



Volvo Car Corporation

MFR	Carline Name	Vehicle Class	Engine Name	Transmission Class	IWC	Tire Size	ase	Front Axle Track Width	Rear Axle Track Width	Average Track Width	Footprint	Projected Sales	City	Highway	MH	MH Rounded
Volvo	XC40 FWD	Small SUV 2WD	2.0T	S8F	4000	235/60R17	106.3	62.9	63.9	63.4	46.8	0	29.8000	47.2000	35.7267	35.7
Volvo	XC40 FWD	Small SUV 2WD	2.0T	S8F	4000	235/55R18	106.3	62.9	63.9	63.4	46.8	1415	29.8000	47.2000	35.7267	35.7
Volvo	XC40 FWD	Small SUV 2WD	2.0T	S8F	4000	235/50R19	106.3	62.9	63.9	63.4	46.8	1175	29.8000	47.2000	35.7267	35.7
Volvo	XC40 FWD	Small SUV 2WD	2.0T	S8F	4000	245/45R20	106.3	62.9	63.9	63.4	46.8	1138	29.8000	47.2000	35.7267	35.7
Volvo	XC40 FWD	Small SUV 2WD	2.0T	S8F	4000	245/40R21	106.3	62.9	63.9	63.4	46.8	0	29.8000	47.2000	35.7267	35.7
Volvo	V60 FWD	Small Station Wagon	2.0T	S8F	4000	205/60 R16	113.1	63.2	63.3	63.2	49.6	0	30.1000	50.1000	36.6912	36.7
Volvo	V60 FWD	Small Station Wagon	2.0T	S8F	4000	225/50 R17	113.1	63.0	63.0	63.0	49.5	0	30.1000	50.1000	36.6912	36.7
Volvo	V60 FWD	Small Station Wagon	2.0T	S8F	4000	235/45 R18	113.1	62.9	62.9	62.9	49.4	292	30.1000	50.1000	36.6912	36.7
Volvo	V60 FWD	Small Station Wagon	2.0T	S8F	4000	235/40 R19	113.1	62.9	62.9	62.9	49.4	1451	30.1000	50.1000	36.6912	36.7
Volvo	V60 FWD	Small Station Wagon	2.0T	S8F	4000	245/35 R20	113.1	62.6	62.6	62.6	49.2	0	30.1000	50.1000	36.6912	36.7
Volvo	XC60 FWD	Small SUV 2WD	2.0T	S8F	4000	235/60 R18	112.8	64.9	65.1	65.0	50.9	605	27.5000	41.4000	32.3944	32.4
Volvo	XC60 FWD	Small SUV 2WD	2.0T	S8F	4000	235/55 R19	112.8	64.9	65.1	65.0	50.9	1015	27.5000	41.4000	32.3944	32.4
Volvo	XC60 FWD	Small SUV 2WD	2.0T	S8F	4000	255/45 R20	112.8	64.8	65.0	64.9	50.8	3882	27.5000	41.4000	32.3944	32.4
Volvo	XC60 FWD	Small SUV 2WD	2.0T	S8F	4000	255/40 R21	112.8	65.0	65.2	65.1	51.0	317	27.5000	41.4000	32.3944	32.4
Volvo	XC60 FWD	Small SUV 2WD	2.0T	S8F	4000	265/35 R22	112.8	65.5	65.7	65.6	51.4	0	27.5000	41.4000	32.3944	32.4
Volvo	V90 FWD	Midsize Station Wagon	2.0T	S8F	4000	245/45 R18	115.8	64.0	64.0	64.0	51.5	0	30.1000	50.1000	36.6912	36.7
Volvo	V90 FWD	Midsize Station Wagon	2.0T	S8F	4000	255/40 R19	115.8	63.6	63.6	63.6	51.1	20	30.1000	50.1000	36.6912	36.7
Volvo	V90 FWD	Midsize Station Wagon	2.0T	S8F	4000	255/35 R20	115.8	63.6	63.6	63.6	51.1	21	30.1000	50.1000	36.6912	36.7
Volvo	S90 AWD	Midsize Car	2.0TS	S8A	4500	245/45 R18	120.5	64.0	64.0	64.0	53.6	12	26.9000	44.8000	32.7968	32.8
Volvo	S90 AWD	Midsize Car	2.0TS	S8A	4500	255/40 R19	120.5	63.6	63.6	63.6	53.2	278	26.9000	44.8000	32.7968	32.8
Volvo	S90 AWD	Midsize Car	2.0TS	S8A	4500	255/35 R20	120.5	63.6	63.6	63.6	53.2	1603	26.9000	44.8000	32.7968	32.8
Volvo	V90 AWD	Midsize Station Wagon	2.0TS	S8A	4500	245/45 R18	115.8	64.0	64.0	64.0	51.5	0	26.9000	44.8000	32.7968	32.8
Volvo	V90 AWD	Midsize Station Wagon	2.0TS	S8A	4500	255/40 R19	115.8	63.6	63.6	63.6	51.1	106	26.9000	44.8000	32.7968	32.8
Volvo	V90 AWD	Midsize Station Wagon	2.0TS	S8A	4500	255/35 R20	115.8	63.6	63.6	63.6	51.1	206	26.9000	44.8000	32.7968	32.8
Volvo	V60 AWD	Small Station Wagon	2.0TSH	S8A	4500	225/50 R17	113.1	63.0	63.0	63.0	49.5	0	89.7787	67.6639	78.2675	78.3
Volvo	V60 AWD	Small Station Wagon	2.0TSH	S8A	4500	235/45 R18	113.1	62.6	62.7	62.6	49.2	0	89.7787	67.6639	78.2675	78.3
Volvo	V60 AWD	Small Station Wagon	2.0TSH	S8A	4500	235/40 R19	113.1	62.9	62.9	62.9	49.4	104	89.7787	67.6639	78.2675	78.3
Volvo	V60 AWD	Small Station Wagon	2.0TSH	S8A	4500	245/35 R20	113.1	62.6	62.6	62.6	49.2	0	89.7787	67.6639	78.2675	78.3
Volvo	S90 AWD	Midsize Car	2.0TSH	S8A	5000	245/45 R18	120.5	64.0	64.0	64.0	53.6	0	82.9858	62.5087	72.3242	72.3
Volvo	S90 AWD	Midsize Car	2.0TSH	S8A	5000	255/40 R19	120.5	63.6	63.6	63.6	53.2	110	82.9858	62.5087	72.3242	72.3
Volvo	S90 AWD	Midsize Car	2.0TSH	S8A	5000	255/35 R20	120.5	63.6	63.6	63.6	53.2	220	82.9858	62.5087	72.3242	72.3
Volvo	Polestar 1	Mini-Compact Car	2.0TSH	S8A	5500	275/30 R21 Front 295/35 R21 Rear	107.9	64.7	65.1	64.9	48.6	86	140.0000	90.0000	112.0000	112.0
Lotus	Evora	Mini-Compact Car	2GR-3.5	M6R	3500	235/35 R19 Front 285/30 R20 Rear	101.4	61.6	62.0	61.8	43.5	18	19.8985	32.6236	24.1347	24.1
Lotus	Evora	Mini-Compact Car	2GR-3.5	M6R	3500	245/35 R19 Front 295/30 R20 Rear	101.4	61.6	62.0	61.8	43.5	54	19.8985	32.6236	24.1347	24.1
Lotus	Evora	Mini-Compact Car	2GR-3.5	S6R	3500	235/35 R19 Front 285/30 R20 Rear	101.4	61.6	62.0	61.8	43.5	12	21.4141	34.5736	25.8400	25.8
Lotus	Evora	Mini-Compact Car	2GR-3.5	S6R	3500	245/35 R19 Front 295/30 R20 Rear	101.4	61.6	62.0	61.8	43.5	36	21.4141	34.5736	25.8400	25.8
Total Volume												14176				

