



**Session #12: Drive Fleet Productivity and Efficiency with a Right Sized Fleet and Right Typed Vehicles**

**November 09, 2022**



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# Format

- Q&A at the end
- Submit questions and comments to “Panelists”
- Scheduled for 2:00p-3:00p
- Handout
- Recording



## Drive Fleet Productivity and Efficiency with a Right Sized Fleet and Right Typed Vehicles November 09, 2022

2:00-2:05 **Rick Sapienza, NCCETC**--Introduction and Welcome

2:05-2:20 **Steve Saltzgeber, RTA: The Fleet Success Company**—The Why and How of Fleet Right Sizing

2:25-2:30 **Ed Tyer and Roger Godwin, City of Tallahassee**—Best Practices in Fleet Right Sizing & Right Typing

2:30-2:45 **Jeff Booton, Denver International Airport**—Case Studies & Lessons Learned in Right Sizing & Right Typing

2:45-3:00 **Q&A**





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Clean Transportation Program  
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# SPEAKER BIO

- 40+ Years' Experience in the Fleet Industry
- Director of Strategic Innovation, Strategy, Client Consultation, Product Management, Training at RTA Fleet Management Systems
- Transportation Industry Consultant With Mercury Associates Over 10 Years
- Local and State Government (City of West Jordan, Stamford, CT, Utah and Georgia) Fleet Administrator
- Successfully Transitioned from Wrench Tuner to Fleet Executive over a \$1.5 Billion (Annual Capital And Operating Budget), 50,000+ unit Fleet with Corporate (Coca-Cola and Republic Services), Fleet VP
- 15 years as a Public Transit and School bus leader at Utah Transit Authority and Salt Lake City School District
- Directed, Managed or Participated in Over 100 Fleet Studies Across North America
- Government Fleet Hall Of Fame Inductee
- Recipient Of Government Fleet's Legendary Achievement Award



**Steve Saltzgiver, Director**



# SFT Webinar Series

*Drive Fleet Productivity and Efficiency with a Right Sized Fleet and Right Typed Vehicles*

# Right-sizing

## Objective:

- Identify the most cost-effective way to meet an organization's need for vehicles and equipment

## When?

- When making requests for funds to add assets to the fleet
- Annually for assets whose usage consistently falls below appropriate usage guidelines or benchmarks
- When assets are eligible for replacement based on pre-defined criteria

## Pros

- Engages fleet users in examining and justifying the costs of asset availability
- Reduces pressure on fleet managers to justify fleet size, composition, and utilization levels

## Cons:

- Does not address impact of changing operational needs on suitability of current fleet size and composition

## Desired Outcomes:

- Determine alternative transportation modes best-suited to cost-effectively meet departmental user needs  
(*e.g., Lease, Own, Short-term rental, Motor-pool, Public transportation, Ad hoc Uber, Personal Mileage reimbursement, Car allowance, etc.*)

# Annual Vehicle Utilization Policy Guideline

Asset Type	Meter Type	Annual Utilization Guideline
Sedans	Miles	6,000 to 10,000
SUV	Miles	6,000 to 10,000
Vans, Passenger	Miles	6,000 to 10,000
Vans, Cargo	Miles	4,000 to 10,000
Trucks, Light	Miles	5,000 to 7,000
Trucks, Utility, 1 Ton & Up	Miles	4,000
Trucks, Specialty	Miles	3,000
Truck Tractors	Miles	8,000 to 10,000
Truck Tractors SW	Miles	10,000
Dump Trucks	Miles	4,000
Dump Trucks Flatbed	Miles	4,000
Ambulances	Miles	10,000
Construction Equipment	Hours	250
Mowing Equip/Agricultural Tractors	Hours	100

**POLICY STATEMENT**

**Fleet Replacement and Utilization Policy**

*Approved by: Board of County Commissioners  
Effective Date: January 14, 2014  
Revision Date: October 23, 2014  
File Name: KCO DOT/FM/FW Departmental Policies/Fleet Replacement and Utilization Policy*

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**Vehicle/Equipment Acquisition, Retention, Replacement and Use Goals**

County Commissioners established three goals to guide vehicle/equipment acquisition, retention, replacement and use. The three goals are:

1. Use the most efficient and effective vehicle/equipment available for every task.
2. Use every vehicle to the maximum extent possible.
3. Create transitions in the fleet using methods that minimize negative impact on the citizens, operating departments and budget.

