

Greenhouse Gas Emissions Factors as CO₂ equivalents		US EPA: https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
	Sources:	Federal Register (2010). Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, page 25,330, footnote 2 https://www.govinfo.gov/content/pkg/FR-2010-05-07/pdf/2010-8159.pdf IPCC (2006). 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Volume 2 (Energy). Intergovernmental Panel on Climate Change, Geneva, Switzerland. https://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html
Gasoline	8.887E-03	metric ton / gallon
Diesel	1.018E-02	metric ton / gallon
Propane	0.00576145	$4.24 \text{ lbs/gallon} \times 0.817 \text{ lbs C/lb Propane} \times 0.4536 \text{ kilograms/pound} \times 44 \text{ kg CO}_2/12 \text{ kg C} \times 1 \text{ metric ton}/1,000 \text{ kg} = \mathbf{0.00576 \text{ metric tons CO}_2/\text{gallon}}$
#2 Heating Oil	0.01022880	$1/42 \text{ barrels/gallon} \times 429.61 \text{ kg CO}_2/\text{barrel} \times 1/1,000 \text{ kg/metric ton} = 0.0102 \text{ metric tons CO}_2/\text{gallon}$

Spreadsheet Name	ITEM	Date Acquired	S/N or VIN	Model
EQ1 - PD	2016 Ford Explorer	(for example 9/16/2008)	1FM5K8AR8GGA13393	FORD Explorer
EQ2 - PD	2013 Dodge Charger		2C3CDXAG3DH568254	DODGE Charger
EQ3 - PD	2018 Ford Explorer		1FM5K8AR2JGC45673	FORD Explorer
EQ4 - PD	2020 Ford F150 Truck		1FTEW1P41LKD12131	FORD F150 Truck
EQ5 - PD				
EQ6 - PD	2010 Dodge Charger		2B3AA4CV6AH318333	DODGE Charger
EQ7 - PD	2014 Ford Taurus		1FAHP2MK8EG102978	FORD Taurus
EQ8 - PD	2015 Ford Interceptor		1FAHP2L88FG184864	FORD Interceptor
pickup	2012 Chevrolet Pickup		1GC0KVC7CF203033	Chevrolet Silverado, 3/4 ton pickup
Toro				
truck #2				
white van	2010 Dodge Van		2D4RN1AE6AR339400	DODGE Grand Caravan
backhoe	2004 Loader Backhoe		T0410GX937042	John Deere 410G Loader Backhoe
chipper				
Dodge 5500	2015 Dodge pickup truck		3C7WRNAL5FG625779	DODGE 5500 Pickup truck
excavator				
grader	2015 Caterpillar AWD grader		M9H00355	Caterpillar 120M2 AWD motor grader
John Deere	1976 Tractor		116J57L	830 Tractor
loader	2013 Wheel Loader		CAT0924KJPWR0665	Caterpillar loader/backhoe/excavator
skid steer	GEHL Skid Steer		04640K00310664	GEHL 4640E SKID STEER
trackless	2018 Sidewalk Tractor		1366	MT7 Sidewalk tractor w/attachments
truck #1	2019 Ford F550 dumptruck		1FDUF5HTXKEE57850	FORD F550 super duty w/attachments
truck #3	2015 Ford F550		1FDUF5HTXFEC47481	FORD F550
truck #4	2017 Mack Dump Truck		1M2AX09C2HM035314	MACK GU713 dump truck w/attachments
truck #5	2011 International 7400		1HTWDAZR8BJ275797	INTERNATIONAL 7400
truck #6	2013 International 7400		1HTWDAZR3DH114610	INTERNATIONAL 7400

