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FREIGHTWAVES

The #1 Source for Navigating the Freight Markets

Speaker Bio



Zach Strickland

Director - Freight Market Intelligence - FreightWaves

Graduated with a B.S. in Finance from the University of Tennessee, Knoxville 2001

15 years experience in Trucking and Transportation.

Worked at an asset based LTL carrier as a Data Engineer, Pricing Manager, and Financial Analyst



FREIGHTWAVES

WHO

FreightWaves is building a world-class community in freight that uses data and technology to understand, react, project changes, and de-risk the market.

WHY

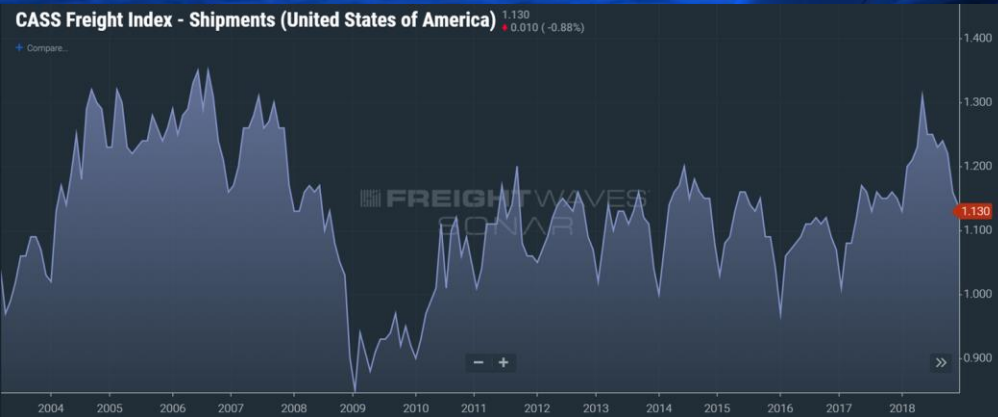
To empower a freight community that's struggling to deal with the risks and volatility of being exposed to the freight markets with data, insights and actionable tools.

Highly Fragmented Industry



- 4500+ Trucking companies with \$20M revenue per year (TL, Flatbed, Reefer, LTL, Parcel)
- 20,000 shippers that spend more than \$10M on trucking freight per year
- 1,600 Brokers with \$10M in revenue per year
- Most of the industry is dependant on anecdotal and spot rate data for daily tactical decisions.

Most Trucking Data Has Been Limited



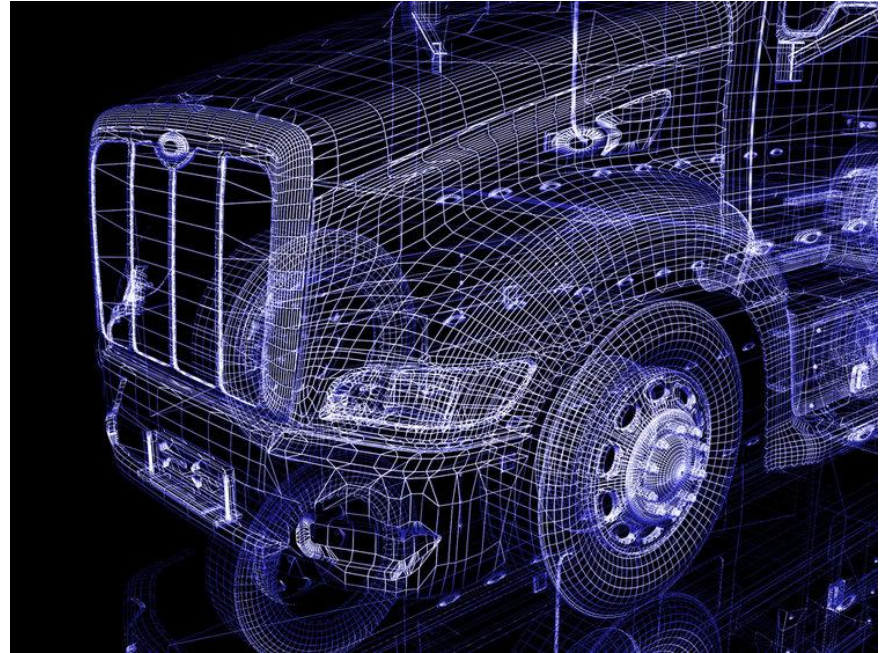
- Measured at the highest levels
- Most data is lagging and non-specific; difficult to action
- Transportation companies look inward to gauge performance.
- YoY, internal metrics specific to their segment.
- Internal bias towards customers and what is current
- Decision process is slow

Technology is Driving Expansion of Data Availability



Electronic Logging Device (ELD) Mandate on April 1st

Smart trucks and telematic devices designed to improve efficiency are widely distributed.