These goals are implemented through the following fleet policy:

**Vehicle/Equipment Acquisition, Retention, Replacement and Utilization Policy**

Purpose

The intent of this policy is to establish guidelines for the acquisition, retention and replacement of vehicular and maintenance equipment owned by County and under the control of the Equipment Rental and Replacement Fund. It is further intended that this policy clarify replacement schedules by vehicle/equipment classifications and eliminate the past practice of retaining vehicles/equipment that have completed their capitalized life cycles. This will also establish uniform policy and procedures for the acquisition and application of four-wheel drive vehicles. This policy is intended to reduce the number of four-wheel drive vehicles in the County's fleet to the extent that only justified driving applications will be eligible for four-wheel drive vehicles.

**I. NEW VEHICLE AND EQUIPMENT ACQUISITIONS**

All additions to the fleet must be approved through the budget process. New acquisitions will meet the follow standards:

1. Minimum usage standards established in (Attachment "A")

# What Key Steps are Involved in Rightsizing your Fleet?



## Data

Export and analyze fleet inventory and use data



## Survey

Design, test, distribute, and report progress



## Analysis

Identify low use, non-essential, non-optimal



## Consensus

Validate results with fleet user mgmt.

# What Should you Consider as Part of your Right-sizing Initiative?



**Right-size**  
Eliminate non-mission essential vehicles

**Right-type**  
Obtain minimum size vehicle necessary for mission

**Right-fuel**  
Identify opportunities for alternative fuel vehicles



# Why Right-Type?

- To reduce capital costs by purchasing vehicles with lower purchase prices
- To reduce operating costs by purchasing vehicles that are more fuel efficient
- To reduce operating costs by purchasing vehicles that cost less to maintain
- To improve efficiency by standardizing



# Why Right-Fuel?

- To reduce greenhouse gas emissions by increasing use of alternative fuels
- To reduce operating costs by identifying areas for deployment of alternative fuel vehicles
- To comply with sustainability objectives
- To promote public/company & organizational image



# Right-size Survey Analysis Results By Department for Discussion

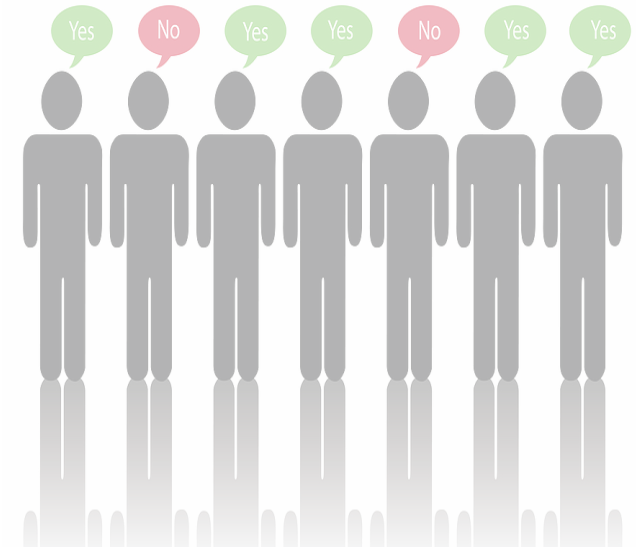
1 eVAM Results													
2	Eliminate	Eliminate	Eliminate	Questionable	Questionable	Questionable	Questionable	Retain	Retain	Retain	Retain		
3 Dept	Already Turned In	Turn In	VAM Answer	No Survey	Bad Data	Missing Data	VAM Answer	VAM Answer	Replaced	New Vehicle	Not Surveyed	Total	
4 Assessor	-	-	2	-	-	-	3	9	-	-	-	14	
5 CD Animal Control	-	-	-	-	-	-	-	4	1	-	-	5	
6 CD Building	-	-	-	-	-	2	-	11	-	4	-	17	
7 CD Code Enforcement	-	-	-	-	-	-	-	2	-	-	-	2	

