

### FedFleet 2021: Federal Automotive Statistical Tool -Federal Vehicle Fleet Data Collection

June 2021

Ron Stewart





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### Federal Automotive Statistical Tool (FAST)

June 2021

# Federal Automotive Statistical Tool (FAST) Federal Vehicle Fleet Data Collection

Ron Stewart FAST Team



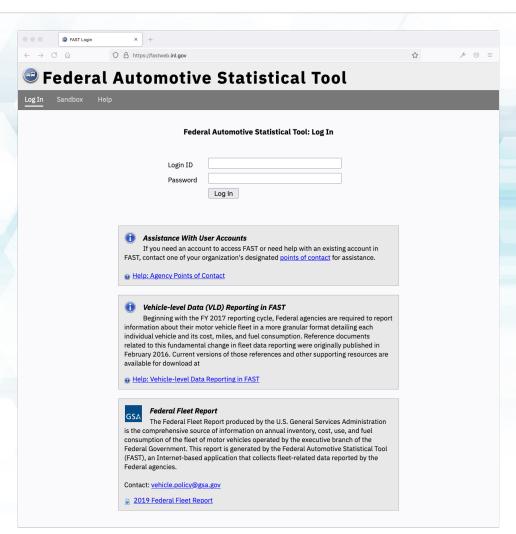
# The Federal Vehicle Fleet



### FAST: Federal Vehicle Fleet Data Collection

- Collaborative project funded / managed by
  - GSA Office of Government-wide Policy
  - DOE Federal Energy Management Program
- Collects federal vehicle fleet information
  - Vehicles & operational data (costs, miles, fuel)
  - Fleet budget & planning data
  - Fueling infrastructure / EVSE data
- Primary federal fleet information source
  - Fleet data FY 2000 to present





