



NAFA 2017 INSTITUTE & EXPO

TAMPA, FLORIDA / APRIL 25-28, 2017 / NAFAINSTITUTE.ORG



**DO YOU
KNOW
HOW
TO
VAM?**

Insights Into
Right-Sizing
Any Fleet



Agenda

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- Vehicle Allocation Methodology
 - What is it?
 - VAM applications
 - The VAM process
 - Typical VAM results
- Idaho National Laboratory Case Study
 - About INL's fleet
 - Fleet strategies achieved through VAM
 - Results
 - Challenges and lessons learned

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Faculty

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG



Scott Conlon, CAFM

Manager
Mercury Associates, Inc.
Rockville, MD



Scott Wold

Director, Mission Support Services
Idaho National Laboratory
Idaho Falls, ID

What is a Vehicle Allocation Methodology?

- A VAM is a structured process for determining the size, number, and types of vehicles needed
- A VAM process includes the following parts:
 - FMIS Data: for initial analysis of fleet inventory and use
 - Survey: design, testing, distribution, progress reporting
 - Analysis: turning survey results into recommendations
 - Consensus: recording agreement or disagreement
- A VAM process results in a to-do list
 - Disposals
 - Reassignments
 - Acquisition policy/procedure changes

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



How is VAM Used?



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-Size?

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- To reduce capital costs by reducing the number of vehicles in the fleet
- To generate revenue by identifying and selling unneeded vehicles
- To reduce future costs by avoiding the replacement of unneeded vehicles
- To demonstrate due diligence by validating fleet spending



Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Why Right-Type?

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- 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



Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Why Right-Fuel?

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- 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 corporate/ organizational image



Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Consider Transportation Alternatives

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA APRIL 25-28, 2017 NAFAINSTITUTE.ORG



Use public transportation?

Borrow another company vehicle?



Rent a vehicle?



Use a personal vehicle?

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Also, for Federal Fleets: It's the Law!

NAFA 2017
INSTITUTE & EXPO
TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG



- 41 CFR Part 102-34.50 (b)
- Executive Order 13693: *Planning for Federal Sustainability in the Next Decade (signed March 2015)* and associated implementing instructions
- FMR Bulletin B-43: *VAM for Agency Fleets*

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



A VAM Should. . .

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- Examine each vehicle
 - By vehicle type
 - Within the context of the organization's vehicle fleet
 - Using survey and fleet inventory data
- Provide right-sizing recommendations
- Based on utilization and criticality
- Report as – **Underutilized**, **Questionable**, or **Retain**
- Provide right-typing recommendations
- Provide right-fueling recommendations

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



What is VAM? – Overview of the Process



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.



The VAM Survey Starts with Fleet Data

NAFA 2017
INSTITUTE & EXPO
TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- Analyze fleet composition
- Analyze data quality
 - Meter information
 - Class information
 - Points of contact
- Analyze organizational structure



Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Designing and Testing the VAM Survey

- Determine which questions to ask
 - Respondent/assignment info
 - Utilization - Meter, hours of use/standby, trips, etc.
 - Criticality - How important is the vehicle? The job?
- Reduce administrative burden wherever possible
- Write survey questions clearly
- Have select users test the survey

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Managing the Survey

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- Use an automated process to distribute if needed
- Provide clear instructions with deadlines
- Provide point of contact information
- Distribute F.A.Q.s with survey
- Report progress through completion
 - By office or program
 - By vehicle and individual