- **Electronic Logging Device Data – Made for measuring Hour of Service, but tracks movement patterns and rates of travel**
- **Electronic Tender Data – Shippers send load requests to carriers electronically – proxy for volume and carrier optionality**
- **Telematics – Devices that measure various activities of the truck. i.e. fuel consumption, acceleration, hard braking, etc.**
- **Data is secondary usage for most. Behaves as a correlative for actions and behavior.**

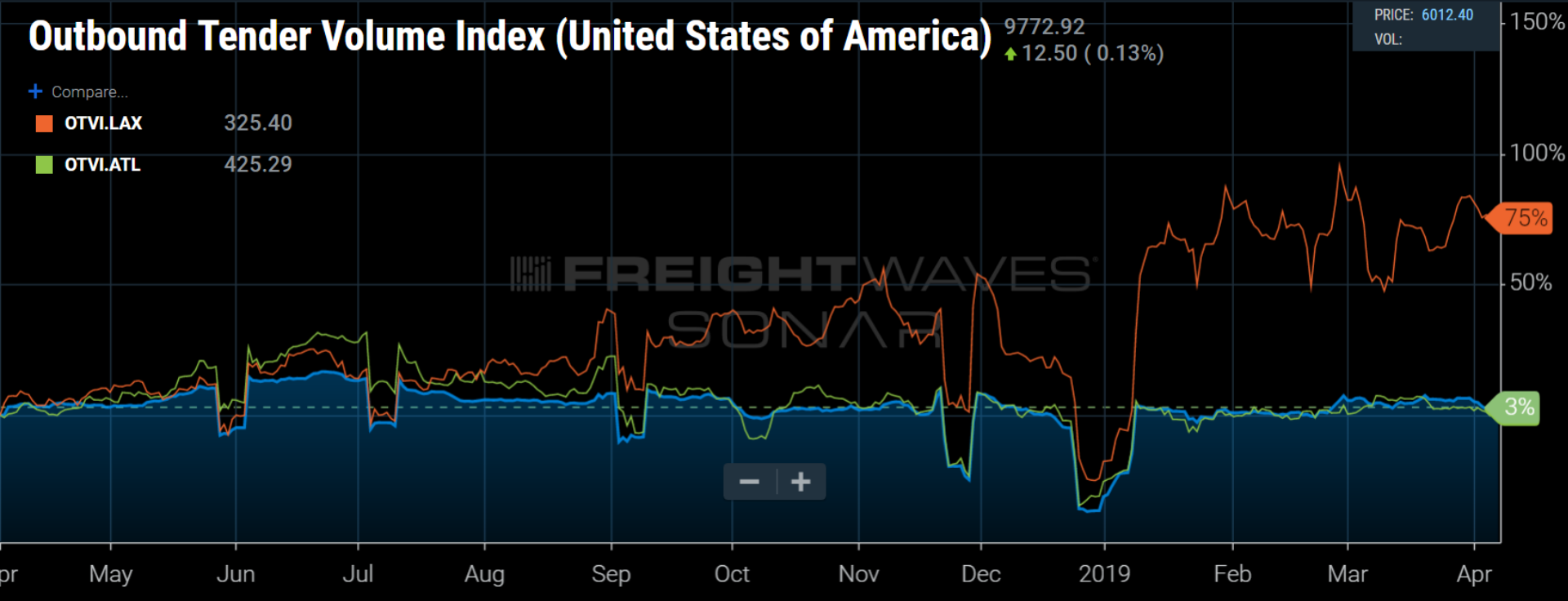
Tender Volumes Reflect Emerging Markets

Outbound Tender Volume Index (United States of America)

