

## Attachment E.

### **Recommendations Which Could Not Be Implemented to the Questionnaires**

Some suggestions for changes to the questionnaire were brought to the Census Bureau's attention after cognitive interviews were completed and could not be implemented for the 2021 VIUS. Many organizations also indicated interest in information during VIUS taskforce meetings in 2015 but had no specific suggestions for new questions attached to those ideas. We need more information to know if these suggestions are possible in a future VIUS.

#### Section D. Leasing

- DOE suggested having leasing questions reviewed by someone at a large fleet leasing company.
- DOE wants to know what share of the market is affected by leasing.
  - We need more information about what this means and how it would be measured. Does this require a new question or can it be calculated from existing information?

#### Section E. Type of Vehicle

- EPA and DOE would like information on "vocational trucks."
  - We need more information about what this means. Is that a body type?
- FMCSA would like to be able to identify farm trucks.
  - We need more information about how to define this if it is not using the type of business variable. VIUS excludes farm tractors and other equipment.
- Washington State DOT wants to capture parcel van group and identify them separately from other truck types.
  - We need more information about what this means and how it would be measured. Is parcel van a specific body type?

#### Section F. Physical Characteristics

- DOE would like the following:
  - Add the following to the equipment list: aerodynamic reflectors, boat tails, single-wide tires, fuel-fired heater, electric HVAC, power take-off powered by main engine, power take-off auxiliary power source, super-single tires, pneumatic blowers, emergency power units, road speed governor (and additional question about what the governor is set to in MPH)
    - We need to know if this applies to all truck types
  - Add a question about aerodynamics that includes all the EPA Smartway technologies.
    - We need to know what those technologies are and if they are redundant to the existing aerodynamics list. We also need to know if this applies to all truck types.
  - Ask "What idle-reducing technology does this vehicle have? Onboard power (ADU), Off-board power, Portable auxiliary pack"
    - We need to know if this applies to all truck types
- FHWA wants to collect:
  - Distance between axles
    - We need to know if this applies to all truck types and how it should be measured.
- BTS would like to add a question about fuel capacity (fuel tank size) to help measure weight.

- EPA wants to add:
  - “Is this vehicle equipped with single-wide tires, instead of duals?”
    - We need to know if this applies to all truck types.
  - “Is this vehicle equipped with technology used to help avoid traffic congestion and provide alternate route selection?”
    - We need to know if this applies to all truck types and if/how this is different from GPS.
- Oregon DOT needs axle weight data and configuration.
  - We need to know if this applies to all truck types and how it should be measured.
- OOIDA wants to add “speed limiter” to the equipment list and at what speeds they are activated.
  - Is this the same as the “road speed governor” above?
- ACEEE would like to collect:
  - Types of tires on semi-truck and trailer
    - We need to know what types are options
  - Smartway components being used
    - See above
  - What aerodynamic add-ons were purchased at the time of vehicle and what were after market?
    - We need to know if this applies to all truck types. This question presents a burden for respondents who did not purchase the vehicle new.
- UCS would like information about stop-start or types of APU and waste heat recovery
  - We need more information about what this means and how to measure.

#### Section G. Time Operated

- EPA would like to add:
  - What are the average number of hours spent idling each week to provide power during rest periods?
    - We added a question about percentage of time idling.
  - What are the average number of hours spent operating on an auxiliary power unit each week to provide power during rest periods?
    - We added a question about percentage of time using an auxiliary power unit.
  - OOIDA wants to collect how many hours per month the truck idled.
    - We added a new question about hours spent operating per week and percentage of hours spent idling.
  - DOE would like to add a followup to time spent idling to ask “What percent of idling time was in periods of 30 minutes or more?”
    - This question presents issues with respondent recall and burden.

#### Section H. Home Base

- FHWA would like to have origin-destination data to help with air quality studies.
  - We need more information on how to collect this and what truck types it applies to.
- DOE would like information on the “primary state of operation” for the vehicle
- NPTC would like to add “branch stores” and “fill centers” to home base types
- OOIDA would like to measure how many trucks do not have a “brick and mortar” home base because truckers live in their trucks.

- o There is already an option for “no home base” in the question. Is the request asking for more information than that?

#### Section I. Miles

- EPA wants the following:
  - o number of trips (key-on to key-off)
  - o duration of trips
  - o number of hours driving by speed
  - o (non semi-trucks only) “How many annual miles did this vehicle tow auxiliary trailers (including campers)?”
    - The question about trailers is already asked of all truck types.
- FMCSA would like information on interstate travel.
  - o We need more information on what they are asking.
- DOE would like to add:
  - o Over the last three to four years, how many annual miles was this vehicle driven?
  - o How many miles per gallon did this vehicle average when it was first purchased?
    - Both these questions present issues with respondent recall and burden.
- AASHTO would like information on miles driven before the engine is rebuilt.
  - o This question presents issues with respondent recall and burden. Also only applies to a small portion of the total trucks.
- NPTC wants to collect ton-miles taxes.
  - o We need more information about what this means and how to measure. We also need to know if this applies to all trucks.
- ACEEE wants to collect vehicle miles per trip.
  - o This question presents issues with respondent recall and burden.
- UCS would like to add a question about idle information as a function of vehicle and/or cargo type.
  - o We need more information about what this means and how to measure.

#### Section J. Fuel and Maintenance

- DOE would like to add:
  - o What type of fuel or fuel combination can be used in this vehicle?
    - We might be able to determine that from the VIN.
  - o What percent of the time was the truck fueled with the selected fuels?
- DOE would like to get data for the 13 categories proposed in the new HD greenhouse gas and fuel economy standards regulation.
  - o We need more information about what this means and how to measure.
- ACEEE would like data on MPGe and charging methods, and new emission treatment elements such as diesel particulate filters and selective catalytic reduction systems.
  - o We need more information about what this means and how to measure.

#### Section L. Weight

- FHWA wants to collect:
  - o Registered weight
  - o Operating weight
  - o Adjusted weight
    - We need more information on how to measure this.

#### Section M. Type of Business

- Washington State DOT would like a way to distinguish urban delivery from long haul/over the road delivery.

#### Section N. For-Hire

- FHWA wants to collect:
  - o How many stops a less than truckload carrier makes in a day?

#### Section P. Hazardous Materials

- FMCSA would like to know if the trucks carrying hazmat are going outside of the state.
  - o We need more information on how to measure this. Is it a yes/no question?

ACEEE = American Council for Energy Efficient Economy

AASHTO = American Association of State Highway and Transportation Officials

BTS = Bureau of Transportation Statistics

DOE = Department of Energy

EPA = Environmental Protection Agency

FMCSA = Federal Motor Carrier Safety Administration

FHWA = Federal Highways Administration

NPTC = National Private Truck Council

OOIDA = Owner-Operator Independent Drivers Association

USC = Union of Concerned Scientists