			FY 2020- 2021 (YTD)						FY 2019- 2020				
		Starting Mileage (or hours)	Ending Mileage (or hours)		Gallons Used	MPG	CO ₂ -eq (mt)*	Starting Mileage (or hours)	Ending Mileage (or hours)		Gallons Used	MPG	CO ₂ -eq (mt)*
Vehicle / Equipment	Fuel Type			YTD miles						YTD miles			
cans	GAS				39.6	0.0	0.4				163.1	0.0	1.4
EQ1 - PD	GAS	39861	42178	2317	170.4	13.6	1.5	31267	39861	8594	810.3	10.6	7.2
EQ2 - PD	GAS	85295	90049	4754	365.5	13.0	3.2	71409	85295	13886	1105.5	12.6	9.8
EQ3 - PD	GAS	15695	17584	1889	133.2	14.2	1.2	6948	15695	8747	683.1	12.8	6.1
EQ4 - PD	GAS	1642	2893	1251	115.1	10.9	1.0	120	1642	1522	120.5	12.6	1.1
EQ6 - PD	GAS	157567	160135	2568	189.6	13.5	1.7	151889	157567	5678	529.2	10.7	4.7
EQ7 - PD	GAS	72332	74441	2109	190	11.1	1.7	62104	72332	10228	764.5	13.4	6.8
EQ8 - PD	GAS	45807	46386	579	37.2	15.6	0.3	38754.9	45807	7052.1	702.3	10.0	6.2
pickup	GAS	51820	52040	220	58.7	3.7	0.5	46349	51820	5471	734.7	7.4	6.5
Toro	GAS	764.4	865	100.6	149.6	0.7	1.3	587.8	764.4	176.6	232.4	0.8	2.1
Truck #2	GAS	51534	52396	862	152.1	5.7	1.4	51479	51534	55	27.1	2.0	0.2
White Van	GAS	74563	74750	187	14.2	13.2	0.1	71798	74563	2765	187.1	14.8	1.7
Burlett	GAS			0	0		0.0	23589	25000	1411	55	25.7	0.5
backhoe	DIESEL	6255.2	6328	72.8	139.8	0.5	1.4	5925	6255.2	330.2	505.2	0.7	5.1
cans	DIESEL				0		0.0				57.9	0.0	0.6
chipper	DIESEL	4232	4232	0	0		0.0	4179	4232	53	73.9	0.7	0.8
Dodge 5500	DIESEL	34640	35852	1212	144.9	8.4	1.5	27942	34640	6698	770.7	8.7	7.8
excavator	DIESEL				0		0.0				88.3	0.0	0.9
grader	DIESEL	2448	2567	119	415.7	0.3	4.2	2096.5	2448	351.5	1285.2	0.3	13.1
John Deere	DIESEL				0		0.0				20.9	0.0	0.2
loader	DIESEL	3812	3958	146	506.6	0.3	5.2	3026	3812	786	1899.6	0.4	19.3
skid-steer	DIESEL	1720	1739.6	19.6	15	1.3	0.2	1692	1720	28	29.9	0.9	0.3
trackless	DIESEL	342	447.7	105.7	12.5	8.5	0.1	169.1	342	172.9	347.9	0.5	3.5
truck #1	DIESEL	4963	5753	790	94.8	8.3	1.0	655	4963	4308	806	5.3	8.2
truck #3	DIESEL	34578	35780	1202	146.8	8.2	1.5	28993.1	34578	5584.9	822.4	6.8	8.4
truck #4	DIESEL	36574	39494	2920	638.8	4.6	6.5	24553	36574	12021	3320.5	3.6	33.8
truck #5	DIESEL	66757	67309	552	109.4	5.0	1.1	60152	66757	6605	1884.6	3.5	19.2
truck #6	DIESEL	52007	52247	240	65	3.7	0.7	44686	52007	7321	2046.7	3.6	20.8
Highway Garage	#2 Heating Oil				0		0.0				4906.1	0.0	50.2
Town Hall	#2 Heating Oil				0		0.0				1522.9	0.0	15.6
Police Station	Propane				0		0.0				1250.9	0.0	7.2
Town Office	Propane				0		0.0				1176.8	0.0	6.8
Town Hall	Propane				0		0.0				2586	0.0	14.9
WW - Generator Bldg	Propane				0		0.0				1324.6	0.0	7.6
WW - Lab Bldg	Propane				0		0.0				3235.2	0.0	18.6
WW - Chemical Bldg	Propane				0		0.0				829.6	0.0	4.8
WW - Supply Garage	Propane				0		0.0				393.5	0.0	2.3
WW - Small Garage	Propane				0		0.0				245.6	0.0	1.4
WW - Main Garage	Propane				0		0.0				475	0.0	2.7
Total CO2 emissions							37.7						328.6
* Emissions as CO ₂ equivalent, in metric tons													
Chart Summary	GAS - Police				1201		10.7				4715.4		41.9
	GAS - other				414.2		3.7				1399.4		12.4
	DIESEL				2289.3		23.3				13959.7		142.1
	#2 Heating Oil - Highway Garage				0		0.0				4906.1		50.2
	#2 Heating Oil - Town Hall				0		0.0				1522.9		15.6
	Propane - Police				0		0.0				1250.9		7.2
	Propane - Town Office				0		0.0				1176.8		6.8
	Propane - Town Hall				0		0.0				2586		14.9
	Propane - Waste Water				0		0.0				6503.5		37.5

