

**MID-CAFE REPORT  
FOR  
2020 MODEL YEAR  
OF  
KIA MOTORS CORPORATION**

**- Light Trucks -**



NOTE : THIS REPORT CONTAINS [REDACTED] INFORMATION.

THE PRODUCTION VOLUME IS [REDACTED] INFORMATION  
AND THIS INFORMATION IS DEEMED BY KMC TO BE EXEMPT  
FROM DISCLOSURE UNDER 5 U.S.C. 552(B)(4) AND  
49 U.S.C 32910(c).

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Note \* : These sections contain [REDACTED] information

## **I. Introduction**

As required by 49 CFR Part 537.9, estimated fuel economy values for Sportage AWD, Sorento AWD, Sorento FWD, Telluride AWD, Telluride FWD, Sedona are included in this report.

The certification emission-data and fuel economy data of the above-mentioned vehicles used to get the following fuel economy values were tested in accordance with applicable exhaust emission test procedures and complied with applicable 2020 exhaust emission standards as defined 40 CFR §86.

## II. Projected Average and Required Fuel Economy

### 1. Projected Average Fuel Economy

- LT : 29.3 MPG (without A/C efficiency & off-cycle credits)

- LT : **30.3** MPG (with A/C efficiency & off-cycle credits)

### 2. Projected Required Fuel Economy

- LT : **32.8** MPG

At this point in time and based on available best present information, the above projections represent the KIA MOTORS CORPORATION (KMC) average and required fuel economy for the 2020 model year for the purpose of the Act.

## II. Projected Average and Required Fuel Economy

### - Projected Required Fuel Economy

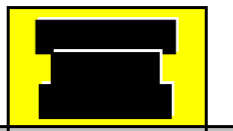
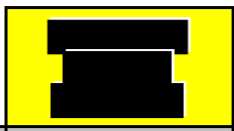
Model Type Description	Carline	Basic Engine (disp)	Drive	T/M class	Base Tire	Projected sales	Track width FR (inch)	Track width RR (inch)	Average Track width (inch)	Wheelbase (inch)	footprint (sqr feet)	Target standard	ETW	IWC
Sportage 2.4 AWD	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	11,399	63.5	64.0	63.8	105.1	46.6	35.15	3,875	4,000
	Sportage AWD	2.4L GDI	AWD	SA6	225/55R18	7,920	63.5	64.0	63.8	105.1	46.6	35.15	3,875	4,000
	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	23,140	63.5	64.0	63.8	105.1	46.6	35.15	3,875	4,000
Sportage 2.0T AWD	Sportage AWD	2.0L T-GDI	AWD	SA6	225/55R18	13,077	63.5	64.0	63.8	105.1	46.6	35.15	3,875	4,000
	Sportage AWD	2.0L T-GDI	AWD	SA6	245/45R19	4,264	63.3	63.8	63.6	105.1	46.4	35.28	4,000	4,000
Sorento 2.4 FWD	Sorento FWD	2.4L GDI	FWD	SA6	235/65R17	24,133	64.3	64.7	64.5	109.4	49.0	33.69	4,250	4,000
Sorento 2.4 AWD	Sorento AWD	2.4L GDI	AWD	SA6	235/65R17	13,145	64.3	64.7	64.5	109.4	49.0	33.69	4,250	4,000
	Sorento FWD	3.3L GDI	FWD	SA8	235/65R17	13,980	64.3	64.7	64.5	109.4	49.0	33.69	4,250	4,000
Sorento 3.3 FWD	Sorento FWD	3.3L GDI	FWD	SA8	235/60R18	545	64.1	64.5	64.3	109.4	48.9	33.75	4,500	4,500
	Sorento FWD	3.3L GDI	FWD	SA8	235/55R19	5,271	64.1	64.5	64.3	109.4	48.9	33.75	4,500	4,500
	Sorento AWD	3.3L GDI	AWD	SA8	235/65R17	5,326	64.3	64.7	64.5	109.4	49.0	33.69	4,500	4,500
Sorento 3.3 AWD	Sorento AWD	3.3L GDI	AWD	SA8	235/60R18	0	64.1	64.5	64.3	109.4	48.9	33.75	4,500	4,500
	Sorento AWD	3.3L GDI	AWD	SA8	235/55R19	9,491	64.1	64.5	64.3	109.4	48.9	33.75	4,750	4,500
	Telluride FWD	3.8L GDI	FWD	SA8	245/60R18	16,736	67.2	67.6	67.4	114.2	53.5	31.26	4,500	4,500
Telluride 3.8 FWD	Telluride FWD	3.8L GDI	FWD	SA8	245/50R20	20,207	67.2	67.6	67.4	114.2	53.5	31.26	4,500	4,500
	Telluride AWD	3.8L GDI	AWD	SA8	245/60R18	19,277	67.2	67.6	67.4	114.2	53.5	31.26	4,750	4,500
Telluride 3.8 AWD	Telluride AWD	3.8L GDI	AWD	SA8	245/50R20	30,375	67.2	67.6	67.4	114.2	53.5	31.26	4,750	4,500
	Sedona	3.3L GDI	FWD	SA8	235/65R17	5,396	68.7	69.0	68.8	120.5	57.6	29.33	4,750	4,500
Sedona 3.3	Sedona	3.3L GDI	FWD	SA8	235/60R18	6,287	68.5	68.8	68.6	120.5	57.4	29.41	5,000	5,000

