



Outbound Logistics Overview



Outbound Overview

- Four Dedicated Outbound Carriers
 - MPF – Meijer Private Fleet – 111 stores serviced in Michigan, northern Ohio, and Indiana.
 - NTB – Nationwide Truck Brokers – 41 stores serviced throughout Michigan, Ohio, Indiana, and Wisconsin.
 - JBH – JB Hunt – 41 stores serviced in Greater Chicago area, Indiana, Michigan, and Wisconsin.
 - USX – US Xpress – 53 stores serviced in Ohio, Kentucky, and Indiana.
- Total OBL miles driven – 65 million.

Outbound Overview

- Total company average is 6,210 deliveries per week; this is an average of 27 deliveries, per store, per week.
- 800 Shuttle / transfer moves per week.
- Average round trip delivery 193 miles.
- 2018 Meijer Private Fleet miles driven – 25.8 million.
- Average of 120,000 miles a tractor per year.
- Meijer Private Fleet average 7+ mpg.

Distribution Timeline



Grand Rapids, MI



Lansing, MI



Newport, MI



Tipp City, OH

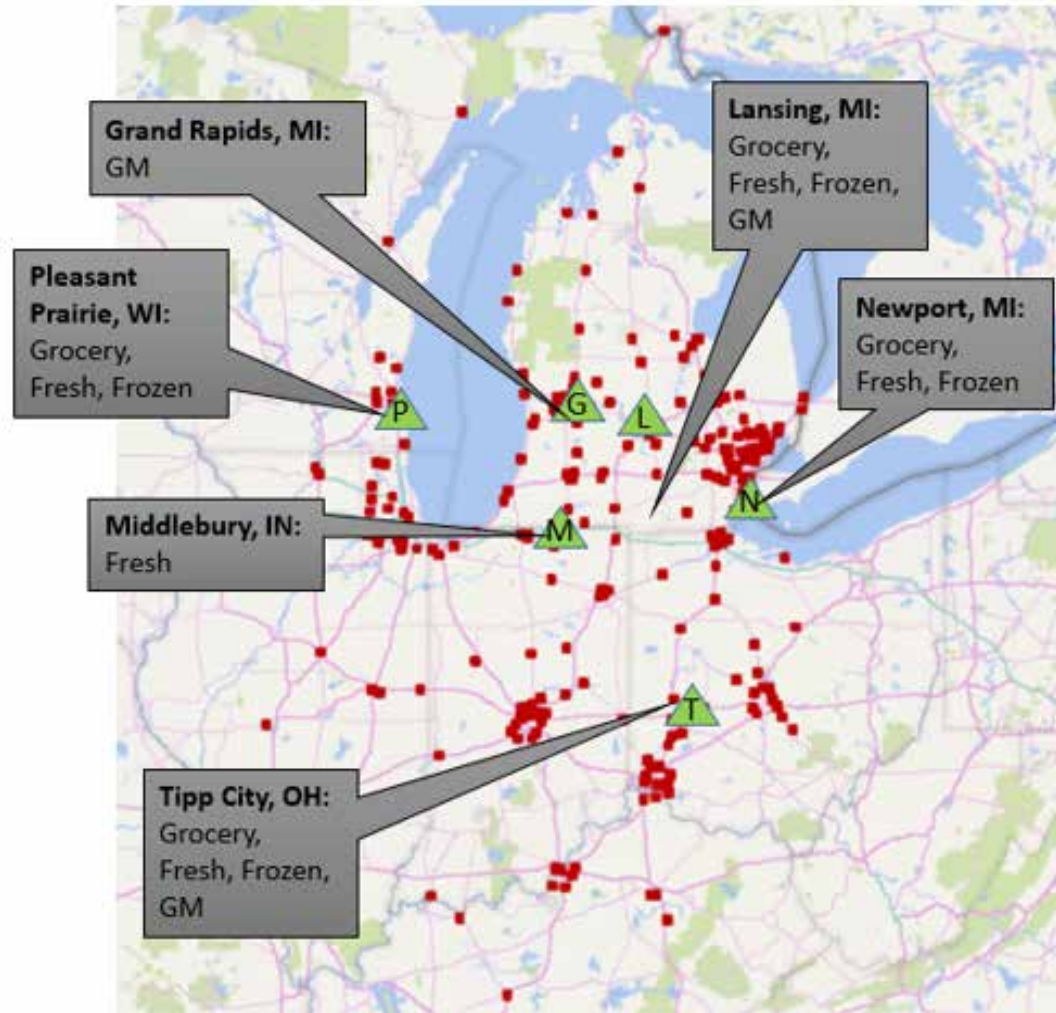


Middlebury, IN



Pleasant Prairie, WI



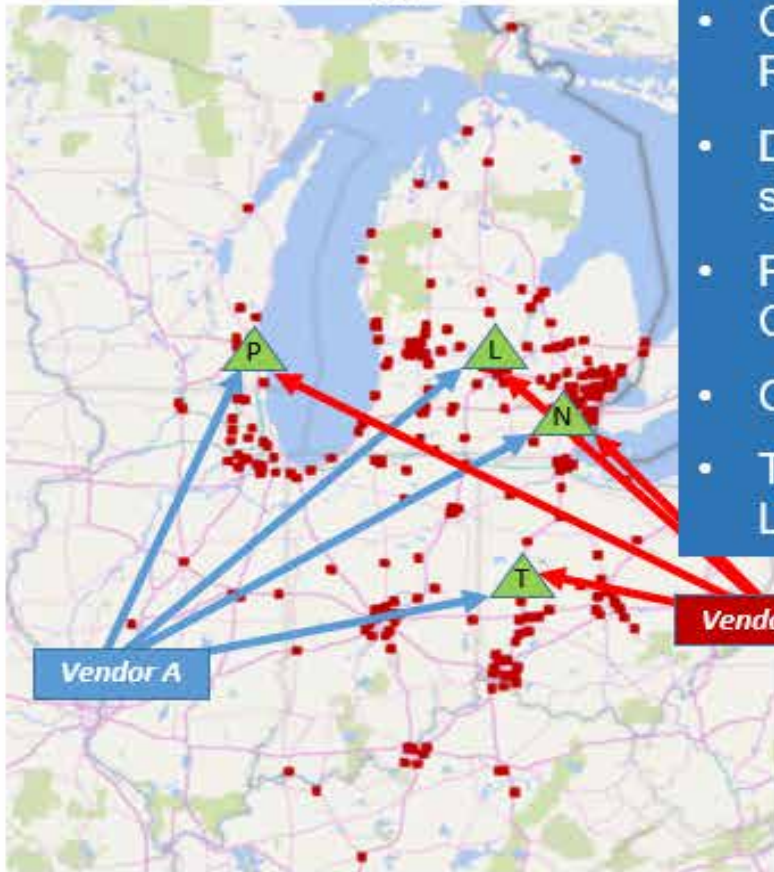


- **246** Stores in 6 States
- **6** Distribution Nodes
- **16** Distribution Facilities

- **~500 Million** cases distributed annually
 - 200 Million Grocery
 - 142 Million Fresh
 - 123 Million GM
 - 35 Million Frozen

