

DGS Fleet Overview FY 17-18

| | |
|-----------------------------|----------------------|
| Total Vehicle Count | 17,297 |
| Equipment (non-pass) | <u>5,009</u> |
| Passenger | 12,288 |
| Law Enforcement | 5,074 |
| PDOT Passenger | <u>1,509</u> |
| Net Passenger* | <u>5,705</u> |
| | |
| Fuel consumption* | 8.25 mil gals |
| Gasoline** | 7.88 mil gals |
| Diesel*** | .28 mil gals |
| | |
| Miles Driven | ???,???,??? |

*Fuel consumption for this class only.

**Fuel type reporting (E15, E85, B5, etc.) is station dependent.

***Does not include PDOT/Turnpike heavy equipment AND PSP fueling (est. 22.5 mil gals additional)

Executive Order Fleet Impacts

Executive Order Commonwealth of Pennsylvania Governor's Office

Subject:
Commonwealth Leadership in Addressing
Climate Change and Promoting Energy
Conservation and Sustainable Governance

Number:
2019-01

Tom Wolf
By Direction of: Tom Wolf, Governor

Date: January 8, 2019

WHEREAS, the Constitution of Pennsylvania protects the Commonwealth's citizens' rights to life, liberty, possessing and protecting property, and happiness. Further, the Constitution of Pennsylvania and various other laws also preserve the Commonwealth's citizens' right to clean air, pure water, and the preservation of the natural, scenic, historic and aesthetic values of the environment; and

WHEREAS, the Commonwealth government has long protected, valued, and recognized these rights, specifically under *Executive Orders: 1973-9 Environmental Protection by State Agencies; 1980-3 Life Cycle Costing; 1998-1 Governor's Green Government Council; 2002-8 Governor's Interagency Task Force on Energy; and 2004-12 Energy Management and Conservation in Commonwealth Facilities*; and

WHEREAS, climate change impacts in Pennsylvania are real and continue to put Pennsylvanians at risk: in recent years, extreme weather and natural disasters have become more frequent and more intense. Like many areas of the United States, Pennsylvania is expected to experience higher temperatures, changes in precipitation, and more frequent extreme weather events and flooding because of climate change in the coming decades; and

WHEREAS, the Commonwealth is committed to further reducing its net greenhouse gas emissions which, left unchecked, would create a high risk of irreversible, widespread, severe climate impacts in the Commonwealth and beyond; and

WHEREAS, as a major energy provider, Pennsylvania can take steps to continue to reduce emissions in the power sector, increase reliance on clean energy and improved energy efficiency, and continue reductions of potent greenhouse gasses such as methane; and

WHEREAS, as a major transportation hub, Pennsylvania can take steps to increase reliance on low-carbon transportation solutions, and reduce emissions from the transportation fleet; and

2. Performance Goals for State Agencies.

a. All agencies under the Governor's jurisdiction shall:

- (1) Collectively reduce overall energy consumption by 3 percent per year, and 21 percent by 2025 from 2017 levels.
- (2) Replace 25 percent of the state passenger car fleet with battery electric and plug-in electric hybrid cars by 2025 and evaluate opportunities for the reduction of vehicle miles traveled and incorporation of new technology where appropriate.

6. Responsibilities of Commonwealth Agencies.

b. The Department of General Services shall:

- (9) Research, recommend, and develop vehicle fleet sustainability practices and metrics consistent with leading fleet accreditation programs.

