Memorandum



Subject: Impact of Offset to Calculated Minimum CAFE Standards for Date: March 27, 2020

Domestic Passenger Cars

From: Kevin Green

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

As discussed in the *Federal Register* notice promulgating final Corporate Average Fuel Economy (CAFE) and CO₂ standards for passenger cars and light trucks produced during model years (MYs) 2021-2026, NHTSA is establishing minimum domestic passenger cars standards (MDPCSs) that are offset from values computed based on the agency's current forecast of manufacturers' average future requirements under the new attribute-based passenger car standards. Section VIII.B.1.b (titled "Separate standards for cars and trucks, and minimum standards for domestic passenger cars") of the notice discusses the basis for and size of these offsets.

Analysis presented throughout the *Federal Register* notice reflects modeling performed without these offsets, as does analysis presented throughout the accompanying Final Regulatory Impact Analysis (FRIA) and Final Environmental Impact Statement (FEIS). To determine whether revising model inputs to reflect these offsets would have changed results, Volpe Center staff repeated the reference case analysis of CAFE standards, changing model inputs such that minimum domestic passenger car standards reflected the offsets. As can be observed in the "impact_of_offset_MDPCS.xlsx" file accompanying this memorandum, this analysis does not show any changes in estimated achieved CAFE levels or regulatory costs.

The offset MDPCSs do increase the quantities of compliance credits projected to be earned by Tesla. However, as discussed in the above-mentioned notice, the CAFE Model does not attempt to simulate credit trading between manufacturers, and because Tesla cannot use these credits, the analysis shows the additional credits earned by Tesla expiring over time.

All model inputs and outputs for this exploration of offset MDPCSs will be available on NHTSA's web site via https://www.nhtsa.gov/corporate-average-fuel-economy/compliance-and-effects-modeling-system, located in the same location as cases included in the sensitivity analysis documented in the FRIA mentioned above.