Projected Required Fuel Economy	32.8
Projected Total Sales Volume	229,969

$$CAFE_{required} = \frac{\sum_i PRODUCTION_i}{\sum_i TARGET_i}$$

**II. Projected Average and Required Fuel Economy**

- Projected Average Fuel Economy (without A/C efficiency & off-cycle credits)



Model Type Description	Carline	Basic Engine (disp)	Drive	T/M class	Base Tire	Projected sales	City_FE	Hwy_FE	Combined FE	IWC	Model Type Comb.FE	Model Type Vol
Sportage 2.4 AWD	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	11,399	27.4	35.9	30.6675	4,000	30.6	55,536
	Sportage AWD	2.4L GDI	AWD	SA6	225/55R18	7,920	28.1	37.2	31.5759	4,000		
	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	23,140	27.2	35.7	30.4640	4,000		
	Sportage AWD	2.4L GDI	AWD	SA6	225/55R18	13,077	27.1	35.5	30.3294	4,000		
Sportage 2.0T AWD	Sportage AWD	2.0L T-GDI	AWD	SA6	245/45R19	4,264	24.4	34.4	28.0722	4,000	28.1	4,264
Sorento 2.4 FWD	Sorento FWD	2.4L GDI	FWD	SA6	235/65R17	24,133	28.0	40.7	32.5740	4,000	32.6	24,133
Sorento 2.4 AWD	Sorento AWD	2.4L GDI	AWD	SA6	235/65R17	13,145	26.6	37.1	30.4822	4,000	30.5	13,145
Sorento 3.3 FWD	Sorento FWD	3.3L GDI	FWD	SA8	235/65R17	13,980	24.6	39.5	29.6295	4,000	29.2	19,796
	Sorento FWD	3.3L GDI	FWD	SA8	235/60R18	545	23.8	37.8	28.5600	4,500		
	Sorento FWD	3.3L GDI	FWD	SA8	235/55R19	5,271	23.7	37.2	28.3258	4,500		
Sorento 3.3 AWD	Sorento AWD	3.3L GDI	AWD	SA8	235/65R17	5,326	24.2	36.5	28.5258	4,500	27.3	14,817
	Sorento AWD	3.3L GDI	AWD	SA8	235/60R18	0	24.2	36.5	28.5258	4,500		
	Sorento AWD	3.3L GDI	AWD	SA8	235/55R19	9,491	22.6	34.4	26.7253	4,500		
Telluride 3.8 FWD	Telluride FWD	3.8L GDI	FWD	SA8	245/60R18	16,736	25.4	37.4	29.6862	4,500	29.7	36,943
	Telluride FWD	3.8L GDI	FWD	SA8	245/50R20	20,207	25.4	37.4	29.6862	4,500		
Telluride 3.8 AWD	Telluride AWD	3.8L GDI	AWD	SA8	245/60R18	19,277	23.9	34.4	27.7055	4,500	27.3	49,652
	Telluride AWD	3.8L GDI	AWD	SA8	245/50R20	30,375	23.2	34.1	27.0978	4,500		
Sedona 3.3	Sedona	3.3L GDI	FWD	SA8	235/65R17	5,396	23.2	34.9	27.3217	4,500	27.4	11,683
	Sedona	3.3L GDI	FWD	SA8	235/60R18	6,287	23.2	35.3	27.4313	5,000		