Supply Chain at Meijer: Logistics

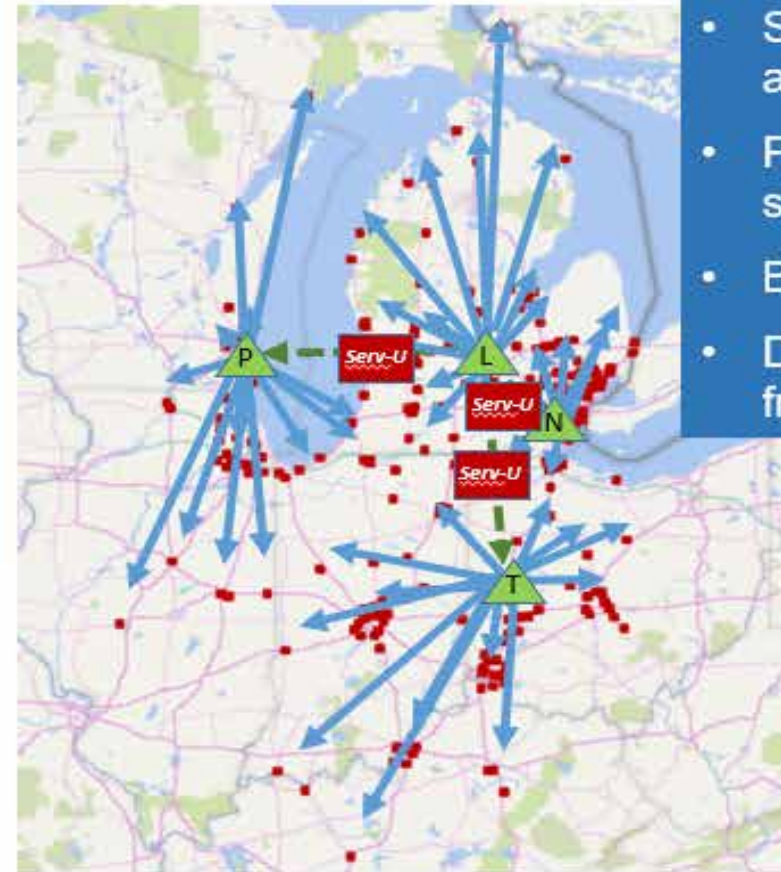
Inbound Logistics



- Centralize or Regional?
- Direct, or multi-stop?
- Prepaid or Collect?
- Order frequency?
- Truckload or LTL?

262K loads delivered per year

Outbound Logistics