Hybrid/PHEV/EV Plans

**DGS owns 1,912 passenger vehicles
25% commitment ~ 500 passenger vehicles.**

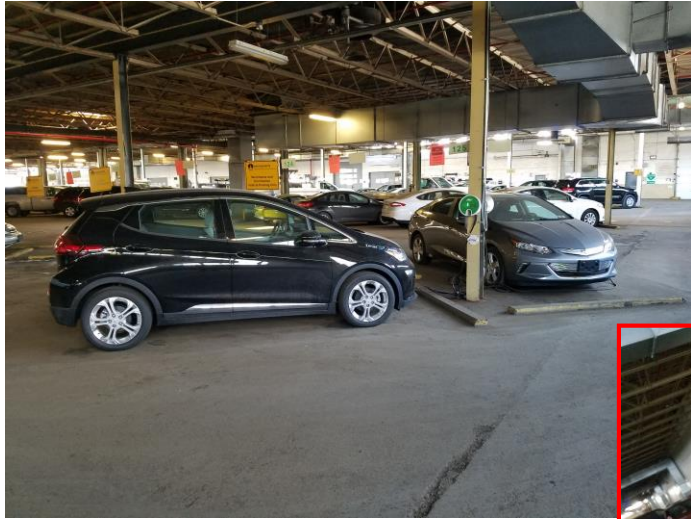
DGS will convert 100 vehicles per year for the next five years to hybrid, EV, or PHEV dependent on intended usage.

DGS currently has 65 alt energy vehicles deployed. Another 35 are on order to complete the year one commitment for compliance with the EO. 100 vehicles will be transitioned each year until 2023.

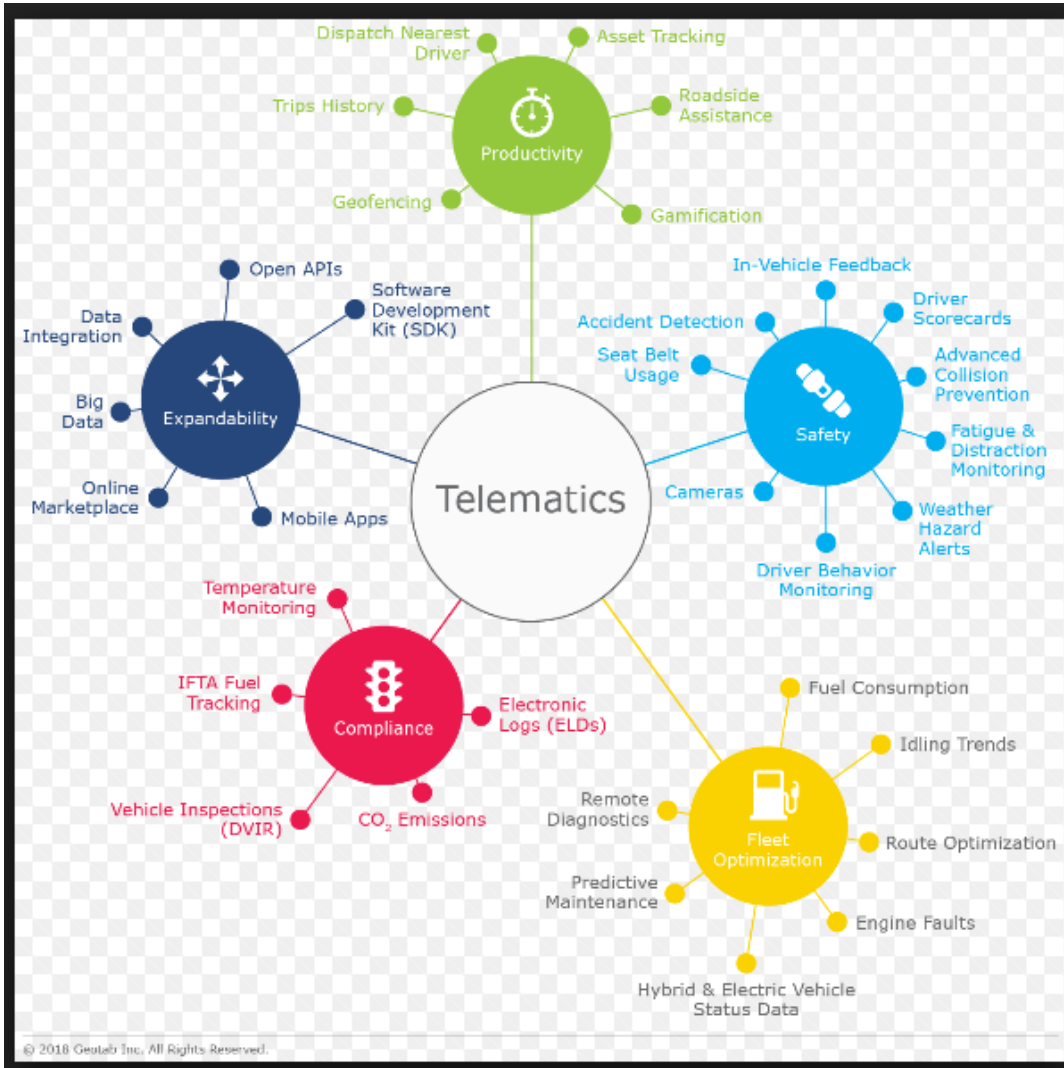
There are 17 fleet (non public) charging stations in the Capitol complex. Generation 2 chargers will be card swipe enabled to permit cost allocation across agencies.