<b>Projected Average Fuel Economy</b>	<b>29.3</b>
<b>Projected Total Sales Volume</b>	<b>229,969</b>

III. Vehicle Configuration Information



Model Type Description	Carline	Basic Engine (disp)	Drive	T/M class	Base Tire	Engine code	LWV	ETW	Eng. Disp.	Net rated power (kW)	Net horsepower	Fuel system	Emission control system	T/M class	Number of forward speed	O/D	N/V	Axle ratio	Combined FE	Projected sales	Road load power at 50 mph	Satisfy at least one of items in 523.5(a)?	Satisfy 523.5(b)(1)?	Approach angle ≥ 28°	Breakover angle ≥ 14°	Departure angle ≥ 20°	Running clearance ≥ 20cm	FR/RR clearance ≥ 18cm	IWC
Sportage 2.4 AWD	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	G4KJ-AC	3,788	3,875	2.4	135	181	DFI	TWC	SA6	6	Yes	30.8	3.20	30,6675	11,399	16.1	No	Yes (AWD)	Yes (28.0)	Yes (18.2)	Yes (24.6)	No (17.2)	Yes (23.1)	4,000
	Sportage AWD	2.4L GDI	AWD	SA6	225/55R18	G4KJ-AC	3,933	3,875	2.4	135	181	DFI	TWC	SA6	6	Yes	31.1	3.20	31,5759	7,920	15.8	No	Yes (AWD)	Yes (28.0)	Yes (18.2)	Yes (24.6)	No (17.2)	Yes (23.1)	4,000
	Sportage AWD	2.4L GDI	AWD	SA6	225/60R17	G4KJ-ACS	3,788	3,875	2.4	135	181	DFI	TWC	SA6	6	Yes	30.8	3.20	30,4640	23,140	16.1	No	Yes (AWD)	Yes (28.0)	Yes (18.2)	Yes (24.6)	No (17.2)	Yes (23.1)	4,000
Sportage 2.0T AWD	Sportage AWD	2.0L T-GDI	AWD	SA6	245/45R19	G4KH-AC	4,090	4,000	2.0	175	235	DFI	TWC	SA6	6	Yes	31.9	3.32	28,0722	4,264	16.3	No	Yes (AWD)	Yes (28.0)	Yes (18.2)	Yes (24.6)	No (17.2)	Yes (23.1)	4,000
	Sportage AWD	2.0L T-GDI	AWD	SA6	245/45R19	G4KH-AC	4,110	4,250	2.4	138	185	DFI	TWC	SA6	6	Yes	33.9	3.65	32,5740	24,133	14.5	Yes, 3rd	No	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,000
Sorento 2.4 FWD	Sorento AWD	2.4L GDI	AWD	SA6	235/65R17	G4KJ-AC	4,253	4,250	2.4	138	185	DFI	TWC	SA6	6	Yes	33.9	3.65	30,4822	13,145	15.8	Yes, 3rd	Yes (AWD)	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,000
	Sorento FWD	3.3L GDI	FWD	SA8	235/65R17	G6DM-AC	4,268	4,250	3.3	214	287	DFI	TWC	SA8	8	Yes	25.9	3.32	29,6295	13,980	14.4	Yes, 3rd	No	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,000
Sorento 2.4 AWD	Sorento FWD	3.3L GDI	FWD	SA8	235/60R18	G6DM-AC	4,343	4,500	3.3	214	287	DFI	TWC	SA8	8	Yes	25.9	3.32	28,5600	545	14.9	Yes, 3rd	No	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
	Sorento FWD	3.3L GDI	FWD	SA8	235/55R18	G6DM-AC	4,471	4,500	3.3	214	287	DFI	TWC	SA8	8	Yes	25.9	3.32	28,3258	5,271	15.2	Yes, 3rd	No	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
Sorento 3.3 AWD	Sorento AWD	3.3L GDI	AWD	SA8	235/65R17	G6DM-AC	4,476	4,500	3.3	214	287	DFI	TWC	SA8	8	Yes	27.3	3.51	28,5258	5,326	15.3	Yes, 3rd	Yes (AWD)	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
	Sorento AWD	3.3L GDI	AWD	SA8	235/60R18	G6DM-AC	4,476	4,500	3.3	214	287	DFI	TWC	SA8	8	Yes	27.3	3.51	28,5258	0	15.3	Yes, 3rd	Yes (AWD)	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
Sorento 3.3 FWD	Sorento FWD	3.3L GDI	FWD	SA8	235/65R17	G6DM-AC	4,603	4,750	3.3	214	287	DFI	TWC	SA8	8	Yes	27.1	3.51	26,7253	9,491	15.9	Yes, 3rd	Yes (AWD)	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
	Sorento FWD	3.3L GDI	FWD	SA8	235/60R18	G6DM-AC	4,603	4,750	3.3	214	287	DFI	TWC	SA8	8	Yes	27.1	3.51	26,7253	9,491	15.9	Yes, 3rd	Yes (AWD)	No (18.4)	Yes (18.6)	No (23.3)	No (20.9)	Yes (26.2)	4,500
Telluride 3.8 FWD	Telluride FWD	3.8L GDI	FWD	SA8	245/60R18	G6DN-AC	4,504	4,500	3.8	217	291	DFI	TWC	SA8	8	Yes	28.2	3.51	29,6862	16,736	15.2	Yes, 3rd	Yes (AWD)	No (18.5)	Yes (17.6)	Yes (21.3)	Yes (20.3)	Yes (20.1)	4,500
	Telluride FWD	3.8L GDI	FWD	SA8	245/60R20	G6DN-AC	4,504	4,500	3.8	217	291	DFI	TWC	SA8	8	Yes	28.2	3.51	29,6862	20,207	15.2	Yes, 3rd	Yes (AWD)	No (18.5)	Yes (17.6)	Yes (21.3)	Yes (20.3)	Yes (20.1)	4,500
Telluride 3.8 AWD	Telluride AWD	3.8L GDI	AWD	SA8	245/60R18	G6DN-AC	4,647	4,750	3.8	217	291	DFI	TWC	SA8	8	Yes	27.3	3.65	27,7055	19,277	16.5	Yes, 3rd	Yes (AWD)	No (18.5)	Yes (17.6)	Yes (21.3)	Yes (20.3)	Yes (20.1)	4,500
	Telluride AWD	3.8L GDI	AWD	SA8	245/60R20	G6DN-AC	4,650	4,750	3.8	217	291	DFI	TWC	SA8	8	Yes	28.2	3.65	27,0978	30,375	17.0	Yes, 3rd	Yes (AWD)	No (18.5)	Yes (17.6)	Yes (21.3)	Yes (20.3)	Yes (20.1)	4,500
Sedona 3.3	Sedona	3.3L GDI	FWD	SA8	235/65R17	G6DM-ACMDPS	4,832	4,750	3.3	206	276	DFI	TWC	SA8	8	Yes	27.6	3.51	27,3217	5,396	16.0	Yes, 3rd	No	No (13.3)	Yes (15.5)	No (19.9)	No (17.1)	N/A	4,500
	Sedona	3.3L GDI	FWD	SA8	235/60R18	G6DM-ACMDPS	4,978	5,000	3.3	206	276	DFI	TWC	SA8	8	Yes	27.6	3.51	27,4313	6,287	15.9	Yes, 3rd	No	No (13.3)	Yes (15.5)	No (19.9)	No (17.1)	N/A	5,000