CAFE Status excluding Fuel Consumption Improvement values The current estimate of Volvo's Import Passenger Car CAFE, based on a model year production forecast of [14176] units. This estimate uses minimum CAFE data requirements	34.8
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CAFE Status including Fuel Consumption Improvement values According to §600.510-12(c) and as calculated in Exhibit III	36.2
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CAFE Requirement The current estimate of Volvo's Import Passenger Car CAFE Requirement, based on a model year production forecast of [14176] units and calculated according to 49 CFR 531.5(c).	40.6
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Volvo Car Corporation

Import Car - SAE Net Horsepower

MFR	Engine Name	Carline Name	(Hp)
Volvo	2.0T	XC40	187
Volvo	2.0T	V60, XC60, V90	250
Volvo	2.0TS	V60, S90, V90	316
Volvo	2.0TSH	V60, S90	313
Volvo	2.0TSH	Polestar 1	328
Lotus	2GR-3.5	Evora	400
Lotus	2GR-3.5	Evora GT	416



Volvo Car Corporation

Import Car - Dimensional Data

MFR	Vehicle Line	Body Style	Drive Type	Wheelbase (inches)	Interior Volume Index (ft3)	Frontal Area (ft3)
Volvo	XC40	Station Wagon	FWD	106.3	123.9	27.6
Volvo	V60	Station Wagon	FWD	113.1	122.7	24.0
Volvo	V60 AWD	Station Wagon	AWD	113.1	122.7	24.0
Volvo	XC60	Station Wagon	FWD	112.8	132.6	28.1
Volvo	S90 AWD	Sedan	AWD	120.5	115.4	24.6
Volvo	V90	Station Wagon	FWD	115.8	132.3	24.8
Volvo	V90 AWD	Station Wagon	AWD	115.8	132.3	24.8
Volvo	Polestar 1	Mini-Compact Car	AWD	107.9	76.3	24.0
Lotus	Evora	Mini-Compact Car	RWD	101.4	50.7	20.7



Volvo Car Corporation

Import Car - Footprint Data

MFR	Carline Name	Engine Name	Transmission Class	Tire Size	Wheelbase (in)	Front Track Width (in)	Rear Track Width (in)	Average Track Width (in)	Footprint (ft2)
Volvo	XC40 FWD	2.0T	S8F	235/60R17	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 FWD	2.0T	S8F	235/55R18	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 FWD	2.0T	S8F	235/50R19	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 FWD	2.0T	S8F	245/45R20	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 FWD	2.0T	S8F	245/40R21	106.3	62.9	63.9	63.4	46.8
Volvo	V60 FWD	2.0T	S8F	205/60 R16	113.1	63.2	63.3	63.2	49.6
Volvo	V60 FWD	2.0T	S8F	225/50 R17	113.1	63.0	63.0	63.0	49.5
Volvo	V60 FWD	2.0T	S8F	235/45 R18	113.1	62.9	62.9	62.9	49.4
Volvo	V60 FWD	2.0T	S8F	235/40 R19	113.1	62.9	62.9	62.9	49.4
Volvo	V60 FWD	2.0T	S8F	245/35 R20	113.1	62.6	62.6	62.6	49.2
Volvo	XC60 FWD	2.0T	S8F	235/60 R18	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 FWD	2.0T	S8F	235/55 R19	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 FWD	2.0T	S8F	255/45 R20	112.8	64.8	65.0	64.9	50.8
Volvo	XC60 FWD	2.0T	S8F	255/40 R21	112.8	65.0	65.2	65.1	51.0
Volvo	XC60 FWD	2.0T	S8F	265/35 R22	112.8	65.5	65.7	65.6	51.4
Volvo	V90 FWD	2.0T	S8F	245/45 R18	115.8	64.0	64.0	64.0	51.5
Volvo	V90 FWD	2.0T	S8F	255/40 R19	115.8	63.6	63.6	63.6	51.1
Volvo	V90 FWD	2.0T	S8F	255/35 R20	115.8	63.6	63.6	63.6	51.1
Volvo	S90 AWD	2.0TS	S8A	245/45 R18	120.5	64.0	64.0	64.0	53.6
Volvo	S90 AWD	2.0TS	S8A	255/40 R19	120.5	63.6	63.6	63.6	53.2
Volvo	S90 AWD	2.0TS	S8A	255/35 R20	120.5	63.6	63.6	63.6	53.2
Volvo	V90 AWD	2.0TS	S8A	245/45 R18	115.8	64.0	64.0	64.0	51.5
Volvo	V90 AWD	2.0TS	S8A	255/40 R19	115.8	63.6	63.6	63.6	51.1
Volvo	V90 AWD	2.0TS	S8A	255/35 R20	115.8	63.6	63.6	63.6	51.1
Volvo	V60 AWD	2.0TSH	S8A	225/50 R17	113.1	63.0	63.0	63.0	49.5
Volvo	V60 AWD	2.0TSH	S8A	235/45 R18	113.1	62.6	62.7	62.6	49.2
Volvo	V60 AWD	2.0TSH	S8A	235/40 R19	113.1	62.9	62.9	62.9	49.4
Volvo	V60 AWD	2.0TSH	S8A	245/35 R20	113.1	62.6	62.6	62.6	49.2
Volvo	S90 AWD	2.0TSH	S8A	245/45 R18	120.5	64.0	64.0	64.0	53.6
Volvo	S90 AWD	2.0TSH	S8A	255/40 R19	120.5	63.6	63.6	63.6	53.2
Volvo	S90 AWD	2.0TSH	S8A	255/35 R20	120.5	63.6	63.6	63.6	53.2
Volvo	Polestar 1	2.0TSH	S8A	275/30 R21 Front 295/35 R21 Rear	107.9	64.7	65.1	64.9	48.6
Lotus	Evora	2GR-3.5	M6R	235/35 R19 Front 285/30 R20 Rear	101.4	61.6	62.0	61.8	43.5
Lotus	Evora	2GR-3.5	M6R	245/35 R19 Front 295/30 R20 Rear	101.4	61.6	62.0	61.8	43.5
Lotus	Evora	2GR-3.5	S6R	235/35 R19 Front 285/30 R20 Rear	101.4	61.6	62.0	61.8	43.5
Lotus	Evora	2GR-3.5	S6R	245/35 R19 Front 295/30 R20 Rear	101.4	61.6	62.0	61.8	43.5