### FY 2020 Federal Fleet Dataset









1.1M fuel records



### Federal Fleet: Recent Trends – FY 2020









#### **Inventory**

658K

+1.9%

0



4.16B

-7.1%



### <u>Fuel</u>

**372M GGE** 

-3.8%



### Cost

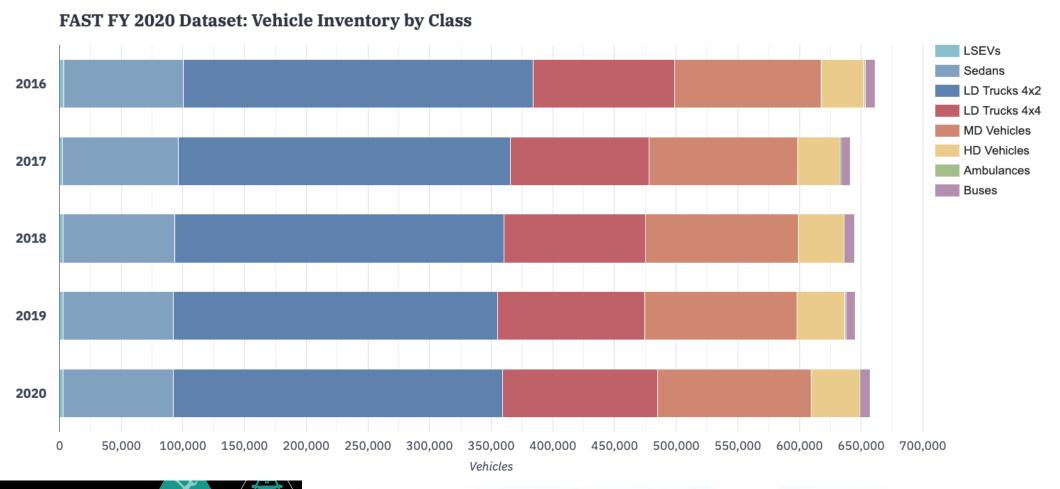
\$4.22B

-3.4%



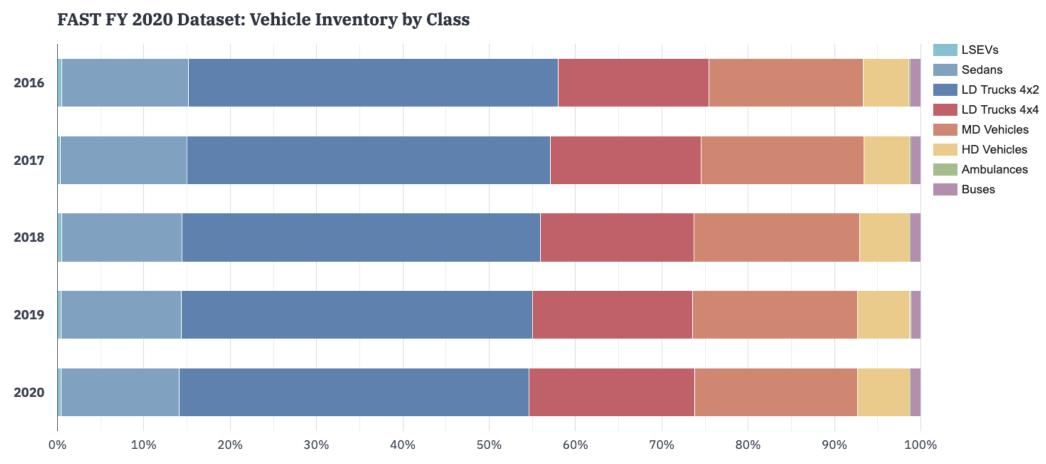