IV. Projected A/C Efficiency Credits

Model Type Description	Carline	Basic Engine (disp)	Drive	T/M class (Drive, type, gear)	Refrigerant	A/C Drive System	Projected sales	Reduc'd Reheat with variable displ compressor	Reduced Reheat with fixed displ or pneumatic compressor	Default to Recirc with feedback sensor	Default to Recirc without feedback sensor	Efficient Blower Motor Controls	Internal Heat Exchanger	Improved Condens or and/or Evaporator (requires EPA approval)	Oil Separator (requires EPA approval)	Total Menu-based Credits	A/C Efficiency Credit	VLM
								2.2 gpm	1.4 gpm	2.2 gpm	1.4 gpm	1.1 gpm	1.4 gpm	1.4 gpm	0.7 gpm	gpm	megagrams	
Sportage 2.4 AWD	Sportage AWD	2.4L GDI	AWD	SA6	R-1234yf	Belt Driven	55,536	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	53,938	225,865
Sportage 2.0T AWD	Sportage AWD	2.0L T-GDI	AWD	SA6	R-1234yf	Belt Driven	4,264	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	4,141	225,865
Sorento 2.4 FWD	Sorento FWD	2.4L GDI	FWD	SA6	R-1234yf	Belt Driven	24,133	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	23,438	225,865
Sorento 2.4 AWD	Sorento AWD	2.4L GDI	AWD	SA6	R-1234yf	Belt Driven	13,145	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	12,767	225,865
Sorento 3.3 FWD	Sorento FWD	3.3L GDI	FWD	SA8	R-1234yf	Belt Driven	19,796	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	19,226	225,865
Sorento 3.3 AWD	Sorento AWD	3.3L GDI	AWD	SA8	R-1234yf	Belt Driven	14,817	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	14,391	225,865
Telluride 3.8 FWD	Telluride FWD	3.8L GDI	FWD	SA8	R-1234yf	Belt Driven	36,943	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	35,880	225,865
Telluride 3.8 AWD	Telluride AWD	3.8L GDI	AWD	SA8	R-1234yf	Belt Driven	49,652	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	48,223	225,865
Sedona	Sedona	3.3L GDI	FWD	SA8	R-1234yf	Belt Driven	11,683	2.2	0.0	0.0	0.0	0.0	1.4	0.0	0.7	4.3	11,347	225,865

Projected AC Efficiency Credit	223,351		VLM	225,865
Projected Total Sales Volume	229,969			
FCIV <sub>AC</sub> (Gal/mi)	0.000483854			

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



V. Projected Off-cycle Credits



Model Type Description	Carline	Basic Engine (disp)	Drive	T/M class (Drive, type, gear)	Description	Projected sales	Off-cycle benefit per vehicle		VLM
							gpm	megagrams	
Sportage 2.4 AWD	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.2, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	23,323	4.9	25,812	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.2, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	4,940	5.4	6,025	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.6, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	14,465	5.3	17,316	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.6, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	3,318	5.8	4,347	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.4, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	4,859	5.1	5,597	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.4, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	1,021	5.6	1,291	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.4, Active transmission warm-up 3.2, Active seat ventilation 1.3, High-Efficiency Alternator 0.5	3,072	6.4	4,441	225,865
	Sportage AWD	2.4L GDI	AWD	SA6	Glazing 1.4, Active transmission warm-up 3.2, Active seat ventilation 1.3, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	538	6.9	838	225,865
Sportage 2.0T AWD	Sportage AWD	2.0L T-GDI	AWD	SA6	Glazing 1.4, Lamp 0.12, Active seat ventilation 1.3, High-Efficiency Alternator 0.5	3,546	3.3	2,643	225,865
	Sportage AWD	2.0L T-GDI	AWD	SA6	Glazing 1.4, Lamp 0.12, Active seat ventilation 1.3, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	718	3.8	616	225,865
Sorento 2.4 FWD	Sorento FWD	2.4L GDI	FWD	SA6	Glazing 1.4, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	9,004	5.2	10,575	225,865
	Sorento FWD	2.4L GDI	FWD	SA6	Glazing 1.4, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	476	5.7	613	225,865
