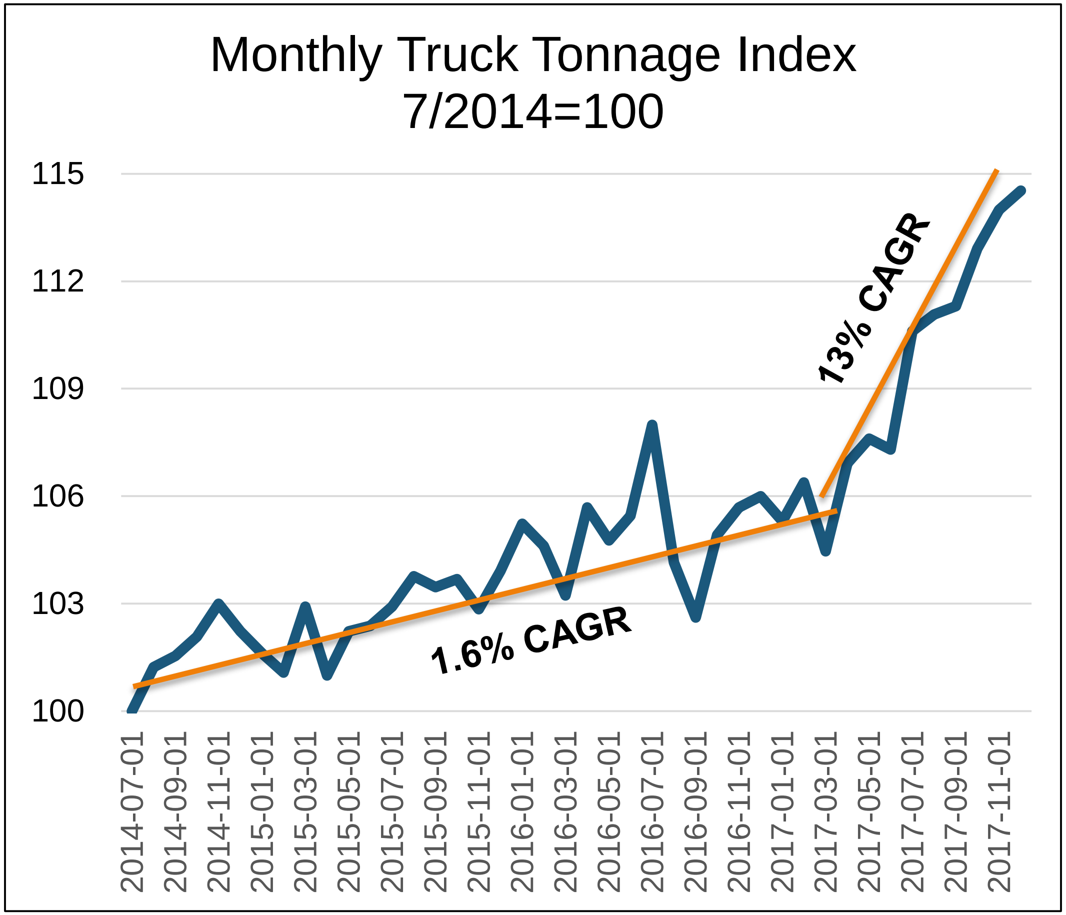
- Rates flat to down 2015 – mid-2017
- Rates up 9.3% June – December 2017
- What are the causes?
  - Increased volume
  - Tight truck capacity
  - Driver shortage
- “A tight supply and demand environment existed in the fourth quarter (2017) and our price improved across the board…” *Schneider National*