### Federal Fleet: Recent Trends - Inventory



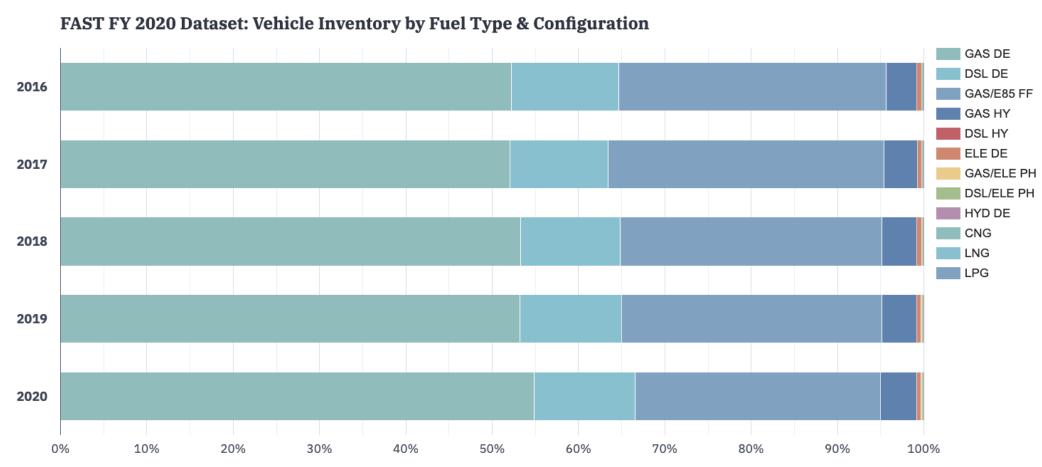


### Federal Fleet: Recent Trends - Inventory



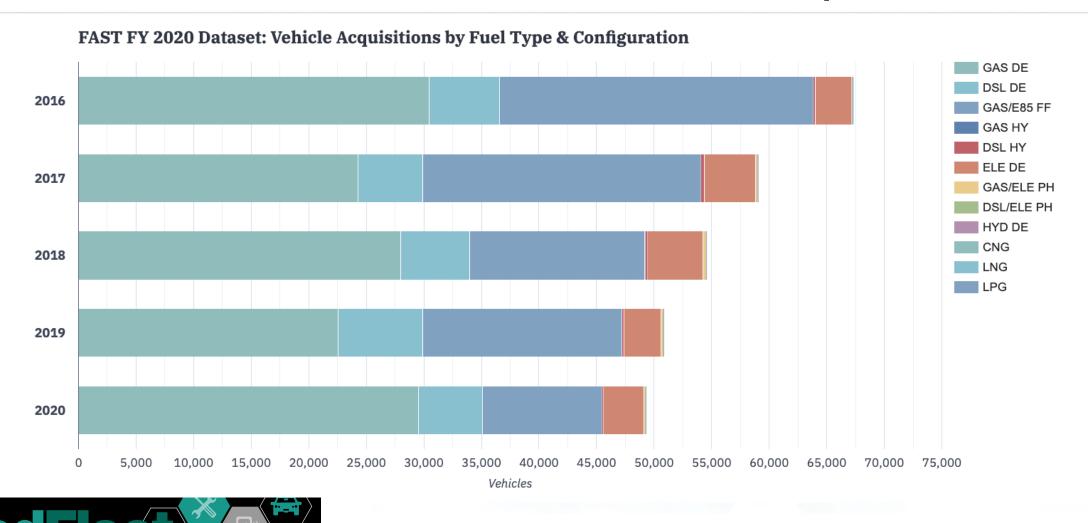


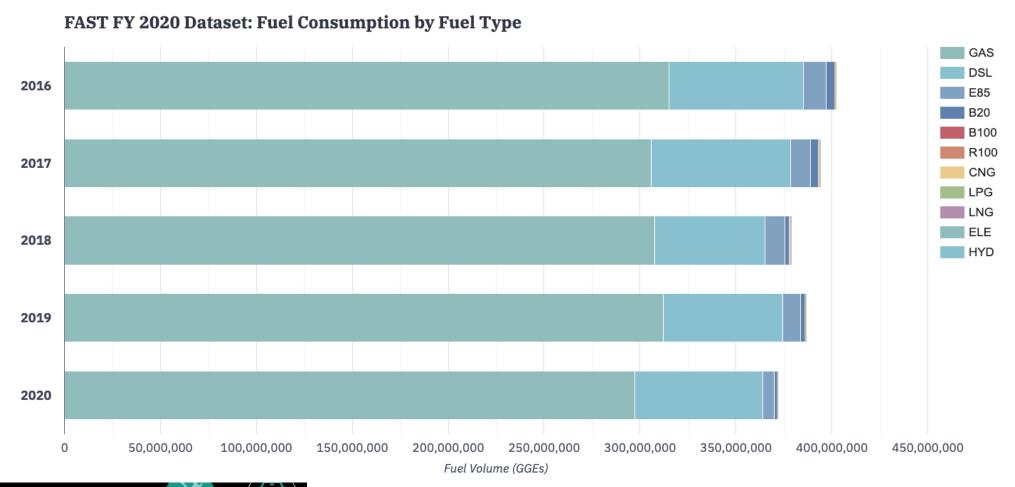
## Federal Fleet: Recent Trends - Inventory





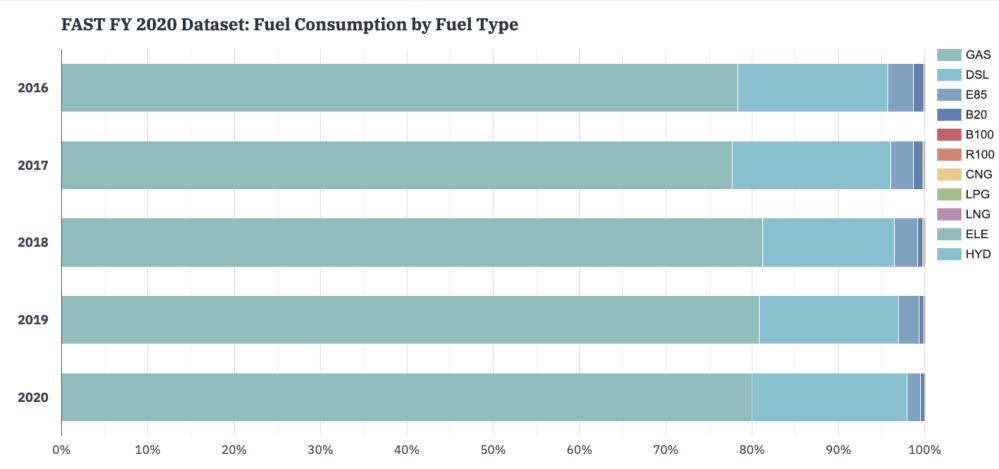
### Federal Fleet: Recent Trends - Acquisitions



