

Executive Summary

Table 1 EPA's Estimated 2017-2025 Model Year Lifetime Discounted Costs, Benefits, and Net Benefits assuming the 3% discount rate SCC Value^{a,b,c,d} (Billions of 2010 dollars)

Lifetime Present Value ^c – 3% Discount Rate	
Program Costs	\$150
Fuel Savings	\$475
Benefits	\$126
Net Benefits ^d	\$451
Annualized Value ^e – 3% Discount Rate	
Annualized costs	\$6.49
Annualized fuel savings	\$20.5
Annualized benefits	\$5.46
Net benefits	\$19.5
Lifetime Present Value ^c – 7% Discount Rate	
Program Costs	\$144
Fuel Savings	\$364
Benefits	\$106
Net Benefits ^d	\$326
Annualized Value ^e – 7% Discount Rate	
Annualized costs	\$10.8
Annualized fuel savings	\$27.3
Annualized benefits	\$7.96
Net benefits	\$24.4

Notes:

^a The agencies estimated the benefits associated with four different values of a one ton CO₂ reduction (model average at 2.5% discount rate, 3%, and 5%; 95th percentile at 3%), which each increase over time. For the purposes of this overview presentation of estimated costs and benefits, however, we are showing the benefits associated with the marginal value deemed to be central by the interagency working group on this topic: the model average at 3% discount rate, in 2010 dollars. Section III.H provides a complete list of values for the 4 estimates.

^b Note that net present value of reduced GHG emissions is calculated differently than other benefits. The same discount rate used to discount the value of damages from future emissions (SCC at 5, 3, and 2.5 percent) is used to calculate net present value of SCC for internal consistency. Refer to Section III.H for more detail.

^c Projected results using 2008 based fleet projection analysis.

^d Present value is the total, aggregated amount that a series of monetized costs or benefits that occur over time is worth in a given year. For this analysis, lifetime present values are calculated for the first year of each model year for MYs 2017-2025 (in year 2010 dollar terms). The lifetime present values shown here are the present values of each MY in its first year summed across MYs.

^e Net benefits reflect the fuel savings plus benefits minus costs.

^f The annualized value is the constant annual value through a given time period (the lifetime of each MY in this analysis) whose summed present value equals the present value from which it was derived. Annualized SCC values are calculated using the same rate as that used to determine the SCC value, while all other costs and benefits are annualized at either 3% or 7%.

This Regulatory Impact Analysis (RIA) contains supporting documentation to the EPA rulemaking. NHTSA has prepared its own RIA in support of its CAFE standards (see