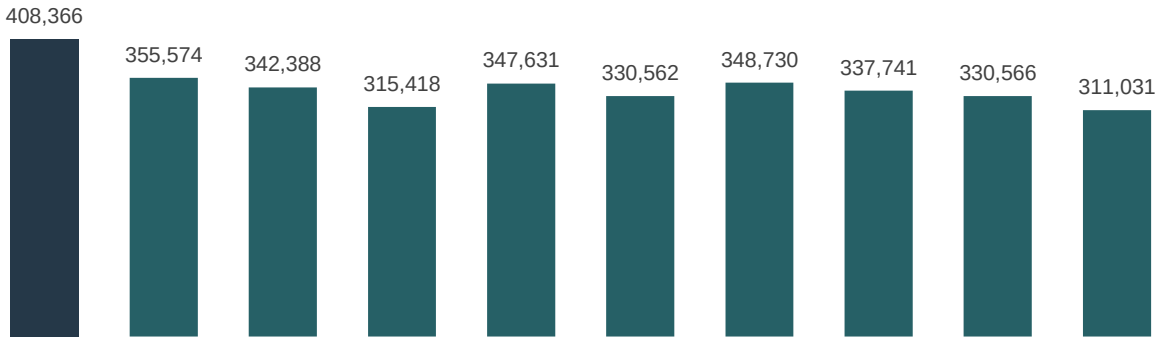
CITY OF COLUMBUS
2021 GREENHOUSE GAS INVENTORY
GOVERNMENT OPERATIONS

KEY TAKEAWAYS

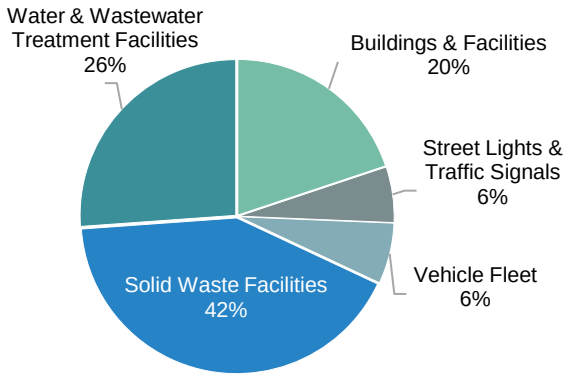
- Whereas the population of Columbus has grown over 22% since 2005 (the benchmark year), total emissions for government operations have decreased nearly 24% over the same time period.
- On a per capita basis, greenhouse gas emissions for government operations have decreased 37% from 2005 levels.
- All sectors show a decrease in emissions from 2020, with the largest changes in street lights and traffic signals—23%—and water and wastewater treatment facilities—10%.
- Solid waste and water and wastewater facilities continue to contribute the most to total emissions for government operations—42% and 26%—respectively.



Government Operations Sector	2005	2013	2014	2015	2016	2017	2018	2019	2020	2021
Buildings & Facilities	87,931	76,431	87,309	79,818	88,451	81,284	86,011	75,347	63,071	61,829
Street Lights & Traffic Signals	29,134	26,749	32,442	31,788	30,471	21,616	25,265	18,733	23,587	17,966
Vehicle Fleet	33,965	30,281	29,459	26,184	23,587	22,564	23,473	23,445	20,141	19,649
Solid Waste Facilities	97,245	97,218	98,597	102,290	108,272	110,308	111,721	122,917	133,148	130,287
Water & Wastewater Treatment Facilities	160,091	124,895	94,582	75,337	96,851	94,790	102,259	97,300	90,619	81,300
Total Emissions (Metric tons CO_2e)	**408,366**	**355,574**	**342,388**	**315,418**	**347,631**	**330,562**	**348,730**	**337,741**	**330,566**	**311,031**

Government Operations Sector	Percent Change in Total Emissions 2005 - 2021	Percent Change in Emissions per Capita 2005 - 2021
Buildings & Facilities	-29.7%	-42.5%
Street Lights & Traffic Signals	-38.3%	-49.6%
Vehicle Fleet	-42.1%	-52.7%
Solid Waste Facilities	34.0%	9.5%
Water & Wastewater Treatment Facilities	-49.2%	-58.5%
Total Emissions (Metric tons CO_2e)	**-23.8%**	**-37.7%**

