

APPENDIX B

Energy, Air Quality, and Climate Modeling Data

Appendix B-1

ENERGY MODELING DATA

This appendix accompanies Sections 3.2 and 4.2 of the Final Environmental Impact Statement (FEIS) and presents fuel consumption results from two additional scenarios that NHTSA ran in the Volpe model. As is the case with Reference Case and High Scenario results presented in Sections 3.2 and 4.2, fuel consumption in the Mid-1 and Mid-2 Scenarios encompasses both gasoline and diesel. Like the High Scenario, the Mid-1 and Mid-2 Scenarios use the fuel prices drawn from the High Price Case in the AEO 2008. Results from the Mid-1 and Mid-2 Scenarios fall between those from the Reference Case and High Scenario. Tables B1-1 through B1-4 correspond to Section 3.2 and show the direct effects on fuel consumption of proposed CAFE standards. Tables B1-5 through B1-8 correspond to Section 4.2 and show the cumulative fuel consumption of the vehicle fleet from the onset of the proposed standards.

Table B1-1							
Mid-1 Scenario Passenger Car Annual Fuel Consumption and Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2015							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Calendar Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Fuel Consumption							
2020	62.1	59.5	59.2	58.8	58.5	57.9	54.5
2030	71.1	66.1	65.5	64.9	64.5	63.4	58.0
2040	81.4	75.4	74.8	74.1	73.6	72.4	66.0
2050	93.2	86.4	85.7	84.9	84.2	82.9	75.6
2060	106.2	98.3	97.5	96.7	95.9	94.4	86.1
Fuel Savings from No Action							
2020	--	2.6	2.9	3.3	3.6	4.3	7.7
2030	--	5.0	5.6	6.1	6.6	7.6	13.1
2040	--	6.0	6.6	7.3	7.9	9.0	15.4
2050	--	6.9	7.6	8.4	9.0	10.3	17.6
2060 <i>a/</i>	--	7.8	8.6	9.5	10.2	11.8	20.1

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Table B1-2							
Mid-1 Scenario Light Truck Annual Fuel Consumption and Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2015							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Calendar Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Fuel Consumption							
2020	77.0	74.1	73.8	73.5	73.2	72.5	69.2
2030	84.3	78.5	77.9	77.4	77.0	75.8	69.8
2040	95.8	88.5	87.8	87.1	86.6	85.2	77.8
2050	109.4	100.9	100.0	99.2	98.7	97.0	88.4
2060	124.6	114.9	113.9	113.0	112.4	110.5	100.6
Fuel Savings from No Action							
2020	--	2.8	3.2	3.5	3.8	4.4	7.8
2030	--	5.7	6.3	6.9	7.3	8.4	14.4
2040	--	7.2	8.0	8.7	9.2	10.6	18.0
2050	--	8.5	9.3	10.1	10.7	12.3	21.0
2060 <i>a/</i>	--	9.7	10.7	11.6	12.2	14.1	24.0

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Table B1-3							
Mid-2 Scenario Passenger Car Annual Fuel Consumption and Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2015							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Calendar Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Fuel Consumption							
2020	62.1	59.4	59.2	58.9	58.6	58.1	54.5
2030	71.1	65.9	65.5	65.1	64.7	63.9	58.0
2040	81.4	75.2	74.8	74.3	73.9	73.0	66.0
2050	93.2	86.2	85.7	85.1	84.6	83.6	75.6
2060	106.2	98.1	97.5	96.9	96.3	95.2	86.1
Fuel Savings from No Action							
2020	--	2.7	2.9	3.2	3.5	4.0	7.7
2030	--	5.2	5.6	6.0	6.4	7.1	13.1
2040	--	6.2	6.6	7.1	7.6	8.4	15.4
2050	--	7.1	7.6	8.1	8.7	9.7	17.6
2060 <i>a/</i>	--	8.1	8.6	9.3	9.9	11.0	20.1

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Table B1-4							
Mid-2 Scenario Light Truck Annual Fuel Consumption and Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2015							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Calendar Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Fuel Consumption							
2020	77.0	75.1	74.6	74.0	73.6	72.7	69.2
2030	84.3	80.9	79.9	78.7	77.9	76.1	69.8
2040	95.8	91.6	90.4	88.8	87.8	85.6	77.8
2050	109.4	104.6	103.1	101.3	100.1	97.5	88.4
2060	124.6	119.1	117.4	115.4	114.0	111.0	100.6
Fuel Savings from No Action							
2020	--	1.9	2.4	3.0	3.4	4.3	7.8
2030	--	3.3	4.3	5.5	6.3	8.1	14.4
2040	--	4.1	5.4	6.9	7.9	10.2	18.0
2050	--	4.8	6.3	8.1	9.2	11.9	21.0
2060 <i>a/</i>	--	5.5	7.2	9.2	10.6	13.6	24.0

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Table B1-5							
Mid-1 Scenario Passenger Car Cumulative Annual Fuel Consumption and Cumulative Fuel Savings (billion gallons)							
Calendar Year	Alternative CAFE Standards for Model Years 2011-2020						
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Cumulative Fuel Consumption							
2010-2020	652.7	638.0	635.8	633.9	631.9	628.1	611.5
2010-2030	1,322.1	1,224.8	1,212.9	1,207.1	1,200.8	1,186.6	1,142.4
2010-2040	2,088.5	1,861.5	1,834.5	1,824.6	1,813.1	1,785.3	1,716.4
2010-2050	2,966.7	2,587.2	2,542.4	2,527.8	2,510.4	2,466.8	2,371.1
2010-2060	3,970.2	3,416.2	3,351.2	3,331.3	3,307.2	3,245.5	3,119.1
Cumulative Fuel Savings from No Action							
2010-2020	--	14.7	16.9	18.8	20.8	24.6	41.2
2010-2030	--	97.3	109.2	115.0	121.4	135.5	179.7
2010-2040	--	227.0	254.0	264.0	275.5	303.3	372.1
2010-2050	--	379.6	424.3	438.9	456.3	499.9	595.6
2010-2060 a/	--	554.0	619.0	638.9	663.1	724.7	851.1
a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.							

Table B1-6							
Mid-1 Scenario Light Truck Cumulative Annual Fuel Consumption and Cumulative Fuel Savings (billion gallons)							
Calendar Year	Alternative CAFE Standards for Model Years 2011-2020						
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Cumulative Fuel Consumption							
2010-2020	845.9	828.4	826.3	824.5	822.9	819.3	803.9
2010-2030	1,649.4	1,517.8	1,508.0	1,499.1	1,492.9	1,476.1	1,426.6
2010-2040	2,553.1	2,232.6	2,211.6	2,192.2	2,179.4	2,143.2	2,053.5
2010-2050	3,584.1	3,031.6	2,996.9	2,964.7	2,944.3	2,884.5	2,748.8
2010-2060	4,760.9	3,939.3	3,888.9	3,842.0	3,812.6	3,725.7	3,537.4
Cumulative Fuel Savings from No Action							
2010-2020	--	17.5	19.7	21.5	23.1	26.6	42.1
2010-2030	--	131.6	141.4	150.2	156.5	173.2	222.7
2010-2040	--	320.5	341.5	360.9	373.7	409.9	499.6
2010-2050	--	552.5	587.2	619.4	639.8	699.6	835.3
2010-2060 a/	--	821.5	871.9	918.9	948.2	1,035.1	1,223.4
a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.							

Table B1-7							
Mid-2 Scenario Passenger Car Cumulative Annual Fuel Consumption and Cumulative Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2020							
Calendar Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Cumulative Fuel Consumption							
2010-2020	652.7	637.3	635.8	634.1	632.3	629.1	611.5
2010-2030	1,322.1	1,222.0	1,215.1	1,208.7	1,203.0	1,189.9	1,142.4
2010-2040	2,088.5	1,855.7	1,841.1	1,828.4	1,818.1	1,791.1	1,716.4
2010-2050	2,966.7	2,577.9	2,554.1	2,534.1	2,518.6	2,475.4	2,371.1
2010-2060	3,970.2	3,403.0	3,368.7	3,340.4	3,318.9	3,257.2	3,119.1
Cumulative Fuel Savings from No Action							
2010-2020	--	15.4	16.9	18.6	20.4	23.6	41.2
2010-2030	--	100.1	107.0	113.4	119.1	132.2	179.7
2010-2040	--	232.8	247.5	260.2	270.5	297.4	372.1
2010-2050	--	388.8	412.7	432.7	448.2	491.3	595.6
2010-2060 <u>a/</u>	--	567.2	601.5	629.8	651.3	713.0	851.1

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Table B1-8							
Mid-2 Scenario Light Truck Cumulative Annual Fuel Consumption and Cumulative Fuel Savings (billion gallons)							
Alternative CAFE Standards for Model Years 2011-2020							
Calendar Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Cost Equal Total Benefit	Technology Exhaustion
Cumulative Fuel Consumption							
2010-2020	845.9	831.8	829.4	826.7	824.4	819.9	803.9
2010-2030	1,649.4	1,550.2	1,535.3	1,518.0	1,505.6	1,480.3	1,426.6
2010-2040	2,553.1	2,313.0	2,278.4	2,238.1	2,210.4	2,152.8	2,053.5
2010-2050	3,584.1	3,170.7	3,112.0	3,043.9	2,997.5	2,900.8	2,748.8
2010-2060	4,760.9	4,146.4	4,060.0	3,959.7	3,891.7	3,749.6	3,537.4
Cumulative Fuel Savings from No Action							
2010-2020	--	14.1	16.5	19.3	21.6	26.0	42.1
2010-2030	--	99.1	114.1	131.4	143.8	169.1	222.7
2010-2040	--	240.1	274.8	315.0	342.7	400.3	499.6
2010-2050	--	413.4	472.1	540.2	586.6	683.3	835.3
2010-2060 <u>a/</u>	--	614.5	700.9	801.2	869.2	1,011.2	1,223.4

a/ Uncertainties in the growth of VMT and number of vehicles in operation make forecasts past 2060 uncertain.

Appendix B-2

AIR QUALITY MODELING DATA

This appendix accompanies Sections 3.3 and 4.3 of the Final Environmental Impact Statement (FEIS) and presents the results of the air quality analysis for individual nonattainment areas. Each table provides the estimated reduction in emissions for one pollutant and calendar year of analysis for each nonattainment area by alternative. In each table, the emissions changes are presented for the proposed model year (MY) 2011-2015 CAFE Standards, and also for the cumulative impacts of the proposed MY 2011-2015 standards and the reasonably foreseeable MY 2016-2020 standards. The tables for the Reference Case are presented first, and then the tables for the High Scenario. Following these tables, national-level emissions results for the Mid-1 and Mid-2 Scenarios are presented.

**Table B2-1
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.07	0.67	0.00	0.00	0.00	0.04	0.05	0.07	0.67
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.07	0.00	0.00	0.00	0.00	0.01	0.01	0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Atlanta, GA	x	x	100	100	0.00	0.02	-0.01	0.21	0.26	0.39	3.54	0.00	0.02	-0.01	0.21	0.26	0.39	3.54
Baltimore, MD	x	x	100	100	0.00	0.01	0.00	0.09	0.11	0.16	1.47	0.00	0.01	0.00	0.09	0.11	0.16	1.47
Baton Rouge, LA	x	-	100	-	0.00	-0.15	-0.17	-0.19	-0.21	-0.27	-1.44	0.00	-0.15	-0.17	-0.19	-0.21	-0.27	-1.44
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.30	-0.34	-0.42	-0.46	-0.60	-3.38	0.00	-0.30	-0.34	-0.42	-0.46	-0.60	-3.38
Birmingham, AL	-	x	-	100	0.00	0.00	0.00	0.03	0.04	0.06	0.54	0.00	0.00	0.00	0.03	0.04	0.06	0.54
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.01	-0.01	0.14	0.17	0.26	2.40	0.00	0.01	-0.01	0.14	0.17	0.26	2.40
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.32	0.00	0.00	0.00	0.02	0.02	0.04	0.32
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.00	0.00	0.03	0.04	0.06	0.58	0.00	0.00	0.00	0.03	0.04	0.06	0.58
Canton-Massillon, OH	-	x	-	100	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.07	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.07
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.15	0.00	0.00	0.00	0.01	0.01	0.02	0.15
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.00	0.00	0.06	0.07	0.10	0.93	0.00	0.00	0.00	0.06	0.07	0.10	0.93
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.28	0.00	0.00	0.00	0.02	0.02	0.03	0.28
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.20	-0.25	-0.10	-0.08	-0.05	1.04	0.00	-0.21	-0.26	-0.10	-0.08	-0.05	1.04
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.00	0.00	0.06	0.07	0.11	0.95	0.00	0.00	0.00	0.06	0.07	0.11	0.95
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.09
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.01	0.00	0.08	0.10	0.15	1.37	0.00	0.01	0.00	0.08	0.10	0.15	1.37
Columbus, OH	x	x	100	100	0.00	0.00	0.00	0.05	0.06	0.10	0.89	0.00	0.00	0.00	0.05	0.06	0.10	0.89
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.02	-0.01	0.21	0.26	0.40	3.60	0.00	0.02	-0.01	0.21	0.26	0.40	3.60
Dayton-Springfield, OH	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.05	0.42	0.00	0.00	0.00	0.02	0.03	0.05	0.42
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.02	-0.03	0.06	0.08	0.13	1.37	0.00	-0.02	-0.03	0.06	0.08	0.13	1.37
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.02	-0.04	0.11	0.14	0.22	2.19	0.00	-0.02	-0.04	0.11	0.14	0.22	2.19
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.18	0.00	0.00	0.00	0.01	0.01	0.02	0.18
Greater Connecticut, CT	x	-	100	-	0.00	0.00	0.00	0.05	0.07	0.10	0.91	0.00	0.00	0.00	0.05	0.07	0.10	0.91
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.05	0.41	0.00	0.00	0.00	0.02	0.03	0.05	0.41
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.04	0.37	0.00	0.00	0.00	0.02	0.03	0.04	0.37

**Table B2-1
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-0.61	-0.70	-0.72	-0.78	-0.97	-4.70	0.00	-0.61	-0.70	-0.73	-0.79	-0.98	-4.71
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.06	-0.07	-0.07	-0.08	-0.10	-0.48	0.00	-0.06	-0.07	-0.07	-0.08	-0.10	-0.48
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Indianapolis, IN	-	x	-	100	0.00	0.00	0.00	0.05	0.06	0.09	0.83	0.00	0.00	0.00	0.05	0.06	0.09	0.83
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.08	0.00	0.00	0.00	0.01	0.01	0.01	0.08
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.07	0.00	0.00	0.00	0.01	0.01	0.01	0.07
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Knoxville, TN	x	x	100	100	0.00	0.00	0.00	0.03	0.04	0.06	0.56	0.00	0.00	0.00	0.03	0.04	0.06	0.56
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.22	0.00	0.00	0.00	0.01	0.02	0.02	0.22
Las Vegas, NV	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.08	0.73	0.00	0.00	0.00	0.04	0.05	0.08	0.73
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.30	-0.39	-0.02	0.03	0.16	3.67	0.00	-0.30	-0.39	-0.02	0.03	0.16	3.67
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.04	0.38	0.00	0.00	0.00	0.02	0.03	0.04	0.38
Louisville, KY-IN	-	x	-	100	0.00	0.00	0.00	0.03	0.04	0.06	0.58	0.00	0.00	0.00	0.03	0.04	0.06	0.58
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.05
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.21	0.00	0.00	0.00	0.01	0.02	0.02	0.21
Memphis, TN-AR	x	-	100	-	0.00	-0.05	-0.06	-0.04	-0.04	-0.04	-0.06	0.00	-0.05	-0.06	-0.04	-0.04	-0.04	-0.06
Milwaukee-Racine, WI	x	-	100	-	0.00	0.00	0.00	0.05	0.07	0.10	0.91	0.00	0.00	0.00	0.05	0.07	0.10	0.91
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.05	-0.12	0.32	0.41	0.65	6.46	0.00	-0.05	-0.12	0.32	0.41	0.65	6.46
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.08
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-0.30	-0.36	-0.24	-0.24	-0.26	-0.22	0.00	-0.31	-0.37	-0.24	-0.24	-0.26	-0.22
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.01	-0.01	0.12	0.15	0.22	2.03	0.00	0.01	-0.01	0.12	0.15	0.22	2.03
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.00	0.00	0.06	0.07	0.11	1.01	0.00	0.00	0.00	0.06	0.07	0.11	1.01
Poughkeepsie, NY	x	x	100	100	0.00	0.00	0.00	0.04	0.05	0.07	0.66	0.00	0.00	0.00	0.04	0.05	0.07	0.66

**Table B2-1
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.48	0.00	0.00	0.00	0.03	0.03	0.05	0.48
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.19	0.00	0.00	0.00	0.01	0.01	0.02	0.19
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.04	0.38	0.00	0.00	0.00	0.02	0.03	0.04	0.38
Rochester, NY	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.07	0.67	0.00	0.00	0.00	0.04	0.05	0.07	0.67
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Sacramento Metro, CA	x	-	50	-	0.00	0.00	0.00	0.07	0.08	0.12	1.12	0.00	0.00	0.00	0.07	0.08	0.12	1.12
San Diego, CA	x	-	100	-	0.00	0.01	0.00	0.09	0.11	0.17	1.57	0.00	0.01	0.00	0.09	0.11	0.17	1.57
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.16	-0.21	-0.05	-0.03	0.01	1.32	0.00	-0.16	-0.21	-0.05	-0.03	0.01	1.32
San Joaquin Valley, CA	x	x	50	100	0.00	-0.02	-0.04	0.09	0.12	0.19	1.93	0.00	-0.02	-0.04	0.09	0.12	0.19	1.93
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Springfield (Western MA), MA	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.48	0.00	0.00	0.00	0.03	0.03	0.05	0.48
St. Louis, MO-IL	x	x	100	100	0.00	-0.08	-0.10	-0.02	-0.01	0.01	0.61	0.00	-0.08	-0.10	-0.02	-0.01	0.01	0.60
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.01	-0.01	0.00	0.00	0.00	-0.01	0.00	-0.01	-0.01	0.00	0.00	0.00	-0.01
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.32	0.00	0.00	0.00	0.02	0.02	0.03	0.32
Washington, DC-MD-VA	x	x	100	100	0.00	0.01	-0.01	0.15	0.18	0.28	2.52	0.00	0.01	-0.01	0.15	0.18	0.28	2.52
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.09
York, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.20	0.00	0.00	0.00	0.01	0.01	0.02	0.20

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See Section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-2
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.04	0.03	0.12	0.14	0.12	1.22	0.00	0.09	0.08	0.18	0.20	0.19	1.40
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.01	0.02	0.02	0.02	0.15
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.01	0.02	0.02	0.02	0.15
Atlanta, GA	x	x	100	100	0.00	0.21	0.18	0.68	0.79	0.70	7.05	0.00	0.50	0.48	1.02	1.16	1.10	8.10
Baltimore, MD	x	x	100	100	0.00	0.08	0.07	0.26	0.30	0.26	2.68	0.00	0.19	0.18	0.39	0.44	0.42	3.07
Baton Rouge, LA	x	-	100	-	0.00	-0.44	-0.48	-0.55	-0.62	-0.77	-3.86	0.00	-1.02	-1.08	-1.17	-1.26	-1.43	-4.41
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.90	-1.00	-1.19	-1.35	-1.64	-8.66	0.00	-2.11	-2.24	-2.48	-2.68	-3.01	-9.91
Birmingham, AL	-	x	-	100	0.00	0.03	0.02	0.09	0.11	0.09	0.96	0.00	0.07	0.07	0.14	0.16	0.15	1.10
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.12	0.11	0.40	0.47	0.42	4.19	0.00	0.30	0.29	0.61	0.69	0.65	4.82
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.02	0.01	0.06	0.07	0.06	0.59	0.00	0.04	0.04	0.09	0.10	0.09	0.67
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.03	0.03	0.10	0.11	0.10	1.00	0.00	0.07	0.07	0.15	0.17	0.16	1.15
Canton-Massillon, OH	-	x	-	100	0.00	-0.05	-0.06	-0.05	-0.06	-0.08	-0.30	0.00	-0.12	-0.13	-0.12	-0.13	-0.15	-0.34
Charleston, WV	-	x	-	100	0.00	0.01	0.01	0.03	0.03	0.03	0.26	0.00	0.02	0.02	0.04	0.04	0.04	0.30
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.05	0.05	0.18	0.20	0.18	1.83	0.00	0.13	0.13	0.26	0.30	0.28	2.10
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.01	0.01	0.05	0.05	0.05	0.49	0.00	0.03	0.03	0.07	0.08	0.08	0.56
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.47	-0.56	-0.26	-0.27	-0.56	0.06	0.00	-1.08	-1.19	-0.88	-0.90	-1.20	0.10
Chico, CA	x	-	100	-	0.00	0.01	0.00	0.02	0.02	0.02	0.18	0.00	0.01	0.01	0.03	0.03	0.03	0.21
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.05	0.04	0.16	0.19	0.17	1.71	0.00	0.12	0.12	0.25	0.28	0.26	1.96
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.02	0.15	0.00	0.01	0.01	0.02	0.03	0.02	0.18
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.07	0.06	0.23	0.27	0.24	2.38	0.00	0.17	0.16	0.35	0.39	0.37	2.74
Columbus, OH	x	x	100	100	0.00	0.05	0.04	0.16	0.18	0.16	1.65	0.00	0.12	0.11	0.24	0.27	0.26	1.89
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.20	0.18	0.67	0.78	0.69	6.99	0.00	0.50	0.48	1.01	1.15	1.09	8.03
Dayton-Springfield, OH	-	x	-	100	0.00	0.02	0.02	0.07	0.08	0.07	0.72	0.00	0.05	0.05	0.11	0.12	0.11	0.83
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.02	0.00	0.20	0.23	0.17	2.38	0.00	0.04	0.03	0.24	0.29	0.23	2.74
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.05	0.02	0.32	0.37	0.29	3.62	0.00	0.12	0.10	0.42	0.49	0.41	4.16
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.01	0.01	0.03	0.04	0.03	0.32	0.00	0.02	0.02	0.05	0.05	0.05	0.37
Greater Connecticut, CT	x	-	100	-	0.00	0.05	0.04	0.16	0.18	0.16	1.64	0.00	0.12	0.11	0.24	0.27	0.25	1.88
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.01	0.01	0.01	0.04
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.02	0.02	0.07	0.08	0.07	0.74	0.00	0.05	0.05	0.11	0.12	0.12	0.85
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.02	0.02	0.06	0.07	0.07	0.66	0.00	0.05	0.05	0.10	0.11	0.10	0.76

**Table B2-2
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.01	0.00	0.02	0.02	0.02	0.18	0.00	0.01	0.01	0.03	0.03	0.03	0.20
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1.73	-1.94	-2.05	-2.30	-2.96	-13.64	0.00	-4.03	-4.30	-4.48	-4.81	-5.53	-15.58
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.17	-0.19	-0.20	-0.23	-0.29	-1.39	0.00	-0.39	-0.42	-0.44	-0.48	-0.54	-1.59
Imperial Co., CA	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.02	0.23	0.00	0.02	0.02	0.03	0.04	0.04	0.26
Indianapolis, IN	-	x	-	100	0.00	0.04	0.04	0.15	0.17	0.15	1.53	0.00	0.11	0.11	0.22	0.25	0.24	1.76
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.01	0.02	0.02	0.02	0.15
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.01	0.02	0.02	0.02	0.15
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.00	0.01	0.01	0.02	0.02	0.02	0.12
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.12	0.00	0.01	0.01	0.02	0.02	0.02	0.14
Knoxville, TN	x	x	100	100	0.00	0.03	0.03	0.10	0.11	0.10	1.03	0.00	0.07	0.07	0.15	0.17	0.16	1.18
Lancaster, PA	-	x	-	100	0.00	0.01	0.01	0.04	0.04	0.04	0.39	0.00	0.03	0.03	0.06	0.06	0.06	0.45
Las Vegas, NV	x	-	100	-	0.00	0.04	0.04	0.14	0.17	0.15	1.50	0.00	0.11	0.10	0.22	0.25	0.23	1.73
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.59	-0.75	0.01	0.06	-0.44	4.29	0.00	-1.34	-1.51	-0.73	-0.67	-1.17	4.98
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.02	0.02	0.07	0.08	0.07	0.72	0.00	0.05	0.05	0.10	0.12	0.11	0.83
Louisville, KY-IN	-	x	-	100	0.00	0.03	0.03	0.10	0.11	0.10	1.01	0.00	0.07	0.07	0.15	0.17	0.16	1.16
Macon, GA	-	x	-	100	0.00	0.01	0.00	0.02	0.02	0.02	0.19	0.00	0.01	0.01	0.03	0.03	0.03	0.22
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.01	0.01	0.01	0.10	0.00	0.01	0.01	0.01	0.02	0.01	0.11
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.00	0.01	0.01	0.02	0.02	0.02	0.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.01	0.01	0.04	0.05	0.04	0.42	0.00	0.03	0.03	0.06	0.07	0.07	0.49
Memphis, TN-AR	x	-	100	-	0.00	-0.12	-0.14	-0.11	-0.12	-0.18	-0.55	0.00	-0.28	-0.30	-0.28	-0.29	-0.35	-0.62
Milwaukee-Racine, WI	x	-	100	-	0.00	0.05	0.04	0.15	0.18	0.16	1.60	0.00	0.11	0.11	0.23	0.26	0.25	1.83
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.10	0.00	0.01	0.01	0.01	0.02	0.01	0.11
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.13	0.05	0.92	1.08	0.83	10.62	0.00	0.33	0.26	1.20	1.40	1.18	12.21
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.01	0.14	0.00	0.01	0.01	0.02	0.02	0.02	0.16
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-0.77	-0.89	-0.67	-0.74	-1.13	-3.04	0.00	-1.79	-1.94	-1.73	-1.82	-2.23	-3.45
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.12	0.10	0.39	0.46	0.40	4.09	0.00	0.29	0.28	0.59	0.67	0.64	4.70
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.05	0.04	0.17	0.19	0.17	1.72	0.00	0.12	0.12	0.25	0.28	0.27	1.98
Poughkeepsie, NY	x	x	100	100	0.00	0.04	0.03	0.12	0.13	0.12	1.21	0.00	0.09	0.08	0.18	0.20	0.19	1.39

**Table B2-2
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.02	0.02	0.08	0.09	0.08	0.83	0.00	0.06	0.06	0.12	0.14	0.13	0.96
Reading, PA	-	x	-	100	0.00	0.01	0.01	0.03	0.04	0.04	0.36	0.00	0.03	0.02	0.05	0.06	0.06	0.41
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.02	0.02	0.08	0.09	0.08	0.84	0.00	0.06	0.06	0.12	0.14	0.13	0.97
Rochester, NY	x	-	100	-	0.00	0.03	0.03	0.11	0.13	0.12	1.18	0.00	0.08	0.08	0.17	0.19	0.18	1.35
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.10	0.00	0.01	0.01	0.01	0.02	0.02	0.12
Sacramento Metro, CA	x	-	50	-	0.00	0.06	0.05	0.20	0.24	0.21	2.13	0.00	0.15	0.15	0.31	0.35	0.33	2.44
San Diego, CA	x	-	100	-	0.00	0.08	0.07	0.26	0.31	0.27	2.74	0.00	0.19	0.19	0.40	0.45	0.43	3.15
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.36	-0.44	-0.14	-0.14	-0.39	0.76	0.00	-0.83	-0.91	-0.61	-0.61	-0.86	0.90
San Joaquin Valley, CA	x	x	50	100	0.00	0.04	0.02	0.31	0.37	0.28	3.60	0.00	0.11	0.09	0.40	0.47	0.40	4.15
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.00	0.01	0.01	0.02	0.02	0.02	0.13
Springfield (Western MA), MA	x	-	100	-	0.00	0.02	0.02	0.08	0.10	0.08	0.85	0.00	0.06	0.06	0.12	0.14	0.13	0.98
St. Louis, MO-IL	x	x	100	100	0.00	-0.17	-0.20	-0.07	-0.07	-0.18	0.34	0.00	-0.38	-0.42	-0.28	-0.28	-0.40	0.40
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.01	-0.02	-0.01	-0.01	-0.02	-0.07	0.00	-0.03	-0.03	-0.03	-0.03	-0.04	-0.08
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	0.01	0.05	0.06	0.05	0.56	0.00	0.04	0.03	0.08	0.09	0.08	0.64
Washington, DC-MD-VA	x	x	100	100	0.00	0.14	0.12	0.45	0.52	0.46	4.63	0.00	0.33	0.32	0.67	0.76	0.72	5.33
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.01	0.15	0.00	0.01	0.01	0.02	0.02	0.02	0.17
York, PA	-	x	-	100	0.00	0.01	0.01	0.04	0.04	0.04	0.38	0.00	0.03	0.03	0.06	0.06	0.06	0.44

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See Section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-3
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.07	0.07	0.14	0.17	0.11	0.73	0.00	0.25	0.26	0.34	0.38	0.33	1.31
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.04	0.14
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.04	0.15
Atlanta, GA	x	x	100	100	0.00	0.45	0.46	0.92	1.06	0.69	4.64	0.00	1.60	1.66	2.17	2.41	2.10	8.40
Baltimore, MD	x	x	100	100	0.00	0.15	0.16	0.32	0.36	0.24	1.59	0.00	0.55	0.57	0.74	0.83	0.72	2.88
Baton Rouge, LA	x	-	100	-	0.00	-0.68	-0.74	-0.87	-0.99	-1.22	-6.35	0.00	-2.22	-2.33	-2.51	-2.69	-2.96	-7.75
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.41	-1.55	-1.86	-2.11	-2.54	-13.34	0.00	-4.66	-4.88	-5.32	-5.69	-6.21	-16.61
Birmingham, AL	-	x	-	100	0.00	0.05	0.06	0.11	0.13	0.08	0.56	0.00	0.19	0.20	0.26	0.29	0.25	1.01
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.23	0.24	0.48	0.55	0.36	2.40	0.00	0.83	0.86	1.13	1.25	1.09	4.35
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.03	0.03	0.07	0.08	0.05	0.35	0.00	0.12	0.12	0.16	0.18	0.16	0.63
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.05	0.06	0.11	0.13	0.09	0.57	0.00	0.20	0.20	0.27	0.30	0.26	1.03
Canton-Massillon, OH	-	x	-	100	0.00	-0.08	-0.09	-0.09	-0.10	-0.14	-0.72	0.00	-0.25	-0.26	-0.28	-0.29	-0.33	-0.81
Charleston, WV	-	x	-	100	0.00	0.01	0.01	0.03	0.03	0.02	0.15	0.00	0.05	0.05	0.07	0.08	0.07	0.27
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.11	0.12	0.23	0.27	0.18	1.17	0.00	0.40	0.42	0.55	0.61	0.53	2.12
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.03	0.03	0.06	0.06	0.04	0.28	0.00	0.10	0.10	0.13	0.15	0.13	0.51
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.66	-0.75	-0.60	-0.66	-1.27	-5.88	0.00	-2.07	-2.18	-2.08	-2.16	-2.78	-5.17
Chico, CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.02	0.11	0.00	0.04	0.04	0.05	0.06	0.05	0.19
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.10	0.10	0.20	0.23	0.15	1.01	0.00	0.35	0.36	0.47	0.52	0.46	1.83
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	0.09	0.00	0.03	0.03	0.04	0.04	0.04	0.15
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.13	0.13	0.27	0.31	0.20	1.35	0.00	0.47	0.48	0.63	0.70	0.61	2.44
Columbus, OH	x	x	100	100	0.00	0.10	0.10	0.20	0.23	0.15	1.00	0.00	0.35	0.36	0.47	0.52	0.45	1.81
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.43	0.45	0.89	1.02	0.67	4.47	0.00	1.54	1.60	2.10	2.32	2.03	8.09
Dayton-Springfield, OH	-	x	-	100	0.00	0.04	0.04	0.08	0.09	0.06	0.41	0.00	0.14	0.15	0.19	0.21	0.19	0.74
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.07	0.06	0.23	0.26	0.08	0.80	0.00	0.27	0.28	0.46	0.52	0.35	2.09
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.12	0.11	0.34	0.39	0.15	1.34	0.00	0.46	0.47	0.71	0.81	0.59	3.10
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.02	0.02	0.04	0.04	0.03	0.19	0.00	0.06	0.07	0.09	0.10	0.08	0.34
Greater Connecticut, CT	x	-	100	-	0.00	0.09	0.10	0.19	0.22	0.14	0.96	0.00	0.33	0.34	0.45	0.50	0.43	1.74
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.04	0.04	0.09	0.10	0.07	0.44	0.00	0.15	0.16	0.20	0.23	0.20	0.79
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.04	0.04	0.08	0.09	0.06	0.38	0.00	0.13	0.14	0.18	0.20	0.17	0.69

**Table B2-3
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.11	0.00	0.04	0.04	0.05	0.06	0.05	0.19
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-2.66	-2.93	-3.31	-3.75	-4.82	-24.81	0.00	-8.68	-9.10	-9.73	-10.36	-11.58	-29.49
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.26	-0.29	-0.33	-0.37	-0.47	-2.45	0.00	-0.86	-0.90	-0.96	-1.03	-1.14	-2.95
Imperial Co., CA	x	-	100	-	0.00	0.01	0.01	0.03	0.03	0.02	0.15	0.00	0.05	0.05	0.07	0.08	0.07	0.27
Indianapolis, IN	-	x	-	100	0.00	0.09	0.09	0.18	0.21	0.14	0.93	0.00	0.32	0.33	0.44	0.48	0.42	1.69
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.03	0.14
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.04	0.15
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.02	0.02	0.03	0.03	0.03	0.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.03	0.14
Knoxville, TN	x	x	100	100	0.00	0.06	0.06	0.12	0.14	0.09	0.61	0.00	0.21	0.22	0.29	0.32	0.28	1.11
Lancaster, PA	-	x	-	100	0.00	0.02	0.02	0.05	0.05	0.03	0.23	0.00	0.08	0.08	0.11	0.12	0.10	0.41
Las Vegas, NV	x	-	100	-	0.00	0.10	0.10	0.20	0.23	0.15	1.01	0.00	0.35	0.36	0.47	0.52	0.46	1.83
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.74	-0.86	-0.36	-0.38	-1.52	-6.18	0.00	-2.20	-2.33	-1.87	-1.85	-2.98	-2.87
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.04	0.05	0.09	0.10	0.07	0.45	0.00	0.16	0.16	0.21	0.23	0.20	0.82
Louisville, KY-IN	-	x	-	100	0.00	0.06	0.06	0.11	0.13	0.09	0.57	0.00	0.20	0.21	0.27	0.30	0.26	1.04
Macon, GA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.11	0.00	0.04	0.04	0.05	0.06	0.05	0.20
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.02	0.02	0.03	0.03	0.02	0.10
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	0.07	0.00	0.02	0.02	0.03	0.04	0.03	0.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.03	0.03	0.06	0.06	0.04	0.28	0.00	0.10	0.10	0.13	0.15	0.13	0.51
Memphis, TN-AR	x	-	100	-	0.00	-0.18	-0.20	-0.20	-0.23	-0.33	-1.65	0.00	-0.58	-0.61	-0.63	-0.66	-0.78	-1.79
Milwaukee-Racine, WI	x	-	100	-	0.00	0.09	0.09	0.18	0.21	0.14	0.92	0.00	0.32	0.33	0.43	0.48	0.42	1.66
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.02	0.02	0.03	0.03	0.03	0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.33	0.31	0.97	1.12	0.41	3.75	0.00	1.28	1.32	2.02	2.30	1.66	8.93
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.04	0.14
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-1.14	-1.27	-1.24	-1.40	-2.13	-10.43	0.00	-3.66	-3.85	-3.91	-4.12	-4.90	-10.94
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.26	0.27	0.53	0.61	0.40	2.69	0.00	0.93	0.96	1.26	1.40	1.22	4.87
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.09	0.10	0.19	0.22	0.14	0.96	0.00	0.33	0.34	0.45	0.50	0.43	1.73
Poughkeepsie, NY	x	x	100	100	0.00	0.07	0.07	0.14	0.17	0.11	0.72	0.00	0.25	0.26	0.34	0.38	0.33	1.31

**Table B2-3
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.05	0.05	0.09	0.11	0.07	0.48	0.00	0.16	0.17	0.22	0.25	0.22	0.87
Reading, PA	-	x	-	100	0.00	0.02	0.02	0.04	0.05	0.03	0.21	0.00	0.07	0.08	0.10	0.11	0.10	0.39
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.06	0.06	0.12	0.14	0.09	0.61	0.00	0.21	0.22	0.28	0.31	0.27	1.10
Rochester, NY	x	-	100	-	0.00	0.07	0.07	0.13	0.16	0.10	0.68	0.00	0.23	0.24	0.32	0.35	0.31	1.23
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.02	0.02	0.03	0.03	0.03	0.11
Sacramento Metro, CA	x	-	50	-	0.00	0.13	0.13	0.26	0.30	0.20	1.32	0.00	0.46	0.47	0.62	0.69	0.60	2.40
San Diego, CA	x	-	100	-	0.00	0.15	0.16	0.31	0.36	0.23	1.56	0.00	0.54	0.56	0.73	0.81	0.71	2.83
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.51	-0.58	-0.42	-0.47	-0.99	-4.46	0.00	-1.58	-1.66	-1.54	-1.59	-2.12	-3.64
San Joaquin Valley, CA	x	x	50	100	0.00	0.14	0.13	0.39	0.45	0.18	1.56	0.00	0.53	0.55	0.82	0.93	0.69	3.57
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.02	0.02	0.03	0.03	0.03	0.12
Springfield (Western MA), MA	x	-	100	-	0.00	0.05	0.05	0.10	0.11	0.07	0.50	0.00	0.17	0.18	0.23	0.26	0.23	0.90
St. Louis, MO-IL	x	x	100	100	0.00	-0.23	-0.27	-0.20	-0.22	-0.46	-2.07	0.00	-0.73	-0.77	-0.72	-0.74	-0.98	-1.69
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.02	-0.02	-0.02	-0.03	-0.04	-0.19	0.00	-0.07	-0.07	-0.07	-0.08	-0.09	-0.21
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.03	0.03	0.06	0.07	0.04	0.30	0.00	0.10	0.11	0.14	0.16	0.14	0.56
Washington, DC-MD-VA	x	x	100	100	0.00	0.27	0.28	0.56	0.64	0.42	2.82	0.00	0.97	1.01	1.32	1.46	1.28	5.10
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.01	0.08	0.00	0.03	0.03	0.04	0.04	0.04	0.15
York, PA	-	x	-	100	0.00	0.02	0.02	0.05	0.05	0.04	0.24	0.00	0.08	0.08	0.11	0.12	0.11	0.43

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-4
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.11	0.13	0.12	0.14	0.05	-0.69	0.00	0.54	0.58	0.56	0.61	0.53	0.60
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	-0.07	0.00	0.06	0.06	0.06	0.07	0.06	0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.02	0.02	0.02	0.01	-0.09	0.00	0.07	0.07	0.07	0.08	0.07	0.08
Atlanta, GA	x	x	100	100	0.00	0.88	1.02	0.95	1.09	0.39	-5.48	0.00	4.33	4.65	4.46	4.83	4.24	4.78
Baltimore, MD	x	x	100	100	0.00	0.24	0.28	0.26	0.30	0.11	-1.49	0.00	1.18	1.27	1.22	1.32	1.15	1.30
Baton Rouge, LA	x	-	100	-	0.00	-0.94	-1.02	-1.26	-1.43	-1.75	-9.58	0.00	-3.75	-3.90	-4.27	-4.54	-4.93	-12.04
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.98	-2.16	-2.63	-2.99	-3.56	-18.73	0.00	-8.00	-8.34	-9.05	-9.64	-10.37	-24.74
Birmingham, AL	-	x	-	100	0.00	0.08	0.10	0.09	0.10	0.04	-0.51	0.00	0.41	0.43	0.42	0.45	0.40	0.45
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.34	0.40	0.37	0.42	0.15	-2.12	0.00	1.67	1.80	1.72	1.87	1.64	1.85
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.05	0.06	0.06	0.06	0.02	-0.32	0.00	0.25	0.27	0.26	0.28	0.25	0.28
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.08	0.09	0.08	0.10	0.03	-0.49	0.00	0.39	0.41	0.40	0.43	0.38	0.43
Canton-Massillon, OH	-	x	-	100	0.00	-0.11	-0.12	-0.15	-0.17	-0.22	-1.34	0.00	-0.42	-0.43	-0.48	-0.51	-0.57	-1.49
Charleston, WV	-	x	-	100	0.00	0.02	0.02	0.02	0.02	0.01	-0.12	0.00	0.10	0.10	0.10	0.11	0.09	0.11
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.21	0.24	0.22	0.26	0.09	-1.30	0.00	1.02	1.10	1.06	1.14	1.00	1.13
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.04	0.05	0.04	0.05	0.02	-0.25	0.00	0.20	0.21	0.20	0.22	0.19	0.22
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.84	-0.87	-1.26	-1.43	-2.32	-17.30	0.00	-2.85	-2.88	-3.53	-3.70	-4.63	-14.68
Chico, CA	x	-	100	-	0.00	0.02	0.02	0.02	0.02	0.01	-0.10	0.00	0.08	0.08	0.08	0.09	0.08	0.09
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.16	0.18	0.17	0.19	0.07	-0.98	0.00	0.77	0.83	0.80	0.86	0.76	0.85
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.07	0.00	0.06	0.06	0.06	0.06	0.05	0.06
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.18	0.22	0.20	0.23	0.08	-1.15	0.00	0.91	0.98	0.94	1.02	0.89	1.01
Columbus, OH	x	x	100	100	0.00	0.16	0.19	0.17	0.20	0.07	-1.00	0.00	0.79	0.85	0.82	0.88	0.78	0.88
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.80	0.93	0.86	0.99	0.35	-4.97	0.00	3.93	4.22	4.05	4.39	3.85	4.34
Dayton-Springfield, OH	-	x	-	100	0.00	0.06	0.07	0.06	0.07	0.02	-0.35	0.00	0.28	0.30	0.29	0.31	0.27	0.31
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.15	0.19	0.12	0.15	-0.16	-3.55	0.00	0.90	0.99	0.86	0.95	0.67	-0.33
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.18	0.23	0.15	0.18	-0.16	-3.90	0.00	1.06	1.16	1.02	1.11	0.81	-0.25
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.03	0.03	0.03	0.03	0.01	-0.17	0.00	0.13	0.14	0.14	0.15	0.13	0.15
Greater Connecticut, CT	x	-	100	-	0.00	0.14	0.16	0.15	0.17	0.06	-0.88	0.00	0.69	0.74	0.71	0.77	0.68	0.76
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.06	0.07	0.07	0.08	0.03	-0.40	0.00	0.32	0.34	0.33	0.35	0.31	0.35
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.05	0.06	0.06	0.07	0.02	-0.34	0.00	0.27	0.29	0.28	0.30	0.26	0.30

**Table B2-4
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.02	0.02	0.02	0.02	0.01	-0.10	0.00	0.08	0.09	0.08	0.09	0.08	0.09
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-3.64	-3.96	-4.94	-5.62	-7.11	-40.89	0.00	-14.36	-14.91	-16.46	-17.50	-19.26	-48.43
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.36	-0.40	-0.49	-0.56	-0.69	-3.85	0.00	-1.45	-1.51	-1.66	-1.76	-1.92	-4.74
Imperial Co., CA	x	-	100	-	0.00	0.03	0.03	0.03	0.03	0.01	-0.17	0.00	0.13	0.14	0.14	0.15	0.13	0.14
Indianapolis, IN	-	x	-	100	0.00	0.15	0.17	0.16	0.19	0.07	-0.94	0.00	0.74	0.79	0.76	0.83	0.72	0.82
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.06	0.00	0.05	0.05	0.05	0.06	0.05	0.06
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	-0.08	0.00	0.06	0.07	0.06	0.07	0.06	0.07
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.02	0.01	0.02	0.01	-0.09	0.00	0.07	0.07	0.07	0.08	0.07	0.07
Knoxville, TN	x	x	100	100	0.00	0.09	0.11	0.10	0.11	0.04	-0.58	0.00	0.46	0.49	0.47	0.51	0.45	0.50
Lancaster, PA	-	x	-	100	0.00	0.03	0.04	0.04	0.04	0.01	-0.20	0.00	0.16	0.17	0.17	0.18	0.16	0.18
Las Vegas, NV	x	-	100	-	0.00	0.19	0.23	0.21	0.24	0.09	-1.21	0.00	0.96	1.03	0.99	1.07	0.94	1.06
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.76	-0.73	-1.37	-1.54	-3.30	-29.47	0.00	-1.83	-1.70	-2.79	-2.84	-4.60	-19.56
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.08	0.09	0.08	0.09	0.03	-0.47	0.00	0.37	0.40	0.38	0.42	0.37	0.41
Louisville, KY-IN	-	x	-	100	0.00	0.08	0.09	0.09	0.10	0.03	-0.50	0.00	0.39	0.42	0.40	0.44	0.38	0.43
Macon, GA	-	x	-	100	0.00	0.01	0.02	0.02	0.02	0.01	-0.09	0.00	0.07	0.08	0.08	0.08	0.07	0.08
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	-0.08	0.00	0.06	0.06	0.06	0.07	0.06	0.07
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.05	0.06	0.06	0.06	0.02	-0.32	0.00	0.26	0.27	0.26	0.29	0.25	0.28
Memphis, TN-AR	x	-	100	-	0.00	-0.25	-0.27	-0.35	-0.40	-0.54	-3.41	0.00	-0.95	-0.98	-1.11	-1.18	-1.34	-3.59
Milwaukee-Racine, WI	x	-	100	-	0.00	0.13	0.15	0.14	0.16	0.06	-0.81	0.00	0.64	0.69	0.66	0.71	0.62	0.71
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.06	0.00	0.04	0.05	0.05	0.05	0.04	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.50	0.63	0.40	0.48	-0.54	-11.92	0.00	2.99	3.27	2.84	3.12	2.20	-1.20
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.06	0.00	0.05	0.05	0.05	0.06	0.05	0.06
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-1.53	-1.64	-2.17	-2.47	-3.51	-23.14	0.00	-5.72	-5.88	-6.75	-7.14	-8.28	-23.07
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.50	0.58	0.53	0.62	0.22	-3.10	0.00	2.45	2.63	2.52	2.73	2.40	2.70
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.13	0.15	0.14	0.16	0.06	-0.79	0.00	0.62	0.67	0.64	0.69	0.61	0.69
Poughkeepsie, NY	x	x	100	100	0.00	0.11	0.13	0.12	0.14	0.05	-0.69	0.00	0.55	0.59	0.56	0.61	0.54	0.61

**Table B2-4
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.07	0.08	0.07	0.08	0.03	-0.42	0.00	0.33	0.35	0.34	0.37	0.32	0.36
Reading, PA	-	x	-	100	0.00	0.03	0.04	0.04	0.04	0.01	-0.20	0.00	0.16	0.17	0.17	0.18	0.16	0.18
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.13	0.15	0.14	0.17	0.06	-0.83	0.00	0.66	0.70	0.67	0.73	0.64	0.72
Rochester, NY	x	-	100	-	0.00	0.10	0.11	0.10	0.12	0.04	-0.60	0.00	0.48	0.51	0.49	0.53	0.47	0.53
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04
Sacramento Metro, CA	x	-	50	-	0.00	0.22	0.26	0.24	0.28	0.10	-1.38	0.00	1.09	1.17	1.12	1.22	1.07	1.21
San Diego, CA	x	-	100	-	0.00	0.22	0.25	0.23	0.27	0.10	-1.35	0.00	1.07	1.15	1.10	1.19	1.04	1.18
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.68	-0.71	-1.02	-1.16	-1.88	-14.05	0.00	-2.32	-2.35	-2.87	-3.02	-3.77	-11.93
San Joaquin Valley, CA	x	x	50	100	0.00	0.31	0.38	0.29	0.34	-0.13	-5.03	0.00	1.73	1.88	1.70	1.85	1.44	0.34
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.06	0.00	0.05	0.05	0.05	0.05	0.04	0.05
Springfield (Western MA), MA	x	-	100	-	0.00	0.07	0.08	0.08	0.09	0.03	-0.45	0.00	0.35	0.38	0.36	0.39	0.35	0.39
St. Louis, MO-IL	x	x	100	100	0.00	-0.31	-0.33	-0.47	-0.53	-0.87	-6.49	0.00	-1.07	-1.08	-1.32	-1.39	-1.74	-5.50
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.03	-0.04	-0.05	-0.06	-0.37	0.00	-0.11	-0.12	-0.13	-0.14	-0.16	-0.41
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.04	0.05	0.04	0.05	0.01	-0.34	0.00	0.21	0.23	0.22	0.24	0.20	0.20
Washington, DC-MD-VA	x	x	100	100	0.00	0.46	0.54	0.50	0.57	0.20	-2.87	0.00	2.27	2.43	2.33	2.53	2.22	2.50
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.07	0.00	0.05	0.06	0.06	0.06	0.05	0.06
York, PA	-	x	-	100	0.00	0.04	0.04	0.04	0.05	0.02	-0.24	0.00	0.19	0.20	0.19	0.21	0.18	0.21

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-5
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.23	0.00	0.00	0.00	0.01	0.01	0.02	0.23
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Atlanta, GA	x	x	100	100	0.00	0.00	-0.01	0.04	0.05	0.10	1.20	0.00	0.00	-0.01	0.04	0.05	0.10	1.20
Baltimore, MD	x	x	100	100	0.00	0.00	0.00	0.02	0.02	0.04	0.50	0.00	0.00	0.00	0.02	0.02	0.04	0.50
Baton Rouge, LA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.12
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Birmingham, AL	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.18	0.00	0.00	0.00	0.01	0.01	0.02	0.18
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.00	-0.01	0.03	0.03	0.07	0.81	0.00	0.00	-0.01	0.03	0.03	0.07	0.81
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.01	0.11
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.20	0.00	0.00	0.00	0.01	0.01	0.02	0.20
Canton-Massillon, OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.03	0.32	0.00	0.00	0.00	0.01	0.01	0.03	0.32
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.01	0.09
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.00	-0.01	0.04	0.05	0.10	1.24	0.00	0.00	-0.01	0.04	0.05	0.10	1.24
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.00	0.00	0.01	0.01	0.03	0.32	0.00	0.00	0.00	0.01	0.01	0.03	0.32
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.00	0.00	0.02	0.02	0.04	0.47	0.00	0.00	0.00	0.02	0.02	0.04	0.47
Columbus, OH	x	x	100	100	0.00	0.00	0.00	0.01	0.01	0.03	0.30	0.00	0.00	0.00	0.01	0.01	0.03	0.30
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.00	-0.01	0.04	0.05	0.10	1.22	0.00	0.00	-0.01	0.04	0.05	0.10	1.22
Dayton-Springfield, OH	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.14
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.05	0.57	0.00	0.00	0.00	0.02	0.02	0.05	0.57
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.00	-0.01	0.03	0.03	0.07	0.85	0.00	0.00	-0.01	0.03	0.03	0.07	0.85
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Greater Connecticut, CT	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.03	0.31	0.00	0.00	0.00	0.01	0.01	0.03	0.31
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.14
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.13

**Table B2-5
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.00	-0.01	0.03	0.04	0.08	0.90	0.00	0.00	-0.01	0.03	0.04	0.08	0.90
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.01	0.08
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Indianapolis, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.28	0.00	0.00	0.00	0.01	0.01	0.02	0.28
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Knoxville, TN	x	x	100	100	0.00	0.00	0.00	0.01	0.01	0.02	0.19	0.00	0.00	0.00	0.01	0.01	0.02	0.19
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Las Vegas, NV	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.25	0.00	0.00	0.00	0.01	0.01	0.02	0.25
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.01	-0.02	0.08	0.10	0.22	2.59	0.00	-0.01	-0.02	0.08	0.10	0.22	2.59
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.13
Louisville, KY-IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.20	0.00	0.00	0.00	0.01	0.01	0.02	0.20
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Memphis, TN-AR	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.17	0.00	0.00	0.00	0.01	0.01	0.01	0.17
Milwaukee-Racine, WI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.03	0.31	0.00	0.00	0.00	0.01	0.01	0.03	0.31
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.01	-0.02	0.08	0.10	0.21	2.54	0.00	-0.01	-0.02	0.08	0.10	0.21	2.54
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	0.00	-0.01	0.04	0.05	0.10	1.21	0.00	0.00	-0.01	0.04	0.05	0.10	1.21
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.00	-0.01	0.02	0.03	0.06	0.69	0.00	0.00	-0.01	0.02	0.03	0.06	0.69
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.00	0.00	0.01	0.01	0.03	0.34	0.00	0.00	0.00	0.01	0.01	0.03	0.34
Poughkeepsie, NY	x	x	100	100	0.00	0.00	0.00	0.01	0.01	0.02	0.22	0.00	0.00	0.00	0.01	0.01	0.02	0.22

**Table B2-5
Reference Case Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.16	0.00	0.00	0.00	0.01	0.01	0.01	0.16
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.13
Rochester, NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.23	0.00	0.00	0.00	0.01	0.01	0.02	0.23
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Sacramento Metro, CA	x	-	50	-	0.00	0.00	0.00	0.01	0.02	0.03	0.38	0.00	0.00	0.00	0.01	0.02	0.03	0.38
San Diego, CA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.53	0.00	0.00	0.00	0.02	0.02	0.04	0.53
San Francisco Bay Area, CA	x	-	100	-	0.00	0.00	-0.01	0.04	0.05	0.10	1.17	0.00	0.00	-0.01	0.04	0.05	0.10	1.17
San Joaquin Valley, CA	x	x	50	100	0.00	0.00	-0.01	0.03	0.03	0.06	0.78	0.00	0.00	-0.01	0.03	0.03	0.06	0.78
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Springfield (Western MA), MA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.16	0.00	0.00	0.00	0.01	0.01	0.01	0.16
St. Louis, MO-IL	x	x	100	100	0.00	0.00	0.00	0.02	0.02	0.04	0.54	0.00	0.00	0.00	0.02	0.02	0.04	0.54
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.01	0.11
Washington, DC-MD-VA	x	x	100	100	0.00	0.00	-0.01	0.03	0.03	0.07	0.86	0.00	0.00	-0.01	0.03	0.03	0.07	0.86
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
York, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-6
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.66	0.00	0.01	0.00	0.03	0.04	0.06	0.68
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.07
Atlanta, GA	x	x	100	100	0.00	0.02	0.00	0.15	0.18	0.28	3.83	0.00	0.04	0.02	0.19	0.22	0.33	3.96
Baltimore, MD	x	x	100	100	0.00	0.01	0.00	0.06	0.07	0.11	1.45	0.00	0.02	0.01	0.07	0.08	0.12	1.50
Baton Rouge, LA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.03	0.34	0.00	0.00	0.00	0.02	0.02	0.03	0.36
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.21
Birmingham, AL	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.04	0.52	0.00	0.01	0.00	0.03	0.03	0.04	0.54
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.01	0.00	0.09	0.11	0.17	2.28	0.00	0.02	0.01	0.11	0.13	0.19	2.35
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.02	0.32	0.00	0.00	0.00	0.02	0.02	0.03	0.33
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.04	0.54	0.00	0.01	0.00	0.03	0.03	0.05	0.56
Canton-Massillon, OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.16	0.00	0.00	0.00	0.01	0.01	0.01	0.16
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.14	0.00	0.00	0.00	0.01	0.01	0.01	0.15
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.07	0.99	0.00	0.01	0.01	0.05	0.06	0.08	1.03
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.26	0.00	0.00	0.00	0.01	0.02	0.02	0.27
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.01	0.00	0.14	0.17	0.26	3.59	0.00	0.04	0.02	0.18	0.21	0.31	3.71
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.01	0.01	0.10
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.00	0.00	0.04	0.04	0.07	0.93	0.00	0.01	0.01	0.05	0.05	0.08	0.96
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.01	0.09
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.01	0.00	0.05	0.06	0.10	1.29	0.00	0.01	0.01	0.06	0.07	0.11	1.34
Columbus, OH	x	x	100	100	0.00	0.00	0.00	0.04	0.04	0.07	0.90	0.00	0.01	0.01	0.04	0.05	0.08	0.92
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.02	0.00	0.15	0.18	0.28	3.80	0.00	0.04	0.02	0.19	0.22	0.32	3.93
Dayton-Springfield, OH	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.39	0.00	0.00	0.00	0.02	0.02	0.03	0.41
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.01	0.00	0.07	0.08	0.13	1.70	0.00	0.02	0.01	0.08	0.10	0.15	1.76
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.01	0.00	0.10	0.11	0.18	2.40	0.00	0.03	0.01	0.12	0.14	0.21	2.48
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.17	0.00	0.00	0.00	0.01	0.01	0.01	0.18
Greater Connecticut, CT	x	-	100	-	0.00	0.00	0.00	0.04	0.04	0.07	0.89	0.00	0.01	0.01	0.04	0.05	0.08	0.92
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.40	0.00	0.00	0.00	0.02	0.02	0.03	0.42
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.03	0.36	0.00	0.00	0.00	0.02	0.02	0.03	0.37

**Table B2-6
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.01	0.01	0.10
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.01	0.00	0.11	0.13	0.19	2.64	0.00	0.03	0.02	0.13	0.15	0.23	2.73
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.22
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.13
Indianapolis, IN	-	x	-	100	0.00	0.00	0.00	0.03	0.04	0.06	0.83	0.00	0.01	0.01	0.04	0.05	0.07	0.86
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.01	0.01	0.07
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.01	0.01	0.07
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.01	0.07
Knoxville, TN	x	x	100	100	0.00	0.00	0.00	0.02	0.03	0.04	0.56	0.00	0.01	0.00	0.03	0.03	0.05	0.58
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.22
Las Vegas, NV	x	-	100	-	0.00	0.00	0.00	0.03	0.04	0.06	0.82	0.00	0.01	0.01	0.04	0.05	0.07	0.84
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.03	0.00	0.31	0.37	0.57	7.75	0.00	0.08	0.05	0.38	0.45	0.66	8.00
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.39	0.00	0.00	0.00	0.02	0.02	0.03	0.40
Louisville, KY-IN	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.04	0.55	0.00	0.01	0.00	0.03	0.03	0.05	0.57
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.23	0.00	0.00	0.00	0.01	0.01	0.02	0.24
Memphis, TN-AR	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.49	0.00	0.01	0.00	0.02	0.03	0.04	0.50
Milwaukee-Racine, WI	x	-	100	-	0.00	0.00	0.00	0.03	0.04	0.06	0.87	0.00	0.01	0.01	0.04	0.05	0.07	0.90
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.03	0.00	0.29	0.34	0.53	7.16	0.00	0.07	0.04	0.35	0.41	0.61	7.40
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.01	0.08
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	0.01	0.00	0.14	0.17	0.26	3.52	0.00	0.04	0.02	0.17	0.20	0.30	3.64
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.01	0.00	0.09	0.11	0.16	2.22	0.00	0.02	0.01	0.11	0.13	0.19	2.30
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.00	0.00	0.04	0.04	0.07	0.94	0.00	0.01	0.01	0.05	0.05	0.08	0.97
Poughkeepsie, NY	x	x	100	100	0.00	0.00	0.00	0.03	0.03	0.05	0.66	0.00	0.01	0.00	0.03	0.04	0.06	0.68

**Table B2-6
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.45	0.00	0.00	0.00	0.02	0.03	0.04	0.47
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.19	0.00	0.00	0.00	0.01	0.01	0.02	0.20
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.46	0.00	0.00	0.00	0.02	0.03	0.04	0.47
Rochester, NY	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.64	0.00	0.01	0.00	0.03	0.04	0.05	0.66
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Sacramento Metro, CA	x	-	50	-	0.00	0.00	0.00	0.05	0.05	0.09	1.16	0.00	0.01	0.01	0.06	0.07	0.10	1.19
San Diego, CA	x	-	100	-	0.00	0.01	0.00	0.06	0.07	0.11	1.49	0.00	0.02	0.01	0.07	0.09	0.13	1.54
San Francisco Bay Area, CA	x	-	100	-	0.00	0.01	0.00	0.13	0.16	0.24	3.31	0.00	0.03	0.02	0.16	0.19	0.28	3.42
San Joaquin Valley, CA	x	x	50	100	0.00	0.01	0.00	0.10	0.12	0.18	2.44	0.00	0.03	0.02	0.12	0.14	0.21	2.53
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Springfield (Western MA), MA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.46	0.00	0.00	0.00	0.02	0.03	0.04	0.48
St. Louis, MO-IL	x	x	100	100	0.00	0.01	0.00	0.06	0.07	0.11	1.52	0.00	0.02	0.01	0.07	0.09	0.13	1.57
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.32	0.00	0.00	0.00	0.02	0.02	0.03	0.33
Washington, DC-MD-VA	x	x	100	100	0.00	0.01	0.00	0.10	0.12	0.19	2.52	0.00	0.03	0.02	0.12	0.14	0.21	2.60
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.01	0.08
York, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.22

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-7
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.01	0.00	0.04	0.05	0.08	1.03	0.00	0.02	0.02	0.06	0.07	0.10	1.10
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.12
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.12
Atlanta, GA	x	x	100	100	0.00	0.04	0.02	0.27	0.32	0.48	6.60	0.00	0.13	0.10	0.39	0.45	0.63	7.04
Baltimore, MD	x	x	100	100	0.00	0.01	0.01	0.09	0.11	0.16	2.26	0.00	0.04	0.04	0.13	0.15	0.22	2.41
Baton Rouge, LA	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.04	0.54	0.00	0.01	0.01	0.03	0.04	0.05	0.58
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.31	0.00	0.01	0.00	0.02	0.02	0.03	0.33
Birmingham, AL	-	x	-	100	0.00	0.00	0.00	0.03	0.04	0.06	0.79	0.00	0.02	0.01	0.05	0.05	0.08	0.85
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.02	0.01	0.14	0.16	0.25	3.42	0.00	0.07	0.05	0.20	0.23	0.33	3.65
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.49	0.00	0.01	0.01	0.03	0.03	0.05	0.53
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.00	0.00	0.03	0.04	0.06	0.81	0.00	0.02	0.01	0.05	0.06	0.08	0.86
Canton-Massillon, OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.23	0.00	0.00	0.00	0.01	0.02	0.02	0.25
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.22
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.01	0.00	0.07	0.08	0.12	1.67	0.00	0.03	0.03	0.10	0.11	0.16	1.78
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.40	0.00	0.01	0.01	0.02	0.03	0.04	0.43
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.03	0.01	0.23	0.27	0.41	5.62	0.00	0.11	0.09	0.33	0.38	0.54	5.99
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.15	0.00	0.00	0.00	0.01	0.01	0.01	0.16
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.01	0.00	0.06	0.07	0.10	1.44	0.00	0.03	0.02	0.08	0.10	0.14	1.53
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.13
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.01	0.00	0.08	0.09	0.14	1.92	0.00	0.04	0.03	0.11	0.13	0.18	2.05
Columbus, OH	x	x	100	100	0.00	0.01	0.00	0.06	0.07	0.10	1.43	0.00	0.03	0.02	0.08	0.10	0.14	1.52
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.04	0.01	0.26	0.30	0.46	6.36	0.00	0.12	0.10	0.37	0.43	0.61	6.78
Dayton-Springfield, OH	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.04	0.59	0.00	0.01	0.01	0.03	0.04	0.06	0.62
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.20	2.76	0.00	0.05	0.04	0.16	0.19	0.26	2.94
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.02	0.01	0.15	0.17	0.26	3.62	0.00	0.07	0.06	0.21	0.25	0.35	3.86
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.26	0.00	0.01	0.00	0.02	0.02	0.03	0.28
Greater Connecticut, CT	x	-	100	-	0.00	0.01	0.00	0.06	0.07	0.10	1.37	0.00	0.03	0.02	0.08	0.09	0.13	1.46
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.00	0.00	0.03	0.03	0.05	0.62	0.00	0.01	0.01	0.04	0.04	0.06	0.66
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.00	0.00	0.02	0.03	0.04	0.55	0.00	0.01	0.01	0.03	0.04	0.05	0.58

**Table B2-7
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.15	0.00	0.00	0.00	0.01	0.01	0.01	0.16
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.03	0.01	0.17	0.20	0.30	4.18	0.00	0.08	0.07	0.25	0.28	0.40	4.46
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.32	0.00	0.01	0.01	0.02	0.02	0.03	0.34
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.21	0.00	0.00	0.00	0.01	0.01	0.02	0.23
Indianapolis, IN	-	x	-	100	0.00	0.01	0.00	0.05	0.06	0.10	1.33	0.00	0.03	0.02	0.08	0.09	0.13	1.42
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.12
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.01	0.01	0.01	0.09
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.12
Knoxville, TN	x	x	100	100	0.00	0.01	0.00	0.04	0.04	0.06	0.87	0.00	0.02	0.01	0.05	0.06	0.08	0.93
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.32	0.00	0.01	0.01	0.02	0.02	0.03	0.35
Las Vegas, NV	x	-	100	-	0.00	0.01	0.00	0.06	0.07	0.10	1.44	0.00	0.03	0.02	0.08	0.10	0.14	1.53
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.08	0.03	0.51	0.60	0.91	12.48	0.00	0.24	0.20	0.73	0.85	1.20	13.31
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.64	0.00	0.01	0.01	0.04	0.04	0.06	0.68
Louisville, KY-IN	-	x	-	100	0.00	0.00	0.00	0.03	0.04	0.06	0.82	0.00	0.02	0.01	0.05	0.06	0.08	0.87
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.15	0.00	0.00	0.00	0.01	0.01	0.01	0.16
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.08
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.40	0.00	0.01	0.01	0.02	0.03	0.04	0.42
Memphis, TN-AR	x	-	100	-	0.00	0.00	0.00	0.03	0.04	0.05	0.73	0.00	0.01	0.01	0.04	0.05	0.07	0.78
Milwaukee-Racine, WI	x	-	100	-	0.00	0.01	0.00	0.05	0.06	0.09	1.31	0.00	0.03	0.02	0.08	0.09	0.13	1.39
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.01	0.01	0.01	0.09
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.07	0.02	0.44	0.52	0.79	10.80	0.00	0.21	0.17	0.63	0.73	1.03	11.52
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.12
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	0.03	0.01	0.22	0.26	0.40	5.48	0.00	0.11	0.09	0.32	0.37	0.52	5.84
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.02	0.01	0.16	0.18	0.28	3.83	0.00	0.07	0.06	0.22	0.26	0.37	4.09
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.01	0.00	0.06	0.07	0.10	1.36	0.00	0.03	0.02	0.08	0.09	0.13	1.45
Poughkeepsie, NY	x	x	100	100	0.00	0.01	0.00	0.04	0.05	0.08	1.03	0.00	0.02	0.02	0.06	0.07	0.10	1.10

**Table B2-7
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.68	0.00	0.01	0.01	0.04	0.05	0.07	0.73
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.30	0.00	0.01	0.00	0.02	0.02	0.03	0.32
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.00	0.04	0.04	0.06	0.86	0.00	0.02	0.01	0.05	0.06	0.08	0.92
Rochester, NY	x	-	100	-	0.00	0.01	0.00	0.04	0.05	0.07	0.97	0.00	0.02	0.02	0.06	0.07	0.09	1.03
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.09
Sacramento Metro, CA	x	-	50	-	0.00	0.01	0.00	0.08	0.09	0.14	1.88	0.00	0.04	0.03	0.11	0.13	0.18	2.01
San Diego, CA	x	-	100	-	0.00	0.01	0.01	0.09	0.11	0.16	2.22	0.00	0.04	0.04	0.13	0.15	0.21	2.37
San Francisco Bay Area, CA	x	-	100	-	0.00	0.03	0.01	0.20	0.24	0.36	5.01	0.00	0.10	0.08	0.29	0.34	0.48	5.34
San Joaquin Valley, CA	x	x	50	100	0.00	0.03	0.01	0.17	0.20	0.30	4.12	0.00	0.08	0.06	0.24	0.28	0.39	4.40
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Springfield (Western MA), MA	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.71	0.00	0.01	0.01	0.04	0.05	0.07	0.75
St. Louis, MO-IL	x	x	100	100	0.00	0.01	0.01	0.09	0.11	0.17	2.30	0.00	0.04	0.04	0.14	0.16	0.22	2.46
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.01	0.08
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.48	0.00	0.01	0.01	0.03	0.03	0.05	0.51
Washington, DC-MD-VA	x	x	100	100	0.00	0.02	0.01	0.16	0.19	0.29	4.01	0.00	0.08	0.06	0.24	0.27	0.38	4.28
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.13
York, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.34	0.00	0.01	0.01	0.02	0.02	0.03	0.36

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-8
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.01	0.01	0.06	0.07	0.10	1.39	0.00	0.04	0.04	0.10	0.11	0.15	1.54
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.15	0.00	0.00	0.00	0.01	0.01	0.02	0.17
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.18	0.00	0.01	0.00	0.01	0.01	0.02	0.20
Atlanta, GA	x	x	100	100	0.00	0.08	0.04	0.46	0.54	0.81	11.08	0.00	0.33	0.30	0.77	0.89	1.21	12.24
Baltimore, MD	x	x	100	100	0.00	0.02	0.01	0.13	0.15	0.22	3.02	0.00	0.09	0.08	0.21	0.24	0.33	3.33
Baton Rouge, LA	x	-	100	-	0.00	0.01	0.00	0.03	0.04	0.06	0.77	0.00	0.02	0.02	0.05	0.06	0.08	0.85
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.40	0.00	0.01	0.01	0.03	0.03	0.04	0.44
Birmingham, AL	-	x	-	100	0.00	0.01	0.00	0.04	0.05	0.08	1.04	0.00	0.03	0.03	0.07	0.08	0.11	1.14
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.03	0.02	0.18	0.21	0.31	4.28	0.00	0.13	0.11	0.30	0.34	0.47	4.73
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.00	0.03	0.03	0.05	0.65	0.00	0.02	0.02	0.05	0.05	0.07	0.72
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.01	0.00	0.04	0.05	0.07	0.99	0.00	0.03	0.03	0.07	0.08	0.11	1.09
Canton-Massillon, OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.29	0.00	0.01	0.01	0.02	0.02	0.03	0.32
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.02	0.25	0.00	0.01	0.01	0.02	0.02	0.03	0.27
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.19	2.62	0.00	0.08	0.07	0.18	0.21	0.29	2.90
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.04	0.50	0.00	0.02	0.01	0.04	0.04	0.06	0.56
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.06	0.03	0.33	0.38	0.57	7.82	0.00	0.23	0.21	0.55	0.63	0.85	8.64
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.20	0.00	0.01	0.01	0.01	0.02	0.02	0.22
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.01	0.01	0.08	0.10	0.14	1.98	0.00	0.06	0.05	0.14	0.16	0.22	2.18
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.14	0.00	0.00	0.00	0.01	0.01	0.02	0.16
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.02	0.01	0.10	0.11	0.17	2.33	0.00	0.07	0.06	0.16	0.19	0.25	2.58
Columbus, OH	x	x	100	100	0.00	0.02	0.01	0.08	0.10	0.15	2.03	0.00	0.06	0.05	0.14	0.16	0.22	2.24
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.08	0.04	0.42	0.49	0.74	10.06	0.00	0.30	0.27	0.70	0.81	1.10	11.11
Dayton-Springfield, OH	-	x	-	100	0.00	0.01	0.00	0.03	0.03	0.05	0.71	0.00	0.02	0.02	0.05	0.06	0.08	0.79
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.03	0.02	0.17	0.20	0.30	4.06	0.00	0.12	0.11	0.28	0.33	0.44	4.48
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.03	0.02	0.19	0.22	0.33	4.56	0.00	0.14	0.12	0.32	0.37	0.50	5.03
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.02	0.34	0.00	0.01	0.01	0.02	0.03	0.04	0.38
Greater Connecticut, CT	x	-	100	-	0.00	0.01	0.01	0.07	0.09	0.13	1.77	0.00	0.05	0.05	0.12	0.14	0.19	1.96
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.01	0.00	0.03	0.04	0.06	0.81	0.00	0.02	0.02	0.06	0.06	0.09	0.89
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.01	0.00	0.03	0.03	0.05	0.69	0.00	0.02	0.02	0.05	0.06	0.08	0.76

**Table B2-8
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.20	0.00	0.01	0.01	0.01	0.02	0.02	0.23
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.04	0.02	0.25	0.29	0.44	5.95	0.00	0.18	0.16	0.42	0.48	0.65	6.58
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.39	0.00	0.01	0.01	0.03	0.03	0.04	0.44
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.02	0.34	0.00	0.01	0.01	0.02	0.03	0.04	0.37
Indianapolis, IN	-	x	-	100	0.00	0.01	0.01	0.08	0.09	0.14	1.89	0.00	0.06	0.05	0.13	0.15	0.21	2.09
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.00	0.00	0.01	0.01	0.01	0.14
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.16	0.00	0.00	0.00	0.01	0.01	0.02	0.18
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.17	0.00	0.01	0.00	0.01	0.01	0.02	0.19
Knoxville, TN	x	x	100	100	0.00	0.01	0.00	0.05	0.06	0.09	1.17	0.00	0.03	0.03	0.08	0.09	0.13	1.29
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.41	0.00	0.01	0.01	0.03	0.03	0.05	0.46
Las Vegas, NV	x	-	100	-	0.00	0.02	0.01	0.10	0.12	0.18	2.45	0.00	0.07	0.07	0.17	0.20	0.27	2.71
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.14	0.07	0.76	0.90	1.34	18.29	0.00	0.55	0.49	1.28	1.47	2.00	20.20
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.01	0.00	0.04	0.05	0.07	0.96	0.00	0.03	0.03	0.07	0.08	0.10	1.06
Louisville, KY-IN	-	x	-	100	0.00	0.01	0.00	0.04	0.05	0.07	1.00	0.00	0.03	0.03	0.07	0.08	0.11	1.11
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.19	0.00	0.01	0.01	0.01	0.02	0.02	0.21
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.15	0.00	0.00	0.00	0.01	0.01	0.02	0.17
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.03	0.03	0.05	0.66	0.00	0.02	0.02	0.05	0.05	0.07	0.72
Memphis, TN-AR	x	-	100	-	0.00	0.01	0.00	0.04	0.04	0.07	0.90	0.00	0.03	0.02	0.06	0.07	0.10	1.00
Milwaukee-Racine, WI	x	-	100	-	0.00	0.01	0.01	0.07	0.08	0.12	1.63	0.00	0.05	0.04	0.11	0.13	0.18	1.80
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.13
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.10	0.05	0.56	0.66	0.99	13.53	0.00	0.40	0.36	0.94	1.08	1.48	14.94
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.13	0.00	0.00	0.00	0.01	0.01	0.01	0.14
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	0.06	0.03	0.30	0.36	0.54	7.33	0.00	0.22	0.20	0.51	0.59	0.80	8.10
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.05	0.03	0.26	0.31	0.46	6.26	0.00	0.19	0.17	0.44	0.50	0.68	6.92
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.01	0.01	0.07	0.08	0.12	1.59	0.00	0.05	0.04	0.11	0.13	0.17	1.76
Poughkeepsie, NY	x	x	100	100	0.00	0.01	0.01	0.06	0.07	0.10	1.40	0.00	0.04	0.04	0.10	0.11	0.15	1.55

**Table B2-8
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.01	0.00	0.04	0.04	0.06	0.84	0.00	0.03	0.02	0.06	0.07	0.09	0.93
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.03	0.41	0.00	0.01	0.01	0.03	0.03	0.05	0.46
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.01	0.07	0.08	0.12	1.68	0.00	0.05	0.04	0.12	0.13	0.18	1.85
Rochester, NY	x	-	100	-	0.00	0.01	0.00	0.05	0.06	0.09	1.22	0.00	0.04	0.03	0.08	0.10	0.13	1.35
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.10	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Sacramento Metro, CA	x	-	50	-	0.00	0.02	0.01	0.12	0.14	0.20	2.79	0.00	0.08	0.07	0.19	0.22	0.30	3.08
San Diego, CA	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.20	2.73	0.00	0.08	0.07	0.19	0.22	0.30	3.02
San Francisco Bay Area, CA	x	-	100	-	0.00	0.05	0.03	0.26	0.31	0.46	6.34	0.00	0.19	0.17	0.44	0.51	0.69	7.00
San Joaquin Valley, CA	x	x	50	100	0.00	0.05	0.03	0.27	0.32	0.47	6.47	0.00	0.19	0.17	0.45	0.52	0.71	7.15
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.13
Springfield (Western MA), MA	x	-	100	-	0.00	0.01	0.00	0.04	0.04	0.07	0.90	0.00	0.03	0.02	0.06	0.07	0.10	1.00
St. Louis, MO-IL	x	x	100	100	0.00	0.02	0.01	0.12	0.14	0.22	2.94	0.00	0.09	0.08	0.21	0.24	0.32	3.25
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.01	0.01	0.01	0.09
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.04	0.60	0.00	0.02	0.02	0.04	0.05	0.07	0.66
Washington, DC-MD-VA	x	x	100	100	0.00	0.04	0.02	0.24	0.28	0.42	5.80	0.00	0.17	0.15	0.40	0.46	0.63	6.40
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.14	0.00	0.00	0.00	0.01	0.01	0.02	0.15
York, PA	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.04	0.48	0.00	0.01	0.01	0.03	0.04	0.05	0.53

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-9
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.19	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.19
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.46	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.46
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.42	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.42
Atlanta, GA	x	x	100	100	0.00	0.39	0.54	-0.35	-0.45	-1.57	-22.28	0.00	0.39	0.54	-0.35	-0.45	-1.57	-22.28
Baltimore, MD	x	x	100	100	0.00	0.16	0.22	-0.15	-0.19	-0.65	-9.26	0.00	0.16	0.22	-0.15	-0.19	-0.65	-9.26
Baton Rouge, LA	x	-	100	-	0.00	-0.98	-1.06	-1.60	-1.80	-2.55	-18.59	0.00	-0.98	-1.06	-1.60	-1.80	-2.56	-18.59
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-2.02	-2.20	-3.17	-3.56	-4.93	-34.43	0.00	-2.03	-2.21	-3.18	-3.57	-4.94	-34.44
Birmingham, AL	-	x	-	100	0.00	0.06	0.08	-0.05	-0.07	-0.24	-3.39	0.00	0.06	0.08	-0.05	-0.07	-0.24	-3.39
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.27	0.36	-0.24	-0.30	-1.06	-15.06	0.00	0.27	0.36	-0.24	-0.30	-1.06	-15.06
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.04	0.05	-0.03	-0.04	-0.14	-2.04	0.00	0.04	0.05	-0.03	-0.04	-0.14	-2.04
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.06	0.09	-0.06	-0.07	-0.25	-3.62	0.00	0.06	0.09	-0.06	-0.07	-0.25	-3.62
Canton-Massillon, OH	-	x	-	100	0.00	-0.11	-0.12	-0.22	-0.25	-0.39	-3.18	0.00	-0.11	-0.12	-0.22	-0.25	-0.39	-3.18
Charleston, WV	-	x	-	100	0.00	0.02	0.02	-0.02	-0.02	-0.07	-0.97	0.00	0.02	0.02	-0.02	-0.02	-0.07	-0.97
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.10	0.14	-0.09	-0.12	-0.41	-5.86	0.00	0.10	0.14	-0.09	-0.12	-0.41	-5.86
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.03	0.04	-0.03	-0.03	-0.12	-1.73	0.00	0.03	0.04	-0.03	-0.03	-0.12	-1.73
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.07	-1.07	-2.65	-3.02	-5.12	-46.89	0.00	-1.08	-1.08	-2.65	-3.03	-5.12	-46.90
Chico, CA	x	-	100	-	0.00	0.01	0.02	-0.01	-0.01	-0.04	-0.63	0.00	0.01	0.02	-0.01	-0.01	-0.04	-0.63
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.11	0.14	-0.10	-0.12	-0.42	-6.00	0.00	0.11	0.14	-0.10	-0.12	-0.42	-6.00
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.57	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.57
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.15	0.21	-0.14	-0.17	-0.61	-8.64	0.00	0.15	0.21	-0.14	-0.17	-0.61	-8.64
Columbus, OH	x	x	100	100	0.00	0.10	0.13	-0.09	-0.11	-0.39	-5.59	0.00	0.10	0.13	-0.09	-0.11	-0.39	-5.59
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.40	0.54	-0.36	-0.45	-1.59	-22.63	0.00	0.40	0.54	-0.36	-0.45	-1.59	-22.63
Dayton-Springfield, OH	-	x	-	100	0.00	0.05	0.06	-0.04	-0.05	-0.18	-2.62	0.00	0.05	0.06	-0.04	-0.05	-0.18	-2.62
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.01	0.07	-0.43	-0.51	-1.14	-13.25	0.00	0.01	0.06	-0.43	-0.51	-1.14	-13.25
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.10	0.18	-0.53	-0.63	-1.54	-18.72	0.00	0.10	0.18	-0.53	-0.63	-1.54	-18.72
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.11	0.00	0.00	0.00	0.00	0.00	-0.01	-0.11
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.02	0.03	-0.02	-0.02	-0.08	-1.12	0.00	0.02	0.03	-0.02	-0.02	-0.08	-1.12
Greater Connecticut, CT	x	-	100	-	0.00	0.10	0.14	-0.09	-0.12	-0.40	-5.73	0.00	0.10	0.14	-0.09	-0.12	-0.40	-5.73
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.13	0.00	0.00	0.00	0.00	0.00	-0.01	-0.13
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.05	0.06	-0.04	-0.05	-0.18	-2.59	0.00	0.05	0.06	-0.04	-0.05	-0.18	-2.59
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.35	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.35

**Table B2-9
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Hickory, NC	-	x	-	100	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.61	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.61
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-3.88	-4.17	-6.71	-7.56	-11.07	-84.42	0.00	-3.91	-4.20	-6.74	-7.58	-11.10	-84.44
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.38	-0.41	-0.64	-0.72	-1.05	-7.95	0.00	-0.38	-0.41	-0.65	-0.73	-1.06	-7.95
Imperial Co., CA	x	-	100	-	0.00	0.01	0.02	-0.01	-0.01	-0.05	-0.72	0.00	0.01	0.02	-0.01	-0.01	-0.05	-0.72
Indianapolis, IN	-	x	-	100	0.00	0.09	0.13	-0.08	-0.10	-0.37	-5.21	0.00	0.09	0.13	-0.08	-0.10	-0.37	-5.21
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.48	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.48
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.45	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.45
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.40	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.40
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.38	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.38
Knoxville, TN	x	x	100	100	0.00	0.06	0.09	-0.06	-0.07	-0.25	-3.54	0.00	0.06	0.09	-0.06	-0.07	-0.25	-3.54
Lancaster, PA	-	x	-	100	0.00	0.02	0.03	-0.02	-0.03	-0.10	-1.38	0.00	0.02	0.03	-0.02	-0.03	-0.10	-1.38
Las Vegas, NV	x	-	100	-	0.00	0.08	0.11	-0.07	-0.09	-0.32	-4.59	0.00	0.08	0.11	-0.07	-0.09	-0.32	-4.59
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	-0.04
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1.40	-1.31	-4.23	-4.85	-8.70	-84.43	0.00	-1.41	-1.32	-4.24	-4.87	-8.71	-84.44
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.36	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.36
Louisville, KY-IN	-	x	-	100	0.00	0.06	0.09	-0.06	-0.07	-0.26	-3.64	0.00	0.06	0.09	-0.06	-0.07	-0.26	-3.64
Macon, GA	-	x	-	100	0.00	0.01	0.02	-0.01	-0.01	-0.05	-0.68	0.00	0.01	0.02	-0.01	-0.01	-0.05	-0.68
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.35	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.35
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.34	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.34
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.02	0.03	-0.02	-0.03	-0.09	-1.33	0.00	0.02	0.03	-0.02	-0.03	-0.09	-1.33
Memphis, TN-AR	x	-	100	-	0.00	-0.27	-0.28	-0.55	-0.63	-1.00	-8.51	0.00	-0.27	-0.28	-0.56	-0.63	-1.00	-8.51
Milwaukee-Racine, WI	x	-	100	-	0.00	0.10	0.14	-0.09	-0.11	-0.40	-5.71	0.00	0.10	0.14	-0.09	-0.11	-0.40	-5.71
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.32	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.32
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.25	0.50	-1.64	-1.94	-4.67	-56.33	0.00	0.25	0.49	-1.64	-1.94	-4.67	-56.33
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.51	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.51
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-1.75	-1.81	-3.67	-4.17	-6.67	-57.28	0.00	-1.76	-1.83	-3.68	-4.18	-6.68	-57.29
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.23	0.31	-0.20	-0.26	-0.90	-12.75	0.00	0.23	0.31	-0.20	-0.26	-0.90	-12.75
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.11	0.15	-0.10	-0.13	-0.45	-6.38	0.00	0.11	0.15	-0.10	-0.13	-0.45	-6.38
Poughkeepsie, NY	x	x	100	100	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.13	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.13

**Table B2-9
Reference Case Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.05	0.07	-0.05	-0.06	-0.21	-2.99	0.00	0.05	0.07	-0.05	-0.06	-0.21	-2.99
Reading, PA	-	x	-	100	0.00	0.02	0.03	-0.02	-0.02	-0.09	-1.21	0.00	0.02	0.03	-0.02	-0.02	-0.09	-1.21
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.41	0.00	0.04	0.06	-0.04	-0.05	-0.17	-2.41
Rochester, NY	x	-	100	-	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.19	0.00	0.07	0.10	-0.07	-0.08	-0.29	-4.19
Rome, GA	-	x	-	100	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.37	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.37
Sacramento Metro, CA	x	-	50	-	0.00	0.12	0.17	-0.11	-0.14	-0.49	-7.04	0.00	0.12	0.17	-0.11	-0.14	-0.49	-7.04
San Diego, CA	x	-	100	-	0.00	0.17	0.24	-0.16	-0.20	-0.69	-9.85	0.00	0.17	0.24	-0.16	-0.20	-0.69	-9.85
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.82	-0.80	-2.20	-2.51	-4.37	-41.10	0.00	-0.83	-0.80	-2.20	-2.52	-4.37	-41.11
San Joaquin Valley, CA	x	x	50	100	0.00	0.05	0.12	-0.54	-0.64	-1.49	-17.62	0.00	0.05	0.12	-0.54	-0.64	-1.49	-17.62
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.39	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.39
Springfield (Western MA), MA	x	-	100	-	0.00	0.05	0.07	-0.05	-0.06	-0.21	-3.01	0.00	0.05	0.07	-0.05	-0.06	-0.21	-3.01
St. Louis, MO-IL	x	x	100	100	0.00	-0.38	-0.37	-1.01	-1.16	-2.01	-18.95	0.00	-0.38	-0.37	-1.02	-1.16	-2.02	-18.95
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.03	-0.06	-0.07	-0.11	-0.94	0.00	-0.03	-0.03	-0.06	-0.07	-0.11	-0.94
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.03	0.04	-0.04	-0.05	-0.16	-2.15	0.00	0.03	0.04	-0.04	-0.05	-0.16	-2.15
Washington, DC-MD-VA	x	x	100	100	0.00	0.28	0.38	-0.25	-0.32	-1.11	-15.83	0.00	0.28	0.38	-0.25	-0.32	-1.11	-15.83
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.55	0.00	0.01	0.01	-0.01	-0.01	-0.04	-0.55
York, PA	-	x	-	100	0.00	0.02	0.03	-0.02	-0.03	-0.09	-1.28	0.00	0.02	0.03	-0.02	-0.03	-0.09	-1.28

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-10
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Benzene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.19	0.30	-0.43	-0.51	-1.06	-16.68	0.00	0.37	0.50	-0.28	-0.36	-0.91	-16.33
Allegan Co., MI	x	-	100	-	0.00	0.02	0.03	-0.05	-0.06	-0.12	-1.82	0.00	0.04	0.05	-0.03	-0.04	-0.10	-1.79
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.03	-0.05	-0.05	-0.11	-1.77	0.00	0.04	0.05	-0.03	-0.04	-0.10	-1.73
Atlanta, GA	x	x	100	100	0.00	1.10	1.76	-2.48	-2.97	-6.14	-96.69	0.00	2.15	2.88	-1.62	-2.09	-5.30	-94.65
Baltimore, MD	x	x	100	100	0.00	0.42	0.67	-0.94	-1.13	-2.33	-36.67	0.00	0.81	1.09	-0.61	-0.79	-2.01	-35.90
Baton Rouge, LA	x	-	100	-	0.00	-3.03	-3.23	-4.73	-5.41	-7.02	-50.70	0.00	-7.11	-7.43	-9.03	-9.88	-11.62	-54.63
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-6.23	-6.73	-9.21	-10.51	-13.36	-89.83	0.00	-14.60	-15.32	-17.99	-19.62	-22.72	-97.99
Birmingham, AL	-	x	-	100	0.00	0.15	0.24	-0.34	-0.40	-0.83	-13.10	0.00	0.29	0.39	-0.22	-0.28	-0.72	-12.82
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.66	1.04	-1.47	-1.77	-3.65	-57.48	0.00	1.28	1.71	-0.96	-1.24	-3.15	-56.27
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.09	0.15	-0.21	-0.25	-0.51	-8.04	0.00	0.18	0.24	-0.13	-0.17	-0.44	-7.87
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.16	0.25	-0.35	-0.42	-0.87	-13.74	0.00	0.31	0.41	-0.23	-0.30	-0.75	-13.45
Canton-Massillon, OH	-	x	-	100	0.00	-0.36	-0.37	-0.69	-0.79	-1.10	-9.42	0.00	-0.87	-0.89	-1.23	-1.35	-1.67	-9.88
Charleston, WV	-	x	-	100	0.00	0.04	0.07	-0.09	-0.11	-0.23	-3.61	0.00	0.08	0.11	-0.06	-0.08	-0.20	-3.53
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.29	0.45	-0.64	-0.77	-1.59	-25.02	0.00	0.56	0.74	-0.42	-0.54	-1.37	-24.49
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.08	0.12	-0.17	-0.20	-0.42	-6.67	0.00	0.15	0.20	-0.11	-0.14	-0.37	-6.52
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-3.53	-3.30	-8.90	-10.29	-15.20	-151.91	0.00	-8.65	-8.52	-14.48	-16.10	-21.22	-155.99
Chico, CA	x	-	100	-	0.00	0.03	0.04	-0.06	-0.08	-0.16	-2.47	0.00	0.05	0.07	-0.04	-0.05	-0.14	-2.42
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.27	0.42	-0.60	-0.72	-1.48	-23.38	0.00	0.52	0.70	-0.39	-0.51	-1.28	-22.89
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.02	0.04	-0.05	-0.06	-0.13	-2.11	0.00	0.05	0.06	-0.04	-0.05	-0.12	-2.06
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.37	0.59	-0.84	-1.00	-2.07	-32.65	0.00	0.73	0.97	-0.55	-0.71	-1.79	-31.96
Columbus, OH	x	x	100	100	0.00	0.26	0.41	-0.58	-0.69	-1.43	-22.57	0.00	0.50	0.67	-0.38	-0.49	-1.24	-22.09
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.09	1.74	-2.46	-2.95	-6.08	-95.83	0.00	2.13	2.85	-1.60	-2.07	-5.25	-93.81
Dayton-Springfield, OH	-	x	-	100	0.00	0.11	0.18	-0.25	-0.31	-0.63	-9.93	0.00	0.22	0.30	-0.17	-0.21	-0.54	-9.72
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.03	0.21	-1.86	-2.19	-3.82	-50.05	0.00	-0.27	-0.01	-2.21	-2.56	-4.23	-49.83
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.13	0.49	-2.36	-2.78	-5.00	-68.10	0.00	0.04	0.43	-2.60	-3.04	-5.31	-67.56
Door Co., WI	x	-	100	-	0.00	0.00	0.01	-0.01	-0.01	-0.03	-0.40	0.00	0.01	0.01	-0.01	-0.01	-0.02	-0.39
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Evansville, IN	-	x	-	100	0.00	0.05	0.08	-0.11	-0.13	-0.28	-4.37	0.00	0.10	0.13	-0.07	-0.09	-0.24	-4.28
Greater Connecticut, CT	x	-	100	-	0.00	0.26	0.41	-0.58	-0.69	-1.42	-22.43	0.00	0.50	0.67	-0.37	-0.49	-1.23	-21.95
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.48	0.00	0.01	0.01	-0.01	-0.01	-0.03	-0.47
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.12	0.18	-0.26	-0.31	-0.65	-10.17	0.00	0.23	0.30	-0.17	-0.22	-0.56	-9.95
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.10	0.16	-0.23	-0.28	-0.58	-9.08	0.00	0.20	0.27	-0.15	-0.20	-0.50	-8.88

**Table B2-10
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	-0.06
Hickory, NC	-	x	-	100	0.00	0.03	0.04	-0.06	-0.07	-0.15	-2.43	0.00	0.05	0.07	-0.04	-0.05	-0.13	-2.38
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-12.12	-12.75	-20.29	-23.24	-30.91	-239.93	0.00	-28.63	-29.69	-37.75	-41.38	-49.57	-255.45
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.18	-1.25	-1.93	-2.21	-2.91	-22.11	0.00	-2.78	-2.89	-3.62	-3.97	-4.72	-23.62
Imperial Co., CA	x	-	100	-	0.00	0.04	0.06	-0.08	-0.10	-0.20	-3.13	0.00	0.07	0.09	-0.05	-0.07	-0.17	-3.07
Indianapolis, IN	-	x	-	100	0.00	0.24	0.38	-0.54	-0.65	-1.33	-21.02	0.00	0.47	0.63	-0.35	-0.45	-1.15	-20.58
Jamestown, NY	x	-	100	-	0.00	0.02	0.03	-0.05	-0.06	-0.12	-1.83	0.00	0.04	0.05	-0.03	-0.04	-0.10	-1.79
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.03	-0.05	-0.06	-0.12	-1.82	0.00	0.04	0.05	-0.03	-0.04	-0.10	-1.78
Johnstown, PA	-	x	-	100	0.00	0.02	0.03	-0.04	-0.04	-0.09	-1.46	0.00	0.03	0.04	-0.02	-0.03	-0.08	-1.43
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.03	-0.04	-0.05	-0.10	-1.63	0.00	0.04	0.05	-0.03	-0.04	-0.09	-1.60
Knoxville, TN	x	x	100	100	0.00	0.16	0.26	-0.36	-0.43	-0.89	-14.07	0.00	0.31	0.42	-0.24	-0.30	-0.77	-13.77
Lancaster, PA	-	x	-	100	0.00	0.06	0.10	-0.14	-0.17	-0.34	-5.37	0.00	0.12	0.16	-0.09	-0.12	-0.29	-5.26
Las Vegas, NV	x	-	100	-	0.00	0.23	0.37	-0.53	-0.63	-1.31	-20.59	0.00	0.46	0.61	-0.34	-0.45	-1.13	-20.15
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.00	0.00	0.00	0.00	0.00	-0.09
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.16	0.00	0.00	0.00	0.00	0.00	-0.01	-0.15
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-4.70	-3.97	-15.01	-17.41	-26.77	-288.64	0.00	-11.87	-11.24	-22.99	-25.72	-35.43	-293.62
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.11	0.18	-0.25	-0.30	-0.63	-9.87	0.00	0.22	0.29	-0.16	-0.21	-0.54	-9.66
Louisville, KY-IN	-	x	-	100	0.00	0.16	0.25	-0.35	-0.42	-0.88	-13.83	0.00	0.31	0.41	-0.23	-0.30	-0.76	-13.53
Macon, GA	-	x	-	100	0.00	0.03	0.05	-0.07	-0.08	-0.16	-2.59	0.00	0.06	0.08	-0.04	-0.06	-0.14	-2.53
Manitowoc Co., WI	x	-	-	-	0.00	0.02	0.02	-0.03	-0.04	-0.08	-1.32	0.00	0.03	0.04	-0.02	-0.03	-0.07	-1.29
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.03	-0.04	-0.04	-0.09	-1.46	0.00	0.03	0.04	-0.02	-0.03	-0.08	-1.43
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.07	0.11	-0.15	-0.18	-0.37	-5.82	0.00	0.13	0.17	-0.10	-0.13	-0.32	-5.70
Memphis, TN-AR	x	-	100	-	0.00	-0.87	-0.87	-1.77	-2.03	-2.87	-25.85	0.00	-2.08	-2.11	-3.07	-3.39	-4.26	-26.91
Milwaukee-Racine, WI	x	-	100	-	0.00	0.25	0.40	-0.56	-0.67	-1.39	-21.87	0.00	0.49	0.65	-0.37	-0.47	-1.20	-21.41
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.02	-0.03	-0.04	-0.08	-1.31	0.00	0.03	0.04	-0.02	-0.03	-0.07	-1.28
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.28	1.35	-7.20	-8.47	-15.15	-204.48	0.00	-0.14	1.00	-8.07	-9.42	-16.24	-203.01
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.02	0.03	-0.05	-0.06	-0.12	-1.92	0.00	0.04	0.06	-0.03	-0.04	-0.11	-1.88
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-5.61	-5.57	-11.83	-13.63	-19.36	-177.94	0.00	-13.52	-13.65	-20.33	-22.46	-28.49	-184.77
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.64	1.02	-1.44	-1.72	-3.56	-56.04	0.00	1.25	1.67	-0.94	-1.21	-3.07	-54.86
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.27	0.43	-0.61	-0.73	-1.50	-23.63	0.00	0.53	0.70	-0.39	-0.51	-1.30	-23.13
Poughkeepsie, NY	x	x	100	100	0.00	0.19	0.30	-0.42	-0.51	-1.05	-16.56	0.00	0.37	0.49	-0.28	-0.36	-0.91	-16.21

**Table B2-10
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.13	0.21	-0.29	-0.35	-0.73	-11.44	0.00	0.25	0.34	-0.19	-0.25	-0.63	-11.19
Reading, PA	-	x	-	100	0.00	0.06	0.09	-0.13	-0.15	-0.31	-4.87	0.00	0.11	0.14	-0.08	-0.11	-0.27	-4.77
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.13	0.21	-0.30	-0.36	-0.73	-11.56	0.00	0.26	0.34	-0.19	-0.25	-0.63	-11.32
Rochester, NY	x	-	100	-	0.00	0.18	0.29	-0.41	-0.50	-1.02	-16.14	0.00	0.36	0.48	-0.27	-0.35	-0.88	-15.80
Rome, GA	-	x	-	100	0.00	0.02	0.03	-0.04	-0.04	-0.09	-1.40	0.00	0.03	0.04	-0.02	-0.03	-0.08	-1.37
Sacramento Metro, CA	x	-	50	-	0.00	0.33	0.53	-0.75	-0.90	-1.85	-29.13	0.00	0.65	0.87	-0.49	-0.63	-1.60	-28.52
San Diego, CA	x	-	100	-	0.00	0.43	0.68	-0.96	-1.15	-2.38	-37.53	0.00	0.83	1.12	-0.63	-0.81	-2.06	-36.74
San Francisco Bay Area, CA	x	-	100	-	0.00	-2.75	-2.50	-7.48	-8.66	-12.97	-133.25	0.00	-6.81	-6.63	-11.93	-13.29	-17.78	-136.35
San Joaquin Valley, CA	x	x	50	100	0.00	0.08	0.45	-2.48	-2.92	-5.20	-69.99	0.00	-0.08	0.31	-2.80	-3.26	-5.59	-69.51
Sheboygan, WI	x	-	100	-	0.00	0.02	0.03	-0.04	-0.05	-0.10	-1.51	0.00	0.03	0.04	-0.03	-0.03	-0.08	-1.48
Springfield (Western MA), MA	x	-	100	-	0.00	0.13	0.21	-0.30	-0.36	-0.74	-11.69	0.00	0.26	0.35	-0.20	-0.25	-0.64	-11.44
St. Louis, MO-IL	x	x	100	100	0.00	-1.27	-1.16	-3.45	-3.99	-5.98	-61.34	0.00	-3.15	-3.07	-5.51	-6.13	-8.20	-62.78
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.10	-0.10	-0.19	-0.22	-0.31	-2.79	0.00	-0.23	-0.24	-0.34	-0.37	-0.47	-2.91
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.08	0.13	-0.23	-0.27	-0.54	-8.16	0.00	0.14	0.20	-0.18	-0.22	-0.49	-8.01
Washington, DC-MD-VA	x	x	100	100	0.00	0.73	1.15	-1.63	-1.95	-4.03	-63.53	0.00	1.41	1.89	-1.06	-1.37	-3.48	-62.19
Wheeling, WV-OH	-	x	-	100	0.00	0.02	0.04	-0.05	-0.06	-0.13	-2.05	0.00	0.05	0.06	-0.03	-0.04	-0.11	-2.01
York, PA	-	x	-	100	0.00	0.06	0.10	-0.14	-0.16	-0.33	-5.27	0.00	0.12	0.16	-0.09	-0.11	-0.29	-5.16

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-11
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.32	0.54	-0.94	-1.11	-2.03	-33.14	0.00	1.01	1.28	-0.37	-0.54	-1.49	-31.81
Allegan Co., MI	x	-	100	-	0.00	0.03	0.06	-0.10	-0.12	-0.22	-3.62	0.00	0.11	0.14	-0.04	-0.06	-0.16	-3.47
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.04	0.06	-0.11	-0.13	-0.23	-3.73	0.00	0.11	0.14	-0.04	-0.06	-0.17	-3.58
Atlanta, GA	x	x	100	100	0.00	2.04	3.45	-5.98	-7.09	-12.95	-211.61	0.00	6.44	8.17	-2.39	-3.45	-9.51	-203.12
Baltimore, MD	x	x	100	100	0.00	0.70	1.18	-2.05	-2.43	-4.44	-72.51	0.00	2.21	2.80	-0.82	-1.18	-3.26	-69.60
Baton Rouge, LA	x	-	100	-	0.00	-4.75	-5.04	-7.48	-8.58	-10.95	-80.75	0.00	-15.68	-16.24	-19.01	-20.55	-23.25	-90.95
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-9.81	-10.56	-14.34	-16.43	-20.51	-137.46	0.00	-32.33	-33.67	-37.99	-40.96	-45.67	-159.00
Birmingham, AL	-	x	-	100	0.00	0.24	0.41	-0.72	-0.85	-1.55	-25.41	0.00	0.77	0.98	-0.29	-0.41	-1.14	-24.39
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	1.06	1.79	-3.10	-3.68	-6.71	-109.74	0.00	3.34	4.24	-1.24	-1.79	-4.93	-105.34
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.15	0.26	-0.45	-0.53	-0.97	-15.82	0.00	0.48	0.61	-0.18	-0.26	-0.71	-15.18
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.25	0.42	-0.73	-0.87	-1.59	-25.98	0.00	0.79	1.00	-0.29	-0.42	-1.17	-24.94
Canton-Massillon, OH	-	x	-	100	0.00	-0.57	-0.57	-1.12	-1.29	-1.75	-15.73	0.00	-1.89	-1.92	-2.54	-2.77	-3.27	-16.86
Charleston, WV	-	x	-	100	0.00	0.06	0.11	-0.19	-0.22	-0.41	-6.69	0.00	0.20	0.26	-0.08	-0.11	-0.30	-6.42
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.51	0.87	-1.51	-1.79	-3.27	-53.46	0.00	1.63	2.06	-0.60	-0.87	-2.40	-51.32
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.12	0.21	-0.36	-0.43	-0.78	-12.80	0.00	0.39	0.49	-0.14	-0.21	-0.57	-12.28
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-5.45	-4.83	-15.28	-17.70	-25.44	-272.47	0.00	-18.17	-17.73	-29.48	-32.50	-40.86	-281.15
Chico, CA	x	-	100	-	0.00	0.05	0.08	-0.14	-0.16	-0.30	-4.87	0.00	0.15	0.19	-0.06	-0.08	-0.22	-4.68
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.44	0.75	-1.30	-1.54	-2.82	-46.08	0.00	1.40	1.78	-0.52	-0.75	-2.07	-44.23
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.04	0.06	-0.11	-0.13	-0.24	-3.90	0.00	0.12	0.15	-0.04	-0.06	-0.18	-3.75
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.59	1.00	-1.74	-2.06	-3.77	-61.56	0.00	1.87	2.38	-0.70	-1.00	-2.77	-59.09
Columbus, OH	x	x	100	100	0.00	0.44	0.74	-1.29	-1.53	-2.80	-45.72	0.00	1.39	1.76	-0.52	-0.75	-2.05	-43.88
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.96	3.32	-5.76	-6.83	-12.48	-203.93	0.00	6.20	7.87	-2.30	-3.32	-9.16	-195.75
Dayton-Springfield, OH	-	x	-	100	0.00	0.18	0.31	-0.53	-0.63	-1.15	-18.76	0.00	0.57	0.72	-0.21	-0.31	-0.84	-18.01
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.02	0.54	-3.67	-4.31	-7.07	-99.05	0.00	-0.04	0.57	-4.16	-4.85	-7.75	-97.33
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.24	0.94	-4.53	-5.32	-8.87	-127.47	0.00	0.63	1.46	-4.68	-5.52	-9.24	-124.76
Door Co., WI	x	-	100	-	0.00	0.01	0.01	-0.02	-0.03	-0.05	-0.76	0.00	0.02	0.03	-0.01	-0.01	-0.03	-0.73
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Evansville, IN	-	x	-	100	0.00	0.08	0.14	-0.24	-0.28	-0.52	-8.48	0.00	0.26	0.33	-0.10	-0.14	-0.38	-8.14
Greater Connecticut, CT	x	-	100	-	0.00	0.42	0.71	-1.24	-1.47	-2.68	-43.77	0.00	1.33	1.69	-0.49	-0.71	-1.97	-42.02
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	-0.02	-0.03	-0.05	-0.87	0.00	0.03	0.03	-0.01	-0.01	-0.04	-0.84
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.19	0.32	-0.56	-0.67	-1.22	-19.89	0.00	0.61	0.77	-0.22	-0.32	-0.89	-19.09
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.17	0.29	-0.49	-0.59	-1.07	-17.50	0.00	0.53	0.68	-0.20	-0.29	-0.79	-16.80

**Table B2-11
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.12	0.00	0.00	0.00	0.00	0.00	-0.01	-0.12
Hickory, NC	-	x	-	100	0.00	0.05	0.08	-0.14	-0.16	-0.30	-4.84	0.00	0.15	0.19	-0.05	-0.08	-0.22	-4.65
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-18.99	-19.76	-32.57	-37.45	-48.94	-395.00	0.00	-62.72	-64.54	-79.04	-85.69	-98.60	-434.54
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.86	-1.95	-3.06	-3.52	-4.55	-35.41	0.00	-6.12	-6.32	-7.59	-8.21	-9.38	-39.32
Imperial Co., CA	x	-	100	-	0.00	0.07	0.11	-0.19	-0.23	-0.41	-6.77	0.00	0.21	0.26	-0.08	-0.11	-0.30	-6.49
Indianapolis, IN	-	x	-	100	0.00	0.41	0.69	-1.20	-1.43	-2.60	-42.54	0.00	1.29	1.64	-0.48	-0.69	-1.91	-40.84
Jamestown, NY	x	-	100	-	0.00	0.03	0.06	-0.10	-0.12	-0.21	-3.44	0.00	0.10	0.13	-0.04	-0.06	-0.15	-3.31
Jefferson Co., NY	x	-	100	-	0.00	0.04	0.06	-0.10	-0.12	-0.23	-3.68	0.00	0.11	0.14	-0.04	-0.06	-0.17	-3.53
Johnstown, PA	-	x	-	100	0.00	0.03	0.04	-0.08	-0.09	-0.16	-2.69	0.00	0.08	0.10	-0.03	-0.04	-0.12	-2.58
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.03	0.06	-0.10	-0.12	-0.22	-3.51	0.00	0.11	0.14	-0.04	-0.06	-0.16	-3.37
Knoxville, TN	x	x	100	100	0.00	0.27	0.45	-0.79	-0.93	-1.71	-27.87	0.00	0.85	1.08	-0.31	-0.45	-1.25	-26.75
Lancaster, PA	-	x	-	100	0.00	0.10	0.17	-0.29	-0.35	-0.64	-10.39	0.00	0.32	0.40	-0.12	-0.17	-0.47	-9.98
Las Vegas, NV	x	-	100	-	0.00	0.44	0.75	-1.30	-1.54	-2.82	-46.07	0.00	1.40	1.78	-0.52	-0.75	-2.07	-44.22
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.17	0.00	0.01	0.01	0.00	0.00	-0.01	-0.17
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.28	0.00	0.01	0.01	0.00	0.00	-0.01	-0.27
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-7.07	-5.30	-26.80	-31.14	-46.39	-540.35	0.00	-23.79	-22.10	-46.25	-51.47	-67.80	-548.49
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.20	0.34	-0.58	-0.69	-1.26	-20.57	0.00	0.63	0.79	-0.23	-0.34	-0.92	-19.75
Louisville, KY-IN	-	x	-	100	0.00	0.25	0.43	-0.74	-0.88	-1.60	-26.21	0.00	0.80	1.01	-0.30	-0.43	-1.18	-25.16
Macon, GA	-	x	-	100	0.00	0.05	0.08	-0.14	-0.16	-0.30	-4.92	0.00	0.15	0.19	-0.06	-0.08	-0.22	-4.72
Manitowoc Co., WI	x	-	-	-	0.00	0.02	0.04	-0.07	-0.08	-0.15	-2.48	0.00	0.08	0.10	-0.03	-0.04	-0.11	-2.38
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.03	0.05	-0.09	-0.11	-0.19	-3.14	0.00	0.10	0.12	-0.04	-0.05	-0.14	-3.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.12	0.21	-0.36	-0.43	-0.78	-12.76	0.00	0.39	0.49	-0.14	-0.21	-0.57	-12.25
Memphis, TN-AR	x	-	100	-	0.00	-1.36	-1.33	-2.91	-3.36	-4.62	-43.84	0.00	-4.51	-4.54	-6.32	-6.91	-8.29	-46.41
Milwaukee-Racine, WI	x	-	100	-	0.00	0.40	0.68	-1.18	-1.40	-2.56	-41.86	0.00	1.27	1.62	-0.47	-0.68	-1.88	-40.18
Nevada (Western Part), CA	x	-	100	-	0.00	0.03	0.04	-0.07	-0.09	-0.16	-2.65	0.00	0.08	0.10	-0.03	-0.04	-0.12	-2.54
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.53	2.61	-13.76	-16.14	-26.80	-382.14	0.00	1.31	3.74	-14.61	-17.17	-28.33	-374.45
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.03	0.06	-0.10	-0.12	-0.22	-3.57	0.00	0.11	0.14	-0.04	-0.06	-0.16	-3.42
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-8.74	-8.43	-19.77	-22.83	-31.69	-309.76	0.00	-29.02	-29.09	-41.87	-45.82	-55.51	-325.83
Phoenix-Mesa, AZ	x	-	100	-	0.00	1.18	2.00	-3.47	-4.11	-7.51	-122.81	0.00	3.74	4.74	-1.39	-2.00	-5.52	-117.89
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.42	0.71	-1.23	-1.46	-2.67	-43.67	0.00	1.33	1.69	-0.49	-0.71	-1.96	-41.92
Poughkeepsie, NY	x	x	100	100	0.00	0.32	0.54	-0.93	-1.11	-2.02	-33.07	0.00	1.01	1.28	-0.37	-0.54	-1.49	-31.74

**Table B2-11
Reference Case Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.21	0.36	-0.62	-0.73	-1.33	-21.80	0.00	0.66	0.84	-0.25	-0.36	-0.98	-20.93
Reading, PA	-	x	-	100	0.00	0.09	0.16	-0.28	-0.33	-0.60	-9.74	0.00	0.30	0.38	-0.11	-0.16	-0.44	-9.35
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.27	0.45	-0.78	-0.93	-1.69	-27.62	0.00	0.84	1.07	-0.31	-0.45	-1.24	-26.52
Rochester, NY	x	-	100	-	0.00	0.30	0.51	-0.88	-1.04	-1.90	-31.02	0.00	0.94	1.20	-0.35	-0.51	-1.39	-29.78
Rome, GA	-	x	-	100	0.00	0.03	0.04	-0.08	-0.09	-0.16	-2.66	0.00	0.08	0.10	-0.03	-0.04	-0.12	-2.55
Sacramento Metro, CA	x	-	50	-	0.00	0.58	0.98	-1.71	-2.02	-3.69	-60.37	0.00	1.84	2.33	-0.68	-0.98	-2.71	-57.95
San Diego, CA	x	-	100	-	0.00	0.69	1.16	-2.01	-2.39	-4.36	-71.28	0.00	2.17	2.75	-0.81	-1.16	-3.20	-68.42
San Francisco Bay Area, CA	x	-	100	-	0.00	-4.29	-3.70	-12.82	-14.86	-21.54	-235.61	0.00	-14.33	-13.86	-24.11	-26.64	-33.84	-242.09
San Joaquin Valley, CA	x	x	50	100	0.00	0.29	1.10	-5.12	-6.01	-10.04	-144.68	0.00	0.80	1.74	-5.23	-6.18	-10.39	-141.54
Sheboygan, WI	x	-	100	-	0.00	0.03	0.05	-0.08	-0.10	-0.18	-2.91	0.00	0.09	0.11	-0.03	-0.05	-0.13	-2.80
Springfield (Western MA), MA	x	-	100	-	0.00	0.22	0.37	-0.64	-0.76	-1.39	-22.66	0.00	0.69	0.87	-0.26	-0.37	-1.02	-21.75
St. Louis, MO-IL	x	x	100	100	0.00	-1.98	-1.71	-5.91	-6.85	-9.93	-108.49	0.00	-6.63	-6.41	-11.13	-12.29	-15.61	-111.49
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.15	-0.15	-0.32	-0.36	-0.50	-4.61	0.00	-0.51	-0.51	-0.70	-0.76	-0.91	-4.90
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.12	0.22	-0.47	-0.55	-0.98	-15.57	0.00	0.38	0.50	-0.27	-0.35	-0.80	-15.01
Washington, DC-MD-VA	x	x	100	100	0.00	1.24	2.09	-3.63	-4.31	-7.87	-128.57	0.00	3.91	4.96	-1.45	-2.10	-5.78	-123.41
Wheeling, WV-OH	-	x	-	100	0.00	0.04	0.06	-0.11	-0.13	-0.23	-3.80	0.00	0.12	0.15	-0.04	-0.06	-0.17	-3.65
York, PA	-	x	-	100	0.00	0.10	0.18	-0.31	-0.36	-0.66	-10.80	0.00	0.33	0.42	-0.12	-0.18	-0.48	-10.36

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-12
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Benzene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.49	0.90	-1.91	-2.23	-3.51	-58.41	0.00	2.34	2.88	-0.41	-0.72	-2.10	-54.92
Allegan Co., MI	x	-	100	-	0.00	0.05	0.10	-0.21	-0.24	-0.38	-6.36	0.00	0.25	0.31	-0.04	-0.08	-0.23	-5.98
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.06	0.11	-0.24	-0.29	-0.45	-7.46	0.00	0.30	0.37	-0.05	-0.09	-0.27	-7.01
Atlanta, GA	x	x	100	100	0.00	3.90	7.12	-15.17	-17.77	-27.96	-464.85	0.00	18.63	22.95	-3.29	-5.76	-16.70	-437.04
Baltimore, MD	x	x	100	100	0.00	1.06	1.94	-4.14	-4.84	-7.62	-126.69	0.00	5.08	6.25	-0.90	-1.57	-4.55	-119.11
Baton Rouge, LA	x	-	100	-	0.00	-6.62	-6.97	-10.83	-12.47	-15.64	-118.99	0.00	-26.61	-27.44	-32.02	-34.46	-38.26	-137.23
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-13.74	-14.76	-20.23	-23.27	-28.61	-191.58	0.00	-55.50	-57.63	-64.12	-68.78	-75.32	-231.18
Birmingham, AL	-	x	-	100	0.00	0.37	0.67	-1.42	-1.66	-2.62	-43.49	0.00	1.74	2.15	-0.31	-0.54	-1.56	-40.89
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	1.51	2.75	-5.86	-6.87	-10.80	-179.62	0.00	7.20	8.87	-1.27	-2.23	-6.45	-168.88
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.23	0.42	-0.89	-1.04	-1.64	-27.28	0.00	1.09	1.35	-0.19	-0.34	-0.98	-25.65
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.35	0.64	-1.35	-1.58	-2.49	-41.43	0.00	1.66	2.05	-0.29	-0.51	-1.49	-38.96
Canton-Massillon, OH	-	x	-	100	0.00	-0.80	-0.79	-1.67	-1.93	-2.51	-23.34	0.00	-3.16	-3.20	-4.24	-4.60	-5.28	-25.26
Charleston, WV	-	x	-	100	0.00	0.09	0.16	-0.34	-0.39	-0.62	-10.31	0.00	0.41	0.51	-0.07	-0.13	-0.37	-9.69
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.92	1.69	-3.59	-4.20	-6.61	-109.99	0.00	4.41	5.43	-0.78	-1.36	-3.95	-103.41
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.18	0.32	-0.69	-0.81	-1.27	-21.17	0.00	0.85	1.05	-0.15	-0.26	-0.76	-19.90
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-7.30	-5.85	-24.98	-28.95	-39.74	-455.02	0.00	-27.55	-26.15	-48.70	-53.76	-65.94	-464.80
Chico, CA	x	-	100	-	0.00	0.07	0.13	-0.27	-0.32	-0.51	-8.42	0.00	0.34	0.42	-0.06	-0.10	-0.30	-7.92
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.70	1.27	-2.71	-3.17	-4.99	-82.89	0.00	3.32	4.09	-0.59	-1.03	-2.98	-77.93
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.05	0.09	-0.19	-0.23	-0.36	-5.97	0.00	0.24	0.29	-0.04	-0.07	-0.21	-5.62
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.82	1.50	-3.19	-3.74	-5.89	-97.86	0.00	3.92	4.83	-0.69	-1.21	-3.52	-92.00
Columbus, OH	x	x	100	100	0.00	0.72	1.31	-2.78	-3.26	-5.12	-85.17	0.00	3.41	4.20	-0.60	-1.06	-3.06	-80.07
Dallas-Fort Worth, TX	x	-	100	-	0.00	3.54	6.47	-13.78	-16.13	-25.39	-422.10	0.00	16.92	20.84	-2.99	-5.23	-15.17	-396.85
Dayton-Springfield, OH	-	x	-	100	0.00	0.25	0.46	-0.97	-1.14	-1.80	-29.87	0.00	1.20	1.47	-0.21	-0.37	-1.07	-28.08
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.27	1.35	-7.20	-8.39	-12.54	-184.78	0.00	2.13	3.52	-6.55	-7.84	-12.36	-177.99
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.37	1.60	-7.99	-9.32	-13.95	-206.77	0.00	2.67	4.25	-7.04	-8.46	-13.51	-198.93
Door Co., WI	x	-	100	-	0.00	0.01	0.02	-0.04	-0.05	-0.07	-1.21	0.00	0.05	0.06	-0.01	-0.01	-0.04	-1.14
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	-0.05
Evansville, IN	-	x	-	100	0.00	0.12	0.22	-0.47	-0.55	-0.86	-14.27	0.00	0.57	0.70	-0.10	-0.18	-0.51	-13.42
Greater Connecticut, CT	x	-	100	-	0.00	0.62	1.14	-2.43	-2.84	-4.47	-74.36	0.00	2.98	3.67	-0.53	-0.92	-2.67	-69.91
Greene Co., PA	x	-	100	-	0.00	0.01	0.02	-0.04	-0.05	-0.08	-1.29	0.00	0.05	0.06	-0.01	-0.02	-0.05	-1.22
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.29	0.52	-1.11	-1.30	-2.04	-33.95	0.00	1.36	1.68	-0.24	-0.42	-1.22	-31.92
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.24	0.44	-0.95	-1.11	-1.75	-29.03	0.00	1.16	1.43	-0.21	-0.36	-1.04	-27.29

**Table B2-12
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Benzene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.21	0.00	0.01	0.01	0.00	0.00	-0.01	-0.20
Hickory, NC	-	x	-	100	0.00	0.07	0.13	-0.28	-0.33	-0.52	-8.57	0.00	0.34	0.42	-0.06	-0.11	-0.31	-8.06
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-26.30	-26.91	-48.45	-55.87	-71.53	-607.89	0.00	-104.97	-107.31	-132.78	-143.48	-161.93	-676.04
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-2.60	-2.71	-4.42	-5.10	-6.44	-51.05	0.00	-10.42	-10.71	-12.74	-13.73	-15.33	-58.07
Imperial Co., CA	x	-	100	-	0.00	0.12	0.22	-0.46	-0.54	-0.85	-14.08	0.00	0.56	0.70	-0.10	-0.17	-0.51	-13.24
Indianapolis, IN	-	x	-	100	0.00	0.67	1.22	-2.59	-3.04	-4.78	-79.42	0.00	3.18	3.92	-0.56	-0.98	-2.85	-74.67
Jamestown, NY	x	-	100	-	0.00	0.05	0.08	-0.18	-0.21	-0.33	-5.47	0.00	0.22	0.27	-0.04	-0.07	-0.20	-5.14
Jefferson Co., NY	x	-	100	-	0.00	0.06	0.10	-0.22	-0.26	-0.40	-6.73	0.00	0.27	0.33	-0.05	-0.08	-0.24	-6.32
Johnstown, PA	-	x	-	100	0.00	0.03	0.06	-0.13	-0.15	-0.24	-4.05	0.00	0.16	0.20	-0.03	-0.05	-0.15	-3.81
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.06	0.11	-0.24	-0.28	-0.44	-7.24	0.00	0.29	0.36	-0.05	-0.09	-0.26	-6.81
Knoxville, TN	x	x	100	100	0.00	0.41	0.75	-1.60	-1.87	-2.94	-48.91	0.00	1.96	2.41	-0.35	-0.61	-1.76	-45.98
Lancaster, PA	-	x	-	100	0.00	0.15	0.27	-0.57	-0.66	-1.04	-17.33	0.00	0.69	0.86	-0.12	-0.21	-0.62	-16.30
Las Vegas, NV	x	-	100	-	0.00	0.86	1.58	-3.36	-3.93	-6.18	-102.80	0.00	4.12	5.07	-0.73	-1.27	-3.69	-96.65
Libby, MT	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.29	0.00	0.01	0.01	0.00	0.00	-0.01	-0.27
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.01	-0.01	-0.01	-0.02	-0.38	0.00	0.02	0.02	0.00	0.00	-0.01	-0.36
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-8.84	-4.78	-46.74	-54.28	-76.58	-960.30	0.00	-31.13	-26.52	-75.95	-85.08	-109.92	-959.11
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.34	0.61	-1.31	-1.53	-2.41	-40.12	0.00	1.61	1.98	-0.28	-0.50	-1.44	-37.72
Louisville, KY-IN	-	x	-	100	0.00	0.35	0.64	-1.37	-1.61	-2.53	-42.06	0.00	1.69	2.08	-0.30	-0.52	-1.51	-39.55
Macon, GA	-	x	-	100	0.00	0.07	0.12	-0.26	-0.30	-0.48	-7.93	0.00	0.32	0.39	-0.06	-0.10	-0.28	-7.45
Manitowoc Co., WI	x	-	-	-	0.00	0.03	0.06	-0.13	-0.15	-0.24	-3.94	0.00	0.16	0.19	-0.03	-0.05	-0.14	-3.71
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.05	0.10	-0.21	-0.25	-0.39	-6.47	0.00	0.26	0.32	-0.05	-0.08	-0.23	-6.08
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.23	0.42	-0.90	-1.05	-1.65	-27.51	0.00	1.10	1.36	-0.19	-0.34	-0.99	-25.87
Memphis, TN-AR	x	-	100	-	0.00	-1.90	-1.82	-4.39	-5.07	-6.70	-65.95	0.00	-7.46	-7.47	-10.50	-11.44	-13.31	-70.17
Milwaukee-Racine, WI	x	-	100	-	0.00	0.58	1.05	-2.24	-2.62	-4.12	-68.55	0.00	2.75	3.38	-0.48	-0.85	-2.46	-64.45
Nevada (Western Part), CA	x	-	100	-	0.00	0.04	0.07	-0.16	-0.18	-0.29	-4.82	0.00	0.19	0.24	-0.03	-0.06	-0.17	-4.53
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.85	4.46	-24.09	-28.09	-41.94	-617.11	0.00	6.89	11.51	-22.10	-26.41	-41.51	-594.62
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.05	0.08	-0.18	-0.21	-0.33	-5.50	0.00	0.22	0.27	-0.04	-0.07	-0.20	-5.17
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-12.03	-11.10	-30.77	-35.59	-47.57	-491.78	0.00	-46.82	-46.37	-69.57	-76.03	-89.74	-516.13
Phoenix-Mesa, AZ	x	-	100	-	0.00	2.21	4.03	-8.58	-10.05	-15.81	-262.87	0.00	10.54	12.98	-1.86	-3.26	-9.45	-247.15
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.56	1.02	-2.18	-2.55	-4.01	-66.71	0.00	2.67	3.29	-0.47	-0.83	-2.40	-62.72
Poughkeepsie, NY	x	x	100	100	0.00	0.49	0.90	-1.92	-2.25	-3.54	-58.81	0.00	2.36	2.90	-0.42	-0.73	-2.11	-55.29

**Table B2-12
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Benzene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.30	0.54	-1.15	-1.35	-2.13	-35.34	0.00	1.42	1.74	-0.25	-0.44	-1.27	-33.23
Reading, PA	-	x	-	100	0.00	0.15	0.27	-0.57	-0.66	-1.04	-17.36	0.00	0.70	0.86	-0.12	-0.22	-0.62	-16.32
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.59	1.08	-2.29	-2.69	-4.23	-70.31	0.00	2.82	3.47	-0.50	-0.87	-2.53	-66.10
Rochester, NY	x	-	100	-	0.00	0.43	0.78	-1.67	-1.95	-3.08	-51.13	0.00	2.05	2.52	-0.36	-0.63	-1.84	-48.07
Rome, GA	-	x	-	100	0.00	0.04	0.07	-0.14	-0.16	-0.26	-4.28	0.00	0.17	0.21	-0.03	-0.05	-0.15	-4.03
Sacramento Metro, CA	x	-	50	-	0.00	0.98	1.80	-3.82	-4.48	-7.05	-117.15	0.00	4.70	5.78	-0.83	-1.45	-4.21	-110.14
San Diego, CA	x	-	100	-	0.00	0.96	1.76	-3.74	-4.38	-6.89	-114.60	0.00	4.59	5.66	-0.81	-1.42	-4.12	-107.74
San Francisco Bay Area, CA	x	-	100	-	0.00	-5.94	-4.77	-20.27	-23.49	-32.24	-368.88	0.00	-22.42	-21.29	-39.57	-43.67	-53.55	-376.88
San Joaquin Valley, CA	x	x	50	100	0.00	0.91	2.68	-10.81	-12.61	-19.06	-288.82	0.00	5.35	7.64	-8.23	-10.13	-17.13	-276.58
Sheboygan, WI	x	-	100	-	0.00	0.04	0.07	-0.16	-0.19	-0.29	-4.85	0.00	0.19	0.24	-0.03	-0.06	-0.17	-4.56
Springfield (Western MA), MA	x	-	100	-	0.00	0.32	0.58	-1.24	-1.45	-2.28	-37.96	0.00	1.52	1.87	-0.27	-0.47	-1.36	-35.69
St. Louis, MO-IL	x	x	100	100	0.00	-2.74	-2.19	-9.38	-10.87	-14.93	-171.02	0.00	-10.32	-9.80	-18.27	-20.17	-24.75	-174.67
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.22	-0.21	-0.46	-0.54	-0.70	-6.60	0.00	-0.86	-0.87	-1.16	-1.26	-1.45	-7.11
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.18	0.35	-0.87	-1.01	-1.57	-25.46	0.00	0.86	1.09	-0.34	-0.48	-1.09	-24.06
Washington, DC-MD-VA	x	x	100	100	0.00	2.04	3.73	-7.94	-9.30	-14.63	-243.29	0.00	9.75	12.01	-1.72	-3.02	-8.74	-228.74
Wheeling, WV-OH	-	x	-	100	0.00	0.05	0.09	-0.19	-0.22	-0.35	-5.84	0.00	0.23	0.29	-0.04	-0.07	-0.21	-5.49
York, PA	-	x	-	100	0.00	0.17	0.31	-0.66	-0.77	-1.21	-20.17	0.00	0.81	1.00	-0.14	-0.25	-0.72	-18.97

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-13
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Butadiene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Atlanta, GA	x	x	100	100	0.00	0.07	0.08	0.10	0.12	0.14	0.54	0.00	0.07	0.08	0.10	0.12	0.14	0.54
Baltimore, MD	x	x	100	100	0.00	0.03	0.03	0.04	0.05	0.06	0.22	0.00	0.03	0.03	0.04	0.05	0.06	0.22
Baton Rouge, LA	x	-	100	-	0.00	-0.12	-0.14	-0.16	-0.19	-0.23	-0.56	0.00	-0.12	-0.14	-0.16	-0.19	-0.23	-0.56
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.25	-0.29	-0.34	-0.40	-0.49	-1.19	0.00	-0.25	-0.29	-0.34	-0.40	-0.49	-1.19
Birmingham, AL	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.02	0.08
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.05	0.05	0.07	0.08	0.09	0.37	0.00	0.05	0.05	0.07	0.08	0.09	0.37
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.01	0.05
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.02	0.09	0.00	0.01	0.01	0.02	0.02	0.02	0.09
Canton-Massillon, OH	-	x	-	100	0.00	-0.01	-0.02	-0.02	-0.02	-0.03	-0.05	0.00	-0.01	-0.02	-0.02	-0.02	-0.03	-0.05
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.03	0.04	0.14
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.04
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.11	-0.13	-0.15	-0.17	-0.22	-0.33	0.00	-0.11	-0.13	-0.15	-0.17	-0.22	-0.33
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.02	0.02	0.03	0.03	0.04	0.15	0.00	0.02	0.02	0.03	0.03	0.04	0.15
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.03	0.03	0.04	0.05	0.05	0.21	0.00	0.03	0.03	0.04	0.05	0.05	0.21
Columbus, OH	x	x	100	100	0.00	0.02	0.02	0.03	0.03	0.03	0.14	0.00	0.02	0.02	0.03	0.03	0.03	0.14
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.07	0.08	0.10	0.12	0.14	0.55	0.00	0.07	0.08	0.10	0.12	0.14	0.55
Dayton-Springfield, OH	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.02	0.15	0.00	0.01	0.01	0.02	0.02	0.02	0.15
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.03	0.03	0.04	0.05	0.05	0.27	0.00	0.03	0.03	0.04	0.05	0.05	0.27
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Greater Connecticut, CT	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.03	0.04	0.14
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.01	0.01	0.01	0.01	0.01	0.06

**Table B2-13
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Butadiene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-0.48	-0.54	-0.64	-0.74	-0.92	-2.11	0.00	-0.48	-0.54	-0.64	-0.74	-0.92	-2.11
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.05	-0.05	-0.06	-0.07	-0.09	-0.21	0.00	-0.05	-0.05	-0.06	-0.07	-0.09	-0.21
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Indianapolis, IN	-	x	-	100	0.00	0.02	0.02	0.02	0.03	0.03	0.13	0.00	0.02	0.02	0.02	0.03	0.03	0.13
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Knoxville, TN	x	x	100	100	0.00	0.01	0.01	0.02	0.02	0.02	0.09	0.00	0.01	0.01	0.02	0.02	0.02	0.09
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Las Vegas, NV	x	-	100	-	0.00	0.01	0.02	0.02	0.03	0.03	0.11	0.00	0.01	0.02	0.02	0.03	0.03	0.11
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.13	-0.15	-0.17	-0.18	-0.25	-0.19	0.00	-0.13	-0.15	-0.17	-0.18	-0.25	-0.19
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.01	0.01	0.01	0.01	0.01	0.06
Louisville, KY-IN	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.09	0.00	0.01	0.01	0.02	0.02	0.02	0.09
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Memphis, TN-AR	x	-	100	-	0.00	-0.03	-0.04	-0.04	-0.05	-0.06	-0.12	0.00	-0.03	-0.04	-0.04	-0.05	-0.06	-0.12
Milwaukee-Racine, WI	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.03	0.04	0.14
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.08	0.08	0.11	0.14	0.15	0.79	0.00	0.08	0.08	0.11	0.14	0.15	0.79
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-0.20	-0.23	-0.26	-0.30	-0.39	-0.75	0.00	-0.20	-0.23	-0.27	-0.30	-0.39	-0.75
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.04	0.05	0.06	0.07	0.08	0.31	0.00	0.04	0.05	0.06	0.07	0.08	0.31
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.02	0.02	0.03	0.03	0.04	0.15	0.00	0.02	0.02	0.03	0.03	0.04	0.15
Poughkeepsie, NY	x	x	100	100	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10

**Table B2-13
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

Butadiene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.06	0.00	0.01	0.01	0.01	0.01	0.01	0.06
Rochester, NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Sacramento Metro, CA	x	-	50	-	0.00	0.02	0.03	0.03	0.04	0.04	0.17	0.00	0.02	0.03	0.03	0.04	0.04	0.17
San Diego, CA	x	-	100	-	0.00	0.03	0.04	0.04	0.05	0.06	0.24	0.00	0.03	0.04	0.04	0.05	0.06	0.24
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.08	-0.10	-0.11	-0.12	-0.16	-0.20	0.00	-0.08	-0.10	-0.11	-0.12	-0.16	-0.20
San Joaquin Valley, CA	x	x	50	100	0.00	0.02	0.02	0.03	0.04	0.04	0.23	0.00	0.02	0.02	0.03	0.04	0.04	0.23
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Springfield (Western MA), MA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
St. Louis, MO-IL	x	x	100	100	0.00	-0.04	-0.04	-0.05	-0.06	-0.07	-0.09	0.00	-0.04	-0.04	-0.05	-0.06	-0.07	-0.09
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.01	0.05
Washington, DC-MD-VA	x	x	100	100	0.00	0.05	0.06	0.07	0.09	0.10	0.38	0.00	0.05	0.06	0.07	0.09	0.10	0.38
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
York, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-14
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	-0.13	0.00	0.03	0.04	0.04	0.05	0.04	-0.08
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.01	0.00	-0.01
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Atlanta, GA	x	x	100	100	0.00	0.04	0.06	0.07	0.08	0.03	-0.78	0.00	0.18	0.21	0.24	0.27	0.25	-0.45
Baltimore, MD	x	x	100	100	0.00	0.01	0.02	0.02	0.03	0.01	-0.30	0.00	0.07	0.08	0.09	0.10	0.10	-0.17
Baton Rouge, LA	x	-	100	-	0.00	-0.34	-0.39	-0.46	-0.51	-0.63	-1.58	0.00	-0.56	-0.63	-0.71	-0.78	-0.92	-1.76
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.69	-0.79	-0.93	-1.05	-1.28	-3.08	0.00	-1.16	-1.29	-1.46	-1.60	-1.88	-3.48
Birmingham, AL	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.11	0.00	0.02	0.03	0.03	0.04	0.03	-0.06
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.02	0.04	0.04	0.05	0.02	-0.46	0.00	0.11	0.13	0.14	0.16	0.15	-0.26
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.00	0.01	0.01	0.01	0.00	-0.07	0.00	0.01	0.02	0.02	0.02	0.02	-0.04
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.11	0.00	0.03	0.03	0.03	0.04	0.04	-0.06
Canton-Massillon, OH	-	x	-	100	0.00	-0.04	-0.05	-0.06	-0.06	-0.08	-0.23	0.00	-0.07	-0.08	-0.09	-0.09	-0.11	-0.24
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.01	0.01	0.01	0.01	0.01	-0.02
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.01	0.02	0.02	0.02	0.01	-0.20	0.00	0.05	0.06	0.06	0.07	0.07	-0.12
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.00	-0.05	0.00	0.01	0.01	0.02	0.02	0.02	-0.03
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.46	-0.52	-0.62	-0.68	-0.90	-2.94	0.00	-0.68	-0.74	-0.85	-0.91	-1.13	-2.92
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.01	0.01	0.01	0.01	-0.01
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.01	0.01	0.02	0.02	0.01	-0.19	0.00	0.04	0.05	0.06	0.07	0.06	-0.11
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.01	0.01	0.01	-0.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.01	0.02	0.02	0.03	0.01	-0.26	0.00	0.06	0.07	0.08	0.09	0.09	-0.15
Columbus, OH	x	x	100	100	0.00	0.01	0.01	0.02	0.02	0.01	-0.18	0.00	0.04	0.05	0.06	0.06	0.06	-0.10
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.04	0.06	0.07	0.08	0.03	-0.77	0.00	0.18	0.21	0.24	0.27	0.25	-0.44
Dayton-Springfield, OH	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.00	-0.08	0.00	0.02	0.02	0.02	0.03	0.03	-0.05
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.04	-0.04	-0.05	-0.05	-0.09	-0.60	0.00	-0.02	-0.01	-0.02	-0.01	-0.05	-0.49
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.04	-0.03	-0.04	-0.04	-0.10	-0.76	0.00	0.01	0.02	0.02	0.03	-0.01	-0.59
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.01	0.01	0.01	0.01	0.01	-0.02
Greater Connecticut, CT	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.01	-0.18	0.00	0.04	0.05	0.06	0.06	0.06	-0.10
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.00	-0.08	0.00	0.02	0.02	0.03	0.03	0.03	-0.05
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.00	-0.07	0.00	0.02	0.02	0.02	0.03	0.02	-0.04

**Table B2-14
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.01	0.01	0.01	0.01	-0.01
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1.38	-1.58	-1.87	-2.09	-2.61	-6.77	0.00	-2.27	-2.52	-2.86	-3.11	-3.70	-7.38
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.13	-0.15	-0.18	-0.20	-0.25	-0.64	0.00	-0.22	-0.24	-0.28	-0.30	-0.36	-0.71
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.01	0.01	0.01	0.01	0.01	-0.01
Indianapolis, IN	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.01	-0.17	0.00	0.04	0.05	0.05	0.06	0.06	-0.10
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.01	0.00	0.00	-0.01
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Knoxville, TN	x	x	100	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.11	0.00	0.03	0.03	0.03	0.04	0.04	-0.06
Lancaster, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.01	0.01	0.01	0.02	0.01	-0.02
Las Vegas, NV	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	-0.17	0.00	0.04	0.05	0.05	0.06	0.05	-0.09
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.68	-0.75	-0.90	-0.99	-1.35	-4.93	0.00	-0.93	-1.00	-1.14	-1.23	-1.57	-4.71
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.00	0.01	0.01	0.01	0.00	-0.08	0.00	0.02	0.02	0.02	0.03	0.03	-0.05
Louisville, KY-IN	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.00	-0.11	0.00	0.03	0.03	0.03	0.04	0.04	-0.06
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.01	0.01	0.01	0.01	-0.01
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.00	-0.05	0.00	0.01	0.01	0.01	0.02	0.02	-0.03
Memphis, TN-AR	x	-	100	-	0.00	-0.11	-0.12	-0.14	-0.16	-0.20	-0.59	0.00	-0.16	-0.18	-0.21	-0.22	-0.27	-0.61
Milwaukee-Racine, WI	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.01	-0.18	0.00	0.04	0.05	0.05	0.06	0.06	-0.10
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.12	-0.11	-0.14	-0.14	-0.31	-2.32	0.00	0.00	0.03	0.03	0.05	-0.06	-1.81
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.01	0.01	-0.01
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-0.69	-0.78	-0.92	-1.03	-1.32	-3.92	0.00	-1.07	-1.17	-1.33	-1.45	-1.76	-4.05
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.02	0.04	0.04	0.05	0.02	-0.45	0.00	0.10	0.12	0.14	0.16	0.15	-0.26
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.01	0.01	0.02	0.02	0.01	-0.19	0.00	0.04	0.05	0.06	0.07	0.06	-0.11
Poughkeepsie, NY	x	x	100	100	0.00	0.01	0.01	0.01	0.01	0.01	-0.13	0.00	0.03	0.04	0.04	0.05	0.04	-0.08

**Table B2-14
Reference Case Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Butadiene 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.00	0.01	0.01	0.01	0.00	-0.09	0.00	0.02	0.03	0.03	0.03	0.03	-0.05
Reading, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.01	0.01	0.01	0.01	0.01	-0.02
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.00	0.01	0.01	0.01	0.00	-0.09	0.00	0.02	0.03	0.03	0.03	0.03	-0.05
Rochester, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.00	-0.13	0.00	0.03	0.04	0.04	0.05	0.04	-0.07
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Sacramento Metro, CA	x	-	50	-	0.00	0.01	0.02	0.02	0.03	0.01	-0.24	0.00	0.05	0.06	0.07	0.08	0.08	-0.13
San Diego, CA	x	-	100	-	0.00	0.01	0.02	0.03	0.03	0.01	-0.30	0.00	0.07	0.08	0.09	0.11	0.10	-0.17
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.37	-0.41	-0.49	-0.55	-0.73	-2.47	0.00	-0.54	-0.58	-0.66	-0.71	-0.90	-2.42
San Joaquin Valley, CA	x	x	50	100	0.00	-0.04	-0.04	-0.05	-0.05	-0.11	-0.80	0.00	0.00	0.01	0.01	0.01	-0.02	-0.62
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Springfield (Western MA), MA	x	-	100	-	0.00	0.00	0.01	0.01	0.01	0.00	-0.09	0.00	0.02	0.03	0.03	0.03	0.03	-0.05
St. Louis, MO-IL	x	x	100	100	0.00	-0.17	-0.19	-0.23	-0.25	-0.34	-1.14	0.00	-0.25	-0.27	-0.31	-0.33	-0.41	-1.12
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.06	0.00	-0.02	-0.02	-0.02	-0.03	-0.03	-0.07
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.07	0.00	0.01	0.01	0.02	0.02	0.02	-0.05
Washington, DC-MD-VA	x	x	100	100	0.00	0.02	0.04	0.04	0.05	0.02	-0.51	0.00	0.12	0.14	0.16	0.18	0.17	-0.29
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.01	0.01	0.01	-0.01
York, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.01	0.01	0.01	0.01	0.01	-0.02

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-15
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.03	-0.02	-0.04	-0.03	-0.07	-0.81	0.00	0.06	0.07	0.07	0.07	0.05	-0.61
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
Atlanta, GA	x	x	100	100	0.00	-0.18	-0.14	-0.22	-0.22	-0.47	-5.20	0.00	0.36	0.46	0.42	0.48	0.31	-3.89
Baltimore, MD	x	x	100	100	0.00	-0.06	-0.05	-0.08	-0.08	-0.16	-1.78	0.00	0.12	0.16	0.14	0.16	0.10	-1.33
Baton Rouge, LA	x	-	100	-	0.00	-0.53	-0.61	-0.72	-0.80	-0.99	-2.67	0.00	-1.12	-1.23	-1.39	-1.49	-1.73	-3.10
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.06	-1.21	-1.43	-1.59	-1.94	-4.76	0.00	-2.30	-2.54	-2.84	-3.05	-3.53	-5.78
Birmingham, AL	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.06	-0.62	0.00	0.04	0.05	0.05	0.06	0.04	-0.47
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.09	-0.07	-0.12	-0.11	-0.24	-2.69	0.00	0.19	0.24	0.22	0.25	0.16	-2.02
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.39	0.00	0.03	0.03	0.03	0.04	0.02	-0.29
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.03	-0.06	-0.64	0.00	0.04	0.06	0.05	0.06	0.04	-0.48
Canton-Massillon, OH	-	x	-	100	0.00	-0.07	-0.08	-0.10	-0.11	-0.14	-0.48	0.00	-0.14	-0.15	-0.17	-0.18	-0.22	-0.50
Charleston, WV	-	x	-	100	0.00	-0.01	0.00	-0.01	-0.01	-0.01	-0.16	0.00	0.01	0.01	0.01	0.02	0.01	-0.12
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.05	-0.04	-0.06	-0.06	-0.12	-1.31	0.00	0.09	0.12	0.11	0.12	0.08	-0.98
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.03	-0.31	0.00	0.02	0.03	0.03	0.03	0.02	-0.24
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.91	-0.99	-1.22	-1.33	-1.79	-7.69	0.00	-1.38	-1.47	-1.71	-1.82	-2.30	-7.37
Chico, CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.12	0.00	0.01	0.01	0.01	0.01	0.01	-0.09
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.04	-0.03	-0.05	-0.05	-0.10	-1.13	0.00	0.08	0.10	0.09	0.10	0.07	-0.85
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.10	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.05	-0.04	-0.07	-0.06	-0.14	-1.51	0.00	0.10	0.13	0.12	0.14	0.09	-1.13
Columbus, OH	x	x	100	100	0.00	-0.04	-0.03	-0.05	-0.05	-0.10	-1.12	0.00	0.08	0.10	0.09	0.10	0.07	-0.84
Dallas-Fort Worth, TX	x	-	100	-	0.00	-0.17	-0.13	-0.22	-0.21	-0.45	-5.01	0.00	0.35	0.44	0.41	0.46	0.30	-3.75
Dayton-Springfield, OH	-	x	-	100	0.00	-0.02	-0.01	-0.02	-0.02	-0.04	-0.46	0.00	0.03	0.04	0.04	0.04	0.03	-0.34
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.16	-0.16	-0.21	-0.22	-0.36	-2.55	0.00	-0.04	-0.02	-0.06	-0.06	-0.17	-2.09
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.19	-0.18	-0.25	-0.26	-0.43	-3.25	0.00	-0.01	0.02	-0.02	-0.01	-0.15	-2.63
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.21	0.00	0.01	0.02	0.02	0.02	0.01	-0.16
Greater Connecticut, CT	x	-	100	-	0.00	-0.04	-0.03	-0.05	-0.05	-0.10	-1.07	0.00	0.07	0.09	0.09	0.10	0.06	-0.80
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.02	-0.01	-0.02	-0.02	-0.04	-0.49	0.00	0.03	0.04	0.04	0.04	0.03	-0.37
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.04	-0.43	0.00	0.03	0.04	0.03	0.04	0.03	-0.32

**Table B2-15
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.12	0.00	0.01	0.01	0.01	0.01	0.01	-0.09
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-2.26	-2.55	-3.05	-3.38	-4.23	-12.53	0.00	-4.52	-4.95	-5.58	-5.99	-7.05	-13.92
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.22	-0.24	-0.29	-0.32	-0.40	-1.14	0.00	-0.44	-0.48	-0.54	-0.58	-0.68	-1.29
Imperial Co., CA	x	-	100	-	0.00	-0.01	0.00	-0.01	-0.01	-0.01	-0.17	0.00	0.01	0.01	0.01	0.02	0.01	-0.12
Indianapolis, IN	-	x	-	100	0.00	-0.04	-0.03	-0.05	-0.04	-0.09	-1.04	0.00	0.07	0.09	0.08	0.10	0.06	-0.78
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.08	0.00	0.01	0.01	0.01	0.01	0.00	-0.06
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.07	0.00	0.00	0.01	0.01	0.01	0.00	-0.05
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.06
Knoxville, TN	x	x	100	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.06	-0.68	0.00	0.05	0.06	0.06	0.06	0.04	-0.51
Lancaster, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.26	0.00	0.02	0.02	0.02	0.02	0.02	-0.19
Las Vegas, NV	x	-	100	-	0.00	-0.04	-0.03	-0.05	-0.05	-0.10	-1.13	0.00	0.08	0.10	0.09	0.10	0.07	-0.85
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1.50	-1.59	-1.99	-2.16	-3.00	-14.79	0.00	-1.88	-1.96	-2.35	-2.48	-3.32	-13.52
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.02	-0.05	-0.51	0.00	0.03	0.04	0.04	0.05	0.03	-0.38
Louisville, KY-IN	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.06	-0.64	0.00	0.04	0.06	0.05	0.06	0.04	-0.48
Macon, GA	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.12	0.00	0.01	0.01	0.01	0.01	0.01	-0.09
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.06	0.00	0.00	0.01	0.00	0.01	0.00	-0.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.08	0.00	0.01	0.01	0.01	0.01	0.00	-0.06
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.03	-0.31	0.00	0.02	0.03	0.03	0.03	0.02	-0.23
Memphis, TN-AR	x	-	100	-	0.00	-0.19	-0.21	-0.25	-0.28	-0.36	-1.30	0.00	-0.33	-0.36	-0.41	-0.44	-0.53	-1.33
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.04	-0.03	-0.04	-0.04	-0.09	-1.03	0.00	0.07	0.09	0.08	0.09	0.06	-0.77
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.06	0.00	0.00	0.01	0.01	0.01	0.00	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.59	-0.57	-0.77	-0.81	-1.31	-9.77	0.00	-0.07	0.02	-0.12	-0.09	-0.50	-7.94
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-1.25	-1.38	-1.68	-1.85	-2.41	-9.06	0.00	-2.15	-2.32	-2.66	-2.84	-3.47	-9.12
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.11	-0.08	-0.13	-0.13	-0.27	-3.02	0.00	0.21	0.26	0.24	0.28	0.18	-2.26
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.04	-0.03	-0.05	-0.05	-0.10	-1.07	0.00	0.07	0.09	0.09	0.10	0.06	-0.80
Poughkeepsie, NY	x	x	100	100	0.00	-0.03	-0.02	-0.04	-0.03	-0.07	-0.81	0.00	0.06	0.07	0.07	0.07	0.05	-0.61

**Table B2-15
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.02	-0.05	-0.54	0.00	0.04	0.05	0.04	0.05	0.03	-0.40
Reading, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.24	0.00	0.02	0.02	0.02	0.02	0.01	-0.18
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.03	-0.06	-0.68	0.00	0.05	0.06	0.06	0.06	0.04	-0.51
Rochester, NY	x	-	100	-	0.00	-0.03	-0.02	-0.03	-0.03	-0.07	-0.76	0.00	0.05	0.07	0.06	0.07	0.04	-0.57
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.07	0.00	0.00	0.01	0.01	0.01	0.00	-0.05
Sacramento Metro, CA	x	-	50	-	0.00	-0.05	-0.04	-0.06	-0.06	-0.13	-1.48	0.00	0.10	0.13	0.12	0.14	0.09	-1.11
San Diego, CA	x	-	100	-	0.00	-0.06	-0.05	-0.08	-0.07	-0.16	-1.75	0.00	0.12	0.15	0.14	0.16	0.10	-1.31
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.75	-0.81	-1.01	-1.10	-1.49	-6.60	0.00	-1.09	-1.16	-1.36	-1.45	-1.85	-6.25
San Joaquin Valley, CA	x	x	50	100	0.00	-0.22	-0.21	-0.28	-0.29	-0.48	-3.69	0.00	0.00	0.03	-0.02	0.00	-0.16	-2.98
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.07	0.00	0.00	0.01	0.01	0.01	0.00	-0.05
Springfield (Western MA), MA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.02	-0.05	-0.56	0.00	0.04	0.05	0.05	0.05	0.03	-0.42
St. Louis, MO-IL	x	x	100	100	0.00	-0.35	-0.38	-0.46	-0.51	-0.69	-3.04	0.00	-0.51	-0.54	-0.63	-0.67	-0.86	-2.88
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.14	0.00	-0.04	-0.04	-0.05	-0.05	-0.06	-0.14
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.02	-0.04	-0.39	0.00	0.02	0.03	0.02	0.03	0.01	-0.29
Washington, DC-MD-VA	x	x	100	100	0.00	-0.11	-0.08	-0.14	-0.13	-0.28	-3.16	0.00	0.22	0.28	0.26	0.29	0.19	-2.36
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.09	0.00	0.01	0.01	0.01	0.01	0.01	-0.07
York, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.27	0.00	0.02	0.02	0.02	0.02	0.02	-0.20