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Analyzing the Results

NAFA 2017
INSTITUTE & EXPO

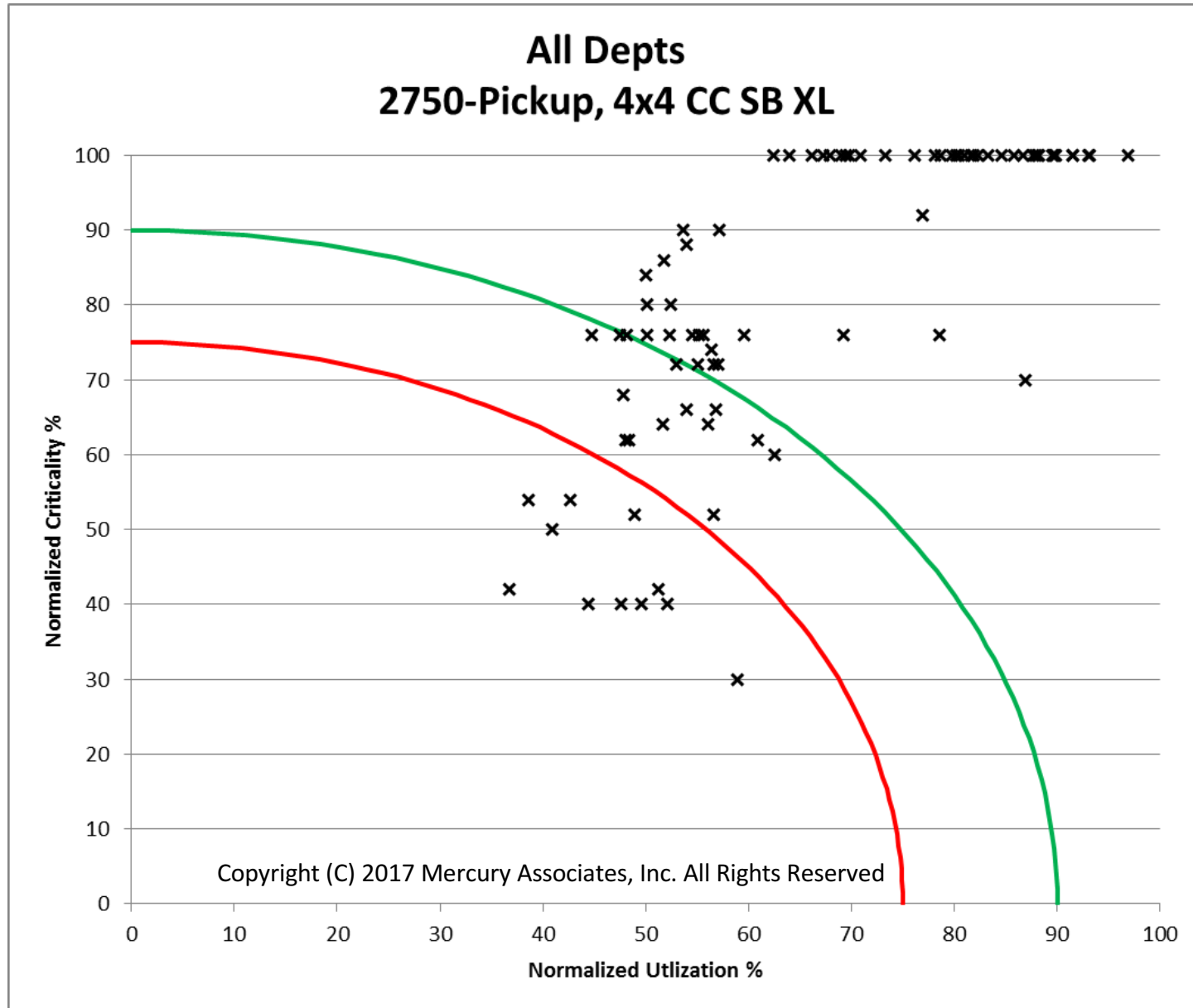
TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- Analyze groups of vehicles separately
 - By class - e.g., analyze SUVs together
 - By vocation - e.g., analyze canine SUVs together
 - By organization - e.g., by region or business unit
- Right-size - find low utilization or low criticality
- Right-type - find mismatched vehicle type and use
- Right-fuel - find distance to alt. fuel infrastructure for classes where AFVs are available

Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved

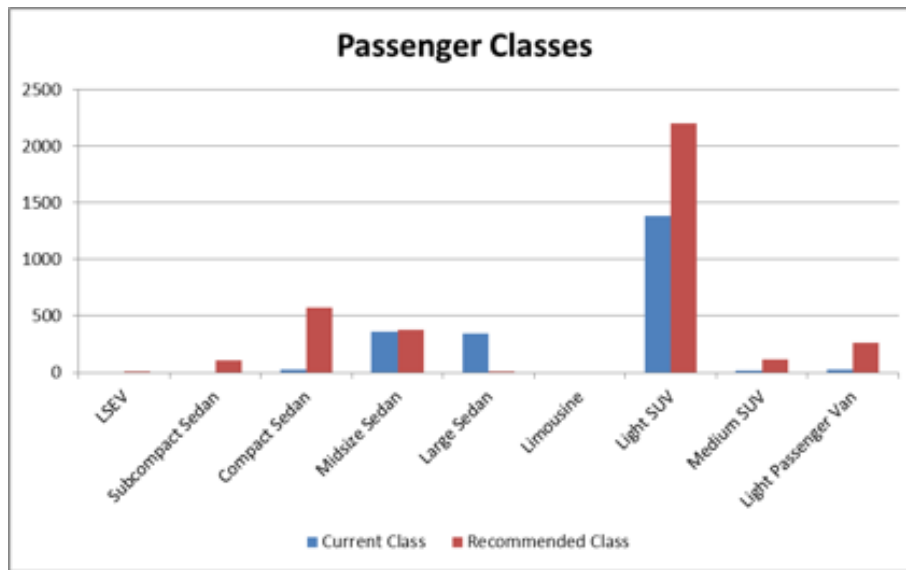


Right-Sizing: Preliminary Results

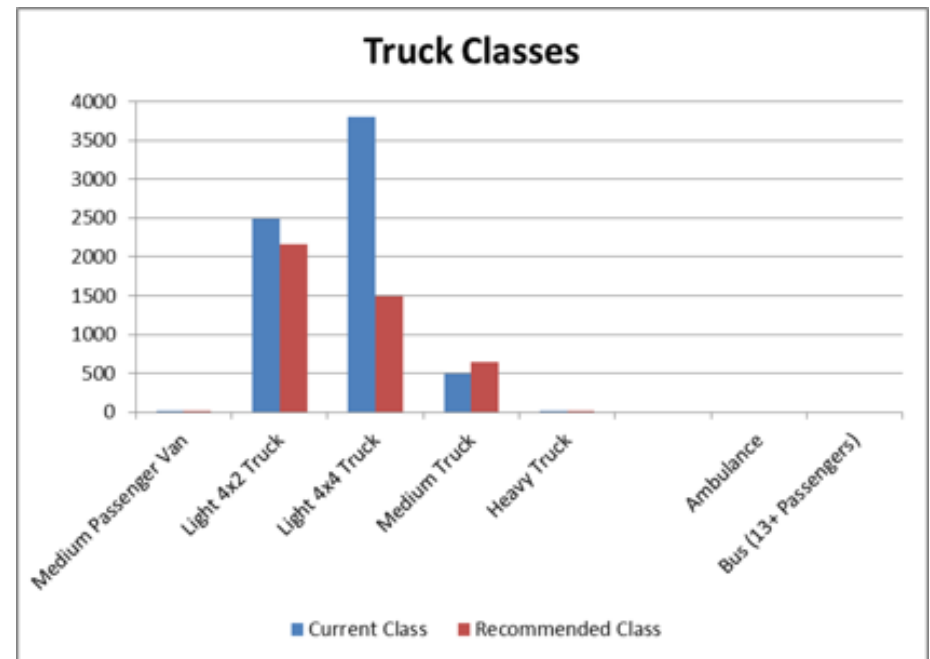