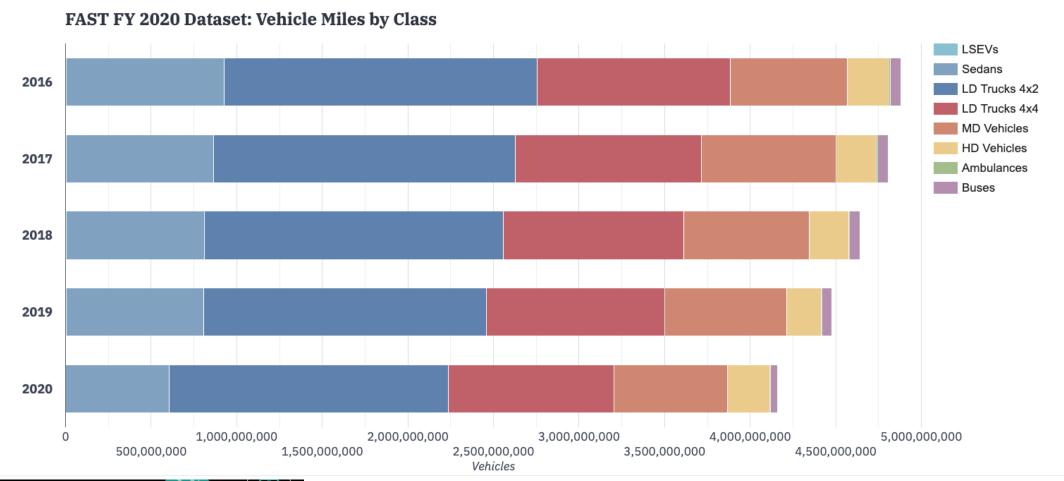




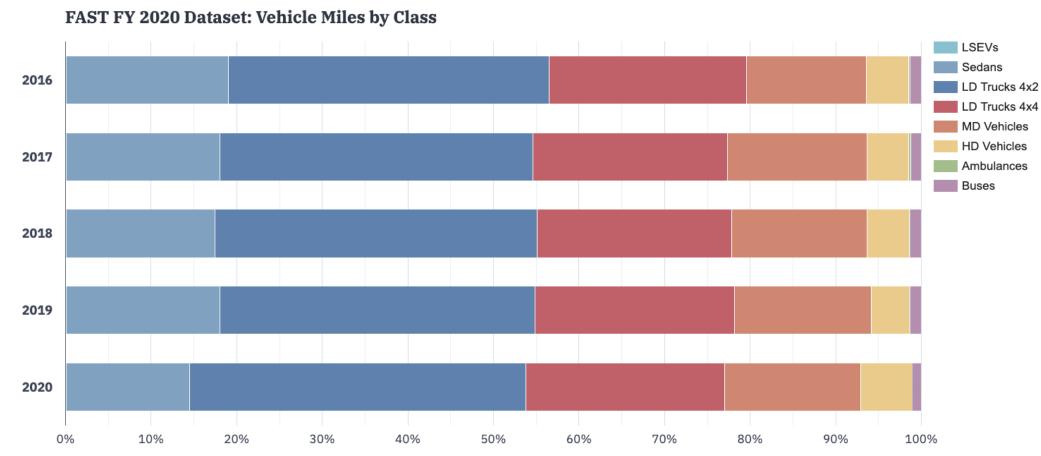
### Federal Fleet: Recent Trends - Fuel



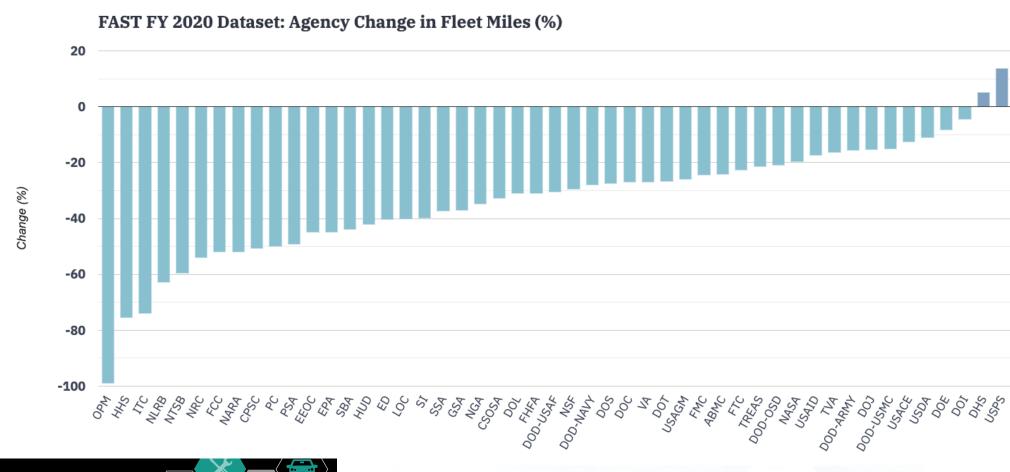


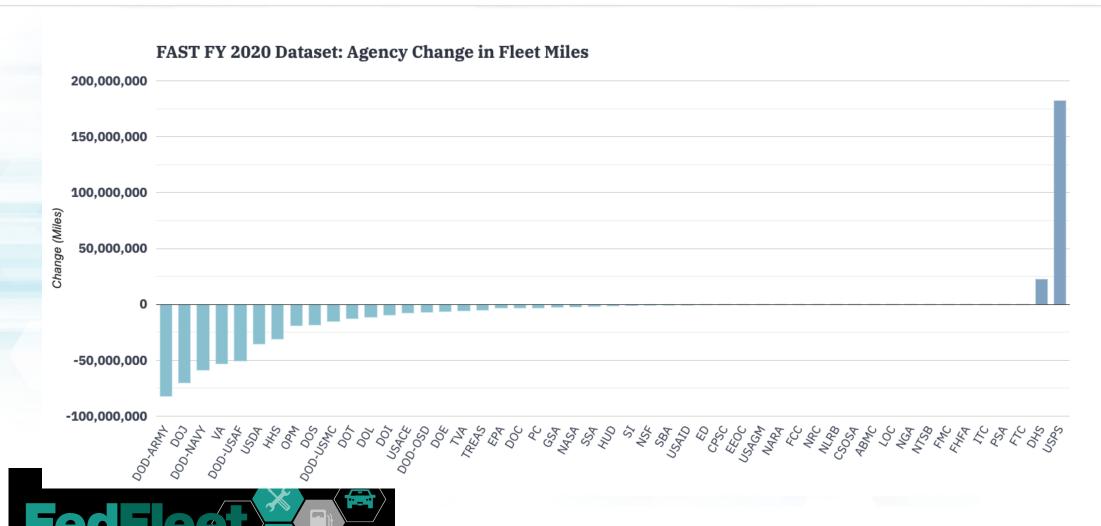












# Current Challenges



### Current Challenges: Data Quality

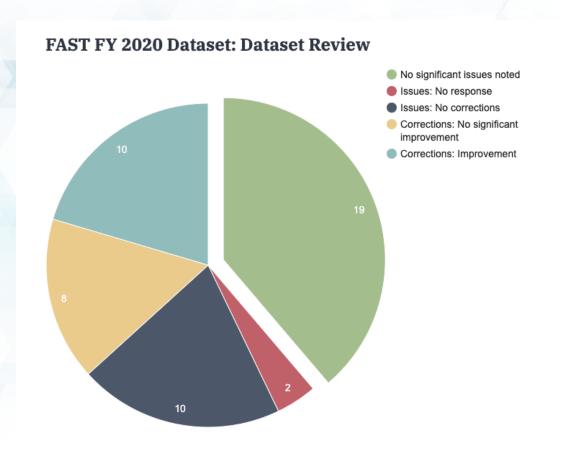
- Is the quality of the fleet dataset improving?
  - It depends on how we look at it...
- We need a simple way to discuss quality of the dataset...
  - ... that is easy to understand
  - ... that allows comparisons along different axes (time, ownership, agency)
  - ... that helps agencies find and fix causes of quality concerns