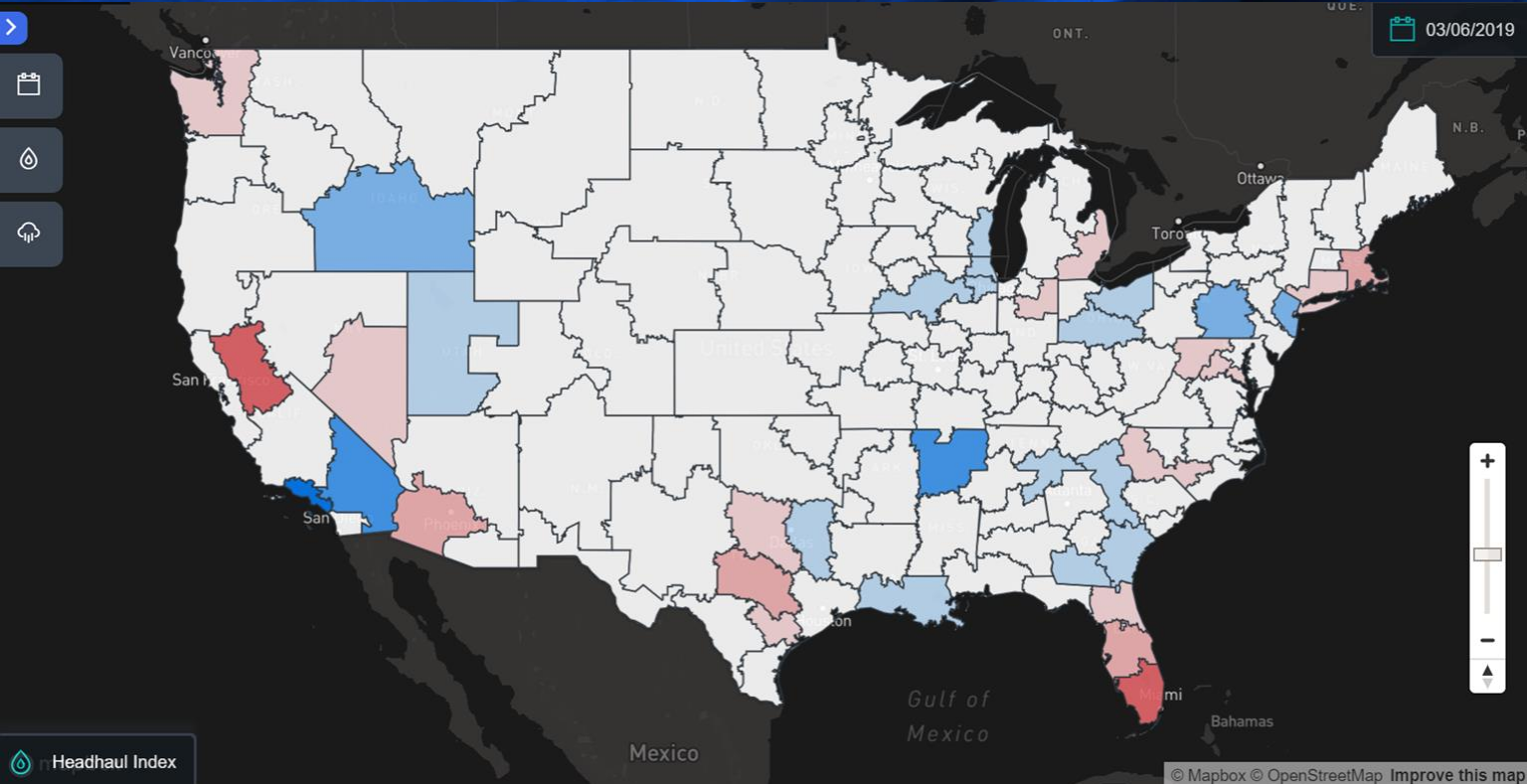
9772.92
▲ 12.50 (0.13%)

PRICE: 6012.40
VOL:

- + Compare...
- OTVI.LAX 325.40
- OTVI.ATL 425.29



Headhaul Index: Out - In



- Red = oversupply of trucks/Backhaul
- Blue = Oversupply of freight/Headhaul

- **Tender Rejection Rates** - The rate at which carriers reject electronic load tenders from their customers..
- If carriers have “better” options they will abandon their contracted accounts.
- When carriers are rejecting loads at higher rates there is higher demand for capacity in the market.
- Data is available next day.
- Rejection rates are activity based. Represent 80% of the contracted freight market making it representative.

Tender Reject Data

Outbound Tender Reject Index (United States of America) 7.39 ▲ 0.02 (1.51%)

+ Compare...



