



# A Dataset of U.S. School Bus Fleets

VERSION 3 | MAY 2024

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## Overview

This update corrects various errors found in version 2 of the dataset, including incorrect data values, data from raw state datasets that were missing, and “scrambling” of data, where LEAs were assigned to incorrect school districts, school districts were assigned to incorrect states, etc. To improve clarity of data, we also ensured, to the best of our ability, that each unique school district, primary user of the school bus, and third party involved had only one name. For example, if a school district was listed as both “Olympia Community Unit School District” and “Olympia CUSD”, we renamed all instances of this school district to “Olympia Community Unit School District.” This document describes specific changes made in each sheet of the dataset.

Except for the replacement of New York City Public Schools (LEA ID 3620580) data in the district summary sheet with that from the FOIL response from the New York City Department of Education, no data has been updated with more recent data.

## Changes by sheet

### Cover Sheet - Data maps

Updated to reflect changes in compiled bus-level and compiled district level sheets.

### Data dictionary

The definition of bus type “Other” was updated to remove reference to motobuses, cars, vans, and taxis, which have been removed as a unique variable from the dataset.

### State summary sheet

Some data in the state summary sheet was missing or incorrect:

VARIABLE CHANGED	STATES AFFECTED
Number of buses	California, Connecticut, Idaho, Illinois, Indiana, Kentucky, Maine, Maryland, Minnesota, Mississippi, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin
Fuel type*	Nevada, North Carolina, Pennsylvania
Bus type*	Kansas, Missouri, South Carolina, Virginia, Washington DC, Wyoming, Kansas
Date and age*	Alabama, Alaska, Arizona, Florida, Massachusetts, Missouri, North Carolina, Pennsylvania, Rhode Island, Virginia

\*The states with corrected bus counts listed in the first row of this table were also affected by these changes.

## STATE-SPECIFIC CHANGES

- Hawaii was added to state list, although fleet data remains unavailable
- Oklahoma was added to state list

## OTHER CHANGES

- Variables “Number of buses owned by third party” and “Percent of buses owned by third party” were added to sheet

## District summary sheet

TYPE OF CHANGE MADE	VARIABLE CHANGED	DESCRIPTION OF ERROR	STATES AFFECTED
<b>Data removed</b>	School district or primary user (rows of sheet)	Some third parties were mistakenly included as districts, some districts no longer in compiled bus-level sheet when duplicate VINs were removed	California, Connecticut, Idaho, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Oregon, Texas, Vermont, Washington, Wisconsin
<b>Unscrambling data</b>	State, LEA ID, School district or primary user	In some cases, LEA IDs were assigned to incorrect school districts, or school districts and primary users were assigned to incorrect states.	California, Alaska, Arizona, Indiana, New York, New Mexico, Washington
<b>Correcting or inputting missing data</b>	School district or primary user	Some raw datasets had school districts that were not included in previous versions of this dataset	California, Connecticut, Illinois, Indiana, Iowa, Maine, Maryland, Minnesota, Nebraska, New Jersey, New Mexico, North Dakota Texas, Vermont, Virginia, Wisconsin
	Date and age	Some data missing or incorrect	Florida, Indiana, Minnesota, North Dakota
	Fuel type	Some data missing or incorrect	Minnesota, North Dakota
	Bus type	Some data missing or incorrect	Kansas, Kentucky, Minnesota, Missouri, New York, South Carolina, Texas, Wyoming
	Total number of buses	Some data incorrect	Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, New Jersey, New Mexico, New York, North Dakota, Oregon, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin
<b>Assigning entities new WRI IDs</b>	WRI Entity ID	Since many changes were made to school districts, primary users, and buses included in the dataset, new bus IDs and entity IDs were created.	All states

## DISTRICT-SPECIFIC CHANGES

- Bus counts for New York City Public Schools (LEA ID 3620580) were updated to reflect data from a separate FOIL request to NYC Department of Education. This data was only used in the district summary and does not affect counts in the compiled bus-level or state summary sheets in order to prevent double-counting buses, as there was no way to know which buses overlapped with the data from the raw state dataset.