### Current Challenges: Data Quality – Review Process

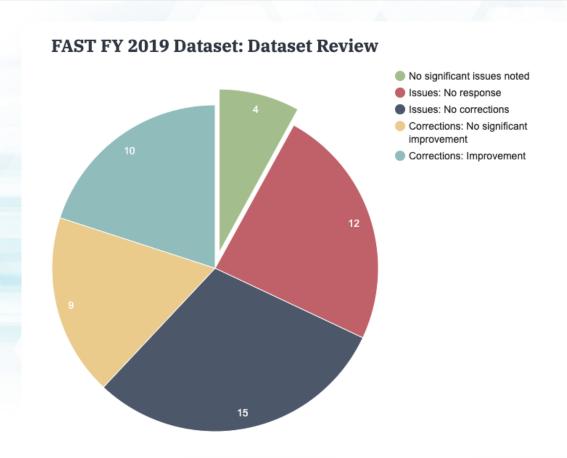
#### Agency Submission Review Process

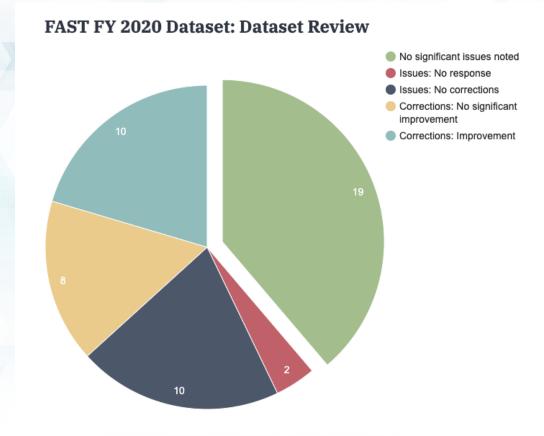
- Agency data validated by FAST during submission
- Agency designates submission as complete
- FAST team reviews agency submission; provides written feedback
- Agencies respond to identified areas of concern
- Agencies granted window to submit corrections





### Current Challenges: Data Quality – Improving?







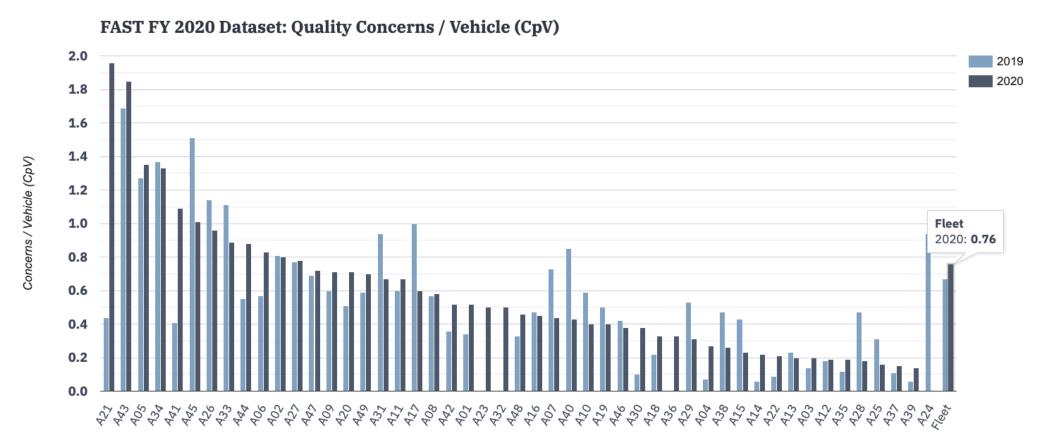
# Current Challenges: Data Quality – Improving?

- Yes? Larger group of agencies w/o significant issues
  - 19 agencies in FY 2020 vs 4 in FY 2019
  - More agencies participating in review / feedback / correction process
- No? Agencies with issues had more issues
  - More issues identified in the dataset as a whole
  - Driven by challenges of FY 2020?
- We want a clearer way to characterize quality