Volvo Car Corporation

Import Car - Configuration Data



MFR	Carline Name	Engine Name	Engine		# cyl	Engine Aspiration	Calibration	Transmission Class	Over Drive	Axle Ratio	Min N/V	Max N/V	Min ETW	Max ETW	Min TRLHP	Max TRLHP	Min LVW	Max LVW	Projected Sales	MH FE
			Displ (l)	Engine Config																
Volvo	XC40	2.0T	2.0	I	4	T	AC_1	S8F	Yes	3.33	27.0	27.6	4000	4000	13.0	14.3	4039	4039	3728	35.7267
Volvo	V60	2.0T	2.0	I	4	T	10_4	S8F	Yes	2.96	26.1	26.6	4250	4250	11.1	11.3	4132	4132	1743	36.6912
Volvo	V90	2.0T	2.0	I	4	T	10_3	S8F	Yes	3.08	26.5	26.9	4250	4250	11.9	12.1	4220	4220	41	36.6912
Volvo	XC60	2.0T	2.0	I	4	T	10_1	S8F	Yes	3.33	26.5	26.7	4250	4250	13.8	14.5	4371	4371	5819	32.3944
Volvo	S90 AWD	2.0TS	2.0	I	4	TS	A2_2	S8A	Yes	3.20	27.6	28.0	4500	4500	12.4	13.0	4479	4479	1893	32.7968
Volvo	V60 AWD	2.0TS	2.0	I	4	TS	A2_4	S8A	Yes	3.08	27.2	27.3	4250	4250	12.3	12.3	4353	4353	0	33.2236
Volvo	V90 AWD	2.0TS	2.0	I	4	TS	A2_2	S8A	Yes	3.20	27.6	28.0	4500	4500	13.2	13.3	4485	4485	312	32.7968
Volvo	V60 AWD	2.0TSH	2.0	I	4	TS	BK_2	S8A	Yes	3.08	27.2	27.3	4750	4750	11.9	12.5	4832	4832	104	78.2675
Volvo	S90 AWD	2.0TSH	2.0	I	4	TS	BR_2	S8A	Yes	3.20	26.9	27.6	5000	5000	12.2	12.6	4914	4914	330	72.3242
Volvo	Polestar 1	2.0TSH	2.0	I	4	TS	BE_1	S8A	Yes	3.20	27.1	27.1	5500	5500	14.3	14.3	5486	5486	86	112.0000
Lotus	Evora 400/410	2GR-3.5	3.5	V	6	S	C132E0271	M6R	No	3.24	36.1	36.1	3375	3500	13.6	13.6	3380	3475	18	24.1347
Lotus	Evora GT	2GR-3.5	3.5	V	6	S	C138E0288	M6R	No	3.24	35.1	35.1	3500	3500	15.1	15.1	3494	3494	54	24.1347
Lotus	Evora 400/410	2GR-3.5	3.5	V	6	S	C132E0271	S6R	No	3.69	29.1	29.1	3375	3500	13.9	13.9	3391	3525	12	25.8400
Lotus	Evora GT	2GR-3.5	3.5	V	6	S	C138E0288	S6R	No	3.69	28.1	28.1	3500	3500	15.1	15.1	3510	3510	36	25.8400
Total Volume																			14176	



Volvo Car Corporation

Code Descriptions

Code	Definition
Engine Config Code	
I	In-line
V	V-Shaped
Engine Aspiration	
T	Turbocharged
N	Naturally aspirated
TS	Turbocharged & Supercharged
TSH	Turbocharged & Supercharged, PHEV
Transmission Class	
Pos 1	S = Semi Automatic, M=Manual
Pos 2	Number of forward gears
Pos 3	F = Front Wheel Drive A = All Wheel Drive R = Rear Wheel Drive



Volvo Car Corporation

Import Passenger Car
Fuel Consumption Improvement Information

Model Type Information				Projected production volume	A/C Efficiency Credits [gpm]	A/C Efficiency Credit [megagrams]	FCIV _{AC} [gal/mile]	Stop/Start Credits [g/mile]	High Efficiency Exterior Lights Credits [g/mile]	Active Engine Warm Up Credits [g/mile]	Thermal Control Technologies					Total Off Cycle Credits [gpm]	OCCredit [megagrams]	FCIV _{OC} [gal/mile]	Final CAFE including Credits
Carline Name	Drive	Engine	Trans								Passive Cabin Ventilation Credits [g/mile]	Active Seat Ventilation Credits [g/mile]	Glass or Glazing Credits [g/mile]	Solar Reflective Surface Coating Credits [g/mile]	Total or Cap Limited Thermal Control [g/mile]				
XC40 T4 FWD	2WD	2.0L	S8	1,275	3.8	2766	0.000504	0.0	0.9	1.5	1.7	0.0	0.7	0.0	2.4	4.8	1195	0.00057516	36.2
				1,939				0.0	0.9	1.5	1.7	0.0	1.0	0.0	2.7	5.1	1931		
				514				0.0	0.9	1.5	1.7	0.0	1.0	0.4	3.0	5.4	542		
V60 T5 FWD	2WD	2.0L	S8	1,260	4.8	1634	0.000504	0.0	1.0	1.5	1.7	0.0	0.3	0.0	2.0	4.5	1107	0.00057516	36.2
				18				0.0	1.0	1.5	1.7	1.0	0.3	0.0	3.0	5.5	19		
				454				0.0	1.0	1.5	1.7	0.0	0.3	0.4	2.4	4.9	434		
XC60 T5 FWD	2WD	2.0L	S8	3,466	4.8	5454	0.000504	0.0	1.0	1.5	1.7	1.0	0.3	0.4	3.0	5.5	12	0.00057516	36.2
				330				0.0	1.0	1.5	1.7	0.0	1.1	0.0	2.8	5.3	3587		
				1,812				0.0	1.0	1.5	1.7	1.0	1.1	0.0	3.0	5.5	354		
V90 T5 FWD	2WD	2.0L	S8	211	4.8	38	0.000504	0.0	1.0	1.5	1.7	1.0	1.1	0.4	3.0	5.5	1946	0.00057516	36.2
				9				0.0	0.9	1.5	1.7	0.0	0.3	0.0	2.0	4.4	8		
				13				0.0	0.9	1.5	1.7	1.0	0.3	0.0	3.0	5.4	14		
S90 T6 AWD	4WD	2.0L	S8	7	4.8	1774	0.000504	0.0	0.9	1.5	1.7	0.0	0.3	0.4	2.4	4.8	7	0.00057516	36.2
				12				0.0	0.9	1.5	1.7	1.0	0.3	0.4	3.0	5.4	13		
				822				0.0	0.9	1.5	1.7	0.0	0.2	0.0	1.9	4.3	690		
V90 T6 AWD	4WD	2.0L	S8	259	4.8	292	0.000504	0.0	0.9	1.5	1.7	1.0	0.2	0.0	2.9	5.3	268	0.00057516	36.2
				673				0.0	0.9	1.5	1.7	0.0	0.2	0.4	2.3	4.7	618		
				139				0.0	0.9	1.5	1.7	1.0	0.2	0.4	3.0	5.4	147		
V60 T8 AWD	4WD	2.0L	S8	106	4.3	87	0.000504	0.0	0.9	1.5	1.7	0.0	0.3	0.0	2.0	4.4	91	0.00057516	36.2
				136				0.0	0.9	1.5	1.7	1.0	0.3	0.0	3.0	5.4	143		
				37				0.0	0.9	1.5	1.7	0.0	0.3	0.4	2.4	4.8	35		
S90 T8 AWD	4WD	2.0L	S8	33	4.3	277	0.000504	0.0	0.9	1.5	1.7	1.0	0.3	0.4	3.0	5.4	35	0.00057516	36.2
				60				2.5	1.0	1.5	1.7	0.0	0.3	0.0	2.0	7.0	82		
				44				2.5	1.0	1.5	1.7	0.0	0.3	0.4	2.4	7.4	64		
Polestar 1	4WD	2.0L	S8	127	4.3	72	0.000504	2.5	0.9	1.5	1.7	0.0	0.2	0.0	1.9	6.8	169	0.00057516	36.2
				54				2.5	0.9	1.5	1.7	1.0	0.2	0.0	2.9	7.8	82		
				116				2.5	0.9	1.5	1.7	0.0	0.2	0.4	2.3	7.2	163		
Lotus	2WD	3.5L	M6/S6	33	0	0	0.000504	2.5	0.9	1.5	1.7	1.0	0.2	0.4	3.0	7.9	51	0.00057516	36.2
				76				2.5	1.0	1.5	1.7	0.0	0.2	0.0	1.9	6.9	102		
Sum				14176		12396		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0		

$$FCIV_{AC} \text{ (gal/mi)} = \frac{(ACCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$

$$\text{Average MPG} = \frac{1}{\frac{1}{MPG} - (FCIV_{AC} + FCIV_{OC} + FCIV_{PU})}$$

$$FCIV_{OC} \text{ (gal/mi)} = \frac{(OCCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$



