CAFE Rulemaking Analysis

Overview of Key Statutory Considerations

The purpose of DOT's CAFE Compliance and Effects Modeling System is to produce analyses informing and supporting the rulemaking process to establish new CAFE standards. CAFE rulemaking procedures must satisfy relevant statutory requirements, many of which influence the nature of DOT's supporting analyses. DOT's model has been designed within this context. Key statutory requirements that have shaped aspects of DOT's model are summarized below:

Statutory and Other Considerations	Relevant Aspects of DOT's Analysis
Administrative Procedure Act (APA): Passed in 1946, establishes "rules for rulemaking". - Public informed of proposed rule - Meaningful opportunity for comment	Analyses supporting proposed and final rules cover a meaningful range of regulatory alternatives with clearly-defined standards (mathematical functions). Model, supporting documentation, and sample inputs and outputs readily available to public (to facility public's ability to comment thoroughly).
National Environmental Policy Act (NEPA): Passed in 1970, requires most agencies to evaluate and take comment on environmental impacts of contemplated regulatory alternatives. - reasonable range of regulatory alternatives - range of environmental impacts - dedicated notice and comment process	Analyses supporting draft and final rules produce estimates of broad range of energy and environmental outcomes (e.g., petroleum imports, global temperature rise) under each alternative.

Energy Policy & Conservation Act (EPCA): Passed in 1975, established key structural and process requirements that remain in place for the CAFE program.
 	
- no specific vehicle need meet standard because compliance based on corporate average
- DOT determines stringency
- separate standards for pass. cars (PC) and light trucks (LT)
- maximum feasible level in each model year
  · technological feasibility
  · economic practicability
  · need of the nation to conserve energy
  · impact of other standards
  · setting aside alternative fuel vehicle AFV/FFV and credit provisions
- AFV and FFV mpg based on petrol. displacement
- allows credit carry-forward, carry-back
- allows fines if compliance not achieved
	Analyses supporting proposed and final rules:
	
	- account for individual OEMs' fleets
	- differentiate between PC and LT fleets
	- account for potential changes in LT definition
	- account for each model year explicitly
	- account for fine payment by some OEMs
	- exclude AFVs and credits for determination of maximum feasible standards
	- include AFVs and credits for "real world" analysis

Statutory and Other Considerations	Relevant Aspects of DOT's Analysis
<u>Energy Independence & Security Act (EISA)</u>: Passed in 2007, required structural changes and introduced requirements and flexibilities	
- limits each rulemaking to at most 5 model years at a time - retains EPCA requirements regarding "maximum feasible" standards · year-by-year, separate PC and LT fleets, etc. - fleet must average at least 35 mpg by MY 2020 - requires vehicle attribute-based standards - standards expressed as mathematical functions - PC←→LT transfers of credits allowed (w/ cap) · technological feasibility - OEM←→OEM trade of credits allowed (w/cap) · technological feasibility - extends carry-forward (i.e., "banking") horizon · carry-forward up to 5 model years (was 3) · carry-back up to 3 years (unchanged)	Analyses supporting proposed and final rules: - account for each model year and fleet explicitly - estimate progress toward 35 mpg requirement - account for standards defined in terms of contemplated function(s) and attribute(s) - represent different contemplated functions - estimate effect of PC←→LT credit transfers - enable future accounting for credit trades
<u>EOP/OMB Requirements</u> (E.O. 12866 and Circular A-4): EOP/OMB requirements regarding analyses supporting agency rulemakings - evaluate costs and benefits - consider maximization of net benefits - sensitivity analysis - uncertainty analysis - consider "what market would do anyway?"	- monetize costs and benefits as fully as practical - estimate stringencies that maximize net benefits - estimate sensitivity of results to key inputs *(currently, discrete-case sensitivity analysis)* - estimate uncertainty of key results - *(currently, probabilistic uncertainty analysis)* - allow analysis with market-drive mpg increases in baseline (and contemplated standards)
<u>Two Key Court Decisions</u> *Competitive Enterprise Institute v. NHTSA*: 1990 DC Circuit ruling upholding NHTSA's consideration of safety when establishing CAFE standards	- estimate safety impacts *(currently, avoided or additional fatalities)*
Center for Biological Diversity v. NHTSA: 2007 9th Circuit ruling - upholding maximization of net benefits - upholding agency's use of CAFE model - requiring agency to prepare EIS under NEPA - requiring agency to ascribe economic value to avoided CO_2	- continue use of CAFE model - produce results supporting preparation of EIS - place dollar value on avoided CO_2 - place dollar values other impacts of uncertain value (e.g., avoided CH_4, N_2O)