



New Ideas in Motion: Improving Tire Wear & Fuel Economy

FLEET PROFILE

230 Freightliner Evolution Sleeper Tractors with 6x2 drive axles

440 Custom Wabash X-Duty Dry Vans

Member of NACFE

As one of the most progressive fleets in the US, Nussbaum focuses on preventative maintenance and data driven acceptance of new technology. The test fleet averaged 8.4 MPG prior to using EQUAL.

TEST SITUATION

- ✓ 1,400 mile round trip route.
- ✓ Looking for fuel economy technology.
- ✓ Some irregular wear on wide based tires.
- ✓ EQUAL installed in all wheel positions.
- ✓ Data collection and comparison with telematics.

TRIAL HIGHLIGHTS

+140,000 miles

20% tire life improvement

3% fuel economy increase

RESULTS

EXTENDED TIRE LIFE SAVINGS



\$326,600

BALANCED WHEEL END FUEL SAVINGS



\$243,570

EXTENDED TIRE LIFE FUEL SAVINGS

\$101,430

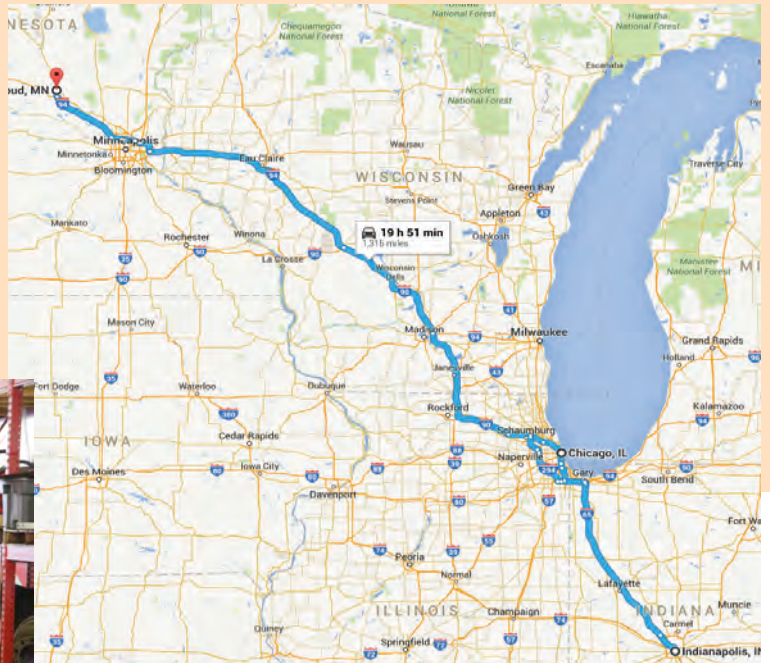
\$671,600

Annual savings from using EQUAL in all wheel positions, fleet wide.



TEST ROUTE

All control and test vehicles traveled on a 1,400 mile route carrying components from St. Cloud, MN to make appliances. From Chicago, finished appliances arrive in Indianapolis, where the trucks reload with steel for the return trip to St. Cloud, MN.



SPECS

- Alcoa Wheels
- XZA3 Steer Tires
- XDNW Wide Base Drive Tire (1 drive axle)
- X1 Multi Wide Base Trailer Tires (1 drive, 2 trailer axles) with automatic tire inflation.

RESULT ANALYSIS

After establishing a baseline, both control and EQUAL tractors pulled trailers equipped with EQUAL.

Trailer tires with EQUAL also showed a 20% increase in life extension, significantly reducing the replacement curve.

Tire manufacturers report 6.5% fuel economy advantages by tires that are 80% worn compared to new tires.



Tractors	Drive Tires Replaced	%
Control (4)	12	75%
EQUAL (3)	2	17%

Improvement with EQUAL			%
Tractors & Trailers	0.25 MPG	Higher when EQUAL is in ALL WHEEL POSITIONS	3.0%

EQUAL improved fuel economy and extended drive and trailer tire life on the test trucks.