Right-Typing: Preliminary Results

Passenger Vehicles



Truck Classes



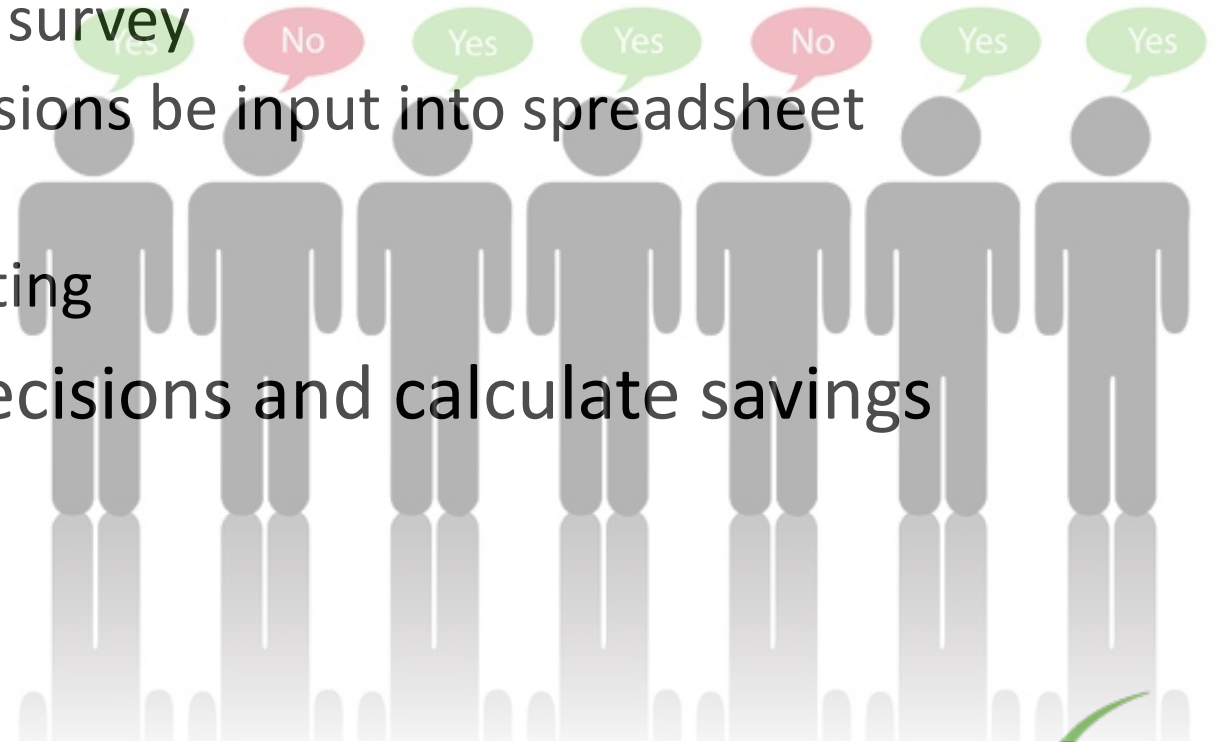
These results show increases in compact sedans and light SUVs, with decreases in larger trucks.