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-16
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Butadiene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.11	-0.10	-0.14	-0.14	-0.24	-2.12	0.00	0.10	0.13	0.09	0.11	0.02	-1.62
Allegan Co., MI	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.23	0.00	0.01	0.01	0.01	0.01	0.00	-0.18
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.27	0.00	0.01	0.02	0.01	0.01	0.00	-0.21
Atlanta, GA	x	x	100	100	0.00	-0.86	-0.79	-1.12	-1.10	-1.90	-16.83	0.00	0.77	1.00	0.75	0.90	0.14	-12.91
Baltimore, MD	x	x	100	100	0.00	-0.24	-0.21	-0.30	-0.30	-0.52	-4.59	0.00	0.21	0.27	0.20	0.25	0.04	-3.52
Baton Rouge, LA	x	-	100	-	0.00	-0.77	-0.87	-1.04	-1.15	-1.43	-4.20	0.00	-1.82	-1.99	-2.23	-2.37	-2.77	-4.92
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.46	-1.67	-1.99	-2.20	-2.69	-6.72	0.00	-3.75	-4.11	-4.57	-4.86	-5.59	-8.56
Birmingham, AL	-	x	-	100	0.00	-0.08	-0.07	-0.10	-0.10	-0.18	-1.57	0.00	0.07	0.09	0.07	0.08	0.01	-1.21
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.33	-0.30	-0.43	-0.42	-0.73	-6.50	0.00	0.30	0.39	0.29	0.35	0.05	-4.99
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.05	-0.05	-0.07	-0.06	-0.11	-0.99	0.00	0.05	0.06	0.04	0.05	0.01	-0.76
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.08	-0.07	-0.10	-0.10	-0.17	-1.50	0.00	0.07	0.09	0.07	0.08	0.01	-1.15
Canton-Massillon, OH	-	x	-	100	0.00	-0.12	-0.13	-0.16	-0.17	-0.22	-0.83	0.00	-0.23	-0.24	-0.28	-0.29	-0.36	-0.86
Charleston, WV	-	x	-	100	0.00	-0.02	-0.02	-0.02	-0.02	-0.04	-0.37	0.00	0.02	0.02	0.02	0.02	0.00	-0.29
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.20	-0.19	-0.26	-0.26	-0.45	-3.98	0.00	0.18	0.24	0.18	0.21	0.03	-3.06
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.04	-0.04	-0.05	-0.05	-0.09	-0.77	0.00	0.04	0.05	0.03	0.04	0.01	-0.59
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.65	-1.75	-2.20	-2.34	-3.24	-16.32	0.00	-2.19	-2.30	-2.80	-2.91	-3.96	-14.99
Chico, CA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.02	-0.03	-0.30	0.00	0.01	0.02	0.01	0.02	0.00	-0.23
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.15	-0.14	-0.20	-0.20	-0.34	-3.00	0.00	0.14	0.18	0.13	0.16	0.02	-2.30
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.22	0.00	0.01	0.01	0.01	0.01	0.00	-0.17
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.18	-0.17	-0.24	-0.23	-0.40	-3.54	0.00	0.16	0.21	0.16	0.19	0.03	-2.72
Columbus, OH	x	x	100	100	0.00	-0.16	-0.14	-0.20	-0.20	-0.35	-3.08	0.00	0.14	0.18	0.14	0.17	0.02	-2.37
Dallas-Fort Worth, TX	x	-	100	-	0.00	-0.78	-0.72	-1.01	-1.00	-1.73	-15.28	0.00	0.70	0.91	0.68	0.82	0.12	-11.72
Dayton-Springfield, OH	-	x	-	100	0.00	-0.06	-0.05	-0.07	-0.07	-0.12	-1.08	0.00	0.05	0.06	0.05	0.06	0.01	-0.83
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.44	-0.43	-0.57	-0.58	-0.92	-6.67	0.00	-0.03	0.02	-0.11	-0.08	-0.42	-5.40
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.48	-0.47	-0.63	-0.64	-1.02	-7.47	0.00	-0.02	0.04	-0.10	-0.06	-0.44	-6.03
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	-0.03	-0.02	-0.03	-0.03	-0.06	-0.52	0.00	0.02	0.03	0.02	0.03	0.00	-0.40
Greater Connecticut, CT	x	-	100	-	0.00	-0.14	-0.13	-0.18	-0.18	-0.30	-2.69	0.00	0.12	0.16	0.12	0.14	0.02	-2.07
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	-0.04
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.06	-0.06	-0.08	-0.08	-0.14	-1.23	0.00	0.06	0.07	0.05	0.07	0.01	-0.94
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.05	-0.05	-0.07	-0.07	-0.12	-1.05	0.00	0.05	0.06	0.05	0.06	0.01	-0.81

Table B2-16
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Butadiene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Hickory, NC	-	x	-	100	0.00	-0.02	-0.01	-0.02	-0.02	-0.04	-0.31	0.00	0.01	0.02	0.01	0.02	0.00	-0.24
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-3.39	-3.79	-4.58	-5.00	-6.39	-21.56	0.00	-7.32	-7.95	-9.00	-9.54	-11.38	-23.52
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.31	-0.35	-0.42	-0.46	-0.58	-1.81	0.00	-0.72	-0.78	-0.88	-0.93	-1.10	-2.06
Imperial Co., CA	x	-	100	-	0.00	-0.03	-0.02	-0.03	-0.03	-0.06	-0.51	0.00	0.02	0.03	0.02	0.03	0.00	-0.39
Indianapolis, IN	-	x	-	100	0.00	-0.15	-0.13	-0.19	-0.19	-0.32	-2.88	0.00	0.13	0.17	0.13	0.15	0.02	-2.21
Jamestown, NY	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.20	0.00	0.01	0.01	0.01	0.01	0.00	-0.15
Jefferson Co., NY	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.24	0.00	0.01	0.01	0.01	0.01	0.00	-0.19
Johnstown, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.15	0.00	0.01	0.01	0.01	0.01	0.00	-0.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.26	0.00	0.01	0.02	0.01	0.01	0.00	-0.20
Knoxville, TN	x	x	100	100	0.00	-0.09	-0.08	-0.12	-0.12	-0.20	-1.77	0.00	0.08	0.11	0.08	0.09	0.01	-1.36
Lancaster, PA	-	x	-	100	0.00	-0.03	-0.03	-0.04	-0.04	-0.07	-0.63	0.00	0.03	0.04	0.03	0.03	0.01	-0.48
Las Vegas, NV	x	-	100	-	0.00	-0.19	-0.17	-0.25	-0.24	-0.42	-3.72	0.00	0.17	0.22	0.17	0.20	0.03	-2.86
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-3.00	-3.11	-3.99	-4.19	-6.03	-34.53	0.00	-2.89	-2.92	-3.82	-3.91	-5.94	-30.25
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.07	-0.07	-0.10	-0.09	-0.16	-1.45	0.00	0.07	0.09	0.06	0.08	0.01	-1.11
Louisville, KY-IN	-	x	-	100	0.00	-0.08	-0.07	-0.10	-0.10	-0.17	-1.52	0.00	0.07	0.09	0.07	0.08	0.01	-1.17
Macon, GA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.29	0.00	0.01	0.02	0.01	0.02	0.00	-0.22
Manitowoc Co., WI	x	-	-	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.14	0.00	0.01	0.01	0.01	0.01	0.00	-0.11
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.23	0.00	0.01	0.01	0.01	0.01	0.00	-0.18
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.05	-0.05	-0.07	-0.06	-0.11	-1.00	0.00	0.05	0.06	0.04	0.05	0.01	-0.76
Memphis, TN-AR	x	-	100	-	0.00	-0.30	-0.33	-0.40	-0.43	-0.57	-2.35	0.00	-0.54	-0.58	-0.67	-0.71	-0.88	-2.35
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.13	-0.12	-0.16	-0.16	-0.28	-2.48	0.00	0.11	0.15	0.11	0.13	0.02	-1.90
Nevada (Western Part), CA	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.17	0.00	0.01	0.01	0.01	0.01	0.00	-0.13
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-1.46	-1.43	-1.91	-1.95	-3.06	-22.28	0.00	-0.13	0.05	-0.38	-0.28	-1.42	-18.06
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.20	0.00	0.01	0.01	0.01	0.01	0.00	-0.15
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-2.08	-2.25	-2.79	-3.00	-4.02	-17.58	0.00	-3.47	-3.71	-4.34	-4.56	-5.80	-17.07
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.49	-0.45	-0.63	-0.62	-1.08	-9.52	0.00	0.43	0.56	0.42	0.51	0.08	-7.30
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.12	-0.11	-0.16	-0.16	-0.27	-2.42	0.00	0.11	0.14	0.11	0.13	0.02	-1.85
Poughkeepsie, NY	x	x	100	100	0.00	-0.11	-0.10	-0.14	-0.14	-0.24	-2.13	0.00	0.10	0.13	0.09	0.11	0.02	-1.63

**Table B2-16
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-0.07	-0.06	-0.08	-0.08	-0.14	-1.28	0.00	0.06	0.08	0.06	0.07	0.01	-0.98
Reading, PA	-	x	-	100	0.00	-0.03	-0.03	-0.04	-0.04	-0.07	-0.63	0.00	0.03	0.04	0.03	0.03	0.01	-0.48
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.13	-0.12	-0.17	-0.17	-0.29	-2.55	0.00	0.12	0.15	0.11	0.14	0.02	-1.95
Rochester, NY	x	-	100	-	0.00	-0.10	-0.09	-0.12	-0.12	-0.21	-1.85	0.00	0.08	0.11	0.08	0.10	0.01	-1.42
Rome, GA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.16	0.00	0.01	0.01	0.01	0.01	0.00	-0.12
Sacramento Metro, CA	x	-	50	-	0.00	-0.22	-0.20	-0.28	-0.28	-0.48	-4.24	0.00	0.19	0.25	0.19	0.23	0.03	-3.25
San Diego, CA	x	-	100	-	0.00	-0.21	-0.19	-0.28	-0.27	-0.47	-4.15	0.00	0.19	0.25	0.18	0.22	0.03	-3.18
San Francisco Bay Area, CA	x	-	100	-	0.00	-1.34	-1.42	-1.78	-1.90	-2.63	-13.23	0.00	-1.78	-1.87	-2.28	-2.37	-3.22	-12.16
San Joaquin Valley, CA	x	x	50	100	0.00	-0.65	-0.62	-0.84	-0.85	-1.37	-10.44	0.00	0.08	0.17	-0.01	0.04	-0.47	-8.34
Sheboygan, WI	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.18	0.00	0.01	0.01	0.01	0.01	0.00	-0.13
Springfield (Western MA), MA	x	-	100	-	0.00	-0.07	-0.06	-0.09	-0.09	-0.16	-1.37	0.00	0.06	0.08	0.06	0.07	0.01	-1.05
St. Louis, MO-IL	x	x	100	100	0.00	-0.62	-0.66	-0.83	-0.88	-1.22	-6.13	0.00	-0.82	-0.86	-1.05	-1.09	-1.49	-5.63
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.04	-0.04	-0.05	-0.06	-0.24	0.00	-0.06	-0.07	-0.08	-0.08	-0.10	-0.24
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.05	-0.05	-0.06	-0.06	-0.11	-0.92	0.00	0.03	0.04	0.03	0.04	-0.01	-0.72
Washington, DC-MD-VA	x	x	100	100	0.00	-0.45	-0.41	-0.58	-0.57	-1.00	-8.81	0.00	0.40	0.52	0.39	0.47	0.07	-6.76
Wheeling, WV-OH	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.21	0.00	0.01	0.01	0.01	0.01	0.00	-0.16
York, PA	-	x	-	100	0.00	-0.04	-0.03	-0.05	-0.05	-0.08	-0.73	0.00	0.03	0.04	0.03	0.04	0.01	-0.56

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-17
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	48.00	66.26	-52.07	-65.35	-205.04	-2,816.53	0.00	48.00	66.26	-52.07	-65.35	-205.05	-2,816.54
Allegan Co., MI	x	-	100	-	0.00	5.25	7.25	-5.70	-7.15	-22.43	-308.09	0.00	5.25	7.25	-5.70	-7.15	-22.43	-308.09
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	4.77	6.59	-5.18	-6.50	-20.39	-280.04	0.00	4.77	6.59	-5.18	-6.50	-20.39	-280.04
Atlanta, GA	x	x	100	100	0.00	255.33	352.44	-276.94	-347.57	-1,090.59	-14,980.69	0.00	255.32	352.43	-276.95	-347.59	-1,090.61	-14,980.71
Baltimore, MD	x	x	100	100	0.00	106.09	146.44	-115.08	-144.43	-453.17	-6,224.87	0.00	106.09	146.44	-115.09	-144.44	-453.18	-6,224.88
Baton Rouge, LA	x	-	100	-	0.00	12.69	20.71	-43.21	-51.68	-128.35	-1,569.39	0.00	12.62	20.64	-43.28	-51.75	-128.42	-1,569.47
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-8.86	-5.79	-49.69	-57.23	-111.49	-1,141.57	0.00	-8.98	-5.93	-49.82	-57.37	-111.64	-1,141.71
Birmingham, AL	-	x	-	100	0.00	38.81	53.57	-42.09	-52.83	-165.78	-2,277.15	0.00	38.81	53.57	-42.10	-52.83	-165.78	-2,277.15
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	172.63	238.28	-187.24	-235.00	-737.36	-10,128.51	0.00	172.62	238.27	-187.25	-235.01	-737.37	-10,128.52
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	23.36	32.25	-25.32	-31.78	-99.74	-1,370.22	0.00	23.36	32.25	-25.32	-31.78	-99.74	-1,370.22
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	41.51	57.29	-45.02	-56.50	-177.30	-2,435.39	0.00	41.51	57.29	-45.02	-56.51	-177.30	-2,435.39
Canton-Massillon, OH	-	x	-	100	0.00	10.26	14.58	-14.98	-18.47	-53.53	-709.96	0.00	10.26	14.58	-14.99	-18.48	-53.54	-709.97
Charleston, WV	-	x	-	100	0.00	11.12	15.34	-12.06	-15.13	-47.48	-652.18	0.00	11.12	15.34	-12.06	-15.13	-47.48	-652.18
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	67.21	92.75	-72.75	-91.32	-286.71	-3,939.21	0.00	67.20	92.75	-72.76	-91.32	-286.71	-3,939.21
Chattanooga, AL-TN-GA	-	x	-	100	0.00	19.89	27.45	-21.56	-27.06	-84.92	-1,166.53	0.00	19.88	27.45	-21.56	-27.06	-84.92	-1,166.53
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	245.14	343.02	-308.73	-383.76	-1,154.97	-15,583.14	0.00	245.03	342.91	-308.84	-383.88	-1,155.09	-15,583.26
Chico, CA	x	-	100	-	0.00	7.18	9.91	-7.79	-9.77	-30.66	-421.18	0.00	7.18	9.91	-7.79	-9.77	-30.66	-421.18
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	68.76	94.91	-74.56	-93.57	-293.64	-4,033.60	0.00	68.75	94.90	-74.56	-93.58	-293.64	-4,033.60
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	6.50	8.97	-7.05	-8.85	-27.77	-381.40	0.00	6.50	8.97	-7.05	-8.85	-27.77	-381.40
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	99.04	136.70	-107.42	-134.82	-423.02	-5,810.71	0.00	99.03	136.70	-107.43	-134.82	-423.03	-5,810.72
Columbus, OH	x	x	100	100	0.00	64.02	88.37	-69.44	-87.15	-273.47	-3,756.41	0.00	64.02	88.37	-69.45	-87.16	-273.47	-3,756.41
Dallas-Fort Worth, TX	x	-	100	-	0.00	259.40	358.06	-281.36	-353.12	-1,108.00	-15,219.68	0.00	259.39	358.04	-281.37	-353.13	-1,108.01	-15,219.70
Dayton-Springfield, OH	-	x	-	100	0.00	30.03	41.46	-32.58	-40.88	-128.29	-1,762.16	0.00	30.03	41.45	-32.58	-40.89	-128.29	-1,762.16
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	118.14	163.60	-133.08	-166.60	-517.06	-7,069.95	0.00	118.12	163.58	-133.10	-166.62	-517.08	-7,069.97
Detroit-Ann Arbor, MI	x	x	100	100	0.00	178.70	247.24	-199.10	-249.42	-776.57	-10,632.45	0.00	178.68	247.22	-199.12	-249.44	-776.59	-10,632.48
Door Co., WI	x	-	100	-	0.00	1.22	1.68	-1.32	-1.66	-5.21	-71.52	0.00	1.22	1.68	-1.32	-1.66	-5.21	-71.52
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.05	0.07	-0.06	-0.07	-0.22	-3.01	0.00	0.05	0.07	-0.06	-0.07	-0.22	-3.01
Evansville, IN	-	x	-	100	0.00	12.88	17.78	-13.95	-17.51	-54.96	-755.06	0.00	12.88	17.77	-13.95	-17.51	-54.96	-755.06
Greater Connecticut, CT	x	-	100	-	0.00	65.67	90.65	-71.23	-89.40	-280.51	-3,853.15	0.00	65.67	90.64	-71.24	-89.41	-280.52	-3,853.15
Greene Co., PA	x	-	100	-	0.00	1.51	2.08	-1.64	-2.05	-6.44	-88.48	0.00	1.51	2.08	-1.64	-2.05	-6.44	-88.48
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	29.70	41.00	-32.22	-40.43	-126.87	-1,742.66	0.00	29.70	41.00	-32.22	-40.43	-126.87	-1,742.66
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	26.91	37.14	-29.18	-36.63	-114.93	-1,578.64	0.00	26.90	37.14	-29.19	-36.63	-114.93	-1,578.64

**Table B2-17
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Emission Changes a/ by Nonattainment Area**

CO 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.19	0.26	-0.20	-0.25	-0.79	-10.86	0.00	0.19	0.26	-0.20	-0.25	-0.79	-10.86
Hickory, NC	-	x	-	100	0.00	6.98	9.63	-7.57	-9.50	-29.80	-409.32	0.00	6.98	9.63	-7.57	-9.50	-29.80	-409.32
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	141.74	208.80	-275.10	-334.76	-911.05	-11,716.28	0.00	141.46	208.53	-275.39	-335.06	-911.36	-11,716.58
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	11.56	17.22	-24.15	-29.31	-78.63	-1,003.73	0.00	11.54	17.19	-24.18	-29.34	-78.66	-1,003.76
Imperial Co., CA	x	-	100	-	0.00	8.28	11.43	-8.98	-11.27	-35.37	-485.89	0.00	8.28	11.43	-8.98	-11.27	-35.37	-485.89
Indianapolis, IN	-	x	-	100	0.00	59.77	82.50	-64.83	-81.36	-255.29	-3,506.70	0.00	59.76	82.50	-64.83	-81.36	-255.29	-3,506.71
Jamestown, NY	x	-	100	-	0.00	5.53	7.63	-5.99	-7.52	-23.61	-324.25	0.00	5.53	7.63	-5.99	-7.52	-23.61	-324.25
Jefferson Co., NY	x	-	100	-	0.00	5.13	7.08	-5.57	-6.99	-21.92	-301.08	0.00	5.13	7.08	-5.57	-6.99	-21.92	-301.08
Johnstown, PA	-	x	-	100	0.00	4.53	6.26	-4.92	-6.17	-19.36	-265.93	0.00	4.53	6.26	-4.92	-6.17	-19.36	-265.93
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	4.34	5.99	-4.72	-5.92	-18.57	-254.97	0.00	4.34	5.99	-4.72	-5.92	-18.57	-254.97
Knoxville, TN	x	x	100	100	0.00	40.61	56.06	-44.05	-55.28	-173.46	-2,382.71	0.00	40.61	56.05	-44.05	-55.28	-173.46	-2,382.71
Lancaster, PA	-	x	-	100	0.00	15.87	21.91	-17.22	-21.61	-67.79	-931.24	0.00	15.87	21.91	-17.22	-21.61	-67.80	-931.24
Las Vegas, NV	x	-	100	-	0.00	52.58	72.58	-57.03	-71.57	-224.58	-3,084.91	0.00	52.58	72.58	-57.03	-71.58	-224.58	-3,084.91
Libby, MT	-	x	-	100	0.00	0.26	0.36	-0.28	-0.35	-1.11	-15.29	0.00	0.26	0.36	-0.28	-0.35	-1.11	-15.29
Liberty-Clairton, PA	-	x	-	100	0.00	0.51	0.71	-0.55	-0.70	-2.18	-30.00	0.00	0.51	0.71	-0.55	-0.70	-2.18	-30.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	523.17	729.23	-632.77	-788.51	-2,399.14	-32,525.58	0.00	522.99	729.05	-632.96	-788.70	-2,399.34	-32,525.77
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	27.11	37.42	-29.40	-36.90	-115.79	-1,590.49	0.00	27.10	37.41	-29.41	-36.91	-115.79	-1,590.49
Louisville, KY-IN	-	x	-	100	0.00	41.71	57.58	-45.22	-56.76	-178.11	-2,446.77	0.00	41.71	57.57	-45.22	-56.76	-178.12	-2,446.77
Macon, GA	-	x	-	100	0.00	7.77	10.73	-8.43	-10.58	-33.19	-455.98	0.00	7.77	10.73	-8.43	-10.58	-33.19	-455.98
Manitowoc Co., WI	x	-	-	-	0.00	3.98	5.49	-4.32	-5.42	-17.00	-233.57	0.00	3.98	5.49	-4.32	-5.42	-17.00	-233.57
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	3.89	5.37	-4.22	-5.29	-16.61	-228.12	0.00	3.89	5.37	-4.22	-5.29	-16.61	-228.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	15.22	21.00	-16.51	-20.71	-65.00	-892.82	0.00	15.22	21.00	-16.51	-20.72	-65.00	-892.82
Memphis, TN-AR	x	-	100	-	0.00	33.05	46.65	-45.33	-56.07	-165.04	-2,204.65	0.00	33.03	46.62	-45.35	-56.09	-165.06	-2,204.68
Milwaukee-Racine, WI	x	-	100	-	0.00	65.40	90.27	-70.94	-89.03	-279.35	-3,837.14	0.00	65.39	90.27	-70.94	-89.03	-279.35	-3,837.14
Nevada (Western Part), CA	x	-	100	-	0.00	3.70	5.10	-4.01	-5.03	-15.80	-216.99	0.00	3.70	5.10	-4.01	-5.03	-15.80	-216.99
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	531.64	735.66	-593.40	-743.29	-2,313.03	-31,662.10	0.00	531.57	735.59	-593.47	-743.37	-2,313.11	-31,662.18
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	5.89	8.13	-6.39	-8.02	-25.16	-345.66	0.00	5.89	8.13	-6.39	-8.02	-25.16	-345.66
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	231.69	326.58	-313.75	-388.37	-1,146.90	-15,343.34	0.00	231.54	326.43	-313.91	-388.53	-1,147.07	-15,343.51
Phoenix-Mesa, AZ	x	-	100	-	0.00	146.16	201.75	-158.47	-198.89	-624.15	-8,573.90	0.00	146.16	201.74	-158.48	-198.90	-624.16	-8,573.91
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	73.12	100.92	-79.30	-99.53	-312.29	-4,289.76	0.00	73.11	100.92	-79.31	-99.53	-312.30	-4,289.77
Poughkeepsie, NY	x	x	100	100	0.00	47.39	65.42	-51.40	-64.51	-202.42	-2,780.52	0.00	47.39	65.41	-51.40	-64.52	-202.43	-2,780.52

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CO 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	34.28	47.32	-37.18	-46.67	-146.43	-2,011.46	0.00	34.28	47.32	-37.19	-46.67	-146.44	-2,011.46
Reading, PA	-	x	-	100	0.00	13.93	19.22	-15.10	-18.96	-59.48	-817.03	0.00	13.92	19.22	-15.10	-18.96	-59.48	-817.03
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	27.64	38.15	-29.98	-37.63	-118.07	-1,621.85	0.00	27.64	38.15	-29.99	-37.63	-118.07	-1,621.85
Rochester, NY	x	-	100	-	0.00	48.02	66.29	-52.09	-65.37	-205.12	-2,817.60	0.00	48.02	66.28	-52.09	-65.38	-205.13	-2,817.61
Rome, GA	-	x	-	100	0.00	4.20	5.80	-4.55	-5.72	-17.93	-246.34	0.00	4.20	5.80	-4.55	-5.72	-17.93	-246.34
Sacramento Metro, CA	x	-	50	-	0.00	80.67	111.36	-87.50	-109.82	-344.58	-4,733.26	0.00	80.67	111.35	-87.51	-109.82	-344.59	-4,733.27
San Diego, CA	x	-	100	-	0.00	112.93	155.88	-122.49	-153.73	-482.37	-6,625.91	0.00	112.92	155.88	-122.50	-153.74	-482.38	-6,625.92
San Francisco Bay Area, CA	x	-	100	-	0.00	233.65	326.27	-288.04	-358.51	-1,085.18	-14,678.59	0.00	233.56	326.18	-288.14	-358.61	-1,085.28	-14,678.69
San Joaquin Valley, CA	x	x	50	100	0.00	162.20	224.52	-181.76	-227.61	-707.50	-9,679.96	0.00	162.17	224.50	-181.79	-227.64	-707.52	-9,679.99
Sheboygan, WI	x	-	100	-	0.00	4.46	6.15	-4.83	-6.07	-19.03	-261.43	0.00	4.46	6.15	-4.83	-6.07	-19.03	-261.43
Springfield (Western MA), MA	x	-	100	-	0.00	34.47	47.58	-37.39	-46.92	-147.23	-2,022.42	0.00	34.47	47.58	-37.39	-46.93	-147.24	-2,022.42
St. Louis, MO-IL	x	x	100	100	0.00	107.47	150.10	-132.71	-165.16	-499.71	-6,757.98	0.00	107.43	150.06	-132.76	-165.21	-499.76	-6,758.02
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	3.57	5.05	-4.93	-6.10	-17.92	-239.24	0.00	3.57	5.05	-4.93	-6.10	-17.92	-239.25
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Ventura Co., CA	x	-	100	-	0.00	23.62	32.63	-25.77	-32.33	-101.28	-1,390.21	0.00	23.62	32.62	-25.77	-32.33	-101.28	-1,390.21
Washington, DC-MD-VA	x	x	100	100	0.00	181.47	250.49	-196.85	-247.06	-775.18	-10,647.94	0.00	181.46	250.48	-196.86	-247.07	-775.20	-10,647.95
Wheeling, WV-OH	-	x	-	100	0.00	6.32	8.73	-6.86	-8.61	-27.01	-370.96	0.00	6.32	8.73	-6.86	-8.61	-27.01	-370.96
York, PA	-	x	-	100	0.00	14.72	20.31	-15.96	-20.03	-62.86	-863.41	0.00	14.71	20.31	-15.96	-20.03	-62.86	-863.41

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-18
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	114.89	188.42	-301.49	-360.77	-715.95	-11,215.20	0.00	219.17	300.56	-219.36	-278.26	-638.57	-11,024.61
Allegan Co., MI	x	-	100	-	0.00	12.56	20.60	-32.97	-39.45	-78.29	-1,226.41	0.00	23.97	32.87	-23.99	-30.43	-69.83	-1,205.57
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	12.16	19.95	-31.92	-38.19	-75.79	-1,187.29	0.00	23.20	31.82	-23.22	-29.46	-67.60	-1,167.12
Atlanta, GA	x	x	100	100	0.00	666.01	1,092.24	-1,747.70	-2,091.35	-4,150.29	-65,013.07	0.00	1,270.49	1,742.33	-1,271.60	-1,613.04	-3,701.67	-63,908.28
Baltimore, MD	x	x	100	100	0.00	252.61	414.28	-662.92	-793.27	-1,574.23	-24,659.69	0.00	481.88	660.85	-482.34	-611.86	-1,404.08	-24,240.66
Baton Rouge, LA	x	-	100	-	0.00	23.78	58.21	-203.27	-239.87	-434.06	-6,122.28	0.00	30.03	67.32	-212.14	-250.39	-448.57	-6,076.07
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-36.56	-21.28	-187.68	-217.80	-347.74	-4,083.86	0.00	-100.63	-85.37	-265.91	-299.63	-433.82	-4,130.90
Birmingham, AL	-	x	-	100	0.00	90.24	147.98	-236.78	-283.34	-562.28	-8,808.07	0.00	172.14	236.06	-172.27	-218.53	-501.50	-8,658.39
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	395.96	649.37	-1,039.08	-1,243.40	-2,467.51	-38,652.68	0.00	755.33	1,035.86	-756.03	-959.04	-2,200.81	-37,995.86
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	55.41	90.86	-145.31	-173.88	-345.10	-5,406.31	0.00	105.71	144.95	-105.68	-134.07	-307.76	-5,314.41
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	94.63	155.20	-248.34	-297.18	-589.74	-9,238.12	0.00	180.53	247.57	-180.69	-229.21	-526.00	-9,081.14
Canton-Massillon, OH	-	x	-	100	0.00	22.40	39.24	-77.18	-91.91	-176.92	-2,682.98	0.00	40.73	59.27	-64.54	-79.43	-165.82	-2,644.94
Charleston, WV	-	x	-	100	0.00	24.84	40.73	-65.18	-77.99	-154.78	-2,424.59	0.00	47.38	64.98	-47.42	-60.16	-138.05	-2,383.39
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	172.51	282.83	-452.08	-540.98	-1,073.77	-16,823.19	0.00	329.15	451.28	-328.64	-416.97	-957.43	-16,537.06
Chattanooga, AL-TN-GA	-	x	-	100	0.00	45.91	75.30	-120.48	-144.17	-286.11	-4,481.83	0.00	87.59	120.12	-87.66	-111.20	-255.18	-4,405.66
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	571.70	965.50	-1,704.96	-2,035.30	-3,978.07	-61,331.25	0.00	1,068.30	1,503.04	-1,333.87	-1,664.83	-3,637.34	-60,373.07
Chico, CA	x	-	100	-	0.00	17.04	27.95	-44.72	-53.51	-106.19	-1,663.47	0.00	32.51	44.58	-32.54	-41.27	-94.71	-1,635.20
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	161.07	264.14	-422.59	-505.68	-1,003.56	-15,720.82	0.00	307.27	421.37	-307.43	-389.99	-895.04	-15,453.64
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	14.52	23.81	-38.10	-45.59	-90.47	-1,417.23	0.00	27.70	37.98	-27.72	-35.16	-80.69	-1,393.15
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	224.89	368.82	-590.17	-706.21	-1,401.47	-21,953.61	0.00	429.01	588.34	-429.40	-544.70	-1,249.99	-21,580.55
Columbus, OH	x	x	100	100	0.00	155.47	254.98	-407.99	-488.21	-968.86	-15,176.88	0.00	296.59	406.73	-296.85	-376.56	-864.13	-14,918.97
Dallas-Fort Worth, TX	x	-	100	-	0.00	660.12	1,082.59	-1,732.28	-2,072.90	-4,113.66	-64,439.23	0.00	1,259.27	1,726.94	-1,260.38	-1,598.82	-3,669.02	-63,344.21
Dayton-Springfield, OH	-	x	-	100	0.00	68.40	112.18	-179.50	-214.80	-426.26	-6,677.26	0.00	130.49	178.95	-130.60	-165.67	-380.19	-6,563.79
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	290.02	478.86	-784.74	-938.48	-1,855.35	-28,949.69	0.00	550.67	759.57	-581.77	-734.83	-1,665.13	-28,467.47
Detroit-Ann Arbor, MI	x	x	100	100	0.00	410.89	677.29	-1,103.45	-1,319.82	-2,611.67	-40,789.80	0.00	781.07	1,075.83	-814.35	-1,029.67	-2,340.36	-40,107.00
Door Co., WI	x	-	100	-	0.00	2.77	4.55	-7.28	-8.71	-17.29	-270.79	0.00	5.29	7.26	-5.30	-6.72	-15.42	-266.19
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.12	0.19	-0.31	-0.37	-0.74	-11.57	0.00	0.23	0.31	-0.23	-0.29	-0.66	-11.38
Evansville, IN	-	x	-	100	0.00	30.11	49.37	-78.93	-94.45	-187.46	-2,936.90	0.00	57.45	78.77	-57.38	-72.80	-167.15	-2,886.96
Greater Connecticut, CT	x	-	100	-	0.00	154.48	253.34	-405.41	-485.12	-962.71	-15,080.40	0.00	294.68	404.12	-294.98	-374.19	-858.67	-14,824.15
Greene Co., PA	x	-	100	-	0.00	3.31	5.43	-8.69	-10.39	-20.63	-323.10	0.00	6.31	8.66	-6.32	-8.02	-18.40	-317.61
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	70.04	114.87	-183.80	-219.94	-436.47	-6,837.17	0.00	133.61	183.23	-133.73	-169.64	-389.29	-6,720.99
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	62.52	102.53	-164.06	-196.32	-389.59	-6,102.80	0.00	119.26	163.55	-119.37	-151.42	-347.48	-5,999.10

Table B2-18
Reference Case Alternative CAFE Standards
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CO 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.43	0.71	-1.14	-1.36	-2.71	-42.39	0.00	0.83	1.14	-0.83	-1.05	-2.41	-41.67
Hickory, NC	-	x	-	100	0.00	16.75	27.47	-43.96	-52.61	-104.40	-1,635.31	0.00	31.96	43.82	-31.99	-40.58	-93.11	-1,607.52
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	311.31	589.71	-1,397.50	-1,658.39	-3,118.13	-46,053.85	0.00	530.64	835.44	-1,281.59	-1,548.57	-3,034.25	-45,509.57
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	23.11	45.48	-116.20	-137.72	-256.75	-3,754.89	0.00	38.04	62.47	-109.88	-132.00	-253.22	-3,713.89
Imperial Co., CA	x	-	100	-	0.00	21.57	35.38	-56.61	-67.74	-134.42	-2,105.69	0.00	41.15	56.43	-41.19	-52.24	-119.89	-2,069.90
Indianapolis, IN	-	x	-	100	0.00	144.79	237.46	-379.96	-454.67	-902.29	-14,134.04	0.00	276.21	378.79	-276.45	-350.68	-804.76	-13,893.86
Jamestown, NY	x	-	100	-	0.00	12.57	20.62	-32.99	-39.48	-78.35	-1,227.35	0.00	23.98	32.89	-24.01	-30.45	-69.88	-1,206.49
Jefferson Co., NY	x	-	100	-	0.00	12.52	20.54	-32.87	-39.33	-78.05	-1,222.67	0.00	23.89	32.77	-23.92	-30.34	-69.62	-1,201.89
Johnstown, PA	-	x	-	100	0.00	10.05	16.49	-26.38	-31.57	-62.66	-981.47	0.00	19.18	26.30	-19.20	-24.35	-55.88	-964.79
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	11.24	18.45	-29.57	-35.39	-70.20	-1,099.37	0.00	21.44	29.42	-21.55	-27.32	-62.64	-1,080.71
Knoxville, TN	x	x	100	100	0.00	96.90	158.91	-254.27	-304.27	-603.82	-9,458.70	0.00	184.85	253.49	-185.00	-234.68	-538.55	-9,297.97
Lancaster, PA	-	x	-	100	0.00	37.01	60.70	-97.12	-116.22	-230.64	-3,612.94	0.00	70.60	96.82	-70.67	-89.64	-205.71	-3,551.55
Las Vegas, NV	x	-	100	-	0.00	141.83	232.60	-372.15	-445.33	-883.77	-13,844.12	0.00	270.56	371.04	-270.76	-343.47	-788.23	-13,608.85
Libby, MT	-	x	-	100	0.00	0.61	1.00	-1.60	-1.92	-3.81	-59.61	0.00	1.16	1.60	-1.17	-1.48	-3.39	-58.59
Liberty-Clairton, PA	-	x	-	100	0.00	1.08	1.78	-2.85	-3.41	-6.77	-105.97	0.00	2.07	2.84	-2.07	-2.63	-6.04	-104.17
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	1,266.12	2,119.03	-3,634.99	-4,342.26	-8,524.13	-	0.00	2,381.26	3,323.60	-2,787.28	-3,494.19	-7,739.00	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	67.97	111.47	-178.39	-213.47	-423.62	-6,635.63	0.00	129.65	177.81	-129.81	-164.67	-377.84	-6,522.89
Louisville, KY-IN	-	x	-	100	0.00	95.26	156.22	-249.89	-299.02	-593.44	-9,296.59	0.00	181.74	249.21	-181.77	-230.59	-529.26	-9,138.57
Macon, GA	-	x	-	100	0.00	17.82	29.22	-46.74	-55.93	-111.01	-1,739.02	0.00	34.00	46.62	-34.00	-43.13	-99.00	-1,709.46
Manitowoc Co., WI	x	-	-	-	0.00	9.06	14.86	-23.77	-28.45	-56.45	-884.31	0.00	17.28	23.70	-17.30	-21.94	-50.35	-869.28
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	10.06	16.49	-26.39	-31.58	-62.67	-981.73	0.00	19.18	26.31	-19.20	-24.36	-55.90	-965.05
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	40.10	65.76	-105.23	-125.92	-249.90	-3,914.53	0.00	76.50	104.91	-76.57	-97.12	-222.88	-3,848.01
Memphis, TN-AR	x	-	100	-	0.00	73.24	126.30	-237.56	-283.18	-548.46	-8,373.45	0.00	134.78	193.25	-193.53	-239.47	-508.96	-8,249.78
Milwaukee-Racine, WI	x	-	100	-	0.00	150.68	247.11	-395.41	-473.16	-938.99	-14,708.89	0.00	287.43	394.18	-287.70	-364.95	-837.50	-14,458.94
Nevada (Western Part), CA	x	-	100	-	0.00	9.01	14.78	-23.65	-28.30	-56.17	-879.86	0.00	17.19	23.58	-17.21	-21.83	-50.10	-864.91
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1,223.33	2,017.19	-3,290.44	-3,935.52	-7,786.14	-	0.00	2,324.92	3,203.24	-2,430.66	-3,072.68	-6,979.50	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	13.21	21.67	-34.66	-41.48	-82.32	-1,289.50	0.00	25.20	34.56	-25.22	-31.99	-73.42	-1,267.58
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	535.60	919.11	-1,704.25	-2,032.21	-3,943.92	-60,344.20	0.00	989.19	1,411.99	-1,376.24	-1,706.09	-3,647.88	-59,441.40
Phoenix-Mesa, AZ	x	-	100	-	0.00	386.13	633.21	-1,012.94	-1,212.12	-2,405.55	-37,683.90	0.00	736.64	1,010.15	-736.84	-934.74	-2,145.38	-37,043.39
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	162.76	266.92	-427.09	-511.07	-1,014.22	-15,887.42	0.00	310.48	425.78	-310.74	-394.18	-904.58	-15,617.44
Poughkeepsie, NY	x	x	100	100	0.00	114.06	187.05	-299.31	-358.16	-710.77	-11,133.98	0.00	217.58	298.38	-217.77	-276.25	-633.94	-10,944.78

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CO 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	78.77	129.19	-206.72	-247.37	-490.90	-7,689.76	0.00	150.27	206.08	-150.41	-190.79	-437.84	-7,559.09
Reading, PA	-	x	-	100	0.00	33.56	55.05	-88.08	-105.40	-209.16	-3,276.45	0.00	64.03	87.81	-64.09	-81.29	-186.55	-3,220.78
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	79.62	130.58	-208.97	-250.06	-496.23	-7,773.11	0.00	151.88	208.30	-152.05	-192.88	-442.60	-7,641.03
Rochester, NY	x	-	100	-	0.00	111.19	182.35	-291.79	-349.16	-692.91	-10,854.25	0.00	212.11	290.89	-212.30	-269.31	-618.02	-10,669.80
Rome, GA	-	x	-	100	0.00	9.63	15.79	-25.26	-30.23	-59.98	-939.59	0.00	18.36	25.18	-18.38	-23.31	-53.50	-923.63
Sacramento Metro, CA	x	-	50	-	0.00	200.68	329.11	-526.62	-630.17	-1,250.56	-19,589.66	0.00	382.82	524.99	-383.16	-486.04	-1,115.39	-19,256.77
San Diego, CA	x	-	100	-	0.00	258.55	424.01	-678.47	-811.88	-1,611.17	-25,238.53	0.00	493.21	676.38	-493.65	-626.20	-1,437.02	-24,809.65
San Francisco Bay Area, CA	x	-	100	-	0.00	532.32	895.59	-1,562.58	-1,865.86	-3,653.45	-56,433.80	0.00	997.43	1,398.60	-1,212.47	-1,516.02	-3,330.78	-55,542.82
San Joaquin Valley, CA	x	x	50	100	0.00	417.51	688.51	-1,123.49	-1,343.73	-2,658.33	-41,507.88	0.00	793.41	1,093.24	-830.15	-1,049.35	-2,383.14	-40,813.97
Sheboygan, WI	x	-	100	-	0.00	10.38	17.03	-27.25	-32.61	-64.71	-1,013.65	0.00	19.81	27.16	-19.83	-25.15	-57.72	-996.42
Springfield (Western MA), MA	x	-	100	-	0.00	80.53	132.07	-211.33	-252.89	-501.85	-7,861.36	0.00	153.63	210.68	-153.76	-195.05	-447.61	-7,727.77
St. Louis, MO-IL	x	x	100	100	0.00	244.33	411.23	-718.38	-857.79	-1,679.28	-25,934.17	0.00	457.68	641.98	-557.90	-697.45	-1,531.43	-25,525.16
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	7.54	13.06	-24.83	-29.60	-57.23	-872.34	0.00	13.84	19.92	-20.37	-25.17	-53.25	-859.58
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	-0.05
Ventura Co., CA	x	-	100	-	0.00	54.59	89.63	-143.96	-172.26	-341.63	-5,348.14	0.00	104.06	142.84	-105.07	-133.19	-305.01	-5,257.55
Washington, DC-MD-VA	x	x	100	100	0.00	437.59	717.65	-1,148.42	-1,374.23	-2,727.12	-42,718.94	0.00	834.74	1,144.77	-835.62	-1,059.99	-2,432.39	-41,993.05
Wheeling, WV-OH	-	x	-	100	0.00	14.13	23.18	-37.08	-44.38	-88.06	-1,379.49	0.00	26.96	36.97	-26.98	-34.23	-78.54	-1,356.05
York, PA	-	x	-	100	0.00	36.32	59.57	-95.32	-114.06	-226.35	-3,545.62	0.00	69.29	95.02	-69.35	-87.97	-201.88	-3,485.37

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-19
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion		
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	181.01	316.27	-608.06	-721.33	-1,289.99	-20,998.63	0.00	589.49	755.24	-284.18	-396.04	-989.32	-20,256.06
Allegan Co., MI	x	-	100	-	0.00	19.77	34.55	-66.43	-78.80	-140.92	-2,293.99	0.00	64.40	82.51	-31.05	-43.27	-108.08	-2,212.87
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	20.40	35.65	-68.53	-81.30	-145.39	-2,366.73	0.00	66.44	85.12	-32.03	-44.64	-111.51	-2,283.03
Atlanta, GA	x	x	100	100	0.00	1,155.97	2,019.74	-3,883.11	-4,606.51	-8,238.03	-	0.00	3,764.57	4,823.13	-1,814.78	-2,529.15	-6,317.87	-
Baltimore, MD	x	x	100	100	0.00	396.07	692.03	-1,330.53	-1,578.39	-2,822.70	-45,948.05	0.00	1,289.84	1,652.54	-621.87	-866.64	-2,164.81	-44,323.23
Baton Rouge, LA	x	-	100	-	0.00	39.17	104.66	-392.43	-461.44	-774.57	-11,503.42	0.00	125.01	203.36	-360.85	-434.01	-763.59	-11,252.13
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-58.42	-29.14	-328.94	-381.97	-581.14	-7,234.75	0.00	-195.41	-163.38	-511.00	-573.47	-787.08	-7,292.01
Birmingham, AL	-	x	-	100	0.00	138.83	242.57	-466.34	-553.22	-989.36	-16,104.98	0.00	452.13	579.26	-217.93	-303.72	-758.74	-15,535.45
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	599.49	1,047.45	-2,013.84	-2,389.01	-4,272.36	-69,545.87	0.00	1,952.31	2,501.29	-941.21	-1,311.69	-3,276.57	-67,086.56
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	86.44	151.00	-290.20	-344.27	-615.70	-10,023.19	0.00	281.50	360.63	-135.52	-188.91	-472.09	-9,668.65
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	141.94	248.01	-476.83	-565.66	-1,011.59	-16,466.79	0.00	462.26	592.24	-222.86	-310.58	-775.81	-15,884.49
Canton-Massillon, OH	-	x	-	100	0.00	33.45	63.18	-146.43	-173.18	-303.09	-4,789.42	0.00	108.60	144.79	-91.61	-118.68	-254.59	-4,640.36
Charleston, WV	-	x	-	100	0.00	36.55	63.87	-122.79	-145.67	-260.50	-4,240.50	0.00	119.04	152.52	-57.39	-79.98	-199.78	-4,090.55
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	292.27	510.53	-980.79	-1,163.52	-2,080.98	-33,878.72	0.00	951.84	1,219.32	-457.69	-638.12	-1,595.28	-32,680.07
Chattanooga, AL-TN-GA	-	x	-	100	0.00	69.89	122.12	-234.82	-278.56	-498.16	-8,108.91	0.00	227.61	291.62	-109.77	-152.97	-382.07	-7,822.18
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	902.42	1,629.29	-3,409.89	-4,039.19	-7,149.98	-	0.00	2,935.14	3,823.15	-1,851.10	-2,479.82	-5,729.47	-
Chico, CA	x	-	100	-	0.00	26.61	46.50	-89.40	-106.05	-189.65	-3,087.19	0.00	86.67	111.04	-41.78	-58.23	-145.45	-2,978.02
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	251.73	439.80	-845.44	-1,002.94	-1,793.64	-29,197.80	0.00	819.78	1,050.27	-395.01	-550.55	-1,375.47	-28,165.19
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	21.33	37.27	-71.66	-85.00	-152.02	-2,474.56	0.00	69.47	89.00	-33.49	-46.67	-116.59	-2,387.05
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	336.29	587.58	-1,129.69	-1,340.15	-2,396.64	-39,012.85	0.00	1,095.18	1,403.14	-527.98	-735.81	-1,838.04	-37,633.25
Columbus, OH	x	x	100	100	0.00	249.74	436.35	-838.92	-995.21	-1,779.78	-28,971.46	0.00	813.31	1,042.00	-392.08	-546.41	-1,364.94	-27,946.95
Dallas-Fort Worth, TX	x	-	100	-	0.00	1,113.98	1,946.37	-3,742.08	-4,439.21	-7,938.83	-	0.00	3,627.81	4,647.92	-1,748.90	-2,437.32	-6,088.43	-
Dayton-Springfield, OH	-	x	-	100	0.00	102.50	179.08	-344.31	-408.45	-730.45	-11,890.33	0.00	333.79	427.65	-160.92	-224.26	-560.19	-11,469.86
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	473.48	833.37	-1,634.36	-1,938.14	-3,457.56	-56,096.85	0.00	1,541.53	1,982.25	-793.65	-1,094.49	-2,680.16	-54,139.24
Detroit-Ann Arbor, MI	x	x	100	100	0.00	624.43	1,097.50	-2,144.26	-2,542.99	-4,538.68	-73,683.58	0.00	2,033.08	2,612.49	-1,033.89	-1,428.54	-3,511.14	-71,105.75
Door Co., WI	x	-	100	-	0.00	4.15	7.26	-13.95	-16.55	-29.60	-481.80	0.00	13.53	17.33	-6.52	-9.09	-22.70	-464.76
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.18	0.32	-0.61	-0.72	-1.29	-20.94	0.00	0.59	0.75	-0.28	-0.39	-0.99	-20.20
Evansville, IN	-	x	-	100	0.00	46.35	80.96	-155.53	-184.51	-329.99	-5,372.30	0.00	150.93	193.35	-72.58	-101.19	-252.97	-5,182.22
Greater Connecticut, CT	x	-	100	-	0.00	239.10	417.76	-803.23	-952.87	-1,704.04	-27,738.40	0.00	778.65	997.60	-375.44	-523.21	-1,306.90	-26,757.53
Greene Co., PA	x	-	100	-	0.00	4.78	8.35	-16.05	-19.04	-34.06	-554.41	0.00	15.56	19.94	-7.50	-10.46	-26.12	-534.80

**Table B2-19
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	108.67	189.87	-365.04	-433.04	-774.43	-12,606.22	0.00	353.89	453.40	-170.60	-237.76	-593.92	-12,160.43
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	95.60	167.03	-321.13	-380.95	-681.27	-11,089.77	0.00	311.32	398.86	-150.08	-209.16	-522.48	-10,697.60
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.67	1.17	-2.26	-2.68	-4.79	-77.94	0.00	2.19	2.80	-1.05	-1.47	-3.67	-75.18
Hickory, NC	-	x	-	100	0.00	26.46	46.24	-88.90	-105.46	-188.60	-3,069.98	0.00	86.18	110.41	-41.55	-57.90	-144.64	-2,961.42
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	501.10	1,024.80	-2,758.31	-3,255.29	-5,612.86	-86,812.21	0.00	1,621.32	2,255.27	-2,020.44	-2,531.88	-5,003.43	-84,383.19
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	33.94	73.59	-216.91	-255.70	-437.30	-6,682.50	0.00	109.52	157.35	-171.37	-211.66	-402.26	-6,507.53
Imperial Co., CA	x	-	100	-	0.00	36.96	64.58	-124.17	-147.30	-263.42	-4,287.93	0.00	120.37	154.22	-58.03	-80.87	-202.02	-4,136.29
Indianapolis, IN	-	x	-	100	0.00	232.39	406.05	-780.66	-926.09	-1,656.17	-26,959.39	0.00	756.82	969.63	-364.85	-508.47	-1,270.15	-26,006.03
Jamestown, NY	x	-	100	-	0.00	18.82	32.88	-63.21	-74.99	-134.11	-2,183.03	0.00	61.28	78.52	-29.54	-41.17	-102.85	-2,105.83
Jefferson Co., NY	x	-	100	-	0.00	20.11	35.14	-67.56	-80.15	-143.33	-2,333.08	0.00	65.49	83.91	-31.58	-44.00	-109.92	-2,250.58
Johnstown, PA	-	x	-	100	0.00	14.67	25.63	-49.29	-58.47	-104.57	-1,702.12	0.00	47.78	61.22	-23.04	-32.11	-80.20	-1,641.93
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	19.16	33.50	-64.54	-76.56	-136.88	-2,227.38	0.00	62.38	79.96	-30.29	-42.17	-105.10	-2,148.73
Knoxville, TN	x	x	100	100	0.00	152.25	266.01	-511.41	-606.69	-1,084.97	-17,661.27	0.00	495.81	635.22	-239.01	-333.09	-832.07	-17,036.71
Lancaster, PA	-	x	-	100	0.00	56.78	99.20	-190.73	-226.26	-404.63	-6,586.56	0.00	184.90	236.89	-89.14	-124.23	-310.32	-6,353.64
Las Vegas, NV	x	-	100	-	0.00	251.67	439.72	-845.33	-1,002.81	-1,793.39	-29,193.45	0.00	819.61	1,050.06	-395.01	-550.52	-1,375.32	-28,161.03
Libby, MT	-	x	-	100	0.00	0.94	1.64	-3.16	-3.75	-6.71	-109.19	0.00	3.07	3.93	-1.48	-2.06	-5.14	-105.33
Liberty-Clairton, PA	-	x	-	100	0.00	1.51	2.65	-5.09	-6.04	-10.81	-175.86	0.00	4.93	6.32	-2.38	-3.32	-8.29	-169.65
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	2,060.05	3,679.70	-7,498.61	-8,886.47	-15,779.77	-	0.00	6,703.13	8,683.80	-3,898.08	-5,279.74	-12,477.83	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	112.36	196.34	-377.57	-447.90	-800.98	-13,038.02	0.00	365.92	468.83	-176.54	-246.00	-614.37	-12,577.03
Louisville, KY-IN	-	x	-	100	0.00	143.21	250.20	-480.90	-570.49	-1,020.27	-16,608.81	0.00	466.39	597.50	-224.63	-313.10	-782.35	-16,021.37
Macon, GA	-	x	-	100	0.00	26.88	46.95	-90.24	-107.05	-191.45	-3,116.63	0.00	87.52	112.13	-42.14	-58.75	-146.80	-3,006.39
Manitowoc Co., WI	x	-	-	-	0.00	13.56	23.69	-45.56	-54.04	-96.65	-1,573.24	0.00	44.16	56.58	-21.30	-29.68	-74.13	-1,517.61
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	17.13	29.93	-57.55	-68.27	-122.09	-1,987.33	0.00	55.79	71.48	-26.90	-37.48	-93.63	-1,917.05
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	69.69	121.76	-234.10	-277.71	-496.64	-8,084.42	0.00	226.95	290.77	-109.41	-152.48	-380.88	-7,798.53
Memphis, TN-AR	x	-	100	-	0.00	110.05	203.95	-453.69	-536.89	-943.83	-15,007.97	0.00	357.58	472.04	-269.17	-352.95	-778.44	-14,527.32
Milwaukee-Racine, WI	x	-	100	-	0.00	228.65	399.50	-768.09	-911.18	-1,629.49	-26,525.05	0.00	744.62	954.00	-358.98	-500.29	-1,249.70	-25,587.06
Nevada (Western Part), CA	x	-	100	-	0.00	14.45	25.25	-48.55	-57.59	-102.99	-1,676.46	0.00	47.06	60.29	-22.69	-31.62	-78.99	-1,617.17
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1,858.79	3,268.35	-6,392.56	-7,581.12	-13,528.82	-	0.00	6,051.93	7,778.28	-3,088.64	-4,265.22	-10,472.03	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	19.49	34.05	-65.45	-77.65	-138.86	-2,260.49	0.00	63.46	81.31	-30.58	-42.63	-106.49	-2,180.55
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	839.87	1,544.25	-3,374.46	-3,994.41	-7,035.98	-	0.00	2,729.70	3,588.88	-1,953.40	-2,576.25	-5,755.61	-
											112,188.96							108,551.44

**Table B2-19
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Phoenix-Mesa, AZ	x	-	100	-	0.00	671.04	1,172.36	-2,253.45	-2,673.27	-4,780.86	-77,826.48	0.00	2,185.33	2,799.71	-1,052.69	-1,467.25	-3,666.07	-75,073.90
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	238.58	416.84	-801.40	-950.70	-1,700.18	-27,675.79	0.00	776.95	995.42	-374.52	-521.96	-1,303.88	-26,697.08
Poughkeepsie, NY	x	x	100	100	0.00	180.63	315.60	-606.77	-719.80	-1,287.26	-20,954.12	0.00	588.24	753.64	-283.58	-395.21	-987.22	-20,213.12
Providence (All RI), RI	x	-	100	-	0.00	119.10	208.10	-400.09	-474.62	-848.79	-13,816.72	0.00	387.87	496.94	-186.99	-260.59	-650.96	-13,328.12
Reading, PA	-	x	-	100	0.00	53.22	92.99	-178.78	-212.09	-379.28	-6,173.99	0.00	173.32	222.06	-83.55	-116.44	-290.88	-5,955.66
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	150.88	263.64	-506.93	-601.36	-1,075.43	-17,505.62	0.00	491.37	629.55	-236.97	-330.23	-824.82	-16,886.62
Rochester, NY	x	-	100	-	0.00	169.45	296.07	-569.22	-675.26	-1,207.59	-19,657.31	0.00	551.83	707.00	-266.03	-370.75	-926.12	-18,962.18
Rome, GA	-	x	-	100	0.00	14.52	25.36	-48.76	-57.85	-103.45	-1,684.01	0.00	47.27	60.57	-22.79	-31.76	-79.34	-1,624.46
Sacramento Metro, CA	x	-	50	-	0.00	329.80	576.24	-1,107.88	-1,314.27	-2,350.37	-38,259.60	0.00	1,074.04	1,376.05	-517.79	-721.61	-1,802.55	-36,906.65
San Diego, CA	x	-	100	-	0.00	389.40	680.37	-1,308.07	-1,551.76	-2,775.08	-45,173.10	0.00	1,268.13	1,624.72	-611.34	-851.98	-2,128.26	-43,575.65
San Francisco Bay Area, CA	x	-	100	-	0.00	811.03	1,459.67	-3,031.32	-3,591.22	-6,362.75	-	0.00	2,638.22	3,430.89	-1,625.49	-2,184.30	-5,079.21	-98,839.82
San Joaquin Valley, CA	x	x	50	100	0.00	710.56	1,248.67	-2,438.46	-2,891.92	-5,161.74	-83,805.24	0.00	2,313.54	2,972.62	-1,174.68	-1,623.47	-3,992.12	-80,872.37
Sheboygan, WI	x	-	100	-	0.00	15.92	27.81	-53.48	-63.44	-113.45	-1,846.76	0.00	51.84	66.42	-25.00	-34.83	-87.01	-1,781.46
Springfield (Western MA), MA	x	-	100	-	0.00	123.79	216.29	-415.83	-493.30	-882.19	-14,360.44	0.00	403.14	516.49	-194.34	-270.84	-676.57	-13,852.62
St. Louis, MO-IL	x	x	100	100	0.00	372.56	670.79	-1,394.47	-1,652.01	-2,926.60	-47,033.81	0.00	1,211.87	1,576.32	-748.98	-1,006.05	-2,337.40	-45,455.81
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	10.79	20.15	-45.58	-53.93	-94.63	-1,500.92	0.00	35.05	46.46	-27.65	-36.07	-78.64	-1,453.41
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.08	0.00	0.00	0.00	0.00	0.00	0.00	-0.08
Ventura Co., CA	x	-	100	-	0.00	83.05	145.28	-280.27	-332.47	-594.31	-9,668.72	0.00	270.44	346.70	-131.88	-183.44	-456.64	-9,327.59
Washington, DC-MD-VA	x	x	100	100	0.00	702.28	1,227.07	-2,359.32	-2,798.84	-5,005.24	-81,475.17	0.00	2,287.06	2,930.20	-1,102.79	-1,536.83	-3,838.75	-78,594.11
Wheeling, WV-OH	-	x	-	100	0.00	20.78	36.31	-69.82	-82.82	-148.11	-2,411.03	0.00	67.68	86.72	-32.63	-45.47	-113.59	-2,325.77
York, PA	-	x	-	100	0.00	58.98	103.05	-198.12	-235.02	-420.30	-6,841.73	0.00	192.06	246.07	-92.59	-129.04	-322.34	-6,599.79

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-20
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

CO 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	250.62	467.86	-1,064.40	-1,248.99	-1,971.55	-32,784.70	0.00	1,261.39	1,553.76	-260.69	-441.95	-1,231.19	-30,957.84
Allegan Co., MI	x	-	100	-	0.00	27.27	50.91	-115.82	-135.90	-214.53	-3,567.35	0.00	137.25	169.07	-28.37	-48.09	-133.97	-3,368.57
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	32.01	59.75	-135.94	-159.52	-251.80	-4,187.12	0.00	161.10	198.44	-33.30	-56.45	-157.24	-3,953.80
Atlanta, GA	x	x	100	100	0.00	1,994.45	3,723.30	-8,470.66	-9,939.64	-15,689.92	-	0.00	10,038.40	12,365.14	-2,074.59	-3,517.08	-9,797.97	-
Baltimore, MD	x	x	100	100	0.00	543.54	1,014.72	-2,308.59	-2,708.95	-4,276.12	260,906.01	0.00	2,735.76	3,369.88	-565.49	-958.62	-2,670.41	246,367.51
Baton Rouge, LA	x	-	100	-	0.00	59.34	170.66	-685.78	-800.82	-1,215.97	-71,106.69	0.00	374.33	521.05	-502.62	-624.90	-1,083.13	-67,144.47
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-86.46	-40.83	-506.17	-586.12	-828.29	-18,626.46	0.00	374.33	521.05	-502.62	-624.90	-1,083.13	-17,880.68
Birmingham, AL	-	x	-	100	0.00	186.62	348.38	-792.54	-929.99	-1,468.01	-10,564.43	0.00	-282.78	-227.61	-797.79	-895.05	-1,169.17	-10,563.97
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	770.66	1,438.70	-3,273.15	-3,840.78	-6,062.74	-24,411.50	0.00	939.27	1,156.97	-194.08	-329.04	-916.71	-23,051.19
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	117.10	218.58	-497.12	-583.33	-920.82	100,816.33	0.00	3,878.87	4,777.94	-801.69	-1,359.09	-3,786.08	-95,198.57
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	177.77	331.88	-755.05	-885.99	-1,398.55	-15,313.04	0.00	589.35	725.92	-121.58	-206.23	-574.86	-14,459.60
Canton-Massillon, OH	-	x	-	100	0.00	41.23	84.79	-231.75	-271.44	-422.18	-23,256.24	0.00	894.77	1,102.17	-184.94	-313.51	-873.37	-21,960.34
Charleston, WV	-	x	-	100	0.00	44.24	82.58	-187.88	-220.46	-348.01	-6,812.25	0.00	217.40	275.62	-100.46	-140.65	-305.93	-6,470.81
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	472.12	881.20	-2,003.96	-2,351.49	-3,712.01	-5,786.95	0.00	222.65	274.26	-46.02	-78.01	-217.32	-5,464.48
Chattanooga, AL-TN-GA	-	x	-	100	0.00	90.80	169.54	-385.84	-452.75	-714.66	-61,730.98	0.00	2,376.05	2,926.61	-489.88	-831.13	-2,317.17	-58,290.34
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	1,295.14	2,504.29	-6,126.95	-7,183.88	-11,270.39	-	0.00	457.04	563.01	-94.66	-160.37	-446.44	-11,221.16
Chico, CA	x	-	100	-	0.00	36.13	67.44	-153.44	-180.05	-284.21	185,112.76	0.00	6,627.96	8,250.77	-1,983.81	-3,035.12	-7,505.60	175,219.54
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	355.69	663.98	-1,510.42	-1,772.36	-2,797.73	-4,726.10	0.00	181.84	223.98	-37.58	-63.71	-177.48	-4,462.75
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	25.63	47.85	-108.86	-127.74	-201.65	-46,524.05	0.00	1,790.22	2,205.13	-369.73	-626.94	-1,746.93	-43,931.42
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	419.86	783.81	-1,783.23	-2,092.47	-3,303.01	-3,353.14	0.00	129.01	158.91	-26.66	-45.20	-125.92	-3,166.30
Columbus, OH	x	x	100	100	0.00	365.42	682.18	-1,551.98	-1,821.13	-2,874.69	-54,925.28	0.00	2,113.24	2,603.05	-436.76	-740.43	-2,062.67	-51,864.70
Dallas-Fort Worth, TX	x	-	100	-	0.00	1,811.02	3,380.89	-7,691.67	-9,025.56	-14,247.02	-47,802.83	0.00	1,839.22	2,265.52	-380.10	-644.40	-1,795.17	-45,139.11
Dayton-Springfield, OH	-	x	-	100	0.00	128.14	239.22	-544.25	-638.63	-1,008.09	-	0.00	9,115.20	11,227.95	-1,883.83	-3,193.67	-8,896.95	-
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	716.97	1,348.51	-3,117.90	-3,657.95	-5,766.06	236,912.04	0.00	644.97	794.47	-133.30	-225.98	-629.53	223,710.59
Detroit-Ann Arbor, MI	x	x	100	100	0.00	806.42	1,516.17	-3,502.59	-4,109.31	-6,478.01	-16,763.40	0.00	3,621.32	4,470.75	-819.83	-1,351.71	-3,655.15	-15,829.30
Door Co., WI	x	-	100	-	0.00	5.18	9.67	-22.01	-25.83	-40.77	-95,615.47	0.00	4,072.39	5,027.03	-917.73	-1,515.18	-4,103.31	101,502.50
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.23	0.44	-0.99	-1.16	-1.83	107,436.94	0.00	26.08	32.13	-5.39	-9.14	-25.46	101,502.50
Evansville, IN	-	x	-	100	0.00	61.28	114.37	-260.04	-305.14	-481.69	-677.91	0.00	1.17	1.45	-0.24	-0.41	-1.14	-28.78
Greater Connecticut, CT	x	-	100	-	0.00	319.01	595.55	-1,354.97	-1,589.94	-2,509.75	-8,010.75	0.00	308.39	379.84	-63.52	-107.80	-300.64	-7,564.21
Greene Co., PA	x	-	100	-	0.00	5.55	10.35	-23.56	-27.64	-43.63	-41,733.98	0.00	1,605.65	1,977.82	-331.93	-562.67	-1,567.35	-39,408.50

**Table B2-20
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2035

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	145.65	271.91	-618.60	-725.88	-1,145.82	-19,053.67	0.00	733.09	903.01	-151.51	-256.85	-715.54	-17,991.95
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	124.55	232.51	-528.97	-620.70	-979.79	-16,292.88	0.00	626.87	772.16	-129.56	-219.64	-611.86	-15,384.99
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.90	1.69	-3.83	-4.50	-7.10	-118.07	0.00	4.55	5.60	-0.93	-1.59	-4.43	-111.48
Hickory, NC	-	x	-	100	0.00	36.76	68.63	-156.13	-183.21	-289.19	-4,808.92	0.00	185.02	227.90	-38.24	-64.83	-180.60	-4,540.96
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	748.58	1,644.28	-4,967.07	-5,812.45	-8,976.67	-	0.00	4,079.65	5,272.33	-2,595.82	-3,464.33	-6,940.19	-
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	40.03	98.38	-341.26	-398.91	-610.69	-9,525.86	0.00	231.37	308.67	-215.69	-275.98	-509.18	-9,110.38
Imperial Co., CA	x	-	100	-	0.00	60.41	112.78	-256.58	-301.08	-475.26	-7,903.08	0.00	304.07	374.55	-62.84	-106.54	-296.79	-7,462.70
Indianapolis, IN	-	x	-	100	0.00	340.77	636.17	-1,447.31	-1,698.30	-2,680.80	-44,578.70	0.00	1,715.17	2,112.72	-354.47	-600.94	-1,674.10	-42,094.65
Jamestown, NY	x	-	100	-	0.00	23.46	43.81	-99.66	-116.94	-184.60	-3,069.61	0.00	118.10	145.48	-24.41	-41.38	-115.28	-2,898.56
Jefferson Co., NY	x	-	100	-	0.00	28.86	53.88	-122.59	-143.85	-227.07	-3,775.85	0.00	145.27	178.95	-30.03	-50.90	-141.80	-3,565.45
Johnstown, PA	-	x	-	100	0.00	17.39	32.47	-73.88	-86.69	-136.84	-2,275.44	0.00	87.54	107.83	-18.10	-30.68	-85.46	-2,148.66
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	30.96	57.87	-132.05	-154.94	-244.52	-4,063.96	0.00	155.91	192.12	-32.79	-55.28	-153.13	-3,837.89
Knoxville, TN	x	x	100	100	0.00	209.85	391.75	-891.24	-1,045.80	-1,650.82	-27,451.42	0.00	1,056.21	1,301.02	-218.27	-370.04	-1,030.89	-25,921.73
Lancaster, PA	-	x	-	100	0.00	74.38	138.85	-315.89	-370.67	-585.10	-9,729.63	0.00	374.35	461.11	-77.37	-131.16	-365.39	-9,187.47
Las Vegas, NV	x	-	100	-	0.00	441.13	823.47	-1,873.21	-2,198.07	-3,469.73	-57,698.85	0.00	2,220.21	2,734.78	-458.54	-777.54	-2,166.54	-54,483.49
Libby, MT	-	x	-	100	0.00	1.25	2.32	-5.29	-6.20	-9.79	-162.87	0.00	6.27	7.72	-1.29	-2.20	-6.12	-153.79
Liberty-Clairton, PA	-	x	-	100	0.00	1.64	3.07	-6.99	-8.20	-12.95	-215.28	0.00	8.27	10.19	-1.72	-2.91	-8.10	-203.29
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	3,119.31	5,955.99	-14,209.69	-16,665.32	-26,199.82	-	0.00	15,867.78	19,678.58	-4,222.08	-6,654.07	-17,078.95	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	172.04	321.24	-731.13	-857.92	-1,354.20	-22,517.20	0.00	866.00	1,066.78	-179.41	-303.93	-846.00	-21,262.77
Louisville, KY-IN	-	x	-	100	0.00	180.52	336.97	-766.45	-899.38	-1,419.71	-23,609.11	0.00	908.56	1,119.12	-187.52	-318.04	-886.39	-22,293.37
Macon, GA	-	x	-	100	0.00	34.03	63.52	-144.47	-169.52	-267.60	-4,450.11	0.00	171.27	210.96	-35.33	-59.93	-167.06	-4,202.09
Manitowoc Co., WI	x	-	-	-	0.00	16.92	31.58	-71.86	-84.32	-133.10	-2,213.19	0.00	85.15	104.88	-17.61	-29.84	-83.12	-2,089.87
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	27.75	51.80	-117.85	-138.29	-218.30	-3,630.00	0.00	139.66	172.03	-28.87	-48.94	-136.32	-3,427.73
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	118.04	220.36	-501.32	-588.26	-928.58	-15,441.23	0.00	594.10	731.81	-122.78	-208.15	-579.88	-14,580.80
Memphis, TN-AR	x	-	100	-	0.00	137.66	276.27	-724.33	-848.69	-1,324.17	-21,506.33	0.00	717.23	902.77	-285.16	-410.28	-931.18	-20,402.00
Milwaukee-Racine, WI	x	-	100	-	0.00	294.12	549.08	-1,249.19	-1,465.83	-2,313.84	-38,476.46	0.00	1,480.36	1,823.49	-305.97	-518.70	-1,444.96	-36,332.45
Nevada (Western Part), CA	x	-	100	-	0.00	20.68	38.60	-87.83	-103.06	-162.68	-2,705.16	0.00	104.08	128.20	-21.51	-36.47	-101.59	-2,554.43
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	2,391.02	4,497.73	-10,401.90	-12,203.59	-19,236.20	-	0.00	12,077.48	14,910.98	-2,738.12	-4,512.62	-12,196.89	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	23.61	44.07	-100.25	-117.64	-185.69	-3,087.87	0.00	118.82	146.35	-24.54	-41.61	-115.95	-2,915.80
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	1,153.31	2,280.04	-5,818.18	-6,818.93	-10,661.73	-	0.00	5,965.32	7,475.12	-2,134.71	-3,137.16	-7,344.68	-
											173,912.58							164,841.22

**Table B2-20
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)							
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	
Phoenix-Mesa, AZ	x	-	100	-	0.00	1,128.10	2,105.79	-4,789.83	-5,620.50	-8,872.22	-	0.00	5,677.68	6,993.49	-1,172.07	-1,987.73	-5,539.49	-	
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	286.21	534.30	-1,215.54	-1,426.33	-2,251.50	147,540.10	0.00	1,440.53	1,774.42	-297.68	-504.68	-1,405.99	139,317.81	
Poughkeepsie, NY	x	x	100	100	0.00	252.33	471.07	-1,071.70	-1,257.55	-1,985.07	-37,440.06	0.00	1,270.04	1,564.41	-262.48	-444.98	-1,239.63	-35,353.77	
Providence (All RI), RI	x	-	100	-	0.00	151.65	283.10	-644.07	-755.76	-1,192.98	-33,009.46	0.00	763.26	940.17	-157.75	-267.43	-745.00	-31,170.08	
Reading, PA	-	x	-	100	0.00	74.48	139.05	-316.35	-371.21	-585.96	-19,837.96	0.00	374.90	461.79	-77.48	-131.35	-365.92	-18,732.53	
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	301.61	563.09	-1,281.26	-1,503.45	-2,373.20	-39,462.54	0.00	1,518.10	1,870.01	-314.03	-532.22	-1,482.22	-37,263.77	
Rochester, NY	x	-	100	-	0.00	219.38	409.55	-931.76	-1,093.34	-1,725.86	-28,699.17	0.00	1,104.20	1,360.13	-228.21	-386.88	-1,077.77	-27,099.96	
Rome, GA	-	x	-	100	0.00	18.38	34.31	-78.06	-91.60	-144.59	-2,404.36	0.00	92.51	113.95	-19.12	-32.41	-90.29	-2,270.38	
Sacramento Metro, CA	x	-	50	-	0.00	502.62	938.32	-2,134.79	-2,505.00	-3,954.18	-65,753.24	0.00	2,529.78	3,116.16	-522.92	-886.47	-2,469.37	-62,089.34	
San Diego, CA	x	-	100	-	0.00	491.69	917.90	-2,088.27	-2,450.42	-3,868.03	-64,321.07	0.00	2,474.76	3,048.37	-511.45	-867.07	-2,415.50	-60,736.91	
San Francisco Bay Area, CA	x	-	100	-	0.00	1,048.40	2,027.72	-4,963.55	-5,819.75	-9,129.90	-	0.00	5,365.92	6,680.26	-1,609.79	-2,461.52	-6,082.73	-	
San Joaquin Valley, CA	x	x	50	100	0.00	1,149.77	2,158.20	-4,968.50	-5,829.38	-9,192.32	149,943.04	0.00	5,801.87	7,158.44	-1,282.67	-2,129.85	-5,804.05	141,931.81	
Sheboygan, WI	x	-	100	-	0.00	20.83	38.88	-88.46	-103.80	-163.85	152,544.74	0.00	104.82	129.12	-21.67	-36.74	-102.33	144,101.92	
Springfield (Western MA), MA	x	-	100	-	0.00	162.86	304.04	-691.71	-811.66	-1,281.23	-2,724.58	0.00	819.72	1,009.72	-169.41	-287.21	-800.10	-2,572.76	
St. Louis, MO-IL	x	x	100	100	0.00	486.70	941.42	-2,304.85	-2,702.42	-4,239.44	-21,305.36	0.00	2,491.14	3,101.41	-747.93	-1,143.44	-2,824.91	-20,118.16	
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	12.18	24.88	-67.26	-78.78	-122.64	-69,623.59	0.00	64.02	81.01	-28.45	-40.10	-88.17	-65,904.08	
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.11	0.00	0.00	0.01	0.00	0.00	0.00	-0.11	
Ventura Co., CA	x	-	100	-	0.00	106.96	199.98	-456.46	-535.59	-845.20	-14,046.83	0.00	538.74	663.91	-113.47	-191.23	-529.43	-13,265.56	
Washington, DC-MD-VA	x	x	100	100	0.00	1,043.78	1,948.62	-4,433.45	-5,202.30	-8,211.89	-	0.00	5,253.59	6,471.34	-1,086.12	-1,841.12	-5,128.42	-	
Wheeling, WV-OH	-	x	-	100	0.00	25.04	46.75	-106.35	-124.79	-196.98	136,553.10	0.00	126.03	155.24	-26.05	-44.16	-123.01	128,944.20	
York, PA	-	x	-	100	0.00	86.55	161.58	-367.61	-431.36	-680.92	-11,322.86	0.00	435.65	536.62	-90.04	-152.64	-425.22	-3,093.11	
																			-10,691.92

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-21
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-2.00	-2.25	-2.61	-2.87	-3.23	-10.84	0.00	-2.01	-2.26	-2.62	-2.88	-3.24	-10.85
Allegan Co., MI	x	-	100	-	0.00	-0.22	-0.25	-0.29	-0.31	-0.35	-1.19	0.00	-0.22	-0.25	-0.29	-0.32	-0.35	-1.19
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.20	-0.22	-0.26	-0.29	-0.32	-1.08	0.00	-0.20	-0.22	-0.26	-0.29	-0.32	-1.08
Atlanta, GA	x	x	100	100	0.00	-10.63	-11.95	-13.88	-15.25	-17.18	-57.56	0.00	-10.68	-12.01	-13.94	-15.31	-17.24	-57.62
Baltimore, MD	x	x	100	100	0.00	-4.43	-4.98	-5.78	-6.35	-7.16	-24.05	0.00	-4.45	-5.00	-5.81	-6.38	-7.19	-24.07
Baton Rouge, LA	x	-	100	-	0.00	-1.03	-1.16	-1.35	-1.48	-1.67	-5.59	0.00	-1.04	-1.16	-1.35	-1.49	-1.67	-5.59
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.64	-0.72	-0.84	-0.92	-1.04	-3.50	0.00	-0.65	-0.73	-0.84	-0.93	-1.04	-3.50
Birmingham, AL	-	x	-	100	0.00	-1.61	-1.81	-2.10	-2.31	-2.60	-8.70	0.00	-1.62	-1.82	-2.11	-2.32	-2.61	-8.71
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-7.20	-8.09	-9.40	-10.33	-11.63	-39.04	0.00	-7.23	-8.13	-9.44	-10.37	-11.68	-39.08
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.94	-1.06	-1.23	-1.35	-1.51	-4.93	0.00	-0.95	-1.07	-1.23	-1.36	-1.52	-4.94
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1.73	-1.95	-2.26	-2.48	-2.80	-9.39	0.00	-1.74	-1.96	-2.27	-2.49	-2.81	-9.40
Canton-Massillon, OH	-	x	-	100	0.00	-0.49	-0.55	-0.64	-0.71	-0.80	-2.67	0.00	-0.50	-0.56	-0.65	-0.71	-0.80	-2.68
Charleston, WV	-	x	-	100	0.00	-0.46	-0.52	-0.60	-0.66	-0.75	-2.51	0.00	-0.47	-0.52	-0.61	-0.67	-0.75	-2.51
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-2.59	-2.92	-3.36	-3.69	-4.11	-12.77	0.00	-2.61	-2.93	-3.38	-3.71	-4.12	-12.78
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.82	-0.92	-1.07	-1.17	-1.32	-4.36	0.00	-0.82	-0.92	-1.07	-1.18	-1.32	-4.37
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-10.77	-12.11	-14.04	-15.43	-17.33	-57.26	0.00	-10.82	-12.17	-14.10	-15.49	-17.40	-57.33
Chico, CA	x	-	100	-	0.00	-0.30	-0.34	-0.39	-0.43	-0.48	-1.62	0.00	-0.30	-0.34	-0.39	-0.43	-0.49	-1.62
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-2.84	-3.19	-3.70	-4.07	-4.57	-15.20	0.00	-2.85	-3.21	-3.72	-4.08	-4.59	-15.22
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.27	-0.30	-0.35	-0.39	-0.44	-1.47	0.00	-0.27	-0.31	-0.36	-0.39	-0.44	-1.47
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-4.13	-4.64	-5.39	-5.92	-6.67	-22.38	0.00	-4.15	-4.66	-5.41	-5.95	-6.70	-22.41
Columbus, OH	x	x	100	100	0.00	-2.67	-3.00	-3.48	-3.83	-4.31	-14.44	0.00	-2.68	-3.01	-3.50	-3.84	-4.32	-14.46
Dallas-Fort Worth, TX	x	-	100	-	0.00	-10.80	-12.15	-14.11	-15.50	-17.46	-58.55	0.00	-10.86	-12.21	-14.17	-15.57	-17.53	-58.61
Dayton-Springfield, OH	-	x	-	100	0.00	-1.25	-1.41	-1.63	-1.80	-2.02	-6.78	0.00	-1.26	-1.41	-1.64	-1.80	-2.03	-6.79
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-5.00	-5.63	-6.53	-7.18	-8.09	-27.11	0.00	-5.03	-5.65	-6.56	-7.21	-8.12	-27.13
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-7.53	-8.47	-9.84	-10.81	-12.18	-40.85	0.00	-7.57	-8.51	-9.88	-10.86	-12.22	-40.89
Door Co., WI	x	-	100	-	0.00	-0.05	-0.06	-0.07	-0.07	-0.08	-0.28	0.00	-0.05	-0.06	-0.07	-0.07	-0.08	-0.28
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Evansville, IN	-	x	-	100	0.00	-0.51	-0.57	-0.66	-0.72	-0.81	-2.56	0.00	-0.51	-0.57	-0.66	-0.73	-0.81	-2.56
Greater Connecticut, CT	x	-	100	-	0.00	-2.74	-3.09	-3.59	-3.94	-4.44	-14.94	0.00	-2.76	-3.10	-3.60	-3.96	-4.46	-14.96
Greene Co., PA	x	-	100	-	0.00	-0.06	-0.07	-0.08	-0.09	-0.10	-0.34	0.00	-0.06	-0.07	-0.08	-0.09	-0.10	-0.34
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1.24	-1.39	-1.62	-1.78	-2.00	-6.70	0.00	-1.24	-1.40	-1.62	-1.78	-2.01	-6.71
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1.12	-1.26	-1.46	-1.61	-1.81	-6.08	0.00	-1.13	-1.27	-1.47	-1.62	-1.82	-6.08

**Table B2-21
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.04	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.04
Hickory, NC	-	x	-	100	0.00	-0.29	-0.33	-0.38	-0.42	-0.47	-1.58	0.00	-0.29	-0.33	-0.38	-0.42	-0.47	-1.58
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-7.97	-8.96	-10.41	-11.44	-12.88	-43.20	0.00	-8.01	-9.01	-10.45	-11.49	-12.93	-43.24
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.56	-0.63	-0.72	-0.79	-0.86	-2.28	0.00	-0.56	-0.63	-0.72	-0.79	-0.86	-2.29
Imperial Co., CA	x	-	100	-	0.00	-0.34	-0.39	-0.45	-0.50	-0.56	-1.87	0.00	-0.35	-0.39	-0.45	-0.50	-0.56	-1.87
Indianapolis, IN	-	x	-	100	0.00	-2.49	-2.80	-3.25	-3.57	-4.02	-13.49	0.00	-2.50	-2.81	-3.26	-3.59	-4.04	-13.50
Jamestown, NY	x	-	100	-	0.00	-0.23	-0.26	-0.30	-0.33	-0.37	-1.25	0.00	-0.23	-0.26	-0.30	-0.33	-0.37	-1.25
Jefferson Co., NY	x	-	100	-	0.00	-0.21	-0.24	-0.28	-0.31	-0.35	-1.16	0.00	-0.22	-0.24	-0.28	-0.31	-0.35	-1.16
Johnstown, PA	-	x	-	100	0.00	-0.19	-0.21	-0.25	-0.27	-0.31	-1.03	0.00	-0.19	-0.21	-0.25	-0.27	-0.31	-1.03
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.19	-0.22	-0.25	-0.28	-0.32	-1.11	0.00	-0.19	-0.22	-0.25	-0.28	-0.32	-1.11
Knoxville, TN	x	x	100	100	0.00	-1.69	-1.90	-2.21	-2.42	-2.73	-9.14	0.00	-1.70	-1.91	-2.22	-2.43	-2.74	-9.15
Lancaster, PA	-	x	-	100	0.00	-0.66	-0.74	-0.86	-0.95	-1.07	-3.58	0.00	-0.66	-0.75	-0.87	-0.95	-1.07	-3.59
Las Vegas, NV	x	-	100	-	0.00	-2.18	-2.46	-2.85	-3.13	-3.53	-11.80	0.00	-2.20	-2.47	-2.86	-3.15	-3.54	-11.81
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.06	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.06
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.12	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.12
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-22.89	-25.75	-29.90	-32.86	-37.01	-124.04	0.00	-23.01	-25.87	-30.03	-32.99	-37.14	-124.17
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1.13	-1.28	-1.48	-1.63	-1.84	-6.18	0.00	-1.14	-1.28	-1.49	-1.64	-1.84	-6.19
Louisville, KY-IN	-	x	-	100	0.00	-1.71	-1.92	-2.22	-2.44	-2.75	-9.05	0.00	-1.72	-1.93	-2.23	-2.45	-2.76	-9.06
Macon, GA	-	x	-	100	0.00	-0.32	-0.36	-0.41	-0.45	-0.51	-1.67	0.00	-0.32	-0.36	-0.41	-0.46	-0.51	-1.68
Manitowoc Co., WI	x	-	-	-	0.00	-0.17	-0.19	-0.22	-0.24	-0.27	-0.91	0.00	-0.17	-0.19	-0.22	-0.24	-0.27	-0.91
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.16	-0.18	-0.21	-0.23	-0.26	-0.88	0.00	-0.16	-0.18	-0.21	-0.23	-0.26	-0.88
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.63	-0.71	-0.83	-0.91	-1.02	-3.43	0.00	-0.64	-0.72	-0.83	-0.91	-1.03	-3.44
Memphis, TN-AR	x	-	100	-	0.00	-1.54	-1.73	-2.01	-2.21	-2.49	-8.34	0.00	-1.55	-1.74	-2.02	-2.22	-2.50	-8.34
Milwaukee-Racine, WI	x	-	100	-	0.00	-2.73	-3.07	-3.56	-3.91	-4.41	-14.80	0.00	-2.74	-3.08	-3.58	-3.93	-4.43	-14.81
Nevada (Western Part), CA	x	-	100	-	0.00	-0.15	-0.17	-0.20	-0.22	-0.25	-0.84	0.00	-0.15	-0.17	-0.20	-0.22	-0.25	-0.84
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-22.45	-25.24	-29.32	-32.22	-36.29	-121.79	0.00	-22.57	-25.36	-29.44	-32.35	-36.43	-121.92
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.24	-0.27	-0.32	-0.35	-0.39	-1.31	0.00	-0.24	-0.28	-0.32	-0.35	-0.39	-1.31
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-10.74	-12.07	-14.02	-15.41	-17.37	-58.34	0.00	-10.79	-12.13	-14.09	-15.48	-17.43	-58.41
Phoenix-Mesa, AZ	x	-	100	-	0.00	-5.99	-6.74	-7.81	-8.59	-9.65	-31.88	0.00	-6.02	-6.77	-7.85	-8.62	-9.68	-31.92
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3.04	-3.42	-3.97	-4.36	-4.91	-16.45	0.00	-3.06	-3.44	-3.99	-4.38	-4.93	-16.47
Poughkeepsie, NY	x	x	100	100	0.00	-1.97	-2.22	-2.58	-2.83	-3.19	-10.70	0.00	-1.98	-2.23	-2.59	-2.84	-3.20	-10.71

**Table B2-21
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-1.43	-1.61	-1.87	-2.05	-2.31	-7.75	0.00	-1.44	-1.61	-1.87	-2.06	-2.32	-7.76
Reading, PA	-	x	-	100	0.00	-0.58	-0.65	-0.76	-0.83	-0.94	-3.14	0.00	-0.58	-0.66	-0.76	-0.84	-0.94	-3.15
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-1.16	-1.30	-1.51	-1.66	-1.87	-6.29	0.00	-1.16	-1.31	-1.52	-1.67	-1.88	-6.29
Rochester, NY	x	-	100	-	0.00	-2.00	-2.25	-2.61	-2.87	-3.23	-10.84	0.00	-2.01	-2.26	-2.62	-2.88	-3.25	-10.86
Rome, GA	-	x	-	100	0.00	-0.17	-0.20	-0.23	-0.25	-0.28	-0.95	0.00	-0.18	-0.20	-0.23	-0.25	-0.28	-0.95
Sacramento Metro, CA	x	-	50	-	0.00	-3.36	-3.78	-4.38	-4.82	-5.43	-18.18	0.00	-3.37	-3.79	-4.40	-4.84	-5.45	-18.20
San Diego, CA	x	-	100	-	0.00	-4.70	-5.29	-6.14	-6.75	-7.60	-25.49	0.00	-4.73	-5.31	-6.17	-6.78	-7.63	-25.52
San Francisco Bay Area, CA	x	-	100	-	0.00	-9.91	-11.15	-12.89	-14.17	-15.85	-51.11	0.00	-9.96	-11.20	-12.95	-14.22	-15.91	-51.17
San Joaquin Valley, CA	x	x	50	100	0.00	-6.84	-7.69	-8.93	-9.81	-11.05	-36.97	0.00	-6.87	-7.73	-8.97	-9.85	-11.09	-37.01
Sheboygan, WI	x	-	100	-	0.00	-0.19	-0.21	-0.24	-0.27	-0.30	-1.02	0.00	-0.19	-0.21	-0.24	-0.27	-0.30	-1.02
Springfield (Western MA), MA	x	-	100	-	0.00	-1.44	-1.61	-1.87	-2.06	-2.32	-7.78	0.00	-1.44	-1.62	-1.88	-2.07	-2.33	-7.79
St. Louis, MO-IL	x	x	100	100	0.00	-4.78	-5.38	-6.25	-6.87	-7.74	-26.12	0.00	-4.81	-5.40	-6.28	-6.90	-7.77	-26.15
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.17	-0.19	-0.22	-0.24	-0.27	-0.90	0.00	-0.17	-0.19	-0.22	-0.24	-0.27	-0.91
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.99	-1.11	-1.29	-1.42	-1.59	-5.35	0.00	-0.99	-1.11	-1.29	-1.42	-1.60	-5.35
Washington, DC-MD-VA	x	x	100	100	0.00	-7.59	-8.53	-9.92	-10.90	-12.28	-41.33	0.00	-7.63	-8.58	-9.96	-10.94	-12.33	-41.37
Wheeling, WV-OH	-	x	-	100	0.00	-0.26	-0.30	-0.34	-0.38	-0.43	-1.43	0.00	-0.26	-0.30	-0.35	-0.38	-0.43	-1.43
York, PA	-	x	-	100	0.00	-0.61	-0.69	-0.80	-0.88	-0.99	-3.32	0.00	-0.62	-0.69	-0.80	-0.88	-0.99	-3.33

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-22
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-5.92	-6.59	-7.35	-8.25	-8.84	-27.07	0.00	-13.92	-14.81	-15.85	-17.04	-17.79	-35.00
Allegan Co., MI	x	-	100	-	0.00	-0.65	-0.72	-0.80	-0.90	-0.97	-2.96	0.00	-1.52	-1.62	-1.73	-1.86	-1.95	-3.83
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.63	-0.70	-0.78	-0.87	-0.94	-2.87	0.00	-1.47	-1.57	-1.68	-1.81	-1.89	-3.71
Atlanta, GA	x	x	100	100	0.00	-34.27	-38.19	-42.59	-47.78	-51.20	-156.67	0.00	-80.63	-85.78	-91.83	-98.73	-103.06	-202.66
Baltimore, MD	x	x	100	100	0.00	-13.03	-14.52	-16.20	-18.17	-19.48	-59.74	0.00	-30.66	-32.62	-34.92	-37.55	-39.20	-77.23
Baton Rouge, LA	x	-	100	-	0.00	-3.08	-3.43	-3.82	-4.29	-4.60	-14.08	0.00	-7.24	-7.70	-8.24	-8.86	-9.25	-18.20
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.85	-2.06	-2.30	-2.58	-2.76	-8.48	0.00	-4.35	-4.62	-4.95	-5.32	-5.56	-10.96
Birmingham, AL	-	x	-	100	0.00	-4.63	-5.16	-5.75	-6.46	-6.91	-21.11	0.00	-10.90	-11.59	-12.41	-13.34	-13.92	-27.32
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-20.40	-22.74	-25.36	-28.45	-30.49	-93.43	0.00	-48.00	-51.07	-54.68	-58.78	-61.37	-120.81
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-2.77	-3.09	-3.43	-3.85	-4.11	-12.24	0.00	-6.52	-6.93	-7.41	-7.97	-8.30	-15.95
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-4.88	-5.43	-6.06	-6.80	-7.29	-22.33	0.00	-11.47	-12.21	-13.07	-14.05	-14.67	-28.88
Canton-Massillon, OH	-	x	-	100	0.00	-1.39	-1.55	-1.73	-1.95	-2.08	-6.38	0.00	-3.28	-3.49	-3.74	-4.02	-4.20	-8.25
Charleston, WV	-	x	-	100	0.00	-1.28	-1.42	-1.59	-1.78	-1.91	-5.85	0.00	-3.01	-3.20	-3.43	-3.68	-3.85	-7.57
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-8.32	-9.28	-10.29	-11.53	-12.25	-35.19	0.00	-19.58	-20.84	-22.24	-23.91	-24.83	-46.31
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-2.36	-2.63	-2.93	-3.29	-3.52	-10.75	0.00	-5.55	-5.90	-6.32	-6.79	-7.09	-13.92
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-31.39	-34.99	-38.94	-43.68	-46.66	-139.83	0.00	-73.87	-78.60	-84.06	-90.36	-94.17	-181.89
Chico, CA	x	-	100	-	0.00	-0.88	-0.98	-1.09	-1.22	-1.31	-4.01	0.00	-2.06	-2.20	-2.35	-2.53	-2.64	-5.19
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-8.21	-9.15	-10.20	-11.44	-12.24	-37.15	0.00	-19.32	-20.56	-22.00	-23.65	-24.67	-48.16
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.75	-0.83	-0.93	-1.04	-1.12	-3.42	0.00	-1.76	-1.87	-2.00	-2.15	-2.25	-4.43
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-11.59	-12.91	-14.40	-16.16	-17.31	-53.03	0.00	-27.26	-29.00	-31.05	-33.38	-34.85	-68.58
Columbus, OH	x	x	100	100	0.00	-8.00	-8.92	-9.94	-11.16	-11.96	-36.59	0.00	-18.83	-20.03	-21.44	-23.05	-24.06	-47.33
Dallas-Fort Worth, TX	x	-	100	-	0.00	-33.98	-37.87	-42.24	-47.39	-50.78	-155.46	0.00	-79.95	-85.07	-91.07	-97.91	-102.21	-201.06
Dayton-Springfield, OH	-	x	-	100	0.00	-3.52	-3.92	-4.38	-4.91	-5.26	-16.11	0.00	-8.29	-8.82	-9.44	-10.15	-10.59	-20.84
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-15.23	-16.97	-18.93	-21.24	-22.76	-69.64	0.00	-35.84	-38.13	-40.82	-43.89	-45.81	-90.08
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-21.49	-23.95	-26.71	-29.97	-32.11	-98.34	0.00	-50.56	-53.79	-57.59	-61.92	-64.64	-127.18
Door Co., WI	x	-	100	-	0.00	-0.14	-0.16	-0.18	-0.20	-0.21	-0.65	0.00	-0.34	-0.36	-0.38	-0.41	-0.43	-0.85
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.03	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.03
Evansville, IN	-	x	-	100	0.00	-1.47	-1.64	-1.81	-2.03	-2.16	-6.28	0.00	-3.45	-3.67	-3.92	-4.22	-4.38	-8.24
Greater Connecticut, CT	x	-	100	-	0.00	-7.98	-8.89	-9.92	-11.13	-11.94	-36.67	0.00	-18.78	-19.98	-21.39	-23.00	-24.02	-47.38
Greene Co., PA	x	-	100	-	0.00	-0.17	-0.19	-0.21	-0.24	-0.25	-0.78	0.00	-0.40	-0.43	-0.46	-0.49	-0.51	-1.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-3.61	-4.02	-4.48	-5.03	-5.39	-16.49	0.00	-8.48	-9.03	-9.66	-10.39	-10.84	-21.33
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-3.22	-3.59	-4.00	-4.49	-4.81	-14.73	0.00	-7.57	-8.06	-8.63	-9.28	-9.68	-19.05

**Table B2-22
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.03	-0.03	-0.10	0.00	-0.05	-0.05	-0.06	-0.06	-0.06	-0.12
Hickory, NC	-	x	-	100	0.00	-0.86	-0.96	-1.07	-1.21	-1.29	-3.96	0.00	-2.03	-2.16	-2.32	-2.49	-2.60	-5.12
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-23.65	-26.35	-29.39	-32.98	-35.34	-108.19	0.00	-55.64	-59.20	-63.38	-68.14	-71.13	-139.93
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.57	-1.76	-1.92	-2.15	-2.24	-5.41	0.00	-3.71	-3.95	-4.19	-4.49	-4.62	-7.49
Imperial Co., CA	x	-	100	-	0.00	-1.11	-1.24	-1.38	-1.55	-1.66	-5.08	0.00	-2.61	-2.78	-2.98	-3.20	-3.34	-6.57
Indianapolis, IN	-	x	-	100	0.00	-7.45	-8.31	-9.26	-10.39	-11.14	-34.10	0.00	-17.54	-18.66	-19.97	-21.48	-22.42	-44.10
Jamestown, NY	x	-	100	-	0.00	-0.65	-0.72	-0.81	-0.90	-0.97	-2.96	0.00	-1.52	-1.62	-1.74	-1.87	-1.95	-3.83
Jefferson Co., NY	x	-	100	-	0.00	-0.65	-0.72	-0.80	-0.90	-0.97	-2.96	0.00	-1.52	-1.62	-1.73	-1.86	-1.94	-3.82
Johnstown, PA	-	x	-	100	0.00	-0.52	-0.58	-0.65	-0.72	-0.78	-2.39	0.00	-1.22	-1.30	-1.39	-1.50	-1.56	-3.08
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.64	-0.71	-0.80	-0.90	-0.98	-3.24	0.00	-1.51	-1.60	-1.72	-1.85	-1.95	-4.10
Knoxville, TN	x	x	100	100	0.00	-4.98	-5.55	-6.19	-6.95	-7.44	-22.76	0.00	-11.72	-12.47	-13.35	-14.35	-14.98	-29.45
Lancaster, PA	-	x	-	100	0.00	-1.91	-2.12	-2.37	-2.66	-2.85	-8.72	0.00	-4.48	-4.77	-5.11	-5.49	-5.73	-11.28
Las Vegas, NV	x	-	100	-	0.00	-7.27	-8.10	-9.03	-10.13	-10.85	-33.10	0.00	-17.11	-18.20	-19.48	-20.94	-21.86	-42.85
Libby, MT	-	x	-	100	0.00	-0.03	-0.04	-0.04	-0.04	-0.05	-0.14	0.00	-0.07	-0.08	-0.08	-0.09	-0.09	-0.19
Liberty-Clairton, PA	-	x	-	100	0.00	-0.06	-0.06	-0.07	-0.08	-0.09	-0.28	0.00	-0.14	-0.15	-0.16	-0.17	-0.18	-0.36
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-69.23	-77.15	-86.04	-96.53	-103.43	-316.44	0.00	-162.88	-173.30	-185.52	-199.46	-208.21	-409.34
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-3.53	-3.94	-4.39	-4.93	-5.29	-16.34	0.00	-8.31	-8.84	-9.47	-10.18	-10.64	-21.08
Louisville, KY-IN	-	x	-	100	0.00	-4.81	-5.37	-5.98	-6.70	-7.16	-21.57	0.00	-11.33	-12.05	-12.89	-13.86	-14.45	-28.02
Macon, GA	-	x	-	100	0.00	-0.90	-1.00	-1.11	-1.25	-1.33	-3.99	0.00	-2.11	-2.24	-2.40	-2.58	-2.69	-5.20
Manitowoc Co., WI	x	-	-	-	0.00	-0.47	-0.52	-0.58	-0.66	-0.70	-2.17	0.00	-1.10	-1.18	-1.26	-1.35	-1.41	-2.80
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.52	-0.58	-0.64	-0.72	-0.77	-2.37	0.00	-1.22	-1.30	-1.39	-1.49	-1.56	-3.07
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-2.06	-2.30	-2.57	-2.88	-3.08	-9.44	0.00	-4.86	-5.17	-5.53	-5.95	-6.21	-12.21
Memphis, TN-AR	x	-	100	-	0.00	-4.37	-4.87	-5.43	-6.09	-6.52	-19.98	0.00	-10.27	-10.93	-11.70	-12.58	-13.13	-25.83
Milwaukee-Racine, WI	x	-	100	-	0.00	-7.77	-8.65	-9.65	-10.83	-11.61	-35.57	0.00	-18.27	-19.44	-20.81	-22.38	-23.36	-46.00
Nevada (Western Part), CA	x	-	100	-	0.00	-0.46	-0.52	-0.58	-0.65	-0.69	-2.13	0.00	-1.09	-1.16	-1.25	-1.34	-1.40	-2.75
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-64.09	-71.42	-79.66	-89.37	-95.78	-293.48	0.00	-150.78	-160.43	-171.75	-184.66	-192.78	-379.49
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.68	-0.75	-0.84	-0.94	-1.01	-3.07	0.00	-1.59	-1.69	-1.81	-1.95	-2.03	-3.97
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-31.57	-35.18	-39.24	-44.03	-47.19	-144.78	0.00	-74.27	-79.02	-84.60	-90.96	-94.97	-187.15
Phoenix-Mesa, AZ	x	-	100	-	0.00	-19.56	-21.80	-24.28	-27.24	-29.13	-87.88	0.00	-46.03	-48.98	-52.40	-56.33	-58.73	-114.11
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-8.37	-9.32	-10.40	-11.66	-12.50	-38.20	0.00	-19.68	-20.94	-22.42	-24.10	-25.16	-49.43
Poughkeepsie, NY	x	x	100	100	0.00	-5.87	-6.54	-7.30	-8.19	-8.78	-26.87	0.00	-13.82	-14.70	-15.74	-16.92	-17.66	-34.75

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Diesel PM 10 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-4.06	-4.52	-5.04	-5.66	-6.06	-18.57	0.00	-9.55	-10.16	-10.87	-11.69	-12.20	-24.02
Reading, PA	-	x	-	100	0.00	-1.73	-1.93	-2.15	-2.41	-2.58	-7.91	0.00	-4.07	-4.33	-4.63	-4.98	-5.20	-10.23
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-4.12	-4.59	-5.13	-5.75	-6.17	-18.98	0.00	-9.70	-10.32	-11.05	-11.88	-12.41	-24.51
Rochester, NY	x	-	100	-	0.00	-5.73	-6.38	-7.12	-7.98	-8.56	-26.20	0.00	-13.47	-14.33	-15.34	-16.50	-17.22	-33.88
Rome, GA	-	x	-	100	0.00	-0.50	-0.55	-0.62	-0.69	-0.74	-2.27	0.00	-1.17	-1.24	-1.33	-1.43	-1.49	-2.93
Sacramento Metro, CA	x	-	50	-	0.00	-10.33	-11.51	-12.84	-14.41	-15.44	-47.26	0.00	-24.31	-25.86	-27.68	-29.76	-31.07	-61.12
San Diego, CA	x	-	100	-	0.00	-13.31	-14.83	-16.54	-18.56	-19.89	-60.88	0.00	-31.31	-33.32	-35.67	-38.35	-40.03	-78.74
San Francisco Bay Area, CA	x	-	100	-	0.00	-28.40	-31.66	-35.18	-39.46	-42.04	-123.79	0.00	-66.83	-71.12	-75.99	-81.68	-85.01	-161.80
San Joaquin Valley, CA	x	x	50	100	0.00	-21.78	-24.27	-27.06	-30.35	-32.51	-99.17	0.00	-51.23	-54.51	-58.34	-62.73	-65.46	-128.38
Sheboygan, WI	x	-	100	-	0.00	-0.54	-0.60	-0.67	-0.75	-0.80	-2.47	0.00	-1.26	-1.34	-1.44	-1.55	-1.62	-3.19
Springfield (Western MA), MA	x	-	100	-	0.00	-4.15	-4.62	-5.15	-5.78	-6.19	-18.97	0.00	-9.75	-10.38	-11.11	-11.94	-12.47	-24.53
St. Louis, MO-IL	x	x	100	100	0.00	-13.69	-15.25	-17.02	-19.10	-20.48	-63.11	0.00	-32.20	-34.26	-36.69	-39.45	-41.20	-81.49
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.45	-0.51	-0.56	-0.63	-0.68	-2.08	0.00	-1.07	-1.14	-1.22	-1.31	-1.37	-2.69
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.82	-3.14	-3.50	-3.93	-4.21	-12.90	0.00	-6.63	-7.06	-7.56	-8.12	-8.48	-16.68
Washington, DC-MD-VA	x	x	100	100	0.00	-22.63	-25.21	-28.13	-31.56	-33.84	-104.01	0.00	-53.23	-56.64	-60.64	-65.20	-68.09	-134.39
Wheeling, WV-OH	-	x	-	100	0.00	-0.73	-0.81	-0.90	-1.01	-1.09	-3.33	0.00	-1.71	-1.82	-1.95	-2.10	-2.19	-4.30
York, PA	-	x	-	100	0.00	-1.87	-2.08	-2.33	-2.61	-2.80	-8.56	0.00	-4.40	-4.68	-5.01	-5.39	-5.63	-11.07

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-23
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-9.16	-10.18	-11.25	-12.68	-13.41	-40.05	0.00	-30.54	-32.12	-33.95	-36.15	-37.28	-60.78
Allegan Co., MI	x	-	100	-	0.00	-1.00	-1.11	-1.23	-1.38	-1.46	-4.38	0.00	-3.34	-3.51	-3.71	-3.95	-4.07	-6.64
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-1.03	-1.15	-1.27	-1.43	-1.51	-4.52	0.00	-3.44	-3.62	-3.83	-4.08	-4.21	-6.86
Atlanta, GA	x	x	100	100	0.00	-58.45	-64.97	-71.81	-80.90	-85.56	-255.47	0.00	-194.92	-204.99	-216.70	-230.72	-237.92	-387.73
Baltimore, MD	x	x	100	100	0.00	-20.08	-22.32	-24.67	-27.79	-29.40	-87.99	0.00	-66.95	-70.41	-74.44	-79.25	-81.74	-133.43
Baton Rouge, LA	x	-	100	-	0.00	-4.83	-5.37	-5.93	-6.68	-7.07	-21.12	0.00	-16.10	-16.93	-17.90	-19.05	-19.65	-32.04
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-2.78	-3.09	-3.41	-3.84	-4.07	-12.18	0.00	-9.26	-9.74	-10.30	-10.96	-11.31	-18.47
Birmingham, AL	-	x	-	100	0.00	-7.00	-7.78	-8.60	-9.69	-10.24	-30.51	0.00	-23.35	-24.55	-25.95	-27.63	-28.49	-46.35
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-30.35	-33.74	-37.29	-42.01	-44.44	-132.85	0.00	-101.22	-106.45	-112.53	-119.81	-123.56	-201.54
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-4.25	-4.73	-5.21	-5.87	-6.18	-17.99	0.00	-14.18	-14.91	-15.75	-16.77	-17.26	-27.59
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-7.19	-7.99	-8.83	-9.95	-10.52	-31.46	0.00	-23.97	-25.21	-26.65	-28.37	-29.26	-47.73
Canton-Massillon, OH	-	x	-	100	0.00	-2.06	-2.29	-2.54	-2.86	-3.02	-9.03	0.00	-6.88	-7.24	-7.65	-8.15	-8.40	-13.70
Charleston, WV	-	x	-	100	0.00	-1.85	-2.06	-2.27	-2.56	-2.71	-8.09	0.00	-6.17	-6.48	-6.86	-7.30	-7.53	-12.27
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-14.01	-15.58	-17.14	-19.30	-20.26	-57.48	0.00	-46.74	-49.17	-51.89	-55.23	-56.78	-89.07
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-3.56	-3.96	-4.38	-4.94	-5.23	-15.73	0.00	-11.88	-12.50	-13.22	-14.07	-14.52	-23.80
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-48.19	-53.59	-59.06	-66.51	-70.04	-202.89	0.00	-160.76	-169.09	-178.55	-190.07	-195.66	-311.71
Chico, CA	x	-	100	-	0.00	-1.35	-1.50	-1.65	-1.86	-1.97	-5.89	0.00	-4.49	-4.72	-4.99	-5.31	-5.48	-8.93
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-12.61	-14.02	-15.48	-17.44	-18.42	-54.53	0.00	-42.05	-44.23	-46.74	-49.76	-51.29	-83.04
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-1.08	-1.20	-1.33	-1.49	-1.58	-4.73	0.00	-3.60	-3.79	-4.00	-4.26	-4.40	-7.17
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-17.02	-18.92	-20.91	-23.56	-24.92	-74.49	0.00	-56.76	-59.70	-63.11	-67.19	-69.29	-113.01
Columbus, OH	x	x	100	100	0.00	-12.63	-14.04	-15.52	-17.48	-18.49	-55.21	0.00	-42.12	-44.29	-46.82	-49.85	-51.41	-83.79
Dallas-Fort Worth, TX	x	-	100	-	0.00	-56.35	-62.64	-69.23	-77.99	-82.50	-246.41	0.00	-187.92	-197.63	-208.92	-222.44	-229.39	-373.93
Dayton-Springfield, OH	-	x	-	100	0.00	-5.19	-5.76	-6.37	-7.18	-7.59	-22.67	0.00	-17.29	-18.18	-19.22	-20.47	-21.11	-34.41
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-24.41	-27.13	-29.99	-33.78	-35.73	-106.63	0.00	-81.40	-85.60	-90.49	-96.34	-99.35	-161.86
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-32.11	-35.69	-39.45	-44.44	-47.00	-140.44	0.00	-107.06	-112.60	-119.03	-126.73	-130.69	-213.09
Door Co., WI	x	-	100	-	0.00	-0.21	-0.23	-0.26	-0.29	-0.31	-0.92	0.00	-0.70	-0.74	-0.78	-0.83	-0.86	-1.40
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.04	0.00	-0.03	-0.03	-0.03	-0.03	-0.04	-0.06
Evansville, IN	-	x	-	100	0.00	-2.22	-2.47	-2.72	-3.06	-3.22	-9.13	0.00	-7.42	-7.80	-8.24	-8.77	-9.01	-14.15
Greater Connecticut, CT	x	-	100	-	0.00	-12.14	-13.49	-14.92	-16.81	-17.79	-53.31	0.00	-40.48	-42.57	-45.01	-47.92	-49.43	-80.78
Greene Co., PA	x	-	100	-	0.00	-0.24	-0.27	-0.30	-0.33	-0.35	-1.06	0.00	-0.81	-0.85	-0.90	-0.95	-0.98	-1.60
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-5.50	-6.11	-6.75	-7.61	-8.05	-24.04	0.00	-18.33	-19.28	-20.38	-21.70	-22.38	-36.48
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-4.84	-5.38	-5.94	-6.70	-7.08	-21.16	0.00	-16.13	-16.96	-17.93	-19.09	-19.69	-32.10

**Table B2-23
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.03	-0.04	-0.04	-0.04	-0.05	-0.13	0.00	-0.11	-0.11	-0.12	-0.13	-0.13	-0.21
Hickory, NC	-	x	-	100	0.00	-1.34	-1.49	-1.65	-1.86	-1.96	-5.88	0.00	-4.47	-4.70	-4.97	-5.30	-5.46	-8.92
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-37.07	-41.20	-45.54	-51.30	-54.27	-162.10	0.00	-123.61	-130.00	-137.42	-146.32	-150.89	-245.98
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-2.32	-2.59	-2.80	-3.15	-3.23	-7.58	0.00	-7.76	-8.16	-8.57	-9.11	-9.28	-12.76
Imperial Co., CA	x	-	100	-	0.00	-1.87	-2.08	-2.30	-2.59	-2.74	-8.18	0.00	-6.24	-6.56	-6.93	-7.38	-7.61	-12.41
Indianapolis, IN	-	x	-	100	0.00	-11.76	-13.07	-14.44	-16.27	-17.21	-51.40	0.00	-39.20	-41.23	-43.58	-46.40	-47.85	-78.01
Jamestown, NY	x	-	100	-	0.00	-0.95	-1.06	-1.17	-1.32	-1.39	-4.17	0.00	-3.18	-3.34	-3.53	-3.76	-3.88	-6.32
Jefferson Co., NY	x	-	100	-	0.00	-1.02	-1.13	-1.25	-1.41	-1.49	-4.46	0.00	-3.40	-3.57	-3.78	-4.02	-4.15	-6.77
Johnstown, PA	-	x	-	100	0.00	-0.75	-0.83	-0.92	-1.03	-1.09	-3.28	0.00	-2.49	-2.62	-2.77	-2.94	-3.04	-4.97
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.11	-1.24	-1.38	-1.56	-1.68	-5.58	0.00	-3.71	-3.90	-4.14	-4.41	-4.58	-8.12
Knoxville, TN	x	x	100	100	0.00	-7.69	-8.55	-9.45	-10.65	-11.26	-33.60	0.00	-25.65	-26.98	-28.52	-30.37	-31.31	-51.00
Lancaster, PA	-	x	-	100	0.00	-2.87	-3.19	-3.53	-3.98	-4.21	-12.56	0.00	-9.58	-10.07	-10.65	-11.34	-11.69	-19.06
Las Vegas, NV	x	-	100	-	0.00	-12.66	-14.07	-15.54	-17.51	-18.50	-54.97	0.00	-42.21	-44.39	-46.91	-49.95	-51.49	-83.60
Libby, MT	-	x	-	100	0.00	-0.05	-0.05	-0.06	-0.07	-0.07	-0.21	0.00	-0.16	-0.17	-0.18	-0.19	-0.19	-0.32
Liberty-Clairton, PA	-	x	-	100	0.00	-0.08	-0.09	-0.10	-0.11	-0.12	-0.38	0.00	-0.27	-0.29	-0.30	-0.32	-0.33	-0.56
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-110.37	-122.69	-135.58	-152.74	-161.52	-481.87	0.00	-368.05	-387.07	-409.16	-435.63	-449.21	-731.59
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-5.78	-6.42	-7.11	-8.01	-8.49	-25.72	0.00	-19.26	-20.26	-21.43	-22.81	-23.55	-38.81
Louisville, KY-IN	-	x	-	100	0.00	-7.11	-7.91	-8.72	-9.83	-10.37	-30.45	0.00	-23.72	-24.95	-26.36	-28.06	-28.91	-46.52
Macon, GA	-	x	-	100	0.00	-1.33	-1.48	-1.63	-1.83	-1.93	-5.64	0.00	-4.43	-4.65	-4.92	-5.23	-5.39	-8.64
Manitowoc Co., WI	x	-	-	-	0.00	-0.69	-0.77	-0.85	-0.96	-1.01	-3.04	0.00	-2.30	-2.42	-2.56	-2.73	-2.81	-4.61
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.87	-0.96	-1.07	-1.20	-1.27	-3.80	0.00	-2.89	-3.04	-3.22	-3.42	-3.53	-5.76
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-3.53	-3.92	-4.33	-4.88	-5.16	-15.41	0.00	-11.76	-12.36	-13.07	-13.92	-14.35	-23.39
Memphis, TN-AR	x	-	100	-	0.00	-6.48	-7.21	-7.97	-8.97	-9.49	-28.35	0.00	-21.62	-22.74	-24.04	-25.59	-26.39	-43.02
Milwaukee-Racine, WI	x	-	100	-	0.00	-11.58	-12.87	-14.23	-16.03	-16.96	-50.70	0.00	-38.62	-40.61	-42.93	-45.71	-47.14	-76.91
Nevada (Western Part), CA	x	-	100	-	0.00	-0.73	-0.81	-0.90	-1.01	-1.07	-3.21	0.00	-2.44	-2.57	-2.72	-2.89	-2.98	-4.87
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-95.73	-106.42	-117.62	-132.51	-140.18	-419.04	0.00	-319.24	-335.74	-354.93	-377.89	-389.72	-635.68
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.98	-1.09	-1.20	-1.35	-1.43	-4.25	0.00	-3.26	-3.43	-3.63	-3.86	-3.98	-6.46
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-48.63	-54.05	-59.75	-67.32	-71.22	-213.18	0.00	-162.15	-170.53	-180.28	-191.95	-197.97	-323.23
Phoenix-Mesa, AZ	x	-	100	-	0.00	-33.41	-37.14	-40.99	-46.18	-48.74	-143.46	0.00	-111.42	-117.19	-123.82	-131.82	-135.82	-218.98
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-12.05	-13.39	-14.80	-16.68	-17.63	-52.60	0.00	-40.18	-42.26	-44.67	-47.56	-49.04	-79.86
Poughkeepsie, NY	x	x	100	100	0.00	-9.14	-10.16	-11.23	-12.65	-13.38	-39.97	0.00	-30.48	-32.05	-33.88	-36.07	-37.20	-60.65

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Diesel PM 10 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-6.03	-6.70	-7.41	-8.34	-8.83	-26.37	0.00	-20.10	-21.14	-22.35	-23.79	-24.54	-40.02
Reading, PA	-	x	-	100	0.00	-2.69	-2.99	-3.31	-3.73	-3.94	-11.78	0.00	-8.98	-9.44	-9.98	-10.63	-10.96	-17.87
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-7.69	-8.55	-9.46	-10.66	-11.28	-33.94	0.00	-25.65	-26.98	-28.53	-30.37	-31.34	-51.36
Rochester, NY	x	-	100	-	0.00	-8.57	-9.53	-10.53	-11.87	-12.55	-37.50	0.00	-28.59	-30.07	-31.79	-33.84	-34.90	-56.90
Rome, GA	-	x	-	100	0.00	-0.73	-0.82	-0.90	-1.02	-1.08	-3.21	0.00	-2.45	-2.58	-2.72	-2.90	-2.99	-4.87
Sacramento Metro, CA	x	-	50	-	0.00	-16.70	-18.56	-20.51	-23.11	-24.45	-73.08	0.00	-55.68	-58.56	-61.90	-65.91	-67.97	-110.86
San Diego, CA	x	-	100	-	0.00	-19.70	-21.90	-24.20	-27.26	-28.84	-86.13	0.00	-65.68	-69.08	-73.02	-77.75	-80.18	-130.70
San Francisco Bay Area, CA	x	-	100	-	0.00	-42.62	-47.40	-52.19	-58.78	-61.83	-177.68	0.00	-142.18	-149.55	-157.88	-168.06	-172.93	-273.86
San Joaquin Valley, CA	x	x	50	100	0.00	-36.30	-40.36	-44.58	-50.22	-53.08	-157.72	0.00	-121.06	-127.32	-134.57	-143.27	-147.70	-239.83
Sheboygan, WI	x	-	100	-	0.00	-0.81	-0.90	-0.99	-1.12	-1.19	-3.56	0.00	-2.70	-2.84	-3.00	-3.19	-3.29	-5.39
Springfield (Western MA), MA	x	-	100	-	0.00	-6.26	-6.96	-7.69	-8.67	-9.17	-27.38	0.00	-20.88	-21.96	-23.22	-24.72	-25.49	-41.55
St. Louis, MO-IL	x	x	100	100	0.00	-20.55	-22.84	-25.26	-28.46	-30.13	-90.60	0.00	-68.53	-72.07	-76.20	-81.14	-83.70	-137.12
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.65	-0.72	-0.80	-0.90	-0.95	-2.83	0.00	-2.16	-2.27	-2.40	-2.56	-2.64	-4.30
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-4.22	-4.69	-5.18	-5.83	-6.17	-18.43	0.00	-14.06	-14.78	-15.63	-16.64	-17.16	-27.97
Washington, DC-MD-VA	x	x	100	100	0.00	-35.69	-39.67	-43.86	-49.41	-52.29	-156.84	0.00	-119.00	-125.15	-132.32	-140.88	-145.32	-237.62
Wheeling, WV-OH	-	x	-	100	0.00	-1.05	-1.17	-1.29	-1.46	-1.54	-4.60	0.00	-3.51	-3.69	-3.90	-4.15	-4.28	-6.98
York, PA	-	x	-	100	0.00	-2.98	-3.32	-3.67	-4.13	-4.37	-13.06	0.00	-9.95	-10.47	-11.07	-11.78	-12.15	-19.81

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-24
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-12.32	-13.71	-15.10	-17.09	-18.01	-53.41	0.00	-50.66	-53.03	-55.80	-59.16	-60.79	-90.25
Allegan Co., MI	x	-	100	-	0.00	-1.34	-1.49	-1.64	-1.86	-1.96	-5.81	0.00	-5.51	-5.77	-6.07	-6.44	-6.61	-9.82
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-1.57	-1.75	-1.93	-2.18	-2.30	-6.83	0.00	-6.47	-6.78	-7.13	-7.56	-7.77	-11.54
Atlanta, GA	x	x	100	100	0.00	-97.99	-109.02	-120.09	-135.92	-143.28	-424.64	0.00	-402.95	-421.85	-443.83	-470.61	-483.54	-717.71
Baltimore, MD	x	x	100	100	0.00	-26.77	-29.78	-32.81	-37.14	-39.16	-116.31	0.00	-110.08	-115.24	-121.25	-128.57	-132.12	-196.39
Baton Rouge, LA	x	-	100	-	0.00	-6.77	-7.54	-8.30	-9.40	-9.91	-29.38	0.00	-27.86	-29.17	-30.69	-32.54	-33.43	-49.64
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-3.53	-3.92	-4.32	-4.89	-5.16	-15.33	0.00	-14.50	-15.18	-15.97	-16.93	-17.40	-25.88
Birmingham, AL	-	x	-	100	0.00	-9.14	-10.17	-11.20	-12.68	-13.36	-39.50	0.00	-37.60	-39.36	-41.41	-43.91	-45.11	-66.85
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-37.90	-42.17	-46.46	-52.58	-55.44	-164.46	0.00	-155.87	-163.18	-171.69	-182.05	-187.06	-277.84
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-5.61	-6.24	-6.86	-7.77	-8.16	-23.65	0.00	-23.08	-24.17	-25.41	-26.94	-27.65	-40.40
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-8.74	-9.73	-10.72	-12.13	-12.79	-37.95	0.00	-35.96	-37.65	-39.61	-42.00	-43.16	-64.11
Canton-Massillon, OH	-	x	-	100	0.00	-2.53	-2.82	-3.10	-3.51	-3.70	-10.97	0.00	-10.41	-10.89	-11.46	-12.15	-12.49	-18.54
Charleston, WV	-	x	-	100	0.00	-2.17	-2.42	-2.66	-3.02	-3.18	-9.42	0.00	-8.94	-9.36	-9.85	-10.44	-10.73	-15.93
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-22.43	-24.97	-27.42	-31.03	-32.57	-93.62	0.00	-92.29	-96.63	-101.57	-107.68	-110.47	-160.58
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-4.59	-5.11	-5.64	-6.39	-6.76	-20.54	0.00	-18.89	-19.77	-20.82	-22.08	-22.71	-34.30
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-65.05	-72.44	-79.33	-89.74	-93.83	-262.09	0.00	-267.72	-280.34	-294.41	-312.07	-319.75	-455.85
Chico, CA	x	-	100	-	0.00	-1.78	-1.98	-2.18	-2.46	-2.60	-7.70	0.00	-7.30	-7.64	-8.04	-8.53	-8.76	-13.01
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-17.31	-19.27	-21.20	-24.00	-25.27	-74.27	0.00	-71.21	-74.55	-78.41	-83.14	-85.39	-126.03
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-1.26	-1.40	-1.55	-1.75	-1.84	-5.47	0.00	-5.18	-5.43	-5.71	-6.05	-6.22	-9.24
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-20.65	-22.97	-25.31	-28.64	-30.19	-89.56	0.00	-84.90	-88.88	-93.52	-99.16	-101.89	-151.31
Columbus, OH	x	x	100	100	0.00	-17.95	-19.98	-22.01	-24.91	-26.25	-77.82	0.00	-73.84	-77.30	-81.33	-86.23	-88.60	-131.52
Dallas-Fort Worth, TX	x	-	100	-	0.00	-89.00	-99.02	-109.08	-123.46	-130.15	-385.82	0.00	-366.00	-383.16	-403.13	-427.46	-439.20	-652.03
Dayton-Springfield, OH	-	x	-	100	0.00	-6.30	-7.01	-7.72	-8.74	-9.21	-27.30	0.00	-25.90	-27.11	-28.53	-30.25	-31.08	-46.14
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-35.82	-39.86	-43.90	-49.68	-52.36	-154.99	0.00	-147.31	-154.22	-162.25	-172.04	-176.75	-262.12
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-40.33	-44.87	-49.43	-55.95	-58.98	-174.88	0.00	-165.85	-173.63	-182.68	-193.70	-199.03	-295.52
Door Co., WI	x	-	100	-	0.00	-0.25	-0.28	-0.31	-0.35	-0.37	-1.11	0.00	-1.05	-1.10	-1.15	-1.22	-1.26	-1.87
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.04	0.00	-0.04	-0.05	-0.05	-0.05	-0.05	-0.08
Evansville, IN	-	x	-	100	0.00	-2.87	-3.20	-3.51	-3.97	-4.15	-11.78	0.00	-11.81	-12.37	-13.00	-13.78	-14.12	-20.34
Greater Connecticut, CT	x	-	100	-	0.00	-15.73	-17.51	-19.29	-21.83	-23.03	-68.48	0.00	-64.70	-67.74	-71.27	-75.58	-77.66	-115.55
Greene Co., PA	x	-	100	-	0.00	-0.27	-0.30	-0.33	-0.38	-0.40	-1.18	0.00	-1.12	-1.17	-1.23	-1.31	-1.35	-2.00
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-7.16	-7.96	-8.77	-9.93	-10.47	-31.03	0.00	-29.44	-30.82	-32.42	-34.38	-35.32	-52.44
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-6.12	-6.81	-7.50	-8.49	-8.95	-26.55	0.00	-25.18	-26.36	-27.73	-29.41	-30.21	-44.86

**Table B2-24
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.04	-0.04	-0.05	-0.06	-0.06	-0.16	0.00	-0.17	-0.17	-0.18	-0.19	-0.20	-0.28
Hickory, NC	-	x	-	100	0.00	-1.81	-2.01	-2.22	-2.51	-2.65	-7.87	0.00	-7.44	-7.79	-8.20	-8.70	-8.94	-13.28
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-52.68	-58.62	-64.57	-73.08	-77.04	-228.40	0.00	-216.66	-226.81	-238.64	-253.03	-259.99	-385.98
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-2.84	-3.17	-3.42	-3.86	-3.95	-9.20	0.00	-11.71	-12.27	-12.82	-13.58	-13.81	-17.56
Imperial Co., CA	x	-	100	-	0.00	-2.97	-3.30	-3.64	-4.12	-4.34	-12.87	0.00	-12.21	-12.78	-13.45	-14.26	-14.65	-21.75
Indianapolis, IN	-	x	-	100	0.00	-16.75	-18.63	-20.53	-23.23	-24.49	-72.60	0.00	-68.87	-72.10	-75.85	-80.43	-82.64	-122.69
Jamestown, NY	x	-	100	-	0.00	-1.15	-1.28	-1.41	-1.60	-1.69	-5.01	0.00	-4.75	-4.97	-5.23	-5.54	-5.69	-8.46
Jefferson Co., NY	x	-	100	-	0.00	-1.42	-1.58	-1.74	-1.97	-2.08	-6.16	0.00	-5.84	-6.11	-6.43	-6.82	-7.01	-10.41
Johnstown, PA	-	x	-	100	0.00	-0.86	-0.96	-1.06	-1.20	-1.26	-3.76	0.00	-3.54	-3.71	-3.90	-4.14	-4.25	-6.34
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.89	-2.10	-2.35	-2.67	-2.88	-9.94	0.00	-7.76	-8.12	-8.59	-9.11	-9.44	-15.67
Knoxville, TN	x	x	100	100	0.00	-10.30	-11.46	-12.63	-14.29	-15.06	-44.62	0.00	-42.37	-44.36	-46.67	-49.48	-50.84	-75.43
Lancaster, PA	-	x	-	100	0.00	-3.66	-4.07	-4.48	-5.07	-5.35	-15.85	0.00	-15.03	-15.74	-16.56	-17.56	-18.04	-26.79
Las Vegas, NV	x	-	100	-	0.00	-21.48	-23.90	-26.31	-29.77	-31.35	-92.17	0.00	-88.34	-92.48	-97.28	-103.14	-105.94	-156.38
Libby, MT	-	x	-	100	0.00	-0.06	-0.07	-0.07	-0.08	-0.09	-0.26	0.00	-0.25	-0.26	-0.28	-0.29	-0.30	-0.45
Liberty-Clairton, PA	-	x	-	100	0.00	-0.09	-0.10	-0.11	-0.12	-0.13	-0.42	0.00	-0.36	-0.38	-0.40	-0.43	-0.44	-0.69
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-161.34	-179.52	-197.70	-223.76	-235.78	-697.03	0.00	-663.52	-694.64	-730.78	-774.86	-796.05	-1,179.52
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-8.74	-9.72	-10.74	-12.16	-12.87	-39.25	0.00	-35.94	-37.62	-39.61	-42.01	-43.23	-65.45
Louisville, KY-IN	-	x	-	100	0.00	-8.71	-9.69	-10.66	-12.06	-12.68	-36.98	0.00	-35.82	-37.50	-39.43	-41.81	-42.92	-62.99
Macon, GA	-	x	-	100	0.00	-1.63	-1.81	-1.99	-2.25	-2.37	-6.84	0.00	-6.70	-7.01	-7.37	-7.81	-8.02	-11.70
Manitowoc Co., WI	x	-	-	-	0.00	-0.84	-0.93	-1.03	-1.16	-1.23	-3.66	0.00	-3.44	-3.60	-3.79	-4.02	-4.13	-6.16
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-1.37	-1.52	-1.67	-1.89	-2.00	-5.93	0.00	-5.61	-5.88	-6.18	-6.56	-6.74	-10.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-5.80	-6.45	-7.11	-8.05	-8.48	-25.15	0.00	-23.85	-24.97	-26.27	-27.86	-28.63	-42.50
Memphis, TN-AR	x	-	100	-	0.00	-8.01	-8.91	-9.81	-11.11	-11.71	-34.71	0.00	-32.93	-34.47	-36.27	-38.46	-39.51	-58.66
Milwaukee-Racine, WI	x	-	100	-	0.00	-14.47	-16.10	-17.74	-20.08	-21.17	-62.81	0.00	-59.51	-62.30	-65.55	-69.50	-71.41	-106.09
Nevada (Western Part), CA	x	-	100	-	0.00	-1.02	-1.13	-1.25	-1.41	-1.49	-4.43	0.00	-4.19	-4.39	-4.62	-4.90	-5.03	-7.48
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-119.80	-133.29	-146.84	-166.20	-175.22	-519.82	0.00	-492.65	-515.75	-542.65	-575.39	-591.22	-878.17
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-1.15	-1.28	-1.41	-1.60	-1.68	-4.96	0.00	-4.74	-4.96	-5.22	-5.53	-5.68	-8.40
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-65.00	-72.32	-79.69	-90.19	-95.10	-282.50	0.00	-267.31	-279.84	-294.45	-312.22	-320.83	-476.96
Phoenix-Mesa, AZ	x	-	100	-	0.00	-54.57	-60.73	-66.80	-75.59	-79.53	-232.45	0.00	-224.45	-234.98	-247.12	-262.01	-269.02	-395.49
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-14.04	-15.63	-17.21	-19.48	-20.53	-60.78	0.00	-57.75	-60.46	-63.61	-67.45	-69.30	-102.78
Poughkeepsie, NY	x	x	100	100	0.00	-12.40	-13.80	-15.20	-17.21	-18.14	-53.78	0.00	-51.00	-53.40	-56.18	-59.57	-61.21	-90.87

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Diesel PM 10 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-7.46	-8.30	-9.14	-10.34	-10.90	-32.34	0.00	-30.66	-32.10	-33.77	-35.81	-36.80	-54.64
Reading, PA	-	x	-	100	0.00	-3.66	-4.07	-4.49	-5.08	-5.35	-15.87	0.00	-15.06	-15.76	-16.58	-17.58	-18.07	-26.82
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-15.01	-16.69	-18.41	-20.84	-22.00	-65.92	0.00	-61.70	-64.59	-67.98	-72.09	-74.11	-110.84
Rochester, NY	x	-	100	-	0.00	-10.78	-12.00	-13.22	-14.96	-15.77	-46.76	0.00	-44.35	-46.42	-48.84	-51.79	-53.22	-79.01
Rome, GA	-	x	-	100	0.00	-0.90	-1.01	-1.11	-1.25	-1.32	-3.92	0.00	-3.71	-3.89	-4.09	-4.34	-4.46	-6.62
Sacramento Metro, CA	x	-	50	-	0.00	-24.76	-27.55	-30.36	-34.36	-36.23	-107.64	0.00	-101.83	-106.60	-112.17	-118.94	-122.22	-181.72
San Diego, CA	x	-	100	-	0.00	-24.16	-26.88	-29.61	-33.52	-35.33	-104.73	0.00	-99.36	-104.02	-109.44	-116.04	-119.23	-177.00
San Francisco Bay Area, CA	x	-	100	-	0.00	-53.91	-60.02	-65.87	-74.53	-78.17	-223.42	0.00	-221.81	-232.25	-244.07	-258.75	-265.39	-384.26
San Joaquin Valley, CA	x	x	50	100	0.00	-56.72	-63.11	-69.46	-78.61	-82.77	-243.26	0.00	-233.27	-244.21	-256.87	-272.36	-279.72	-412.80
Sheboygan, WI	x	-	100	-	0.00	-1.03	-1.14	-1.26	-1.43	-1.51	-4.48	0.00	-4.23	-4.43	-4.66	-4.94	-5.08	-7.56
Springfield (Western MA), MA	x	-	100	-	0.00	-8.00	-8.91	-9.81	-11.10	-11.70	-34.70	0.00	-32.91	-34.46	-36.25	-38.44	-39.50	-58.64
St. Louis, MO-IL	x	x	100	100	0.00	-26.23	-29.18	-32.16	-36.40	-38.41	-114.62	0.00	-107.84	-112.89	-118.80	-125.98	-129.48	-193.10
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.74	-0.82	-0.90	-1.02	-1.08	-3.19	0.00	-3.03	-3.17	-3.34	-3.54	-3.64	-5.40
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-5.28	-5.87	-6.47	-7.32	-7.71	-22.87	0.00	-21.70	-22.71	-23.90	-25.34	-26.04	-38.65
Washington, DC-MD-VA	x	x	100	100	0.00	-51.54	-57.34	-63.19	-71.52	-75.43	-224.54	0.00	-211.92	-221.85	-233.45	-247.54	-254.39	-378.74
Wheeling, WV-OH	-	x	-	100	0.00	-1.23	-1.37	-1.51	-1.71	-1.80	-5.33	0.00	-5.06	-5.30	-5.57	-5.91	-6.07	-9.02
York, PA	-	x	-	100	0.00	-4.26	-4.73	-5.22	-5.90	-6.22	-18.46	0.00	-17.50	-18.32	-19.28	-20.44	-21.00	-31.18

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-25
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.01	-0.04	0.14	0.17	0.32	3.44	0.00	-0.01	-0.04	0.14	0.17	0.32	3.44
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.38	0.00	0.00	0.00	0.02	0.02	0.03	0.38
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.03	0.34	0.00	0.00	0.00	0.01	0.02	0.03	0.34
Atlanta, GA	x	x	100	100	0.00	-0.07	-0.19	0.73	0.90	1.68	18.29	0.00	-0.07	-0.19	0.73	0.90	1.68	18.29
Baltimore, MD	x	x	100	100	0.00	-0.03	-0.08	0.30	0.37	0.70	7.60	0.00	-0.03	-0.08	0.30	0.37	0.70	7.60
Baton Rouge, LA	x	-	100	-	0.00	-0.64	-0.73	-0.82	-0.90	-1.10	-5.36	0.00	-0.65	-0.73	-0.82	-0.90	-1.11	-5.37
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.29	-1.43	-1.75	-1.93	-2.45	-13.27	0.00	-1.29	-1.44	-1.76	-1.93	-2.46	-13.27
Birmingham, AL	-	x	-	100	0.00	-0.01	-0.03	0.11	0.14	0.26	2.78	0.00	-0.01	-0.03	0.11	0.14	0.26	2.78
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.05	-0.13	0.49	0.61	1.14	12.37	0.00	-0.05	-0.13	0.49	0.61	1.14	12.37
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.01	-0.02	0.07	0.08	0.15	1.67	0.00	-0.01	-0.02	0.07	0.08	0.15	1.67
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.01	-0.03	0.12	0.15	0.27	2.97	0.00	-0.01	-0.03	0.12	0.15	0.27	2.97
Canton-Massillon, OH	-	x	-	100	0.00	-0.09	-0.10	-0.08	-0.09	-0.09	-0.08	0.00	-0.09	-0.10	-0.08	-0.09	-0.09	-0.08
Charleston, WV	-	x	-	100	0.00	0.00	-0.01	0.03	0.04	0.07	0.80	0.00	0.00	-0.01	0.03	0.04	0.07	0.80
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.02	-0.05	0.19	0.24	0.44	4.81	0.00	-0.02	-0.05	0.19	0.24	0.44	4.81
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.01	-0.01	0.06	0.07	0.13	1.42	0.00	-0.01	-0.01	0.06	0.07	0.13	1.42
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.00	-1.23	-0.55	-0.51	-0.12	8.40	0.00	-1.01	-1.23	-0.55	-0.52	-0.12	8.40
Chico, CA	x	-	100	-	0.00	0.00	-0.01	0.02	0.03	0.05	0.51	0.00	0.00	-0.01	0.02	0.03	0.05	0.51
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.02	-0.05	0.20	0.24	0.45	4.92	0.00	-0.02	-0.05	0.20	0.24	0.45	4.92
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.47	0.00	0.00	0.00	0.02	0.02	0.04	0.47
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.03	-0.07	0.28	0.35	0.65	7.09	0.00	-0.03	-0.07	0.28	0.35	0.65	7.09
Columbus, OH	x	x	100	100	0.00	-0.02	-0.05	0.18	0.22	0.42	4.59	0.00	-0.02	-0.05	0.18	0.22	0.42	4.59
Dallas-Fort Worth, TX	x	-	100	-	0.00	-0.07	-0.19	0.74	0.91	1.71	18.58	0.00	-0.07	-0.19	0.74	0.91	1.71	18.58
Dayton-Springfield, OH	-	x	-	100	0.00	-0.01	-0.02	0.09	0.11	0.20	2.15	0.00	-0.01	-0.02	0.09	0.11	0.20	2.15
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.14	-0.21	0.19	0.26	0.58	7.41	0.00	-0.14	-0.21	0.19	0.26	0.58	7.41
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.17	-0.26	0.36	0.46	0.96	11.68	0.00	-0.17	-0.26	0.36	0.46	0.96	11.68
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.01	0.09
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	-0.01	0.04	0.05	0.08	0.92	0.00	0.00	-0.01	0.04	0.05	0.08	0.92
Greater Connecticut, CT	x	-	100	-	0.00	-0.02	-0.05	0.19	0.23	0.43	4.70	0.00	-0.02	-0.05	0.19	0.23	0.43	4.70
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.00	0.00	0.00	0.00	0.01	0.01	0.11
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.01	-0.02	0.09	0.10	0.20	2.13	0.00	-0.01	-0.02	0.09	0.10	0.20	2.13
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.01	-0.02	0.08	0.09	0.18	1.93	0.00	-0.01	-0.02	0.08	0.09	0.18	1.93

**Table B2-25
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.00	-0.01	0.02	0.02	0.05	0.50	0.00	0.00	-0.01	0.02	0.02	0.05	0.50
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-2.68	-3.05	-3.12	-3.38	-3.96	-15.70	0.00	-2.69	-3.07	-3.14	-3.40	-3.98	-15.72
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.26	-0.29	-0.31	-0.33	-0.40	-1.67	0.00	-0.26	-0.29	-0.31	-0.33	-0.40	-1.67
Imperial Co., CA	x	-	100	-	0.00	0.00	-0.01	0.02	0.03	0.05	0.59	0.00	0.00	-0.01	0.02	0.03	0.05	0.59
Indianapolis, IN	-	x	-	100	0.00	-0.02	-0.04	0.17	0.21	0.39	4.28	0.00	-0.02	-0.04	0.17	0.21	0.39	4.28
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.04	0.40	0.00	0.00	0.00	0.02	0.02	0.04	0.40
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.03	0.37	0.00	0.00	0.00	0.01	0.02	0.03	0.37
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.02	0.03	0.32	0.00	0.00	0.00	0.01	0.02	0.03	0.32
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.03	0.31	0.00	0.00	0.00	0.01	0.02	0.03	0.31
Knoxville, TN	x	x	100	100	0.00	-0.01	-0.03	0.12	0.14	0.27	2.91	0.00	-0.01	-0.03	0.12	0.14	0.27	2.91
Lancaster, PA	-	x	-	100	0.00	0.00	-0.01	0.05	0.06	0.10	1.14	0.00	0.00	-0.01	0.05	0.06	0.10	1.14
Las Vegas, NV	x	-	100	-	0.00	-0.01	-0.04	0.15	0.18	0.35	3.77	0.00	-0.01	-0.04	0.15	0.18	0.35	3.77
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1.57	-1.98	-0.40	-0.25	0.81	23.56	0.00	-1.57	-1.98	-0.41	-0.26	0.80	23.55
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.01	-0.02	0.08	0.10	0.18	1.94	0.00	-0.01	-0.02	0.08	0.10	0.18	1.94
Louisville, KY-IN	-	x	-	100	0.00	-0.01	-0.03	0.12	0.15	0.27	2.99	0.00	-0.01	-0.03	0.12	0.15	0.27	2.99
Macon, GA	-	x	-	100	0.00	0.00	-0.01	0.02	0.03	0.05	0.56	0.00	0.00	-0.01	0.02	0.03	0.05	0.56
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.01	0.01	0.03	0.29	0.00	0.00	0.00	0.01	0.01	0.03	0.29
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.03	0.28	0.00	0.00	0.00	0.01	0.01	0.03	0.28
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	-0.01	0.04	0.05	0.10	1.09	0.00	0.00	-0.01	0.04	0.05	0.10	1.09
Memphis, TN-AR	x	-	100	-	0.00	-0.22	-0.25	-0.18	-0.19	-0.16	0.35	0.00	-0.22	-0.26	-0.18	-0.19	-0.17	0.35
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.02	-0.05	0.19	0.23	0.43	4.68	0.00	-0.02	-0.05	0.19	0.23	0.43	4.68
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.26	0.00	0.00	0.00	0.01	0.01	0.02	0.26
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.51	-0.80	1.03	1.33	2.83	34.52	0.00	-0.52	-0.80	1.03	1.33	2.82	34.51
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.04	0.42	0.00	0.00	0.00	0.02	0.02	0.04	0.42
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-1.42	-1.69	-1.15	-1.18	-0.99	3.30	0.00	-1.43	-1.70	-1.16	-1.19	-1.00	3.29
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.04	-0.11	0.42	0.51	0.96	10.47	0.00	-0.04	-0.11	0.42	0.51	0.96	10.47
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.02	-0.05	0.21	0.26	0.48	5.24	0.00	-0.02	-0.05	0.21	0.26	0.48	5.24
Poughkeepsie, NY	x	x	100	100	0.00	-0.01	-0.04	0.14	0.17	0.31	3.39	0.00	-0.01	-0.04	0.14	0.17	0.31	3.39

**Table B2-25
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-0.01	-0.03	0.10	0.12	0.23	2.46	0.00	-0.01	-0.03	0.10	0.12	0.23	2.46
Reading, PA	-	x	-	100	0.00	0.00	-0.01	0.04	0.05	0.09	1.00	0.00	0.00	-0.01	0.04	0.05	0.09	1.00
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.01	-0.02	0.08	0.10	0.18	1.98	0.00	-0.01	-0.02	0.08	0.10	0.18	1.98
Rochester, NY	x	-	100	-	0.00	-0.01	-0.04	0.14	0.17	0.32	3.44	0.00	-0.01	-0.04	0.14	0.17	0.32	3.44
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.03	0.30	0.00	0.00	0.00	0.01	0.01	0.03	0.30
Sacramento Metro, CA	x	-	50	-	0.00	-0.02	-0.06	0.23	0.28	0.53	5.78	0.00	-0.02	-0.06	0.23	0.28	0.53	5.78
San Diego, CA	x	-	100	-	0.00	-0.03	-0.08	0.32	0.40	0.74	8.09	0.00	-0.03	-0.08	0.32	0.40	0.74	8.09
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.82	-1.02	-0.35	-0.30	0.13	9.29	0.00	-0.83	-1.03	-0.35	-0.30	0.13	9.29
San Joaquin Valley, CA	x	x	50	100	0.00	-0.17	-0.26	0.29	0.38	0.83	10.37	0.00	-0.17	-0.26	0.29	0.38	0.83	10.37
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.03	0.32	0.00	0.00	0.00	0.01	0.02	0.03	0.32
Springfield (Western MA), MA	x	-	100	-	0.00	-0.01	-0.03	0.10	0.12	0.23	2.47	0.00	-0.01	-0.03	0.10	0.12	0.23	2.47
St. Louis, MO-IL	x	x	100	100	0.00	-0.38	-0.47	-0.16	-0.14	0.06	4.27	0.00	-0.38	-0.47	-0.16	-0.14	0.06	4.26
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.02	-0.03	-0.02	-0.02	-0.02	0.03	0.00	-0.02	-0.03	-0.02	-0.02	-0.02	0.03
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.01	-0.02	0.06	0.08	0.15	1.66	0.00	-0.01	-0.02	0.06	0.08	0.15	1.66
Washington, DC-MD-VA	x	x	100	100	0.00	-0.05	-0.13	0.52	0.64	1.20	13.00	0.00	-0.05	-0.13	0.52	0.64	1.20	13.00
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.02	0.02	0.04	0.45	0.00	0.00	0.00	0.02	0.02	0.04	0.45
York, PA	-	x	-	100	0.00	0.00	-0.01	0.04	0.05	0.10	1.05	0.00	0.00	-0.01	0.04	0.05	0.10	1.05

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-26
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.05	0.00	0.49	0.57	0.74	9.68	0.00	0.14	0.09	0.62	0.71	0.90	10.10
Allegan Co., MI	x	-	100	-	0.00	0.01	0.00	0.05	0.06	0.08	1.06	0.00	0.02	0.01	0.07	0.08	0.10	1.10
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.05	0.06	0.08	1.02	0.00	0.01	0.01	0.07	0.08	0.10	1.07
Atlanta, GA	x	x	100	100	0.00	0.27	-0.03	2.83	3.32	4.31	56.09	0.00	0.81	0.52	3.57	4.14	5.22	58.56
Baltimore, MD	x	x	100	100	0.00	0.10	-0.01	1.07	1.26	1.64	21.27	0.00	0.31	0.20	1.35	1.57	1.98	22.21
Baton Rouge, LA	x	-	100	-	0.00	-1.89	-2.11	-2.29	-2.57	-3.06	-12.85	0.00	-4.39	-4.68	-4.95	-5.32	-5.88	-15.38
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-3.83	-4.24	-4.97	-5.59	-6.71	-32.99	0.00	-8.95	-9.48	-10.42	-11.25	-12.50	-38.38
Birmingham, AL	-	x	-	100	0.00	0.04	0.00	0.38	0.45	0.58	7.60	0.00	0.11	0.07	0.48	0.56	0.71	7.93
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.16	-0.02	1.68	1.97	2.56	33.35	0.00	0.48	0.31	2.12	2.46	3.10	34.82
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.02	0.00	0.23	0.28	0.36	4.66	0.00	0.07	0.04	0.30	0.34	0.43	4.87
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.04	0.00	0.40	0.47	0.61	7.97	0.00	0.11	0.07	0.51	0.59	0.74	8.32
Canton-Massillon, OH	-	x	-	100	0.00	-0.24	-0.28	-0.22	-0.24	-0.27	-0.05	0.00	-0.55	-0.60	-0.54	-0.58	-0.62	-0.31
Charleston, WV	-	x	-	100	0.00	0.01	0.00	0.11	0.12	0.16	2.09	0.00	0.03	0.02	0.13	0.15	0.19	2.18
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.07	-0.01	0.73	0.86	1.12	14.51	0.00	0.21	0.13	0.92	1.07	1.35	15.16
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.02	0.00	0.19	0.23	0.30	3.87	0.00	0.06	0.04	0.25	0.29	0.36	4.04
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-2.54	-3.09	-1.06	-1.08	-0.99	26.46	0.00	-5.76	-6.41	-4.35	-4.43	-4.37	24.77
Chico, CA	x	-	100	-	0.00	0.01	0.00	0.07	0.08	0.11	1.44	0.00	0.02	0.01	0.09	0.11	0.13	1.50
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.06	-0.01	0.68	0.80	1.04	13.56	0.00	0.20	0.13	0.86	1.00	1.26	14.16
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.00	0.06	0.07	0.09	1.22	0.00	0.02	0.01	0.08	0.09	0.11	1.28
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.09	-0.01	0.95	1.12	1.46	18.94	0.00	0.27	0.17	1.20	1.40	1.76	19.78
Columbus, OH	x	x	100	100	0.00	0.06	-0.01	0.66	0.77	1.01	13.09	0.00	0.19	0.12	0.83	0.97	1.22	13.67
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.26	-0.03	2.80	3.29	4.28	55.59	0.00	0.80	0.51	3.54	4.10	5.17	58.05
Dayton-Springfield, OH	-	x	-	100	0.00	0.03	0.00	0.29	0.34	0.44	5.76	0.00	0.08	0.05	0.37	0.43	0.54	6.01
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.20	-0.37	0.83	0.99	1.34	21.93	0.00	-0.39	-0.56	0.70	0.88	1.25	22.57
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.17	-0.39	1.32	1.56	2.09	31.95	0.00	-0.29	-0.52	1.29	1.58	2.14	33.01
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.02	0.23	0.00	0.00	0.00	0.01	0.02	0.02	0.24
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.01	0.00	0.13	0.15	0.19	2.53	0.00	0.04	0.02	0.16	0.19	0.24	2.65
Greater Connecticut, CT	x	-	100	-	0.00	0.06	-0.01	0.66	0.77	1.00	13.01	0.00	0.19	0.12	0.83	0.96	1.21	13.58
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.02	0.02	0.28	0.00	0.00	0.00	0.02	0.02	0.03	0.29
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.03	0.00	0.30	0.35	0.45	5.90	0.00	0.09	0.05	0.38	0.44	0.55	6.16
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.03	0.00	0.27	0.31	0.40	5.27	0.00	0.08	0.05	0.33	0.39	0.49	5.50