Volvo Car Corporation

Domestic Passenger Cars
Model Type Summary / CAFE Status

MFR	Carline Name	Vehicle Class	Engine Name	Transmission Class	IWC	Tire Size	Wheelbase	Front Axle Track Width	Rear Axle Track Width	Average Track Width	Footprint	Projected Sales	City	Highway	MH	MH Rounded
Volvo	S60 FWD	Compact Car	2.0T	S8F	4000	215/60 R16	113.1	63.2	63.3	63.2	49.6	0	30.1000	50.1000	36.6912	36.7
Volvo	S60 FWD	Compact Car	2.0T	S8F	4000	225/50 R17	113.1	63.0	63.0	63.0	49.5	0	30.1000	50.1000	36.6912	36.7
Volvo	S60 FWD	Compact Car	2.0T	S8F	4000	235/45 R18	113.1	62.9	62.9	62.9	49.4	4548	30.1000	50.1000	36.6912	36.7
Volvo	S60 FWD	Compact Car	2.0T	S8F	4000	235/40 R19	113.1	62.9	62.9	62.9	49.4	2581	30.1000	50.1000	36.6912	36.7
Volvo	S60 FWD	Compact Car	2.0T	S8F	4000	245/35 R20	113.1	62.6	62.6	62.6	49.2	0	30.1000	50.1000	36.6912	36.7
Volvo	S60 AWD	Compact Car	2.0TS	S8A	4000	225/50 R17	113.1	63.0	63.0	63.0	49.5	0	27.1000	45.9000	33.2236	33.2
Volvo	S60 AWD	Compact Car	2.0TS	S8A	4000	235/45 R18	113.1	62.9	62.9	62.9	49.4	2669	27.1000	45.9000	33.2236	33.2
Volvo	S60 AWD	Compact Car	2.0TS	S8A	4000	235/40 R19	113.1	62.9	62.9	62.9	49.4	2712	27.1000	45.9000	33.2236	33.2
Volvo	S60 AWD	Compact Car	2.0TS	S8A	4000	245/35 R20	113.1	62.6	62.6	62.6	49.2	0	27.1000	45.9000	33.2236	33.2
Volvo	S60 AWD	Compact Car	2.0TSH	S8A	4500	225/50 R17	113.1	63.0	63.0	63.0	49.5	0	89.7787	67.6639	78.2675	78.3
Volvo	S60 AWD	Compact Car	2.0TSH	S8A	4500	235/45 R18	113.1	62.6	62.7	62.6	49.2	279	89.7787	67.6639	78.2675	78.3
Volvo	S60 AWD	Compact Car	2.0TSH	S8A	4500	235/40 R19	113.1	62.9	62.9	62.9	49.4	418	89.7787	67.6639	78.2675	78.3
Volvo	S60 AWD	Compact Car	2.0TSH	S8A	4500	245/35 R20	113.1	62.6	62.6	62.6	49.2	0	89.7787	67.6639	78.2675	78.3
Total Volume												13207				

CAFE Status excluding Fuel Consumption Improvement values The current estimate of Volvo's Domestic Passenger Car CAFE, based on a model year production forecast of [13207] units. This estimate uses minimum CAFE data requirements	36.4
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CAFE Status including Fuel Consumption Improvement values According to §600.510-12(c) and as calculated in Exhibit III	37.9
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CAFE Requirement The current estimate of Volvo's Domestic Passenger Car CAFE Requirement, based on a model year production forecast of [13207] units and calculated according to 49 CFR 531.5(c) and (d).	40.9
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Volvo Car Corporation

Domestic Car - SAE Net Horsepower

MFR	Engine Name	Carline Name	(Hp)
Volvo	2.0T	S60	250
Volvo	2.0TS	S60	316
Volvo	2.0TSH	S60	313



Volvo Car Corporation

Domestic Car - Dimensional Data

MFR	Vehicle Line	Body Style	Drive Type	Wheelbase (inches)	Interior Volume Index (ft3)	Frontal Area (ft3)
Volvo	S60	Sedan	FWD	113.1	104.2	23.9
Volvo	S60 AWD	Sedan	AWD	113.1	104.2	23.9



Volvo Car Corporation

Domestic Car - Footprint Data

MFR	Carline Name	Engine Name	Transmission Class	Tire Size	Wheelbase (in)	Front Track Width (in)	Rear Track Width (in)	Average Track Width (in)	Footprint (ft2)
Volvo	S60 FWD	2.0T	S8F	215/60 R16	113.1	63.2	63.3	63.2	49.6
Volvo	S60 FWD	2.0T	S8F	225/50 R17	113.1	63.0	63.0	63.0	49.5
Volvo	S60 FWD	2.0T	S8F	235/45 R18	113.1	62.9	62.9	62.9	49.4
Volvo	S60 FWD	2.0T	S8F	235/40 R19	113.1	62.9	62.9	62.9	49.4
Volvo	S60 FWD	2.0T	S8F	245/35 R20	113.1	62.6	62.6	62.6	49.2
Volvo	S60 AWD	2.0TS	S8A	225/50 R17	113.1	63.0	63.0	63.0	49.5
Volvo	S60 AWD	2.0TS	S8A	235/45 R18	113.1	62.9	62.9	62.9	49.4
Volvo	S60 AWD	2.0TS	S8A	235/40 R19	113.1	62.9	62.9	62.9	49.4
Volvo	S60 AWD	2.0TS	S8A	245/35 R20	113.1	62.6	62.6	62.6	49.2
Volvo	S60 AWD	2.0TSH	S8A	225/50 R17	113.1	63.0	63.0	63.0	49.5
Volvo	S60 AWD	2.0TSH	S8A	235/45 R18	113.1	62.6	62.7	62.6	49.2
Volvo	S60 AWD	2.0TSH	S8A	235/40 R19	113.1	62.9	62.9	62.9	49.4
Volvo	S60 AWD	2.0TSH	S8A	245/35 R20	113.1	62.6	62.6	62.6	49.2