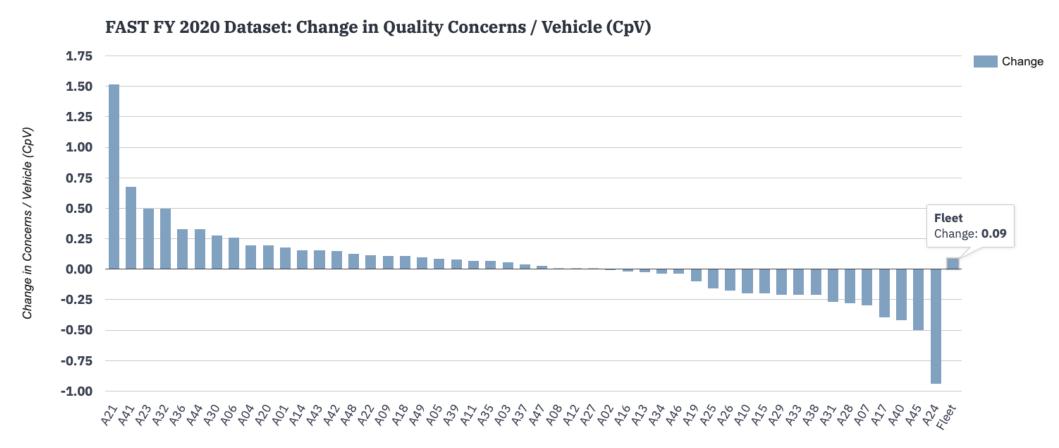


- Data quality metric: Quality Concerns per Vehicle (CpV)
- Aggregates concerns across multiple areas
  - Year-to-year continuity of reporting
  - Reasonability of key vehicle attributes
  - Completeness of data (e.g., missing vehicles, presence of "placeholder" attributes)
- ... divided by # of vehicles
- Easy to understand and compare