**Table B2-26
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Hickory, NC	-	x	-	100	0.00	0.01	0.00	0.07	0.08	0.11	1.41	0.00	0.02	0.01	0.09	0.10	0.13	1.47
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-7.70	-8.69	-8.53	-9.53	-11.23	-35.01	0.00	-17.85	-19.11	-19.26	-20.62	-22.55	-44.61
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.74	-0.84	-0.85	-0.95	-1.13	-3.96	0.00	-1.73	-1.85	-1.89	-2.03	-2.23	-4.91
Imperial Co., CA	x	-	100	-	0.00	0.01	0.00	0.09	0.11	0.14	1.82	0.00	0.03	0.02	0.12	0.13	0.17	1.90
Indianapolis, IN	-	x	-	100	0.00	0.06	-0.01	0.61	0.72	0.94	12.19	0.00	0.18	0.11	0.78	0.90	1.13	12.73
Jamestown, NY	x	-	100	-	0.00	0.01	0.00	0.05	0.06	0.08	1.06	0.00	0.02	0.01	0.07	0.08	0.10	1.11
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.00	0.05	0.06	0.08	1.05	0.00	0.02	0.01	0.07	0.08	0.10	1.10
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.04	0.05	0.07	0.85	0.00	0.01	0.01	0.05	0.06	0.08	0.88
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.05	0.06	0.07	0.95	0.00	0.01	0.01	0.06	0.07	0.09	0.99
Knoxville, TN	x	x	100	100	0.00	0.04	0.00	0.41	0.48	0.63	8.16	0.00	0.12	0.08	0.52	0.60	0.76	8.52
Lancaster, PA	-	x	-	100	0.00	0.01	0.00	0.16	0.18	0.24	3.12	0.00	0.04	0.03	0.20	0.23	0.29	3.25
Las Vegas, NV	x	-	100	-	0.00	0.06	-0.01	0.60	0.71	0.92	11.94	0.00	0.17	0.11	0.76	0.88	1.11	12.47
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.10
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-3.70	-4.72	0.07	0.34	1.07	73.67	0.00	-8.27	-9.43	-4.49	-4.27	-3.53	72.58
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.03	0.00	0.29	0.34	0.44	5.72	0.00	0.08	0.05	0.36	0.42	0.53	5.98
Louisville, KY-IN	-	x	-	100	0.00	0.04	0.00	0.40	0.47	0.62	8.02	0.00	0.12	0.07	0.51	0.59	0.75	8.37
Macon, GA	-	x	-	100	0.00	0.01	0.00	0.08	0.09	0.12	1.50	0.00	0.02	0.01	0.10	0.11	0.14	1.57
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.04	0.05	0.06	0.76	0.00	0.01	0.01	0.05	0.06	0.07	0.80
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.07	0.85	0.00	0.01	0.01	0.05	0.06	0.08	0.88
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.02	0.00	0.17	0.20	0.26	3.38	0.00	0.05	0.03	0.21	0.25	0.31	3.53
Memphis, TN-AR	x	-	100	-	0.00	-0.58	-0.68	-0.46	-0.50	-0.56	1.38	0.00	-1.33	-1.46	-1.24	-1.31	-1.38	0.82
Milwaukee-Racine, WI	x	-	100	-	0.00	0.06	-0.01	0.64	0.75	0.98	12.69	0.00	0.18	0.12	0.81	0.94	1.18	13.25
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.04	0.04	0.06	0.76	0.00	0.01	0.01	0.05	0.06	0.07	0.79
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.59	-1.24	3.83	4.56	6.10	94.58	0.00	-1.03	-1.72	3.66	4.49	6.14	97.64
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.00	0.06	0.07	0.09	1.11	0.00	0.02	0.01	0.07	0.08	0.10	1.16
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-3.81	-4.48	-2.79	-3.03	-3.34	13.61	0.00	-8.72	-9.54	-7.90	-8.27	-8.66	10.07
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.15	-0.01	1.64	1.92	2.50	32.51	0.00	0.47	0.30	2.07	2.40	3.03	33.95
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.07	-0.01	0.69	0.81	1.05	13.71	0.00	0.20	0.13	0.87	1.01	1.28	14.31
Poughkeepsie, NY	x	x	100	100	0.00	0.05	0.00	0.48	0.57	0.74	9.61	0.00	0.14	0.09	0.61	0.71	0.89	10.03

**Table B2-26
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.03	0.00	0.33	0.39	0.51	6.63	0.00	0.10	0.06	0.42	0.49	0.62	6.93
Reading, PA	-	x	-	100	0.00	0.01	0.00	0.14	0.17	0.22	2.83	0.00	0.04	0.03	0.18	0.21	0.26	2.95
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.03	0.00	0.34	0.40	0.52	6.71	0.00	0.10	0.06	0.43	0.50	0.62	7.00
Rochester, NY	x	-	100	-	0.00	0.04	0.00	0.47	0.55	0.72	9.36	0.00	0.13	0.09	0.60	0.69	0.87	9.78
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.04	0.05	0.06	0.81	0.00	0.01	0.01	0.05	0.06	0.08	0.85
Sacramento Metro, CA	x	-	50	-	0.00	0.08	-0.01	0.85	1.00	1.30	16.90	0.00	0.24	0.16	1.07	1.25	1.57	17.65
San Diego, CA	x	-	100	-	0.00	0.10	-0.01	1.10	1.29	1.67	21.77	0.00	0.31	0.20	1.38	1.61	2.03	22.74
San Francisco Bay Area, CA	x	-	100	-	0.00	-2.04	-2.52	-0.58	-0.54	-0.36	27.19	0.00	-4.60	-5.15	-3.17	-3.18	-3.02	26.07
San Joaquin Valley, CA	x	x	50	100	0.00	-0.21	-0.43	1.30	1.54	2.07	32.21	0.00	-0.37	-0.61	1.23	1.51	2.07	33.24
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.04	0.05	0.07	0.87	0.00	0.01	0.01	0.06	0.06	0.08	0.91
Springfield (Western MA), MA	x	-	100	-	0.00	0.03	0.00	0.34	0.40	0.52	6.78	0.00	0.10	0.06	0.43	0.50	0.63	7.08
St. Louis, MO-IL	x	x	100	100	0.00	-0.94	-1.16	-0.27	-0.26	-0.18	12.45	0.00	-2.12	-2.38	-1.47	-1.48	-1.40	11.93
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.06	-0.08	-0.05	-0.06	-0.07	0.10	0.00	-0.15	-0.16	-0.14	-0.15	-0.16	0.04
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	-0.01	0.22	0.26	0.34	4.52	0.00	0.04	0.02	0.27	0.31	0.40	4.71
Washington, DC-MD-VA	x	x	100	100	0.00	0.18	-0.02	1.86	2.18	2.83	36.85	0.00	0.53	0.34	2.34	2.72	3.43	38.48
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.00	0.06	0.07	0.09	1.19	0.00	0.02	0.01	0.08	0.09	0.11	1.24
York, PA	-	x	-	100	0.00	0.01	0.00	0.15	0.18	0.24	3.06	0.00	0.04	0.03	0.19	0.23	0.28	3.19

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

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**Table B2-27
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.11	0.04	0.75	0.87	1.07	14.29	0.00	0.41	0.35	1.14	1.31	1.55	15.61
Allegan Co., MI	x	-	100	-	0.00	0.01	0.00	0.08	0.10	0.12	1.56	0.00	0.05	0.04	0.12	0.14	0.17	1.70
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.00	0.08	0.10	0.12	1.61	0.00	0.05	0.04	0.13	0.15	0.17	1.76
Atlanta, GA	x	x	100	100	0.00	0.70	0.27	4.78	5.58	6.86	91.23	0.00	2.65	2.25	7.29	8.35	9.91	99.66
Baltimore, MD	x	x	100	100	0.00	0.24	0.09	1.64	1.91	2.35	31.26	0.00	0.91	0.77	2.50	2.86	3.39	34.15
Baton Rouge, LA	x	-	100	-	0.00	-2.94	-3.27	-3.54	-4.00	-4.70	-19.26	0.00	-9.67	-10.17	-10.69	-11.39	-12.27	-25.84
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-6.00	-6.61	-7.69	-8.71	-10.29	-49.61	0.00	-19.78	-20.74	-22.40	-23.93	-25.87	-63.86
Birmingham, AL	-	x	-	100	0.00	0.08	0.03	0.57	0.67	0.82	10.96	0.00	0.32	0.27	0.88	1.00	1.19	11.97
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.36	0.14	2.48	2.89	3.56	47.31	0.00	1.37	1.16	3.78	4.33	5.14	51.69
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.05	0.02	0.36	0.42	0.51	6.82	0.00	0.20	0.17	0.54	0.62	0.74	7.45
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.09	0.03	0.59	0.68	0.84	11.20	0.00	0.32	0.28	0.90	1.03	1.22	12.24
Canton-Massillon, OH	-	x	-	100	0.00	-0.37	-0.42	-0.34	-0.39	-0.45	-0.28	0.00	-1.20	-1.27	-1.22	-1.28	-1.36	-0.93
Charleston, WV	-	x	-	100	0.00	0.02	0.01	0.15	0.18	0.22	2.88	0.00	0.08	0.07	0.23	0.26	0.31	3.15
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.18	0.07	1.21	1.41	1.73	23.05	0.00	0.67	0.57	1.84	2.11	2.50	25.18
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.04	0.02	0.29	0.34	0.41	5.52	0.00	0.16	0.14	0.44	0.51	0.60	6.03
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-3.78	-4.57	-1.67	-1.75	-1.85	38.58	0.00	-12.17	-13.20	-10.28	-10.52	-10.66	35.14
Chico, CA	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.16	2.10	0.00	0.06	0.05	0.17	0.19	0.23	2.29
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.15	0.06	1.04	1.21	1.49	19.86	0.00	0.58	0.49	1.59	1.82	2.16	21.70
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.00	0.09	0.10	0.13	1.68	0.00	0.05	0.04	0.13	0.15	0.18	1.84
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.20	0.08	1.39	1.62	2.00	26.54	0.00	0.77	0.65	2.12	2.43	2.88	28.99
Columbus, OH	x	x	100	100	0.00	0.15	0.06	1.03	1.20	1.48	19.71	0.00	0.57	0.49	1.58	1.81	2.14	21.53
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.67	0.26	4.60	5.37	6.61	87.92	0.00	2.55	2.16	7.03	8.05	9.55	96.04
Dayton-Springfield, OH	-	x	-	100	0.00	0.06	0.02	0.42	0.49	0.61	8.09	0.00	0.23	0.20	0.65	0.74	0.88	8.84
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.21	-0.44	1.33	1.58	1.98	33.61	0.00	-0.56	-0.80	1.15	1.46	1.94	35.91
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.15	-0.44	1.92	2.26	2.82	45.28	0.00	-0.32	-0.62	1.98	2.42	3.10	48.61
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.02	0.33	0.00	0.01	0.01	0.03	0.03	0.04	0.36
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Evansville, IN	-	x	-	100	0.00	0.03	0.01	0.19	0.22	0.27	3.65	0.00	0.11	0.09	0.29	0.33	0.40	3.99
Greater Connecticut, CT	x	-	100	-	0.00	0.14	0.06	0.99	1.15	1.42	18.87	0.00	0.55	0.46	1.51	1.73	2.05	20.62
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.38	0.00	0.01	0.01	0.03	0.03	0.04	0.41
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.07	0.03	0.45	0.52	0.65	8.58	0.00	0.25	0.21	0.69	0.79	0.93	9.37
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.06	0.02	0.40	0.46	0.57	7.54	0.00	0.22	0.19	0.60	0.69	0.82	8.24

**Table B2-27
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Hickory, NC	-	x	-	100	0.00	0.02	0.01	0.11	0.13	0.16	2.09	0.00	0.06	0.05	0.17	0.19	0.23	2.28
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-11.90	-13.39	-13.18	-14.83	-17.37	-52.56	0.00	-39.07	-41.25	-41.94	-44.50	-47.65	-77.20
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.16	-1.29	-1.33	-1.50	-1.76	-6.21	0.00	-3.80	-4.00	-4.13	-4.39	-4.72	-8.69
Imperial Co., CA	x	-	100	-	0.00	0.02	0.01	0.15	0.18	0.22	2.92	0.00	0.08	0.07	0.23	0.27	0.32	3.19
Indianapolis, IN	-	x	-	100	0.00	0.14	0.05	0.96	1.12	1.38	18.34	0.00	0.53	0.45	1.47	1.68	1.99	20.04
Jamestown, NY	x	-	100	-	0.00	0.01	0.00	0.08	0.09	0.11	1.49	0.00	0.04	0.04	0.12	0.14	0.16	1.62
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.00	0.08	0.10	0.12	1.59	0.00	0.05	0.04	0.13	0.15	0.17	1.73
Johnstown, PA	-	x	-	100	0.00	0.01	0.00	0.06	0.07	0.09	1.16	0.00	0.03	0.03	0.09	0.11	0.13	1.27
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.00	0.08	0.09	0.11	1.52	0.00	0.04	0.04	0.12	0.14	0.16	1.66
Knoxville, TN	x	x	100	100	0.00	0.09	0.04	0.63	0.73	0.90	12.02	0.00	0.35	0.30	0.96	1.10	1.30	13.13
Lancaster, PA	-	x	-	100	0.00	0.03	0.01	0.23	0.27	0.34	4.48	0.00	0.13	0.11	0.36	0.41	0.49	4.90
Las Vegas, NV	x	-	100	-	0.00	0.15	0.06	1.04	1.21	1.49	19.86	0.00	0.58	0.49	1.59	1.82	2.16	21.70
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.01	0.01	0.01	0.08
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.12	0.00	0.00	0.00	0.01	0.01	0.01	0.13
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-5.33	-6.79	0.31	0.65	1.28	112.99	0.00	-16.93	-18.73	-11.28	-11.01	-10.31	112.79
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.07	0.03	0.46	0.54	0.67	8.87	0.00	0.26	0.22	0.71	0.81	0.96	9.69
Louisville, KY-IN	-	x	-	100	0.00	0.09	0.03	0.59	0.69	0.85	11.30	0.00	0.33	0.28	0.90	1.03	1.23	12.34
Macon, GA	-	x	-	100	0.00	0.02	0.01	0.11	0.13	0.16	2.12	0.00	0.06	0.05	0.17	0.19	0.23	2.32
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.00	0.06	0.07	0.08	1.07	0.00	0.03	0.03	0.09	0.10	0.12	1.17
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.00	0.07	0.08	0.10	1.35	0.00	0.04	0.03	0.11	0.12	0.15	1.48
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.04	0.02	0.29	0.34	0.41	5.50	0.00	0.16	0.14	0.44	0.50	0.60	6.01
Memphis, TN-AR	x	-	100	-	0.00	-0.89	-1.03	-0.74	-0.82	-0.94	1.49	0.00	-2.89	-3.09	-2.83	-2.96	-3.11	0.08
Milwaukee-Racine, WI	x	-	100	-	0.00	0.14	0.05	0.94	1.10	1.36	18.05	0.00	0.52	0.44	1.44	1.65	1.96	19.71
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.00	0.06	0.07	0.09	1.14	0.00	0.03	0.03	0.09	0.10	0.12	1.25
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.57	-1.43	5.58	6.59	8.23	133.98	0.00	-1.30	-2.22	5.50	6.79	8.76	143.64
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.00	0.08	0.09	0.12	1.54	0.00	0.04	0.04	0.12	0.14	0.17	1.68
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-5.77	-6.75	-4.37	-4.82	-5.48	18.90	0.00	-18.76	-20.09	-17.90	-18.68	-19.52	10.47
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.40	0.16	2.77	3.24	3.98	52.95	0.00	1.54	1.30	4.23	4.85	5.75	57.84
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.14	0.06	0.99	1.15	1.42	18.83	0.00	0.55	0.46	1.50	1.72	2.04	20.57
Poughkeepsie, NY	x	x	100	100	0.00	0.11	0.04	0.75	0.87	1.07	14.26	0.00	0.41	0.35	1.14	1.31	1.55	15.57

**Table B2-27
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.07	0.03	0.49	0.57	0.71	9.40	0.00	0.27	0.23	0.75	0.86	1.02	10.27
Reading, PA	-	x	-	100	0.00	0.03	0.01	0.22	0.26	0.32	4.20	0.00	0.12	0.10	0.34	0.38	0.46	4.59
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.09	0.03	0.62	0.73	0.90	11.91	0.00	0.35	0.29	0.95	1.09	1.29	13.01
Rochester, NY	x	-	100	-	0.00	0.10	0.04	0.70	0.82	1.01	13.37	0.00	0.39	0.33	1.07	1.22	1.45	14.61
Rome, GA	-	x	-	100	0.00	0.01	0.00	0.06	0.07	0.09	1.15	0.00	0.03	0.03	0.09	0.10	0.12	1.25
Sacramento Metro, CA	x	-	50	-	0.00	0.20	0.08	1.36	1.59	1.96	26.03	0.00	0.75	0.64	2.08	2.38	2.83	28.43
San Diego, CA	x	-	100	-	0.00	0.23	0.09	1.61	1.88	2.31	30.73	0.00	0.89	0.76	2.46	2.81	3.34	33.57
San Francisco Bay Area, CA	x	-	100	-	0.00	-3.02	-3.70	-1.04	-1.05	-1.04	37.47	0.00	-9.71	-10.57	-7.86	-7.98	-7.99	35.25
San Joaquin Valley, CA	x	x	50	100	0.00	-0.16	-0.49	2.20	2.60	3.24	51.64	0.00	-0.31	-0.65	2.31	2.82	3.59	55.46
Sheboygan, WI	x	-	100	-	0.00	0.01	0.00	0.07	0.08	0.09	1.26	0.00	0.04	0.03	0.10	0.12	0.14	1.37
Springfield (Western MA), MA	x	-	100	-	0.00	0.07	0.03	0.51	0.60	0.73	9.77	0.00	0.28	0.24	0.78	0.89	1.06	10.67
St. Louis, MO-IL	x	x	100	100	0.00	-1.40	-1.71	-0.49	-0.49	-0.49	17.17	0.00	-4.49	-4.88	-3.64	-3.70	-3.71	16.13
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.10	-0.11	-0.09	-0.10	-0.11	0.05	0.00	-0.32	-0.35	-0.32	-0.34	-0.36	-0.11
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.04	0.00	0.32	0.38	0.47	6.44	0.00	0.14	0.11	0.47	0.54	0.65	7.01
Washington, DC-MD-VA	x	x	100	100	0.00	0.42	0.16	2.90	3.39	4.17	55.43	0.00	1.61	1.36	4.43	5.08	6.02	60.55
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.00	0.09	0.10	0.12	1.64	0.00	0.05	0.04	0.13	0.15	0.18	1.79
York, PA	-	x	-	100	0.00	0.04	0.01	0.24	0.28	0.35	4.65	0.00	0.14	0.11	0.37	0.43	0.51	5.08

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-28
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Formaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.18	0.10	0.99	1.16	1.39	18.45	0.00	0.86	0.80	1.81	2.06	2.37	21.18
Allegan Co., MI	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.15	2.01	0.00	0.09	0.09	0.20	0.22	0.26	2.30
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.01	0.13	0.15	0.18	2.36	0.00	0.11	0.10	0.23	0.26	0.30	2.70
Atlanta, GA	x	x	100	100	0.00	1.44	0.82	7.91	9.23	11.07	146.86	0.00	6.82	6.33	14.42	16.36	18.86	168.54
Baltimore, MD	x	x	100	100	0.00	0.39	0.22	2.16	2.51	3.02	40.02	0.00	1.86	1.73	3.93	4.46	5.14	45.93
Baton Rouge, LA	x	-	100	-	0.00	-4.09	-4.54	-4.94	-5.61	-6.56	-26.45	0.00	-16.54	-17.31	-18.20	-19.31	-20.55	-38.41
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-8.37	-9.23	-10.77	-12.25	-14.34	-68.42	0.00	-34.00	-35.50	-38.13	-40.56	-43.33	-94.73
Birmingham, AL	-	x	-	100	0.00	0.13	0.08	0.74	0.86	1.04	13.74	0.00	0.64	0.59	1.35	1.53	1.76	15.77
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.56	0.32	3.06	3.57	4.28	56.75	0.00	2.64	2.45	5.57	6.32	7.29	65.12
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.08	0.05	0.46	0.54	0.65	8.62	0.00	0.40	0.37	0.85	0.96	1.11	9.89
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.13	0.07	0.70	0.82	0.99	13.09	0.00	0.61	0.56	1.29	1.46	1.68	15.02
Canton-Massillon, OH	-	x	-	100	0.00	-0.51	-0.58	-0.51	-0.58	-0.67	-0.99	0.00	-2.05	-2.15	-2.13	-2.25	-2.37	-2.19
Charleston, WV	-	x	-	100	0.00	0.03	0.02	0.18	0.20	0.25	3.26	0.00	0.15	0.14	0.32	0.36	0.42	3.74
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.34	0.19	1.87	2.18	2.62	34.75	0.00	1.61	1.50	3.41	3.87	4.46	39.88
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.07	0.04	0.36	0.42	0.50	6.69	0.00	0.31	0.29	0.66	0.75	0.86	7.68
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-5.09	-6.13	-2.42	-2.60	-2.86	50.31	0.00	-20.00	-21.42	-17.82	-18.27	-18.57	45.99
Chico, CA	x	-	100	-	0.00	0.03	0.01	0.14	0.17	0.20	2.66	0.00	0.12	0.11	0.26	0.30	0.34	3.05
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.26	0.15	1.41	1.65	1.97	26.19	0.00	1.22	1.13	2.57	2.92	3.36	30.05
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.02	0.01	0.10	0.12	0.14	1.89	0.00	0.09	0.08	0.19	0.21	0.24	2.17
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.30	0.17	1.66	1.94	2.33	30.92	0.00	1.44	1.33	3.03	3.44	3.97	35.48
Columbus, OH	x	x	100	100	0.00	0.26	0.15	1.45	1.69	2.03	26.91	0.00	1.25	1.16	2.64	3.00	3.46	30.88
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.31	0.75	7.18	8.38	10.05	133.35	0.00	6.19	5.75	13.09	14.86	17.12	153.04
Dayton-Springfield, OH	-	x	-	100	0.00	0.09	0.05	0.51	0.59	0.71	9.44	0.00	0.44	0.41	0.93	1.05	1.21	10.83
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.18	-0.47	1.97	2.33	2.82	47.61	0.00	-0.36	-0.67	2.05	2.55	3.23	53.28
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.16	-0.48	2.27	2.68	3.25	53.87	0.00	-0.24	-0.57	2.50	3.07	3.85	60.38
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.02	0.02	0.03	0.38	0.00	0.02	0.02	0.04	0.04	0.05	0.44
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Evansville, IN	-	x	-	100	0.00	0.04	0.03	0.24	0.28	0.34	4.51	0.00	0.21	0.19	0.44	0.50	0.58	5.17
Greater Connecticut, CT	x	-	100	-	0.00	0.23	0.13	1.26	1.48	1.77	23.49	0.00	1.09	1.01	2.31	2.62	3.02	26.96
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.02	0.03	0.03	0.41	0.00	0.02	0.02	0.04	0.05	0.05	0.47
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.11	0.06	0.58	0.67	0.81	10.72	0.00	0.50	0.46	1.05	1.19	1.38	12.31
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.09	0.05	0.49	0.58	0.69	9.17	0.00	0.43	0.40	0.90	1.02	1.18	10.52

**Table B2-28
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.01	0.01	0.01	0.08
Hickory, NC	-	x	-	100	0.00	0.03	0.02	0.15	0.17	0.20	2.71	0.00	0.13	0.12	0.27	0.30	0.35	3.11
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-16.47	-18.51	-18.37	-20.79	-24.23	-71.90	0.00	-66.44	-69.73	-71.36	-75.44	-79.95	-115.70
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.61	-1.80	-1.90	-2.15	-2.51	-9.31	0.00	-6.51	-6.82	-7.11	-7.53	-8.01	-13.88
Imperial Co., CA	x	-	100	-	0.00	0.04	0.02	0.24	0.28	0.34	4.45	0.00	0.21	0.19	0.44	0.50	0.57	5.11
Indianapolis, IN	-	x	-	100	0.00	0.25	0.14	1.35	1.58	1.89	25.09	0.00	1.17	1.08	2.46	2.80	3.22	28.80
Jamestown, NY	x	-	100	-	0.00	0.02	0.01	0.09	0.11	0.13	1.73	0.00	0.08	0.07	0.17	0.19	0.22	1.98
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.16	2.13	0.00	0.10	0.09	0.21	0.24	0.27	2.44
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.07	0.08	0.10	1.28	0.00	0.06	0.06	0.13	0.14	0.16	1.47
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.01	0.12	0.14	0.17	2.29	0.00	0.11	0.10	0.22	0.25	0.29	2.62
Knoxville, TN	x	x	100	100	0.00	0.15	0.09	0.83	0.97	1.17	15.45	0.00	0.72	0.67	1.52	1.72	1.98	17.73
Lancaster, PA	-	x	-	100	0.00	0.05	0.03	0.29	0.34	0.41	5.48	0.00	0.25	0.24	0.54	0.61	0.70	6.29
Las Vegas, NV	x	-	100	-	0.00	0.32	0.18	1.75	2.04	2.45	32.48	0.00	1.51	1.40	3.19	3.62	4.17	37.27
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.09	0.00	0.00	0.00	0.01	0.01	0.01	0.11
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.12	0.00	0.01	0.01	0.01	0.01	0.02	0.14
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-6.91	-8.85	0.88	1.37	2.04	161.30	0.00	-26.48	-28.92	-18.78	-18.33	-17.35	167.25
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.12	0.07	0.68	0.80	0.96	12.67	0.00	0.59	0.55	1.24	1.41	1.63	14.54
Louisville, KY-IN	-	x	-	100	0.00	0.13	0.07	0.72	0.83	1.00	13.29	0.00	0.62	0.57	1.30	1.48	1.71	15.25
Macon, GA	-	x	-	100	0.00	0.02	0.01	0.13	0.16	0.19	2.50	0.00	0.12	0.11	0.25	0.28	0.32	2.87
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.07	0.08	0.09	1.25	0.00	0.06	0.05	0.12	0.14	0.16	1.43
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.01	0.11	0.13	0.15	2.04	0.00	0.09	0.09	0.20	0.23	0.26	2.34
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.09	0.05	0.47	0.55	0.66	8.69	0.00	0.40	0.37	0.85	0.97	1.12	9.97
Memphis, TN-AR	x	-	100	-	0.00	-1.23	-1.41	-1.12	-1.26	-1.45	0.21	0.00	-4.92	-5.20	-5.00	-5.24	-5.50	-2.35
Milwaukee-Racine, WI	x	-	100	-	0.00	0.21	0.12	1.17	1.36	1.63	21.66	0.00	1.01	0.93	2.13	2.41	2.78	24.85
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.08	0.10	0.11	1.52	0.00	0.07	0.07	0.15	0.17	0.20	1.75
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.62	-1.61	6.53	7.71	9.36	158.53	0.00	-1.35	-2.36	6.69	8.35	10.60	177.35
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.02	0.01	0.09	0.11	0.13	1.74	0.00	0.08	0.07	0.17	0.19	0.22	1.99
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-7.92	-9.21	-6.40	-7.14	-8.20	19.58	0.00	-31.55	-33.43	-31.16	-32.51	-33.86	5.40
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.82	0.46	4.47	5.22	6.26	83.05	0.00	3.86	3.58	8.15	9.25	10.66	95.31
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.21	0.12	1.13	1.32	1.59	21.07	0.00	0.98	0.91	2.07	2.35	2.71	24.19
Poughkeepsie, NY	x	x	100	100	0.00	0.18	0.10	1.00	1.17	1.40	18.58	0.00	0.86	0.80	1.82	2.07	2.39	21.32

**Table B2-28
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.11	0.06	0.60	0.70	0.84	11.17	0.00	0.52	0.48	1.10	1.24	1.43	12.81
Reading, PA	-	x	-	100	0.00	0.05	0.03	0.30	0.34	0.41	5.48	0.00	0.25	0.24	0.54	0.61	0.70	6.29
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.22	0.12	1.20	1.40	1.67	22.21	0.00	1.03	0.96	2.18	2.47	2.85	25.49
Rochester, NY	x	-	100	-	0.00	0.16	0.09	0.87	1.01	1.22	16.15	0.00	0.75	0.70	1.59	1.80	2.07	18.54
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.07	0.09	0.10	1.35	0.00	0.06	0.06	0.13	0.15	0.17	1.55
Sacramento Metro, CA	x	-	50	-	0.00	0.36	0.21	1.99	2.33	2.79	37.01	0.00	1.72	1.60	3.63	4.12	4.75	42.47
San Diego, CA	x	-	100	-	0.00	0.36	0.20	1.95	2.27	2.73	36.20	0.00	1.68	1.56	3.55	4.03	4.65	41.55
San Francisco Bay Area, CA	x	-	100	-	0.00	-4.14	-4.98	-1.98	-2.13	-2.35	40.62	0.00	-16.26	-17.42	-14.51	-14.87	-15.12	37.07
San Joaquin Valley, CA	x	x	50	100	0.00	0.01	-0.43	3.53	4.15	5.02	78.53	0.00	0.61	0.17	4.61	5.50	6.68	88.52
Sheboygan, WI	x	-	100	-	0.00	0.02	0.01	0.08	0.10	0.12	1.53	0.00	0.07	0.07	0.15	0.17	0.20	1.76
Springfield (Western MA), MA	x	-	100	-	0.00	0.12	0.07	0.65	0.75	0.90	11.99	0.00	0.56	0.52	1.18	1.34	1.54	13.76
St. Louis, MO-IL	x	x	100	100	0.00	-1.91	-2.30	-0.90	-0.97	-1.07	18.97	0.00	-7.50	-8.03	-6.68	-6.84	-6.96	17.36
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.14	-0.16	-0.14	-0.15	-0.18	-0.21	0.00	-0.56	-0.59	-0.58	-0.61	-0.64	-0.52
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.06	0.02	0.40	0.47	0.56	7.72	0.00	0.28	0.25	0.68	0.78	0.91	8.82
Washington, DC-MD-VA	x	x	100	100	0.00	0.75	0.43	4.14	4.83	5.80	76.86	0.00	3.57	3.31	7.55	8.56	9.87	88.21
Wheeling, WV-OH	-	x	-	100	0.00	0.02	0.01	0.10	0.12	0.14	1.84	0.00	0.09	0.08	0.18	0.21	0.24	2.12
York, PA	-	x	-	100	0.00	0.06	0.04	0.34	0.40	0.48	6.37	0.00	0.30	0.27	0.63	0.71	0.82	7.31

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-29
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-1.76	-2.04	-2.31	-2.34	-4.06	-28.02	0.00	-1.78	-2.06	-2.32	-2.35	-4.08	-28.04
Allegan Co., MI	x	-	100	-	0.00	-0.19	-0.22	-0.25	-0.26	-0.44	-3.07	0.00	-0.19	-0.22	-0.25	-0.26	-0.45	-3.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.18	-0.20	-0.23	-0.23	-0.40	-2.79	0.00	-0.18	-0.20	-0.23	-0.23	-0.41	-2.79
Atlanta, GA	x	x	100	100	0.00	-9.36	-10.85	-12.25	-12.41	-21.60	-148.94	0.00	-9.44	-10.93	-12.33	-12.50	-21.69	-149.03
Baltimore, MD	x	x	100	100	0.00	-3.91	-4.52	-5.11	-5.18	-9.00	-62.04	0.00	-3.94	-4.56	-5.15	-5.22	-9.04	-62.07
Baton Rouge, LA	x	-	100	-	0.00	-33.90	-37.89	-45.61	-49.96	-63.10	-322.52	0.00	-34.08	-38.08	-45.80	-50.16	-63.30	-322.72
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-66.99	-74.83	-90.17	-98.91	-124.13	-629.30	0.00	-67.34	-75.19	-90.55	-99.30	-124.52	-629.69
Birmingham, AL	-	x	-	100	0.00	-1.42	-1.64	-1.85	-1.88	-3.27	-22.59	0.00	-1.43	-1.65	-1.87	-1.89	-3.29	-22.60
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-6.34	-7.35	-8.30	-8.41	-14.63	-100.84	0.00	-6.40	-7.41	-8.36	-8.47	-14.69	-100.90
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.82	-0.95	-1.07	-1.08	-1.90	-13.25	0.00	-0.82	-0.95	-1.07	-1.08	-1.91	-13.25
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1.53	-1.77	-2.00	-2.02	-3.52	-24.25	0.00	-1.54	-1.78	-2.01	-2.04	-3.53	-24.26
Canton-Massillon, OH	-	x	-	100	0.00	-4.74	-5.31	-6.37	-6.94	-8.97	-47.14	0.00	-4.77	-5.34	-6.40	-6.97	-9.00	-47.17
Charleston, WV	-	x	-	100	0.00	-0.41	-0.47	-0.53	-0.54	-0.94	-6.49	0.00	-0.41	-0.48	-0.54	-0.54	-0.94	-6.49
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-2.18	-2.53	-2.84	-2.84	-5.15	-36.50	0.00	-2.19	-2.55	-2.86	-2.86	-5.17	-36.52
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.71	-0.83	-0.93	-0.95	-1.66	-11.46	0.00	-0.72	-0.83	-0.94	-0.95	-1.66	-11.47
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-57.53	-64.65	-77.09	-83.55	-110.79	-600.52	0.00	-57.86	-64.99	-77.44	-83.92	-111.16	-600.89
Chico, CA	x	-	100	-	0.00	-0.26	-0.31	-0.34	-0.35	-0.61	-4.19	0.00	-0.27	-0.31	-0.35	-0.35	-0.61	-4.19
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-2.49	-2.88	-3.25	-3.29	-5.75	-39.77	0.00	-2.51	-2.90	-3.27	-3.31	-5.77	-39.80
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.24	-0.28	-0.31	-0.32	-0.55	-3.80	0.00	-0.24	-0.28	-0.31	-0.32	-0.55	-3.80
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-3.64	-4.22	-4.76	-4.82	-8.39	-57.84	0.00	-3.67	-4.25	-4.79	-4.86	-8.43	-57.87
Columbus, OH	x	x	100	100	0.00	-2.35	-2.72	-3.07	-3.11	-5.42	-37.36	0.00	-2.37	-2.74	-3.09	-3.14	-5.44	-37.38
Dallas-Fort Worth, TX	x	-	100	-	0.00	-9.52	-11.03	-12.46	-12.62	-21.96	-151.40	0.00	-9.60	-11.11	-12.54	-12.71	-22.05	-151.49
Dayton-Springfield, OH	-	x	-	100	0.00	-1.10	-1.28	-1.44	-1.46	-2.54	-17.53	0.00	-1.11	-1.29	-1.45	-1.47	-2.55	-17.54
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-9.95	-11.30	-13.24	-14.04	-20.43	-121.92	0.00	-10.02	-11.37	-13.31	-14.12	-20.50	-121.99
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-12.54	-14.28	-16.64	-17.53	-26.23	-160.70	0.00	-12.63	-14.37	-16.73	-17.62	-26.33	-160.80
Door Co., WI	x	-	100	-	0.00	-0.04	-0.05	-0.06	-0.06	-0.10	-0.71	0.00	-0.05	-0.05	-0.06	-0.06	-0.10	-0.71
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Evansville, IN	-	x	-	100	0.00	-0.43	-0.50	-0.56	-0.56	-1.01	-7.12	0.00	-0.43	-0.50	-0.57	-0.57	-1.02	-7.13
Greater Connecticut, CT	x	-	100	-	0.00	-2.42	-2.81	-3.17	-3.22	-5.59	-38.46	0.00	-2.44	-2.83	-3.19	-3.24	-5.61	-38.49
Greene Co., PA	x	-	100	-	0.00	-0.06	-0.06	-0.07	-0.07	-0.13	-0.88	0.00	-0.06	-0.06	-0.07	-0.07	-0.13	-0.88
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1.09	-1.26	-1.43	-1.45	-2.51	-17.34	0.00	-1.10	-1.27	-1.44	-1.46	-2.52	-17.35
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.99	-1.14	-1.29	-1.31	-2.28	-15.71	0.00	-1.00	-1.15	-1.30	-1.32	-2.29	-15.72

**Table B2-29
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.11	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.11
Hickory, NC	-	x	-	100	0.00	-0.26	-0.30	-0.34	-0.34	-0.59	-4.08	0.00	-0.26	-0.30	-0.34	-0.34	-0.59	-4.08
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-142.99	-159.98	-192.25	-210.25	-267.62	-1,381.43	0.00	-143.75	-160.76	-193.07	-211.10	-268.48	-1,382.28
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-13.53	-15.14	-18.20	-19.91	-25.29	-130.29	0.00	-13.60	-15.21	-18.27	-19.99	-25.38	-130.37
Imperial Co., CA	x	-	100	-	0.00	-0.30	-0.35	-0.40	-0.40	-0.70	-4.83	0.00	-0.31	-0.35	-0.40	-0.41	-0.70	-4.84
Indianapolis, IN	-	x	-	100	0.00	-2.19	-2.54	-2.87	-2.91	-5.06	-34.88	0.00	-2.21	-2.56	-2.89	-2.93	-5.08	-34.90
Jamestown, NY	x	-	100	-	0.00	-0.20	-0.24	-0.27	-0.27	-0.47	-3.23	0.00	-0.20	-0.24	-0.27	-0.27	-0.47	-3.23
Jefferson Co., NY	x	-	100	-	0.00	-0.19	-0.22	-0.25	-0.25	-0.44	-3.00	0.00	-0.19	-0.22	-0.25	-0.25	-0.44	-3.00
Johnstown, PA	-	x	-	100	0.00	-0.17	-0.19	-0.22	-0.22	-0.39	-2.65	0.00	-0.17	-0.19	-0.22	-0.22	-0.39	-2.65
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.18	-0.20	-0.23	-0.23	-0.40	-2.68	0.00	-0.18	-0.20	-0.23	-0.24	-0.40	-2.69
Knoxville, TN	x	x	100	100	0.00	-1.49	-1.72	-1.95	-1.97	-3.43	-23.68	0.00	-1.50	-1.74	-1.96	-1.99	-3.45	-23.69
Lancaster, PA	-	x	-	100	0.00	-0.58	-0.68	-0.76	-0.77	-1.34	-9.27	0.00	-0.59	-0.68	-0.77	-0.78	-1.35	-9.27
Las Vegas, NV	x	-	100	-	0.00	-1.92	-2.23	-2.51	-2.55	-4.44	-30.61	0.00	-1.94	-2.24	-2.53	-2.56	-4.45	-30.63
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.15	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.15
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.31	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.31
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-93.36	-105.11	-124.94	-134.91	-181.87	-1,004.35	0.00	-93.91	-105.67	-125.52	-135.52	-182.49	-1,004.96
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1.00	-1.16	-1.31	-1.33	-2.31	-15.89	0.00	-1.01	-1.17	-1.32	-1.34	-2.32	-15.90
Louisville, KY-IN	-	x	-	100	0.00	-1.49	-1.72	-1.94	-1.97	-3.45	-23.94	0.00	-1.50	-1.74	-1.96	-1.98	-3.46	-23.95
Macon, GA	-	x	-	100	0.00	-0.28	-0.32	-0.36	-0.36	-0.64	-4.45	0.00	-0.28	-0.32	-0.36	-0.37	-0.64	-4.45
Manitowoc Co., WI	x	-	-	-	0.00	-0.15	-0.17	-0.19	-0.20	-0.34	-2.34	0.00	-0.15	-0.17	-0.19	-0.20	-0.34	-2.34
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.14	-0.17	-0.19	-0.19	-0.33	-2.27	0.00	-0.14	-0.17	-0.19	-0.19	-0.33	-2.27
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.56	-0.65	-0.73	-0.74	-1.29	-8.88	0.00	-0.56	-0.65	-0.74	-0.75	-1.29	-8.89
Memphis, TN-AR	x	-	100	-	0.00	-11.98	-13.43	-16.08	-17.50	-22.77	-120.76	0.00	-12.04	-13.50	-16.15	-17.57	-22.84	-120.83
Milwaukee-Racine, WI	x	-	100	-	0.00	-2.40	-2.79	-3.15	-3.19	-5.54	-38.21	0.00	-2.42	-2.81	-3.17	-3.21	-5.57	-38.24
Nevada (Western Part), CA	x	-	100	-	0.00	-0.14	-0.16	-0.18	-0.18	-0.31	-2.16	0.00	-0.14	-0.16	-0.18	-0.18	-0.31	-2.16
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-38.56	-43.89	-51.17	-53.98	-80.34	-489.83	0.00	-38.82	-44.16	-51.45	-54.27	-80.64	-490.12
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.21	-0.25	-0.28	-0.28	-0.49	-3.42	0.00	-0.22	-0.25	-0.28	-0.29	-0.50	-3.42
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-79.42	-89.09	-106.57	-115.94	-151.18	-803.65	0.00	-79.86	-89.54	-107.05	-116.43	-151.67	-804.14
Phoenix-Mesa, AZ	x	-	100	-	0.00	-5.23	-6.07	-6.84	-6.91	-12.13	-84.05	0.00	-5.27	-6.11	-6.89	-6.96	-12.18	-84.10
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-2.68	-3.10	-3.50	-3.55	-6.18	-42.61	0.00	-2.70	-3.12	-3.53	-3.57	-6.20	-42.64
Poughkeepsie, NY	x	x	100	100	0.00	-1.74	-2.02	-2.28	-2.31	-4.01	-27.67	0.00	-1.75	-2.03	-2.29	-2.32	-4.03	-27.68

**Table B2-29
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-1.26	-1.46	-1.65	-1.67	-2.90	-20.02	0.00	-1.27	-1.47	-1.66	-1.68	-2.92	-20.03
Reading, PA	-	x	-	100	0.00	-0.51	-0.59	-0.67	-0.68	-1.18	-8.13	0.00	-0.52	-0.60	-0.67	-0.68	-1.18	-8.13
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-1.02	-1.18	-1.33	-1.35	-2.35	-16.19	0.00	-1.03	-1.19	-1.34	-1.36	-2.36	-16.20
Rochester, NY	x	-	100	-	0.00	-1.76	-2.04	-2.31	-2.34	-4.07	-28.03	0.00	-1.78	-2.06	-2.32	-2.35	-4.08	-28.05
Rome, GA	-	x	-	100	0.00	-0.15	-0.18	-0.20	-0.20	-0.36	-2.45	0.00	-0.16	-0.18	-0.20	-0.21	-0.36	-2.45
Sacramento Metro, CA	x	-	50	-	0.00	-2.96	-3.43	-3.87	-3.92	-6.82	-47.05	0.00	-2.98	-3.45	-3.90	-3.95	-6.85	-47.08
San Diego, CA	x	-	100	-	0.00	-4.14	-4.80	-5.42	-5.50	-9.56	-65.91	0.00	-4.18	-4.84	-5.46	-5.53	-9.60	-65.95
San Francisco Bay Area, CA	x	-	100	-	0.00	-47.62	-53.56	-63.77	-69.00	-92.22	-504.43	0.00	-47.90	-53.85	-64.07	-69.30	-92.53	-504.74
San Joaquin Valley, CA	x	x	50	100	0.00	-12.57	-14.29	-16.69	-17.66	-26.01	-157.03	0.00	-12.65	-14.38	-16.78	-17.75	-26.10	-157.13
Sheboygan, WI	x	-	100	-	0.00	-0.16	-0.19	-0.22	-0.22	-0.38	-2.61	0.00	-0.17	-0.19	-0.22	-0.22	-0.38	-2.61
Springfield (Western MA), MA	x	-	100	-	0.00	-1.26	-1.47	-1.66	-1.68	-2.92	-20.12	0.00	-1.28	-1.48	-1.67	-1.69	-2.93	-20.13
St. Louis, MO-IL	x	x	100	100	0.00	-22.29	-25.07	-29.85	-32.31	-43.13	-235.65	0.00	-22.42	-25.20	-29.99	-32.45	-43.28	-235.79
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.33	-1.49	-1.78	-1.94	-2.52	-13.36	0.00	-1.33	-1.50	-1.79	-1.95	-2.53	-13.37
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-1.03	-1.19	-1.36	-1.40	-2.31	-15.37	0.00	-1.04	-1.20	-1.37	-1.41	-2.32	-15.38
Washington, DC-MD-VA	x	x	100	100	0.00	-6.70	-7.77	-8.78	-8.90	-15.45	-106.34	0.00	-6.76	-7.82	-8.84	-8.96	-15.51	-106.40
Wheeling, WV-OH	-	x	-	100	0.00	-0.23	-0.27	-0.30	-0.31	-0.54	-3.69	0.00	-0.23	-0.27	-0.31	-0.31	-0.54	-3.69
York, PA	-	x	-	100	0.00	-0.54	-0.63	-0.71	-0.72	-1.25	-8.59	0.00	-0.54	-0.63	-0.71	-0.72	-1.25	-8.60

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-30
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

NOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-3.94	-3.54	-10.06	-11.36	-20.74	-201.85	0.00	-9.98	-9.61	-16.88	-18.25	-27.68	-198.93
Allegan Co., MI	x	-	100	-	0.00	-0.43	-0.39	-1.10	-1.24	-2.27	-22.07	0.00	-1.09	-1.05	-1.85	-2.00	-3.03	-21.75
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.42	-0.38	-1.07	-1.20	-2.20	-21.37	0.00	-1.06	-1.02	-1.79	-1.93	-2.93	-21.07
Atlanta, GA	x	x	100	100	0.00	-22.79	-20.49	-58.29	-65.83	-120.18	-1,169.83	0.00	-57.77	-55.61	-97.75	-105.70	-160.38	-1,152.89
Baltimore, MD	x	x	100	100	0.00	-8.69	-7.82	-22.17	-25.03	-45.66	-444.07	0.00	-22.02	-21.21	-37.20	-40.23	-60.98	-437.72
Baton Rouge, LA	x	-	100	-	0.00	-100.20	-110.50	-131.37	-147.54	-177.40	-866.16	0.00	-234.31	-247.95	-276.03	-297.26	-330.76	-1,010.24
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-198.85	-219.88	-257.12	-288.71	-341.95	-1,595.62	0.00	-464.44	-492.17	-543.37	-585.11	-645.63	-1,887.86
Birmingham, AL	-	x	-	100	0.00	-3.07	-2.76	-7.88	-8.89	-16.25	-158.36	0.00	-7.79	-7.49	-13.20	-14.27	-21.67	-156.04
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-13.59	-12.23	-34.71	-39.19	-71.52	-695.82	0.00	-34.44	-33.16	-58.22	-62.96	-95.48	-685.81
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.78	-1.58	-4.70	-5.31	-9.80	-96.41	0.00	-4.54	-4.34	-7.82	-8.46	-12.97	-94.83
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.25	-2.92	-8.30	-9.37	-17.09	-166.30	0.00	-8.23	-7.93	-13.92	-15.05	-22.82	-163.91
Canton-Massillon, OH	-	x	-	100	0.00	-13.75	-15.02	-18.85	-21.18	-26.65	-147.01	0.00	-32.27	-33.99	-38.88	-41.88	-47.84	-165.33
Charleston, WV	-	x	-	100	0.00	-0.85	-0.77	-2.18	-2.46	-4.48	-43.63	0.00	-2.16	-2.08	-3.65	-3.94	-5.98	-43.00
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-5.13	-4.46	-14.10	-15.93	-29.80	-296.80	0.00	-13.16	-12.50	-23.21	-25.11	-39.04	-291.28
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.56	-1.41	-4.01	-4.53	-8.27	-80.59	0.00	-3.97	-3.82	-6.72	-7.27	-11.03	-79.41
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-163.56	-176.63	-237.38	-266.88	-354.00	-2,198.89	0.00	-386.10	-404.11	-478.80	-515.98	-608.64	-2,393.96
Chico, CA	x	-	100	-	0.00	-0.58	-0.53	-1.49	-1.69	-3.08	-29.94	0.00	-1.48	-1.42	-2.50	-2.71	-4.11	-29.51
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-5.41	-4.84	-13.96	-15.77	-28.88	-282.06	0.00	-13.72	-13.19	-23.35	-25.25	-38.44	-277.81
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.50	-0.45	-1.27	-1.44	-2.62	-25.51	0.00	-1.26	-1.22	-2.13	-2.31	-3.50	-25.14
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-7.71	-6.94	-19.71	-22.25	-40.61	-395.17	0.00	-19.55	-18.82	-33.06	-35.75	-54.22	-389.48
Columbus, OH	x	x	100	100	0.00	-5.32	-4.79	-13.61	-15.37	-28.06	-273.11	0.00	-13.49	-12.99	-22.82	-24.68	-37.45	-269.16
Dallas-Fort Worth, TX	x	-	100	-	0.00	-22.61	-20.34	-57.81	-65.28	-119.16	-1,159.69	0.00	-57.32	-55.18	-96.95	-104.84	-159.04	-1,142.94
Dayton-Springfield, OH	-	x	-	100	0.00	-2.34	-2.11	-5.99	-6.76	-12.35	-120.17	0.00	-5.94	-5.72	-10.05	-10.86	-16.48	-118.43
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-26.64	-27.38	-47.12	-53.08	-81.44	-648.03	0.00	-64.21	-65.57	-88.39	-95.38	-124.49	-664.98
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-31.86	-32.30	-59.12	-66.62	-105.15	-869.39	0.00	-77.25	-78.37	-109.12	-117.78	-157.17	-884.85
Door Co., WI	x	-	100	-	0.00	-0.10	-0.09	-0.24	-0.27	-0.50	-4.87	0.00	-0.24	-0.23	-0.41	-0.44	-0.67	-4.80
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.21	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.20
Evansville, IN	-	x	-	100	0.00	-0.92	-0.80	-2.49	-2.81	-5.24	-51.97	0.00	-2.34	-2.23	-4.11	-4.44	-6.88	-51.03
Greater Connecticut, CT	x	-	100	-	0.00	-5.33	-4.80	-13.58	-15.34	-27.96	-271.72	0.00	-13.51	-13.02	-22.80	-24.66	-37.35	-267.86
Greene Co., PA	x	-	100	-	0.00	-0.11	-0.10	-0.29	-0.33	-0.60	-5.81	0.00	-0.29	-0.28	-0.49	-0.53	-0.80	-5.73
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-2.40	-2.16	-6.13	-6.93	-12.64	-123.05	0.00	-6.08	-5.85	-10.29	-11.12	-16.87	-121.27
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.14	-1.93	-5.48	-6.18	-11.29	-109.84	0.00	-5.43	-5.23	-9.19	-9.93	-15.07	-108.25

**Table B2-30
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.04	-0.04	-0.08	-0.75	0.00	-0.04	-0.03	-0.06	-0.07	-0.10	-0.74
Hickory, NC	-	x	-	100	0.00	-0.58	-0.52	-1.47	-1.66	-3.03	-29.45	0.00	-1.46	-1.41	-2.47	-2.67	-4.04	-29.03
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-420.26	-461.97	-560.12	-629.16	-769.64	-3,944.50	0.00	-984.20	-1,039.71	-1,168.96	-1,259.01	-1,414.58	-4,532.89
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-39.77	-43.77	-52.74	-59.24	-72.08	-364.07	0.00	-93.10	-98.41	-110.30	-118.79	-133.07	-420.23
Imperial Co., CA	x	-	100	-	0.00	-0.74	-0.66	-1.89	-2.13	-3.89	-37.90	0.00	-1.87	-1.80	-3.17	-3.43	-5.20	-37.35
Indianapolis, IN	-	x	-	100	0.00	-4.96	-4.46	-12.68	-14.32	-26.14	-254.37	0.00	-12.57	-12.10	-21.26	-22.99	-34.88	-250.69
Jamestown, NY	x	-	100	-	0.00	-0.43	-0.39	-1.10	-1.24	-2.27	-22.09	0.00	-1.09	-1.05	-1.85	-2.00	-3.03	-21.77
Jefferson Co., NY	x	-	100	-	0.00	-0.43	-0.39	-1.10	-1.24	-2.26	-22.01	0.00	-1.09	-1.05	-1.84	-1.99	-3.02	-21.70
Johnstown, PA	-	x	-	100	0.00	-0.35	-0.31	-0.88	-1.00	-1.82	-17.68	0.00	-0.88	-0.85	-1.48	-1.60	-2.43	-17.43
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.47	-0.44	-1.09	-1.24	-2.18	-20.44	0.00	-1.17	-1.15	-1.88	-2.04	-2.98	-20.27
Knoxville, TN	x	x	100	100	0.00	-3.31	-2.98	-8.47	-9.57	-17.48	-170.16	0.00	-8.39	-8.08	-14.21	-15.36	-23.32	-167.69
Lancaster, PA	-	x	-	100	0.00	-1.27	-1.14	-3.24	-3.66	-6.68	-65.02	0.00	-3.21	-3.10	-5.44	-5.88	-8.92	-64.09
Las Vegas, NV	x	-	100	-	0.00	-4.82	-4.32	-12.36	-13.96	-25.53	-248.82	0.00	-12.21	-11.75	-20.71	-22.40	-34.03	-245.15
Libby, MT	-	x	-	100	0.00	-0.02	-0.02	-0.05	-0.06	-0.11	-1.07	0.00	-0.05	-0.05	-0.09	-0.10	-0.15	-1.06
Liberty-Clairton, PA	-	x	-	100	0.00	-0.04	-0.04	-0.10	-0.11	-0.20	-1.93	0.00	-0.10	-0.10	-0.17	-0.18	-0.27	-1.91
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-263.79	-282.44	-397.62	-447.20	-612.47	-4,052.64	0.00	-625.01	-651.33	-790.39	-851.97	-1,025.91	-4,341.38
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-2.38	-2.15	-6.01	-6.79	-12.35	-119.79	0.00	-6.01	-5.80	-10.11	-10.93	-16.53	-118.13
Louisville, KY-IN	-	x	-	100	0.00	-3.14	-2.80	-8.18	-9.24	-16.98	-166.36	0.00	-7.98	-7.66	-13.65	-14.76	-22.55	-163.76
Macon, GA	-	x	-	100	0.00	-0.58	-0.52	-1.52	-1.72	-3.17	-31.07	0.00	-1.48	-1.42	-2.54	-2.74	-4.20	-30.58
Manitowoc Co., WI	x	-	-	-	0.00	-0.31	-0.28	-0.80	-0.90	-1.64	-15.95	0.00	-0.80	-0.77	-1.34	-1.45	-2.20	-15.73
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.35	-0.31	-0.88	-1.00	-1.82	-17.67	0.00	-0.88	-0.84	-1.48	-1.60	-2.43	-17.42
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.37	-1.24	-3.51	-3.97	-7.24	-70.45	0.00	-3.48	-3.35	-5.89	-6.37	-9.66	-69.43
Memphis, TN-AR	x	-	100	-	0.00	-34.51	-37.60	-48.05	-53.99	-68.96	-394.12	0.00	-81.14	-85.32	-98.51	-106.13	-122.31	-438.85
Milwaukee-Racine, WI	x	-	100	-	0.00	-5.17	-4.66	-13.21	-14.92	-27.22	-264.81	0.00	-13.11	-12.63	-22.16	-23.97	-36.34	-261.00
Nevada (Western Part), CA	x	-	100	-	0.00	-0.31	-0.28	-0.79	-0.89	-1.63	-15.84	0.00	-0.78	-0.76	-1.33	-1.43	-2.17	-15.61
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-98.53	-100.22	-180.78	-203.69	-319.44	-2,618.75	0.00	-238.53	-242.38	-334.93	-361.48	-479.90	-2,670.13
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.45	-0.40	-1.15	-1.30	-2.37	-23.16	0.00	-1.13	-1.09	-1.92	-2.08	-3.16	-22.81
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-229.16	-249.33	-321.15	-360.93	-463.88	-2,689.58	0.00	-539.14	-566.49	-656.77	-707.60	-818.49	-2,982.88
Phoenix-Mesa, AZ	x	-	100	-	0.00	-12.79	-11.41	-33.25	-37.55	-68.95	-674.84	0.00	-32.51	-31.20	-55.52	-60.04	-91.61	-664.40
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-5.56	-4.99	-14.23	-16.07	-29.35	-285.78	0.00	-14.09	-13.56	-23.85	-25.79	-39.15	-281.62
Poughkeepsie, NY	x	x	100	100	0.00	-3.91	-3.52	-9.99	-11.28	-20.59	-200.39	0.00	-9.91	-9.54	-16.76	-18.12	-27.49	-197.49

**Table B2-30
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-2.70	-2.43	-6.90	-7.79	-14.22	-138.41	0.00	-6.85	-6.59	-11.58	-12.52	-18.99	-136.42
Reading, PA	-	x	-	100	0.00	-1.15	-1.03	-2.94	-3.32	-6.06	-58.97	0.00	-2.92	-2.81	-4.93	-5.33	-8.09	-58.12
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-2.76	-2.49	-7.01	-7.92	-14.43	-140.14	0.00	-6.99	-6.74	-11.78	-12.74	-19.29	-138.17
Rochester, NY	x	-	100	-	0.00	-3.81	-3.43	-9.74	-11.00	-20.07	-195.35	0.00	-9.66	-9.30	-16.33	-17.66	-26.79	-192.53
Rome, GA	-	x	-	100	0.00	-0.33	-0.30	-0.84	-0.95	-1.74	-16.91	0.00	-0.84	-0.80	-1.41	-1.53	-2.32	-16.67
Sacramento Metro, CA	x	-	50	-	0.00	-6.87	-6.18	-17.57	-19.84	-36.22	-352.55	0.00	-17.42	-16.77	-29.47	-31.87	-48.35	-347.45
San Diego, CA	x	-	100	-	0.00	-8.86	-7.96	-22.64	-25.57	-46.67	-454.20	0.00	-22.45	-21.61	-37.97	-41.06	-62.29	-447.64
San Francisco Bay Area, CA	x	-	100	-	0.00	-134.39	-144.69	-197.74	-222.35	-298.45	-1,899.09	0.00	-317.67	-331.97	-396.73	-427.57	-508.18	-2,054.66
San Joaquin Valley, CA	x	x	50	100	0.00	-33.92	-34.53	-62.08	-69.94	-109.53	-896.20	0.00	-82.09	-83.44	-115.11	-124.23	-164.74	-914.16
Sheboygan, WI	x	-	100	-	0.00	-0.36	-0.32	-0.91	-1.03	-1.88	-18.27	0.00	-0.91	-0.88	-1.53	-1.66	-2.51	-18.01
Springfield (Western MA), MA	x	-	100	-	0.00	-2.76	-2.48	-7.05	-7.96	-14.54	-141.48	0.00	-6.99	-6.73	-11.83	-12.79	-19.40	-139.43
St. Louis, MO-IL	x	x	100	100	0.00	-62.91	-67.76	-92.34	-103.83	-139.09	-881.58	0.00	-148.66	-155.39	-185.44	-199.85	-237.22	-954.77
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.81	-4.16	-5.29	-5.94	-7.56	-42.75	0.00	-8.96	-9.43	-10.86	-11.70	-13.45	-47.73
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.37	-2.23	-5.43	-6.13	-10.72	-100.04	0.00	-5.90	-5.80	-9.38	-10.14	-14.78	-99.37
Washington, DC-MD-VA	x	x	100	100	0.00	-15.13	-13.63	-38.50	-43.47	-79.23	-769.86	0.00	-38.32	-36.92	-64.64	-69.90	-105.88	-758.95
Wheeling, WV-OH	-	x	-	100	0.00	-0.48	-0.44	-1.24	-1.40	-2.55	-24.83	0.00	-1.23	-1.18	-2.08	-2.24	-3.40	-24.47
York, PA	-	x	-	100	0.00	-1.25	-1.12	-3.18	-3.59	-6.56	-63.82	0.00	-3.16	-3.04	-5.34	-5.77	-8.75	-62.90

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-31
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

NOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-5.06	-3.10	-22.26	-25.51	-43.07	-500.92	0.00	-15.71	-13.36	-36.12	-39.50	-57.43	-481.65
Allegan Co., MI	x	-	100	-	0.00	-0.55	-0.34	-2.43	-2.79	-4.71	-54.72	0.00	-1.72	-1.46	-3.95	-4.31	-6.27	-52.62
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.57	-0.35	-2.51	-2.88	-4.86	-56.47	0.00	-1.77	-1.51	-4.08	-4.46	-6.48	-54.30
Atlanta, GA	x	x	100	100	0.00	-32.26	-19.77	-142.10	-162.84	-274.98	-3,198.57	0.00	-100.15	-85.16	-230.49	-252.05	-366.56	-3,075.40
Baltimore, MD	x	x	100	100	0.00	-11.12	-6.85	-48.78	-55.89	-94.33	-1,096.46	0.00	-34.54	-29.42	-79.23	-86.64	-125.89	-1,054.44
Baton Rouge, LA	x	-	100	-	0.00	-156.14	-171.14	-206.75	-233.42	-277.77	-1,400.30	0.00	-515.19	-538.69	-594.70	-634.80	-688.81	-1,775.83
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-310.54	-342.24	-399.39	-450.64	-526.61	-2,439.52	0.00	-1,025.40	-1,074.51	-1,170.01	-1,248.19	-1,343.33	-3,210.24
Birmingham, AL	-	x	-	100	0.00	-3.85	-2.35	-17.03	-19.52	-32.98	-383.95	0.00	-11.94	-10.14	-27.58	-30.17	-43.91	-369.09
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-16.78	-10.31	-73.76	-84.53	-142.70	-1,659.22	0.00	-52.12	-44.35	-119.74	-130.93	-190.34	-1,595.48
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-2.25	-1.30	-10.41	-11.94	-20.28	-237.86	0.00	-6.94	-5.79	-16.61	-18.18	-26.69	-228.24
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.97	-2.44	-17.47	-20.02	-33.79	-392.87	0.00	-12.34	-10.50	-28.35	-31.00	-45.07	-377.78
Canton-Massillon, OH	-	x	-	100	0.00	-21.18	-22.84	-30.48	-34.48	-43.02	-261.28	0.00	-69.74	-72.44	-83.32	-89.08	-98.94	-307.30
Charleston, WV	-	x	-	100	0.00	-1.02	-0.63	-4.49	-5.15	-8.70	-101.15	0.00	-3.17	-2.70	-7.29	-7.97	-11.60	-97.26
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-7.10	-3.83	-34.56	-39.63	-67.72	-800.31	0.00	-21.82	-17.86	-54.28	-59.46	-88.09	-766.54
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.99	-1.24	-8.65	-9.91	-16.70	-193.72	0.00	-6.19	-5.29	-14.09	-15.41	-22.34	-186.38
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-249.20	-261.74	-402.72	-456.46	-602.61	-4,364.54	0.00	-817.66	-840.65	-1,027.95	-1,101.67	-1,263.53	-4,816.95
Chico, CA	x	-	100	-	0.00	-0.74	-0.46	-3.27	-3.75	-6.33	-73.64	0.00	-2.31	-1.96	-5.31	-5.81	-8.44	-70.81
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-6.86	-4.12	-30.73	-35.22	-59.60	-695.22	0.00	-21.27	-17.97	-49.57	-54.22	-79.11	-667.99
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.60	-0.37	-2.62	-3.01	-5.08	-59.04	0.00	-1.85	-1.58	-4.26	-4.66	-6.77	-56.77
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-9.41	-5.78	-41.37	-47.41	-80.04	-930.72	0.00	-29.22	-24.86	-67.15	-73.42	-106.75	-894.95
Columbus, OH	x	x	100	100	0.00	-6.97	-4.27	-30.70	-35.19	-59.41	-691.05	0.00	-21.65	-18.41	-49.81	-54.46	-79.21	-664.45
Dallas-Fort Worth, TX	x	-	100	-	0.00	-31.12	-19.09	-136.98	-156.98	-265.04	-3,082.64	0.00	-96.63	-82.18	-222.24	-243.03	-353.39	-2,964.04
Dayton-Springfield, OH	-	x	-	100	0.00	-2.86	-1.76	-12.60	-14.44	-24.39	-283.63	0.00	-8.89	-7.56	-20.45	-22.36	-32.52	-272.72
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-39.27	-36.75	-92.14	-105.00	-157.74	-1,527.24	0.00	-127.03	-124.92	-193.04	-208.48	-263.81	-1,540.61
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-45.19	-41.21	-112.92	-128.78	-196.61	-1,959.15	0.00	-145.76	-141.96	-229.61	-248.31	-319.14	-1,960.63
Door Co., WI	x	-	100	-	0.00	-0.12	-0.07	-0.51	-0.59	-0.99	-11.49	0.00	-0.36	-0.31	-0.83	-0.91	-1.32	-11.05
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	-0.02	-0.02	-0.04	-0.50	0.00	-0.01	-0.01	-0.03	-0.04	-0.06	-0.48
Evansville, IN	-	x	-	100	0.00	-1.13	-0.61	-5.48	-6.29	-10.74	-126.93	0.00	-3.47	-2.84	-8.62	-9.44	-13.98	-121.58
Greater Connecticut, CT	x	-	100	-	0.00	-6.74	-4.17	-29.48	-33.78	-56.99	-662.13	0.00	-20.94	-17.85	-47.94	-52.41	-76.12	-636.83
Greene Co., PA	x	-	100	-	0.00	-0.13	-0.08	-0.59	-0.67	-1.14	-13.23	0.00	-0.41	-0.35	-0.95	-1.04	-1.52	-12.72
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-3.04	-1.86	-13.36	-15.31	-25.85	-300.71	0.00	-9.43	-8.02	-21.68	-23.71	-34.47	-289.14
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.67	-1.64	-11.76	-13.47	-22.75	-264.55	0.00	-8.30	-7.06	-19.08	-20.86	-30.33	-254.38

**Table B2-31
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

NOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.01	-0.08	-0.09	-0.16	-1.84	0.00	-0.05	-0.04	-0.13	-0.14	-0.20	-1.76
Hickory, NC	-	x	-	100	0.00	-0.74	-0.46	-3.26	-3.73	-6.30	-73.26	0.00	-2.31	-1.97	-5.29	-5.79	-8.41	-70.45
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-652.99	-711.17	-893.85	-1,009.90	-1,225.61	-6,711.10	0.00	-2,152.75	-2,245.23	-2,518.76	-2,690.37	-2,946.61	-8,222.63
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-61.80	-67.48	-83.43	-94.24	-113.45	-601.22	0.00	-203.80	-212.78	-237.11	-253.19	-276.24	-746.61
Imperial Co., CA	x	-	100	-	0.00	-1.03	-0.63	-4.55	-5.21	-8.79	-102.29	0.00	-3.21	-2.73	-7.37	-8.06	-11.73	-98.35
Indianapolis, IN	-	x	-	100	0.00	-6.49	-3.98	-28.58	-32.75	-55.29	-643.09	0.00	-20.16	-17.14	-46.36	-50.70	-73.72	-618.35
Jamestown, NY	x	-	100	-	0.00	-0.53	-0.32	-2.31	-2.65	-4.48	-52.08	0.00	-1.64	-1.39	-3.76	-4.11	-5.97	-50.08
Jefferson Co., NY	x	-	100	-	0.00	-0.56	-0.35	-2.48	-2.84	-4.79	-55.67	0.00	-1.75	-1.49	-4.02	-4.39	-6.39	-53.53
Johnstown, PA	-	x	-	100	0.00	-0.41	-0.26	-1.81	-2.07	-3.50	-40.64	0.00	-1.29	-1.10	-2.95	-3.22	-4.68	-39.09
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.74	-0.55	-2.61	-2.99	-4.90	-54.60	0.00	-2.32	-2.11	-4.58	-4.99	-6.95	-53.06
Knoxville, TN	x	x	100	100	0.00	-4.24	-2.60	-18.71	-21.44	-36.20	-421.21	0.00	-13.17	-11.19	-30.33	-33.17	-48.25	-404.97
Lancaster, PA	-	x	-	100	0.00	-1.59	-0.97	-6.98	-8.00	-13.51	-157.12	0.00	-4.93	-4.19	-11.33	-12.39	-18.01	-151.08
Las Vegas, NV	x	-	100	-	0.00	-6.93	-4.20	-30.81	-35.31	-59.70	-695.62	0.00	-21.49	-18.21	-49.82	-54.49	-79.39	-668.57
Libby, MT	-	x	-	100	0.00	-0.03	-0.02	-0.12	-0.13	-0.22	-2.60	0.00	-0.08	-0.07	-0.19	-0.21	-0.30	-2.50
Liberty-Clairton, PA	-	x	-	100	0.00	-0.05	-0.03	-0.19	-0.22	-0.37	-4.24	0.00	-0.15	-0.13	-0.33	-0.36	-0.51	-4.10
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-401.30	-413.27	-701.03	-795.60	-1,085.35	-8,565.12	0.00	-1,313.42	-1,339.95	-1,712.23	-1,837.96	-2,153.20	-9,187.65
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-3.27	-2.07	-13.98	-16.02	-26.95	-311.95	0.00	-10.17	-8.74	-22.90	-25.03	-36.20	-300.31
Louisville, KY-IN	-	x	-	100	0.00	-3.82	-2.25	-17.37	-19.91	-33.76	-394.84	0.00	-11.82	-9.93	-27.88	-30.51	-44.64	-379.14
Macon, GA	-	x	-	100	0.00	-0.71	-0.41	-3.25	-3.72	-6.32	-74.01	0.00	-2.18	-1.83	-5.19	-5.68	-8.33	-71.04
Manitowoc Co., WI	x	-	-	-	0.00	-0.39	-0.24	-1.68	-1.92	-3.24	-37.58	0.00	-1.20	-1.02	-2.73	-2.99	-4.33	-36.15
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.48	-0.30	-2.11	-2.42	-4.08	-47.42	0.00	-1.49	-1.27	-3.42	-3.74	-5.44	-45.60
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.95	-1.19	-8.57	-9.82	-16.58	-192.85	0.00	-6.04	-5.14	-13.90	-15.20	-22.11	-185.43
Memphis, TN-AR	x	-	100	-	0.00	-53.00	-56.78	-78.55	-88.89	-112.63	-720.54	0.00	-174.34	-180.65	-210.93	-225.66	-252.71	-831.09
Milwaukee-Racine, WI	x	-	100	-	0.00	-6.41	-3.94	-28.14	-32.25	-54.43	-632.87	0.00	-19.89	-16.93	-45.69	-49.96	-72.62	-608.57
Nevada (Western Part), CA	x	-	100	-	0.00	-0.41	-0.25	-1.78	-2.04	-3.44	-40.01	0.00	-1.26	-1.07	-2.89	-3.16	-4.59	-38.47
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-140.24	-128.96	-343.59	-391.75	-595.17	-5,879.58	0.00	-452.76	-442.34	-705.14	-762.25	-974.96	-5,897.97
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.53	-0.32	-2.38	-2.73	-4.62	-53.85	0.00	-1.66	-1.40	-3.85	-4.21	-6.14	-51.75
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-352.33	-375.99	-531.60	-601.77	-769.25	-5,064.40	0.00	-1,158.45	-1,198.49	-1,412.44	-1,511.62	-1,701.16	-5,780.39
Phoenix-Mesa, AZ	x	-	100	-	0.00	-18.00	-10.68	-81.56	-93.48	-158.40	-1,851.05	0.00	-55.76	-46.94	-131.08	-143.41	-209.67	-1,777.76
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-6.64	-4.06	-29.30	-33.58	-56.72	-659.99	0.00	-20.61	-17.51	-47.50	-51.94	-75.57	-634.52
Poughkeepsie, NY	x	x	100	100	0.00	-5.05	-3.10	-22.21	-25.46	-42.98	-499.86	0.00	-15.68	-13.33	-36.04	-39.42	-57.31	-480.63

**Table B2-31
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area)**

NOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-3.33	-2.05	-14.65	-16.79	-28.34	-329.62	0.00	-10.35	-8.80	-23.78	-26.00	-37.80	-316.95
Reading, PA	-	x	-	100	0.00	-1.49	-0.91	-6.54	-7.50	-12.66	-147.28	0.00	-4.62	-3.93	-10.62	-11.61	-16.89	-141.61
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-4.30	-2.68	-18.66	-21.38	-36.04	-418.19	0.00	-13.36	-11.42	-30.42	-33.25	-48.23	-402.34
Rochester, NY	x	-	100	-	0.00	-4.74	-2.91	-20.84	-23.88	-40.32	-468.92	0.00	-14.71	-12.51	-33.81	-36.98	-53.77	-450.89
Rome, GA	-	x	-	100	0.00	-0.41	-0.25	-1.79	-2.05	-3.45	-40.17	0.00	-1.26	-1.07	-2.90	-3.17	-4.61	-38.63
Sacramento Metro, CA	x	-	50	-	0.00	-9.23	-5.67	-40.58	-46.50	-78.50	-912.78	0.00	-28.67	-24.39	-65.87	-72.02	-104.70	-877.71
San Diego, CA	x	-	100	-	0.00	-10.88	-6.67	-47.88	-54.87	-92.65	-1,077.55	0.00	-33.77	-28.72	-77.68	-84.95	-123.53	-1,036.09
San Francisco Bay Area, CA	x	-	100	-	0.00	-204.00	-213.29	-335.95	-380.90	-507.04	-3,756.40	0.00	-668.97	-686.53	-848.30	-909.49	-1,048.51	-4,114.10
San Joaquin Valley, CA	x	x	50	100	0.00	-50.35	-45.71	-127.10	-144.97	-221.88	-2,220.55	0.00	-162.31	-157.82	-257.21	-278.22	-358.48	-2,219.58
Sheboygan, WI	x	-	100	-	0.00	-0.45	-0.28	-1.96	-2.25	-3.80	-44.09	0.00	-1.40	-1.19	-3.20	-3.49	-5.07	-42.41
Springfield (Western MA), MA	x	-	100	-	0.00	-3.46	-2.12	-15.22	-17.44	-29.45	-342.55	0.00	-10.74	-9.13	-24.70	-27.01	-39.27	-329.37
St. Louis, MO-IL	x	x	100	100	0.00	-95.48	-99.93	-156.61	-177.55	-235.94	-1,739.76	0.00	-313.15	-321.49	-396.36	-424.91	-489.33	-1,908.45
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-5.85	-6.28	-8.55	-9.67	-12.17	-76.09	0.00	-19.25	-19.97	-23.15	-24.76	-27.62	-88.52
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-3.10	-2.28	-11.22	-12.84	-21.10	-236.28	0.00	-9.77	-8.81	-19.51	-21.25	-29.73	-229.34
Washington, DC-MD-VA	x	x	100	100	0.00	-19.84	-12.28	-86.64	-99.29	-167.47	-1,945.14	0.00	-61.65	-52.58	-140.95	-154.11	-223.75	-1,870.92
Wheeling, WV-OH	-	x	-	100	0.00	-0.58	-0.36	-2.56	-2.93	-4.94	-57.51	0.00	-1.80	-1.53	-4.15	-4.53	-6.59	-55.30
York, PA	-	x	-	100	0.00	-1.65	-1.01	-7.25	-8.31	-14.03	-163.22	0.00	-5.12	-4.36	-11.77	-12.87	-18.72	-156.94

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-32
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-5.32	-0.36	-43.76	-50.22	-74.68	-965.39	0.00	-9.96	-3.12	-57.39	-64.03	-89.96	-904.25
Allegan Co., MI	x	-	100	-	0.00	-0.58	-0.04	-4.76	-5.46	-8.13	-105.04	0.00	-1.08	-0.34	-6.24	-6.97	-9.79	-98.39
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.68	-0.05	-5.59	-6.42	-9.54	-123.31	0.00	-1.28	-0.41	-7.34	-8.19	-11.50	-115.50
Atlanta, GA	x	x	100	100	0.00	-42.31	-2.78	-348.16	-399.54	-594.23	-7,682.28	0.00	-78.98	-24.53	-456.46	-509.25	-715.58	-7,195.54
Baltimore, MD	x	x	100	100	0.00	-11.62	-0.86	-95.00	-109.02	-162.10	-2,094.35	0.00	-21.89	-7.06	-124.81	-139.22	-195.48	-1,961.99
Baton Rouge, LA	x	-	100	-	0.00	-217.16	-237.02	-295.99	-335.81	-395.65	-2,078.85	0.00	-877.48	-912.34	-1,011.81	-1,076.45	-1,154.56	-2,758.22
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-432.87	-476.93	-560.00	-634.89	-735.26	-3,392.42	0.00	-1,758.60	-1,834.41	-1,990.08	-2,114.77	-2,250.75	-4,810.55
Birmingham, AL	-	x	-	100	0.00	-3.92	-0.22	-32.53	-37.33	-55.54	-718.54	0.00	-7.25	-2.15	-42.55	-47.48	-66.78	-672.88
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-16.41	-1.14	-134.61	-154.47	-229.71	-2,968.92	0.00	-30.75	-9.73	-176.65	-197.06	-276.81	-2,781.03
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-2.29	0.05	-20.19	-23.17	-34.55	-449.49	0.00	-3.84	-0.61	-25.90	-28.94	-41.00	-420.27
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.79	-0.26	-31.05	-35.63	-52.99	-684.88	0.00	-7.10	-2.25	-40.76	-45.47	-63.86	-641.54
Canton-Massillon, OH	-	x	-	100	0.00	-29.07	-31.00	-44.50	-50.56	-61.65	-400.45	0.00	-115.92	-119.56	-139.80	-149.13	-162.79	-481.00
Charleston, WV	-	x	-	100	0.00	-0.94	-0.06	-7.72	-8.86	-13.18	-170.40	0.00	-1.76	-0.55	-10.13	-11.30	-15.88	-159.61
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-8.97	0.50	-81.05	-93.03	-138.87	-1,810.15	0.00	-14.44	-1.37	-103.23	-115.42	-163.93	-1,691.51
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-2.11	-0.33	-16.09	-18.46	-27.37	-351.20	0.00	-4.34	-1.89	-21.62	-24.08	-33.53	-329.64
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-336.69	-341.13	-635.30	-723.54	-927.45	-7,642.08	0.00	-1,304.61	-1,321.48	-1,726.21	-1,850.83	-2,088.00	-8,319.46
Chico, CA	x	-	100	-	0.00	-0.77	-0.05	-6.31	-7.24	-10.77	-139.17	0.00	-1.43	-0.45	-8.27	-9.23	-12.97	-130.35
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-7.32	-0.25	-61.80	-70.93	-105.60	-1,368.30	0.00	-13.19	-3.44	-80.39	-89.74	-126.46	-1,280.77
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.55	-0.04	-4.48	-5.14	-7.64	-98.74	0.00	-1.02	-0.32	-5.87	-6.55	-9.21	-92.49
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-8.93	-0.61	-73.32	-84.14	-125.14	-1,617.43	0.00	-16.73	-5.27	-96.21	-107.33	-150.77	-1,515.05
Columbus, OH	x	x	100	100	0.00	-7.75	-0.51	-63.79	-73.21	-108.88	-1,407.55	0.00	-14.48	-4.50	-83.64	-93.31	-131.12	-1,318.38
Dallas-Fort Worth, TX	x	-	100	-	0.00	-38.46	-2.56	-316.19	-362.84	-539.64	-6,976.04	0.00	-71.86	-22.43	-414.65	-462.59	-649.96	-6,534.19
Dayton-Springfield, OH	-	x	-	100	0.00	-2.72	-0.18	-22.37	-25.67	-38.18	-493.61	0.00	-5.09	-1.59	-29.34	-32.73	-45.99	-462.35
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-51.44	-40.76	-173.09	-197.99	-277.05	-3,072.20	0.00	-175.26	-161.81	-331.62	-361.18	-447.43	-3,013.67
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-55.76	-43.54	-191.91	-219.54	-307.93	-3,437.42	0.00	-188.61	-173.12	-363.27	-395.91	-492.22	-3,364.84
Door Co., WI	x	-	100	-	0.00	-0.11	-0.01	-0.90	-1.04	-1.54	-19.96	0.00	-0.21	-0.06	-1.19	-1.32	-1.86	-18.70
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	-0.04	-0.05	-0.07	-0.89	0.00	-0.01	0.00	-0.05	-0.05	-0.08	-0.83
Evansville, IN	-	x	-	100	0.00	-1.11	0.13	-10.45	-11.99	-17.93	-234.50	0.00	-1.65	0.06	-13.14	-14.71	-20.98	-218.92
Greater Connecticut, CT	x	-	100	-	0.00	-6.85	-0.54	-55.80	-64.03	-95.19	-1,229.45	0.00	-12.98	-4.28	-73.40	-81.87	-114.90	-1,151.87
Greene Co., PA	x	-	100	-	0.00	-0.12	-0.01	-0.97	-1.11	-1.65	-21.36	0.00	-0.22	-0.07	-1.27	-1.42	-1.99	-20.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-3.09	-0.21	-25.43	-29.18	-43.40	-561.05	0.00	-5.78	-1.80	-33.35	-37.20	-52.27	-525.51
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.65	-0.18	-21.75	-24.96	-37.12	-479.77	0.00	-4.95	-1.55	-28.53	-31.83	-44.71	-449.39

**Table B2-32
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	0.00	-0.15	-0.17	-0.26	-3.44	0.00	-0.01	0.01	-0.18	-0.20	-0.30	-3.20
Hickory, NC	-	x	-	100	0.00	-0.79	-0.06	-6.42	-7.37	-10.96	-141.64	0.00	-1.48	-0.48	-8.44	-9.42	-13.22	-132.69
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-905.71	-977.56	-1,307.89	-1,485.01	-1,780.83	-10,509.33	0.00	-3,636.47	-3,766.40	-4,285.49	-4,565.23	-4,939.33	-13,186.33
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-85.68	-93.15	-119.24	-135.32	-160.48	-881.77	0.00	-345.44	-358.68	-401.41	-427.26	-459.70	-1,144.59
Imperial Co., CA	x	-	100	-	0.00	-1.28	-0.09	-10.55	-12.10	-18.00	-232.71	0.00	-2.40	-0.75	-13.83	-15.43	-21.68	-217.97
Indianapolis, IN	-	x	-	100	0.00	-7.24	-0.48	-59.49	-68.27	-101.54	-1,312.65	0.00	-13.52	-4.22	-78.02	-87.04	-122.30	-1,229.51
Jamestown, NY	x	-	100	-	0.00	-0.50	-0.03	-4.10	-4.70	-6.99	-90.39	0.00	-0.94	-0.29	-5.38	-6.00	-8.43	-84.67
Jefferson Co., NY	x	-	100	-	0.00	-0.62	-0.04	-5.04	-5.79	-8.60	-111.20	0.00	-1.15	-0.37	-6.62	-7.38	-10.37	-104.16
Johnstown, PA	-	x	-	100	0.00	-0.38	-0.03	-3.05	-3.50	-5.20	-67.06	0.00	-0.72	-0.25	-4.02	-4.48	-6.29	-62.85
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.17	-0.60	-6.07	-6.95	-10.09	-123.30	0.00	-3.29	-2.54	-9.43	-10.39	-13.76	-117.41
Knoxville, TN	x	x	100	100	0.00	-4.44	-0.28	-36.62	-42.02	-62.51	-808.23	0.00	-8.27	-2.54	-47.98	-53.53	-75.24	-756.98
Lancaster, PA	-	x	-	100	0.00	-1.58	-0.11	-12.99	-14.90	-22.16	-286.50	0.00	-2.95	-0.92	-17.03	-19.00	-26.70	-268.36
Las Vegas, NV	x	-	100	-	0.00	-9.09	-0.32	-76.66	-87.98	-130.98	-1,697.02	0.00	-16.39	-4.30	-99.74	-111.33	-156.89	-1,588.50
Libby, MT	-	x	-	100	0.00	-0.03	0.00	-0.22	-0.25	-0.37	-4.79	0.00	-0.05	-0.01	-0.28	-0.32	-0.45	-4.49
Liberty-Clairton, PA	-	x	-	100	0.00	-0.05	-0.01	-0.30	-0.35	-0.51	-6.42	0.00	-0.11	-0.07	-0.43	-0.47	-0.65	-6.05
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-544.52	-529.30	-1,177.37	-1,342.58	-1,766.83	-16,114.92	0.00	-2,062.45	-2,058.12	-2,925.58	-3,147.88	-3,630.07	-16,890.93
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-4.05	-0.68	-30.55	-35.05	-51.94	-665.86	0.00	-8.43	-3.80	-41.21	-45.88	-63.80	-625.17
Louisville, KY-IN	-	x	-	100	0.00	-3.61	-0.01	-31.22	-35.84	-53.41	-693.58	0.00	-6.25	-1.28	-40.29	-45.01	-63.61	-648.79
Macon, GA	-	x	-	100	0.00	-0.66	0.02	-5.86	-6.73	-10.03	-130.60	0.00	-1.10	-0.16	-7.51	-8.39	-11.89	-122.09
Manitowoc Co., WI	x	-	-	-	0.00	-0.37	-0.03	-2.96	-3.40	-5.05	-65.23	0.00	-0.70	-0.24	-3.91	-4.36	-6.11	-61.12
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.59	-0.04	-4.85	-5.56	-8.27	-106.90	0.00	-1.11	-0.35	-6.36	-7.10	-9.97	-100.14
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-2.51	-0.17	-20.61	-23.65	-35.17	-454.68	0.00	-4.68	-1.46	-27.02	-30.15	-42.36	-425.88
Memphis, TN-AR	x	-	100	-	0.00	-72.44	-76.49	-116.01	-131.88	-162.73	-1,126.05	0.00	-287.25	-295.24	-352.95	-376.90	-414.32	-1,315.89
Milwaukee-Racine, WI	x	-	100	-	0.00	-6.27	-0.44	-51.38	-58.96	-87.68	-1,133.13	0.00	-11.76	-3.74	-67.44	-75.24	-105.67	-1,061.44
Nevada (Western Part), CA	x	-	100	-	0.00	-0.44	-0.03	-3.62	-4.15	-6.17	-79.69	0.00	-0.84	-0.27	-4.75	-5.30	-7.44	-74.66
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-173.73	-138.32	-580.11	-663.53	-927.72	-10,263.86	0.00	-593.28	-548.79	-1,115.94	-1,215.16	-1,503.53	-10,075.66
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.49	-0.02	-4.11	-4.71	-7.02	-90.84	0.00	-0.89	-0.25	-5.35	-5.98	-8.41	-85.05
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-482.44	-504.20	-807.21	-918.15	-1,145.38	-8,367.14	0.00	-1,902.03	-1,947.94	-2,381.42	-2,545.73	-2,817.72	-9,557.51
Phoenix-Mesa, AZ	x	-	100	-	0.00	-22.76	-0.28	-195.40	-224.25	-334.10	-4,335.86	0.00	-39.90	-8.89	-252.77	-282.29	-398.62	-4,056.71
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-6.05	-0.37	-49.93	-57.30	-85.23	-1,102.24	0.00	-11.23	-3.42	-65.39	-72.96	-102.56	-1,032.31
Poughkeepsie, NY	x	x	100	100	0.00	-5.36	-0.36	-44.06	-50.56	-75.19	-972.01	0.00	-10.02	-3.14	-57.79	-64.47	-90.58	-910.45

**Table B2-32
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-3.23	-0.22	-26.48	-30.39	-45.20	-584.18	0.00	-6.04	-1.90	-34.74	-38.76	-54.45	-547.20
Reading, PA	-	x	-	100	0.00	-1.58	-0.11	-13.01	-14.92	-22.20	-286.92	0.00	-2.96	-0.93	-17.06	-19.03	-26.74	-268.75
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-6.66	-0.71	-52.99	-60.80	-90.30	-1,163.82	0.00	-13.00	-4.81	-70.22	-78.28	-109.57	-1,091.06
Rochester, NY	x	-	100	-	0.00	-4.66	-0.31	-38.31	-43.96	-65.38	-845.09	0.00	-8.72	-2.73	-50.24	-56.05	-78.75	-791.57
Rome, GA	-	x	-	100	0.00	-0.39	-0.03	-3.21	-3.68	-5.48	-70.80	0.00	-0.73	-0.23	-4.21	-4.70	-6.60	-66.31
Sacramento Metro, CA	x	-	50	-	0.00	-10.76	-0.81	-87.86	-100.83	-149.91	-1,936.77	0.00	-20.29	-6.59	-115.47	-128.80	-180.83	-1,814.42
San Diego, CA	x	-	100	-	0.00	-10.44	-0.69	-85.84	-98.51	-146.51	-1,893.96	0.00	-19.50	-6.08	-112.56	-125.58	-176.45	-1,773.99
San Francisco Bay Area, CA	x	-	100	-	0.00	-275.21	-279.06	-517.75	-589.64	-755.35	-6,207.97	0.00	-1,066.87	-1,080.98	-1,409.61	-1,511.26	-1,704.11	-6,764.94
San Joaquin Valley, CA	x	x	50	100	0.00	-66.52	-47.84	-256.47	-293.56	-416.35	-4,790.23	0.00	-216.30	-192.03	-457.96	-500.70	-633.71	-4,645.01
Sheboygan, WI	x	-	100	-	0.00	-0.45	-0.04	-3.65	-4.18	-6.22	-80.28	0.00	-0.86	-0.29	-4.80	-5.35	-7.51	-75.22
Springfield (Western MA), MA	x	-	100	-	0.00	-3.46	-0.23	-28.43	-32.63	-48.53	-627.35	0.00	-6.46	-2.02	-37.29	-41.60	-58.45	-587.62
St. Louis, MO-IL	x	x	100	100	0.00	-128.79	-130.68	-241.68	-275.23	-352.39	-2,889.78	0.00	-499.45	-506.19	-659.11	-706.59	-796.43	-3,151.73
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-7.98	-8.49	-12.35	-14.03	-17.15	-113.12	0.00	-31.79	-32.77	-38.50	-41.08	-44.92	-134.98
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-3.35	-1.34	-20.11	-23.05	-33.77	-421.28	0.00	-8.63	-5.89	-29.49	-32.64	-44.06	-398.66
Washington, DC-MD-VA	x	x	100	100	0.00	-22.49	-1.84	-182.66	-209.61	-311.59	-4,023.27	0.00	-42.76	-14.33	-240.50	-268.23	-376.33	-3,769.69
Wheeling, WV-OH	-	x	-	100	0.00	-0.53	-0.04	-4.37	-5.02	-7.46	-96.45	0.00	-0.99	-0.31	-5.73	-6.40	-8.99	-90.34
York, PA	-	x	-	100	0.00	-1.84	-0.13	-15.11	-17.35	-25.80	-333.43	0.00	-3.44	-1.08	-19.83	-22.12	-31.08	-312.32

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-33
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.16	0.20	0.06	0.06	0.14	2.65	0.00	0.16	0.20	0.06	0.05	0.14	2.65
Allegan Co., MI	x	-	100	-	0.00	0.02	0.02	0.01	0.01	0.02	0.29	0.00	0.02	0.02	0.01	0.01	0.01	0.29
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.01	0.01	0.01	0.26	0.00	0.02	0.02	0.01	0.01	0.01	0.26
Atlanta, GA	x	x	100	100	0.00	0.87	1.07	0.33	0.29	0.73	14.10	0.00	0.87	1.07	0.33	0.29	0.73	14.10
Baltimore, MD	x	x	100	100	0.00	0.36	0.44	0.14	0.12	0.30	5.86	0.00	0.36	0.44	0.13	0.12	0.30	5.86
Baton Rouge, LA	x	-	100	-	0.00	-5.77	-6.40	-8.15	-9.00	-11.55	-63.85	0.00	-5.80	-6.43	-8.18	-9.04	-11.58	-63.88
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-11.73	-13.02	-16.45	-18.17	-23.35	-130.45	0.00	-11.79	-13.08	-16.52	-18.24	-23.42	-130.52
Birmingham, AL	-	x	-	100	0.00	0.13	0.16	0.05	0.04	0.11	2.15	0.00	0.13	0.16	0.05	0.04	0.11	2.14
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.59	0.72	0.22	0.20	0.49	9.53	0.00	0.59	0.72	0.22	0.20	0.49	9.53
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.08	0.10	0.03	0.03	0.07	1.30	0.00	0.08	0.10	0.03	0.03	0.07	1.30
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.14	0.17	0.05	0.05	0.12	2.29	0.00	0.14	0.17	0.05	0.05	0.12	2.29
Canton-Massillon, OH	-	x	-	100	0.00	-0.72	-0.80	-1.05	-1.17	-1.48	-7.86	0.00	-0.73	-0.80	-1.06	-1.17	-1.49	-7.87
Charleston, WV	-	x	-	100	0.00	0.04	0.05	0.01	0.01	0.03	0.61	0.00	0.04	0.05	0.01	0.01	0.03	0.61
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.24	0.29	0.09	0.09	0.20	3.77	0.00	0.24	0.29	0.09	0.09	0.20	3.77
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.07	0.08	0.03	0.02	0.06	1.10	0.00	0.07	0.08	0.03	0.02	0.06	1.10
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-7.63	-8.38	-11.59	-12.87	-16.19	-80.59	0.00	-7.68	-8.42	-11.64	-12.92	-16.24	-80.64
Chico, CA	x	-	100	-	0.00	0.02	0.03	0.01	0.01	0.02	0.40	0.00	0.02	0.03	0.01	0.01	0.02	0.40
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.24	0.29	0.09	0.08	0.20	3.81	0.00	0.24	0.29	0.09	0.08	0.20	3.81
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.02	0.03	0.01	0.01	0.02	0.36	0.00	0.02	0.03	0.01	0.01	0.02	0.36
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.34	0.42	0.13	0.11	0.28	5.47	0.00	0.34	0.41	0.13	0.11	0.28	5.47
Columbus, OH	x	x	100	100	0.00	0.22	0.27	0.08	0.07	0.18	3.54	0.00	0.22	0.27	0.08	0.07	0.18	3.54
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.89	1.09	0.33	0.30	0.74	14.33	0.00	0.89	1.09	0.33	0.30	0.74	14.32
Dayton-Springfield, OH	-	x	-	100	0.00	0.10	0.13	0.04	0.03	0.09	1.66	0.00	0.10	0.13	0.04	0.03	0.09	1.66
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.57	-0.59	-1.22	-1.38	-1.61	-4.33	0.00	-0.58	-0.59	-1.23	-1.39	-1.62	-4.34
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.43	-0.40	-1.23	-1.41	-1.56	-1.68	0.00	-0.43	-0.41	-1.24	-1.42	-1.57	-1.69
Door Co., WI	x	-	100	-	0.00	0.00	0.01	0.00	0.00	0.00	0.07	0.00	0.00	0.01	0.00	0.00	0.00	0.07
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.04	0.05	0.02	0.02	0.04	0.72	0.00	0.04	0.05	0.02	0.02	0.04	0.72
Greater Connecticut, CT	x	-	100	-	0.00	0.22	0.28	0.08	0.07	0.19	3.62	0.00	0.22	0.27	0.08	0.07	0.19	3.62
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.00	0.00	0.00	0.08	0.00	0.01	0.01	0.00	0.00	0.00	0.08
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.10	0.12	0.04	0.03	0.08	1.64	0.00	0.10	0.12	0.04	0.03	0.08	1.64
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.09	0.11	0.03	0.03	0.08	1.49	0.00	0.09	0.11	0.03	0.03	0.08	1.49

**Table B2-33
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.02	0.03	0.01	0.01	0.02	0.39	0.00	0.02	0.03	0.01	0.01	0.02	0.39
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-23.46	-25.98	-33.47	-37.01	-47.34	-258.20	0.00	-23.59	-26.12	-33.60	-37.15	-47.48	-258.34
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-2.26	-2.51	-3.22	-3.56	-4.56	-24.96	0.00	-2.28	-2.52	-3.24	-3.58	-4.57	-24.97
Imperial Co., CA	x	-	100	-	0.00	0.03	0.03	0.01	0.01	0.02	0.46	0.00	0.03	0.03	0.01	0.01	0.02	0.46
Indianapolis, IN	-	x	-	100	0.00	0.20	0.25	0.08	0.07	0.17	3.30	0.00	0.20	0.25	0.08	0.07	0.17	3.30
Jamestown, NY	x	-	100	-	0.00	0.02	0.02	0.01	0.01	0.02	0.31	0.00	0.02	0.02	0.01	0.01	0.02	0.31
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.02	0.01	0.01	0.01	0.28	0.00	0.02	0.02	0.01	0.01	0.01	0.28
Johnstown, PA	-	x	-	100	0.00	0.02	0.02	0.01	0.01	0.01	0.25	0.00	0.02	0.02	0.01	0.01	0.01	0.25
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.02	0.01	0.00	0.01	0.24	0.00	0.01	0.02	0.01	0.00	0.01	0.24
Knoxville, TN	x	x	100	100	0.00	0.14	0.17	0.05	0.05	0.12	2.24	0.00	0.14	0.17	0.05	0.05	0.12	2.24
Lancaster, PA	-	x	-	100	0.00	0.05	0.07	0.02	0.02	0.05	0.88	0.00	0.05	0.07	0.02	0.02	0.05	0.88
Las Vegas, NV	x	-	100	-	0.00	0.18	0.22	0.07	0.06	0.15	2.91	0.00	0.18	0.22	0.07	0.06	0.15	2.91
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-11.10	-12.11	-17.44	-19.41	-24.20	-114.31	0.00	-11.17	-12.19	-17.52	-19.49	-24.28	-114.39
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.09	0.11	0.03	0.03	0.08	1.50	0.00	0.09	0.11	0.03	0.03	0.08	1.50
Louisville, KY-IN	-	x	-	100	0.00	0.14	0.18	0.05	0.05	0.12	2.31	0.00	0.14	0.18	0.05	0.05	0.12	2.31
Macon, GA	-	x	-	100	0.00	0.03	0.03	0.01	0.01	0.02	0.43	0.00	0.03	0.03	0.01	0.01	0.02	0.43
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.02	0.01	0.00	0.01	0.22	0.00	0.01	0.02	0.01	0.00	0.01	0.22
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.02	0.00	0.00	0.01	0.21	0.00	0.01	0.02	0.00	0.00	0.01	0.21
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.05	0.06	0.02	0.02	0.04	0.84	0.00	0.05	0.06	0.02	0.02	0.04	0.84
Memphis, TN-AR	x	-	100	-	0.00	-1.76	-1.94	-2.59	-2.87	-3.64	-18.96	0.00	-1.77	-1.95	-2.60	-2.88	-3.65	-18.97
Milwaukee-Racine, WI	x	-	100	-	0.00	0.22	0.27	0.08	0.07	0.19	3.61	0.00	0.22	0.27	0.08	0.07	0.19	3.61
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.02	0.00	0.00	0.01	0.20	0.00	0.01	0.02	0.00	0.00	0.01	0.20
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-1.49	-1.44	-3.96	-4.52	-5.07	-7.36	0.00	-1.51	-1.46	-3.99	-4.54	-5.09	-7.39
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.02	0.02	0.01	0.01	0.02	0.33	0.00	0.02	0.02	0.01	0.01	0.02	0.33
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-11.52	-12.70	-17.01	-18.86	-23.90	-124.07	0.00	-11.59	-12.77	-17.08	-18.93	-23.97	-124.14
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.50	0.62	0.19	0.17	0.42	8.10	0.00	0.50	0.62	0.19	0.17	0.42	8.10
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.25	0.31	0.09	0.08	0.21	4.04	0.00	0.25	0.31	0.09	0.08	0.21	4.04
Poughkeepsie, NY	x	x	100	100	0.00	0.16	0.20	0.06	0.05	0.14	2.62	0.00	0.16	0.20	0.06	0.05	0.14	2.62

**Table B2-33
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.12	0.14	0.04	0.04	0.10	1.89	0.00	0.12	0.14	0.04	0.04	0.10	1.89
Reading, PA	-	x	-	100	0.00	0.05	0.06	0.02	0.02	0.04	0.77	0.00	0.05	0.06	0.02	0.02	0.04	0.77
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.09	0.12	0.04	0.03	0.08	1.53	0.00	0.09	0.12	0.04	0.03	0.08	1.53
Rochester, NY	x	-	100	-	0.00	0.16	0.20	0.06	0.06	0.14	2.65	0.00	0.16	0.20	0.06	0.05	0.14	2.65
Rome, GA	-	x	-	100	0.00	0.01	0.02	0.01	0.00	0.01	0.23	0.00	0.01	0.02	0.01	0.00	0.01	0.23
Sacramento Metro, CA	x	-	50	-	0.00	0.28	0.34	0.10	0.09	0.23	4.46	0.00	0.28	0.34	0.10	0.09	0.23	4.46
San Diego, CA	x	-	100	-	0.00	0.39	0.47	0.14	0.13	0.32	6.24	0.00	0.39	0.47	0.14	0.13	0.32	6.24
San Francisco Bay Area, CA	x	-	100	-	0.00	-6.08	-6.65	-9.36	-10.40	-13.04	-63.49	0.00	-6.11	-6.69	-9.40	-10.45	-13.08	-63.53
San Joaquin Valley, CA	x	x	50	100	0.00	-0.60	-0.60	-1.41	-1.60	-1.84	-3.85	0.00	-0.61	-0.61	-1.42	-1.61	-1.84	-3.86
Sheboygan, WI	x	-	100	-	0.00	0.02	0.02	0.01	0.01	0.01	0.25	0.00	0.02	0.02	0.01	0.01	0.01	0.25
Springfield (Western MA), MA	x	-	100	-	0.00	0.12	0.14	0.04	0.04	0.10	1.90	0.00	0.12	0.14	0.04	0.04	0.10	1.90
St. Louis, MO-IL	x	x	100	100	0.00	-2.81	-3.08	-4.33	-4.81	-6.04	-29.41	0.00	-2.83	-3.10	-4.35	-4.83	-6.06	-29.43
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.20	-0.22	-0.29	-0.32	-0.40	-2.11	0.00	-0.20	-0.22	-0.29	-0.32	-0.41	-2.11
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.05	0.07	-0.01	-0.02	0.01	0.98	0.00	0.05	0.07	-0.01	-0.02	0.01	0.98
Washington, DC-MD-VA	x	x	100	100	0.00	0.62	0.76	0.23	0.21	0.52	10.01	0.00	0.62	0.76	0.23	0.21	0.52	10.01
Wheeling, WV-OH	-	x	-	100	0.00	0.02	0.03	0.01	0.01	0.02	0.35	0.00	0.02	0.03	0.01	0.01	0.02	0.35
York, PA	-	x	-	100	0.00	0.05	0.06	0.02	0.02	0.04	0.81	0.00	0.05	0.06	0.02	0.02	0.04	0.81

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-34
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.41	0.51	0.01	0.02	0.52	5.04	0.00	0.91	1.04	0.46	0.50	1.05	6.97
Allegan Co., MI	x	-	100	-	0.00	0.05	0.06	0.00	0.00	0.06	0.55	0.00	0.10	0.11	0.05	0.05	0.11	0.76
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.04	0.05	0.00	0.00	0.06	0.53	0.00	0.10	0.11	0.05	0.05	0.11	0.74
Atlanta, GA	x	x	100	100	0.00	2.39	2.98	0.05	0.11	3.02	29.20	0.00	5.26	6.02	2.69	2.90	6.09	40.43
Baltimore, MD	x	x	100	100	0.00	0.91	1.13	0.02	0.04	1.14	11.07	0.00	1.99	2.28	1.02	1.10	2.31	15.32
Baton Rouge, LA	x	-	100	-	0.00	-17.36	-19.08	-23.32	-26.31	-31.33	-160.70	0.00	-40.56	-42.88	-48.18	-52.06	-57.71	-184.95
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-35.25	-38.79	-46.97	-52.98	-63.47	-327.26	0.00	-82.34	-87.10	-97.35	-105.18	-116.97	-377.52
Birmingham, AL	-	x	-	100	0.00	0.32	0.40	0.01	0.02	0.41	3.96	0.00	0.71	0.82	0.36	0.39	0.83	5.48
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	1.42	1.77	0.03	0.07	1.79	17.35	0.00	3.12	3.58	1.60	1.72	3.62	24.03
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.20	0.25	0.01	0.01	0.26	2.45	0.00	0.44	0.51	0.23	0.25	0.51	3.39
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.34	0.42	0.01	0.02	0.43	4.15	0.00	0.75	0.85	0.38	0.41	0.86	5.74
Canton-Massillon, OH	-	x	-	100	0.00	-2.20	-2.40	-3.04	-3.43	-4.00	-20.14	0.00	-5.15	-5.43	-6.21	-6.71	-7.36	-22.98
Charleston, WV	-	x	-	100	0.00	0.09	0.11	0.00	0.00	0.11	1.09	0.00	0.20	0.22	0.10	0.11	0.23	1.51
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.63	0.79	0.03	0.05	0.81	7.70	0.00	1.40	1.60	0.74	0.80	1.63	10.63
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.17	0.21	0.00	0.01	0.21	2.01	0.00	0.36	0.42	0.19	0.20	0.42	2.79
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-23.37	-25.41	-33.96	-38.26	-43.24	-210.74	0.00	-54.90	-57.66	-68.08	-73.55	-79.23	-237.05
Chico, CA	x	-	100	-	0.00	0.06	0.08	0.00	0.00	0.08	0.75	0.00	0.13	0.15	0.07	0.07	0.16	1.03
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.58	0.72	0.02	0.03	0.73	7.08	0.00	1.28	1.46	0.66	0.71	1.48	9.80
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.05	0.06	0.00	0.00	0.07	0.64	0.00	0.11	0.13	0.06	0.06	0.13	0.88
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.81	1.01	0.02	0.04	1.02	9.86	0.00	1.77	2.03	0.91	0.98	2.05	13.65
Columbus, OH	x	x	100	100	0.00	0.56	0.70	0.01	0.03	0.71	6.82	0.00	1.23	1.40	0.63	0.68	1.42	9.44
Dallas-Fort Worth, TX	x	-	100	-	0.00	2.37	2.95	0.05	0.11	2.99	28.94	0.00	5.21	5.96	2.66	2.88	6.03	40.06
Dayton-Springfield, OH	-	x	-	100	0.00	0.25	0.31	0.01	0.01	0.31	3.00	0.00	0.54	0.62	0.28	0.30	0.63	4.15
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-1.89	-1.93	-3.90	-4.38	-3.97	-14.48	0.00	-4.56	-4.63	-6.95	-7.51	-7.09	-13.74
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-1.65	-1.59	-4.14	-4.64	-3.76	-10.92	0.00	-4.05	-4.00	-6.98	-7.54	-6.61	-8.41
Door Co., WI	x	-	100	-	0.00	0.01	0.01	0.00	0.00	0.01	0.12	0.00	0.02	0.03	0.01	0.01	0.03	0.17
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.11	0.14	0.01	0.01	0.14	1.34	0.00	0.24	0.28	0.13	0.14	0.28	1.85
Greater Connecticut, CT	x	-	100	-	0.00	0.55	0.69	0.01	0.02	0.70	6.76	0.00	1.22	1.39	0.62	0.67	1.41	9.37
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.00	0.00	0.02	0.15	0.00	0.03	0.03	0.01	0.01	0.03	0.20
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.25	0.31	0.01	0.01	0.32	3.07	0.00	0.55	0.63	0.28	0.31	0.64	4.25
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.22	0.28	0.00	0.01	0.28	2.74	0.00	0.49	0.56	0.25	0.27	0.57	3.79

**Table B2-34
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Hickory, NC	-	x	-	100	0.00	0.06	0.07	0.00	0.00	0.08	0.73	0.00	0.13	0.15	0.07	0.07	0.15	1.02
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-70.77	-77.66	-96.11	-108.38	-128.17	-652.97	0.00	-165.50	-174.80	-197.72	-213.63	-235.92	-749.34
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-6.83	-7.50	-9.25	-10.43	-12.36	-63.13	0.00	-15.98	-16.88	-19.05	-20.59	-22.76	-72.52
Imperial Co., CA	x	-	100	-	0.00	0.08	0.10	0.00	0.00	0.10	0.95	0.00	0.17	0.19	0.09	0.09	0.20	1.31
Indianapolis, IN	-	x	-	100	0.00	0.52	0.65	0.01	0.02	0.66	6.35	0.00	1.14	1.31	0.58	0.63	1.32	8.79
Jamestown, NY	x	-	100	-	0.00	0.05	0.06	0.00	0.00	0.06	0.55	0.00	0.10	0.11	0.05	0.05	0.11	0.76
Jefferson Co., NY	x	-	100	-	0.00	0.04	0.06	0.00	0.00	0.06	0.55	0.00	0.10	0.11	0.05	0.05	0.11	0.76
Johnstown, PA	-	x	-	100	0.00	0.04	0.04	0.00	0.00	0.05	0.44	0.00	0.08	0.09	0.04	0.04	0.09	0.61
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.04	0.05	0.00	0.00	0.05	0.48	0.00	0.08	0.10	0.04	0.04	0.10	0.66
Knoxville, TN	x	x	100	100	0.00	0.35	0.43	0.01	0.02	0.44	4.25	0.00	0.76	0.88	0.39	0.42	0.89	5.88
Lancaster, PA	-	x	-	100	0.00	0.13	0.17	0.00	0.01	0.17	1.62	0.00	0.29	0.33	0.15	0.16	0.34	2.25
Las Vegas, NV	x	-	100	-	0.00	0.51	0.64	0.01	0.03	0.64	6.23	0.00	1.12	1.28	0.57	0.62	1.30	8.62
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.01	0.04
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.01	0.00	0.00	0.01	0.07
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-34.15	-36.89	-51.65	-58.16	-64.01	-303.32	0.00	-80.42	-84.17	-102.00	-110.21	-116.95	-336.68
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.24	0.30	0.00	0.01	0.31	2.97	0.00	0.53	0.61	0.27	0.29	0.62	4.11
Louisville, KY-IN	-	x	-	100	0.00	0.34	0.43	0.01	0.02	0.44	4.20	0.00	0.76	0.87	0.39	0.42	0.88	5.81
Macon, GA	-	x	-	100	0.00	0.06	0.08	0.00	0.00	0.08	0.79	0.00	0.14	0.16	0.07	0.08	0.16	1.09
Manitowoc Co., WI	x	-	-	-	0.00	0.03	0.04	0.00	0.00	0.04	0.40	0.00	0.07	0.08	0.04	0.04	0.08	0.55
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.04	0.04	0.00	0.00	0.05	0.44	0.00	0.08	0.09	0.04	0.04	0.09	0.61
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.14	0.18	0.00	0.01	0.18	1.76	0.00	0.32	0.36	0.16	0.17	0.37	2.43
Memphis, TN-AR	x	-	100	-	0.00	-5.35	-5.85	-7.51	-8.46	-9.79	-48.87	0.00	-12.54	-13.21	-15.25	-16.48	-17.98	-55.58
Milwaukee-Racine, WI	x	-	100	-	0.00	0.54	0.67	0.01	0.02	0.68	6.60	0.00	1.19	1.36	0.61	0.66	1.38	9.14
Nevada (Western Part), CA	x	-	100	-	0.00	0.03	0.04	0.00	0.00	0.04	0.39	0.00	0.07	0.08	0.04	0.04	0.08	0.55
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-5.53	-5.44	-13.18	-14.76	-12.34	-38.40	0.00	-13.54	-13.47	-22.54	-24.35	-21.78	-31.81
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.05	0.06	0.00	0.00	0.06	0.58	0.00	0.10	0.12	0.05	0.06	0.12	0.80
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-35.06	-38.28	-49.42	-55.70	-64.24	-319.47	0.00	-82.18	-86.53	-100.21	-108.27	-117.94	-362.72
Phoenix-Mesa, AZ	x	-	100	-	0.00	1.39	1.74	0.04	0.08	1.77	17.01	0.00	3.07	3.51	1.58	1.71	3.56	23.53
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.58	0.73	0.01	0.03	0.74	7.14	0.00	1.28	1.47	0.66	0.71	1.49	9.88
Poughkeepsie, NY	x	x	100	100	0.00	0.41	0.51	0.01	0.02	0.52	5.00	0.00	0.90	1.03	0.46	0.50	1.04	6.92

**Table B2-34
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.28	0.35	0.01	0.01	0.36	3.45	0.00	0.62	0.71	0.32	0.34	0.72	4.78
Reading, PA	-	x	-	100	0.00	0.12	0.15	0.00	0.01	0.15	1.47	0.00	0.26	0.30	0.14	0.15	0.31	2.04
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.29	0.36	0.01	0.01	0.36	3.48	0.00	0.63	0.72	0.32	0.34	0.73	4.83
Rochester, NY	x	-	100	-	0.00	0.40	0.50	0.01	0.02	0.50	4.87	0.00	0.88	1.00	0.45	0.48	1.02	6.75
Rome, GA	-	x	-	100	0.00	0.03	0.04	0.00	0.00	0.04	0.42	0.00	0.08	0.09	0.04	0.04	0.09	0.58
Sacramento Metro, CA	x	-	50	-	0.00	0.72	0.90	0.02	0.03	0.91	8.80	0.00	1.58	1.81	0.81	0.87	1.83	12.18
San Diego, CA	x	-	100	-	0.00	0.93	1.16	0.02	0.04	1.17	11.33	0.00	2.04	2.34	1.04	1.13	2.36	15.69
San Francisco Bay Area, CA	x	-	100	-	0.00	-18.73	-20.32	-27.57	-31.05	-34.80	-168.11	0.00	-44.04	-46.20	-54.99	-59.42	-63.70	-188.32
San Joaquin Valley, CA	x	x	50	100	0.00	-1.96	-1.94	-4.60	-5.15	-4.35	-13.79	0.00	-4.79	-4.78	-7.90	-8.53	-7.68	-11.65
Sheboygan, WI	x	-	100	-	0.00	0.04	0.05	0.00	0.00	0.05	0.45	0.00	0.08	0.09	0.04	0.05	0.09	0.63
Springfield (Western MA), MA	x	-	100	-	0.00	0.29	0.36	0.01	0.01	0.37	3.53	0.00	0.64	0.73	0.32	0.35	0.74	4.89
St. Louis, MO-IL	x	x	100	100	0.00	-8.67	-9.41	-12.75	-14.37	-16.11	-77.85	0.00	-20.39	-21.39	-25.45	-27.50	-29.49	-87.23
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.60	-0.65	-0.83	-0.94	-1.09	-5.46	0.00	-1.40	-1.47	-1.70	-1.83	-2.00	-6.21
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.11	0.15	-0.11	-0.12	0.09	1.58	0.00	0.23	0.28	-0.02	-0.02	0.21	2.38
Washington, DC-MD-VA	x	x	100	100	0.00	1.57	1.96	0.03	0.07	1.98	19.16	0.00	3.45	3.95	1.76	1.90	3.99	26.53
Wheeling, WV-OH	-	x	-	100	0.00	0.05	0.06	0.00	0.00	0.06	0.62	0.00	0.11	0.13	0.06	0.06	0.13	0.86
York, PA	-	x	-	100	0.00	0.13	0.16	0.00	0.01	0.16	1.59	0.00	0.29	0.33	0.15	0.16	0.33	2.20

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-35
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.62	0.77	-0.04	-0.01	0.86	7.07	0.00	1.99	2.23	1.24	1.34	2.34	12.54
Allegan Co., MI	x	-	100	-	0.00	0.07	0.08	0.00	0.00	0.09	0.77	0.00	0.22	0.24	0.14	0.15	0.26	1.37
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.07	0.09	0.00	0.00	0.10	0.80	0.00	0.22	0.25	0.14	0.15	0.26	1.41
Atlanta, GA	x	x	100	100	0.00	3.94	4.92	-0.22	-0.05	5.50	45.16	0.00	12.74	14.26	7.90	8.56	14.96	80.08
Baltimore, MD	x	x	100	100	0.00	1.35	1.68	-0.08	-0.02	1.88	15.46	0.00	4.36	4.88	2.70	2.93	5.12	27.42
Baton Rouge, LA	x	-	100	-	0.00	-27.20	-29.83	-36.11	-40.89	-47.89	-240.90	0.00	-89.80	-93.98	-103.14	-110.29	-118.93	-304.96
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-55.24	-60.64	-72.67	-82.33	-97.07	-490.39	0.00	-182.32	-190.92	-208.60	-223.08	-241.23	-623.53
Birmingham, AL	-	x	-	100	0.00	0.47	0.59	-0.03	0.00	0.66	5.43	0.00	1.53	1.71	0.95	1.03	1.80	9.62
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	2.04	2.55	-0.12	-0.03	2.85	23.41	0.00	6.60	7.39	4.09	4.43	7.75	41.52
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.30	0.37	-0.01	0.00	0.42	3.41	0.00	0.96	1.08	0.60	0.65	1.13	6.02
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.48	0.60	-0.03	-0.01	0.67	5.54	0.00	1.56	1.75	0.97	1.05	1.84	9.83
Canton-Massillon, OH	-	x	-	100	0.00	-3.46	-3.77	-4.72	-5.34	-6.12	-30.35	0.00	-11.41	-11.92	-13.27	-14.19	-15.16	-37.86
Charleston, WV	-	x	-	100	0.00	0.12	0.16	-0.01	0.00	0.17	1.43	0.00	0.40	0.45	0.25	0.27	0.47	2.53
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	1.02	1.27	-0.03	0.02	1.43	11.60	0.00	3.29	3.68	2.08	2.25	3.88	20.48
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.24	0.30	-0.01	0.00	0.33	2.72	0.00	0.77	0.86	0.47	0.51	0.90	4.83
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-36.76	-39.88	-52.78	-59.63	-65.77	-318.07	0.00	-121.56	-126.55	-144.53	-154.48	-162.39	-385.91
Chico, CA	x	-	100	-	0.00	0.09	0.11	-0.01	0.00	0.13	1.04	0.00	0.29	0.33	0.18	0.20	0.34	1.84
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.86	1.07	-0.04	-0.01	1.20	9.86	0.00	2.79	3.12	1.73	1.88	3.27	17.47
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.07	0.09	0.00	0.00	0.10	0.83	0.00	0.24	0.26	0.15	0.16	0.28	1.48
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	1.15	1.43	-0.07	-0.01	1.60	13.13	0.00	3.71	4.15	2.30	2.49	4.35	23.29
Columbus, OH	x	x	100	100	0.00	0.85	1.06	-0.05	-0.01	1.19	9.75	0.00	2.75	3.08	1.71	1.85	3.23	17.30
Dallas-Fort Worth, TX	x	-	100	-	0.00	3.80	4.74	-0.22	-0.05	5.30	43.51	0.00	12.28	13.74	7.61	8.25	14.42	77.17
Dayton-Springfield, OH	-	x	-	100	0.00	0.35	0.44	-0.02	0.00	0.49	4.00	0.00	1.13	1.26	0.70	0.76	1.33	7.10
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-2.98	-3.03	-6.16	-6.89	-5.83	-22.27	0.00	-9.95	-10.04	-14.15	-15.09	-13.95	-18.93
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-2.76	-2.71	-6.58	-7.34	-5.63	-18.98	0.00	-9.26	-9.20	-14.23	-15.16	-13.29	-11.79
Door Co., WI	x	-	100	-	0.00	0.01	0.02	0.00	0.00	0.02	0.16	0.00	0.05	0.05	0.03	0.03	0.05	0.29
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.16	0.20	0.00	0.00	0.23	1.84	0.00	0.52	0.58	0.33	0.36	0.61	3.25
Greater Connecticut, CT	x	-	100	-	0.00	0.81	1.02	-0.05	-0.01	1.13	9.33	0.00	2.63	2.94	1.63	1.76	3.09	16.55
Greene Co., PA	x	-	100	-	0.00	0.02	0.02	0.00	0.00	0.02	0.19	0.00	0.05	0.06	0.03	0.04	0.06	0.33
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.37	0.46	-0.02	0.00	0.52	4.24	0.00	1.20	1.34	0.74	0.80	1.41	7.53
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.33	0.41	-0.02	0.00	0.45	3.73	0.00	1.05	1.18	0.65	0.71	1.24	6.62

**Table B2-35
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.00	0.01	0.01	0.05
Hickory, NC	-	x	-	100	0.00	0.09	0.11	-0.01	0.00	0.13	1.03	0.00	0.29	0.33	0.18	0.20	0.34	1.83
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-110.95	-121.49	-148.88	-168.55	-195.74	-979.58	0.00	-366.36	-383.16	-422.75	-452.05	-485.77	-1,233.36
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-10.73	-11.75	-14.32	-16.22	-18.90	-94.82	0.00	-35.41	-37.05	-40.78	-43.61	-46.93	-119.68
Imperial Co., CA	x	-	100	-	0.00	0.13	0.16	-0.01	0.00	0.18	1.44	0.00	0.41	0.46	0.25	0.27	0.48	2.56
Indianapolis, IN	-	x	-	100	0.00	0.79	0.99	-0.04	-0.01	1.10	9.08	0.00	2.56	2.87	1.59	1.72	3.01	16.10
Jamestown, NY	x	-	100	-	0.00	0.06	0.08	0.00	0.00	0.09	0.73	0.00	0.21	0.23	0.13	0.14	0.24	1.30
Jefferson Co., NY	x	-	100	-	0.00	0.07	0.09	0.00	0.00	0.10	0.79	0.00	0.22	0.25	0.14	0.15	0.26	1.39
Johnstown, PA	-	x	-	100	0.00	0.05	0.06	0.00	0.00	0.07	0.57	0.00	0.16	0.18	0.10	0.11	0.19	1.02
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.06	0.08	-0.01	-0.01	0.08	0.71	0.00	0.20	0.22	0.12	0.13	0.23	1.28
Knoxville, TN	x	x	100	100	0.00	0.52	0.65	-0.03	-0.01	0.72	5.95	0.00	1.68	1.88	1.04	1.13	1.97	10.55
Lancaster, PA	-	x	-	100	0.00	0.19	0.24	-0.01	0.00	0.27	2.22	0.00	0.63	0.70	0.39	0.42	0.73	3.93
Las Vegas, NV	x	-	100	-	0.00	0.86	1.07	-0.05	-0.01	1.20	9.85	0.00	2.78	3.11	1.73	1.87	3.27	17.46
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.07
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.01	0.06	0.00	0.02	0.02	0.01	0.01	0.02	0.10
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-53.62	-57.78	-80.48	-90.80	-96.85	-457.34	0.00	-177.47	-184.16	-215.32	-230.07	-238.30	-539.86
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.38	0.48	-0.03	-0.01	0.53	4.37	0.00	1.23	1.38	0.76	0.82	1.44	7.75
Louisville, KY-IN	-	x	-	100	0.00	0.49	0.61	-0.02	0.00	0.69	5.63	0.00	1.59	1.78	0.99	1.08	1.87	9.96
Macon, GA	-	x	-	100	0.00	0.09	0.12	0.00	0.00	0.13	1.06	0.00	0.30	0.33	0.19	0.20	0.35	1.87
Manitowoc Co., WI	x	-	-	-	0.00	0.05	0.06	0.00	0.00	0.06	0.53	0.00	0.15	0.17	0.09	0.10	0.17	0.94
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.06	0.07	0.00	0.00	0.08	0.67	0.00	0.19	0.21	0.12	0.13	0.22	1.19
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.24	0.30	-0.01	0.00	0.33	2.72	0.00	0.77	0.86	0.48	0.52	0.90	4.83
Memphis, TN-AR	x	-	100	-	0.00	-8.43	-9.19	-11.65	-13.17	-14.96	-73.76	0.00	-27.84	-29.06	-32.54	-34.79	-37.03	-91.45
Milwaukee-Racine, WI	x	-	100	-	0.00	0.78	0.97	-0.04	-0.01	1.09	8.93	0.00	2.52	2.82	1.56	1.69	2.96	15.83
Nevada (Western Part), CA	x	-	100	-	0.00	0.05	0.06	0.00	0.00	0.07	0.56	0.00	0.16	0.18	0.10	0.11	0.19	1.00
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-9.22	-9.16	-20.90	-23.34	-18.51	-65.33	0.00	-30.85	-30.82	-46.13	-49.16	-43.90	-46.30
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.07	0.08	0.00	0.00	0.09	0.76	0.00	0.22	0.24	0.13	0.15	0.25	1.35
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-55.10	-60.03	-76.70	-86.74	-97.94	-481.22	0.00	-182.06	-189.94	-213.51	-228.25	-242.37	-594.19
Phoenix-Mesa, AZ	x	-	100	-	0.00	2.30	2.87	-0.11	0.00	3.22	26.34	0.00	7.44	8.33	4.64	5.03	8.75	46.65
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.81	1.02	-0.05	-0.01	1.14	9.32	0.00	2.63	2.94	1.63	1.77	3.09	16.53
Poughkeepsie, NY	x	x	100	100	0.00	0.62	0.77	-0.04	-0.01	0.86	7.05	0.00	1.99	2.23	1.23	1.34	2.34	12.51

**Table B2-35
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.41	0.51	-0.02	-0.01	0.57	4.65	0.00	1.31	1.47	0.81	0.88	1.54	8.25
Reading, PA	-	x	-	100	0.00	0.18	0.23	-0.01	0.00	0.25	2.08	0.00	0.59	0.66	0.36	0.39	0.69	3.69
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.51	0.64	-0.03	-0.01	0.71	5.88	0.00	1.66	1.86	1.02	1.11	1.95	10.43
Rochester, NY	x	-	100	-	0.00	0.58	0.72	-0.03	-0.01	0.81	6.62	0.00	1.87	2.09	1.16	1.25	2.19	11.74
Rome, GA	-	x	-	100	0.00	0.05	0.06	0.00	0.00	0.07	0.57	0.00	0.16	0.18	0.10	0.11	0.19	1.01
Sacramento Metro, CA	x	-	50	-	0.00	1.12	1.40	-0.06	-0.01	1.57	12.88	0.00	3.63	4.07	2.25	2.44	4.27	22.84
San Diego, CA	x	-	100	-	0.00	1.33	1.66	-0.08	-0.02	1.85	15.21	0.00	4.29	4.80	2.66	2.88	5.04	26.97
San Francisco Bay Area, CA	x	-	100	-	0.00	-29.59	-32.06	-42.89	-48.43	-53.05	-255.29	0.00	-97.87	-101.82	-116.86	-124.89	-130.88	-308.03
San Joaquin Valley, CA	x	x	50	100	0.00	-3.00	-2.93	-7.30	-8.14	-6.16	-20.34	0.00	-10.07	-9.98	-15.65	-16.67	-14.50	-11.81
Sheboygan, WI	x	-	100	-	0.00	0.05	0.07	0.00	0.00	0.08	0.62	0.00	0.18	0.20	0.11	0.12	0.21	1.10
Springfield (Western MA), MA	x	-	100	-	0.00	0.42	0.53	-0.02	-0.01	0.59	4.83	0.00	1.36	1.53	0.85	0.92	1.60	8.57
St. Louis, MO-IL	x	x	100	100	0.00	-13.70	-14.84	-19.84	-22.41	-24.55	-118.19	0.00	-45.30	-47.13	-54.07	-57.79	-60.58	-142.66
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.94	-1.03	-1.29	-1.46	-1.67	-8.25	0.00	-3.11	-3.25	-3.63	-3.88	-4.13	-10.26
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.15	0.20	-0.20	-0.21	0.15	2.03	0.00	0.46	0.55	0.05	0.06	0.48	4.21
Washington, DC-MD-VA	x	x	100	100	0.00	2.39	2.98	-0.14	-0.04	3.33	27.39	0.00	7.73	8.65	4.78	5.18	9.07	48.60
Wheeling, WV-OH	-	x	-	100	0.00	0.07	0.09	0.00	0.00	0.10	0.81	0.00	0.23	0.26	0.14	0.15	0.27	1.44
York, PA	-	x	-	100	0.00	0.20	0.25	-0.01	0.00	0.28	2.30	0.00	0.65	0.73	0.40	0.44	0.76	4.08

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-36
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

PM 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.81	1.02	-0.12	-0.08	1.13	7.84	0.00	3.31	3.68	2.19	2.37	3.83	17.83
Allegan Co., MI	x	-	100	-	0.00	0.09	0.11	-0.01	-0.01	0.12	0.85	0.00	0.36	0.40	0.24	0.26	0.42	1.94
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.10	0.13	-0.02	-0.01	0.14	1.00	0.00	0.42	0.47	0.28	0.30	0.49	2.28
Atlanta, GA	x	x	100	100	0.00	6.43	8.09	-0.99	-0.64	9.02	62.44	0.00	26.38	29.26	17.44	18.89	30.50	141.94
Baltimore, MD	x	x	100	100	0.00	1.75	2.20	-0.27	-0.18	2.46	17.00	0.00	7.18	7.97	4.75	5.14	8.30	38.66
Baton Rouge, LA	x	-	100	-	0.00	-38.02	-41.71	-50.45	-57.39	-66.53	-329.91	0.00	-154.49	-161.06	-175.16	-186.48	-198.65	-448.20
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-77.20	-84.82	-101.47	-115.48	-134.89	-670.69	0.00	-313.78	-327.29	-354.47	-377.41	-403.12	-917.07
Birmingham, AL	-	x	-	100	0.00	0.60	0.76	-0.09	-0.06	0.85	5.85	0.00	2.47	2.74	1.64	1.77	2.86	13.29
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	2.48	3.12	-0.38	-0.25	3.48	24.12	0.00	10.19	11.30	6.73	7.29	11.78	54.83
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.38	0.48	-0.05	-0.03	0.54	3.70	0.00	1.56	1.73	1.04	1.13	1.81	8.38
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.57	0.72	-0.09	-0.06	0.80	5.56	0.00	2.35	2.61	1.55	1.68	2.72	12.65
Canton-Massillon, OH	-	x	-	100	0.00	-4.86	-5.31	-6.60	-7.50	-8.54	-42.03	0.00	-19.73	-20.54	-22.58	-24.04	-25.43	-56.15
Charleston, WV	-	x	-	100	0.00	0.14	0.18	-0.02	-0.01	0.20	1.38	0.00	0.58	0.65	0.39	0.42	0.68	3.15
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	1.54	1.94	-0.21	-0.12	2.17	14.96	0.00	6.33	7.01	4.23	4.57	7.33	33.84
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.29	0.36	-0.05	-0.03	0.40	2.81	0.00	1.19	1.32	0.78	0.84	1.37	6.42
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-51.45	-55.83	-74.05	-83.94	-91.40	-442.51	0.00	-208.95	-216.77	-244.45	-260.06	-270.75	-566.58
Chico, CA	x	-	100	-	0.00	0.12	0.15	-0.02	-0.01	0.16	1.13	0.00	0.48	0.53	0.32	0.34	0.55	2.57
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	1.15	1.45	-0.17	-0.11	1.62	11.17	0.00	4.72	5.24	3.13	3.39	5.46	25.37
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.08	0.10	-0.01	-0.01	0.12	0.80	0.00	0.34	0.38	0.22	0.24	0.39	1.82
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	1.35	1.70	-0.21	-0.14	1.90	13.14	0.00	5.55	6.16	3.67	3.97	6.42	29.88
Columbus, OH	x	x	100	100	0.00	1.18	1.48	-0.18	-0.12	1.65	11.44	0.00	4.83	5.36	3.20	3.46	5.59	26.01
Dallas-Fort Worth, TX	x	-	100	-	0.00	5.84	7.34	-0.90	-0.58	8.19	56.69	0.00	23.95	26.56	15.84	17.15	27.69	128.88
Dayton-Springfield, OH	-	x	-	100	0.00	0.41	0.52	-0.06	-0.04	0.58	4.01	0.00	1.69	1.88	1.12	1.21	1.96	9.12
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-4.11	-4.15	-8.83	-9.88	-7.99	-33.33	0.00	-16.62	-16.71	-23.26	-24.66	-22.59	-25.04
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-4.24	-4.24	-9.42	-10.52	-8.30	-34.11	0.00	-17.12	-17.14	-24.38	-25.83	-23.37	-23.55
Door Co., WI	x	-	100	-	0.00	0.02	0.02	0.00	0.00	0.02	0.16	0.00	0.07	0.08	0.05	0.05	0.08	0.37
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Evansville, IN	-	x	-	100	0.00	0.20	0.25	-0.03	-0.01	0.28	1.95	0.00	0.83	0.92	0.55	0.60	0.96	4.41
Greater Connecticut, CT	x	-	100	-	0.00	1.03	1.29	-0.16	-0.11	1.44	9.97	0.00	4.21	4.67	2.78	3.01	4.87	22.68
Greene Co., PA	x	-	100	-	0.00	0.02	0.02	0.00	0.00	0.03	0.17	0.00	0.07	0.08	0.05	0.05	0.08	0.39
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.47	0.59	-0.07	-0.05	0.66	4.56	0.00	1.93	2.14	1.27	1.38	2.23	10.37
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.40	0.51	-0.06	-0.04	0.56	3.90	0.00	1.65	1.83	1.09	1.18	1.90	8.86

**Table B2-36
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.07
Hickory, NC	-	x	-	100	0.00	0.12	0.15	-0.02	-0.01	0.17	1.15	0.00	0.49	0.54	0.32	0.35	0.56	2.61
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-155.05	-169.88	-208.18	-236.68	-271.92	-1,343.93	0.00	-630.06	-656.40	-717.50	-763.79	-811.04	-1,811.36
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-15.03	-16.48	-20.02	-22.77	-26.32	-130.35	0.00	-61.06	-63.64	-69.33	-73.81	-78.55	-176.61
Imperial Co., CA	x	-	100	-	0.00	0.19	0.25	-0.03	-0.02	0.27	1.89	0.00	0.80	0.89	0.53	0.57	0.92	4.30
Indianapolis, IN	-	x	-	100	0.00	1.10	1.38	-0.17	-0.11	1.54	10.67	0.00	4.51	5.00	2.98	3.23	5.21	24.25
Jamestown, NY	x	-	100	-	0.00	0.08	0.10	-0.01	-0.01	0.11	0.73	0.00	0.31	0.34	0.21	0.22	0.36	1.67
Jefferson Co., NY	x	-	100	-	0.00	0.09	0.12	-0.01	-0.01	0.13	0.90	0.00	0.38	0.42	0.25	0.27	0.44	2.05
Johnstown, PA	-	x	-	100	0.00	0.06	0.07	-0.01	-0.01	0.08	0.54	0.00	0.23	0.25	0.15	0.16	0.27	1.24
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.09	0.11	-0.03	-0.03	0.12	0.88	0.00	0.37	0.41	0.22	0.24	0.42	2.09
Knoxville, TN	x	x	100	100	0.00	0.68	0.85	-0.10	-0.07	0.95	6.57	0.00	2.78	3.08	1.84	1.99	3.21	14.94
Lancaster, PA	-	x	-	100	0.00	0.24	0.30	-0.04	-0.02	0.34	2.33	0.00	0.98	1.09	0.65	0.70	1.14	5.29
Las Vegas, NV	x	-	100	-	0.00	1.43	1.79	-0.21	-0.13	2.01	13.86	0.00	5.86	6.49	3.88	4.20	6.77	31.46
Libby, MT	-	x	-	100	0.00	0.00	0.01	0.00	0.00	0.01	0.04	0.00	0.02	0.02	0.01	0.01	0.02	0.09
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.01	0.05	0.00	0.02	0.02	0.01	0.01	0.02	0.11
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-74.69	-80.42	-113.39	-128.26	-134.06	-638.28	0.00	-303.19	-313.44	-362.41	-385.36	-394.97	-781.59
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.55	0.69	-0.10	-0.07	0.76	5.32	0.00	2.24	2.49	1.47	1.59	2.59	12.15
Louisville, KY-IN	-	x	-	100	0.00	0.59	0.74	-0.08	-0.05	0.82	5.69	0.00	2.41	2.67	1.60	1.73	2.78	12.90
Macon, GA	-	x	-	100	0.00	0.11	0.14	-0.02	-0.01	0.16	1.08	0.00	0.46	0.50	0.30	0.33	0.53	2.44
Manitowoc Co., WI	x	-	-	-	0.00	0.05	0.07	-0.01	-0.01	0.08	0.53	0.00	0.22	0.25	0.15	0.16	0.26	1.20
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.09	0.11	-0.01	-0.01	0.13	0.87	0.00	0.37	0.41	0.24	0.26	0.42	1.97
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.38	0.48	-0.06	-0.04	0.53	3.70	0.00	1.56	1.73	1.03	1.12	1.80	8.40
Memphis, TN-AR	x	-	100	-	0.00	-11.86	-12.95	-16.30	-18.52	-20.89	-102.52	0.00	-48.18	-50.12	-55.36	-58.92	-62.15	-135.88
Milwaukee-Racine, WI	x	-	100	-	0.00	0.95	1.19	-0.15	-0.10	1.33	9.20	0.00	3.89	4.31	2.57	2.78	4.49	20.93
Nevada (Western Part), CA	x	-	100	-	0.00	0.07	0.08	-0.01	-0.01	0.09	0.65	0.00	0.27	0.30	0.18	0.20	0.32	1.47
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-14.03	-14.17	-29.87	-33.41	-27.19	-113.91	0.00	-56.73	-57.06	-79.04	-83.78	-76.98	-87.25
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.08	0.10	-0.01	-0.01	0.11	0.74	0.00	0.31	0.35	0.21	0.22	0.36	1.68
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-77.29	-84.28	-107.48	-122.01	-136.42	-667.35	0.00	-313.98	-326.42	-362.41	-385.67	-405.50	-877.20
Phoenix-Mesa, AZ	x	-	100	-	0.00	3.66	4.60	-0.53	-0.33	5.15	35.52	0.00	15.01	16.65	9.98	10.80	17.37	80.56
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.92	1.16	-0.14	-0.09	1.30	8.96	0.00	3.79	4.20	2.51	2.71	4.38	20.37
Poughkeepsie, NY	x	x	100	100	0.00	0.81	1.02	-0.13	-0.08	1.14	7.90	0.00	3.34	3.70	2.21	2.39	3.86	17.96

**Table B2-36
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	0.49	0.61	-0.08	-0.05	0.69	4.75	0.00	2.00	2.22	1.33	1.44	2.32	10.79
Reading, PA	-	x	-	100	0.00	0.24	0.30	-0.04	-0.02	0.34	2.33	0.00	0.98	1.09	0.65	0.71	1.14	5.30
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.97	1.22	-0.16	-0.11	1.36	9.40	0.00	3.97	4.40	2.61	2.83	4.59	21.41
Rochester, NY	x	-	100	-	0.00	0.71	0.89	-0.11	-0.07	0.99	6.87	0.00	2.90	3.22	1.92	2.08	3.35	15.61
Rome, GA	-	x	-	100	0.00	0.06	0.07	-0.01	-0.01	0.08	0.58	0.00	0.24	0.27	0.16	0.17	0.28	1.31
Sacramento Metro, CA	x	-	50	-	0.00	1.62	2.04	-0.25	-0.16	2.27	15.72	0.00	6.64	7.36	4.39	4.75	7.68	35.75
San Diego, CA	x	-	100	-	0.00	1.59	1.99	-0.24	-0.16	2.22	15.39	0.00	6.50	7.21	4.30	4.66	7.52	34.99
San Francisco Bay Area, CA	x	-	100	-	0.00	-41.85	-45.42	-60.21	-68.25	-74.34	-359.97	0.00	-169.97	-176.33	-198.82	-211.52	-220.24	-461.05
San Joaquin Valley, CA	x	x	50	100	0.00	-3.86	-3.65	-10.56	-11.74	-8.04	-29.75	0.00	-15.57	-15.23	-24.76	-26.18	-21.97	-7.84
Sheboygan, WI	x	-	100	-	0.00	0.07	0.08	-0.01	-0.01	0.09	0.65	0.00	0.27	0.30	0.18	0.20	0.32	1.48
Springfield (Western MA), MA	x	-	100	-	0.00	0.53	0.66	-0.08	-0.05	0.74	5.10	0.00	2.15	2.39	1.42	1.54	2.49	11.59
St. Louis, MO-IL	x	x	100	100	0.00	-19.35	-21.00	-27.85	-31.57	-34.37	-166.42	0.00	-78.58	-81.52	-91.94	-97.81	-101.83	-213.08
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.33	-1.45	-1.81	-2.06	-2.33	-11.49	0.00	-5.39	-5.61	-6.18	-6.58	-6.95	-15.32
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.15	0.22	-0.31	-0.32	0.15	1.69	0.00	0.64	0.76	0.06	0.08	0.64	5.35
Washington, DC-MD-VA	x	x	100	100	0.00	3.36	4.23	-0.53	-0.35	4.71	32.62	0.00	13.78	15.28	9.10	9.85	15.93	74.20
Wheeling, WV-OH	-	x	-	100	0.00	0.08	0.10	-0.01	-0.01	0.11	0.78	0.00	0.33	0.37	0.22	0.24	0.38	1.78
York, PA	-	x	-	100	0.00	0.28	0.35	-0.04	-0.03	0.39	2.71	0.00	1.14	1.27	0.76	0.82	1.32	6.16

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-37
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

SOx 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.50	-0.52	-1.01	-1.14	-1.80	-14.86	0.00	-0.51	-0.52	-1.02	-1.14	-1.81	-14.86
Allegan Co., MI	x	-	100	-	0.00	-0.06	-0.06	-0.11	-0.12	-0.20	-1.63	0.00	-0.06	-0.06	-0.11	-0.13	-0.20	-1.63
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.05	-0.05	-0.10	-0.11	-0.18	-1.48	0.00	-0.05	-0.05	-0.10	-0.11	-0.18	-1.48
Atlanta, GA	x	x	100	100	0.00	-2.68	-2.74	-5.38	-6.06	-9.58	-79.00	0.00	-2.70	-2.76	-5.40	-6.08	-9.60	-79.02
Baltimore, MD	x	x	100	100	0.00	-1.12	-1.14	-2.24	-2.52	-3.99	-32.86	0.00	-1.13	-1.15	-2.25	-2.53	-4.00	-32.87
Baton Rouge, LA	x	-	100	-	0.00	-25.08	-27.92	-34.55	-38.05	-48.44	-260.78	0.00	-25.22	-28.05	-34.69	-38.20	-48.59	-260.92
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-50.14	-55.84	-68.85	-75.80	-96.24	-514.41	0.00	-50.40	-56.11	-69.12	-76.08	-96.54	-514.70
Birmingham, AL	-	x	-	100	0.00	-0.41	-0.42	-0.82	-0.92	-1.45	-12.00	0.00	-0.41	-0.42	-0.82	-0.92	-1.46	-12.00
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-1.82	-1.86	-3.64	-4.10	-6.48	-53.45	0.00	-1.83	-1.87	-3.66	-4.12	-6.50	-53.46
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.24	-0.24	-0.48	-0.54	-0.86	-7.13	0.00	-0.24	-0.24	-0.48	-0.54	-0.86	-7.13
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.44	-0.45	-0.88	-0.99	-1.56	-12.85	0.00	-0.44	-0.45	-0.88	-0.99	-1.56	-12.86
Canton-Massillon, OH	-	x	-	100	0.00	-3.37	-3.74	-4.69	-5.17	-6.65	-36.72	0.00	-3.38	-3.76	-4.71	-5.19	-6.67	-36.74
Charleston, WV	-	x	-	100	0.00	-0.12	-0.12	-0.23	-0.26	-0.42	-3.44	0.00	-0.12	-0.12	-0.24	-0.26	-0.42	-3.44
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.64	-0.65	-1.32	-1.49	-2.39	-20.10	0.00	-0.64	-0.65	-1.33	-1.50	-2.40	-20.11
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.21	-0.21	-0.41	-0.47	-0.74	-6.12	0.00	-0.21	-0.21	-0.42	-0.47	-0.74	-6.12
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-38.92	-43.11	-55.12	-60.81	-79.07	-450.03	0.00	-39.13	-43.32	-55.34	-61.04	-79.30	-450.26
Chico, CA	x	-	100	-	0.00	-0.08	-0.08	-0.15	-0.17	-0.27	-2.22	0.00	-0.08	-0.08	-0.15	-0.17	-0.27	-2.22
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.71	-0.73	-1.44	-1.62	-2.56	-21.19	0.00	-0.72	-0.73	-1.44	-1.63	-2.57	-21.19
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.07	-0.07	-0.14	-0.15	-0.24	-2.01	0.00	-0.07	-0.07	-0.14	-0.16	-0.24	-2.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-1.04	-1.07	-2.09	-2.35	-3.72	-30.66	0.00	-1.05	-1.07	-2.10	-2.36	-3.73	-30.67
Columbus, OH	x	x	100	100	0.00	-0.67	-0.69	-1.35	-1.52	-2.40	-19.81	0.00	-0.68	-0.69	-1.35	-1.53	-2.41	-19.82
Dallas-Fort Worth, TX	x	-	100	-	0.00	-2.73	-2.79	-5.47	-6.16	-9.73	-80.28	0.00	-2.75	-2.81	-5.49	-6.18	-9.75	-80.30
Dayton-Springfield, OH	-	x	-	100	0.00	-0.32	-0.32	-0.63	-0.71	-1.13	-9.30	0.00	-0.32	-0.33	-0.64	-0.72	-1.13	-9.30
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-5.44	-5.94	-8.26	-9.15	-12.50	-79.75	0.00	-5.47	-5.97	-8.29	-9.19	-12.53	-79.78
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-6.34	-6.89	-9.90	-11.00	-15.29	-101.26	0.00	-6.38	-6.93	-9.94	-11.04	-15.33	-101.30
Door Co., WI	x	-	100	-	0.00	-0.01	-0.01	-0.03	-0.03	-0.05	-0.38	0.00	-0.01	-0.01	-0.03	-0.03	-0.05	-0.38
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	-0.02	-0.02
Evansville, IN	-	x	-	100	0.00	-0.13	-0.13	-0.26	-0.29	-0.46	-3.88	0.00	-0.13	-0.13	-0.26	-0.29	-0.47	-3.89
Greater Connecticut, CT	x	-	100	-	0.00	-0.69	-0.71	-1.39	-1.56	-2.47	-20.36	0.00	-0.70	-0.71	-1.39	-1.57	-2.48	-20.36
Greene Co., PA	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.04	-0.06	-0.47	0.00	-0.02	-0.02	-0.03	-0.04	-0.06	-0.47
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.31	-0.32	-0.63	-0.71	-1.11	-9.19	0.00	-0.31	-0.32	-0.63	-0.71	-1.12	-9.19
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.28	-0.29	-0.57	-0.64	-1.01	-8.33	0.00	-0.29	-0.29	-0.57	-0.64	-1.01	-8.33

**Table B2-37
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.06	0.00	0.00	0.00	0.00	0.00	-0.01	-0.06
Hickory, NC	-	x	-	100	0.00	-0.07	-0.08	-0.15	-0.17	-0.26	-2.16	0.00	-0.07	-0.08	-0.15	-0.17	-0.26	-2.16
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-104.32	-116.03	-144.30	-158.95	-203.00	-1,102.47	0.00	-104.87	-116.59	-144.88	-159.55	-203.62	-1,103.08
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-9.99	-11.11	-13.81	-15.21	-19.41	-105.17	0.00	-10.04	-11.17	-13.86	-15.26	-19.46	-105.23
Imperial Co., CA	x	-	100	-	0.00	-0.09	-0.09	-0.17	-0.20	-0.31	-2.56	0.00	-0.09	-0.09	-0.18	-0.20	-0.31	-2.56
Indianapolis, IN	-	x	-	100	0.00	-0.63	-0.64	-1.26	-1.42	-2.24	-18.50	0.00	-0.63	-0.65	-1.27	-1.42	-2.25	-18.50
Jamestown, NY	x	-	100	-	0.00	-0.06	-0.06	-0.12	-0.13	-0.21	-1.71	0.00	-0.06	-0.06	-0.12	-0.13	-0.21	-1.71
Jefferson Co., NY	x	-	100	-	0.00	-0.05	-0.06	-0.11	-0.12	-0.19	-1.59	0.00	-0.05	-0.06	-0.11	-0.12	-0.19	-1.59
Johnstown, PA	-	x	-	100	0.00	-0.05	-0.05	-0.10	-0.11	-0.17	-1.40	0.00	-0.05	-0.05	-0.10	-0.11	-0.17	-1.40
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.05	-0.05	-0.10	-0.11	-0.17	-1.38	0.00	-0.05	-0.05	-0.10	-0.11	-0.17	-1.38
Knoxville, TN	x	x	100	100	0.00	-0.43	-0.44	-0.86	-0.96	-1.52	-12.56	0.00	-0.43	-0.44	-0.86	-0.97	-1.53	-12.57
Lancaster, PA	-	x	-	100	0.00	-0.17	-0.17	-0.33	-0.38	-0.60	-4.91	0.00	-0.17	-0.17	-0.34	-0.38	-0.60	-4.91
Las Vegas, NV	x	-	100	-	0.00	-0.55	-0.56	-1.11	-1.25	-1.97	-16.25	0.00	-0.55	-0.57	-1.11	-1.25	-1.97	-16.26
Libby, MT	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.08	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.08
Liberty-Clairton, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.16	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.16
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-60.85	-67.26	-87.10	-96.17	-126.04	-731.74	0.00	-61.18	-67.59	-87.45	-96.53	-126.41	-732.10
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.29	-0.29	-0.57	-0.65	-1.02	-8.41	0.00	-0.29	-0.30	-0.58	-0.65	-1.02	-8.41
Louisville, KY-IN	-	x	-	100	0.00	-0.43	-0.44	-0.87	-0.98	-1.55	-12.80	0.00	-0.43	-0.44	-0.87	-0.98	-1.55	-12.81
Macon, GA	-	x	-	100	0.00	-0.08	-0.08	-0.16	-0.18	-0.29	-2.38	0.00	-0.08	-0.08	-0.16	-0.18	-0.29	-2.38
Manitowoc Co., WI	x	-	-	-	0.00	-0.04	-0.04	-0.08	-0.10	-0.15	-1.24	0.00	-0.04	-0.04	-0.08	-0.10	-0.15	-1.24
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.04	-0.04	-0.08	-0.09	-0.15	-1.20	0.00	-0.04	-0.04	-0.08	-0.09	-0.15	-1.20
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.16	-0.16	-0.32	-0.36	-0.57	-4.71	0.00	-0.16	-0.16	-0.32	-0.36	-0.57	-4.71
Memphis, TN-AR	x	-	100	-	0.00	-8.38	-9.30	-11.74	-12.94	-16.69	-92.94	0.00	-8.43	-9.35	-11.78	-12.99	-16.73	-92.98
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.69	-0.70	-1.38	-1.56	-2.46	-20.25	0.00	-0.69	-0.71	-1.39	-1.56	-2.46	-20.26
Nevada (Western Part), CA	x	-	100	-	0.00	-0.04	-0.04	-0.08	-0.09	-0.14	-1.15	0.00	-0.04	-0.04	-0.08	-0.09	-0.14	-1.15
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-19.79	-21.53	-30.73	-34.11	-47.25	-310.73	0.00	-19.90	-21.64	-30.85	-34.24	-47.37	-310.85
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.06	-0.06	-0.12	-0.14	-0.22	-1.82	0.00	-0.06	-0.06	-0.12	-0.14	-0.22	-1.82
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-55.34	-61.40	-77.59	-85.55	-110.41	-616.37	0.00	-55.64	-61.70	-77.90	-85.88	-110.73	-616.69
Phoenix-Mesa, AZ	x	-	100	-	0.00	-1.51	-1.54	-3.04	-3.42	-5.42	-44.91	0.00	-1.52	-1.55	-3.05	-3.44	-5.44	-44.93
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.77	-0.78	-1.54	-1.73	-2.74	-22.61	0.00	-0.77	-0.79	-1.55	-1.74	-2.75	-22.62
Poughkeepsie, NY	x	x	100	100	0.00	-0.50	-0.51	-1.00	-1.13	-1.78	-14.67	0.00	-0.50	-0.51	-1.00	-1.13	-1.78	-14.67