## Compiled bus-level sheet

TYPE OF CHANGE MADE	VARIABLE CHANGED	DESCRIPTION OF ERROR	STATES AFFECTED
Data removed	Buses (rows of sheet)	Some VINs were duplicated in the sheet. Duplicates were removed and only the VIN with the most recent inspection date was kept.	Connecticut, Idaho, Illinois, Indiana, Maryland, Montana, Oregon, Utah, Washington, West Virginia
	Delivery date	Delivery dates erroneously assigned to buses when none were included in raw dataset.	Kentucky
	State District ID	State district IDs assigned to multiple different districts in raw dataset.	North Carolina
	County	Counties assigned to incorrect districts in raw dataset.	Georgia, North Carolina
Unscrambling data	LEA ID, School district or primary user, VIN, State	In some cases, LEA IDs were assigned to incorrect school districts, VINs were assigned to incorrect buses, or school districts and primary users were assigned to incorrect states.	Alaska, Arizona, California, Illinois, Indiana, New Jersey, North Carolina, Oregon, Washington
Ensuring each unique and entity and third party had only one name	School district or primary user, Third party involved	Some entities had multiple names; i.e. "Adair County" and "Adair Co.", "First Student" and First Student Inc."	Connecticut, Illinois, Iowa, Kentucky, Maryland, Missouri, New Jersey, New York, Ohio, Vermont
Correcting or inputting missing data	Missing buses (rows of sheet)	Some raw datasets had buses that were not included in previous versions of this dataset	California, Kentucky, Maine, Minnesota, Nebraska, New Jersey, North Dakota, Vermont
	LEA IDs, Name of school district or primary user, Third party involved	Some data incorrect or scrambled	Connecticut, Florida, Illinois, Iowa, Kentucky, Maine, Minnesota, New Jersey, Oregon
	Does the school district or primary user own the bus?	Some data incorrect or missing	Alabama, Arizona, Idaho, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, North Carolina, North Carolina, North Dakota, Rhode Island, South Carolina, Wyoming
	County	Some data incorrect or missing	Georgia
	ZIP code	Some data incorrect or missing	Rhode Island
	Bus type	Some data incorrect or missing	California, West Virginia
	Shell capacity	Some data incorrect or missing	Georgia

TYPE OF CHANGE MADE	VARIABLE CHANGED	DESCRIPTION OF ERROR	STATES AFFECTED
Correcting or inputting missing data (cont.)	Fuel type	Some data incorrect or missing	Minnesota, Pennsylvania
	Age data (Build date, purchase date)	Some data incorrect or missing	Delaware, Florida, North Dakota
	Date updated or last inspected	Some data incorrect or missing	Kansas, New Jersey, New York, North Dakota, Oregon, South Carolina, Washington, Vermont
Assigning buses and entities new WRI IDs	WRI Bus ID, WRI Entity ID	Since many changes were made to school districts, primary users, and buses included in the dataset, new bus IDs and entity IDs were created.	All states

## STATE-SPECIFIC CHANGES

- Connecticut
- Towns and cities were assumed to third parties, not primary users – moved to “Third party involved” column
- Massachusetts
  - In raw dataset it was unclear if certain municipality and school districts listed as bus owners were separate entities (i.e. “AMHERST TOWN OF” and “AMHERST TOWN OF SCHOOL DEPT”) Criteria established to determine whether a bus should be assigned an LEA ID is as follows:
    - If the municipality and school district had the same Business FID, they were assumed to both represent a public school district, and the matching LEA ID was assigned.
    - If there was a municipality listed without a similar school district listed (i.e. “DARTMOUTH TOWN OF” is present but “DARTMOUTH TOWN OF SCHOOL DEPT” is not), the owner was assumed to be a municipality and no LEA ID was assigned.
  - Municipalities (without LEA IDs) were considered third parties in our dataset, as they may be providing transportation to private schools (see MA General Law Part I, Title XII, Chapter 71, Section 68).
- Nebraska
  - Ensured that only “bus” types from raw dataset were included in dataset
  - Added LEA IDs and names based on NCES GRF in cases where only one LEA existed within the county or zip code provided
- South Dakota
  - Raw dataset included vehicles that were not school buses. Only included buses from raw dataset where makes and models were school buses
- Wisconsin
  - Excluded buses based on manufacturer or type where the vehicle was likely not a school bus. When there was doubt in vehicle manufacturer or type, vehicles were included if they served a school district.