Volvo Car Corporation

Domestic Car - Configuration Data



MFR	Carline Name	Engine Name	Engine Displ (l)	EPA Engine Config	# cyl	Engine Aspiration	Calibration	Transmission Class	Over Drive	Axle Ratio	Min N/V	Max N/V	Min ETW	Max ETW	Min TRLHP	Max TRLHP	Min LVW	Max LVW	Projected Sales	MH FE
Volvo	S60	2.0T	2.0	1	4	T	10_4	S8F	Yes	2.96	26.1	26.6	4000	4000	10.6	11.3	4027	4027	7129	36.6912
Volvo	S60 AWD	2.0TS	2.0	1	4	TS	A2_4	S8A	Yes	3.08	27.2	27.3	4250	4250	12.1	12.7	4306	4306	5381	33.2236
Volvo	S60 AWD	2.0TSH	2.0	1	4	TS	BR_3	S8A	Yes	3.08	27.2	27.3	4750	4750	11.7	12.3	5510	5510	697	78.2675
Total Volume																			13207	



Volvo Car Corporation

Domestic Passenger Car
Fuel Consumption Improvement Information

Vehicle Lifetime Miles | 195264

MFR	Model Type Information				Projected production volume	A/C Efficiency Credits [gpm]	A/C Efficiency Credit [megagrams]	FCIV _{AC} [gal/mile]	Stop/Start Credits [g/mile]	High Efficiency Exterior Lights Credits [g/mile]	Active Engine Warm Up Credits [g/mile]	Thermal Control Technologies					Total Off Cycle Credits [gpm]	OCcredit [megagrams]	FCIV _{OC} [gal/mile]	Final CAFE including Credits	
	Carline Name	Drive	Engine	Trans								Passive Cabin Ventilation Credits [g/mile]	Active Seat Ventilation Credits [g/mile]	Glass or Glazing Credits [g/mile]	Solar Reflective Surface Coating Credits [g/mile]	Total or Cap Limited Thermal Control [g/mile]					
Volvo	S60 T5 FWD	2WD	2.0L	S8	5,266	4.8	6682	0.000537	0.0	1.0	1.5	1.7	0.0	0.2	0.0	1.9	4.4	4524	0.00052370	37.9	
					82				0.0	1.0	1.5	1.7	1.0	0.2	0.0	2.9	5.4	86			
					1,748				0.0	1.0	1.5	1.7	0.0	0.2	0.4	2.3	4.8	1638			
					33				0.0	1.0	1.5	1.7	1.0	0.2	0.4	3.0	5.5	35			
Volvo	S60 T6 AWD	4WD	2.0L	S8	3,967	4.8	5043		0.0	1.0	1.5	1.7	0.0	0.2	0.0	1.9	4.4	3408			12002.3
					147				0.0	1.0	1.5	1.7	1.0	0.2	0.0	2.9	5.4	155			
					1,215				0.0	1.0	1.5	1.7	0.0	0.2	0.4	2.3	4.8	1139			
					52				0.0	1.0	1.5	1.7	1.0	0.2	0.4	3.0	5.5	56			
Volvo	S60 T8 AWD	4WD	2.0L	S8	505	4.3	585		2.5	1.0	1.5	1.7	0.0	0.2	0.0	1.9	6.9	680			12002.3
					32				2.5	1.0	1.5	1.7	1.0	0.2	0.0	2.9	7.9	49			
					146				2.5	1.0	1.5	1.7	0.0	0.2	0.4	2.3	7.3	208			
					14				2.5	1.0	1.5	1.7	1.0	0.2	0.4	3.0	8.0	22			
				Sum	13207		12310														

$$FCIV_{AC} \text{ (gal/mi)} = \frac{(ACCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$

$$\text{Average MPG} = \frac{1}{\frac{1}{MPG} - (FCIV_{AC} + FCIV_{OC} + FCIV_{PU})}$$

$$FCIV_{OC} \text{ (gal/mi)} = \frac{(OCCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$