The first multi-agency pooled EV's will be on line this summer.

DGS Fleet Hybrid/EV/PHEV/CNG



Telematics



Telematics

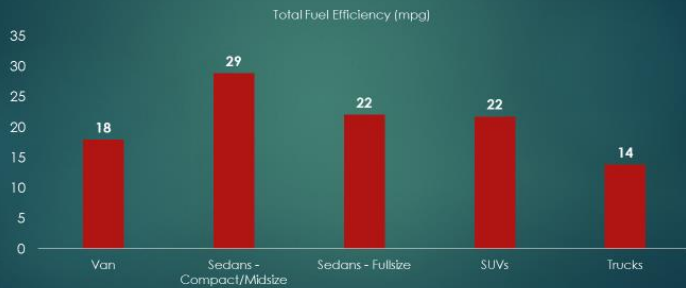
Field of study

Telematics is an interdisciplinary field that encompasses telecommunications, vehicular technologies, for instance, road transportation, road safety, electrical engineering, and computer science. [Wikipedia](#)

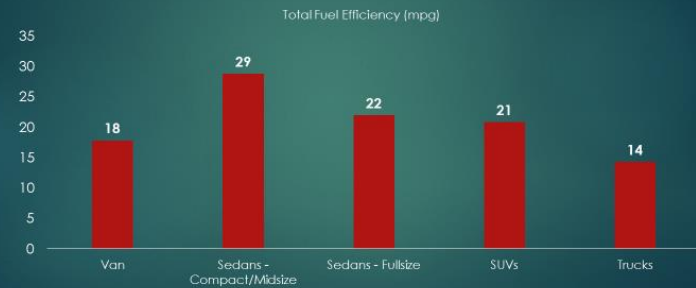
- The technology of sending, receiving and storing information using telecommunication devices to control remote objects
- The integrated use of informatics and telecommunications for application in vehicles and to control vehicles on the move
- GPS technology integrated with computers and cellular technology in automotive navigation systems

Telematics – Fleet MPG

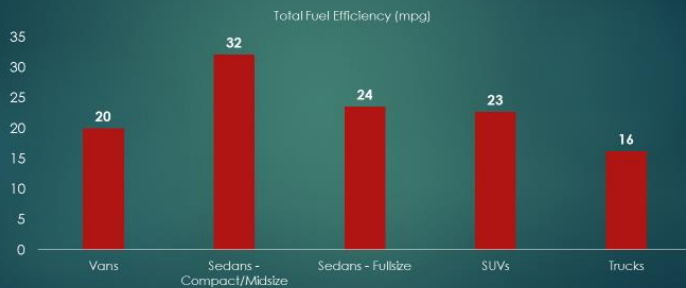
Fuel Efficiency by Vehicle Type
April 1, 2018 – June 30, 2018