8 CD Fire Marshal	Subject	Option 1 Text	Score	Option 2 Text	Score	Option 3 Text
9 Community Services						
10 Corrections						
11 CRESA						
12 Environmental Services/Vegetation Management						
13 ES Clean Water	Carry Equipment	Yes	7	No	0	
14 GS Facilities Maintenance	Must be secured	Yes	5	No	0	
15 GS Purchasing	Difficult to transfer	Yes	5	No	0	
16 Health Department	Percent public transport needed	0%	1	More than 0% but less than 30%	3	More than 30% but less than 60%
17 Juvenile	Criticality category	Essential	20	Very Important	13	Important
18 Medical Examiner	Consequence of elimination	Elimination would be inconvenient, would require additional planning and scheduling	1	Elimination would require personnel to use personal vehicles occasionally	5	Elimination would require personnel to use personal vehicles daily
19 Prosecuting Attorney	On-call taxi or shuttle	On-call taxi service	1	Scheduled shuttle service	1	Neither
20 PW Construction & Design						
21 PW Development Engineering						
22 PW Equipment Services						
23 PW Motor Pool						
24 PW Operations & Maintenance						
25 PW Parks & Recreation						
26 PW Wastewater Treatment Plant						
27 Sheriff						
28 Total						
29 % of Total						
30						



# Gaining Consensus?

- Distribute preliminary results
- Tailor consensus approach for gathering decisions
  - A. Send out another survey
  - B. Request that decisions be input into spreadsheet
  - C. Email
  - D. Face-to-face meeting
- Record the final decisions and calculate savings





# Design and Implement a Cost Charge-Back System

- **Objective:**
  - ✓ Create economic incentives for efficient vehicle assignment and use
- **When:**
  - ✓ When making requests for funds to add assets to the fleet
  - ✓ Annually for assets whose usage consistently falls below appropriate usage guidelines or benchmarks
  - ✓ When assets are eligible for replacement based on pre-defined criteria
- **Pros:**
  - ✓ Draws attention to, and requires users to manage, costs of asset availability
  - ✓ Places onus on fleet users to justify utilization levels and costs
- **Cons:**
  - ✓ Rate design can undermine incentives associated with charging costs back to users - rates for activity-based costing versus asset cost control
  - ✓ Centralized budgeting and cost control can undermine user motivation to manage and reduce costs

*"Can't Manage Costs - You Can't See": Transparency is an effective tool for Right-sizing!*

# Right-size Summary

- Asset is the single largest cost to owning and operating a fleet
- Figure out who should “own the problem” of managing fleet utilization in *your* organization - fleet users or the fleet manager(s)?
- Update and enforce utilization management policies, processes, and ad hoc studies
- Remember the relationship between fleet size and composition, fleet replacement and capital financing practices, and cost transparency

# Questions

Steve Saltzgeber

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801-702-7288



**CITY OF  
TALLAHASSEE**



Ed Tyer

Eddie.Tyer@talgov.com

- Service Manger for City of Tallahassee Fleet Operations
- 42 years in the automotive industry
- Started out working at NAPA after school at 16
- 21 years working at an independent shop
- ASE Dual Master Certified



Roger Godwin

roger.godwin@talgov.com

- Superintendent for City of Tallahassee Fleet Operations
- 22 years with the City
- Started in the part department and worked his way up the shop as master technician and shop supervisor
- Always enjoyed wrenching and continues to do so in his spare time

# Fleet Right Sizing and Right Typing

Roger Godwin and Ed Tyer



# Introduction

- **City of Tallahassee Fleet Maintains over 3,000 pieces of equipment with an approximate acquired cost of \$180M**
- **We operate out of 7 Shops serving over 15 different Customer Departments**
- **Travels 1M miles per month**
- **Fuel and Maintenance average \$1.2M per month**
- **Replacement equipment average \$14M per year**
- **Operating budget \$15M per year**
- **3) Green Fleet Awards**
- **3) 50 Leading Fleet Awards**
- **3) 100 Best Fleets Awards**
- **Certified Fleet Management Organization**
- **ASE Blue Seal Certified**

# Collaboration with Departments

First Step to Success



# Department Collaboration

## First

- Meet with Departments
- Understand their operational needs
- Build trust
- Getting their acceptance is critical

## Results

- Builds relationships
- Assist you in determining the best suited equipment
- They'll be more inclined to receive your input
- This makes the whole experience better



A glowing yellow tent is pitched on a rocky, dark mountain slope at night. The tent is illuminated from within, casting a warm yellow light. The background features dark, jagged mountain peaks under a deep blue night sky with a bright star or moon in the upper right corner. The overall scene is serene and isolated.