Volvo Car Corporation

Trucks Model Type Summary / CAFE Status

MFR	Truckline Name	Vehicle Class	Engine Name	Transmission Class	IWC	Base Tire	Wheelbase	Front Axle Track Width	Rear Axle Track Width	Average Track Width	Footprint	Projected Sales	City	Highway	MH	MH Rounded
Volvo	XC40 AWD	Small SUV 4WD	2.0T	S8A	4000	235/60R17	106.3	62.9	63.9	63.4	46.8	0	27.9000	43.7000	33.3214	33.3
Volvo	XC40 AWD	Small SUV 4WD	2.0T	S8A	4000	235/55R18	106.3	62.9	63.9	63.4	46.8	3454	27.9000	43.7000	33.3214	33.3
Volvo	XC40 AWD	Small SUV 4WD	2.0T	S8A	4000	235/50R19	106.3	62.9	63.9	63.4	46.8	8968	27.9000	43.7000	33.3214	33.3
Volvo	XC40 AWD	Small SUV 4WD	2.0T	S8A	4000	245/45R20	106.3	62.9	63.9	63.4	46.8	7581	27.9000	43.7000	33.3214	33.3
Volvo	XC40 AWD	Small SUV 4WD	2.0T	S8A	4000	245/40R21	106.3	62.9	63.9	63.4	46.8	1	27.9000	43.7000	33.3214	33.3
Volvo	V60 CC AWD	Small Station Wagon	2.0T	S8A	4000	215/55R18	113.1	64.9	64.2	64.6	50.7	3059	27.4000	44.3000	33.0786	33.1
Volvo	V60 CC AWD	Small Station Wagon	2.0T	S8A	4000	235/50R18	113.1	64.9	64.2	64.6	50.7	0	27.4000	44.3000	33.0786	33.1
Volvo	V60 CC AWD	Small Station Wagon	2.0T	S8A	4000	235/45 R19	113.1	64.6	63.8	64.2	50.4	2859	27.4000	44.3000	33.0786	33.1
Volvo	V60 CC AWD	Small Station Wagon	2.0T	S8A	4000	245/40R20	113.1	64.6	63.8	64.2	50.4	0	27.4000	44.3000	33.0786	33.1
Volvo	XC60 AWD	Small SUV 4WD	2.0T	S8A	4500	235/60R18	112.8	64.9	65.1	65.0	50.9	2508	25.9000	38.4000	30.3451	30.3
Volvo	XC60 AWD	Small SUV 4WD	2.0T	S8A	4500	235/55R19	112.8	64.9	65.1	65.0	50.9	3871	25.9000	38.4000	30.3451	30.3
Volvo	XC60 AWD	Small SUV 4WD	2.0T	S8A	4500	255/45R20	112.8	64.8	65.0	64.9	50.8	7098	25.9000	38.4000	30.3451	30.3
Volvo	XC60 AWD	Small SUV 4WD	2.0T	S8A	4500	255/40R21	112.8	65.0	65.2	65.1	51.0	275	25.9000	38.4000	30.3451	30.3
Volvo	XC60 AWD	Small SUV 4WD	2.0T	S8A	4500	265/35R22	112.8	65.5	65.7	65.6	51.4	0	25.9000	38.4000	30.3451	30.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0T	S8A	4500	235/60 R18	117.5	65.5	65.6	65.6	53.5	226	25.9000	38.4000	30.3451	30.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0T	S8A	4500	235/55 R19	117.5	65.5	65.6	65.6	53.5	709	25.9000	38.4000	30.3451	30.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0T	S8A	4500	275/45 R20	117.5	65.8	65.9	65.8	53.7	6217	25.9000	38.4000	30.3451	30.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0T	S8A	4500	275/40 R21	117.5	65.8	65.9	65.8	53.7	0	25.9000	38.4000	30.3451	30.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0T	S8A	4500	275/35 R22	117.5	65.8	65.9	65.8	53.7	28	25.9000	38.4000	30.3451	30.3
Volvo	XC90 FWD	Standard SUV 2WD	2.0T	S8F	4500	235/60 R18	117.5	65.5	65.6	65.6	53.5	75	27.2000	42.7000	32.5106	32.5
Volvo	XC90 FWD	Standard SUV 2WD	2.0T	S8F	4500	235/55 R19	117.5	65.5	65.6	65.6	53.5	232	27.2000	42.7000	32.5106	32.5
Volvo	XC90 FWD	Standard SUV 2WD	2.0T	S8F	4500	275/45 R20	117.5	65.8	65.9	65.8	53.7	2371	27.2000	42.7000	32.5106	32.5
Volvo	XC90 FWD	Standard SUV 2WD	2.0T	S8F	4500	275/40 R21	117.5	65.8	65.9	65.8	53.7	0	27.2000	42.7000	32.5106	32.5
Volvo	XC90 FWD	Standard SUV 2WD	2.0T	S8F	4500	275/35 R22	117.5	65.8	65.9	65.8	53.7	7	27.2000	42.7000	32.5106	32.5
Volvo	XC60 AWD	Small SUV 4WD	2.0TS	S8A	4500	235/60R18	112.8	64.9	65.1	65	50.9	0	25.4000	38.9000	30.1008	30.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TS	S8A	4500	235/55R19	112.8	64.9	65.1	65.0	50.9	2540	25.4000	38.9000	30.1008	30.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TS	S8A	4500	255/45R20	112.8	64.8	65.0	64.9	50.8	3324	25.4000	38.9000	30.1008	30.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TS	S8A	4500	255/40R21	112.8	65.0	65.2	65.1	51.0	228	25.4000	38.9000	30.1008	30.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TS	S8A	4500	265/35R22	112.8	65.5	65.7	65.6	51.4	0	25.4000	38.9000	30.1008	30.1
Volvo	V90CC AWD	Midsize Station Wagon	2.0TS	S8A	4500	235/55 R18	115.8	64.9	64.6	64.8	52.1	0	25.8000	42.2000	31.2682	31.3
Volvo	V90CC AWD	Midsize Station Wagon	2.0TS	S8A	4500	235/50 R19	115.8	64.9	64.6	64.8	52.1	137	25.8000	42.2000	31.2682	31.3
Volvo	V90CC AWD	Midsize Station Wagon	2.0TS	S8A	4500	245/45 R20	115.8	65.0	64.7	64.8	52.1	1265	25.8000	42.2000	31.2682	31.3
Volvo	V90CC AWD	Midsize Station Wagon	2.0TS	S8A	4500	245/40 R21	115.8	65.0	64.7	64.8	52.1	0	25.8000	42.2000	31.2682	31.3
Volvo	XC90 AWD	Standard SUV 4WD	2.0TS	S8A	5000	235/60 R18	117.5	65.5	65.6	65.6	53.5	0	22.1000	36.9000	26.9673	27.0
Volvo	XC90 AWD	Standard SUV 4WD	2.0TS	S8A	5000	235/55 R19	117.5	65.5	65.6	65.6	53.5	2990	22.1000	36.9000	26.9673	27.0
Volvo	XC90 AWD	Standard SUV 4WD	2.0TS	S8A	5000	275/45 R20	117.5	65.8	65.9	65.8	53.7	8497	22.1000	36.9000	26.9673	27.0
Volvo	XC90 AWD	Standard SUV 4WD	2.0TS	S8A	5000	275/40 R21	117.5	65.8	65.9	65.8	53.7	10469	22.1000	36.9000	26.9673	27.0
Volvo	XC90 AWD	Standard SUV 4WD	2.0TS	S8A	5000	275/35 R22	117.5	65.8	65.9	65.8	53.7	164	22.1000	36.9000	26.9673	27.0
Volvo	XC60 AWD	Small SUV 4WD	2.0TSH	S8A	5000	235/60R18	112.8	64.9	65.1	65	50.9	0	56.9459	67.1083	61.1102	61.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TSH	S8A	5000	235/55R19	112.8	64.9	65.1	65.0	50.9	1209	56.9459	67.1083	61.1102	61.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TSH	S8A	5000	255/45R20	112.8	64.8	65.0	64.9	50.8	1639	56.9459	67.1083	61.1102	61.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TSH	S8A	5000	255/40R21	112.8	65.0	65.2	65.1	51.0	1044	56.9459	67.1083	61.1102	61.1
Volvo	XC60 AWD	Small SUV 4WD	2.0TSH	S8A	5000	265/35R22	112.8	65.5	65.7	65.6	51.4	102	56.9459	67.1083	61.1102	61.1
Volvo	XC90 AWD	Standard SUV 4WD	2.0TSH	S8A	5500	235/55 R19	117.5	65.5	65.6	65.6	53.5	667	58.0911	65.9503	61.3828	61.4
Volvo	XC90 AWD	Standard SUV 4WD	2.0TSH	S8A	5500	275/45 R20	117.5	65.8	65.9	65.8	53.7	1856	58.0911	65.9503	61.3828	61.4
Volvo	XC90 AWD	Standard SUV 4WD	2.0TSH	S8A	5500	275/40 R21	117.5	65.8	65.9	65.8	53.7	2524	58.0911	65.9503	61.3828	61.4
Volvo	XC90 AWD	Standard SUV 4WD	2.0TSH	S8A	5500	275/35 R22	117.5	65.8	65.9	65.8	53.7	178	58.0911	65.9503	61.3828	61.4
Total Volume												88372				

CAFE Status excluding Fuel Consumption Improvement values The current estimate of Volvo's Truck CAFE, based on a model year production forecast of [88372] units. This estimate uses minimum CAFE data requirements	31.9
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CAFE Status including Fuel Consumption Improvement values According to §600.510-12(c) and as calculated in Exhibit III	33.7
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CAFE Requirement The current estimate of Volvo's Truck CAFE Requirement, based on a model year production forecast of [88372] units and calculated according to 49 CFR 533.5(j)	32.5
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Volvo Car Corporation

SEA Net Horsepower - Trucks

MFR	Engine Name	Truckline Name	Power (Hp)
Volvo	2.0T	XC40	248
Volvo	2.0T	XC60, V60CC, XC90, V90CC	250
Volvo	2.0TS	XC60, XC90, V90CC	316
Volvo	2.0TSH	XC60, XC90	313



Volvo Car Corporation

Truck Dimensional Data

MFR	Vehicle Line	Drive Type	Wheelbase (inches)	Passenger Carrying Volume (ft3)	Cargo Carrying Volume (ft3)	Frontal Area (ft3)
Volvo	XC40	AWD	106.3	98.4	21.7	27.6
Volvo	V60CC	AWD	113.1	93.6	25.5	24.8
Volvo	XC60	AWD	112.8	102.9	25.8	28.1
Volvo	V90CC	AWD	115.8	98.4	30.1	25.5
Volvo	XC90 5-seater	FWD	117.5	103.8	40.2	29.9
Volvo	XC90 7-seater	FWD	117.5	103.8	41.8	29.9
Volvo	XC90 5-seater	AWD	117.5	103.8	40.2	29.9
Volvo	XC90 7-seater	AWD	117.5	103.8	41.8	29.9