Source: CASS Information Systems Truckload Linehaul Index

# Trucking tonnage grew slowly from mid-2014 to mid-2017. Since then, it has taken off

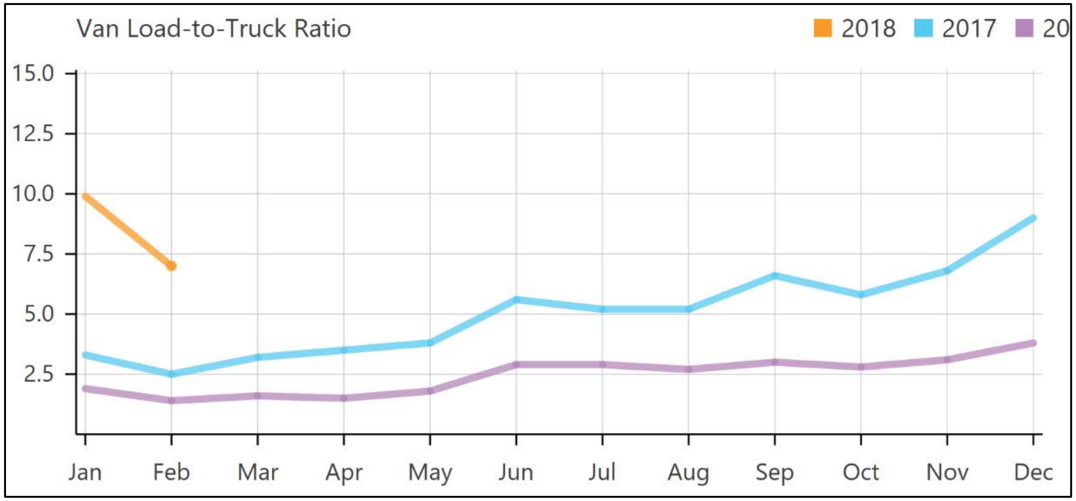
- Truck tonnage growth CAGR:
  - 7/2014 to 3/2017 1.6%
  - 3/2017 to 12/2017 13%




Source: Federal Reserve Bank of St. Louis Truckload Tonnage index data; Schneider National Q4, 2017 earnings release

# Demand has been very strong for spot capacity

- DAT dry van load-to-truck ratio up dramatically
  - Roughly doubled 2017 vs. 2016
  - 2018 vs. 2017 roughly doubled again
- Spot market responds more quickly than contract market
- Brokerage rates increasing
- Contract rates increasing




Source: DAT Trendlines

## The implementation of ELD’s has and will decrease truck capacity

| ELD Rule | Impact |
|---|---|
| • Electronic Logging Devices (ELD’s) record driver hours-of-service, required December, 2017 for interstate commerce<br>• April 1, 2018 full enforcement<br>• Makes it difficult for drivers to cheat on hours<br>• Could make it easier for drivers to claim coercion on carriers, shippers | • Large carriers have had ELD’s for years<br>• Q4, 2017 many other carries installed<br>• Q1, 2018 “rest” of carriers to implement<br>    ▪ Likely the greatest creative paper log Co’s<br>• Q2, 2018 enforce compliance<br>• Impacts:<br>  – Routes requiring just over 1 or 2 full days<br>    ▪ Avg. days for 450-550 mile lane increased from 1.05 to 1.22<br>  – Short hauls where multiple loads/day<br>  – 1-day lanes, nowhere to park<br>  – Various one-off situations |

Source: Stifel presentation “The ELD Mandate is Finally Here” 12/19/2017; JOC article “ELD mandate delaying US truck shipments” 2/16/2018

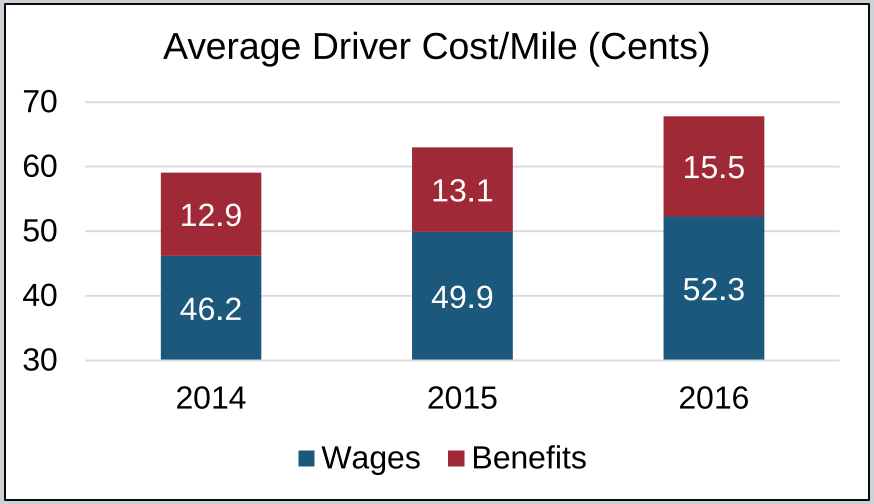
# A driver shortage and increasing driver costs are also a key factor

