



FY 2021 Federal Vehicle Fleet Data Overview

March 2022

Changing the World's Energy Future

Ron Stewart



DISCLAIMER

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness, of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. References herein to any specific commercial product, process, or service by trade name, trade mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof.

FY 2021 Federal Vehicle Fleet Data Overview

Ron Stewart

March 2022

**Idaho National Laboratory
Idaho Falls, Idaho 83415**

<http://www.inl.gov>

**Prepared for the
U.S. Department of Energy
Under DOE Idaho Operations Office
Contract DE-AC07-05ID14517, DE-AC07-05ID14517**

FY 2021 Federal Vehicle Fleet Data Overview

***Federal Automotive Statistical Tool Project
March 2022 INTERFUEL Meeting***

Data Call Overview

- **Fleet data submissions from 49 agencies**
- **Timeline**
 - Data call opened October 1, 2021
 - ... closed December 15, 2021
 - Review feedback to agencies January 24, 2022
 - Agency updates due February 21, 2022
 - Dataset declared final February 25, 2022
- **Dataset**
 - 706K vehicles
 - 1.06M fuel entries
 - 32.5M data points



FY 2021 Federal Fleet by the Numbers



Inventory

657K vehicles

vs FY 2020: -0.1%



vs FY 2019: +1.8%



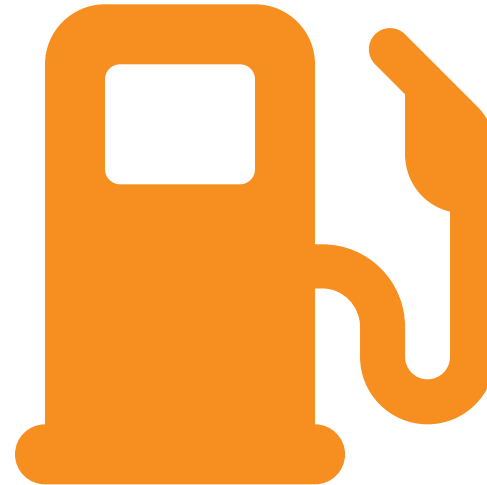
Miles

4.22B miles

vs FY 2020: +1.5%



vs FY 2019: -6.1%



Fuel

368M GGEs

vs FY 2020: -1.1%



vs FY 2019: -5.1%



Cost

\$ 4.44B

vs FY 2020: +5.0%





vs FY 2019: +1.6%










Source: Federal Automotive Statistical Tool, <https://fastweb.inl.gov/>

Cost figures include only operating costs (lease, maintenance, accident repair, fuel, indirect costs, depreciation) and do not include costs associated with vehicle acquisition or disposal

Compliance Overview: EPA Act AFV Acquisitions

- **Target: 75% of covered LD vehicle acquisitions**
- **FY 2021 Performance: 62.2%**
 -  **Challenges**
 - Declining availability of E85 flex-fuel vehicles
 - Supply chain impacts on planned acquisitions
 -  **Positives**
 - 19 of 28 agencies met 75% compliance target

Source: Federal Automotive Statistical Tool, <https://fastweb.inl.gov/>



Agency	FY 2021 Inventory	Compliance %	
U.S. Postal Service	234,035	1	
Department of Defense	25	100	
Department of Homeland Security	7	76	
Department of Justice	7,554	65	
Department of Agriculture	0	102	
Department of the Interior	28,768	147	
Department of Veterans Affairs	22,762	57	
Department of Energy	14,946	157	
Department of State	13,199	100	
Department of Education	7,115		

Review Process Participation

- **Agency submissions reviewed against 8 groups of metrics**
- **All organizations received written feedback, with opportunity to provide updates to address identified concerns**
 - EPAct-covered/scorecard agencies received additional compliance impact review
- **Agency participation**
 - ⬆ 6 agencies: no areas of concern identified
 - ⬆ 8 agencies: no response
 - ⬇ 21 agencies: no updates to submission
 - 14 agencies: updated submission



Data Quality Overview

- **FY 2020, we piloted “Concerns per Vehicle” (CpV) quality metric**
 - Aggregate of occurrences of 12 types of problems
 - Enables comparison of quality over time or between agencies
 -  Metric decreases? Fewer issues, improved quality
 -  Metric increases? More issues, decreased quality
- **Overall CpV scores**
 - FY 2020: 0.76
 - FY 2021: 0.65 (15% improvement)





Data Quality Overview

- **By Agency**

- 24 agencies improved CpV over FY 2020
- 11 of 14 agencies providing updates improved CpV

- **By Metric**

-  Improvements in 8 of 12 metrics over FY 2020
 - Fewer placeholder vehicle attributes
 - Fewer vehicles showing changes to static attributes
 - Fewer vehicles missing from prior year submissions
-  Decreased quality in 4 of 12 metrics over FY 2020
 - More vehicles with invalid fuel efficiency based on reported fuel consumption and miles



Want to Know More?



On-line training event: May 17-19, 2022

[Information](#) | [Registration](#)



Ron Stewart

FAST Support Team

Idaho National Laboratory

ron.stewart@inl.gov

FASTsupport@inl.gov



Idaho National Laboratory

Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment.

WWW.INL.GOV