**Table B2-37
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-0.36	-0.37	-0.72	-0.81	-1.29	-10.61	0.00	-0.36	-0.37	-0.73	-0.82	-1.29	-10.62
Reading, PA	-	x	-	100	0.00	-0.15	-0.15	-0.29	-0.33	-0.52	-4.31	0.00	-0.15	-0.15	-0.29	-0.33	-0.52	-4.31
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.29	-0.30	-0.58	-0.66	-1.04	-8.57	0.00	-0.29	-0.30	-0.59	-0.66	-1.04	-8.57
Rochester, NY	x	-	100	-	0.00	-0.51	-0.52	-1.01	-1.14	-1.80	-14.86	0.00	-0.51	-0.52	-1.02	-1.14	-1.81	-14.87
Rome, GA	-	x	-	100	0.00	-0.04	-0.05	-0.09	-0.10	-0.16	-1.30	0.00	-0.04	-0.05	-0.09	-0.10	-0.16	-1.30
Sacramento Metro, CA	x	-	50	-	0.00	-0.85	-0.87	-1.70	-1.91	-3.03	-24.96	0.00	-0.85	-0.87	-1.71	-1.92	-3.03	-24.97
San Diego, CA	x	-	100	-	0.00	-1.19	-1.21	-2.38	-2.68	-4.24	-34.95	0.00	-1.20	-1.22	-2.39	-2.69	-4.25	-34.96
San Francisco Bay Area, CA	x	-	100	-	0.00	-31.90	-35.30	-45.39	-50.10	-65.37	-375.40	0.00	-32.07	-35.47	-45.57	-50.28	-65.56	-375.59
San Joaquin Valley, CA	x	x	50	100	0.00	-6.65	-7.25	-10.22	-11.34	-15.60	-101.15	0.00	-6.69	-7.29	-10.26	-11.38	-15.64	-101.19
Sheboygan, WI	x	-	100	-	0.00	-0.05	-0.05	-0.09	-0.11	-0.17	-1.38	0.00	-0.05	-0.05	-0.09	-0.11	-0.17	-1.38
Springfield (Western MA), MA	x	-	100	-	0.00	-0.36	-0.37	-0.73	-0.82	-1.29	-10.67	0.00	-0.36	-0.37	-0.73	-0.82	-1.30	-10.67
St. Louis, MO-IL	x	x	100	100	0.00	-14.80	-16.38	-21.05	-23.23	-30.31	-173.97	0.00	-14.88	-16.46	-21.13	-23.32	-30.40	-174.06
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.93	-1.03	-1.30	-1.44	-1.85	-10.30	0.00	-0.94	-1.04	-1.31	-1.44	-1.86	-10.30
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.37	-0.39	-0.67	-0.75	-1.13	-8.60	0.00	-0.38	-0.40	-0.67	-0.75	-1.13	-8.60
Washington, DC-MD-VA	x	x	100	100	0.00	-1.92	-1.96	-3.84	-4.33	-6.83	-56.27	0.00	-1.93	-1.98	-3.86	-4.34	-6.84	-56.29
Wheeling, WV-OH	-	x	-	100	0.00	-0.07	-0.07	-0.13	-0.15	-0.24	-1.96	0.00	-0.07	-0.07	-0.13	-0.15	-0.24	-1.96
York, PA	-	x	-	100	0.00	-0.15	-0.16	-0.31	-0.35	-0.55	-4.56	0.00	-0.16	-0.16	-0.31	-0.35	-0.55	-4.56

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-38
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-1.63	-1.66	-3.08	-3.50	-4.67	-38.53	0.00	-3.72	-3.79	-5.43	-5.94	-7.19	-40.22
Allegan Co., MI	x	-	100	-	0.00	-0.18	-0.18	-0.34	-0.38	-0.51	-4.21	0.00	-0.41	-0.41	-0.59	-0.65	-0.79	-4.40
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.17	-0.18	-0.33	-0.37	-0.49	-4.08	0.00	-0.39	-0.40	-0.58	-0.63	-0.76	-4.26
Atlanta, GA	x	x	100	100	0.00	-9.42	-9.60	-17.83	-20.26	-27.05	-223.28	0.00	-21.57	-21.95	-31.46	-34.40	-41.64	-233.06
Baltimore, MD	x	x	100	100	0.00	-3.58	-3.65	-6.78	-7.70	-10.28	-84.78	0.00	-8.21	-8.35	-11.96	-13.08	-15.83	-88.50
Baton Rouge, LA	x	-	100	-	0.00	-75.03	-82.77	-98.45	-110.80	-131.94	-649.88	0.00	-175.15	-185.45	-205.99	-222.21	-246.13	-759.18
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-149.87	-165.43	-195.95	-220.52	-262.22	-1,280.17	0.00	-349.92	-370.61	-410.76	-443.04	-490.28	-1,499.00
Birmingham, AL	-	x	-	100	0.00	-1.27	-1.30	-2.41	-2.74	-3.66	-30.22	0.00	-2.91	-2.96	-4.25	-4.65	-5.63	-31.54
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-5.61	-5.72	-10.61	-12.06	-16.10	-132.83	0.00	-12.85	-13.07	-18.73	-20.48	-24.78	-138.65
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.76	-0.77	-1.45	-1.65	-2.20	-18.34	0.00	-1.73	-1.76	-2.54	-2.78	-3.38	-19.12
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1.34	-1.37	-2.54	-2.88	-3.85	-31.75	0.00	-3.07	-3.12	-4.48	-4.89	-5.92	-33.14
Canton-Massillon, OH	-	x	-	100	0.00	-10.07	-11.09	-13.37	-15.06	-18.01	-91.34	0.00	-23.50	-24.85	-27.81	-30.02	-33.35	-105.90
Charleston, WV	-	x	-	100	0.00	-0.35	-0.36	-0.67	-0.76	-1.01	-8.33	0.00	-0.81	-0.82	-1.17	-1.28	-1.55	-8.69
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-2.26	-2.29	-4.38	-4.98	-6.69	-56.27	0.00	-5.17	-5.24	-7.65	-8.37	-10.19	-58.54
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.65	-0.66	-1.23	-1.39	-1.86	-15.38	0.00	-1.48	-1.51	-2.16	-2.37	-2.87	-16.05
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-116.83	-128.24	-157.70	-177.65	-213.90	-1,126.18	0.00	-272.40	-287.70	-325.27	-351.25	-391.91	-1,293.20
Chico, CA	x	-	100	-	0.00	-0.24	-0.25	-0.46	-0.52	-0.69	-5.71	0.00	-0.55	-0.56	-0.81	-0.88	-1.07	-5.96
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-2.25	-2.29	-4.28	-4.86	-6.50	-53.78	0.00	-5.16	-5.25	-7.54	-8.24	-9.99	-56.11
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.21	-0.21	-0.39	-0.44	-0.59	-4.87	0.00	-0.47	-0.48	-0.69	-0.75	-0.91	-5.08
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-3.18	-3.25	-6.02	-6.85	-9.14	-75.43	0.00	-7.29	-7.42	-10.64	-11.63	-14.07	-78.74
Columbus, OH	x	x	100	100	0.00	-2.20	-2.24	-4.16	-4.73	-6.32	-52.13	0.00	-5.04	-5.13	-7.35	-8.03	-9.72	-54.41
Dallas-Fort Worth, TX	x	-	100	-	0.00	-9.34	-9.52	-17.68	-20.09	-26.82	-221.36	0.00	-21.40	-21.77	-31.20	-34.11	-41.29	-231.06
Dayton-Springfield, OH	-	x	-	100	0.00	-0.97	-0.99	-1.83	-2.08	-2.78	-22.94	0.00	-2.22	-2.26	-3.23	-3.53	-4.28	-23.94
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-16.66	-18.04	-24.21	-27.33	-33.80	-205.17	0.00	-38.72	-40.61	-48.15	-52.14	-59.27	-227.75
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-19.18	-20.67	-28.50	-32.20	-40.13	-252.63	0.00	-44.52	-46.59	-56.08	-60.77	-69.47	-278.16
Door Co., WI	x	-	100	-	0.00	-0.04	-0.04	-0.07	-0.08	-0.11	-0.93	0.00	-0.09	-0.09	-0.13	-0.14	-0.17	-0.97
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.04
Evansville, IN	-	x	-	100	0.00	-0.40	-0.40	-0.77	-0.88	-1.18	-9.86	0.00	-0.91	-0.93	-1.35	-1.48	-1.79	-10.26
Greater Connecticut, CT	x	-	100	-	0.00	-2.19	-2.24	-4.15	-4.72	-6.29	-51.88	0.00	-5.03	-5.12	-7.33	-8.01	-9.69	-54.17
Greene Co., PA	x	-	100	-	0.00	-0.05	-0.05	-0.09	-0.10	-0.13	-1.11	0.00	-0.11	-0.11	-0.16	-0.17	-0.21	-1.16
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.99	-1.01	-1.88	-2.13	-2.85	-23.49	0.00	-2.27	-2.31	-3.31	-3.62	-4.38	-24.52
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.88	-0.90	-1.67	-1.90	-2.54	-20.97	0.00	-2.03	-2.06	-2.96	-3.23	-3.91	-21.89

**Table B2-38
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.14	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.15
Hickory, NC	-	x	-	100	0.00	-0.24	-0.24	-0.45	-0.51	-0.68	-5.62	0.00	-0.54	-0.55	-0.79	-0.87	-1.05	-5.87
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-312.25	-344.20	-411.45	-463.16	-552.46	-2,749.96	0.00	-728.79	-771.36	-859.07	-926.85	-1,027.75	-3,203.58
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-29.88	-32.94	-39.31	-44.25	-52.75	-261.69	0.00	-69.74	-73.82	-82.14	-88.62	-98.23	-305.13
Imperial Co., CA	x	-	100	-	0.00	-0.31	-0.31	-0.58	-0.66	-0.88	-7.23	0.00	-0.70	-0.71	-1.02	-1.11	-1.35	-7.55
Indianapolis, IN	-	x	-	100	0.00	-2.05	-2.09	-3.88	-4.41	-5.88	-48.55	0.00	-4.69	-4.78	-6.84	-7.48	-9.06	-50.68
Jamestown, NY	x	-	100	-	0.00	-0.18	-0.18	-0.34	-0.38	-0.51	-4.22	0.00	-0.41	-0.42	-0.59	-0.65	-0.79	-4.40
Jefferson Co., NY	x	-	100	-	0.00	-0.18	-0.18	-0.34	-0.38	-0.51	-4.20	0.00	-0.41	-0.41	-0.59	-0.65	-0.78	-4.39
Johnstown, PA	-	x	-	100	0.00	-0.14	-0.15	-0.27	-0.31	-0.41	-3.38	0.00	-0.33	-0.33	-0.48	-0.52	-0.63	-3.53
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.18	-0.18	-0.33	-0.37	-0.49	-3.94	0.00	-0.41	-0.42	-0.59	-0.64	-0.77	-4.14
Knoxville, TN	x	x	100	100	0.00	-1.37	-1.40	-2.59	-2.95	-3.93	-32.48	0.00	-3.14	-3.19	-4.57	-5.00	-6.05	-33.90
Lancaster, PA	-	x	-	100	0.00	-0.52	-0.53	-0.99	-1.13	-1.50	-12.41	0.00	-1.20	-1.22	-1.75	-1.91	-2.32	-12.96
Las Vegas, NV	x	-	100	-	0.00	-2.00	-2.03	-3.78	-4.30	-5.74	-47.47	0.00	-4.57	-4.65	-6.68	-7.30	-8.84	-49.54
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.20	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.21
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.03	-0.05	-0.37	0.00	-0.04	-0.04	-0.05	-0.06	-0.07	-0.39
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-183.61	-201.11	-250.88	-282.72	-341.99	-1,848.53	0.00	-427.87	-451.41	-514.31	-555.64	-621.89	-2,108.83
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.97	-0.99	-1.83	-2.08	-2.78	-22.89	0.00	-2.23	-2.27	-3.24	-3.54	-4.29	-23.90
Louisville, KY-IN	-	x	-	100	0.00	-1.32	-1.34	-2.51	-2.86	-3.82	-31.69	0.00	-3.02	-3.07	-4.42	-4.84	-5.86	-33.05
Macon, GA	-	x	-	100	0.00	-0.25	-0.25	-0.47	-0.53	-0.71	-5.92	0.00	-0.56	-0.57	-0.82	-0.90	-1.09	-6.17
Manitowoc Co., WI	x	-	-	-	0.00	-0.13	-0.13	-0.24	-0.28	-0.37	-3.05	0.00	-0.30	-0.30	-0.43	-0.47	-0.57	-3.18
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.14	-0.15	-0.27	-0.31	-0.41	-3.37	0.00	-0.33	-0.33	-0.48	-0.52	-0.63	-3.52
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.57	-0.58	-1.07	-1.22	-1.63	-13.45	0.00	-1.30	-1.32	-1.90	-2.07	-2.51	-14.04
Memphis, TN-AR	x	-	100	-	0.00	-25.09	-27.60	-33.46	-37.67	-45.15	-231.25	0.00	-58.52	-61.88	-69.43	-74.94	-83.36	-267.41
Milwaukee-Racine, WI	x	-	100	-	0.00	-2.13	-2.18	-4.04	-4.59	-6.13	-50.55	0.00	-4.89	-4.98	-7.13	-7.79	-9.43	-52.77
Nevada (Western Part), CA	x	-	100	-	0.00	-0.13	-0.13	-0.24	-0.27	-0.37	-3.02	0.00	-0.29	-0.30	-0.43	-0.47	-0.56	-3.16
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-59.82	-64.55	-88.42	-99.88	-124.24	-775.54	0.00	-138.90	-145.45	-174.42	-188.98	-215.74	-855.53
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.19	-0.19	-0.35	-0.40	-0.53	-4.42	0.00	-0.42	-0.43	-0.62	-0.68	-0.82	-4.61
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-165.97	-182.51	-221.75	-249.73	-299.50	-1,540.77	0.00	-387.14	-409.25	-459.74	-496.27	-552.27	-1,779.68
Phoenix-Mesa, AZ	x	-	100	-	0.00	-5.36	-5.46	-10.20	-11.60	-15.51	-128.59	0.00	-12.28	-12.48	-17.97	-19.65	-23.81	-134.12
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-2.30	-2.34	-4.35	-4.95	-6.60	-54.54	0.00	-5.27	-5.36	-7.68	-8.40	-10.17	-56.93
Poughkeepsie, NY	x	x	100	100	0.00	-1.61	-1.65	-3.05	-3.47	-4.63	-38.25	0.00	-3.70	-3.76	-5.39	-5.89	-7.13	-39.93

**Table B2-38
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-1.12	-1.14	-2.11	-2.40	-3.20	-26.42	0.00	-2.55	-2.60	-3.73	-4.07	-4.93	-27.58
Reading, PA	-	x	-	100	0.00	-0.47	-0.48	-0.90	-1.02	-1.36	-11.26	0.00	-1.09	-1.11	-1.59	-1.73	-2.10	-11.75
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-1.13	-1.16	-2.14	-2.43	-3.25	-26.77	0.00	-2.60	-2.64	-3.78	-4.14	-5.00	-27.95
Rochester, NY	x	-	100	-	0.00	-1.57	-1.60	-2.98	-3.38	-4.52	-37.29	0.00	-3.60	-3.67	-5.26	-5.75	-6.96	-38.92
Rome, GA	-	x	-	100	0.00	-0.14	-0.14	-0.26	-0.29	-0.39	-3.23	0.00	-0.31	-0.32	-0.45	-0.50	-0.60	-3.37
Sacramento Metro, CA	x	-	50	-	0.00	-2.84	-2.89	-5.37	-6.11	-8.15	-67.29	0.00	-6.50	-6.62	-9.48	-10.37	-12.55	-70.24
San Diego, CA	x	-	100	-	0.00	-3.66	-3.73	-6.92	-7.87	-10.50	-86.70	0.00	-8.38	-8.53	-12.22	-13.36	-16.17	-90.49
San Francisco Bay Area, CA	x	-	100	-	0.00	-95.69	-104.96	-129.70	-146.12	-176.21	-936.11	0.00	-223.07	-235.52	-266.96	-288.33	-322.04	-1,072.53
San Joaquin Valley, CA	x	x	50	100	0.00	-20.71	-22.36	-30.56	-34.52	-42.92	-267.22	0.00	-48.09	-50.37	-60.34	-65.37	-74.60	-294.95
Sheboygan, WI	x	-	100	-	0.00	-0.15	-0.15	-0.28	-0.32	-0.42	-3.49	0.00	-0.34	-0.34	-0.49	-0.54	-0.65	-3.64
Springfield (Western MA), MA	x	-	100	-	0.00	-1.14	-1.16	-2.16	-2.45	-3.27	-27.00	0.00	-2.61	-2.66	-3.81	-4.16	-5.04	-28.19
St. Louis, MO-IL	x	x	100	100	0.00	-44.38	-48.68	-60.12	-67.74	-81.68	-433.58	0.00	-103.45	-109.22	-123.78	-133.68	-149.30	-496.86
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-2.78	-3.06	-3.70	-4.17	-4.99	-25.50	0.00	-6.48	-6.86	-7.69	-8.30	-9.22	-29.50
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-1.15	-1.20	-1.95	-2.21	-2.87	-21.52	0.00	-2.64	-2.73	-3.61	-3.93	-4.64	-22.87
Washington, DC-MD-VA	x	x	100	100	0.00	-6.22	-6.35	-11.76	-13.36	-17.83	-147.02	0.00	-14.26	-14.51	-20.77	-22.71	-27.47	-153.49
Wheeling, WV-OH	-	x	-	100	0.00	-0.20	-0.20	-0.38	-0.43	-0.57	-4.74	0.00	-0.46	-0.47	-0.67	-0.73	-0.88	-4.95
York, PA	-	x	-	100	0.00	-0.51	-0.52	-0.97	-1.11	-1.48	-12.18	0.00	-1.18	-1.20	-1.72	-1.88	-2.27	-12.72

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-39
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-2.56	-2.61	-4.77	-5.43	-6.99	-57.66	0.00	-8.13	-8.26	-11.02	-11.91	-13.68	-61.88
Allegan Co., MI	x	-	100	-	0.00	-0.28	-0.28	-0.52	-0.59	-0.76	-6.30	0.00	-0.89	-0.90	-1.20	-1.30	-1.49	-6.76
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.29	-0.29	-0.54	-0.61	-0.79	-6.50	0.00	-0.92	-0.93	-1.24	-1.34	-1.54	-6.98
Atlanta, GA	x	x	100	100	0.00	-16.33	-16.65	-30.45	-34.67	-44.64	-368.13	0.00	-51.87	-52.71	-70.36	-76.01	-87.29	-395.07
Baltimore, MD	x	x	100	100	0.00	-5.61	-5.72	-10.45	-11.90	-15.32	-126.27	0.00	-17.83	-18.12	-24.17	-26.11	-29.98	-135.54
Baton Rouge, LA	x	-	100	-	0.00	-117.45	-129.27	-152.28	-172.17	-201.87	-972.26	0.00	-387.63	-406.16	-442.40	-472.53	-509.54	-1,261.78
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-234.54	-258.30	-303.00	-342.53	-401.15	-1,913.85	0.00	-774.31	-811.52	-882.37	-942.38	-1,015.54	-2,493.56
Birmingham, AL	-	x	-	100	0.00	-1.96	-1.99	-3.65	-4.15	-5.35	-44.16	0.00	-6.21	-6.31	-8.43	-9.10	-10.46	-47.38
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-8.48	-8.65	-15.81	-18.00	-23.17	-191.02	0.00	-26.94	-27.38	-36.54	-39.47	-45.32	-205.02
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.18	-1.20	-2.23	-2.54	-3.27	-27.20	0.00	-3.75	-3.81	-5.11	-5.53	-6.36	-29.12
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-2.01	-2.05	-3.74	-4.26	-5.49	-45.23	0.00	-6.38	-6.48	-8.65	-9.35	-10.73	-48.55
Canton-Massillon, OH	-	x	-	100	0.00	-15.74	-17.29	-20.63	-23.33	-27.46	-135.99	0.00	-51.89	-54.33	-59.50	-63.57	-68.68	-174.46
Charleston, WV	-	x	-	100	0.00	-0.52	-0.53	-0.96	-1.10	-1.41	-11.64	0.00	-1.64	-1.67	-2.23	-2.40	-2.76	-12.50
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-3.88	-3.94	-7.38	-8.40	-10.86	-91.01	0.00	-12.29	-12.47	-16.85	-18.22	-20.99	-97.21
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.00	-1.02	-1.85	-2.11	-2.72	-22.34	0.00	-3.17	-3.22	-4.29	-4.64	-5.32	-23.99
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-182.79	-200.22	-243.79	-275.80	-326.29	-1,683.48	0.00	-601.80	-629.37	-694.98	-742.95	-805.02	-2,124.32
Chico, CA	x	-	100	-	0.00	-0.38	-0.38	-0.70	-0.80	-1.03	-8.48	0.00	-1.19	-1.21	-1.62	-1.75	-2.01	-9.10
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-3.52	-3.58	-6.58	-7.49	-9.65	-79.84	0.00	-11.17	-11.34	-15.18	-16.40	-18.84	-85.62
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.30	-0.31	-0.56	-0.64	-0.82	-6.80	0.00	-0.96	-0.97	-1.30	-1.40	-1.61	-7.29
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-4.76	-4.85	-8.87	-10.09	-13.00	-107.14	0.00	-15.11	-15.35	-20.49	-22.14	-25.42	-115.00
Columbus, OH	x	x	100	100	0.00	-3.53	-3.60	-6.58	-7.49	-9.65	-79.54	0.00	-11.21	-11.39	-15.20	-16.43	-18.86	-85.36
Dallas-Fort Worth, TX	x	-	100	-	0.00	-15.74	-16.05	-29.35	-33.42	-43.03	-354.82	0.00	-50.02	-50.82	-67.84	-73.29	-84.15	-380.81
Dayton-Springfield, OH	-	x	-	100	0.00	-1.45	-1.48	-2.70	-3.08	-3.96	-32.65	0.00	-4.60	-4.68	-6.24	-6.74	-7.74	-35.04
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-26.34	-28.46	-37.90	-42.95	-51.97	-312.15	0.00	-86.12	-89.58	-102.80	-110.15	-120.92	-371.71
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-29.74	-32.03	-43.52	-49.33	-59.97	-370.61	0.00	-97.07	-100.84	-116.75	-125.16	-137.80	-436.81
Door Co., WI	x	-	100	-	0.00	-0.06	-0.06	-0.11	-0.12	-0.16	-1.32	0.00	-0.19	-0.19	-0.25	-0.27	-0.31	-1.42
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.06	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.06
Evansville, IN	-	x	-	100	0.00	-0.62	-0.62	-1.17	-1.33	-1.72	-14.44	0.00	-1.95	-1.98	-2.68	-2.89	-3.33	-15.42
Greater Connecticut, CT	x	-	100	-	0.00	-3.39	-3.46	-6.32	-7.19	-9.26	-76.28	0.00	-10.78	-10.96	-14.61	-15.79	-18.12	-81.89
Greene Co., PA	x	-	100	-	0.00	-0.07	-0.07	-0.13	-0.14	-0.18	-1.52	0.00	-0.21	-0.22	-0.29	-0.31	-0.36	-1.63
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1.54	-1.57	-2.86	-3.26	-4.20	-34.61	0.00	-4.88	-4.96	-6.62	-7.15	-8.21	-37.15
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1.35	-1.38	-2.52	-2.87	-3.69	-30.45	0.00	-4.29	-4.36	-5.82	-6.29	-7.22	-32.68

**Table B2-39
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.21	0.00	-0.03	-0.03	-0.04	-0.04	-0.05	-0.22
Hickory, NC	-	x	-	100	0.00	-0.37	-0.38	-0.70	-0.80	-1.02	-8.44	0.00	-1.19	-1.21	-1.61	-1.74	-2.00	-9.06
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-488.87	-537.68	-636.58	-719.78	-845.12	-4,115.32	0.00	-1,612.86	-1,689.48	-1,843.99	-1,969.86	-2,125.68	-5,316.45
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-46.73	-51.42	-60.74	-68.68	-80.59	-390.57	0.00	-154.21	-161.55	-176.17	-188.18	-203.01	-505.55
Imperial Co., CA	x	-	100	-	0.00	-0.52	-0.53	-0.97	-1.11	-1.43	-11.77	0.00	-1.66	-1.69	-2.25	-2.43	-2.79	-12.64
Indianapolis, IN	-	x	-	100	0.00	-3.28	-3.35	-6.12	-6.97	-8.98	-74.02	0.00	-10.43	-10.60	-14.15	-15.29	-17.56	-79.44
Jamestown, NY	x	-	100	-	0.00	-0.27	-0.27	-0.50	-0.56	-0.73	-6.00	0.00	-0.85	-0.86	-1.15	-1.24	-1.42	-6.43
Jefferson Co., NY	x	-	100	-	0.00	-0.28	-0.29	-0.53	-0.60	-0.78	-6.41	0.00	-0.90	-0.92	-1.23	-1.32	-1.52	-6.88
Johnstown, PA	-	x	-	100	0.00	-0.21	-0.21	-0.39	-0.44	-0.57	-4.68	0.00	-0.66	-0.67	-0.90	-0.97	-1.11	-5.03
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.32	-0.33	-0.57	-0.64	-0.82	-6.49	0.00	-1.02	-1.04	-1.34	-1.45	-1.65	-7.05
Knoxville, TN	x	x	100	100	0.00	-2.15	-2.19	-4.01	-4.56	-5.88	-48.47	0.00	-6.83	-6.94	-9.26	-10.00	-11.49	-52.01
Lancaster, PA	-	x	-	100	0.00	-0.80	-0.82	-1.50	-1.70	-2.19	-18.09	0.00	-2.55	-2.59	-3.46	-3.74	-4.29	-19.41
Las Vegas, NV	x	-	100	-	0.00	-3.53	-3.60	-6.60	-7.52	-9.68	-79.96	0.00	-11.22	-11.40	-15.23	-16.46	-18.91	-85.77
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.30	0.00	-0.04	-0.04	-0.06	-0.06	-0.07	-0.32
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.02	-0.04	-0.05	-0.06	-0.50	0.00	-0.07	-0.07	-0.10	-0.11	-0.12	-0.53
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-288.41	-315.18	-389.78	-441.10	-524.00	-2,785.11	0.00	-948.42	-990.96	-1,101.46	-1,177.95	-1,279.28	-3,473.32
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1.62	-1.65	-3.00	-3.42	-4.39	-36.04	0.00	-5.14	-5.23	-6.96	-7.51	-8.62	-38.74
Louisville, KY-IN	-	x	-	100	0.00	-1.98	-2.02	-3.72	-4.23	-5.46	-45.26	0.00	-6.29	-6.38	-8.56	-9.25	-10.63	-48.49
Macon, GA	-	x	-	100	0.00	-0.37	-0.38	-0.69	-0.79	-1.02	-8.47	0.00	-1.17	-1.19	-1.60	-1.73	-1.98	-9.07
Manitowoc Co., WI	x	-	-	-	0.00	-0.19	-0.20	-0.36	-0.41	-0.53	-4.33	0.00	-0.61	-0.62	-0.83	-0.90	-1.03	-4.65
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.24	-0.25	-0.45	-0.51	-0.66	-5.46	0.00	-0.77	-0.78	-1.04	-1.13	-1.30	-5.86
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.98	-1.00	-1.84	-2.09	-2.69	-22.20	0.00	-3.13	-3.18	-4.24	-4.58	-5.26	-23.82
Memphis, TN-AR	x	-	100	-	0.00	-39.20	-43.03	-51.60	-58.36	-68.77	-344.11	0.00	-129.19	-135.23	-148.39	-158.57	-171.43	-439.60
Milwaukee-Racine, WI	x	-	100	-	0.00	-3.24	-3.30	-6.03	-6.87	-8.84	-72.86	0.00	-10.28	-10.45	-13.94	-15.06	-17.29	-78.21
Nevada (Western Part), CA	x	-	100	-	0.00	-0.20	-0.21	-0.38	-0.43	-0.56	-4.61	0.00	-0.65	-0.66	-0.88	-0.95	-1.09	-4.95
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-92.80	-100.03	-135.06	-153.08	-185.83	-1,138.29	0.00	-303.06	-314.94	-363.61	-389.74	-428.71	-1,345.89
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.27	-0.28	-0.51	-0.58	-0.75	-6.19	0.00	-0.87	-0.88	-1.18	-1.27	-1.46	-6.64
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-259.75	-285.03	-342.86	-387.79	-457.30	-2,302.76	0.00	-855.96	-895.80	-984.19	-1,051.80	-1,137.65	-2,934.32
Phoenix-Mesa, AZ	x	-	100	-	0.00	-9.31	-9.48	-17.46	-19.88	-25.62	-212.30	0.00	-29.55	-30.01	-40.21	-43.45	-49.94	-227.52
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3.37	-3.43	-6.28	-7.15	-9.21	-75.94	0.00	-10.69	-10.86	-14.51	-15.67	-18.00	-81.49
Poughkeepsie, NY	x	x	100	100	0.00	-2.55	-2.60	-4.76	-5.42	-6.98	-57.54	0.00	-8.11	-8.24	-11.00	-11.89	-13.65	-61.75

**Table B2-39
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-1.68	-1.72	-3.14	-3.57	-4.60	-37.94	0.00	-5.35	-5.44	-7.26	-7.84	-9.00	-40.73
Reading, PA	-	x	-	100	0.00	-0.75	-0.77	-1.40	-1.60	-2.06	-16.95	0.00	-2.39	-2.43	-3.24	-3.50	-4.02	-18.19
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-2.15	-2.20	-4.00	-4.56	-5.86	-48.22	0.00	-6.84	-6.95	-9.26	-10.01	-11.48	-51.79
Rochester, NY	x	-	100	-	0.00	-2.40	-2.44	-4.47	-5.08	-6.55	-53.98	0.00	-7.61	-7.73	-10.32	-11.15	-12.80	-57.93
Rome, GA	-	x	-	100	0.00	-0.21	-0.21	-0.38	-0.44	-0.56	-4.62	0.00	-0.65	-0.66	-0.88	-0.96	-1.10	-4.96
Sacramento Metro, CA	x	-	50	-	0.00	-4.67	-4.76	-8.70	-9.90	-12.75	-105.08	0.00	-14.82	-15.06	-20.10	-21.71	-24.93	-112.79
San Diego, CA	x	-	100	-	0.00	-5.50	-5.61	-10.26	-11.68	-15.04	-124.03	0.00	-17.48	-17.76	-23.71	-25.62	-29.41	-133.11
San Francisco Bay Area, CA	x	-	100	-	0.00	-149.47	-163.64	-199.93	-226.20	-267.86	-1,391.39	0.00	-491.97	-514.40	-568.85	-608.17	-659.32	-1,751.02
San Joaquin Valley, CA	x	x	50	100	0.00	-33.19	-35.72	-48.67	-55.17	-67.12	-416.35	0.00	-108.30	-112.48	-130.39	-139.79	-153.97	-490.07
Sheboygan, WI	x	-	100	-	0.00	-0.23	-0.23	-0.42	-0.48	-0.62	-5.08	0.00	-0.72	-0.73	-0.97	-1.05	-1.21	-5.45
Springfield (Western MA), MA	x	-	100	-	0.00	-1.75	-1.78	-3.26	-3.71	-4.78	-39.43	0.00	-5.56	-5.65	-7.54	-8.14	-9.35	-42.32
St. Louis, MO-IL	x	x	100	100	0.00	-69.30	-75.88	-92.68	-104.85	-124.15	-644.46	0.00	-228.12	-238.52	-263.73	-281.96	-305.65	-811.25
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-4.33	-4.76	-5.70	-6.44	-7.59	-37.78	0.00	-14.29	-14.96	-16.40	-17.52	-18.94	-48.35
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-1.76	-1.84	-2.95	-3.35	-4.21	-31.26	0.00	-5.66	-5.81	-7.26	-7.82	-8.81	-34.64
Washington, DC-MD-VA	x	x	100	100	0.00	-9.98	-10.18	-18.57	-21.15	-27.22	-224.12	0.00	-31.70	-32.22	-42.96	-46.41	-53.28	-240.63
Wheeling, WV-OH	-	x	-	100	0.00	-0.29	-0.30	-0.55	-0.62	-0.80	-6.62	0.00	-0.93	-0.95	-1.27	-1.37	-1.57	-7.10
York, PA	-	x	-	100	0.00	-0.83	-0.85	-1.55	-1.77	-2.28	-18.79	0.00	-2.65	-2.69	-3.59	-3.88	-4.46	-20.17

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-40
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

SOx 2035

Nonattainment Area	Status <u>b</u>		General Conformity Threshold <u>c</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-3.47	-3.53	-6.51	-7.43	-9.31	-76.66	0.00	-13.43	-13.64	-17.71	-19.02	-21.27	-84.05
Allegan Co., MI	x	-	100	-	0.00	-0.38	-0.38	-0.71	-0.81	-1.01	-8.34	0.00	-1.46	-1.48	-1.93	-2.07	-2.31	-9.14
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.44	-0.45	-0.83	-0.95	-1.19	-9.79	0.00	-1.72	-1.74	-2.26	-2.43	-2.72	-10.74
Atlanta, GA	x	x	100	100	0.00	-27.58	-28.11	-51.82	-59.13	-74.09	-609.92	0.00	-106.82	-108.48	-140.83	-151.32	-169.17	-668.69
Baltimore, MD	x	x	100	100	0.00	-7.54	-7.68	-14.15	-16.14	-20.23	-166.39	0.00	-29.20	-29.65	-38.48	-41.34	-46.21	-182.47
Baton Rouge, LA	x	-	100	-	0.00	-164.05	-180.70	-212.54	-241.40	-280.54	-1,327.22	0.00	-666.90	-695.90	-752.42	-800.25	-852.86	-1,862.42
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-327.45	-360.91	-422.58	-479.94	-557.19	-2,609.28	0.00	-1,331.71	-1,389.95	-1,500.39	-1,595.62	-1,699.71	-3,680.79
Birmingham, AL	-	x	-	100	0.00	-2.57	-2.62	-4.84	-5.52	-6.92	-57.00	0.00	-9.96	-10.12	-13.14	-14.12	-15.79	-62.48
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-10.67	-10.88	-20.04	-22.87	-28.65	-235.79	0.00	-41.33	-41.97	-54.48	-58.54	-65.44	-258.54
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.57	-1.60	-2.98	-3.40	-4.27	-35.44	0.00	-6.08	-6.17	-8.06	-8.66	-9.69	-38.74
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-2.46	-2.51	-4.62	-5.28	-6.61	-54.39	0.00	-9.54	-9.68	-12.57	-13.50	-15.10	-59.64
Canton-Massillon, OH	-	x	-	100	0.00	-21.89	-24.07	-28.63	-32.52	-37.88	-183.56	0.00	-88.88	-92.70	-100.62	-107.05	-114.22	-254.44
Charleston, WV	-	x	-	100	0.00	-0.61	-0.62	-1.15	-1.31	-1.64	-13.53	0.00	-2.37	-2.41	-3.12	-3.36	-3.75	-14.83
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-6.28	-6.38	-11.95	-13.63	-17.12	-142.38	0.00	-24.29	-24.63	-32.21	-34.62	-38.76	-155.49
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.30	-1.33	-2.41	-2.76	-3.45	-28.12	0.00	-5.04	-5.12	-6.61	-7.10	-7.93	-30.93
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-254.70	-279.18	-339.74	-386.04	-451.88	-2,295.03	0.00	-1,032.22	-1,075.31	-1,176.90	-1,252.65	-1,339.79	-3,107.07
Chico, CA	x	-	100	-	0.00	-0.50	-0.51	-0.94	-1.07	-1.34	-11.05	0.00	-1.94	-1.97	-2.55	-2.74	-3.07	-12.12
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-4.87	-4.96	-9.17	-10.47	-13.12	-108.35	0.00	-18.84	-19.12	-24.88	-26.73	-29.90	-118.66
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.35	-0.36	-0.67	-0.76	-0.95	-7.84	0.00	-1.37	-1.40	-1.81	-1.95	-2.18	-8.60
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-5.81	-5.92	-10.92	-12.46	-15.61	-128.44	0.00	-22.51	-22.86	-29.67	-31.88	-35.64	-140.84
Columbus, OH	x	x	100	100	0.00	-5.05	-5.15	-9.49	-10.83	-13.57	-111.75	0.00	-19.57	-19.88	-25.81	-27.73	-31.00	-122.52
Dallas-Fort Worth, TX	x	-	100	-	0.00	-25.05	-25.53	-47.06	-53.70	-67.29	-553.90	0.00	-97.03	-98.53	-127.92	-137.44	-153.65	-607.29
Dayton-Springfield, OH	-	x	-	100	0.00	-1.77	-1.81	-3.33	-3.80	-4.76	-39.19	0.00	-6.87	-6.97	-9.05	-9.73	-10.87	-42.97
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-37.35	-40.33	-54.09	-61.53	-73.41	-439.25	0.00	-149.94	-155.40	-176.37	-188.12	-203.29	-550.02
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-40.36	-43.55	-58.71	-66.79	-79.76	-480.85	0.00	-161.95	-167.80	-190.83	-203.57	-220.10	-600.06
Door Co., WI	x	-	100	-	0.00	-0.07	-0.07	-0.13	-0.15	-0.19	-1.59	0.00	-0.28	-0.28	-0.37	-0.39	-0.44	-1.74
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.07	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.08
Evansville, IN	-	x	-	100	0.00	-0.80	-0.81	-1.53	-1.75	-2.20	-18.37	0.00	-3.10	-3.14	-4.12	-4.43	-4.96	-20.03
Greater Connecticut, CT	x	-	100	-	0.00	-4.43	-4.52	-8.31	-9.49	-11.88	-97.72	0.00	-17.17	-17.44	-22.62	-24.30	-27.16	-107.18
Greene Co., PA	x	-	100	-	0.00	-0.08	-0.08	-0.14	-0.16	-0.21	-1.70	0.00	-0.30	-0.30	-0.39	-0.42	-0.47	-1.86
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-2.01	-2.05	-3.79	-4.32	-5.41	-44.55	0.00	-7.80	-7.92	-10.29	-11.05	-12.36	-48.84
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1.72	-1.76	-3.24	-3.69	-4.63	-38.10	0.00	-6.68	-6.78	-8.80	-9.45	-10.57	-41.77

Table B2-40
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

SOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.27	0.00	-0.04	-0.04	-0.06	-0.06	-0.07	-0.29
Hickory, NC	-	x	-	100	0.00	-0.51	-0.52	-0.96	-1.09	-1.37	-11.25	0.00	-1.97	-2.01	-2.60	-2.80	-3.13	-12.34
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-683.09	-751.84	-889.07	-1,009.88	-1,174.94	-5,624.23	0.00	-2,775.59	-2,895.56	-3,136.65	-3,336.45	-3,557.80	-7,844.88
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-65.16	-71.76	-84.56	-96.04	-111.66	-530.40	0.00	-264.86	-276.36	-299.00	-318.02	-338.99	-742.73
Imperial Co., CA	x	-	100	-	0.00	-0.84	-0.85	-1.57	-1.79	-2.24	-18.48	0.00	-3.24	-3.29	-4.27	-4.58	-5.13	-20.26
Indianapolis, IN	-	x	-	100	0.00	-4.71	-4.80	-8.86	-10.10	-12.66	-104.22	0.00	-18.26	-18.54	-24.07	-25.86	-28.91	-114.27
Jamestown, NY	x	-	100	-	0.00	-0.32	-0.33	-0.61	-0.70	-0.87	-7.18	0.00	-1.26	-1.28	-1.66	-1.78	-1.99	-7.87
Jefferson Co., NY	x	-	100	-	0.00	-0.40	-0.41	-0.75	-0.86	-1.07	-8.83	0.00	-1.55	-1.57	-2.04	-2.19	-2.45	-9.68
Johnstown, PA	-	x	-	100	0.00	-0.24	-0.25	-0.45	-0.52	-0.65	-5.34	0.00	-0.94	-0.95	-1.24	-1.33	-1.49	-5.85
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.55	-0.57	-0.96	-1.09	-1.35	-10.44	0.00	-2.14	-2.19	-2.73	-2.93	-3.25	-11.74
Knoxville, TN	x	x	100	100	0.00	-2.90	-2.96	-5.45	-6.22	-7.79	-64.16	0.00	-11.23	-11.40	-14.81	-15.91	-17.79	-70.33
Lancaster, PA	-	x	-	100	0.00	-1.03	-1.05	-1.93	-2.21	-2.76	-22.75	0.00	-3.99	-4.05	-5.25	-5.65	-6.31	-24.94
Las Vegas, NV	x	-	100	-	0.00	-6.04	-6.15	-11.38	-12.99	-16.28	-134.39	0.00	-23.37	-23.73	-30.86	-33.16	-37.09	-147.19
Libby, MT	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.04	-0.05	-0.38	0.00	-0.07	-0.07	-0.09	-0.09	-0.11	-0.42
Liberty-Clairton, PA	-	x	-	100	0.00	-0.03	-0.03	-0.05	-0.05	-0.07	-0.52	0.00	-0.10	-0.10	-0.13	-0.14	-0.15	-0.58
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-405.12	-442.83	-548.97	-623.92	-733.11	-3,856.97	0.00	-1,638.97	-1,705.77	-1,879.57	-2,001.35	-2,144.77	-5,131.89
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-2.47	-2.53	-4.59	-5.24	-6.55	-53.37	0.00	-9.60	-9.75	-12.58	-13.51	-15.08	-58.74
Louisville, KY-IN	-	x	-	100	0.00	-2.44	-2.49	-4.62	-5.27	-6.62	-54.78	0.00	-9.46	-9.60	-12.51	-13.44	-15.04	-59.93
Macon, GA	-	x	-	100	0.00	-0.46	-0.46	-0.87	-0.99	-1.24	-10.29	0.00	-1.76	-1.79	-2.34	-2.51	-2.81	-11.25
Manitowoc Co., WI	x	-	-	-	0.00	-0.24	-0.24	-0.44	-0.50	-0.63	-5.19	0.00	-0.91	-0.93	-1.20	-1.29	-1.44	-5.69
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.38	-0.39	-0.72	-0.82	-1.03	-8.49	0.00	-1.49	-1.51	-1.96	-2.11	-2.36	-9.31
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.63	-1.66	-3.07	-3.50	-4.39	-36.10	0.00	-6.32	-6.42	-8.34	-8.96	-10.01	-39.58
Memphis, TN-AR	x	-	100	-	0.00	-54.46	-59.86	-71.52	-81.25	-94.74	-463.63	0.00	-221.09	-230.53	-250.65	-266.68	-284.68	-639.46
Milwaukee-Racine, WI	x	-	100	-	0.00	-4.07	-4.15	-7.65	-8.73	-10.94	-90.00	0.00	-15.78	-16.03	-20.80	-22.35	-24.98	-98.69
Nevada (Western Part), CA	x	-	100	-	0.00	-0.29	-0.29	-0.54	-0.61	-0.77	-6.33	0.00	-1.11	-1.13	-1.47	-1.57	-1.76	-6.95
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-125.96	-136.07	-182.21	-207.27	-247.23	-1,476.25	0.00	-505.81	-524.28	-594.68	-634.30	-685.34	-1,850.31
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.32	-0.33	-0.61	-0.70	-0.87	-7.20	0.00	-1.25	-1.27	-1.66	-1.78	-1.99	-7.89
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-362.08	-397.65	-477.39	-542.37	-633.05	-3,128.63	0.00	-1,469.21	-1,531.57	-1,668.08	-1,774.91	-1,895.68	-4,293.81
Phoenix-Mesa, AZ	x	-	100	-	0.00	-15.32	-15.60	-28.95	-33.04	-41.43	-342.75	0.00	-59.30	-60.18	-78.39	-84.24	-94.25	-375.08
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3.95	-4.03	-7.43	-8.48	-10.62	-87.48	0.00	-15.31	-15.54	-20.18	-21.69	-24.25	-95.89
Poughkeepsie, NY	x	x	100	100	0.00	-3.49	-3.56	-6.56	-7.48	-9.38	-77.18	0.00	-13.52	-13.73	-17.83	-19.15	-21.41	-84.62

Table B2-40
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

SOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-2.10	-2.14	-3.94	-4.50	-5.64	-46.39	0.00	-8.13	-8.26	-10.72	-11.51	-12.87	-50.86
Reading, PA	-	x	-	100	0.00	-1.03	-1.05	-1.94	-2.21	-2.77	-22.78	0.00	-3.99	-4.05	-5.26	-5.65	-6.32	-24.98
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-4.23	-4.32	-7.92	-9.03	-11.31	-92.73	0.00	-16.40	-16.66	-21.58	-23.18	-25.90	-101.81
Rochester, NY	x	-	100	-	0.00	-3.04	-3.09	-5.70	-6.51	-8.15	-67.10	0.00	-11.76	-11.94	-15.50	-16.65	-18.62	-73.57
Rome, GA	-	x	-	100	0.00	-0.25	-0.26	-0.48	-0.55	-0.68	-5.62	0.00	-0.98	-1.00	-1.30	-1.39	-1.56	-6.16
Sacramento Metro, CA	x	-	50	-	0.00	-6.97	-7.11	-13.09	-14.93	-18.71	-153.89	0.00	-27.01	-27.43	-35.60	-38.24	-42.75	-168.77
San Diego, CA	x	-	100	-	0.00	-6.80	-6.93	-12.78	-14.58	-18.27	-150.38	0.00	-26.34	-26.75	-34.73	-37.31	-41.71	-164.87
San Francisco Bay Area, CA	x	-	100	-	0.00	-207.30	-227.23	-276.47	-314.15	-367.71	-1,866.85	0.00	-840.14	-875.22	-957.84	-1,019.49	-1,090.39	-2,527.86
San Joaquin Valley, CA	x	x	50	100	0.00	-48.14	-51.73	-71.55	-81.42	-97.68	-610.15	0.00	-192.67	-199.34	-228.97	-244.40	-264.97	-749.38
Sheboygan, WI	x	-	100	-	0.00	-0.29	-0.30	-0.54	-0.62	-0.78	-6.38	0.00	-1.12	-1.14	-1.48	-1.59	-1.78	-7.00
Springfield (Western MA), MA	x	-	100	-	0.00	-2.25	-2.30	-4.23	-4.83	-6.05	-49.81	0.00	-8.73	-8.86	-11.50	-12.36	-13.82	-54.61
St. Louis, MO-IL	x	x	100	100	0.00	-96.15	-105.39	-128.23	-145.71	-170.55	-865.96	0.00	-389.66	-405.92	-444.25	-472.84	-505.73	-1,172.53
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-6.01	-6.61	-7.87	-8.94	-10.41	-50.56	0.00	-24.40	-25.45	-27.63	-29.39	-31.37	-70.01
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.30	-2.41	-3.84	-4.37	-5.37	-39.27	0.00	-9.06	-9.29	-11.30	-12.10	-13.32	-45.10
Washington, DC-MD-VA	x	x	100	100	0.00	-14.52	-14.80	-27.23	-31.06	-38.91	-319.87	0.00	-56.24	-57.12	-74.08	-79.59	-88.96	-350.89
Wheeling, WV-OH	-	x	-	100	0.00	-0.35	-0.35	-0.65	-0.74	-0.93	-7.66	0.00	-1.34	-1.36	-1.77	-1.90	-2.12	-8.40
York, PA	-	x	-	100	0.00	-1.20	-1.22	-2.25	-2.57	-3.22	-26.48	0.00	-4.64	-4.71	-6.12	-6.57	-7.35	-29.03

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-41
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

VOCs 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-6.54	-6.62	-15.02	-17.23	-29.56	-285.24	0.00	-6.59	-6.67	-15.07	-17.28	-29.61	-285.29
Allegan Co., MI	x	-	100	-	0.00	-0.72	-0.72	-1.64	-1.88	-3.23	-31.20	0.00	-0.72	-0.73	-1.65	-1.89	-3.24	-31.21
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.65	-0.66	-1.49	-1.71	-2.94	-28.37	0.00	-0.66	-0.66	-1.50	-1.72	-2.95	-28.38
Atlanta, GA	x	x	100	100	0.00	-34.78	-35.17	-79.83	-91.56	-157.12	-1,516.42	0.00	-35.03	-35.43	-80.09	-91.82	-157.39	-1,516.66
Baltimore, MD	x	x	100	100	0.00	-14.50	-14.66	-33.25	-38.14	-65.42	-631.15	0.00	-14.60	-14.77	-33.36	-38.25	-65.53	-631.25
Baton Rouge, LA	x	-	100	-	0.00	-8.60	-9.03	-16.70	-19.05	-29.98	-263.03	0.00	-8.65	-9.08	-16.75	-19.11	-30.03	-263.08
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-12.62	-13.43	-22.86	-26.02	-39.19	-325.27	0.00	-12.70	-13.51	-22.94	-26.10	-39.27	-325.34
Birmingham, AL	-	x	-	100	0.00	-5.27	-5.33	-12.11	-13.89	-23.84	-230.14	0.00	-5.31	-5.37	-12.15	-13.93	-23.88	-230.17
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-23.56	-23.83	-54.05	-61.99	-106.36	-1,026.27	0.00	-23.73	-24.00	-54.23	-62.17	-106.54	-1,026.43
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-3.06	-3.09	-7.10	-8.14	-14.03	-136.05	0.00	-3.08	-3.11	-7.12	-8.17	-14.06	-136.07
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-5.66	-5.73	-13.00	-14.91	-25.57	-246.77	0.00	-5.71	-5.77	-13.04	-14.95	-25.62	-246.80
Canton-Massillon, OH	-	x	-	100	0.00	-2.30	-2.37	-4.87	-5.58	-9.21	-85.49	0.00	-2.31	-2.38	-4.89	-5.59	-9.23	-85.50
Charleston, WV	-	x	-	100	0.00	-1.52	-1.53	-3.48	-3.99	-6.84	-66.04	0.00	-1.53	-1.54	-3.49	-4.00	-6.86	-66.05
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-8.30	-8.34	-19.54	-22.43	-38.93	-379.97	0.00	-8.36	-8.40	-19.60	-22.49	-38.99	-380.03
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-2.67	-2.69	-6.14	-7.05	-12.11	-117.13	0.00	-2.68	-2.71	-6.16	-7.07	-12.13	-117.15
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-42.70	-43.62	-94.00	-107.68	-181.18	-1,713.81	0.00	-42.99	-43.92	-94.30	-107.99	-181.50	-1,714.09
Chico, CA	x	-	100	-	0.00	-0.98	-0.99	-2.25	-2.58	-4.42	-42.65	0.00	-0.99	-1.00	-2.25	-2.58	-4.43	-42.66
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-9.26	-9.36	-21.32	-24.45	-42.01	-405.98	0.00	-9.33	-9.43	-21.38	-24.52	-42.08	-406.05
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.89	-0.90	-2.03	-2.33	-4.00	-38.64	0.00	-0.89	-0.90	-2.04	-2.34	-4.01	-38.65
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-13.51	-13.66	-31.00	-35.56	-61.00	-588.66	0.00	-13.61	-13.76	-31.10	-35.66	-61.11	-588.75
Columbus, OH	x	x	100	100	0.00	-8.72	-8.82	-20.02	-22.96	-39.41	-380.31	0.00	-8.79	-8.89	-20.09	-23.03	-39.47	-380.37
Dallas-Fort Worth, TX	x	-	100	-	0.00	-35.36	-35.76	-81.15	-93.07	-159.71	-1,541.21	0.00	-35.61	-36.02	-81.41	-93.34	-159.98	-1,541.46
Dayton-Springfield, OH	-	x	-	100	0.00	-4.09	-4.14	-9.40	-10.78	-18.49	-178.45	0.00	-4.12	-4.17	-9.43	-10.81	-18.52	-178.48
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-17.25	-17.50	-39.09	-44.81	-76.44	-733.31	0.00	-17.37	-17.63	-39.21	-44.94	-76.57	-733.43
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-25.60	-25.95	-58.20	-66.73	-114.01	-1,095.53	0.00	-25.78	-26.13	-58.38	-66.92	-114.21	-1,095.70
Door Co., WI	x	-	100	-	0.00	-0.17	-0.17	-0.38	-0.44	-0.75	-7.24	0.00	-0.17	-0.17	-0.38	-0.44	-0.75	-7.25
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.30	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.30
Evansville, IN	-	x	-	100	0.00	-1.63	-1.64	-3.81	-4.38	-7.57	-73.72	0.00	-1.64	-1.65	-3.83	-4.39	-7.59	-73.73
Greater Connecticut, CT	x	-	100	-	0.00	-8.99	-9.10	-20.62	-23.65	-40.55	-391.13	0.00	-9.06	-9.16	-20.68	-23.71	-40.62	-391.19
Greene Co., PA	x	-	100	-	0.00	-0.21	-0.21	-0.47	-0.54	-0.93	-8.96	0.00	-0.21	-0.21	-0.47	-0.54	-0.93	-8.96
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-4.05	-4.09	-9.29	-10.66	-18.29	-176.47	0.00	-4.08	-4.12	-9.32	-10.69	-18.32	-176.50
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-3.67	-3.71	-8.42	-9.66	-16.57	-159.89	0.00	-3.70	-3.74	-8.45	-9.68	-16.60	-159.91

**Table B2-41
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.02	-0.06	-0.07	-0.11	-1.09	0.00	-0.02	-0.03	-0.06	-0.07	-0.11	-1.09
Hickory, NC	-	x	-	100	0.00	-0.95	-0.96	-2.19	-2.51	-4.30	-41.51	0.00	-0.96	-0.97	-2.19	-2.52	-4.31	-41.51
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-47.61	-49.52	-96.78	-110.59	-178.60	-1,615.32	0.00	-47.92	-49.83	-97.10	-110.92	-178.93	-1,615.61
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-3.80	-3.94	-7.80	-8.92	-14.49	-131.88	0.00	-3.82	-3.97	-7.83	-8.94	-14.51	-131.90
Imperial Co., CA	x	-	100	-	0.00	-1.13	-1.14	-2.59	-2.97	-5.10	-49.21	0.00	-1.14	-1.15	-2.60	-2.98	-5.11	-49.21
Indianapolis, IN	-	x	-	100	0.00	-8.15	-8.24	-18.70	-21.44	-36.80	-355.10	0.00	-8.21	-8.30	-18.76	-21.51	-36.86	-355.16
Jamestown, NY	x	-	100	-	0.00	-0.75	-0.76	-1.73	-1.98	-3.40	-32.85	0.00	-0.76	-0.77	-1.74	-1.99	-3.41	-32.85
Jefferson Co., NY	x	-	100	-	0.00	-0.70	-0.71	-1.61	-1.84	-3.16	-30.52	0.00	-0.71	-0.71	-1.61	-1.85	-3.17	-30.52
Johnstown, PA	-	x	-	100	0.00	-0.62	-0.63	-1.42	-1.63	-2.80	-26.97	0.00	-0.62	-0.63	-1.43	-1.63	-2.80	-26.98
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.64	-0.65	-1.44	-1.65	-2.81	-26.86	0.00	-0.64	-0.65	-1.44	-1.66	-2.81	-26.86
Knoxville, TN	x	x	100	100	0.00	-5.53	-5.59	-12.69	-14.55	-24.98	-241.09	0.00	-5.57	-5.63	-12.73	-14.60	-25.02	-241.13
Lancaster, PA	-	x	-	100	0.00	-2.16	-2.19	-4.97	-5.70	-9.77	-94.31	0.00	-2.18	-2.20	-4.98	-5.71	-9.79	-94.33
Las Vegas, NV	x	-	100	-	0.00	-7.14	-7.22	-16.41	-18.82	-32.30	-311.87	0.00	-7.19	-7.28	-16.46	-18.87	-32.36	-311.92
Libby, MT	-	x	-	100	0.00	-0.04	-0.04	-0.08	-0.09	-0.16	-1.55	0.00	-0.04	-0.04	-0.08	-0.09	-0.16	-1.55
Liberty-Clairton, PA	-	x	-	100	0.00	-0.07	-0.07	-0.16	-0.19	-0.32	-3.09	0.00	-0.07	-0.07	-0.16	-0.19	-0.32	-3.09
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-86.51	-88.23	-191.84	-219.81	-371.18	-3,523.91	0.00	-87.11	-88.85	-192.46	-220.45	-371.83	-3,524.48
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-3.72	-3.76	-8.52	-9.77	-16.75	-161.54	0.00	-3.74	-3.79	-8.55	-9.80	-16.78	-161.57
Louisville, KY-IN	-	x	-	100	0.00	-5.56	-5.61	-12.83	-14.71	-25.31	-244.92	0.00	-5.60	-5.65	-12.87	-14.76	-25.36	-244.96
Macon, GA	-	x	-	100	0.00	-1.03	-1.04	-2.38	-2.73	-4.70	-45.54	0.00	-1.04	-1.05	-2.39	-2.74	-4.71	-45.55
Manitowoc Co., WI	x	-	-	-	0.00	-0.55	-0.55	-1.25	-1.44	-2.46	-23.76	0.00	-0.55	-0.56	-1.26	-1.44	-2.47	-23.76
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.53	-0.54	-1.22	-1.40	-2.40	-23.12	0.00	-0.53	-0.54	-1.22	-1.40	-2.40	-23.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-2.07	-2.10	-4.76	-5.46	-9.37	-90.41	0.00	-2.09	-2.11	-4.78	-5.48	-9.38	-90.42
Memphis, TN-AR	x	-	100	-	0.00	-6.72	-6.90	-14.44	-16.53	-27.48	-256.77	0.00	-6.76	-6.95	-14.48	-16.57	-27.53	-256.81
Milwaukee-Racine, WI	x	-	100	-	0.00	-8.93	-9.03	-20.48	-23.49	-40.30	-388.86	0.00	-8.99	-9.10	-20.55	-23.56	-40.37	-388.92
Nevada (Western Part), CA	x	-	100	-	0.00	-0.50	-0.51	-1.16	-1.33	-2.28	-21.99	0.00	-0.51	-0.51	-1.16	-1.33	-2.28	-21.99
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-76.46	-77.52	-173.70	-199.17	-340.17	-3,267.36	0.00	-77.00	-78.08	-174.26	-199.74	-340.76	-3,267.88
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.80	-0.80	-1.83	-2.10	-3.61	-34.85	0.00	-0.80	-0.81	-1.84	-2.11	-3.61	-34.86
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-46.24	-47.47	-99.63	-114.06	-189.92	-1,776.61	0.00	-46.55	-47.79	-99.96	-114.39	-190.26	-1,776.91
Phoenix-Mesa, AZ	x	-	100	-	0.00	-19.52	-19.72	-45.04	-51.66	-88.86	-859.49	0.00	-19.67	-19.87	-45.18	-51.81	-89.01	-859.62
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-9.95	-10.06	-22.84	-26.20	-44.96	-433.97	0.00	-10.02	-10.13	-22.91	-26.27	-45.04	-434.04
Poughkeepsie, NY	x	x	100	100	0.00	-6.46	-6.53	-14.83	-17.01	-29.18	-281.60	0.00	-6.51	-6.58	-14.88	-17.06	-29.23	-281.65

**Table B2-41
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-4.68	-4.73	-10.73	-12.31	-21.12	-203.76	0.00	-4.71	-4.76	-10.76	-12.34	-21.15	-203.79
Reading, PA	-	x	-	100	0.00	-1.90	-1.92	-4.36	-5.00	-8.57	-82.74	0.00	-1.91	-1.93	-4.37	-5.01	-8.59	-82.76
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-3.78	-3.83	-8.68	-9.95	-17.06	-164.60	0.00	-3.81	-3.86	-8.70	-9.98	-17.09	-164.63
Rochester, NY	x	-	100	-	0.00	-6.55	-6.62	-15.03	-17.23	-29.57	-285.36	0.00	-6.59	-6.67	-15.07	-17.28	-29.62	-285.40
Rome, GA	-	x	-	100	0.00	-0.57	-0.58	-1.31	-1.51	-2.59	-24.95	0.00	-0.58	-0.58	-1.32	-1.51	-2.59	-24.95
Sacramento Metro, CA	x	-	50	-	0.00	-10.98	-11.11	-25.22	-28.92	-49.63	-479.05	0.00	-11.06	-11.19	-25.30	-29.01	-49.72	-479.13
San Diego, CA	x	-	100	-	0.00	-15.39	-15.57	-35.33	-40.52	-69.53	-670.96	0.00	-15.50	-15.68	-35.44	-40.64	-69.65	-671.06
San Francisco Bay Area, CA	x	-	100	-	0.00	-38.24	-38.96	-85.18	-97.61	-165.18	-1,571.56	0.00	-38.51	-39.24	-85.46	-97.90	-165.47	-1,571.81
San Joaquin Valley, CA	x	x	50	100	0.00	-23.41	-23.73	-53.16	-60.95	-104.07	-999.47	0.00	-23.57	-23.90	-53.33	-61.12	-104.25	-999.63
Sheboygan, WI	x	-	100	-	0.00	-0.61	-0.62	-1.40	-1.61	-2.75	-26.55	0.00	-0.62	-0.62	-1.40	-1.61	-2.76	-26.55
Springfield (Western MA), MA	x	-	100	-	0.00	-4.70	-4.75	-10.78	-12.37	-21.22	-204.80	0.00	-4.73	-4.79	-10.82	-12.40	-21.26	-204.83
St. Louis, MO-IL	x	x	100	100	0.00	-18.54	-18.94	-40.82	-46.76	-78.68	-744.28	0.00	-18.67	-19.07	-40.95	-46.90	-78.82	-744.40
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.73	-0.75	-1.57	-1.80	-2.99	-27.95	0.00	-0.74	-0.76	-1.58	-1.81	-3.00	-27.96
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-3.25	-3.29	-7.45	-8.55	-14.66	-141.30	0.00	-3.28	-3.32	-7.48	-8.57	-14.68	-141.32
Washington, DC-MD-VA	x	x	100	100	0.00	-24.87	-25.16	-57.00	-65.37	-112.10	-1,081.18	0.00	-25.05	-25.34	-57.18	-65.56	-112.30	-1,081.35
Wheeling, WV-OH	-	x	-	100	0.00	-0.86	-0.87	-1.98	-2.27	-3.89	-37.57	0.00	-0.87	-0.88	-1.98	-2.28	-3.90	-37.57
York, PA	-	x	-	100	0.00	-2.01	-2.03	-4.61	-5.28	-9.06	-87.46	0.00	-2.02	-2.04	-4.62	-5.30	-9.08	-87.47

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-42
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

VOCs 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-21.05	-20.40	-47.90	-55.70	-85.04	-852.00	0.00	-50.54	-50.59	-78.75	-87.79	-118.38	-869.01
Allegan Co., MI	x	-	100	-	0.00	-2.30	-2.23	-5.24	-6.09	-9.30	-93.17	0.00	-5.53	-5.53	-8.61	-9.60	-12.94	-95.03
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-2.23	-2.16	-5.07	-5.90	-9.01	-90.23	0.00	-5.36	-5.36	-8.34	-9.30	-12.54	-92.04
Atlanta, GA	x	x	100	100	0.00	-121.92	-118.14	-277.49	-322.72	-492.74	-4,937.14	0.00	-292.74	-293.01	-456.23	-508.60	-685.82	-5,035.58
Baltimore, MD	x	x	100	100	0.00	-46.39	-44.96	-105.48	-122.67	-187.24	-1,875.28	0.00	-111.37	-111.49	-173.47	-193.38	-260.69	-1,912.79
Baton Rouge, LA	x	-	100	-	0.00	-27.52	-28.27	-50.95	-59.00	-83.65	-743.47	0.00	-65.10	-66.88	-89.78	-99.36	-125.32	-771.80
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-39.96	-41.95	-67.41	-77.87	-105.95	-870.95	0.00	-93.96	-97.50	-122.92	-135.56	-165.36	-915.51
Birmingham, AL	-	x	-	100	0.00	-16.47	-15.95	-37.51	-43.63	-66.63	-667.94	0.00	-39.54	-39.57	-61.66	-68.73	-92.71	-681.21
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-72.61	-70.37	-165.17	-192.10	-293.25	-2,937.60	0.00	-174.34	-174.51	-271.62	-302.79	-408.23	-2,996.28
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-9.78	-9.44	-22.51	-26.19	-40.13	-404.09	0.00	-23.51	-23.49	-36.89	-41.14	-55.66	-411.86
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-17.36	-16.82	-39.48	-45.91	-70.09	-702.11	0.00	-41.67	-41.71	-64.92	-72.37	-97.57	-716.14
Canton-Massillon, OH	-	x	-	100	0.00	-7.13	-7.12	-14.70	-17.06	-25.20	-240.17	0.00	-16.99	-17.23	-24.95	-27.72	-36.24	-246.72
Charleston, WV	-	x	-	100	0.00	-4.55	-4.41	-10.35	-12.04	-18.38	-184.18	0.00	-10.92	-10.93	-17.02	-18.98	-25.59	-187.85
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-29.13	-27.99	-68.00	-79.13	-121.75	-1,233.76	0.00	-70.09	-69.90	-110.93	-123.77	-168.17	-1,256.39
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-8.38	-8.12	-19.10	-22.21	-33.92	-339.96	0.00	-20.13	-20.15	-31.39	-34.99	-47.20	-346.72
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-135.27	-133.10	-293.03	-340.46	-511.68	-5,006.77	0.00	-323.53	-326.01	-489.40	-544.65	-723.45	-5,123.73
Chico, CA	x	-	100	-	0.00	-3.12	-3.03	-7.10	-8.26	-12.61	-126.37	0.00	-7.50	-7.50	-11.68	-13.02	-17.56	-128.89
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-29.15	-28.21	-66.58	-77.43	-118.36	-1,187.82	0.00	-70.01	-70.04	-109.34	-121.91	-164.56	-1,211.23
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-2.66	-2.58	-6.06	-7.04	-10.75	-107.70	0.00	-6.39	-6.40	-9.96	-11.10	-14.97	-109.85
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-41.23	-39.95	-93.79	-109.08	-166.52	-1,668.22	0.00	-98.99	-99.09	-154.23	-171.93	-231.81	-1,701.53
Columbus, OH	x	x	100	100	0.00	-28.47	-27.59	-64.79	-75.35	-115.04	-1,152.67	0.00	-68.35	-68.42	-106.53	-118.75	-160.13	-1,175.67
Dallas-Fort Worth, TX	x	-	100	-	0.00	-120.92	-117.17	-275.16	-320.01	-488.57	-4,894.95	0.00	-290.33	-290.61	-452.43	-504.36	-680.06	-4,992.62
Dayton-Springfield, OH	-	x	-	100	0.00	-12.53	-12.14	-28.51	-33.16	-50.63	-507.23	0.00	-30.09	-30.11	-46.88	-52.26	-70.47	-517.35
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-56.98	-55.48	-127.73	-148.51	-225.67	-2,245.22	0.00	-136.66	-137.07	-211.01	-235.11	-315.59	-2,292.26
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-79.44	-77.27	-178.66	-207.73	-315.99	-3,148.79	0.00	-190.56	-191.05	-294.84	-328.55	-441.44	-3,214.06
Door Co., WI	x	-	100	-	0.00	-0.51	-0.49	-1.16	-1.35	-2.05	-20.58	0.00	-1.22	-1.22	-1.90	-2.12	-2.86	-20.99
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.02	-0.02	-0.05	-0.06	-0.09	-0.86	0.00	-0.05	-0.05	-0.08	-0.09	-0.12	-0.88
Evansville, IN	-	x	-	100	0.00	-5.15	-4.95	-11.97	-13.93	-21.40	-216.51	0.00	-12.38	-12.36	-19.55	-21.81	-29.60	-220.54
Greater Connecticut, CT	x	-	100	-	0.00	-28.43	-27.56	-64.60	-75.13	-114.65	-1,147.89	0.00	-68.25	-68.33	-106.26	-118.45	-159.65	-1,170.90
Greene Co., PA	x	-	100	-	0.00	-0.61	-0.59	-1.38	-1.60	-2.45	-24.55	0.00	-1.46	-1.46	-2.27	-2.53	-3.41	-25.04
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-12.83	-12.43	-29.19	-33.95	-51.84	-519.36	0.00	-30.80	-30.83	-48.00	-53.51	-72.16	-529.73
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-11.46	-11.10	-26.07	-30.31	-46.28	-463.65	0.00	-27.51	-27.53	-42.86	-47.78	-64.42	-472.91

**Table B2-42
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.08	-0.07	-0.18	-0.20	-0.31	-3.16	0.00	-0.18	-0.18	-0.29	-0.32	-0.43	-3.22
Hickory, NC	-	x	-	100	0.00	-3.08	-2.98	-7.00	-8.14	-12.42	-124.37	0.00	-7.39	-7.39	-11.51	-12.83	-17.29	-126.86
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-152.49	-154.36	-298.88	-346.51	-502.58	-4,645.37	0.00	-362.07	-369.47	-516.13	-572.38	-736.13	-4,793.66
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-11.89	-12.01	-23.49	-27.24	-39.63	-368.16	0.00	-28.24	-28.79	-40.45	-44.87	-57.87	-379.62
Imperial Co., CA	x	-	100	-	0.00	-3.95	-3.83	-8.99	-10.46	-15.97	-159.96	0.00	-9.49	-9.50	-14.78	-16.48	-22.22	-163.15
Indianapolis, IN	-	x	-	100	0.00	-26.52	-25.70	-60.35	-70.19	-107.16	-1,073.65	0.00	-63.68	-63.74	-99.23	-110.62	-149.16	-1,095.07
Jamestown, NY	x	-	100	-	0.00	-2.30	-2.23	-5.24	-6.10	-9.31	-93.26	0.00	-5.53	-5.54	-8.62	-9.61	-12.96	-95.13
Jefferson Co., NY	x	-	100	-	0.00	-2.30	-2.23	-5.23	-6.08	-9.28	-92.94	0.00	-5.52	-5.52	-8.60	-9.58	-12.92	-94.80
Johnstown, PA	-	x	-	100	0.00	-1.85	-1.79	-4.20	-4.89	-7.46	-74.71	0.00	-4.44	-4.45	-6.92	-7.71	-10.39	-76.21
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-2.33	-2.28	-5.11	-5.94	-8.97	-88.33	0.00	-5.58	-5.61	-8.50	-9.47	-12.63	-90.31
Knoxville, TN	x	x	100	100	0.00	-17.72	-17.17	-40.35	-46.93	-71.65	-718.04	0.00	-42.56	-42.59	-66.33	-73.95	-99.72	-732.34
Lancaster, PA	-	x	-	100	0.00	-6.78	-6.57	-15.43	-17.94	-27.40	-274.47	0.00	-16.28	-16.30	-25.37	-28.28	-38.14	-279.95
Las Vegas, NV	x	-	100	-	0.00	-25.84	-25.03	-58.90	-68.51	-104.64	-1,049.18	0.00	-62.06	-62.10	-96.80	-107.92	-145.58	-1,070.00
Libby, MT	-	x	-	100	0.00	-0.11	-0.11	-0.25	-0.30	-0.45	-4.53	0.00	-0.27	-0.27	-0.42	-0.47	-0.63	-4.62
Liberty-Clairton, PA	-	x	-	100	0.00	-0.21	-0.20	-0.47	-0.55	-0.83	-8.24	0.00	-0.50	-0.50	-0.78	-0.86	-1.16	-8.42
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-283.09	-277.84	-618.42	-718.65	-1,083.04	-10,642.28	0.00	-677.52	-681.94	-1,030.06	-1,146.69	-1,527.09	-10,884.37
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-12.60	-12.23	-28.57	-33.22	-50.67	-506.76	0.00	-30.25	-30.29	-47.03	-52.42	-70.60	-517.00
Louisville, KY-IN	-	x	-	100	0.00	-17.06	-16.49	-39.09	-45.46	-69.56	-699.15	0.00	-40.98	-40.97	-64.13	-71.50	-96.62	-712.78
Macon, GA	-	x	-	100	0.00	-3.17	-3.07	-7.28	-8.47	-12.97	-130.45	0.00	-7.62	-7.62	-11.94	-13.32	-18.00	-132.98
Manitowoc Co., WI	x	-	-	-	0.00	-1.67	-1.62	-3.80	-4.42	-6.74	-67.44	0.00	-4.02	-4.02	-6.25	-6.97	-9.39	-68.79
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-1.84	-1.79	-4.20	-4.88	-7.45	-74.62	0.00	-4.43	-4.43	-6.90	-7.69	-10.37	-76.11
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-7.35	-7.12	-16.71	-19.44	-29.68	-297.35	0.00	-17.64	-17.65	-27.48	-30.64	-41.31	-303.29
Memphis, TN-AR	x	-	100	-	0.00	-20.88	-20.74	-43.74	-50.79	-75.47	-725.70	0.00	-49.81	-50.40	-73.85	-82.10	-107.91	-744.52
Milwaukee-Racine, WI	x	-	100	-	0.00	-27.64	-26.79	-62.87	-73.12	-111.62	-1,118.04	0.00	-66.36	-66.43	-103.39	-115.25	-155.38	-1,140.38
Nevada (Western Part), CA	x	-	100	-	0.00	-1.65	-1.60	-3.76	-4.37	-6.68	-66.89	0.00	-3.97	-3.98	-6.19	-6.90	-9.30	-68.23
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-237.53	-231.10	-533.67	-620.51	-943.60	-9,398.61	0.00	-569.73	-571.28	-881.00	-981.69	-1,318.63	-9,594.03
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-2.40	-2.32	-5.47	-6.37	-9.73	-97.58	0.00	-5.76	-5.77	-8.99	-10.03	-13.53	-99.51
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-147.54	-146.39	-310.76	-360.85	-537.19	-5,179.68	0.00	-352.14	-356.14	-523.78	-582.35	-766.72	-5,311.88
Phoenix-Mesa, AZ	x	-	100	-	0.00	-69.35	-67.06	-158.76	-184.66	-282.46	-2,837.76	0.00	-166.58	-166.60	-260.55	-290.51	-392.43	-2,893.27
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-29.76	-28.83	-67.75	-78.79	-120.32	-1,205.81	0.00	-71.45	-71.51	-111.38	-124.16	-167.45	-1,229.83
Poughkeepsie, NY	x	x	100	100	0.00	-20.90	-20.25	-47.55	-55.30	-84.43	-845.85	0.00	-50.18	-50.22	-78.19	-87.16	-117.52	-862.73

**Table B2-42
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-14.44	-13.99	-32.85	-38.20	-58.33	-584.30	0.00	-34.67	-34.70	-54.02	-60.22	-81.19	-595.97
Reading, PA	-	x	-	100	0.00	-6.15	-5.96	-13.99	-16.27	-24.84	-248.91	0.00	-14.76	-14.78	-23.01	-25.65	-34.58	-253.87
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-14.69	-14.24	-33.35	-38.79	-59.18	-592.31	0.00	-35.26	-35.31	-54.88	-61.17	-82.43	-604.21
Rochester, NY	x	-	100	-	0.00	-20.37	-19.74	-46.36	-53.91	-82.31	-824.60	0.00	-48.92	-48.96	-76.22	-84.97	-114.57	-841.06
Rome, GA	-	x	-	100	0.00	-1.76	-1.71	-4.01	-4.67	-7.12	-71.38	0.00	-4.23	-4.24	-6.60	-7.35	-9.92	-72.80
Sacramento Metro, CA	x	-	50	-	0.00	-36.76	-35.62	-83.65	-97.28	-148.52	-1,488.04	0.00	-88.26	-88.34	-137.53	-153.32	-206.73	-1,517.73
San Diego, CA	x	-	100	-	0.00	-47.36	-45.89	-107.77	-125.33	-191.35	-1,917.13	0.00	-113.71	-113.82	-177.19	-197.53	-266.35	-1,955.38
San Francisco Bay Area, CA	x	-	100	-	0.00	-119.69	-117.38	-262.19	-304.70	-459.61	-4,522.42	0.00	-286.53	-288.29	-436.33	-485.78	-647.48	-4,624.41
San Joaquin Valley, CA	x	x	50	100	0.00	-80.70	-78.48	-181.58	-211.13	-321.21	-3,201.53	0.00	-193.59	-194.07	-299.62	-333.88	-448.67	-3,267.78
Sheboygan, WI	x	-	100	-	0.00	-1.91	-1.85	-4.35	-5.05	-7.71	-77.19	0.00	-4.59	-4.60	-7.15	-7.97	-10.74	-78.74
Springfield (Western MA), MA	x	-	100	-	0.00	-14.75	-14.29	-33.57	-39.04	-59.60	-597.17	0.00	-35.42	-35.45	-55.19	-61.53	-82.97	-609.08
St. Louis, MO-IL	x	x	100	100	0.00	-57.86	-56.99	-124.98	-145.20	-218.00	-2,129.98	0.00	-138.36	-139.48	-208.93	-232.49	-308.53	-2,180.21
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-2.21	-2.20	-4.61	-5.35	-7.95	-76.22	0.00	-5.27	-5.34	-7.80	-8.67	-11.38	-78.23
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-10.12	-9.81	-22.96	-26.70	-40.74	-407.65	0.00	-24.28	-24.32	-37.78	-42.12	-56.75	-415.85
Washington, DC-MD-VA	x	x	100	100	0.00	-80.60	-78.14	-183.09	-212.93	-324.92	-3,252.86	0.00	-193.48	-193.71	-301.20	-335.76	-452.50	-3,318.11
Wheeling, WV-OH	-	x	-	100	0.00	-2.59	-2.51	-5.89	-6.85	-10.46	-104.79	0.00	-6.22	-6.22	-9.69	-10.80	-14.56	-106.88
York, PA	-	x	-	100	0.00	-6.66	-6.45	-15.15	-17.61	-26.89	-269.39	0.00	-15.98	-16.00	-24.90	-27.76	-37.43	-274.77

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-43
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-31.79	-29.40	-80.42	-93.83	-141.34	-1,506.76	0.00	-105.40	-104.45	-158.64	-175.22	-226.22	-1,540.20
Allegan Co., MI	x	-	100	-	0.00	-3.47	-3.21	-8.79	-10.25	-15.44	-164.60	0.00	-11.51	-11.41	-17.33	-19.14	-24.71	-168.25
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-3.59	-3.32	-9.07	-10.58	-15.94	-169.88	0.00	-11.89	-11.78	-17.89	-19.76	-25.51	-173.66
Atlanta, GA	x	x	100	100	0.00	-202.84	-187.59	-513.34	-598.96	-902.25	-9,619.70	0.00	-672.58	-666.48	-1,012.51	-1,118.34	-1,443.96	-9,832.95
Baltimore, MD	x	x	100	100	0.00	-69.72	-64.51	-176.23	-205.62	-309.65	-3,299.90	0.00	-231.18	-229.11	-347.78	-384.11	-495.81	-3,373.40
Baton Rouge, LA	x	-	100	-	0.00	-43.02	-43.43	-82.82	-96.21	-134.60	-1,248.03	0.00	-141.87	-144.78	-185.54	-202.98	-244.94	-1,317.49
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-62.52	-65.17	-105.78	-122.58	-163.86	-1,370.37	0.00	-205.77	-212.36	-253.33	-275.87	-321.69	-1,484.90
Birmingham, AL	-	x	-	100	0.00	-24.28	-22.44	-61.52	-71.78	-108.17	-1,153.86	0.00	-80.50	-79.76	-121.28	-133.96	-173.02	-1,179.31
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-105.37	-97.47	-266.49	-310.94	-468.32	-4,991.91	0.00	-349.38	-346.24	-525.78	-580.72	-749.69	-5,102.85
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-14.63	-13.46	-37.56	-43.83	-66.23	-709.90	0.00	-48.54	-48.01	-73.63	-81.37	-105.40	-724.80
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-24.95	-23.08	-63.10	-73.63	-110.89	-1,182.00	0.00	-82.73	-81.99	-124.50	-137.51	-177.52	-1,208.28
Canton-Massillon, OH	-	x	-	100	0.00	-10.59	-10.27	-23.40	-27.25	-39.70	-398.84	0.00	-35.02	-35.26	-49.06	-53.93	-67.40	-413.15
Charleston, WV	-	x	-	100	0.00	-6.42	-5.94	-16.24	-18.95	-28.54	-304.26	0.00	-21.28	-21.09	-32.03	-35.38	-45.68	-311.01
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-47.87	-43.80	-124.49	-145.31	-220.22	-2,372.03	0.00	-158.83	-156.84	-242.70	-268.32	-348.65	-2,419.24
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-12.40	-11.49	-31.25	-36.45	-54.86	-583.99	0.00	-41.11	-40.76	-61.74	-68.18	-87.95	-597.15
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-204.02	-193.03	-485.24	-565.66	-839.78	-8,730.46	0.00	-675.56	-674.44	-983.55	-1,084.02	-1,379.21	-8,973.86
Chico, CA	x	-	100	-	0.00	-4.67	-4.32	-11.82	-13.79	-20.78	-221.52	0.00	-15.49	-15.35	-23.32	-25.76	-33.26	-226.43
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-43.64	-40.29	-110.96	-129.48	-195.25	-2,085.46	0.00	-144.72	-143.32	-218.42	-241.29	-311.89	-2,130.85
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-3.75	-3.47	-9.48	-11.06	-16.66	-177.61	0.00	-12.43	-12.32	-18.70	-20.66	-26.67	-181.55
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-59.09	-54.66	-149.46	-174.39	-262.67	-2,799.95	0.00	-195.93	-194.16	-294.87	-325.68	-420.46	-2,862.15
Columbus, OH	x	x	100	100	0.00	-43.83	-40.54	-110.92	-129.42	-194.95	-2,078.43	0.00	-145.34	-144.02	-218.78	-241.65	-312.00	-2,124.52
Dallas-Fort Worth, TX	x	-	100	-	0.00	-195.58	-180.90	-494.86	-577.39	-869.73	-9,272.18	0.00	-648.51	-642.64	-976.15	-1,078.18	-1,392.03	-9,477.89
Dayton-Springfield, OH	-	x	-	100	0.00	-18.00	-16.64	-45.53	-53.13	-80.03	-853.14	0.00	-59.67	-59.13	-89.82	-99.21	-128.08	-872.07
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-89.11	-83.02	-221.18	-258.00	-386.93	-4,094.35	0.00	-295.34	-293.36	-439.95	-485.61	-624.16	-4,192.06
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-116.14	-108.07	-289.15	-337.30	-506.22	-5,363.07	0.00	-384.95	-382.22	-574.38	-634.06	-815.55	-5,489.60
Door Co., WI	x	-	100	-	0.00	-0.73	-0.67	-1.85	-2.15	-3.24	-34.58	0.00	-2.42	-2.40	-3.64	-4.02	-5.19	-35.35
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.03	-0.03	-0.08	-0.09	-0.14	-1.47	0.00	-0.10	-0.10	-0.15	-0.17	-0.22	-1.50
Evansville, IN	-	x	-	100	0.00	-7.60	-6.96	-19.76	-23.06	-34.94	-376.31	0.00	-25.22	-24.90	-38.52	-42.59	-55.33	-383.82
Greater Connecticut, CT	x	-	100	-	0.00	-42.18	-39.04	-106.52	-124.29	-187.14	-1,993.64	0.00	-139.85	-138.62	-210.29	-232.26	-299.74	-2,038.19
Greene Co., PA	x	-	100	-	0.00	-0.84	-0.78	-2.12	-2.48	-3.73	-39.78	0.00	-2.78	-2.76	-4.19	-4.63	-5.97	-40.66
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-19.08	-17.65	-48.27	-56.32	-84.84	-904.49	0.00	-63.26	-62.69	-95.22	-105.17	-135.79	-924.55
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-16.79	-15.53	-42.48	-49.56	-74.65	-795.79	0.00	-55.67	-55.17	-83.79	-92.55	-119.49	-813.46

Table B2-43
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

VOCs 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.11	-0.10	-0.29	-0.33	-0.51	-5.46	0.00	-0.37	-0.36	-0.56	-0.62	-0.80	-5.57
Hickory, NC	-	x	-	100	0.00	-4.66	-4.31	-11.78	-13.74	-20.69	-220.49	0.00	-15.45	-15.31	-23.24	-25.67	-33.13	-225.40
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-236.89	-234.13	-492.16	-572.50	-819.86	-7,970.18	0.00	-782.32	-792.54	-1,062.19	-1,165.15	-1,433.78	-8,319.11
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-17.97	-17.75	-37.43	-43.54	-62.40	-607.44	0.00	-59.36	-60.12	-80.69	-88.52	-108.99	-633.83
Imperial Co., CA	x	-	100	-	0.00	-6.49	-6.00	-16.42	-19.16	-28.86	-307.66	0.00	-21.52	-21.32	-32.39	-35.78	-46.19	-314.49
Indianapolis, IN	-	x	-	100	0.00	-40.80	-37.74	-103.24	-120.45	-181.44	-1,934.32	0.00	-135.29	-134.06	-203.64	-224.92	-290.40	-1,977.23
Jamestown, NY	x	-	100	-	0.00	-3.31	-3.06	-8.36	-9.76	-14.70	-156.68	0.00	-10.96	-10.87	-16.50	-18.22	-23.53	-160.16
Jefferson Co., NY	x	-	100	-	0.00	-3.54	-3.27	-8.94	-10.43	-15.71	-167.50	0.00	-11.73	-11.62	-17.65	-19.49	-25.16	-171.22
Johnstown, PA	-	x	-	100	0.00	-2.59	-2.40	-6.54	-7.63	-11.49	-122.41	0.00	-8.60	-8.52	-12.92	-14.27	-18.41	-125.15
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-4.01	-3.80	-9.51	-11.09	-16.45	-170.82	0.00	-13.27	-13.26	-19.30	-21.27	-27.04	-175.63
Knoxville, TN	x	x	100	100	0.00	-26.69	-24.68	-67.57	-78.84	-118.78	-1,266.54	0.00	-88.51	-87.70	-133.26	-147.19	-190.06	-1,294.58
Lancaster, PA	-	x	-	100	0.00	-9.97	-9.22	-25.23	-29.43	-44.33	-472.62	0.00	-33.06	-32.76	-49.76	-54.96	-70.96	-483.11
Las Vegas, NV	x	-	100	-	0.00	-43.85	-40.51	-111.28	-129.85	-195.72	-2,088.91	0.00	-145.41	-144.04	-219.23	-242.17	-312.88	-2,134.73
Libby, MT	-	x	-	100	0.00	-0.17	-0.15	-0.42	-0.49	-0.73	-7.83	0.00	-0.55	-0.54	-0.82	-0.91	-1.18	-8.00
Liberty-Clairton, PA	-	x	-	100	0.00	-0.29	-0.27	-0.71	-0.82	-1.23	-12.98	0.00	-0.95	-0.95	-1.41	-1.56	-1.99	-13.30
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-441.17	-416.03	-1,059.19	-1,234.91	-1,837.54	-19,180.03	0.00	-1,461.14	-1,457.12	-2,137.94	-2,357.11	-3,005.73	-19,697.15
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-20.14	-18.69	-50.56	-58.98	-88.69	-942.57	0.00	-66.78	-66.24	-100.08	-110.51	-142.41	-964.13
Louisville, KY-IN	-	x	-	100	0.00	-24.55	-22.63	-62.70	-73.17	-110.44	-1,181.59	0.00	-81.43	-80.60	-123.19	-136.11	-176.11	-1,206.88
Macon, GA	-	x	-	100	0.00	-4.57	-4.21	-11.71	-13.67	-20.65	-221.13	0.00	-15.17	-15.01	-22.98	-25.40	-32.88	-225.81
Manitowoc Co., WI	x	-	-	-	0.00	-2.40	-2.22	-6.06	-7.07	-10.64	-113.25	0.00	-7.97	-7.90	-11.97	-13.22	-17.05	-115.79
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-3.01	-2.79	-7.62	-8.89	-13.39	-142.67	0.00	-9.99	-9.90	-15.03	-16.60	-21.43	-145.84
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-12.24	-11.32	-30.96	-36.12	-54.41	-580.05	0.00	-40.57	-40.20	-61.07	-67.45	-87.08	-592.92
Memphis, TN-AR	x	-	100	-	0.00	-30.96	-29.81	-69.95	-81.48	-119.42	-1,212.89	0.00	-102.40	-102.83	-145.12	-159.66	-200.63	-1,253.25
Milwaukee-Racine, WI	x	-	100	-	0.00	-40.20	-37.19	-101.66	-118.62	-178.65	-1,904.19	0.00	-133.30	-132.11	-200.59	-221.55	-286.01	-1,946.53
Nevada (Western Part), CA	x	-	100	-	0.00	-2.54	-2.35	-6.43	-7.50	-11.30	-120.40	0.00	-8.43	-8.36	-12.69	-14.01	-18.09	-123.08
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-347.29	-323.33	-863.53	-1,007.30	-1,511.29	-16,002.78	0.00	-1,151.08	-1,143.11	-1,716.31	-1,894.55	-2,436.08	-16,382.19
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-3.39	-3.13	-8.61	-10.05	-15.14	-161.67	0.00	-11.24	-11.14	-16.96	-18.73	-24.21	-165.21
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-224.56	-215.49	-512.54	-597.11	-877.37	-8,953.86	0.00	-742.95	-745.20	-1,058.43	-1,164.87	-1,467.36	-9,241.84
Phoenix-Mesa, AZ	x	-	100	-	0.00	-115.43	-106.43	-294.39	-343.53	-518.38	-5,543.30	0.00	-382.80	-378.96	-578.72	-639.38	-827.04	-5,662.53
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-41.80	-38.65	-105.85	-123.51	-186.07	-1,984.30	0.00	-138.61	-137.34	-208.73	-230.55	-297.72	-2,028.19
Poughkeepsie, NY	x	x	100	100	0.00	-31.72	-29.34	-80.25	-93.64	-141.04	-1,503.58	0.00	-105.18	-104.23	-158.31	-174.85	-225.75	-1,536.95

**Table B2-43
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-20.92	-19.36	-52.93	-61.76	-93.02	-991.58	0.00	-69.38	-68.76	-104.42	-115.33	-148.90	-1,013.61
Reading, PA	-	x	-	100	0.00	-9.35	-8.64	-23.64	-27.59	-41.56	-443.01	0.00	-30.99	-30.71	-46.64	-51.52	-66.51	-452.84
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-26.76	-24.79	-67.45	-78.69	-118.43	-1,260.63	0.00	-88.73	-87.96	-133.27	-147.18	-189.84	-1,289.02
Rochester, NY	x	-	100	-	0.00	-29.76	-27.52	-75.29	-87.84	-132.31	-1,410.53	0.00	-98.67	-97.78	-148.51	-164.03	-211.78	-1,441.84
Rome, GA	-	x	-	100	0.00	-2.55	-2.36	-6.45	-7.52	-11.33	-120.83	0.00	-8.45	-8.38	-12.72	-14.05	-18.14	-123.51
Sacramento Metro, CA	x	-	50	-	0.00	-57.96	-53.62	-146.60	-171.05	-257.63	-2,746.13	0.00	-192.19	-190.46	-289.23	-319.45	-412.41	-2,807.15
San Diego, CA	x	-	100	-	0.00	-68.36	-63.23	-172.98	-201.82	-304.01	-3,241.07	0.00	-226.68	-224.62	-341.20	-376.86	-486.57	-3,312.97
San Francisco Bay Area, CA	x	-	100	-	0.00	-177.32	-167.24	-425.56	-496.16	-738.22	-7,704.16	0.00	-587.28	-585.70	-859.14	-947.20	-1,207.73	-7,912.16
San Joaquin Valley, CA	x	x	50	100	0.00	-131.00	-121.76	-327.21	-381.71	-573.28	-6,081.12	0.00	-434.26	-431.01	-649.07	-716.59	-922.38	-6,222.87
Sheboygan, WI	x	-	100	-	0.00	-2.81	-2.60	-7.10	-8.28	-12.47	-132.79	0.00	-9.32	-9.24	-14.01	-15.48	-19.97	-135.77
Springfield (Western MA), MA	x	-	100	-	0.00	-21.73	-20.10	-54.99	-64.16	-96.65	-1,030.36	0.00	-72.06	-71.41	-108.47	-119.81	-154.69	-1,053.22
St. Louis, MO-IL	x	x	100	100	0.00	-85.85	-81.49	-202.33	-235.83	-349.33	-3,617.24	0.00	-284.22	-284.05	-411.80	-453.72	-576.00	-3,721.40
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.19	-3.08	-7.13	-8.31	-12.15	-122.81	0.00	-10.54	-10.60	-14.87	-16.35	-20.50	-127.03
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Ventura Co., CA	x	-	100	-	0.00	-14.76	-13.67	-37.22	-43.42	-65.36	-695.84	0.00	-48.94	-48.52	-73.53	-81.20	-104.76	-711.49
Washington, DC-MD-VA	x	x	100	100	0.00	-124.02	-114.80	-313.09	-365.29	-549.96	-5,858.06	0.00	-411.19	-407.59	-618.18	-682.74	-881.03	-5,989.15
Wheeling, WV-OH	-	x	-	100	0.00	-3.65	-3.37	-9.23	-10.77	-16.23	-172.99	0.00	-12.10	-11.99	-18.21	-20.12	-25.97	-176.83
York, PA	-	x	-	100	0.00	-10.36	-9.58	-26.21	-30.58	-46.06	-490.99	0.00	-34.35	-34.04	-51.70	-57.10	-73.72	-501.89

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-44
Reference Case Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2035

Nonattainment Area	Status <u>b</u>		General Conformity Threshold <u>c</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-39.50	-32.11	-130.99	-153.06	-222.87	-2,565.74	0.00	-150.69	-144.33	-254.43	-282.02	-359.47	-2,586.41
Allegan Co., MI	x	-	100	-	0.00	-4.30	-3.49	-14.25	-16.65	-24.25	-279.17	0.00	-16.40	-15.70	-27.68	-30.69	-39.11	-281.42
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-5.05	-4.11	-16.74	-19.56	-28.48	-327.78	0.00	-19.27	-18.46	-32.52	-36.05	-45.94	-330.43
Atlanta, GA	x	x	100	100	0.00	-314.13	-255.32	-1,042.11	-1,217.76	-1,773.22	-20,415.24	0.00	-1,198.46	-1,147.77	-2,023.86	-2,243.38	-2,859.66	-20,579.23
Baltimore, MD	x	x	100	100	0.00	-85.90	-69.89	-284.45	-332.40	-483.91	-5,568.76	0.00	-327.78	-314.01	-552.91	-612.84	-780.96	-5,614.20
Baton Rouge, LA	x	-	100	-	0.00	-58.60	-56.90	-128.80	-150.04	-205.86	-2,035.69	0.00	-231.53	-233.60	-311.14	-339.82	-403.03	-2,143.00
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-85.57	-88.21	-151.74	-176.38	-231.42	-1,991.03	0.00	-342.47	-351.89	-417.55	-452.63	-516.27	-2,190.19
Birmingham, AL	-	x	-	100	0.00	-29.28	-23.77	-97.33	-113.74	-165.66	-1,908.26	0.00	-111.68	-106.93	-188.84	-209.34	-266.94	-1,923.31
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-121.57	-98.86	-402.97	-470.89	-685.61	-7,891.78	0.00	-463.85	-444.29	-782.90	-867.80	-1,106.03	-7,955.64
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-17.81	-14.32	-60.20	-70.35	-102.66	-1,187.60	0.00	-67.81	-64.74	-115.87	-128.53	-164.35	-1,195.59
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-28.05	-22.81	-92.96	-108.63	-158.17	-1,820.55	0.00	-107.02	-102.51	-180.62	-200.21	-255.17	-1,835.30
Canton-Massillon, OH	-	x	-	100	0.00	-12.93	-11.72	-34.32	-40.04	-56.66	-608.60	0.00	-50.37	-49.79	-74.62	-82.05	-100.65	-625.38
Charleston, WV	-	x	-	100	0.00	-6.97	-5.67	-23.12	-27.02	-39.34	-452.86	0.00	-26.59	-25.47	-44.90	-49.77	-63.44	-456.51
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-70.96	-56.83	-241.40	-282.13	-411.96	-4,773.46	0.00	-270.01	-257.51	-463.25	-513.96	-657.90	-4,803.51
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-14.89	-12.25	-48.37	-56.51	-82.09	-939.75	0.00	-56.95	-54.73	-94.90	-105.12	-133.51	-948.75
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-257.09	-217.81	-790.19	-922.93	-1,331.85	-15,014.20	0.00	-988.43	-957.97	-1,592.89	-1,760.83	-2,215.74	-15,221.71
Chico, CA	x	-	100	-	0.00	-5.69	-4.63	-18.88	-22.06	-32.13	-369.86	0.00	-21.72	-20.80	-36.67	-40.65	-51.82	-372.84
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-55.30	-44.77	-184.73	-215.88	-314.59	-3,628.38	0.00	-210.84	-201.70	-357.59	-396.48	-505.97	-3,655.77
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-4.04	-3.29	-13.40	-15.66	-22.80	-262.47	0.00	-15.42	-14.77	-26.04	-28.86	-36.78	-264.59
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-66.21	-53.83	-219.51	-256.50	-373.47	-4,299.11	0.00	-252.62	-241.96	-426.43	-472.67	-602.45	-4,333.84
Columbus, OH	x	x	100	100	0.00	-57.56	-46.79	-190.94	-223.13	-324.90	-3,740.57	0.00	-219.61	-210.32	-370.84	-411.07	-523.98	-3,770.64
Dallas-Fort Worth, TX	x	-	100	-	0.00	-285.36	-231.96	-946.45	-1,105.97	-1,610.40	-18,539.72	0.00	-1,088.70	-1,042.69	-1,838.27	-2,037.65	-2,597.31	-18,688.92
Dayton-Springfield, OH	-	x	-	100	0.00	-20.19	-16.41	-66.97	-78.26	-113.95	-1,311.85	0.00	-77.04	-73.78	-130.08	-144.18	-183.79	-1,322.41
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-120.97	-99.83	-390.70	-456.48	-662.65	-7,575.01	0.00	-462.82	-445.17	-768.65	-851.20	-1,080.15	-7,650.58
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-135.92	-112.16	-439.00	-512.91	-744.57	-8,511.70	0.00	-520.00	-500.16	-863.64	-956.40	-1,213.66	-8,596.57
Door Co., WI	x	-	100	-	0.00	-0.82	-0.66	-2.71	-3.17	-4.61	-53.06	0.00	-3.12	-2.99	-5.26	-5.83	-7.44	-53.49
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.03	-0.03	-0.12	-0.14	-0.20	-2.33	0.00	-0.13	-0.12	-0.22	-0.25	-0.32	-2.34
Evansville, IN	-	x	-	100	0.00	-9.03	-7.18	-31.05	-36.29	-53.05	-616.39	0.00	-34.31	-32.66	-59.28	-65.79	-84.37	-619.82
Greater Connecticut, CT	x	-	100	-	0.00	-50.52	-41.13	-167.11	-195.28	-284.25	-3,270.18	0.00	-192.80	-184.73	-325.00	-360.21	-458.94	-3,297.12
Greene Co., PA	x	-	100	-	0.00	-0.87	-0.71	-2.90	-3.39	-4.93	-56.78	0.00	-3.33	-3.19	-5.63	-6.24	-7.95	-57.24
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-22.95	-18.66	-76.12	-88.95	-129.52	-1,491.05	0.00	-87.56	-83.86	-147.84	-163.88	-208.89	-1,503.05
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-19.63	-15.96	-65.10	-76.07	-110.77	-1,275.14	0.00	-74.90	-71.74	-126.46	-140.17	-178.67	-1,285.43

Table B2-44
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

VOCs 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.12	-0.10	-0.44	-0.52	-0.76	-8.94	0.00	-0.47	-0.44	-0.83	-0.93	-1.19	-8.96
Hickory, NC	-	x	-	100	0.00	-5.81	-4.73	-19.24	-22.48	-32.73	-376.62	0.00	-22.17	-21.24	-37.39	-41.45	-52.82	-379.69
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-320.92	-299.03	-794.19	-926.13	-1,296.56	-13,549.29	0.00	-1,257.11	-1,252.86	-1,793.83	-1,967.49	-2,383.74	-14,033.02
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-22.92	-21.58	-55.17	-64.32	-89.65	-925.72	0.00	-89.98	-89.95	-126.55	-138.67	-167.17	-962.10
Imperial Co., CA	x	-	100	-	0.00	-9.52	-7.74	-31.57	-36.89	-53.72	-618.47	0.00	-36.32	-34.78	-61.32	-67.98	-86.65	-623.45
Indianapolis, IN	-	x	-	100	0.00	-53.69	-43.65	-178.09	-208.10	-303.02	-3,488.52	0.00	-204.85	-196.19	-345.89	-383.41	-488.72	-3,516.59
Jamestown, NY	x	-	100	-	0.00	-3.70	-3.01	-12.27	-14.34	-20.87	-240.27	0.00	-14.12	-13.52	-23.83	-26.42	-33.67	-242.21
Jefferson Co., NY	x	-	100	-	0.00	-4.56	-3.70	-15.10	-17.64	-25.68	-295.60	0.00	-17.38	-16.65	-29.33	-32.51	-41.44	-298.00
Johnstown, PA	-	x	-	100	0.00	-2.77	-2.26	-9.13	-10.67	-15.53	-178.53	0.00	-10.57	-10.13	-17.78	-19.71	-25.10	-180.03
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-6.53	-5.71	-18.74	-21.88	-31.30	-345.60	0.00	-25.25	-24.70	-39.10	-43.12	-53.63	-352.40
Knoxville, TN	x	x	100	100	0.00	-33.02	-26.83	-109.60	-128.07	-186.50	-2,147.48	0.00	-125.97	-120.63	-212.80	-235.88	-300.71	-2,164.65
Lancaster, PA	-	x	-	100	0.00	-11.72	-9.53	-38.87	-45.43	-66.14	-761.45	0.00	-44.72	-42.83	-75.51	-83.70	-106.68	-767.58
Las Vegas, NV	x	-	100	-	0.00	-68.62	-55.56	-229.15	-267.78	-390.22	-4,500.37	0.00	-261.60	-250.26	-443.62	-491.85	-627.66	-4,534.42
Libby, MT	-	x	-	100	0.00	-0.20	-0.16	-0.65	-0.76	-1.11	-12.74	0.00	-0.75	-0.72	-1.26	-1.40	-1.78	-12.84
Liberty-Clairton, PA	-	x	-	100	0.00	-0.29	-0.25	-0.91	-1.07	-1.54	-17.44	0.00	-1.13	-1.09	-1.83	-2.03	-2.56	-17.67
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-598.49	-506.48	-1,843.56	-2,153.29	-3,108.18	-35,061.74	0.00	-2,300.51	-2,228.88	-3,712.26	-4,103.96	-5,166.16	-35,540.07
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-28.39	-23.39	-91.90	-107.38	-155.92	-1,783.52	0.00	-108.58	-104.40	-180.60	-200.01	-253.91	-1,801.00
Louisville, KY-IN	-	x	-	100	0.00	-27.71	-22.35	-93.21	-108.92	-158.85	-1,835.32	0.00	-105.58	-100.88	-179.83	-199.44	-254.81	-1,848.31
Macon, GA	-	x	-	100	0.00	-5.16	-4.15	-17.47	-20.42	-29.80	-344.90	0.00	-19.65	-18.76	-33.61	-37.28	-47.69	-347.19
Manitowoc Co., WI	x	-	-	-	0.00	-2.69	-2.19	-8.88	-10.38	-15.10	-173.62	0.00	-10.27	-9.85	-17.29	-19.16	-24.40	-175.08
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-4.38	-3.56	-14.51	-16.96	-24.69	-284.19	0.00	-16.71	-16.01	-28.20	-31.26	-39.84	-286.49
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-18.60	-15.12	-61.69	-72.08	-104.96	-1,208.36	0.00	-70.96	-67.96	-119.81	-132.81	-169.28	-1,218.08
Memphis, TN-AR	x	-	100	-	0.00	-37.55	-33.50	-103.43	-120.71	-171.70	-1,869.10	0.00	-145.81	-143.47	-220.52	-242.80	-299.79	-1,913.42
Milwaukee-Racine, WI	x	-	100	-	0.00	-46.42	-37.75	-153.82	-179.75	-261.71	-3,012.22	0.00	-177.10	-169.64	-298.88	-331.29	-422.23	-3,036.64
Nevada (Western Part), CA	x	-	100	-	0.00	-3.27	-2.66	-10.83	-12.65	-18.42	-211.93	0.00	-12.49	-11.97	-21.06	-23.34	-29.74	-213.67
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-405.22	-334.78	-1,305.89	-1,525.73	-2,214.27	-25,297.56	0.00	-1,550.61	-1,491.97	-2,571.83	-2,847.83	-3,612.51	-25,553.98
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-3.68	-2.99	-12.28	-14.35	-20.91	-241.04	0.00	-14.05	-13.44	-23.79	-26.38	-33.65	-242.89
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-286.80	-252.93	-811.06	-946.77	-1,351.63	-14,846.09	0.00	-1,111.18	-1,089.58	-1,705.67	-1,879.82	-2,331.74	-15,159.94
Phoenix-Mesa, AZ	x	-	100	-	0.00	-173.87	-140.37	-583.50	-681.90	-994.23	-11,480.86	0.00	-662.52	-633.28	-1,126.97	-1,249.73	-1,596.12	-11,563.78
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-45.00	-36.56	-149.42	-174.61	-254.28	-2,928.27	0.00	-171.66	-164.38	-290.06	-321.54	-409.93	-2,951.60
Poughkeepsie, NY	x	x	100	100	0.00	-39.77	-32.33	-131.89	-154.11	-224.40	-2,583.34	0.00	-151.73	-145.32	-256.17	-283.96	-361.94	-2,604.15

**Table B2-44
Reference Case Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Providence (All RI), RI	x	-	100	-	0.00	-23.91	-19.44	-79.28	-92.64	-134.88	-1,552.71	0.00	-91.23	-87.38	-154.00	-170.70	-217.58	-1,565.24
Reading, PA	-	x	-	100	0.00	-11.74	-9.54	-38.93	-45.49	-66.24	-762.56	0.00	-44.79	-42.89	-75.62	-83.82	-106.84	-768.70
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-48.35	-39.50	-158.90	-185.67	-270.08	-3,101.92	0.00	-184.62	-177.08	-309.98	-343.48	-437.16	-3,128.89
Rochester, NY	x	-	100	-	0.00	-34.58	-28.11	-114.67	-133.99	-195.10	-2,246.03	0.00	-131.92	-126.35	-222.73	-246.88	-314.69	-2,264.13
Rome, GA	-	x	-	100	0.00	-2.90	-2.35	-9.61	-11.22	-16.34	-188.16	0.00	-11.05	-10.58	-18.66	-20.68	-26.36	-189.67
Sacramento Metro, CA	x	-	50	-	0.00	-79.48	-64.67	-263.10	-307.45	-447.58	-5,150.23	0.00	-303.27	-290.55	-511.48	-566.92	-722.40	-5,192.36
San Diego, CA	x	-	100	-	0.00	-77.47	-62.97	-256.95	-300.25	-437.20	-5,033.34	0.00	-295.55	-283.05	-499.05	-553.17	-705.12	-5,073.83
San Francisco Bay Area, CA	x	-	100	-	0.00	-213.85	-182.39	-648.67	-757.57	-1,091.43	-12,256.20	0.00	-823.20	-799.38	-1,316.24	-1,454.31	-1,825.92	-12,438.86
San Joaquin Valley, CA	x	x	50	100	0.00	-188.48	-154.44	-616.45	-720.30	-1,047.15	-12,011.02	0.00	-720.15	-691.28	-1,205.40	-1,335.47	-1,698.28	-12,119.72
Sheboygan, WI	x	-	100	-	0.00	-3.30	-2.69	-10.92	-12.76	-18.57	-213.60	0.00	-12.61	-12.09	-21.25	-23.55	-30.00	-215.37
Springfield (Western MA), MA	x	-	100	-	0.00	-25.66	-20.86	-85.11	-99.46	-144.82	-1,667.26	0.00	-97.91	-93.77	-165.31	-183.24	-233.57	-1,680.68
St. Louis, MO-IL	x	x	100	100	0.00	-104.52	-90.25	-309.24	-361.10	-518.59	-5,779.47	0.00	-403.31	-393.04	-635.44	-701.46	-876.93	-5,877.88
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.68	-3.32	-9.86	-11.51	-16.31	-175.81	0.00	-14.33	-14.15	-21.34	-23.48	-28.85	-180.48
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Ventura Co., CA	x	-	100	-	0.00	-17.10	-13.95	-56.39	-65.89	-95.88	-1,102.14	0.00	-65.28	-62.58	-109.83	-121.71	-154.99	-1,111.46
Washington, DC-MD-VA	x	x	100	100	0.00	-165.54	-134.83	-547.15	-639.36	-930.61	-10,704.01	0.00	-631.79	-605.44	-1,064.48	-1,179.79	-1,502.96	-10,792.77
Wheeling, WV-OH	-	x	-	100	0.00	-3.95	-3.21	-13.09	-15.29	-22.27	-256.34	0.00	-15.05	-14.42	-25.42	-28.17	-35.91	-258.40
York, PA	-	x	-	100	0.00	-13.65	-11.09	-45.25	-52.87	-76.98	-886.21	0.00	-52.06	-49.87	-87.89	-97.43	-124.18	-893.36

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-45
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.08	0.11	0.12	0.15	0.22	0.62	0.00	0.08	0.11	0.12	0.15	0.22	0.62
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Atlanta, GA	x	x	100	100	0.00	0.45	0.56	0.65	0.79	1.17	3.30	0.00	0.45	0.56	0.65	0.79	1.17	3.30
Baltimore, MD	x	x	100	100	0.00	0.19	0.23	0.27	0.33	0.49	1.37	0.00	0.19	0.23	0.27	0.33	0.49	1.37
Baton Rouge, LA	x	-	100	-	0.00	-0.34	-0.42	-0.56	-0.63	-0.72	-1.34	0.00	-0.34	-0.42	-0.56	-0.63	-0.72	-1.35
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.74	-0.92	-1.21	-1.38	-1.60	-3.15	0.00	-0.74	-0.92	-1.21	-1.38	-1.60	-3.15
Birmingham, AL	-	x	-	100	0.00	0.07	0.09	0.10	0.12	0.18	0.50	0.00	0.07	0.09	0.10	0.12	0.18	0.50
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.30	0.38	0.44	0.53	0.79	2.23	0.00	0.30	0.38	0.44	0.53	0.79	2.23
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.04	0.05	0.06	0.07	0.11	0.30	0.00	0.04	0.05	0.06	0.07	0.11	0.30
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.07	0.09	0.11	0.13	0.19	0.54	0.00	0.07	0.09	0.11	0.13	0.19	0.54
Canton-Massillon, OH	-	x	-	100	0.00	-0.03	-0.04	-0.05	-0.06	-0.05	-0.06	0.00	-0.03	-0.04	-0.05	-0.06	-0.05	-0.06
Charleston, WV	-	x	-	100	0.00	0.02	0.02	0.03	0.03	0.05	0.14	0.00	0.02	0.02	0.03	0.03	0.05	0.14
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.12	0.15	0.17	0.21	0.31	0.87	0.00	0.12	0.15	0.17	0.21	0.31	0.87
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.03	0.04	0.05	0.06	0.09	0.26	0.00	0.03	0.04	0.05	0.06	0.09	0.26
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.09	-0.11	-0.23	-0.22	0.00	0.97	0.00	-0.10	-0.11	-0.23	-0.22	0.00	0.97
Chico, CA	x	-	100	-	0.00	0.01	0.02	0.02	0.02	0.03	0.09	0.00	0.01	0.02	0.02	0.02	0.03	0.09
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.12	0.15	0.18	0.21	0.32	0.89	0.00	0.12	0.15	0.18	0.21	0.32	0.89
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.17	0.22	0.25	0.31	0.46	1.28	0.00	0.17	0.22	0.25	0.31	0.46	1.28
Columbus, OH	x	x	100	100	0.00	0.11	0.14	0.16	0.20	0.29	0.83	0.00	0.11	0.14	0.16	0.20	0.29	0.83
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.45	0.57	0.66	0.80	1.19	3.35	0.00	0.45	0.57	0.66	0.80	1.19	3.35
Dayton-Springfield, OH	-	x	-	100	0.00	0.05	0.07	0.08	0.09	0.14	0.39	0.00	0.05	0.07	0.08	0.09	0.14	0.39
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.15	0.19	0.20	0.25	0.41	1.27	0.00	0.15	0.19	0.20	0.25	0.41	1.27
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.25	0.31	0.35	0.43	0.68	2.04	0.00	0.25	0.31	0.35	0.43	0.68	2.04
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.02	0.03	0.03	0.04	0.06	0.17	0.00	0.02	0.03	0.03	0.04	0.06	0.17
Greater Connecticut, CT	x	-	100	-	0.00	0.11	0.15	0.17	0.20	0.30	0.85	0.00	0.11	0.15	0.17	0.20	0.30	0.85
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.05	0.07	0.08	0.09	0.14	0.38	0.00	0.05	0.07	0.08	0.09	0.14	0.38

**Table B2-45
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.05	0.06	0.07	0.08	0.12	0.35	0.00	0.05	0.06	0.07	0.08	0.12	0.35
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.01	0.02	0.02	0.02	0.03	0.09	0.00	0.01	0.02	0.02	0.02	0.03	0.09
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1.23	-1.54	-2.06	-2.32	-2.54	-4.38	0.00	-1.23	-1.54	-2.07	-2.33	-2.54	-4.39
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.12	-0.15	-0.20	-0.23	-0.25	-0.45	0.00	-0.12	-0.15	-0.20	-0.23	-0.25	-0.45
Imperial Co., CA	x	-	100	-	0.00	0.01	0.02	0.02	0.03	0.04	0.11	0.00	0.01	0.02	0.02	0.03	0.04	0.11
Indianapolis, IN	-	x	-	100	0.00	0.10	0.13	0.15	0.18	0.27	0.77	0.00	0.10	0.13	0.15	0.18	0.27	0.77
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.03	0.07	0.00	0.01	0.01	0.01	0.02	0.03	0.07
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Knoxville, TN	x	x	100	100	0.00	0.07	0.09	0.10	0.13	0.19	0.53	0.00	0.07	0.09	0.10	0.13	0.19	0.53
Lancaster, PA	-	x	-	100	0.00	0.03	0.04	0.04	0.05	0.07	0.21	0.00	0.03	0.04	0.04	0.05	0.07	0.21
Las Vegas, NV	x	-	100	-	0.00	0.09	0.12	0.13	0.16	0.24	0.68	0.00	0.09	0.12	0.13	0.16	0.24	0.68
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.12	0.16	0.03	0.13	0.69	3.42	0.00	0.12	0.16	0.03	0.13	0.69	3.42
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.05	0.06	0.07	0.08	0.12	0.35	0.00	0.05	0.06	0.07	0.08	0.12	0.35
Louisville, KY-IN	-	x	-	100	0.00	0.07	0.09	0.11	0.13	0.19	0.54	0.00	0.07	0.09	0.11	0.13	0.19	0.54
Macon, GA	-	x	-	100	0.00	0.01	0.02	0.02	0.02	0.04	0.10	0.00	0.01	0.02	0.02	0.02	0.04	0.10
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.03	0.03	0.04	0.05	0.07	0.20	0.00	0.03	0.03	0.04	0.05	0.07	0.20
Memphis, TN-AR	x	-	100	-	0.00	-0.06	-0.07	-0.10	-0.11	-0.10	-0.06	0.00	-0.06	-0.07	-0.11	-0.11	-0.10	-0.06
Milwaukee-Racine, WI	x	-	100	-	0.00	0.11	0.14	0.17	0.20	0.30	0.85	0.00	0.11	0.14	0.17	0.20	0.30	0.85
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.73	0.92	1.02	1.26	2.00	6.02	0.00	0.72	0.92	1.02	1.26	2.00	6.02
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-0.35	-0.44	-0.66	-0.71	-0.57	-0.20	0.00	-0.36	-0.44	-0.66	-0.71	-0.58	-0.20

**Table B2-45
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acetaldehyde 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.26	0.32	0.37	0.45	0.67	1.89	0.00	0.26	0.32	0.37	0.45	0.67	1.89
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.13	0.16	0.19	0.23	0.34	0.95	0.00	0.13	0.16	0.19	0.23	0.34	0.95
Poughkeepsie, NY	x	x	100	100	0.00	0.08	0.10	0.12	0.15	0.22	0.61	0.00	0.08	0.10	0.12	0.15	0.22	0.61
Providence (All RI), RI	x	-	100	-	0.00	0.06	0.08	0.09	0.11	0.16	0.44	0.00	0.06	0.08	0.09	0.11	0.16	0.44
Reading, PA	-	x	-	100	0.00	0.02	0.03	0.04	0.04	0.06	0.18	0.00	0.02	0.03	0.04	0.04	0.06	0.18
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.05	0.06	0.07	0.09	0.13	0.36	0.00	0.05	0.06	0.07	0.09	0.13	0.36
Rochester, NY	x	-	100	-	0.00	0.08	0.11	0.12	0.15	0.22	0.62	0.00	0.08	0.11	0.12	0.15	0.22	0.62
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Sacramento Metro, CA	x	-	50	-	0.00	0.14	0.18	0.21	0.25	0.37	1.04	0.00	0.14	0.18	0.21	0.25	0.37	1.04
San Diego, CA	x	-	100	-	0.00	0.20	0.25	0.29	0.35	0.52	1.46	0.00	0.20	0.25	0.29	0.35	0.52	1.46
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.02	-0.02	-0.10	-0.07	0.16	1.23	0.00	-0.02	-0.02	-0.10	-0.07	0.16	1.23
San Joaquin Valley, CA	x	x	50	100	0.00	0.21	0.27	0.30	0.37	0.59	1.80	0.00	0.21	0.27	0.30	0.37	0.59	1.80
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Springfield (Western MA), MA	x	-	100	-	0.00	0.06	0.08	0.09	0.11	0.16	0.45	0.00	0.06	0.08	0.09	0.11	0.16	0.45
St. Louis, MO-IL	x	x	100	100	0.00	-0.01	-0.01	-0.05	-0.04	0.07	0.56	0.00	-0.01	-0.01	-0.05	-0.04	0.07	0.56
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.04	0.05	0.06	0.07	0.10	0.30	0.00	0.04	0.05	0.06	0.07	0.10	0.30
Washington, DC-MD-VA	x	x	100	100	0.00	0.32	0.40	0.46	0.56	0.83	2.35	0.00	0.32	0.40	0.46	0.56	0.83	2.35
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
York, PA	-	x	-	100	0.00	0.03	0.03	0.04	0.05	0.07	0.19	0.00	0.03	0.03	0.04	0.05	0.07	0.19

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-46
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.22	0.23	0.20	0.28	0.36	1.12	0.00	0.31	0.33	0.30	0.40	0.51	1.28
Allegan Co., MI	x	-	100	-	0.00	0.02	0.03	0.02	0.03	0.04	0.12	0.00	0.03	0.04	0.03	0.04	0.06	0.14
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.02	0.03	0.04	0.12	0.00	0.03	0.04	0.03	0.04	0.05	0.14
Atlanta, GA	x	x	100	100	0.00	1.25	1.35	1.14	1.61	2.10	6.46	0.00	1.78	1.94	1.77	2.34	2.94	7.43
Baltimore, MD	x	x	100	100	0.00	0.48	0.51	0.43	0.61	0.80	2.45	0.00	0.67	0.73	0.67	0.89	1.12	2.82
Baton Rouge, LA	x	-	100	-	0.00	-1.08	-1.26	-1.58	-1.74	-1.93	-3.54	0.00	-1.78	-2.02	-2.36	-2.55	-2.74	-4.04
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-2.33	-2.71	-3.33	-3.70	-4.15	-7.94	0.00	-3.82	-4.30	-4.98	-5.43	-5.89	-9.08
Birmingham, AL	-	x	-	100	0.00	0.17	0.18	0.15	0.22	0.28	0.88	0.00	0.24	0.26	0.24	0.32	0.40	1.01
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.75	0.80	0.68	0.96	1.25	3.84	0.00	1.06	1.15	1.05	1.39	1.75	4.42
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.10	0.11	0.09	0.13	0.17	0.54	0.00	0.15	0.16	0.15	0.19	0.24	0.62
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.18	0.19	0.16	0.23	0.30	0.92	0.00	0.25	0.28	0.25	0.33	0.42	1.06
Canton-Massillon, OH	-	x	-	100	0.00	-0.10	-0.13	-0.17	-0.18	-0.19	-0.27	0.00	-0.18	-0.21	-0.26	-0.27	-0.27	-0.31
Charleston, WV	-	x	-	100	0.00	0.05	0.05	0.04	0.06	0.08	0.24	0.00	0.07	0.07	0.07	0.09	0.11	0.28
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.32	0.35	0.30	0.42	0.54	1.67	0.00	0.46	0.50	0.46	0.61	0.76	1.92
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.09	0.09	0.08	0.11	0.14	0.45	0.00	0.12	0.13	0.12	0.16	0.20	0.51
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.56	-0.75	-1.39	-1.24	-1.12	0.05	0.00	-1.17	-1.38	-2.02	-1.83	-1.63	0.09
Chico, CA	x	-	100	-	0.00	0.03	0.03	0.03	0.04	0.05	0.17	0.00	0.05	0.05	0.05	0.06	0.08	0.19
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.30	0.33	0.28	0.39	0.51	1.56	0.00	0.43	0.47	0.43	0.57	0.71	1.80
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.03	0.03	0.02	0.04	0.05	0.14	0.00	0.04	0.04	0.04	0.05	0.06	0.16
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.42	0.46	0.38	0.54	0.71	2.18	0.00	0.60	0.65	0.60	0.79	0.99	2.51
Columbus, OH	x	x	100	100	0.00	0.29	0.32	0.27	0.38	0.49	1.51	0.00	0.41	0.45	0.41	0.55	0.69	1.73
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.24	1.34	1.13	1.60	2.08	6.41	0.00	1.76	1.92	1.75	2.32	2.92	7.36
Dayton-Springfield, OH	-	x	-	100	0.00	0.13	0.14	0.12	0.17	0.22	0.66	0.00	0.18	0.20	0.18	0.24	0.30	0.76
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.36	0.37	0.22	0.40	0.58	2.18	0.00	0.46	0.49	0.36	0.58	0.80	2.51
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.57	0.60	0.41	0.67	0.94	3.31	0.00	0.77	0.82	0.66	0.97	1.31	3.81
Door Co., WI	x	-	100	-	0.00	0.01	0.01	0.00	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.06	0.06	0.05	0.07	0.09	0.29	0.00	0.08	0.09	0.08	0.11	0.13	0.34
Greater Connecticut, CT	x	-	100	-	0.00	0.29	0.31	0.26	0.37	0.49	1.50	0.00	0.41	0.45	0.41	0.54	0.68	1.72
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.04
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.13	0.14	0.12	0.17	0.22	0.68	0.00	0.19	0.20	0.19	0.25	0.31	0.78

**Table B2-46
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.12	0.13	0.11	0.15	0.20	0.61	0.00	0.17	0.18	0.17	0.22	0.28	0.70
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.03	0.03	0.03	0.04	0.05	0.16	0.00	0.04	0.05	0.04	0.06	0.07	0.19
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-4.03	-4.76	-6.15	-6.64	-7.28	-12.50	0.00	-6.78	-7.69	-9.17	-9.76	-10.36	-14.28
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.40	-0.47	-0.60	-0.66	-0.72	-1.27	0.00	-0.67	-0.76	-0.90	-0.97	-1.03	-1.45
Imperial Co., CA	x	-	100	-	0.00	0.04	0.04	0.04	0.05	0.07	0.21	0.00	0.06	0.06	0.06	0.08	0.10	0.24
Indianapolis, IN	-	x	-	100	0.00	0.27	0.29	0.25	0.35	0.46	1.41	0.00	0.39	0.42	0.38	0.51	0.64	1.61
Jamestown, NY	x	-	100	-	0.00	0.02	0.03	0.02	0.03	0.04	0.12	0.00	0.03	0.04	0.03	0.04	0.06	0.14
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.03	0.02	0.03	0.04	0.12	0.00	0.03	0.04	0.03	0.04	0.06	0.14
Johnstown, PA	-	x	-	100	0.00	0.02	0.02	0.02	0.02	0.03	0.10	0.00	0.03	0.03	0.03	0.04	0.04	0.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.02	0.02	0.03	0.04	0.11	0.00	0.03	0.03	0.03	0.04	0.05	0.13
Knoxville, TN	x	x	100	100	0.00	0.18	0.20	0.17	0.23	0.31	0.94	0.00	0.26	0.28	0.26	0.34	0.43	1.08
Lancaster, PA	-	x	-	100	0.00	0.07	0.08	0.06	0.09	0.12	0.36	0.00	0.10	0.11	0.10	0.13	0.16	0.41
Las Vegas, NV	x	-	100	-	0.00	0.27	0.29	0.24	0.34	0.45	1.38	0.00	0.38	0.41	0.38	0.50	0.63	1.58
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.10	-0.33	-1.43	-0.92	-0.45	3.93	0.00	-0.72	-0.95	-2.02	-1.39	-0.72	4.57
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.13	0.14	0.12	0.16	0.21	0.66	0.00	0.18	0.20	0.18	0.24	0.30	0.76
Louisville, KY-IN	-	x	-	100	0.00	0.18	0.19	0.16	0.23	0.30	0.92	0.00	0.25	0.28	0.25	0.33	0.42	1.06
Macon, GA	-	x	-	100	0.00	0.03	0.04	0.03	0.04	0.06	0.17	0.00	0.05	0.05	0.05	0.06	0.08	0.20
Manitowoc Co., WI	x	-	-	-	0.00	0.02	0.02	0.02	0.02	0.03	0.09	0.00	0.02	0.03	0.02	0.03	0.04	0.10
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.02	0.02	0.03	0.10	0.00	0.03	0.03	0.03	0.04	0.04	0.11
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.08	0.08	0.07	0.10	0.13	0.39	0.00	0.11	0.12	0.11	0.14	0.18	0.45
Memphis, TN-AR	x	-	100	-	0.00	-0.22	-0.27	-0.40	-0.40	-0.41	-0.50	0.00	-0.40	-0.46	-0.59	-0.59	-0.59	-0.57
Milwaukee-Racine, WI	x	-	100	-	0.00	0.28	0.31	0.26	0.36	0.48	1.46	0.00	0.40	0.44	0.40	0.53	0.67	1.68
Nevada (Western Part), CA	x	-	100	-	0.00	0.02	0.02	0.02	0.02	0.03	0.09	0.00	0.02	0.03	0.02	0.03	0.04	0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1.67	1.74	1.17	1.94	2.72	9.73	0.00	2.21	2.37	1.87	2.80	3.79	11.19
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.02	0.03	0.02	0.03	0.04	0.13	0.00	0.04	0.04	0.04	0.05	0.06	0.15
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1.37	-1.68	-2.52	-2.51	-2.56	-2.79	0.00	-2.49	-2.86	-3.72	-3.70	-3.67	-3.16

**Table B2-46
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acetaldehyde 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.73	0.78	0.66	0.93	1.22	3.75	0.00	1.03	1.12	1.02	1.36	1.71	4.31
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.31	0.33	0.28	0.39	0.51	1.58	0.00	0.43	0.47	0.43	0.57	0.72	1.82
Poughkeepsie, NY	x	x	100	100	0.00	0.21	0.23	0.20	0.28	0.36	1.11	0.00	0.30	0.33	0.30	0.40	0.50	1.27
Providence (All RI), RI	x	-	100	-	0.00	0.15	0.16	0.13	0.19	0.25	0.76	0.00	0.21	0.23	0.21	0.28	0.35	0.88
Reading, PA	-	x	-	100	0.00	0.06	0.07	0.06	0.08	0.11	0.33	0.00	0.09	0.10	0.09	0.12	0.15	0.37
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.15	0.16	0.14	0.19	0.25	0.77	0.00	0.21	0.23	0.21	0.28	0.35	0.89
Rochester, NY	x	-	100	-	0.00	0.21	0.23	0.19	0.27	0.35	1.08	0.00	0.30	0.32	0.30	0.39	0.49	1.24
Rome, GA	-	x	-	100	0.00	0.02	0.02	0.02	0.02	0.03	0.09	0.00	0.03	0.03	0.03	0.03	0.04	0.11
Sacramento Metro, CA	x	-	50	-	0.00	0.38	0.41	0.34	0.49	0.63	1.95	0.00	0.54	0.58	0.53	0.71	0.89	2.24
San Diego, CA	x	-	100	-	0.00	0.49	0.52	0.44	0.63	0.82	2.51	0.00	0.69	0.75	0.69	0.91	1.14	2.88
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.33	-0.47	-1.01	-0.84	-0.70	0.70	0.00	-0.77	-0.93	-1.46	-1.25	-1.02	0.83
San Joaquin Valley, CA	x	x	50	100	0.00	0.56	0.59	0.39	0.65	0.92	3.30	0.00	0.75	0.80	0.63	0.95	1.28	3.80
Sheboygan, WI	x	-	100	-	0.00	0.02	0.02	0.02	0.03	0.03	0.10	0.00	0.03	0.03	0.03	0.04	0.05	0.12
Springfield (Western MA), MA	x	-	100	-	0.00	0.15	0.16	0.14	0.19	0.25	0.78	0.00	0.21	0.23	0.21	0.28	0.36	0.90
St. Louis, MO-IL	x	x	100	100	0.00	-0.15	-0.22	-0.47	-0.39	-0.33	0.31	0.00	-0.36	-0.43	-0.68	-0.58	-0.48	0.37
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.03	-0.05	-0.05	-0.05	-0.06	0.00	-0.05	-0.05	-0.07	-0.07	-0.07	-0.07
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.10	0.10	0.09	0.12	0.16	0.51	0.00	0.14	0.15	0.13	0.18	0.23	0.59
Washington, DC-MD-VA	x	x	100	100	0.00	0.82	0.89	0.75	1.06	1.38	4.25	0.00	1.17	1.27	1.16	1.54	1.93	4.88
Wheeling, WV-OH	-	x	-	100	0.00	0.03	0.03	0.02	0.03	0.04	0.14	0.00	0.04	0.04	0.04	0.05	0.06	0.16
York, PA	-	x	-	100	0.00	0.07	0.07	0.06	0.09	0.11	0.35	0.00	0.10	0.11	0.10	0.13	0.16	0.41

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-47
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.23	0.27	0.13	0.21	0.26	0.66	0.00	0.51	0.58	0.45	0.57	0.65	1.19
Allegan Co., MI	x	-	100	-	0.00	0.03	0.03	0.01	0.02	0.03	0.07	0.00	0.06	0.06	0.05	0.06	0.07	0.13
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.03	0.03	0.01	0.02	0.03	0.07	0.00	0.06	0.06	0.05	0.06	0.07	0.13
Atlanta, GA	x	x	100	100	0.00	1.48	1.70	0.85	1.36	1.65	4.20	0.00	3.24	3.68	2.89	3.64	4.16	7.61
Baltimore, MD	x	x	100	100	0.00	0.51	0.58	0.29	0.47	0.56	1.44	0.00	1.11	1.26	0.99	1.25	1.42	2.61
Baton Rouge, LA	x	-	100	-	0.00	-1.74	-1.99	-2.49	-2.73	-3.03	-5.75	0.00	-3.60	-3.97	-4.54	-4.88	-5.18	-7.02
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-3.68	-4.21	-5.12	-5.66	-6.31	-12.08	0.00	-7.63	-8.44	-9.49	-10.25	-10.93	-15.05
Birmingham, AL	-	x	-	100	0.00	0.18	0.20	0.10	0.16	0.20	0.50	0.00	0.39	0.44	0.35	0.44	0.50	0.91
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.77	0.88	0.44	0.70	0.85	2.18	0.00	1.68	1.91	1.50	1.89	2.16	3.95
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.11	0.13	0.06	0.10	0.12	0.31	0.00	0.24	0.28	0.22	0.27	0.31	0.57
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.18	0.21	0.10	0.17	0.20	0.52	0.00	0.40	0.45	0.36	0.45	0.51	0.93
Canton-Massillon, OH	-	x	-	100	0.00	-0.19	-0.22	-0.30	-0.32	-0.36	-0.65	0.00	-0.39	-0.43	-0.52	-0.55	-0.57	-0.73
Charleston, WV	-	x	-	100	0.00	0.05	0.05	0.03	0.04	0.05	0.13	0.00	0.10	0.12	0.09	0.12	0.13	0.24
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.37	0.43	0.21	0.34	0.42	1.06	0.00	0.82	0.93	0.73	0.92	1.05	1.92
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.09	0.10	0.05	0.08	0.10	0.25	0.00	0.20	0.22	0.17	0.22	0.25	0.46
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.46	-1.66	-3.02	-2.99	-3.23	-5.33	0.00	-2.89	-3.11	-4.52	-4.45	-4.52	-4.69
Chico, CA	x	-	100	-	0.00	0.03	0.04	0.02	0.03	0.04	0.10	0.00	0.07	0.08	0.07	0.08	0.10	0.18
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.32	0.37	0.18	0.30	0.36	0.91	0.00	0.71	0.80	0.63	0.79	0.91	1.66
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.03	0.03	0.02	0.03	0.03	0.08	0.00	0.06	0.07	0.05	0.07	0.08	0.14
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.43	0.49	0.25	0.40	0.48	1.22	0.00	0.94	1.07	0.84	1.06	1.21	2.21
Columbus, OH	x	x	100	100	0.00	0.32	0.37	0.18	0.29	0.36	0.91	0.00	0.70	0.79	0.62	0.79	0.90	1.64
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.43	1.63	0.82	1.31	1.59	4.05	0.00	3.12	3.55	2.79	3.51	4.01	7.33
Dayton-Springfield, OH	-	x	-	100	0.00	0.13	0.15	0.08	0.12	0.15	0.37	0.00	0.29	0.33	0.26	0.32	0.37	0.67
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.31	0.35	-0.08	0.09	0.15	0.73	0.00	0.70	0.82	0.40	0.65	0.81	1.89
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.48	0.55	0.01	0.24	0.34	1.21	0.00	1.09	1.25	0.73	1.07	1.29	2.81
Door Co., WI	x	-	100	-	0.00	0.01	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.06	0.07	0.03	0.05	0.07	0.17	0.00	0.13	0.15	0.12	0.15	0.17	0.30
Greater Connecticut, CT	x	-	100	-	0.00	0.31	0.35	0.18	0.28	0.34	0.87	0.00	0.67	0.76	0.60	0.75	0.86	1.57
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.00	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.02	0.02	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.14	0.16	0.08	0.13	0.15	0.39	0.00	0.30	0.35	0.27	0.34	0.39	0.72

**Table B2-47
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.12	0.14	0.07	0.11	0.14	0.35	0.00	0.27	0.30	0.24	0.30	0.34	0.63
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.03	0.04	0.02	0.03	0.04	0.10	0.00	0.07	0.08	0.07	0.08	0.10	0.17
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-6.74	-7.70	-10.02	-10.86	-12.03	-22.48	0.00	-13.89	-15.30	-17.88	-19.03	-20.13	-26.72
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.67	-0.76	-0.98	-1.06	-1.18	-2.22	0.00	-1.38	-1.52	-1.76	-1.88	-1.99	-2.67
Imperial Co., CA	x	-	100	-	0.00	0.05	0.05	0.03	0.04	0.05	0.13	0.00	0.10	0.12	0.09	0.12	0.13	0.24
Indianapolis, IN	-	x	-	100	0.00	0.30	0.34	0.17	0.27	0.33	0.84	0.00	0.65	0.74	0.58	0.73	0.84	1.53
Jamestown, NY	x	-	100	-	0.00	0.02	0.03	0.01	0.02	0.03	0.07	0.00	0.05	0.06	0.05	0.06	0.07	0.12
Jefferson Co., NY	x	-	100	-	0.00	0.03	0.03	0.01	0.02	0.03	0.07	0.00	0.06	0.06	0.05	0.06	0.07	0.13
Johnstown, PA	-	x	-	100	0.00	0.02	0.02	0.01	0.02	0.02	0.05	0.00	0.04	0.05	0.04	0.05	0.05	0.10
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.03	0.01	0.02	0.03	0.07	0.00	0.05	0.06	0.05	0.06	0.07	0.13
Knoxville, TN	x	x	100	100	0.00	0.19	0.22	0.11	0.18	0.22	0.55	0.00	0.43	0.48	0.38	0.48	0.55	1.00
Lancaster, PA	-	x	-	100	0.00	0.07	0.08	0.04	0.07	0.08	0.21	0.00	0.16	0.18	0.14	0.18	0.20	0.37
Las Vegas, NV	x	-	100	-	0.00	0.32	0.37	0.18	0.30	0.36	0.91	0.00	0.71	0.80	0.63	0.79	0.91	1.66
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1.34	-1.52	-4.08	-3.74	-3.93	-5.60	0.00	-2.46	-2.54	-5.15	-4.61	-4.40	-2.60
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.14	0.16	0.08	0.13	0.16	0.41	0.00	0.31	0.36	0.28	0.35	0.40	0.74
Louisville, KY-IN	-	x	-	100	0.00	0.18	0.21	0.10	0.17	0.20	0.52	0.00	0.40	0.46	0.36	0.45	0.51	0.94
Macon, GA	-	x	-	100	0.00	0.03	0.04	0.02	0.03	0.04	0.10	0.00	0.08	0.09	0.07	0.08	0.10	0.18
Manitowoc Co., WI	x	-	-	-	0.00	0.02	0.02	0.01	0.02	0.02	0.05	0.00	0.04	0.04	0.03	0.04	0.05	0.09
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.03	0.01	0.02	0.02	0.06	0.00	0.05	0.05	0.04	0.05	0.06	0.11
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.09	0.10	0.05	0.08	0.10	0.25	0.00	0.20	0.22	0.17	0.22	0.25	0.46
Memphis, TN-AR	x	-	100	-	0.00	-0.44	-0.50	-0.73	-0.77	-0.84	-1.50	0.00	-0.89	-0.97	-1.22	-1.26	-1.32	-1.62
Milwaukee-Racine, WI	x	-	100	-	0.00	0.29	0.34	0.17	0.27	0.33	0.83	0.00	0.64	0.73	0.57	0.72	0.82	1.50
Nevada (Western Part), CA	x	-	100	-	0.00	0.02	0.02	0.01	0.02	0.02	0.05	0.00	0.04	0.05	0.04	0.05	0.05	0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1.36	1.56	-0.07	0.60	0.89	3.40	0.00	3.10	3.58	2.01	3.01	3.66	8.09
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.02	0.03	0.01	0.02	0.03	0.07	0.00	0.05	0.06	0.05	0.06	0.07	0.13
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-2.72	-3.11	-4.73	-4.90	-5.36	-9.45	0.00	-5.51	-6.02	-7.74	-7.96	-8.26	-9.91

**Table B2-47
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acetaldehyde 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.86	0.98	0.49	0.79	0.95	2.44	0.00	1.88	2.14	1.68	2.11	2.41	4.42
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.31	0.35	0.17	0.28	0.34	0.87	0.00	0.67	0.76	0.60	0.75	0.86	1.57
Poughkeepsie, NY	x	x	100	100	0.00	0.23	0.27	0.13	0.21	0.26	0.66	0.00	0.51	0.57	0.45	0.57	0.65	1.19
Providence (All RI), RI	x	-	100	-	0.00	0.15	0.17	0.09	0.14	0.17	0.43	0.00	0.33	0.38	0.30	0.37	0.43	0.78
Reading, PA	-	x	-	100	0.00	0.07	0.08	0.04	0.06	0.08	0.19	0.00	0.15	0.17	0.13	0.17	0.19	0.35
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.19	0.22	0.11	0.18	0.21	0.55	0.00	0.42	0.48	0.38	0.48	0.54	0.99
Rochester, NY	x	-	100	-	0.00	0.22	0.25	0.12	0.20	0.24	0.62	0.00	0.47	0.54	0.42	0.53	0.61	1.12
Rome, GA	-	x	-	100	0.00	0.02	0.02	0.01	0.02	0.02	0.05	0.00	0.04	0.05	0.04	0.05	0.05	0.10
Sacramento Metro, CA	x	-	50	-	0.00	0.42	0.48	0.24	0.39	0.47	1.20	0.00	0.92	1.05	0.83	1.04	1.19	2.17
San Diego, CA	x	-	100	-	0.00	0.50	0.57	0.29	0.46	0.55	1.41	0.00	1.09	1.24	0.97	1.23	1.40	2.56
San Francisco Bay Area, CA	x	-	100	-	0.00	-1.09	-1.24	-2.39	-2.34	-2.51	-4.04	0.00	-2.13	-2.28	-3.48	-3.38	-3.39	-3.30
San Joaquin Valley, CA	x	x	50	100	0.00	0.55	0.64	0.02	0.28	0.40	1.41	0.00	1.25	1.45	0.86	1.24	1.50	3.23
Sheboygan, WI	x	-	100	-	0.00	0.02	0.02	0.01	0.02	0.02	0.06	0.00	0.04	0.05	0.04	0.05	0.06	0.10
Springfield (Western MA), MA	x	-	100	-	0.00	0.16	0.18	0.09	0.15	0.18	0.45	0.00	0.35	0.39	0.31	0.39	0.45	0.81
St. Louis, MO-IL	x	x	100	100	0.00	-0.50	-0.57	-1.11	-1.08	-1.16	-1.87	0.00	-0.99	-1.06	-1.61	-1.56	-1.57	-1.53
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.05	-0.06	-0.08	-0.09	-0.10	-0.17	0.00	-0.10	-0.11	-0.14	-0.14	-0.15	-0.19
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.10	0.11	0.05	0.08	0.10	0.27	0.00	0.21	0.24	0.18	0.24	0.27	0.51
Washington, DC-MD-VA	x	x	100	100	0.00	0.90	1.03	0.52	0.83	1.00	2.55	0.00	1.97	2.24	1.76	2.21	2.53	4.62
Wheeling, WV-OH	-	x	-	100	0.00	0.03	0.03	0.02	0.02	0.03	0.08	0.00	0.06	0.07	0.05	0.07	0.07	0.14
York, PA	-	x	-	100	0.00	0.08	0.09	0.04	0.07	0.08	0.21	0.00	0.17	0.19	0.15	0.19	0.21	0.39

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-48
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.14	0.21	-0.03	0.00	-0.06	-0.62	0.00	0.71	0.86	0.61	0.66	0.63	0.54
Allegan Co., MI	x	-	100	-	0.00	0.02	0.02	0.00	0.00	-0.01	-0.07	0.00	0.08	0.09	0.07	0.07	0.07	0.06
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.03	0.00	0.00	-0.01	-0.08	0.00	0.09	0.11	0.08	0.08	0.08	0.07
Atlanta, GA	x	x	100	100	0.00	1.11	1.71	-0.23	-0.04	-0.48	-4.91	0.00	5.64	6.86	4.82	5.26	4.99	4.29
Baltimore, MD	x	x	100	100	0.00	0.30	0.46	-0.06	-0.01	-0.13	-1.34	0.00	1.54	1.87	1.31	1.43	1.36	1.17
Baton Rouge, LA	x	-	100	-	0.00	-2.54	-2.84	-3.53	-3.90	-4.35	-8.60	0.00	-5.91	-6.43	-7.27	-7.82	-8.29	-10.80
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-5.23	-5.89	-7.09	-7.84	-8.70	-16.81	0.00	-12.49	-13.66	-15.14	-16.28	-17.22	-22.20
Birmingham, AL	-	x	-	100	0.00	0.10	0.16	-0.02	0.00	-0.04	-0.46	0.00	0.53	0.64	0.45	0.49	0.47	0.40
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.43	0.66	-0.09	-0.02	-0.19	-1.90	0.00	2.18	2.65	1.86	2.03	1.93	1.66
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.07	0.10	-0.01	0.00	-0.03	-0.29	0.00	0.33	0.40	0.28	0.31	0.29	0.25
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.10	0.15	-0.02	0.00	-0.04	-0.44	0.00	0.50	0.61	0.43	0.47	0.44	0.38
Canton-Massillon, OH	-	x	-	100	0.00	-0.31	-0.34	-0.47	-0.51	-0.58	-1.21	0.00	-0.68	-0.72	-0.87	-0.93	-1.00	-1.34
Charleston, WV	-	x	-	100	0.00	0.02	0.04	-0.01	0.00	-0.01	-0.11	0.00	0.13	0.15	0.11	0.12	0.11	0.10
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.26	0.40	-0.05	-0.01	-0.11	-1.16	0.00	1.34	1.62	1.14	1.24	1.18	1.02
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.05	0.08	-0.01	0.00	-0.02	-0.22	0.00	0.26	0.31	0.22	0.24	0.23	0.20
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-3.03	-3.11	-5.29	-5.71	-6.63	-15.52	0.00	-5.21	-5.23	-7.69	-8.22	-9.08	-13.17
Chico, CA	x	-	100	-	0.00	0.02	0.03	0.00	0.00	-0.01	-0.09	0.00	0.10	0.12	0.09	0.10	0.09	0.08
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.20	0.30	-0.04	-0.01	-0.09	-0.88	0.00	1.01	1.22	0.86	0.94	0.89	0.76
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.02	0.00	0.00	-0.01	-0.06	0.00	0.07	0.09	0.06	0.07	0.06	0.06
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.23	0.36	-0.05	-0.01	-0.10	-1.03	0.00	1.19	1.45	1.01	1.11	1.05	0.90
Columbus, OH	x	x	100	100	0.00	0.20	0.31	-0.04	-0.01	-0.09	-0.90	0.00	1.03	1.26	0.88	0.96	0.91	0.79
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.01	1.55	-0.21	-0.04	-0.44	-4.46	0.00	5.13	6.23	4.38	4.77	4.53	3.90
Dayton-Springfield, OH	-	x	-	100	0.00	0.07	0.11	-0.01	0.00	-0.03	-0.32	0.00	0.36	0.44	0.31	0.34	0.32	0.28
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.03	0.13	-0.67	-0.67	-0.90	-3.19	0.00	1.01	1.35	0.49	0.55	0.37	-0.30
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.01	0.17	-0.72	-0.71	-0.97	-3.50	0.00	1.19	1.59	0.62	0.70	0.51	-0.22
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.02	0.01	0.01	0.01	0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.03	0.05	-0.01	0.00	-0.01	-0.15	0.00	0.17	0.21	0.15	0.16	0.15	0.13
Greater Connecticut, CT	x	-	100	-	0.00	0.18	0.27	-0.04	-0.01	-0.08	-0.79	0.00	0.90	1.10	0.77	0.84	0.80	0.69
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.02	0.02	0.01	0.01	0.01	0.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.08	0.12	-0.02	0.00	-0.04	-0.36	0.00	0.41	0.50	0.35	0.38	0.36	0.31

**Table B2-48
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.07	0.11	-0.01	0.00	-0.03	-0.31	0.00	0.35	0.43	0.30	0.33	0.31	0.27
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.02	0.03	0.00	0.00	-0.01	-0.09	0.00	0.10	0.13	0.09	0.10	0.09	0.08
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-10.18	-11.27	-14.62	-16.06	-18.03	-36.68	0.00	-22.94	-24.77	-28.75	-30.89	-32.93	-43.45
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.00	-1.11	-1.41	-1.55	-1.73	-3.45	0.00	-2.30	-2.50	-2.85	-3.06	-3.25	-4.26
Imperial Co., CA	x	-	100	-	0.00	0.03	0.05	-0.01	0.00	-0.01	-0.15	0.00	0.17	0.21	0.15	0.16	0.15	0.13
Indianapolis, IN	-	x	-	100	0.00	0.19	0.29	-0.04	-0.01	-0.08	-0.84	0.00	0.96	1.17	0.82	0.90	0.85	0.73
Jamestown, NY	x	-	100	-	0.00	0.01	0.02	0.00	0.00	-0.01	-0.06	0.00	0.07	0.08	0.06	0.06	0.06	0.05
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.02	0.00	0.00	-0.01	-0.07	0.00	0.08	0.10	0.07	0.08	0.07	0.06
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.00	-0.04	0.00	0.05	0.06	0.04	0.05	0.04	0.04
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.03	0.00	0.00	-0.01	-0.08	0.00	0.09	0.11	0.08	0.08	0.08	0.07
Knoxville, TN	x	x	100	100	0.00	0.12	0.18	-0.02	0.00	-0.05	-0.52	0.00	0.59	0.72	0.51	0.55	0.53	0.45
Lancaster, PA	-	x	-	100	0.00	0.04	0.06	-0.01	0.00	-0.02	-0.18	0.00	0.21	0.26	0.18	0.20	0.19	0.16
Las Vegas, NV	x	-	100	-	0.00	0.25	0.38	-0.05	-0.01	-0.11	-1.09	0.00	1.25	1.52	1.07	1.16	1.10	0.95
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-3.96	-3.75	-8.18	-8.70	-10.36	-26.44	0.00	-4.66	-3.99	-8.91	-9.47	-10.93	-17.54
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.10	0.15	-0.02	0.00	-0.04	-0.42	0.00	0.49	0.59	0.42	0.45	0.43	0.37
Louisville, KY-IN	-	x	-	100	0.00	0.10	0.15	-0.02	0.00	-0.04	-0.44	0.00	0.51	0.62	0.44	0.48	0.45	0.39
Macon, GA	-	x	-	100	0.00	0.02	0.03	0.00	0.00	-0.01	-0.08	0.00	0.10	0.12	0.08	0.09	0.09	0.07
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.00	0.00	0.00	-0.04	0.00	0.05	0.06	0.04	0.04	0.04	0.04
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.00	0.00	-0.01	-0.07	0.00	0.08	0.10	0.07	0.07	0.07	0.06
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.07	0.10	-0.01	0.00	-0.03	-0.29	0.00	0.33	0.41	0.29	0.31	0.30	0.25
Memphis, TN-AR	x	-	100	-	0.00	-0.75	-0.81	-1.15	-1.26	-1.43	-3.06	0.00	-1.57	-1.66	-2.05	-2.20	-2.37	-3.22
Milwaukee-Racine, WI	x	-	100	-	0.00	0.16	0.25	-0.03	-0.01	-0.07	-0.72	0.00	0.83	1.01	0.71	0.78	0.74	0.63
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.02	0.00	0.00	0.00	-0.05	0.00	0.06	0.07	0.05	0.05	0.05	0.04
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.13	0.40	-2.28	-2.26	-3.04	-10.70	0.00	3.31	4.45	1.56	1.77	1.18	-1.08
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.02	0.00	0.00	-0.01	-0.06	0.00	0.07	0.08	0.06	0.06	0.06	0.05
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-4.81	-5.14	-7.61	-8.28	-9.46	-20.76	0.00	-9.63	-10.10	-12.93	-13.86	-15.02	-20.70