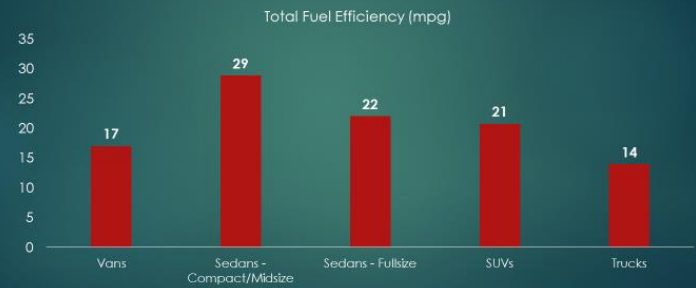
Fuel Efficiency by Vehicle Type
July 1, 2018 – September 30, 2018



Fuel Efficiency by Vehicle Type
October 1 – December 31, 2018

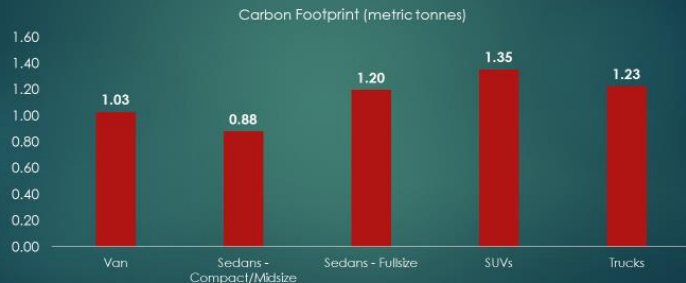


Fuel Efficiency by Vehicle Type
January 1-March 9, 2019

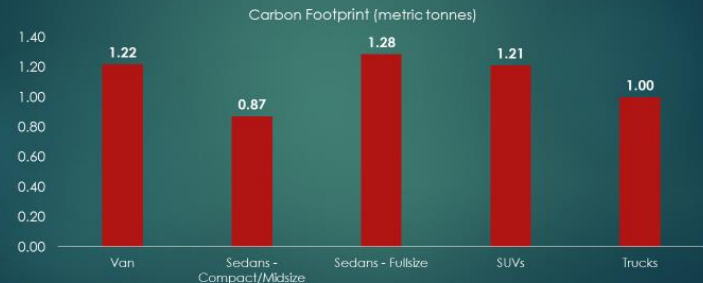


Telematics – Carbon Footprint

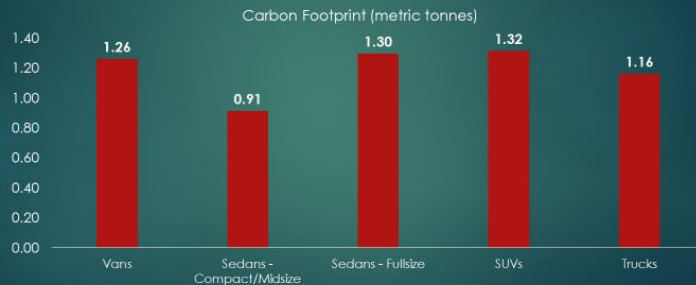
Carbon Footprint – Vehicle Average April 1, 2018 – June 30, 2018



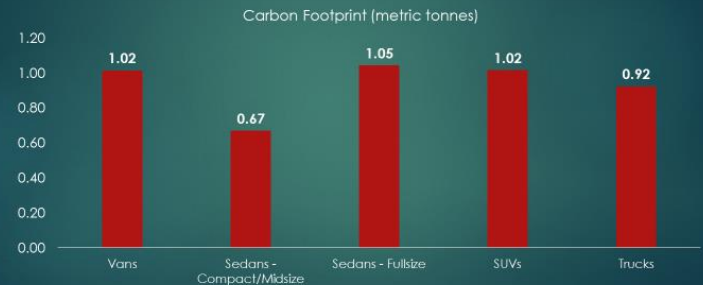
Carbon Footprint – Vehicle Average July 1, 2018 – September 30, 2018