- +

- **Dec 17th ELD mandate mostly impacted smaller fleets and O/O – the least visible sector of trucking.**
- **Implemented for safety, but studies show an increase in accidents in smaller fleets with increased HOS compliance rates.**
- **ELDs help identify driver inefficiencies – detention, traffic, routing, parking**
- **Parking is now a bigger issue as drivers spend time looking for parking instead of heading towards destination**
- **The biggest issue for drivers is now WAIT time - every minute on line 4 on duty/non driving on a dock comes off their 60 hr weekly work limit (with paper you could off duty and catch up later)**

Trucks in Market (Los Angeles, CA) 116.8 ↓ 2.6 (-2.18%)

- + Compare...
- ▶ Studies



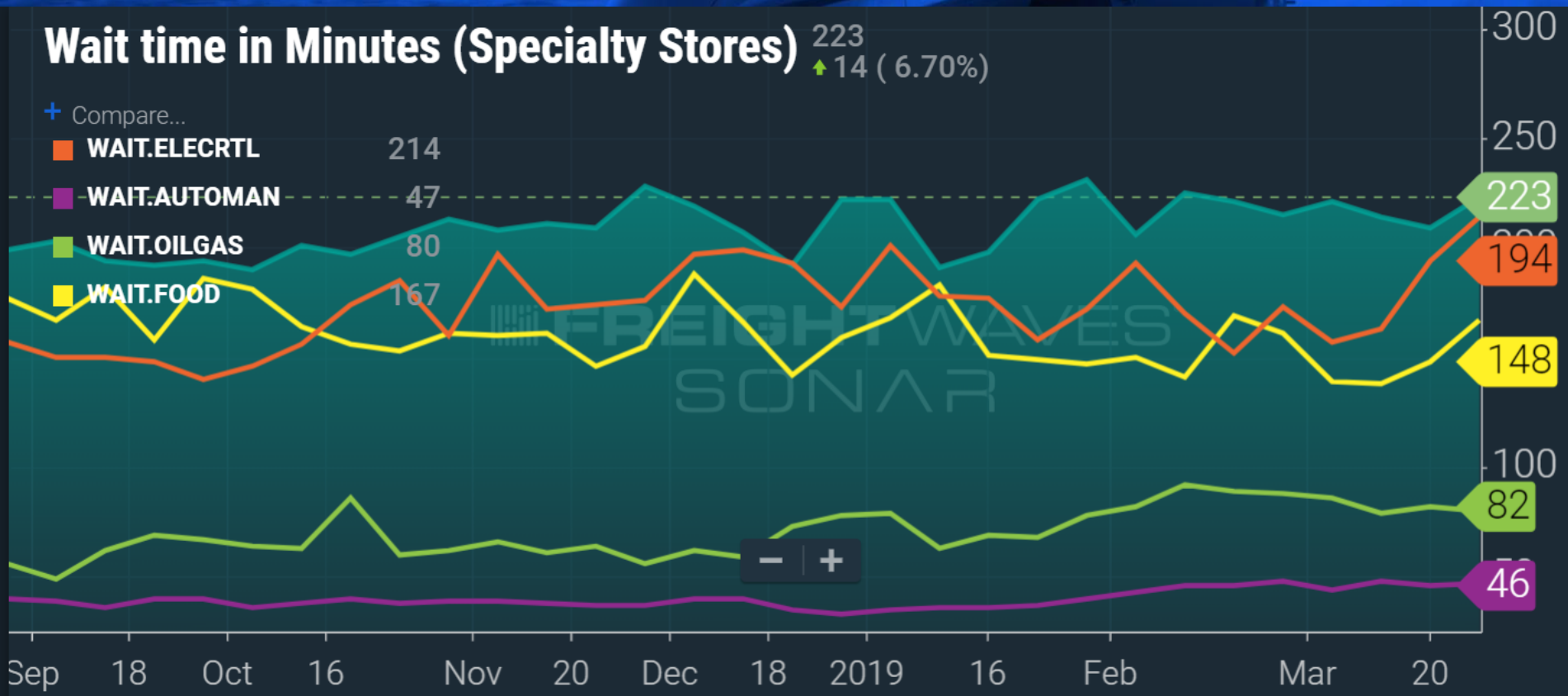
- | +

Wait time in Minutes (Specialty Stores)

