Right Truck for the Job
Getting to and into Chicago

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Food Freight Workshop
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An effort of the Carbon War Room and the North American Council for Freight Efficiency
Today

- Trucking Efficiency
- Fleet Fuel Study
- Technologies
- Rural vs. Urban
- Questions
Dedicated to doubling the efficiency of North American goods movement

We pursue this goal in two ways:
1. By improving the quality of information flow and
2. By highlighting successful adoption of technologies

www.nacfe.org

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$70,000/year 1% savings = $700 year/truck

Source: ATRI Sept 2015
4th Annual Fleet Fuel Study
Fuel Economy Technologies

• Which ones are most popular on new trucks?
• Did they keep buying them?
• Are they delivering fuel savings?
$9,000 in fuel savings per truck per year
Value of each Technology
Complete, unbiased review of available technologies for fleet confidence to adopt.

- Tire Pressure Systems
- 6x2 Axles
- Idle Reduction
- Transmissions
- Engine Parameters
- LRR Tires
- Lightweighting
- Downspeeding
- Maintenance for FE
- Determining Efficiency
- Trailer Aerodynamics
- Tractor Aerodynamics
- Lubricants
- Driver Coaching
• Old or current = 7 mpg truck that will do all
• First, last and every mile in between
• Urban parking challenges
• Efficiency is requiring us to think differently and optimize the equipment for segments of the routes
## Rural vs. & Urban

<table>
<thead>
<tr>
<th></th>
<th>Long Haul (Rural)</th>
<th>Intra-City (Urban)</th>
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</thead>
<tbody>
<tr>
<td><strong>Route</strong></td>
<td>65 mph, 500 miles/day</td>
<td>Start/Stop, Pickup &amp; Delivery</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td>Optimized for Long Haul</td>
<td>Maneuverable, Low Emission</td>
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<tr>
<td><strong>Technologies</strong></td>
<td>Aerodynamics, powertrain, LRR tires, idle reduction</td>
<td>Alternative fuels, high level of telematics, safety systems</td>
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<tr>
<td><strong>Drivers</strong></td>
<td>Out two weeks sleeping in truck</td>
<td>Home every night, tenured</td>
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<td><strong>Future</strong></td>
<td>Platooning, Long Combination Vehicles, Autonomous and even self driving for 24/7 operation</td>
<td>Traffic jam operation, scheduled deliveries, kitting, zero emission</td>
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<tr>
<td><strong>Examples</strong></td>
<td>Autonomous SuperTruck</td>
<td>Electric, City automated trucks</td>
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Summary

• Intermodal within the truck supply chain
  – 12 mpg high freight efficiency long haul trucks
  – Zero emission highly maneuverable city tractors

• Trailers may have to change

• Driver acceptance should be strong

• Optimized for segments rather than built for the average route
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For questions, comments and suggestions, contact Mike at 260.750.0106,
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