**Table B2-48
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acetaldehyde 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.63	0.96	-0.13	-0.02	-0.27	-2.78	0.00	3.19	3.88	2.73	2.97	2.82	2.43
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.16	0.24	-0.03	-0.01	-0.07	-0.70	0.00	0.81	0.99	0.69	0.75	0.72	0.62
Poughkeepsie, NY	x	x	100	100	0.00	0.14	0.22	-0.03	0.00	-0.06	-0.62	0.00	0.71	0.87	0.61	0.66	0.63	0.54
Providence (All RI), RI	x	-	100	-	0.00	0.08	0.13	-0.02	0.00	-0.04	-0.37	0.00	0.43	0.52	0.37	0.40	0.38	0.33
Reading, PA	-	x	-	100	0.00	0.04	0.06	-0.01	0.00	-0.02	-0.18	0.00	0.21	0.26	0.18	0.20	0.19	0.16
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.17	0.26	-0.03	-0.01	-0.07	-0.74	0.00	0.85	1.04	0.73	0.79	0.75	0.65
Rochester, NY	x	-	100	-	0.00	0.12	0.19	-0.02	0.00	-0.05	-0.54	0.00	0.62	0.76	0.53	0.58	0.55	0.47
Rome, GA	-	x	-	100	0.00	0.01	0.02	0.00	0.00	0.00	-0.05	0.00	0.05	0.06	0.04	0.05	0.05	0.04
Sacramento Metro, CA	x	-	50	-	0.00	0.28	0.43	-0.06	-0.01	-0.12	-1.24	0.00	1.42	1.73	1.21	1.32	1.26	1.08
San Diego, CA	x	-	100	-	0.00	0.27	0.42	-0.06	-0.01	-0.12	-1.21	0.00	1.39	1.69	1.19	1.30	1.23	1.06
San Francisco Bay Area, CA	x	-	100	-	0.00	-2.46	-2.53	-4.30	-4.64	-5.39	-12.60	0.00	-4.24	-4.26	-6.26	-6.69	-7.39	-10.71
San Joaquin Valley, CA	x	x	50	100	0.00	0.13	0.41	-0.83	-0.80	-1.14	-4.51	0.00	2.05	2.64	1.31	1.45	1.20	0.30
Sheboygan, WI	x	-	100	-	0.00	0.01	0.02	0.00	0.00	-0.01	-0.05	0.00	0.06	0.07	0.05	0.05	0.05	0.04
Springfield (Western MA), MA	x	-	100	-	0.00	0.09	0.14	-0.02	0.00	-0.04	-0.40	0.00	0.46	0.56	0.39	0.43	0.41	0.35
St. Louis, MO-IL	x	x	100	100	0.00	-1.14	-1.17	-1.99	-2.14	-2.49	-5.83	0.00	-1.95	-1.96	-2.88	-3.08	-3.40	-4.94
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.09	-0.09	-0.13	-0.14	-0.16	-0.33	0.00	-0.18	-0.20	-0.24	-0.25	-0.27	-0.36
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.05	0.08	-0.03	-0.02	-0.05	-0.31	0.00	0.27	0.33	0.22	0.24	0.23	0.18
Washington, DC-MD-VA	x	x	100	100	0.00	0.58	0.89	-0.12	-0.02	-0.25	-2.57	0.00	2.95	3.59	2.52	2.75	2.61	2.25
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.02	0.00	0.00	-0.01	-0.06	0.00	0.07	0.09	0.06	0.07	0.06	0.05
York, PA	-	x	-	100	0.00	0.05	0.07	-0.01	0.00	-0.02	-0.21	0.00	0.24	0.30	0.21	0.23	0.22	0.19

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-49
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.02	0.02	0.04	0.05	0.06	0.21	0.00	0.02	0.02	0.04	0.05	0.06	0.21
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Atlanta, GA	x	x	100	100	0.00	0.10	0.12	0.21	0.25	0.34	1.12	0.00	0.10	0.12	0.21	0.25	0.34	1.12
Baltimore, MD	x	x	100	100	0.00	0.04	0.05	0.09	0.10	0.14	0.47	0.00	0.04	0.05	0.09	0.10	0.14	0.47
Baton Rouge, LA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.11	0.00	0.01	0.01	0.02	0.02	0.03	0.11
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.07	0.00	0.01	0.01	0.01	0.01	0.02	0.07
Birmingham, AL	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.05	0.17	0.00	0.02	0.02	0.03	0.04	0.05	0.17
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.07	0.08	0.14	0.17	0.23	0.76	0.00	0.07	0.08	0.14	0.17	0.23	0.76
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.18	0.00	0.02	0.02	0.03	0.04	0.05	0.18
Canton-Massillon, OH	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.02	0.05	0.00	0.00	0.01	0.01	0.01	0.02	0.05
Charleston, WV	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.01	0.05	0.00	0.00	0.01	0.01	0.01	0.01	0.05
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.03	0.03	0.05	0.06	0.09	0.29	0.00	0.03	0.03	0.05	0.06	0.09	0.29
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.01	0.01	0.02	0.02	0.03	0.09
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.10	0.12	0.21	0.25	0.35	1.15	0.00	0.10	0.12	0.21	0.25	0.35	1.15
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.03	0.03	0.06	0.07	0.09	0.30	0.00	0.03	0.03	0.06	0.07	0.09	0.30
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.04	0.05	0.08	0.10	0.13	0.44	0.00	0.04	0.05	0.08	0.10	0.13	0.44
Columbus, OH	x	x	100	100	0.00	0.02	0.03	0.05	0.06	0.08	0.28	0.00	0.02	0.03	0.05	0.06	0.08	0.28
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.10	0.12	0.21	0.25	0.34	1.14	0.00	0.10	0.12	0.21	0.25	0.34	1.14
Dayton-Springfield, OH	-	x	-	100	0.00	0.01	0.01	0.02	0.03	0.04	0.13	0.00	0.01	0.01	0.02	0.03	0.04	0.13
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.05	0.06	0.10	0.12	0.16	0.53	0.00	0.05	0.06	0.10	0.12	0.16	0.53
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.07	0.09	0.15	0.17	0.24	0.79	0.00	0.07	0.09	0.15	0.17	0.24	0.79
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.02	0.06	0.00	0.00	0.01	0.01	0.01	0.02	0.06
Greater Connecticut, CT	x	-	100	-	0.00	0.03	0.03	0.05	0.06	0.09	0.29	0.00	0.03	0.03	0.05	0.06	0.09	0.29
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.01	0.01	0.02	0.03	0.04	0.13	0.00	0.01	0.01	0.02	0.03	0.04	0.13

**Table B2-49
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.01	0.01	0.02	0.03	0.04	0.12	0.00	0.01	0.01	0.02	0.03	0.04	0.12
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.07	0.09	0.15	0.18	0.25	0.84	0.00	0.07	0.09	0.15	0.18	0.25	0.84
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.04	0.00	0.00	0.00	0.01	0.01	0.01	0.04
Indianapolis, IN	-	x	-	100	0.00	0.02	0.03	0.05	0.06	0.08	0.26	0.00	0.02	0.03	0.05	0.06	0.08	0.26
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Knoxville, TN	x	x	100	100	0.00	0.02	0.02	0.03	0.04	0.05	0.18	0.00	0.02	0.02	0.03	0.04	0.05	0.18
Lancaster, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Las Vegas, NV	x	-	100	-	0.00	0.02	0.02	0.04	0.05	0.07	0.23	0.00	0.02	0.02	0.04	0.05	0.07	0.23
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.21	0.26	0.44	0.53	0.73	2.42	0.00	0.21	0.26	0.44	0.53	0.73	2.42
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.04	0.12	0.00	0.01	0.01	0.02	0.03	0.04	0.12
Louisville, KY-IN	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.06	0.18	0.00	0.02	0.02	0.03	0.04	0.06	0.18
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.07	0.00	0.01	0.01	0.01	0.01	0.02	0.07
Memphis, TN-AR	x	-	100	-	0.00	0.01	0.02	0.03	0.04	0.05	0.16	0.00	0.01	0.02	0.03	0.04	0.05	0.16
Milwaukee-Racine, WI	x	-	100	-	0.00	0.03	0.03	0.05	0.06	0.09	0.29	0.00	0.03	0.03	0.05	0.06	0.09	0.29
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.21	0.26	0.43	0.52	0.71	2.37	0.00	0.21	0.26	0.43	0.52	0.71	2.37
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.01	0.01	0.03
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	0.10	0.12	0.21	0.25	0.34	1.13	0.00	0.10	0.12	0.21	0.25	0.34	1.13

**Table B2-49
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acrolein 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.06	0.07	0.12	0.14	0.19	0.64	0.00	0.06	0.07	0.12	0.14	0.19	0.64
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.03	0.03	0.06	0.07	0.10	0.32	0.00	0.03	0.03	0.06	0.07	0.10	0.32
Poughkeepsie, NY	x	x	100	100	0.00	0.02	0.02	0.04	0.05	0.06	0.21	0.00	0.02	0.02	0.04	0.05	0.06	0.21
Providence (All RI), RI	x	-	100	-	0.00	0.01	0.02	0.03	0.03	0.05	0.15	0.00	0.01	0.02	0.03	0.03	0.05	0.15
Reading, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.04	0.12	0.00	0.01	0.01	0.02	0.03	0.04	0.12
Rochester, NY	x	-	100	-	0.00	0.02	0.02	0.04	0.05	0.06	0.21	0.00	0.02	0.02	0.04	0.05	0.06	0.21
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Sacramento Metro, CA	x	-	50	-	0.00	0.03	0.04	0.07	0.08	0.11	0.35	0.00	0.03	0.04	0.07	0.08	0.11	0.35
San Diego, CA	x	-	100	-	0.00	0.04	0.05	0.09	0.11	0.15	0.50	0.00	0.04	0.05	0.09	0.11	0.15	0.50
San Francisco Bay Area, CA	x	-	100	-	0.00	0.10	0.12	0.20	0.24	0.33	1.09	0.00	0.10	0.12	0.20	0.24	0.33	1.09
San Joaquin Valley, CA	x	x	50	100	0.00	0.06	0.08	0.13	0.16	0.22	0.72	0.00	0.06	0.08	0.13	0.16	0.22	0.72
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Springfield (Western MA), MA	x	-	100	-	0.00	0.01	0.02	0.03	0.03	0.05	0.15	0.00	0.01	0.02	0.03	0.03	0.05	0.15
St. Louis, MO-IL	x	x	100	100	0.00	0.04	0.05	0.09	0.11	0.15	0.50	0.00	0.04	0.05	0.09	0.11	0.15	0.50
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Washington, DC-MD-VA	x	x	100	100	0.00	0.07	0.09	0.15	0.18	0.24	0.80	0.00	0.07	0.09	0.15	0.18	0.24	0.80
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
York, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.01	0.02	0.06

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-50
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.07	0.07	0.11	0.14	0.17	0.61	0.00	0.08	0.08	0.13	0.16	0.20	0.63
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Atlanta, GA	x	x	100	100	0.00	0.39	0.39	0.64	0.79	1.01	3.51	0.00	0.45	0.46	0.73	0.90	1.15	3.63
Baltimore, MD	x	x	100	100	0.00	0.15	0.15	0.24	0.30	0.38	1.33	0.00	0.17	0.18	0.28	0.34	0.44	1.38
Baton Rouge, LA	x	-	100	-	0.00	0.03	0.03	0.06	0.07	0.09	0.32	0.00	0.04	0.04	0.07	0.08	0.10	0.33
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.19	0.00	0.02	0.02	0.04	0.05	0.06	0.19
Birmingham, AL	-	x	-	100	0.00	0.05	0.05	0.09	0.11	0.14	0.48	0.00	0.06	0.06	0.10	0.12	0.16	0.49
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.23	0.23	0.38	0.47	0.60	2.09	0.00	0.27	0.27	0.44	0.54	0.69	2.16
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.03	0.03	0.05	0.07	0.08	0.29	0.00	0.04	0.04	0.06	0.08	0.10	0.30
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.06	0.06	0.09	0.11	0.14	0.50	0.00	0.06	0.07	0.10	0.13	0.16	0.52
Canton-Massillon, OH	-	x	-	100	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.15
Charleston, WV	-	x	-	100	0.00	0.01	0.01	0.02	0.03	0.04	0.13	0.00	0.02	0.02	0.03	0.03	0.04	0.14
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.10	0.10	0.17	0.20	0.26	0.91	0.00	0.12	0.12	0.19	0.23	0.30	0.94
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.03	0.03	0.04	0.05	0.07	0.24	0.00	0.03	0.03	0.05	0.06	0.08	0.25
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.36	0.37	0.60	0.74	0.95	3.29	0.00	0.42	0.43	0.69	0.85	1.08	3.40
Chico, CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.01	0.01	0.02	0.02	0.03	0.09
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.09	0.09	0.15	0.19	0.25	0.85	0.00	0.11	0.11	0.18	0.22	0.28	0.88
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.13	0.13	0.22	0.27	0.34	1.19	0.00	0.15	0.16	0.25	0.31	0.39	1.23
Columbus, OH	x	x	100	100	0.00	0.09	0.09	0.15	0.18	0.24	0.82	0.00	0.11	0.11	0.17	0.21	0.27	0.85
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.38	0.39	0.63	0.78	1.00	3.48	0.00	0.45	0.46	0.73	0.90	1.14	3.60
Dayton-Springfield, OH	-	x	-	100	0.00	0.04	0.04	0.07	0.08	0.10	0.36	0.00	0.05	0.05	0.08	0.09	0.12	0.37
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.17	0.17	0.28	0.35	0.45	1.56	0.00	0.20	0.21	0.33	0.40	0.51	1.61
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.24	0.24	0.40	0.50	0.64	2.20	0.00	0.28	0.29	0.46	0.57	0.72	2.27
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.05	0.16	0.00	0.02	0.02	0.03	0.04	0.05	0.16
Greater Connecticut, CT	x	-	100	-	0.00	0.09	0.09	0.15	0.18	0.24	0.82	0.00	0.11	0.11	0.17	0.21	0.27	0.84
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.04	0.04	0.07	0.08	0.11	0.37	0.00	0.05	0.05	0.08	0.10	0.12	0.38

**Table B2-50
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.04	0.04	0.06	0.07	0.10	0.33	0.00	0.04	0.04	0.07	0.08	0.11	0.34
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.01	0.01	0.02	0.02	0.03	0.09
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.27	0.27	0.44	0.55	0.70	2.42	0.00	0.31	0.32	0.51	0.62	0.80	2.50
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.02	0.02	0.04	0.04	0.06	0.20	0.00	0.03	0.03	0.04	0.05	0.06	0.20
Imperial Co., CA	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.03	0.11	0.00	0.01	0.01	0.02	0.03	0.04	0.12
Indianapolis, IN	-	x	-	100	0.00	0.08	0.08	0.14	0.17	0.22	0.76	0.00	0.10	0.10	0.16	0.20	0.25	0.79
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.01	0.02	0.02	0.06
Knoxville, TN	x	x	100	100	0.00	0.06	0.06	0.09	0.12	0.15	0.51	0.00	0.07	0.07	0.11	0.13	0.17	0.53
Lancaster, PA	-	x	-	100	0.00	0.02	0.02	0.04	0.04	0.06	0.20	0.00	0.03	0.03	0.04	0.05	0.06	0.20
Las Vegas, NV	x	-	100	-	0.00	0.08	0.08	0.14	0.17	0.22	0.75	0.00	0.10	0.10	0.16	0.19	0.25	0.77
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.78	0.79	1.29	1.60	2.05	7.10	0.00	0.92	0.93	1.48	1.83	2.33	7.34
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.04	0.04	0.07	0.08	0.10	0.36	0.00	0.05	0.05	0.07	0.09	0.12	0.37
Louisville, KY-IN	-	x	-	100	0.00	0.06	0.06	0.09	0.11	0.14	0.50	0.00	0.06	0.07	0.10	0.13	0.17	0.52
Macon, GA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.02	0.02	0.04	0.05	0.06	0.21	0.00	0.03	0.03	0.04	0.05	0.07	0.22
Memphis, TN-AR	x	-	100	-	0.00	0.05	0.05	0.08	0.10	0.13	0.45	0.00	0.06	0.06	0.09	0.12	0.15	0.46
Milwaukee-Racine, WI	x	-	100	-	0.00	0.09	0.09	0.14	0.18	0.23	0.80	0.00	0.10	0.10	0.17	0.20	0.26	0.82
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.72	0.73	1.19	1.48	1.89	6.56	0.00	0.85	0.86	1.37	1.69	2.16	6.78
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.01	0.02	0.02	0.07
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	0.36	0.36	0.59	0.73	0.93	3.23	0.00	0.42	0.42	0.67	0.83	1.06	3.33

**Table B2-50
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acrolein 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.22	0.23	0.37	0.46	0.59	2.04	0.00	0.26	0.27	0.42	0.52	0.67	2.10
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.09	0.10	0.16	0.19	0.25	0.86	0.00	0.11	0.11	0.18	0.22	0.28	0.89
Poughkeepsie, NY	x	x	100	100	0.00	0.07	0.07	0.11	0.14	0.17	0.60	0.00	0.08	0.08	0.13	0.15	0.20	0.62
Providence (All RI), RI	x	-	100	-	0.00	0.05	0.05	0.08	0.09	0.12	0.42	0.00	0.05	0.05	0.09	0.11	0.14	0.43
Reading, PA	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.05	0.18	0.00	0.02	0.02	0.04	0.05	0.06	0.18
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.05	0.05	0.08	0.09	0.12	0.42	0.00	0.05	0.06	0.09	0.11	0.14	0.43
Rochester, NY	x	-	100	-	0.00	0.06	0.07	0.11	0.13	0.17	0.59	0.00	0.08	0.08	0.12	0.15	0.19	0.61
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Sacramento Metro, CA	x	-	50	-	0.00	0.12	0.12	0.19	0.24	0.31	1.06	0.00	0.14	0.14	0.22	0.27	0.35	1.09
San Diego, CA	x	-	100	-	0.00	0.15	0.15	0.25	0.31	0.39	1.36	0.00	0.18	0.18	0.28	0.35	0.45	1.41
San Francisco Bay Area, CA	x	-	100	-	0.00	0.33	0.34	0.55	0.68	0.87	3.03	0.00	0.39	0.40	0.63	0.78	1.00	3.13
San Joaquin Valley, CA	x	x	50	100	0.00	0.25	0.25	0.41	0.50	0.65	2.24	0.00	0.29	0.29	0.47	0.58	0.74	2.31
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.06
Springfield (Western MA), MA	x	-	100	-	0.00	0.05	0.05	0.08	0.10	0.12	0.42	0.00	0.05	0.06	0.09	0.11	0.14	0.44
St. Louis, MO-IL	x	x	100	100	0.00	0.15	0.15	0.25	0.31	0.40	1.39	0.00	0.18	0.18	0.29	0.36	0.46	1.44
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.03	0.03	0.05	0.07	0.08	0.29	0.00	0.04	0.04	0.06	0.07	0.09	0.30
Washington, DC-MD-VA	x	x	100	100	0.00	0.25	0.26	0.42	0.52	0.67	2.31	0.00	0.30	0.30	0.48	0.59	0.76	2.39
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.02	0.08
York, PA	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.06	0.19	0.00	0.02	0.03	0.04	0.05	0.06	0.20

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-51
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.11	0.11	0.18	0.22	0.27	0.94	0.00	0.14	0.14	0.23	0.27	0.34	1.00
Allegan Co., MI	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.02	0.03	0.04	0.11
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.11	0.00	0.02	0.02	0.03	0.03	0.04	0.11
Atlanta, GA	x	x	100	100	0.00	0.70	0.67	1.13	1.38	1.73	5.98	0.00	0.92	0.91	1.44	1.75	2.20	6.38
Baltimore, MD	x	x	100	100	0.00	0.24	0.23	0.39	0.47	0.59	2.05	0.00	0.31	0.31	0.49	0.60	0.75	2.19
Baton Rouge, LA	x	-	100	-	0.00	0.06	0.06	0.09	0.11	0.14	0.49	0.00	0.08	0.08	0.12	0.14	0.18	0.53
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.03	0.03	0.05	0.07	0.08	0.28	0.00	0.04	0.04	0.07	0.08	0.10	0.30
Birmingham, AL	-	x	-	100	0.00	0.08	0.08	0.14	0.17	0.21	0.72	0.00	0.11	0.11	0.17	0.21	0.26	0.77
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.36	0.35	0.58	0.71	0.90	3.10	0.00	0.47	0.47	0.75	0.91	1.14	3.31
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.05	0.05	0.08	0.10	0.13	0.45	0.00	0.07	0.07	0.11	0.13	0.16	0.48
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.09	0.08	0.14	0.17	0.21	0.73	0.00	0.11	0.11	0.18	0.22	0.27	0.78
Canton-Massillon, OH	-	x	-	100	0.00	0.02	0.02	0.04	0.05	0.06	0.21	0.00	0.03	0.03	0.05	0.06	0.08	0.23
Charleston, WV	-	x	-	100	0.00	0.02	0.02	0.04	0.04	0.05	0.19	0.00	0.03	0.03	0.05	0.06	0.07	0.20
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.18	0.17	0.28	0.35	0.44	1.51	0.00	0.23	0.23	0.36	0.44	0.55	1.61
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.04	0.04	0.07	0.08	0.10	0.36	0.00	0.06	0.06	0.09	0.11	0.13	0.39
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.59	0.57	0.96	1.17	1.48	5.09	0.00	0.78	0.78	1.22	1.49	1.87	5.43
Chico, CA	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.15
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.15	0.15	0.25	0.30	0.38	1.30	0.00	0.20	0.20	0.31	0.38	0.48	1.39
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.03	0.11	0.00	0.02	0.02	0.03	0.03	0.04	0.12
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.20	0.20	0.33	0.40	0.50	1.74	0.00	0.27	0.27	0.42	0.51	0.64	1.86
Columbus, OH	x	x	100	100	0.00	0.15	0.15	0.24	0.30	0.37	1.29	0.00	0.20	0.20	0.31	0.38	0.47	1.38
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.67	0.65	1.08	1.33	1.67	5.76	0.00	0.88	0.88	1.39	1.69	2.12	6.15
Dayton-Springfield, OH	-	x	-	100	0.00	0.06	0.06	0.10	0.12	0.15	0.53	0.00	0.08	0.08	0.13	0.16	0.19	0.57
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.29	0.28	0.47	0.58	0.72	2.50	0.00	0.38	0.38	0.60	0.73	0.92	2.67
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.38	0.37	0.62	0.76	0.95	3.28	0.00	0.50	0.50	0.79	0.96	1.21	3.50
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.03	0.03	0.05	0.06	0.07	0.24	0.00	0.04	0.04	0.06	0.07	0.09	0.26
Greater Connecticut, CT	x	-	100	-	0.00	0.14	0.14	0.23	0.28	0.36	1.24	0.00	0.19	0.19	0.30	0.36	0.45	1.32
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.07	0.06	0.11	0.13	0.16	0.56	0.00	0.09	0.09	0.14	0.16	0.21	0.60

**Table B2-51
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.06	0.06	0.09	0.11	0.14	0.49	0.00	0.08	0.08	0.12	0.15	0.18	0.53
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.15
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.44	0.43	0.71	0.87	1.10	3.79	0.00	0.58	0.58	0.91	1.11	1.39	4.04
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.03	0.03	0.05	0.07	0.08	0.29	0.00	0.04	0.04	0.07	0.09	0.11	0.31
Imperial Co., CA	x	-	100	-	0.00	0.02	0.02	0.04	0.04	0.06	0.19	0.00	0.03	0.03	0.05	0.06	0.07	0.20
Indianapolis, IN	-	x	-	100	0.00	0.14	0.14	0.23	0.28	0.35	1.20	0.00	0.18	0.18	0.29	0.35	0.44	1.28
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.03	0.04	0.10
Jefferson Co., NY	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.03	0.03	0.04	0.11
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.02	0.03	0.04	0.11
Knoxville, TN	x	x	100	100	0.00	0.09	0.09	0.15	0.18	0.23	0.79	0.00	0.12	0.12	0.19	0.23	0.29	0.84
Lancaster, PA	-	x	-	100	0.00	0.03	0.03	0.06	0.07	0.09	0.29	0.00	0.04	0.04	0.07	0.09	0.11	0.31
Las Vegas, NV	x	-	100	-	0.00	0.15	0.15	0.25	0.30	0.38	1.30	0.00	0.20	0.20	0.31	0.38	0.48	1.39
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	1.31	1.27	2.13	2.60	3.28	11.30	0.00	1.73	1.72	2.72	3.31	4.15	12.06
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.07	0.07	0.11	0.13	0.17	0.58	0.00	0.09	0.09	0.14	0.17	0.21	0.62
Louisville, KY-IN	-	x	-	100	0.00	0.09	0.08	0.14	0.17	0.21	0.74	0.00	0.11	0.11	0.18	0.22	0.27	0.79
Macon, GA	-	x	-	100	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.15
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.03	0.07
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.01	0.01	0.02	0.03	0.03	0.09
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.04	0.04	0.07	0.08	0.10	0.36	0.00	0.06	0.05	0.09	0.11	0.13	0.38
Memphis, TN-AR	x	-	100	-	0.00	0.08	0.07	0.12	0.15	0.19	0.66	0.00	0.10	0.10	0.16	0.19	0.24	0.71
Milwaukee-Racine, WI	x	-	100	-	0.00	0.14	0.13	0.22	0.27	0.34	1.18	0.00	0.18	0.18	0.28	0.35	0.43	1.26
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.03	0.08
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1.14	1.10	1.84	2.25	2.84	9.78	0.00	1.50	1.49	2.35	2.87	3.59	10.43
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.02	0.03	0.04	0.11
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	0.58	0.56	0.93	1.14	1.44	4.96	0.00	0.76	0.76	1.19	1.45	1.82	5.29

**Table B2-51
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acrolein 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.40	0.39	0.65	0.80	1.01	3.47	0.00	0.53	0.53	0.83	1.02	1.27	3.70
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.14	0.14	0.23	0.28	0.36	1.23	0.00	0.19	0.19	0.30	0.36	0.45	1.32
Poughkeepsie, NY	x	x	100	100	0.00	0.11	0.11	0.18	0.22	0.27	0.93	0.00	0.14	0.14	0.22	0.27	0.34	1.00
Providence (All RI), RI	x	-	100	-	0.00	0.07	0.07	0.12	0.14	0.18	0.62	0.00	0.09	0.09	0.15	0.18	0.23	0.66
Reading, PA	-	x	-	100	0.00	0.03	0.03	0.05	0.06	0.08	0.28	0.00	0.04	0.04	0.07	0.08	0.10	0.29
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.09	0.09	0.15	0.18	0.23	0.78	0.00	0.12	0.12	0.19	0.23	0.29	0.83
Rochester, NY	x	-	100	-	0.00	0.10	0.10	0.16	0.20	0.25	0.88	0.00	0.13	0.13	0.21	0.26	0.32	0.94
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Sacramento Metro, CA	x	-	50	-	0.00	0.20	0.19	0.32	0.39	0.49	1.71	0.00	0.26	0.26	0.41	0.50	0.63	1.82
San Diego, CA	x	-	100	-	0.00	0.23	0.23	0.38	0.46	0.58	2.01	0.00	0.31	0.31	0.48	0.59	0.74	2.15
San Francisco Bay Area, CA	x	-	100	-	0.00	0.53	0.51	0.85	1.05	1.32	4.54	0.00	0.69	0.69	1.09	1.33	1.67	4.84
San Joaquin Valley, CA	x	x	50	100	0.00	0.43	0.42	0.70	0.86	1.08	3.73	0.00	0.57	0.57	0.90	1.09	1.37	3.98
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.09
Springfield (Western MA), MA	x	-	100	-	0.00	0.07	0.07	0.12	0.15	0.19	0.64	0.00	0.10	0.10	0.15	0.19	0.24	0.68
St. Louis, MO-IL	x	x	100	100	0.00	0.24	0.23	0.39	0.48	0.61	2.09	0.00	0.32	0.32	0.50	0.61	0.77	2.23
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.02	0.07
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.05	0.05	0.08	0.10	0.13	0.43	0.00	0.07	0.07	0.10	0.13	0.16	0.46
Washington, DC-MD-VA	x	x	100	100	0.00	0.42	0.41	0.68	0.84	1.05	3.63	0.00	0.56	0.55	0.87	1.07	1.33	3.88
Wheeling, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.11	0.00	0.02	0.02	0.03	0.03	0.04	0.11
York, PA	-	x	-	100	0.00	0.04	0.03	0.06	0.07	0.09	0.31	0.00	0.05	0.05	0.07	0.09	0.11	0.33

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-52
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.15	0.14	0.24	0.29	0.37	1.25	0.00	0.22	0.22	0.34	0.41	0.51	1.38
Allegan Co., MI	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.04	0.04	0.06	0.15
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.16	0.00	0.03	0.03	0.04	0.05	0.07	0.18
Atlanta, GA	x	x	100	100	0.00	1.21	1.15	1.92	2.33	2.92	9.94	0.00	1.77	1.76	2.72	3.27	4.06	10.98
Baltimore, MD	x	x	100	100	0.00	0.33	0.31	0.52	0.63	0.80	2.71	0.00	0.48	0.48	0.74	0.89	1.11	2.99
Baton Rouge, LA	x	-	100	-	0.00	0.08	0.08	0.13	0.16	0.20	0.69	0.00	0.12	0.12	0.19	0.23	0.28	0.76
Beaumont/Port Arthur, TX	x	-	100	-	0.00	0.04	0.04	0.07	0.08	0.10	0.36	0.00	0.06	0.06	0.10	0.12	0.15	0.39
Birmingham, AL	-	x	-	100	0.00	0.11	0.11	0.18	0.22	0.27	0.93	0.00	0.17	0.16	0.25	0.31	0.38	1.03
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.47	0.44	0.74	0.90	1.13	3.84	0.00	0.68	0.68	1.05	1.26	1.57	4.24
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.07	0.07	0.11	0.14	0.17	0.58	0.00	0.10	0.10	0.16	0.19	0.24	0.64
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.11	0.10	0.17	0.21	0.26	0.89	0.00	0.16	0.16	0.24	0.29	0.36	0.98
Canton-Massillon, OH	-	x	-	100	0.00	0.03	0.03	0.05	0.06	0.08	0.26	0.00	0.05	0.05	0.07	0.08	0.10	0.28
Charleston, WV	-	x	-	100	0.00	0.03	0.03	0.04	0.05	0.06	0.22	0.00	0.04	0.04	0.06	0.07	0.09	0.24
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.29	0.27	0.45	0.55	0.69	2.35	0.00	0.42	0.42	0.64	0.77	0.96	2.60
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.06	0.05	0.09	0.11	0.13	0.45	0.00	0.08	0.08	0.12	0.15	0.18	0.50
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	0.86	0.81	1.36	1.64	2.06	7.02	0.00	1.25	1.24	1.92	2.31	2.87	7.75
Chico, CA	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.18	0.00	0.03	0.03	0.05	0.06	0.07	0.20
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.22	0.21	0.34	0.42	0.52	1.77	0.00	0.32	0.31	0.48	0.58	0.72	1.96
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.02	0.01	0.02	0.03	0.04	0.13	0.00	0.02	0.02	0.03	0.04	0.05	0.14
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.26	0.24	0.40	0.49	0.62	2.09	0.00	0.37	0.37	0.57	0.69	0.85	2.31
Columbus, OH	x	x	100	100	0.00	0.22	0.21	0.35	0.43	0.54	1.82	0.00	0.32	0.32	0.50	0.60	0.74	2.01
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.10	1.05	1.75	2.11	2.65	9.02	0.00	1.61	1.60	2.47	2.96	3.69	9.97
Dayton-Springfield, OH	-	x	-	100	0.00	0.08	0.07	0.12	0.15	0.19	0.64	0.00	0.11	0.11	0.17	0.21	0.26	0.71
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.44	0.42	0.70	0.85	1.07	3.64	0.00	0.65	0.64	0.99	1.20	1.49	4.02
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.50	0.47	0.79	0.96	1.20	4.09	0.00	0.73	0.72	1.12	1.34	1.67	4.52
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.04	0.04	0.06	0.07	0.09	0.31	0.00	0.05	0.05	0.08	0.10	0.12	0.34
Greater Connecticut, CT	x	-	100	-	0.00	0.19	0.18	0.31	0.37	0.47	1.59	0.00	0.28	0.28	0.43	0.52	0.65	1.76
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.09	0.08	0.14	0.17	0.21	0.73	0.00	0.13	0.13	0.20	0.24	0.30	0.80

**Table B2-52
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.08	0.07	0.12	0.15	0.18	0.62	0.00	0.11	0.11	0.17	0.20	0.25	0.69
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.02	0.02	0.04	0.04	0.05	0.18	0.00	0.03	0.03	0.05	0.06	0.07	0.20
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	0.65	0.62	1.03	1.25	1.57	5.34	0.00	0.95	0.94	1.46	1.75	2.18	5.90
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	0.04	0.04	0.07	0.08	0.10	0.35	0.00	0.06	0.06	0.10	0.12	0.14	0.39
Imperial Co., CA	x	-	100	-	0.00	0.04	0.03	0.06	0.07	0.09	0.30	0.00	0.05	0.05	0.08	0.10	0.12	0.33
Indianapolis, IN	-	x	-	100	0.00	0.21	0.20	0.33	0.40	0.50	1.70	0.00	0.30	0.30	0.46	0.56	0.69	1.88
Jamestown, NY	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.03	0.12	0.00	0.02	0.02	0.03	0.04	0.05	0.13
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.03	0.03	0.04	0.05	0.06	0.16
Johnstown, PA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.02	0.02	0.02	0.03	0.04	0.10
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.15	0.00	0.03	0.03	0.04	0.05	0.06	0.17
Knoxville, TN	x	x	100	100	0.00	0.13	0.12	0.20	0.24	0.31	1.05	0.00	0.19	0.18	0.29	0.34	0.43	1.15
Lancaster, PA	-	x	-	100	0.00	0.05	0.04	0.07	0.09	0.11	0.37	0.00	0.07	0.07	0.10	0.12	0.15	0.41
Las Vegas, NV	x	-	100	-	0.00	0.27	0.25	0.43	0.51	0.65	2.20	0.00	0.39	0.39	0.60	0.72	0.90	2.43
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	2.00	1.90	3.17	3.84	4.83	16.41	0.00	2.93	2.90	4.49	5.39	6.70	18.13
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.10	0.10	0.17	0.20	0.25	0.86	0.00	0.15	0.15	0.23	0.28	0.35	0.95
Louisville, KY-IN	-	x	-	100	0.00	0.11	0.10	0.17	0.21	0.26	0.90	0.00	0.16	0.16	0.25	0.30	0.37	0.99
Macon, GA	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.05	0.17	0.00	0.03	0.03	0.05	0.06	0.07	0.19
Manitowoc Co., WI	x	-	-	-	0.00	0.01	0.01	0.02	0.02	0.02	0.08	0.00	0.02	0.01	0.02	0.03	0.03	0.09
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.14	0.00	0.02	0.02	0.04	0.05	0.06	0.15
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.07	0.07	0.11	0.14	0.17	0.59	0.00	0.10	0.10	0.16	0.19	0.24	0.65
Memphis, TN-AR	x	-	100	-	0.00	0.10	0.09	0.16	0.19	0.24	0.81	0.00	0.14	0.14	0.22	0.27	0.33	0.90
Milwaukee-Racine, WI	x	-	100	-	0.00	0.18	0.17	0.28	0.34	0.43	1.47	0.00	0.26	0.26	0.40	0.48	0.60	1.62
Nevada (Western Part), CA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.03	0.03	0.04	0.11
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	1.48	1.41	2.35	2.84	3.57	12.14	0.00	2.16	2.15	3.32	3.99	4.96	13.41
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.01	0.01	0.02	0.03	0.03	0.12	0.00	0.02	0.02	0.03	0.04	0.05	0.13
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	0.80	0.76	1.27	1.54	1.93	6.58	0.00	1.17	1.16	1.80	2.16	2.69	7.26

**Table B2-52
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Acrolein 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.69	0.65	1.09	1.32	1.65	5.62	0.00	1.00	0.99	1.54	1.85	2.30	6.21
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.17	0.17	0.28	0.33	0.42	1.43	0.00	0.25	0.25	0.39	0.47	0.58	1.58
Poughkeepsie, NY	x	x	100	100	0.00	0.15	0.15	0.24	0.29	0.37	1.26	0.00	0.22	0.22	0.34	0.41	0.51	1.39
Providence (All RI), RI	x	-	100	-	0.00	0.09	0.09	0.15	0.18	0.22	0.76	0.00	0.13	0.13	0.21	0.25	0.31	0.83
Reading, PA	-	x	-	100	0.00	0.05	0.04	0.07	0.09	0.11	0.37	0.00	0.07	0.07	0.10	0.12	0.15	0.41
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.18	0.17	0.29	0.35	0.44	1.50	0.00	0.27	0.27	0.41	0.49	0.61	1.66
Rochester, NY	x	-	100	-	0.00	0.13	0.13	0.21	0.26	0.32	1.09	0.00	0.19	0.19	0.30	0.36	0.45	1.21
Rome, GA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.09	0.00	0.02	0.02	0.03	0.03	0.04	0.10
Sacramento Metro, CA	x	-	50	-	0.00	0.31	0.29	0.48	0.59	0.74	2.50	0.00	0.45	0.44	0.68	0.82	1.02	2.77
San Diego, CA	x	-	100	-	0.00	0.30	0.28	0.47	0.57	0.72	2.45	0.00	0.44	0.43	0.67	0.80	1.00	2.71
San Francisco Bay Area, CA	x	-	100	-	0.00	0.69	0.66	1.10	1.33	1.67	5.68	0.00	1.01	1.01	1.55	1.87	2.32	6.28
San Joaquin Valley, CA	x	x	50	100	0.00	0.71	0.67	1.12	1.36	1.71	5.81	0.00	1.04	1.03	1.59	1.91	2.37	6.41
Sheboygan, WI	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.02	0.02	0.03	0.03	0.04	0.11
Springfield (Western MA), MA	x	-	100	-	0.00	0.10	0.09	0.16	0.19	0.24	0.81	0.00	0.14	0.14	0.22	0.27	0.33	0.90
St. Louis, MO-IL	x	x	100	100	0.00	0.32	0.31	0.51	0.62	0.78	2.64	0.00	0.47	0.47	0.72	0.87	1.08	2.92
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.07	0.06	0.10	0.13	0.16	0.53	0.00	0.10	0.09	0.15	0.18	0.22	0.59
Washington, DC-MD-VA	x	x	100	100	0.00	0.64	0.60	1.01	1.22	1.53	5.20	0.00	0.93	0.92	1.42	1.71	2.12	5.75
Wheeling, WV-OH	-	x	-	100	0.00	0.02	0.01	0.02	0.03	0.04	0.12	0.00	0.02	0.02	0.03	0.04	0.05	0.14
York, PA	-	x	-	100	0.00	0.05	0.05	0.08	0.10	0.13	0.43	0.00	0.08	0.08	0.12	0.14	0.18	0.48

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-53
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.23	-0.29	-0.63	-0.75	-1.07	-3.90	0.00	-0.23	-0.29	-0.63	-0.75	-1.07	-3.90
Allegan Co., MI	x	-	100	-	0.00	-0.03	-0.03	-0.07	-0.08	-0.12	-0.43	0.00	-0.03	-0.03	-0.07	-0.08	-0.12	-0.43
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.02	-0.03	-0.06	-0.07	-0.11	-0.39	0.00	-0.02	-0.03	-0.06	-0.07	-0.11	-0.39
Atlanta, GA	x	x	100	100	0.00	-1.23	-1.54	-3.37	-4.01	-5.70	-20.76	0.00	-1.23	-1.54	-3.37	-4.01	-5.70	-20.76
Baltimore, MD	x	x	100	100	0.00	-0.51	-0.64	-1.40	-1.67	-2.37	-8.62	0.00	-0.51	-0.64	-1.40	-1.67	-2.37	-8.62
Baton Rouge, LA	x	-	100	-	0.00	-3.05	-3.77	-5.29	-6.08	-7.38	-17.32	0.00	-3.05	-3.78	-5.30	-6.09	-7.38	-17.33
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-5.97	-7.38	-10.19	-11.71	-14.08	-32.08	0.00	-5.98	-7.40	-10.21	-11.72	-14.10	-32.09
Birmingham, AL	-	x	-	100	0.00	-0.19	-0.23	-0.51	-0.61	-0.87	-3.16	0.00	-0.19	-0.23	-0.51	-0.61	-0.87	-3.16
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.83	-1.04	-2.28	-2.71	-3.85	-14.03	0.00	-0.83	-1.04	-2.28	-2.71	-3.85	-14.03
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.11	-0.14	-0.31	-0.37	-0.52	-1.90	0.00	-0.11	-0.14	-0.31	-0.37	-0.52	-1.90
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.20	-0.25	-0.55	-0.65	-0.93	-3.37	0.00	-0.20	-0.25	-0.55	-0.65	-0.93	-3.37
Canton-Massillon, OH	-	x	-	100	0.00	-0.44	-0.54	-0.80	-0.93	-1.16	-2.96	0.00	-0.44	-0.55	-0.81	-0.93	-1.16	-2.96
Charleston, WV	-	x	-	100	0.00	-0.05	-0.07	-0.15	-0.17	-0.25	-0.90	0.00	-0.05	-0.07	-0.15	-0.17	-0.25	-0.90
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.32	-0.41	-0.89	-1.05	-1.50	-5.46	0.00	-0.32	-0.41	-0.89	-1.05	-1.50	-5.46
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.10	-0.12	-0.26	-0.31	-0.44	-1.62	0.00	-0.10	-0.12	-0.26	-0.31	-0.44	-1.62
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-5.53	-6.87	-10.71	-12.43	-15.82	-43.69	0.00	-5.54	-6.88	-10.72	-12.45	-15.83	-43.70
Chico, CA	x	-	100	-	0.00	-0.03	-0.04	-0.09	-0.11	-0.16	-0.58	0.00	-0.03	-0.04	-0.09	-0.11	-0.16	-0.58
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.33	-0.42	-0.91	-1.08	-1.53	-5.59	0.00	-0.33	-0.42	-0.91	-1.08	-1.53	-5.59
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.03	-0.04	-0.09	-0.10	-0.15	-0.53	0.00	-0.03	-0.04	-0.09	-0.10	-0.15	-0.53
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.48	-0.60	-1.31	-1.56	-2.21	-8.05	0.00	-0.48	-0.60	-1.31	-1.56	-2.21	-8.05
Columbus, OH	x	x	100	100	0.00	-0.31	-0.39	-0.85	-1.01	-1.43	-5.20	0.00	-0.31	-0.39	-0.85	-1.01	-1.43	-5.20
Dallas-Fort Worth, TX	x	-	100	-	0.00	-1.25	-1.57	-3.42	-4.08	-5.79	-21.09	0.00	-1.25	-1.57	-3.42	-4.08	-5.79	-21.09
Dayton-Springfield, OH	-	x	-	100	0.00	-0.14	-0.18	-0.40	-0.47	-0.67	-2.44	0.00	-0.14	-0.18	-0.40	-0.47	-0.67	-2.44
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-1.07	-1.33	-2.42	-2.85	-3.83	-12.34	0.00	-1.07	-1.34	-2.42	-2.85	-3.83	-12.34
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-1.39	-1.74	-3.28	-3.86	-5.26	-17.44	0.00	-1.39	-1.74	-3.28	-3.86	-5.26	-17.44
Door Co., WI	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.10	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.10
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	-0.06	-0.08	-0.17	-0.20	-0.29	-1.05	0.00	-0.06	-0.08	-0.17	-0.20	-0.29	-1.05
Greater Connecticut, CT	x	-	100	-	0.00	-0.32	-0.40	-0.87	-1.03	-1.47	-5.34	0.00	-0.32	-0.40	-0.87	-1.03	-1.47	-5.34
Greene Co., PA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.12	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.12
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.14	-0.18	-0.39	-0.47	-0.66	-2.41	0.00	-0.14	-0.18	-0.39	-0.47	-0.66	-2.41

**Table B2-53
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.13	-0.16	-0.36	-0.42	-0.60	-2.19	0.00	-0.13	-0.16	-0.36	-0.42	-0.60	-2.19
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Hickory, NC	-	x	-	100	0.00	-0.03	-0.04	-0.09	-0.11	-0.16	-0.57	0.00	-0.03	-0.04	-0.09	-0.11	-0.16	-0.57
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-12.99	-16.07	-22.98	-26.48	-32.40	-78.66	0.00	-13.02	-16.10	-23.01	-26.51	-32.43	-78.68
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.24	-1.54	-2.19	-2.52	-3.07	-7.41	0.00	-1.24	-1.54	-2.19	-2.52	-3.08	-7.41
Imperial Co., CA	x	-	100	-	0.00	-0.04	-0.05	-0.11	-0.13	-0.18	-0.67	0.00	-0.04	-0.05	-0.11	-0.13	-0.18	-0.67
Indianapolis, IN	-	x	-	100	0.00	-0.29	-0.36	-0.79	-0.94	-1.33	-4.86	0.00	-0.29	-0.36	-0.79	-0.94	-1.33	-4.86
Jamestown, NY	x	-	100	-	0.00	-0.03	-0.03	-0.07	-0.09	-0.12	-0.45	0.00	-0.03	-0.03	-0.07	-0.09	-0.12	-0.45
Jefferson Co., NY	x	-	100	-	0.00	-0.02	-0.03	-0.07	-0.08	-0.11	-0.42	0.00	-0.02	-0.03	-0.07	-0.08	-0.11	-0.42
Johnstown, PA	-	x	-	100	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.37	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.37
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.35	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.35
Knoxville, TN	x	x	100	100	0.00	-0.20	-0.25	-0.54	-0.64	-0.91	-3.30	0.00	-0.20	-0.25	-0.54	-0.64	-0.91	-3.30
Lancaster, PA	-	x	-	100	0.00	-0.08	-0.10	-0.21	-0.25	-0.35	-1.29	0.00	-0.08	-0.10	-0.21	-0.25	-0.35	-1.29
Las Vegas, NV	x	-	100	-	0.00	-0.25	-0.32	-0.69	-0.83	-1.17	-4.27	0.00	-0.25	-0.32	-0.69	-0.83	-1.17	-4.27
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	-0.01	-0.02	0.00	0.00	0.00	0.00	0.00	-0.01	-0.02
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.04	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.04
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-9.14	-11.35	-18.27	-21.27	-27.41	-78.67	0.00	-9.15	-11.37	-18.29	-21.29	-27.43	-78.68
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.13	-0.16	-0.36	-0.43	-0.61	-2.20	0.00	-0.13	-0.16	-0.36	-0.43	-0.61	-2.20
Louisville, KY-IN	-	x	-	100	0.00	-0.20	-0.25	-0.55	-0.66	-0.93	-3.39	0.00	-0.20	-0.25	-0.55	-0.66	-0.93	-3.39
Macon, GA	-	x	-	100	0.00	-0.04	-0.05	-0.10	-0.12	-0.17	-0.63	0.00	-0.04	-0.05	-0.10	-0.12	-0.17	-0.63
Manitowoc Co., WI	x	-	-	-	0.00	-0.02	-0.02	-0.05	-0.06	-0.09	-0.32	0.00	-0.02	-0.02	-0.05	-0.06	-0.09	-0.32
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.02	-0.02	-0.05	-0.06	-0.09	-0.32	0.00	-0.02	-0.02	-0.05	-0.06	-0.09	-0.32
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.07	-0.09	-0.20	-0.24	-0.34	-1.24	0.00	-0.07	-0.09	-0.20	-0.24	-0.34	-1.24
Memphis, TN-AR	x	-	100	-	0.00	-1.12	-1.39	-2.09	-2.41	-3.02	-7.93	0.00	-1.12	-1.39	-2.09	-2.42	-3.02	-7.93
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.31	-0.40	-0.86	-1.03	-1.46	-5.32	0.00	-0.31	-0.40	-0.86	-1.03	-1.46	-5.32
Nevada (Western Part), CA	x	-	100	-	0.00	-0.02	-0.02	-0.05	-0.06	-0.08	-0.30	0.00	-0.02	-0.02	-0.05	-0.06	-0.08	-0.30
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-4.25	-5.31	-9.93	-11.70	-15.90	-52.49	0.00	-4.26	-5.32	-9.94	-11.70	-15.91	-52.49
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.03	-0.04	-0.08	-0.09	-0.13	-0.48	0.00	-0.03	-0.04	-0.08	-0.09	-0.13	-0.48
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-7.44	-9.23	-13.92	-16.11	-20.21	-53.37	0.00	-7.46	-9.24	-13.93	-16.13	-20.23	-53.38

**Table B2-53
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.70	-0.88	-1.93	-2.30	-3.26	-11.88	0.00	-0.70	-0.88	-1.93	-2.30	-3.26	-11.88
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.35	-0.44	-0.97	-1.15	-1.63	-5.94	0.00	-0.35	-0.44	-0.97	-1.15	-1.63	-5.94
Poughkeepsie, NY	x	x	100	100	0.00	-0.23	-0.29	-0.63	-0.74	-1.06	-3.85	0.00	-0.23	-0.29	-0.63	-0.74	-1.06	-3.85
Providence (All RI), RI	x	-	100	-	0.00	-0.16	-0.21	-0.45	-0.54	-0.77	-2.79	0.00	-0.16	-0.21	-0.45	-0.54	-0.77	-2.79
Reading, PA	-	x	-	100	0.00	-0.07	-0.08	-0.18	-0.22	-0.31	-1.13	0.00	-0.07	-0.08	-0.18	-0.22	-0.31	-1.13
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.13	-0.17	-0.36	-0.43	-0.62	-2.25	0.00	-0.13	-0.17	-0.36	-0.43	-0.62	-2.25
Rochester, NY	x	-	100	-	0.00	-0.23	-0.29	-0.63	-0.75	-1.07	-3.90	0.00	-0.23	-0.29	-0.63	-0.75	-1.07	-3.90
Rome, GA	-	x	-	100	0.00	-0.02	-0.03	-0.06	-0.07	-0.09	-0.34	0.00	-0.02	-0.03	-0.06	-0.07	-0.09	-0.34
Sacramento Metro, CA	x	-	50	-	0.00	-0.39	-0.49	-1.06	-1.27	-1.80	-6.56	0.00	-0.39	-0.49	-1.06	-1.27	-1.80	-6.56
San Diego, CA	x	-	100	-	0.00	-0.54	-0.68	-1.49	-1.77	-2.52	-9.18	0.00	-0.54	-0.68	-1.49	-1.77	-2.52	-9.18
San Francisco Bay Area, CA	x	-	100	-	0.00	-4.66	-5.79	-9.15	-10.64	-13.62	-38.30	0.00	-4.67	-5.80	-9.16	-10.65	-13.63	-38.30
San Joaquin Valley, CA	x	x	50	100	0.00	-1.37	-1.71	-3.16	-3.72	-5.03	-16.42	0.00	-1.37	-1.71	-3.16	-3.72	-5.03	-16.42
Sheboygan, WI	x	-	100	-	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.36	0.00	-0.02	-0.03	-0.06	-0.07	-0.10	-0.36
Springfield (Western MA), MA	x	-	100	-	0.00	-0.17	-0.21	-0.46	-0.54	-0.77	-2.80	0.00	-0.17	-0.21	-0.46	-0.54	-0.77	-2.80
St. Louis, MO-IL	x	x	100	100	0.00	-2.15	-2.67	-4.22	-4.91	-6.28	-17.65	0.00	-2.15	-2.67	-4.23	-4.91	-6.29	-17.66
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.12	-0.15	-0.23	-0.27	-0.33	-0.87	0.00	-0.12	-0.15	-0.23	-0.27	-0.33	-0.87
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.13	-0.16	-0.34	-0.40	-0.56	-2.00	0.00	-0.13	-0.16	-0.34	-0.40	-0.56	-2.00
Washington, DC-MD-VA	x	x	100	100	0.00	-0.87	-1.10	-2.40	-2.85	-4.05	-14.75	0.00	-0.87	-1.10	-2.40	-2.85	-4.05	-14.75
Wheeling, WV-OH	-	x	-	100	0.00	-0.03	-0.04	-0.08	-0.10	-0.14	-0.51	0.00	-0.03	-0.04	-0.08	-0.10	-0.14	-0.51
York, PA	-	x	-	100	0.00	-0.07	-0.09	-0.19	-0.23	-0.33	-1.20	0.00	-0.07	-0.09	-0.19	-0.23	-0.33	-1.20

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-54
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Benzene 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-1.24	-1.20	-2.41	-3.02	-4.07	-15.29	0.00	-1.11	-1.04	-2.31	-2.97	-4.09	-14.96
Allegan Co., MI	x	-	100	-	0.00	-0.14	-0.13	-0.26	-0.33	-0.44	-1.67	0.00	-0.12	-0.11	-0.25	-0.32	-0.45	-1.64
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.13	-0.13	-0.25	-0.32	-0.43	-1.62	0.00	-0.12	-0.11	-0.24	-0.31	-0.43	-1.58
Atlanta, GA	x	x	100	100	0.00	-7.20	-6.97	-13.95	-17.49	-23.58	-88.61	0.00	-6.43	-6.03	-13.37	-17.21	-23.70	-86.74
Baltimore, MD	x	x	100	100	0.00	-2.73	-2.64	-5.29	-6.63	-8.94	-33.61	0.00	-2.44	-2.29	-5.07	-6.53	-8.99	-32.90
Baton Rouge, LA	x	-	100	-	0.00	-9.89	-11.13	-14.67	-16.68	-19.53	-46.47	0.00	-14.97	-16.57	-20.31	-22.60	-25.59	-50.07
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-19.00	-21.52	-27.76	-31.37	-36.34	-82.33	0.00	-29.33	-32.60	-39.20	-43.31	-48.52	-89.80
Birmingham, AL	-	x	-	100	0.00	-0.98	-0.94	-1.89	-2.37	-3.19	-12.01	0.00	-0.87	-0.82	-1.81	-2.33	-3.21	-11.75
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-4.28	-4.14	-8.29	-10.40	-14.02	-52.68	0.00	-3.82	-3.58	-7.95	-10.23	-14.09	-51.57
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.60	-0.58	-1.16	-1.45	-1.96	-7.37	0.00	-0.53	-0.50	-1.11	-1.43	-1.97	-7.21
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1.02	-0.99	-1.98	-2.49	-3.35	-12.59	0.00	-0.91	-0.86	-1.90	-2.45	-3.37	-12.33
Canton-Massillon, OH	-	x	-	100	0.00	-1.50	-1.65	-2.32	-2.69	-3.23	-8.64	0.00	-2.14	-2.34	-3.04	-3.45	-4.03	-9.05
Charleston, WV	-	x	-	100	0.00	-0.27	-0.26	-0.52	-0.65	-0.88	-3.30	0.00	-0.24	-0.22	-0.50	-0.64	-0.88	-3.24
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-1.86	-1.80	-3.61	-4.53	-6.10	-22.93	0.00	-1.66	-1.56	-3.46	-4.45	-6.13	-22.45
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.50	-0.48	-0.96	-1.21	-1.63	-6.11	0.00	-0.44	-0.42	-0.92	-1.19	-1.63	-5.98
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-20.23	-21.85	-32.64	-38.44	-47.50	-139.22	0.00	-27.02	-29.04	-40.41	-46.84	-56.44	-142.96
Chico, CA	x	-	100	-	0.00	-0.18	-0.18	-0.36	-0.45	-0.60	-2.27	0.00	-0.16	-0.15	-0.34	-0.44	-0.61	-2.22
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-1.74	-1.69	-3.37	-4.23	-5.70	-21.43	0.00	-1.55	-1.46	-3.23	-4.16	-5.73	-20.98
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.16	-0.15	-0.30	-0.38	-0.51	-1.93	0.00	-0.14	-0.13	-0.29	-0.38	-0.52	-1.89
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-2.43	-2.35	-4.71	-5.91	-7.96	-29.92	0.00	-2.17	-2.04	-4.51	-5.81	-8.00	-29.29
Columbus, OH	x	x	100	100	0.00	-1.68	-1.63	-3.26	-4.08	-5.50	-20.69	0.00	-1.50	-1.41	-3.12	-4.02	-5.53	-20.25
Dallas-Fort Worth, TX	x	-	100	-	0.00	-7.14	-6.91	-13.82	-17.34	-23.37	-87.83	0.00	-6.37	-5.97	-13.25	-17.06	-23.49	-85.98
Dayton-Springfield, OH	-	x	-	100	0.00	-0.74	-0.72	-1.43	-1.80	-2.42	-9.10	0.00	-0.66	-0.62	-1.37	-1.77	-2.43	-8.91
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-4.76	-4.86	-8.46	-10.32	-13.41	-45.87	0.00	-5.28	-5.38	-9.16	-11.19	-14.48	-45.67
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-6.17	-6.25	-11.14	-13.66	-17.89	-62.42	0.00	-6.60	-6.65	-11.80	-14.55	-19.05	-61.92
Door Co., WI	x	-	100	-	0.00	-0.03	-0.03	-0.06	-0.07	-0.10	-0.37	0.00	-0.03	-0.03	-0.06	-0.07	-0.10	-0.36
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Evansville, IN	-	x	-	100	0.00	-0.33	-0.31	-0.63	-0.79	-1.07	-4.00	0.00	-0.29	-0.27	-0.60	-0.78	-1.07	-3.92
Greater Connecticut, CT	x	-	100	-	0.00	-1.67	-1.62	-3.23	-4.06	-5.47	-20.55	0.00	-1.49	-1.40	-3.10	-3.99	-5.50	-20.12
Greene Co., PA	x	-	100	-	0.00	-0.04	-0.03	-0.07	-0.09	-0.12	-0.44	0.00	-0.03	-0.03	-0.07	-0.09	-0.12	-0.43
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.76	-0.73	-1.47	-1.84	-2.48	-9.32	0.00	-0.68	-0.63	-1.41	-1.81	-2.49	-9.12

Table B2-54
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Benzene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.68	-0.65	-1.31	-1.64	-2.21	-8.32	0.00	-0.60	-0.57	-1.25	-1.62	-2.22	-8.14
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.06	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.06
Hickory, NC	-	x	-	100	0.00	-0.18	-0.18	-0.35	-0.44	-0.59	-2.23	0.00	-0.16	-0.15	-0.34	-0.43	-0.60	-2.18
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-43.06	-48.09	-64.91	-74.35	-88.05	-219.90	0.00	-63.76	-70.23	-87.99	-98.64	-113.06	-234.12
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-4.07	-4.56	-6.11	-6.98	-8.24	-20.26	0.00	-6.08	-6.70	-8.34	-9.32	-10.65	-21.65
Imperial Co., CA	x	-	100	-	0.00	-0.23	-0.23	-0.45	-0.57	-0.76	-2.87	0.00	-0.21	-0.20	-0.43	-0.56	-0.77	-2.81
Indianapolis, IN	-	x	-	100	0.00	-1.57	-1.52	-3.03	-3.80	-5.13	-19.26	0.00	-1.40	-1.31	-2.91	-3.74	-5.15	-18.86
Jamestown, NY	x	-	100	-	0.00	-0.14	-0.13	-0.26	-0.33	-0.45	-1.67	0.00	-0.12	-0.11	-0.25	-0.32	-0.45	-1.64
Jefferson Co., NY	x	-	100	-	0.00	-0.14	-0.13	-0.26	-0.33	-0.44	-1.67	0.00	-0.12	-0.11	-0.25	-0.32	-0.45	-1.63
Johnstown, PA	-	x	-	100	0.00	-0.11	-0.11	-0.21	-0.26	-0.36	-1.34	0.00	-0.10	-0.09	-0.20	-0.26	-0.36	-1.31
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.12	-0.12	-0.24	-0.30	-0.40	-1.50	0.00	-0.11	-0.10	-0.23	-0.29	-0.40	-1.47
Knoxville, TN	x	x	100	100	0.00	-1.05	-1.01	-2.03	-2.54	-3.43	-12.89	0.00	-0.93	-0.88	-1.95	-2.50	-3.45	-12.62
Lancaster, PA	-	x	-	100	0.00	-0.40	-0.39	-0.78	-0.97	-1.31	-4.92	0.00	-0.36	-0.33	-0.74	-0.96	-1.32	-4.82
Las Vegas, NV	x	-	100	-	0.00	-1.53	-1.48	-2.97	-3.72	-5.02	-18.87	0.00	-1.37	-1.28	-2.85	-3.67	-5.05	-18.47
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.08	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.08
Liberty-Clairton, PA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.14	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.14
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-35.06	-37.38	-57.94	-68.87	-86.28	-264.54	0.00	-44.92	-47.75	-69.42	-81.49	-99.96	-269.11
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.74	-0.71	-1.42	-1.79	-2.41	-9.04	0.00	-0.66	-0.62	-1.36	-1.76	-2.42	-8.85
Louisville, KY-IN	-	x	-	100	0.00	-1.03	-1.00	-1.99	-2.50	-3.37	-12.67	0.00	-0.92	-0.86	-1.91	-2.46	-3.39	-12.40
Macon, GA	-	x	-	100	0.00	-0.19	-0.19	-0.37	-0.47	-0.63	-2.37	0.00	-0.17	-0.16	-0.36	-0.46	-0.63	-2.32
Manitowoc Co., WI	x	-	-	-	0.00	-0.10	-0.09	-0.19	-0.24	-0.32	-1.21	0.00	-0.09	-0.08	-0.18	-0.23	-0.32	-1.18
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.11	-0.11	-0.21	-0.26	-0.36	-1.34	0.00	-0.10	-0.09	-0.20	-0.26	-0.36	-1.31
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.43	-0.42	-0.84	-1.05	-1.42	-5.34	0.00	-0.39	-0.36	-0.80	-1.04	-1.43	-5.22
Memphis, TN-AR	x	-	100	-	0.00	-3.89	-4.27	-6.10	-7.09	-8.61	-23.69	0.00	-5.45	-5.93	-7.86	-8.97	-10.57	-24.66
Milwaukee-Racine, WI	x	-	100	-	0.00	-1.63	-1.58	-3.16	-3.96	-5.33	-20.05	0.00	-1.45	-1.36	-3.02	-3.89	-5.36	-19.63
Nevada (Western Part), CA	x	-	100	-	0.00	-0.10	-0.09	-0.19	-0.24	-0.32	-1.20	0.00	-0.09	-0.08	-0.18	-0.23	-0.32	-1.17
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-18.71	-18.99	-33.68	-41.26	-53.94	-187.41	0.00	-20.19	-20.38	-35.84	-44.12	-57.61	-186.06
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.14	-0.14	-0.28	-0.35	-0.47	-1.76	0.00	-0.13	-0.12	-0.27	-0.34	-0.47	-1.72
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-26.21	-28.67	-41.25	-48.11	-58.59	-163.08	0.00	-36.42	-39.53	-52.80	-60.45	-71.52	-169.34

**Table B2-54
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-4.17	-4.04	-8.08	-10.14	-13.67	-51.36	0.00	-3.72	-3.49	-7.75	-9.98	-13.74	-50.28
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-1.76	-1.70	-3.41	-4.27	-5.76	-21.65	0.00	-1.57	-1.47	-3.27	-4.21	-5.79	-21.20
Poughkeepsie, NY	x	x	100	100	0.00	-1.23	-1.19	-2.39	-3.00	-4.04	-15.18	0.00	-1.10	-1.03	-2.29	-2.95	-4.06	-14.86
Providence (All RI), RI	x	-	100	-	0.00	-0.85	-0.82	-1.65	-2.07	-2.79	-10.48	0.00	-0.76	-0.71	-1.58	-2.04	-2.80	-10.26
Reading, PA	-	x	-	100	0.00	-0.36	-0.35	-0.70	-0.88	-1.19	-4.47	0.00	-0.32	-0.30	-0.67	-0.87	-1.19	-4.37
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.86	-0.83	-1.67	-2.09	-2.82	-10.59	0.00	-0.77	-0.72	-1.60	-2.06	-2.83	-10.37
Rochester, NY	x	-	100	-	0.00	-1.20	-1.16	-2.33	-2.92	-3.94	-14.79	0.00	-1.07	-1.01	-2.23	-2.87	-3.96	-14.48
Rome, GA	-	x	-	100	0.00	-0.10	-0.10	-0.20	-0.25	-0.34	-1.28	0.00	-0.09	-0.09	-0.19	-0.25	-0.34	-1.25
Sacramento Metro, CA	x	-	50	-	0.00	-2.17	-2.10	-4.20	-5.27	-7.10	-26.70	0.00	-1.94	-1.82	-4.03	-5.19	-7.14	-26.14
San Diego, CA	x	-	100	-	0.00	-2.80	-2.71	-5.41	-6.79	-9.15	-34.40	0.00	-2.49	-2.34	-5.19	-6.68	-9.20	-33.67
San Francisco Bay Area, CA	x	-	100	-	0.00	-17.17	-18.46	-27.94	-33.01	-40.99	-122.12	0.00	-22.61	-24.21	-34.19	-39.81	-48.27	-124.97
San Joaquin Valley, CA	x	x	50	100	0.00	-6.43	-6.53	-11.56	-14.15	-18.49	-64.15	0.00	-6.95	-7.03	-12.32	-15.16	-19.77	-63.70
Sheboygan, WI	x	-	100	-	0.00	-0.11	-0.11	-0.22	-0.27	-0.37	-1.38	0.00	-0.10	-0.09	-0.21	-0.27	-0.37	-1.35
Springfield (Western MA), MA	x	-	100	-	0.00	-0.87	-0.84	-1.69	-2.11	-2.85	-10.72	0.00	-0.78	-0.73	-1.62	-2.08	-2.87	-10.49
St. Louis, MO-IL	x	x	100	100	0.00	-7.91	-8.51	-12.87	-15.21	-18.88	-56.22	0.00	-10.43	-11.17	-15.76	-18.35	-22.24	-57.54
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.43	-0.47	-0.66	-0.77	-0.94	-2.55	0.00	-0.60	-0.65	-0.86	-0.98	-1.15	-2.66
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.64	-0.63	-1.21	-1.51	-2.03	-7.48	0.00	-0.60	-0.58	-1.20	-1.52	-2.07	-7.35
Washington, DC-MD-VA	x	x	100	100	0.00	-4.73	-4.58	-9.16	-11.49	-15.49	-58.23	0.00	-4.22	-3.96	-8.78	-11.31	-15.57	-57.00
Wheeling, WV-OH	-	x	-	100	0.00	-0.15	-0.15	-0.30	-0.37	-0.50	-1.88	0.00	-0.14	-0.13	-0.28	-0.37	-0.50	-1.84
York, PA	-	x	-	100	0.00	-0.39	-0.38	-0.76	-0.95	-1.29	-4.83	0.00	-0.35	-0.33	-0.73	-0.94	-1.29	-4.73

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-55
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Benzene 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-2.66	-2.39	-4.75	-6.01	-7.95	-30.03	0.00	-2.17	-1.80	-4.42	-5.90	-8.12	-28.82
Allegan Co., MI	x	-	100	-	0.00	-0.29	-0.26	-0.52	-0.66	-0.87	-3.28	0.00	-0.24	-0.20	-0.48	-0.64	-0.89	-3.15
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.30	-0.27	-0.54	-0.68	-0.90	-3.38	0.00	-0.25	-0.20	-0.50	-0.66	-0.92	-3.25
Atlanta, GA	x	x	100	100	0.00	-16.96	-15.26	-30.33	-38.40	-50.79	-191.74	0.00	-13.89	-11.51	-28.21	-37.65	-51.87	-184.05
Baltimore, MD	x	x	100	100	0.00	-5.81	-5.23	-10.39	-13.16	-17.40	-65.70	0.00	-4.76	-3.94	-9.66	-12.90	-17.77	-63.06
Baton Rouge, LA	x	-	100	-	0.00	-15.91	-17.46	-22.89	-26.01	-30.26	-73.17	0.00	-29.35	-31.83	-37.83	-41.71	-46.39	-82.41
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-30.02	-33.34	-42.48	-47.80	-54.89	-124.55	0.00	-57.44	-62.71	-72.82	-79.50	-87.25	-144.07
Birmingham, AL	-	x	-	100	0.00	-2.04	-1.83	-3.64	-4.61	-6.10	-23.03	0.00	-1.67	-1.38	-3.39	-4.52	-6.23	-22.10
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-8.80	-7.91	-15.73	-19.91	-26.34	-99.44	0.00	-7.20	-5.97	-14.63	-19.52	-26.90	-95.45
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.27	-1.14	-2.27	-2.87	-3.80	-14.33	0.00	-1.04	-0.86	-2.11	-2.81	-3.88	-13.76
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-2.08	-1.87	-3.72	-4.72	-6.24	-23.55	0.00	-1.71	-1.41	-3.46	-4.62	-6.37	-22.60
Canton-Massillon, OH	-	x	-	100	0.00	-2.49	-2.65	-3.73	-4.34	-5.20	-14.26	0.00	-4.17	-4.44	-5.63	-6.37	-7.33	-15.27
Charleston, WV	-	x	-	100	0.00	-0.54	-0.48	-0.96	-1.21	-1.61	-6.06	0.00	-0.44	-0.36	-0.89	-1.19	-1.64	-5.82
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-4.29	-3.86	-7.66	-9.70	-12.83	-48.44	0.00	-3.51	-2.91	-7.13	-9.51	-13.10	-46.50
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.03	-0.92	-1.83	-2.32	-3.07	-11.59	0.00	-0.84	-0.70	-1.71	-2.28	-3.14	-11.13
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-35.61	-36.63	-55.56	-66.01	-81.27	-246.89	0.00	-52.97	-54.84	-75.81	-88.37	-105.59	-254.75
Chico, CA	x	-	100	-	0.00	-0.39	-0.35	-0.70	-0.88	-1.17	-4.41	0.00	-0.32	-0.26	-0.65	-0.87	-1.19	-4.24
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-3.69	-3.32	-6.60	-8.36	-11.06	-41.75	0.00	-3.02	-2.51	-6.14	-8.20	-11.29	-40.07
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.31	-0.28	-0.56	-0.71	-0.94	-3.54	0.00	-0.26	-0.21	-0.52	-0.69	-0.96	-3.40
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-4.93	-4.44	-8.82	-11.17	-14.78	-55.78	0.00	-4.04	-3.35	-8.21	-10.95	-15.09	-53.55
Columbus, OH	x	x	100	100	0.00	-3.66	-3.30	-6.55	-8.30	-10.97	-41.43	0.00	-3.00	-2.49	-6.09	-8.13	-11.21	-39.76
Dallas-Fort Worth, TX	x	-	100	-	0.00	-16.34	-14.71	-29.23	-37.01	-48.95	-184.78	0.00	-13.38	-11.09	-27.18	-36.28	-49.98	-177.37
Dayton-Springfield, OH	-	x	-	100	0.00	-1.50	-1.35	-2.69	-3.40	-4.50	-17.00	0.00	-1.23	-1.02	-2.50	-3.34	-4.60	-16.32
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-9.53	-9.10	-16.10	-19.88	-25.60	-89.75	0.00	-10.54	-10.00	-17.75	-22.22	-28.75	-88.20
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-11.91	-11.27	-20.29	-25.16	-32.54	-115.50	0.00	-12.67	-11.84	-21.83	-27.57	-36.00	-113.05
Door Co., WI	x	-	100	-	0.00	-0.06	-0.05	-0.11	-0.14	-0.18	-0.69	0.00	-0.05	-0.04	-0.10	-0.14	-0.19	-0.66
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.03	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.03
Evansville, IN	-	x	-	100	0.00	-0.68	-0.61	-1.22	-1.54	-2.03	-7.68	0.00	-0.56	-0.46	-1.13	-1.51	-2.08	-7.37
Greater Connecticut, CT	x	-	100	-	0.00	-3.51	-3.16	-6.27	-7.94	-10.51	-39.66	0.00	-2.87	-2.38	-5.83	-7.79	-10.73	-38.07
Greene Co., PA	x	-	100	-	0.00	-0.07	-0.06	-0.13	-0.16	-0.21	-0.79	0.00	-0.06	-0.05	-0.12	-0.16	-0.21	-0.76
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1.59	-1.43	-2.85	-3.61	-4.77	-18.03	0.00	-1.31	-1.08	-2.65	-3.54	-4.88	-17.30

Table B2-55
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Benzene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1.40	-1.26	-2.51	-3.18	-4.20	-15.86	0.00	-1.15	-0.95	-2.33	-3.11	-4.29	-15.22
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.11	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.11
Hickory, NC	-	x	-	100	0.00	-0.39	-0.35	-0.69	-0.88	-1.16	-4.39	0.00	-0.32	-0.26	-0.65	-0.86	-1.19	-4.21
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-70.56	-76.44	-103.24	-118.47	-139.64	-357.91	0.00	-125.04	-134.55	-164.21	-182.95	-206.44	-393.74
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-6.59	-7.17	-9.57	-10.93	-12.82	-32.08	0.00	-11.87	-12.82	-15.47	-17.16	-19.24	-35.63
Imperial Co., CA	x	-	100	-	0.00	-0.54	-0.49	-0.97	-1.23	-1.62	-6.13	0.00	-0.44	-0.37	-0.90	-1.20	-1.66	-5.89
Indianapolis, IN	-	x	-	100	0.00	-3.41	-3.07	-6.10	-7.72	-10.21	-38.55	0.00	-2.79	-2.31	-5.67	-7.57	-10.43	-37.00
Jamestown, NY	x	-	100	-	0.00	-0.28	-0.25	-0.49	-0.63	-0.83	-3.12	0.00	-0.23	-0.19	-0.46	-0.61	-0.84	-3.00
Jefferson Co., NY	x	-	100	-	0.00	-0.30	-0.27	-0.53	-0.67	-0.88	-3.34	0.00	-0.24	-0.20	-0.49	-0.65	-0.90	-3.20
Johnstown, PA	-	x	-	100	0.00	-0.22	-0.19	-0.38	-0.49	-0.64	-2.43	0.00	-0.18	-0.15	-0.36	-0.48	-0.66	-2.34
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.28	-0.25	-0.50	-0.64	-0.84	-3.18	0.00	-0.23	-0.19	-0.47	-0.63	-0.86	-3.06
Knoxville, TN	x	x	100	100	0.00	-2.23	-2.01	-3.99	-5.06	-6.69	-25.25	0.00	-1.83	-1.52	-3.71	-4.96	-6.83	-24.24
Lancaster, PA	-	x	-	100	0.00	-0.83	-0.75	-1.49	-1.89	-2.49	-9.42	0.00	-0.68	-0.57	-1.39	-1.85	-2.55	-9.04
Las Vegas, NV	x	-	100	-	0.00	-3.69	-3.32	-6.60	-8.36	-11.06	-41.74	0.00	-3.02	-2.50	-6.14	-8.20	-11.29	-40.07
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.16	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.15
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.02	-0.04	-0.05	-0.07	-0.25	0.00	-0.02	-0.02	-0.04	-0.05	-0.07	-0.24
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-64.25	-64.78	-102.54	-123.24	-153.83	-489.62	0.00	-88.81	-90.25	-132.08	-156.79	-191.46	-496.99
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1.65	-1.48	-2.95	-3.73	-4.94	-18.64	0.00	-1.35	-1.12	-2.74	-3.66	-5.04	-17.89
Louisville, KY-IN	-	x	-	100	0.00	-2.10	-1.89	-3.76	-4.76	-6.29	-23.75	0.00	-1.72	-1.43	-3.49	-4.66	-6.42	-22.80
Macon, GA	-	x	-	100	0.00	-0.39	-0.35	-0.70	-0.89	-1.18	-4.46	0.00	-0.32	-0.27	-0.66	-0.87	-1.21	-4.28
Manitowoc Co., WI	x	-	-	-	0.00	-0.20	-0.18	-0.36	-0.45	-0.60	-2.25	0.00	-0.16	-0.13	-0.33	-0.44	-0.61	-2.16
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.25	-0.23	-0.45	-0.57	-0.75	-2.84	0.00	-0.21	-0.17	-0.42	-0.56	-0.77	-2.73
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.02	-0.92	-1.83	-2.32	-3.06	-11.56	0.00	-0.84	-0.69	-1.70	-2.27	-3.13	-11.10
Memphis, TN-AR	x	-	100	-	0.00	-6.55	-6.91	-9.93	-11.61	-14.03	-39.72	0.00	-10.62	-11.22	-14.56	-16.60	-19.31	-42.05
Milwaukee-Racine, WI	x	-	100	-	0.00	-3.35	-3.02	-6.00	-7.60	-10.05	-37.93	0.00	-2.75	-2.28	-5.58	-7.45	-10.26	-36.41
Nevada (Western Part), CA	x	-	100	-	0.00	-0.21	-0.19	-0.38	-0.48	-0.63	-2.40	0.00	-0.17	-0.14	-0.35	-0.47	-0.65	-2.30
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-36.00	-34.18	-61.20	-75.80	-97.91	-346.26	0.00	-38.76	-36.39	-66.33	-83.54	-108.80	-339.29
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.29	-0.26	-0.51	-0.65	-0.86	-3.23	0.00	-0.23	-0.19	-0.48	-0.63	-0.87	-3.10
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-44.84	-47.01	-68.38	-80.28	-97.41	-280.68	0.00	-71.31	-75.01	-98.68	-113.08	-132.32	-295.24

**Table B2-55
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-9.84	-8.86	-17.60	-22.29	-29.48	-111.28	0.00	-8.06	-6.68	-16.37	-21.85	-30.10	-106.82
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3.50	-3.15	-6.26	-7.93	-10.48	-39.57	0.00	-2.87	-2.37	-5.82	-7.77	-10.70	-37.99
Poughkeepsie, NY	x	x	100	100	0.00	-2.65	-2.38	-4.74	-6.00	-7.94	-29.96	0.00	-2.17	-1.80	-4.41	-5.88	-8.10	-28.76
Providence (All RI), RI	x	-	100	-	0.00	-1.75	-1.57	-3.12	-3.96	-5.23	-19.76	0.00	-1.43	-1.19	-2.91	-3.88	-5.34	-18.96
Reading, PA	-	x	-	100	0.00	-0.78	-0.70	-1.40	-1.77	-2.34	-8.83	0.00	-0.64	-0.53	-1.30	-1.73	-2.39	-8.47
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-2.21	-1.99	-3.96	-5.01	-6.63	-25.03	0.00	-1.81	-1.50	-3.68	-4.91	-6.77	-24.03
Rochester, NY	x	-	100	-	0.00	-2.49	-2.24	-4.45	-5.63	-7.45	-28.11	0.00	-2.04	-1.69	-4.13	-5.52	-7.60	-26.98
Rome, GA	-	x	-	100	0.00	-0.21	-0.19	-0.38	-0.48	-0.64	-2.41	0.00	-0.17	-0.14	-0.35	-0.47	-0.65	-2.31
Sacramento Metro, CA	x	-	50	-	0.00	-4.84	-4.35	-8.65	-10.96	-14.49	-54.71	0.00	-3.96	-3.28	-8.05	-10.74	-14.80	-52.51
San Diego, CA	x	-	100	-	0.00	-5.71	-5.14	-10.22	-12.94	-17.11	-64.59	0.00	-4.68	-3.88	-9.50	-12.68	-17.47	-62.00
San Francisco Bay Area, CA	x	-	100	-	0.00	-30.07	-30.79	-47.18	-56.21	-69.45	-213.49	0.00	-43.97	-45.34	-63.49	-74.33	-89.28	-219.36
San Joaquin Valley, CA	x	x	50	100	0.00	-13.47	-12.74	-22.98	-28.51	-36.89	-131.09	0.00	-14.27	-13.31	-24.66	-31.17	-40.74	-128.25
Sheboygan, WI	x	-	100	-	0.00	-0.23	-0.21	-0.42	-0.53	-0.70	-2.64	0.00	-0.19	-0.16	-0.39	-0.52	-0.71	-2.53
Springfield (Western MA), MA	x	-	100	-	0.00	-1.82	-1.63	-3.25	-4.11	-5.44	-20.53	0.00	-1.49	-1.23	-3.02	-4.03	-5.55	-19.71
St. Louis, MO-IL	x	x	100	100	0.00	-13.86	-14.19	-21.74	-25.90	-31.99	-98.30	0.00	-20.28	-20.92	-29.28	-34.27	-41.15	-101.02
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.71	-0.75	-1.07	-1.24	-1.50	-4.18	0.00	-1.16	-1.23	-1.58	-1.80	-2.08	-4.44
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-1.30	-1.18	-2.29	-2.88	-3.79	-14.11	0.00	-1.14	-0.98	-2.21	-2.91	-3.95	-13.60
Washington, DC-MD-VA	x	x	100	100	0.00	-10.30	-9.27	-18.43	-23.33	-30.86	-116.50	0.00	-8.44	-6.99	-17.14	-22.87	-31.51	-111.82
Wheeling, WV-OH	-	x	-	100	0.00	-0.30	-0.27	-0.55	-0.69	-0.91	-3.45	0.00	-0.25	-0.21	-0.51	-0.68	-0.93	-3.31
York, PA	-	x	-	100	0.00	-0.87	-0.78	-1.55	-1.96	-2.59	-9.78	0.00	-0.71	-0.59	-1.44	-1.92	-2.65	-9.39

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-56
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Benzene 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-5.08	-4.40	-8.15	-10.51	-13.93	-52.40	0.00	-3.86	-2.89	-7.38	-10.35	-14.58	-49.27
Allegan Co., MI	x	-	100	-	0.00	-0.55	-0.48	-0.89	-1.14	-1.52	-5.70	0.00	-0.42	-0.31	-0.80	-1.13	-1.59	-5.36
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.65	-0.56	-1.04	-1.34	-1.78	-6.69	0.00	-0.49	-0.37	-0.94	-1.32	-1.86	-6.29
Atlanta, GA	x	x	100	100	0.00	-40.42	-34.99	-64.87	-83.67	-110.86	-417.01	0.00	-30.70	-23.02	-58.73	-82.38	-116.05	-392.07
Baltimore, MD	x	x	100	100	0.00	-11.01	-9.54	-17.68	-22.80	-30.21	-113.65	0.00	-8.37	-6.27	-16.01	-22.45	-31.63	-106.85
Baton Rouge, LA	x	-	100	-	0.00	-23.19	-24.93	-32.44	-37.02	-43.14	-106.75	0.00	-47.71	-51.09	-59.82	-65.91	-73.00	-123.11
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-42.52	-46.59	-58.61	-65.90	-75.41	-171.87	0.00	-92.89	-100.49	-114.38	-124.21	-134.99	-207.39
Birmingham, AL	-	x	-	100	0.00	-3.78	-3.27	-6.07	-7.83	-10.37	-39.02	0.00	-2.87	-2.15	-5.50	-7.71	-10.86	-36.68
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-15.62	-13.52	-25.07	-32.33	-42.84	-161.14	0.00	-11.86	-8.89	-22.69	-31.83	-44.84	-151.50
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-2.37	-2.05	-3.81	-4.91	-6.51	-24.48	0.00	-1.80	-1.35	-3.45	-4.83	-6.81	-23.01
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.60	-3.12	-5.78	-7.46	-9.88	-37.17	0.00	-2.74	-2.05	-5.24	-7.34	-10.34	-34.95
Canton-Massillon, OH	-	x	-	100	0.00	-3.71	-3.84	-5.33	-6.24	-7.49	-20.94	0.00	-6.75	-7.06	-8.80	-9.99	-11.48	-22.66
Charleston, WV	-	x	-	100	0.00	-0.90	-0.78	-1.44	-1.86	-2.46	-9.25	0.00	-0.68	-0.51	-1.30	-1.83	-2.57	-8.70
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-9.56	-8.28	-15.35	-19.80	-26.23	-98.67	0.00	-7.26	-5.45	-13.90	-19.49	-27.46	-92.77
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.84	-1.59	-2.95	-3.81	-5.05	-18.99	0.00	-1.40	-1.05	-2.67	-3.75	-5.29	-17.86
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-58.30	-57.56	-86.60	-104.67	-130.05	-408.20	0.00	-88.19	-88.48	-122.83	-146.04	-176.76	-416.97
Chico, CA	x	-	100	-	0.00	-0.73	-0.63	-1.18	-1.52	-2.01	-7.55	0.00	-0.56	-0.42	-1.06	-1.49	-2.10	-7.10
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-7.21	-6.24	-11.57	-14.92	-19.77	-74.36	0.00	-5.47	-4.10	-10.47	-14.69	-20.69	-69.91
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.52	-0.45	-0.83	-1.08	-1.42	-5.36	0.00	-0.39	-0.30	-0.75	-1.06	-1.49	-5.04
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-8.51	-7.37	-13.66	-17.61	-23.34	-87.79	0.00	-6.46	-4.85	-12.36	-17.34	-24.43	-82.54
Columbus, OH	x	x	100	100	0.00	-7.41	-6.41	-11.89	-15.33	-20.31	-76.40	0.00	-5.62	-4.22	-10.76	-15.09	-21.26	-71.83
Dallas-Fort Worth, TX	x	-	100	-	0.00	-36.70	-31.77	-58.90	-75.98	-100.67	-378.66	0.00	-27.87	-20.90	-53.33	-74.80	-105.38	-356.01
Dayton-Springfield, OH	-	x	-	100	0.00	-2.60	-2.25	-4.17	-5.38	-7.12	-26.79	0.00	-1.97	-1.48	-3.77	-5.29	-7.46	-25.19
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-18.23	-16.59	-28.45	-35.88	-46.55	-165.77	0.00	-18.90	-16.75	-30.88	-40.28	-53.41	-159.68
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-20.28	-18.42	-31.69	-40.01	-51.95	-185.49	0.00	-20.78	-18.32	-34.14	-44.66	-59.36	-178.46
Door Co., WI	x	-	100	-	0.00	-0.11	-0.09	-0.17	-0.22	-0.29	-1.08	0.00	-0.08	-0.06	-0.15	-0.21	-0.30	-1.02
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.05	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.05
Evansville, IN	-	x	-	100	0.00	-1.24	-1.07	-1.99	-2.57	-3.40	-12.80	0.00	-0.94	-0.71	-1.80	-2.53	-3.56	-12.04
Greater Connecticut, CT	x	-	100	-	0.00	-6.46	-5.60	-10.38	-13.38	-17.73	-66.70	0.00	-4.91	-3.68	-9.39	-13.18	-18.56	-62.71
Greene Co., PA	x	-	100	-	0.00	-0.11	-0.10	-0.18	-0.23	-0.31	-1.16	0.00	-0.09	-0.06	-0.16	-0.23	-0.32	-1.09
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-2.95	-2.56	-4.74	-6.11	-8.10	-30.45	0.00	-2.24	-1.68	-4.29	-6.02	-8.47	-28.63

**Table B2-56
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Benzene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.52	-2.18	-4.05	-5.23	-6.92	-26.04	0.00	-1.92	-1.44	-3.67	-5.14	-7.25	-24.48
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.04	-0.05	-0.19	0.00	-0.01	-0.01	-0.03	-0.04	-0.05	-0.18
Hickory, NC	-	x	-	100	0.00	-0.74	-0.64	-1.20	-1.54	-2.04	-7.69	0.00	-0.57	-0.42	-1.08	-1.52	-2.14	-7.23
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-105.80	-111.60	-150.09	-173.73	-205.81	-545.34	0.00	-204.38	-216.39	-261.38	-292.48	-330.18	-606.48
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-9.54	-10.19	-13.41	-15.39	-18.04	-45.80	0.00	-19.20	-20.48	-24.24	-26.85	-29.94	-52.09
Imperial Co., CA	x	-	100	-	0.00	-1.22	-1.06	-1.96	-2.53	-3.36	-12.63	0.00	-0.93	-0.70	-1.78	-2.50	-3.52	-11.88
Indianapolis, IN	-	x	-	100	0.00	-6.91	-5.98	-11.08	-14.30	-18.94	-71.25	0.00	-5.24	-3.93	-10.04	-14.07	-19.83	-66.99
Jamestown, NY	x	-	100	-	0.00	-0.48	-0.41	-0.76	-0.98	-1.30	-4.91	0.00	-0.36	-0.27	-0.69	-0.97	-1.37	-4.61
Jefferson Co., NY	x	-	100	-	0.00	-0.58	-0.51	-0.94	-1.21	-1.60	-6.04	0.00	-0.44	-0.33	-0.85	-1.19	-1.68	-5.67
Johnstown, PA	-	x	-	100	0.00	-0.35	-0.31	-0.57	-0.73	-0.97	-3.64	0.00	-0.27	-0.20	-0.51	-0.72	-1.01	-3.42
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.63	-0.54	-1.01	-1.30	-1.73	-6.49	0.00	-0.48	-0.36	-0.91	-1.28	-1.81	-6.11
Knoxville, TN	x	x	100	100	0.00	-4.25	-3.68	-6.83	-8.80	-11.66	-43.88	0.00	-3.23	-2.42	-6.18	-8.67	-12.21	-41.25
Lancaster, PA	-	x	-	100	0.00	-1.51	-1.30	-2.42	-3.12	-4.13	-15.55	0.00	-1.14	-0.86	-2.19	-3.07	-4.33	-14.62
Las Vegas, NV	x	-	100	-	0.00	-8.94	-7.74	-14.35	-18.50	-24.52	-92.22	0.00	-6.79	-5.09	-12.99	-18.22	-25.66	-86.71
Libby, MT	-	x	-	100	0.00	-0.03	-0.02	-0.04	-0.05	-0.07	-0.26	0.00	-0.02	-0.01	-0.04	-0.05	-0.07	-0.24
Liberty-Clairton, PA	-	x	-	100	0.00	-0.03	-0.03	-0.05	-0.07	-0.09	-0.34	0.00	-0.03	-0.02	-0.05	-0.07	-0.10	-0.32
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-111.99	-107.72	-169.14	-207.47	-261.77	-861.48	0.00	-151.83	-147.83	-220.69	-269.63	-335.78	-860.42
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-3.49	-3.02	-5.60	-7.22	-9.57	-35.99	0.00	-2.65	-1.99	-5.07	-7.11	-10.02	-33.84
Louisville, KY-IN	-	x	-	100	0.00	-3.66	-3.17	-5.87	-7.57	-10.03	-37.74	0.00	-2.78	-2.08	-5.31	-7.45	-10.50	-35.48
Macon, GA	-	x	-	100	0.00	-0.69	-0.60	-1.11	-1.43	-1.89	-7.11	0.00	-0.52	-0.39	-1.00	-1.41	-1.98	-6.69
Manitowoc Co., WI	x	-	-	-	0.00	-0.34	-0.30	-0.55	-0.71	-0.94	-3.54	0.00	-0.26	-0.20	-0.50	-0.70	-0.98	-3.33
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.56	-0.49	-0.90	-1.16	-1.54	-5.80	0.00	-0.43	-0.32	-0.82	-1.15	-1.61	-5.45
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-2.39	-2.07	-3.84	-4.95	-6.56	-24.68	0.00	-1.82	-1.36	-3.48	-4.88	-6.87	-23.20
Memphis, TN-AR	x	-	100	-	0.00	-9.87	-10.11	-14.30	-16.89	-20.48	-59.16	0.00	-17.19	-17.82	-22.75	-26.12	-30.40	-62.95
Milwaukee-Racine, WI	x	-	100	-	0.00	-5.96	-5.16	-9.57	-12.34	-16.35	-61.50	0.00	-4.53	-3.39	-8.66	-12.15	-17.11	-57.82
Nevada (Western Part), CA	x	-	100	-	0.00	-0.42	-0.36	-0.67	-0.87	-1.15	-4.32	0.00	-0.32	-0.24	-0.61	-0.85	-1.20	-4.07
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-60.96	-55.54	-95.12	-119.95	-155.57	-553.61	0.00	-63.42	-56.27	-103.45	-134.86	-178.69	-533.43
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.48	-0.41	-0.77	-0.99	-1.31	-4.94	0.00	-0.36	-0.27	-0.70	-0.97	-1.37	-4.64
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-69.99	-70.89	-102.20	-121.60	-148.58	-441.17	0.00	-116.97	-120.18	-157.09	-182.19	-214.56	-463.02

**Table B2-56
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Benzene 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-22.86	-19.79	-36.68	-47.32	-62.69	-235.82	0.00	-17.36	-13.02	-33.21	-46.58	-65.63	-221.71
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-5.80	-5.02	-9.31	-12.01	-15.91	-59.84	0.00	-4.41	-3.30	-8.43	-11.82	-16.65	-56.26
Poughkeepsie, NY	x	x	100	100	0.00	-5.11	-4.43	-8.21	-10.59	-14.03	-52.76	0.00	-3.88	-2.91	-7.43	-10.42	-14.68	-49.60
Providence (All RI), RI	x	-	100	-	0.00	-3.07	-2.66	-4.93	-6.36	-8.43	-31.71	0.00	-2.33	-1.75	-4.47	-6.26	-8.82	-29.81
Reading, PA	-	x	-	100	0.00	-1.51	-1.31	-2.42	-3.12	-4.14	-15.57	0.00	-1.15	-0.86	-2.19	-3.08	-4.33	-14.64
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-6.11	-5.29	-9.81	-12.66	-16.77	-63.07	0.00	-4.64	-3.48	-8.88	-12.46	-17.55	-59.30
Rochester, NY	x	-	100	-	0.00	-4.45	-3.85	-7.14	-9.20	-12.19	-45.87	0.00	-3.38	-2.53	-6.46	-9.06	-12.77	-43.13
Rome, GA	-	x	-	100	0.00	-0.37	-0.32	-0.60	-0.77	-1.02	-3.84	0.00	-0.28	-0.21	-0.54	-0.76	-1.07	-3.61
Sacramento Metro, CA	x	-	50	-	0.00	-10.19	-8.82	-16.35	-21.09	-27.94	-105.10	0.00	-7.74	-5.80	-14.80	-20.76	-29.25	-98.81
San Diego, CA	x	-	100	-	0.00	-9.96	-8.63	-15.99	-20.63	-27.33	-102.81	0.00	-7.57	-5.67	-14.48	-20.31	-28.61	-96.66
San Francisco Bay Area, CA	x	-	100	-	0.00	-47.30	-46.70	-70.25	-84.89	-105.47	-330.92	0.00	-71.60	-71.85	-99.70	-118.51	-143.41	-338.10
San Joaquin Valley, CA	x	x	50	100	0.00	-27.66	-24.91	-43.45	-55.09	-71.81	-259.10	0.00	-26.99	-23.28	-45.38	-60.08	-80.70	-248.12
Sheboygan, WI	x	-	100	-	0.00	-0.42	-0.37	-0.68	-0.87	-1.16	-4.35	0.00	-0.32	-0.24	-0.61	-0.86	-1.21	-4.09
Springfield (Western MA), MA	x	-	100	-	0.00	-3.30	-2.86	-5.30	-6.83	-9.05	-34.05	0.00	-2.51	-1.88	-4.80	-6.73	-9.48	-32.02
St. Louis, MO-IL	x	x	100	100	0.00	-21.90	-21.62	-32.53	-39.32	-48.87	-153.42	0.00	-33.11	-33.21	-46.12	-54.85	-66.39	-156.69
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.03	-1.07	-1.49	-1.75	-2.10	-5.92	0.00	-1.86	-1.94	-2.44	-2.77	-3.20	-6.38
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.28	-2.00	-3.63	-4.66	-6.15	-22.84	0.00	-1.88	-1.49	-3.44	-4.74	-6.57	-21.58
Washington, DC-MD-VA	x	x	100	100	0.00	-21.15	-18.31	-33.95	-43.79	-58.02	-218.26	0.00	-16.07	-12.05	-30.74	-43.11	-60.74	-205.20
Wheeling, WV-OH	-	x	-	100	0.00	-0.51	-0.44	-0.81	-1.05	-1.39	-5.24	0.00	-0.39	-0.29	-0.74	-1.03	-1.46	-4.92
York, PA	-	x	-	100	0.00	-1.75	-1.52	-2.82	-3.63	-4.81	-18.10	0.00	-1.33	-1.00	-2.55	-3.58	-5.04	-17.02

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-57
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Butadiene 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.03	0.10	0.00	0.02	0.02	0.03	0.03	0.03	0.10
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Atlanta, GA	x	x	100	100	0.00	0.08	0.09	0.13	0.16	0.19	0.54	0.00	0.08	0.09	0.13	0.16	0.19	0.54
Baltimore, MD	x	x	100	100	0.00	0.03	0.04	0.06	0.07	0.08	0.22	0.00	0.03	0.04	0.06	0.07	0.08	0.22
Baton Rouge, LA	x	-	100	-	0.00	-0.13	-0.16	-0.21	-0.24	-0.28	-0.56	0.00	-0.13	-0.16	-0.21	-0.24	-0.28	-0.56
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.27	-0.33	-0.44	-0.50	-0.59	-1.19	0.00	-0.27	-0.34	-0.44	-0.50	-0.59	-1.19
Birmingham, AL	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.08
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.06	0.06	0.09	0.11	0.13	0.37	0.00	0.06	0.06	0.09	0.11	0.13	0.37
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.01	0.02	0.02	0.03	0.03	0.09	0.00	0.01	0.02	0.02	0.03	0.03	0.09
Canton-Massillon, OH	-	x	-	100	0.00	-0.01	-0.02	-0.02	-0.03	-0.03	-0.05	0.00	-0.01	-0.02	-0.02	-0.03	-0.03	-0.05
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.02
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.02	0.02	0.04	0.04	0.05	0.14	0.00	0.02	0.02	0.04	0.04	0.05	0.14
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.04
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.11	-0.15	-0.19	-0.20	-0.24	-0.33	0.00	-0.11	-0.15	-0.19	-0.20	-0.24	-0.33
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.02	0.03	0.04	0.04	0.05	0.15	0.00	0.02	0.03	0.04	0.04	0.05	0.15
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.03	0.04	0.05	0.06	0.07	0.21	0.00	0.03	0.04	0.05	0.06	0.07	0.21
Columbus, OH	x	x	100	100	0.00	0.02	0.02	0.03	0.04	0.05	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.14
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.09	0.10	0.14	0.16	0.19	0.55	0.00	0.09	0.10	0.14	0.16	0.19	0.55
Dayton-Springfield, OH	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.06	0.00	0.01	0.01	0.02	0.02	0.02	0.06
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.15	0.00	0.02	0.02	0.03	0.03	0.04	0.15
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.04	0.04	0.06	0.07	0.08	0.27	0.00	0.04	0.04	0.06	0.07	0.08	0.27
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Greater Connecticut, CT	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.14
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.06	0.00	0.01	0.01	0.02	0.02	0.02	0.06

**Table B2-57
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.06	0.00	0.01	0.01	0.01	0.02	0.02	0.06
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-0.49	-0.63	-0.81	-0.92	-1.09	-2.11	0.00	-0.50	-0.63	-0.81	-0.92	-1.09	-2.11
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.05	-0.06	-0.08	-0.09	-0.11	-0.21	0.00	-0.05	-0.06	-0.08	-0.09	-0.11	-0.21
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Indianapolis, IN	-	x	-	100	0.00	0.02	0.02	0.03	0.04	0.04	0.13	0.00	0.02	0.02	0.03	0.04	0.04	0.13
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Knoxville, TN	x	x	100	100	0.00	0.01	0.02	0.02	0.03	0.03	0.09	0.00	0.01	0.02	0.02	0.03	0.03	0.09
Lancaster, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.03
Las Vegas, NV	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.04	0.11	0.00	0.02	0.02	0.03	0.03	0.04	0.11
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.12	-0.17	-0.20	-0.21	-0.26	-0.19	0.00	-0.12	-0.17	-0.20	-0.21	-0.26	-0.19
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.06	0.00	0.01	0.01	0.01	0.02	0.02	0.06
Louisville, KY-IN	-	x	-	100	0.00	0.01	0.02	0.02	0.03	0.03	0.09	0.00	0.01	0.02	0.02	0.03	0.03	0.09
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.01	0.03
Memphis, TN-AR	x	-	100	-	0.00	-0.03	-0.04	-0.05	-0.06	-0.07	-0.12	0.00	-0.03	-0.04	-0.05	-0.06	-0.07	-0.12
Milwaukee-Racine, WI	x	-	100	-	0.00	0.02	0.02	0.03	0.04	0.05	0.14	0.00	0.02	0.02	0.03	0.04	0.05	0.14
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	0.10	0.10	0.16	0.20	0.22	0.79	0.00	0.10	0.10	0.16	0.20	0.22	0.79
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-0.20	-0.26	-0.33	-0.37	-0.45	-0.75	0.00	-0.20	-0.26	-0.34	-0.37	-0.45	-0.75

**Table B2-57
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Butadiene 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.05	0.05	0.08	0.09	0.11	0.31	0.00	0.05	0.05	0.08	0.09	0.11	0.31
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.02	0.03	0.04	0.05	0.05	0.15	0.00	0.02	0.03	0.04	0.05	0.05	0.15
Poughkeepsie, NY	x	x	100	100	0.00	0.02	0.02	0.02	0.03	0.03	0.10	0.00	0.02	0.02	0.02	0.03	0.03	0.10
Providence (All RI), RI	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.02	0.07
Reading, PA	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.01	0.03
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.02	0.06	0.00	0.01	0.01	0.01	0.02	0.02	0.06
Rochester, NY	x	-	100	-	0.00	0.02	0.02	0.03	0.03	0.03	0.10	0.00	0.02	0.02	0.03	0.03	0.03	0.10
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Sacramento Metro, CA	x	-	50	-	0.00	0.03	0.03	0.04	0.05	0.06	0.17	0.00	0.03	0.03	0.04	0.05	0.06	0.17
San Diego, CA	x	-	100	-	0.00	0.04	0.04	0.06	0.07	0.08	0.24	0.00	0.04	0.04	0.06	0.07	0.08	0.24
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.08	-0.11	-0.13	-0.14	-0.17	-0.20	0.00	-0.08	-0.11	-0.13	-0.14	-0.17	-0.20
San Joaquin Valley, CA	x	x	50	100	0.00	0.03	0.03	0.04	0.05	0.06	0.23	0.00	0.03	0.03	0.04	0.05	0.06	0.23
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Springfield (Western MA), MA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.07	0.00	0.01	0.01	0.02	0.02	0.03	0.07
St. Louis, MO-IL	x	x	100	100	0.00	-0.04	-0.05	-0.06	-0.07	-0.08	-0.09	0.00	-0.04	-0.05	-0.06	-0.07	-0.08	-0.09
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Washington, DC-MD-VA	x	x	100	100	0.00	0.06	0.07	0.10	0.12	0.13	0.38	0.00	0.06	0.07	0.10	0.12	0.13	0.38
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
York, PA	-	x	-	100	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.01	0.03

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-58
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

Butadiene 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.02	0.02	0.01	0.01	-0.01	-0.13	0.00	0.05	0.05	0.05	0.05	0.03	-0.08
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.01	0.01	0.00	0.00	-0.01
Atlanta, GA	x	x	100	100	0.00	0.10	0.11	0.08	0.05	-0.07	-0.78	0.00	0.27	0.30	0.28	0.27	0.17	-0.45
Baltimore, MD	x	x	100	100	0.00	0.04	0.04	0.03	0.02	-0.03	-0.30	0.00	0.10	0.11	0.11	0.10	0.06	-0.17
Baton Rouge, LA	x	-	100	-	0.00	-0.41	-0.48	-0.60	-0.67	-0.77	-1.58	0.00	-0.66	-0.75	-0.87	-0.96	-1.06	-1.76
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-0.85	-0.98	-1.21	-1.35	-1.54	-3.08	0.00	-1.37	-1.54	-1.79	-1.96	-2.15	-3.48
Birmingham, AL	-	x	-	100	0.00	0.01	0.01	0.01	0.01	-0.01	-0.11	0.00	0.04	0.04	0.04	0.04	0.02	-0.06
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.06	0.07	0.05	0.03	-0.04	-0.46	0.00	0.16	0.18	0.17	0.16	0.10	-0.26
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07	0.00	0.02	0.02	0.02	0.02	0.01	-0.04
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.01	0.02	0.01	0.01	-0.01	-0.11	0.00	0.04	0.04	0.04	0.04	0.02	-0.06
Canton-Massillon, OH	-	x	-	100	0.00	-0.05	-0.06	-0.08	-0.09	-0.10	-0.23	0.00	-0.08	-0.09	-0.11	-0.12	-0.13	-0.24
Charleston, WV	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.01	0.01	0.01	0.01	0.01	-0.02
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.03	0.03	0.02	0.01	-0.02	-0.20	0.00	0.07	0.08	0.07	0.07	0.04	-0.12
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.01	0.01	0.01	0.00	0.00	-0.05	0.00	0.02	0.02	0.02	0.02	0.01	-0.03
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.52	-0.61	-0.81	-0.94	-1.17	-2.94	0.00	-0.75	-0.85	-1.04	-1.18	-1.41	-2.92
Chico, CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.02	0.03	0.02	0.01	-0.02	-0.19	0.00	0.07	0.07	0.07	0.06	0.04	-0.11
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.03	0.04	0.03	0.02	-0.02	-0.26	0.00	0.09	0.10	0.10	0.09	0.06	-0.15
Columbus, OH	x	x	100	100	0.00	0.02	0.03	0.02	0.01	-0.02	-0.18	0.00	0.06	0.07	0.07	0.06	0.04	-0.10
Dallas-Fort Worth, TX	x	-	100	-	0.00	0.10	0.11	0.08	0.05	-0.07	-0.77	0.00	0.27	0.30	0.28	0.26	0.17	-0.44
Dayton-Springfield, OH	-	x	-	100	0.00	0.01	0.01	0.01	0.01	-0.01	-0.08	0.00	0.03	0.03	0.03	0.03	0.02	-0.05
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.03	-0.03	-0.07	-0.09	-0.16	-0.60	0.00	0.01	0.00	-0.02	-0.05	-0.11	-0.49
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.01	-0.02	-0.06	-0.09	-0.18	-0.76	0.00	0.05	0.05	0.02	-0.01	-0.09	-0.59
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.01	0.01	0.01	0.01	0.01	-0.02
Greater Connecticut, CT	x	-	100	-	0.00	0.02	0.03	0.02	0.01	-0.02	-0.18	0.00	0.06	0.07	0.07	0.06	0.04	-0.10
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.01	0.01	0.01	0.01	-0.01	-0.08	0.00	0.03	0.03	0.03	0.03	0.02	-0.05

**Table B2-58
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07	0.00	0.03	0.03	0.03	0.03	0.02	-0.04
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1.68	-1.95	-2.43	-2.74	-3.18	-6.77	0.00	-2.65	-2.98	-3.49	-3.86	-4.30	-7.38
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.16	-0.19	-0.23	-0.26	-0.31	-0.64	0.00	-0.26	-0.29	-0.34	-0.37	-0.42	-0.71
Imperial Co., CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.01	0.01	0.01	0.01	0.01	-0.01
Indianapolis, IN	-	x	-	100	0.00	0.02	0.02	0.02	0.01	-0.01	-0.17	0.00	0.06	0.06	0.06	0.06	0.04	-0.10
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.01	0.00	0.00	0.00	-0.01
Knoxville, TN	x	x	100	100	0.00	0.01	0.02	0.01	0.01	-0.01	-0.11	0.00	0.04	0.04	0.04	0.04	0.02	-0.06
Lancaster, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.00	-0.04	0.00	0.02	0.02	0.02	0.01	0.01	-0.02
Las Vegas, NV	x	-	100	-	0.00	0.02	0.02	0.02	0.01	-0.01	-0.17	0.00	0.06	0.06	0.06	0.06	0.04	-0.09
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-0.73	-0.87	-1.18	-1.40	-1.82	-4.93	0.00	-0.98	-1.11	-1.41	-1.64	-2.04	-4.71
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.01	0.01	0.01	0.00	-0.01	-0.08	0.00	0.03	0.03	0.03	0.03	0.02	-0.05
Louisville, KY-IN	-	x	-	100	0.00	0.01	0.02	0.01	0.01	-0.01	-0.11	0.00	0.04	0.04	0.04	0.04	0.02	-0.06
Macon, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.00	-0.05	0.00	0.02	0.02	0.02	0.02	0.01	-0.03
Memphis, TN-AR	x	-	100	-	0.00	-0.12	-0.14	-0.18	-0.21	-0.25	-0.59	0.00	-0.19	-0.21	-0.25	-0.28	-0.32	-0.61
Milwaukee-Racine, WI	x	-	100	-	0.00	0.02	0.02	0.02	0.01	-0.01	-0.18	0.00	0.06	0.07	0.06	0.06	0.04	-0.10
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.05	-0.07	-0.20	-0.29	-0.56	-2.32	0.00	0.12	0.12	0.02	-0.06	-0.29	-1.81
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-0.80	-0.94	-1.20	-1.38	-1.68	-3.92	0.00	-1.21	-1.37	-1.64	-1.84	-2.12	-4.05

**Table B2-58
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Butadiene 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.06	0.06	0.05	0.03	-0.04	-0.45	0.00	0.16	0.17	0.16	0.15	0.10	-0.26
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.03	0.03	0.02	0.01	-0.02	-0.19	0.00	0.07	0.07	0.07	0.07	0.04	-0.11
Poughkeepsie, NY	x	x	100	100	0.00	0.02	0.02	0.01	0.01	-0.01	-0.13	0.00	0.05	0.05	0.05	0.05	0.03	-0.08
Providence (All RI), RI	x	-	100	-	0.00	0.01	0.01	0.01	0.01	-0.01	-0.09	0.00	0.03	0.04	0.03	0.03	0.02	-0.05
Reading, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.00	-0.04	0.00	0.01	0.02	0.01	0.01	0.01	-0.02
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.01	0.01	0.01	0.01	-0.01	-0.09	0.00	0.03	0.04	0.03	0.03	0.02	-0.05
Rochester, NY	x	-	100	-	0.00	0.02	0.02	0.01	0.01	-0.01	-0.13	0.00	0.05	0.05	0.05	0.04	0.03	-0.07
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Sacramento Metro, CA	x	-	50	-	0.00	0.03	0.03	0.02	0.01	-0.02	-0.24	0.00	0.08	0.09	0.09	0.08	0.05	-0.13
San Diego, CA	x	-	100	-	0.00	0.04	0.04	0.03	0.02	-0.03	-0.30	0.00	0.11	0.12	0.11	0.10	0.07	-0.17
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.41	-0.49	-0.65	-0.76	-0.96	-2.47	0.00	-0.58	-0.66	-0.82	-0.93	-1.13	-2.42
San Joaquin Valley, CA	x	x	50	100	0.00	-0.02	-0.03	-0.07	-0.10	-0.19	-0.80	0.00	0.04	0.04	0.00	-0.02	-0.11	-0.62
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Springfield (Western MA), MA	x	-	100	-	0.00	0.01	0.01	0.01	0.01	-0.01	-0.09	0.00	0.03	0.04	0.03	0.03	0.02	-0.05
St. Louis, MO-IL	x	x	100	100	0.00	-0.19	-0.23	-0.30	-0.35	-0.44	-1.14	0.00	-0.27	-0.31	-0.38	-0.43	-0.52	-1.12
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.01	-0.02	-0.02	-0.02	-0.03	-0.06	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.07
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.01	0.01	0.00	0.00	-0.01	-0.07	0.00	0.02	0.02	0.02	0.02	0.01	-0.05
Washington, DC-MD-VA	x	x	100	100	0.00	0.07	0.07	0.05	0.03	-0.04	-0.51	0.00	0.18	0.20	0.19	0.18	0.11	-0.29
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.01	0.01	0.01	0.01	0.00	-0.01
York, PA	-	x	-	100	0.00	0.01	0.01	0.00	0.00	0.00	-0.04	0.00	0.01	0.02	0.02	0.01	0.01	-0.02

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-59
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.03	-0.02	-0.06	-0.10	-0.17	-0.81	0.00	0.07	0.09	0.05	0.01	-0.06	-0.61
Allegan Co., MI	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
Atlanta, GA	x	x	100	100	0.00	-0.20	-0.12	-0.39	-0.66	-1.08	-5.20	0.00	0.42	0.59	0.33	0.06	-0.36	-3.89
Baltimore, MD	x	x	100	100	0.00	-0.07	-0.04	-0.13	-0.23	-0.37	-1.78	0.00	0.15	0.20	0.11	0.02	-0.12	-1.33
Baton Rouge, LA	x	-	100	-	0.00	-0.68	-0.77	-0.95	-1.07	-1.23	-2.67	0.00	-1.33	-1.46	-1.67	-1.83	-1.99	-3.10
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.35	-1.53	-1.86	-2.08	-2.35	-4.76	0.00	-2.73	-3.01	-3.40	-3.69	-3.97	-5.78
Birmingham, AL	-	x	-	100	0.00	-0.02	-0.01	-0.05	-0.08	-0.13	-0.62	0.00	0.05	0.07	0.04	0.01	-0.04	-0.47
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.10	-0.06	-0.20	-0.34	-0.56	-2.69	0.00	0.22	0.30	0.17	0.03	-0.19	-2.02
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.01	-0.01	-0.03	-0.05	-0.08	-0.39	0.00	0.03	0.04	0.02	0.00	-0.03	-0.29
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.02	-0.01	-0.05	-0.08	-0.13	-0.64	0.00	0.05	0.07	0.04	0.01	-0.04	-0.48
Canton-Massillon, OH	-	x	-	100	0.00	-0.09	-0.10	-0.13	-0.16	-0.19	-0.48	0.00	-0.16	-0.18	-0.21	-0.24	-0.27	-0.50
Charleston, WV	-	x	-	100	0.00	-0.01	0.00	-0.01	-0.02	-0.03	-0.16	0.00	0.01	0.02	0.01	0.00	-0.01	-0.12
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.05	-0.03	-0.10	-0.17	-0.27	-1.31	0.00	0.11	0.15	0.08	0.01	-0.09	-0.98
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.04	-0.07	-0.31	0.00	0.03	0.04	0.02	0.00	-0.02	-0.24
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.14	-1.20	-1.67	-2.05	-2.58	-7.69	0.00	-1.63	-1.70	-2.19	-2.63	-3.17	-7.37
Chico, CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.02	-0.02	-0.12	0.00	0.01	0.01	0.01	0.00	-0.01	-0.09
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.04	-0.03	-0.09	-0.14	-0.23	-1.13	0.00	0.09	0.13	0.07	0.01	-0.08	-0.85
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.10	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.06	-0.03	-0.11	-0.19	-0.31	-1.51	0.00	0.12	0.17	0.10	0.02	-0.11	-1.13
Columbus, OH	x	x	100	100	0.00	-0.04	-0.03	-0.08	-0.14	-0.23	-1.12	0.00	0.09	0.13	0.07	0.01	-0.08	-0.84
Dallas-Fort Worth, TX	x	-	100	-	0.00	-0.19	-0.11	-0.38	-0.63	-1.04	-5.01	0.00	0.41	0.57	0.32	0.06	-0.35	-3.75
Dayton-Springfield, OH	-	x	-	100	0.00	-0.02	-0.01	-0.03	-0.06	-0.10	-0.46	0.00	0.04	0.05	0.03	0.01	-0.03	-0.34
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.19	-0.18	-0.32	-0.45	-0.64	-2.55	0.00	-0.05	-0.01	-0.15	-0.28	-0.48	-2.09
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.23	-0.20	-0.38	-0.54	-0.80	-3.25	0.00	-0.01	0.05	-0.12	-0.30	-0.55	-2.63
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	-0.01	0.00	-0.02	-0.03	-0.04	-0.21	0.00	0.02	0.02	0.01	0.00	-0.01	-0.16
Greater Connecticut, CT	x	-	100	-	0.00	-0.04	-0.02	-0.08	-0.14	-0.22	-1.07	0.00	0.09	0.12	0.07	0.01	-0.08	-0.80
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.02	-0.01	-0.04	-0.06	-0.10	-0.49	0.00	0.04	0.06	0.03	0.01	-0.03	-0.37

**Table B2-59
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.02	-0.01	-0.03	-0.05	-0.09	-0.43	0.00	0.04	0.05	0.03	0.00	-0.03	-0.32
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickory, NC	-	x	-	100	0.00	0.00	0.00	-0.01	-0.02	-0.02	-0.12	0.00	0.01	0.01	0.01	0.00	-0.01	-0.09
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-2.86	-3.19	-4.03	-4.62	-5.38	-12.53	0.00	-5.36	-5.85	-6.77	-7.52	-8.32	-13.92
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.27	-0.31	-0.38	-0.44	-0.51	-1.14	0.00	-0.52	-0.57	-0.66	-0.73	-0.80	-1.29
Imperial Co., CA	x	-	100	-	0.00	-0.01	0.00	-0.01	-0.02	-0.03	-0.17	0.00	0.01	0.02	0.01	0.00	-0.01	-0.12
Indianapolis, IN	-	x	-	100	0.00	-0.04	-0.02	-0.08	-0.13	-0.22	-1.04	0.00	0.09	0.12	0.07	0.01	-0.07	-0.78
Jamestown, NY	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.08	0.00	0.01	0.01	0.01	0.00	-0.01	-0.06
Jefferson Co., NY	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
Johnstown, PA	-	x	-	100	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.07	0.00	0.01	0.01	0.00	0.00	0.00	-0.05
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.06
Knoxville, TN	x	x	100	100	0.00	-0.03	-0.02	-0.05	-0.09	-0.14	-0.68	0.00	0.06	0.08	0.04	0.01	-0.05	-0.51
Lancaster, PA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.05	-0.26	0.00	0.02	0.03	0.02	0.00	-0.02	-0.19
Las Vegas, NV	x	-	100	-	0.00	-0.04	-0.03	-0.09	-0.14	-0.23	-1.13	0.00	0.09	0.13	0.07	0.01	-0.08	-0.85
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1.85	-1.90	-2.77	-3.50	-4.57	-14.79	0.00	-2.23	-2.24	-3.14	-3.96	-5.04	-13.52
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.02	-0.01	-0.04	-0.06	-0.10	-0.51	0.00	0.04	0.06	0.03	0.01	-0.04	-0.38
Louisville, KY-IN	-	x	-	100	0.00	-0.02	-0.01	-0.05	-0.08	-0.13	-0.64	0.00	0.05	0.07	0.04	0.01	-0.04	-0.48
Macon, GA	-	x	-	100	0.00	0.00	0.00	-0.01	-0.02	-0.03	-0.12	0.00	0.01	0.01	0.01	0.00	-0.01	-0.09
Manitowoc Co., WI	x	-	-	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.06	0.00	0.00	0.01	0.00	0.00	0.00	-0.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.08	0.00	0.01	0.01	0.00	0.00	-0.01	-0.06
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.04	-0.07	-0.31	0.00	0.03	0.04	0.02	0.00	-0.02	-0.23
Memphis, TN-AR	x	-	100	-	0.00	-0.24	-0.26	-0.34	-0.40	-0.49	-1.30	0.00	-0.39	-0.42	-0.51	-0.58	-0.67	-1.33
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.04	-0.02	-0.08	-0.13	-0.21	-1.03	0.00	0.08	0.12	0.07	0.01	-0.07	-0.77
Nevada (Western Part), CA	x	-	100	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.06	0.00	0.01	0.01	0.00	0.00	0.00	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-0.70	-0.62	-1.16	-1.66	-2.41	-9.77	0.00	-0.08	0.10	-0.42	-0.95	-1.71	-7.94
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1.57	-1.70	-2.27	-2.71	-3.31	-9.06	0.00	-2.55	-2.71	-3.32	-3.84	-4.46	-9.12

**Table B2-59
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Butadiene 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.11	-0.07	-0.23	-0.38	-0.63	-3.02	0.00	0.25	0.34	0.19	0.03	-0.21	-2.26
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.04	-0.02	-0.08	-0.14	-0.22	-1.07	0.00	0.09	0.12	0.07	0.01	-0.07	-0.80
Poughkeepsie, NY	x	x	100	100	0.00	-0.03	-0.02	-0.06	-0.10	-0.17	-0.81	0.00	0.07	0.09	0.05	0.01	-0.06	-0.61
Providence (All RI), RI	x	-	100	-	0.00	-0.02	-0.01	-0.04	-0.07	-0.11	-0.54	0.00	0.04	0.06	0.03	0.01	-0.04	-0.40
Reading, PA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.05	-0.24	0.00	0.02	0.03	0.02	0.00	-0.02	-0.18
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.03	-0.02	-0.05	-0.09	-0.14	-0.68	0.00	0.06	0.08	0.04	0.01	-0.05	-0.51
Rochester, NY	x	-	100	-	0.00	-0.03	-0.02	-0.06	-0.10	-0.16	-0.76	0.00	0.06	0.09	0.05	0.01	-0.05	-0.57
Rome, GA	-	x	-	100	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.07	0.00	0.01	0.01	0.00	0.00	0.00	-0.05
Sacramento Metro, CA	x	-	50	-	0.00	-0.06	-0.03	-0.11	-0.19	-0.31	-1.48	0.00	0.12	0.17	0.09	0.02	-0.10	-1.11
San Diego, CA	x	-	100	-	0.00	-0.07	-0.04	-0.13	-0.22	-0.36	-1.75	0.00	0.14	0.20	0.11	0.02	-0.12	-1.31
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.94	-0.99	-1.38	-1.71	-2.17	-6.60	0.00	-1.30	-1.34	-1.76	-2.13	-2.60	-6.25
San Joaquin Valley, CA	x	x	50	100	0.00	-0.25	-0.22	-0.43	-0.61	-0.90	-3.69	0.00	-0.01	0.07	-0.13	-0.33	-0.62	-2.98
Sheboygan, WI	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.07	0.00	0.01	0.01	0.00	0.00	0.00	-0.05
Springfield (Western MA), MA	x	-	100	-	0.00	-0.02	-0.01	-0.04	-0.07	-0.12	-0.56	0.00	0.05	0.06	0.04	0.01	-0.04	-0.42
St. Louis, MO-IL	x	x	100	100	0.00	-0.43	-0.46	-0.64	-0.79	-1.00	-3.04	0.00	-0.60	-0.62	-0.81	-0.98	-1.20	-2.88
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.03	-0.04	-0.04	-0.05	-0.14	0.00	-0.04	-0.05	-0.06	-0.06	-0.07	-0.14
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.02	-0.01	-0.03	-0.05	-0.08	-0.39	0.00	0.02	0.03	0.02	-0.01	-0.04	-0.29
Washington, DC-MD-VA	x	x	100	100	0.00	-0.12	-0.07	-0.24	-0.40	-0.66	-3.16	0.00	0.26	0.36	0.20	0.03	-0.22	-2.36
Wheeling, WV-OH	-	x	-	100	0.00	0.00	0.00	-0.01	-0.01	-0.02	-0.09	0.00	0.01	0.01	0.01	0.00	-0.01	-0.07
York, PA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.06	-0.27	0.00	0.02	0.03	0.02	0.00	-0.02	-0.20

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-60
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

Butadiene 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-0.16	-0.12	-0.21	-0.33	-0.48	-2.12	0.00	0.07	0.14	0.03	-0.11	-0.29	-1.62
Allegan Co., MI	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.04	-0.05	-0.23	0.00	0.01	0.02	0.00	-0.01	-0.03	-0.18
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.02	-0.01	-0.03	-0.04	-0.06	-0.27	0.00	0.01	0.02	0.00	-0.01	-0.04	-0.21
Atlanta, GA	x	x	100	100	0.00	-1.25	-0.93	-1.68	-2.64	-3.86	-16.83	0.00	0.52	1.10	0.25	-0.88	-2.30	-12.91
Baltimore, MD	x	x	100	100	0.00	-0.34	-0.25	-0.46	-0.72	-1.05	-4.59	0.00	0.14	0.30	0.07	-0.24	-0.63	-3.52
Baton Rouge, LA	x	-	100	-	0.00	-1.02	-1.12	-1.37	-1.58	-1.82	-4.20	0.00	-2.19	-2.36	-2.67	-2.95	-3.22	-4.92
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.92	-2.15	-2.59	-2.90	-3.26	-6.72	0.00	-4.46	-4.86	-5.40	-5.86	-6.25	-8.56
Birmingham, AL	-	x	-	100	0.00	-0.12	-0.09	-0.16	-0.25	-0.36	-1.57	0.00	0.05	0.10	0.02	-0.08	-0.21	-1.21
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-0.48	-0.36	-0.65	-1.02	-1.49	-6.50	0.00	0.20	0.43	0.10	-0.34	-0.89	-4.99
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.07	-0.05	-0.10	-0.15	-0.23	-0.99	0.00	0.03	0.06	0.01	-0.05	-0.13	-0.76
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-0.11	-0.08	-0.15	-0.24	-0.34	-1.50	0.00	0.05	0.10	0.02	-0.08	-0.20	-1.15
Canton-Massillon, OH	-	x	-	100	0.00	-0.15	-0.16	-0.21	-0.25	-0.30	-0.83	0.00	-0.28	-0.29	-0.34	-0.40	-0.46	-0.86
Charleston, WV	-	x	-	100	0.00	-0.03	-0.02	-0.04	-0.06	-0.09	-0.37	0.00	0.01	0.02	0.01	-0.02	-0.05	-0.29
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-0.30	-0.22	-0.40	-0.62	-0.91	-3.98	0.00	0.12	0.26	0.06	-0.21	-0.54	-3.06
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.06	-0.04	-0.08	-0.12	-0.18	-0.77	0.00	0.02	0.05	0.01	-0.04	-0.10	-0.59
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-2.24	-2.19	-3.03	-3.90	-4.98	-16.32	0.00	-2.88	-2.77	-3.74	-4.85	-6.09	-14.99
Chico, CA	x	-	100	-	0.00	-0.02	-0.02	-0.03	-0.05	-0.07	-0.30	0.00	0.01	0.02	0.00	-0.02	-0.04	-0.23
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-0.22	-0.17	-0.30	-0.47	-0.69	-3.00	0.00	0.09	0.20	0.05	-0.16	-0.41	-2.30
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.03	-0.05	-0.22	0.00	0.01	0.01	0.00	-0.01	-0.03	-0.17
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-0.26	-0.20	-0.35	-0.56	-0.81	-3.54	0.00	0.11	0.23	0.05	-0.19	-0.48	-2.72
Columbus, OH	x	x	100	100	0.00	-0.23	-0.17	-0.31	-0.48	-0.71	-3.08	0.00	0.09	0.20	0.05	-0.16	-0.42	-2.37
Dallas-Fort Worth, TX	x	-	100	-	0.00	-1.14	-0.85	-1.53	-2.40	-3.50	-15.28	0.00	0.47	1.00	0.23	-0.80	-2.09	-11.72
Dayton-Springfield, OH	-	x	-	100	0.00	-0.08	-0.06	-0.11	-0.17	-0.25	-1.08	0.00	0.03	0.07	0.02	-0.06	-0.15	-0.83
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-0.62	-0.52	-0.83	-1.20	-1.67	-6.67	0.00	-0.18	-0.01	-0.36	-0.81	-1.36	-5.40
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-0.68	-0.57	-0.92	-1.34	-1.86	-7.47	0.00	-0.18	0.02	-0.38	-0.88	-1.49	-6.03
Door Co., WI	x	-	100	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.04	0.00	0.00	0.00	0.00	0.00	-0.01	-0.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	-0.04	-0.03	-0.05	-0.08	-0.12	-0.52	0.00	0.02	0.03	0.01	-0.03	-0.07	-0.40
Greater Connecticut, CT	x	-	100	-	0.00	-0.20	-0.15	-0.27	-0.42	-0.62	-2.69	0.00	0.08	0.18	0.04	-0.14	-0.37	-2.07
Greene Co., PA	x	-	100	-	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.05	0.00	0.00	0.00	0.00	0.00	-0.01	-0.04
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-0.09	-0.07	-0.12	-0.19	-0.28	-1.23	0.00	0.04	0.08	0.02	-0.06	-0.17	-0.94

**Table B2-60
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Butadiene 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-0.08	-0.06	-0.11	-0.16	-0.24	-1.05	0.00	0.03	0.07	0.02	-0.06	-0.14	-0.81
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Hickory, NC	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.05	-0.07	-0.31	0.00	0.01	0.02	0.00	-0.02	-0.04	-0.24
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-4.52	-4.84	-6.09	-7.17	-8.46	-21.56	0.00	-8.89	-9.44	-10.94	-12.40	-13.87	-23.52
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.42	-0.45	-0.56	-0.65	-0.75	-1.81	0.00	-0.86	-0.93	-1.06	-1.18	-1.30	-2.06
Imperial Co., CA	x	-	100	-	0.00	-0.04	-0.03	-0.05	-0.08	-0.12	-0.51	0.00	0.02	0.03	0.01	-0.03	-0.07	-0.39
Indianapolis, IN	-	x	-	100	0.00	-0.21	-0.16	-0.29	-0.45	-0.66	-2.88	0.00	0.09	0.19	0.04	-0.15	-0.39	-2.21
Jamestown, NY	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.03	-0.05	-0.20	0.00	0.01	0.01	0.00	-0.01	-0.03	-0.15
Jefferson Co., NY	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.04	-0.06	-0.24	0.00	0.01	0.02	0.00	-0.01	-0.03	-0.19
Johnstown, PA	-	x	-	100	0.00	-0.01	-0.01	-0.01	-0.02	-0.03	-0.15	0.00	0.00	0.01	0.00	-0.01	-0.02	-0.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.02	-0.01	-0.03	-0.04	-0.06	-0.26	0.00	0.01	0.02	0.00	-0.01	-0.04	-0.20
Knoxville, TN	x	x	100	100	0.00	-0.13	-0.10	-0.18	-0.28	-0.41	-1.77	0.00	0.05	0.12	0.03	-0.09	-0.24	-1.36
Lancaster, PA	-	x	-	100	0.00	-0.05	-0.03	-0.06	-0.10	-0.14	-0.63	0.00	0.02	0.04	0.01	-0.03	-0.09	-0.48
Las Vegas, NV	x	-	100	-	0.00	-0.28	-0.21	-0.37	-0.58	-0.85	-3.72	0.00	0.11	0.24	0.06	-0.20	-0.51	-2.86
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-4.14	-3.87	-5.57	-7.45	-9.81	-34.53	0.00	-4.08	-3.58	-5.55	-7.88	-10.59	-30.25
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-0.11	-0.08	-0.15	-0.23	-0.33	-1.45	0.00	0.04	0.10	0.02	-0.08	-0.20	-1.11
Louisville, KY-IN	-	x	-	100	0.00	-0.11	-0.08	-0.15	-0.24	-0.35	-1.52	0.00	0.05	0.10	0.02	-0.08	-0.21	-1.17
Macon, GA	-	x	-	100	0.00	-0.02	-0.02	-0.03	-0.05	-0.07	-0.29	0.00	0.01	0.02	0.00	-0.02	-0.04	-0.22
Manitowoc Co., WI	x	-	-	-	0.00	-0.01	-0.01	-0.01	-0.02	-0.03	-0.14	0.00	0.00	0.01	0.00	-0.01	-0.02	-0.11
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.02	-0.01	-0.02	-0.04	-0.05	-0.23	0.00	0.01	0.02	0.00	-0.01	-0.03	-0.18
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.07	-0.06	-0.10	-0.16	-0.23	-1.00	0.00	0.03	0.07	0.02	-0.05	-0.14	-0.76
Memphis, TN-AR	x	-	100	-	0.00	-0.40	-0.41	-0.54	-0.66	-0.81	-2.35	0.00	-0.67	-0.69	-0.84	-1.00	-1.17	-2.35
Milwaukee-Racine, WI	x	-	100	-	0.00	-0.18	-0.14	-0.25	-0.39	-0.57	-2.48	0.00	0.08	0.16	0.04	-0.13	-0.34	-1.90
Nevada (Western Part), CA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.17	0.00	0.01	0.01	0.00	-0.01	-0.02	-0.13
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-2.06	-1.74	-2.77	-4.02	-5.59	-22.28	0.00	-0.63	-0.04	-1.22	-2.73	-4.55	-18.06
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.03	-0.05	-0.20	0.00	0.01	0.01	0.00	-0.01	-0.03	-0.15
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-2.81	-2.85	-3.78	-4.70	-5.84	-17.58	0.00	-4.37	-4.43	-5.53	-6.72	-8.02	-17.07

**Table B2-60
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Butadiene 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-0.71	-0.53	-0.95	-1.49	-2.18	-9.52	0.00	0.29	0.62	0.14	-0.50	-1.30	-7.30
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-0.18	-0.13	-0.24	-0.38	-0.55	-2.42	0.00	0.07	0.16	0.04	-0.13	-0.33	-1.85
Poughkeepsie, NY	x	x	100	100	0.00	-0.16	-0.12	-0.21	-0.33	-0.49	-2.13	0.00	0.07	0.14	0.03	-0.11	-0.29	-1.63
Providence (All RI), RI	x	-	100	-	0.00	-0.10	-0.07	-0.13	-0.20	-0.29	-1.28	0.00	0.04	0.08	0.02	-0.07	-0.17	-0.98
Reading, PA	-	x	-	100	0.00	-0.05	-0.03	-0.06	-0.10	-0.14	-0.63	0.00	0.02	0.04	0.01	-0.03	-0.09	-0.48
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-0.19	-0.14	-0.25	-0.40	-0.58	-2.55	0.00	0.08	0.17	0.04	-0.13	-0.35	-1.95
Rochester, NY	x	-	100	-	0.00	-0.14	-0.10	-0.19	-0.29	-0.42	-1.85	0.00	0.06	0.12	0.03	-0.10	-0.25	-1.42
Rome, GA	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.04	-0.16	0.00	0.00	0.01	0.00	-0.01	-0.02	-0.12
Sacramento Metro, CA	x	-	50	-	0.00	-0.32	-0.24	-0.42	-0.67	-0.97	-4.24	0.00	0.13	0.28	0.06	-0.22	-0.58	-3.25
San Diego, CA	x	-	100	-	0.00	-0.31	-0.23	-0.42	-0.65	-0.95	-4.15	0.00	0.13	0.27	0.06	-0.22	-0.57	-3.18
San Francisco Bay Area, CA	x	-	100	-	0.00	-1.82	-1.78	-2.46	-3.16	-4.04	-13.23	0.00	-2.34	-2.26	-3.04	-3.94	-4.95	-12.16
San Joaquin Valley, CA	x	x	50	100	0.00	-0.92	-0.75	-1.23	-1.82	-2.56	-10.44	0.00	-0.14	0.16	-0.39	-1.09	-1.95	-8.34
Sheboygan, WI	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.03	-0.04	-0.18	0.00	0.01	0.01	0.00	-0.01	-0.02	-0.13
Springfield (Western MA), MA	x	-	100	-	0.00	-0.10	-0.08	-0.14	-0.22	-0.31	-1.37	0.00	0.04	0.09	0.02	-0.07	-0.19	-1.05
St. Louis, MO-IL	x	x	100	100	0.00	-0.84	-0.82	-1.14	-1.46	-1.87	-6.13	0.00	-1.08	-1.04	-1.40	-1.82	-2.29	-5.63
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.04	-0.04	-0.06	-0.07	-0.08	-0.24	0.00	-0.08	-0.08	-0.09	-0.11	-0.13	-0.24
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-0.07	-0.06	-0.10	-0.15	-0.22	-0.92	0.00	0.02	0.05	0.00	-0.06	-0.14	-0.72
Washington, DC-MD-VA	x	x	100	100	0.00	-0.66	-0.49	-0.88	-1.38	-2.02	-8.81	0.00	0.27	0.58	0.13	-0.46	-1.20	-6.76
Wheeling, WV-OH	-	x	-	100	0.00	-0.02	-0.01	-0.02	-0.03	-0.05	-0.21	0.00	0.01	0.01	0.00	-0.01	-0.03	-0.16
York, PA	-	x	-	100	0.00	-0.05	-0.04	-0.07	-0.11	-0.17	-0.73	0.00	0.02	0.05	0.01	-0.04	-0.10	-0.56

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-61
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

CO 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-162.27	-208.19	-420.79	-504.21	-727.77	-2,624.50	0.00	-162.27	-208.19	-420.80	-504.22	-727.78	-2,624.51
Allegan Co., MI	x	-	100	-	0.00	-17.75	-22.77	-46.03	-55.15	-79.61	-287.08	0.00	-17.75	-22.77	-46.03	-55.15	-79.61	-287.09
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-16.13	-20.70	-41.84	-50.13	-72.36	-260.94	0.00	-16.13	-20.70	-41.84	-50.13	-72.36	-260.94
Atlanta, GA	x	x	100	100	0.00	-863.08	-1,107.30	-2,238.12	-2,681.82	-3,870.89	-13,959.30	0.00	-863.10	-1,107.33	-2,238.14	-2,681.85	-3,870.91	-13,959.32
Baltimore, MD	x	x	100	100	0.00	-358.64	-460.12	-930.00	-1,114.38	-1,608.46	-5,800.46	0.00	-358.65	-460.13	-930.01	-1,114.39	-1,608.47	-5,800.47
Baton Rouge, LA	x	-	100	-	0.00	-111.80	-142.83	-261.71	-311.04	-434.25	-1,462.39	0.00	-111.88	-142.92	-261.81	-311.13	-434.35	-1,462.46
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-108.81	-138.40	-225.41	-264.94	-352.82	-1,063.74	0.00	-108.98	-138.58	-225.59	-265.13	-353.02	-1,063.87
Birmingham, AL	-	x	-	100	0.00	-131.19	-168.31	-340.20	-407.65	-588.39	-2,121.90	0.00	-131.19	-168.32	-340.21	-407.65	-588.40	-2,121.90
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-583.54	-748.66	-1,513.21	-1,813.20	-2,617.13	-9,437.94	0.00	-583.55	-748.68	-1,513.22	-1,813.22	-2,617.15	-9,437.96
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-78.93	-101.26	-204.69	-245.27	-354.03	-1,276.80	0.00	-78.93	-101.26	-204.69	-245.28	-354.04	-1,276.80
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-140.31	-180.01	-363.85	-435.98	-629.29	-2,269.34	0.00	-140.31	-180.02	-363.85	-435.99	-629.29	-2,269.35
Canton-Massillon, OH	-	x	-	100	0.00	-43.69	-55.98	-109.63	-131.02	-187.20	-661.55	0.00	-43.71	-55.99	-109.64	-131.04	-187.21	-661.56
Charleston, WV	-	x	-	100	0.00	-37.57	-48.21	-97.44	-116.75	-168.52	-607.72	0.00	-37.58	-48.21	-97.44	-116.75	-168.52	-607.72
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-226.84	-291.04	-588.39	-705.05	-1,017.72	-3,670.63	0.00	-226.85	-291.04	-588.39	-705.05	-1,017.73	-3,670.64
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-67.20	-86.22	-174.27	-208.82	-301.42	-1,087.00	0.00	-67.20	-86.22	-174.27	-208.83	-301.42	-1,087.00
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-928.89	-1,190.88	-2,367.77	-2,833.45	-4,068.36	-14,520.68	0.00	-929.03	-1,191.03	-2,367.92	-2,833.61	-4,068.53	-14,520.79
Chico, CA	x	-	100	-	0.00	-24.27	-31.13	-62.92	-75.40	-108.83	-392.46	0.00	-24.27	-31.13	-62.92	-75.40	-108.83	-392.46
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-232.37	-298.13	-602.60	-722.07	-1,042.23	-3,758.59	0.00	-232.38	-298.14	-602.61	-722.08	-1,042.24	-3,758.59
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-21.97	-28.19	-56.98	-68.28	-98.55	-355.40	0.00	-21.97	-28.19	-56.98	-68.28	-98.55	-355.40
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-334.77	-429.50	-868.12	-1,040.23	-1,501.44	-5,414.53	0.00	-334.78	-429.51	-868.13	-1,040.24	-1,501.45	-5,414.54
Columbus, OH	x	x	100	100	0.00	-216.42	-277.66	-561.21	-672.47	-970.63	-3,500.29	0.00	-216.42	-277.66	-561.21	-672.47	-970.63	-3,500.30
Dallas-Fort Worth, TX	x	-	100	-	0.00	-876.85	-1,124.97	-2,273.83	-2,724.61	-3,932.65	-14,182.00	0.00	-876.87	-1,125.00	-2,273.85	-2,724.64	-3,932.67	-14,182.02
Dayton-Springfield, OH	-	x	-	100	0.00	-101.52	-130.25	-263.27	-315.46	-455.33	-1,642.01	0.00	-101.53	-130.25	-263.27	-315.46	-455.33	-1,642.01
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-410.91	-527.09	-1,060.83	-1,270.71	-1,831.65	-6,587.92	0.00	-410.94	-527.12	-1,060.86	-1,270.74	-1,831.68	-6,587.94
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-616.39	-790.71	-1,593.37	-1,908.80	-2,752.48	-9,907.53	0.00	-616.42	-790.74	-1,593.40	-1,908.83	-2,752.52	-9,907.56
Door Co., WI	x	-	100	-	0.00	-4.12	-5.29	-10.68	-12.80	-18.48	-66.64	0.00	-4.12	-5.29	-10.68	-12.80	-18.48	-66.64
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.17	-0.22	-0.45	-0.54	-0.78	-2.80	0.00	-0.17	-0.22	-0.45	-0.54	-0.78	-2.80
Evansville, IN	-	x	-	100	0.00	-43.49	-55.79	-112.79	-135.15	-195.08	-703.58	0.00	-43.49	-55.79	-112.79	-135.15	-195.08	-703.58
Greater Connecticut, CT	x	-	100	-	0.00	-222.00	-284.81	-575.67	-689.79	-995.63	-3,590.44	0.00	-222.00	-284.82	-575.67	-689.80	-995.64	-3,590.44
Greene Co., PA	x	-	100	-	0.00	-5.10	-6.54	-13.22	-15.84	-22.86	-82.45	0.00	-5.10	-6.54	-13.22	-15.84	-22.86	-82.45
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-100.40	-128.81	-260.35	-311.97	-450.29	-1,623.84	0.00	-100.40	-128.81	-260.36	-311.97	-450.29	-1,623.84

**Table B2-61
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-90.95	-116.69	-235.85	-282.61	-407.91	-1,471.01	0.00	-90.95	-116.69	-235.85	-282.61	-407.91	-1,471.01
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.63	-0.80	-1.62	-1.94	-2.81	-10.12	0.00	-0.63	-0.80	-1.62	-1.94	-2.81	-10.12
Hickory, NC	-	x	-	100	0.00	-23.58	-30.26	-61.15	-73.28	-105.77	-381.41	0.00	-23.58	-30.26	-61.15	-73.28	-105.77	-381.41
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-763.12	-976.60	-1,862.71	-2,221.44	-3,145.82	-10,917.46	0.00	-763.47	-976.98	-1,863.10	-2,221.84	-3,146.23	-10,917.74
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-66.26	-84.77	-160.70	-191.55	-270.68	-935.30	0.00	-66.29	-84.81	-160.74	-191.59	-270.72	-935.32
Imperial Co., CA	x	-	100	-	0.00	-27.99	-35.91	-72.59	-86.98	-125.55	-452.76	0.00	-27.99	-35.92	-72.59	-86.98	-125.55	-452.76
Indianapolis, IN	-	x	-	100	0.00	-202.03	-259.20	-523.90	-627.77	-906.10	-3,267.62	0.00	-202.04	-259.21	-523.91	-627.77	-906.11	-3,267.62
Jamestown, NY	x	-	100	-	0.00	-18.68	-23.97	-48.44	-58.05	-83.78	-302.14	0.00	-18.68	-23.97	-48.44	-58.05	-83.78	-302.14
Jefferson Co., NY	x	-	100	-	0.00	-17.35	-22.25	-44.98	-53.90	-77.80	-280.55	0.00	-17.35	-22.26	-44.98	-53.90	-77.80	-280.55
Johnstown, PA	-	x	-	100	0.00	-15.32	-19.66	-39.73	-47.61	-68.71	-247.80	0.00	-15.32	-19.66	-39.73	-47.61	-68.71	-247.80
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-14.70	-18.85	-38.10	-45.65	-65.89	-237.59	0.00	-14.70	-18.85	-38.10	-45.65	-65.89	-237.59
Knoxville, TN	x	x	100	100	0.00	-137.27	-176.12	-355.98	-426.55	-615.67	-2,220.26	0.00	-137.28	-176.12	-355.98	-426.55	-615.68	-2,220.26
Lancaster, PA	-	x	-	100	0.00	-53.65	-68.83	-139.13	-166.71	-240.62	-867.75	0.00	-53.65	-68.83	-139.13	-166.71	-240.63	-867.75
Las Vegas, NV	x	-	100	-	0.00	-177.73	-228.02	-460.88	-552.25	-797.11	-2,874.58	0.00	-177.73	-228.02	-460.89	-552.26	-797.12	-2,874.58
Libby, MT	-	x	-	100	0.00	-0.88	-1.13	-2.28	-2.74	-3.95	-14.25	0.00	-0.88	-1.13	-2.28	-2.74	-3.95	-14.25
Liberty-Clairton, PA	-	x	-	100	0.00	-1.73	-2.22	-4.48	-5.37	-7.75	-27.96	0.00	-1.73	-2.22	-4.48	-5.37	-7.75	-27.96
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1,921.32	-2,463.68	-4,919.78	-5,889.44	-8,468.10	-30,307.98	0.00	-1,921.54	-2,463.92	-4,920.03	-5,889.70	-8,468.36	-30,308.16
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-91.64	-117.57	-237.62	-284.73	-410.97	-1,482.05	0.00	-91.64	-117.57	-237.63	-284.73	-410.98	-1,482.05
Louisville, KY-IN	-	x	-	100	0.00	-140.95	-180.84	-365.53	-438.00	-632.21	-2,279.95	0.00	-140.95	-180.84	-365.53	-438.00	-632.21	-2,279.95
Macon, GA	-	x	-	100	0.00	-26.27	-33.70	-68.12	-81.62	-117.82	-424.89	0.00	-26.27	-33.70	-68.12	-81.62	-117.82	-424.89
Manitowoc Co., WI	x	-	-	-	0.00	-13.46	-17.27	-34.90	-41.81	-60.35	-217.64	0.00	-13.46	-17.27	-34.90	-41.81	-60.35	-217.64
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-13.14	-16.86	-34.08	-40.84	-58.94	-212.56	0.00	-13.14	-16.86	-34.08	-40.84	-58.94	-212.56
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-51.44	-65.99	-133.39	-159.83	-230.70	-831.95	0.00	-51.44	-66.00	-133.39	-159.83	-230.70	-831.95
Memphis, TN-AR	x	-	100	-	0.00	-133.90	-171.60	-338.15	-404.36	-578.92	-2,054.34	0.00	-133.93	-171.63	-338.18	-404.40	-578.95	-2,054.36
Milwaukee-Racine, WI	x	-	100	-	0.00	-221.07	-283.63	-573.27	-686.92	-991.49	-3,575.52	0.00	-221.08	-283.63	-573.28	-686.93	-991.49	-3,575.52
Nevada (Western Part), CA	x	-	100	-	0.00	-12.50	-16.04	-32.42	-38.84	-56.07	-202.19	0.00	-12.50	-16.04	-32.42	-38.84	-56.07	-202.19
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-1,836.32	-2,355.60	-4,745.84	-5,685.25	-8,197.60	-29,503.37	0.00	-1,836.41	-2,355.70	-4,745.94	-5,685.35	-8,197.71	-29,503.45
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-19.91	-25.55	-51.64	-61.88	-89.32	-322.10	0.00	-19.91	-25.55	-51.64	-61.88	-89.32	-322.10
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-929.31	-1,191.02	-2,350.08	-2,810.56	-4,025.54	-14,297.23	0.00	-929.51	-1,191.23	-2,350.30	-2,810.78	-4,025.77	-14,297.39

**Table B2-61
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

CO 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-493.92	-633.69	-1,280.88	-1,534.82	-2,215.36	-7,989.33	0.00	-493.93	-633.70	-1,280.89	-1,534.84	-2,215.38	-7,989.34
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-247.14	-317.08	-640.89	-767.95	-1,108.44	-3,997.29	0.00	-247.15	-317.08	-640.90	-767.95	-1,108.45	-3,997.29
Poughkeepsie, NY	x	x	100	100	0.00	-160.19	-205.52	-415.41	-497.77	-718.47	-2,590.95	0.00	-160.20	-205.53	-415.42	-497.77	-718.47	-2,590.95
Providence (All RI), RI	x	-	100	-	0.00	-115.89	-148.68	-300.51	-360.09	-519.75	-1,874.32	0.00	-115.89	-148.68	-300.52	-360.09	-519.75	-1,874.32
Reading, PA	-	x	-	100	0.00	-47.07	-60.39	-122.07	-146.26	-211.11	-761.33	0.00	-47.07	-60.39	-122.07	-146.27	-211.12	-761.33
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-93.44	-119.88	-242.31	-290.34	-419.08	-1,511.27	0.00	-93.44	-119.89	-242.31	-290.35	-419.08	-1,511.27
Rochester, NY	x	-	100	-	0.00	-162.33	-208.27	-420.95	-504.40	-728.05	-2,625.50	0.00	-162.33	-208.27	-420.96	-504.41	-728.05	-2,625.50
Rome, GA	-	x	-	100	0.00	-14.19	-18.21	-36.80	-44.10	-63.65	-229.54	0.00	-14.19	-18.21	-36.80	-44.10	-63.65	-229.54
Sacramento Metro, CA	x	-	50	-	0.00	-272.70	-349.86	-707.15	-847.34	-1,223.04	-4,410.55	0.00	-272.70	-349.87	-707.16	-847.35	-1,223.04	-4,410.55
San Diego, CA	x	-	100	-	0.00	-381.74	-489.76	-989.91	-1,186.16	-1,712.08	-6,174.16	0.00	-381.75	-489.77	-989.92	-1,186.17	-1,712.10	-6,174.17
San Francisco Bay Area, CA	x	-	100	-	0.00	-870.81	-1,116.52	-2,225.02	-2,663.12	-3,826.61	-13,677.80	0.00	-870.92	-1,116.65	-2,225.15	-2,663.25	-3,826.75	-13,677.90
San Joaquin Valley, CA	x	x	50	100	0.00	-561.93	-720.82	-1,451.59	-1,738.86	-2,506.92	-9,019.98	0.00	-561.96	-720.85	-1,451.62	-1,738.89	-2,506.96	-9,020.01
Sheboygan, WI	x	-	100	-	0.00	-15.06	-19.32	-39.06	-46.80	-67.55	-243.61	0.00	-15.06	-19.33	-39.06	-46.80	-67.55	-243.61
Springfield (Western MA), MA	x	-	100	-	0.00	-116.52	-149.49	-302.15	-362.05	-522.58	-1,884.53	0.00	-116.52	-149.49	-302.15	-362.06	-522.58	-1,884.53
St. Louis, MO-IL	x	x	100	100	0.00	-401.07	-514.23	-1,024.58	-1,226.30	-1,761.96	-6,297.22	0.00	-401.12	-514.29	-1,024.64	-1,226.36	-1,762.02	-6,297.26
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-14.55	-18.64	-36.72	-43.91	-62.85	-222.93	0.00	-14.55	-18.65	-36.72	-43.91	-62.85	-222.93
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Ventura Co., CA	x	-	100	-	0.00	-80.20	-102.89	-207.83	-249.02	-359.36	-1,295.42	0.00	-80.20	-102.90	-207.84	-249.03	-359.37	-1,295.43
Washington, DC-MD-VA	x	x	100	100	0.00	-613.47	-787.07	-1,590.83	-1,906.21	-2,751.37	-9,921.96	0.00	-613.49	-787.09	-1,590.84	-1,906.22	-2,751.38	-9,921.97
Wheeling, WV-OH	-	x	-	100	0.00	-21.37	-27.42	-55.42	-66.41	-95.85	-345.67	0.00	-21.37	-27.42	-55.42	-66.41	-95.85	-345.67
York, PA	-	x	-	100	0.00	-49.74	-63.82	-128.99	-154.57	-223.10	-804.54	0.00	-49.74	-63.82	-128.99	-154.57	-223.10	-804.54

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-62
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