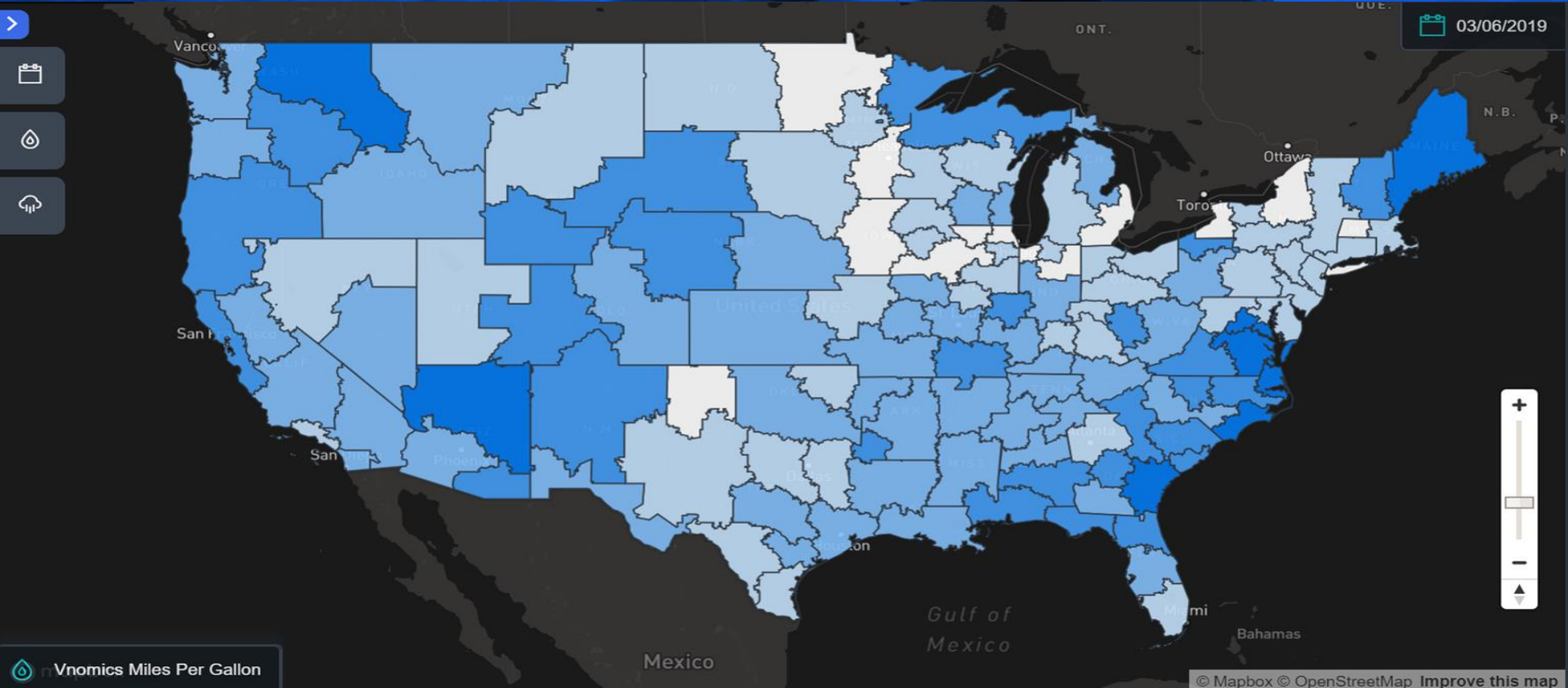
223
▲ 14 (6.70%)

+ Compare...