Sector Percentage of Total

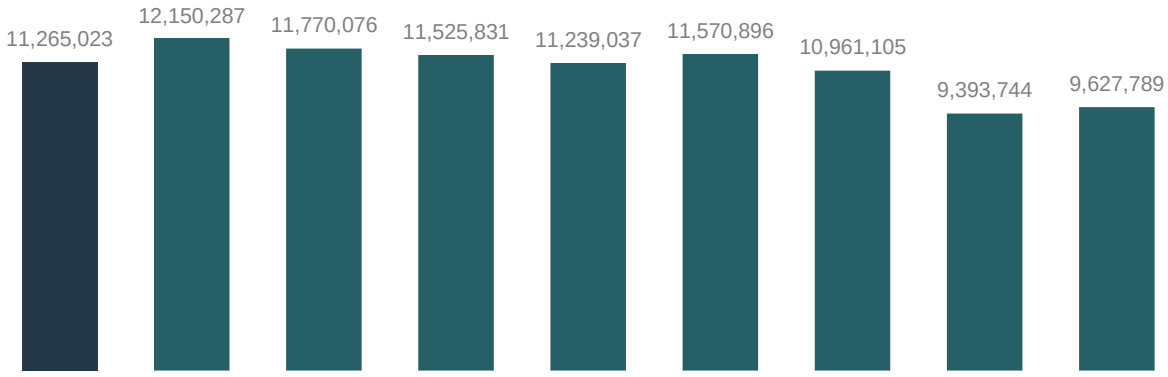


MID-OHIO REGIONAL MORPC PLANNING COMMISSION

CITY OF COLUMBUS
2021 GREENHOUSE GAS INVENTORY
COMMUNITY-SCALE

KEY TAKEAWAYS

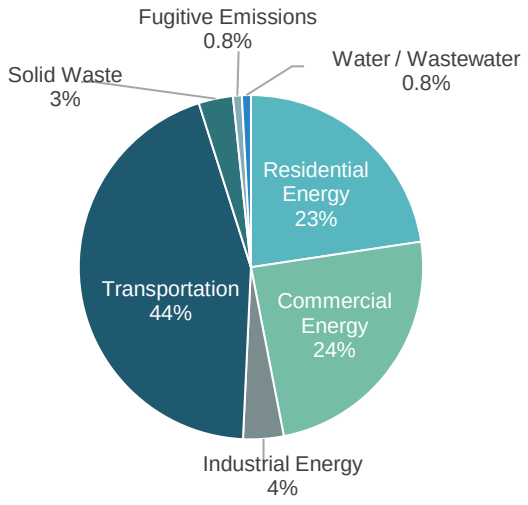
- Total greenhouse gas emissions across the City have decreased over 14% to the benchmark year of 2013, despite a 13% growth in population during the same time period.
- On a per capita basis, emissions are 24% lower than they were in 2013.
- Transportation continues to be the largest contributor of greenhouse gas emissions for Columbus at 44%, having grown by nearly 19% on a per capita basis from 2020 and 25% since 2013.
- The increase in emissions from 2020 to 2021 for the Industrial sector is primarily due to methodological changes. Analyzing commercial and industrial (C&I) sectors together is a better metric. C&I decreased 6% in total emissions from 2020 levels and almost 48% since 2013.



Community-Scale Sector	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential Energy	2,641,935	3,020,841	2,700,722	2,614,721	2,423,504	2,763,887	2,492,497	2,406,417	2,178,011
Commercial Energy	4,883,764	4,640,654	4,216,227	4,170,874	3,748,313	3,573,927	3,343,330	2,759,194	2,340,597
Industrial Energy	287,152	713,266	657,967	626,048	611,877	371,757	347,443	139,625	366,358
Transportation	3,015,878	3,365,275	3,796,842	3,696,430	4,029,621	4,373,857	4,292,211	3,615,510	4,271,031
Solid Waste	249,007	249,877	244,372	263,633	275,496	332,321	304,904	307,564	310,579
Fugitive Emissions	59,171	63,481	57,928	56,682	55,435	52,887	83,420	74,815	79,913
Water/Wastewater	128,116	96,893	96,017	97,444	94,790	102,259	97,300	90,619	81,300
Total Emissions (Metric tons CO_2e)	**11,265,023**	**12,150,287**	**11,770,076**	**11,525,831**	**11,239,037**	**11,570,896**	**10,961,105**	**9,393,744**	**9,627,789**

Community Scale Sector		Percent Change in Total Emissions 2013 to 2021		Percent Change in Emissions per Capita 2013 to 2021	
Residential Energy		-17.6%		-27.0%	
Commercial (C) Energy	C&I Energy Combined	-52.1%	-47.7%	-57.6%	-53.7%
Industrial (I) Energy		27.6%		13.0%	
Transportation		41.6%		25.4%	
Solid Waste		24.7%		10.4%	
Fugitive Emissions		35.1%		19.6%	
Water/Wastewater		-36.5%		-43.8%	
Total Emissions		**-14.5%**		**-24.3%**	

Sector Percentage of Total



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