Carbon Footprint – Vehicle Average October 1-December 31, 2018

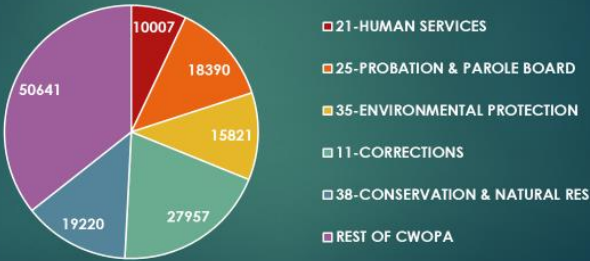


Carbon Footprint – Vehicle Average January 1, 2019 – March 9, 2019

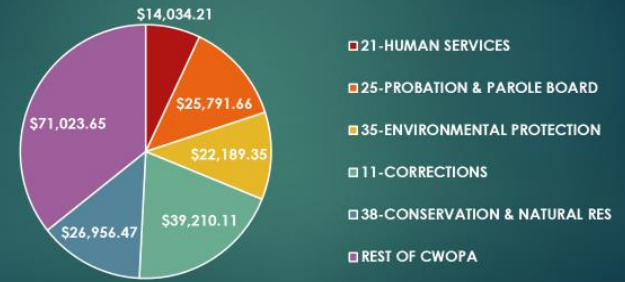


Telematics – Idle Time/Cost

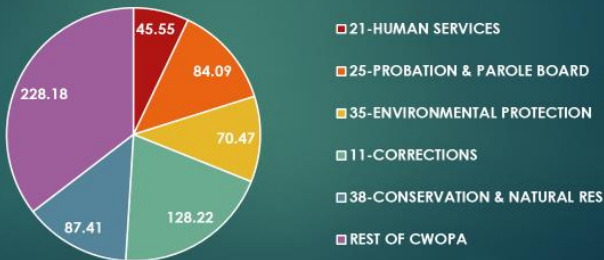
Idle Time (Hours) January 1, 2019 – March 9, 2019



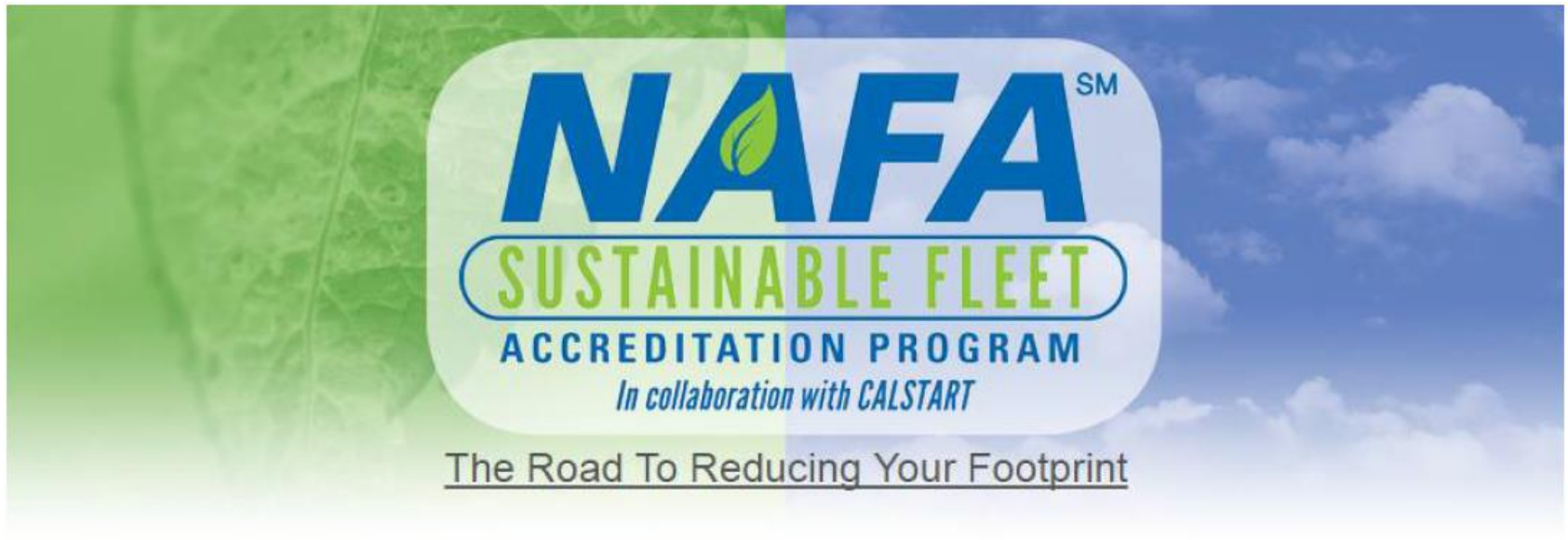
Idle Cost January 1, 2019 – March 9, 2019