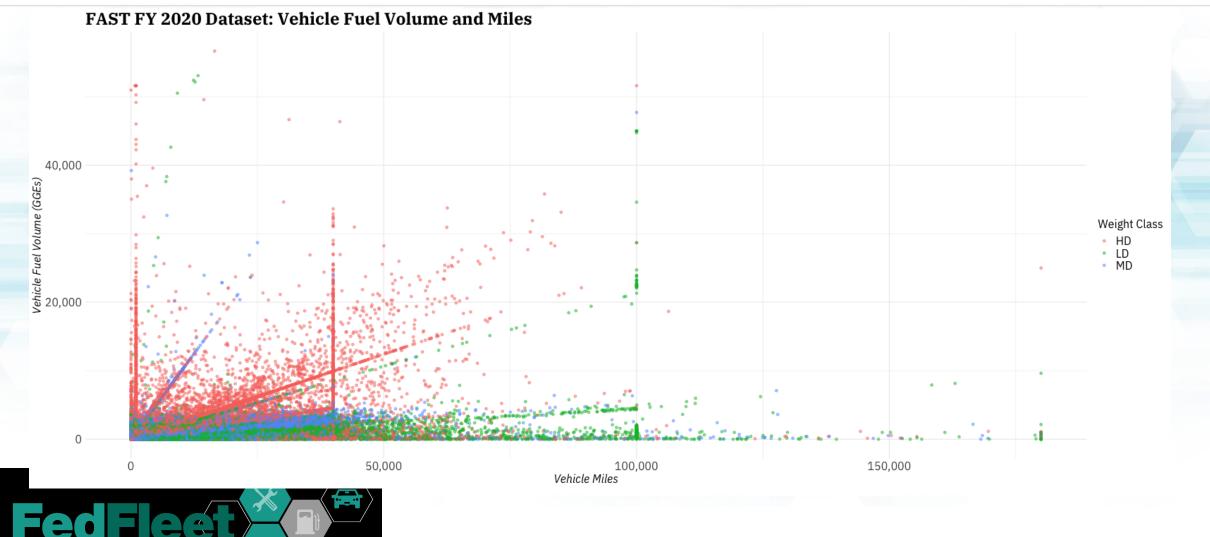




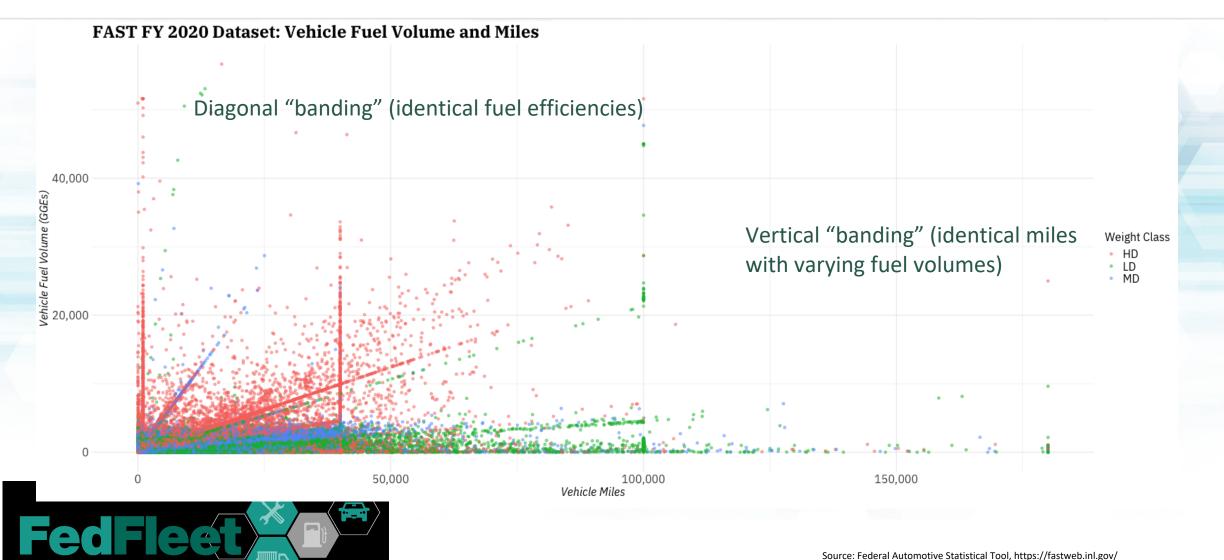




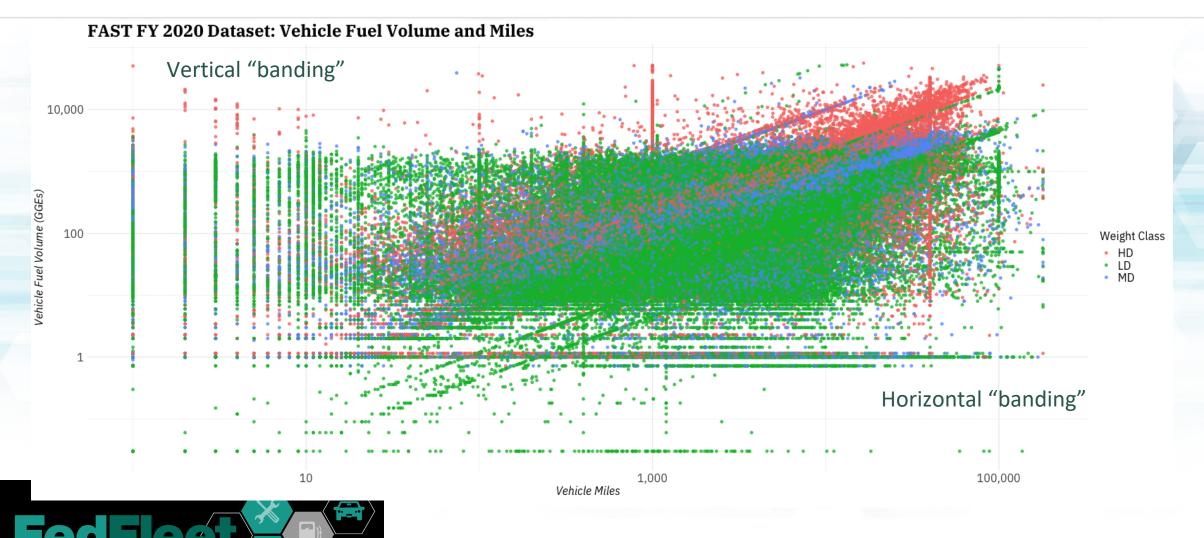
### Current Challenges: Data Quality – Placeholders



### Current Challenges: Data Quality – Placeholders



### Current Challenges: Data Quality – Placeholders



# **Future Directions**



### **Future Directions**

- Continued emphasis on quality of fleet data
  - Assessing
  - Understanding
  - Improving
- Increased interest in fleet data



### Future Directions

- Streamlining / accelerating / simplifying fleet data collection and reporting
  - Better source data
    - Expanded use of vehicle telematics
    - Expanded integration of systems/processes upstream of fleet MISs
  - Shorter reporting / review / feedback timelines
    - Maturing reporting processes and tools within agencies
    - Improved feedback to agencies
    - Virtuous impact of improved data quality: improving quality simplifies reporting
    - Automation of reporting?



# Discussion



### Contacts & Resources

- GSA Office of Government-wide Policy
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- FAST
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- FAST Help
  - Phttps://fastweb.inl.gov/help/

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