Volvo Car Corporation

Truck Footprint Data

MFR	Truckline Name	Engine Name	Transmission Class	Tire Size	Wheelbase (in)	Front Track Width (in)	Rear Track Width (in)	Average Track Width (in)	Footprint (ft2)
Volvo	XC40 AWD	2.0T	S8A	235/60R17	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 AWD	2.0T	S8A	235/55R18	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 AWD	2.0T	S8A	235/50R19	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 AWD	2.0T	S8A	245/45R20	106.3	62.9	63.9	63.4	46.8
Volvo	XC40 AWD	2.0T	S8A	245/40R21	106.3	62.9	63.9	63.4	46.8
Volvo	V60 CC AWD	2.0T	S8A	215/55R18	113.1	64.9	64.2	64.6	50.7
Volvo	V60 CC AWD	2.0T	S8A	235/50R18	113.1	64.9	64.2	64.6	50.7
Volvo	V60 CC AWD	2.0T	S8A	235/45 R19	113.1	64.6	63.8	64.2	50.4
Volvo	V60 CC AWD	2.0T	S8A	245/40R20	113.1	64.6	63.8	64.2	50.4
Volvo	XC60 AWD	2.0T	S8A	235/60R18	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0T	S8A	235/55R19	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0T	S8A	255/45R20	112.8	64.8	65.0	64.9	50.8
Volvo	XC60 AWD	2.0T	S8A	255/40R21	112.8	65.0	65.2	65.1	51.0
Volvo	XC60 AWD	2.0T	S8A	265/35R22	112.8	65.5	65.7	65.6	51.4
Volvo	XC90 AWD	2.0T	S8A	235/60 R18	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 AWD	2.0T	S8A	235/55 R19	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 AWD	2.0T	S8A	275/45 R20	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0T	S8A	275/40 R21	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0T	S8A	275/35 R22	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 FWD	2.0T	S8F	235/60 R18	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 FWD	2.0T	S8F	235/55 R19	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 FWD	2.0T	S8F	275/45 R20	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 FWD	2.0T	S8F	275/40 R21	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 FWD	2.0T	S8F	275/35 R22	117.5	65.8	65.9	65.8	53.7
Volvo	XC60 AWD	2.0TS	S8A	235/60R18	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0TS	S8A	235/55R19	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0TS	S8A	255/45R20	112.8	64.8	65.0	64.9	50.8
Volvo	XC60 AWD	2.0TS	S8A	255/40R21	112.8	65.0	65.2	65.1	51.0
Volvo	XC60 AWD	2.0TS	S8A	265/35R22	112.8	65.5	65.7	65.6	51.4
Volvo	V90CC AWD	2.0TS	S8A	235/55 R18	115.8	64.9	64.6	64.8	52.1
Volvo	V90CC AWD	2.0TS	S8A	235/50 R19	115.8	64.9	64.6	64.8	52.1
Volvo	V90CC AWD	2.0TS	S8A	245/45 R20	115.8	65.0	64.7	64.8	52.1
Volvo	V90CC AWD	2.0TS	S8A	245/40 R21	115.8	65.0	64.7	64.8	52.1
Volvo	XC90 AWD	2.0TS	S8A	235/60 R18	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 AWD	2.0TS	S8A	235/55 R19	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 AWD	2.0TS	S8A	275/45 R20	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0TS	S8A	275/40 R21	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0TS	S8A	275/35 R22	117.5	65.8	65.9	65.8	53.7
Volvo	XC60 AWD	2.0TSH	S8A	235/60R18	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0TSH	S8A	235/55R19	112.8	64.9	65.1	65.0	50.9
Volvo	XC60 AWD	2.0TSH	S8A	255/45R20	112.8	64.8	65.0	64.9	50.8
Volvo	XC60 AWD	2.0TSH	S8A	255/40R21	112.8	65.0	65.2	65.1	51.0
Volvo	XC60 AWD	2.0TSH	S8A	265/35R22	112.8	65.5	65.7	65.6	51.4
Volvo	XC90 AWD	2.0TSH	S8A	235/55 R19	117.5	65.5	65.6	65.6	53.5
Volvo	XC90 AWD	2.0TSH	S8A	275/45 R20	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0TSH	S8A	275/40 R21	117.5	65.8	65.9	65.8	53.7
Volvo	XC90 AWD	2.0TSH	S8A	275/35 R22	117.5	65.8	65.9	65.8	53.7



Volvo Car Corporation

Truck Configuration Data



MFR	Truckline Name	Engine Name	Engine Displ (l)	EPA Engine Config	# cyl	Engine Aspiration	Calibration	Transmission Class	Over Drive	Axle Ratio	Min N/V	Max N/V	Min ETW	Max ETW	Min TRLHP	Max TRLHP	Min LVW	Max LVW	Projected Sales	MH FE
Volvo	XC40 AWD	2.0T	2.0	1	4	T	16_1	S8A	Yes	3.33	27.0	27.6	4250	4250	13.5	15.0	4170	4170	20004	33.3214
Volvo	V60 CC AWD	2.0T	2.0	1	4	T	10_5	S8A	Yes	3.20	26.9	27.3	4250	4250	13.4	13.9	4339	4339	5918	33.0786
Volvo	XC60 AWD	2.0T	2.0	1	4	T	10_2	S8A	Yes	3.33	26.5	26.7	4500	4500	15.0	15.7	4513	4513	13752	30.3451
Volvo	XC90 AWD	2.0T	2.0	1	4	T	10_2	S8A	Yes	3.33	26.1	26.7	4750	4750	14.8	15.3	4820	4820	7180	30.3451
Volvo	XC90 FWD	2.0T	2.0	1	4	T	10_1	S8F	Yes	3.33	26.1	26.7	4750	4750	13.6	14.4	4693	4693	2685	32.5106
Volvo	XC60 AWD	2.0TS	2.0	1	4	TS	A2_1	S8A	Yes	3.33	26.5	26.7	4500	4500	15.0	15.7	4590	4590	6092	30.1008
Volvo	XC90 AWD	2.0TS	2.0	1	4	TS	A2_1	S8A	Yes	3.33	26.1	26.7	5000	5000	14.8	15.6	4998	4998	22120	26.9673
Volvo	V90 CC AWD	2.0TS	2.0	1	4	TS	A2_3	S8A	Yes	3.33	27.0	27.6	4500	4500	13.3	14.1	4448	4448	1402	31.2682
Volvo	XC60 AWD	2.0TSH	2.0	1	4	TS	BR_1	S8A	Yes	3.33	26.5	26.7	5000	5000	14.8	15.6	5049	5049	3737	61.1102
Volvo	XC60 AWD	2.0TSH	2.0	1	4	TS	BK_1	S8A	Yes	3.33	26.5	26.7	5000	5000	14.8	15.6	5045	5045	257	61.1102
Volvo	XC90 AWD	2.0TSH	2.0	1	4	TS	BR_1	S8A	Yes	3.33	26.1	26.6	5500	5500	14.3	15.1	5519	5519	5225	61.3828
Total Volume																			88372	



