



U.S. Department
of Transportation
**Office of the
Secretary of
Transportation**

Memorandum

Subject: Application of NEMS for Final Rule Regarding MY 2021-2026
CAFE and CO₂ Standards

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To: Docket Numbers NHTSA-2017-0069 and NHTSA-2018-0067

To develop some inputs (e.g., projections of future fuel prices) to analysis informing decisions regarding final Corporate Average Fuel Economy (CAFE) and CO₂ standards for passenger cars and light trucks produced during model years (MYs) 2021-2026, Volpe Center staff exercised the 2019 version of the National Energy Modeling System (NEMS). NEMS is a modeling system maintained by the Department of Energy's (DOE's) Energy Information Administration (EIA), which uses NEMS to, among other things, produce EIA's Annual Energy Outlook (AEO). Information regarding AEO is available at <https://www.eia.gov/outlooks/aeo/>, and information regarding the availability of NEMS is available at https://www.eia.gov/outlooks/aeo/info_nems_archive.php.

The Volpe Center's application of NEMS for this analysis is discussed in Section VI.D.b.1(b)(1), titled "Macroeconomic assumptions used to analyze economic consequences of the final rule" of the Notice promulgating the above-mentioned standards. As discussed in the Notice, the Center's modifications to EIA's AEO 2019 Reference case are all contained in the "NEMS_SAFE_rule.trnldvx_input.xlsx" NEMS input file accompanying this memorandum. Among the corresponding NEMS output files, the CAFE/CO₂ analysis made use of values in the "NEMS_SAFE_rule.api_output.csv" file also accompanying this memorandum.