Gaining Consensus

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

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

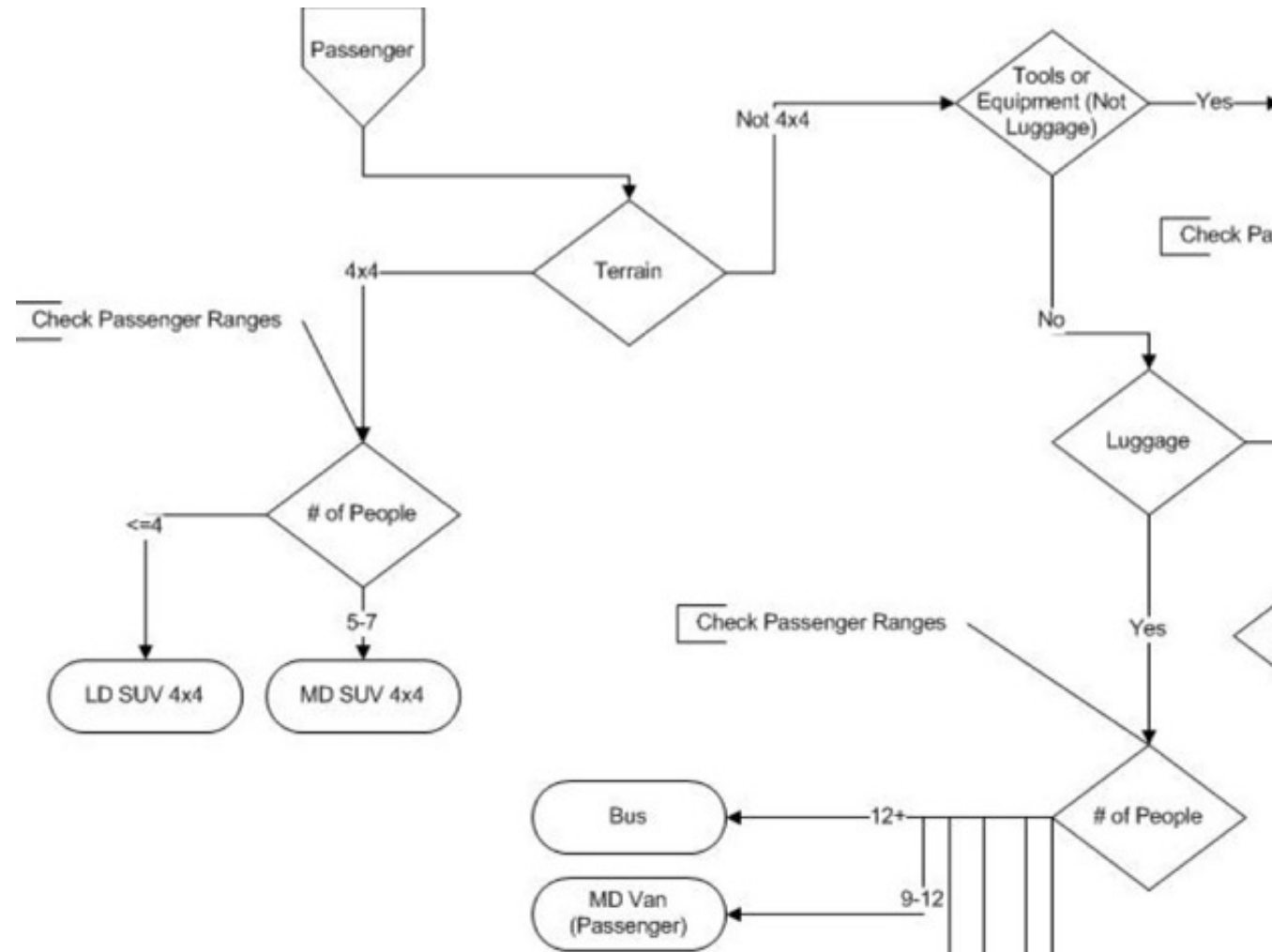


Copyright (C) 2017 Mercury Associates, Inc. All Rights Reserved



Sample Decision-Tree: Passenger Vehicle

A decision tree is a decision support tool that uses a tree-like graph or model of decisions and their possible consequences, including chance event outcomes, resource costs, and utility



Sample Right-Sizing Results

eVAM Summary				
Office	Eliminate	Questionable	Retain	Total
Western Region	238	118	1,585	1,941
North East Region	182	127	905	1,214
Central Region	354	184	3,281	3,819
South East Region	260	130	1,644	2,034
Total	1,034	559	7,415	9,008
% of Total	11.5%	6.2%	82.3%	

% Eliminate	% Questionable	% Retain
12.3%	6.1%	81.7%
15.0%	10.5%	74.5%
9.3%	4.8%	85.9%
12.8%	6.4%	80.8%
11.5%	6.2%	82.3%

Case Study

Idaho National Laboratory (INL)



About INL

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

- The Department of Energy's Idaho National Laboratory focuses on engineering and applied science. This focus has been used over the past 65 years to help reduce risks associated with research, design, development and deployment of new concepts of national importance.
- About 6,000 researchers, technicians and staff work at the 890-square-mile DOE-owned Site in southeastern Idaho and at the Research and Education Campus in the city of Idaho Falls, Idaho.
- The fleet supporting the lab currently consists of 594 Light, Medium, and Heavy Duty vehicles, including full sized buses to transport employees to/from the site.