## Driver Shortage Issues

- ATA est. shortage of 50,000 drivers
- Median for-hire driver age: 49, 52 for private fleets
- Issues include:
  - Recoveries in manufacturing, construction take away drivers
  - More stringent safety requirements eliminate poor drivers
  - Drug test eliminate a percentage of the potential driver base
  - Women ~6% of truck drivers
  - Minimum age of 21
- Carriers added 5,600 employees in February – most monthly since 2015

## Driver Cost

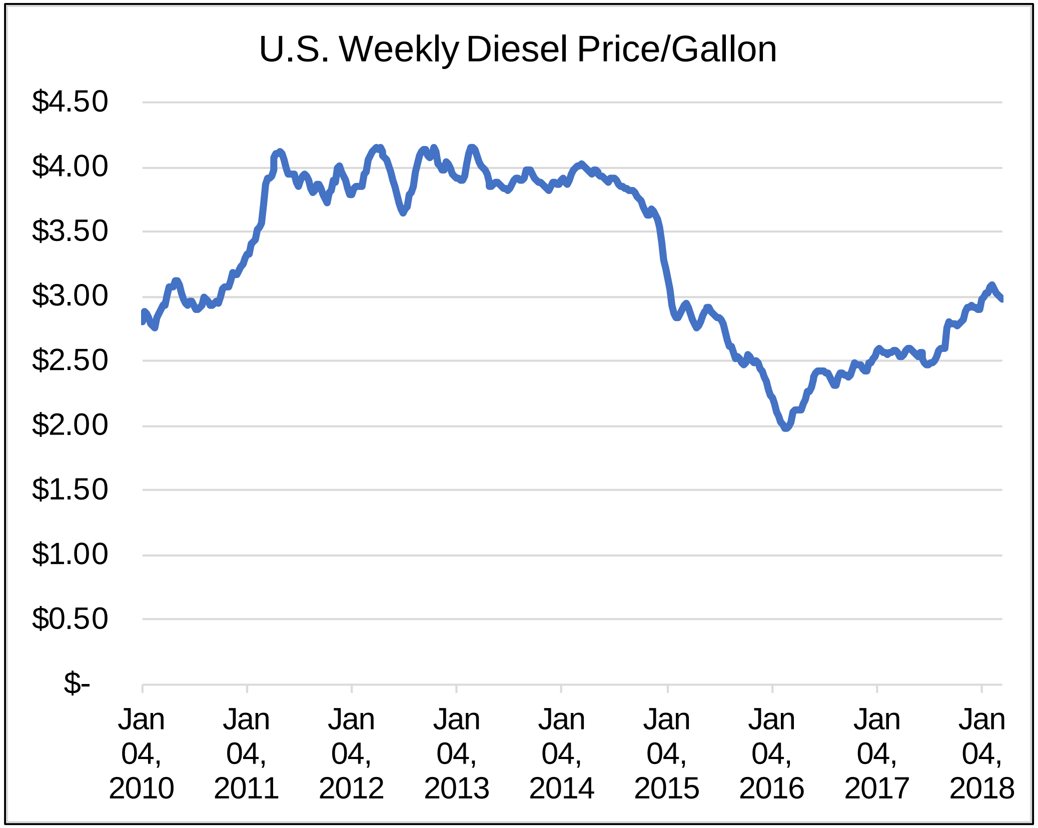
- Driver costs have been increasing – and likely more since 2016
- 7.7% annual 2014-2016 growth, despite weak trucking market
- Driver costs ~43% of ops cost
- Stifel estimates 50% driver pay increase necessary




Source: ATA 2017 Truck Driver Shortage Analysis; American Transportation Research Institute "An Analysis of the Operational Costs of Trucking: 2017 Update" report; WSJ article "Truckers Boosted Hiring at Fastest Pace Since 2015" 3/9/2018; Stifel 2018 Trucking Outlook