- Store-DF alignment
- Peddle (multi-stop) routing
- Backhaul
- Delivery frequency

340K store deliveries per year
60.9 million miles per year

Transportation Sustainability

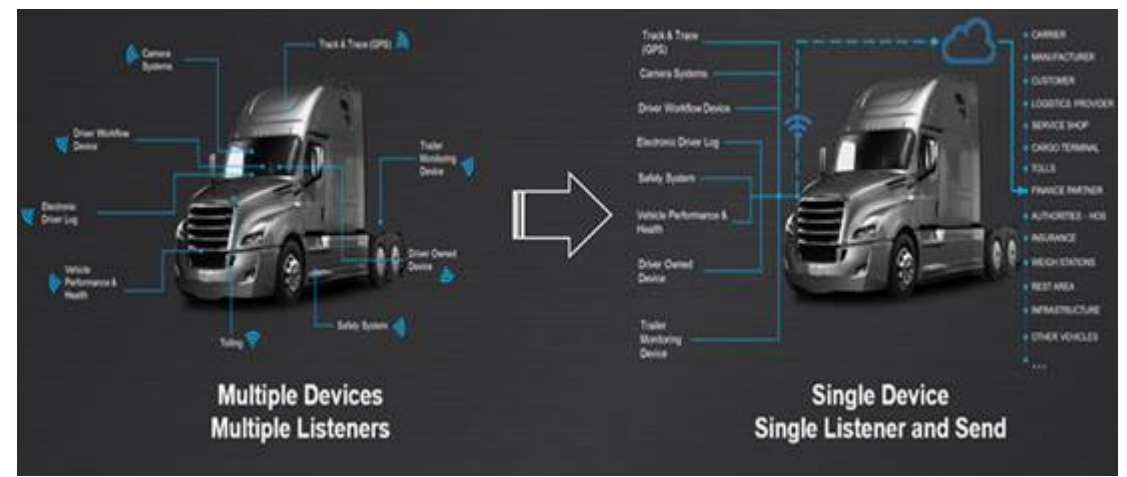
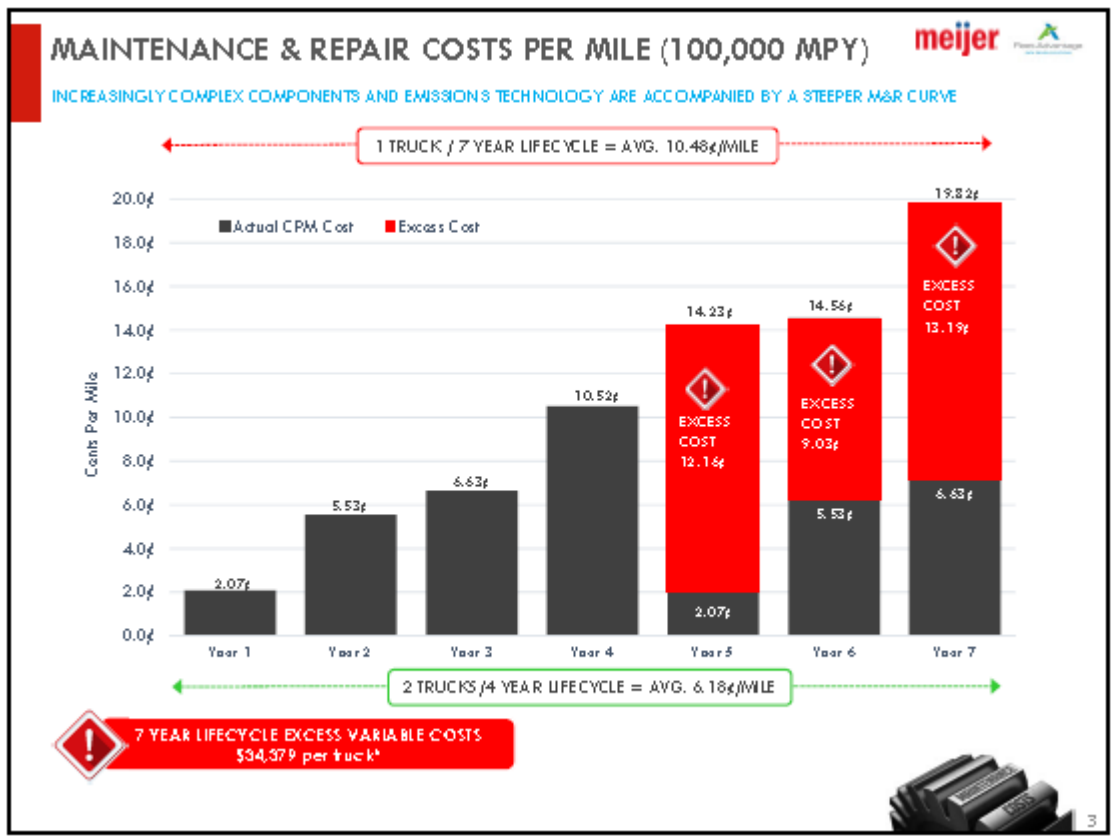
Vendor Pick Ups