	Sorento FWD	2.4L GDI	FWD	SA6	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	11,556	5.1	13,311	225,865
	Sorento FWD	2.4L GDI	FWD	SA6	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	3,097	5.6	3,917	225,865
Sorento 2.4 AWD	Sorento AWD	2.4L GDI	AWD	SA6	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	10,773	5.1	12,410	225,865
	Sorento AWD	2.4L GDI	AWD	SA6	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	2,372	5.6	3,000	225,865
Sorento 3.3 FWD	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	7,923	5.1	9,127	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	2,895	5.6	3,662	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	586	5.1	675	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	219	5.6	277	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	2,225	5.1	2,563	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	867	5.6	1,097	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	1,868	5.1	2,152	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	903	5.6	1,142	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Active seat ventilation 1.3, High-Efficiency Alternator 0.5	1,593	6.4	2,303	225,865
	Sorento FWD	3.3L GDI	FWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Active seat ventilation 1.3, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	717	6.9	1,117	225,865
Sorento 3.3 AWD	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	5,976	5.1	6,884	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	2,017	5.6	2,551	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	463	5.1	533	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.06, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	137	5.6	173	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	1,409	5.1	1,623	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	457	5.6	578	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, High-Efficiency Alternator 0.5	1,369	5.1	1,577	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	542	5.6	686	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Active seat ventilation 1.3, High-Efficiency Alternator 0.5	1,694	6.4	2,449	225,865
	Sorento AWD	3.3L GDI	AWD	SA8	Glazing 1.3, Lamp 0.12, Active transmission warm-up 3.2, Active seat ventilation 1.3, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	753	6.9	1,174	225,865
Telluride 3.8 FWD	Telluride FWD	3.8L GDI	FWD	SA8	Glazing 1.3, Lamp 0.2, Active seat ventilation 1.3, Engine Idle start-stop 2.9	17,341	5.7	22,325	225,865
	Telluride FWD	3.8L GDI	FWD	SA8	Glazing 1.3, Lamp 0.2, Active seat ventilation 1.3, Solar reflective surface coating 0.5, Engine Idle start-stop 2.9	19,602	6.2	27,450	225,865
Telluride 3.8 AWD	Telluride AWD	3.8L GDI	AWD	SA8	Glazing 1.3, Lamp 0.2, Active seat ventilation 1.3, Engine Idle start-stop 2.9	21,897	5.7	28,191	225,865
	Telluride AWD	3.8L GDI	AWD	SA8	Glazing 1.3, Lamp 0.2, Active seat ventilation 1.3, Solar reflective surface coating 0.5, Engine Idle start-stop 2.9	27,755	6.2	38,867	225,865
Sedona	Sedona	3.3L GDI	FWD	SA8	High-Efficiency Alternator 0.5	777	0.5	88	225,865
	Sedona	3.3L GDI	FWD	SA8	Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	332	1.0	75	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.7, High-Efficiency Alternator 0.5	7,589	2.2	3,771	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.7, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	2,126	2.7	1,297	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.8 High-Efficiency Alternator 0.5	327	2.3	170	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.8, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	76	2.8	48	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.8, Lamp 0.6, Active seat ventilation 1.3, High-Efficiency Alternator 0.5	355	4.2	337	225,865
	Sedona	3.3L GDI	FWD	SA8	Glazing 1.8, Lamp 0.6, Active seat ventilation 1.3, Solar reflective surface coating 0.5, High-Efficiency Alternator 0.5	101	4.7	107	225,865

