

Utilizing Fleet Efficiency Metrics to Identify and Codify Best Practices that Reduce Costs and Carbon Emissions:

A Time Warner Cable Success Story

Andrea Thomas

Sr. Sustainability Strategist
Coppervale Enterprises, Inc.

Jack Sheehan

Sr. Manager Tech Ops
Time Warner Cable



Society of Cable
Telecommunications
Engineers

SCTE SEMI FORUM

April 10, 2013 • Atlanta, GA

www.scte.org/SEMI

#scteSEMI

TWC Fleet Efficiency

Since 2010, TWC has recognized significant savings by utilizing GPS to reduce **vehicle idle time** across the Enterprise, despite *increasing* its fleet by over a thousand vehicles.



1.6M Gal
Saved



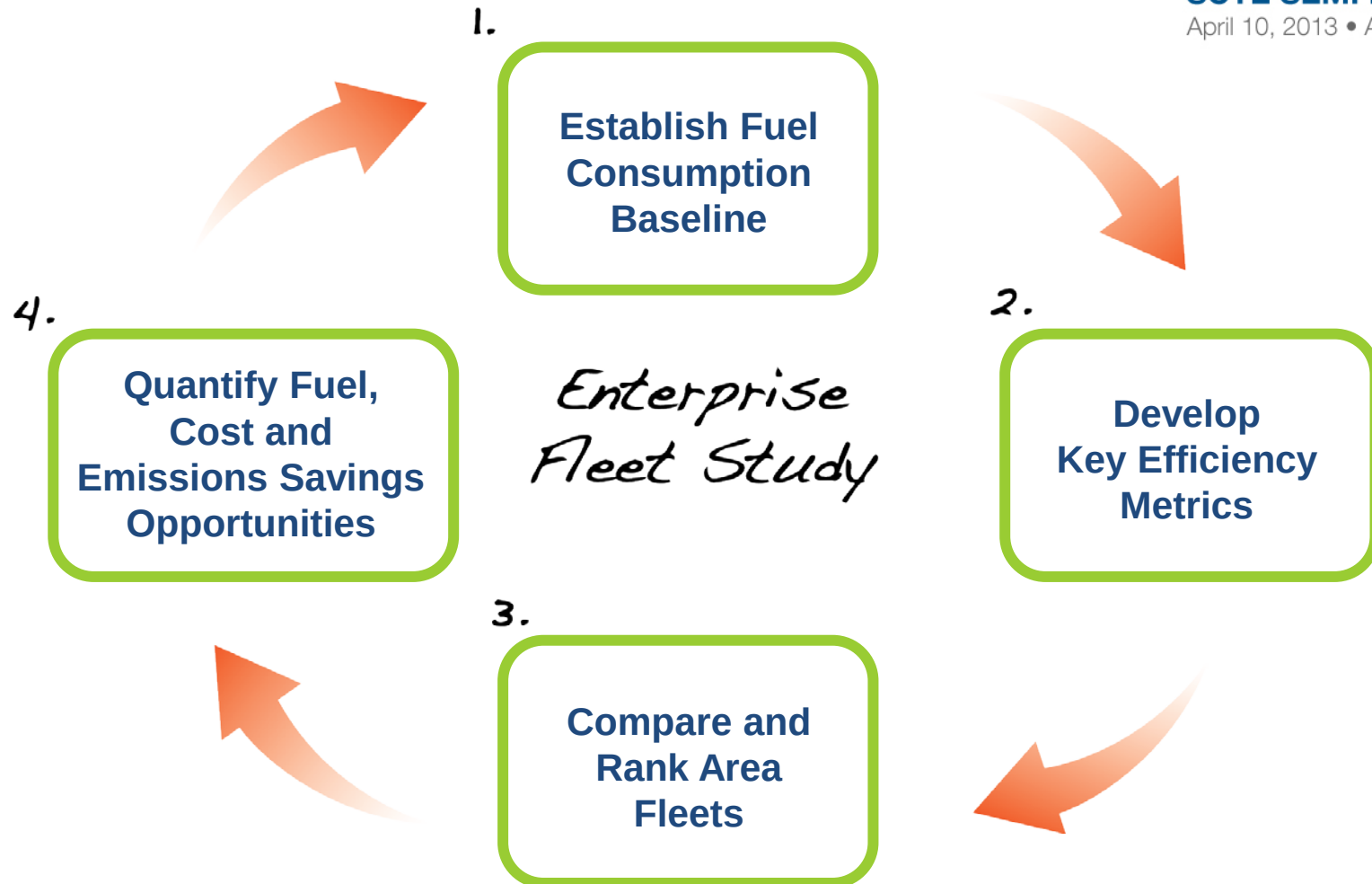
\$5.7M
Saved



15.6K Tons
Saved

But, they wanted to do even *better!*

Moving Beyond Anti-Idling

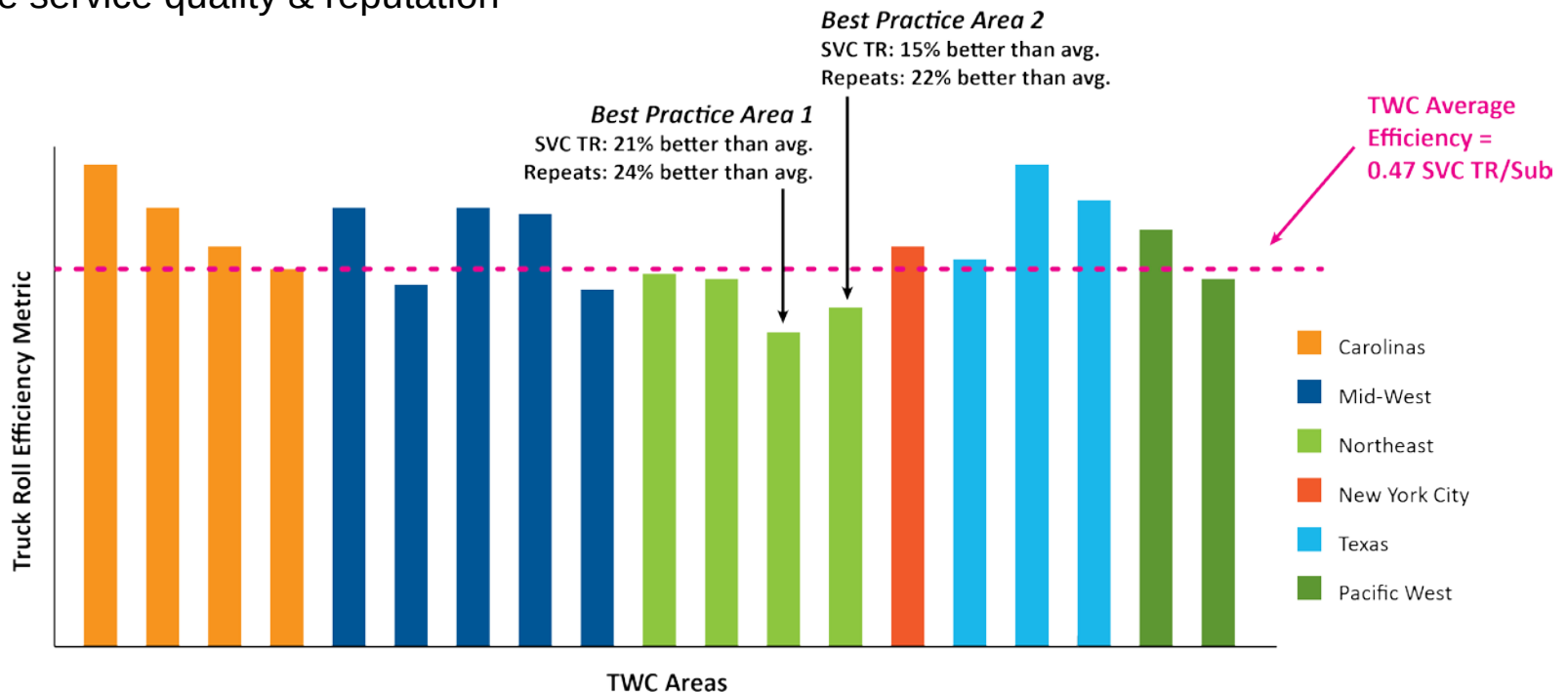


Enterprise Fleet Study Results

Truck Roll Operational Efficiency

Reduce unnecessary repeat service truck rolls by bringing Area Service TR/SUB Metrics back to the company average

- Save **326,000** Truck Rolls
- Save **\$18 Million** in labor & vehicle costs
- Improve service quality & reputation