Volvo Car Corporation

Truck
Fuel Consumption Improvement Information

Vehicle Lifetime Miles 225865

MFR	Model Type Information				Projected production volume	A/C Efficiency Credits [gpm]	A/C Efficiency Credit [megagrams]	FCIV _{AC} [gal/mile]	Thermal Control Technologies								Total Off Cycle Credits [gpm]	OCCredit [megagrams]	FCIV _{OC} [gal/mile]	Final CAFE including Credits	
	Carline Name	Drive	Engine	Trans					Stop/Start Credits [g/mile]	High Efficiency Exterior Lights Credits [g/mile]	Active Engine Warm Up Credits [g/mile]	Passive Cabin Ventilation Credits [g/mile]	Active Seat Ventilation Credits [g/mile]	Glass or Glazing Credits [g/mile]	Solar Reflective Surface Coating Credits [g/mile]	Total or Cap Limited Thermal Control [g/mile]					
Volvo	XC40 T5 AWD	4WD	2.0L	S8	2,354	5.4	24398	0.000721	0.0	0.9	3.2	2.3	0.0	0.9	0.0	3.2	7.3	3881	0.00096654	33.7	
					11,650				0.0	0.9	3.2	2.3	0.0	1.3	0.0	3.6	7.7	20261			
					6,000				0.0	0.9	3.2	2.3	0.0	1.3	0.5	4.1	8.2	11113			
Volvo	V60 CC T5 AWD	4WD	2.0L	S8	4,526	6.8	9089	0.000721	0.0	1.0	3.2	2.3	0.0	1.4	0.0	3.7	7.9	8076	0.00096654	33.7	
					280				0.0	1.0	3.2	2.3	1.3	1.4	0.0	4.3	8.5	538			
					1,050				0.0	1.0	3.2	2.3	0.0	1.4	0.5	4.2	8.4	1992			
Volvo	XC60 T5 AWD	4WD	2.0L	S8	62	6.8	21121	0.000721	0.0	1.0	3.2	2.3	1.3	1.4	0.5	4.3	8.5	119	0.00096654	33.7	
					9,043				0.0	1.0	3.2	2.3	0.0	1.4	0.0	3.7	7.9	16136			
					574				0.0	1.0	3.2	2.3	1.3	1.4	0.0	4.3	8.5	1102			
Volvo	XC60 T5 AWD	4WD	2.0L	S8	3,826	6.8	21121	0.000721	0.0	1.0	3.2	2.3	0.0	1.4	0.5	4.2	8.4	7259	0.00096654	33.7	
					309				0.0	1.0	3.2	2.3	1.3	1.4	0.5	4.3	8.5	593			
					5,064				0.0	1.0	3.2	2.3	0.0	1.7	0.0	4.0	8.2	9379			
Volvo	XC90 T5 AWD	4WD	2.0L	S8	2,116	6.8	11028	0.000721	0.0	1.0	3.2	2.3	0.0	1.7	0.5	4.3	8.5	4062	0.00096654	33.7	
					1,783				0.0	1.0	3.2	2.3	0.0	1.7	0.0	4.0	8.2	3302			
					902				0.0	1.0	3.2	2.3	0.0	1.7	0.5	4.3	8.5	1732			
Volvo	XC60 T6 AWD	4WD	2.0L	S8	3,781	6.8	9357	0.000721	0.0	1.0	3.2	2.3	0.0	1.4	0.0	3.7	7.9	6747	0.00096654	33.7	
					440				0.0	1.0	3.2	2.3	1.3	1.4	0.0	4.3	8.5	845			
					1,618				0.0	1.0	3.2	2.3	0.0	1.4	0.5	4.2	8.4	3070			
Volvo	XC60 T6 AWD	4WD	2.0L	S8	253	6.8	9357	0.000721	0.0	1.0	3.2	2.3	1.3	1.4	0.5	4.3	8.5	486	0.00096654	33.7	
					799				0.0	0.9	3.2	2.3	0.0	1.6	0.0	3.9	8.0	1444			
					116				0.0	0.9	3.2	2.3	1.3	1.6	0.0	4.3	8.4	220			
Volvo	V90 CC T6 AWD	4WD	2.0L	S8	399	6.8	2153	0.000721	0.0	0.9	3.2	2.3	0.0	1.6	0.5	4.3	8.4	757	0.00096654	33.7	
					88				0.0	0.9	3.2	2.3	1.3	1.6	0.5	4.3	8.4	167			
					10,140				0.0	1.0	3.2	2.3	0.0	1.7	0.0	4.0	8.2	18780			
Volvo	XC90 T6 AWD	4WD	2.0L	S8	5,363	6.8	33974	0.000721	0.0	1.0	3.2	2.3	0.0	1.7	0.0	4.3	8.5	10296	0.00096654	33.7	
					4,587				0.0	1.0	3.2	2.3	0.0	1.7	0.5	4.3	8.5	8806			
					2,030				0.0	1.0	3.2	2.3	1.3	1.7	0.5	4.3	8.5	3897			
Volvo	XC60 T8 AWD	4WD	2.0L	S8	2,270	6.1	5503	0.000721	4.4	1.0	3.2	2.3	0.0	1.4	0.0	3.7	12.3	6306	0.00096654	33.7	
					316				4.4	1.0	3.2	2.3	1.3	1.4	0.0	4.3	12.9	921			
					1,247				4.4	1.0	3.2	2.3	0.0	1.4	0.5	4.2	12.8	3605			
Volvo	XC60 T8 AWD	4WD	2.0L	S8	161	6.1	5503	0.000721	4.4	1.0	3.2	2.3	1.3	1.4	0.5	4.3	12.9	469	0.00096654	33.7	
					1,729				4.4	1.0	3.2	2.3	0.0	1.7	0.0	4.0	12.6	4921			
					1,882				4.4	1.0	3.2	2.3	1.3	1.7	0.0	4.3	12.9	5484			
Volvo	XC90 T8 AWD	4WD	2.0L	S8	689	6.1	7024	0.000721	4.4	1.0	3.2	2.3	0.0	1.7	0.5	4.3	12.9	2008	0.00096654	33.7	
					798				4.4	1.0	3.2	2.3	1.3	1.7	0.5	4.3	12.9	2325			
					127				4.4	1.0	3.2	2.3	0.0	1.4	0.0	3.7	12.3	353			
Volvo	XC90 T8 AWD	4WD	2.0L	S8	127	6.1	175		4.4	1.0	3.2	2.3	0.0	1.4	0.0	3.7	12.3	353			
					Sum		88372														
							127945.9														

$$FCIV_{AC} \text{ (gal/mi)} = \frac{(ACCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$

$$\text{Average MPG} = \frac{1}{\frac{1}{MPG} - (FCIV_{AC} + FCIV_{OC} + FCIV_{PU})}$$

$$FCIV_{OC} \text{ (gal/mi)} = \frac{(OCCredit \times 1,000,000)}{(VLM \times Production \times 8887)}$$



Volvo Car Corporation

Light Truck Vehicle Information

MFR	Truckline Name	4-Wheel Drive	Truck Criteria						3-Row Seating
			not<28 deg	not<14 deg	not<20 deg	not<20 cm	not<18 cm		
			Approach Angle	Breakover Angle	Departure Angle	Running Clearance	Front Axle Clearance	Rear Axle Clearance	
Volvo	XC40 AWD	Yes	21.7	21.9	30.4	21.1	21.8	25.8	No
Volvo	V60CC AWD	Yes	17.0	18.4	22.8	20.1	21.2	25.2	No
Volvo	V90CC AWD	Yes	18.9	17.7	20.7	20.1	21.0	25.2	No
Volvo	XC60 AWD	Yes	23.1	20.8	25.5	21.6	22.5	23.2	No
Volvo	XC90 FWD	No	23.8	21.3	23.3	23.8	23.8	24.4	Yes
Volvo	XC90 AWD	Yes	23.8	21.3	23.3	23.8	23.8	24.4	Yes

All values in the above table are determined at EPA Curb Weight