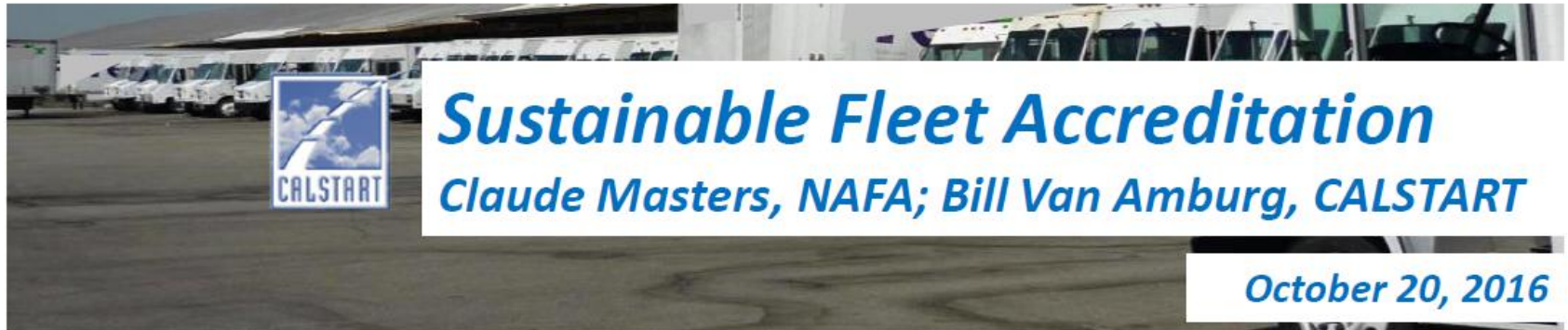
Idle – Carbon Footprint (Metric Tonnes) January 1, 2019 – March 9, 2019



Fleet Sustainability Program



The Road To Reducing Your Footprint



Sustainable Fleet Accreditation

Claude Masters, NAFA; Bill Van Amburg, CALSTART

October 20, 2016

Fleet Sustainability Program

Current Accredited Fleets

- Chesterfield County Government, Fleet Services
- City of Anaheim, California
- City of Austin, Texas
- City of Boston, Central Fleet Management
- City of Chesapeake, Central Fleet Management
- City of Minneapolis, Fleet Services Division
- City of Sacramento, Fleet Management Division
- County of Sonoma, Fleet Operations
- County of Ventura
- Dakota County
- Eugene Water and Electric Board
- Fleet and Surplus Services-MN
- Florida Power & Light
- Kent Fire Department RFA
- Minnesota Department of Natural Resources
- Minnesota Department of Transportation
- Ontario Ministry of Transportation, Fleet Management Centre
- Port Authority of New York and New Jersey
- Time Warner Cable
- Town of Greenwich, Connecticut
- University of California, Davis
- University of Illinois, Facilities & Services
- University of Minnesota
- Yale University

Other Future Fleet Possibilities

- Volkswagen settlement (older heavy diesel replacements + charger infrastructure)
- EV pools
- Ridesharing across agencies
- Parcel/mail ride along
- Last mile delivery
- Sustainability points for solicitation proposal evaluation/scoring
- Bicycle/motorcycle alternatives