# At least diesel fuel prices have remained relatively stable

- National diesel fuel price about $3.00/gallon
- Significantly below 2011 – 2014 costs, but above rates for 2016 and much of 2017
- Diesel prices not expected to spike, but you never know




Source: U.S. Energy Information Administration

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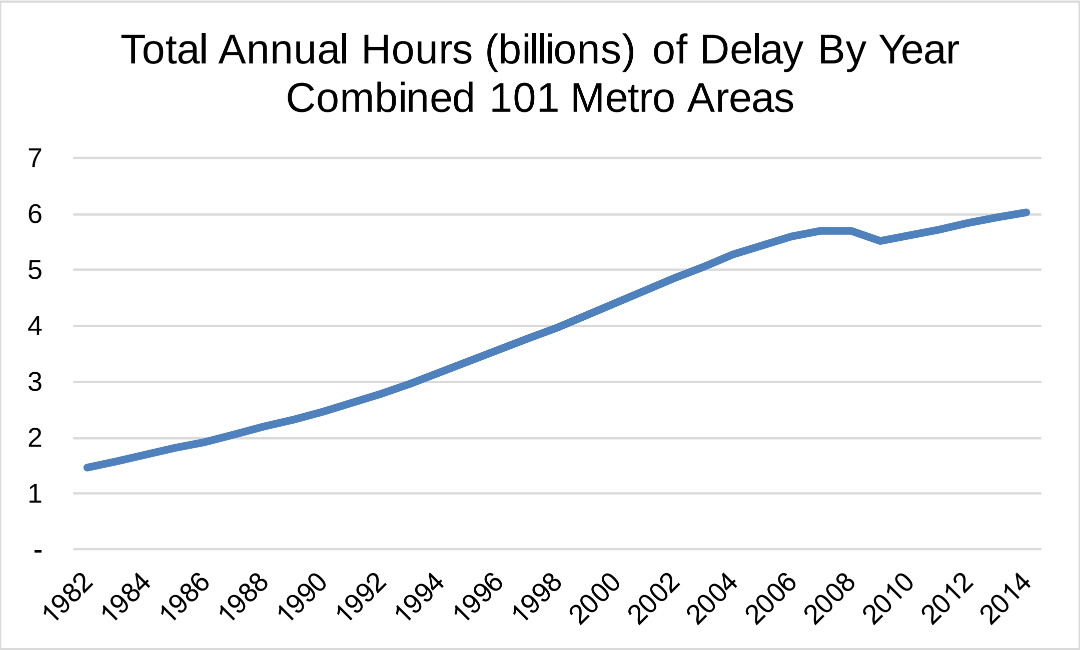
# Highway congestion continues to get worse

- Impact of congestion on U.S. Drivers
  - 6.9 B hours
  - 3.1 B gallons of fuel
  - $160 B total cost
- Highway congestion delay 1982 – 2014 increased at 4.4% CAGR
- Trucks are 7% of urban traffic, but experience 18% of the urban congestion cost