CO 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-855.96	-827.58	-1,624.04	-2,043.57	-2,734.05	-10,278.77	0.00	-789.13	-744.90	-1,581.84	-2,038.85	-2,777.24	-10,104.10
Allegan Co., MI	x	-	100	-	0.00	-93.60	-90.50	-177.59	-223.47	-298.98	-1,124.01	0.00	-86.29	-81.46	-172.98	-222.95	-303.70	-1,104.91
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-90.62	-87.61	-171.93	-216.34	-289.44	-1,088.16	0.00	-83.54	-78.86	-167.46	-215.84	-294.01	-1,069.67
Atlanta, GA	x	x	100	100	0.00	-4,961.88	-4,797.33	-9,414.32	-11,846.31	-15,848.91	-59,584.74	0.00	-4,574.44	-4,318.05	-9,169.68	-11,818.94	-16,099.28	-58,572.20
Baltimore, MD	x	x	100	100	0.00	-1,882.08	-1,819.67	-3,570.91	-4,493.37	-6,011.57	-22,600.71	0.00	-1,735.13	-1,637.89	-3,478.13	-4,483.01	-6,106.56	-22,216.66
Baton Rouge, LA	x	-	100	-	0.00	-532.81	-533.51	-966.89	-1,198.71	-1,572.53	-5,611.09	0.00	-557.83	-554.61	-1,011.37	-1,266.16	-1,665.29	-5,568.74
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-443.66	-465.95	-753.14	-911.53	-1,156.72	-3,742.88	0.00	-543.17	-569.20	-873.70	-1,050.81	-1,311.74	-3,785.98
Birmingham, AL	-	x	-	100	0.00	-672.24	-649.94	-1,275.46	-1,604.95	-2,147.23	-8,072.63	0.00	-619.74	-585.00	-1,242.31	-1,601.23	-2,181.14	-7,935.45
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-2,950.04	-2,852.21	-5,597.18	-7,043.09	-9,422.78	-35,425.34	0.00	-2,719.70	-2,567.27	-5,451.75	-7,026.84	-9,571.66	-34,823.36
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-412.57	-398.88	-782.82	-985.05	-1,317.90	-4,954.91	0.00	-380.32	-358.98	-762.43	-982.73	-1,338.68	-4,870.67
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-705.07	-681.69	-1,337.75	-1,683.32	-2,252.08	-8,466.78	0.00	-650.02	-613.59	-1,302.99	-1,679.44	-2,287.66	-8,322.90
Canton-Massillon, OH	-	x	-	100	0.00	-213.33	-208.65	-399.01	-499.73	-664.51	-2,458.96	0.00	-205.37	-197.52	-397.73	-507.75	-683.88	-2,424.10
Charleston, WV	-	x	-	100	0.00	-185.05	-178.91	-351.10	-441.79	-591.07	-2,222.15	0.00	-170.60	-161.04	-341.97	-440.77	-600.41	-2,184.38
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-1,283.68	-1,241.03	-2,435.76	-3,065.06	-4,100.81	-15,418.53	0.00	-1,183.15	-1,116.72	-2,372.16	-3,057.67	-4,165.30	-15,156.28
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-342.06	-330.71	-648.99	-816.65	-1,092.58	-4,107.61	0.00	-315.34	-297.67	-632.13	-814.76	-1,109.84	-4,037.81
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-4,776.14	-4,644.46	-8,997.93	-11,296.25	-15,067.68	-56,210.34	0.00	-4,500.03	-4,288.58	-8,865.26	-11,372.22	-15,404.41	-55,332.17
Chico, CA	x	-	100	-	0.00	-126.96	-122.75	-240.88	-303.11	-405.52	-1,524.58	0.00	-117.05	-110.49	-234.62	-302.41	-411.93	-1,498.67
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-1,199.79	-1,160.00	-2,276.43	-2,864.51	-3,832.38	-14,408.20	0.00	-1,106.07	-1,044.06	-2,217.23	-2,857.85	-3,892.88	-14,163.32
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-108.17	-104.58	-205.23	-258.24	-345.49	-1,298.90	0.00	-99.72	-94.13	-199.89	-257.64	-350.95	-1,276.83
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-1,675.53	-1,619.97	-3,179.03	-4,000.27	-5,351.87	-20,120.57	0.00	-1,544.71	-1,458.13	-3,096.43	-3,991.04	-5,436.42	-19,778.66
Columbus, OH	x	x	100	100	0.00	-1,158.32	-1,119.91	-2,197.71	-2,765.44	-3,699.82	-13,909.67	0.00	-1,067.87	-1,008.02	-2,140.60	-2,759.06	-3,758.27	-13,673.30
Dallas-Fort Worth, TX	x	-	100	-	0.00	-4,918.09	-4,755.00	-9,331.23	-11,741.76	-15,709.03	-59,058.82	0.00	-4,534.08	-4,279.96	-9,088.76	-11,714.65	-15,957.20	-58,055.23
Dayton-Springfield, OH	-	x	-	100	0.00	-509.62	-492.72	-966.91	-1,216.69	-1,627.79	-6,119.73	0.00	-469.83	-443.49	-941.79	-1,213.88	-1,653.50	-6,015.74
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-2,220.50	-2,149.95	-4,205.62	-5,289.03	-7,070.82	-26,532.51	0.00	-2,058.32	-1,947.67	-4,108.03	-5,288.62	-7,193.95	-26,090.55
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-3,124.86	-3,024.53	-5,921.01	-7,447.37	-9,958.08	-37,384.02	0.00	-2,892.79	-2,735.68	-5,779.61	-7,442.74	-10,127.55	-36,758.23
Door Co., WI	x	-	100	-	0.00	-20.67	-19.98	-39.21	-49.34	-66.01	-248.18	0.00	-19.05	-17.99	-38.19	-49.23	-67.06	-243.96
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.88	-0.85	-1.68	-2.11	-2.82	-10.61	0.00	-0.81	-0.77	-1.63	-2.10	-2.87	-10.43
Evansville, IN	-	x	-	100	0.00	-224.11	-216.66	-425.23	-535.09	-715.91	-2,691.68	0.00	-206.56	-194.97	-414.13	-533.81	-727.17	-2,645.91
Greater Connecticut, CT	x	-	100	-	0.00	-1,150.97	-1,112.81	-2,183.76	-2,747.89	-3,676.33	-13,821.25	0.00	-1,061.12	-1,001.65	-2,127.03	-2,741.56	-3,734.42	-13,586.40
Greene Co., PA	x	-	100	-	0.00	-24.66	-23.84	-46.79	-58.87	-78.77	-296.12	0.00	-22.73	-21.46	-45.57	-58.74	-80.01	-291.09
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-521.82	-504.52	-990.07	-1,245.83	-1,666.77	-6,266.30	0.00	-481.08	-454.11	-964.34	-1,242.96	-1,693.10	-6,159.81

**Table B2-62
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-465.77	-450.33	-883.73	-1,112.02	-1,487.74	-5,593.24	0.00	-429.41	-405.34	-860.76	-1,109.45	-1,511.25	-5,498.20
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-3.23	-3.13	-6.14	-7.72	-10.33	-38.85	0.00	-2.98	-2.81	-5.98	-7.71	-10.50	-38.19
Hickory, NC	-	x	-	100	0.00	-124.81	-120.67	-236.81	-297.98	-398.66	-1,498.77	0.00	-115.07	-108.62	-230.65	-297.29	-404.96	-1,473.30
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-3,785.04	-3,735.26	-7,000.04	-8,734.32	-11,556.91	-42,208.54	0.00	-3,764.09	-3,668.72	-7,104.99	-9,003.56	-12,019.39	-41,709.71
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-312.43	-309.31	-575.42	-716.98	-946.94	-3,441.38	0.00	-314.31	-307.75	-587.91	-743.02	-988.68	-3,403.80
Imperial Co., CA	x	-	100	-	0.00	-160.71	-155.38	-304.92	-383.69	-513.33	-1,929.87	0.00	-148.16	-139.86	-296.99	-382.80	-521.44	-1,897.08
Indianapolis, IN	-	x	-	100	0.00	-1,078.73	-1,042.96	-2,046.70	-2,575.43	-3,445.60	-12,953.91	0.00	-994.50	-938.76	-1,993.52	-2,569.48	-3,500.04	-12,733.78
Jamestown, NY	x	-	100	-	0.00	-93.67	-90.57	-177.73	-223.64	-299.20	-1,124.87	0.00	-86.36	-81.52	-173.11	-223.12	-303.93	-1,105.75
Jefferson Co., NY	x	-	100	-	0.00	-93.32	-90.22	-177.05	-222.79	-298.06	-1,120.58	0.00	-86.03	-81.21	-172.45	-222.27	-302.77	-1,101.54
Johnstown, PA	-	x	-	100	0.00	-74.91	-72.42	-142.12	-178.84	-239.26	-899.52	0.00	-69.06	-65.19	-138.43	-178.43	-243.04	-884.23
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-83.94	-81.16	-159.23	-200.36	-268.04	-1,007.57	0.00	-77.41	-73.09	-155.13	-199.93	-272.31	-990.48
Knoxville, TN	x	x	100	100	0.00	-721.90	-697.96	-1,369.68	-1,723.51	-2,305.84	-8,668.94	0.00	-665.53	-628.23	-1,334.09	-1,719.53	-2,342.27	-8,521.62
Lancaster, PA	-	x	-	100	0.00	-275.74	-266.60	-523.18	-658.33	-880.77	-3,311.28	0.00	-254.21	-239.97	-509.58	-656.81	-894.68	-3,255.01
Las Vegas, NV	x	-	100	-	0.00	-1,056.59	-1,021.54	-2,004.70	-2,522.58	-3,374.91	-12,688.19	0.00	-974.07	-919.47	-1,952.59	-2,516.74	-3,428.21	-12,472.57
Libby, MT	-	x	-	100	0.00	-4.55	-4.40	-8.63	-10.86	-14.53	-54.63	0.00	-4.19	-3.96	-8.41	-10.84	-14.76	-53.70
Liberty-Clairton, PA	-	x	-	100	0.00	-8.09	-7.82	-15.35	-19.31	-25.84	-97.12	0.00	-7.46	-7.04	-14.95	-19.27	-26.24	-95.47
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-10,221.78	-9,923.57	-19,296.43	-24,241.40	-32,362.84	-	0.00	-9,571.43	-9,097.19	-18,949.39	-24,341.19	-33,024.76	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-506.46	-489.67	-960.91	-1,209.13	-1,617.66	-6,081.58	0.00	-466.93	-440.77	-935.96	-1,206.36	-1,643.23	-5,978.25
Louisville, KY-IN	-	x	-	100	0.00	-709.48	-685.94	-1,346.15	-1,693.91	-2,266.27	-8,520.36	0.00	-654.04	-617.36	-1,311.12	-1,689.95	-2,302.03	-8,375.54
Macon, GA	-	x	-	100	0.00	-132.71	-128.31	-251.81	-316.86	-423.93	-1,593.82	0.00	-122.34	-115.48	-245.25	-316.12	-430.61	-1,566.73
Manitowoc Co., WI	x	-	-	-	0.00	-67.49	-65.26	-128.06	-161.14	-215.58	-810.47	0.00	-62.23	-58.74	-124.73	-160.77	-218.99	-796.70
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-74.93	-72.44	-142.16	-178.89	-239.33	-899.76	0.00	-69.08	-65.21	-138.47	-178.47	-243.11	-884.47
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-298.76	-288.85	-566.85	-713.28	-954.29	-3,587.68	0.00	-275.43	-260.00	-552.12	-711.64	-969.36	-3,526.71
Memphis, TN-AR	x	-	100	-	0.00	-660.18	-644.20	-1,238.40	-1,552.53	-2,067.06	-7,674.30	0.00	-630.09	-603.80	-1,228.63	-1,571.56	-2,121.58	-7,560.96
Milwaukee-Racine, WI	x	-	100	-	0.00	-1,122.61	-1,085.38	-2,129.95	-2,680.18	-3,585.75	-13,480.76	0.00	-1,034.96	-976.95	-2,074.61	-2,673.99	-3,642.40	-13,251.68
Nevada (Western Part), CA	x	-	100	-	0.00	-67.15	-64.93	-127.41	-160.32	-214.49	-806.39	0.00	-61.91	-58.44	-124.10	-159.95	-217.88	-792.69
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-9,316.61	-9,018.13	-17,651.62	-22,201.30	-29,684.86	-	0.00	-8,627.09	-8,159.53	-17,232.57	-22,190.02	-30,192.49	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-98.41	-95.15	-186.73	-234.96	-314.35	-1,181.83	0.00	-90.73	-85.64	-181.87	-234.42	-319.32	-1,161.75
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-4,744.56	-4,626.20	-8,908.64	-11,171.90	-14,880.49	-55,305.71	0.00	-4,515.40	-4,321.80	-8,824.75	-11,295.03	-15,259.60	-54,478.29

**Table B2-62
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

CO 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-2,875.92	-2,780.51	-5,456.68	-6,866.34	-9,186.40	-34,537.45	0.00	-2,651.20	-2,502.54	-5,314.72	-6,850.32	-9,331.36	-33,950.42
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-1,212.54	-1,172.33	-2,300.60	-2,894.91	-3,873.04	-14,560.89	0.00	-1,117.86	-1,055.20	-2,240.81	-2,888.22	-3,934.22	-14,313.45
Poughkeepsie, NY	x	x	100	100	0.00	-849.76	-821.58	-1,612.28	-2,028.77	-2,714.25	-10,204.34	0.00	-783.41	-739.50	-1,570.38	-2,024.09	-2,757.13	-10,030.94
Providence (All RI), RI	x	-	100	-	0.00	-586.89	-567.43	-1,113.53	-1,401.19	-1,874.61	-7,047.70	0.00	-541.07	-510.74	-1,084.60	-1,397.95	-1,904.23	-6,927.94
Reading, PA	-	x	-	100	0.00	-250.06	-241.77	-474.45	-597.02	-798.74	-3,002.88	0.00	-230.54	-217.62	-462.12	-595.64	-811.35	-2,951.86
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-593.27	-573.60	-1,125.61	-1,416.39	-1,894.95	-7,124.09	0.00	-546.96	-516.31	-1,096.38	-1,413.13	-1,924.90	-7,003.04
Rochester, NY	x	-	100	-	0.00	-828.41	-800.94	-1,571.77	-1,977.80	-2,646.05	-9,947.96	0.00	-763.73	-720.92	-1,530.93	-1,973.24	-2,687.86	-9,778.92
Rome, GA	-	x	-	100	0.00	-71.71	-69.33	-136.06	-171.21	-229.05	-861.14	0.00	-66.11	-62.41	-132.52	-170.81	-232.67	-846.51
Sacramento Metro, CA	x	-	50	-	0.00	-1,495.11	-1,445.53	-2,836.71	-3,569.52	-4,775.58	-17,954.00	0.00	-1,378.37	-1,301.11	-2,763.00	-3,561.28	-4,851.02	-17,648.91
San Diego, CA	x	-	100	-	0.00	-1,926.24	-1,862.36	-3,654.71	-4,598.82	-6,152.66	-23,131.22	0.00	-1,775.83	-1,676.30	-3,559.74	-4,588.21	-6,249.86	-22,738.15
San Francisco Bay Area, CA	x	-	100	-	0.00	-4,384.19	-4,260.42	-8,266.48	-10,380.83	-13,851.59	-51,721.81	0.00	-4,120.22	-3,922.28	-8,133.53	-10,439.44	-14,150.29	-50,905.22
San Joaquin Valley, CA	x	x	50	100	0.00	-3,180.91	-3,079.06	-6,026.52	-7,579.79	-10,134.65	-38,042.14	0.00	-2,945.72	-2,786.17	-5,883.69	-7,576.18	-10,308.20	-37,406.18
Sheboygan, WI	x	-	100	-	0.00	-77.36	-74.80	-146.78	-184.70	-247.11	-929.01	0.00	-71.32	-67.33	-142.97	-184.28	-251.01	-913.23
Springfield (Western MA), MA	x	-	100	-	0.00	-599.99	-580.09	-1,138.38	-1,432.45	-1,916.45	-7,204.97	0.00	-553.14	-522.14	-1,108.80	-1,429.15	-1,946.72	-7,082.53
St. Louis, MO-IL	x	x	100	100	0.00	-2,015.26	-1,958.51	-3,799.48	-4,771.15	-6,366.12	-23,768.77	0.00	-1,894.43	-1,803.63	-3,738.91	-4,798.63	-6,503.92	-23,393.92
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-68.92	-67.30	-129.20	-161.93	-215.52	-799.50	0.00	-65.93	-63.23	-128.33	-164.07	-221.36	-787.81
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.04	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.04
Ventura Co., CA	x	-	100	-	0.00	-408.51	-395.05	-774.85	-974.93	-1,304.17	-4,901.60	0.00	-376.94	-355.96	-755.06	-973.03	-1,325.12	-4,818.57
Washington, DC-MD-VA	x	x	100	100	0.00	-3,260.42	-3,152.32	-6,186.05	-7,784.07	-10,414.11	-39,152.08	0.00	-3,005.89	-2,837.44	-6,025.36	-7,766.15	-10,578.68	-38,486.81
Wheeling, WV-OH	-	x	-	100	0.00	-105.28	-101.79	-199.76	-251.36	-336.29	-1,264.31	0.00	-97.06	-91.62	-194.57	-250.78	-341.61	-1,242.82
York, PA	-	x	-	100	0.00	-270.61	-261.63	-513.43	-646.06	-864.35	-3,249.58	0.00	-249.48	-235.50	-500.09	-644.57	-878.01	-3,194.36

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-63
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-1,721.15	-1,540.56	-3,044.37	-3,848.39	-5,055.46	-19,027.11	0.00	-1,464.05	-1,220.47	-2,900.27	-3,850.01	-5,249.54	-18,354.26
Allegan Co., MI	x	-	100	-	0.00	-188.03	-168.30	-332.58	-420.42	-552.28	-2,078.62	0.00	-159.94	-133.33	-316.84	-420.59	-573.49	-2,005.11
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-193.99	-173.64	-343.13	-433.75	-569.79	-2,144.52	0.00	-165.01	-137.56	-326.89	-433.93	-591.67	-2,068.68
Atlanta, GA	x	x	100	100	0.00	-10,991.45	-9,838.20	-19,441.70	-24,576.29	-32,284.79	-	0.00	-9,349.57	-7,794.03	-18,521.42	-24,586.58	-33,524.15	-
Baltimore, MD	x	x	100	100	0.00	-3,766.14	-3,371.00	-6,661.54	-8,420.86	-11,062.11	-41,634.07	0.00	-3,203.61	-2,670.63	-6,346.26	-8,424.44	-11,486.80	-40,161.80
Baton Rouge, LA	x	-	100	-	0.00	-1,044.72	-971.39	-1,791.24	-2,234.47	-2,890.85	-10,423.39	0.00	-1,067.99	-972.70	-1,891.52	-2,420.79	-3,179.62	-10,195.69
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-798.06	-787.38	-1,297.50	-1,580.10	-1,986.17	-6,555.49	0.00	-1,039.90	-1,032.79	-1,608.71	-1,954.02	-2,420.40	-6,607.38
Birmingham, AL	-	x	-	100	0.00	-1,320.03	-1,181.52	-2,334.88	-2,951.52	-3,877.29	-14,592.91	0.00	-1,122.83	-936.01	-2,224.34	-2,952.74	-4,026.12	-14,076.85
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-5,700.32	-5,102.24	-10,082.73	-12,745.59	-16,743.32	-63,016.33	0.00	-4,848.86	-4,042.14	-9,605.50	-12,750.97	-17,386.10	-60,787.92
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-821.49	-735.27	-1,453.08	-1,836.86	-2,413.03	-9,082.13	0.00	-698.67	-582.38	-1,384.19	-1,837.52	-2,505.55	-8,760.88
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1,349.70	-1,208.09	-2,387.35	-3,017.85	-3,964.42	-14,920.75	0.00	-1,148.09	-957.08	-2,274.35	-3,019.12	-4,116.61	-14,393.12
Canton-Massillon, OH	-	x	-	100	0.00	-405.86	-368.02	-710.49	-894.24	-1,168.91	-4,339.75	0.00	-368.66	-318.08	-701.03	-918.82	-1,237.01	-4,204.69
Charleston, WV	-	x	-	100	0.00	-347.57	-311.10	-614.79	-777.15	-1,020.91	-3,842.37	0.00	-295.65	-246.46	-585.69	-777.48	-1,060.10	-3,706.49
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-2,776.46	-2,485.01	-4,911.23	-6,208.41	-8,155.89	-30,697.91	0.00	-2,361.03	-1,967.89	-4,678.04	-6,210.30	-8,468.30	-29,611.80
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-664.66	-594.93	-1,175.64	-1,486.13	-1,952.25	-7,347.58	0.00	-565.40	-471.35	-1,120.02	-1,486.78	-2,027.22	-7,087.77
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-9,556.09	-8,606.09	-16,820.58	-21,219.64	-27,810.78	-	0.00	-8,388.82	-7,112.69	-16,292.93	-21,497.53	-29,136.38	-
Chico, CA	x	-	100	-	0.00	-253.04	-226.49	-447.58	-565.79	-743.25	-2,797.34	0.00	-215.24	-179.43	-426.39	-566.02	-771.78	-2,698.42
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-2,393.13	-2,142.01	-4,233.00	-5,350.96	-7,029.35	-26,456.47	0.00	-2,035.54	-1,696.83	-4,032.52	-5,353.09	-7,299.09	-25,520.81
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-202.83	-181.55	-358.76	-453.51	-595.75	-2,242.22	0.00	-172.53	-143.83	-341.78	-453.70	-618.63	-2,162.93
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-3,197.68	-2,862.18	-5,656.06	-7,149.84	-9,392.42	-35,350.00	0.00	-2,720.04	-2,267.50	-5,388.35	-7,152.85	-9,753.00	-34,099.93
Columbus, OH	x	x	100	100	0.00	-2,374.64	-2,125.48	-4,200.26	-5,309.56	-6,974.93	-26,251.39	0.00	-2,019.92	-1,683.86	-4,001.44	-5,311.78	-7,242.69	-25,323.06
Dallas-Fort Worth, TX	x	-	100	-	0.00	-10,592.26	-9,480.89	-18,735.59	-23,683.70	-31,112.23	-	0.00	-9,010.03	-7,510.99	-17,848.76	-23,693.64	-32,306.59	-
Dayton-Springfield, OH	-	x	-	100	0.00	-974.59	-872.33	-1,723.85	-2,179.12	-2,862.62	-10,773.97	0.00	-829.01	-691.08	-1,642.26	-2,180.04	-2,972.51	-10,392.97
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-4,615.08	-4,136.95	-8,153.63	-10,302.01	-13,525.82	-50,830.01	0.00	-3,955.83	-3,311.53	-7,798.79	-10,337.49	-14,074.94	-49,056.20
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-6,057.68	-5,428.59	-10,704.69	-13,526.48	-17,761.18	-66,765.56	0.00	-5,184.89	-4,337.01	-10,231.11	-13,565.33	-18,474.83	-64,429.75
Door Co., WI	x	-	100	-	0.00	-39.49	-35.35	-69.85	-88.30	-115.99	-436.56	0.00	-33.59	-28.00	-66.54	-88.34	-120.45	-421.13
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-1.72	-1.54	-3.04	-3.84	-5.04	-18.98	0.00	-1.46	-1.22	-2.89	-3.84	-5.24	-18.31
Evansville, IN	-	x	-	100	0.00	-440.28	-394.06	-778.80	-984.50	-1,293.32	-4,867.90	0.00	-374.40	-312.06	-741.82	-984.80	-1,342.86	-4,695.67
Greater Connecticut, CT	x	-	100	-	0.00	-2,273.59	-2,035.05	-4,021.52	-5,083.61	-6,678.10	-25,134.09	0.00	-1,934.01	-1,612.26	-3,831.21	-5,085.78	-6,934.50	-24,245.31
Greene Co., PA	x	-	100	-	0.00	-45.44	-40.67	-80.38	-101.61	-133.48	-502.36	0.00	-38.65	-32.22	-76.57	-101.65	-138.60	-484.59

**Table B2-63
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1,033.27	-924.85	-1,827.64	-2,310.32	-3,034.97	-11,422.64	0.00	-878.92	-732.69	-1,741.13	-2,311.29	-3,151.48	-11,018.71
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-908.97	-813.60	-1,607.79	-2,032.41	-2,669.88	-10,048.57	0.00	-773.19	-644.55	-1,531.69	-2,033.26	-2,772.38	-9,693.22
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-6.39	-5.72	-11.30	-14.28	-18.76	-70.62	0.00	-5.43	-4.53	-10.76	-14.29	-19.48	-68.12
Hickory, NC	-	x	-	100	0.00	-251.63	-225.23	-445.09	-562.63	-739.10	-2,781.74	0.00	-214.05	-178.44	-424.02	-562.87	-767.48	-2,683.37
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-7,535.31	-6,894.22	-13,094.88	-16,430.29	-21,400.45	-78,661.56	0.00	-7,148.77	-6,298.98	-13,237.80	-17,201.22	-22,954.77	-76,460.60
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-587.91	-540.54	-1,017.54	-1,274.50	-1,656.71	-6,055.09	0.00	-570.83	-508.36	-1,042.38	-1,348.16	-1,790.45	-5,896.55
Imperial Co., CA	x	-	100	-	0.00	-351.46	-314.58	-621.66	-785.84	-1,032.33	-3,885.34	0.00	-298.96	-249.22	-592.24	-786.17	-1,071.96	-3,747.95
Indianapolis, IN	-	x	-	100	0.00	-2,209.72	-1,977.87	-3,908.55	-4,940.81	-6,490.52	-24,428.22	0.00	-1,879.64	-1,566.92	-3,723.55	-4,942.88	-6,739.69	-23,564.37
Jamestown, NY	x	-	100	-	0.00	-178.93	-160.16	-316.49	-400.08	-525.57	-1,978.07	0.00	-152.20	-126.88	-301.51	-400.25	-545.74	-1,908.12
Jefferson Co., NY	x	-	100	-	0.00	-191.23	-171.17	-338.25	-427.58	-561.69	-2,114.03	0.00	-162.67	-135.60	-322.24	-427.76	-583.26	-2,039.28
Johnstown, PA	-	x	-	100	0.00	-139.52	-124.88	-246.77	-311.95	-409.79	-1,542.31	0.00	-118.68	-98.94	-235.10	-312.08	-425.53	-1,487.77
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-182.64	-163.50	-323.01	-408.30	-536.33	-2,018.25	0.00	-155.49	-129.68	-307.86	-408.61	-557.05	-1,946.99
Knoxville, TN	x	x	100	100	0.00	-1,447.60	-1,295.71	-2,560.51	-3,236.75	-4,251.98	-16,003.08	0.00	-1,231.35	-1,026.48	-2,439.31	-3,238.10	-4,415.20	-15,437.16
Lancaster, PA	-	x	-	100	0.00	-539.87	-483.22	-954.92	-1,207.11	-1,585.73	-5,968.16	0.00	-459.22	-382.82	-909.72	-1,207.62	-1,646.60	-5,757.11
Las Vegas, NV	x	-	100	-	0.00	-2,392.80	-2,141.72	-4,232.40	-5,350.19	-7,028.33	-26,452.53	0.00	-2,035.30	-1,696.65	-4,031.99	-5,352.37	-7,298.07	-25,517.04
Libby, MT	-	x	-	100	0.00	-8.95	-8.01	-15.83	-20.01	-26.29	-98.94	0.00	-7.61	-6.35	-15.08	-20.02	-27.30	-95.44
Liberty-Clairton, PA	-	x	-	100	0.00	-14.42	-12.91	-25.50	-32.23	-42.34	-159.35	0.00	-12.27	-10.23	-24.30	-32.25	-43.97	-153.72
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-21,078.88	-	-37,158.65	-46,906.14	-61,519.90	-	0.00	-18,327.90	-	-35,810.23	-47,336.97	-64,275.90	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1,068.71	-956.59	-1,890.30	-2,389.52	-3,138.98	-11,813.90	0.00	-909.15	-757.93	-1,800.91	-2,390.61	-3,259.57	-11,396.19
Louisville, KY-IN	-	x	-	100	0.00	-1,361.27	-1,218.42	-2,407.85	-3,043.79	-3,998.52	-15,049.44	0.00	-1,157.81	-965.12	-2,293.75	-3,044.94	-4,151.90	-14,517.15
Macon, GA	-	x	-	100	0.00	-255.44	-228.63	-451.83	-571.16	-750.31	-2,824.01	0.00	-217.25	-181.09	-430.41	-571.37	-779.09	-2,724.13
Manitowoc Co., WI	x	-	-	-	0.00	-128.95	-115.42	-228.09	-288.33	-378.76	-1,425.53	0.00	-109.69	-91.45	-217.30	-288.45	-393.31	-1,375.12
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-162.89	-145.80	-288.12	-364.22	-478.45	-1,800.74	0.00	-138.56	-115.51	-274.49	-364.37	-496.82	-1,737.06
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-662.64	-593.11	-1,172.07	-1,481.62	-1,946.34	-7,325.39	0.00	-563.66	-469.88	-1,116.59	-1,482.24	-2,021.06	-7,066.34
Memphis, TN-AR	x	-	100	-	0.00	-1,262.92	-1,142.10	-2,215.61	-2,791.14	-3,652.28	-13,598.90	0.00	-1,132.01	-970.21	-2,170.32	-2,852.01	-3,849.74	-13,163.38
Milwaukee-Racine, WI	x	-	100	-	0.00	-2,174.13	-1,946.01	-3,845.59	-4,861.22	-6,385.96	-24,034.66	0.00	-1,849.38	-1,541.69	-3,663.58	-4,863.27	-6,631.13	-23,184.74
Nevada (Western Part), CA	x	-	100	-	0.00	-137.41	-122.99	-243.05	-307.24	-403.61	-1,519.06	0.00	-116.89	-97.44	-231.55	-307.37	-419.11	-1,465.34
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-18,057.02	-	-31,907.00	-40,316.71	-52,936.98	-	0.00	-15,461.82	-	-30,502.08	-40,439.18	-55,070.38	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-185.28	-165.84	-327.72	-414.27	-544.21	-2,048.26	0.00	-157.59	-131.37	-312.20	-414.44	-565.10	-1,975.82
							18,947.70				230,527.74			15,461.35				222,688.14

**Table B2-63
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-9,411.54	-8,501.00	-16,526.94	-20,828.46	-27,267.12	-	0.00	-8,385.98	-7,165.51	-16,137.15	-21,230.36	-28,690.94	-98,359.74
Phoenix-Mesa, AZ	x	-	100	-	0.00	-6,378.75	-5,709.38	-11,282.90	-14,262.81	-18,736.55	-70,519.49	0.00	-5,425.44	-4,522.56	-10,748.33	-14,268.30	-19,455.34	-68,025.35
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-2,268.43	-2,030.42	-4,012.41	-5,072.09	-6,662.99	-25,077.36	0.00	-1,929.56	-1,608.53	-3,822.47	-5,074.20	-6,918.76	-24,190.54
Poughkeepsie, NY	x	x	100	100	0.00	-1,717.50	-1,537.30	-3,037.91	-3,840.23	-5,044.74	-18,986.77	0.00	-1,460.95	-1,217.88	-2,894.12	-3,841.85	-5,238.41	-18,315.35
Providence (All RI), RI	x	-	100	-	0.00	-1,132.49	-1,013.66	-2,003.14	-2,532.17	-3,326.40	-12,519.49	0.00	-963.32	-803.05	-1,908.33	-2,533.24	-3,454.10	-12,076.77
Reading, PA	-	x	-	100	0.00	-506.05	-452.95	-895.10	-1,131.50	-1,486.40	-5,594.33	0.00	-430.46	-358.84	-852.73	-1,131.97	-1,543.46	-5,396.50
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-1,434.88	-1,284.34	-2,537.99	-3,208.27	-4,214.55	-15,862.05	0.00	-1,220.59	-1,017.54	-2,417.91	-3,209.67	-4,376.39	-15,301.17
Rochester, NY	x	-	100	-	0.00	-1,611.21	-1,442.16	-2,849.90	-3,602.57	-4,732.54	-17,811.72	0.00	-1,370.53	-1,142.51	-2,715.01	-3,604.08	-4,914.21	-17,181.85
Rome, GA	-	x	-	100	0.00	-138.03	-123.55	-244.15	-308.63	-405.43	-1,525.90	0.00	-117.41	-97.88	-232.59	-308.76	-420.99	-1,471.94
Sacramento Metro, CA	x	-	50	-	0.00	-3,135.95	-2,806.92	-5,546.86	-7,011.79	-9,211.08	-34,667.47	0.00	-2,667.52	-2,223.72	-5,284.32	-7,014.75	-9,564.69	-33,441.55
San Diego, CA	x	-	100	-	0.00	-3,702.60	-3,314.11	-6,549.16	-8,278.81	-10,875.51	-40,931.87	0.00	-3,149.52	-2,625.52	-6,239.16	-8,282.28	-11,293.01	-39,484.41
San Francisco Bay Area, CA	x	-	100	-	0.00	-8,502.66	-7,653.23	-14,972.83	-18,892.07	-24,765.36	-92,671.25	0.00	-7,443.55	-6,302.08	-14,481.85	-19,118.12	-25,925.26	-89,559.93
San Joaquin Valley, CA	x	x	50	100	0.00	-6,889.19	-6,173.53	-12,174.41	-15,383.81	-20,200.25	-75,936.91	0.00	-5,895.53	-4,930.94	-11,634.71	-15,426.88	-21,010.83	-73,279.41
Sheboygan, WI	x	-	100	-	0.00	-151.37	-135.49	-267.74	-338.46	-444.61	-1,673.37	0.00	-128.76	-107.34	-255.07	-338.60	-461.68	-1,614.20
Springfield (Western MA), MA	x	-	100	-	0.00	-1,177.05	-1,053.55	-2,081.97	-2,631.82	-3,457.30	-13,012.17	0.00	-1,001.23	-834.65	-1,983.42	-2,632.92	-3,590.03	-12,552.02
St. Louis, MO-IL	x	x	100	100	0.00	-3,910.94	-3,520.49	-6,886.61	-8,689.03	-11,390.01	-42,617.89	0.00	-3,425.04	-2,900.36	-6,662.09	-8,794.29	-11,924.72	-41,188.04
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-126.67	-114.67	-222.02	-279.59	-365.69	-1,360.00	0.00	-114.16	-98.12	-218.13	-286.34	-386.09	-1,316.95
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.07	0.00	-0.01	0.00	-0.01	-0.01	-0.02	-0.07
Ventura Co., CA	x	-	100	-	0.00	-793.00	-709.98	-1,402.38	-1,772.61	-2,328.37	-8,760.94	0.00	-675.45	-563.48	-1,336.93	-1,774.28	-2,418.64	-8,451.84
Washington, DC-MD-VA	x	x	100	100	0.00	-6,678.18	-5,977.51	-11,812.31	-14,931.94	-19,615.40	-73,825.61	0.00	-5,680.76	-4,735.70	-11,253.34	-14,938.36	-20,368.56	-71,215.05
Wheeling, WV-OH	-	x	-	100	0.00	-197.62	-176.88	-349.55	-441.87	-580.46	-2,184.66	0.00	-168.10	-140.13	-333.00	-442.05	-602.74	-2,107.41
York, PA	-	x	-	100	0.00	-560.78	-501.94	-991.91	-1,253.88	-1,647.16	-6,199.38	0.00	-477.02	-397.65	-944.96	-1,254.40	-1,710.40	-5,980.15

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-64
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area

CO 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-2,875.38	-2,469.32	-4,645.25	-5,957.65	-7,836.68	-29,411.14	0.00	-2,249.30	-1,686.98	-4,318.65	-5,989.21	-8,349.27	-27,772.27
Allegan Co., MI	x	-	100	-	0.00	-312.87	-268.69	-505.46	-648.26	-852.72	-3,200.27	0.00	-244.75	-183.56	-469.92	-651.70	-908.50	-3,021.94
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-367.23	-315.37	-593.27	-760.89	-1,000.87	-3,756.26	0.00	-287.27	-215.46	-551.56	-764.92	-1,066.33	-3,546.95
Atlanta, GA	x	x	100	100	0.00	-22,882.74	-	-36,967.65	-47,411.95	-62,365.53	-	0.00	-17,900.20	-	-34,368.46	-47,663.05	-66,444.77	-
Baltimore, MD	x	x	100	100	0.00	-6,236.44	-5,355.74	-10,075.11	-12,921.58	-16,996.99	-63,789.78	0.00	-4,878.58	-3,658.99	-9,366.82	-12,990.09	-18,108.81	-60,235.28
Baton Rouge, LA	x	-	100	-	0.00	-1,774.40	-1,579.50	-2,811.56	-3,558.95	-4,617.96	-16,709.79	0.00	-1,722.11	-1,461.80	-2,956.01	-3,917.34	-5,242.75	-16,040.75
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1,209.98	-1,151.21	-1,843.95	-2,270.39	-2,858.67	-9,477.35	0.00	-1,619.15	-1,557.07	-2,403.16	-2,966.06	-3,695.47	-9,476.93
Birmingham, AL	-	x	-	100	0.00	-2,141.00	-1,838.64	-3,458.84	-4,436.05	-5,835.18	-21,899.55	0.00	-1,674.78	-1,256.07	-3,215.62	-4,459.52	-6,216.82	-20,679.21
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-8,842.11	-7,593.44	-14,284.65	-18,320.41	-24,098.60	-90,442.28	0.00	-6,916.86	-5,187.69	-13,280.35	-18,417.49	-25,674.91	-85,402.60
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1,342.96	-1,153.28	-2,169.61	-2,782.60	-3,660.26	-13,737.32	0.00	-1,050.37	-787.69	-2,016.89	-2,797.17	-3,899.51	-12,971.70
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-2,039.69	-1,751.65	-3,295.17	-4,226.14	-5,559.05	-20,863.16	0.00	-1,595.58	-1,196.69	-3,063.50	-4,248.53	-5,922.67	-19,700.61
Canton-Massillon, OH	-	x	-	100	0.00	-615.85	-536.15	-987.74	-1,260.67	-1,649.99	-6,111.27	0.00	-525.38	-416.27	-962.97	-1,311.69	-1,800.06	-5,804.96
Charleston, WV	-	x	-	100	0.00	-507.54	-435.87	-819.95	-1,051.61	-1,383.28	-5,191.47	0.00	-397.03	-297.77	-762.30	-1,057.18	-1,473.76	-4,902.18
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-5,413.73	-4,649.05	-8,746.16	-11,217.30	-14,755.38	-55,378.83	0.00	-4,234.01	-3,175.05	-8,130.28	-11,275.78	-15,719.62	-52,292.23
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1,042.28	-895.12	-1,683.81	-2,159.50	-2,840.57	-10,660.40	0.00	-815.49	-611.70	-1,565.58	-2,171.10	-3,026.52	-10,066.50
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-16,438.56	-	-26,477.45	-33,890.22	-44,487.43	-	0.00	-13,341.56	-	-25,109.84	-34,559.96	-47,863.30	-
Chico, CA	x	-	100	-	0.00	-414.50	-355.97	-669.64	-858.83	-1,129.70	-4,239.79	0.00	-324.25	-243.19	-622.56	-863.38	-1,203.60	-4,003.53
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-4,080.31	-3,504.05	-6,591.87	-8,454.27	-11,120.76	-41,736.71	0.00	-3,191.66	-2,393.65	-6,128.20	-8,498.85	-11,847.96	-39,410.86
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-294.09	-252.56	-475.11	-609.34	-801.52	-3,008.10	0.00	-230.05	-172.54	-441.70	-612.56	-853.94	-2,840.48
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-4,817.23	-4,136.94	-7,782.35	-9,981.06	-13,129.05	-49,273.45	0.00	-3,768.33	-2,826.27	-7,235.20	-10,033.94	-13,987.82	-46,527.79
Columbus, OH	x	x	100	100	0.00	-4,192.54	-3,600.47	-6,773.16	-8,686.75	-11,426.53	-42,883.90	0.00	-3,279.65	-2,459.75	-6,296.94	-8,732.76	-12,173.92	-40,494.27
Dallas-Fort Worth, TX	x	-	100	-	0.00	-20,778.37	-	-33,567.97	-43,051.78	-56,630.16	-	0.00	-16,254.07	-	-31,207.85	-43,279.81	-60,334.28	-
Dayton-Springfield, OH	-	x	-	100	0.00	-1,470.23	-1,262.61	-2,375.20	-3,046.25	-4,007.03	-15,038.44	0.00	-1,150.10	-862.58	-2,208.20	-3,062.39	-4,269.13	-14,200.46
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-8,409.59	-7,231.34	-13,576.67	-17,404.54	-22,883.21	-85,776.59	0.00	-6,634.58	-5,004.54	-12,679.56	-17,553.74	-24,434.17	-81,040.88
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-9,447.94	-8,123.67	-15,253.54	-19,554.65	-25,710.77	-96,381.63	0.00	-7,450.51	-5,618.37	-14,242.30	-19,718.98	-27,450.23	-91,057.85
Door Co., WI	x	-	100	-	0.00	-59.46	-51.06	-96.05	-123.19	-162.04	-608.15	0.00	-46.51	-34.88	-89.30	-123.84	-172.64	-574.27
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-2.67	-2.30	-4.32	-5.54	-7.28	-27.34	0.00	-2.09	-1.57	-4.01	-5.57	-7.76	-25.82
Evansville, IN	-	x	-	100	0.00	-702.51	-603.27	-1,134.95	-1,455.63	-1,914.76	-7,186.44	0.00	-549.38	-411.95	-1,054.98	-1,463.17	-2,039.84	-6,785.85
Greater Connecticut, CT	x	-	100	-	0.00	-3,660.31	-3,143.41	-5,913.31	-7,583.96	-9,975.90	-37,439.54	0.00	-2,863.38	-2,147.58	-5,497.62	-7,624.20	-10,628.48	-35,353.35
Greene Co., PA	x	-	100	-	0.00	-63.63	-54.65	-102.80	-131.85	-173.43	-650.88	0.00	-49.78	-37.33	-95.57	-132.54	-184.77	-614.61

**Table B2-64
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1,671.10	-1,435.11	-2,699.71	-3,462.44	-4,554.49	-17,093.04	0.00	-1,307.23	-980.43	-2,509.89	-3,480.78	-4,852.39	-16,140.57
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1,428.97	-1,227.17	-2,308.53	-2,960.75	-3,894.56	-14,616.33	0.00	-1,117.82	-838.37	-2,146.22	-2,976.44	-4,149.30	-13,801.87
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-10.35	-8.89	-16.73	-21.45	-28.22	-105.92	0.00	-8.09	-6.07	-15.55	-21.56	-30.06	-100.01
Hickory, NC	-	x	-	100	0.00	-421.77	-362.21	-681.38	-873.88	-1,149.50	-4,314.08	0.00	-329.94	-247.46	-633.47	-878.52	-1,224.69	-4,073.69
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-13,095.94	-	-20,930.03	-26,649.81	-34,793.46	-	0.00	-11,621.27	-9,417.50	-20,868.53	-28,190.34	-38,399.42	-
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-891.03	-787.18	-1,417.77	-1,799.79	-2,342.38	-8,545.64	0.00	-828.90	-688.87	-1,453.14	-1,943.36	-2,623.00	-8,172.91
Imperial Co., CA	x	-	100	-	0.00	-693.14	-595.25	-1,119.78	-1,436.15	-1,889.11	-7,089.85	0.00	-542.22	-406.66	-1,041.05	-1,443.76	-2,012.67	-6,694.78
Indianapolis, IN	-	x	-	100	0.00	-3,909.77	-3,357.64	-6,316.34	-8,100.86	-10,655.85	-39,991.54	0.00	-3,058.46	-2,293.85	-5,872.24	-8,143.77	-11,352.84	-37,763.09
Jamestown, NY	x	-	100	-	0.00	-269.22	-231.20	-434.93	-557.81	-733.74	-2,753.74	0.00	-210.60	-157.95	-404.35	-560.77	-781.74	-2,600.30
Jefferson Co., NY	x	-	100	-	0.00	-331.16	-284.40	-535.00	-686.15	-902.56	-3,387.31	0.00	-259.06	-194.29	-497.39	-689.79	-961.60	-3,198.56
Johnstown, PA	-	x	-	100	0.00	-199.57	-171.39	-322.41	-413.50	-543.91	-2,041.30	0.00	-156.12	-117.10	-299.75	-415.70	-579.50	-1,927.56
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-356.62	-306.33	-576.05	-738.74	-971.65	-3,645.77	0.00	-279.41	-209.78	-536.00	-743.10	-1,035.63	-3,442.97
Knoxville, TN	x	x	100	100	0.00	-2,407.62	-2,067.62	-3,889.57	-4,988.48	-6,561.83	-24,626.65	0.00	-1,883.37	-1,412.53	-3,616.09	-5,014.89	-6,991.02	-23,254.37
Lancaster, PA	-	x	-	100	0.00	-853.34	-732.83	-1,378.59	-1,768.07	-2,325.72	-8,728.45	0.00	-667.53	-500.65	-1,281.66	-1,777.44	-2,477.84	-8,242.07
Las Vegas, NV	x	-	100	-	0.00	-5,060.38	-4,345.71	-8,175.20	-10,484.94	-13,791.90	-51,761.61	0.00	-3,958.29	-2,968.61	-7,600.17	-10,540.23	-14,693.78	-48,877.11
Libby, MT	-	x	-	100	0.00	-14.28	-12.27	-23.08	-29.60	-38.93	-146.11	0.00	-11.17	-8.38	-21.45	-29.75	-41.48	-137.97
Liberty-Clairton, PA	-	x	-	100	0.00	-18.89	-16.22	-30.51	-39.13	-51.46	-193.13	0.00	-14.78	-11.09	-28.37	-39.34	-54.84	-182.37
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-38,212.94	-	-61,611.98	-78,914.85	-103,663.62	-	0.00	-30,632.96	-	-58,038.52	-80,085.50	-111,159.59	-
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1,975.02	-1,696.16	-3,190.63	-4,092.02	-5,382.56	-20,200.17	0.00	-1,545.32	-1,159.17	-2,966.65	-4,114.04	-5,734.96	-19,074.82
Louisville, KY-IN	-	x	-	100	0.00	-2,070.55	-1,778.12	-3,345.06	-4,290.16	-5,643.30	-21,179.73	0.00	-1,619.51	-1,214.54	-3,109.68	-4,312.68	-6,012.23	-19,999.37
Macon, GA	-	x	-	100	0.00	-390.27	-335.15	-630.51	-808.65	-1,063.70	-3,992.19	0.00	-305.24	-228.90	-586.12	-812.88	-1,133.23	-3,769.69
Manitowoc Co., WI	x	-	-	-	0.00	-194.11	-166.70	-313.59	-402.19	-529.03	-1,985.45	0.00	-151.85	-113.89	-291.55	-404.32	-563.64	-1,874.82
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-318.37	-273.41	-514.33	-659.65	-867.70	-3,256.47	0.00	-249.05	-186.79	-478.17	-663.14	-924.45	-3,075.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1,354.27	-1,163.02	-2,187.86	-2,805.99	-3,690.99	-13,852.32	0.00	-1,059.39	-794.55	-2,034.04	-2,820.85	-3,932.41	-13,080.43
Memphis, TN-AR	x	-	100	-	0.00	-1,931.54	-1,676.70	-3,102.73	-3,964.21	-5,194.08	-19,293.32	0.00	-1,618.54	-1,268.72	-2,994.75	-4,094.54	-5,637.74	-18,302.63
Milwaukee-Racine, WI	x	-	100	-	0.00	-3,374.59	-2,898.03	-5,451.72	-6,991.97	-9,197.21	-34,517.21	0.00	-2,639.82	-1,979.88	-5,068.44	-7,029.03	-9,798.81	-32,593.82
Nevada (Western Part), CA	x	-	100	-	0.00	-237.26	-203.75	-383.30	-491.59	-646.63	-2,426.80	0.00	-185.60	-139.20	-356.35	-494.19	-688.93	-2,291.58
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-28,055.32	-	-45,292.75	-58,062.37	-76,338.92	-	0.00	-22,136.69	-	-42,303.02	-58,563.19	-81,515.89	-
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-270.82	-232.57	-437.51	-561.12	-738.10	-2,770.13	0.00	-211.84	-158.88	-406.74	-564.09	-786.37	-2,615.76

**Table B2-64
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

CO 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-NJ	x	x	100	100	0.00	-15,551.53	-	-25,007.19	-31,972.79	-41,922.29	-	0.00	-12,873.80	-	-23,974.53	-32,862.21	-45,348.83	-
Phoenix-Mesa, AZ	x	-	100	-	0.00	-12,939.56	-	-20,904.36	-26,810.52	-35,266.66	-	0.00	-10,121.04	-7,590.29	-19,433.53	-26,951.46	-37,572.41	-
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3,283.67	-2,819.95	-5,304.85	-6,803.61	-8,949.45	132,358.16	0.00	-2,568.65	-1,926.49	-4,931.85	-6,839.62	-9,534.80	124,981.95
Poughkeepsie, NY	x	x	100	100	0.00	-2,895.10	-2,486.25	-4,677.10	-5,998.50	-7,890.40	-29,612.77	0.00	-2,264.72	-1,698.55	-4,348.26	-6,030.27	-8,406.51	-27,962.66
Providence (All RI), RI	x	-	100	-	0.00	-1,739.89	-1,494.18	-2,810.83	-3,604.97	-4,741.96	-17,796.62	0.00	-1,361.05	-1,020.79	-2,613.21	-3,624.06	-5,052.13	-16,804.94
Reading, PA	-	x	-	100	0.00	-854.59	-733.90	-1,380.61	-1,770.66	-2,329.12	-8,741.23	0.00	-668.51	-501.38	-1,283.54	-1,780.04	-2,481.47	-8,254.14
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-3,461.16	-2,972.41	-5,591.55	-7,171.27	-9,433.02	-35,401.83	0.00	-2,707.74	-2,030.93	-5,198.64	-7,209.48	-10,050.24	-33,429.31
Rochester, NY	x	-	100	-	0.00	-2,517.06	-2,161.60	-4,066.37	-5,215.23	-6,860.09	-25,746.01	0.00	-1,969.00	-1,476.76	-3,780.48	-5,242.85	-7,308.81	-24,311.37
Rome, GA	-	x	-	100	0.00	-210.87	-181.09	-340.67	-436.92	-574.72	-2,156.95	0.00	-164.96	-123.72	-316.72	-439.24	-612.32	-2,036.76
Sacramento Metro, CA	x	-	50	-	0.00	-5,766.92	-4,952.53	-9,316.59	-11,948.75	-15,717.33	-58,987.20	0.00	-4,511.30	-3,383.53	-8,661.63	-12,012.12	-16,745.46	-55,700.32
San Diego, CA	x	-	100	-	0.00	-5,641.28	-4,844.62	-9,113.63	-11,688.46	-15,374.96	-57,702.40	0.00	-4,412.94	-3,309.72	-8,472.86	-11,750.36	-16,380.61	-54,487.05
San Francisco Bay Area, CA	x	-	100	-	0.00	-13,316.53	-	-21,448.38	-27,452.80	-36,036.57	-	0.00	-10,810.40	-8,308.28	-20,343.28	-27,998.07	-38,773.77	-
San Joaquin Valley, CA	x	x	50	100	0.00	-13,406.61	-	-21,647.89	-27,754.74	-36,496.02	-	0.00	-10,553.11	-7,948.33	-20,193.11	-27,968.50	-38,946.63	-
Sheboygan, WI	x	-	100	-	0.00	-238.96	-205.22	-386.05	-495.12	-651.27	-2,444.22	0.00	-186.94	-140.21	-358.91	-497.74	-693.88	-2,308.03
Springfield (Western MA), MA	x	-	100	-	0.00	-1,868.59	-1,604.70	-3,018.75	-3,871.62	-5,092.72	-19,113.03	0.00	-1,461.72	-1,096.29	-2,806.50	-3,892.13	-5,425.83	-18,047.99
St. Louis, MO-IL	x	x	100	100	0.00	-6,183.49	-5,340.78	-9,959.42	-12,747.48	-16,733.20	-62,459.29	0.00	-5,020.20	-3,858.46	-9,446.71	-13,001.10	-18,004.60	-59,122.52
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-178.90	-155.62	-287.04	-366.46	-479.77	-1,778.34	0.00	-151.90	-120.01	-279.10	-380.55	-522.70	-1,688.63
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.10	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.10
Ventura Co., CA	x	-	100	-	0.00	-1,232.68	-1,058.88	-1,991.15	-2,553.47	-3,358.51	-12,601.40	0.00	-965.95	-725.32	-1,852.87	-2,568.69	-3,579.80	-11,900.53
Washington, DC-MD-VA	x	x	100	100	0.00	-11,976.51	-	-19,348.30	-24,814.65	-32,641.05	-	0.00	-9,369.02	-7,026.95	-17,988.24	-24,946.38	-34,776.35	-
Wheeling, WV-OH	-	x	-	100	0.00	-287.29	-246.72	-464.12	-595.25	-782.99	-2,938.57	0.00	-224.73	-168.55	-431.49	-598.40	-834.20	-2,774.83
York, PA	-	x	-	100	0.00	-993.07	-852.83	-1,604.33	-2,057.60	-2,706.56	-10,157.74	0.00	-776.84	-582.64	-1,491.54	-2,068.50	-2,883.59	-9,591.72

a/ Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

b/ Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

c/ Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-65
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-4.24	-5.43	-5.94	-6.71	-7.78	-10.10	0.00	-4.25	-5.45	-5.96	-6.73	-7.80	-10.11
Allegan Co., MI	x	-	100	-	0.00	-0.46	-0.59	-0.65	-0.73	-0.85	-1.10	0.00	-0.46	-0.60	-0.65	-0.74	-0.85	-1.11
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.42	-0.54	-0.59	-0.67	-0.77	-1.01	0.00	-0.42	-0.54	-0.59	-0.67	-0.78	-1.01
Atlanta, GA	x	x	100	100	0.00	-22.52	-28.87	-31.58	-35.66	-41.33	-53.63	0.00	-22.59	-28.94	-31.66	-35.74	-41.42	-53.69
Baltimore, MD	x	x	100	100	0.00	-9.38	-12.03	-13.17	-14.87	-17.24	-22.41	0.00	-9.41	-12.06	-13.20	-14.90	-17.27	-22.43
Baton Rouge, LA	x	-	100	-	0.00	-2.18	-2.80	-3.06	-3.46	-4.01	-5.21	0.00	-2.19	-2.81	-3.07	-3.47	-4.02	-5.21
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1.36	-1.75	-1.91	-2.16	-2.50	-3.26	0.00	-1.37	-1.75	-1.92	-2.17	-2.51	-3.26
Birmingham, AL	-	x	-	100	0.00	-3.41	-4.38	-4.78	-5.40	-6.26	-8.11	0.00	-3.42	-4.39	-4.80	-5.41	-6.27	-8.12
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-15.25	-19.55	-21.39	-24.16	-28.01	-36.38	0.00	-15.30	-19.60	-21.45	-24.22	-28.06	-36.42
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.99	-2.55	-2.77	-3.13	-3.62	-4.59	0.00	-1.99	-2.56	-2.78	-3.14	-3.63	-4.60
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.67	-4.70	-5.14	-5.81	-6.73	-8.75	0.00	-3.68	-4.71	-5.16	-5.82	-6.75	-8.76
Canton-Massillon, OH	-	x	-	100	0.00	-1.04	-1.34	-1.47	-1.65	-1.92	-2.49	0.00	-1.05	-1.34	-1.47	-1.66	-1.92	-2.49
Charleston, WV	-	x	-	100	0.00	-0.98	-1.26	-1.38	-1.55	-1.80	-2.34	0.00	-0.98	-1.26	-1.38	-1.56	-1.80	-2.34
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-5.41	-6.96	-7.48	-8.43	-9.77	-11.90	0.00	-5.43	-6.98	-7.50	-8.46	-9.79	-11.91
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.73	-2.22	-2.42	-2.73	-3.16	-4.06	0.00	-1.73	-2.22	-2.42	-2.74	-3.17	-4.07
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-22.75	-29.17	-31.81	-35.91	-41.61	-53.36	0.00	-22.82	-29.25	-31.89	-35.99	-41.70	-53.42
Chico, CA	x	-	100	-	0.00	-0.63	-0.81	-0.89	-1.00	-1.16	-1.51	0.00	-0.64	-0.81	-0.89	-1.01	-1.17	-1.51
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-6.00	-7.69	-8.40	-9.48	-10.99	-14.17	0.00	-6.02	-7.71	-8.42	-9.51	-11.02	-14.18
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.57	-0.74	-0.81	-0.91	-1.05	-1.37	0.00	-0.58	-0.74	-0.81	-0.91	-1.06	-1.37
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-8.75	-11.21	-12.27	-13.85	-16.06	-20.86	0.00	-8.77	-11.24	-12.30	-13.89	-16.09	-20.88
Columbus, OH	x	x	100	100	0.00	-5.65	-7.24	-7.92	-8.94	-10.37	-13.46	0.00	-5.67	-7.26	-7.94	-8.97	-10.39	-13.47
Dallas-Fort Worth, TX	x	-	100	-	0.00	-22.89	-29.35	-32.11	-36.26	-42.03	-54.56	0.00	-22.96	-29.43	-32.19	-36.34	-42.12	-54.62
Dayton-Springfield, OH	-	x	-	100	0.00	-2.65	-3.40	-3.72	-4.20	-4.87	-6.32	0.00	-2.66	-3.41	-3.73	-4.21	-4.88	-6.32
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-10.60	-13.59	-14.87	-16.79	-19.46	-25.26	0.00	-10.63	-13.63	-14.90	-16.83	-19.50	-25.28
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-15.97	-20.47	-22.39	-25.29	-29.32	-38.06	0.00	-16.02	-20.52	-22.45	-25.35	-29.38	-38.10
Door Co., WI	x	-	100	-	0.00	-0.11	-0.14	-0.15	-0.17	-0.20	-0.26	0.00	-0.11	-0.14	-0.15	-0.17	-0.20	-0.26
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01
Evansville, IN	-	x	-	100	0.00	-1.06	-1.36	-1.47	-1.66	-1.92	-2.38	0.00	-1.07	-1.37	-1.48	-1.67	-1.93	-2.39
Greater Connecticut, CT	x	-	100	-	0.00	-5.82	-7.46	-8.17	-9.23	-10.70	-13.92	0.00	-5.84	-7.48	-8.19	-9.25	-10.72	-13.94
Greene Co., PA	x	-	100	-	0.00	-0.13	-0.17	-0.19	-0.21	-0.24	-0.32	0.00	-0.13	-0.17	-0.19	-0.21	-0.24	-0.32
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-2.62	-3.36	-3.68	-4.15	-4.81	-6.25	0.00	-2.63	-3.37	-3.69	-4.16	-4.82	-6.25

**Table B2-65
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.38	-3.04	-3.33	-3.76	-4.36	-5.66	0.00	-2.38	-3.05	-3.34	-3.77	-4.37	-5.67
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.02	-0.02	-0.03	-0.03	-0.04	0.00	-0.02	-0.02	-0.02	-0.03	-0.03	-0.04
Hickory, NC	-	x	-	100	0.00	-0.62	-0.79	-0.87	-0.98	-1.13	-1.47	0.00	-0.62	-0.79	-0.87	-0.98	-1.14	-1.48
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-16.89	-21.65	-23.69	-26.75	-31.01	-40.25	0.00	-16.94	-21.71	-23.75	-26.81	-31.07	-40.30
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.14	-1.47	-1.53	-1.72	-1.99	-2.13	0.00	-1.14	-1.47	-1.54	-1.73	-2.00	-2.13
Imperial Co., CA	x	-	100	-	0.00	-0.73	-0.94	-1.03	-1.16	-1.34	-1.74	0.00	-0.73	-0.94	-1.03	-1.16	-1.34	-1.74
Indianapolis, IN	-	x	-	100	0.00	-5.27	-6.76	-7.40	-8.35	-9.68	-12.57	0.00	-5.29	-6.78	-7.42	-8.37	-9.70	-12.58
Jamestown, NY	x	-	100	-	0.00	-0.49	-0.63	-0.68	-0.77	-0.90	-1.16	0.00	-0.49	-0.63	-0.69	-0.77	-0.90	-1.17
Jefferson Co., NY	x	-	100	-	0.00	-0.45	-0.58	-0.64	-0.72	-0.83	-1.08	0.00	-0.46	-0.58	-0.64	-0.72	-0.83	-1.08
Johnstown, PA	-	x	-	100	0.00	-0.40	-0.51	-0.56	-0.64	-0.74	-0.96	0.00	-0.40	-0.52	-0.56	-0.64	-0.74	-0.96
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.41	-0.53	-0.58	-0.66	-0.77	-1.04	0.00	-0.41	-0.53	-0.58	-0.66	-0.77	-1.04
Knoxville, TN	x	x	100	100	0.00	-3.58	-4.59	-5.02	-5.67	-6.57	-8.52	0.00	-3.59	-4.60	-5.03	-5.68	-6.58	-8.53
Lancaster, PA	-	x	-	100	0.00	-1.40	-1.80	-1.96	-2.22	-2.57	-3.34	0.00	-1.41	-1.80	-1.97	-2.22	-2.58	-3.34
Las Vegas, NV	x	-	100	-	0.00	-4.63	-5.93	-6.48	-7.32	-8.49	-11.00	0.00	-4.64	-5.95	-6.50	-7.34	-8.51	-11.01
Libby, MT	-	x	-	100	0.00	-0.02	-0.03	-0.03	-0.04	-0.04	-0.05	0.00	-0.02	-0.03	-0.03	-0.04	-0.04	-0.05
Liberty-Clairton, PA	-	x	-	100	0.00	-0.05	-0.06	-0.07	-0.07	-0.09	-0.11	0.00	-0.05	-0.06	-0.07	-0.07	-0.09	-0.11
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-48.51	-62.19	-68.03	-76.82	-89.05	-115.58	0.00	-48.66	-62.36	-68.21	-77.01	-89.24	-115.70
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-2.41	-3.08	-3.38	-3.81	-4.42	-5.76	0.00	-2.41	-3.09	-3.39	-3.82	-4.43	-5.76
Louisville, KY-IN	-	x	-	100	0.00	-3.60	-4.62	-5.04	-5.69	-6.59	-8.44	0.00	-3.61	-4.63	-5.05	-5.70	-6.60	-8.45
Macon, GA	-	x	-	100	0.00	-0.67	-0.86	-0.93	-1.05	-1.22	-1.56	0.00	-0.67	-0.86	-0.94	-1.06	-1.22	-1.56
Manitowoc Co., WI	x	-	-	-	0.00	-0.35	-0.45	-0.50	-0.56	-0.65	-0.85	0.00	-0.36	-0.46	-0.50	-0.56	-0.65	-0.85
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.34	-0.44	-0.48	-0.54	-0.63	-0.82	0.00	-0.34	-0.44	-0.48	-0.55	-0.63	-0.82
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.34	-1.72	-1.88	-2.13	-2.47	-3.20	0.00	-1.35	-1.73	-1.89	-2.13	-2.47	-3.20
Memphis, TN-AR	x	-	100	-	0.00	-3.26	-4.18	-4.57	-5.16	-5.98	-7.77	0.00	-3.27	-4.19	-4.58	-5.17	-6.00	-7.78
Milwaukee-Racine, WI	x	-	100	-	0.00	-5.78	-7.41	-8.11	-9.16	-10.61	-13.79	0.00	-5.80	-7.43	-8.13	-9.18	-10.64	-13.80
Nevada (Western Part), CA	x	-	100	-	0.00	-0.33	-0.42	-0.46	-0.52	-0.60	-0.78	0.00	-0.33	-0.42	-0.46	-0.52	-0.60	-0.78
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-47.57	-60.99	-66.74	-75.36	-87.36	-113.48	0.00	-47.72	-61.15	-66.91	-75.54	-87.54	-113.60
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.52	-0.66	-0.72	-0.82	-0.95	-1.22	0.00	-0.52	-0.66	-0.72	-0.82	-0.95	-1.22
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-22.76	-29.18	-31.94	-36.07	-41.81	-54.37	0.00	-22.83	-29.26	-32.02	-36.15	-41.90	-54.42

**Table B2-65
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Diesel PM 10 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-12.66	-16.24	-17.70	-19.99	-23.16	-29.71	0.00	-12.70	-16.28	-17.75	-20.03	-23.21	-29.74
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-6.44	-8.26	-9.03	-10.20	-11.82	-15.33	0.00	-6.46	-8.28	-9.05	-10.22	-11.85	-15.34
Poughkeepsie, NY	x	x	100	100	0.00	-4.18	-5.36	-5.87	-6.63	-7.68	-9.97	0.00	-4.20	-5.38	-5.88	-6.64	-7.70	-9.98
Providence (All RI), RI	x	-	100	-	0.00	-3.03	-3.88	-4.25	-4.80	-5.56	-7.22	0.00	-3.04	-3.89	-4.26	-4.81	-5.57	-7.23
Reading, PA	-	x	-	100	0.00	-1.23	-1.58	-1.72	-1.95	-2.26	-2.93	0.00	-1.23	-1.58	-1.73	-1.95	-2.26	-2.93
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-2.45	-3.14	-3.44	-3.88	-4.50	-5.86	0.00	-2.46	-3.15	-3.45	-3.89	-4.51	-5.86
Rochester, NY	x	-	100	-	0.00	-4.24	-5.43	-5.95	-6.71	-7.78	-10.10	0.00	-4.25	-5.45	-5.96	-6.73	-7.80	-10.12
Rome, GA	-	x	-	100	0.00	-0.37	-0.48	-0.52	-0.59	-0.68	-0.88	0.00	-0.37	-0.48	-0.52	-0.59	-0.68	-0.88
Sacramento Metro, CA	x	-	50	-	0.00	-7.11	-9.12	-9.97	-11.26	-13.06	-16.94	0.00	-7.13	-9.14	-10.00	-11.29	-13.08	-16.95
San Diego, CA	x	-	100	-	0.00	-9.97	-12.78	-13.98	-15.78	-18.30	-23.75	0.00	-10.00	-12.81	-14.01	-15.82	-18.33	-23.78
San Francisco Bay Area, CA	x	-	100	-	0.00	-20.84	-26.74	-28.99	-32.72	-37.90	-47.63	0.00	-20.90	-26.81	-29.07	-32.79	-37.98	-47.68
San Joaquin Valley, CA	x	x	50	100	0.00	-14.49	-18.57	-20.31	-22.93	-26.58	-34.45	0.00	-14.53	-18.62	-20.36	-22.99	-26.64	-34.48
Sheboygan, WI	x	-	100	-	0.00	-0.40	-0.51	-0.55	-0.63	-0.73	-0.95	0.00	-0.40	-0.51	-0.56	-0.63	-0.73	-0.95
Springfield (Western MA), MA	x	-	100	-	0.00	-3.04	-3.90	-4.27	-4.82	-5.58	-7.25	0.00	-3.05	-3.91	-4.28	-4.83	-5.60	-7.26
St. Louis, MO-IL	x	x	100	100	0.00	-10.15	-13.01	-14.25	-16.09	-18.66	-24.34	0.00	-10.18	-13.04	-14.29	-16.13	-18.70	-24.37
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.35	-0.45	-0.50	-0.56	-0.65	-0.84	0.00	-0.35	-0.45	-0.50	-0.56	-0.65	-0.84
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.09	-2.68	-2.93	-3.31	-3.84	-4.98	0.00	-2.10	-2.69	-2.94	-3.32	-3.85	-4.99
Washington, DC-MD-VA	x	x	100	100	0.00	-16.09	-20.63	-22.59	-25.51	-29.57	-38.51	0.00	-16.15	-20.69	-22.65	-25.57	-29.64	-38.55
Wheeling, WV-OH	-	x	-	100	0.00	-0.56	-0.72	-0.78	-0.88	-1.02	-1.33	0.00	-0.56	-0.72	-0.78	-0.89	-1.03	-1.33
York, PA	-	x	-	100	0.00	-1.30	-1.67	-1.82	-2.06	-2.39	-3.10	0.00	-1.30	-1.67	-1.83	-2.06	-2.39	-3.10

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-66
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Diesel PM 10 2020

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-12.94	-15.67	-16.13	-17.89	-19.44	-24.81	0.00	-22.63	-26.09	-26.64	-28.84	-30.30	-32.08
Allegan Co., MI	x	-	100	-	0.00	-1.41	-1.71	-1.76	-1.96	-2.13	-2.71	0.00	-2.47	-2.85	-2.91	-3.15	-3.31	-3.51
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-1.37	-1.66	-1.71	-1.90	-2.06	-2.63	0.00	-2.40	-2.76	-2.82	-3.06	-3.21	-3.40
Atlanta, GA	x	x	100	100	0.00	-74.93	-90.78	-93.43	-103.59	-112.57	-143.59	0.00	-131.09	-151.11	-154.28	-167.04	-175.47	-185.74
Baltimore, MD	x	x	100	100	0.00	-28.51	-34.53	-35.56	-39.43	-42.85	-54.76	0.00	-49.86	-57.47	-58.70	-63.55	-66.77	-70.78
Baton Rouge, LA	x	-	100	-	0.00	-6.73	-8.15	-8.39	-9.30	-10.11	-12.90	0.00	-11.77	-13.56	-13.85	-14.99	-15.75	-16.68
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-4.04	-4.90	-5.04	-5.59	-6.08	-7.77	0.00	-7.07	-8.15	-8.32	-9.01	-9.47	-10.04
Birmingham, AL	-	x	-	100	0.00	-10.12	-12.26	-12.61	-13.99	-15.20	-19.35	0.00	-17.71	-20.42	-20.84	-22.56	-23.69	-25.04
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-44.62	-54.06	-55.65	-61.71	-67.06	-85.63	0.00	-78.06	-89.98	-91.89	-99.48	-104.51	-110.72
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-6.02	-7.30	-7.47	-8.28	-8.99	-11.22	0.00	-10.56	-12.18	-12.38	-13.40	-14.06	-14.62
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-10.67	-12.92	-13.30	-14.75	-16.03	-20.47	0.00	-18.66	-21.51	-21.96	-23.78	-24.98	-26.46
Canton-Massillon, OH	-	x	-	100	0.00	-3.05	-3.70	-3.80	-4.22	-4.58	-5.85	0.00	-5.34	-6.15	-6.28	-6.80	-7.14	-7.57
Charleston, WV	-	x	-	100	0.00	-2.80	-3.39	-3.49	-3.87	-4.20	-5.36	0.00	-4.89	-5.64	-5.76	-6.23	-6.55	-6.93
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-17.96	-21.83	-22.16	-24.55	-26.59	-32.25	0.00	-31.59	-36.47	-36.89	-39.91	-41.80	-42.44
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-5.15	-6.24	-6.42	-7.12	-7.74	-9.85	0.00	-9.02	-10.39	-10.61	-11.49	-12.06	-12.75
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-68.34	-82.89	-84.90	-94.12	-102.16	-128.15	0.00	-119.77	-138.14	-140.60	-152.17	-159.70	-166.71
Chico, CA	x	-	100	-	0.00	-1.92	-2.32	-2.39	-2.65	-2.88	-3.68	0.00	-3.36	-3.87	-3.95	-4.28	-4.49	-4.76
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-17.92	-21.72	-22.31	-24.74	-26.87	-34.05	0.00	-31.38	-36.18	-36.89	-39.93	-41.93	-44.14
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-1.64	-1.98	-2.04	-2.26	-2.46	-3.14	0.00	-2.86	-3.30	-3.37	-3.65	-3.83	-4.06
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-25.34	-30.69	-31.60	-35.04	-38.07	-48.60	0.00	-44.32	-51.09	-52.17	-56.48	-59.34	-62.85
Columbus, OH	x	x	100	100	0.00	-17.50	-21.20	-21.82	-24.19	-26.29	-33.53	0.00	-30.61	-35.28	-36.03	-39.00	-40.97	-43.38
Dallas-Fort Worth, TX	x	-	100	-	0.00	-74.32	-90.03	-92.67	-102.75	-111.66	-142.48	0.00	-130.01	-149.86	-153.02	-165.67	-174.04	-184.28
Dayton-Springfield, OH	-	x	-	100	0.00	-7.70	-9.33	-9.60	-10.65	-11.57	-14.76	0.00	-13.47	-15.53	-15.86	-17.17	-18.03	-19.10
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-33.31	-40.35	-41.53	-46.05	-50.04	-63.83	0.00	-58.27	-67.17	-68.58	-74.25	-78.00	-82.56
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-47.00	-56.94	-58.61	-64.98	-70.62	-90.13	0.00	-82.22	-94.77	-96.77	-104.77	-110.07	-116.56
Door Co., WI	x	-	100	-	0.00	-0.31	-0.38	-0.39	-0.43	-0.47	-0.60	0.00	-0.55	-0.63	-0.64	-0.70	-0.73	-0.78
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	0.00	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03
Evansville, IN	-	x	-	100	0.00	-3.17	-3.85	-3.92	-4.34	-4.71	-5.76	0.00	-5.57	-6.43	-6.52	-7.05	-7.39	-7.55
Greater Connecticut, CT	x	-	100	-	0.00	-17.47	-21.16	-21.79	-24.17	-26.27	-33.61	0.00	-30.55	-35.21	-35.97	-38.95	-40.92	-43.43
Greene Co., PA	x	-	100	-	0.00	-0.37	-0.45	-0.46	-0.52	-0.56	-0.71	0.00	-0.65	-0.75	-0.77	-0.83	-0.87	-0.92
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-7.88	-9.55	-9.83	-10.90	-11.85	-15.12	0.00	-13.79	-15.90	-16.24	-17.58	-18.47	-19.55

**Table B2-66
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-7.04	-8.53	-8.78	-9.73	-10.58	-13.50	0.00	-12.32	-14.20	-14.50	-15.70	-16.49	-17.46
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.05	-0.06	-0.06	-0.06	-0.07	-0.09	0.00	-0.08	-0.10	-0.10	-0.10	-0.11	-0.11
Hickory, NC	-	x	-	100	0.00	-1.89	-2.29	-2.36	-2.62	-2.84	-3.63	0.00	-3.31	-3.81	-3.89	-4.22	-4.43	-4.70
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-51.72	-62.66	-64.49	-71.51	-77.71	-99.16	0.00	-90.48	-104.29	-106.49	-115.29	-121.12	-128.25
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-3.30	-4.04	-3.96	-4.38	-4.71	-4.96	0.00	-5.87	-6.80	-6.73	-7.26	-7.55	-6.87
Imperial Co., CA	x	-	100	-	0.00	-2.43	-2.94	-3.03	-3.36	-3.65	-4.66	0.00	-4.25	-4.90	-5.00	-5.41	-5.69	-6.02
Indianapolis, IN	-	x	-	100	0.00	-16.30	-19.75	-20.32	-22.54	-24.49	-31.25	0.00	-28.52	-32.87	-33.56	-36.34	-38.17	-40.42
Jamestown, NY	x	-	100	-	0.00	-1.42	-1.72	-1.77	-1.96	-2.13	-2.72	0.00	-2.48	-2.86	-2.92	-3.16	-3.32	-3.51
Jefferson Co., NY	x	-	100	-	0.00	-1.41	-1.71	-1.76	-1.95	-2.12	-2.71	0.00	-2.47	-2.85	-2.91	-3.15	-3.31	-3.51
Johnstown, PA	-	x	-	100	0.00	-1.14	-1.38	-1.42	-1.57	-1.71	-2.19	0.00	-1.99	-2.29	-2.34	-2.54	-2.66	-2.83
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.42	-1.72	-1.80	-2.00	-2.18	-2.97	0.00	-2.48	-2.85	-2.94	-3.19	-3.37	-3.76
Knoxville, TN	x	x	100	100	0.00	-10.89	-13.20	-13.58	-15.06	-16.36	-20.86	0.00	-19.06	-21.97	-22.43	-24.28	-25.51	-26.99
Lancaster, PA	-	x	-	100	0.00	-4.17	-5.05	-5.20	-5.76	-6.26	-7.99	0.00	-7.29	-8.40	-8.58	-9.29	-9.76	-10.34
Las Vegas, NV	x	-	100	-	0.00	-15.89	-19.25	-19.80	-21.95	-23.85	-30.34	0.00	-27.80	-32.05	-32.70	-35.41	-37.19	-39.27
Libby, MT	-	x	-	100	0.00	-0.07	-0.08	-0.09	-0.09	-0.10	-0.13	0.00	-0.12	-0.14	-0.14	-0.15	-0.16	-0.17
Liberty-Clairton, PA	-	x	-	100	0.00	-0.13	-0.16	-0.16	-0.18	-0.19	-0.26	0.00	-0.22	-0.26	-0.27	-0.29	-0.30	-0.33
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-151.38	-183.39	-188.73	-209.27	-227.40	-290.02	0.00	-264.84	-305.28	-311.68	-337.44	-354.48	-375.16
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-7.74	-9.37	-9.67	-10.72	-11.65	-14.97	0.00	-13.53	-15.59	-15.94	-17.26	-18.14	-19.32
Louisville, KY-IN	-	x	-	100	0.00	-10.49	-12.72	-13.04	-14.46	-15.70	-19.77	0.00	-18.38	-21.20	-21.59	-23.37	-24.53	-25.68
Macon, GA	-	x	-	100	0.00	-1.95	-2.37	-2.42	-2.69	-2.92	-3.66	0.00	-3.42	-3.95	-4.02	-4.35	-4.56	-4.76
Manitowoc Co., WI	x	-	-	-	0.00	-1.03	-1.25	-1.28	-1.42	-1.55	-1.98	0.00	-1.80	-2.07	-2.12	-2.29	-2.41	-2.56
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-1.13	-1.37	-1.41	-1.57	-1.70	-2.18	0.00	-1.98	-2.29	-2.33	-2.53	-2.66	-2.81
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-4.51	-5.47	-5.63	-6.24	-6.78	-8.65	0.00	-7.90	-9.10	-9.30	-10.06	-10.57	-11.19
Memphis, TN-AR	x	-	100	-	0.00	-9.55	-11.57	-11.91	-13.20	-14.35	-18.31	0.00	-16.70	-19.25	-19.66	-21.29	-22.36	-23.68
Milwaukee-Racine, WI	x	-	100	-	0.00	-16.99	-20.58	-21.18	-23.49	-25.53	-32.60	0.00	-29.71	-34.25	-34.98	-37.87	-39.79	-42.15
Nevada (Western Part), CA	x	-	100	-	0.00	-1.02	-1.23	-1.27	-1.41	-1.53	-1.95	0.00	-1.78	-2.05	-2.09	-2.27	-2.38	-2.52
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-140.18	-169.81	-174.81	-193.84	-210.65	-268.97	0.00	-245.21	-282.65	-288.64	-312.50	-328.30	-347.81
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-1.48	-1.79	-1.84	-2.04	-2.21	-2.81	0.00	-2.58	-2.98	-3.04	-3.29	-3.45	-3.64
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-69.06	-83.66	-86.15	-95.53	-103.82	-132.69	0.00	-120.80	-139.24	-142.21	-153.97	-161.77	-171.52

**Table B2-66
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Diesel PM 10 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-42.65	-51.71	-53.05	-58.81	-63.86	-80.55	0.00	-74.71	-86.15	-87.77	-95.00	-99.74	-104.58
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-18.29	-22.16	-22.80	-25.28	-27.47	-35.01	0.00	-32.00	-36.89	-37.66	-40.77	-42.82	-45.30
Poughkeepsie, NY	x	x	100	100	0.00	-12.84	-15.56	-16.02	-17.76	-19.30	-24.63	0.00	-22.47	-25.90	-26.45	-28.63	-30.08	-31.85
Providence (All RI), RI	x	-	100	-	0.00	-8.87	-10.75	-11.07	-12.27	-13.33	-17.02	0.00	-15.52	-17.89	-18.27	-19.78	-20.78	-22.01
Reading, PA	-	x	-	100	0.00	-3.78	-4.58	-4.71	-5.23	-5.68	-7.25	0.00	-6.61	-7.62	-7.78	-8.42	-8.85	-9.37
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-9.02	-10.93	-11.26	-12.49	-13.58	-17.39	0.00	-15.78	-18.19	-18.59	-20.12	-21.15	-22.47
Rochester, NY	x	-	100	-	0.00	-12.52	-15.17	-15.61	-17.31	-18.81	-24.01	0.00	-21.90	-25.25	-25.78	-27.91	-29.32	-31.05
Rome, GA	-	x	-	100	0.00	-1.08	-1.31	-1.35	-1.50	-1.63	-2.08	0.00	-1.90	-2.19	-2.23	-2.42	-2.54	-2.69
Sacramento Metro, CA	x	-	50	-	0.00	-22.59	-27.37	-28.17	-31.24	-33.94	-43.31	0.00	-39.52	-45.56	-46.52	-50.36	-52.91	-56.02
San Diego, CA	x	-	100	-	0.00	-29.11	-35.26	-36.29	-40.24	-43.73	-55.80	0.00	-50.92	-58.69	-59.93	-64.88	-68.16	-72.17
San Francisco Bay Area, CA	x	-	100	-	0.00	-61.61	-74.79	-76.30	-84.57	-91.72	-113.45	0.00	-108.12	-124.76	-126.66	-137.05	-143.71	-148.29
San Joaquin Valley, CA	x	x	50	100	0.00	-47.58	-57.66	-59.29	-65.75	-71.43	-90.89	0.00	-83.27	-95.99	-97.96	-106.05	-111.39	-117.66
Sheboygan, WI	x	-	100	-	0.00	-1.18	-1.42	-1.47	-1.63	-1.77	-2.26	0.00	-2.06	-2.37	-2.42	-2.62	-2.75	-2.92
Springfield (Western MA), MA	x	-	100	-	0.00	-9.07	-10.98	-11.30	-12.54	-13.62	-17.38	0.00	-15.86	-18.28	-18.67	-20.21	-21.23	-22.48
St. Louis, MO-IL	x	x	100	100	0.00	-29.97	-36.30	-37.41	-41.49	-45.10	-57.84	0.00	-52.41	-60.40	-61.73	-66.84	-70.24	-74.68
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.99	-1.20	-1.24	-1.37	-1.49	-1.91	0.00	-1.74	-2.00	-2.05	-2.22	-2.33	-2.46
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-6.17	-7.47	-7.69	-8.53	-9.26	-11.82	0.00	-10.79	-12.43	-12.70	-13.75	-14.44	-15.29
Washington, DC-MD-VA	x	x	100	100	0.00	-49.52	-59.98	-61.79	-68.52	-74.47	-95.33	0.00	-86.61	-99.82	-101.98	-110.42	-116.02	-123.17
Wheeling, WV-OH	-	x	-	100	0.00	-1.59	-1.93	-1.98	-2.20	-2.39	-3.05	0.00	-2.78	-3.21	-3.28	-3.55	-3.73	-3.94
York, PA	-	x	-	100	0.00	-4.09	-4.96	-5.10	-5.66	-6.15	-7.85	0.00	-7.16	-8.25	-8.42	-9.12	-9.58	-10.15

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-67
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Diesel PM 10 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-19.99	-23.94	-24.26	-26.78	-28.64	-36.29	0.00	-45.46	-51.26	-51.79	-55.46	-57.04	-55.07
Allegan Co., MI	x	-	100	-	0.00	-2.18	-2.61	-2.65	-2.93	-3.13	-3.96	0.00	-4.97	-5.60	-5.66	-6.06	-6.23	-6.02
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-2.26	-2.70	-2.74	-3.02	-3.23	-4.10	0.00	-5.13	-5.78	-5.84	-6.26	-6.44	-6.22
Atlanta, GA	x	x	100	100	0.00	-127.59	-152.76	-154.80	-170.88	-182.75	-231.48	0.00	-290.15	-327.15	-330.49	-353.92	-364.01	-351.32
Baltimore, MD	x	x	100	100	0.00	-43.85	-52.49	-53.22	-58.75	-62.83	-79.73	0.00	-99.68	-112.39	-113.57	-121.62	-125.11	-120.90
Baton Rouge, LA	x	-	100	-	0.00	-10.54	-12.62	-12.79	-14.12	-15.10	-19.14	0.00	-23.96	-27.02	-27.30	-29.23	-30.07	-29.03
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-6.07	-7.26	-7.36	-8.13	-8.70	-11.04	0.00	-13.79	-15.55	-15.71	-16.83	-17.31	-16.74
Birmingham, AL	-	x	-	100	0.00	-15.28	-18.29	-18.52	-20.45	-21.86	-27.64	0.00	-34.75	-39.18	-39.57	-42.37	-43.57	-41.99
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-66.27	-79.34	-80.42	-88.78	-94.95	-120.38	0.00	-150.69	-169.90	-171.66	-183.83	-189.08	-182.62
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-9.23	-11.07	-11.15	-12.30	-13.14	-16.30	0.00	-21.05	-23.74	-23.91	-25.60	-26.29	-25.00
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-15.69	-18.79	-19.04	-21.02	-22.48	-28.51	0.00	-35.68	-40.23	-40.65	-43.53	-44.77	-43.24
Canton-Massillon, OH	-	x	-	100	0.00	-4.51	-5.39	-5.47	-6.03	-6.45	-8.18	0.00	-10.25	-11.55	-11.67	-12.50	-12.85	-12.41
Charleston, WV	-	x	-	100	0.00	-4.04	-4.83	-4.90	-5.41	-5.78	-7.33	0.00	-9.18	-10.35	-10.46	-11.20	-11.52	-11.12
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-30.26	-36.34	-36.40	-40.17	-42.82	-52.08	0.00	-69.20	-78.11	-78.43	-83.93	-86.12	-80.70
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-7.79	-9.33	-9.47	-10.45	-11.18	-14.25	0.00	-17.71	-19.96	-20.18	-21.62	-22.24	-21.56
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-104.54	-125.38	-126.18	-139.26	-148.65	-183.84	0.00	-238.52	-269.12	-270.87	-289.95	-297.79	-282.44
Chico, CA	x	-	100	-	0.00	-2.94	-3.52	-3.57	-3.94	-4.21	-5.34	0.00	-6.68	-7.54	-7.61	-8.15	-8.39	-8.10
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-27.47	-32.91	-33.28	-36.74	-39.27	-49.41	0.00	-62.54	-70.53	-71.17	-76.21	-78.35	-75.24
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-2.36	-2.82	-2.86	-3.16	-3.38	-4.28	0.00	-5.36	-6.04	-6.11	-6.54	-6.73	-6.50
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-37.17	-44.49	-45.10	-49.78	-53.24	-67.49	0.00	-84.51	-95.28	-96.27	-103.09	-106.04	-102.40
Columbus, OH	x	x	100	100	0.00	-27.57	-33.01	-33.45	-36.93	-39.49	-50.03	0.00	-62.70	-70.69	-71.41	-76.48	-78.66	-75.92
Dallas-Fort Worth, TX	x	-	100	-	0.00	-123.02	-147.28	-149.26	-164.77	-176.21	-223.28	0.00	-279.74	-315.41	-318.65	-341.24	-350.98	-338.82
Dayton-Springfield, OH	-	x	-	100	0.00	-11.32	-13.55	-13.73	-15.16	-16.21	-20.55	0.00	-25.74	-29.02	-29.32	-31.40	-32.29	-31.18
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-53.28	-63.79	-64.63	-71.35	-76.30	-96.62	0.00	-121.16	-136.61	-138.00	-147.78	-151.99	-146.66
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-70.09	-83.92	-85.05	-93.88	-100.41	-127.25	0.00	-159.38	-179.70	-181.56	-194.43	-199.98	-193.08
Door Co., WI	x	-	100	-	0.00	-0.46	-0.55	-0.56	-0.61	-0.66	-0.83	0.00	-1.04	-1.18	-1.19	-1.27	-1.31	-1.26
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.02	-0.02	-0.02	-0.03	-0.03	-0.03	0.00	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05
Evansville, IN	-	x	-	100	0.00	-4.80	-5.77	-5.78	-6.38	-6.80	-8.28	0.00	-10.99	-12.40	-12.45	-13.32	-13.67	-12.82
Greater Connecticut, CT	x	-	100	-	0.00	-26.52	-31.75	-32.20	-35.54	-38.02	-48.30	0.00	-60.29	-67.97	-68.69	-73.57	-75.68	-73.20
Greene Co., PA	x	-	100	-	0.00	-0.53	-0.63	-0.64	-0.71	-0.76	-0.96	0.00	-1.20	-1.35	-1.37	-1.46	-1.51	-1.45
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-12.00	-14.37	-14.56	-16.07	-17.19	-21.78	0.00	-27.29	-30.77	-31.08	-33.29	-34.24	-33.05

**Table B2-67
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-10.56	-12.64	-12.81	-14.14	-15.13	-19.17	0.00	-24.01	-27.08	-27.35	-29.29	-30.13	-29.09
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.07	-0.08	-0.08	-0.09	-0.10	-0.12	0.00	-0.16	-0.18	-0.18	-0.19	-0.20	-0.19
Hickory, NC	-	x	-	100	0.00	-2.93	-3.51	-3.56	-3.93	-4.20	-5.33	0.00	-6.66	-7.51	-7.59	-8.13	-8.36	-8.08
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-80.92	-96.88	-98.18	-108.38	-115.91	-146.88	0.00	-184.01	-207.48	-209.61	-224.47	-230.87	-222.88
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-4.85	-5.88	-5.67	-6.24	-6.59	-6.87	0.00	-11.29	-12.79	-12.59	-13.44	-13.68	-11.56
Imperial Co., CA	x	-	100	-	0.00	-4.08	-4.89	-4.95	-5.47	-5.85	-7.41	0.00	-9.28	-10.47	-10.57	-11.32	-11.65	-11.24
Indianapolis, IN	-	x	-	100	0.00	-25.66	-30.73	-31.14	-34.37	-36.76	-46.58	0.00	-58.36	-65.80	-66.48	-71.19	-73.22	-70.68
Jamestown, NY	x	-	100	-	0.00	-2.08	-2.49	-2.52	-2.79	-2.98	-3.78	0.00	-4.73	-5.33	-5.39	-5.77	-5.93	-5.73
Jefferson Co., NY	x	-	100	-	0.00	-2.22	-2.66	-2.70	-2.98	-3.19	-4.04	0.00	-5.06	-5.70	-5.76	-6.17	-6.35	-6.13
Johnstown, PA	-	x	-	100	0.00	-1.63	-1.95	-1.98	-2.18	-2.34	-2.97	0.00	-3.70	-4.18	-4.22	-4.52	-4.65	-4.50
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-2.49	-2.96	-3.08	-3.41	-3.67	-5.06	0.00	-5.60	-6.29	-6.45	-6.92	-7.15	-7.36
Knoxville, TN	x	x	100	100	0.00	-16.79	-20.10	-20.37	-22.48	-24.05	-30.44	0.00	-38.19	-43.06	-43.49	-46.57	-47.90	-46.22
Lancaster, PA	-	x	-	100	0.00	-6.27	-7.51	-7.61	-8.40	-8.98	-11.38	0.00	-14.26	-16.08	-16.24	-17.40	-17.89	-17.27
Las Vegas, NV	x	-	100	-	0.00	-27.60	-33.05	-33.45	-36.93	-39.48	-49.81	0.00	-62.79	-70.81	-71.49	-76.55	-78.71	-75.75
Libby, MT	-	x	-	100	0.00	-0.10	-0.12	-0.13	-0.14	-0.15	-0.19	0.00	-0.24	-0.27	-0.27	-0.29	-0.30	-0.29
Liberty-Clairton, PA	-	x	-	100	0.00	-0.18	-0.21	-0.22	-0.24	-0.26	-0.34	0.00	-0.41	-0.46	-0.47	-0.50	-0.51	-0.51
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-240.88	-288.41	-292.19	-322.55	-344.93	-436.63	0.00	-547.81	-617.68	-623.93	-668.15	-687.18	-662.90
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-12.65	-15.13	-15.39	-16.99	-18.19	-23.31	0.00	-28.72	-32.37	-32.77	-35.10	-36.12	-35.16
Louisville, KY-IN	-	x	-	100	0.00	-15.47	-18.54	-18.71	-20.66	-22.07	-27.59	0.00	-35.24	-39.75	-40.08	-42.91	-44.10	-42.15
Macon, GA	-	x	-	100	0.00	-2.88	-3.46	-3.48	-3.85	-4.11	-5.11	0.00	-6.57	-7.41	-7.47	-8.00	-8.21	-7.83
Manitowoc Co., WI	x	-	-	-	0.00	-1.51	-1.81	-1.83	-2.02	-2.17	-2.76	0.00	-3.43	-3.87	-3.91	-4.19	-4.31	-4.18
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-1.89	-2.27	-2.30	-2.54	-2.71	-3.44	0.00	-4.31	-4.86	-4.91	-5.26	-5.41	-5.22
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-7.70	-9.21	-9.34	-10.31	-11.02	-13.97	0.00	-17.50	-19.73	-19.93	-21.35	-21.96	-21.20
Memphis, TN-AR	x	-	100	-	0.00	-14.15	-16.94	-17.17	-18.96	-20.27	-25.69	0.00	-32.18	-36.29	-36.66	-39.26	-40.38	-38.98
Milwaukee-Racine, WI	x	-	100	-	0.00	-25.29	-30.27	-30.68	-33.87	-36.23	-45.94	0.00	-57.49	-64.82	-65.49	-70.14	-72.14	-69.69
Nevada (Western Part), CA	x	-	100	-	0.00	-1.60	-1.92	-1.94	-2.14	-2.29	-2.91	0.00	-3.64	-4.10	-4.14	-4.44	-4.56	-4.41
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-209.03	-250.24	-253.65	-280.00	-299.47	-379.70	0.00	-475.28	-535.87	-541.43	-579.81	-596.38	-576.00
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-2.13	-2.56	-2.59	-2.86	-3.05	-3.85	0.00	-4.86	-5.48	-5.53	-5.92	-6.09	-5.85
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-106.20	-127.13	-128.90	-142.30	-152.20	-193.17	0.00	-241.44	-272.22	-275.08	-294.59	-303.03	-292.89

**Table B2-67
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Diesel PM 10 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-72.71	-87.12	-88.00	-97.13	-103.78	-129.99	0.00	-165.60	-186.78	-188.36	-201.67	-207.28	-198.42
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-26.30	-31.49	-31.90	-35.21	-37.66	-47.66	0.00	-59.81	-67.44	-68.12	-72.95	-75.02	-72.36
Poughkeepsie, NY	x	x	100	100	0.00	-19.95	-23.89	-24.21	-26.72	-28.58	-36.22	0.00	-45.37	-51.15	-51.68	-55.34	-56.92	-54.96
Providence (All RI), RI	x	-	100	-	0.00	-13.16	-15.76	-15.97	-17.63	-18.85	-23.90	0.00	-29.93	-33.74	-34.09	-36.51	-37.55	-36.26
Reading, PA	-	x	-	100	0.00	-5.88	-7.04	-7.13	-7.87	-8.42	-10.67	0.00	-13.37	-15.07	-15.23	-16.31	-16.77	-16.19
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-16.82	-20.13	-20.43	-22.56	-24.13	-30.75	0.00	-38.22	-43.08	-43.57	-46.66	-48.01	-46.53
Rochester, NY	x	-	100	-	0.00	-18.72	-22.41	-22.71	-25.07	-26.81	-33.98	0.00	-42.56	-47.99	-48.48	-51.92	-53.40	-51.56
Rome, GA	-	x	-	100	0.00	-1.60	-1.92	-1.95	-2.15	-2.30	-2.91	0.00	-3.65	-4.11	-4.15	-4.45	-4.57	-4.42
Sacramento Metro, CA	x	-	50	-	0.00	-36.46	-43.64	-44.24	-48.83	-52.23	-66.22	0.00	-82.89	-93.46	-94.43	-101.12	-104.01	-100.45
San Diego, CA	x	-	100	-	0.00	-43.00	-51.48	-52.17	-57.59	-61.59	-78.04	0.00	-97.78	-110.25	-111.38	-119.28	-122.68	-118.43
San Francisco Bay Area, CA	x	-	100	-	0.00	-92.31	-110.75	-111.26	-122.78	-131.01	-161.00	0.00	-210.78	-237.86	-239.18	-256.00	-262.83	-248.15
San Joaquin Valley, CA	x	x	50	100	0.00	-79.16	-94.80	-95.96	-105.93	-113.25	-142.91	0.00	-180.11	-203.10	-205.06	-219.58	-225.79	-217.32
Sheboygan, WI	x	-	100	-	0.00	-1.77	-2.12	-2.15	-2.37	-2.53	-3.22	0.00	-4.02	-4.53	-4.58	-4.90	-5.04	-4.88
Springfield (Western MA), MA	x	-	100	-	0.00	-13.67	-16.37	-16.59	-18.31	-19.58	-24.81	0.00	-31.09	-35.05	-35.41	-37.92	-39.00	-37.65
St. Louis, MO-IL	x	x	100	100	0.00	-44.93	-53.77	-54.57	-60.24	-64.46	-82.09	0.00	-102.09	-115.09	-116.37	-124.63	-128.22	-124.25
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.41	-1.69	-1.72	-1.89	-2.03	-2.57	0.00	-3.22	-3.63	-3.66	-3.92	-4.03	-3.89
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-9.20	-11.02	-11.16	-12.32	-13.18	-16.70	0.00	-20.93	-23.59	-23.84	-25.53	-26.25	-25.34
Washington, DC-MD-VA	x	x	100	100	0.00	-77.98	-93.33	-94.67	-104.51	-111.80	-142.11	0.00	-177.23	-199.81	-201.96	-216.29	-222.51	-215.31
Wheeling, WV-OH	-	x	-	100	0.00	-2.30	-2.75	-2.78	-3.07	-3.29	-4.17	0.00	-5.22	-5.88	-5.95	-6.37	-6.55	-6.32
York, PA	-	x	-	100	0.00	-6.52	-7.80	-7.91	-8.73	-9.33	-11.83	0.00	-14.82	-16.71	-16.88	-18.07	-18.59	-17.95

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-68
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Diesel PM 10 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-26.98	-32.02	-32.27	-35.51	-37.53	-47.91	0.00	-72.10	-80.40	-81.00	-86.26	-87.77	-80.97
Allegan Co., MI	x	-	100	-	0.00	-2.94	-3.48	-3.51	-3.86	-4.08	-5.21	0.00	-7.84	-8.75	-8.81	-9.39	-9.55	-8.81
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-3.45	-4.09	-4.13	-4.54	-4.80	-6.13	0.00	-9.22	-10.28	-10.35	-11.03	-11.22	-10.35
Atlanta, GA	x	x	100	100	0.00	-214.61	-254.70	-256.69	-282.42	-298.48	-380.94	0.00	-573.53	-639.55	-644.28	-686.13	-698.07	-643.86
Baltimore, MD	x	x	100	100	0.00	-58.66	-69.61	-70.18	-77.22	-81.62	-104.34	0.00	-156.71	-174.74	-176.08	-187.52	-190.80	-176.18
Baton Rouge, LA	x	-	100	-	0.00	-14.84	-17.61	-17.75	-19.53	-20.64	-26.36	0.00	-39.65	-44.22	-44.55	-47.44	-48.27	-44.53
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-7.73	-9.17	-9.25	-10.17	-10.75	-13.75	0.00	-20.64	-23.02	-23.19	-24.70	-25.13	-23.22
Birmingham, AL	-	x	-	100	0.00	-20.01	-23.76	-23.93	-26.33	-27.82	-35.44	0.00	-53.50	-59.67	-60.09	-63.99	-65.10	-59.97
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-83.04	-98.54	-99.33	-109.29	-115.51	-147.54	0.00	-221.88	-247.42	-249.27	-265.47	-270.10	-249.25
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-12.23	-14.53	-14.57	-16.03	-16.92	-21.21	0.00	-32.78	-36.57	-36.75	-39.12	-39.76	-36.24
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-19.16	-22.74	-22.92	-25.22	-26.65	-34.04	0.00	-51.19	-57.08	-57.51	-61.25	-62.32	-57.51
Canton-Massillon, OH	-	x	-	100	0.00	-5.54	-6.58	-6.63	-7.29	-7.71	-9.84	0.00	-14.81	-16.52	-16.64	-17.72	-18.03	-16.63
Charleston, WV	-	x	-	100	0.00	-4.76	-5.65	-5.70	-6.27	-6.62	-8.45	0.00	-12.72	-14.19	-14.30	-15.22	-15.49	-14.29
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-48.82	-58.04	-58.10	-63.91	-67.39	-83.99	0.00	-130.96	-146.13	-146.72	-156.19	-158.68	-144.05
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-10.12	-11.99	-12.15	-13.37	-14.16	-18.42	0.00	-26.95	-30.04	-30.34	-32.32	-32.93	-30.77
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-140.73	-167.61	-166.72	-183.35	-192.97	-235.12	0.00	-378.85	-422.96	-423.43	-450.60	-457.16	-408.94
Chico, CA	x	-	100	-	0.00	-3.89	-4.62	-4.65	-5.12	-5.41	-6.91	0.00	-10.39	-11.59	-11.68	-12.43	-12.65	-11.67
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-37.85	-44.95	-45.21	-49.74	-52.54	-66.63	0.00	-101.27	-112.95	-113.68	-121.05	-123.11	-113.06
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-2.76	-3.28	-3.30	-3.63	-3.84	-4.91	0.00	-7.38	-8.23	-8.29	-8.83	-8.98	-8.29
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-45.23	-53.67	-54.10	-59.52	-62.91	-80.34	0.00	-120.85	-134.76	-135.77	-144.59	-147.11	-135.74
Columbus, OH	x	x	100	100	0.00	-39.32	-46.67	-47.04	-51.75	-54.69	-69.81	0.00	-105.09	-117.19	-118.06	-125.72	-127.91	-117.98
Dallas-Fort Worth, TX	x	-	100	-	0.00	-194.94	-231.36	-233.17	-256.55	-271.14	-346.12	0.00	-520.94	-580.91	-585.23	-623.24	-634.10	-584.93
Dayton-Springfield, OH	-	x	-	100	0.00	-13.79	-16.37	-16.50	-18.15	-19.19	-24.49	0.00	-36.86	-41.11	-41.41	-44.10	-44.87	-41.39
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-78.43	-93.09	-93.79	-103.19	-109.05	-139.04	0.00	-209.64	-233.78	-235.48	-250.77	-255.12	-235.15
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-88.34	-104.84	-105.67	-116.26	-122.88	-156.89	0.00	-236.07	-263.24	-265.21	-282.43	-287.36	-265.11
Door Co., WI	x	-	100	-	0.00	-0.56	-0.66	-0.67	-0.73	-0.78	-0.99	0.00	-1.49	-1.66	-1.68	-1.78	-1.82	-1.68
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.02	-0.03	-0.03	-0.03	-0.03	-0.04	0.00	-0.06	-0.07	-0.07	-0.07	-0.08	-0.07
Evansville, IN	-	x	-	100	0.00	-6.23	-7.41	-7.40	-8.14	-8.57	-10.57	0.00	-16.74	-18.68	-18.73	-19.94	-20.24	-18.25
Greater Connecticut, CT	x	-	100	-	0.00	-34.49	-40.92	-41.27	-45.41	-48.00	-61.43	0.00	-92.12	-102.72	-103.52	-110.25	-112.19	-103.66
Greene Co., PA	x	-	100	-	0.00	-0.60	-0.71	-0.71	-0.79	-0.83	-1.06	0.00	-1.60	-1.78	-1.79	-1.91	-1.94	-1.79
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-15.68	-18.61	-18.75	-20.63	-21.81	-27.84	0.00	-41.90	-46.72	-47.07	-50.12	-51.00	-47.04

**Table B2-68
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Diesel PM 10 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-13.41	-15.92	-16.04	-17.65	-18.65	-23.82	0.00	-35.84	-39.96	-40.26	-42.88	-43.62	-40.25
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.09	-0.10	-0.10	-0.11	-0.12	-0.14	0.00	-0.23	-0.26	-0.26	-0.28	-0.28	-0.25
Hickory, NC	-	x	-	100	0.00	-3.97	-4.71	-4.75	-5.22	-5.52	-7.06	0.00	-10.60	-11.82	-11.91	-12.68	-12.90	-11.92
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-115.40	-136.95	-138.03	-151.87	-160.50	-204.90	0.00	-308.38	-343.87	-346.43	-368.93	-375.36	-346.26
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-5.94	-7.15	-6.86	-7.53	-7.84	-8.25	0.00	-16.32	-18.28	-17.99	-19.11	-19.24	-15.75
Imperial Co., CA	x	-	100	-	0.00	-6.50	-7.72	-7.78	-8.56	-9.05	-11.55	0.00	-17.38	-19.38	-19.52	-20.79	-21.15	-19.51
Indianapolis, IN	-	x	-	100	0.00	-36.68	-43.53	-43.87	-48.27	-51.02	-65.13	0.00	-98.02	-109.31	-110.12	-117.27	-119.31	-110.06
Jamestown, NY	x	-	100	-	0.00	-2.53	-3.00	-3.02	-3.33	-3.52	-4.49	0.00	-6.75	-7.53	-7.59	-8.08	-8.22	-7.59
Jefferson Co., NY	x	-	100	-	0.00	-3.11	-3.69	-3.72	-4.10	-4.33	-5.53	0.00	-8.31	-9.27	-9.34	-9.95	-10.12	-9.34
Johnstown, PA	-	x	-	100	0.00	-1.89	-2.24	-2.26	-2.49	-2.63	-3.37	0.00	-5.04	-5.62	-5.67	-6.04	-6.14	-5.69
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-4.29	-5.05	-5.28	-5.81	-6.22	-8.92	0.00	-11.23	-12.48	-12.81	-13.67	-14.02	-14.05
Knoxville, TN	x	x	100	100	0.00	-22.56	-26.78	-26.98	-29.69	-31.37	-40.02	0.00	-60.30	-67.24	-67.74	-72.13	-73.39	-67.67
Lancaster, PA	-	x	-	100	0.00	-8.01	-9.50	-9.58	-10.54	-11.14	-14.22	0.00	-21.40	-23.86	-24.04	-25.60	-26.05	-24.03
Las Vegas, NV	x	-	100	-	0.00	-46.96	-55.76	-56.10	-61.72	-65.19	-82.69	0.00	-125.63	-140.12	-141.03	-150.18	-152.73	-140.29
Libby, MT	-	x	-	100	0.00	-0.13	-0.16	-0.16	-0.18	-0.19	-0.24	0.00	-0.36	-0.40	-0.40	-0.43	-0.44	-0.40
Liberty-Clairton, PA	-	x	-	100	0.00	-0.20	-0.23	-0.24	-0.26	-0.28	-0.38	0.00	-0.52	-0.58	-0.59	-0.63	-0.64	-0.62
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-353.18	-419.23	-422.25	-464.58	-490.90	-625.31	0.00	-944.15	-1,052.90	-1,060.40	-1,129.23	-1,148.75	-1,058.15
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-19.27	-22.83	-23.15	-25.48	-26.99	-35.21	0.00	-51.30	-57.17	-57.78	-61.55	-62.71	-58.72
Louisville, KY-IN	-	x	-	100	0.00	-19.00	-22.58	-22.67	-24.94	-26.33	-33.17	0.00	-50.89	-56.77	-57.09	-60.79	-61.79	-56.51
Macon, GA	-	x	-	100	0.00	-3.55	-4.22	-4.22	-4.65	-4.90	-6.14	0.00	-9.51	-10.61	-10.66	-11.34	-11.53	-10.50
Manitowoc Co., WI	x	-	-	-	0.00	-1.84	-2.18	-2.20	-2.42	-2.56	-3.28	0.00	-4.90	-5.47	-5.51	-5.87	-5.97	-5.53
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-2.99	-3.55	-3.58	-3.94	-4.16	-5.32	0.00	-7.99	-8.91	-8.98	-9.56	-9.73	-8.98
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-12.71	-15.08	-15.20	-16.72	-17.67	-22.56	0.00	-33.95	-37.86	-38.14	-40.62	-41.33	-38.12
Memphis, TN-AR	x	-	100	-	0.00	-17.54	-20.81	-20.98	-23.08	-24.39	-31.14	0.00	-46.87	-52.26	-52.65	-56.07	-57.05	-52.63
Milwaukee-Racine, WI	x	-	100	-	0.00	-31.70	-37.62	-37.93	-41.73	-44.10	-56.34	0.00	-84.71	-94.46	-95.17	-101.35	-103.12	-95.18
Nevada (Western Part), CA	x	-	100	-	0.00	-2.23	-2.65	-2.67	-2.94	-3.11	-3.98	0.00	-5.97	-6.66	-6.71	-7.14	-7.27	-6.71
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-262.44	-311.45	-313.95	-345.43	-365.09	-466.33	0.00	-701.27	-781.98	-787.86	-839.04	-853.68	-787.81
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-2.52	-2.99	-3.01	-3.31	-3.50	-4.45	0.00	-6.74	-7.52	-7.57	-8.06	-8.20	-7.54
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-142.44	-169.03	-170.43	-187.53	-198.22	-253.43	0.00	-380.55	-424.35	-427.59	-455.38	-463.35	-427.88

**Table B2-68
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Diesel PM 10 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-119.16	-141.54	-142.20	-156.44	-165.17	-208.53	0.00	-319.01	-355.83	-357.92	-381.10	-387.47	-354.80
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-30.75	-36.50	-36.77	-40.46	-42.76	-54.52	0.00	-82.19	-91.66	-92.32	-98.32	-100.02	-92.20
Poughkeepsie, NY	x	x	100	100	0.00	-27.17	-32.24	-32.50	-35.75	-37.79	-48.24	0.00	-72.60	-80.95	-81.56	-86.85	-88.37	-81.52
Providence (All RI), RI	x	-	100	-	0.00	-16.33	-19.38	-19.54	-21.50	-22.72	-29.01	0.00	-43.64	-48.67	-49.03	-52.22	-53.13	-49.02
Reading, PA	-	x	-	100	0.00	-8.02	-9.52	-9.59	-10.55	-11.15	-14.24	0.00	-21.43	-23.90	-24.07	-25.64	-26.08	-24.06
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-32.95	-39.07	-39.48	-43.44	-45.94	-59.14	0.00	-87.92	-98.02	-98.86	-105.30	-107.19	-99.44
Rochester, NY	x	-	100	-	0.00	-23.62	-28.03	-28.25	-31.09	-32.85	-41.95	0.00	-63.12	-70.39	-70.91	-75.51	-76.83	-70.88
Rome, GA	-	x	-	100	0.00	-1.98	-2.35	-2.37	-2.60	-2.75	-3.51	0.00	-5.29	-5.90	-5.94	-6.33	-6.44	-5.94
Sacramento Metro, CA	x	-	50	-	0.00	-54.26	-64.39	-64.93	-71.44	-75.52	-96.57	0.00	-144.97	-161.65	-162.89	-173.48	-176.52	-163.02
San Diego, CA	x	-	100	-	0.00	-52.92	-62.81	-63.30	-69.64	-73.60	-93.95	0.00	-141.42	-157.70	-158.87	-169.19	-172.14	-158.79
San Francisco Bay Area, CA	x	-	100	-	0.00	-117.18	-139.38	-139.33	-153.25	-161.55	-200.43	0.00	-314.57	-351.05	-352.27	-374.98	-380.84	-344.72
San Joaquin Valley, CA	x	x	50	100	0.00	-124.00	-147.24	-148.11	-162.94	-172.11	-218.23	0.00	-331.73	-369.98	-372.38	-396.52	-403.26	-370.33
Sheboygan, WI	x	-	100	-	0.00	-2.26	-2.68	-2.70	-2.97	-3.14	-4.02	0.00	-6.02	-6.72	-6.77	-7.21	-7.34	-6.78
Springfield (Western MA), MA	x	-	100	-	0.00	-17.53	-20.81	-20.97	-23.07	-24.38	-31.13	0.00	-46.85	-52.24	-52.63	-56.05	-57.02	-52.60
St. Louis, MO-IL	x	x	100	100	0.00	-57.53	-68.24	-68.88	-75.79	-80.14	-102.82	0.00	-153.60	-171.26	-172.65	-183.88	-187.15	-173.23
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.61	-1.92	-1.93	-2.12	-2.24	-2.87	0.00	-4.31	-4.81	-4.84	-5.16	-5.25	-4.84
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-11.56	-13.71	-13.82	-15.21	-16.07	-20.52	0.00	-30.88	-34.44	-34.69	-36.94	-37.59	-34.67
Washington, DC-MD-VA	x	x	100	100	0.00	-112.98	-134.05	-135.23	-148.79	-157.30	-201.44	0.00	-301.76	-336.47	-339.12	-361.17	-367.53	-339.77
Wheeling, WV-OH	-	x	-	100	0.00	-2.70	-3.20	-3.22	-3.55	-3.75	-4.79	0.00	-7.20	-8.03	-8.09	-8.62	-8.77	-8.09
York, PA	-	x	-	100	0.00	-9.32	-11.06	-11.15	-12.27	-12.97	-16.56	0.00	-24.91	-27.78	-27.98	-29.80	-30.32	-27.98

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-69
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.32	0.41	0.59	0.71	1.02	3.20	0.00	0.32	0.41	0.59	0.71	1.02	3.20
Allegan Co., MI	x	-	100	-	0.00	0.04	0.04	0.06	0.08	0.11	0.35	0.00	0.04	0.04	0.06	0.08	0.11	0.35
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.03	0.04	0.06	0.07	0.10	0.32	0.00	0.03	0.04	0.06	0.07	0.10	0.32
Atlanta, GA	x	x	100	100	0.00	1.72	2.17	3.13	3.76	5.44	17.04	0.00	1.72	2.17	3.13	3.76	5.44	17.04
Baltimore, MD	x	x	100	100	0.00	0.72	0.90	1.30	1.56	2.26	7.08	0.00	0.72	0.90	1.30	1.56	2.26	7.08
Baton Rouge, LA	x	-	100	-	0.00	-1.40	-1.76	-2.23	-2.53	-2.86	-5.00	0.00	-1.40	-1.76	-2.24	-2.54	-2.86	-5.00
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-3.05	-3.83	-4.92	-5.61	-6.49	-12.36	0.00	-3.06	-3.84	-4.93	-5.62	-6.50	-12.37
Birmingham, AL	-	x	-	100	0.00	0.26	0.33	0.48	0.57	0.83	2.59	0.00	0.26	0.33	0.48	0.57	0.83	2.59
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	1.16	1.46	2.11	2.54	3.67	11.52	0.00	1.16	1.46	2.11	2.54	3.67	11.52
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.16	0.20	0.29	0.34	0.50	1.56	0.00	0.16	0.20	0.29	0.34	0.50	1.56
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.28	0.35	0.51	0.61	0.88	2.77	0.00	0.28	0.35	0.51	0.61	0.88	2.77
Canton-Massillon, OH	-	x	-	100	0.00	-0.12	-0.16	-0.19	-0.20	-0.19	-0.08	0.00	-0.13	-0.16	-0.19	-0.20	-0.19	-0.08
Charleston, WV	-	x	-	100	0.00	0.07	0.09	0.14	0.16	0.24	0.74	0.00	0.07	0.09	0.14	0.16	0.24	0.74
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.45	0.57	0.82	0.99	1.43	4.48	0.00	0.45	0.57	0.82	0.99	1.43	4.48
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.13	0.17	0.24	0.29	0.42	1.33	0.00	0.13	0.17	0.24	0.29	0.42	1.33
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-0.51	-0.64	-0.48	-0.36	0.65	7.83	0.00	-0.52	-0.65	-0.49	-0.37	0.65	7.83
Chico, CA	x	-	100	-	0.00	0.05	0.06	0.09	0.11	0.15	0.48	0.00	0.05	0.06	0.09	0.11	0.15	0.48
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.46	0.58	0.84	1.01	1.46	4.59	0.00	0.46	0.58	0.84	1.01	1.46	4.59
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.04	0.06	0.08	0.10	0.14	0.43	0.00	0.04	0.06	0.08	0.10	0.14	0.43
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.67	0.84	1.21	1.46	2.11	6.61	0.00	0.67	0.84	1.21	1.46	2.11	6.61
Columbus, OH	x	x	100	100	0.00	0.43	0.54	0.78	0.94	1.36	4.27	0.00	0.43	0.54	0.78	0.94	1.36	4.27
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.75	2.20	3.18	3.82	5.52	17.32	0.00	1.75	2.20	3.18	3.82	5.52	17.32
Dayton-Springfield, OH	-	x	-	100	0.00	0.20	0.25	0.37	0.44	0.64	2.00	0.00	0.20	0.25	0.37	0.44	0.64	2.00
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	0.55	0.69	1.04	1.28	1.99	6.90	0.00	0.55	0.69	1.04	1.28	1.99	6.90
Detroit-Ann Arbor, MI	x	x	100	100	0.00	0.94	1.18	1.76	2.14	3.24	10.88	0.00	0.94	1.18	1.76	2.14	3.24	10.88
Door Co., WI	x	-	100	-	0.00	0.01	0.01	0.01	0.02	0.03	0.08	0.00	0.01	0.01	0.01	0.02	0.03	0.08
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.09	0.11	0.16	0.19	0.27	0.86	0.00	0.09	0.11	0.16	0.19	0.27	0.86
Greater Connecticut, CT	x	-	100	-	0.00	0.44	0.56	0.80	0.97	1.40	4.38	0.00	0.44	0.56	0.80	0.97	1.40	4.38
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.02	0.02	0.03	0.10	0.00	0.01	0.01	0.02	0.02	0.03	0.10
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.20	0.25	0.36	0.44	0.63	1.98	0.00	0.20	0.25	0.36	0.44	0.63	1.98

**Table B2-69
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.18	0.23	0.33	0.40	0.57	1.80	0.00	0.18	0.23	0.33	0.40	0.57	1.80
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.05	0.06	0.09	0.10	0.15	0.47	0.00	0.05	0.06	0.09	0.10	0.15	0.47
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-5.16	-6.48	-8.10	-9.13	-9.87	-14.63	0.00	-5.18	-6.50	-8.12	-9.15	-9.89	-14.65
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-0.51	-0.64	-0.81	-0.91	-1.00	-1.55	0.00	-0.51	-0.64	-0.81	-0.91	-1.00	-1.55
Imperial Co., CA	x	-	100	-	0.00	0.06	0.07	0.10	0.12	0.18	0.55	0.00	0.06	0.07	0.10	0.12	0.18	0.55
Indianapolis, IN	-	x	-	100	0.00	0.40	0.51	0.73	0.88	1.27	3.99	0.00	0.40	0.51	0.73	0.88	1.27	3.99
Jamestown, NY	x	-	100	-	0.00	0.04	0.05	0.07	0.08	0.12	0.37	0.00	0.04	0.05	0.07	0.08	0.12	0.37
Jefferson Co., NY	x	-	100	-	0.00	0.03	0.04	0.06	0.08	0.11	0.34	0.00	0.03	0.04	0.06	0.08	0.11	0.34
Johnstown, PA	-	x	-	100	0.00	0.03	0.04	0.06	0.07	0.10	0.30	0.00	0.03	0.04	0.06	0.07	0.10	0.30
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.03	0.04	0.05	0.06	0.09	0.29	0.00	0.03	0.04	0.05	0.06	0.09	0.29
Knoxville, TN	x	x	100	100	0.00	0.27	0.34	0.50	0.60	0.86	2.71	0.00	0.27	0.34	0.50	0.60	0.86	2.71
Lancaster, PA	-	x	-	100	0.00	0.11	0.13	0.19	0.23	0.34	1.06	0.00	0.11	0.13	0.19	0.23	0.34	1.06
Las Vegas, NV	x	-	100	-	0.00	0.35	0.45	0.64	0.77	1.12	3.51	0.00	0.35	0.45	0.64	0.77	1.12	3.51
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	0.23	0.30	1.11	1.66	4.20	21.95	0.00	0.22	0.29	1.10	1.65	4.19	21.95
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.18	0.23	0.33	0.40	0.58	1.81	0.00	0.18	0.23	0.33	0.40	0.58	1.81
Louisville, KY-IN	-	x	-	100	0.00	0.28	0.35	0.51	0.61	0.89	2.78	0.00	0.28	0.35	0.51	0.61	0.89	2.78
Macon, GA	-	x	-	100	0.00	0.05	0.07	0.10	0.11	0.17	0.52	0.00	0.05	0.07	0.10	0.11	0.17	0.52
Manitowoc Co., WI	x	-	-	-	0.00	0.03	0.03	0.05	0.06	0.08	0.27	0.00	0.03	0.03	0.05	0.06	0.08	0.27
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.03	0.03	0.05	0.06	0.08	0.26	0.00	0.03	0.03	0.05	0.06	0.08	0.26
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.10	0.13	0.19	0.22	0.32	1.02	0.00	0.10	0.13	0.19	0.22	0.32	1.02
Memphis, TN-AR	x	-	100	-	0.00	-0.26	-0.32	-0.36	-0.39	-0.30	0.32	0.00	-0.26	-0.32	-0.37	-0.39	-0.31	0.32
Milwaukee-Racine, WI	x	-	100	-	0.00	0.44	0.55	0.80	0.96	1.39	4.37	0.00	0.44	0.55	0.80	0.96	1.39	4.37
Nevada (Western Part), CA	x	-	100	-	0.00	0.02	0.03	0.05	0.05	0.08	0.25	0.00	0.02	0.03	0.05	0.05	0.08	0.25
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	2.74	3.45	5.15	6.28	9.54	32.16	0.00	2.74	3.45	5.15	6.27	9.53	32.16
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.04	0.05	0.07	0.09	0.13	0.39	0.00	0.04	0.05	0.07	0.09	0.13	0.39
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1.59	-1.99	-2.23	-2.36	-1.70	3.07	0.00	-1.59	-2.00	-2.24	-2.37	-1.71	3.06

**Table B2-69
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Formaldehyde 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.98	1.24	1.79	2.15	3.11	9.75	0.00	0.98	1.24	1.79	2.15	3.11	9.75
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.49	0.62	0.89	1.08	1.56	4.88	0.00	0.49	0.62	0.89	1.08	1.56	4.88
Poughkeepsie, NY	x	x	100	100	0.00	0.32	0.40	0.58	0.70	1.01	3.16	0.00	0.32	0.40	0.58	0.70	1.01	3.16
Providence (All RI), RI	x	-	100	-	0.00	0.23	0.29	0.42	0.50	0.73	2.29	0.00	0.23	0.29	0.42	0.50	0.73	2.29
Reading, PA	-	x	-	100	0.00	0.09	0.12	0.17	0.20	0.30	0.93	0.00	0.09	0.12	0.17	0.20	0.30	0.93
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.19	0.23	0.34	0.41	0.59	1.85	0.00	0.19	0.23	0.34	0.41	0.59	1.85
Rochester, NY	x	-	100	-	0.00	0.32	0.41	0.59	0.71	1.02	3.21	0.00	0.32	0.41	0.59	0.71	1.02	3.21
Rome, GA	-	x	-	100	0.00	0.03	0.04	0.05	0.06	0.09	0.28	0.00	0.03	0.04	0.05	0.06	0.09	0.28
Sacramento Metro, CA	x	-	50	-	0.00	0.54	0.68	0.99	1.19	1.72	5.39	0.00	0.54	0.68	0.99	1.19	1.72	5.39
San Diego, CA	x	-	100	-	0.00	0.76	0.96	1.38	1.66	2.40	7.54	0.00	0.76	0.96	1.38	1.66	2.40	7.54
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.19	-0.23	0.03	0.21	1.26	8.66	0.00	-0.19	-0.23	0.02	0.21	1.26	8.65
San Joaquin Valley, CA	x	x	50	100	0.00	0.80	1.01	1.51	1.85	2.83	9.67	0.00	0.80	1.00	1.51	1.85	2.83	9.67
Sheboygan, WI	x	-	100	-	0.00	0.03	0.04	0.05	0.07	0.09	0.30	0.00	0.03	0.04	0.05	0.07	0.09	0.30
Springfield (Western MA), MA	x	-	100	-	0.00	0.23	0.29	0.42	0.51	0.73	2.30	0.00	0.23	0.29	0.42	0.51	0.73	2.30
St. Louis, MO-IL	x	x	100	100	0.00	-0.09	-0.11	0.01	0.09	0.58	3.97	0.00	-0.09	-0.11	0.01	0.09	0.57	3.97
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.03	-0.04	-0.04	-0.04	-0.04	0.03	0.00	-0.03	-0.04	-0.04	-0.04	-0.04	0.03
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.15	0.19	0.28	0.33	0.49	1.55	0.00	0.15	0.19	0.28	0.33	0.49	1.55
Washington, DC-MD-VA	x	x	100	100	0.00	1.22	1.54	2.22	2.67	3.86	12.11	0.00	1.22	1.54	2.22	2.67	3.86	12.11
Wheeling, WV-OH	-	x	-	100	0.00	0.04	0.05	0.08	0.09	0.13	0.42	0.00	0.04	0.05	0.08	0.09	0.13	0.42
York, PA	-	x	-	100	0.00	0.10	0.12	0.18	0.22	0.31	0.98	0.00	0.10	0.12	0.18	0.22	0.31	0.98

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-70
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	1.08	1.12	1.50	1.95	2.57	8.87	0.00	1.31	1.36	1.80	2.31	3.01	9.26
Allegan Co., MI	x	-	100	-	0.00	0.12	0.12	0.16	0.21	0.28	0.97	0.00	0.14	0.15	0.20	0.25	0.33	1.01
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.11	0.12	0.16	0.21	0.27	0.94	0.00	0.14	0.14	0.19	0.24	0.32	0.98
Atlanta, GA	x	x	100	100	0.00	6.28	6.48	8.72	11.32	14.90	51.40	0.00	7.59	7.91	10.42	13.41	17.45	53.67
Baltimore, MD	x	x	100	100	0.00	2.38	2.46	3.31	4.29	5.65	19.50	0.00	2.88	3.00	3.95	5.09	6.62	20.36
Baton Rouge, LA	x	-	100	-	0.00	-4.33	-5.13	-6.13	-6.70	-7.31	-11.78	0.00	-7.39	-8.40	-9.50	-10.21	-10.81	-14.09
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-9.52	-11.15	-13.45	-14.92	-16.61	-30.23	0.00	-15.85	-17.92	-20.45	-22.26	-23.99	-35.18
Birmingham, AL	-	x	-	100	0.00	0.85	0.88	1.18	1.53	2.02	6.96	0.00	1.03	1.07	1.41	1.82	2.36	7.27
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	3.74	3.85	5.19	6.73	8.86	30.56	0.00	4.51	4.70	6.19	7.97	10.38	31.91
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.52	0.54	0.73	0.94	1.24	4.27	0.00	0.63	0.66	0.87	1.12	1.45	4.46
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.89	0.92	1.24	1.61	2.12	7.30	0.00	1.08	1.12	1.48	1.91	2.48	7.63
Canton-Massillon, OH	-	x	-	100	0.00	-0.38	-0.48	-0.55	-0.55	-0.52	-0.05	0.00	-0.75	-0.87	-0.94	-0.94	-0.91	-0.29
Charleston, WV	-	x	-	100	0.00	0.23	0.24	0.33	0.42	0.56	1.92	0.00	0.28	0.29	0.39	0.50	0.65	2.00
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	1.63	1.68	2.26	2.93	3.86	13.30	0.00	1.96	2.05	2.70	3.47	4.52	13.89
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.43	0.45	0.60	0.78	1.03	3.54	0.00	0.52	0.55	0.72	0.92	1.20	3.70
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1.26	-2.26	-1.91	-0.65	1.34	24.25	0.00	-4.67	-5.89	-5.46	-4.09	-1.71	22.70
Chico, CA	x	-	100	-	0.00	0.16	0.17	0.22	0.29	0.38	1.32	0.00	0.19	0.20	0.27	0.34	0.45	1.37
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	1.52	1.57	2.11	2.74	3.60	12.43	0.00	1.83	1.91	2.52	3.24	4.22	12.98
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.14	0.14	0.19	0.25	0.32	1.12	0.00	0.17	0.17	0.23	0.29	0.38	1.17
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	2.12	2.19	2.95	3.82	5.03	17.36	0.00	2.56	2.67	3.52	4.53	5.89	18.12
Columbus, OH	x	x	100	100	0.00	1.47	1.51	2.04	2.64	3.48	12.00	0.00	1.77	1.85	2.43	3.13	4.07	12.53
Dallas-Fort Worth, TX	x	-	100	-	0.00	6.23	6.43	8.65	11.22	14.77	50.95	0.00	7.52	7.84	10.33	13.29	17.30	53.20
Dayton-Springfield, OH	-	x	-	100	0.00	0.65	0.67	0.90	1.16	1.53	5.28	0.00	0.78	0.81	1.07	1.38	1.79	5.51
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	1.97	1.92	2.72	3.73	5.17	20.10	0.00	2.01	1.98	2.88	4.04	5.68	20.68
Detroit-Ann Arbor, MI	x	x	100	100	0.00	3.06	3.04	4.23	5.71	7.79	29.28	0.00	3.31	3.33	4.66	6.36	8.72	30.25
Door Co., WI	x	-	100	-	0.00	0.03	0.03	0.04	0.05	0.06	0.21	0.00	0.03	0.03	0.04	0.06	0.07	0.22
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.28	0.29	0.39	0.51	0.67	2.32	0.00	0.34	0.36	0.47	0.61	0.79	2.42
Greater Connecticut, CT	x	-	100	-	0.00	1.46	1.50	2.02	2.63	3.46	11.92	0.00	1.76	1.83	2.42	3.11	4.05	12.45
Greene Co., PA	x	-	100	-	0.00	0.03	0.03	0.04	0.06	0.07	0.26	0.00	0.04	0.04	0.05	0.07	0.09	0.27
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.66	0.68	0.92	1.19	1.57	5.41	0.00	0.80	0.83	1.10	1.41	1.84	5.64

**Table B2-70
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.59	0.61	0.82	1.06	1.40	4.83	0.00	0.71	0.74	0.98	1.26	1.64	5.04
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.01	0.03
Hickory, NC	-	x	-	100	0.00	0.16	0.16	0.22	0.28	0.37	1.29	0.00	0.19	0.20	0.26	0.34	0.44	1.35
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-15.85	-19.06	-22.47	-23.98	-25.36	-32.08	0.00	-28.04	-32.10	-35.82	-37.79	-38.98	-40.89
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-1.59	-1.90	-2.26	-2.43	-2.60	-3.63	0.00	-2.78	-3.18	-3.56	-3.78	-3.94	-4.50
Imperial Co., CA	x	-	100	-	0.00	0.20	0.21	0.28	0.37	0.48	1.66	0.00	0.25	0.26	0.34	0.43	0.57	1.74
Indianapolis, IN	-	x	-	100	0.00	1.37	1.41	1.90	2.46	3.24	11.18	0.00	1.65	1.72	2.27	2.92	3.79	11.67
Jamestown, NY	x	-	100	-	0.00	0.12	0.12	0.16	0.21	0.28	0.97	0.00	0.14	0.15	0.20	0.25	0.33	1.01
Jefferson Co., NY	x	-	100	-	0.00	0.12	0.12	0.16	0.21	0.28	0.97	0.00	0.14	0.15	0.20	0.25	0.33	1.01
Johnstown, PA	-	x	-	100	0.00	0.09	0.10	0.13	0.17	0.22	0.78	0.00	0.11	0.12	0.16	0.20	0.26	0.81
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.11	0.11	0.15	0.19	0.25	0.87	0.00	0.13	0.13	0.18	0.23	0.30	0.91
Knoxville, TN	x	x	100	100	0.00	0.91	0.94	1.27	1.65	2.17	7.48	0.00	1.10	1.15	1.52	1.95	2.54	7.81
Lancaster, PA	-	x	-	100	0.00	0.35	0.36	0.48	0.63	0.83	2.86	0.00	0.42	0.44	0.58	0.75	0.97	2.98
Las Vegas, NV	x	-	100	-	0.00	1.34	1.38	1.86	2.41	3.17	10.95	0.00	1.62	1.68	2.22	2.86	3.72	11.43
Libby, MT	-	x	-	100	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.08	0.00	0.01	0.01	0.02	0.02	0.03	0.09
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	1.83	0.43	2.29	5.76	10.92	67.52	0.00	-2.58	-4.24	-2.10	1.78	7.80	66.52
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.64	0.66	0.89	1.16	1.52	5.25	0.00	0.77	0.81	1.06	1.37	1.78	5.48
Louisville, KY-IN	-	x	-	100	0.00	0.90	0.93	1.25	1.62	2.13	7.35	0.00	1.08	1.13	1.49	1.92	2.50	7.68
Macon, GA	-	x	-	100	0.00	0.17	0.17	0.23	0.30	0.40	1.38	0.00	0.20	0.21	0.28	0.36	0.47	1.44
Manitowoc Co., WI	x	-	-	-	0.00	0.09	0.09	0.12	0.15	0.20	0.70	0.00	0.10	0.11	0.14	0.18	0.24	0.73
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.09	0.10	0.13	0.17	0.22	0.78	0.00	0.11	0.12	0.16	0.20	0.26	0.81
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.38	0.39	0.53	0.68	0.90	3.10	0.00	0.46	0.48	0.63	0.81	1.05	3.23
Memphis, TN-AR	x	-	100	-	0.00	-0.78	-1.01	-1.11	-1.04	-0.89	1.27	0.00	-1.63	-1.93	-2.03	-1.97	-1.76	0.75
Milwaukee-Racine, WI	x	-	100	-	0.00	1.42	1.47	1.97	2.56	3.37	11.63	0.00	1.72	1.79	2.36	3.03	3.95	12.14
Nevada (Western Part), CA	x	-	100	-	0.00	0.09	0.09	0.12	0.15	0.20	0.70	0.00	0.10	0.11	0.14	0.18	0.24	0.73
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	8.95	8.86	12.36	16.75	22.91	86.68	0.00	9.58	9.59	13.52	18.56	25.55	89.49
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.12	0.13	0.17	0.22	0.30	1.02	0.00	0.15	0.16	0.21	0.27	0.35	1.06
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-4.61	-6.15	-6.64	-5.96	-4.65	12.48	0.00	-10.15	-12.06	-12.55	-11.88	-10.22	9.23

**Table B2-70
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Formaldehyde 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	3.64	3.76	5.06	6.56	8.64	29.80	0.00	4.40	4.58	6.04	7.77	10.12	31.11
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	1.54	1.58	2.13	2.77	3.64	12.56	0.00	1.85	1.93	2.55	3.28	4.26	13.12
Poughkeepsie, NY	x	x	100	100	0.00	1.08	1.11	1.49	1.94	2.55	8.80	0.00	1.30	1.35	1.78	2.30	2.99	9.19
Providence (All RI), RI	x	-	100	-	0.00	0.74	0.77	1.03	1.34	1.76	6.08	0.00	0.90	0.94	1.23	1.59	2.06	6.35
Reading, PA	-	x	-	100	0.00	0.32	0.33	0.44	0.57	0.75	2.59	0.00	0.38	0.40	0.53	0.68	0.88	2.71
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.75	0.78	1.04	1.35	1.78	6.15	0.00	0.91	0.95	1.25	1.60	2.09	6.42
Rochester, NY	x	-	100	-	0.00	1.05	1.08	1.46	1.89	2.49	8.58	0.00	1.27	1.32	1.74	2.24	2.91	8.96
Rome, GA	-	x	-	100	0.00	0.09	0.09	0.13	0.16	0.22	0.74	0.00	0.11	0.11	0.15	0.19	0.25	0.78
Sacramento Metro, CA	x	-	50	-	0.00	1.89	1.95	2.63	3.41	4.49	15.49	0.00	2.29	2.38	3.14	4.04	5.26	16.17
San Diego, CA	x	-	100	-	0.00	2.44	2.52	3.39	4.39	5.78	19.96	0.00	2.95	3.07	4.04	5.21	6.77	20.84
San Francisco Bay Area, CA	x	-	100	-	0.00	-0.39	-1.18	-0.67	0.62	2.60	24.92	0.00	-3.02	-3.98	-3.38	-1.96	0.38	23.90
San Joaquin Valley, CA	x	x	50	100	0.00	3.03	3.00	4.19	5.68	7.78	29.52	0.00	3.23	3.23	4.57	6.29	8.67	30.47
Sheboygan, WI	x	-	100	-	0.00	0.10	0.10	0.14	0.18	0.23	0.80	0.00	0.12	0.12	0.16	0.21	0.27	0.84
Springfield (Western MA), MA	x	-	100	-	0.00	0.76	0.78	1.05	1.37	1.80	6.22	0.00	0.92	0.96	1.26	1.62	2.11	6.49
St. Louis, MO-IL	x	x	100	100	0.00	-0.19	-0.56	-0.32	0.26	1.17	11.41	0.00	-1.41	-1.85	-1.58	-0.93	0.14	10.93
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.09	-0.12	-0.13	-0.13	-0.11	0.10	0.00	-0.19	-0.22	-0.24	-0.23	-0.21	0.04
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.49	0.50	0.68	0.89	1.18	4.15	0.00	0.58	0.60	0.80	1.05	1.37	4.32
Washington, DC-MD-VA	x	x	100	100	0.00	4.13	4.26	5.73	7.44	9.79	33.78	0.00	4.98	5.20	6.85	8.81	11.47	35.27
Wheeling, WV-OH	-	x	-	100	0.00	0.13	0.14	0.19	0.24	0.32	1.09	0.00	0.16	0.17	0.22	0.28	0.37	1.14
York, PA	-	x	-	100	0.00	0.34	0.35	0.48	0.62	0.81	2.80	0.00	0.41	0.43	0.57	0.73	0.95	2.93

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-71
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	1.66	1.66	2.23	2.90	3.72	12.94	0.00	2.32	2.39	3.09	3.94	4.97	14.14
Allegan Co., MI	x	-	100	-	0.00	0.18	0.18	0.24	0.32	0.41	1.41	0.00	0.25	0.26	0.34	0.43	0.54	1.54
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.19	0.19	0.25	0.33	0.42	1.46	0.00	0.26	0.27	0.35	0.44	0.56	1.59
Atlanta, GA	x	x	100	100	0.00	10.60	10.60	14.22	18.49	23.77	82.66	0.00	14.84	15.26	19.72	25.15	31.77	90.31
Baltimore, MD	x	x	100	100	0.00	3.63	3.63	4.87	6.34	8.14	28.32	0.00	5.08	5.23	6.76	8.62	10.89	30.94
Baton Rouge, LA	x	-	100	-	0.00	-6.80	-7.94	-9.35	-10.14	-10.98	-17.45	0.00	-14.89	-16.58	-18.24	-19.41	-20.23	-23.41
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-14.96	-17.24	-20.50	-22.61	-24.94	-44.95	0.00	-31.73	-35.20	-39.07	-42.06	-44.50	-57.86
Birmingham, AL	-	x	-	100	0.00	1.27	1.27	1.71	2.22	2.85	9.93	0.00	1.78	1.83	2.37	3.02	3.82	10.85
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	5.50	5.50	7.37	9.59	12.33	42.87	0.00	7.70	7.92	10.23	13.04	16.48	46.83
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.79	0.79	1.06	1.38	1.78	6.18	0.00	1.11	1.14	1.47	1.88	2.37	6.75
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	1.30	1.30	1.75	2.27	2.92	10.15	0.00	1.82	1.87	2.42	3.09	3.90	11.09
Canton-Massillon, OH	-	x	-	100	0.00	-0.63	-0.78	-0.87	-0.87	-0.85	-0.25	0.00	-1.58	-1.79	-1.90	-1.92	-1.86	-0.84
Charleston, WV	-	x	-	100	0.00	0.34	0.34	0.45	0.58	0.75	2.61	0.00	0.47	0.48	0.62	0.80	1.00	2.86
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	2.68	2.68	3.59	4.67	6.01	20.89	0.00	3.75	3.86	4.98	6.35	8.03	22.82
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.64	0.64	0.86	1.12	1.44	5.00	0.00	0.90	0.92	1.19	1.52	1.92	5.46
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-2.18	-3.84	-3.24	-1.28	1.35	34.95	0.00	-10.88	-13.04	-12.20	-9.94	-6.29	31.84
Chico, CA	x	-	100	-	0.00	0.24	0.24	0.33	0.43	0.55	1.90	0.00	0.34	0.35	0.45	0.58	0.73	2.08
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	2.31	2.31	3.10	4.03	5.18	18.00	0.00	3.23	3.32	4.29	5.48	6.92	19.66
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.20	0.20	0.26	0.34	0.44	1.53	0.00	0.27	0.28	0.36	0.46	0.59	1.67
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	3.08	3.08	4.14	5.38	6.92	24.05	0.00	4.32	4.44	5.74	7.32	9.24	26.27
Columbus, OH	x	x	100	100	0.00	2.29	2.29	3.07	3.99	5.14	17.86	0.00	3.21	3.30	4.26	5.43	6.86	19.51
Dallas-Fort Worth, TX	x	-	100	-	0.00	10.22	10.21	13.70	17.82	22.91	79.66	0.00	14.30	14.71	19.00	24.23	30.62	87.03
Dayton-Springfield, OH	-	x	-	100	0.00	0.94	0.94	1.26	1.64	2.11	7.33	0.00	1.32	1.35	1.75	2.23	2.82	8.01
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	3.14	2.95	4.17	5.76	7.75	30.45	0.00	3.49	3.38	4.90	6.89	9.43	32.54
Detroit-Ann Arbor, MI	x	x	100	100	0.00	4.45	4.24	5.92	8.06	10.73	41.03	0.00	5.26	5.19	7.27	9.96	13.35	44.05
Door Co., WI	x	-	100	-	0.00	0.04	0.04	0.05	0.07	0.09	0.30	0.00	0.05	0.05	0.07	0.09	0.11	0.32
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.42	0.42	0.57	0.74	0.95	3.31	0.00	0.59	0.61	0.79	1.01	1.27	3.62
Greater Connecticut, CT	x	-	100	-	0.00	2.19	2.19	2.94	3.82	4.92	17.10	0.00	3.07	3.16	4.08	5.20	6.57	18.68
Greene Co., PA	x	-	100	-	0.00	0.04	0.04	0.06	0.08	0.10	0.34	0.00	0.06	0.06	0.08	0.10	0.13	0.37
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	1.00	1.00	1.34	1.74	2.23	7.77	0.00	1.39	1.43	1.85	2.36	2.99	8.49

**Table B2-71
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.88	0.88	1.18	1.53	1.97	6.84	0.00	1.23	1.26	1.63	2.08	2.63	7.47
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.01	0.05	0.00	0.01	0.01	0.01	0.01	0.02	0.05
Hickory, NC	-	x	-	100	0.00	0.24	0.24	0.33	0.42	0.54	1.89	0.00	0.34	0.35	0.45	0.58	0.73	2.07
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-24.93	-29.60	-34.34	-36.35	-38.29	-47.63	0.00	-56.99	-63.86	-69.38	-72.60	-74.03	-69.95
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-2.53	-2.99	-3.49	-3.73	-3.99	-5.63	0.00	-5.68	-6.34	-6.93	-7.31	-7.53	-7.87
Imperial Co., CA	x	-	100	-	0.00	0.34	0.34	0.45	0.59	0.76	2.64	0.00	0.47	0.49	0.63	0.80	1.02	2.89
Indianapolis, IN	-	x	-	100	0.00	2.13	2.13	2.86	3.72	4.78	16.62	0.00	2.98	3.07	3.96	5.06	6.39	18.16
Jamestown, NY	x	-	100	-	0.00	0.17	0.17	0.23	0.30	0.39	1.35	0.00	0.24	0.25	0.32	0.41	0.52	1.47
Jefferson Co., NY	x	-	100	-	0.00	0.18	0.18	0.25	0.32	0.41	1.44	0.00	0.26	0.27	0.34	0.44	0.55	1.57
Johnstown, PA	-	x	-	100	0.00	0.13	0.13	0.18	0.23	0.30	1.05	0.00	0.19	0.19	0.25	0.32	0.40	1.15
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.18	0.18	0.24	0.31	0.39	1.37	0.00	0.25	0.25	0.33	0.42	0.53	1.50
Knoxville, TN	x	x	100	100	0.00	1.40	1.40	1.87	2.44	3.13	10.89	0.00	1.95	2.01	2.60	3.31	4.18	11.89
Lancaster, PA	-	x	-	100	0.00	0.52	0.52	0.70	0.91	1.17	4.06	0.00	0.73	0.75	0.97	1.24	1.56	4.44
Las Vegas, NV	x	-	100	-	0.00	2.31	2.31	3.10	4.03	5.17	18.00	0.00	3.23	3.32	4.29	5.47	6.92	19.66
Libby, MT	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.07	0.00	0.01	0.01	0.02	0.02	0.03	0.07
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.11	0.00	0.02	0.02	0.03	0.03	0.04	0.12
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	3.00	0.48	3.53	9.07	16.20	102.39	0.00	-7.70	-10.74	-6.81	-0.13	9.36	102.20
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	1.03	1.03	1.38	1.80	2.31	8.04	0.00	1.44	1.48	1.92	2.44	3.09	8.78
Louisville, KY-IN	-	x	-	100	0.00	1.31	1.31	1.76	2.29	2.94	10.24	0.00	1.84	1.89	2.44	3.11	3.93	11.19
Macon, GA	-	x	-	100	0.00	0.25	0.25	0.33	0.43	0.55	1.92	0.00	0.34	0.35	0.46	0.58	0.74	2.10
Manitowoc Co., WI	x	-	-	-	0.00	0.12	0.12	0.17	0.22	0.28	0.97	0.00	0.17	0.18	0.23	0.30	0.37	1.06
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.16	0.16	0.21	0.27	0.35	1.23	0.00	0.22	0.23	0.29	0.37	0.47	1.34
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.64	0.64	0.86	1.11	1.43	4.98	0.00	0.89	0.92	1.19	1.52	1.92	5.44
Memphis, TN-AR	x	-	100	-	0.00	-1.30	-1.66	-1.81	-1.71	-1.53	1.35	0.00	-3.54	-4.05	-4.21	-4.13	-3.83	0.07
Milwaukee-Racine, WI	x	-	100	-	0.00	2.10	2.10	2.81	3.66	4.70	16.35	0.00	2.93	3.02	3.90	4.97	6.28	17.86
Nevada (Western Part), CA	x	-	100	-	0.00	0.13	0.13	0.18	0.23	0.30	1.03	0.00	0.19	0.19	0.25	0.31	0.40	1.13
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	12.97	12.32	17.27	23.61	31.52	121.41	0.00	15.11	14.82	20.95	28.91	38.97	130.16
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.18	0.18	0.24	0.31	0.40	1.39	0.00	0.25	0.26	0.33	0.42	0.54	1.52
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-7.48	-9.89	-10.51	-9.39	-7.73	17.13	0.00	-21.85	-25.17	-25.76	-24.68	-22.08	9.49

**Table B2-71
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Formaldehyde 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	6.15	6.15	8.25	10.73	13.80	47.98	0.00	8.61	8.86	11.45	14.59	18.44	52.41
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	2.19	2.19	2.93	3.82	4.91	17.06	0.00	3.06	3.15	4.07	5.19	6.56	18.64
Poughkeepsie, NY	x	x	100	100	0.00	1.66	1.66	2.22	2.89	3.71	12.92	0.00	2.32	2.39	3.08	3.93	4.96	14.11
Providence (All RI), RI	x	-	100	-	0.00	1.09	1.09	1.46	1.91	2.45	8.52	0.00	1.53	1.57	2.03	2.59	3.27	9.30
Reading, PA	-	x	-	100	0.00	0.49	0.49	0.65	0.85	1.09	3.81	0.00	0.68	0.70	0.91	1.16	1.46	4.16
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	1.38	1.38	1.86	2.41	3.10	10.79	0.00	1.94	1.99	2.57	3.28	4.15	11.79
Rochester, NY	x	-	100	-	0.00	1.55	1.55	2.08	2.71	3.48	12.12	0.00	2.18	2.24	2.89	3.69	4.66	13.24
Rome, GA	-	x	-	100	0.00	0.13	0.13	0.18	0.23	0.30	1.04	0.00	0.19	0.19	0.25	0.32	0.40	1.13
Sacramento Metro, CA	x	-	50	-	0.00	3.02	3.02	4.06	5.28	6.78	23.58	0.00	4.23	4.35	5.63	7.17	9.06	25.77
San Diego, CA	x	-	100	-	0.00	3.57	3.57	4.79	6.23	8.01	27.85	0.00	5.00	5.14	6.64	8.47	10.70	30.42
San Francisco Bay Area, CA	x	-	100	-	0.00	-1.06	-2.40	-1.68	0.20	2.69	33.95	0.00	-7.84	-9.57	-8.59	-6.39	-2.98	31.94
San Joaquin Valley, CA	x	x	50	100	0.00	5.09	4.87	6.79	9.23	12.27	46.79	0.00	6.06	5.99	8.37	11.43	15.30	50.25
Sheboygan, WI	x	-	100	-	0.00	0.15	0.15	0.20	0.25	0.33	1.14	0.00	0.20	0.21	0.27	0.35	0.44	1.24
Springfield (Western MA), MA	x	-	100	-	0.00	1.14	1.13	1.52	1.98	2.55	8.85	0.00	1.59	1.63	2.11	2.69	3.40	9.67
St. Louis, MO-IL	x	x	100	100	0.00	-0.50	-1.13	-0.80	0.07	1.21	15.56	0.00	-3.64	-4.44	-3.99	-2.98	-1.42	14.62
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.16	-0.20	-0.22	-0.21	-0.20	0.05	0.00	-0.41	-0.47	-0.49	-0.49	-0.47	-0.10
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.73	0.72	0.97	1.27	1.65	5.84	0.00	0.99	1.01	1.32	1.71	2.18	6.36
Washington, DC-MD-VA	x	x	100	100	0.00	6.44	6.44	8.64	11.23	14.44	50.22	0.00	9.02	9.27	11.98	15.28	19.30	54.87
Wheeling, WV-OH	-	x	-	100	0.00	0.19	0.19	0.26	0.33	0.43	1.49	0.00	0.27	0.27	0.35	0.45	0.57	1.62
York, PA	-	x	-	100	0.00	0.54	0.54	0.73	0.94	1.21	4.22	0.00	0.76	0.78	1.01	1.28	1.62	4.61

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-72
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