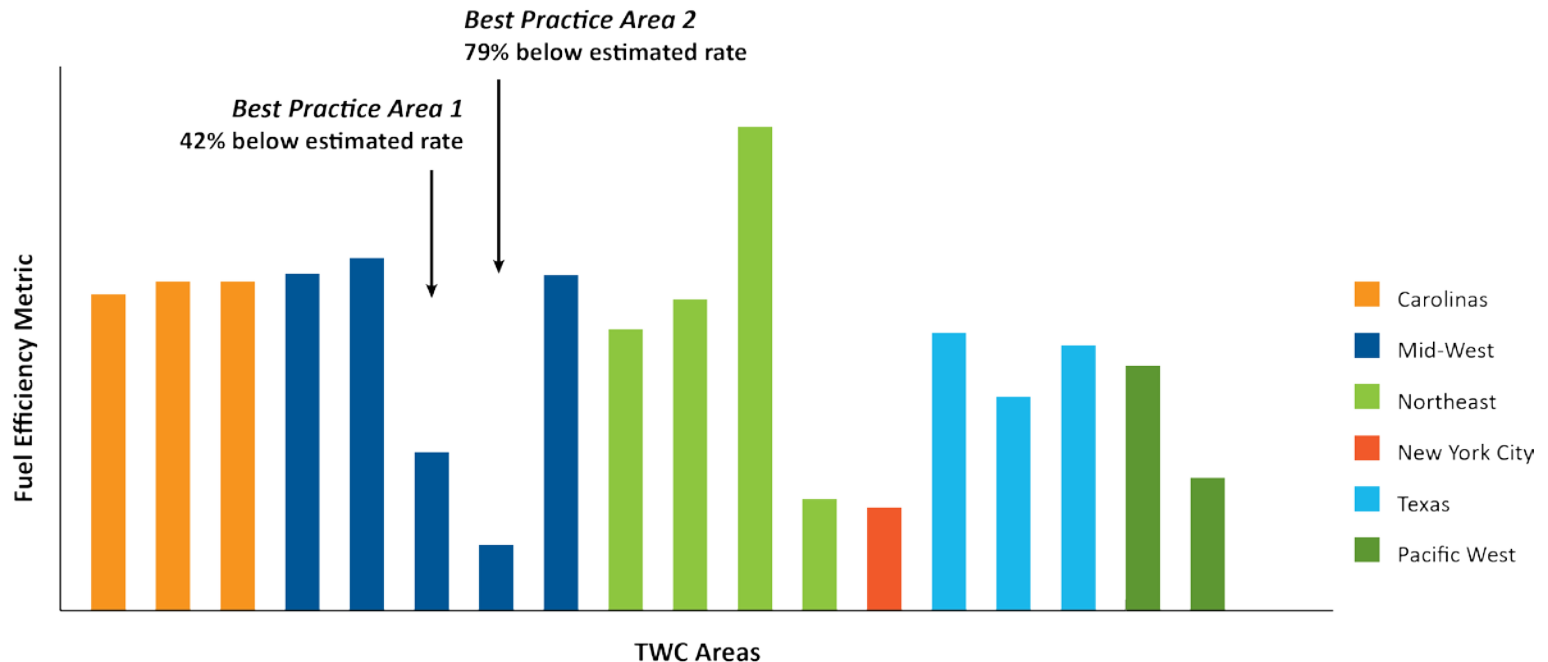


Enterprise Fleet Study Results

Vehicle Fuel Energy Efficiency

Reduce total fuel consumed per truck roll by bringing Area Service Fuel GAL/TR Metrics back to the expected Area averages based on density

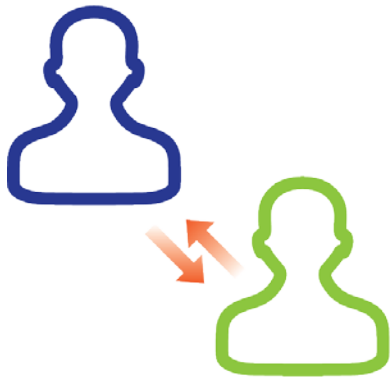
- Save **3.7 Million** gallons (gas + diesel)
- Save **\$14 Million** in fuel costs
- Save **33,800 Metric Tons** of carbon



Fleet Best Practice Analysis

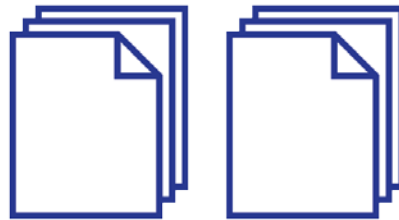
Qualitative Research to Identify Smarter Solutions

Facilitate Interviews



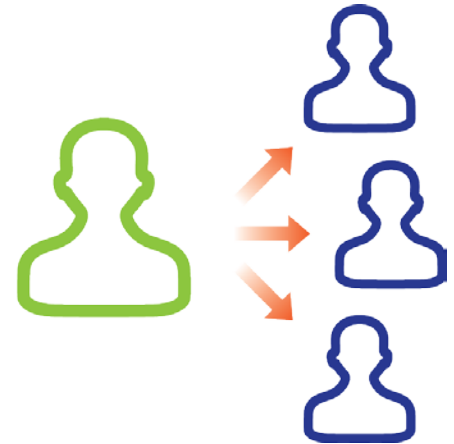
- Fleet Managers
- Tech Ops
- Customer Care
- Engineering

Document Best Practices



- Human behavior
- Decision-making
- Use of Technology

Socialize Across Enterprise



- Training
- New policies
- Process Improvements

Truck Roll Efficiency Best Practices

Optimized Procedures

Standard processes for CSRs & Technicians to reduce unnecessary service and repeat truck rolls.



