Log of changes: Dataset on Electric School Bus Adoption, Version 2 (Spring 2022)

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New variables

We added the following variables to the dataset. Except where otherwise indicated, these data were already available at this spatial scale (school district or state), so no transformation or analysis was needed to add them to the dataset.

At the school district level:

- Congressional district ID (STCD116) (NCES)
- Number of congressional districts in the school district (NCES) (in a separate tab, similar to the structure for utilities, to make it easier to identify all the school districts within one congressional district)
- Number of schools in school district (NCES)
- Percentage of schools in district that are Title I schoolwide eligible (2020-21) (NCES)
- Percentage of students in district eligible for free/reduced lunch (2020-21) (NCES)
- Tribal school district? (NCES)
- Percent low-income (below 200% of federal poverty level, weighted average of all census block groups in the school district. Data from EPA EJScreen, 2021)
- Percent non-white and/or Hispanic (Identified as other than "White alone" on the census, weighted average of all census block groups in the school district. Data from EPA EJScreen, 2021))
- Average annual ozone concentration (ppb) weighted average of all census block groups in the school district. Data from EPA EJScreen, 2021))
- Average annual PM2.5 concentration (ug/m3) (weighted average of all census block groups in the school district. Data from EPA EJScreen, 2021))
- Number of ESBs committed
- Has delivered or operating ESBs?
- Number of ESBs awarded
- Number of ESBs ordered
- Number of ESBs delivered
- Number of ESBs operating
- 2021 American Rescue Plan (ARP) Electric School Bus Rebates Wait List Position (EPA, 2022)
- EPA School Bus Rebates (DERA) 2020 Wait List Position (EPA, 2021)

At the state level:

- Total committed electric school buses
- Committed ESBs as a share of registered school buses in state (WRI analysis based on Atlas EV Hub, 2019)
- # of persons, mode to school: school bus (2017, National Household Travel Survey)
- % of persons, mode to school: school bus (2017, National Household Travel Survey)

Revised data structure

We restructured the data on committed ESBs. We switched from tracking total committed ESBs at the school district level, to tracking each ESB within a school district, and aggregating those to the school district level. This enables us to track where ESBs are in the different phases of the adoption process. As part of this restructuring process, we also updated those variables to reflect the most recently available data.

Specifically, we switched the following variables from the school district level to the bus level:

- Number of ESBs committed
- Bus OEM (original equipment manufacturer)
- Bus model
- Bus type
- Dealer
- Multiple funding sources used?
- Funding source(s)
- Agency(ies) administering funds
- Charging company involved
- Other groups involved
- Other notes

We also added the following variables at the bus level, using the same methods and types of sources as were previously used for tracking committed ESBs at the school district level:

- Current status of bus
- Quarter awarded
- Quarter ordered
- Quarter delivered
- Quarter first operating
- Electric powertrain manufacturer
- $ amount toward bus
- Charging company
- Charger type
- Charging funding source
- $ amount toward charger
- Notes
- Date of most recent source
- Date most recently checked/updated
- Sources

We also moved the data on counties to a separate tab (similar to the structure for utilities and congressional districts) and restructured that data to make it easier to identify all the school districts within one county.