# Determine your utilization

**Not all Fleets are alike**

# Utilization

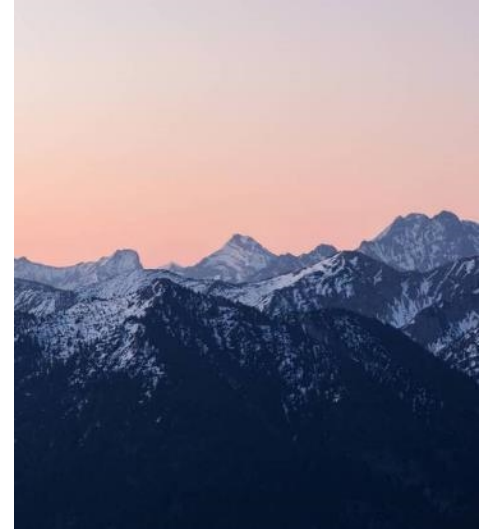
- Not all Fleets are alike
- Determine your utilization, one size doesn't fit all
- Review and update policy
- Educate departments of responsibilities
- Move under utilized equipment to motorpool
- Shared equipment programs and Key Valets

# Right Fuel Type

- Consider alternative fuels and the potential cost savings
- Application specific, determine what technologies are available to fit your operation
- Evaluate Electric Charging Options, CNG Fueling, Bio Diesel or Hydrogen availability
- Create a Transition Plan, Investigate Utility, State and Tax Incentives or Grants

# Summary

Everything is fluid, constantly look for ways to improve you Fleet, don't just pick the latest Industry standard, you know your Fleet and its Customers





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**Ed Tyer**

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**Thank you**



Jeff Booton

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303-342-2022



## Denver International Airport

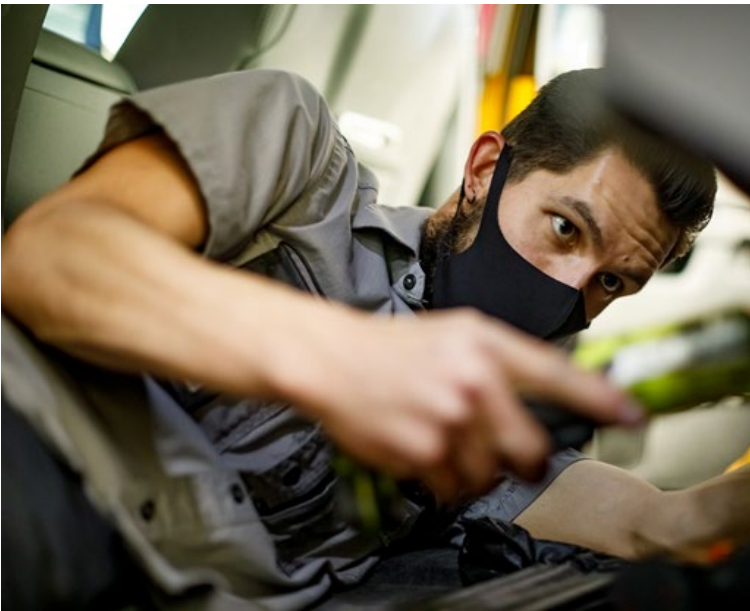
- Sr. Director of Airport Maintenance Division
- 38+ years in Fleet Management
- AS in Vehicle Maintenance, BS in Logistics, MBA
- 2018 Public Sector Fleet Manager of the Year
- DEN “Team Fleet” Recognition in 2022
  - #4 Green Fleet (NAFA)
  - #1 Airport Fleet (ACT)
  - #3 Leading Fleet/#1 Midsize Fleet (Government Fleet)



# RIGHT-SIZING AND RIGHT-TYPING

November 9, 2022

JEFF BOOTON, SENIOR DIRECTOR OF MAINTENANCE



## **Working Definitions**

- Differentiate between “Right-Sizing” and “Right-Typing”.

## **Implementation**

- How do we implement Right-Sizing/Right-Typing into our business.

## **Benefits**

- My Fleet’s saving’s.

## **Case Study’s**

- What we’ve done with the savings this year.

## **Lessons Learned**

- Things to keep in mind when undergoing this process.



# WORKING DEFINITIONS

***Right-sizing* and *Right-typing* are very similar with the difference lying in the scope of each process:**

## **Right-Sizing (Overall Fleet-level)**

- Optimizing fleet utilization across the organization.
  - Co-utilization / redistributing vehicles.



