

## Memorandum

National Highway Traffic Safety Administration

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Memo: Submission to Docket No. NHTSA-2014-0132; Southwest Research Institute (SwRI) engine maps or delta maps used in research supporting Notice of Proposed Rulemaking (NPRM) for NHTSA and EPA's Phase 2 Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles

NHTSA's contractor SwRI received a request from the Union of Concerned Scientists (UCS) to release the engine maps used in research supporting the Phase 2 NPRM. In response, engine maps used in the research where the GT-POWER model simulation and experimental validation (engine testing) were completed entirely with Federal funding are being released in Microsoft Excel files that accompany this memo. Engine maps that were not developed and validated with Federal funding and used in the project are proprietary to their owners and not available for public release. For these maps, the SwRI contractor created delta maps that show the percent difference in fuel flow rate, compared to the proprietary baseline engine fuel map, for each technology or technology combination documented in the research.

Below is an inventory of the five files being released:

Engine	File Type
Ford 3.5 Liter V-6	Fuel maps
Cummins 6.7 Liter 300 HP (base) & 4.5 Liter 256 HP (variant)	Fuel maps
Cummins 6.7 Liter 385 HP (base) & 4.5 Liter 256 HP (variant)	Fuel maps
Ford 6.2 Liter V-8	Delta maps
Detroit 14.8 Liter DD15 (base) and 12.3 Liter variant	Delta maps



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