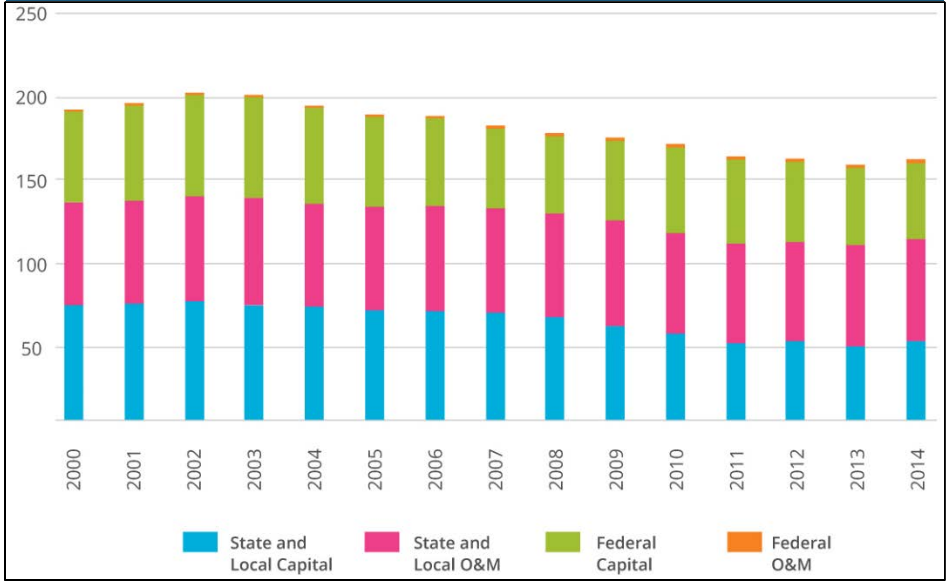



Source: Texas A&M Transportation Institute 2015 Urban Mobility Scorecard

# A wholesale infrastructure improvement effort is unlikely – and would be expensive

- Public highway spending has declined over time, particularly for capital
- Highway trust fund (fuel taxes) not keeping up
- $836 B estimated backlog of highway and bridge system projects
  - $420 B repair existing
  - $123 B bridge repair
  - $167 B system expansion
  - $126 B system enhancement

Public Spending on Highway Infrastructure
$ Billions




Source: American Society of Civil Engineers

# Tractors are getting more efficient, but at a higher cost per truck

- New engine improvements
  - Better gas mileage
  - Improved emissions
- However, the improvements do not come for free, and they still haul the same freight

## Trailer productivity – not likely to impact costs

| Drop Trailers | Capacity |
|---|---|
| • Trailer productivity is frequently sacrificed for improved truck and driver productivity<br>– Drop trailers common<br>– However, not all carriers, shipper locations, and intermediaries can support drop trailers | • Unlikely to increase trailer length beyond 53’<br>• Unlikely to increase trailer width beyond 102’’<br>• Unlikely to increase trailer high cube higher beyond 110’’<br>• Unlikely in many states to increase weight limitations |

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## 2018 likely to be a high cost trucking year, but many shippers are even more concerned about capacity

| Pricing | |
|---|---|
| **Increasing Demand** | **Limiting Capacity** |
| • Higher economic growth<br>• Tax cut impacts<br>• Increased domestic production – multiplier effect | • Strong job market<br>• ELD mandate comes into force<br>• High equipment orders, but will take time |

- Stifel forecasts 2018 truckload pricing up 12% y/y
- Beyond 2018 there are not many factors favoring lower trucking costs

### Capacity

- Discussion of driver shortage has existed for years, but the freight has always moved
- But 2018 may be different, it is possible that some shippers may not get the capacity to move the freight they want, when they want

Source: Stifel 2018 Trucking Outlook

# Technology can help, but only on the margin, and not short-term

- Driverless trucks
  - Technology progressing, but public acceptance may be slow
  - Likely years out
- Platooning being tested, could be helpful on interstates
  - Does not replace driver in the near-term
  - Improves fuel economy
  - May need infrastructure, logistics coordinator
- Driver assist technology should continue to decrease accidents, but marginal cost benefit
- Other technologies can help, but only on the margin
  - Weight station bypass
  - Improved routing
  - Fuel buying and fueling services
  - Other in-cab/telematics

Source: U.S. Federal Highway Administration

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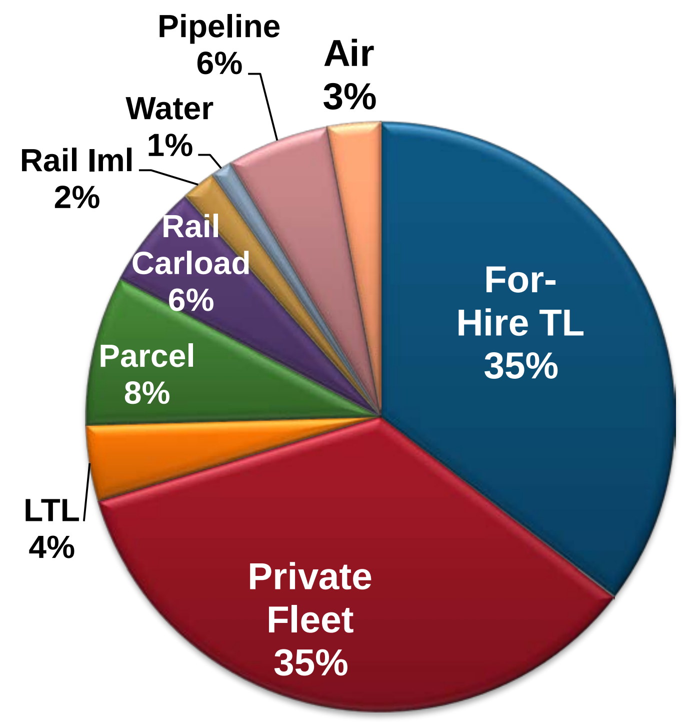
## Capacity can be solved by adding a private fleet, but the rest of the issues still exist, and it is likely to exacerbate the cost problem