Outbound Logistics Overview

Transportation Trends

- Maintenance expense





Improved Performance on Safety

Radar sensors capturing entire length of tractor & trailer

- Lane Change Assist: Detects moving objects on passenger side of the truck and warns the driver to avoid a lane change.
- Turn Assist: Detects moving objects in the passenger side, when the truck is stopped, initiating a turn, or turning at slow speeds.
- Trailer Sweep Assist: Calculates when the trailer or rear of the tractor might come into contact with stationary objects.



Partnership

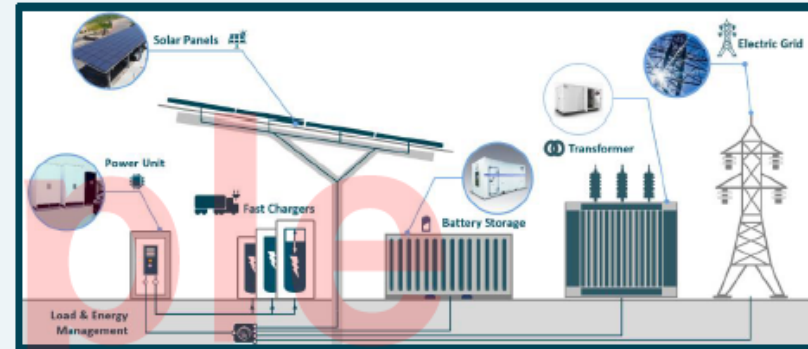
- NACFE
- Pre-service testing
- Advanced power train
- Collaboration



Electric Drivetrain

With the electrification of the truck sector customers are facing **new challenges**.

- ❖ Which routes can be electrified?
- ❖ How long is charging going to take?
- ❖ How will those trucks be charged?
- ❖ How will the infrastructure be cost-optimized for the use cases?



Electric Drivetrain

Truck Class	8 (>15t)
Range	160 Miles
Battery Size	440 KWH
Recharge Time	200 Min for 80% SOC
GVWR	80,000 LBS
Wheel Base	191"
Peak Power	500 KW



Customer First

- Outbound Logistics partnered in numerous special events throughout the year:
 - Operation Good Cheer
 - Holiday events
 - Community donations



Wreaths Across America

- December 2018



THANK YOU

ANY QUESTIONS?