



The Office of Vehicle Safety Compliance (OVSC) of the National Highway Traffic Safety Administration (NHTSA) is issuing this memorandum to announce changes to the NHTSA CAFE Projections Reporting Template (OMB Control No. 2127-0019, NHTSA Form 1474). The first version of the template was released to standardize pre and mid model years reports for the Corporate Average Fuel Economy (CAFE) Program required by 49 CFR 537.7(b) and (c), as well as supplementary information required by 49 CFR 537.8. The projection reporting template organizes the required data in a manner consistent with NHTSA and EPA regulations and simplifies the reporting process by incorporating standardized responses consistent with those provided to EPA. The template collects the relevant data, calculates intermediate and final values in accordance with EPA and NHTSA methodologies, and aggregates all the final values required by NHTSA regulations in a single summary worksheet.

The latest revision to CAFE Projections Reporting Template, version 2.25, was made in the March 2022 CAFE final rule. Version 2.25 included several general improvements made to simplify the use and the effectiveness for manufacturers and addressed and fixed many of the concerns raised by manufacturers. NHTSA modified the CAFE Reporting Template adding filters and sorting functions to help manufacturers connect the data definitions to the location of each of the required data fields in the template. For the information required pursuant to 49 CFR 537.7(b)(2), areas were also included for manufacturers to compare the values the template calculates to their own internally calculated CAFÉ values. Additionally, NHTSA expanded the CAFE Reporting Template to include more of the required information regarding vehicle classification, and eased manufacturers reporting burden by having them report only the data used for each vehicle's qualification pathway ignoring other possible light truck classification information.

On July 12, 2022, NHTSA hosted a public workshop to demonstrate the use of the reporting template in addition to two other credit templates required by 49 CFR Part 536 and 537. Prior to and during the workshop, manufacturers requested changes to the reporting template. NHTSA has created version 2.3 of the template incorporating the requested changes. Version 2.3 of the template is being released on the NHTSA Public Information Center (PIC). A summary of the changes made in Version 2.3 of the Template is shown below in the Table.

Topic	Issue	Change Point
Flex Fuel/F-Factor	We believe that an outdated F-factor may be in use within the template. We believe an F-factor of 0.15 is being used, whereas 0.14 would be appropriate. Can NHTSA please consider the most up to date F-factor in future template iterations?	The formula for FE calculation has been updated based on F-Factor (Fuel consumption factor) after discussion with EPA. F-Factor is 0.14. Added "Yes" and "No" toggle on summary tab for opting to use "F-Factor" for "Flex Fuel" vehicles, use of toggle is explained on data definitions tab.
Test Procedure	Test Procedure Adjustment for cars (doesn't seem right, please check if needs to be updated)	No changes were made to TPA. NHTSA confirmed TPA based on EPA reg 40 CFR 600.510-12
Standards	SAFE rule coefficients are still listed for MY24-26	The standards have been updated with new 2024-2027 standards - updated on supporting tab 2 for a, b, c, d, e, f, g, h values. The min. domestic passenger car standards have been updated with new 2024 - 2027 standards on supporting 2 tab
Redaction	The lack of redaction on the AC tab allows for users to back calculate model type volume.	Redacted credit benefits and column(s) AD, AE and AF in public version to prevent back calculation.
Data Definitions	We believe that the template requests inclusion of information that is not required under the applicable regulations. For example, the fields optional equipment and number of doors. We request that only information required by the regulation be included in the template. Can NHTSA please fully populate within the Data Definitions tab with the specific regulatory citation included for each individual entry?	" Optional equipment " is required according to 49 CFR 537.7(c)(4)(xix) for " number of doors " and " carline class " based on 49 CFR 537.7(c)(4)(xvi)(A)(2), manufacturers are required to provide " Body Style ". " Body Style " is defined in 40 CFR 600.002 as "means a level of commonality in vehicle construction as defined by <u>number of doors</u> and <u>roof treatment</u> (e.g., sedan, convertible, fastback, hatchback) <u>and number of seats</u> (i.e., front, second, or third seat) requiring seat belts pursuant to National Highway Traffic Safety Administration safety regulations in 49 CFR part 571. Station wagons and light trucks are identified as car lines."
BEV	For BEVs, we wish to see consistency with the units used by EPA. Can NHTSA please use the same units and metrics used within EPA's reports?	Formulas have been unhidden so that the equations can be seen by clicking on any (self-populating) cell in the spreadsheet. In addition, the data definition tab has references for each cell that point to the regulatory text where the equations can be found.
Weighted Average	In the Subconfig tab it appears that combined fuel economy is being calculated using a 50/50 weighting as opposed to the 55/45 weighting which is required within the regulations. Can NHTSA please use the weighting required within the regulations and correct the template?	FE Calculation at subconfiguration level has been removed. No calculation is required at subconfiguration level according to 40 CFR § 600.207-12
AC/OC	Like high-efficiency lighting, thermal control technologies also may come in various combinations that may need to be accounted for in the template.	No change was made
AC/OC	Requests that additional columns be added for AC efficiency technologies.	Added 10 columns to AC tabs for DP, IP and LT and updated formula in column AN for "Total Credits Prior to Cap". The columns will reflect the Additional AC Technology Name(s) entered by OEMs in the updated "AC OC & Full-Size PU Truck Tech" tab by entering the name corresponding to each row of AC additional technology information