- Private fleet and dedicated truckload are options for capacity
  - Guaranteed capacity
  - Can provide high quality service
- Private fleets typically a high cost, low productivity option
  - Shippers don’t run the operations like a carrier
  - Recruit drivers, set up safety programs, etc. as a sub-scale operation
  - Technology investment more significant for shipper sub-scale
  - More difficult to have repetitive loaded moves (low empty miles)
  - Typically over pay and over benefit drivers
- Private fleets and dedicated truckload operations have the same driver shortage and operating cost challenges of a carrier

# Shifting to other modes will be difficult since trucking is such a large percent of the market

- For-hire truckload and private fleets account for 70% of the transportation market
- Rail intermodal could be an alternative for *some* freight
  - LOH
  - Intermodal network
  - Drayage distance
- Rail carload can be an option for some freight, but likely requires a lot – facilities, equipment, systems, pricing & services from railroad
- Parcel, LTL and Air freight too expensive

**Est. 2015 US Freight Transportation Revenue by Mode**




Source: Stifel 2018 Trucking Outlook; ArcBest Corporation Stephens Fall Investment Conference Presentation 11/11/2015; TandLA analysis

## However, this issue is solvable - when “out of capacity” there is still significant wasted excess capacity in the trucking system

***--ILLUSTRATIVE--***

| Opportunity | Explanation | Potential Impact |
|---|---|---|
| Saturday + Sunday Operations | Expand to 7-day operation | increase working days 5 to 7 – up to 40%? |
| More fluid load and unload operations and timing | Eliminate waiting hours between drop off (8-10 AM) and load pick-up (3-5 PM) | Gain 3-5 hours/load – 10 to 15%? |
| Slip seat drivers (private fleet) | Increase truck utilization | Truck utilization up 100%<br>Accounts for 16-18% of operating costs<br>Benefit of 8%? |
| Ship more early in the week | Friday volumes are typically much higher than Monday | 10 to 15%? |

## In the short-term, you can tap into this inefficiency and partially mitigate by changing how you operate your supply chain

| What You Ship | When You Ship | How You Ship/Receive |
|---|---|---|
| • Redesign product packaging (balance weight/density with cube)<br>• Restructure order/ shipment quantities<br>– Optimize weight and cube<br>– Send full trailers | • Wider windows for pickup and delivery<br>• Extended operating hours<br>• Extended gate hours<br>• Weekends<br>• Drop and hook<br>• Slip seat tractors (night operations)<br>• Day-of-week, week-of-month, end-of-quarter | • Shipment optimization<br>• Route optimization<br>• Continuous moves<br>• Skipping legs in the supply chain/DC bypass<br>• Dock scheduling<br>• Dock worker/lumper scheduling |

But a single shipper can only gain partial benefits

# To manage cost and capacity long-term, however, will require more significant supply chain changes

| Change Options | Not Off-the-Shelf |
|---|---|
| • Redesign DC network – make sure the moves are aligned with HOS limits<br>• Develop new port strategies – limit the truck LOH<br>• Consider intermodal for longer haul and medium-haul moves<br>• Consider new rail carload/ multi-modal services<br>• Redesign manufacturing and packaging networks and locations | • Many solutions can't be bought "off-the-shelf" from service providers<br>– More complex<br>– Require doing things differently than they are done today<br>– More likely to be company-specific<br>• Supply chain software not set up easily to plan or operate a more complex supply chain<br>• Many solutions will require capital |

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