## **Right-Typing (Individual Vehicle-level)**

- Optimizing individual vehicles to ensure they are appropriate for the specific job requirement.
  - Form factor / fuel type.



***Right-sizing* and *Right-typing* opportunities are analyzed during our annual review of the Vehicle/Equipment Replacement Program:**

## **Annual Utilization Analysis**

- Gather typical fleet data (e.g. miles/hours, age, O&M costs, etc.). What will be replaced?
  - Telematics / Fuel Mgt. Sys. / Maintenance Management Sys. / Motor Pool / EV Charging Network.

## **Right-Sizing Lens**

- Strategic look at fleet in terms of potential cross-utilization opportunities.
  - Monitor new products in the marketplace that can improve efficiency (e.g. multi-function).

## **Right-Typing Lens**

- Tactical focus on low utilization to identify opportunities.
  - Low utilization often means the customer doesn't have the right vehicle for the job.

## Benefits

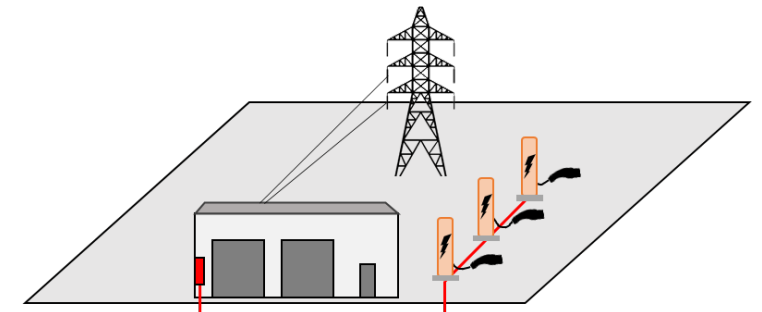
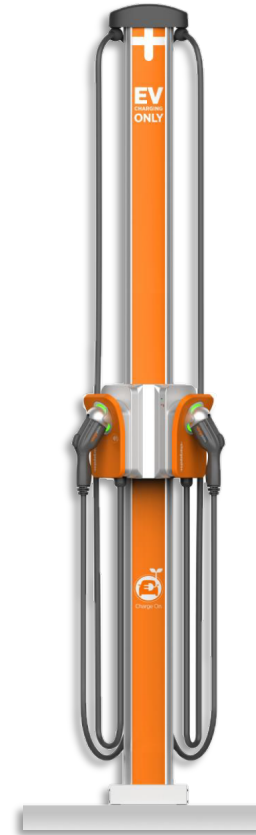
- Customer Satisfaction
  - Happy customers = they take better care of their vehicles/equipment.
- Financial Savings (Depends on maturity level of your program)
  - 2016 - Right-Typing = \$79K / Right-Sizing = \$1.15M / Total Savings ~ \$1.2M
  - 2017 - Right-Typing = \$35K / Right-Sizing = \$355K / Total Savings ~ \$390K
  - 2018 - Right-Typing = \$0 / Right-Sizing = \$0 / Total Savings \$0
- Credibility
  - Satisfied customers and documented optimization records earns credibility with leadership

# CASE STUDY 1 (GREEN FLEET INITIATIVE)



## Overview/Goal

- Quick all-inclusive dive into EV's (Vehicles, Chargers, and Infrastructure)
  - Complete in current year @ "net-0" cost
- Use available resources to enable quick implementation
  - Utilize available power capability
  - Doing the infrastructure work in-house
  - Fund project through fleet right-sizing/right-typing



**Sustainability:** Our goal is to become the greenest airport in the world

# CASE STUDY 1 (GREEN FLEET INITIATIVE)



## Vehicles

- Fleet analysis to find good EV candidate vehicles from our current replacement list
  - High utilization on a single shift
  - Filled a deficient operational need
  - Opportunity for right-sizing/typing
    - Intended to pay for the project
- Identified 8 vehicles as EV candidates
  - Downsized fleet by 5 vehicles



**Sustainability:** Our goal is to become the greenest airport in the world

# CASE STUDY 1 (GREEN FLEET INITIATIVE)



## Vehicles (Cont.)

- Four (4) Ford E-Transit chassis
  - 1 cargo van, 2 stake bed, 1 custom bed
  - Right-typed from 5 CNG/Diesel trucks
  - Cost delta = \$28K
- Two (2) Chevy Bolt EUV's
  - Replaced 2 Hybrid Sedans
  - Cost delta = \$19K
- Two (2) Aebi Schmidt eSwingo 200+
  - Right-typed/Right-sized from 6 CNG scrubbers
  - Cost delta = \$18K