\* Credits are estimated based on 2019MY data. Exact credits will be calculated when submitting 2020MY Final Report.

\* Off-cycle technologies under EPA review have not been reflected yet.

Projected OC Credit	277,821	VLM	225,865
Projected Total Sales Volume	229,969		
FCIV <sub>OC</sub> (Gal/mi)	0.000601855		

$$FCIV_{OC} (\text{gal/mi}) = \frac{(OC\text{Credit} \times 1,000,000)}{(VLM \times Production \times 8867)}$$

## VI. Projected Average Fuel Economy Adjustment

### 1. FCIV<sub>AC</sub>

Projected AC Efficiency Credit	223,351
Projected Total Sales Volume	229,969
FCIV <sub>AC</sub> (Gal/mi) <sup>2)</sup>	0.000483854

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

### 2. FCIV<sub>OC</sub>

Projected OC Credit <sup>1)</sup>	277,821
Projected Total Sales Volume	229,969
FCIV <sub>OC</sub> (Gal/mi) <sup>2)</sup>	0.000601855

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

### 3. FCIV<sub>PU</sub>

Projected PU Credit	0
Projected Total Sales Volume	229,969
FCIV <sub>PU</sub> (Gal/mi) <sup>2)</sup>	0.000000000

$$FCIV_{PU} \text{ (gal/mi)} = \frac{(PUCredit \times 1,000,000)}{(225,865 \times Production \times 8887)}$$

### 4. Average MPG

Average MPG	30.3
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P4	MPG	29.3
P6	FCIV <sub>AC</sub> (Gal/mi)	0.000483854
P7	FCIV <sub>OC</sub> (Gal/mi)	0.000601855
N/A	FCIV <sub>PU</sub> (Gal/mi)	0.000000000

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

VLM	225,865
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1) Credits are estimated based on 2019MY data. Exact credits will be calculated when submitting 2020MY Final Report.

2) Not rounded, only shown in 9 decimal places.