Criteria:

Retention, Replacement, Disposal

NAFA2017
INSTITUTE & EXPO

TAMPA FLORIDA APRIL 25-28, 2017 NAFAINSTITUTE.ORG

Department of Energy (DOE) criteria to justify vehicle retention, replacement or disposal without replacement:

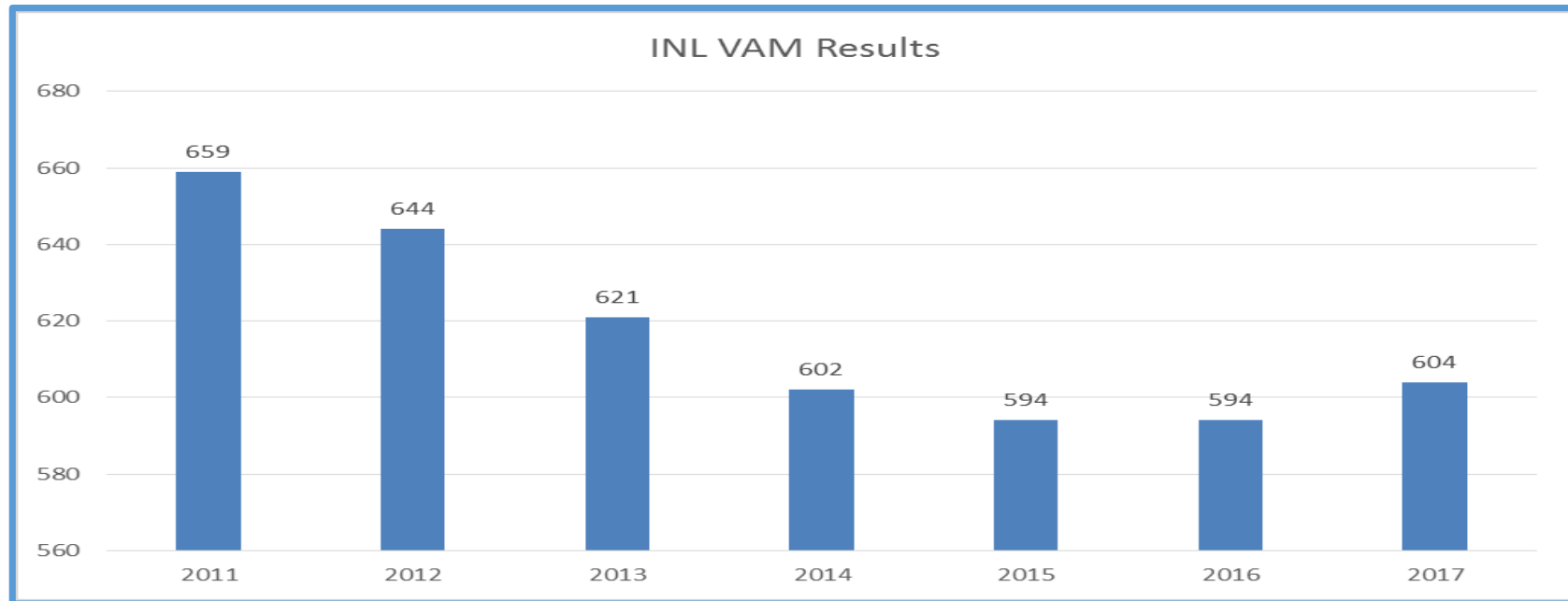
1. Mission criticality
2. Utilization by mileage, trip, or hours
3. Personnel-to-vehicle ratios
4. Terrain
5. Climate
6. Fleet condition/down-time



INL VAM Results

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA APRIL 25-28 2017 NAFAINSTITUTE.ORG



Notes:

- Telematics data helped eliminate 65 leased vehicles for an estimated annual savings of approximately \$390,000
- VAM means right size, not reduce (fleet will expand in 2017 due to increased mission scope).
- Project or short term rentals can cover peaks, multi-use vehicles reduce total number of chassis needed.
- The VAM should support Federal and State requirements including sustainability.



Challenges and Lessons Learned

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG



- Obtaining accurate and unbiased information on utilization
- Obtaining accurate and consistent vehicle use questionnaire results
- Overcoming organizational resistance
- Managing the many moving parts

- Telematics provide accurate data and resolve utilization conflicts
- Fleet customer relationships and communications are critical
- You must learn to put yourself in the shoes of stakeholders to anticipate how they will view the process and the results



Q&A and Wrap-Up

NAFA 2017
INSTITUTE & EXPO

TAMPA FLORIDA • APRIL 25-28, 2017 • NAFAINSTITUTE.ORG

Connect with Scott!



sconlon@mercury-assoc.com



scott.wold@inl.gov