AC/OC	In the PMY/MMY template, the Summary tab shows 'production volume' as a single value, for each category (DP, IP, LT) for Off Cycle (cells E78-80). How is this number calculated, as some technologies are applied to only certain confs or subconfigurations, and some vehicles will employ multiple technologies on the same car, but each is tracked with its own application rate?	Removed the summing on summary page for AC/OC credits calculation. New version of the template will just have model type PV and FCIV values.
Formatting	As we reviewed the PMY/MMY template, I noticed that there are white cells - I believe these are expected user input or selection, gray cells - I believe these are automated calculations, and yellow (see FP and Target tab columns for subconf index, conf index, base level index) - what does the yellow shading indicate? Is there a guide included that identifies what each cell color means?	The yellow cells appear when a public report is generated and indicate data redaction.
Formatting	Added 100 characters instead of 50 characters for cells in footprint and target tab for electrical vehicles	This has been changed to 100 characters
Footprint and subconfiguration Tab	Add "MFI = Multipoint/Sequential Fuel Injection" to the list of "Fuel System" on Footprint and subconfiguration tab.	MFI has been added to the list of Fuel Systems.
Formatting	Additional formatting changes were requested/or made by our developer to improve the function of the template:	Moved "OC & Full-Size PU Truck Tech." tab before AC Tabs
Formatting		Updated Data definitions tab
Formatting		Updated manufacturer list
Formatting		Updated Tab "AC OC & Full-Size PU Truck Tech" from "OC & Full-Size PU Truck Tech."
Formatting		Updated language at the top of the template

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These changes are reflected in the latest version 2.4 of the template.

S.No.	Sheet/Tab Reference	Changes to the Template with brief description
1	Data Definitions	Updated Data Definitions tab to incorporate the changes to the subsequent tabs.
2	General Info.	Manufacturers not on the current list of manufacturers (new manufacturers or manufacturers with new names) can now select "Other" in the "Manufacturer" dropdown. Once the manufacturer chooses "Other" under "Manufacturer" dropdown menu they will be able to enter "Manufacturer Name" and "Manufacturer Code" in the space provided. The "Manufacturer Name" and "Manufacturer Code" will only pop up once "other" is chosen.
3	Summary	Edited the FE formulas to make template values in grey cells visible only when OEMs enter values in white cells.
4	Summary	Added cells M78, M79, and M80 for OEMs to enter their final Fleet Average FE values with AC/OC benefits to compare with the corresponding values calculated by the template.
5	Footprint and Subconfig. – DP, IP, LT	The space after "4WD" in "Drive System" dropdown was removed in the "Supporting" tab.
6	Footprint and Subconfig. – DP, IP, LT	Users can now select "Gasoline (Mid-grade Unleaded Required)" or "Gasoline (Mid-grade Unleaded Recommended)" in the "Fuel Type" dropdown list.
7	Footprint & SubConfig. - DP, IP and LT	Updated the formula in cell AI9.
8	FE Configuration – DP, IP, LT	Added additional column(s) and updated the formulas to incorporate calculation based on the Utility Factor.
9	FE Configuration – DP, IP, LT	Added an additional column and updated the formulas for OEMs to select Non-PEF and PEF from drop-down list.
10	FE Configuration, FE Base Level and FE Model Type – DP, IP, LT	Added additional columns and automating the FE calculation.
11	FE Configuration and FE Base level – DP, IP LT	<ul style="list-style-type: none"> • Added columns calculating FE based on configuration to the configuration tab. • Added columns calculating FE based on base level to the Base level tab. • Made the City, HWY and Combined FE columns in base level tab and Model Type tab unprotected so that OEMs can edit the FE values if there is some discrepancy.
12	AC OC & Full Size PU Truck Tech.	Added 40 additional rows under Alternative Technology and 5-cycle Technology.
13	Supporting	<ul style="list-style-type: none"> • Added "Other" to the "Manufacturer" list. • Removed the space after "4WD" in "Drive System" list. • Updated conversion factor for hydrogen from 1 to 1.019 to reflect current regulations.
14	Supporting 2	Added "Gasoline (Mid-grade Unleaded Required)" and "Gasoline (Mid-grade Unleaded Recommended)" to the "Conventional Fuel Type" list.

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These changes are reflected in the latest version 2.41 of the template.

S.No.	Sheet/Tab Reference	Changes to the Template with brief description
1	Calculation Tab	Updated Adjustment Factor formulas.
2	Full-Size Pickup truck	Updated the supporting tab to add 10%. 40 CFR 86.1870-12(a)(2) - Full-size pickup trucks that are strong hybrid electric vehicles and that are produced in 2017 through 2021 model years are eligible for a credit of 20 grams/mile. This same credit is available again for those vehicles produced in 2023 and 2024 model years. To receive this credit in a model year, the manufacturer must produce a quantity of strong hybrid electric full-size pickup trucks such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full-size pickup trucks, is not less than 10 percent in that model year. Full-size pickup trucks earning credits under this paragraph (a)(2) may not earn credits based on the production multipliers described in § 86.1866-12(b).
3	Vehicle Classification LT	Updated Formula in column BL for "Qualify as a Full-Size Pickup Truck?"
4	Configuration Tab(s)	Updated from row 360 onwards in column CF.