

## Municipal greenhouse gas emissions documentation

To determine the city's greenhouse gas (GHG) emissions, the CATF requested city data for the purchase of diesel, unleaded, and fuel oil for 2021. These fuels are used for transportation and building heat. The city also provided a number for all gallons of fuel procured for the school district. It was assumed that these were used for heating the school buildings, as the school buses are contracted and that fuel consumption is not purchased by the city. Finally, the city's portion of emissions due to the electric department's diesel generation is assumed to be 15% of the electricity generated by diesel.

Year 2021's numbers may be different than other years due to COVID, and should be compared to future years as the numbers are available.

The emissions for each fuel type are estimated using the EPA's [GHG Emission Factors Hub](#), which provides GHG emissions calculations for typical sources. This calculation does not include any estimate of GHG emissions for wastewater or solid waste, as was the case in the 2006 report.

Emission Source	Fuel in Gallons	kg CO2/ gallon	kg CO2	percentage to city	Total Tons CO2
Diesel Used for Electricity Generation	14838	10.21	151495.98	0.15	22.724397
Unleaded fuel for vehicles	31362.523	8.78	275362.9519	1	275.3629519
Diesel equipment fuel	2459	10.21	25106.39	1	25.10639
Diesel highway fuel	17703	10.21	180747.63	1	180.74763
Heating Oil	36609	11.27	412583.43	1	412.58343
School District Fuels	17966	11.27	202476.82	1	202.47682

Sector	Tons CO2	Percentage
Vehicles	481.2169719	43.00%
Buildings	615.06025	54.97%
Electricity	22.724397	2.03%