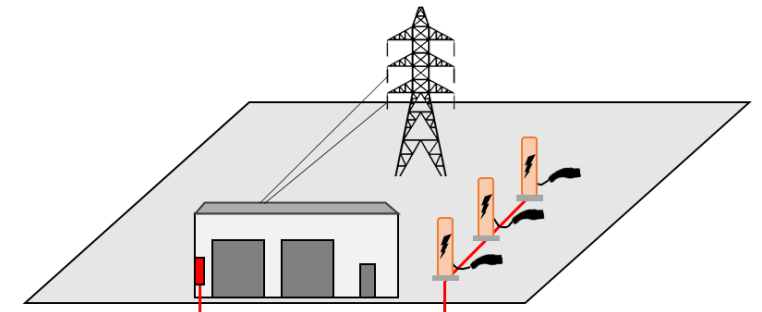
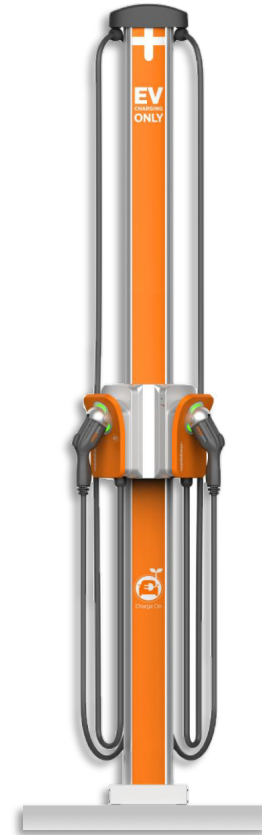
**Sustainability:** Our goal is to become the greenest airport in the world

# CASE STUDY 1 (GREEN FLEET INITIATIVE)



## Results

- “Net 0” goal resulted in a \$17.5K surplus!
  - Right-sizing/right-typing fleet (\$65K) covered the cost of chargers and infrastructure (\$47.5K)
- ~\$35K Fuel Annually
- CO<sup>2</sup> Annually = 153 Tons
- Added capacity for 6 future charging stations



**Sustainability:** Our goal is to become the greenest airport in the world

# Case Study 2 (WING PLOWS)

## Overview/Goal

- Optimize our landside snow removal operation to offset staffing shortages
  - Carrying 30+% vacancy rate into winter
  - Service roads to a 4/8-lane boulevard
- Right-size/Right-type boulevard truck fleet
  - **Right-type** trucks by incorporating “Wing Plows” which facilitates **right-sizing** the fleet
  - One truck can now clean more surface area which reduces the need for as many trucks (e.g. truck operators)

## Airport Land Area

- 53 Sq. Miles



## Landside Snow Operations

- 195 lane miles
- 307 acres of parking lots



# Case Study 2 (WING PLOWS)



## Process

- Identified four plow trucks due for replacement
- Invested in upfitting four other trucks with wing plows to offset purchasing of replacements

## Results

- Net savings of ~\$1.7M in capitol budget by *NOT* replacing four trucks
  - Maintenance, Fuel, and Environmental Costs
- Saved 8 truck operator positions
  - 4 dayshift / 4 nightshift



## Things to consider to ensure a successful program:

### Buy-in

- Leadership has buy-in until your customer complains to them.
  - Your challenge is to build a business case that demonstrates the value.

### Communication

- Communicate with your customer to understand their needs, be objective.
  - This is an exercise to balance the fleets efficiency with mission requirements.
  - Don't use words like "reduce" when talking about their fleet. Use words like "optimize".

### Consistency

- This is not a one-and-done process. Fleets evolve annually.

# INDUSTRY LEADERS



**DRIVE CLEAN  
COLORADO**  
a Clean Cities Coalition

GHG Reduction Award  
2015 & 2016



Fleet Mgr. of the Year 2018



Top 50 Fleet for 7 Straight Years  
\*#1 Mid-Size Fleet in 2020\*



Top 100 Fleet for 8 Years



Leading Airport Fleet



Top 30 Fleet for 8 Years  
\*Top 3 in 2017 & 2020\*

**NGVAMERICA**

Natural Gas Vehicles for America

25+ Years of Exemplary NGV  
Industry Leadership  
\*Achievement Award 2014\*



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