Formaldehyde 2035

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	2.21	2.18	2.91	3.76	4.78	16.55	0.00	3.52	3.63	4.60	5.76	7.13	19.00
Allegan Co., MI	x	-	100	-	0.00	0.24	0.24	0.32	0.41	0.52	1.80	0.00	0.38	0.40	0.50	0.63	0.78	2.07
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.28	0.28	0.37	0.48	0.61	2.11	0.00	0.45	0.46	0.59	0.74	0.91	2.43
Atlanta, GA	x	x	100	100	0.00	17.58	17.35	23.15	29.94	38.03	131.75	0.00	28.03	28.90	36.62	45.81	56.76	151.19
Baltimore, MD	x	x	100	100	0.00	4.79	4.73	6.31	8.16	10.36	35.91	0.00	7.64	7.88	9.98	12.49	15.47	41.21
Baton Rouge, LA	x	-	100	-	0.00	-9.56	-11.04	-12.85	-13.89	-14.98	-23.73	0.00	-24.35	-26.84	-29.11	-30.85	-31.89	-34.45
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-21.06	-24.02	-28.26	-31.06	-34.08	-61.38	0.00	-51.92	-57.03	-62.40	-66.85	-70.06	-84.98
Birmingham, AL	-	x	-	100	0.00	1.65	1.62	2.17	2.80	3.56	12.33	0.00	2.62	2.70	3.43	4.29	5.31	14.15
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	6.79	6.70	8.94	11.57	14.69	50.91	0.00	10.83	11.17	14.15	17.70	21.93	58.42
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	1.03	1.02	1.36	1.76	2.23	7.73	0.00	1.64	1.70	2.15	2.69	3.33	8.87
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	1.57	1.55	2.06	2.67	3.39	11.74	0.00	2.50	2.58	3.26	4.08	5.06	13.48
Canton-Massillon, OH	-	x	-	100	0.00	-0.95	-1.15	-1.29	-1.31	-1.32	-0.89	0.00	-2.71	-3.02	-3.19	-3.26	-3.21	-1.96
Charleston, WV	-	x	-	100	0.00	0.39	0.38	0.51	0.66	0.84	2.92	0.00	0.62	0.64	0.81	1.02	1.26	3.35
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	4.16	4.10	5.48	7.08	9.00	31.17	0.00	6.63	6.84	8.66	10.84	13.43	35.77
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.80	0.79	1.05	1.36	1.73	6.00	0.00	1.28	1.32	1.67	2.09	2.58	6.89
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-3.30	-5.60	-4.74	-2.14	1.17	45.13	0.00	-18.56	-21.67	-20.31	-17.28	-12.17	41.26
Chico, CA	x	-	100	-	0.00	0.32	0.31	0.42	0.54	0.69	2.39	0.00	0.51	0.52	0.66	0.83	1.03	2.74
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	3.14	3.09	4.13	5.34	6.78	23.49	0.00	5.00	5.15	6.53	8.17	10.12	26.96
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.23	0.22	0.30	0.38	0.49	1.69	0.00	0.36	0.37	0.47	0.59	0.73	1.94
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	3.70	3.65	4.87	6.30	8.01	27.73	0.00	5.90	6.08	7.71	9.64	11.95	31.83
Columbus, OH	x	x	100	100	0.00	3.22	3.18	4.24	5.49	6.97	24.14	0.00	5.14	5.30	6.71	8.39	10.40	27.70
Dallas-Fort Worth, TX	x	-	100	-	0.00	15.97	15.75	21.02	27.19	34.53	119.63	0.00	25.45	26.24	33.25	41.60	51.54	137.29
Dayton-Springfield, OH	-	x	-	100	0.00	1.13	1.11	1.49	1.92	2.44	8.46	0.00	1.80	1.86	2.35	2.94	3.65	9.71
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	4.63	4.29	6.04	8.28	10.96	42.71	0.00	5.84	5.73	8.09	11.05	14.76	47.80
Detroit-Ann Arbor, MI	x	x	100	100	0.00	5.31	4.95	6.94	9.46	12.49	48.32	0.00	6.83	6.73	9.40	12.76	16.94	54.16
Door Co., WI	x	-	100	-	0.00	0.05	0.05	0.06	0.08	0.10	0.34	0.00	0.07	0.08	0.10	0.12	0.15	0.39
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Evansville, IN	-	x	-	100	0.00	0.54	0.53	0.71	0.92	1.17	4.05	0.00	0.86	0.89	1.12	1.41	1.74	4.64
Greater Connecticut, CT	x	-	100	-	0.00	2.81	2.78	3.70	4.79	6.08	21.07	0.00	4.48	4.62	5.86	7.33	9.08	24.18
Greene Co., PA	x	-	100	-	0.00	0.05	0.05	0.06	0.08	0.11	0.37	0.00	0.08	0.08	0.10	0.13	0.16	0.42
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	1.28	1.27	1.69	2.19	2.78	9.62	0.00	2.05	2.11	2.67	3.35	4.14	11.04

Table B2-72
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area

Formaldehyde 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	1.10	1.08	1.45	1.87	2.37	8.23	0.00	1.75	1.80	2.29	2.86	3.54	9.44
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.00	0.01	0.01	0.02	0.02	0.03	0.07
Hickory, NC	-	x	-	100	0.00	0.32	0.32	0.43	0.55	0.70	2.43	0.00	0.52	0.53	0.67	0.84	1.05	2.79
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-34.95	-41.11	-47.11	-49.68	-52.11	-64.50	0.00	-93.27	-103.33	-110.73	-115.58	-117.08	-103.79
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-3.65	-4.24	-4.91	-5.27	-5.64	-8.35	0.00	-9.44	-10.42	-11.26	-11.88	-12.20	-12.45
Imperial Co., CA	x	-	100	-	0.00	0.53	0.53	0.70	0.91	1.15	3.99	0.00	0.85	0.88	1.11	1.39	1.72	4.58
Indianapolis, IN	-	x	-	100	0.00	3.00	2.96	3.95	5.12	6.50	22.51	0.00	4.79	4.94	6.26	7.83	9.70	25.83
Jamestown, NY	x	-	100	-	0.00	0.21	0.20	0.27	0.35	0.45	1.55	0.00	0.33	0.34	0.43	0.54	0.67	1.78
Jefferson Co., NY	x	-	100	-	0.00	0.25	0.25	0.33	0.43	0.55	1.91	0.00	0.41	0.42	0.53	0.66	0.82	2.19
Johnstown, PA	-	x	-	100	0.00	0.15	0.15	0.20	0.26	0.33	1.15	0.00	0.24	0.25	0.32	0.40	0.49	1.32
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.27	0.27	0.36	0.47	0.59	2.05	0.00	0.44	0.45	0.57	0.71	0.88	2.35
Knoxville, TN	x	x	100	100	0.00	1.85	1.83	2.44	3.15	4.00	13.86	0.00	2.95	3.04	3.85	4.82	5.97	15.91
Lancaster, PA	-	x	-	100	0.00	0.66	0.65	0.86	1.12	1.42	4.91	0.00	1.05	1.08	1.37	1.71	2.12	5.64
Las Vegas, NV	x	-	100	-	0.00	3.89	3.84	5.12	6.62	8.41	29.14	0.00	6.20	6.39	8.10	10.13	12.55	33.44
Libby, MT	-	x	-	100	0.00	0.01	0.01	0.01	0.02	0.02	0.08	0.00	0.02	0.02	0.02	0.03	0.04	0.09
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.03	0.11	0.00	0.02	0.02	0.03	0.04	0.05	0.12
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	5.13	1.50	6.16	14.03	23.74	144.70	0.00	-12.04	-16.26	-9.73	0.18	14.27	150.04
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	1.52	1.50	2.00	2.58	3.28	11.37	0.00	2.42	2.49	3.16	3.95	4.90	13.05
Louisville, KY-IN	-	x	-	100	0.00	1.59	1.57	2.09	2.71	3.44	11.92	0.00	2.54	2.62	3.31	4.15	5.14	13.68
Macon, GA	-	x	-	100	0.00	0.30	0.30	0.39	0.51	0.65	2.25	0.00	0.48	0.49	0.62	0.78	0.97	2.58
Manitowoc Co., WI	x	-	-	-	0.00	0.15	0.15	0.20	0.25	0.32	1.12	0.00	0.24	0.25	0.31	0.39	0.48	1.28
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.24	0.24	0.32	0.42	0.53	1.83	0.00	0.39	0.40	0.51	0.64	0.79	2.10
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	1.04	1.03	1.37	1.77	2.25	7.80	0.00	1.66	1.71	2.17	2.71	3.36	8.95
Memphis, TN-AR	x	-	100	-	0.00	-2.03	-2.52	-2.76	-2.69	-2.56	0.19	0.00	-6.17	-6.93	-7.20	-7.21	-6.89	-2.11
Milwaukee-Racine, WI	x	-	100	-	0.00	2.59	2.56	3.41	4.42	5.61	19.43	0.00	4.13	4.26	5.40	6.76	8.37	22.30
Nevada (Western Part), CA	x	-	100	-	0.00	0.18	0.18	0.24	0.31	0.39	1.37	0.00	0.29	0.30	0.38	0.48	0.59	1.57
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	15.34	14.23	20.05	27.49	36.42	142.22	0.00	19.27	18.89	26.72	36.60	48.94	159.10
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.21	0.21	0.27	0.35	0.45	1.56	0.00	0.33	0.34	0.43	0.54	0.67	1.79
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-11.21	-14.46	-15.32	-14.03	-12.16	17.57	0.00	-37.18	-42.03	-42.86	-41.81	-38.37	4.85

**Table B2-72
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

Formaldehyde 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	9.94	9.81	13.09	16.93	21.50	74.50	0.00	15.85	16.34	20.71	25.91	32.10	85.50
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	2.52	2.49	3.32	4.30	5.46	18.91	0.00	4.02	4.15	5.26	6.57	8.14	21.70
Poughkeepsie, NY	x	x	100	100	0.00	2.22	2.20	2.93	3.79	4.81	16.67	0.00	3.55	3.66	4.63	5.80	7.18	19.13
Providence (All RI), RI	x	-	100	-	0.00	1.34	1.32	1.76	2.28	2.89	10.02	0.00	2.13	2.20	2.78	3.48	4.32	11.50
Reading, PA	-	x	-	100	0.00	0.66	0.65	0.86	1.12	1.42	4.92	0.00	1.05	1.08	1.37	1.71	2.12	5.65
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	2.66	2.62	3.50	4.53	5.75	19.93	0.00	4.24	4.37	5.54	6.93	8.58	22.87
Rochester, NY	x	-	100	-	0.00	1.93	1.91	2.55	3.29	4.18	14.49	0.00	3.08	3.18	4.03	5.04	6.24	16.63
Rome, GA	-	x	-	100	0.00	0.16	0.16	0.21	0.28	0.35	1.21	0.00	0.26	0.27	0.34	0.42	0.52	1.39
Sacramento Metro, CA	x	-	50	-	0.00	4.43	4.37	5.83	7.55	9.58	33.20	0.00	7.06	7.28	9.23	11.55	14.30	38.10
San Diego, CA	x	-	100	-	0.00	4.33	4.28	5.71	7.38	9.37	32.48	0.00	6.91	7.12	9.03	11.29	13.99	37.27
San Francisco Bay Area, CA	x	-	100	-	0.00	-2.72	-4.58	-3.89	-1.79	0.88	36.44	0.00	-15.13	-17.66	-16.57	-14.12	-9.99	33.25
San Joaquin Valley, CA	x	x	50	100	0.00	8.13	7.71	10.65	14.32	18.72	70.45	0.00	11.15	11.16	15.11	20.01	26.05	79.42
Sheboygan, WI	x	-	100	-	0.00	0.18	0.18	0.24	0.31	0.40	1.38	0.00	0.29	0.30	0.38	0.48	0.59	1.58
Springfield (Western MA), MA	x	-	100	-	0.00	1.44	1.42	1.89	2.45	3.11	10.76	0.00	2.29	2.36	2.99	3.74	4.63	12.35
St. Louis, MO-IL	x	x	100	100	0.00	-1.23	-2.09	-1.76	-0.78	0.46	17.02	0.00	-6.94	-8.11	-7.59	-6.45	-4.53	15.58
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.25	-0.31	-0.34	-0.35	-0.34	-0.18	0.00	-0.73	-0.81	-0.86	-0.87	-0.85	-0.47
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.89	0.87	1.17	1.53	1.96	6.93	0.00	1.38	1.41	1.81	2.30	2.88	7.91
Washington, DC-MD-VA	x	x	100	100	0.00	9.20	9.08	12.11	15.67	19.90	68.95	0.00	14.67	15.13	19.17	23.98	29.71	79.13
Wheeling, WV-OH	-	x	-	100	0.00	0.22	0.22	0.29	0.38	0.48	1.65	0.00	0.35	0.36	0.46	0.58	0.71	1.90
York, PA	-	x	-	100	0.00	0.76	0.75	1.00	1.30	1.65	5.72	0.00	1.22	1.25	1.59	1.99	2.46	6.56

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-73
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

NOx 2015

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-3.92	-5.28	-9.03	-10.11	-11.59	-26.11	0.00	-3.94	-5.30	-9.05	-10.13	-11.61	-26.13
Allegan Co., MI	x	-	100	-	0.00	-0.43	-0.58	-0.99	-1.11	-1.27	-2.86	0.00	-0.43	-0.58	-0.99	-1.11	-1.27	-2.86
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.39	-0.53	-0.90	-1.01	-1.15	-2.60	0.00	-0.39	-0.53	-0.90	-1.01	-1.16	-2.60
Atlanta, GA	x	x	100	100	0.00	-20.82	-28.05	-47.96	-53.74	-61.59	-138.79	0.00	-20.92	-28.16	-48.07	-53.85	-61.71	-138.87
Baltimore, MD	x	x	100	100	0.00	-8.69	-11.70	-19.99	-22.39	-25.67	-57.81	0.00	-8.73	-11.75	-20.03	-22.44	-25.72	-57.84
Baton Rouge, LA	x	-	100	-	0.00	-77.87	-98.62	-124.77	-142.22	-163.88	-300.53	0.00	-78.10	-98.87	-125.03	-142.49	-164.16	-300.72
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-153.98	-194.79	-244.75	-279.11	-321.66	-586.39	0.00	-154.43	-195.27	-245.25	-279.63	-322.20	-586.75
Birmingham, AL	-	x	-	100	0.00	-3.15	-4.25	-7.27	-8.14	-9.33	-21.05	0.00	-3.17	-4.26	-7.29	-8.16	-9.35	-21.06
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-14.11	-19.01	-32.48	-36.39	-41.71	-93.97	0.00	-14.18	-19.09	-32.56	-36.47	-41.79	-94.02
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-1.81	-2.45	-4.24	-4.75	-5.44	-12.34	0.00	-1.82	-2.46	-4.25	-4.76	-5.45	-12.35
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-3.39	-4.57	-7.81	-8.75	-10.03	-22.59	0.00	-3.41	-4.59	-7.83	-8.77	-10.05	-22.61
Canton-Massillon, OH	-	x	-	100	0.00	-10.87	-13.83	-17.91	-20.39	-23.48	-43.93	0.00	-10.91	-13.86	-17.95	-20.42	-23.52	-43.95
Charleston, WV	-	x	-	100	0.00	-0.91	-1.22	-2.09	-2.34	-2.68	-6.05	0.00	-0.91	-1.23	-2.09	-2.35	-2.69	-6.05
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-4.82	-6.55	-11.57	-12.94	-14.83	-34.01	0.00	-4.84	-6.57	-11.60	-12.97	-14.86	-34.03
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-1.59	-2.14	-3.68	-4.12	-4.73	-10.68	0.00	-1.60	-2.15	-3.69	-4.13	-4.74	-10.69
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-131.55	-168.10	-223.74	-254.20	-292.62	-559.58	0.00	-131.97	-168.56	-224.21	-254.70	-293.13	-559.92
Chico, CA	x	-	100	-	0.00	-0.59	-0.79	-1.35	-1.51	-1.73	-3.90	0.00	-0.59	-0.79	-1.35	-1.52	-1.74	-3.91
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-5.53	-7.45	-12.79	-14.32	-16.41	-37.06	0.00	-5.55	-7.48	-12.82	-14.35	-16.45	-37.08
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.53	-0.72	-1.22	-1.37	-1.57	-3.54	0.00	-0.53	-0.72	-1.23	-1.37	-1.57	-3.54
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-8.09	-10.90	-18.63	-20.87	-23.92	-53.89	0.00	-8.13	-10.94	-18.67	-20.92	-23.97	-53.93
Columbus, OH	x	x	100	100	0.00	-5.22	-7.04	-12.03	-13.48	-15.45	-34.81	0.00	-5.25	-7.06	-12.06	-13.51	-15.48	-34.83
Dallas-Fort Worth, TX	x	-	100	-	0.00	-21.18	-28.53	-48.76	-54.63	-62.61	-141.08	0.00	-21.28	-28.64	-48.88	-54.75	-62.73	-141.16
Dayton-Springfield, OH	-	x	-	100	0.00	-2.45	-3.30	-5.65	-6.33	-7.25	-16.34	0.00	-2.46	-3.32	-5.66	-6.34	-7.26	-16.34
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-22.56	-29.34	-42.78	-48.34	-55.55	-113.61	0.00	-22.64	-29.43	-42.87	-48.44	-55.65	-113.68
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-28.34	-37.06	-55.50	-62.61	-71.92	-149.75	0.00	-28.45	-37.18	-55.62	-62.74	-72.05	-149.84
Door Co., WI	x	-	100	-	0.00	-0.10	-0.13	-0.23	-0.26	-0.29	-0.66	0.00	-0.10	-0.13	-0.23	-0.26	-0.29	-0.66
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.03	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.03
Evansville, IN	-	x	-	100	0.00	-0.95	-1.29	-2.27	-2.54	-2.91	-6.64	0.00	-0.96	-1.30	-2.27	-2.54	-2.91	-6.64
Greater Connecticut, CT	x	-	100	-	0.00	-5.39	-7.26	-12.40	-13.89	-15.92	-35.84	0.00	-5.42	-7.29	-12.43	-13.92	-15.95	-35.86
Greene Co., PA	x	-	100	-	0.00	-0.12	-0.17	-0.28	-0.32	-0.36	-0.82	0.00	-0.12	-0.17	-0.28	-0.32	-0.36	-0.82
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-2.42	-3.27	-5.58	-6.26	-7.17	-16.15	0.00	-2.44	-3.28	-5.60	-6.27	-7.18	-16.16

**Table B2-73
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-2.20	-2.96	-5.06	-5.67	-6.50	-14.64	0.00	-2.21	-2.97	-5.07	-5.68	-6.51	-14.65
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.02	-0.03	-0.04	-0.04	-0.10	0.00	-0.01	-0.02	-0.03	-0.04	-0.04	-0.10
Hickory, NC	-	x	-	100	0.00	-0.57	-0.77	-1.31	-1.47	-1.69	-3.80	0.00	-0.57	-0.77	-1.32	-1.48	-1.69	-3.80
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-328.23	-416.29	-531.03	-604.98	-697.00	-1,287.24	0.00	-329.22	-417.36	-532.13	-606.13	-698.18	-1,288.04
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-31.07	-39.39	-50.15	-57.14	-65.84	-121.41	0.00	-31.16	-39.49	-50.26	-57.25	-65.95	-121.48
Imperial Co., CA	x	-	100	-	0.00	-0.68	-0.91	-1.56	-1.74	-2.00	-4.50	0.00	-0.68	-0.91	-1.56	-1.75	-2.00	-4.51
Indianapolis, IN	-	x	-	100	0.00	-4.88	-6.57	-11.23	-12.59	-14.43	-32.51	0.00	-4.90	-6.60	-11.26	-12.61	-14.45	-32.52
Jamestown, NY	x	-	100	-	0.00	-0.45	-0.61	-1.04	-1.16	-1.33	-3.01	0.00	-0.45	-0.61	-1.04	-1.17	-1.34	-3.01
Jefferson Co., NY	x	-	100	-	0.00	-0.42	-0.57	-0.97	-1.08	-1.24	-2.79	0.00	-0.42	-0.57	-0.97	-1.08	-1.24	-2.80
Johnstown, PA	-	x	-	100	0.00	-0.37	-0.50	-0.85	-0.96	-1.10	-2.47	0.00	-0.37	-0.50	-0.86	-0.96	-1.10	-2.47
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.39	-0.52	-0.87	-0.98	-1.12	-2.50	0.00	-0.39	-0.53	-0.88	-0.98	-1.13	-2.50
Knoxville, TN	x	x	100	100	0.00	-3.31	-4.46	-7.62	-8.54	-9.79	-22.06	0.00	-3.32	-4.48	-7.64	-8.56	-9.81	-22.07
Lancaster, PA	-	x	-	100	0.00	-1.30	-1.75	-2.98	-3.34	-3.83	-8.63	0.00	-1.30	-1.75	-2.99	-3.35	-3.84	-8.64
Las Vegas, NV	x	-	100	-	0.00	-4.27	-5.76	-9.85	-11.04	-12.65	-28.53	0.00	-4.29	-5.78	-9.88	-11.06	-12.68	-28.54
Libby, MT	-	x	-	100	0.00	-0.02	-0.03	-0.05	-0.05	-0.06	-0.14	0.00	-0.02	-0.03	-0.05	-0.05	-0.06	-0.14
Liberty-Clairton, PA	-	x	-	100	0.00	-0.04	-0.06	-0.10	-0.11	-0.13	-0.29	0.00	-0.04	-0.06	-0.10	-0.11	-0.13	-0.29
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-213.15	-273.21	-369.82	-419.73	-483.01	-935.87	0.00	-213.85	-273.97	-370.61	-420.56	-483.86	-936.45
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-2.23	-3.00	-5.12	-5.74	-6.58	-14.81	0.00	-2.24	-3.01	-5.13	-5.75	-6.59	-14.82
Louisville, KY-IN	-	x	-	100	0.00	-3.30	-4.46	-7.68	-8.60	-9.86	-22.30	0.00	-3.32	-4.48	-7.70	-8.62	-9.88	-22.32
Macon, GA	-	x	-	100	0.00	-0.61	-0.83	-1.43	-1.60	-1.83	-4.14	0.00	-0.62	-0.83	-1.43	-1.60	-1.83	-4.15
Manitowoc Co., WI	x	-	-	-	0.00	-0.33	-0.44	-0.75	-0.85	-0.97	-2.18	0.00	-0.33	-0.44	-0.76	-0.85	-0.97	-2.18
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.32	-0.43	-0.73	-0.82	-0.94	-2.12	0.00	-0.32	-0.43	-0.73	-0.82	-0.94	-2.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-1.24	-1.67	-2.86	-3.20	-3.67	-8.28	0.00	-1.25	-1.68	-2.87	-3.21	-3.68	-8.28
Memphis, TN-AR	x	-	100	-	0.00	-27.44	-34.94	-45.62	-51.89	-59.76	-112.52	0.00	-27.52	-35.03	-45.72	-51.99	-59.86	-112.59
Milwaukee-Racine, WI	x	-	100	-	0.00	-5.35	-7.21	-12.31	-13.79	-15.81	-35.61	0.00	-5.38	-7.23	-12.34	-13.82	-15.84	-35.63
Nevada (Western Part), CA	x	-	100	-	0.00	-0.30	-0.41	-0.70	-0.78	-0.89	-2.01	0.00	-0.30	-0.41	-0.70	-0.78	-0.90	-2.01
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-87.18	-113.86	-169.66	-191.47	-219.94	-456.43	0.00	-87.51	-114.23	-170.04	-191.87	-220.35	-456.71
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.48	-0.64	-1.10	-1.23	-1.41	-3.18	0.00	-0.48	-0.64	-1.10	-1.23	-1.41	-3.19
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-181.89	-231.72	-303.15	-344.80	-397.05	-748.85	0.00	-182.47	-232.33	-303.79	-345.47	-397.73	-749.31

**Table B2-73
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

NOx 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-11.62	-15.68	-26.98	-30.22	-34.64	-78.32	0.00	-11.68	-15.75	-27.05	-30.29	-34.70	-78.37
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-5.95	-8.02	-13.72	-15.37	-17.62	-39.71	0.00	-5.98	-8.05	-13.75	-15.40	-17.65	-39.73
Poughkeepsie, NY	x	x	100	100	0.00	-3.87	-5.21	-8.91	-9.98	-11.44	-25.78	0.00	-3.89	-5.23	-8.93	-10.00	-11.46	-25.79
Providence (All RI), RI	x	-	100	-	0.00	-2.80	-3.77	-6.45	-7.22	-8.28	-18.65	0.00	-2.81	-3.79	-6.46	-7.24	-8.30	-18.67
Reading, PA	-	x	-	100	0.00	-1.14	-1.53	-2.62	-2.93	-3.36	-7.57	0.00	-1.14	-1.54	-2.62	-2.94	-3.37	-7.58
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-2.27	-3.06	-5.22	-5.84	-6.70	-15.08	0.00	-2.28	-3.07	-5.23	-5.86	-6.71	-15.09
Rochester, NY	x	-	100	-	0.00	-3.92	-5.28	-9.03	-10.12	-11.59	-26.12	0.00	-3.94	-5.30	-9.05	-10.14	-11.62	-26.14
Rome, GA	-	x	-	100	0.00	-0.34	-0.46	-0.79	-0.88	-1.01	-2.28	0.00	-0.34	-0.46	-0.79	-0.89	-1.02	-2.28
Sacramento Metro, CA	x	-	50	-	0.00	-6.58	-8.86	-15.15	-16.97	-19.45	-43.84	0.00	-6.61	-8.90	-15.19	-17.01	-19.49	-43.87
San Diego, CA	x	-	100	-	0.00	-9.22	-12.42	-21.23	-23.78	-27.26	-61.42	0.00	-9.26	-12.47	-21.28	-23.84	-27.31	-61.45
San Francisco Bay Area, CA	x	-	100	-	0.00	-108.81	-139.25	-186.86	-212.19	-244.23	-470.03	0.00	-109.17	-139.64	-187.26	-212.61	-244.65	-470.32
San Joaquin Valley, CA	x	x	50	100	0.00	-28.45	-37.08	-54.71	-61.78	-70.98	-146.33	0.00	-28.56	-37.20	-54.83	-61.90	-71.11	-146.41
Sheboygan, WI	x	-	100	-	0.00	-0.37	-0.49	-0.84	-0.94	-1.08	-2.43	0.00	-0.37	-0.50	-0.84	-0.95	-1.08	-2.43
Springfield (Western MA), MA	x	-	100	-	0.00	-2.81	-3.79	-6.48	-7.26	-8.32	-18.75	0.00	-2.83	-3.81	-6.49	-7.28	-8.34	-18.76
St. Louis, MO-IL	x	x	100	100	0.00	-50.94	-65.17	-87.36	-99.21	-114.19	-219.58	0.00	-51.10	-65.35	-87.55	-99.41	-114.39	-219.72
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.04	-3.87	-5.05	-5.75	-6.62	-12.45	0.00	-3.05	-3.88	-5.06	-5.76	-6.63	-12.46
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-2.31	-3.09	-5.05	-5.67	-6.51	-14.32	0.00	-2.32	-3.10	-5.07	-5.69	-6.52	-14.33
Washington, DC-MD-VA	x	x	100	100	0.00	-14.92	-20.09	-34.28	-38.40	-44.02	-99.09	0.00	-14.99	-20.17	-34.36	-38.49	-44.10	-99.15
Wheeling, WV-OH	-	x	-	100	0.00	-0.52	-0.70	-1.19	-1.33	-1.53	-3.44	0.00	-0.52	-0.70	-1.19	-1.33	-1.53	-3.44
York, PA	-	x	-	100	0.00	-1.20	-1.62	-2.77	-3.10	-3.55	-8.01	0.00	-1.21	-1.63	-2.77	-3.11	-3.56	-8.01

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-74
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

NOx 2020

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-23.50	-26.27	-45.50	-52.04	-64.28	-184.99	0.00	-30.55	-33.42	-53.09	-60.03	-72.01	-182.32
Allegan Co., MI	x	-	100	-	0.00	-2.57	-2.87	-4.98	-5.69	-7.03	-20.23	0.00	-3.34	-3.65	-5.81	-6.56	-7.87	-19.94
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-2.49	-2.78	-4.82	-5.51	-6.81	-19.59	0.00	-3.24	-3.54	-5.62	-6.36	-7.63	-19.31
Atlanta, GA	x	x	100	100	0.00	-136.13	-152.21	-263.65	-301.53	-372.50	-1,072.16	0.00	-176.98	-193.56	-307.59	-347.81	-417.23	-1,056.63
Baltimore, MD	x	x	100	100	0.00	-51.74	-57.86	-100.15	-114.54	-141.48	-406.99	0.00	-67.31	-73.63	-116.91	-132.18	-158.53	-401.17
Baton Rouge, LA	x	-	100	-	0.00	-248.55	-292.44	-352.54	-392.34	-437.15	-793.84	0.00	-415.60	-471.31	-538.11	-587.85	-633.44	-925.89
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-483.18	-569.51	-676.38	-751.72	-832.93	-1,462.39	0.00	-814.35	-924.40	-1,044.45	-1,139.49	-1,222.47	-1,730.23
Birmingham, AL	-	x	-	100	0.00	-18.40	-20.57	-35.66	-40.79	-50.40	-145.14	0.00	-23.91	-26.15	-41.59	-47.03	-56.43	-143.01
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-81.03	-90.61	-156.88	-179.42	-221.63	-637.72	0.00	-105.38	-115.26	-183.08	-207.01	-248.30	-628.54
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-11.05	-12.34	-21.55	-24.65	-30.51	-88.36	0.00	-14.26	-15.57	-24.99	-28.28	-34.01	-86.91
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-19.37	-21.66	-37.50	-42.88	-52.97	-152.42	0.00	-25.19	-27.55	-43.76	-49.48	-59.35	-150.23
Canton-Massillon, OH	-	x	-	100	0.00	-36.40	-42.60	-53.68	-59.97	-67.88	-134.73	0.00	-59.40	-67.16	-79.19	-86.85	-94.81	-151.53
Charleston, WV	-	x	-	100	0.00	-5.08	-5.68	-9.84	-11.25	-13.90	-39.99	0.00	-6.60	-7.22	-11.48	-12.98	-15.57	-39.41
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-33.38	-37.21	-65.66	-75.18	-93.25	-272.01	0.00	-42.68	-46.55	-75.62	-85.67	-103.32	-266.96
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-9.37	-10.47	-18.15	-20.76	-25.65	-73.86	0.00	-12.17	-13.31	-21.17	-23.94	-28.72	-72.78
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-469.96	-546.53	-723.51	-811.75	-933.93	-2,015.29	0.00	-744.96	-839.04	-1,027.84	-1,132.36	-1,254.42	-2,194.08
Chico, CA	x	-	100	-	0.00	-3.48	-3.90	-6.75	-7.72	-9.53	-27.44	0.00	-4.53	-4.96	-7.87	-8.90	-10.68	-27.04
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-32.66	-36.51	-63.40	-72.52	-89.64	-258.51	0.00	-42.37	-46.32	-73.83	-83.51	-100.25	-254.61
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-2.97	-3.32	-5.75	-6.58	-8.13	-23.38	0.00	-3.86	-4.23	-6.71	-7.59	-9.10	-23.04
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-46.01	-51.45	-89.09	-101.89	-125.86	-362.18	0.00	-59.84	-65.45	-103.96	-117.55	-141.00	-356.96
Columbus, OH	x	x	100	100	0.00	-31.78	-35.54	-61.55	-70.40	-86.97	-250.30	0.00	-41.32	-45.20	-71.82	-81.21	-97.41	-246.68
Dallas-Fort Worth, TX	x	-	100	-	0.00	-134.99	-150.93	-261.40	-298.96	-369.31	-1,062.86	0.00	-175.52	-191.96	-305.00	-344.88	-413.69	-1,047.51
Dayton-Springfield, OH	-	x	-	100	0.00	-13.99	-15.64	-27.09	-30.98	-38.27	-110.14	0.00	-18.19	-19.89	-31.61	-35.74	-42.87	-108.55
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-100.25	-114.54	-172.50	-195.46	-233.48	-593.92	0.00	-145.89	-162.37	-222.58	-248.21	-285.69	-609.46
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-127.64	-145.32	-224.12	-254.38	-305.73	-796.80	0.00	-182.50	-202.60	-284.19	-317.66	-368.21	-810.97
Door Co., WI	x	-	100	-	0.00	-0.57	-0.63	-1.10	-1.26	-1.55	-4.47	0.00	-0.74	-0.81	-1.28	-1.45	-1.74	-4.40
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.02	-0.03	-0.05	-0.05	-0.07	-0.19	0.00	-0.03	-0.03	-0.05	-0.06	-0.07	-0.19
Evansville, IN	-	x	-	100	0.00	-5.88	-6.55	-11.53	-13.20	-16.36	-47.63	0.00	-7.53	-8.22	-13.30	-15.07	-18.16	-46.77
Greater Connecticut, CT	x	-	100	-	0.00	-31.69	-35.44	-61.31	-70.12	-86.60	-249.03	0.00	-41.24	-45.11	-71.59	-80.94	-97.06	-245.49
Greene Co., PA	x	-	100	-	0.00	-0.68	-0.76	-1.31	-1.50	-1.85	-5.33	0.00	-0.88	-0.96	-1.53	-1.73	-2.07	-5.25
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-14.32	-16.01	-27.74	-31.72	-39.18	-112.77	0.00	-18.62	-20.37	-32.36	-36.59	-43.89	-111.14

**Table B2-74
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-12.79	-14.30	-24.76	-28.32	-34.98	-100.67	0.00	-16.63	-18.19	-28.89	-32.67	-39.19	-99.22
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.09	-0.10	-0.17	-0.19	-0.24	-0.69	0.00	-0.11	-0.12	-0.20	-0.22	-0.27	-0.68
Hickory, NC	-	x	-	100	0.00	-3.43	-3.84	-6.64	-7.60	-9.38	-26.99	0.00	-4.46	-4.88	-7.75	-8.77	-10.51	-26.60
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,068.00	-1,254.04	-1,537.41	-1,713.59	-1,920.98	-3,615.15	0.00	-1,769.58	-2,004.47	-2,316.32	-2,534.20	-2,744.31	-4,154.41
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-100.32	-117.87	-143.76	-160.16	-179.21	-333.67	0.00	-166.69	-188.88	-217.46	-237.81	-257.13	-385.14
Imperial Co., CA	x	-	100	-	0.00	-4.41	-4.93	-8.54	-9.77	-12.07	-34.73	0.00	-5.74	-6.27	-9.97	-11.27	-13.52	-34.23
Indianapolis, IN	-	x	-	100	0.00	-29.61	-33.11	-57.33	-65.57	-81.00	-233.13	0.00	-38.50	-42.10	-66.90	-75.65	-90.74	-229.76
Jamestown, NY	x	-	100	-	0.00	-2.57	-2.88	-4.98	-5.70	-7.04	-20.25	0.00	-3.35	-3.66	-5.81	-6.57	-7.88	-19.96
Jefferson Co., NY	x	-	100	-	0.00	-2.56	-2.87	-4.96	-5.68	-7.01	-20.18	0.00	-3.34	-3.65	-5.79	-6.55	-7.86	-19.89
Johnstown, PA	-	x	-	100	0.00	-2.06	-2.31	-3.99	-4.56	-5.64	-16.21	0.00	-2.68	-2.94	-4.66	-5.27	-6.32	-15.98
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-2.51	-2.81	-4.74	-5.41	-6.65	-18.73	0.00	-3.34	-3.66	-5.64	-6.36	-7.57	-18.58
Knoxville, TN	x	x	100	100	0.00	-19.79	-22.13	-38.34	-43.85	-54.18	-155.95	0.00	-25.73	-28.14	-44.73	-50.58	-60.67	-153.69
Lancaster, PA	-	x	-	100	0.00	-7.57	-8.46	-14.66	-16.76	-20.71	-59.60	0.00	-9.84	-10.77	-17.10	-19.34	-23.20	-58.74
Las Vegas, NV	x	-	100	-	0.00	-28.90	-32.30	-56.02	-64.07	-79.17	-228.04	0.00	-37.53	-41.04	-65.30	-73.85	-88.62	-224.68
Libby, MT	-	x	-	100	0.00	-0.12	-0.14	-0.24	-0.28	-0.34	-0.98	0.00	-0.16	-0.18	-0.28	-0.32	-0.38	-0.97
Liberty-Clairton, PA	-	x	-	100	0.00	-0.23	-0.26	-0.44	-0.50	-0.62	-1.77	0.00	-0.30	-0.33	-0.52	-0.59	-0.70	-1.75
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-799.36	-926.02	-1,262.34	-1,419.66	-1,648.34	-3,714.26	0.00	-1,244.35	-1,398.12	-1,754.06	-1,937.67	-2,165.26	-3,978.89
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-14.01	-15.68	-27.08	-30.96	-38.22	-109.78	0.00	-18.27	-19.99	-31.65	-35.78	-42.89	-108.27
Louisville, KY-IN	-	x	-	100	0.00	-19.18	-21.43	-37.30	-42.67	-52.78	-152.47	0.00	-24.82	-27.13	-43.36	-49.06	-58.94	-150.08
Macon, GA	-	x	-	100	0.00	-3.57	-3.99	-6.96	-7.96	-9.85	-28.48	0.00	-4.62	-5.05	-8.08	-9.14	-10.99	-28.03
Manitowoc Co., WI	x	-	-	-	0.00	-1.86	-2.08	-3.60	-4.12	-5.09	-14.62	0.00	-2.43	-2.66	-4.21	-4.76	-5.71	-14.41
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-2.06	-2.30	-3.99	-4.56	-5.63	-16.20	0.00	-2.68	-2.93	-4.65	-5.26	-6.31	-15.97
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-8.20	-9.17	-15.88	-18.16	-22.43	-64.57	0.00	-10.66	-11.66	-18.53	-20.95	-25.13	-63.63
Memphis, TN-AR	x	-	100	-	0.00	-93.44	-109.16	-139.49	-156.04	-177.45	-361.21	0.00	-151.26	-170.83	-203.57	-223.55	-245.07	-402.21
Milwaukee-Racine, WI	x	-	100	-	0.00	-30.84	-34.49	-59.71	-68.29	-84.35	-242.70	0.00	-40.11	-43.88	-69.68	-78.79	-94.51	-239.21
Nevada (Western Part), CA	x	-	100	-	0.00	-1.85	-2.06	-3.57	-4.09	-5.05	-14.52	0.00	-2.40	-2.63	-4.17	-4.71	-5.65	-14.31
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-388.98	-443.21	-679.89	-771.40	-925.85	-2,400.10	0.00	-558.43	-620.30	-865.52	-966.94	-1,119.02	-2,447.18
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-2.69	-3.00	-5.21	-5.96	-7.36	-21.22	0.00	-3.49	-3.81	-6.07	-6.86	-8.24	-20.91
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-626.43	-731.25	-939.91	-1,051.95	-1,198.69	-2,465.01	0.00	-1,010.57	-1,140.81	-1,365.59	-1,500.41	-1,647.68	-2,733.83

**Table B2-74
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

NOx 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-77.90	-87.04	-151.42	-173.22	-214.19	-618.49	0.00	-100.88	-110.26	-176.11	-199.23	-239.30	-608.92
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-33.24	-37.16	-64.39	-73.64	-90.98	-261.92	0.00	-43.20	-47.24	-75.10	-84.93	-101.89	-258.11
Poughkeepsie, NY	x	x	100	100	0.00	-23.33	-26.08	-45.17	-51.66	-63.82	-183.66	0.00	-30.33	-33.18	-52.71	-59.60	-71.49	-181.00
Providence (All RI), RI	x	-	100	-	0.00	-16.12	-18.02	-31.20	-35.69	-44.08	-126.86	0.00	-20.96	-22.92	-36.41	-41.17	-49.39	-125.03
Reading, PA	-	x	-	100	0.00	-6.86	-7.68	-13.29	-15.20	-18.78	-54.04	0.00	-8.93	-9.76	-15.51	-17.54	-21.04	-53.26
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-16.36	-18.30	-31.64	-36.18	-44.68	-128.44	0.00	-21.30	-23.30	-36.96	-41.78	-50.10	-126.63
Rochester, NY	x	-	100	-	0.00	-22.74	-25.43	-44.04	-50.36	-62.21	-179.04	0.00	-29.57	-32.34	-51.38	-58.10	-69.69	-176.46
Rome, GA	-	x	-	100	0.00	-1.97	-2.20	-3.81	-4.36	-5.39	-15.50	0.00	-2.56	-2.80	-4.45	-5.03	-6.03	-15.27
Sacramento Metro, CA	x	-	50	-	0.00	-41.03	-45.88	-79.46	-90.88	-112.27	-323.11	0.00	-53.36	-58.35	-92.72	-104.84	-125.76	-318.44
San Diego, CA	x	-	100	-	0.00	-52.87	-59.11	-102.38	-117.09	-144.64	-416.28	0.00	-68.74	-75.18	-119.45	-135.07	-162.02	-410.27
San Francisco Bay Area, CA	x	-	100	-	0.00	-393.70	-457.19	-611.90	-687.14	-793.30	-1,740.52	0.00	-619.93	-697.60	-862.12	-950.74	-1,056.64	-1,883.10
San Joaquin Valley, CA	x	x	50	100	0.00	-133.47	-152.11	-233.05	-264.40	-317.24	-821.37	0.00	-191.79	-213.07	-296.95	-331.70	-383.73	-837.83
Sheboygan, WI	x	-	100	-	0.00	-2.13	-2.38	-4.12	-4.72	-5.82	-16.74	0.00	-2.77	-3.04	-4.82	-5.44	-6.53	-16.51
Springfield (Western MA), MA	x	-	100	-	0.00	-16.47	-18.41	-31.89	-36.47	-45.05	-129.67	0.00	-21.41	-23.42	-37.21	-42.07	-50.47	-127.79
St. Louis, MO-IL	x	x	100	100	0.00	-183.68	-213.36	-285.03	-320.03	-369.26	-807.97	0.00	-289.55	-325.88	-402.14	-443.40	-492.53	-875.05
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-10.26	-11.99	-15.26	-17.07	-19.38	-39.18	0.00	-16.65	-18.81	-22.34	-24.53	-26.86	-43.75
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-12.38	-13.92	-23.34	-26.64	-32.66	-91.68	0.00	-16.57	-18.20	-27.86	-31.40	-37.31	-91.08
Washington, DC-MD-VA	x	x	100	100	0.00	-89.82	-100.45	-173.75	-198.70	-245.39	-705.58	0.00	-116.91	-127.89	-202.91	-229.41	-275.08	-695.58
Wheeling, WV-OH	-	x	-	100	0.00	-2.89	-3.23	-5.60	-6.40	-7.91	-22.75	0.00	-3.76	-4.11	-6.53	-7.38	-8.86	-22.42
York, PA	-	x	-	100	0.00	-7.43	-8.31	-14.39	-16.45	-20.32	-58.49	0.00	-9.66	-10.57	-16.79	-18.98	-22.77	-57.65

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-75
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

NOx 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-55.00	-55.23	-97.42	-115.18	-143.73	-453.89	0.00	-69.99	-69.52	-115.01	-135.78	-166.20	-436.43
Allegan Co., MI	x	-	100	-	0.00	-6.01	-6.03	-10.64	-12.58	-15.70	-49.58	0.00	-7.65	-7.59	-12.56	-14.83	-18.16	-47.68
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-6.20	-6.23	-10.98	-12.99	-16.20	-51.16	0.00	-7.89	-7.84	-12.97	-15.31	-18.74	-49.20
Atlanta, GA	x	x	100	100	0.00	-351.10	-352.55	-621.95	-735.39	-917.68	-2,898.26	0.00	-446.73	-443.67	-734.18	-866.80	-1,061.00	-2,786.66
Baltimore, MD	x	x	100	100	0.00	-120.47	-120.99	-213.33	-252.22	-314.70	-993.52	0.00	-153.43	-152.42	-252.00	-297.47	-364.04	-955.44
Baton Rouge, LA	x	-	100	-	0.00	-399.21	-459.48	-552.25	-613.25	-680.25	-1,268.83	0.00	-841.09	-931.65	-1,043.50	-1,131.78	-1,202.15	-1,609.10
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-762.08	-883.26	-1,038.05	-1,147.38	-1,260.64	-2,210.47	0.00	-1,640.42	-1,823.12	-2,013.81	-2,175.80	-2,294.42	-2,908.84
Birmingham, AL	-	x	-	100	0.00	-42.10	-42.27	-74.61	-88.22	-110.11	-347.90	0.00	-53.52	-53.13	-88.01	-103.92	-127.23	-334.44
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-182.22	-182.99	-322.73	-381.58	-476.13	-1,503.44	0.00	-231.97	-230.41	-381.11	-449.91	-550.64	-1,445.69
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-25.85	-25.89	-45.95	-54.37	-67.94	-215.53	0.00	-32.53	-32.20	-53.82	-63.65	-78.11	-206.81
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-43.15	-43.33	-76.42	-90.35	-112.74	-355.98	0.00	-54.93	-54.56	-90.24	-106.53	-130.38	-342.31
Canton-Massillon, OH	-	x	-	100	0.00	-60.74	-68.65	-87.37	-98.11	-111.33	-236.75	0.00	-120.79	-132.55	-154.27	-169.05	-183.00	-278.45
Charleston, WV	-	x	-	100	0.00	-11.11	-11.15	-19.67	-23.26	-29.02	-91.66	0.00	-14.13	-14.04	-23.22	-27.42	-33.56	-88.13
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-86.16	-86.11	-153.69	-182.00	-227.70	-725.17	0.00	-107.34	-105.94	-178.74	-211.71	-260.40	-694.57
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-21.33	-21.43	-37.74	-44.62	-55.65	-175.53	0.00	-27.23	-27.07	-44.66	-52.70	-64.46	-168.88
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-833.80	-921.93	-1,253.17	-1,424.33	-1,654.58	-3,954.76	0.00	-1,542.23	-1,670.83	-2,045.09	-2,269.71	-2,513.54	-4,364.70
Chico, CA	x	-	100	-	0.00	-8.09	-8.12	-14.32	-16.93	-21.13	-66.73	0.00	-10.29	-10.22	-16.91	-19.96	-24.43	-64.16
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-76.05	-76.30	-134.88	-159.53	-199.16	-629.95	0.00	-96.41	-95.65	-158.81	-187.60	-229.83	-605.28
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-6.48	-6.51	-11.48	-13.58	-16.94	-53.49	0.00	-8.25	-8.20	-13.56	-16.01	-19.59	-51.44
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-102.20	-102.63	-181.02	-214.03	-267.07	-843.34	0.00	-130.09	-129.22	-213.75	-252.34	-308.85	-810.93
Columbus, OH	x	x	100	100	0.00	-75.86	-76.17	-134.38	-158.89	-198.27	-626.17	0.00	-96.53	-95.87	-158.63	-187.29	-229.24	-602.07
Dallas-Fort Worth, TX	x	-	100	-	0.00	-338.43	-339.84	-599.47	-708.80	-884.48	-2,793.22	0.00	-430.68	-427.75	-707.73	-835.55	-1,022.71	-2,685.75
Dayton-Springfield, OH	-	x	-	100	0.00	-31.14	-31.27	-55.16	-65.22	-81.38	-257.00	0.00	-39.63	-39.36	-65.12	-76.88	-94.10	-247.12
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-208.90	-219.61	-344.02	-400.09	-484.97	-1,383.85	0.00	-321.79	-335.77	-471.90	-540.30	-630.57	-1,395.96
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-259.02	-270.59	-431.09	-502.60	-611.96	-1,775.21	0.00	-389.24	-403.82	-579.01	-665.65	-781.98	-1,776.55
Door Co., WI	x	-	100	-	0.00	-1.26	-1.27	-2.24	-2.64	-3.30	-10.41	0.00	-1.61	-1.60	-2.64	-3.12	-3.81	-10.01
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.05	-0.05	-0.10	-0.11	-0.14	-0.45	0.00	-0.07	-0.07	-0.11	-0.13	-0.16	-0.43
Evansville, IN	-	x	-	100	0.00	-13.67	-13.66	-24.38	-28.87	-36.12	-115.01	0.00	-17.04	-16.82	-28.36	-33.59	-41.32	-110.17
Greater Connecticut, CT	x	-	100	-	0.00	-72.79	-73.12	-128.87	-152.36	-190.09	-599.96	0.00	-92.77	-92.17	-152.31	-179.77	-219.97	-577.04
Greene Co., PA	x	-	100	-	0.00	-1.45	-1.46	-2.57	-3.04	-3.79	-11.98	0.00	-1.85	-1.84	-3.04	-3.58	-4.39	-11.52
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-33.01	-33.15	-58.48	-69.14	-86.28	-272.48	0.00	-42.01	-41.73	-69.04	-81.51	-99.76	-261.99

**Table B2-75
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-29.05	-29.17	-51.45	-60.83	-75.91	-239.71	0.00	-36.97	-36.72	-60.75	-71.72	-87.78	-230.49
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.20	-0.20	-0.35	-0.42	-0.52	-1.67	0.00	-0.25	-0.24	-0.41	-0.49	-0.60	-1.60
Hickory, NC	-	x	-	100	0.00	-8.05	-8.08	-14.25	-16.85	-21.03	-66.38	0.00	-10.25	-10.18	-16.84	-19.88	-24.32	-63.84
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,748.50	-1,997.32	-2,458.83	-2,743.54	-3,073.25	-6,081.00	0.00	-3,597.79	-3,970.13	-4,516.47	-4,919.26	-5,266.36	-7,450.62
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-162.34	-186.02	-226.78	-252.55	-281.79	-544.78	0.00	-337.30	-372.79	-421.37	-458.16	-488.92	-676.51
Imperial Co., CA	x	-	100	-	0.00	-11.23	-11.28	-19.89	-23.52	-29.35	-92.68	0.00	-14.29	-14.19	-23.48	-27.72	-33.94	-89.12
Indianapolis, IN	-	x	-	100	0.00	-70.60	-70.89	-125.06	-147.87	-184.52	-582.71	0.00	-89.85	-89.23	-147.64	-174.31	-213.35	-560.29
Jamestown, NY	x	-	100	-	0.00	-5.72	-5.74	-10.13	-11.98	-14.94	-47.19	0.00	-7.28	-7.23	-11.96	-14.12	-17.28	-45.38
Jefferson Co., NY	x	-	100	-	0.00	-6.11	-6.14	-10.83	-12.80	-15.98	-50.44	0.00	-7.78	-7.73	-12.79	-15.10	-18.48	-48.50
Johnstown, PA	-	x	-	100	0.00	-4.47	-4.49	-7.91	-9.35	-11.67	-36.82	0.00	-5.70	-5.66	-9.35	-11.04	-13.51	-35.42
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-6.31	-6.42	-10.98	-12.93	-16.03	-49.47	0.00	-8.47	-8.53	-13.47	-15.78	-19.07	-48.07
Knoxville, TN	x	x	100	100	0.00	-46.22	-46.41	-81.89	-96.83	-120.83	-381.66	0.00	-58.80	-58.39	-96.65	-114.11	-139.68	-366.95
Lancaster, PA	-	x	-	100	0.00	-17.25	-17.32	-30.56	-36.13	-45.08	-142.37	0.00	-21.95	-21.81	-36.08	-42.59	-52.13	-136.89
Las Vegas, NV	x	-	100	-	0.00	-76.20	-76.48	-135.09	-159.75	-199.40	-630.31	0.00	-96.75	-96.03	-159.22	-188.04	-230.28	-605.80
Libby, MT	-	x	-	100	0.00	-0.29	-0.29	-0.51	-0.60	-0.75	-2.36	0.00	-0.36	-0.36	-0.60	-0.71	-0.86	-2.27
Liberty-Clairton, PA	-	x	-	100	0.00	-0.48	-0.48	-0.84	-0.99	-1.23	-3.84	0.00	-0.62	-0.62	-1.00	-1.18	-1.44	-3.71
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1,484.60	-1,620.72	-2,286.31	-2,615.21	-3,074.95	-7,760.96	0.00	-2,627.74	-2,823.34	-3,567.26	-3,989.39	-4,476.95	-8,325.04
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-34.45	-34.65	-60.90	-71.97	-89.74	-282.67	0.00	-44.12	-43.90	-72.22	-85.18	-104.11	-272.12
Louisville, KY-IN	-	x	-	100	0.00	-43.06	-43.17	-76.45	-90.44	-112.96	-357.77	0.00	-54.40	-53.91	-89.79	-106.13	-130.12	-343.54
Macon, GA	-	x	-	100	0.00	-8.05	-8.07	-14.31	-16.93	-21.15	-67.06	0.00	-10.15	-10.05	-16.78	-19.84	-24.34	-64.37
Manitowoc Co., WI	x	-	-	-	0.00	-4.14	-4.16	-7.32	-8.65	-10.79	-34.05	0.00	-5.28	-5.25	-8.66	-10.22	-12.50	-32.76
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-5.21	-5.23	-9.22	-10.91	-13.61	-42.96	0.00	-6.63	-6.59	-10.89	-12.86	-15.74	-41.31
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-21.17	-21.26	-37.50	-44.34	-55.33	-174.74	0.00	-26.94	-26.76	-44.27	-52.27	-63.98	-168.02
Memphis, TN-AR	x	-	100	-	0.00	-158.15	-177.68	-230.26	-259.47	-296.41	-652.89	0.00	-308.50	-337.41	-397.91	-437.52	-476.55	-753.06
Milwaukee-Racine, WI	x	-	100	-	0.00	-69.51	-69.80	-123.10	-145.55	-181.62	-573.45	0.00	-88.50	-87.91	-145.38	-171.63	-210.05	-551.43
Nevada (Western Part), CA	x	-	100	-	0.00	-4.40	-4.41	-7.78	-9.20	-11.48	-36.25	0.00	-5.60	-5.56	-9.19	-10.85	-13.28	-34.86
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-785.33	-821.98	-1,302.84	-1,517.83	-1,845.61	-5,327.55	0.00	-1,189.12	-1,235.87	-1,761.15	-2,022.15	-2,370.78	-5,344.22
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-5.90	-5.92	-10.46	-12.36	-15.43	-48.80	0.00	-7.48	-7.43	-12.32	-14.55	-17.82	-46.90
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1,076.70	-1,205.50	-1,578.66	-1,782.31	-2,043.78	-4,588.91	0.00	-2,076.68	-2,266.78	-2,694.23	-2,968.31	-3,244.72	-5,237.68

**Table B2-75
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

NOx 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-202.04	-202.60	-358.62	-424.22	-529.77	-1,677.25	0.00	-255.51	-253.31	-421.51	-498.11	-610.57	-1,610.85
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-72.42	-72.71	-128.30	-151.70	-189.32	-598.02	0.00	-92.10	-91.46	-151.40	-178.76	-218.84	-574.95
Poughkeepsie, NY	x	x	100	100	0.00	-54.88	-55.11	-97.21	-114.94	-143.42	-452.93	0.00	-69.85	-69.37	-114.77	-135.50	-165.85	-435.51
Providence (All RI), RI	x	-	100	-	0.00	-36.19	-36.35	-64.11	-75.80	-94.58	-298.67	0.00	-46.07	-45.76	-75.70	-89.36	-109.38	-287.19
Reading, PA	-	x	-	100	0.00	-16.17	-16.24	-28.64	-33.87	-42.26	-133.45	0.00	-20.58	-20.44	-33.82	-39.92	-48.86	-128.32
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-46.05	-46.27	-81.48	-96.31	-120.14	-378.93	0.00	-58.78	-58.43	-96.40	-113.76	-139.14	-364.56
Rochester, NY	x	-	100	-	0.00	-51.48	-51.70	-91.19	-107.83	-134.55	-424.90	0.00	-65.52	-65.08	-107.67	-127.11	-155.58	-408.55
Rome, GA	-	x	-	100	0.00	-4.41	-4.43	-7.81	-9.24	-11.53	-36.40	0.00	-5.61	-5.57	-9.22	-10.89	-13.33	-35.00
Sacramento Metro, CA	x	-	50	-	0.00	-100.24	-100.66	-177.54	-209.91	-261.93	-827.08	0.00	-127.60	-126.75	-209.65	-247.50	-302.92	-795.31
San Diego, CA	x	-	100	-	0.00	-118.30	-118.79	-209.54	-247.76	-309.17	-976.38	0.00	-150.54	-149.51	-247.38	-292.06	-357.48	-938.81
San Francisco Bay Area, CA	x	-	100	-	0.00	-699.51	-770.97	-1,057.91	-1,204.39	-1,403.49	-3,403.72	0.00	-1,279.73	-1,383.64	-1,706.87	-1,897.97	-2,108.91	-3,727.84
San Joaquin Valley, CA	x	x	50	100	0.00	-292.07	-304.81	-486.89	-567.87	-691.90	-2,012.07	0.00	-437.20	-453.17	-651.83	-749.84	-881.78	-2,011.19
Sheboygan, WI	x	-	100	-	0.00	-4.85	-4.87	-8.58	-10.15	-12.66	-39.95	0.00	-6.18	-6.14	-10.15	-11.98	-14.65	-38.43
Springfield (Western MA), MA	x	-	100	-	0.00	-37.61	-37.76	-66.62	-78.76	-98.29	-310.39	0.00	-47.86	-47.53	-78.65	-92.85	-113.65	-298.45
St. Louis, MO-IL	x	x	100	100	0.00	-325.70	-359.22	-491.94	-559.86	-651.98	-1,576.42	0.00	-597.24	-646.01	-795.61	-884.33	-981.92	-1,729.27
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-17.14	-19.30	-24.81	-27.92	-31.79	-68.94	0.00	-33.72	-36.94	-43.30	-47.54	-51.63	-80.21
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-27.17	-27.58	-47.35	-55.79	-69.19	-214.09	0.00	-36.24	-36.48	-57.86	-67.81	-82.08	-207.81
Washington, DC-MD-VA	x	x	100	100	0.00	-213.90	-214.88	-378.67	-447.67	-558.51	-1,762.52	0.00	-272.69	-270.97	-447.62	-528.31	-646.39	-1,695.27
Wheeling, WV-OH	-	x	-	100	0.00	-6.31	-6.34	-11.18	-13.22	-16.50	-52.11	0.00	-8.04	-7.98	-13.20	-15.59	-19.08	-50.11
York, PA	-	x	-	100	0.00	-17.92	-18.00	-31.74	-37.53	-46.83	-147.89	0.00	-22.81	-22.66	-37.48	-44.25	-54.16	-142.21

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-76
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

NOx 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-106.28	-99.54	-167.80	-205.74	-261.35	-866.05	0.00	-124.59	-114.39	-194.74	-243.61	-309.94	-811.20
Allegan Co., MI	x	-	100	-	0.00	-11.56	-10.83	-18.26	-22.39	-28.44	-94.24	0.00	-13.56	-12.45	-21.19	-26.51	-33.72	-88.27
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-13.58	-12.72	-21.44	-26.28	-33.39	-110.62	0.00	-15.92	-14.62	-24.88	-31.13	-39.60	-103.62
Atlanta, GA	x	x	100	100	0.00	-845.63	-792.02	-1,335.15	-1,637.10	-2,079.67	-6,891.77	0.00	-991.10	-909.92	-1,549.31	-1,938.24	-2,466.08	-6,455.12
Baltimore, MD	x	x	100	100	0.00	-230.68	-216.10	-364.16	-446.48	-567.13	-1,878.84	0.00	-270.66	-248.59	-422.90	-528.94	-672.83	-1,760.10
Baton Rouge, LA	x	-	100	-	0.00	-577.45	-652.19	-780.93	-869.44	-965.38	-1,864.93	0.00	-1,385.80	-1,514.64	-1,682.07	-1,823.79	-1,929.91	-2,474.40
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-1,075.34	-1,231.37	-1,434.50	-1,581.54	-1,729.00	-3,043.34	0.00	-2,687.89	-2,955.67	-3,226.77	-3,471.95	-3,631.11	-4,315.54
Birmingham, AL	-	x	-	100	0.00	-79.04	-74.01	-124.81	-153.05	-194.45	-644.60	0.00	-92.52	-84.90	-144.71	-181.08	-230.45	-603.64
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-326.90	-306.20	-516.10	-632.79	-803.82	-2,663.41	0.00	-383.32	-351.99	-599.09	-749.41	-953.39	-2,494.86
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-49.16	-45.94	-77.74	-95.40	-121.32	-403.24	0.00	-56.97	-52.09	-89.50	-112.22	-143.14	-377.03
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-75.41	-70.64	-119.06	-145.98	-185.43	-614.40	0.00	-88.43	-81.21	-138.21	-172.88	-219.94	-575.53
Canton-Massillon, OH	-	x	-	100	0.00	-89.61	-98.47	-124.40	-141.03	-160.98	-359.24	0.00	-197.62	-213.08	-245.68	-270.71	-293.43	-431.50
Charleston, WV	-	x	-	100	0.00	-18.76	-17.57	-29.62	-36.31	-46.13	-152.87	0.00	-21.99	-20.19	-34.37	-43.00	-54.71	-143.18
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-197.56	-184.49	-312.55	-383.67	-488.07	-1,623.89	0.00	-228.09	-208.22	-358.91	-450.37	-574.92	-1,517.46
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-38.96	-36.58	-61.39	-75.20	-95.42	-315.07	0.00	-46.26	-42.68	-71.90	-89.71	-113.81	-295.72
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1,340.47	-1,414.96	-1,929.13	-2,239.25	-2,645.38	-6,855.71	0.00	-2,586.46	-2,721.67	-3,349.71	-3,788.84	-4,261.34	-7,463.38
Chico, CA	x	-	100	-	0.00	-15.32	-14.35	-24.19	-29.66	-37.68	-124.85	0.00	-17.96	-16.49	-28.07	-35.12	-44.68	-116.94
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-150.26	-140.62	-237.37	-291.15	-370.00	-1,227.50	0.00	-175.37	-160.76	-274.65	-343.88	-437.94	-1,148.98
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-10.87	-10.18	-17.16	-21.05	-26.73	-88.58	0.00	-12.75	-11.71	-19.92	-24.92	-31.71	-82.98
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-178.08	-166.80	-281.15	-344.72	-437.90	-1,451.00	0.00	-208.79	-191.72	-326.34	-408.23	-519.36	-1,359.15
Columbus, OH	x	x	100	100	0.00	-154.94	-145.12	-244.63	-299.95	-381.04	-1,262.71	0.00	-181.60	-166.73	-283.88	-355.14	-451.85	-1,182.72
Dallas-Fort Worth, TX	x	-	100	-	0.00	-767.95	-719.28	-1,212.47	-1,486.67	-1,888.55	-6,258.20	0.00	-900.17	-826.48	-1,407.09	-1,760.27	-2,239.58	-5,861.82
Dayton-Springfield, OH	-	x	-	100	0.00	-54.34	-50.90	-85.79	-105.19	-133.63	-442.82	0.00	-63.70	-58.48	-99.57	-124.56	-158.47	-414.77
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-396.68	-390.22	-604.36	-726.25	-899.24	-2,756.07	0.00	-583.91	-576.75	-831.51	-993.17	-1,198.09	-2,703.56
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-440.79	-432.78	-672.54	-808.86	-1,002.62	-3,083.71	0.00	-643.55	-634.22	-919.32	-1,099.87	-1,329.48	-3,018.60
Door Co., WI	x	-	100	-	0.00	-2.20	-2.06	-3.47	-4.25	-5.40	-17.91	0.00	-2.58	-2.37	-4.03	-5.04	-6.41	-16.78
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.10	-0.09	-0.15	-0.19	-0.24	-0.80	0.00	-0.11	-0.10	-0.17	-0.22	-0.28	-0.74
Evansville, IN	-	x	-	100	0.00	-25.50	-23.78	-40.38	-49.59	-63.12	-210.37	0.00	-29.25	-26.64	-46.16	-58.00	-74.15	-196.39
Greater Connecticut, CT	x	-	100	-	0.00	-135.47	-126.92	-213.84	-262.16	-332.98	-1,102.94	0.00	-159.05	-146.12	-248.45	-310.70	-395.16	-1,033.34
Greene Co., PA	x	-	100	-	0.00	-2.35	-2.20	-3.71	-4.55	-5.78	-19.17	0.00	-2.76	-2.53	-4.31	-5.39	-6.86	-17.95
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-61.76	-57.85	-97.51	-119.56	-151.89	-503.32	0.00	-72.40	-66.47	-113.16	-141.57	-180.12	-471.44

**Table B2-76
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

NOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-52.82	-49.47	-83.39	-102.25	-129.89	-430.40	0.00	-61.92	-56.86	-96.79	-121.08	-154.04	-403.15
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.37	-0.34	-0.59	-0.72	-0.92	-3.08	0.00	-0.41	-0.37	-0.66	-0.83	-1.07	-2.87
Hickory, NC	-	x	-	100	0.00	-15.60	-14.62	-24.63	-30.20	-38.36	-127.07	0.00	-18.31	-16.81	-28.60	-35.77	-45.50	-119.04
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-2,593.63	-2,888.15	-3,555.99	-3,997.11	-4,504.34	-9,427.92	0.00	-5,962.00	-6,472.48	-7,324.13	-8,006.50	-8,577.26	-11,829.45
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-234.04	-262.95	-318.13	-355.46	-396.90	-791.03	0.00	-552.88	-602.82	-674.01	-732.98	-779.14	-1,026.81
Imperial Co., CA	x	-	100	-	0.00	-25.62	-23.99	-40.45	-49.59	-63.00	-208.77	0.00	-30.03	-27.57	-46.94	-58.72	-74.71	-195.54
Indianapolis, IN	-	x	-	100	0.00	-144.50	-135.34	-228.15	-279.74	-355.36	-1,177.58	0.00	-169.38	-155.51	-264.76	-331.22	-421.41	-1,102.99
Jamestown, NY	x	-	100	-	0.00	-9.95	-9.32	-15.71	-19.27	-24.47	-81.09	0.00	-11.67	-10.72	-18.24	-22.82	-29.03	-75.96
Jefferson Co., NY	x	-	100	-	0.00	-12.24	-11.47	-19.33	-23.70	-30.11	-99.76	0.00	-14.36	-13.19	-22.44	-28.07	-35.71	-93.45
Johnstown, PA	-	x	-	100	0.00	-7.40	-6.93	-11.67	-14.31	-18.17	-60.16	0.00	-8.70	-8.00	-13.58	-16.97	-21.58	-56.38
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-14.40	-13.75	-22.42	-27.28	-34.33	-110.61	0.00	-18.55	-17.60	-27.85	-34.18	-42.57	-105.33
Knoxville, TN	x	x	100	100	0.00	-88.95	-83.31	-140.45	-172.21	-218.78	-725.06	0.00	-104.22	-95.67	-162.94	-203.86	-259.39	-679.09
Lancaster, PA	-	x	-	100	0.00	-31.54	-29.54	-49.80	-61.06	-77.56	-257.02	0.00	-36.97	-33.95	-57.79	-72.30	-91.98	-240.74
Las Vegas, NV	x	-	100	-	0.00	-186.37	-174.42	-294.42	-361.11	-458.90	-1,522.40	0.00	-217.55	-199.43	-340.68	-426.55	-543.20	-1,425.04
Libby, MT	-	x	-	100	0.00	-0.53	-0.49	-0.83	-1.02	-1.30	-4.30	0.00	-0.62	-0.57	-0.97	-1.21	-1.54	-4.03
Liberty-Clairton, PA	-	x	-	100	0.00	-0.72	-0.68	-1.14	-1.39	-1.76	-5.76	0.00	-0.88	-0.82	-1.36	-1.69	-2.12	-5.43
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-2,546.24	-2,631.53	-3,730.44	-4,378.91	-5,254.49	-14,456.69	0.00	-4,555.14	-4,718.98	-6,047.83	-6,944.48	-7,970.37	-15,152.84
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-73.94	-69.46	-116.50	-142.68	-181.00	-597.34	0.00	-87.97	-81.22	-136.62	-170.40	-216.08	-560.84
Louisville, KY-IN	-	x	-	100	0.00	-75.99	-71.05	-120.11	-147.36	-187.34	-622.21	0.00	-88.33	-80.84	-138.57	-173.65	-221.34	-582.03
Macon, GA	-	x	-	100	0.00	-14.28	-13.34	-22.58	-27.71	-35.24	-117.16	0.00	-16.53	-15.11	-25.98	-32.58	-41.56	-109.53
Manitowoc Co., WI	x	-	-	-	0.00	-7.19	-6.74	-11.35	-13.92	-17.67	-58.51	0.00	-8.46	-7.77	-13.20	-16.51	-20.99	-54.83
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-11.77	-11.03	-18.58	-22.79	-28.95	-95.90	0.00	-13.81	-12.68	-21.58	-26.99	-34.33	-89.84
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-50.05	-46.88	-79.03	-96.90	-123.09	-407.89	0.00	-58.67	-53.87	-91.71	-114.73	-145.97	-382.05
Memphis, TN-AR	x	-	100	-	0.00	-236.21	-257.09	-330.83	-377.28	-434.48	-1,010.18	0.00	-505.16	-541.82	-633.74	-702.49	-768.04	-1,180.48
Milwaukee-Racine, WI	x	-	100	-	0.00	-124.78	-116.88	-196.99	-241.53	-306.80	-1,016.53	0.00	-146.33	-134.38	-228.69	-286.06	-363.91	-952.22
Nevada (Western Part), CA	x	-	100	-	0.00	-8.78	-8.23	-13.86	-16.99	-21.58	-71.49	0.00	-10.31	-9.47	-16.10	-20.13	-25.61	-66.97
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-1,328.42	-1,307.64	-2,022.90	-2,430.19	-3,007.91	-9,207.71	0.00	-1,960.89	-1,938.35	-2,789.42	-3,329.82	-4,014.12	-9,038.87
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-9.98	-9.34	-15.77	-19.34	-24.57	-81.50	0.00	-11.66	-10.70	-18.26	-22.86	-29.10	-76.30
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1,660.52	-1,791.45	-2,344.32	-2,687.62	-3,119.11	-7,506.16	0.00	-3,450.16	-3,681.64	-4,366.17	-4,867.14	-5,364.15	-8,574.04

**Table B2-76
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

NOx 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-475.37	-444.62	-751.26	-921.64	-1,171.56	-3,889.69	0.00	-553.26	-506.62	-867.52	-1,086.83	-1,384.94	-3,639.27
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-121.29	-113.59	-191.52	-234.84	-298.34	-988.81	0.00	-142.07	-130.41	-222.15	-277.95	-353.68	-926.08
Poughkeepsie, NY	x	x	100	100	0.00	-107.01	-100.23	-168.95	-207.15	-263.15	-871.99	0.00	-125.44	-115.18	-196.08	-245.29	-312.07	-816.77
Providence (All RI), RI	x	-	100	-	0.00	-64.32	-60.24	-101.54	-124.50	-158.16	-524.07	0.00	-75.41	-69.24	-117.86	-147.44	-187.57	-490.89
Reading, PA	-	x	-	100	0.00	-31.59	-29.59	-49.87	-61.15	-77.68	-257.40	0.00	-37.03	-34.00	-57.88	-72.40	-92.12	-241.10
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-128.53	-120.51	-202.77	-248.52	-315.54	-1,044.06	0.00	-151.49	-139.38	-236.23	-295.20	-375.12	-978.79
Rochester, NY	x	-	100	-	0.00	-93.03	-87.14	-146.89	-180.10	-228.79	-758.13	0.00	-109.06	-100.14	-170.47	-213.26	-271.32	-710.12
Rome, GA	-	x	-	100	0.00	-7.79	-7.30	-12.31	-15.09	-19.17	-63.51	0.00	-9.14	-8.39	-14.28	-17.87	-22.73	-59.49
Sacramento Metro, CA	x	-	50	-	0.00	-213.35	-199.87	-336.79	-412.92	-524.48	-1,737.47	0.00	-250.36	-229.96	-391.16	-489.22	-622.28	-1,627.71
San Diego, CA	x	-	100	-	0.00	-208.49	-195.28	-329.18	-403.62	-512.73	-1,699.07	0.00	-244.38	-224.37	-382.00	-477.89	-608.02	-1,591.44
San Francisco Bay Area, CA	x	-	100	-	0.00	-1,091.80	-1,153.05	-1,570.58	-1,822.55	-2,152.28	-5,569.17	0.00	-2,110.32	-2,221.41	-2,731.54	-3,088.56	-3,472.09	-6,068.82
San Joaquin Valley, CA	x	x	50	100	0.00	-595.31	-579.30	-914.41	-1,104.02	-1,375.33	-4,297.32	0.00	-836.08	-814.89	-1,212.49	-1,462.11	-1,784.08	-4,167.03
Sheboygan, WI	x	-	100	-	0.00	-8.85	-8.29	-13.97	-17.12	-21.75	-72.02	0.00	-10.40	-9.55	-16.23	-20.30	-25.81	-67.48
Springfield (Western MA), MA	x	-	100	-	0.00	-69.06	-64.68	-109.04	-133.70	-169.84	-562.80	0.00	-80.95	-74.32	-126.54	-158.30	-201.40	-527.15
St. Louis, MO-IL	x	x	100	100	0.00	-509.38	-538.19	-732.48	-849.80	-1,003.20	-2,592.42	0.00	-986.04	-1,038.25	-1,275.70	-1,442.01	-1,620.42	-2,827.41
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-24.93	-27.33	-34.67	-39.36	-45.03	-101.48	0.00	-54.58	-58.78	-68.00	-75.03	-81.49	-121.09
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-48.12	-45.63	-75.32	-91.92	-116.07	-377.93	0.00	-59.96	-56.26	-91.30	-112.81	-141.57	-357.64
Washington, DC-MD-VA	x	x	100	100	0.00	-443.43	-415.50	-699.91	-858.06	-1,089.80	-3,609.27	0.00	-520.87	-478.60	-813.45	-1,017.19	-1,293.57	-3,381.78
Wheeling, WV-OH	-	x	-	100	0.00	-10.62	-9.95	-16.76	-20.56	-26.11	-86.53	0.00	-12.45	-11.43	-19.46	-24.34	-30.97	-81.05
York, PA	-	x	-	100	0.00	-36.71	-34.38	-57.96	-71.06	-90.27	-299.12	0.00	-43.04	-39.52	-67.27	-84.15	-107.06	-280.18

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-77
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

PM 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.21	0.18	0.72	0.82	0.69	2.47	0.00	0.21	0.18	0.72	0.82	0.69	2.47
Allegan Co., MI	x	-	100	-	0.00	0.02	0.02	0.08	0.09	0.08	0.27	0.00	0.02	0.02	0.08	0.09	0.08	0.27
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.02	0.07	0.08	0.07	0.25	0.00	0.02	0.02	0.07	0.08	0.07	0.25
Atlanta, GA	x	x	100	100	0.00	1.10	0.96	3.84	4.38	3.67	13.14	0.00	1.09	0.95	3.84	4.38	3.67	13.14
Baltimore, MD	x	x	100	100	0.00	0.45	0.40	1.60	1.82	1.52	5.46	0.00	0.45	0.40	1.60	1.82	1.52	5.46
Baton Rouge, LA	x	-	100	-	0.00	-14.25	-17.94	-22.86	-26.13	-30.64	-59.49	0.00	-14.29	-17.98	-22.90	-26.17	-30.69	-59.53
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-28.84	-36.24	-46.54	-53.19	-62.19	-121.56	0.00	-28.92	-36.33	-46.63	-53.29	-62.29	-121.62
Birmingham, AL	-	x	-	100	0.00	0.17	0.15	0.58	0.67	0.56	2.00	0.00	0.17	0.15	0.58	0.67	0.56	2.00
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	0.74	0.65	2.60	2.96	2.48	8.88	0.00	0.74	0.64	2.60	2.96	2.48	8.88
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.10	0.09	0.35	0.40	0.34	1.21	0.00	0.10	0.09	0.35	0.40	0.34	1.21
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.18	0.16	0.62	0.71	0.60	2.14	0.00	0.18	0.15	0.62	0.71	0.60	2.14
Canton-Massillon, OH	-	x	-	100	0.00	-1.82	-2.31	-2.86	-3.26	-3.88	-7.33	0.00	-1.83	-2.32	-2.86	-3.27	-3.88	-7.33
Charleston, WV	-	x	-	100	0.00	0.05	0.04	0.17	0.19	0.16	0.57	0.00	0.05	0.04	0.17	0.19	0.16	0.57
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	0.30	0.27	1.03	1.18	1.00	3.52	0.00	0.30	0.27	1.03	1.18	1.00	3.52
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.09	0.08	0.30	0.34	0.29	1.03	0.00	0.09	0.08	0.30	0.34	0.29	1.03
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-19.81	-25.30	-29.92	-34.21	-41.42	-75.09	0.00	-19.87	-25.37	-29.99	-34.28	-41.50	-75.14
Chico, CA	x	-	100	-	0.00	0.03	0.03	0.11	0.12	0.10	0.37	0.00	0.03	0.03	0.11	0.12	0.10	0.37
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.30	0.26	1.04	1.18	0.99	3.55	0.00	0.30	0.26	1.04	1.18	0.99	3.55
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.03	0.02	0.10	0.11	0.09	0.33	0.00	0.03	0.02	0.10	0.11	0.09	0.33
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	0.42	0.37	1.49	1.70	1.42	5.10	0.00	0.42	0.37	1.49	1.70	1.42	5.10
Columbus, OH	x	x	100	100	0.00	0.27	0.24	0.96	1.10	0.92	3.30	0.00	0.27	0.24	0.96	1.10	0.92	3.29
Dallas-Fort Worth, TX	x	-	100	-	0.00	1.11	0.97	3.91	4.45	3.73	13.35	0.00	1.11	0.97	3.90	4.45	3.73	13.35
Dayton-Springfield, OH	-	x	-	100	0.00	0.13	0.11	0.45	0.52	0.43	1.55	0.00	0.13	0.11	0.45	0.51	0.43	1.55
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-1.90	-2.58	-2.10	-2.40	-3.48	-4.03	0.00	-1.91	-2.59	-2.11	-2.41	-3.49	-4.04
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-1.79	-2.55	-1.43	-1.65	-2.95	-1.56	0.00	-1.80	-2.56	-1.44	-1.66	-2.96	-1.57
Door Co., WI	x	-	100	-	0.00	0.01	0.00	0.02	0.02	0.02	0.06	0.00	0.01	0.00	0.02	0.02	0.02	0.06
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evansville, IN	-	x	-	100	0.00	0.06	0.05	0.20	0.22	0.19	0.67	0.00	0.06	0.05	0.20	0.22	0.19	0.67
Greater Connecticut, CT	x	-	100	-	0.00	0.28	0.25	0.99	1.13	0.94	3.38	0.00	0.28	0.24	0.99	1.12	0.94	3.38
Greene Co., PA	x	-	100	-	0.00	0.01	0.01	0.02	0.03	0.02	0.08	0.00	0.01	0.01	0.02	0.03	0.02	0.08
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.13	0.11	0.45	0.51	0.43	1.53	0.00	0.13	0.11	0.45	0.51	0.43	1.53

**Table B2-77
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.12	0.10	0.41	0.46	0.39	1.38	0.00	0.12	0.10	0.40	0.46	0.39	1.38
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hickory, NC	-	x	-	100	0.00	0.03	0.03	0.10	0.12	0.10	0.36	0.00	0.03	0.03	0.10	0.12	0.10	0.36
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-58.35	-73.59	-92.87	-106.15	-125.01	-240.60	0.00	-58.52	-73.76	-93.05	-106.34	-125.20	-240.73
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-5.62	-7.09	-8.97	-10.25	-12.06	-23.26	0.00	-5.64	-7.10	-8.98	-10.27	-12.08	-23.27
Imperial Co., CA	x	-	100	-	0.00	0.04	0.03	0.12	0.14	0.12	0.43	0.00	0.04	0.03	0.12	0.14	0.12	0.43
Indianapolis, IN	-	x	-	100	0.00	0.26	0.22	0.90	1.03	0.86	3.08	0.00	0.26	0.22	0.90	1.02	0.86	3.08
Jamestown, NY	x	-	100	-	0.00	0.02	0.02	0.08	0.09	0.08	0.28	0.00	0.02	0.02	0.08	0.09	0.08	0.28
Jefferson Co., NY	x	-	100	-	0.00	0.02	0.02	0.08	0.09	0.07	0.26	0.00	0.02	0.02	0.08	0.09	0.07	0.26
Johnstown, PA	-	x	-	100	0.00	0.02	0.02	0.07	0.08	0.07	0.23	0.00	0.02	0.02	0.07	0.08	0.07	0.23
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.02	0.02	0.06	0.07	0.06	0.22	0.00	0.02	0.02	0.06	0.07	0.06	0.22
Knoxville, TN	x	x	100	100	0.00	0.17	0.15	0.61	0.70	0.58	2.09	0.00	0.17	0.15	0.61	0.70	0.58	2.09
Lancaster, PA	-	x	-	100	0.00	0.07	0.06	0.24	0.27	0.23	0.82	0.00	0.07	0.06	0.24	0.27	0.23	0.82
Las Vegas, NV	x	-	100	-	0.00	0.23	0.20	0.79	0.90	0.76	2.71	0.00	0.23	0.20	0.79	0.90	0.76	2.71
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Liberty-Clairton, PA	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-29.49	-37.94	-43.26	-49.47	-60.87	-106.51	0.00	-29.58	-38.04	-43.37	-49.58	-60.98	-106.59
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.12	0.10	0.41	0.46	0.39	1.39	0.00	0.12	0.10	0.41	0.46	0.39	1.39
Louisville, KY-IN	-	x	-	100	0.00	0.18	0.16	0.63	0.72	0.60	2.16	0.00	0.18	0.16	0.63	0.72	0.60	2.16
Macon, GA	-	x	-	100	0.00	0.03	0.03	0.12	0.13	0.11	0.40	0.00	0.03	0.03	0.12	0.13	0.11	0.40
Manitowoc Co., WI	x	-	-	-	0.00	0.02	0.01	0.06	0.07	0.06	0.20	0.00	0.02	0.01	0.06	0.07	0.06	0.20
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.02	0.01	0.06	0.07	0.06	0.20	0.00	0.02	0.01	0.06	0.07	0.06	0.20
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.07	0.06	0.23	0.26	0.22	0.78	0.00	0.07	0.06	0.23	0.26	0.22	0.78
Memphis, TN-AR	x	-	100	-	0.00	-4.46	-5.67	-6.92	-7.92	-9.45	-17.67	0.00	-4.48	-5.68	-6.94	-7.93	-9.47	-17.68
Milwaukee-Racine, WI	x	-	100	-	0.00	0.28	0.24	0.98	1.12	0.94	3.36	0.00	0.28	0.24	0.98	1.12	0.94	3.36
Nevada (Western Part), CA	x	-	100	-	0.00	0.02	0.01	0.06	0.06	0.05	0.19	0.00	0.02	0.01	0.06	0.06	0.05	0.19
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-5.86	-8.24	-5.11	-5.87	-9.90	-6.86	0.00	-5.88	-8.27	-5.14	-5.90	-9.93	-6.88
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.03	0.02	0.09	0.10	0.08	0.30	0.00	0.03	0.02	0.09	0.10	0.08	0.30
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-29.34	-37.26	-45.39	-51.89	-62.03	-115.61	0.00	-29.42	-37.36	-45.48	-51.99	-62.13	-115.68

**Table B2-77
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

PM 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	0.63	0.56	2.21	2.52	2.12	7.55	0.00	0.63	0.55	2.21	2.52	2.11	7.55
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.31	0.27	1.10	1.25	1.05	3.76	0.00	0.31	0.27	1.10	1.25	1.05	3.76
Poughkeepsie, NY	x	x	100	100	0.00	0.20	0.18	0.71	0.81	0.68	2.44	0.00	0.20	0.18	0.71	0.81	0.68	2.44
Providence (All RI), RI	x	-	100	-	0.00	0.15	0.13	0.52	0.59	0.49	1.76	0.00	0.15	0.13	0.52	0.59	0.49	1.76
Reading, PA	-	x	-	100	0.00	0.06	0.05	0.21	0.24	0.20	0.72	0.00	0.06	0.05	0.21	0.24	0.20	0.72
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.12	0.10	0.42	0.47	0.40	1.42	0.00	0.12	0.10	0.42	0.47	0.40	1.42
Rochester, NY	x	-	100	-	0.00	0.21	0.18	0.72	0.82	0.69	2.47	0.00	0.21	0.18	0.72	0.82	0.69	2.47
Rome, GA	-	x	-	100	0.00	0.02	0.02	0.06	0.07	0.06	0.22	0.00	0.02	0.02	0.06	0.07	0.06	0.22
Sacramento Metro, CA	x	-	50	-	0.00	0.35	0.30	1.21	1.38	1.16	4.15	0.00	0.35	0.30	1.21	1.38	1.16	4.15
San Diego, CA	x	-	100	-	0.00	0.48	0.42	1.70	1.94	1.62	5.81	0.00	0.48	0.42	1.70	1.94	1.62	5.81
San Francisco Bay Area, CA	x	-	100	-	0.00	-15.93	-20.41	-23.76	-27.17	-33.12	-59.16	0.00	-15.98	-20.46	-23.82	-27.23	-33.18	-59.20
San Joaquin Valley, CA	x	x	50	100	0.00	-2.14	-2.96	-2.13	-2.45	-3.79	-3.59	0.00	-2.15	-2.97	-2.14	-2.46	-3.80	-3.60
Sheboygan, WI	x	-	100	-	0.00	0.02	0.02	0.07	0.08	0.06	0.23	0.00	0.02	0.02	0.07	0.08	0.06	0.23
Springfield (Western MA), MA	x	-	100	-	0.00	0.15	0.13	0.52	0.59	0.50	1.77	0.00	0.15	0.13	0.52	0.59	0.50	1.77
St. Louis, MO-IL	x	x	100	100	0.00	-7.37	-9.44	-11.00	-12.58	-15.33	-27.40	0.00	-7.39	-9.47	-11.03	-12.61	-15.36	-27.42
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-0.50	-0.63	-0.77	-0.88	-1.05	-1.97	0.00	-0.50	-0.63	-0.77	-0.88	-1.05	-1.97
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.03	0.00	0.24	0.27	0.19	0.91	0.00	0.03	0.00	0.24	0.27	0.18	0.91
Washington, DC-MD-VA	x	x	100	100	0.00	0.78	0.68	2.73	3.11	2.60	9.33	0.00	0.78	0.68	2.73	3.11	2.60	9.33
Wheeling, WV-OH	-	x	-	100	0.00	0.03	0.02	0.10	0.11	0.09	0.33	0.00	0.03	0.02	0.10	0.11	0.09	0.33
York, PA	-	x	-	100	0.00	0.06	0.06	0.22	0.25	0.21	0.76	0.00	0.06	0.05	0.22	0.25	0.21	0.76

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-78
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

PM 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	0.66	0.69	2.19	2.02	1.98	4.62	0.00	1.36	1.47	3.10	2.91	2.93	6.39
Allegan Co., MI	x	-	100	-	0.00	0.07	0.08	0.24	0.22	0.22	0.50	0.00	0.15	0.16	0.34	0.32	0.32	0.70
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.07	0.07	0.23	0.21	0.21	0.49	0.00	0.14	0.16	0.33	0.31	0.31	0.68
Atlanta, GA	x	x	100	100	0.00	3.86	3.98	12.71	11.69	11.46	26.76	0.00	7.86	8.55	17.95	16.87	17.00	37.05
Baltimore, MD	x	x	100	100	0.00	1.46	1.51	4.82	4.43	4.34	10.14	0.00	2.98	3.24	6.80	6.39	6.44	14.04
Baton Rouge, LA	x	-	100	-	0.00	-44.57	-52.02	-62.21	-69.64	-78.18	-147.28	0.00	-73.39	-82.90	-94.13	-103.20	-111.99	-169.51
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-90.23	-105.25	-126.87	-141.69	-158.87	-299.94	0.00	-148.76	-167.99	-191.79	-209.92	-227.65	-346.00
Birmingham, AL	-	x	-	100	0.00	0.52	0.54	1.72	1.59	1.55	3.63	0.00	1.07	1.16	2.43	2.29	2.31	5.02
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	2.29	2.37	7.55	6.95	6.81	15.90	0.00	4.67	5.08	10.67	10.02	10.10	22.02
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.33	0.34	1.07	0.98	0.96	2.25	0.00	0.66	0.72	1.51	1.42	1.43	3.10
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.55	0.57	1.80	1.66	1.63	3.80	0.00	1.12	1.21	2.55	2.40	2.41	5.26
Canton-Massillon, OH	-	x	-	100	0.00	-5.71	-6.68	-7.76	-8.76	-9.88	-18.46	0.00	-9.36	-10.58	-11.77	-12.99	-14.13	-21.06
Charleston, WV	-	x	-	100	0.00	0.14	0.15	0.47	0.44	0.43	1.00	0.00	0.29	0.32	0.67	0.63	0.63	1.38
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	1.04	1.08	3.35	3.09	3.04	7.06	0.00	2.10	2.29	4.73	4.46	4.50	9.74
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.27	0.28	0.88	0.81	0.79	1.85	0.00	0.54	0.59	1.24	1.16	1.17	2.56
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-61.87	-72.63	-80.45	-92.10	-104.74	-193.15	0.00	-100.65	-113.96	-122.75	-136.85	-149.57	-217.26
Chico, CA	x	-	100	-	0.00	0.10	0.10	0.33	0.30	0.29	0.68	0.00	0.20	0.22	0.46	0.43	0.43	0.95
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	0.94	0.97	3.08	2.84	2.78	6.49	0.00	1.91	2.08	4.35	4.09	4.13	8.98
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.08	0.09	0.28	0.25	0.25	0.58	0.00	0.17	0.19	0.39	0.37	0.37	0.81
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	1.30	1.34	4.29	3.95	3.87	9.03	0.00	2.65	2.88	6.06	5.69	5.74	12.51
Columbus, OH	x	x	100	100	0.00	0.90	0.93	2.97	2.73	2.68	6.25	0.00	1.84	1.99	4.19	3.94	3.97	8.65
Dallas-Fort Worth, TX	x	-	100	-	0.00	3.82	3.95	12.59	11.59	11.36	26.52	0.00	7.79	8.47	17.79	16.72	16.85	36.72
Dayton-Springfield, OH	-	x	-	100	0.00	0.40	0.41	1.30	1.20	1.18	2.75	0.00	0.81	0.88	1.84	1.73	1.75	3.80
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-5.84	-7.04	-5.00	-6.69	-8.22	-13.27	0.00	-8.96	-10.27	-8.12	-10.11	-11.53	-12.59
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-5.62	-6.88	-3.37	-5.32	-6.99	-10.01	0.00	-8.33	-9.61	-5.88	-8.17	-9.66	-7.71
Door Co., WI	x	-	100	-	0.00	0.02	0.02	0.05	0.05	0.05	0.11	0.00	0.03	0.04	0.07	0.07	0.07	0.15
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Evansville, IN	-	x	-	100	0.00	0.18	0.19	0.58	0.54	0.53	1.23	0.00	0.37	0.40	0.82	0.78	0.78	1.70
Greater Connecticut, CT	x	-	100	-	0.00	0.89	0.92	2.94	2.71	2.65	6.20	0.00	1.82	1.98	4.16	3.91	3.94	8.58
Greene Co., PA	x	-	100	-	0.00	0.02	0.02	0.06	0.06	0.06	0.13	0.00	0.04	0.04	0.09	0.08	0.08	0.18
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.41	0.42	1.34	1.23	1.21	2.81	0.00	0.83	0.90	1.89	1.77	1.79	3.90

**Table B2-78
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.36	0.37	1.19	1.10	1.08	2.51	0.00	0.74	0.80	1.68	1.58	1.60	3.48
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.02
Hickory, NC	-	x	-	100	0.00	0.10	0.10	0.32	0.29	0.29	0.67	0.00	0.20	0.21	0.45	0.42	0.43	0.93
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-182.47	-213.13	-252.33	-283.26	-318.55	-598.45	0.00	-299.94	-338.92	-382.19	-419.93	-456.14	-686.77
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-17.60	-20.55	-24.41	-27.38	-30.77	-57.86	0.00	-28.94	-32.70	-36.96	-40.58	-44.07	-66.47
Imperial Co., CA	x	-	100	-	0.00	0.12	0.13	0.41	0.38	0.37	0.87	0.00	0.25	0.28	0.58	0.55	0.55	1.20
Indianapolis, IN	-	x	-	100	0.00	0.84	0.87	2.76	2.54	2.49	5.82	0.00	1.71	1.86	3.90	3.67	3.70	8.05
Jamestown, NY	x	-	100	-	0.00	0.07	0.08	0.24	0.22	0.22	0.51	0.00	0.15	0.16	0.34	0.32	0.32	0.70
Jefferson Co., NY	x	-	100	-	0.00	0.07	0.07	0.24	0.22	0.22	0.50	0.00	0.15	0.16	0.34	0.32	0.32	0.70
Johnstown, PA	-	x	-	100	0.00	0.06	0.06	0.19	0.18	0.17	0.40	0.00	0.12	0.13	0.27	0.25	0.26	0.56
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.06	0.06	0.21	0.19	0.19	0.44	0.00	0.13	0.14	0.29	0.27	0.28	0.61
Knoxville, TN	x	x	100	100	0.00	0.56	0.58	1.85	1.70	1.67	3.89	0.00	1.14	1.24	2.61	2.45	2.47	5.39
Lancaster, PA	-	x	-	100	0.00	0.21	0.22	0.71	0.65	0.64	1.49	0.00	0.44	0.47	1.00	0.94	0.94	2.06
Las Vegas, NV	x	-	100	-	0.00	0.82	0.85	2.71	2.49	2.44	5.71	0.00	1.68	1.82	3.83	3.60	3.63	7.90
Libby, MT	-	x	-	100	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.02	0.02	0.02	0.03
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.04	0.00	0.01	0.01	0.03	0.03	0.03	0.06
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-91.86	-108.16	-114.87	-133.19	-152.57	-278.00	0.00	-148.49	-168.34	-176.12	-198.22	-217.49	-308.57
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.39	0.40	1.29	1.19	1.17	2.72	0.00	0.80	0.87	1.83	1.72	1.73	3.77
Louisville, KY-IN	-	x	-	100	0.00	0.56	0.58	1.83	1.68	1.65	3.85	0.00	1.13	1.23	2.58	2.43	2.45	5.32
Macon, GA	-	x	-	100	0.00	0.10	0.11	0.34	0.32	0.31	0.72	0.00	0.21	0.23	0.48	0.45	0.46	1.00
Manitowoc Co., WI	x	-	-	-	0.00	0.05	0.05	0.17	0.16	0.16	0.36	0.00	0.11	0.12	0.24	0.23	0.23	0.50
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.06	0.06	0.19	0.18	0.17	0.40	0.00	0.12	0.13	0.27	0.25	0.26	0.56
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.23	0.24	0.76	0.70	0.69	1.61	0.00	0.47	0.51	1.08	1.02	1.02	2.23
Memphis, TN-AR	x	-	100	-	0.00	-13.97	-16.36	-18.78	-21.27	-24.05	-44.79	0.00	-22.86	-25.85	-28.54	-31.57	-34.39	-50.94
Milwaukee-Racine, WI	x	-	100	-	0.00	0.87	0.90	2.87	2.64	2.59	6.05	0.00	1.78	1.93	4.06	3.81	3.84	8.38
Nevada (Western Part), CA	x	-	100	-	0.00	0.05	0.05	0.17	0.16	0.16	0.36	0.00	0.11	0.12	0.24	0.23	0.23	0.50
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-18.36	-22.36	-12.32	-18.38	-23.66	-35.19	0.00	-27.48	-31.65	-20.96	-28.08	-32.84	-29.15
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.08	0.08	0.25	0.23	0.23	0.53	0.00	0.16	0.17	0.36	0.34	0.34	0.74
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-91.70	-107.40	-122.65	-139.14	-157.42	-292.80	0.00	-149.88	-169.55	-186.50	-206.53	-225.08	-332.43

**Table B2-78
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

PM 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	2.26	2.34	7.40	6.81	6.68	15.59	0.00	4.59	4.99	10.45	9.83	9.91	21.56
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	0.94	0.97	3.11	2.86	2.80	6.54	0.00	1.92	2.09	4.39	4.12	4.16	9.06
Poughkeepsie, NY	x	x	100	100	0.00	0.66	0.68	2.18	2.00	1.96	4.58	0.00	1.35	1.46	3.07	2.89	2.91	6.34
Providence (All RI), RI	x	-	100	-	0.00	0.46	0.47	1.50	1.38	1.36	3.16	0.00	0.93	1.01	2.12	1.99	2.01	4.38
Reading, PA	-	x	-	100	0.00	0.19	0.20	0.64	0.59	0.58	1.35	0.00	0.40	0.43	0.90	0.85	0.86	1.87
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.46	0.47	1.52	1.40	1.37	3.19	0.00	0.94	1.02	2.14	2.01	2.03	4.42
Rochester, NY	x	-	100	-	0.00	0.64	0.66	2.12	1.95	1.91	4.47	0.00	1.31	1.43	3.00	2.82	2.84	6.18
Rome, GA	-	x	-	100	0.00	0.06	0.06	0.18	0.17	0.17	0.39	0.00	0.11	0.12	0.26	0.24	0.25	0.54
Sacramento Metro, CA	x	-	50	-	0.00	1.16	1.20	3.83	3.52	3.45	8.06	0.00	2.37	2.57	5.41	5.08	5.12	11.16
San Diego, CA	x	-	100	-	0.00	1.50	1.55	4.93	4.54	4.45	10.39	0.00	3.05	3.32	6.97	6.55	6.60	14.38
San Francisco Bay Area, CA	x	-	100	-	0.00	-49.84	-58.56	-64.02	-73.57	-83.86	-154.07	0.00	-80.91	-91.65	-97.83	-109.38	-119.69	-172.60
San Joaquin Valley, CA	x	x	50	100	0.00	-6.46	-7.85	-4.47	-6.57	-8.41	-12.64	0.00	-9.69	-11.15	-7.55	-10.03	-11.69	-10.68
Sheboygan, WI	x	-	100	-	0.00	0.06	0.06	0.20	0.18	0.18	0.42	0.00	0.12	0.13	0.28	0.26	0.26	0.58
Springfield (Western MA), MA	x	-	100	-	0.00	0.47	0.48	1.54	1.41	1.39	3.24	0.00	0.95	1.03	2.17	2.04	2.06	4.48
St. Louis, MO-IL	x	x	100	100	0.00	-23.07	-27.10	-29.65	-34.07	-38.83	-71.35	0.00	-37.45	-42.42	-45.31	-50.65	-55.42	-79.95
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-1.56	-1.82	-2.10	-2.37	-2.68	-5.00	0.00	-2.55	-2.88	-3.19	-3.52	-3.84	-5.69
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.09	0.07	0.73	0.61	0.55	1.45	0.00	0.28	0.28	1.00	0.86	0.83	2.18
Washington, DC-MD-VA	x	x	100	100	0.00	2.53	2.61	8.34	7.67	7.52	17.56	0.00	5.15	5.60	11.78	11.06	11.15	24.31
Wheeling, WV-OH	-	x	-	100	0.00	0.08	0.08	0.27	0.25	0.24	0.57	0.00	0.17	0.18	0.38	0.36	0.36	0.79
York, PA	-	x	-	100	0.00	0.21	0.22	0.69	0.64	0.62	1.46	0.00	0.43	0.47	0.98	0.92	0.93	2.02

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-79
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

PM 2025

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	1.07	1.13	3.43	3.02	3.08	6.41	0.00	2.99	3.33	5.95	5.51	5.75	11.36
Allegan Co., MI	x	-	100	-	0.00	0.12	0.12	0.37	0.33	0.34	0.70	0.00	0.33	0.36	0.65	0.60	0.63	1.24
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.12	0.13	0.39	0.34	0.35	0.72	0.00	0.34	0.37	0.67	0.62	0.65	1.28
Atlanta, GA	x	x	100	100	0.00	6.85	7.23	21.92	19.26	19.66	40.92	0.00	19.13	21.24	38.01	35.17	36.70	72.56
Baltimore, MD	x	x	100	100	0.00	2.34	2.47	7.51	6.59	6.73	14.01	0.00	6.55	7.27	13.01	12.04	12.57	24.85
Baton Rouge, LA	x	-	100	-	0.00	-69.85	-80.24	-94.61	-105.30	-116.96	-218.28	0.00	-146.34	-162.09	-179.22	-194.26	-206.57	-276.33
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-141.45	-162.43	-193.09	-214.30	-237.83	-444.35	0.00	-296.91	-328.88	-365.36	-395.30	-420.27	-564.98
Birmingham, AL	-	x	-	100	0.00	0.82	0.87	2.63	2.32	2.36	4.92	0.00	2.30	2.55	4.57	4.23	4.41	8.72
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	3.55	3.75	11.37	9.98	10.19	21.21	0.00	9.92	11.01	19.71	18.23	19.03	37.62
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.52	0.55	1.65	1.45	1.48	3.09	0.00	1.45	1.61	2.86	2.65	2.77	5.46
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.84	0.89	2.69	2.36	2.41	5.02	0.00	2.35	2.61	4.67	4.32	4.50	8.91
Canton-Massillon, OH	-	x	-	100	0.00	-8.95	-10.30	-11.82	-13.28	-14.79	-27.50	0.00	-18.64	-20.65	-22.47	-24.51	-26.08	-34.31
Charleston, WV	-	x	-	100	0.00	0.22	0.23	0.69	0.61	0.62	1.29	0.00	0.60	0.67	1.20	1.11	1.16	2.29
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	1.79	1.89	5.62	4.95	5.06	10.51	0.00	4.95	5.50	9.75	9.04	9.44	18.56
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.41	0.43	1.32	1.16	1.19	2.47	0.00	1.15	1.28	2.29	2.12	2.21	4.38
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-96.79	-111.66	-121.85	-139.38	-156.09	-288.21	0.00	-199.29	-220.70	-233.41	-257.41	-274.23	-349.68
Chico, CA	x	-	100	-	0.00	0.16	0.17	0.50	0.44	0.45	0.94	0.00	0.44	0.49	0.87	0.81	0.84	1.67
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	1.50	1.59	4.79	4.21	4.30	8.94	0.00	4.18	4.65	8.30	7.68	8.02	15.83
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.13	0.13	0.40	0.36	0.36	0.75	0.00	0.35	0.39	0.70	0.65	0.68	1.34
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	1.99	2.10	6.38	5.60	5.72	11.90	0.00	5.56	6.18	11.06	10.23	10.67	21.11
Columbus, OH	x	x	100	100	0.00	1.48	1.56	4.74	4.16	4.25	8.84	0.00	4.13	4.59	8.21	7.60	7.93	15.68
Dallas-Fort Worth, TX	x	-	100	-	0.00	6.60	6.97	21.12	18.56	18.94	39.42	0.00	18.43	20.47	36.63	33.88	35.36	69.92
Dayton-Springfield, OH	-	x	-	100	0.00	0.61	0.64	1.94	1.71	1.74	3.63	0.00	1.70	1.88	3.37	3.12	3.25	6.43
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-8.98	-10.57	-7.05	-9.93	-11.73	-20.18	0.00	-16.88	-18.67	-14.78	-18.46	-19.91	-17.16
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-8.84	-10.49	-5.22	-8.55	-10.43	-17.20	0.00	-15.96	-17.65	-11.76	-15.97	-17.35	-10.68
Door Co., WI	x	-	100	-	0.00	0.02	0.03	0.08	0.07	0.07	0.15	0.00	0.07	0.08	0.14	0.13	0.13	0.26
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Evansville, IN	-	x	-	100	0.00	0.28	0.30	0.89	0.78	0.80	1.67	0.00	0.78	0.87	1.55	1.43	1.50	2.94
Greater Connecticut, CT	x	-	100	-	0.00	1.41	1.49	4.53	3.98	4.06	8.45	0.00	3.95	4.39	7.85	7.26	7.58	14.99
Greene Co., PA	x	-	100	-	0.00	0.03	0.03	0.09	0.08	0.08	0.17	0.00	0.08	0.09	0.16	0.15	0.15	0.30
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.64	0.68	2.06	1.81	1.85	3.85	0.00	1.80	2.00	3.57	3.31	3.45	6.82

**Table B2-79
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.57	0.60	1.81	1.59	1.63	3.38	0.00	1.58	1.76	3.14	2.91	3.03	6.00
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.02	0.02	0.02	0.04
Hickory, NC	-	x	-	100	0.00	0.16	0.17	0.50	0.44	0.45	0.94	0.00	0.44	0.49	0.87	0.80	0.84	1.66
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-285.88	-328.60	-383.47	-428.33	-476.28	-887.61	0.00	-597.50	-661.81	-727.48	-790.30	-840.59	-1,117.56
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-27.59	-31.71	-37.17	-41.46	-46.08	-85.92	0.00	-57.73	-63.95	-70.48	-76.49	-81.34	-108.44
Imperial Co., CA	x	-	100	-	0.00	0.22	0.23	0.70	0.62	0.63	1.31	0.00	0.61	0.68	1.22	1.12	1.17	2.32
Indianapolis, IN	-	x	-	100	0.00	1.38	1.45	4.41	3.87	3.95	8.22	0.00	3.85	4.27	7.64	7.07	7.38	14.59
Jamestown, NY	x	-	100	-	0.00	0.11	0.12	0.36	0.31	0.32	0.67	0.00	0.31	0.35	0.62	0.57	0.60	1.18
Jefferson Co., NY	x	-	100	-	0.00	0.12	0.13	0.38	0.33	0.34	0.71	0.00	0.33	0.37	0.66	0.61	0.64	1.26
Johnstown, PA	-	x	-	100	0.00	0.09	0.09	0.28	0.24	0.25	0.52	0.00	0.24	0.27	0.48	0.45	0.46	0.92
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.10	0.11	0.35	0.30	0.31	0.65	0.00	0.30	0.33	0.60	0.55	0.58	1.16
Knoxville, TN	x	x	100	100	0.00	0.90	0.95	2.89	2.54	2.59	5.39	0.00	2.52	2.80	5.01	4.63	4.84	9.56
Lancaster, PA	-	x	-	100	0.00	0.34	0.36	1.08	0.95	0.97	2.01	0.00	0.94	1.04	1.87	1.73	1.80	3.56
Las Vegas, NV	x	-	100	-	0.00	1.50	1.58	4.78	4.20	4.29	8.92	0.00	4.18	4.64	8.29	7.67	8.01	15.82
Libby, MT	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.03	0.03	0.03	0.06
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.03	0.02	0.03	0.05	0.00	0.02	0.03	0.05	0.05	0.05	0.09
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-143.27	-165.67	-172.46	-200.73	-225.92	-414.41	0.00	-291.99	-323.33	-332.71	-370.93	-395.62	-489.17
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.66	0.70	2.12	1.86	1.90	3.96	0.00	1.85	2.05	3.68	3.40	3.55	7.03
Louisville, KY-IN	-	x	-	100	0.00	0.86	0.91	2.73	2.40	2.45	5.10	0.00	2.39	2.65	4.73	4.38	4.57	9.03
Macon, GA	-	x	-	100	0.00	0.16	0.17	0.51	0.45	0.46	0.96	0.00	0.45	0.50	0.89	0.82	0.86	1.70
Manitowoc Co., WI	x	-	-	-	0.00	0.08	0.08	0.26	0.23	0.23	0.48	0.00	0.22	0.25	0.44	0.41	0.43	0.85
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.10	0.11	0.32	0.29	0.29	0.61	0.00	0.28	0.31	0.56	0.52	0.54	1.07
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.41	0.44	1.32	1.16	1.19	2.47	0.00	1.15	1.28	2.29	2.12	2.21	4.37
Memphis, TN-AR	x	-	100	-	0.00	-21.92	-25.23	-28.62	-32.28	-36.01	-66.84	0.00	-45.51	-50.40	-54.51	-59.59	-63.42	-82.86
Milwaukee-Racine, WI	x	-	100	-	0.00	1.35	1.43	4.33	3.81	3.89	8.09	0.00	3.78	4.20	7.52	6.95	7.26	14.35
Nevada (Western Part), CA	x	-	100	-	0.00	0.09	0.09	0.27	0.24	0.25	0.51	0.00	0.24	0.27	0.47	0.44	0.46	0.91
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-28.86	-34.17	-19.00	-29.31	-35.32	-59.20	0.00	-52.87	-58.48	-41.59	-54.66	-59.23	-41.95
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.12	0.12	0.37	0.33	0.33	0.69	0.00	0.32	0.36	0.64	0.59	0.62	1.23
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-143.62	-165.41	-186.24	-210.66	-235.13	-436.04	0.00	-297.76	-329.78	-355.12	-388.87	-413.97	-538.41

**Table B2-79
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

PM 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	4.01	4.24	12.78	11.24	11.47	23.87	0.00	11.18	12.42	22.16	20.52	21.41	42.27
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	1.41	1.49	4.53	3.98	4.06	8.45	0.00	3.95	4.39	7.85	7.26	7.58	14.98
Poughkeepsie, NY	x	x	100	100	0.00	1.07	1.13	3.43	3.01	3.07	6.39	0.00	2.99	3.32	5.94	5.49	5.73	11.34
Providence (All RI), RI	x	-	100	-	0.00	0.71	0.74	2.26	1.98	2.02	4.21	0.00	1.97	2.19	3.92	3.62	3.78	7.47
Reading, PA	-	x	-	100	0.00	0.32	0.33	1.01	0.89	0.90	1.88	0.00	0.88	0.98	1.75	1.62	1.69	3.34
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	0.89	0.94	2.86	2.51	2.56	5.33	0.00	2.49	2.76	4.95	4.58	4.78	9.45
Rochester, NY	x	-	100	-	0.00	1.00	1.06	3.21	2.82	2.88	6.00	0.00	2.80	3.11	5.57	5.15	5.38	10.64
Rome, GA	-	x	-	100	0.00	0.09	0.09	0.28	0.24	0.25	0.51	0.00	0.24	0.27	0.48	0.44	0.46	0.91
Sacramento Metro, CA	x	-	50	-	0.00	1.95	2.06	6.25	5.49	5.61	11.67	0.00	5.45	6.06	10.84	10.03	10.47	20.70
San Diego, CA	x	-	100	-	0.00	2.31	2.44	7.38	6.49	6.62	13.78	0.00	6.44	7.15	12.80	11.84	12.36	24.44
San Francisco Bay Area, CA	x	-	100	-	0.00	-78.15	-90.20	-97.49	-111.91	-125.45	-231.32	0.00	-160.57	-177.82	-187.01	-206.69	-220.25	-279.11
San Joaquin Valley, CA	x	x	50	100	0.00	-9.69	-11.52	-5.44	-9.18	-11.25	-18.43	0.00	-17.40	-19.24	-12.44	-17.16	-18.66	-10.70
Sheboygan, WI	x	-	100	-	0.00	0.09	0.10	0.30	0.26	0.27	0.56	0.00	0.26	0.29	0.52	0.48	0.50	1.00
Springfield (Western MA), MA	x	-	100	-	0.00	0.73	0.77	2.35	2.06	2.11	4.38	0.00	2.05	2.27	4.07	3.77	3.93	7.77
St. Louis, MO-IL	x	x	100	100	0.00	-36.17	-41.74	-45.14	-51.81	-58.07	-107.09	0.00	-74.32	-82.30	-86.59	-95.69	-101.96	-129.27
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-2.44	-2.81	-3.21	-3.61	-4.02	-7.48	0.00	-5.08	-5.63	-6.10	-6.66	-7.09	-9.30
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.14	0.12	1.10	0.85	0.82	1.84	0.00	0.64	0.71	1.83	1.55	1.60	3.82
Washington, DC-MD-VA	x	x	100	100	0.00	4.15	4.38	13.30	11.68	11.92	24.82	0.00	11.60	12.88	23.06	21.33	22.26	44.04
Wheeling, WV-OH	-	x	-	100	0.00	0.12	0.13	0.39	0.35	0.35	0.74	0.00	0.34	0.38	0.68	0.63	0.66	1.30
York, PA	-	x	-	100	0.00	0.35	0.37	1.12	0.98	1.00	2.09	0.00	0.98	1.08	1.94	1.79	1.87	3.70

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-80
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

PM 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	1.38	1.48	4.44	3.72	3.87	7.04	0.00	4.85	5.45	8.99	8.22	8.70	16.00
Allegan Co., MI	x	-	100	-	0.00	0.15	0.16	0.48	0.40	0.42	0.77	0.00	0.53	0.59	0.98	0.89	0.95	1.74
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	0.18	0.19	0.57	0.47	0.49	0.90	0.00	0.62	0.70	1.15	1.05	1.11	2.04
Atlanta, GA	x	x	100	100	0.00	10.97	11.79	35.34	29.59	30.80	56.02	0.00	38.61	43.35	71.57	65.44	69.23	127.34
Baltimore, MD	x	x	100	100	0.00	2.98	3.21	9.62	8.06	8.39	15.25	0.00	10.51	11.80	19.49	17.82	18.85	34.68
Baton Rouge, LA	x	-	100	-	0.00	-98.04	-111.45	-130.00	-144.23	-159.12	-295.96	0.00	-238.69	-261.88	-285.54	-307.75	-323.81	-402.08
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-198.53	-225.61	-265.40	-293.45	-323.56	-601.68	0.00	-484.58	-531.75	-582.30	-626.38	-659.11	-822.70
Birmingham, AL	-	x	-	100	0.00	1.03	1.11	3.31	2.77	2.89	5.25	0.00	3.62	4.06	6.70	6.13	6.48	11.92
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	4.24	4.55	13.65	11.43	11.90	21.64	0.00	14.91	16.74	27.64	25.28	26.74	49.19
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	0.65	0.70	2.09	1.75	1.82	3.32	0.00	2.29	2.57	4.23	3.87	4.10	7.52
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	0.98	1.05	3.15	2.64	2.74	4.99	0.00	3.44	3.86	6.38	5.83	6.17	11.35
Canton-Massillon, OH	-	x	-	100	0.00	-12.62	-14.36	-16.38	-18.34	-20.26	-37.71	0.00	-30.52	-33.47	-36.09	-39.09	-41.12	-50.37
Charleston, WV	-	x	-	100	0.00	0.24	0.26	0.78	0.66	0.68	1.24	0.00	0.86	0.96	1.59	1.45	1.54	2.82
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	2.65	2.85	8.44	7.08	7.38	13.42	0.00	9.27	10.41	17.10	15.66	16.57	30.36
Chattanooga, AL-TN-GA	-	x	-	100	0.00	0.49	0.53	1.60	1.33	1.39	2.52	0.00	1.73	1.95	3.23	2.95	3.12	5.76
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-136.10	-155.12	-167.87	-192.06	-213.01	-396.98	0.00	-324.14	-355.03	-372.39	-408.43	-429.52	-508.28
Chico, CA	x	-	100	-	0.00	0.20	0.21	0.64	0.54	0.56	1.01	0.00	0.70	0.79	1.30	1.19	1.25	2.31
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	1.97	2.12	6.32	5.29	5.51	10.02	0.00	6.91	7.76	12.80	11.71	12.38	22.76
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	0.14	0.15	0.45	0.38	0.40	0.72	0.00	0.50	0.56	0.92	0.84	0.89	1.64
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	2.31	2.48	7.44	6.23	6.48	11.79	0.00	8.12	9.12	15.06	13.77	14.57	26.80
Columbus, OH	x	x	100	100	0.00	2.01	2.16	6.47	5.42	5.64	10.26	0.00	7.07	7.94	13.11	11.99	12.68	23.33
Dallas-Fort Worth, TX	x	-	100	-	0.00	9.96	10.71	32.09	26.87	27.97	50.86	0.00	35.05	39.36	64.98	59.41	62.86	115.62
Dayton-Springfield, OH	-	x	-	100	0.00	0.70	0.76	2.27	1.90	1.98	3.60	0.00	2.48	2.78	4.60	4.20	4.45	8.18
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-12.59	-14.56	-9.33	-13.76	-15.83	-29.90	0.00	-26.44	-28.66	-22.64	-28.54	-29.90	-22.46
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-13.16	-15.23	-9.16	-13.99	-16.18	-30.60	0.00	-27.30	-29.56	-22.53	-28.95	-30.31	-21.13
Door Co., WI	x	-	100	-	0.00	0.03	0.03	0.09	0.08	0.08	0.15	0.00	0.10	0.11	0.19	0.17	0.18	0.33
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.02
Evansville, IN	-	x	-	100	0.00	0.35	0.37	1.10	0.92	0.96	1.75	0.00	1.21	1.36	2.23	2.04	2.16	3.95
Greater Connecticut, CT	x	-	100	-	0.00	1.75	1.88	5.65	4.73	4.92	8.95	0.00	6.16	6.92	11.43	10.45	11.06	20.35
Greene Co., PA	x	-	100	-	0.00	0.03	0.03	0.10	0.08	0.09	0.16	0.00	0.11	0.12	0.20	0.18	0.19	0.35
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	0.80	0.86	2.58	2.16	2.25	4.09	0.00	2.82	3.17	5.23	4.78	5.06	9.30

**Table B2-80
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

PM 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	0.68	0.74	2.21	1.85	1.92	3.50	0.00	2.41	2.71	4.47	4.09	4.32	7.95
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	0.01	0.01	0.02	0.01	0.01	0.03	0.00	0.02	0.02	0.03	0.03	0.03	0.06
Hickory, NC	-	x	-	100	0.00	0.20	0.22	0.65	0.54	0.57	1.03	0.00	0.71	0.80	1.32	1.21	1.27	2.35
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-401.30	-456.35	-526.87	-586.95	-648.02	-1,205.64	0.00	-974.01	-1,068.37	-1,158.76	-1,251.84	-1,317.08	-1,624.97
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-38.80	-44.11	-51.28	-56.97	-62.86	-116.93	0.00	-94.36	-103.52	-112.67	-121.53	-127.87	-158.44
Imperial Co., CA	x	-	100	-	0.00	0.33	0.36	1.07	0.90	0.93	1.70	0.00	1.17	1.31	2.17	1.98	2.10	3.86
Indianapolis, IN	-	x	-	100	0.00	1.87	2.01	6.04	5.06	5.26	9.57	0.00	6.60	7.41	12.23	11.18	11.83	21.76
Jamestown, NY	x	-	100	-	0.00	0.13	0.14	0.42	0.35	0.36	0.66	0.00	0.45	0.51	0.84	0.77	0.81	1.50
Jefferson Co., NY	x	-	100	-	0.00	0.16	0.17	0.51	0.43	0.45	0.81	0.00	0.56	0.63	1.04	0.95	1.00	1.84
Johnstown, PA	-	x	-	100	0.00	0.10	0.10	0.31	0.26	0.27	0.49	0.00	0.34	0.38	0.62	0.57	0.60	1.11
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	0.14	0.15	0.51	0.42	0.44	0.79	0.00	0.54	0.60	1.04	0.93	0.99	1.87
Knoxville, TN	x	x	100	100	0.00	1.15	1.24	3.72	3.11	3.24	5.90	0.00	4.06	4.56	7.53	6.89	7.29	13.40
Lancaster, PA	-	x	-	100	0.00	0.41	0.44	1.32	1.10	1.15	2.09	0.00	1.44	1.62	2.67	2.44	2.58	4.75
Las Vegas, NV	x	-	100	-	0.00	2.44	2.62	7.83	6.57	6.84	12.43	0.00	8.57	9.62	15.87	14.52	15.36	28.22
Libby, MT	-	x	-	100	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.04	0.04	0.04	0.08
Liberty-Clairton, PA	-	x	-	100	0.00	0.01	0.01	0.03	0.02	0.02	0.04	0.00	0.03	0.03	0.06	0.05	0.06	0.10
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-201.05	-229.55	-235.44	-275.60	-306.82	-572.60	0.00	-471.64	-515.98	-526.20	-584.63	-614.58	-701.16
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	0.93	0.99	3.02	2.52	2.62	4.77	0.00	3.28	3.68	6.11	5.58	5.90	10.90
Louisville, KY-IN	-	x	-	100	0.00	1.00	1.08	3.21	2.70	2.81	5.10	0.00	3.52	3.95	6.51	5.96	6.30	11.57
Macon, GA	-	x	-	100	0.00	0.19	0.20	0.61	0.51	0.53	0.97	0.00	0.67	0.75	1.23	1.13	1.19	2.19
Manitowoc Co., WI	x	-	-	-	0.00	0.09	0.10	0.30	0.25	0.26	0.47	0.00	0.33	0.37	0.61	0.55	0.59	1.08
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	0.15	0.16	0.49	0.41	0.43	0.78	0.00	0.54	0.60	1.00	0.91	0.96	1.77
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	0.65	0.70	2.09	1.75	1.82	3.31	0.00	2.28	2.57	4.24	3.87	4.10	7.54
Memphis, TN-AR	x	-	100	-	0.00	-30.92	-35.19	-39.76	-44.68	-49.41	-91.97	0.00	-74.57	-81.75	-87.69	-95.21	-100.15	-121.90
Milwaukee-Racine, WI	x	-	100	-	0.00	1.62	1.74	5.21	4.36	4.54	8.26	0.00	5.69	6.39	10.55	9.65	10.20	18.77
Nevada (Western Part), CA	x	-	100	-	0.00	0.11	0.12	0.37	0.31	0.32	0.58	0.00	0.40	0.45	0.74	0.68	0.72	1.32
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-42.82	-49.47	-32.20	-47.08	-54.13	-102.19	0.00	-90.18	-97.77	-77.88	-97.76	-102.42	-78.27
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	0.13	0.14	0.42	0.35	0.37	0.66	0.00	0.46	0.51	0.85	0.78	0.82	1.51
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-202.23	-230.23	-257.44	-290.56	-321.52	-598.68	0.00	-486.22	-532.94	-568.57	-618.81	-650.92	-786.94

**Table B2-80
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

PM 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	6.26	6.74	20.07	16.83	17.52	31.87	0.00	21.99	24.68	40.65	37.20	39.36	72.27
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	1.58	1.69	5.07	4.25	4.42	8.04	0.00	5.54	6.22	10.27	9.39	9.94	18.28
Poughkeepsie, NY	x	x	100	100	0.00	1.39	1.49	4.47	3.74	3.90	7.09	0.00	4.88	5.48	9.05	8.28	8.76	16.11
Providence (All RI), RI	x	-	100	-	0.00	0.83	0.90	2.69	2.25	2.34	4.26	0.00	2.93	3.29	5.44	4.97	5.26	9.68
Reading, PA	-	x	-	100	0.00	0.41	0.44	1.32	1.11	1.15	2.09	0.00	1.44	1.62	2.67	2.44	2.59	4.76
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	1.65	1.77	5.33	4.46	4.64	8.43	0.00	5.81	6.52	10.78	9.85	10.43	19.20
Rochester, NY	x	-	100	-	0.00	1.21	1.30	3.89	3.25	3.39	6.16	0.00	4.25	4.77	7.87	7.20	7.61	14.01
Rome, GA	-	x	-	100	0.00	0.10	0.11	0.33	0.27	0.28	0.52	0.00	0.36	0.40	0.66	0.60	0.64	1.17
Sacramento Metro, CA	x	-	50	-	0.00	2.76	2.97	8.90	7.45	7.75	14.10	0.00	9.72	10.91	18.02	16.48	17.43	32.07
San Diego, CA	x	-	100	-	0.00	2.70	2.91	8.71	7.30	7.59	13.81	0.00	9.52	10.69	17.64	16.13	17.07	31.39
San Francisco Bay Area, CA	x	-	100	-	0.00	-110.69	-126.16	-136.59	-156.25	-173.28	-322.93	0.00	-263.67	-288.79	-302.97	-332.27	-349.43	-413.60
San Joaquin Valley, CA	x	x	50	100	0.00	-13.17	-15.36	-5.60	-11.70	-13.96	-26.69	0.00	-25.27	-27.17	-15.76	-23.65	-24.67	-7.03
Sheboygan, WI	x	-	100	-	0.00	0.11	0.12	0.37	0.31	0.32	0.58	0.00	0.40	0.45	0.75	0.68	0.72	1.33
Springfield (Western MA), MA	x	-	100	-	0.00	0.90	0.96	2.89	2.42	2.52	4.57	0.00	3.15	3.54	5.84	5.34	5.65	10.40
St. Louis, MO-IL	x	x	100	100	0.00	-51.18	-58.34	-63.14	-72.23	-80.11	-149.30	0.00	-121.90	-133.52	-140.05	-153.60	-161.54	-191.16
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.45	-3.93	-4.47	-5.01	-5.54	-10.31	0.00	-8.35	-9.15	-9.86	-10.68	-11.24	-13.74
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	0.10	0.07	1.24	0.86	0.85	1.51	0.00	0.87	1.01	2.40	1.96	2.08	4.80
Washington, DC-MD-VA	x	x	100	100	0.00	5.72	6.15	18.47	15.46	16.09	29.26	0.00	20.16	22.64	37.40	34.19	36.17	66.57
Wheeling, WV-OH	-	x	-	100	0.00	0.14	0.15	0.44	0.37	0.39	0.70	0.00	0.48	0.54	0.90	0.82	0.87	1.60
York, PA	-	x	-	100	0.00	0.48	0.51	1.53	1.28	1.34	2.43	0.00	1.68	1.88	3.11	2.84	3.00	5.53

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-81
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

SOx 2015

Nonattainment Area	Status <u>b</u> / O3 PM2.5		General Conformity Threshold <u>c</u> / O3 PM2.5		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion				
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-2.00	-2.48	-3.67	-4.27	-5.29	-13.85	0.00	-2.00	-2.49	-3.67	-4.27	-5.29	-13.85
Allegan Co., MI	x	-	100	-	0.00	-0.22	-0.27	-0.40	-0.47	-0.58	-1.51	0.00	-0.22	-0.27	-0.40	-0.47	-0.58	-1.51
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.20	-0.25	-0.36	-0.42	-0.53	-1.38	0.00	-0.20	-0.25	-0.37	-0.42	-0.53	-1.38
Atlanta, GA	x	x	100	100	0.00	-10.61	-13.20	-19.50	-22.69	-28.12	-73.62	0.00	-10.64	-13.22	-19.53	-22.71	-28.15	-73.63
Baltimore, MD	x	x	100	100	0.00	-4.42	-5.49	-8.12	-9.44	-11.70	-30.62	0.00	-4.43	-5.51	-8.13	-9.45	-11.71	-30.63
Baton Rouge, LA	x	-	100	-	0.00	-59.93	-75.50	-96.16	-109.83	-127.58	-243.00	0.00	-60.10	-75.68	-96.35	-110.03	-127.78	-243.13
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-119.23	-150.23	-190.99	-218.08	-253.07	-479.34	0.00	-119.57	-150.59	-191.36	-218.48	-253.48	-479.61
Birmingham, AL	-	x	-	100	0.00	-1.61	-2.00	-2.96	-3.44	-4.27	-11.18	0.00	-1.61	-2.01	-2.96	-3.45	-4.27	-11.18
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-7.18	-8.93	-13.20	-15.35	-19.03	-49.81	0.00	-7.20	-8.95	-13.22	-15.37	-19.05	-49.82
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-0.95	-1.18	-1.75	-2.03	-2.52	-6.64	0.00	-0.95	-1.18	-1.75	-2.04	-2.53	-6.65
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-1.73	-2.15	-3.17	-3.69	-4.58	-11.98	0.00	-1.73	-2.15	-3.18	-3.70	-4.58	-11.98
Canton-Massillon, OH	-	x	-	100	0.00	-8.18	-10.30	-13.22	-15.11	-17.61	-34.22	0.00	-8.21	-10.33	-13.24	-15.13	-17.64	-34.23
Charleston, WV	-	x	-	100	0.00	-0.46	-0.57	-0.85	-0.99	-1.22	-3.21	0.00	-0.46	-0.58	-0.85	-0.99	-1.23	-3.21
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-2.63	-3.27	-4.88	-5.68	-7.06	-18.73	0.00	-2.64	-3.28	-4.88	-5.69	-7.07	-18.73
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-0.82	-1.02	-1.51	-1.75	-2.17	-5.70	0.00	-0.82	-1.02	-1.51	-1.75	-2.17	-5.70
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-96.73	-121.70	-157.40	-180.14	-210.81	-419.35	0.00	-96.99	-121.99	-157.70	-180.45	-211.13	-419.56
Chico, CA	x	-	100	-	0.00	-0.30	-0.37	-0.55	-0.64	-0.79	-2.07	0.00	-0.30	-0.37	-0.55	-0.64	-0.79	-2.07
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-2.84	-3.53	-5.22	-6.07	-7.53	-19.74	0.00	-2.84	-3.54	-5.23	-6.08	-7.54	-19.75
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.27	-0.34	-0.50	-0.58	-0.72	-1.88	0.00	-0.27	-0.34	-0.50	-0.58	-0.72	-1.88
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-4.12	-5.12	-7.57	-8.81	-10.91	-28.57	0.00	-4.13	-5.13	-7.58	-8.82	-10.93	-28.58
Columbus, OH	x	x	100	100	0.00	-2.66	-3.31	-4.89	-5.69	-7.05	-18.46	0.00	-2.67	-3.32	-4.90	-5.70	-7.06	-18.47
Dallas-Fort Worth, TX	x	-	100	-	0.00	-10.79	-13.41	-19.82	-23.06	-28.58	-74.81	0.00	-10.81	-13.44	-19.85	-23.08	-28.61	-74.83
Dayton-Springfield, OH	-	x	-	100	0.00	-1.25	-1.55	-2.29	-2.67	-3.31	-8.66	0.00	-1.25	-1.56	-2.30	-2.67	-3.31	-8.66
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-14.90	-18.69	-25.03	-28.78	-34.23	-74.31	0.00	-14.94	-18.74	-25.07	-28.82	-34.28	-74.34
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-18.06	-22.63	-30.69	-35.33	-42.26	-94.36	0.00	-18.11	-22.68	-30.74	-35.39	-42.32	-94.40
Door Co., WI	x	-	100	-	0.00	-0.05	-0.06	-0.09	-0.11	-0.13	-0.35	0.00	-0.05	-0.06	-0.09	-0.11	-0.13	-0.35
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01
Evansville, IN	-	x	-	100	0.00	-0.51	-0.64	-0.95	-1.10	-1.37	-3.62	0.00	-0.51	-0.64	-0.95	-1.10	-1.37	-3.62
Greater Connecticut, CT	x	-	100	-	0.00	-2.74	-3.41	-5.03	-5.85	-7.25	-18.97	0.00	-2.75	-3.41	-5.04	-5.86	-7.26	-18.98
Greene Co., PA	x	-	100	-	0.00	-0.06	-0.08	-0.12	-0.13	-0.17	-0.43	0.00	-0.06	-0.08	-0.12	-0.13	-0.17	-0.44
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-1.24	-1.54	-2.27	-2.64	-3.27	-8.57	0.00	-1.24	-1.54	-2.27	-2.64	-3.28	-8.57

**Table B2-81
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-1.12	-1.39	-2.06	-2.39	-2.96	-7.76	0.00	-1.12	-1.39	-2.06	-2.39	-2.97	-7.76
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.05	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.05
Hickory, NC	-	x	-	100	0.00	-0.29	-0.36	-0.53	-0.62	-0.77	-2.01	0.00	-0.29	-0.36	-0.53	-0.62	-0.77	-2.01
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-250.71	-315.78	-403.16	-460.62	-535.65	-1,027.30	0.00	-251.42	-316.54	-403.95	-461.44	-536.49	-1,027.87
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-23.98	-30.20	-38.54	-44.03	-51.18	-98.00	0.00	-24.04	-30.27	-38.61	-44.10	-51.26	-98.06
Imperial Co., CA	x	-	100	-	0.00	-0.34	-0.43	-0.63	-0.74	-0.91	-2.39	0.00	-0.35	-0.43	-0.63	-0.74	-0.91	-2.39
Indianapolis, IN	-	x	-	100	0.00	-2.49	-3.09	-4.57	-5.31	-6.58	-17.24	0.00	-2.49	-3.10	-4.57	-5.32	-6.59	-17.24
Jamestown, NY	x	-	100	-	0.00	-0.23	-0.29	-0.42	-0.49	-0.61	-1.59	0.00	-0.23	-0.29	-0.42	-0.49	-0.61	-1.59
Jefferson Co., NY	x	-	100	-	0.00	-0.21	-0.27	-0.39	-0.46	-0.57	-1.48	0.00	-0.21	-0.27	-0.39	-0.46	-0.57	-1.48
Johnstown, PA	-	x	-	100	0.00	-0.19	-0.23	-0.35	-0.40	-0.50	-1.31	0.00	-0.19	-0.24	-0.35	-0.40	-0.50	-1.31
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.19	-0.24	-0.35	-0.40	-0.50	-1.29	0.00	-0.19	-0.24	-0.35	-0.40	-0.50	-1.29
Knoxville, TN	x	x	100	100	0.00	-1.69	-2.10	-3.10	-3.61	-4.47	-11.71	0.00	-1.69	-2.10	-3.10	-3.61	-4.47	-11.71
Lancaster, PA	-	x	-	100	0.00	-0.66	-0.82	-1.21	-1.41	-1.75	-4.58	0.00	-0.66	-0.82	-1.21	-1.41	-1.75	-4.58
Las Vegas, NV	x	-	100	-	0.00	-2.18	-2.71	-4.01	-4.67	-5.78	-15.15	0.00	-2.19	-2.72	-4.02	-4.67	-5.79	-15.15
Libby, MT	-	x	-	100	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.08	0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.08
Liberty-Clairton, PA	-	x	-	100	0.00	-0.02	-0.03	-0.04	-0.05	-0.06	-0.15	0.00	-0.02	-0.03	-0.04	-0.05	-0.06	-0.15
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-153.54	-193.09	-251.15	-287.66	-337.56	-681.85	0.00	-153.96	-193.54	-251.62	-288.15	-338.06	-682.19
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-1.13	-1.41	-2.08	-2.42	-2.99	-7.83	0.00	-1.13	-1.41	-2.08	-2.42	-3.00	-7.84
Louisville, KY-IN	-	x	-	100	0.00	-1.71	-2.13	-3.15	-3.66	-4.54	-11.93	0.00	-1.71	-2.13	-3.15	-3.67	-4.55	-11.93
Macon, GA	-	x	-	100	0.00	-0.32	-0.40	-0.59	-0.68	-0.84	-2.22	0.00	-0.32	-0.40	-0.59	-0.68	-0.85	-2.22
Manitowoc Co., WI	x	-	-	-	0.00	-0.17	-0.21	-0.31	-0.36	-0.44	-1.15	0.00	-0.17	-0.21	-0.31	-0.36	-0.44	-1.15
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.16	-0.20	-0.30	-0.35	-0.43	-1.12	0.00	-0.16	-0.20	-0.30	-0.35	-0.43	-1.12
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-0.63	-0.79	-1.16	-1.35	-1.68	-4.39	0.00	-0.63	-0.79	-1.16	-1.35	-1.68	-4.39
Memphis, TN-AR	x	-	100	-	0.00	-20.50	-25.81	-33.18	-37.94	-44.27	-86.60	0.00	-20.56	-25.87	-33.24	-38.01	-44.34	-86.64
Milwaukee-Racine, WI	x	-	100	-	0.00	-2.72	-3.39	-5.00	-5.82	-7.21	-18.87	0.00	-2.73	-3.39	-5.01	-5.82	-7.22	-18.88
Nevada (Western Part), CA	x	-	100	-	0.00	-0.15	-0.19	-0.28	-0.33	-0.41	-1.07	0.00	-0.15	-0.19	-0.28	-0.33	-0.41	-1.07
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-55.92	-70.09	-94.80	-109.12	-130.38	-289.54	0.00	-56.06	-70.24	-94.96	-109.29	-130.55	-289.66
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.24	-0.30	-0.45	-0.52	-0.65	-1.69	0.00	-0.24	-0.30	-0.45	-0.52	-0.65	-1.69
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-135.60	-170.68	-219.56	-251.10	-293.09	-574.34	0.00	-135.97	-171.09	-219.98	-251.55	-293.54	-574.65

**Table B2-81
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

SOx 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-6.00	-7.46	-11.05	-12.86	-15.94	-41.85	0.00	-6.02	-7.48	-11.06	-12.87	-15.96	-41.86
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-3.04	-3.78	-5.58	-6.49	-8.05	-21.07	0.00	-3.04	-3.78	-5.59	-6.50	-8.05	-21.08
Poughkeepsie, NY	x	x	100	100	0.00	-1.97	-2.45	-3.62	-4.21	-5.22	-13.67	0.00	-1.98	-2.46	-3.63	-4.22	-5.23	-13.67
Providence (All RI), RI	x	-	100	-	0.00	-1.43	-1.77	-2.62	-3.05	-3.78	-9.89	0.00	-1.43	-1.78	-2.62	-3.05	-3.78	-9.89
Reading, PA	-	x	-	100	0.00	-0.58	-0.72	-1.06	-1.24	-1.53	-4.02	0.00	-0.58	-0.72	-1.07	-1.24	-1.54	-4.02
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-1.15	-1.43	-2.12	-2.46	-3.05	-7.98	0.00	-1.16	-1.44	-2.12	-2.47	-3.05	-7.99
Rochester, NY	x	-	100	-	0.00	-2.00	-2.48	-3.67	-4.27	-5.29	-13.85	0.00	-2.00	-2.49	-3.67	-4.27	-5.30	-13.85
Rome, GA	-	x	-	100	0.00	-0.17	-0.22	-0.32	-0.37	-0.46	-1.21	0.00	-0.18	-0.22	-0.32	-0.37	-0.46	-1.21
Sacramento Metro, CA	x	-	50	-	0.00	-3.35	-4.17	-6.16	-7.17	-8.88	-23.26	0.00	-3.36	-4.18	-6.17	-7.18	-8.89	-23.26
San Diego, CA	x	-	100	-	0.00	-4.70	-5.84	-8.63	-10.04	-12.44	-32.57	0.00	-4.71	-5.85	-8.64	-10.05	-12.45	-32.58
San Francisco Bay Area, CA	x	-	100	-	0.00	-79.81	-100.40	-130.18	-149.04	-174.63	-349.80	0.00	-80.03	-100.63	-130.43	-149.30	-174.89	-349.98
San Joaquin Valley, CA	x	x	50	100	0.00	-18.53	-23.23	-31.27	-35.98	-42.90	-94.25	0.00	-18.58	-23.29	-31.33	-36.04	-42.95	-94.29
Sheboygan, WI	x	-	100	-	0.00	-0.19	-0.23	-0.34	-0.40	-0.49	-1.29	0.00	-0.19	-0.23	-0.34	-0.40	-0.49	-1.29
Springfield (Western MA), MA	x	-	100	-	0.00	-1.43	-1.78	-2.63	-3.06	-3.80	-9.94	0.00	-1.44	-1.79	-2.64	-3.07	-3.80	-9.94
St. Louis, MO-IL	x	x	100	100	0.00	-37.01	-46.56	-60.36	-69.10	-80.96	-162.11	0.00	-37.11	-46.67	-60.47	-69.22	-81.09	-162.19
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-2.27	-2.86	-3.68	-4.21	-4.91	-9.59	0.00	-2.28	-2.87	-3.69	-4.21	-4.92	-9.60
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-1.28	-1.60	-2.28	-2.64	-3.23	-8.01	0.00	-1.28	-1.60	-2.29	-2.65	-3.24	-8.01
Washington, DC-MD-VA	x	x	100	100	0.00	-7.57	-9.42	-13.90	-16.18	-20.04	-52.44	0.00	-7.59	-9.43	-13.92	-16.19	-20.06	-52.45
Wheeling, WV-OH	-	x	-	100	0.00	-0.26	-0.33	-0.48	-0.56	-0.70	-1.82	0.00	-0.26	-0.33	-0.48	-0.56	-0.70	-1.82
York, PA	-	x	-	100	0.00	-0.61	-0.76	-1.12	-1.31	-1.62	-4.24	0.00	-0.61	-0.76	-1.13	-1.31	-1.62	-4.25

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-82
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

SOx 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-6.43	-7.06	-9.74	-11.36	-13.54	-35.31	0.00	-9.21	-9.99	-12.91	-14.82	-17.16	-36.86
Allegan Co., MI	x	-	100	-	0.00	-0.70	-0.77	-1.06	-1.24	-1.48	-3.86	0.00	-1.01	-1.09	-1.41	-1.62	-1.88	-4.03
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-0.68	-0.75	-1.03	-1.20	-1.43	-3.74	0.00	-0.98	-1.06	-1.37	-1.57	-1.82	-3.90
Atlanta, GA	x	x	100	100	0.00	-37.24	-40.90	-56.43	-65.80	-78.47	-204.64	0.00	-53.35	-57.89	-74.82	-85.84	-99.41	-213.60
Baltimore, MD	x	x	100	100	0.00	-14.15	-15.54	-21.44	-25.00	-29.81	-77.70	0.00	-20.28	-22.01	-28.44	-32.62	-37.77	-81.12
Baton Rouge, LA	x	-	100	-	0.00	-187.23	-219.36	-262.66	-292.66	-326.16	-595.62	0.00	-312.02	-353.13	-401.33	-438.63	-473.14	-695.79
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-372.26	-436.49	-521.68	-580.91	-646.75	-1,173.28	0.00	-621.45	-703.66	-798.56	-872.26	-940.03	-1,373.84
Birmingham, AL	-	x	-	100	0.00	-5.04	-5.53	-7.63	-8.90	-10.61	-27.69	0.00	-7.21	-7.82	-10.12	-11.61	-13.44	-28.90
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-22.16	-24.34	-33.58	-39.16	-46.69	-121.74	0.00	-31.76	-34.46	-44.53	-51.09	-59.16	-127.08
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-3.03	-3.32	-4.60	-5.37	-6.41	-16.81	0.00	-4.33	-4.69	-6.08	-6.99	-8.10	-17.52
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-5.30	-5.82	-8.03	-9.36	-11.16	-29.10	0.00	-7.59	-8.24	-10.64	-12.21	-14.14	-30.37
Canton-Massillon, OH	-	x	-	100	0.00	-25.53	-29.83	-35.94	-40.13	-44.87	-83.71	0.00	-42.29	-47.79	-54.58	-59.77	-64.67	-97.05
Charleston, WV	-	x	-	100	0.00	-1.39	-1.53	-2.11	-2.45	-2.93	-7.63	0.00	-1.99	-2.16	-2.79	-3.20	-3.71	-7.97
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-9.19	-10.07	-13.98	-16.34	-19.54	-51.57	0.00	-13.07	-14.14	-18.41	-21.18	-24.61	-53.65
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-2.56	-2.81	-3.88	-4.53	-5.40	-14.09	0.00	-3.67	-3.98	-5.15	-5.91	-6.84	-14.71
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-302.62	-352.35	-427.90	-479.14	-538.13	-1,032.15	0.00	-497.28	-560.80	-644.62	-707.81	-769.00	-1,185.22
Chico, CA	x	-	100	-	0.00	-0.95	-1.05	-1.44	-1.68	-2.01	-5.24	0.00	-1.37	-1.48	-1.92	-2.20	-2.54	-5.47
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-8.94	-9.82	-13.56	-15.82	-18.87	-49.29	0.00	-12.80	-13.88	-17.96	-20.61	-23.88	-51.43
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-0.81	-0.89	-1.23	-1.44	-1.71	-4.46	0.00	-1.16	-1.26	-1.63	-1.87	-2.17	-4.66
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-12.59	-13.82	-19.07	-22.24	-26.52	-69.13	0.00	-18.03	-19.57	-25.29	-29.01	-33.59	-72.17
Columbus, OH	x	x	100	100	0.00	-8.69	-9.55	-13.18	-15.36	-18.32	-47.78	0.00	-12.46	-13.52	-17.47	-20.04	-23.21	-49.87
Dallas-Fort Worth, TX	x	-	100	-	0.00	-36.92	-40.55	-55.95	-65.24	-77.80	-202.87	0.00	-52.90	-57.40	-74.19	-85.12	-98.56	-211.76
Dayton-Springfield, OH	-	x	-	100	0.00	-3.83	-4.20	-5.80	-6.76	-8.06	-21.02	0.00	-5.48	-5.95	-7.69	-8.82	-10.21	-21.94
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-47.48	-54.45	-68.40	-77.47	-88.55	-188.04	0.00	-75.38	-84.24	-99.62	-110.62	-122.25	-208.73
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-56.25	-64.23	-81.46	-92.55	-106.28	-231.54	0.00	-88.41	-98.54	-117.50	-130.91	-145.37	-254.94
Door Co., WI	x	-	100	-	0.00	-0.16	-0.17	-0.24	-0.27	-0.33	-0.85	0.00	-0.22	-0.24	-0.31	-0.36	-0.41	-0.89
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.04	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.04
Evansville, IN	-	x	-	100	0.00	-1.62	-1.77	-2.46	-2.87	-3.43	-9.04	0.00	-2.30	-2.49	-3.24	-3.72	-4.32	-9.41
Greater Connecticut, CT	x	-	100	-	0.00	-8.67	-9.52	-13.13	-15.30	-18.25	-47.55	0.00	-12.42	-13.48	-17.41	-19.97	-23.13	-49.65
Greene Co., PA	x	-	100	-	0.00	-0.19	-0.20	-0.28	-0.33	-0.39	-1.02	0.00	-0.27	-0.29	-0.37	-0.43	-0.49	-1.06
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-3.92	-4.30	-5.94	-6.92	-8.26	-21.53	0.00	-5.61	-6.09	-7.87	-9.03	-10.46	-22.47

**Table B2-82
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-3.50	-3.84	-5.30	-6.18	-7.37	-19.22	0.00	-5.01	-5.44	-7.03	-8.06	-9.34	-20.06
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.02	-0.03	-0.04	-0.04	-0.05	-0.13	0.00	-0.03	-0.04	-0.05	-0.05	-0.06	-0.14
Hickory, NC	-	x	-	100	0.00	-0.94	-1.03	-1.42	-1.66	-1.98	-5.15	0.00	-1.34	-1.46	-1.89	-2.16	-2.51	-5.38
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-783.60	-917.20	-1,100.61	-1,227.28	-1,369.41	-2,520.35	0.00	-1,303.05	-1,473.96	-1,678.02	-1,835.29	-1,981.88	-2,936.09
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-74.84	-87.62	-105.07	-117.13	-130.65	-239.84	0.00	-124.53	-140.89	-160.31	-175.29	-189.22	-279.65
Imperial Co., CA	x	-	100	-	0.00	-1.21	-1.33	-1.83	-2.13	-2.54	-6.63	0.00	-1.73	-1.88	-2.42	-2.78	-3.22	-6.92
Indianapolis, IN	-	x	-	100	0.00	-8.10	-8.89	-12.27	-14.31	-17.07	-44.50	0.00	-11.60	-12.59	-16.27	-18.67	-21.62	-46.45
Jamestown, NY	x	-	100	-	0.00	-0.70	-0.77	-1.07	-1.24	-1.48	-3.87	0.00	-1.01	-1.09	-1.41	-1.62	-1.88	-4.03
Jefferson Co., NY	x	-	100	-	0.00	-0.70	-0.77	-1.06	-1.24	-1.48	-3.85	0.00	-1.00	-1.09	-1.41	-1.62	-1.87	-4.02
Johnstown, PA	-	x	-	100	0.00	-0.56	-0.62	-0.85	-1.00	-1.19	-3.09	0.00	-0.81	-0.88	-1.13	-1.30	-1.51	-3.23
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-0.68	-0.75	-1.02	-1.19	-1.41	-3.61	0.00	-0.98	-1.07	-1.37	-1.57	-1.80	-3.79
Knoxville, TN	x	x	100	100	0.00	-5.42	-5.95	-8.21	-9.57	-11.41	-29.76	0.00	-7.76	-8.42	-10.88	-12.48	-14.46	-31.07
Lancaster, PA	-	x	-	100	0.00	-2.07	-2.27	-3.14	-3.66	-4.36	-11.38	0.00	-2.97	-3.22	-4.16	-4.77	-5.53	-11.87
Las Vegas, NV	x	-	100	-	0.00	-7.91	-8.68	-11.99	-13.98	-16.67	-43.51	0.00	-11.32	-12.29	-15.89	-18.23	-21.11	-45.40
Libby, MT	-	x	-	100	0.00	-0.03	-0.04	-0.05	-0.06	-0.07	-0.19	0.00	-0.05	-0.05	-0.07	-0.08	-0.09	-0.20
Liberty-Clairton, PA	-	x	-	100	0.00	-0.06	-0.07	-0.09	-0.11	-0.13	-0.34	0.00	-0.09	-0.10	-0.13	-0.14	-0.17	-0.36
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-483.22	-561.17	-685.51	-769.15	-866.55	-1,694.18	0.00	-789.39	-888.88	-1,026.65	-1,129.48	-1,230.76	-1,932.75
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-3.83	-4.21	-5.80	-6.76	-8.06	-20.98	0.00	-5.49	-5.96	-7.70	-8.83	-10.22	-21.91
Louisville, KY-IN	-	x	-	100	0.00	-5.26	-5.77	-7.97	-9.30	-11.10	-29.05	0.00	-7.51	-8.15	-10.55	-12.11	-14.04	-30.29
Macon, GA	-	x	-	100	0.00	-0.98	-1.07	-1.49	-1.73	-2.07	-5.42	0.00	-1.40	-1.52	-1.97	-2.26	-2.62	-5.65
Manitowoc Co., WI	x	-	-	-	0.00	-0.51	-0.56	-0.77	-0.90	-1.07	-2.79	0.00	-0.73	-0.79	-1.02	-1.17	-1.36	-2.92
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.56	-0.62	-0.85	-0.99	-1.19	-3.09	0.00	-0.81	-0.88	-1.13	-1.30	-1.50	-3.23
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-2.24	-2.46	-3.40	-3.96	-4.73	-12.32	0.00	-3.21	-3.49	-4.51	-5.17	-5.99	-12.86
Memphis, TN-AR	x	-	100	-	0.00	-63.96	-74.67	-90.14	-100.72	-112.76	-211.95	0.00	-105.73	-119.41	-136.60	-149.70	-162.15	-245.09
Milwaukee-Racine, WI	x	-	100	-	0.00	-8.44	-9.27	-12.78	-14.90	-17.77	-46.33	0.00	-12.09	-13.12	-16.95	-19.45	-22.52	-48.36
Nevada (Western Part), CA	x	-	100	-	0.00	-0.50	-0.55	-0.76	-0.89	-1.06	-2.77	0.00	-0.72	-0.78	-1.01	-1.16	-1.35	-2.89
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-174.23	-199.17	-252.03	-286.13	-328.22	-710.79	0.00	-274.53	-306.18	-364.37	-405.63	-449.92	-784.09
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-0.74	-0.81	-1.11	-1.30	-1.55	-4.05	0.00	-1.05	-1.14	-1.48	-1.69	-1.96	-4.22
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-424.17	-494.97	-598.09	-668.55	-748.82	-1,412.12	0.00	-700.52	-791.01	-905.55	-992.68	-1,075.75	-1,631.08