Efficient Technologies

Call Center & Technical Operations systems to prevent service truck rolls for known issues and to optimize routing.

Metrics, Incentives & Training

Programs to aid CSR & Technician performance in scheduling and handling service truck rolls.



Leadership & Communications

Call Center & Technical Operations Management processes to reduce unnecessary service and repeat truck rolls.

Truck Roll Efficiency Best Practices



Optimized Procedures

- Trigger System Outages
- Trouble Call Pre-Call & Cancellation Policy
- Customer Self Help & CSR Troubleshooting
- Standard QC Checklist for Techs

Truck Roll Efficiency Best Practices



Metrics, Incentives & Training

- Standard Tools to Track Tech & CSR Metrics
- CSR Metrics Drive Bonus & Shift Bid
- Universal Tech Training

Truck Roll Efficiency Best Practices



Efficient Technologies

- Workforce Management & GPS Systems
- Call Center Troubleshooting System
- Electronic Call Center Announcements
- Flux Report for Plant Maintenance

Truck Roll Efficiency Best Practices



Leadership & Communications

- Standard for CSR Coaching
- Provide Tech Feedback on Work Orders to CSRs
- Review Repeat Trouble Call Reasons with Sups & Leads
- CSR Ride-Alongs & Tech Call Center Monitoring

Fuel Efficiency Best Practices

Efficient Routing

Optimize WFM solution and encourage superior communication between techs and dispatch



Idle Time Management

Utilize reports and scorecards out of GPS to set and track goals for improvement while inspiring friendly, effective competition

Vehicle Right-sizing & Weight Maintenance

Downsize engine class, maintain a civilized pool fleet, and adopt on-board equipment systems



Alternative Fuels

Incorporate DC-drive “hybrid” bucket trucks; consider costs and benefits of alternative fuel vehicles (AFVs) utilizing E85, CNG and electricity

Training & Leadership

Equip and encourage supervisors to follow-up on scorecards, reports and training resources for techs



Vehicle Utilization & Preventative Maintenance

Measure/monitor vehicle use and maintenance KPIs; implement big win solutions like tire replacement programs

Fuel Efficiency Best Practices



Efficient Routing

- Run WFM Auto Router Throughout Day
- GPS Identifies Closest Tech
- Techs Start from Home
- Standard QC Checklist for Techs



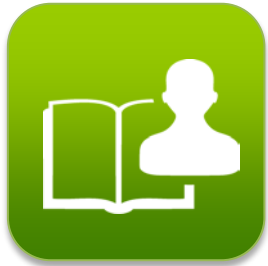
Fuel Efficiency Best Practices



Vehicle Right-sizing & Weight Management

- Replace Heavy Duty Vehicles with Fuel Efficient Alternatives
- Standard Vehicle Inventory & Interior Specifications (Drawers/Tackle Box Systems)

Fuel Efficiency Best Practices



Training & Leadership

- Utilize GPS Sponsored Trainings for Updated Learning
- Supervisor Coaching for Techs to Reduce Vehicle Idle
- Incorporate Fuel Efficiency Tips, Good Driving Behavior and Alternate Fuel Education into New Hire Training

Fuel Efficiency Best Practices



Idle Time Management

- GPS Reports Provide Idle Per Vehicle
- Idle Alerts to Supervisors
- Establish Idle Goals



Fuel Efficiency Best Practices



Alternative Fuels

- Replace EOL Bucket Trucks with DC Drive
- Utilize E85 Ethanol “Flex-Fuel” Vehicles
- Consider Hybrid Battery Electric and CNG Vehicles with Positive Business Case

Fuel Efficiency Best Practices



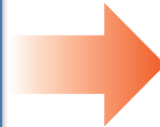
Vehicle Utilization & Preventative Maintenance

- Formal Vehicle Replacement Policy
- Rotate Vehicles
- Fleet Management Systems Monitor Vehicle Maintenance
- Tire Replacement Program

Encouraging Fleet Evolution

Next Steps

Socialize Best Practices Across TWC Enterprise



Measure Performance Going Forward

- Integrate efficiency best practices through existing process improvement workflows
 - Customer Care, Tech Ops, Fleet and Engineering to manage for best practices
- Update fuel baseline and efficiency metrics for 2012
 - Develop internal methods for quarterly reporting of fleet energy and efficiency data
 - Measure and manage Area efficiency performance relative to 2012 baseline

Thank You

Andrea Thomas

Sr. Sustainability Strategist
Coppervale Enterprises, Inc.

athomas@coppervale.org

360-392-2209

www.coppervale.org



Jack Sheehan

Sr. Manager Tech Ops
Time Warner Cable

jack.sheehan@twcable.com

(203) 449-4890