	FY 2018-2019						FY 2017-2018					
Vehicle / Equipment	Starting Mileage (or hours)	Ending Mileage (or hours)	YTD miles	Gallons Used	MPG	CO ₂ -eq (mt)*	Starting Mileage (or hours)	Ending Mileage (or hours)	YTD miles	Gallons Used	MPG	CO ₂ -eq (mt)*
cans				150.2	0.0	1.3				119.2	0.0	1.1
EQ1 - PD	23291	31267	7976	729.2	10.9	6.5	14318	23291	8973	689.5	13.0	6.1
EQ2 - PD	57321	71409	14088	1169.6	12.0	10.4	48439	57321	8882	702.4	12.6	6.2
EQ3 - PD	157	6948	6791	553.2	12.3	4.9	93047	94902	1855	147.1	12.6	1.3
EQ4 - PD	84685	93637	8952	856.4	10.5	7.6	75963	84685	8722	653.5	13.3	5.8
EQ6 - PD	148226	151889	3663	330.6	11.1	2.9	96947	108226	11279	1055.3	10.7	9.4
EQ7 - PD	52446.8	62104	9657.2	661.2	14.6	5.9	42583	52446.8	9863.8	682.6	14.5	6.1
EQ8 - PD	30396	38754.9	8358.9	865.2	9.7	7.7	19039.3	30396	11356.7	863.8	13.1	7.7
pickup	40979	46349	5370	750.6	7.2	6.7	36445	40979	4534	643	7.1	5.7
Toro	436.6	587.8	151.2	181.6	0.8	1.6	291.9	436.6	144.7	213.5	0.7	1.9
Truck #2			0	0		0.0			0	0		0.0
White Van	66125	71798	5673	351.8	16.1	3.1	59491	66125	6634	398.8	16.6	3.5
Burlett			25589	1040.3	24.6	9.2	23469	53500	30031	886.2	33.9	7.9
backhoe	5672.4	5925	252.6	398.3	0.6	4.1	5289.2	5672.4	383.2	523.6	0.7	5.3
cans		0		11.9	0.0	0.1		0		103.2	0.0	1.1
chipper	4173.7	4179	5.3	14.6	0.4	0.1			0			0.0
Dodge 5500	22442	27942	5500	689.5	8.0	7.0	16435	22442	6007	692.1	8.7	7.0
excavator		0				0.0		0				0.0
grader	1613.2	2096.5	483.3	1758.1	0.3	17.9	953.9	1613.2	659.3	2654.7	0.2	27.0
John Deere		0		8.8	0.0	0.1		0				0.0
loader	2351	3026	675	1463.8	0.5	14.9	1637	2351	714	1456.9	0.5	14.8
skid-steer	1642	1692	50	57	0.9	0.6	1404.8	1642	237.2	282.2	0.8	2.9
trackless	4.5	169.1	164.6	370.5	0.4	3.8			0			0.0
truck #1			0			0.0			0			0.0
truck #3	22186	28993.1	6807.1	1263.7	5.4	12.9	13735	22186	8451	1471.4	5.7	15.0
truck #4	14935	24553	9618	2735.4	3.5	27.8	6836.6	14935	8098.4	2572.5	3.1	26.2
truck #5	54808	60152	5344	1618.9	3.3	16.5	47045	54808	7763	2359.3	3.3	24.0
truck #6	39502	44686	5184	1807.6	2.9	18.4	33658	39502	5844	1868.9	3.1	19.0
Highway Garage				4371.6	0.0	44.7				3813.9	0.0	39.0
Town Hall				2007	0.0	20.5				1789.3	0.0	18.3
Police Station				1242.4	0.0	7.2				1195.2	0.0	6.9
Town Office				1953.8	0.0	11.3				1580	0.0	9.1
Town Hall				2262.9	0.0	13.0				2412.1	0.0	13.9
WW - Generator Bldg				1727	0.0	10.0				1482.2	0.0	8.5
WW - Lab Bldg				2477.7	0.0	14.3				818.5	0.0	4.7
WW - Chemical Bldg				698.7	0.0	4.0				610.9	0.0	3.5
WW - Supply Garage				428.8	0.0	2.5				317.3	0.0	1.8
WW - Small Garage				271.4	0.0	1.6				227.1	0.0	1.3
WW - Main Garage				513.6	0.0	3.0				342	0.0	2.0
Total CO2 emissions						324.0						314.1
* Emissions as CO ₂ eq												
Chart Summary				5165.4		45.9				4794.2		42.6
				2474.5		22.0				2260.7		20.1
				12198.1		124.2				13984.8		142.4
				4371.6		44.7				3813.9		39.0
				2007		20.5				1789.3		18.3
				1242.4		7.2				1195.2		6.9
				1953.8		11.3				1580		9.1
				2262.9		13.0				2412.1		13.9
				6117.2		35.2				3798		21.9

BRANDON CO2 emissions (CO2 equivalent, in metric tons)

	2017-2018	2018-2019	2019-2020	2020-2021
GAS - Police	42.6	45.9	41.9	10.7
GAS - other	20.1	22.0	12.4	3.7
DIESEL	142.4	124.2	142.1	23.3
#2 Heating Oil - Highway Garage	39.0	44.7	50.2	0.0
#2 Heating Oil - Town Hall	18.3	20.5	15.6	0.0
Propane - Police	6.9	7.2	7.2	0.0
Propane - Town Office	9.1	11.3	6.8	0.0
Propane - Town Hall	13.9	13.0	14.9	0.0
Propane - Waste Water	21.9	35.2	37.5	0.0
Total CO2 emissions	314.1	324.0	328.6	37.7