**Table B2-82
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

SOx 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-21.34	-23.42	-32.37	-37.76	-45.07	-117.86	0.00	-30.52	-33.10	-42.85	-49.19	-57.01	-122.92
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-9.09	-9.99	-13.78	-16.07	-19.16	-49.99	0.00	-13.03	-14.13	-18.27	-20.96	-24.27	-52.17
Poughkeepsie, NY	x	x	100	100	0.00	-6.38	-7.01	-9.67	-11.27	-13.44	-35.06	0.00	-9.14	-9.92	-12.82	-14.71	-17.03	-36.59
Providence (All RI), RI	x	-	100	-	0.00	-4.41	-4.84	-6.68	-7.79	-9.29	-24.22	0.00	-6.32	-6.85	-8.86	-10.16	-11.77	-25.28
Reading, PA	-	x	-	100	0.00	-1.88	-2.06	-2.85	-3.32	-3.96	-10.32	0.00	-2.69	-2.92	-3.77	-4.33	-5.01	-10.77
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-4.47	-4.91	-6.78	-7.90	-9.42	-24.53	0.00	-6.41	-6.96	-8.99	-10.31	-11.94	-25.61
Rochester, NY	x	-	100	-	0.00	-6.22	-6.83	-9.43	-10.99	-13.11	-34.18	0.00	-8.91	-9.67	-12.50	-14.34	-16.60	-35.67
Rome, GA	-	x	-	100	0.00	-0.54	-0.59	-0.82	-0.95	-1.13	-2.96	0.00	-0.77	-0.84	-1.08	-1.24	-1.44	-3.09
Sacramento Metro, CA	x	-	50	-	0.00	-11.22	-12.33	-17.01	-19.83	-23.65	-61.67	0.00	-16.08	-17.45	-22.55	-25.87	-29.96	-64.38
San Diego, CA	x	-	100	-	0.00	-14.46	-15.88	-21.91	-25.55	-30.47	-79.46	0.00	-20.72	-22.48	-29.06	-33.34	-38.60	-82.94
San Francisco Bay Area, CA	x	-	100	-	0.00	-249.19	-289.89	-352.75	-395.26	-444.39	-857.95	0.00	-408.68	-460.65	-530.35	-582.72	-633.73	-982.98
San Joaquin Valley, CA	x	x	50	100	0.00	-60.20	-68.84	-87.05	-98.80	-113.30	-244.91	0.00	-94.92	-105.88	-125.93	-140.16	-155.41	-270.32
Sheboygan, WI	x	-	100	-	0.00	-0.58	-0.64	-0.88	-1.03	-1.23	-3.20	0.00	-0.84	-0.91	-1.17	-1.34	-1.56	-3.34
Springfield (Western MA), MA	x	-	100	-	0.00	-4.50	-4.95	-6.83	-7.96	-9.49	-24.75	0.00	-6.45	-7.00	-9.05	-10.38	-12.02	-25.83
St. Louis, MO-IL	x	x	100	100	0.00	-115.51	-134.38	-163.50	-183.19	-205.94	-397.38	0.00	-189.47	-213.57	-245.85	-270.12	-293.74	-455.37
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-7.07	-8.26	-9.96	-11.13	-12.46	-23.37	0.00	-11.70	-13.22	-15.11	-16.56	-17.93	-27.04
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-3.98	-4.45	-5.93	-6.85	-8.05	-19.72	0.00	-5.93	-6.51	-8.13	-9.22	-10.50	-20.96
Washington, DC-MD-VA	x	x	100	100	0.00	-24.56	-26.98	-37.20	-43.37	-51.72	-134.74	0.00	-35.20	-38.20	-49.35	-56.61	-65.54	-140.68
Wheeling, WV-OH	-	x	-	100	0.00	-0.79	-0.87	-1.20	-1.40	-1.67	-4.34	0.00	-1.13	-1.23	-1.59	-1.82	-2.11	-4.53
York, PA	-	x	-	100	0.00	-2.03	-2.23	-3.08	-3.59	-4.28	-11.16	0.00	-2.91	-3.16	-4.08	-4.68	-5.42	-11.65

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-83
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

SOx 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-10.03	-10.73	-14.61	-17.02	-20.10	-52.25	0.00	-17.30	-18.38	-22.91	-26.08	-29.58	-56.07
Allegan Co., MI	x	-	100	-	0.00	-1.10	-1.17	-1.60	-1.86	-2.20	-5.71	0.00	-1.89	-2.01	-2.50	-2.85	-3.23	-6.13
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-1.13	-1.21	-1.65	-1.92	-2.27	-5.89	0.00	-1.95	-2.07	-2.58	-2.94	-3.34	-6.32
Atlanta, GA	x	x	100	100	0.00	-64.01	-68.52	-93.28	-108.64	-128.33	-333.57	0.00	-110.41	-117.33	-146.25	-166.48	-188.85	-357.98
Baltimore, MD	x	x	100	100	0.00	-21.97	-23.52	-32.01	-37.28	-44.04	-114.41	0.00	-37.92	-40.30	-50.22	-57.15	-64.82	-122.81
Baton Rouge, LA	x	-	100	-	0.00	-293.46	-338.60	-399.89	-442.66	-488.38	-880.98	0.00	-624.92	-693.46	-767.87	-829.93	-878.31	-1,143.31
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-583.25	-673.61	-794.07	-878.37	-968.08	-1,734.16	0.00	-1,245.10	-1,382.29	-1,528.68	-1,651.22	-1,745.98	-2,259.45
Birmingham, AL	-	x	-	100	0.00	-7.67	-8.21	-11.18	-13.02	-15.39	-40.02	0.00	-13.23	-14.06	-17.53	-19.95	-22.63	-42.93
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-33.23	-35.57	-48.42	-56.39	-66.60	-173.09	0.00	-57.33	-60.92	-75.93	-86.43	-98.03	-185.78
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-4.69	-5.01	-6.84	-7.98	-9.43	-24.65	0.00	-8.05	-8.54	-10.68	-12.17	-13.83	-26.39
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-7.87	-8.42	-11.46	-13.35	-15.77	-40.98	0.00	-13.57	-14.43	-17.98	-20.46	-23.21	-43.99
Canton-Massillon, OH	-	x	-	100	0.00	-39.89	-45.90	-54.51	-60.47	-66.92	-123.23	0.00	-84.32	-93.44	-103.86	-112.46	-119.33	-158.08
Charleston, WV	-	x	-	100	0.00	-2.02	-2.17	-2.95	-3.44	-4.06	-10.55	0.00	-3.49	-3.71	-4.63	-5.27	-5.97	-11.32
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-15.56	-16.61	-22.74	-26.53	-31.41	-82.47	0.00	-26.59	-28.20	-35.35	-40.33	-45.89	-88.09
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-3.89	-4.17	-5.67	-6.61	-7.80	-20.24	0.00	-6.73	-7.15	-8.91	-10.13	-11.49	-21.74
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-473.68	-542.65	-649.91	-723.36	-804.26	-1,525.42	0.00	-989.77	-1,094.54	-1,223.93	-1,328.99	-1,415.72	-1,924.87
Chico, CA	x	-	100	-	0.00	-1.47	-1.58	-2.15	-2.50	-2.96	-7.68	0.00	-2.54	-2.70	-3.37	-3.83	-4.35	-8.24
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-13.84	-14.81	-20.18	-23.51	-27.78	-72.35	0.00	-23.84	-25.32	-31.60	-35.98	-40.83	-77.58
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-1.18	-1.27	-1.72	-2.01	-2.37	-6.16	0.00	-2.04	-2.17	-2.70	-3.07	-3.49	-6.61
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-18.64	-19.95	-27.16	-31.63	-37.36	-97.08	0.00	-32.15	-34.17	-42.59	-48.47	-54.98	-104.20
Columbus, OH	x	x	100	100	0.00	-13.83	-14.81	-20.15	-23.47	-27.73	-72.07	0.00	-23.86	-25.35	-31.60	-35.97	-40.80	-77.35
Dallas-Fort Worth, TX	x	-	100	-	0.00	-61.70	-66.06	-89.92	-104.72	-123.70	-321.51	0.00	-106.44	-113.11	-140.99	-160.48	-182.04	-345.05
Dayton-Springfield, OH	-	x	-	100	0.00	-5.68	-6.08	-8.27	-9.64	-11.38	-29.58	0.00	-9.79	-10.41	-12.97	-14.77	-16.75	-31.75
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-75.19	-84.60	-104.91	-118.30	-133.94	-282.84	0.00	-149.66	-163.98	-188.17	-206.77	-223.94	-336.81
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-86.70	-97.19	-121.38	-137.24	-155.94	-335.82	0.00	-170.80	-186.76	-215.53	-237.44	-258.04	-395.80
Door Co., WI	x	-	100	-	0.00	-0.23	-0.25	-0.34	-0.39	-0.46	-1.20	0.00	-0.40	-0.42	-0.53	-0.60	-0.68	-1.29
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.01	-0.02	-0.02	-0.05	0.00	-0.02	-0.02	-0.02	-0.03	-0.03	-0.05
Evansville, IN	-	x	-	100	0.00	-2.47	-2.64	-3.61	-4.21	-4.98	-13.08	0.00	-4.22	-4.48	-5.61	-6.40	-7.28	-13.97
Greater Connecticut, CT	x	-	100	-	0.00	-13.28	-14.22	-19.35	-22.53	-26.61	-69.12	0.00	-22.92	-24.36	-30.36	-34.55	-39.18	-74.20
Greene Co., PA	x	-	100	-	0.00	-0.26	-0.28	-0.39	-0.45	-0.53	-1.38	0.00	-0.46	-0.49	-0.60	-0.69	-0.78	-1.48
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-6.02	-6.44	-8.77	-10.22	-12.07	-31.36	0.00	-10.38	-11.03	-13.75	-15.65	-17.76	-33.66

**Table B2-83
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-5.30	-5.67	-7.72	-8.99	-10.62	-27.59	0.00	-9.14	-9.71	-12.10	-13.77	-15.63	-29.61
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.04	-0.04	-0.05	-0.06	-0.07	-0.19	0.00	-0.06	-0.06	-0.08	-0.09	-0.11	-0.20
Hickory, NC	-	x	-	100	0.00	-1.47	-1.57	-2.14	-2.49	-2.94	-7.64	0.00	-2.53	-2.69	-3.36	-3.82	-4.33	-8.21
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,228.28	-1,415.66	-1,675.55	-1,856.35	-2,050.57	-3,728.94	0.00	-2,608.01	-2,892.55	-3,207.73	-3,469.44	-3,675.41	-4,817.30
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-117.13	-135.07	-159.72	-176.88	-195.29	-353.90	0.00	-249.03	-276.26	-306.16	-331.04	-350.54	-458.09
Imperial Co., CA	x	-	100	-	0.00	-2.05	-2.19	-2.98	-3.47	-4.10	-10.67	0.00	-3.53	-3.75	-4.68	-5.33	-6.04	-11.45
Indianapolis, IN	-	x	-	100	0.00	-12.87	-13.78	-18.76	-21.85	-25.80	-67.07	0.00	-22.20	-23.60	-29.41	-33.48	-37.98	-71.98
Jamestown, NY	x	-	100	-	0.00	-1.04	-1.12	-1.52	-1.77	-2.09	-5.43	0.00	-1.80	-1.91	-2.38	-2.71	-3.08	-5.83
Jefferson Co., NY	x	-	100	-	0.00	-1.11	-1.19	-1.62	-1.89	-2.23	-5.81	0.00	-1.92	-2.04	-2.55	-2.90	-3.29	-6.23
Johnstown, PA	-	x	-	100	0.00	-0.82	-0.87	-1.19	-1.38	-1.63	-4.24	0.00	-1.41	-1.50	-1.86	-2.12	-2.41	-4.56
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.18	-1.27	-1.71	-1.98	-2.32	-5.88	0.00	-2.08	-2.22	-2.73	-3.09	-3.48	-6.39
Knoxville, TN	x	x	100	100	0.00	-8.43	-9.02	-12.28	-14.30	-16.89	-43.92	0.00	-14.53	-15.44	-19.25	-21.91	-24.86	-47.13
Lancaster, PA	-	x	-	100	0.00	-3.15	-3.37	-4.58	-5.34	-6.31	-16.39	0.00	-5.43	-5.77	-7.19	-8.18	-9.28	-17.59
Las Vegas, NV	x	-	100	-	0.00	-13.88	-14.85	-20.23	-23.57	-27.84	-72.45	0.00	-23.92	-25.41	-31.69	-36.08	-40.95	-77.72
Libby, MT	-	x	-	100	0.00	-0.05	-0.06	-0.08	-0.09	-0.10	-0.27	0.00	-0.09	-0.10	-0.12	-0.14	-0.15	-0.29
Liberty-Clairton, PA	-	x	-	100	0.00	-0.09	-0.09	-0.13	-0.15	-0.17	-0.45	0.00	-0.15	-0.16	-0.20	-0.23	-0.26	-0.48
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-760.22	-868.07	-1,046.29	-1,167.39	-1,302.41	-2,523.62	0.00	-1,574.69	-1,738.56	-1,952.99	-2,125.17	-2,270.67	-3,147.21
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-6.30	-6.75	-9.17	-10.68	-12.60	-32.66	0.00	-10.90	-11.59	-14.42	-16.40	-18.59	-35.10
Louisville, KY-IN	-	x	-	100	0.00	-7.82	-8.37	-11.41	-13.30	-15.72	-41.01	0.00	-13.45	-14.29	-17.84	-20.33	-23.08	-43.94
Macon, GA	-	x	-	100	0.00	-1.46	-1.56	-2.13	-2.49	-2.94	-7.68	0.00	-2.51	-2.67	-3.33	-3.80	-4.31	-8.22
Manitowoc Co., WI	x	-	-	-	0.00	-0.76	-0.81	-1.10	-1.28	-1.51	-3.93	0.00	-1.30	-1.39	-1.73	-1.96	-2.23	-4.22
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-0.95	-1.02	-1.38	-1.61	-1.90	-4.95	0.00	-1.64	-1.74	-2.17	-2.47	-2.80	-5.31
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-3.86	-4.13	-5.62	-6.55	-7.74	-20.11	0.00	-6.66	-7.08	-8.82	-10.04	-11.39	-21.59
Memphis, TN-AR	x	-	100	-	0.00	-99.89	-114.81	-136.63	-151.70	-168.08	-311.80	0.00	-210.53	-233.19	-259.59	-281.28	-298.74	-398.33
Milwaukee-Racine, WI	x	-	100	-	0.00	-12.68	-13.57	-18.47	-21.51	-25.41	-66.02	0.00	-21.87	-23.24	-28.97	-32.97	-37.40	-70.87
Nevada (Western Part), CA	x	-	100	-	0.00	-0.80	-0.86	-1.17	-1.36	-1.61	-4.17	0.00	-1.38	-1.47	-1.83	-2.09	-2.37	-4.48
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-268.73	-301.60	-375.82	-424.57	-481.87	-1,031.42	0.00	-531.12	-581.13	-669.44	-736.89	-799.97	-1,219.53
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-1.07	-1.15	-1.57	-1.82	-2.15	-5.61	0.00	-1.85	-1.97	-2.45	-2.79	-3.17	-6.01
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-664.20	-762.88	-909.06	-1,009.82	-1,119.66	-2,086.56	0.00	-1,397.45	-1,547.34	-1,724.07	-1,868.91	-1,986.14	-2,658.83

**Table B2-83
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

SOx 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-36.73	-39.29	-53.57	-62.43	-73.79	-192.36	0.00	-63.19	-67.11	-83.79	-95.44	-108.36	-206.16
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-13.20	-14.13	-19.24	-22.40	-26.47	-68.81	0.00	-22.76	-24.19	-30.16	-34.33	-38.94	-73.84
Poughkeepsie, NY	x	x	100	100	0.00	-10.01	-10.71	-14.58	-16.98	-20.06	-52.14	0.00	-17.26	-18.34	-22.87	-26.03	-29.52	-55.95
Providence (All RI), RI	x	-	100	-	0.00	-6.60	-7.07	-9.62	-11.20	-13.23	-34.38	0.00	-11.39	-12.10	-15.08	-17.17	-19.47	-36.90
Reading, PA	-	x	-	100	0.00	-2.95	-3.16	-4.30	-5.00	-5.91	-15.36	0.00	-5.09	-5.40	-6.74	-7.67	-8.70	-16.49
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-8.41	-9.00	-12.25	-14.26	-16.84	-43.69	0.00	-14.52	-15.44	-19.23	-21.88	-24.80	-46.93
Rochester, NY	x	-	100	-	0.00	-9.39	-10.05	-13.68	-15.93	-18.82	-48.91	0.00	-16.19	-17.21	-21.45	-24.42	-27.70	-52.49
Rome, GA	-	x	-	100	0.00	-0.80	-0.86	-1.17	-1.36	-1.61	-4.19	0.00	-1.39	-1.47	-1.84	-2.09	-2.37	-4.50
Sacramento Metro, CA	x	-	50	-	0.00	-18.28	-19.57	-26.63	-31.02	-36.64	-95.22	0.00	-31.54	-33.51	-41.77	-47.54	-53.93	-102.20
San Diego, CA	x	-	100	-	0.00	-21.57	-23.09	-31.43	-36.61	-43.24	-112.38	0.00	-37.20	-39.54	-49.28	-56.10	-63.63	-120.61
San Francisco Bay Area, CA	x	-	100	-	0.00	-388.80	-445.09	-533.83	-594.49	-661.49	-1,260.75	0.00	-810.83	-896.34	-1,003.32	-1,089.97	-1,161.88	-1,586.62
San Joaquin Valley, CA	x	x	50	100	0.00	-97.03	-108.71	-135.90	-153.71	-174.73	-377.26	0.00	-190.88	-208.66	-240.98	-265.57	-288.75	-444.06
Sheboygan, WI	x	-	100	-	0.00	-0.88	-0.95	-1.29	-1.50	-1.77	-4.60	0.00	-1.53	-1.62	-2.02	-2.30	-2.61	-4.94
Springfield (Western MA), MA	x	-	100	-	0.00	-6.86	-7.34	-9.99	-11.64	-13.75	-35.73	0.00	-11.83	-12.57	-15.67	-17.83	-20.23	-38.34
St. Louis, MO-IL	x	x	100	100	0.00	-180.21	-206.31	-247.41	-275.51	-306.53	-583.95	0.00	-375.89	-415.54	-465.09	-505.23	-538.53	-735.08
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-11.02	-12.67	-15.07	-16.72	-18.52	-34.23	0.00	-23.26	-25.76	-28.66	-31.05	-32.96	-43.81
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-6.06	-6.61	-8.69	-10.01	-11.65	-28.32	0.00	-11.05	-11.89	-14.33	-16.09	-17.94	-31.39
Washington, DC-MD-VA	x	x	100	100	0.00	-39.03	-41.79	-56.86	-66.22	-78.20	-203.08	0.00	-67.38	-71.62	-89.23	-101.54	-115.16	-218.04
Wheeling, WV-OH	-	x	-	100	0.00	-1.15	-1.23	-1.68	-1.95	-2.31	-6.00	0.00	-1.99	-2.11	-2.63	-2.99	-3.40	-6.44
York, PA	-	x	-	100	0.00	-3.27	-3.50	-4.76	-5.55	-6.55	-17.02	0.00	-5.64	-5.99	-7.47	-8.50	-9.64	-18.27

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-84
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

SOx 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-13.65	-14.39	-19.27	-22.48	-26.46	-68.77	0.00	-26.51	-27.90	-33.96	-38.52	-43.25	-75.40
Allegan Co., MI	x	-	100	-	0.00	-1.49	-1.57	-2.10	-2.45	-2.88	-7.48	0.00	-2.88	-3.04	-3.69	-4.19	-4.71	-8.20
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-1.74	-1.84	-2.46	-2.87	-3.38	-8.79	0.00	-3.39	-3.57	-4.34	-4.92	-5.53	-9.63
Atlanta, GA	x	x	100	100	0.00	-108.63	-114.44	-153.34	-178.85	-210.50	-547.16	0.00	-210.90	-221.91	-270.13	-306.42	-344.07	-599.88
Baltimore, MD	x	x	100	100	0.00	-29.66	-31.25	-41.86	-48.82	-57.45	-149.27	0.00	-57.61	-60.62	-73.77	-83.68	-93.94	-163.70
Baton Rouge, LA	x	-	100	-	0.00	-411.65	-470.18	-549.57	-605.92	-664.11	-1,190.65	0.00	-1,021.40	-1,122.66	-1,226.30	-1,318.07	-1,381.08	-1,670.77
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-817.61	-934.85	-1,090.69	-1,201.52	-1,315.39	-2,340.78	0.00	-2,034.74	-2,237.48	-2,441.16	-2,622.20	-2,745.18	-3,302.03
Birmingham, AL	-	x	-	100	0.00	-10.14	-10.68	-14.32	-16.70	-19.66	-51.14	0.00	-19.68	-20.71	-25.21	-28.61	-32.13	-56.05
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-42.01	-44.26	-59.30	-69.16	-81.39	-211.52	0.00	-81.58	-85.84	-104.48	-118.51	-133.06	-231.93
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-6.26	-6.59	-8.85	-10.33	-12.17	-31.79	0.00	-12.10	-12.71	-15.52	-17.62	-19.81	-34.75
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-9.69	-10.21	-13.68	-15.95	-18.78	-48.80	0.00	-18.82	-19.80	-24.10	-27.34	-30.70	-53.51
Canton-Massillon, OH	-	x	-	100	0.00	-55.58	-63.32	-74.34	-82.13	-90.26	-164.67	0.00	-136.93	-150.34	-164.68	-177.27	-186.13	-228.26
Charleston, WV	-	x	-	100	0.00	-2.41	-2.54	-3.40	-3.97	-4.67	-12.14	0.00	-4.68	-4.92	-5.99	-6.80	-7.63	-13.31
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-25.10	-26.38	-35.47	-41.43	-48.83	-127.73	0.00	-48.39	-50.84	-62.10	-70.56	-79.37	-139.49
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-5.05	-5.33	-7.12	-8.30	-9.76	-25.22	0.00	-9.87	-10.40	-12.62	-14.30	-16.03	-27.75
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-663.02	-751.45	-890.20	-987.41	-1,091.00	-2,058.87	0.00	-1,609.58	-1,763.16	-1,942.72	-2,097.86	-2,212.08	-2,787.35
Chico, CA	x	-	100	-	0.00	-1.97	-2.07	-2.78	-3.24	-3.81	-9.91	0.00	-3.82	-4.02	-4.89	-5.55	-6.23	-10.87
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-19.24	-20.26	-27.17	-31.70	-37.33	-97.20	0.00	-37.29	-39.22	-47.79	-54.23	-60.92	-106.45
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-1.40	-1.47	-1.97	-2.30	-2.71	-7.03	0.00	-2.71	-2.85	-3.47	-3.94	-4.43	-7.71
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-22.88	-24.11	-32.30	-37.67	-44.34	-115.23	0.00	-44.43	-46.76	-56.91	-64.55	-72.48	-126.34
Columbus, OH	x	x	100	100	0.00	-19.90	-20.97	-28.10	-32.77	-38.57	-100.25	0.00	-38.64	-40.66	-49.50	-56.15	-63.04	-109.91
Dallas-Fort Worth, TX	x	-	100	-	0.00	-98.66	-103.94	-139.26	-162.43	-191.17	-496.90	0.00	-191.56	-201.56	-245.35	-278.31	-312.49	-544.80
Dayton-Springfield, OH	-	x	-	100	0.00	-6.98	-7.35	-9.85	-11.49	-13.53	-35.16	0.00	-13.55	-14.26	-17.36	-19.69	-22.11	-38.55
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-107.69	-119.58	-146.71	-165.23	-186.22	-394.05	0.00	-246.41	-267.33	-301.84	-330.13	-354.06	-493.42
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-117.00	-129.79	-159.52	-179.78	-202.82	-431.37	0.00	-266.91	-289.43	-327.21	-358.11	-384.41	-538.31
Door Co., WI	x	-	100	-	0.00	-0.28	-0.30	-0.40	-0.46	-0.55	-1.42	0.00	-0.55	-0.58	-0.70	-0.80	-0.89	-1.56
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.06	0.00	-0.02	-0.02	-0.03	-0.03	-0.04	-0.07
Evansville, IN	-	x	-	100	0.00	-3.22	-3.39	-4.56	-5.33	-6.28	-16.48	0.00	-6.20	-6.51	-7.96	-9.05	-10.19	-17.97
Greater Connecticut, CT	x	-	100	-	0.00	-17.42	-18.36	-24.59	-28.68	-33.75	-87.66	0.00	-33.86	-35.63	-43.36	-49.17	-55.20	-96.15
Greene Co., PA	x	-	100	-	0.00	-0.30	-0.32	-0.43	-0.50	-0.59	-1.52	0.00	-0.59	-0.62	-0.75	-0.85	-0.96	-1.67
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-7.93	-8.36	-11.20	-13.06	-15.37	-39.96	0.00	-15.41	-16.21	-19.73	-22.38	-25.13	-43.81

**Table B2-84
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

SOx 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-6.79	-7.15	-9.58	-11.17	-13.15	-34.18	0.00	-13.18	-13.87	-16.88	-19.14	-21.50	-37.47
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.05	-0.05	-0.07	-0.08	-0.09	-0.24	0.00	-0.09	-0.09	-0.11	-0.13	-0.14	-0.26
Hickory, NC	-	x	-	100	0.00	-2.01	-2.11	-2.83	-3.30	-3.89	-10.10	0.00	-3.90	-4.10	-4.99	-5.66	-6.35	-11.07
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,724.06	-1,966.75	-2,303.79	-2,542.50	-2,790.29	-5,045.49	0.00	-4,262.97	-4,683.09	-5,122.40	-5,509.83	-5,779.04	-7,037.64
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-163.84	-187.06	-218.81	-241.32	-264.62	-475.82	0.00	-406.05	-446.22	-487.64	-524.27	-549.52	-666.30
Imperial Co., CA	x	-	100	-	0.00	-3.29	-3.47	-4.65	-5.42	-6.38	-16.58	0.00	-6.39	-6.72	-8.18	-9.28	-10.42	-18.17
Indianapolis, IN	-	x	-	100	0.00	-18.56	-19.56	-26.20	-30.56	-35.97	-93.50	0.00	-36.04	-37.93	-46.17	-52.37	-58.80	-102.51
Jamestown, NY	x	-	100	-	0.00	-1.28	-1.35	-1.81	-2.11	-2.48	-6.44	0.00	-2.48	-2.61	-3.18	-3.61	-4.05	-7.06
Jefferson Co., NY	x	-	100	-	0.00	-1.57	-1.66	-2.22	-2.59	-3.05	-7.92	0.00	-3.06	-3.22	-3.91	-4.44	-4.98	-8.69
Johnstown, PA	-	x	-	100	0.00	-0.95	-1.00	-1.34	-1.57	-1.84	-4.79	0.00	-1.85	-1.95	-2.37	-2.69	-3.02	-5.25
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-1.99	-2.12	-2.78	-3.22	-3.75	-9.36	0.00	-4.02	-4.26	-5.09	-5.72	-6.35	-10.53
Knoxville, TN	x	x	100	100	0.00	-11.42	-12.03	-16.13	-18.81	-22.14	-57.55	0.00	-22.18	-23.33	-28.40	-32.22	-36.18	-63.09
Lancaster, PA	-	x	-	100	0.00	-4.05	-4.27	-5.72	-6.67	-7.85	-20.41	0.00	-7.87	-8.28	-10.08	-11.43	-12.84	-22.38
Las Vegas, NV	x	-	100	-	0.00	-23.87	-25.13	-33.70	-39.33	-46.30	-120.57	0.00	-46.26	-48.65	-59.28	-67.27	-75.57	-132.04
Libby, MT	-	x	-	100	0.00	-0.07	-0.07	-0.10	-0.11	-0.13	-0.34	0.00	-0.13	-0.14	-0.17	-0.19	-0.21	-0.37
Liberty-Clairton, PA	-	x	-	100	0.00	-0.10	-0.10	-0.13	-0.16	-0.18	-0.47	0.00	-0.19	-0.20	-0.24	-0.27	-0.31	-0.52
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1,075.62	-1,214.13	-1,448.45	-1,611.65	-1,788.08	-3,460.09	0.00	-2,581.04	-2,822.10	-3,124.15	-3,382.05	-3,578.17	-4,603.81
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-9.61	-10.14	-13.54	-15.77	-18.54	-47.88	0.00	-18.78	-19.78	-24.00	-27.18	-30.47	-52.70
Louisville, KY-IN	-	x	-	100	0.00	-9.70	-10.21	-13.70	-16.00	-18.84	-49.15	0.00	-18.76	-19.73	-24.06	-27.32	-30.70	-53.77
Macon, GA	-	x	-	100	0.00	-1.82	-1.91	-2.57	-3.00	-3.53	-9.23	0.00	-3.51	-3.69	-4.50	-5.11	-5.75	-10.09
Manitowoc Co., WI	x	-	-	-	0.00	-0.93	-0.98	-1.31	-1.52	-1.79	-4.65	0.00	-1.80	-1.90	-2.31	-2.61	-2.93	-5.11
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-1.51	-1.59	-2.14	-2.49	-2.93	-7.62	0.00	-2.94	-3.09	-3.76	-4.27	-4.79	-8.35
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-6.43	-6.77	-9.08	-10.59	-12.46	-32.39	0.00	-12.48	-13.14	-15.99	-18.14	-20.37	-35.51
Memphis, TN-AR	x	-	100	-	0.00	-139.01	-158.20	-186.08	-205.74	-226.36	-415.92	0.00	-341.43	-374.69	-410.93	-442.64	-465.17	-573.66
Milwaukee-Racine, WI	x	-	100	-	0.00	-16.04	-16.90	-22.63	-26.40	-31.07	-80.74	0.00	-31.14	-32.77	-39.89	-45.24	-50.80	-88.53
Nevada (Western Part), CA	x	-	100	-	0.00	-1.13	-1.19	-1.59	-1.86	-2.19	-5.68	0.00	-2.19	-2.31	-2.81	-3.19	-3.58	-6.23
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-362.67	-402.86	-494.01	-556.24	-626.76	-1,324.34	0.00	-830.59	-901.23	-1,017.20	-1,112.33	-1,192.68	-1,659.91
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-1.28	-1.35	-1.81	-2.11	-2.48	-6.46	0.00	-2.48	-2.61	-3.18	-3.61	-4.05	-7.07
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-928.88	-1,055.99	-1,244.38	-1,377.02	-1,516.70	-2,806.69	0.00	-2,274.56	-2,494.96	-2,739.56	-2,952.87	-3,105.88	-3,851.97

**Table B2-84
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

SOx 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-60.75	-63.94	-85.80	-100.14	-117.94	-307.48	0.00	-117.57	-123.63	-150.72	-171.10	-192.28	-336.49
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-15.57	-16.41	-21.98	-25.64	-30.18	-78.48	0.00	-30.23	-31.81	-38.72	-43.93	-49.33	-86.03
Poughkeepsie, NY	x	x	100	100	0.00	-13.75	-14.48	-19.41	-22.63	-26.64	-69.24	0.00	-26.69	-28.09	-34.19	-38.78	-43.55	-75.91
Providence (All RI), RI	x	-	100	-	0.00	-8.26	-8.71	-11.67	-13.61	-16.01	-41.62	0.00	-16.05	-16.89	-20.55	-23.31	-26.18	-45.63
Reading, PA	-	x	-	100	0.00	-4.06	-4.28	-5.73	-6.68	-7.86	-20.44	0.00	-7.88	-8.29	-10.09	-11.45	-12.85	-22.41
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-16.58	-17.48	-23.39	-27.27	-32.08	-83.19	0.00	-32.27	-33.98	-41.31	-46.83	-52.54	-91.34
Rochester, NY	x	-	100	-	0.00	-11.95	-12.59	-16.87	-19.68	-23.16	-60.20	0.00	-23.21	-24.42	-29.73	-33.72	-37.86	-66.00
Rome, GA	-	x	-	100	0.00	-1.00	-1.05	-1.41	-1.65	-1.94	-5.04	0.00	-1.94	-2.05	-2.49	-2.82	-3.17	-5.53
Sacramento Metro, CA	x	-	50	-	0.00	-27.43	-28.91	-38.72	-45.16	-53.14	-138.05	0.00	-53.29	-56.08	-68.24	-77.40	-86.90	-151.40
San Diego, CA	x	-	100	-	0.00	-26.78	-28.22	-37.81	-44.10	-51.90	-134.90	0.00	-52.00	-54.72	-66.61	-75.55	-84.84	-147.90
San Francisco Bay Area, CA	x	-	100	-	0.00	-539.52	-611.51	-724.36	-803.44	-887.69	-1,674.75	0.00	-1,309.94	-1,434.95	-1,581.01	-1,707.22	-1,800.11	-2,267.74
San Joaquin Valley, CA	x	x	50	100	0.00	-143.29	-158.16	-196.04	-221.72	-251.27	-547.36	0.00	-322.07	-348.36	-396.34	-435.17	-469.10	-672.27
Sheboygan, WI	x	-	100	-	0.00	-1.14	-1.20	-1.61	-1.87	-2.21	-5.73	0.00	-2.21	-2.33	-2.83	-3.21	-3.61	-6.28
Springfield (Western MA), MA	x	-	100	-	0.00	-8.87	-9.35	-12.52	-14.61	-17.19	-44.69	0.00	-17.23	-18.13	-22.06	-25.03	-28.10	-48.99
St. Louis, MO-IL	x	x	100	100	0.00	-250.24	-283.63	-335.98	-372.66	-411.74	-776.85	0.00	-607.56	-665.54	-733.29	-791.83	-834.92	-1,051.88
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-15.28	-17.40	-20.44	-22.58	-24.82	-45.36	0.00	-37.61	-41.29	-45.24	-48.70	-51.15	-62.80
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-7.87	-8.48	-10.95	-12.60	-14.59	-35.23	0.00	-16.40	-17.49	-20.59	-22.99	-25.32	-40.46
Washington, DC-MD-VA	x	x	100	100	0.00	-57.06	-60.13	-80.52	-93.91	-110.50	-286.95	0.00	-110.89	-116.70	-141.99	-161.03	-180.76	-314.78
Wheeling, WV-OH	-	x	-	100	0.00	-1.36	-1.44	-1.93	-2.25	-2.64	-6.87	0.00	-2.65	-2.79	-3.39	-3.85	-4.32	-7.53
York, PA	-	x	-	100	0.00	-4.72	-4.97	-6.66	-7.77	-9.14	-23.75	0.00	-9.16	-9.64	-11.73	-13.31	-14.94	-26.04

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-85
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2015

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-32.66	-39.53	-64.83	-75.19	-93.80	-265.80	0.00	-32.72	-39.59	-64.89	-75.26	-93.87	-265.84
Allegan Co., MI	x	-	100	-	0.00	-3.57	-4.32	-7.09	-8.23	-10.26	-29.07	0.00	-3.58	-4.33	-7.10	-8.23	-10.27	-29.08
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-3.25	-3.93	-6.45	-7.48	-9.33	-26.44	0.00	-3.25	-3.94	-6.46	-7.49	-9.34	-26.44
Atlanta, GA	x	x	100	100	0.00	-173.59	-210.12	-344.60	-399.72	-498.62	-1,413.03	0.00	-173.91	-210.46	-344.95	-400.08	-499.00	-1,413.25
Baltimore, MD	x	x	100	100	0.00	-72.29	-87.50	-143.47	-166.42	-207.58	-588.12	0.00	-72.42	-87.65	-143.62	-166.57	-207.74	-588.21
Baton Rouge, LA	x	-	100	-	0.00	-34.60	-42.04	-64.70	-74.77	-92.37	-245.09	0.00	-34.67	-42.12	-64.77	-74.85	-92.46	-245.14
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-46.28	-56.34	-83.83	-96.69	-118.81	-303.10	0.00	-46.37	-56.45	-83.94	-96.80	-118.92	-303.16
Birmingham, AL	-	x	-	100	0.00	-26.33	-31.87	-52.28	-60.65	-75.65	-214.45	0.00	-26.38	-31.92	-52.34	-60.70	-75.71	-214.48
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-117.52	-142.25	-233.26	-270.56	-337.50	-956.30	0.00	-117.73	-142.48	-233.49	-270.81	-337.76	-956.45
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-15.47	-18.72	-30.80	-35.74	-44.60	-126.77	0.00	-15.50	-18.75	-30.83	-35.77	-44.63	-126.79
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-28.26	-34.20	-56.09	-65.06	-81.15	-229.94	0.00	-28.31	-34.26	-56.14	-65.12	-81.21	-229.98
Canton-Massillon, OH	-	x	-	100	0.00	-10.37	-12.58	-20.07	-23.25	-28.88	-79.66	0.00	-10.39	-12.60	-20.09	-23.27	-28.90	-79.67
Charleston, WV	-	x	-	100	0.00	-7.56	-9.15	-15.01	-17.41	-21.72	-61.54	0.00	-7.57	-9.17	-15.02	-17.43	-21.73	-61.55
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-42.77	-51.74	-85.55	-99.27	-123.98	-354.06	0.00	-42.84	-51.82	-85.63	-99.36	-124.08	-354.12
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-13.37	-16.18	-26.58	-30.83	-38.47	-109.14	0.00	-13.40	-16.21	-26.60	-30.86	-38.49	-109.16
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-202.13	-244.88	-395.98	-458.95	-571.32	-1,596.96	0.00	-202.51	-245.29	-396.39	-459.38	-571.77	-1,597.22
Chico, CA	x	-	100	-	0.00	-4.88	-5.91	-9.69	-11.24	-14.03	-39.74	0.00	-4.89	-5.92	-9.70	-11.25	-14.04	-39.75
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-46.38	-56.14	-92.16	-106.90	-133.37	-378.30	0.00	-46.47	-56.23	-92.25	-107.00	-133.47	-378.36
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-4.42	-5.36	-8.78	-10.19	-12.71	-36.01	0.00	-4.43	-5.36	-8.79	-10.20	-12.72	-36.01
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-67.40	-81.59	-133.79	-155.19	-193.58	-548.52	0.00	-67.53	-81.72	-133.93	-155.33	-193.73	-548.61
Columbus, OH	x	x	100	100	0.00	-43.54	-52.70	-86.43	-100.25	-125.05	-354.38	0.00	-43.62	-52.79	-86.51	-100.34	-125.15	-354.43
Dallas-Fort Worth, TX	x	-	100	-	0.00	-176.45	-213.58	-350.26	-406.28	-506.80	-1,436.13	0.00	-176.77	-213.93	-350.61	-406.65	-507.18	-1,436.36
Dayton-Springfield, OH	-	x	-	100	0.00	-20.43	-24.73	-40.55	-47.04	-58.68	-166.28	0.00	-20.47	-24.77	-40.60	-47.08	-58.72	-166.31
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-84.70	-102.56	-167.47	-194.22	-242.12	-683.31	0.00	-84.86	-102.72	-167.65	-194.39	-242.30	-683.42
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-126.23	-152.83	-249.86	-289.77	-361.31	-1,020.83	0.00	-126.47	-153.08	-250.12	-290.04	-361.58	-1,021.00
Door Co., WI	x	-	100	-	0.00	-0.83	-1.00	-1.65	-1.91	-2.38	-6.75	0.00	-0.83	-1.01	-1.65	-1.91	-2.38	-6.75
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.03	-0.04	-0.07	-0.08	-0.10	-0.28	0.00	-0.03	-0.04	-0.07	-0.08	-0.10	-0.28
Evansville, IN	-	x	-	100	0.00	-8.33	-10.08	-16.64	-19.30	-24.10	-68.69	0.00	-8.35	-10.10	-16.65	-19.32	-24.12	-68.70
Greater Connecticut, CT	x	-	100	-	0.00	-44.81	-54.25	-88.93	-103.15	-128.66	-364.46	0.00	-44.90	-54.34	-89.02	-103.24	-128.76	-364.52
Greene Co., PA	x	-	100	-	0.00	-1.03	-1.24	-2.04	-2.36	-2.95	-8.35	0.00	-1.03	-1.24	-2.04	-2.36	-2.95	-8.35
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-20.20	-24.45	-40.10	-46.52	-58.03	-164.44	0.00	-20.24	-24.49	-40.15	-46.56	-58.07	-164.46

**Table B2-85
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2015

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-18.31	-22.16	-36.34	-42.15	-52.58	-148.99	0.00	-18.34	-22.19	-36.37	-42.19	-52.62	-149.01
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.12	-0.15	-0.25	-0.29	-0.36	-1.01	0.00	-0.12	-0.15	-0.25	-0.29	-0.36	-1.01
Hickory, NC	-	x	-	100	0.00	-4.75	-5.75	-9.43	-10.94	-13.65	-38.68	0.00	-4.76	-5.76	-9.44	-10.95	-13.66	-38.68
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-203.42	-246.90	-387.38	-448.21	-555.41	-1,505.19	0.00	-203.81	-247.32	-387.80	-448.65	-555.87	-1,505.46
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-16.45	-19.96	-31.45	-36.40	-45.14	-122.89	0.00	-16.48	-19.99	-31.49	-36.44	-45.17	-122.91
Imperial Co., CA	x	-	100	-	0.00	-5.63	-6.82	-11.18	-12.97	-16.18	-45.85	0.00	-5.64	-6.83	-11.19	-12.98	-16.19	-45.86
Indianapolis, IN	-	x	-	100	0.00	-40.65	-49.21	-80.70	-93.61	-116.77	-330.89	0.00	-40.73	-49.29	-80.78	-93.69	-116.86	-330.94
Jamestown, NY	x	-	100	-	0.00	-3.76	-4.55	-7.47	-8.66	-10.80	-30.61	0.00	-3.77	-4.56	-7.47	-8.67	-10.81	-30.61
Jefferson Co., NY	x	-	100	-	0.00	-3.49	-4.23	-6.94	-8.05	-10.04	-28.44	0.00	-3.50	-4.24	-6.94	-8.05	-10.04	-28.44
Johnstown, PA	-	x	-	100	0.00	-3.09	-3.74	-6.13	-7.11	-8.87	-25.14	0.00	-3.10	-3.75	-6.14	-7.12	-8.88	-25.14
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-3.12	-3.77	-6.15	-7.13	-8.89	-25.03	0.00	-3.12	-3.78	-6.15	-7.14	-8.89	-25.03
Knoxville, TN	x	x	100	100	0.00	-27.59	-33.40	-54.78	-63.54	-79.27	-224.65	0.00	-27.64	-33.46	-54.84	-63.60	-79.33	-224.69
Lancaster, PA	-	x	-	100	0.00	-10.80	-13.07	-21.43	-24.86	-31.01	-87.88	0.00	-10.82	-13.09	-21.46	-24.88	-31.04	-87.90
Las Vegas, NV	x	-	100	-	0.00	-35.68	-43.19	-70.85	-82.19	-102.53	-290.61	0.00	-35.75	-43.26	-70.93	-82.26	-102.60	-290.65
Libby, MT	-	x	-	100	0.00	-0.18	-0.21	-0.35	-0.41	-0.51	-1.44	0.00	-0.18	-0.21	-0.35	-0.41	-0.51	-1.44
Liberty-Clairton, PA	-	x	-	100	0.00	-0.36	-0.43	-0.70	-0.82	-1.02	-2.88	0.00	-0.36	-0.43	-0.71	-0.82	-1.02	-2.88
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-413.37	-500.72	-811.74	-940.96	-1,171.79	-3,283.65	0.00	-414.14	-501.55	-812.58	-941.83	-1,172.70	-3,284.18
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-18.51	-22.41	-36.73	-42.61	-53.15	-150.53	0.00	-18.55	-22.45	-36.77	-42.65	-53.19	-150.55
Louisville, KY-IN	-	x	-	100	0.00	-27.93	-33.80	-55.54	-64.43	-80.39	-228.23	0.00	-27.98	-33.86	-55.60	-64.49	-80.45	-228.26
Macon, GA	-	x	-	100	0.00	-5.19	-6.28	-10.32	-11.98	-14.94	-42.44	0.00	-5.20	-6.29	-10.33	-11.99	-14.95	-42.44
Manitowoc Co., WI	x	-	-	-	0.00	-2.72	-3.30	-5.40	-6.27	-7.82	-22.14	0.00	-2.73	-3.30	-5.41	-6.27	-7.82	-22.14
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-2.65	-3.20	-5.25	-6.09	-7.60	-21.54	0.00	-2.65	-3.21	-5.26	-6.10	-7.61	-21.54
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-10.35	-12.53	-20.55	-23.83	-29.73	-84.25	0.00	-10.37	-12.55	-20.57	-23.85	-29.75	-84.26
Memphis, TN-AR	x	-	100	-	0.00	-30.84	-37.38	-59.94	-69.44	-86.33	-239.26	0.00	-30.90	-37.45	-60.00	-69.50	-86.40	-239.30
Milwaukee-Racine, WI	x	-	100	-	0.00	-44.53	-53.90	-88.39	-102.52	-127.88	-362.35	0.00	-44.61	-53.99	-88.47	-102.61	-127.98	-362.40
Nevada (Western Part), CA	x	-	100	-	0.00	-2.52	-3.05	-5.00	-5.80	-7.23	-20.49	0.00	-2.52	-3.05	-5.00	-5.80	-7.24	-20.49
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-376.69	-456.06	-745.43	-864.49	-1,077.86	-3,044.60	0.00	-377.39	-456.81	-746.19	-865.28	-1,078.68	-3,045.08
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-3.98	-4.82	-7.91	-9.18	-11.45	-32.47	0.00	-3.99	-4.83	-7.92	-9.19	-11.46	-32.48
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-213.00	-258.17	-414.28	-479.96	-596.79	-1,655.48	0.00	-213.40	-258.60	-414.72	-480.41	-597.26	-1,655.76

**Table B2-85
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

VOCs 2015

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-98.06	-118.69	-194.96	-226.16	-282.18	-800.89	0.00	-98.24	-118.88	-195.15	-226.36	-282.40	-801.02
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-49.67	-60.12	-98.61	-114.38	-142.68	-404.38	0.00	-49.76	-60.22	-98.71	-114.48	-142.79	-404.44
Poughkeepsie, NY	x	x	100	100	0.00	-32.24	-39.03	-64.00	-74.24	-92.60	-262.40	0.00	-32.30	-39.09	-64.06	-74.30	-92.67	-262.45
Providence (All RI), RI	x	-	100	-	0.00	-23.33	-28.24	-46.31	-53.72	-67.01	-189.87	0.00	-23.37	-28.29	-46.36	-53.77	-67.06	-189.90
Reading, PA	-	x	-	100	0.00	-9.47	-11.47	-18.80	-21.81	-27.21	-77.10	0.00	-9.49	-11.49	-18.82	-21.83	-27.23	-77.11
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-18.86	-22.83	-37.42	-43.41	-54.14	-153.38	0.00	-18.89	-22.87	-37.46	-43.45	-54.19	-153.40
Rochester, NY	x	-	100	-	0.00	-32.67	-39.55	-64.85	-75.22	-93.84	-265.90	0.00	-32.73	-39.61	-64.92	-75.29	-93.91	-265.94
Rome, GA	-	x	-	100	0.00	-2.86	-3.46	-5.67	-6.58	-8.20	-23.25	0.00	-2.86	-3.46	-5.68	-6.58	-8.21	-23.25
Sacramento Metro, CA	x	-	50	-	0.00	-54.83	-66.37	-108.86	-126.27	-157.52	-446.39	0.00	-54.94	-66.48	-108.97	-126.39	-157.63	-446.46
San Diego, CA	x	-	100	-	0.00	-76.81	-92.98	-152.48	-176.87	-220.63	-625.21	0.00	-76.96	-93.13	-152.64	-177.03	-220.80	-625.31
San Francisco Bay Area, CA	x	-	100	-	0.00	-183.76	-222.57	-361.36	-418.92	-521.81	-1,464.41	0.00	-184.10	-222.94	-361.73	-419.31	-522.21	-1,464.64
San Joaquin Valley, CA	x	x	50	100	0.00	-115.26	-139.55	-228.06	-264.48	-329.75	-931.32	0.00	-115.47	-139.78	-228.29	-264.72	-330.00	-931.47
Sheboygan, WI	x	-	100	-	0.00	-3.04	-3.68	-6.04	-7.00	-8.73	-24.74	0.00	-3.05	-3.69	-6.04	-7.01	-8.74	-24.74
Springfield (Western MA), MA	x	-	100	-	0.00	-23.45	-28.38	-46.54	-53.99	-67.35	-190.84	0.00	-23.49	-28.43	-46.59	-54.04	-67.40	-190.87
St. Louis, MO-IL	x	x	100	100	0.00	-87.78	-106.35	-171.97	-199.31	-248.12	-693.54	0.00	-87.94	-106.52	-172.15	-199.50	-248.31	-693.65
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-3.36	-4.07	-6.53	-7.56	-9.40	-26.04	0.00	-3.37	-4.08	-6.54	-7.57	-9.41	-26.05
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-16.20	-19.61	-32.14	-37.28	-46.49	-131.67	0.00	-16.23	-19.64	-32.17	-37.31	-46.53	-131.69
Washington, DC-MD-VA	x	x	100	100	0.00	-123.89	-149.97	-245.83	-285.15	-355.68	-1,007.46	0.00	-124.12	-150.22	-246.08	-285.40	-355.94	-1,007.62
Wheeling, WV-OH	-	x	-	100	0.00	-4.30	-5.21	-8.54	-9.90	-12.35	-35.00	0.00	-4.31	-5.21	-8.55	-9.91	-12.36	-35.01
York, PA	-	x	-	100	0.00	-10.01	-12.12	-19.88	-23.06	-28.76	-81.49	0.00	-10.03	-12.14	-19.90	-23.08	-28.78	-81.51

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-86
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2020

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-113.97	-121.85	-188.85	-218.95	-268.15	-780.87	0.00	-151.31	-161.36	-231.31	-263.81	-315.77	-796.45
Allegan Co., MI	x	-	100	-	0.00	-12.46	-13.32	-20.65	-23.94	-29.32	-85.39	0.00	-16.55	-17.64	-25.29	-28.85	-34.53	-87.09
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-12.07	-12.91	-20.00	-23.19	-28.40	-82.70	0.00	-16.03	-17.09	-24.50	-27.94	-33.45	-84.35
Atlanta, GA	x	x	100	100	0.00	-660.32	-705.97	-1,094.24	-1,268.67	-1,553.76	-4,524.91	0.00	-876.59	-934.82	-1,340.17	-1,528.49	-1,829.63	-4,615.13
Baltimore, MD	x	x	100	100	0.00	-250.95	-268.32	-415.78	-482.04	-590.32	-1,718.70	0.00	-333.22	-355.38	-509.32	-580.86	-695.23	-1,753.08
Baton Rouge, LA	x	-	100	-	0.00	-115.78	-126.16	-182.18	-209.19	-251.70	-681.39	0.00	-162.31	-175.84	-234.12	-263.37	-308.23	-707.36
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-149.39	-164.51	-228.07	-260.33	-309.78	-798.23	0.00	-215.65	-235.52	-301.46	-336.48	-388.63	-839.06
Birmingham, AL	-	x	-	100	0.00	-89.28	-95.45	-147.98	-171.58	-210.15	-612.17	0.00	-118.50	-126.36	-181.21	-206.68	-247.42	-624.33
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-393.02	-420.21	-651.21	-755.00	-924.62	-2,692.32	0.00	-521.80	-556.49	-797.65	-909.71	-1,088.88	-2,746.10
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-53.69	-57.35	-89.19	-103.45	-126.79	-370.35	0.00	-71.09	-75.76	-108.99	-124.39	-149.04	-377.47
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-93.94	-100.43	-155.64	-180.45	-220.99	-643.49	0.00	-124.72	-133.01	-190.65	-217.43	-260.25	-656.34
Canton-Massillon, OH	-	x	-	100	0.00	-34.26	-36.94	-55.50	-64.09	-77.90	-220.11	0.00	-46.60	-50.06	-69.42	-78.69	-93.28	-226.12
Charleston, WV	-	x	-	100	0.00	-24.64	-26.34	-40.82	-47.33	-57.97	-168.80	0.00	-32.71	-34.88	-50.00	-57.03	-68.26	-172.17
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-162.63	-173.52	-270.90	-314.38	-385.69	-1,130.74	0.00	-214.63	-228.49	-330.19	-377.12	-452.44	-1,151.48
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-45.45	-48.59	-75.32	-87.33	-106.97	-311.57	0.00	-60.32	-64.32	-92.24	-105.21	-125.94	-317.77
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-690.37	-741.11	-1,131.75	-1,309.58	-1,598.16	-4,588.72	0.00	-927.39	-992.50	-1,400.05	-1,592.16	-1,896.93	-4,695.92
Chico, CA	x	-	100	-	0.00	-16.90	-18.07	-28.01	-32.47	-39.77	-115.82	0.00	-22.44	-23.93	-34.31	-39.13	-46.83	-118.13
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-158.54	-169.45	-262.91	-304.86	-373.46	-1,088.64	0.00	-210.29	-224.20	-321.78	-367.07	-439.53	-1,110.10
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-14.41	-15.40	-23.87	-27.68	-33.90	-98.70	0.00	-19.13	-20.40	-29.24	-33.35	-39.92	-100.68
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-223.18	-238.61	-369.80	-428.74	-525.07	-1,528.93	0.00	-296.30	-315.99	-452.95	-516.58	-618.33	-1,559.46
Columbus, OH	x	x	100	100	0.00	-154.17	-164.83	-255.48	-296.20	-362.76	-1,056.43	0.00	-204.67	-218.27	-312.90	-356.87	-427.18	-1,077.50
Dallas-Fort Worth, TX	x	-	100	-	0.00	-654.76	-700.03	-1,084.97	-1,257.91	-1,540.57	-4,486.24	0.00	-869.24	-927.00	-1,328.87	-1,515.59	-1,814.15	-4,575.76
Dayton-Springfield, OH	-	x	-	100	0.00	-67.85	-72.54	-112.43	-130.35	-159.64	-464.88	0.00	-90.07	-96.06	-137.70	-157.05	-187.99	-474.15
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-303.04	-324.38	-500.54	-579.99	-709.57	-2,057.76	0.00	-403.73	-431.01	-614.88	-700.68	-837.54	-2,100.87
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-424.14	-453.89	-701.08	-812.46	-994.20	-2,885.88	0.00	-564.63	-602.64	-860.66	-980.93	-1,172.90	-2,945.70
Door Co., WI	x	-	100	-	0.00	-2.75	-2.94	-4.56	-5.29	-6.48	-18.86	0.00	-3.65	-3.90	-5.59	-6.37	-7.63	-19.23
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.11	-0.12	-0.19	-0.22	-0.27	-0.79	0.00	-0.15	-0.16	-0.23	-0.27	-0.32	-0.81
Evansville, IN	-	x	-	100	0.00	-28.60	-30.53	-47.61	-55.24	-67.75	-198.43	0.00	-37.78	-40.23	-58.07	-66.31	-79.53	-202.12
Greater Connecticut, CT	x	-	100	-	0.00	-153.67	-164.32	-254.57	-295.13	-361.41	-1,052.05	0.00	-204.08	-217.66	-311.88	-355.67	-425.68	-1,073.14
Greene Co., PA	x	-	100	-	0.00	-3.28	-3.51	-5.44	-6.31	-7.73	-22.50	0.00	-4.36	-4.65	-6.66	-7.60	-9.10	-22.94
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-69.47	-74.27	-115.12	-133.47	-163.46	-476.00	0.00	-92.23	-98.36	-141.00	-160.81	-192.48	-485.50

**Table B2-86
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2020

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-62.02	-66.31	-102.77	-119.15	-145.93	-424.94	0.00	-82.34	-87.81	-125.88	-143.57	-171.85	-433.42
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.42	-0.45	-0.70	-0.81	-0.99	-2.90	0.00	-0.56	-0.59	-0.85	-0.97	-1.17	-2.95
Hickory, NC	-	x	-	100	0.00	-16.64	-17.80	-27.57	-31.97	-39.15	-113.98	0.00	-22.10	-23.57	-33.78	-38.52	-46.11	-116.26
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-688.66	-746.07	-1,101.30	-1,268.47	-1,535.00	-4,257.50	0.00	-949.68	-1,024.13	-1,394.12	-1,574.99	-1,856.33	-4,393.41
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-54.23	-58.70	-86.91	-100.14	-121.27	-337.42	0.00	-74.61	-80.41	-109.79	-124.11	-146.42	-347.92
Imperial Co., CA	x	-	100	-	0.00	-21.40	-22.88	-35.46	-41.11	-50.34	-146.60	0.00	-28.41	-30.29	-43.43	-49.53	-59.28	-149.53
Indianapolis, IN	-	x	-	100	0.00	-143.61	-153.54	-237.98	-275.91	-337.90	-984.00	0.00	-190.66	-203.32	-291.47	-332.42	-397.91	-1,003.64
Jamestown, NY	x	-	100	-	0.00	-12.48	-13.34	-20.67	-23.97	-29.35	-85.48	0.00	-16.57	-17.67	-25.32	-28.88	-34.57	-87.18
Jefferson Co., NY	x	-	100	-	0.00	-12.44	-13.30	-20.61	-23.89	-29.26	-85.18	0.00	-16.51	-17.61	-25.24	-28.78	-34.45	-86.89
Johnstown, PA	-	x	-	100	0.00	-10.00	-10.69	-16.57	-19.21	-23.52	-68.47	0.00	-13.28	-14.17	-20.30	-23.15	-27.71	-69.84
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-12.08	-12.95	-19.86	-22.99	-28.08	-80.95	0.00	-16.17	-17.29	-24.50	-27.88	-33.26	-82.77
Knoxville, TN	x	x	100	100	0.00	-96.02	-102.66	-159.13	-184.49	-225.96	-658.08	0.00	-127.46	-135.93	-194.88	-222.27	-266.07	-671.20
Lancaster, PA	-	x	-	100	0.00	-36.72	-39.25	-60.84	-70.54	-86.39	-251.56	0.00	-48.74	-51.98	-74.52	-84.99	-101.73	-256.58
Las Vegas, NV	x	-	100	-	0.00	-140.21	-149.88	-232.41	-269.47	-330.06	-961.57	0.00	-186.06	-198.40	-284.56	-324.58	-388.57	-980.66
Libby, MT	-	x	-	100	0.00	-0.61	-0.65	-1.00	-1.16	-1.42	-4.15	0.00	-0.80	-0.86	-1.23	-1.40	-1.68	-4.23
Liberty-Clairton, PA	-	x	-	100	0.00	-1.11	-1.19	-1.84	-2.13	-2.61	-7.56	0.00	-1.48	-1.58	-2.26	-2.57	-3.08	-7.72
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-1,459.53	-1,565.69	-2,397.21	-2,774.84	-3,388.44	-9,753.70	0.00	-1,956.59	-2,092.67	-2,960.29	-3,368.21	-4,016.25	-9,975.57
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-67.93	-72.65	-112.48	-130.39	-159.65	-464.45	0.00	-90.26	-96.29	-137.87	-157.20	-188.11	-473.83
Louisville, KY-IN	-	x	-	100	0.00	-93.14	-99.52	-154.56	-179.24	-219.62	-640.77	0.00	-123.44	-131.58	-189.05	-215.69	-258.35	-653.27
Macon, GA	-	x	-	100	0.00	-17.36	-18.55	-28.82	-33.42	-40.96	-119.56	0.00	-23.00	-24.51	-35.24	-40.21	-48.17	-121.88
Manitowoc Co., WI	x	-	-	-	0.00	-9.03	-9.66	-14.96	-17.35	-21.24	-61.81	0.00	-12.00	-12.80	-18.34	-20.91	-25.02	-63.05
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-9.98	-10.68	-16.54	-19.18	-23.49	-68.39	0.00	-13.26	-14.14	-20.26	-23.11	-27.66	-69.76
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-39.77	-42.52	-65.91	-76.41	-93.58	-272.53	0.00	-52.80	-56.31	-80.72	-92.07	-110.20	-277.96
Memphis, TN-AR	x	-	100	-	0.00	-102.33	-110.17	-166.45	-192.33	-234.10	-665.11	0.00	-138.62	-148.72	-207.40	-235.37	-279.48	-682.36
Milwaukee-Racine, WI	x	-	100	-	0.00	-149.59	-159.94	-247.86	-287.36	-351.92	-1,024.69	0.00	-198.61	-211.82	-303.60	-346.25	-414.44	-1,045.16
Nevada (Western Part), CA	x	-	100	-	0.00	-8.95	-9.57	-14.83	-17.19	-21.05	-61.30	0.00	-11.88	-12.67	-18.16	-20.72	-24.80	-62.53
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-1,266.72	-1,355.69	-2,093.38	-2,425.87	-2,968.33	-8,613.87	0.00	-1,686.69	-1,800.37	-2,570.37	-2,929.40	-3,502.37	-8,792.97
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-13.03	-13.93	-21.61	-25.05	-30.69	-89.43	0.00	-17.29	-18.44	-26.45	-30.17	-36.13	-91.20
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-727.77	-783.18	-1,185.28	-1,369.85	-1,668.06	-4,747.19	0.00	-984.56	-1,055.87	-1,475.20	-1,674.69	-1,989.58	-4,868.36

**Table B2-86
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

VOCs 2020

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-378.23	-404.19	-627.56	-727.76	-891.65	-2,600.82	0.00	-501.42	-534.51	-767.72	-875.89	-1,049.02	-2,651.69
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-161.24	-172.38	-267.21	-309.81	-379.44	-1,105.13	0.00	-214.02	-228.23	-327.24	-373.23	-446.78	-1,127.14
Poughkeepsie, NY	x	x	100	100	0.00	-113.15	-120.97	-187.49	-217.37	-266.22	-775.23	0.00	-150.21	-160.20	-229.64	-261.90	-313.50	-790.70
Providence (All RI), RI	x	-	100	-	0.00	-78.17	-83.57	-129.52	-150.17	-183.90	-535.52	0.00	-103.78	-110.67	-158.64	-180.93	-216.57	-546.21
Reading, PA	-	x	-	100	0.00	-33.30	-35.60	-55.17	-63.97	-78.34	-228.12	0.00	-44.20	-47.14	-67.57	-77.07	-92.25	-232.68
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-79.33	-84.83	-131.39	-152.32	-186.52	-542.85	0.00	-105.37	-112.39	-161.00	-183.60	-219.72	-553.76
Rochester, NY	x	-	100	-	0.00	-110.30	-117.93	-182.78	-211.91	-259.53	-755.75	0.00	-146.44	-156.17	-223.87	-255.32	-305.62	-770.83
Rome, GA	-	x	-	100	0.00	-9.55	-10.21	-15.82	-18.34	-22.46	-65.42	0.00	-12.68	-13.52	-19.38	-22.10	-26.45	-66.72
Sacramento Metro, CA	x	-	50	-	0.00	-199.04	-212.80	-329.83	-382.40	-468.32	-1,363.80	0.00	-264.24	-281.80	-403.97	-460.73	-551.49	-1,391.01
San Diego, CA	x	-	100	-	0.00	-256.44	-274.17	-424.93	-492.67	-603.37	-1,757.06	0.00	-340.44	-363.06	-520.45	-593.58	-710.51	-1,792.12
San Francisco Bay Area, CA	x	-	100	-	0.00	-619.15	-664.03	-1,017.55	-1,177.97	-1,438.75	-4,144.82	0.00	-829.45	-886.96	-1,255.84	-1,429.13	-1,704.55	-4,238.29
San Joaquin Valley, CA	x	x	50	100	0.00	-431.12	-461.34	-712.68	-825.93	-1,010.72	-2,934.21	0.00	-573.85	-612.47	-874.82	-997.10	-1,192.29	-2,994.94
Sheboygan, WI	x	-	100	-	0.00	-10.34	-11.05	-17.12	-19.85	-24.31	-70.75	0.00	-13.73	-14.64	-20.98	-23.92	-28.63	-72.17
Springfield (Western MA), MA	x	-	100	-	0.00	-79.88	-85.40	-132.36	-153.46	-187.94	-547.31	0.00	-106.04	-113.09	-162.12	-184.90	-221.32	-558.23
St. Louis, MO-IL	x	x	100	100	0.00	-294.26	-315.97	-482.07	-557.75	-680.50	-1,952.14	0.00	-395.58	-423.44	-596.73	-678.48	-808.12	-1,998.17
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-10.78	-11.61	-17.52	-20.24	-24.62	-69.86	0.00	-14.62	-15.69	-21.85	-24.79	-29.42	-71.70
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura Co., CA	x	-	100	-	0.00	-54.61	-58.40	-90.44	-104.85	-128.39	-373.61	0.00	-72.54	-77.38	-110.83	-126.38	-151.25	-381.13
Washington, DC-MD-VA	x	x	100	100	0.00	-435.53	-465.71	-721.46	-836.40	-1,024.22	-2,981.26	0.00	-578.43	-616.94	-883.92	-1,008.02	-1,206.41	-3,041.07
Wheeling, WV-OH	-	x	-	100	0.00	-14.02	-14.99	-23.23	-26.93	-32.98	-96.04	0.00	-18.61	-19.84	-28.45	-32.45	-38.84	-97.96
York, PA	-	x	-	100	0.00	-36.04	-38.53	-59.72	-69.23	-84.79	-246.90	0.00	-47.84	-51.02	-73.14	-83.42	-99.85	-251.83

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-87
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2025

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-196.61	-201.47	-317.42	-370.39	-453.20	-1,365.29	0.00	-291.09	-300.62	-426.30	-487.19	-579.44	-1,395.59
Allegan Co., MI	x	-	100	-	0.00	-21.48	-22.01	-34.68	-40.46	-49.51	-149.15	0.00	-31.80	-32.84	-46.57	-53.22	-63.30	-152.46
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-22.17	-22.72	-35.79	-41.77	-51.10	-153.93	0.00	-32.83	-33.91	-48.08	-54.94	-65.34	-157.36
Atlanta, GA	x	x	100	100	0.00	-1,255.08	-1,286.06	-2,026.33	-2,364.53	-2,893.19	-8,716.53	0.00	-1,857.98	-1,918.77	-2,721.24	-3,109.96	-3,698.93	-8,909.76
Baltimore, MD	x	x	100	100	0.00	-430.78	-441.47	-695.37	-811.39	-992.73	-2,990.07	0.00	-637.97	-658.91	-934.14	-1,067.49	-1,269.51	-3,056.68
Baton Rouge, LA	x	-	100	-	0.00	-192.50	-203.04	-294.79	-339.25	-406.89	-1,130.86	0.00	-314.39	-332.67	-431.44	-482.71	-557.73	-1,193.80
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-238.52	-256.07	-352.89	-402.25	-475.65	-1,241.71	0.00	-412.36	-441.93	-545.50	-602.56	-683.67	-1,345.49
Birmingham, AL	-	x	-	100	0.00	-150.45	-154.15	-242.95	-283.52	-346.93	-1,045.53	0.00	-222.63	-229.89	-326.16	-372.78	-443.43	-1,068.59
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-651.49	-667.61	-1,051.73	-1,227.23	-1,501.56	-4,523.23	0.00	-964.64	-996.26	-1,412.64	-1,614.37	-1,919.99	-4,623.76
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-92.02	-94.18	-148.89	-173.84	-212.87	-643.25	0.00	-135.64	-139.92	-199.24	-227.91	-271.40	-656.75
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-154.26	-158.08	-249.04	-290.59	-355.55	-1,071.03	0.00	-228.42	-235.91	-334.50	-382.26	-454.63	-1,094.83
Canton-Massillon, OH	-	x	-	100	0.00	-55.91	-58.05	-88.18	-102.28	-124.08	-361.40	0.00	-86.62	-90.50	-123.07	-139.30	-163.54	-374.36
Charleston, WV	-	x	-	100	0.00	-39.70	-40.68	-64.09	-74.79	-91.51	-275.69	0.00	-58.77	-60.70	-86.08	-98.37	-117.00	-281.81
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-305.66	-312.47	-495.55	-578.87	-709.35	-2,149.32	0.00	-448.71	-462.37	-660.93	-756.67	-902.08	-2,192.10
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-76.34	-78.26	-123.18	-143.71	-175.80	-529.16	0.00	-113.17	-116.91	-165.60	-189.20	-224.95	-541.08
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1,174.45	-1,210.35	-1,877.08	-2,184.71	-2,663.37	-7,910.77	0.00	-1,773.73	-1,841.30	-2,563.21	-2,917.01	-3,449.87	-8,131.32
Chico, CA	x	-	100	-	0.00	-28.90	-29.62	-46.66	-54.45	-66.63	-200.72	0.00	-42.79	-44.19	-62.67	-71.62	-85.19	-205.17
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-271.50	-278.08	-438.65	-511.96	-626.58	-1,889.66	0.00	-401.33	-414.30	-588.37	-672.63	-800.34	-1,930.79
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-23.18	-23.75	-37.42	-43.66	-53.42	-160.93	0.00	-34.32	-35.44	-50.26	-57.43	-68.31	-164.51
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-365.40	-374.44	-589.89	-688.33	-842.20	-2,537.07	0.00	-541.01	-558.74	-792.29	-905.44	-1,076.86	-2,593.43
Columbus, OH	x	x	100	100	0.00	-271.18	-277.88	-437.82	-510.89	-625.11	-1,883.29	0.00	-401.46	-414.60	-587.98	-671.97	-799.22	-1,925.05
Dallas-Fort Worth, TX	x	-	100	-	0.00	-1,209.86	-1,239.75	-1,953.26	-2,279.24	-2,788.79	-8,401.63	0.00	-1,791.16	-1,849.80	-2,623.25	-2,997.93	-3,565.61	-8,588.03
Dayton-Springfield, OH	-	x	-	100	0.00	-111.32	-114.07	-179.72	-209.72	-256.60	-773.04	0.00	-164.81	-170.20	-241.37	-275.85	-328.08	-790.19
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-539.12	-553.39	-867.75	-1,011.79	-1,236.64	-3,709.94	0.00	-802.99	-830.59	-1,171.25	-1,336.84	-1,587.28	-3,798.48
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-705.14	-723.60	-1,135.53	-1,324.18	-1,618.74	-4,859.54	0.00	-1,049.24	-1,085.03	-1,531.43	-1,748.31	-2,076.40	-4,974.19
Door Co., WI	x	-	100	-	0.00	-4.51	-4.62	-7.28	-8.50	-10.40	-31.33	0.00	-6.68	-6.90	-9.78	-11.18	-13.30	-32.03
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.19	-0.19	-0.31	-0.36	-0.44	-1.34	0.00	-0.28	-0.29	-0.41	-0.47	-0.56	-1.36
Evansville, IN	-	x	-	100	0.00	-48.50	-49.58	-78.63	-91.85	-112.55	-340.98	0.00	-71.21	-73.38	-104.88	-120.07	-143.14	-347.78
Greater Connecticut, CT	x	-	100	-	0.00	-260.36	-266.84	-420.22	-490.31	-599.86	-1,806.46	0.00	-385.67	-398.36	-564.62	-645.19	-767.24	-1,846.82
Greene Co., PA	x	-	100	-	0.00	-5.19	-5.32	-8.38	-9.78	-11.97	-36.05	0.00	-7.69	-7.94	-11.26	-12.86	-15.30	-36.85
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-118.02	-120.94	-190.54	-222.34	-272.04	-819.57	0.00	-174.72	-180.44	-255.89	-292.44	-347.82	-837.75

**Table B2-87
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2025

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-103.84	-106.41	-167.65	-195.63	-239.36	-721.08	0.00	-153.74	-158.78	-225.16	-257.32	-306.04	-737.08
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-0.70	-0.72	-1.14	-1.33	-1.63	-4.95	0.00	-1.03	-1.07	-1.52	-1.74	-2.08	-5.05
Hickory, NC	-	x	-	100	0.00	-28.78	-29.50	-46.46	-54.22	-66.33	-199.79	0.00	-42.63	-44.03	-62.42	-71.33	-84.83	-204.24
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,162.13	-1,214.67	-1,810.34	-2,092.96	-2,527.06	-7,221.87	0.00	-1,841.68	-1,934.84	-2,577.70	-2,903.24	-3,385.48	-7,538.05
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-88.43	-92.40	-137.82	-159.36	-192.44	-550.41	0.00	-140.00	-147.05	-196.08	-220.88	-257.64	-574.32
Imperial Co., CA	x	-	100	-	0.00	-40.15	-41.14	-64.81	-75.63	-92.54	-278.78	0.00	-59.43	-61.38	-87.04	-99.48	-118.31	-284.96
Indianapolis, IN	-	x	-	100	0.00	-252.39	-258.63	-407.48	-475.48	-581.78	-1,752.71	0.00	-373.66	-385.89	-547.25	-625.41	-743.84	-1,791.59
Jamestown, NY	x	-	100	-	0.00	-20.45	-20.95	-33.01	-38.52	-47.13	-141.97	0.00	-30.27	-31.27	-44.33	-50.67	-60.26	-145.12
Jefferson Co., NY	x	-	100	-	0.00	-21.86	-22.40	-35.29	-41.18	-50.38	-151.77	0.00	-32.37	-33.43	-47.40	-54.17	-64.43	-155.15
Johnstown, PA	-	x	-	100	0.00	-15.99	-16.39	-25.81	-30.11	-36.84	-110.91	0.00	-23.69	-24.47	-34.68	-39.63	-47.12	-113.40
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-23.01	-23.72	-36.76	-42.78	-52.14	-154.78	0.00	-34.78	-36.11	-50.23	-57.16	-67.58	-159.14
Knoxville, TN	x	x	100	100	0.00	-165.22	-169.29	-266.76	-311.29	-380.89	-1,147.63	0.00	-244.56	-252.55	-358.21	-409.39	-486.94	-1,173.03
Lancaster, PA	-	x	-	100	0.00	-61.67	-63.20	-99.56	-116.18	-142.15	-428.25	0.00	-91.31	-94.30	-133.72	-152.82	-181.75	-437.75
Las Vegas, NV	x	-	100	-	0.00	-272.19	-278.84	-439.64	-513.08	-627.88	-1,892.78	0.00	-402.60	-415.68	-590.00	-674.40	-802.31	-1,934.30
Libby, MT	-	x	-	100	0.00	-1.02	-1.05	-1.65	-1.92	-2.36	-7.10	0.00	-1.51	-1.56	-2.22	-2.53	-3.01	-7.25
Liberty-Clairton, PA	-	x	-	100	0.00	-1.72	-1.76	-2.76	-3.22	-3.93	-11.76	0.00	-2.57	-2.66	-3.73	-4.26	-5.05	-12.05
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-2,567.66	-2,643.79	-4,110.33	-4,785.92	-5,837.89	-17,379.25	0.00	-3,865.83	-4,009.89	-5,598.12	-6,375.02	-7,546.25	-17,847.82
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-123.45	-126.59	-199.06	-232.21	-283.99	-854.07	0.00	-183.23	-189.35	-267.89	-306.00	-363.68	-873.61
Louisville, KY-IN	-	x	-	100	0.00	-153.52	-157.18	-248.20	-289.73	-354.69	-1,070.66	0.00	-226.62	-233.87	-332.55	-380.28	-452.65	-1,093.57
Macon, GA	-	x	-	100	0.00	-28.69	-29.37	-46.41	-54.18	-66.34	-200.37	0.00	-42.31	-43.66	-62.13	-71.06	-84.61	-204.61
Manitowoc Co., WI	x	-	-	-	0.00	-14.80	-15.17	-23.88	-27.86	-34.09	-102.62	0.00	-21.94	-22.66	-32.10	-36.68	-43.61	-104.92
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-18.62	-19.08	-30.06	-35.08	-42.92	-129.27	0.00	-27.57	-28.48	-40.38	-46.14	-54.88	-132.15
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-75.69	-77.56	-122.19	-142.58	-174.46	-525.59	0.00	-112.05	-115.72	-164.10	-187.54	-223.06	-537.25
Memphis, TN-AR	x	-	100	-	0.00	-167.81	-173.82	-265.77	-308.60	-374.95	-1,099.02	0.00	-257.90	-268.91	-368.37	-417.65	-491.47	-1,135.59
Milwaukee-Racine, WI	x	-	100	-	0.00	-248.53	-254.68	-401.20	-468.15	-572.79	-1,725.41	0.00	-368.01	-380.07	-538.90	-615.85	-732.43	-1,763.77
Nevada (Western Part), CA	x	-	100	-	0.00	-15.72	-16.11	-25.37	-29.60	-36.22	-109.09	0.00	-23.28	-24.04	-34.08	-38.95	-46.32	-111.52
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-2,105.37	-2,160.77	-3,389.71	-3,952.66	-4,831.54	-14,500.31	0.00	-3,134.10	-3,241.35	-4,573.13	-5,220.29	-6,199.24	-14,844.09
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-21.06	-21.57	-34.02	-39.70	-48.59	-146.49	0.00	-31.15	-32.16	-45.65	-52.18	-62.08	-149.70
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1,231.72	-1,274.52	-1,954.38	-2,270.42	-2,760.46	-8,113.20	0.00	-1,886.42	-1,965.24	-2,700.73	-3,064.35	-3,609.57	-8,374.14

**Table B2-87
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

VOCs 2025

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-720.64	-737.92	-1,164.88	-1,359.71	-1,664.43	-5,022.84	0.00	-1,064.24	-1,098.37	-1,561.25	-1,785.17	-2,124.68	-5,130.88
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-258.82	-265.20	-417.91	-487.67	-596.72	-1,798.00	0.00	-383.09	-395.60	-561.14	-641.33	-762.82	-1,837.77
Poughkeepsie, NY	x	x	100	100	0.00	-196.20	-201.05	-316.75	-369.61	-452.24	-1,362.41	0.00	-290.48	-299.99	-425.41	-486.17	-578.23	-1,392.65
Providence (All RI), RI	x	-	100	-	0.00	-129.40	-132.60	-208.90	-243.76	-298.26	-898.49	0.00	-191.59	-197.86	-280.58	-320.65	-381.35	-918.44
Reading, PA	-	x	-	100	0.00	-57.81	-59.24	-93.33	-108.90	-133.25	-401.42	0.00	-85.58	-88.39	-125.34	-143.24	-170.36	-410.33
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-164.79	-168.92	-265.89	-310.21	-379.48	-1,142.27	0.00	-244.27	-252.35	-357.45	-408.40	-485.57	-1,168.00
Rochester, NY	x	-	100	-	0.00	-184.06	-188.61	-297.15	-346.74	-424.26	-1,278.10	0.00	-272.50	-281.42	-399.08	-456.08	-542.44	-1,306.47
Rome, GA	-	x	-	100	0.00	-15.77	-16.16	-25.45	-29.70	-36.34	-109.49	0.00	-23.34	-24.11	-34.19	-39.07	-46.47	-111.92
Sacramento Metro, CA	x	-	50	-	0.00	-358.39	-367.26	-578.57	-675.11	-826.02	-2,488.30	0.00	-530.65	-548.04	-777.10	-888.07	-1,056.20	-2,543.59
San Diego, CA	x	-	100	-	0.00	-422.90	-433.35	-682.75	-796.70	-974.81	-2,936.78	0.00	-626.08	-646.58	-916.94	-1,047.91	-1,246.34	-3,001.93
San Francisco Bay Area, CA	x	-	100	-	0.00	-1,031.58	-1,062.20	-1,651.24	-1,922.62	-2,345.16	-6,980.83	0.00	-1,553.32	-1,611.26	-2,249.17	-2,561.24	-3,031.69	-7,169.31
San Joaquin Valley, CA	x	x	50	100	0.00	-798.33	-819.01	-1,286.26	-1,500.14	-1,834.18	-5,510.17	0.00	-1,186.72	-1,226.88	-1,733.27	-1,979.15	-2,351.23	-5,638.62
Sheboygan, WI	x	-	100	-	0.00	-17.35	-17.78	-27.99	-32.66	-39.96	-120.33	0.00	-25.70	-26.55	-37.62	-42.99	-51.12	-123.02
Springfield (Western MA), MA	x	-	100	-	0.00	-134.44	-137.77	-217.05	-253.28	-309.90	-933.62	0.00	-199.04	-205.56	-291.50	-333.14	-396.22	-954.33
St. Louis, MO-IL	x	x	100	100	0.00	-488.95	-504.34	-780.24	-907.75	-1,105.99	-3,277.63	0.00	-740.70	-769.52	-1,068.20	-1,214.86	-1,435.52	-3,372.00
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-17.09	-17.71	-27.01	-31.35	-38.06	-111.28	0.00	-26.35	-27.49	-37.55	-42.54	-50.01	-115.10
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Ventura Co., CA	x	-	100	-	0.00	-90.94	-93.22	-146.74	-171.21	-209.45	-630.51	0.00	-134.79	-139.24	-197.26	-225.38	-267.98	-644.69
Washington, DC-MD-VA	x	x	100	100	0.00	-765.17	-784.24	-1,234.91	-1,440.88	-1,762.78	-5,308.05	0.00	-1,133.61	-1,170.94	-1,659.45	-1,896.20	-2,254.82	-5,426.84
Wheeling, WV-OH	-	x	-	100	0.00	-22.57	-23.13	-36.44	-42.52	-52.03	-156.75	0.00	-33.42	-34.51	-48.94	-55.93	-66.52	-160.23
York, PA	-	x	-	100	0.00	-64.07	-65.66	-103.44	-120.70	-147.68	-444.89	0.00	-94.86	-97.97	-138.92	-158.76	-188.82	-454.77

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

**Table B2-88
High Scenario Alternative CAFE Standards
Emission Changes g/ by Nonattainment Area**

VOCs 2035

Nonattainment Area	Status <u>b</u> /		General Conformity Threshold <u>c</u> /		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Albany-Schenectady-Troy, NY	x	-	100	-	0.00	-322.11	-316.77	-497.95	-591.61	-735.24	-2,301.72	0.00	-476.03	-475.54	-683.53	-798.16	-968.09	-2,320.27
Allegan Co., MI	x	-	100	-	0.00	-35.05	-34.47	-54.18	-64.37	-80.00	-250.45	0.00	-51.79	-51.74	-74.37	-86.84	-105.34	-252.46
Amador and Calaveras Cos. (Central Mountain Cos.), CA	x	-	100	-	0.00	-41.16	-40.48	-63.62	-75.59	-93.94	-294.05	0.00	-60.83	-60.78	-87.34	-101.99	-123.70	-296.43
Atlanta, GA	x	x	100	100	0.00	-2,562.73	-2,520.17	-3,961.82	-4,707.08	-5,849.92	-18,314.51	0.00	-3,786.96	-3,782.97	-5,437.94	-6,350.02	-7,702.20	-18,461.62
Baltimore, MD	x	x	100	100	0.00	-699.41	-687.89	-1,081.10	-1,284.38	-1,596.10	-4,995.74	0.00	-1,034.09	-1,033.15	-1,484.53	-1,733.32	-2,102.12	-5,036.50
Baton Rouge, LA	x	-	100	-	0.00	-302.27	-308.90	-448.46	-522.32	-633.18	-1,826.22	0.00	-519.60	-538.52	-696.28	-786.51	-916.25	-1,922.49
Beaumont/Port Arthur, TX	x	-	100	-	0.00	-344.03	-361.77	-493.93	-565.70	-670.93	-1,786.15	0.00	-655.26	-693.76	-840.54	-928.04	-1,049.67	-1,964.82
Birmingham, AL	-	x	-	100	0.00	-239.40	-235.39	-370.16	-439.82	-546.65	-1,711.90	0.00	-353.55	-353.12	-507.83	-593.09	-719.49	-1,725.40
Boston-Lawrence-Worcester (E. MA), MA	x	-	100	-	0.00	-990.89	-974.50	-1,531.76	-1,819.85	-2,261.62	-7,079.72	0.00	-1,464.62	-1,463.17	-2,102.89	-2,455.46	-2,978.14	-7,137.00
Boston-Manchester-Portsmouth (SE), NH	x	-	100	-	0.00	-148.29	-145.62	-229.56	-272.92	-339.46	-1,065.40	0.00	-217.88	-217.32	-313.72	-366.79	-445.53	-1,072.57
Buffalo-Niagara Falls, NY	x	-	100	-	0.00	-228.60	-224.81	-353.37	-419.83	-521.74	-1,633.22	0.00	-337.89	-337.56	-485.14	-566.47	-687.05	-1,646.44
Canton-Massillon, OH	-	x	-	100	0.00	-82.50	-82.66	-125.09	-147.24	-180.91	-545.98	0.00	-131.45	-133.85	-182.24	-209.34	-248.98	-561.03
Charleston, WV	-	x	-	100	0.00	-56.85	-55.91	-87.89	-104.42	-129.77	-406.26	0.00	-84.02	-83.93	-120.64	-140.87	-170.87	-409.53
Charlotte-Gastonia-Rock Hill, NC-SC	x	-	100	-	0.00	-594.96	-584.01	-921.48	-1,095.78	-1,363.27	-4,282.27	0.00	-872.52	-869.83	-1,257.45	-1,470.78	-1,787.41	-4,309.23
Chattanooga, AL-TN-GA	-	x	-	100	0.00	-118.71	-116.93	-183.22	-217.52	-270.08	-843.05	0.00	-176.58	-176.70	-252.77	-294.74	-356.91	-851.12
Chicago-Gary-Lake Co., IL-IN	x	x	100	100	0.00	-1,929.38	-1,908.47	-2,964.71	-3,512.37	-4,349.91	-13,469.23	0.00	-2,920.75	-2,936.27	-4,146.47	-4,816.56	-5,806.14	-13,655.39
Chico, CA	x	-	100	-	0.00	-46.43	-45.66	-71.78	-85.28	-105.99	-331.80	0.00	-68.62	-68.55	-98.53	-115.05	-139.55	-334.47
Cincinnati-Hamilton, OH-KY-IN	x	x	100	100	0.00	-454.57	-446.80	-703.10	-835.56	-1,038.74	-3,255.01	0.00	-670.32	-669.23	-963.51	-1,125.63	-1,366.05	-3,279.59
Clearfield and Indiana Cos., PA	x	-	100	-	0.00	-32.95	-32.41	-50.94	-60.52	-75.22	-235.46	0.00	-48.71	-48.66	-69.94	-81.66	-99.04	-237.36
Cleveland-Akron-Lorain, OH	x	x	100	100	0.00	-539.77	-530.83	-834.41	-991.35	-1,232.00	-3,856.73	0.00	-797.78	-796.98	-1,145.47	-1,337.54	-1,622.28	-3,887.89
Columbus, OH	x	x	100	100	0.00	-469.56	-461.77	-725.91	-862.46	-1,071.86	-3,355.66	0.00	-693.89	-693.16	-996.39	-1,163.51	-1,411.26	-3,382.64
Dallas-Fort Worth, TX	x	-	100	-	0.00	-2,327.44	-2,288.82	-3,598.02	-4,274.81	-5,312.65	-16,631.97	0.00	-3,439.50	-3,435.93	-4,938.84	-5,767.13	-6,995.07	-16,765.82
Dayton-Springfield, OH	-	x	-	100	0.00	-164.69	-161.96	-254.59	-302.48	-375.92	-1,176.86	0.00	-243.38	-243.13	-349.47	-408.08	-494.97	-1,186.33
Denver-Boulder-Greeley-Ft. Collins, CO (EAC)	x	-	100	-	0.00	-958.46	-944.43	-1,478.67	-1,755.12	-2,178.67	-6,795.53	0.00	-1,428.13	-1,429.77	-2,042.67	-2,380.98	-2,881.87	-6,863.33
Detroit-Ann Arbor, MI	x	x	100	100	0.00	-1,076.95	-1,061.18	-1,661.49	-1,972.12	-2,448.05	-7,635.84	0.00	-1,604.65	-1,606.49	-2,295.18	-2,675.32	-3,238.16	-7,711.98
Door Co., WI	x	-	100	-	0.00	-6.66	-6.55	-10.30	-12.24	-15.21	-47.60	0.00	-9.85	-9.84	-14.14	-16.51	-20.02	-47.98
Essex Co., NY (Whiteface Mountain)	x	-	100	-	0.00	-0.29	-0.28	-0.45	-0.53	-0.66	-2.09	0.00	-0.42	-0.42	-0.61	-0.71	-0.87	-2.10
Evansville, IN	-	x	-	100	0.00	-76.59	-75.13	-118.73	-141.23	-175.79	-552.97	0.00	-111.96	-111.52	-161.61	-189.16	-230.07	-556.04
Greater Connecticut, CT	x	-	100	-	0.00	-410.85	-404.11	-635.01	-754.39	-937.43	-2,933.68	0.00	-607.66	-607.16	-872.20	-1,018.30	-1,234.86	-2,957.85
Greene Co., PA	x	-	100	-	0.00	-7.13	-7.01	-11.02	-13.09	-16.27	-50.94	0.00	-10.53	-10.52	-15.13	-17.66	-21.42	-51.35
Greensboro-Winston Salem-High Point, NC	-	x	-	100	0.00	-187.18	-184.08	-289.37	-343.80	-427.27	-1,337.62	0.00	-276.62	-276.33	-397.20	-463.82	-562.57	-1,348.38

**Table B2-88
High Scenario Alternative CAFE Standards
Emission Changes a/ by Nonattainment Area**

VOCs 2035

Nonattainment Area	Status <u>b/</u>		General Conformity Threshold <u>c/</u>		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
					Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	O3	PM2.5	O3	PM2.5	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Harrisburg-Lebanon-Carlisle, PA	-	x	-	100	0.00	-160.09	-157.44	-247.48	-294.03	-365.41	-1,143.93	0.00	-236.60	-236.35	-339.72	-396.69	-481.15	-1,153.16
Haywood and Swain Cos. (Great Smoky Mountains National Park), NC	x	-	100	-	0.00	-1.10	-1.07	-1.71	-2.03	-2.54	-8.02	0.00	-1.59	-1.58	-2.31	-2.70	-3.30	-8.04
Hickory, NC	-	x	-	100	0.00	-47.30	-46.52	-73.12	-86.86	-107.95	-337.87	0.00	-69.94	-69.87	-100.40	-117.23	-142.17	-340.62
Houston-Galveston-Brazoria, TX	x	-	100	-	0.00	-1,893.43	-1,909.99	-2,849.52	-3,342.27	-4,088.01	-12,155.06	0.00	-3,098.57	-3,175.50	-4,243.96	-4,846.32	-5,722.76	-12,589.02
Huntington-Ashland, WV-KY-OH	-	x	-	100	0.00	-131.07	-132.60	-196.64	-230.29	-281.13	-830.47	0.00	-216.89	-222.85	-295.59	-336.71	-396.41	-863.10
Imperial Co., CA	x	-	100	-	0.00	-77.64	-76.35	-120.03	-142.60	-177.23	-554.83	0.00	-114.74	-114.62	-164.76	-192.39	-233.35	-559.29
Indianapolis, IN	-	x	-	100	0.00	-437.94	-430.67	-677.02	-804.37	-999.65	-3,129.55	0.00	-647.19	-646.52	-929.31	-1,085.17	-1,316.22	-3,154.73
Jamestown, NY	x	-	100	-	0.00	-30.17	-29.67	-46.63	-55.41	-68.86	-215.55	0.00	-44.59	-44.54	-64.02	-74.75	-90.67	-217.29
Jefferson Co., NY	x	-	100	-	0.00	-37.12	-36.51	-57.38	-68.17	-84.72	-265.19	0.00	-54.87	-54.82	-78.78	-91.98	-111.56	-267.34
Johnstown, PA	-	x	-	100	0.00	-22.45	-22.08	-34.69	-41.20	-51.20	-160.16	0.00	-33.23	-33.21	-47.67	-55.65	-67.47	-161.51
Kern Co. (Eastern Kern), CA	x	-	100	-	0.00	-45.45	-45.21	-69.43	-82.03	-101.24	-310.04	0.00	-70.39	-71.18	-98.87	-114.28	-136.95	-316.14
Knoxville, TN	x	x	100	100	0.00	-269.53	-265.05	-416.70	-495.09	-615.31	-1,926.50	0.00	-398.23	-397.79	-571.89	-667.83	-810.07	-1,941.91
Lancaster, PA	-	x	-	100	0.00	-95.59	-94.01	-147.78	-175.57	-218.20	-683.09	0.00	-141.27	-141.13	-202.85	-236.87	-287.31	-688.60
Las Vegas, NV	x	-	100	-	0.00	-563.85	-554.22	-872.12	-1,036.41	-1,288.41	-4,037.28	0.00	-831.52	-830.20	-1,195.19	-1,396.27	-1,694.46	-4,067.83
Libby, MT	-	x	-	100	0.00	-1.60	-1.57	-2.47	-2.94	-3.65	-11.43	0.00	-2.36	-2.36	-3.39	-3.96	-4.81	-11.52
Liberty-Clairton, PA	-	x	-	100	0.00	-2.23	-2.21	-3.44	-4.07	-5.04	-15.65	0.00	-3.37	-3.39	-4.79	-5.57	-6.72	-15.85
Los Angeles South Coast Air Basin, CA	x	x	25	100	0.00	-4,502.35	-4,452.76	-6,919.64	-8,198.58	-10,154.65	-31,453.87	0.00	-6,810.88	-6,845.78	-9,672.38	-11,237.26	-13,548.52	-31,882.98
Los Angeles-San Bernardino Cos (W Mojave Desert), CA	x	-	100	-	0.00	-225.50	-222.16	-347.96	-413.05	-512.79	-1,599.99	0.00	-335.76	-336.08	-480.41	-560.06	-678.01	-1,615.67
Louisville, KY-IN	-	x	-	100	0.00	-229.49	-225.45	-355.13	-422.14	-524.94	-1,646.46	0.00	-337.71	-336.97	-485.90	-567.90	-689.56	-1,658.11
Macon, GA	-	x	-	100	0.00	-43.05	-42.27	-66.65	-79.24	-98.57	-309.41	0.00	-63.22	-63.05	-91.05	-106.47	-129.34	-311.46
Manitowoc Co., WI	x	-	-	-	0.00	-21.83	-21.47	-33.73	-40.07	-49.79	-155.75	0.00	-32.31	-32.29	-46.36	-54.11	-65.61	-157.06
Mariposa and Tuolumne Cos. (Southern Mountain Cos.), CA	x	-	100	-	0.00	-35.69	-35.10	-55.16	-65.54	-81.45	-254.95	0.00	-52.75	-52.70	-75.74	-88.43	-107.25	-257.01
Martinsburg, WV-Hagerstown, MD	-	x	-	100	0.00	-151.69	-149.18	-234.51	-278.62	-346.26	-1,084.02	0.00	-224.17	-223.94	-321.90	-375.88	-455.91	-1,092.74
Memphis, TN-AR	x	-	100	-	0.00	-249.68	-249.29	-379.93	-448.01	-551.65	-1,676.77	0.00	-392.46	-398.31	-547.49	-630.77	-752.92	-1,716.53
Milwaukee-Racine, WI	x	-	100	-	0.00	-378.24	-371.99	-584.69	-694.65	-863.26	-2,702.26	0.00	-559.11	-558.56	-802.73	-937.31	-1,136.81	-2,724.17
Nevada (Western Part), CA	x	-	100	-	0.00	-26.62	-26.19	-41.15	-48.89	-60.75	-190.13	0.00	-39.37	-39.34	-56.52	-65.99	-80.02	-191.69
New York-N. New Jersey-Long Island, NY-NJ-CT	x	x	100	100	0.00	-3,202.95	-3,156.56	-4,940.54	-5,863.76	-7,278.10	-22,694.43	0.00	-4,775.69	-4,782.04	-6,828.55	-7,958.33	-9,630.90	-22,924.47
Parkersburg-Marietta, WV-OH	-	x	-	100	0.00	-30.21	-29.70	-46.73	-55.53	-69.02	-216.24	0.00	-44.58	-44.51	-64.06	-74.83	-90.80	-217.90
Philadelphia-Wilmington, Atlantic City, PA-DE-MD-	x	x	100	100	0.00	-1,963.60	-1,955.90	-2,995.32	-3,536.30	-4,360.77	-13,318.42	0.00	-3,057.67	-3,096.07	-4,284.05	-4,945.78	-5,918.20	-13,599.98

**Table B2-88
High Scenario Alternative CAFE Standards
Emission Changes ^{a/} by Nonattainment Area**

VOCs 2035

Nonattainment Area	Status ^{b/}		General Conformity Threshold ^{c/}		Emission Changes for Proposed Alternatives (tons/year)							Emission Changes for Cumulative Impacts (tons/year)						
	O3	PM2.5	O3	PM2.5	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
					No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
NJ																		
Phoenix-Mesa, AZ	x	-	100	-	0.00	-1,436.42	-1,411.37	-2,222.54	-2,641.69	-3,284.70	-10,299.48	0.00	-2,115.14	-2,110.92	-3,042.37	-3,555.37	-4,316.30	-10,373.86
Pittsburgh-Beaver Valley, PA	x	x	100	100	0.00	-367.49	-361.36	-568.15	-675.05	-838.98	-2,626.95	0.00	-542.89	-542.27	-779.67	-910.50	-1,104.46	-2,647.88
Poughkeepsie, NY	x	x	100	100	0.00	-324.32	-318.94	-501.36	-595.67	-740.28	-2,317.51	0.00	-479.30	-478.81	-688.22	-803.64	-974.74	-2,336.19
Providence (All RI), RI	x	-	100	-	0.00	-194.94	-191.71	-301.36	-358.04	-444.96	-1,392.93	0.00	-288.12	-287.83	-413.70	-483.07	-585.90	-1,404.18
Reading, PA	-	x	-	100	0.00	-95.73	-94.15	-147.99	-175.83	-218.52	-684.09	0.00	-141.48	-141.33	-203.15	-237.22	-287.72	-689.60
Riverside Co., CA (Coachella Valley)	x	-	100	-	0.00	-390.44	-384.22	-603.17	-716.40	-889.97	-2,782.73	0.00	-578.60	-578.43	-829.73	-968.29	-1,173.63	-2,806.93
Rochester, NY	x	-	100	-	0.00	-281.97	-277.30	-435.90	-517.89	-643.62	-2,014.91	0.00	-416.72	-416.29	-598.36	-698.71	-847.47	-2,031.15
Rome, GA	-	x	-	100	0.00	-23.62	-23.23	-36.52	-43.39	-53.92	-168.80	0.00	-34.91	-34.87	-50.12	-58.53	-70.99	-170.16
Sacramento Metro, CA	x	-	50	-	0.00	-646.90	-636.25	-999.91	-1,187.91	-1,476.20	-4,620.27	0.00	-956.54	-955.69	-1,373.13	-1,603.22	-1,944.30	-4,658.06
San Diego, CA	x	-	100	-	0.00	-631.87	-621.38	-976.81	-1,160.55	-1,442.32	-4,515.41	0.00	-933.76	-932.78	-1,340.81	-1,565.68	-1,899.05	-4,551.73
San Francisco Bay Area, CA	x	-	100	-	0.00	-1,581.79	-1,566.30	-2,427.91	-2,874.90	-3,558.14	-10,995.03	0.00	-2,404.95	-2,420.43	-3,407.26	-3,954.16	-4,761.22	-11,158.90
San Joaquin Valley, CA	x	x	50	100	0.00	-1,514.02	-1,490.44	-2,338.06	-2,776.46	-3,448.42	-10,775.08	0.00	-2,247.08	-2,247.33	-3,220.03	-3,756.55	-4,551.39	-10,872.59
Sheboygan, WI	x	-	100	-	0.00	-26.84	-26.41	-41.49	-49.28	-61.24	-191.62	0.00	-39.71	-39.69	-57.00	-66.54	-80.68	-193.21
Springfield (Western MA), MA	x	-	100	-	0.00	-209.30	-205.83	-323.57	-384.43	-477.76	-1,495.70	0.00	-309.31	-308.99	-444.15	-518.63	-629.06	-1,507.74
St. Louis, MO-IL	x	x	100	100	0.00	-752.21	-746.37	-1,152.10	-1,362.82	-1,684.59	-5,184.76	0.00	-1,153.23	-1,163.14	-1,627.50	-1,885.30	-2,265.18	-5,273.05
Steubenville-Weirton, OH-WV	-	x	-	100	0.00	-23.74	-23.76	-36.03	-42.43	-52.16	-157.72	0.00	-37.69	-38.35	-52.34	-60.17	-71.63	-161.90
Sutter County (Sutter Buttes), CA	x	-	100	-	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01
Ventura Co., CA	x	-	100	-	0.00	-138.59	-136.35	-214.16	-254.39	-316.07	-988.73	0.00	-205.18	-205.07	-294.37	-343.61	-416.58	-997.09
Washington, DC-MD-VA	x	x	100	100	0.00	-1,345.11	-1,323.12	-2,078.87	-2,469.61	-3,068.72	-9,602.56	0.00	-1,989.90	-1,988.40	-2,855.90	-3,334.10	-4,042.91	-9,682.19
Wheeling, WV-OH	-	x	-	100	0.00	-32.18	-31.65	-49.75	-59.11	-73.45	-229.96	0.00	-47.56	-47.51	-68.29	-79.74	-96.72	-231.81
York, PA	-	x	-	100	0.00	-111.26	-109.42	-172.00	-204.35	-253.96	-795.02	0.00	-164.44	-164.27	-236.11	-275.70	-334.40	-801.43

^{a/} Reductions are shown as negative values. Positive values are emission increases. Values of less than 0.005 tons/year are rounded to zero.

^{b/} Pollutants for which the area is designated nonattainment or maintenance as of 2008. Source: 40 CFR 81.

^{c/} Emissions thresholds in tons/year of: VOCs or NOx in ozone NAAs; primary PM2.5 in PM2.5 NAAs. Source: 40 CFR 51.853. These thresholds are provided for information only; a general conformity determination is not required for the proposed actions. (See section 3.3.1.)

EPA. 2008. Greenbook. Currently Designated Nonattainment Areas for All Criteria Pollutants. U.S. Environmental Protection Agency. <http://www.epa.gov/air/oaqps/greenbk/anc13.html>. Accessed June 12, 2008.

Table B2-89

**Mid-1 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Outcomes from Criteria Pollutant Emissions
 from Passenger Cars and Light Trucks (cases/year)**

Health Outcome and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Mortality (ages 30 and older)							
2015	0 a/	-27 b/	-35	-39	-40	-54	-101
2020	0	-91	-106	-113	-116	-145	-277
2025	0	-145	-164	-175	-177	-219	-418
2035	0	-206	-231	-246	-248	-304	-592
Chronic Bronchitis							
2015	0	-23	-31	-34	-35	-47	-88
2020	0	-79	-92	-99	-101	-126	-241
2025	0	-126	-143	-152	-154	-190	-363
2035	0	-179	-201	-214	-216	-265	-515
Emergency Room Visits for Asthma							
2015	0	-6	-7	-8	-8	-11	-21
2020	0	-19	-22	-24	-24	-30	-58
2025	0	-30	-34	-37	-37	-46	-87
2035	0	-43	-48	-51	-52	-63	-124
Work Loss Days							
2015	0	-4,786	-6,286	-6,869	-7,214	-9,579	-18,055
2020	0	-16,252	-18,887	-20,226	-20,632	-25,842	-49,452
2025	0	-25,777	-29,269	-31,195	-31,616	-38,995	-74,497
2035	0	-36,751	-41,123	-43,781	-44,239	-54,224	-105,514

a/ Changes in health outcome for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.
 b/ Negative changes indicate reductions; positive emissions changes are increases.

Table B2-90

**Mid-1 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Costs from Criteria Pollutant Emissions
 from Passenger Cars and Light Trucks (US million dollars/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
2015	0 a/	-44 b/	-54	-66	-77	-98	-223
2020	0	-219	-250	-292	-320	-409	-990
2025	0	-375	-416	-485	-524	-694	-1,808
2035	0	-580	-628	-730	-775	-1,074	-2,985

a/ Changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative changes indicate economic benefit; positive emissions changes are economic costs.

Table B2-91

**Mid-1 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Outcomes from Criteria Air Pollutant Emissions
 from Passenger Cars and Light Trucks – Cumulative Effects with MY 2011-2015 Standards and Potential MY
 2016-2020 Standards (cases/year)**

Health Outcome and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Mortality (ages 30 and older)							
2015	0 a/	-27 b/	-35	-39	-41	-54	-101
2020	0	-149	-168	-175	-177	-209	-300
2025	0	-297	-326	-336	-336	-385	-470
2035	0	-484	-527	-540	-537	-608	-682
Chronic Bronchitis							
2015	0	-23	-31	-34	-35	-47	-88
2020	0	-130	-146	-152	-154	-182	-261
2025	0	-258	-283	-292	-292	-335	-408
2035	0	-421	-458	-470	-467	-528	-593
Emergency Room Visits for Asthma							
2015	0	-6	-7	-8	-8	-11	-21
2020	0	-31	-35	-37	-37	-44	-63
2025	0	-62	-68	-70	-70	-80	-98
2035	0	-101	-110	-113	-112	-127	-142
Work Loss Days							
2015	0	-4,804	-6,305	-6,889	-7,235	-9,601	-18,070
2020	0	-26,583	-29,884	-31,209	-31,481	-37,220	-53,440
2025	0	-52,861	-58,086	-59,891	-59,835	-68,617	-83,728
2035	0	-86,346	-93,877	-96,257	-95,754	-108,319	-121,611

a/ Changes in health outcome for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.
 b/ Negative changes indicate reductions; positive emissions changes are increases.

Table B2-92

**Mid-1 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Costs from Criteria Air Pollutant Emissions
 from Passenger Cars and Light Trucks – Cumulative Effects with MY 2011-2015 Standards and Potential MY
 2016-2020 Standards (US million dollars/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
2015	0 a/	-44 b/	-54	-66	-77	-98	-223
2020	0	-355	-395	-438	-468	-564	-1,079
2025	0	-729	-793	-867	-908	-1,105	-2,019
2035	0	-1,210	-1,300	-1,415	-1,463	-1,838	-3,322

a/ Changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative changes indicate economic benefit; positive emissions changes are economic costs.

Table B2-93

**Mid-2 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Outcomes from Criteria Pollutant Emissions
 from Passenger Cars and Light Trucks (cases/year)**

Health Outcome and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Mortality (ages 30 and older)							
2015	0 a/	-31 b/	-35	-39	-41	-54	-101
2020	0	-78	-90	-103	-109	-142	-277
2025	0	-116	-134	-155	-165	-214	-418
2035	0	-158	-184	-214	-229	-295	-592
Chronic Bronchitis							
2015	0	-27	-31	-34	-35	-47	-88
2020	0	-68	-78	-89	-95	-124	-241
2025	0	-101	-117	-135	-144	-186	-363
2035	0	-137	-160	-187	-199	-257	-515
Emergency Room Visits for Asthma							
2015	0	-7	-7	-8	-8	-11	-21
2020	0	-16	-19	-21	-23	-30	-58
2025	0	-24	-28	-32	-35	-45	-87
2035	0	-33	-38	-45	-48	-62	-124
Work Loss Days							
2015	0	-5,578	-6,319	-6,882	-7,240	-9,687	-18,055
2020	0	-13,891	-16,030	-18,338	-19,499	-25,371	-49,452
2025	0	-20,659	-23,936	-27,681	-29,495	-38,089	-74,497
2035	0	-28,142	-32,723	-38,236	-40,877	-52,607	-105,514
<p>a/ Changes in health outcome for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.</p> <p>b/ Negative changes indicate reductions; positive emissions changes are increases.</p>							

Table B2-94

**Mid-2 Scenario Alternative CAFE Standards
Nationwide Changes in Health Costs from Criteria Pollutant Emissions
from Passenger Cars and Light Trucks (US million dollars/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
2015	0 a/	-48 b/	-55	-65	-76	-94	-223
2020	0	-197	-224	-266	-300	-370	-990
2025	0	-322	-363	-435	-485	-600	-1,809
2035	0	-480	-536	-647	-710	-891	-2,987

a/ Changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative changes indicate economic benefit; positive emissions changes are economic costs.

Table B2-95

**Mid-2 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Outcomes from Criteria Air Pollutant Emissions from Passenger Cars and
 Light Trucks – Cumulative Effects with MY 2011-2015 Standards and Potential MY 2016-2020 Standards
 (cases/year)**

Health Outcome and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Mortality (ages 30 and older)							
2015	0 a/	-31 b/	-36	-39	-41	-54	-101
2020	0	-130	-146	-161	-169	-207	-300
2025	0	-254	-280	-308	-320	-381	-470
2035	0	-411	-451	-494	-512	-601	-682
Chronic Bronchitis							
2015	0	-27	-31	-34	-35	-47	-88
2020	0	-113	-127	-140	-147	-180	-261
2025	0	-221	-244	-268	-279	-331	-408
2035	0	-357	-392	-430	-445	-522	-593
Emergency Room Visits for Asthma							
2015	0	-7	-7	-8	-8	-11	-21
2020	0	-27	-30	-34	-35	-43	-63
2025	0	-53	-58	-64	-67	-80	-98
2035	0	-86	-94	-103	-107	-125	-142
Work Loss Days							
2015	0	-5,595	-6,338	-6,902	-7,260	-9,709	-18,070
2020	0	-23,238	-25,942	-28,747	-30,080	-36,839	-53,440
2025	0	-45,256	-49,966	-54,943	-57,097	-67,915	-83,728
2035	0	-73,235	-80,409	-88,131	-91,321	-107,056	-121,611

a/ Changes in health outcome for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.
 b/ Negative changes indicate reductions; positive emissions changes are increases.

Table B2-96

**Mid-2 Scenario Alternative CAFE Standards
 Nationwide Changes in Health Costs from Criteria Air Pollutant Emissions from Passenger Cars and Light Trucks – Cumulative Effects with MY 2011-2015 Standards and Potential MY 2016-2020 Standards
 (US million dollars/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
2015	0 a/	-48 b/	-55	-65	-76	-94	-223
2020	0	-321	-356	-405	-444	-524	-1,079
2025	0	-645	-705	-797	-857	-1,003	-2,019
2035	0	-1,055	-1,145	-1,295	-1,376	-1,624	-3,322

a/ Changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative changes indicate economic benefit; positive emissions changes are economic costs.

Mid-1 Scenario Alternative CAFE Standards

Criteria Pollutants

Table B2-97							
Mid-1 Scenario Alternative CAFE Standards							
Nationwide Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	18,861,709	18,835,680	18,816,491	18,789,216	18,776,753	18,721,534	18,198,147
2020	16,619,854	16,458,256	16,430,977	16,340,575	16,309,581	16,052,513	14,015,233
2025	16,403,499	16,065,661	16,044,287	15,886,507	15,841,194	15,327,327	11,538,880
2035	17,713,991	17,119,445	17,113,141	16,881,947	16,839,209	15,958,532	9,913,291
Nitrogen Oxides (NOx)							
2015	2,148,052	2,144,736	2,143,994	2,142,982	2,142,008	2,140,513	2,131,158
2020	1,530,682	1,517,579	1,515,603	1,512,403	1,510,275	1,503,934	1,458,868
2025	1,292,315	1,267,801	1,265,212	1,259,315	1,256,219	1,241,533	1,139,549
2035	1,228,251	1,186,912	1,184,073	1,174,794	1,171,422	1,141,971	949,127
Particulate Matter (PM2.5)							
2015	74,919	74,568	74,459	74,416	74,391	74,218	73,597
2020	75,571	74,382	74,189	74,091	74,062	73,681	71,953
2025	79,258	77,372	77,117	76,976	76,945	76,405	73,807
2035	89,447	86,758	86,438	86,244	86,210	85,480	81,727
Sulfur Oxides (SO _x)							
2015	194,594	192,447	191,956	191,394	190,895	189,826	183,320
2020	199,331	192,099	191,192	190,039	189,188	186,662	171,340
2025	210,380	198,886	197,662	196,047	194,936	191,245	168,860
2035	238,442	222,172	220,622	218,537	217,194	212,220	182,153
Volatile Organic Compounds (VOC)							
2015	2,107,357	2,100,168	2,098,265	2,094,906	2,092,438	2,086,535	2,036,819
2020	1,738,318	1,711,810	1,708,599	1,700,636	1,696,030	1,676,716	1,531,670
2025	1,646,853	1,600,847	1,596,881	1,583,857	1,577,197	1,541,937	1,284,617
2035	1,709,979	1,633,344	1,628,654	1,608,312	1,600,418	1,534,803	1,081,653

Table B2-98

**Mid-1 Scenario Alternative CAFE Standards
Nationwide Changes in Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	0 a/	-26,029 b/	-45,217	-72,492	-84,955	-140,175	-663,562
2020	0	-161,598	-188,877	-279,278	-310,273	-567,341	-2,604,621
2025	0	-337,839	-359,212	-516,992	-562,305	-1,076,172	-4,864,620
2035	0	-594,546	-600,849	-832,044	-874,782	-1,755,459	-7,800,700
Nitrogen Oxides (NO_x)							
2015	0	-3,316	-4,058	-5,069	-6,044	-7,538	-16,893
2020	0	-13,103	-15,079	-18,279	-20,407	-26,748	-71,814
2025	0	-24,513	-27,103	-33,000	-36,095	-50,781	-152,765
2035	0	-41,339	-44,177	-53,457	-56,828	-86,279	-279,123
Particulate Matter (PM_{2.5})							
2015	0	-350	-460	-503	-528	-701	-1,321
2020	0	-1,189	-1,382	-1,480	-1,510	-1,891	-3,618
2025	0	-1,886	-2,142	-2,283	-2,313	-2,853	-5,451
2035	0	-2,689	-3,009	-3,203	-3,237	-3,968	-7,721
Sulfur Oxides (SO_x)							
2015	0	-2,147	-2,638	-3,200	-3,699	-4,768	-11,274
2020	0	-7,231	-8,139	-9,292	-10,142	-12,668	-27,991
2025	0	-11,494	-12,718	-14,333	-15,444	-19,135	-41,521
2035	0	-16,270	-17,820	-19,906	-21,248	-26,222	-56,289
Volatile Organic Compounds (VOC)							
2015	0	-7,190	-9,092	-12,452	-14,920	-20,823	-70,539
2020	0	-26,508	-29,719	-37,682	-42,288	-61,602	-206,648
2025	0	-46,006	-49,973	-62,997	-69,657	-104,916	-362,236
2035	0	-76,635	-81,325	-101,667	-109,560	-175,176	-628,326

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

Table B2-99

**Mid-1 Scenario Alternative CAFE Standards
Cumulative Nationwide Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)
with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	18,861,709	18,835,676	18,816,487	18,789,212	18,776,749	18,721,529	18,198,144
2020	16,619,854	16,476,152	16,449,846	16,355,482	16,325,123	16,046,278	14,057,662
2025	16,403,499	16,137,915	16,120,862	15,946,493	15,902,717	15,301,041	11,706,038
2035	17,713,991	17,306,263	17,311,609	17,036,710	16,996,553	15,888,952	10,338,916
Nitrogen Oxides (NOx)							
2015	2,148,052	2,144,723	2,143,980	2,142,969	2,141,994	2,140,499	2,131,148
2020	1,530,682	1,509,982	1,507,511	1,504,253	1,502,093	1,495,444	1,454,741
2025	1,292,315	1,248,710	1,244,869	1,238,642	1,235,541	1,218,882	1,131,426
2035	1,228,251	1,154,483	1,149,489	1,138,976	1,135,665	1,099,173	940,625
Particulate Matter (PM2.5)							
2015	74,919	74,567	74,457	74,415	74,389	74,216	73,596
2020	75,571	73,626	73,385	73,288	73,268	72,848	71,661
2025	79,258	75,391	75,008	74,876	74,880	74,238	73,132
2035	89,447	83,129	82,578	82,404	82,441	81,521	80,549
Sulfur Oxides (SO_x)							
2015	194,594	192,441	191,949	191,387	190,888	189,819	183,315
2020	199,331	187,353	186,126	184,893	183,972	181,170	167,666
2025	210,380	186,293	184,222	182,411	181,138	176,698	159,282
2035	238,442	199,015	195,907	193,473	191,849	185,489	164,654
Volatile Organic Compounds (VOC)							
2015	2,107,357	2,100,151	2,098,248	2,094,888	2,092,419	2,086,516	2,036,807
2020	1,738,318	1,701,609	1,697,890	1,689,499	1,684,500	1,664,131	1,527,120
2025	1,646,853	1,574,849	1,569,635	1,555,313	1,547,684	1,508,613	1,275,275
2035	1,709,979	1,589,720	1,583,037	1,559,441	1,549,832	1,472,687	1,073,784

Table B2-100

**Mid-1 Scenario Alternative CAFE Standards
Cumulative Nationwide Changes in Criteria Pollutant Emissions from Passenger Cars and Light Trucks
(tons/year) with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	0 a/	-26,033 b/	-45,221	-72,496	-84,959	-140,179	-663,565
2020	0	-143,701	-170,008	-264,372	-294,731	-573,575	-2,562,191
2025	0	-265,585	-282,638	-457,006	-500,782	-1,102,458	-4,697,461
2035	0	-407,727	-402,382	-677,281	-717,438	-1,825,039	-7,375,075
Nitrogen Oxides (NO_x)							
2015	0	-3,328	-4,071	-5,083	-6,058	-7,553	-16,904
2020	0	-20,699	-23,171	-26,429	-28,589	-35,238	-75,941
2025	0	-43,605	-47,445	-53,672	-56,773	-73,432	-160,889
2035	0	-73,768	-78,761	-89,275	-92,585	-129,078	-287,626
Particulate Matter (PM_{2.5})							
2015	0	-352	-461	-504	-529	-702	-1,322
2020	0	-1,945	-2,187	-2,284	-2,304	-2,723	-3,910
2025	0	-3,868	-4,250	-4,382	-4,378	-5,021	-6,126
2035	0	-6,318	-6,869	-7,043	-7,006	-7,926	-8,898
Sulfur Oxides (SO_x)							
2015	0	-2,154	-2,645	-3,207	-3,707	-4,776	-11,280
2020	0	-11,977	-13,204	-14,437	-15,358	-18,161	-31,665
2025	0	-24,087	-26,159	-27,969	-29,243	-33,682	-51,098
2035	0	-39,428	-42,535	-44,969	-46,594	-52,954	-73,788
Volatile Organic Compounds (VOC)							
2015	0	-7,206	-9,109	-12,469	-14,938	-20,841	-70,550
2020	0	-36,709	-40,427	-48,819	-53,817	-74,187	-211,198
2025	0	-72,004	-77,219	-91,541	-99,170	-138,240	-371,578
2035	0	-120,259	-126,942	-150,538	-160,147	-237,292	-636,195

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

Hazardous Air Pollutants

Table B2-101							
Mid-1 Scenario Alternative CAFE Standards							
Nationwide Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	11,165	11,170	11,176	11,176	11,174	11,186	11,268
2020	8,634	8,646	8,648	8,646	8,638	8,659	8,784
2025	7,613	7,612	7,613	7,603	7,592	7,592	7,586
2035	7,364	7,328	7,331	7,309	7,298	7,246	6,938
Acrolein <u>a/</u>							
2015	530	534	535	537	538	543	583
2020	393	407	409	414	416	431	547
2025	336	359	360	368	371	395	575
2035	315	349	350	360	364	399	646
Benzene							
2015	60,125	60,009	59,965	59,901	59,861	59,736	58,661
2020	47,458	46,962	46,888	46,705	46,624	46,133	42,385
2025	42,930	41,994	41,912	41,594	41,476	40,510	33,469
2035	42,626	40,990	40,911	40,416	40,290	38,510	26,306
1,3-Butadiene							
2015	6,134	6,134	6,133	6,134	6,134	6,134	6,141
2020	4,698	4,692	4,689	4,686	4,685	4,677	4,617
2025	4,092	4,070	4,067	4,058	4,057	4,027	3,815
2035	3,885	3,830	3,827	3,810	3,811	3,735	3,231
Diesel Particulate Matter (DPM)							
2015	88,405	87,414	87,200	87,066	86,914	86,578	85,735
2020	90,085	86,819	86,354	86,081	85,807	85,273	83,498
2025	94,782	89,613	88,948	88,567	88,201	87,535	85,050
2035	107,203	99,901	99,026	98,526	98,063	97,264	93,876
Formaldehyde							
2015	16,197	16,211	16,232	16,247	16,245	16,301	16,790
2020	12,928	13,002	13,017	13,055	13,050	13,234	14,641
2025	11,716	11,834	11,842	11,898	11,893	12,168	14,238
2035	11,694	11,856	11,860	11,933	11,926	12,295	15,022

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

Table B2-102

**Mid-1 Scenario Alternative CAFE Standards
Nationwide Changes in Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)**

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	0 /a	5 /b	10	11	9	20	103
2020	0	12	14	12	4	25	151
2025	0	-1	1	-10	-21	-20	-27
2035	0	-36	-33	-55	-66	-118	-426
Acrolein <u>a/</u>							
2015	0	3	5	7	8	13	53
2020	0	14	15	20	22	37	153
2025	0	23	24	32	35	59	239
2035	0	34	35	45	49	84	330
Benzene							
2015	0	-115	-159	-224	-263	-388	-1,463
2020	0	-496	-570	-753	-834	-1,325	-5,073
2025	0	-936	-1,018	-1,336	-1,454	-2,419	-9,461
2035	0	-1,635	-1,715	-2,210	-2,336	-4,116	-16,320
1,3-Butadiene							
2015	0	0	-1	0	0	0	7
2020	0	-6	-9	-12	-13	-21	-81
2025	0	-22	-26	-34	-35	-65	-277
2035	0	-55	-58	-75	-74	-150	-654
Diesel Particulate Matter (DPM)							
2015	0	-991	-1,205	-1,338	-1,490	-1,826	-2,670
2020	0	-3,266	-3,731	-4,004	-4,278	-4,811	-6,587
2025	0	-5,168	-5,834	-6,215	-6,581	-7,247	-9,732
2035	0	-7,302	-8,177	-8,676	-9,140	-9,939	-13,326
Formaldehyde							
2015	0	14	34	50	48	104	592
2020	0	75	89	128	122	307	1,714
2025	0	118	126	183	177	453	2,522
2035	0	162	166	239	232	601	3,328

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

c/ Data on upstream emissions reductions were not available for acrolein. Thus, the emissions for acrolein reflect only the change in tailpipe emissions.

Table B2-103

**Mid-1 Scenario Alternative CAFE Standards
Cumulative Nationwide Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)
with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	11,165	11,170	11,176	11,176	11,174	11,186	11,268
2020	8,634	8,644	8,647	8,646	8,639	8,666	8,808
2025	7,613	7,618	7,621	7,614	7,606	7,617	7,673
2035	7,364	7,363	7,371	7,353	7,349	7,296	7,153
Acrolein <u>a/</u>							
2015	530	534	535	537	538	543	583
2020	393	410	412	417	420	436	552
2025	336	367	369	379	382	412	591
2035	315	366	369	382	388	433	680
Benzene							
2015	60,125	60,009	59,965	59,901	59,861	59,736	58,661
2020	47,458	46,839	46,758	46,566	46,482	45,953	42,348
2025	42,930	41,707	41,607	41,258	41,132	40,020	33,465
2035	42,626	40,579	40,476	39,894	39,757	37,564	26,566
1,3-Butadiene							
2015	6,134	6,134	6,133	6,134	6,134	6,134	6,141
2020	4,698	4,691	4,688	4,685	4,685	4,678	4,625
2025	4,092	4,074	4,070	4,062	4,063	4,031	3,850
2035	3,885	3,852	3,850	3,832	3,837	3,744	3,331
Diesel Particulate Matter (DPM)							
2015	88,405	87,410	87,196	87,063	86,911	86,574	85,732
2020	90,085	84,312	83,681	83,392	83,088	82,520	81,614
2025	94,782	82,961	81,859	81,448	81,017	80,266	80,139
2035	107,203	87,669	85,991	85,445	84,871	83,922	84,904
Formaldehyde							
2015	16,197	16,211	16,231	16,247	16,245	16,301	16,789
2020	12,928	12,954	12,967	13,012	13,009	13,221	14,660
2025	11,716	11,724	11,731	11,805	11,807	12,156	14,332
2035	11,694	11,692	11,694	11,802	11,814	12,308	15,281

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

Table B2-104

**Mid-1 Scenario Alternative CAFE Standards
Cumulative Nationwide Changes in Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks
(tons/year) with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	0 /a	5 /b	10	11	9	20	103
2020	0	10	13	12	5	32	174
2025	0	5	9	2	-6	5	60
2035	0	-1	7	-11	-15	-68	-211
Acrolein <u>a/</u>							
2015	0	3	5	7	8	13	53
2020	0	16	18	24	26	43	158
2025	0	31	33	43	46	76	255
2035	0	51	54	67	73	118	365
Benzene							
2015	0	-116	-159	-224	-264	-388	-1,463
2020	0	-619	-700	-892	-976	-1,505	-5,110
2025	0	-1,223	-1,323	-1,672	-1,798	-2,910	-9,465
2035	0	-2,046	-2,150	-2,732	-2,869	-5,062	-16,060
1,3-Butadiene							
2015	0	0	-1	0	0	0	7
2020	0	-7	-10	-13	-13	-20	-73
2025	0	-18	-22	-30	-29	-61	-242
2035	0	-34	-35	-53	-48	-141	-555
Diesel Particulate Matter (DPM)							
2015	0	-994	-1,208	-1,342	-1,494	-1,830	-2,673
2020	0	-5,773	-6,403	-6,692	-6,997	-7,565	-8,471
2025	0	-11,821	-12,923	-13,334	-13,765	-14,516	-14,643
2035	0	-19,534	-21,212	-21,758	-22,331	-23,281	-22,299
Formaldehyde							
2015	0	14	34	50	48	104	592
2020	0	26	39	85	81	293	1,732
2025	0	8	15	89	91	440	2,616
2035	0	-1	0	108	120	614	3,587

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

c/ Data on upstream emissions reductions were not available for acrolein. Thus, the emissions for acrolein reflect only the change in tailpipe emissions.

Mid-2 Scenario Alternative CAFE Standards

Criteria Pollutants

Table B2-105							
Mid-2 Scenario Alternative CAFE Standards							
Nationwide Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	18,861,709	18,814,670	18,811,274	18,792,788	18,777,406	18,736,309	18,198,147
2020	16,619,854	16,441,954	16,436,732	16,367,374	16,326,970	16,208,067	14,015,233
2025	16,403,499	16,073,264	16,068,721	15,942,747	15,883,299	15,679,950	11,538,880
2035	17,713,991	17,176,090	17,172,587	16,977,632	16,914,309	16,581,815	9,913,291
Nitrogen Oxides (NOx)							
2015	2,148,052	2,144,437	2,143,883	2,143,055	2,142,058	2,140,777	2,131,158
2020	1,530,682	1,518,343	1,516,796	1,513,932	1,511,463	1,507,093	1,458,868
2025	1,292,315	1,270,295	1,267,998	1,262,610	1,258,840	1,250,716	1,139,549
2035	1,228,251	1,192,739	1,189,619	1,180,701	1,176,125	1,161,590	949,127
Particulate Matter (PM2.5)							
2015	74,919	74,510	74,456	74,415	74,389	74,210	73,597
2020	75,571	74,555	74,399	74,230	74,145	73,715	71,953
2025	79,258	77,747	77,507	77,233	77,100	76,471	73,807
2035	89,447	87,388	87,053	86,649	86,456	85,598	81,727
Sulfur Oxides (SO_x)							
2015	194,594	192,250	191,923	191,453	190,942	190,095	183,320
2020	199,331	193,095	192,187	190,894	189,865	187,761	171,340
2025	210,380	200,917	199,540	197,583	196,156	193,051	168,860
2035	238,442	225,514	223,601	220,896	219,058	214,800	182,153
Volatile Organic Compounds (VOC)							
2015	2,107,357	2,098,877	2,097,887	2,095,334	2,092,712	2,088,579	2,036,819
2020	1,738,318	1,713,586	1,711,101	1,703,967	1,698,791	1,687,948	1,531,670
2025	1,646,853	1,605,832	1,602,197	1,590,227	1,582,597	1,564,921	1,284,617
2035	1,709,979	1,643,563	1,638,616	1,619,383	1,609,834	1,579,256	1,081,653

Table B2-106

**Mid-2 Scenario Alternative CAFE Standards
 Nationwide Changes in Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	0 a/	-47,039 b/	-50,435	-68,920	-84,303	-125,399	-663,562
2020	0	-177,900	-183,122	-252,479	-292,884	-411,786	-2,604,621
2025	0	-330,235	-334,778	-460,752	-520,200	-723,549	-4,864,620
2035	0	-537,901	-541,404	-736,359	-799,682	-1,132,175	-7,800,700
Nitrogen Oxides (NO_x)							
2015	0	-3,614	-4,169	-4,997	-5,994	-7,275	-16,893
2020	0	-12,339	-13,886	-16,750	-19,219	-23,589	-71,814
2025	0	-22,020	-24,317	-29,705	-33,474	-41,599	-152,765
2035	0	-35,511	-38,632	-47,549	-52,125	-66,661	-279,123
Particulate Matter (PM_{2.5})							
2015	0	-408	-462	-504	-530	-709	-1,321
2020	0	-1,016	-1,173	-1,342	-1,427	-1,856	-3,618
2025	0	-1,512	-1,751	-2,025	-2,158	-2,787	-5,451
2035	0	-2,059	-2,394	-2,798	-2,991	-3,849	-7,721
Sulfur Oxides (SO_x)							
2015	0	-2,344	-2,672	-3,142	-3,653	-4,499	-11,274
2020	0	-6,235	-7,143	-8,436	-9,466	-11,569	-27,991
2025	0	-9,463	-10,841	-12,797	-14,225	-17,329	-41,521
2035	0	-12,929	-14,841	-17,547	-19,385	-23,642	-56,289
Volatile Organic Compounds (VOC)							
2015	0	-8,481	-9,470	-12,024	-14,645	-18,778	-70,539
2020	0	-24,732	-27,217	-34,351	-39,527	-50,369	-206,648
2025	0	-41,021	-44,656	-56,626	-64,256	-81,932	-362,236
2035	0	-66,416	-71,363	-90,596	-100,145	-130,723	-628,326

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

Table B2-107

**Mid-2 Scenario Alternative CAFE Standards
Cumulative Nationwide Criteria Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)
with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	18,861,709	18,814,667	18,811,270	18,792,784	18,777,402	18,736,305	18,198,144
2020	16,619,854	16,460,267	16,456,238	16,384,062	16,343,572	16,216,663	14,057,662
2025	16,403,499	16,147,244	16,147,526	16,009,963	15,949,565	15,714,680	11,706,038
2035	17,713,991	17,367,387	17,376,352	17,151,134	17,084,525	16,671,469	10,338,916
Nitrogen Oxides (NOx)							
2015	2,148,052	2,144,426	2,143,871	2,143,042	2,142,044	2,140,762	2,131,148
2020	1,530,682	1,511,287	1,509,337	1,506,131	1,503,475	1,498,626	1,454,741
2025	1,292,315	1,252,538	1,249,274	1,242,886	1,238,670	1,228,946	1,131,426
2035	1,228,251	1,162,736	1,158,035	1,146,861	1,141,449	1,122,758	940,625
Particulate Matter (PM2.5)							
2015	74,919	74,509	74,455	74,414	74,387	74,208	73,596
2020	75,571	73,871	73,673	73,468	73,370	72,876	71,661
2025	79,258	75,947	75,602	75,238	75,081	74,289	73,132
2035	89,447	84,089	83,564	82,999	82,765	81,614	80,549
Sulfur Oxides (SO_x)							
2015	194,594	192,244	191,916	191,446	190,935	190,087	183,315
2020	199,331	188,807	187,612	186,037	184,836	182,276	167,666
2025	210,380	189,508	187,381	184,691	182,834	178,542	159,282
2035	238,442	204,515	201,233	197,188	194,576	188,149	164,654
Volatile Organic Compounds (VOC)							
2015	2,107,357	2,098,862	2,097,871	2,095,317	2,092,695	2,088,560	2,036,807
2020	1,738,318	1,704,349	1,701,288	1,693,431	1,687,746	1,675,780	1,527,120
2025	1,646,853	1,582,298	1,577,246	1,563,290	1,554,362	1,533,457	1,275,275
2035	1,709,979	1,604,445	1,597,203	1,573,769	1,561,807	1,523,833	1,073,784

Table B2-108

**Mid-2 Scenario Alternative CAFE Standards
Cumulative Nationwide Changes in Criteria Pollutant Emissions from Passenger Cars and Light Trucks
(tons/year) with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Carbon Monoxide (CO)							
2015	0 a/	-47,042 b/	-50,438	-68,924	-84,307	-125,404	-663,565
2020	0	-159,587	-163,615	-235,792	-276,282	-403,191	-2,562,191
2025	0	-256,255	-255,973	-393,536	-453,934	-688,819	-4,697,461
2035	0	-346,604	-337,639	-562,857	-629,466	-1,042,522	-7,375,075
Nitrogen Oxides (NO_x)							
2015	0	-3,626	-4,181	-5,010	-6,008	-7,290	-16,904
2020	0	-19,395	-21,345	-24,550	-27,207	-32,056	-75,941
2025	0	-39,776	-43,041	-49,429	-53,645	-63,369	-160,889
2035	0	-65,515	-70,216	-81,389	-86,802	-105,492	-287,626
Particulate Matter (PM_{2.5})							
2015	0	-409	-464	-505	-531	-710	-1,322
2020	0	-1,700	-1,898	-2,103	-2,201	-2,696	-3,910
2025	0	-3,311	-3,656	-4,020	-4,178	-4,969	-6,126
2035	0	-5,359	-5,884	-6,449	-6,682	-7,833	-8,898
Sulfur Oxides (SO_x)							
2015	0	-2,350	-2,678	-3,149	-3,660	-4,507	-11,280
2020	0	-10,523	-11,718	-13,293	-14,494	-17,054	-31,665
2025	0	-20,873	-23,000	-25,689	-27,547	-31,839	-51,098
2035	0	-33,927	-37,210	-41,254	-43,866	-50,293	-73,788
Volatile Organic Compounds (VOC)							
2015	0	-8,496	-9,486	-12,040	-14,662	-18,797	-70,550
2020	0	-33,969	-37,030	-44,887	-50,571	-62,537	-211,198
2025	0	-64,556	-69,608	-83,564	-92,492	-113,396	-371,578
2035	0	-105,534	-112,776	-136,210	-148,172	-186,146	-636,195

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

Hazardous Air Pollutants

Table B2-109							
Mid-2 Scenario Alternative CAFE Standards							
Nationwide Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	11,165	11,175	11,176	11,176	11,174	11,184	11,268
2020	8,634	8,641	8,641	8,643	8,638	8,654	8,784
2025	7,613	7,602	7,603	7,601	7,593	7,606	7,586
2035	7,364	7,320	7,321	7,311	7,303	7,300	6,938
Acrolein <u>a/</u>							
2015	530	535	535	537	538	541	583
2020	393	406	407	412	414	422	547
2025	336	356	358	365	368	379	575
2035	315	344	346	355	360	374	646
Benzene							
2015	60,125	59,972	59,956	59,909	59,865	59,774	58,661
2020	47,458	46,965	46,927	46,773	46,674	46,414	42,385
2025	42,930	42,062	42,008	41,733	41,583	41,138	33,469
2035	42,626	41,183	41,113	40,664	40,485	39,714	26,306
1,3-Butadiene							
2015	6,134	6,133	6,133	6,133	6,134	6,133	6,141
2020	4,698	4,689	4,689	4,687	4,685	4,680	4,617
2025	4,092	4,069	4,068	4,061	4,059	4,044	3,815
2035	3,885	3,834	3,834	3,818	3,815	3,781	3,231
Diesel Particulate Matter (DPM)							
2015	88,405	87,361	87,202	87,065	86,920	86,564	85,735
2020	90,085	87,353	86,885	86,437	86,073	85,196	83,498
2025	94,782	90,651	89,932	89,230	88,691	87,398	85,050
2035	107,203	101,576	100,571	99,569	98,827	97,070	93,876
Formaldehyde							
2015	16,197	16,234	16,235	16,244	16,245	16,288	16,790
2020	12,928	13,005	13,003	13,039	13,043	13,138	14,641
2025	11,716	11,820	11,816	11,872	11,879	12,009	14,238
2035	11,694	11,828	11,822	11,897	11,905	12,072	15,022

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

Table B2-110

**Mid-2 Scenario Alternative CAFE Standards
Nationwide Changes in Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)**

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	0 /a	10 /b	10	11	9	19	103
2020	0	7	7	9	4	20	151
2025	0	-10	-9	-11	-19	-7	-27
2035	0	-44	-43	-53	-61	-64	-426
Acrolein <u>a/</u>							
2015	0	5	5	7	8	11	53
2020	0	13	14	18	21	28	153
2025	0	20	22	28	32	43	239
2035	0	29	30	40	44	59	330
Benzene							
2015	0	-153	-169	-215	-260	-351	-1,463
2020	0	-493	-531	-685	-784	-1,044	-5,073
2025	0	-868	-922	-1,197	-1,346	-1,792	-9,461
2035	0	-1,442	-1,513	-1,962	-2,141	-2,912	-16,320
1,3-Butadiene							
2015	0	-1	-1	-1	-1	-1	7
2020	0	-9	-10	-12	-13	-19	-81
2025	0	-23	-24	-31	-33	-48	-277
2035	0	-51	-52	-67	-70	-104	-654
Diesel Particulate Matter (DPM)							
2015	0	-1,043	-1,203	-1,340	-1,485	-1,841	-2,670
2020	0	-2,732	-3,200	-3,648	-4,012	-4,889	-6,587
2025	0	-4,131	-4,850	-5,552	-6,091	-7,384	-9,732
2035	0	-5,627	-6,631	-7,634	-8,376	-10,133	-13,326
Formaldehyde							
2015	0	37	37	47	48	91	592
2020	0	77	75	111	115	210	1,714
2025	0	104	100	156	163	293	2,522
2035	0	134	128	203	211	378	3,328

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

c/ Data on upstream emissions reductions were not available for acrolein. Thus, the emissions for acrolein reflect only the change in tailpipe emissions.

Table B2-111

**Mid-2 Scenario Alternative CAFE Standards
Cumulative Nationwide Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks (tons/year)
with MY 2011-2015 Standards and Potential MY 2016-2020 Standards**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Pollutant and Year	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	11,165	11,175	11,176	11,176	11,174	11,184	11,268
2020	8,634	8,636	8,637	8,641	8,637	8,659	8,808
2025	7,613	7,600	7,603	7,607	7,603	7,629	7,673
2035	7,364	7,338	7,347	7,345	7,345	7,361	7,153
Acrolein <u>a/</u>							
2015	530	535	535	537	538	541	583
2020	393	408	410	415	418	426	552
2025	336	362	364	373	378	393	591
2035	315	357	361	374	381	403	680
Benzene							
2015	60,125	59,972	59,956	59,909	59,865	59,773	58,661
2020	47,458	46,856	46,811	46,645	46,539	46,254	42,348
2025	42,930	41,810	41,741	41,428	41,261	40,736	33,465
2035	42,626	40,839	40,748	40,209	39,998	39,029	26,566
1,3-Butadiene							
2015	6,134	6,133	6,133	6,133	6,134	6,133	6,141
2020	4,698	4,688	4,687	4,686	4,685	4,680	4,625
2025	4,092	4,071	4,071	4,065	4,064	4,050	3,850
2035	3,885	3,852	3,854	3,839	3,839	3,803	3,331
Diesel Particulate Matter (DPM)							
2015	88,405	87,358	87,198	87,061	86,916	86,560	85,732
2020	90,085	85,080	84,461	83,886	83,441	82,363	81,614
2025	94,782	84,603	83,491	82,462	81,723	79,917	80,139
2035	107,203	90,445	88,723	87,126	86,026	83,338	84,904
Formaldehyde							
2015	16,197	16,234	16,235	16,244	16,245	16,288	16,789
2020	12,928	12,952	12,949	12,991	12,997	13,109	14,660
2025	11,716	11,696	11,692	11,765	11,780	11,958	14,332
2035	11,694	11,632	11,630	11,738	11,766	12,021	15,281

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

Table B2-112

Mid-2 Scenario Alternative CAFE Standards
Cumulative Nationwide Changes in Toxic Air Pollutant Emissions from Passenger Cars and Light Trucks
(tons/year) with MY 2011-2015 Standards and Potential MY 2016-2020 Standards

Pollutant and Year	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	No Action	25% Below Optimized	Optimized	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Acetaldehyde							
2015	0 /a	10 /b	10	11	9	19	103
2020	0	2	3	7	3	25	174
2025	0	-13	-9	-6	-10	17	60
2035	0	-26	-17	-19	-19	-2	-211
Acrolein <u>a/</u>							
2015	0	5	5	7	8	11	53
2020	0	15	16	21	24	33	158
2025	0	26	28	37	42	57	255
2035	0	42	45	59	65	88	365
Benzene							
2015	0	-153	-169	-216	-260	-351	-1,463
2020	0	-602	-647	-813	-919	-1,203	-5,110
2025	0	-1,119	-1,188	-1,502	-1,669	-2,194	-9,465
2035	0	-1,787	-1,878	-2,416	-2,628	-3,596	-16,060
1,3-Butadiene							
2015	0	-1	-1	-1	-1	-1	7
2020	0	-10	-11	-12	-13	-18	-73
2025	0	-22	-21	-27	-28	-43	-242
2035	0	-33	-31	-46	-46	-82	-555
Diesel Particulate Matter (DPM)							
2015	0	-1,046	-1,206	-1,343	-1,488	-1,845	-2,673
2020	0	-5,005	-5,623	-6,199	-6,644	-7,721	-8,471
2025	0	-10,179	-11,291	-12,320	-13,058	-14,865	-14,643
2035	0	-16,758	-18,480	-20,077	-21,177	-23,865	-22,299
Formaldehyde							
2015	0	37	37	47	48	91	592
2020	0	24	21	63	70	182	1,732
2025	0	-20	-24	49	64	243	2,616
2035	0	-62	-64	44	73	328	3,587

a/ Emissions changes for the No Action Alternative are shown as zero because the No Action Alternative is the baseline to which the emissions for the other alternatives are compared.

b/ Negative emissions changes indicate reductions; positive emissions changes are increases.

c/ Data on upstream emissions reductions were not available for acrolein. Thus, the emissions for acrolein reflect only the change in tailpipe emissions.

Appendix B-3

CLIMATE CHANGE MODELING DATA

This appendix accompanies Sections 3.4 and 4.4 of the Final Environmental Impact Statement (FEIS). It presents the results from the Model for Assessment of Greenhouse Gas-induced Climate Change (MAGICC) for the CAFE Alternatives for the Mid-1 and the Mid-2 Scenarios and compares the results to the Reference Case. The CAFE Alternatives use the A1B marker scenario from the Intergovernmental Panel on Climate Change (IPCC) as a reference case, equivalent to the A1B-AIM scenario in MAGICC. Tables B3-1 through B3-8 provide the results for the 2011-2015 CAFE Alternatives (Section 3.4 of the EIS) and Tables B3-9 through B3-16 provide the results for the MY 2011-2020 CAFE Alternatives (Section 4.4 of the EIS).

Mid 1 Scenario – 2011-2015

Table B3-1		
Mid 1 Scenario Emissions and Emission Reductions (compared to the No Action Alternative) Due to the MY 2011-2015 CAFE Standard Alternatives from 2010-2100 (MMTCO₂)		
Alternative	Emissions	Emission Reductions Compared to No Action Alternative
No Action	195,501	0
25 Percent Below Optimized	182,893	12,608
Optimized	181,509	13,992
25 Percent Above Optimized	180,401	15,100
50 Percent Above Optimized	179,464	16,037
Total Costs Equal Total Benefits	177,743	17,759
Technology Exhaustion	170,829	24,672

Table B3-2									
Mid 1 Scenario MY 2011-2015 CAFE Standard Alternatives Impact on CO₂ Concentration, Global Mean Surface Temperature Increase, and Sea-level Rise in 2100 Using MAGICC									
Totals by Alternative	CO₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C)			Sea-level Rise (cm)		
	2030	2060	2100	2030	2060	2100	2030	2060	2100
No Action (A1B – AIM) ^{a/}	455.5	573.7	717.2	0.874	1.944	2.959	7.99	19.30	37.10
25 Percent Below Optimized	455.4	573.2	716.1	0.873	1.942	2.954	7.99	19.28	37.06
Optimized	455.4	573.1	715.9	0.873	1.942	2.954	7.99	19.28	37.05
25 Percent Above Optimized	455.4	573.1	715.8	0.873	1.942	2.953	7.99	19.28	37.05
50 Percent Above Optimized	455.4	573.0	715.7	0.873	1.941	2.953	7.99	19.28	37.05
Total Costs Equal Total Benefits	455.4	572.9	715.6	0.873	1.941	2.952	7.99	19.27	37.04
Technology Exhaustion	455.3	572.6	714.9	0.872	1.938	2.948	7.99	19.26	37.00
Reduction from CAFE Alternatives									
25 Percent Below Optimized	0.1	0.5	1.1	0.001	0.002	0.005	0.00	0.02	0.04
Optimized	0.1	0.6	1.3	0.001	0.003	0.005	0.00	0.02	0.05
25 Percent Above Optimized	0.1	0.6	1.4	0.001	0.003	0.006	0.00	0.02	0.05
50 Percent Above Optimized	0.1	0.7	1.5	0.001	0.003	0.006	0.00	0.02	0.05
Total Costs Equal Total Benefits	0.1	0.8	1.6	0.001	0.004	0.007	0.00	0.03	0.06
Technology Exhaustion	0.2	1.1	2.3	0.002	0.006	0.011	0.00	0.04	0.10

^{a/} The A1B-AIM scenario is the SRES marker scenario used by the IPCC WGI to represent the SRES A1B (medium) storyline.

Mid 2 Scenario – 2011-2015

Alternative	Emissions	Emission Reductions Compared to No Action Alternative
No Action	195,501	0
25 Percent Below Optimized	185,761	9,740
Optimized	184,038	11,463
25 Percent Above Optimized	182,281	13,221
50 Percent Above Optimized	180,886	14,615
Total Costs Equal Total Benefits	178,093	17,408
Technology Exhaustion	170,829	24,672

Totals by Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C)			Sea-level Rise (cm)		
	2030	2060	2100	2030	2060	2100	2030	2060	2100
No Action (A1B-AIM) ^{a/}	455.5	573.7	717.2	0.874	1.944	2.959	7.99	19.30	37.10
25 Percent Below Optimized	455.4	573.3	716.3	0.873	1.943	2.955	7.99	19.28	37.07
Optimized	455.4	573.2	716.2	0.873	1.942	2.955	7.99	19.28	37.06
25 Percent Above Optimized	455.4	573.1	716.0	0.873	1.942	2.954	7.99	19.28	37.06
50 Percent Above Optimized	455.4	573.1	715.9	0.873	1.942	2.953	7.99	19.28	37.05
Total Costs Equal Total Benefits	455.4	573	715.6	0.873	1.941	2.952	7.99	19.27	37.04
Technology Exhaustion	455.3	572.6	714.9	0.872	1.938	2.948	7.99	19.26	37.00
Reduction from CAFE Alternatives									
25 Percent Below Optimized	0.1	0.4	0.9	0.000	0.002	0.004	0.00	0.02	0.03
Optimized	0.1	0.5	1.0	0.001	0.002	0.004	0.00	0.02	0.04
25 Percent Above Optimized	0.1	0.6	1.2	0.001	0.002	0.005	0.00	0.02	0.04
50 Percent Above Optimized	0.1	0.6	1.3	0.001	0.003	0.006	0.00	0.02	0.05
Total Costs Equal Total Benefits	0.1	0.7	1.6	0.001	0.003	0.007	0.00	0.03	0.06
Technology Exhaustion	0.2	1.1	2.3	0.002	0.006	0.011	0.00	0.04	0.10

^{a/} The A1B-AIM scenario is the SRES marker scenario used by the IPCC WG1 to represent the SRES A1B (medium) storyline.

Mid 1 Scenario – 2011-2020

Alternative	Emissions	Emission Reductions Compared to No Action Alternative
No Action	195,501	0
25 Percent Below Optimized	160,992	34,510
Optimized	158,054	37,447
25 Percent Above Optimized	156,749	38,752
50 Percent Above Optimized	155,685	39,816
Total Costs Equal Total Benefits	152,907	42,594
Technology Exhaustion	152,290	43,211

Totals by Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C)			Sea-level Rise (cm)		
	2030	2060	2100	2030	2060	2100	2030	2060	2100
No Action (A1B-AIM) ^{a/}	455.5	573.7	717.2	0.874	1.944	2.959	7.99	19.30	37.10
25 Percent Below Optimized	455.3	572.3	714	0.873	1.938	2.946	7.99	19.26	36.99
Optimized	455.2	572.2	713.7	0.872	1.938	2.945	7.99	19.25	36.98
25 Percent Above Optimized	455.2	572.1	713.6	0.872	1.937	2.944	7.99	19.25	36.97
50 Percent Above Optimized	455.2	572.1	713.5	0.872	1.937	2.944	7.99	19.25	36.97
Total Costs Equal Total Benefits	455.2	571.9	713.2	0.872	1.937	2.943	7.99	19.25	36.96
Technology Exhaustion	455.2	571.9	713.1	0.872	1.935	2.941	7.99	19.24	36.94
Reduction from CAFE Alternatives									
25 Percent Below Optimized	0.2	1.4	3.2	0.001	0.006	0.013	0.00	0.04	0.11
Optimized	0.3	1.5	3.5	0.001	0.007	0.014	0.00	0.05	0.12
25 Percent Above Optimized	0.3	1.6	3.6	0.001	0.007	0.015	0.00	0.05	0.13
50 Percent Above Optimized	0.3	1.6	3.7	0.001	0.007	0.015	0.00	0.05	0.13
Total Costs Equal Total Benefits	0.3	1.8	4.0	0.001	0.008	0.016	0.00	0.05	0.14
Technology Exhaustion	0.3	1.8	4.1	0.002	0.009	0.018	0.00	0.06	0.16

^{a/} The A1B-AIM scenario is the SRES marker scenario used by the IPCC WG1 to represent the SRES A1B (medium) storyline.

Mid 2 Scenario- 2011-2020

Table B3-7		
Mid 2 Scenario Cumulative Emissions and Emission Reductions (compared to the No Action Alternative) Due to the MY 2011-2015 CAFE Standard and Potential MY 2011-2020 CAFE Standard Alternatives from 2010-2100 (MMTCO2)		
Alternative	Emissions	Emission Reductions Compared to No Action Alternative
No Action	195,501	0
25 Percent Below Optimized	165,957	29,544
Optimized	162,913	32,589
25 Percent Above Optimized	159,943	35,558
50 Percent Above Optimized	157,891	37,610
Total Costs Equal Total Benefits	153,159	42,342
Technology Exhaustion	152,290	43,211

Table B3-8									
Mid 2 Scenario MY 2011-2015 CAFE Standards and Potential MY 2016-2020 CAFE Standard Alternatives Cumulative Impact on CO₂ Concentration, Global Mean Surface Temperature Increase, and Sea-level Rise in 2100 Using MAGICC									
	CO₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C)			Sea-level Rise (cm)		
	2030	2060	2100	2030	2060	2100	2030	2060	2100
Totals by Alternative									
No Action (A1B-AIM) ^{a/}	455.5	573.7	717.2	0.874	1.944	2.959	7.99	19.30	37.10
25 Percent Below Optimized	455.3	572.5	714.5	0.873	1.939	2.948	7.99	19.26	37.00
Optimized	455.3	572.4	714.2	0.873	1.939	2.947	7.99	19.26	36.99
25 Percent Above Optimized	455.3	572.2	713.9	0.872	1.938	2.945	7.99	19.26	36.98
50 Percent Above Optimized	455.2	572.2	713.7	0.872	1.938	2.945	7.99	19.25	36.97
Total Costs Equal Total Benefits	455.2	572	713.3	0.872	1.937	2.943	7.99	19.25	36.96
Technology Exhaustion	455.2	571.9	713.1	0.872	1.935	2.941	7.99	19.24	36.94
Reduction from CAFE Alternatives									
25 Percent Below Optimized	0.2	1.2	2.7	0.001	0.005	0.011	0.00	0.04	0.10
Optimized	0.2	1.3	3.0	0.001	0.006	0.012	0.00	0.04	0.11
25 Percent Above Optimized	0.2	1.5	3.3	0.001	0.006	0.014	0.00	0.04	0.12
50 Percent Above Optimized	0.3	1.5	3.5	0.001	0.007	0.014	0.00	0.05	0.13
Total Costs Equal Total Benefits	0.3	1.7	3.9	0.001	0.008	0.016	0.00	0.05	0.14
Technology Exhaustion	0.3	1.8	4.1	0.002	0.009	0.018	0.00	0.06	0.16
^{a/} The A1B-AIM scenario is the SRES marker scenario used by the IPCC WG1 to represent the SRES A1B (medium) storyline.									