## Compiled district-level sheet

TYPE OF CHANGE MADE	VARIABLE CHANGED	DESCRIPTION OF ERROR	STATES AFFECTED
Data removed	Type "Other (motobuses, cars, vans, etc)"	Entire variable removed: This type only appeared in Texas' raw dataset, and these types were not included in their own count of school buses	Texas
Correcting or inputting missing data	School district or primary user (rows of sheet)	Raw dataset had school districts that were not included in previous versions of this dataset	Texas
	Who owns the buses?	Some data missing or incorrect	Nevada, Tennessee
	Total number of buses	Some data incorrect	Mississippi, Nevada
	Age data (More than 15 years, Unknown)	Some data incorrect	Mississippi
	Date last updated or inspected	Some data incorrect	Mississippi, Texas
Assigning entities new WRI IDs	WRI Entity ID	Since many changes were made to school districts, primary users, and buses included in the dataset, new bus IDs and entity IDs were created.	All states

## Data cleaning and sources

- In Table 3, changed Florida's "Year Variable" to "Build date"
- Updated Table 4
- In Table 5, added "New York City Department of Education" to Source column for New York

## Impact of changes to total bus counts

STATE	TOTAL NUMBER OF BUSES, VERSION 3 (CURRENT)	TOTAL NUMBER OF BUSES, VERSION 2	CHANGE
Alabama	10,482	10,482	No change
Alaska	954	954	No change
Arizona	6,643	6,643	No change
Arkansas	7,016	7,016	No change
California	24,325	19,900	+4,425 buses
Colorado	Unavailable	Unavailable	No change
Connecticut	8,804	8,814	-10 buses
Delaware	1,551	1,551	No change
Florida	17,949	17,949	No change
Georgia	20,125	20,125	No change
Hawaii	Unavailable	Unavailable	No change
Idaho	3,058	3,803	-745 buses
Illinois	21,820	21,915	-95 buses
Indiana	15,666	15,669	-3 buses
Iowa	6,840	6,840	No change

STATE	TOTAL NUMBER OF BUSES, VERSION 3 (CURRENT)	TOTAL NUMBER OF BUSES, VERSION 2	CHANGE
Kansas	4,115	4,115	No change
Kentucky	9,528	9,527	+1 bus
Louisiana	Unavailable	Unavailable	No change
Maine	2,849	1,491	+1,358 buses
Maryland	8,903	8,908	-5 buses
Massachusetts	8,182	8,182	No change
Michigan	16,699	16,699	No change
Minnesota	2,190	2,189	+1 bus
Mississippi	3,818	3,674	+144 buses
Missouri	12,226	12,226	No change
Montana	2,464	2,540	+76 buses
Nebraska	3,429	3,426	+3 buses
Nevada	2,876	2,876	No change
New Hampshire	Unavailable	Unavailable	No change
New Jersey	17,866	17,866	No change
New Mexico	1,963	1,962	+1 bus
New York	46,595	46,595	No change
North Carolina	12,707	12,707	No change
North Dakota	2,067	2,039	+28 buses
Ohio	19,572	19,572	No change
Oklahoma	13,567	Unavailable	+13,567 buses
Oregon	7,480	7,498	+18 buses
Pennsylvania	15,426	15,426	No change
Rhode Island	862	862	No change
South Carolina	5,686	5,686	No change
South Dakota	3,619	2,684	+935 buses
Tennessee	9,065	9,065	No change
Texas	46,308	46,016	+292 buses
Utah	3,288	3,303	-15 buses
Vermont	1,770	1,765	+5 buses
Virginia	16,844	16,844	No change
Washington	10,762	12,628	-1,866 buses
Washington DC	683	683	No change
West Virginia	3,918	3,920	-2 buses
Wisconsin	10,913	11,868	-955 buses
Wyoming	1,828	1,828	No change
<b>Total</b>	<b>475,301</b>	<b>458,331</b>	<b>+16,970 buses</b>