- WAIT.ELECRTL
- WAIT.AUTOMAN
- WAIT.OILGAS
- WAIT.FOOD



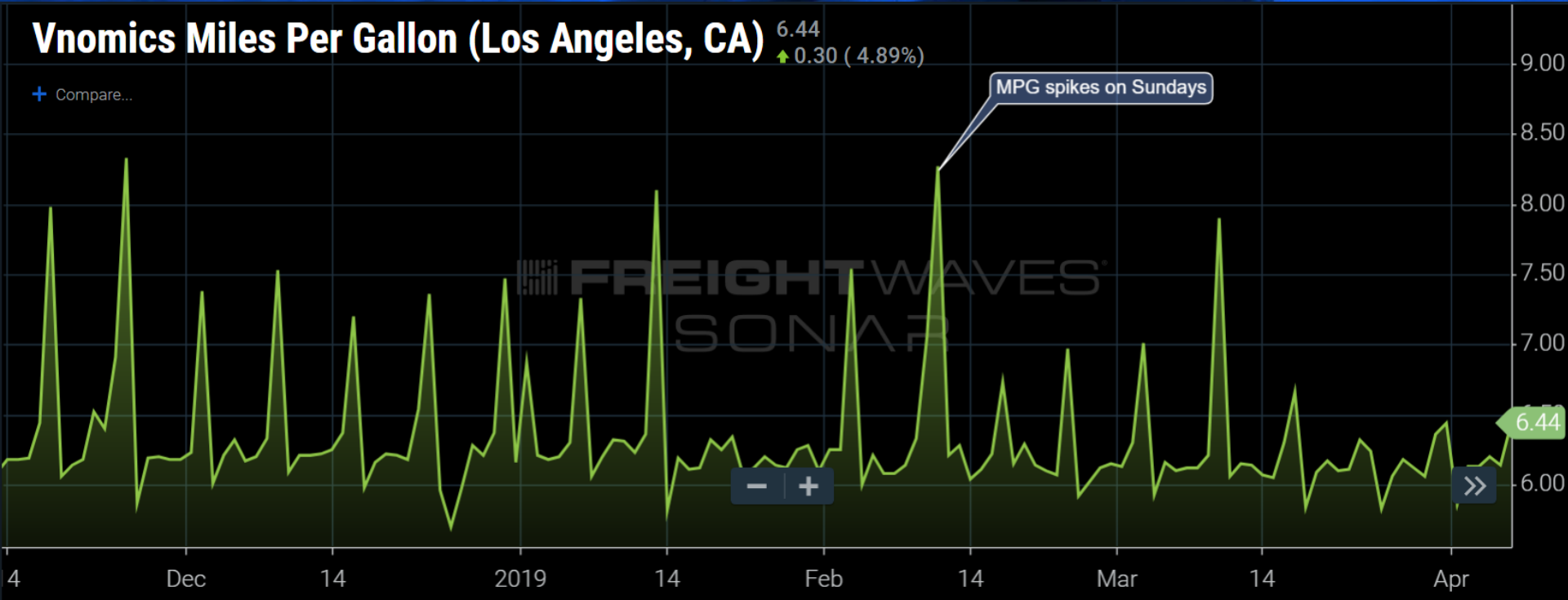
MPG by Market



Vnomics Miles Per Gallon (Los Angeles, CA) 6.44 ↑ 0.30 (4.89%)

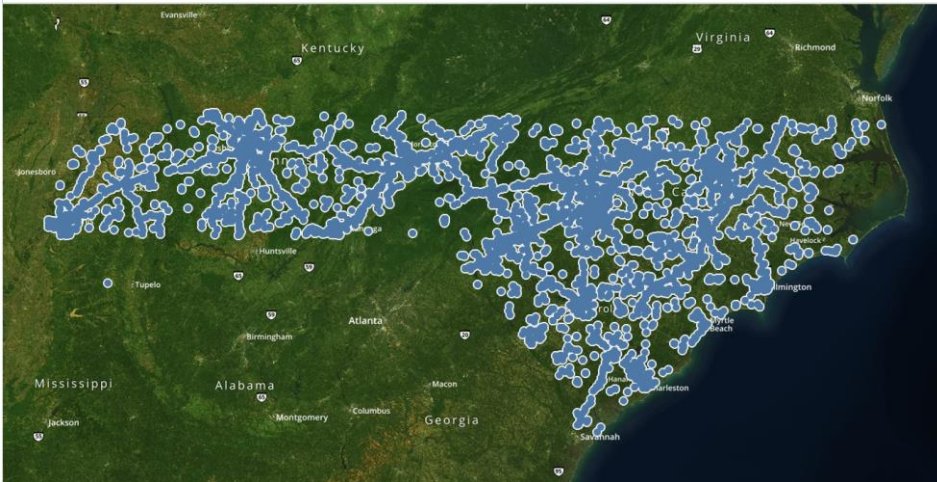
+ Compare...

MPG spikes on Sundays



Traffic and Congestion

Sheet 1 - September, 10



- Image of trucks on September 10th vs 16th
- Mass exodus from Hurricane Florence
- ELDs and other telematics devices allow for geospatial mapping

Sheet 1 - September, 16



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