

***2019 Greenhouse Gas Emissions Inventory  
Laurel Creech***



# History of Nashville's GHG Inventories

**2009: Mayor's Climate Protection Agreement**

**2005 & 2011 GHG Inventories**

**2014: Compact of Mayors**

**2014 GHG Inventory**



**2015: Global Covenant of Mayors**

**GHG Wedge Analysis**

**2017 GHG Inventory**

**2021: Climate Action Report**

**GHG Goals: 80% reduction X 2050**

**2019 GHG Inventory**

## BADGES





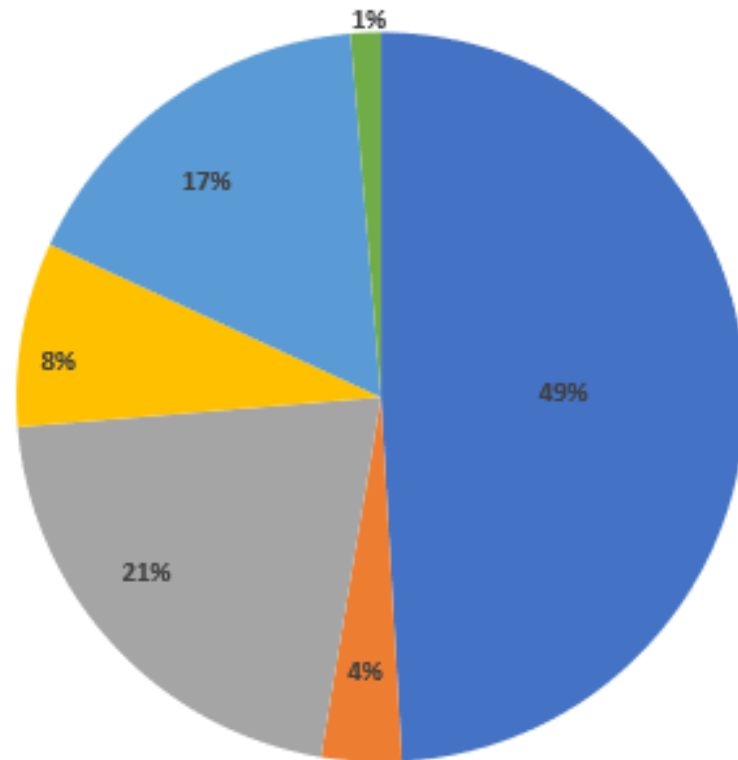
# Community GHG Emissions Comparisons

CO2e Emissions Comparisons of 2005, 2011, 2014, 2017 & 2019 Community GHG Inventories					
Community Inventories					
Sectors	2005	2011	2014	2017	2019
<i>Transportation &amp; Mobile Sources</i>	4,673,831	4,489,677	5,015,806	5,610,743	5,694,132
<i>Solid Waste</i>	722,897	342,791	530,723	406,068	454,903
<i>Commercial Energy</i>	3,969,299	3,723,787	3,003,329	2,407,955	2,248,302
<i>Industrial Energy</i>	1,599,172	1,365,688	992,843	934,431	946,508
<i>Residential Energy</i>	3,425,508	3,323,045	2,604,297	1,919,763	1,830,724
<i>Process &amp; Fugitive Emissions</i>	-	-	105,427	151,791	24,220
<i>Water &amp; Wastewater</i>	-	-	-	-	57,755
<b>Total CO2e Emissions (metric tons)</b>	<b>14,390,707</b>	<b>13,244,988</b>	<b>12,252,425</b>	<b>11,430,751</b>	<b>11,256,544</b>
<b>Community emissions per person</b>	<b>26.17</b>	<b>20.84</b>	<b>18.33</b>	<b>16.54</b>	<b>16.22</b>

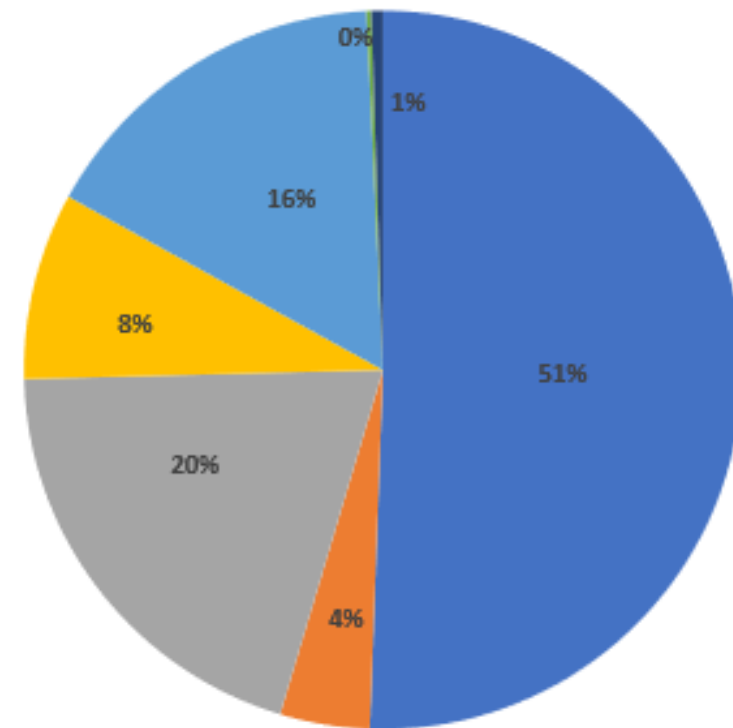


## Community GHG Emissions Comparisons

Nashville 2017 Emissions



Nashville 2019 Emissions



- Transportation
- Solid Waste
- Commercial
- Industrial
- Residential
- Fugitive Emissions
- Water & Wastewater



## Community GHG Emissions Comparisons

### Electricity kWh

	2014	2017	2019
Residential	4,243,333,464	3,792,104,680	4,108,406,229
Commercial	5,318,818,523	5,298,729,847	5,534,812,601
Industrial	1,047,868,177	1,051,145,295	896,059,458
Total	10,610,020,164	10,141,979,822	10,539,278,288

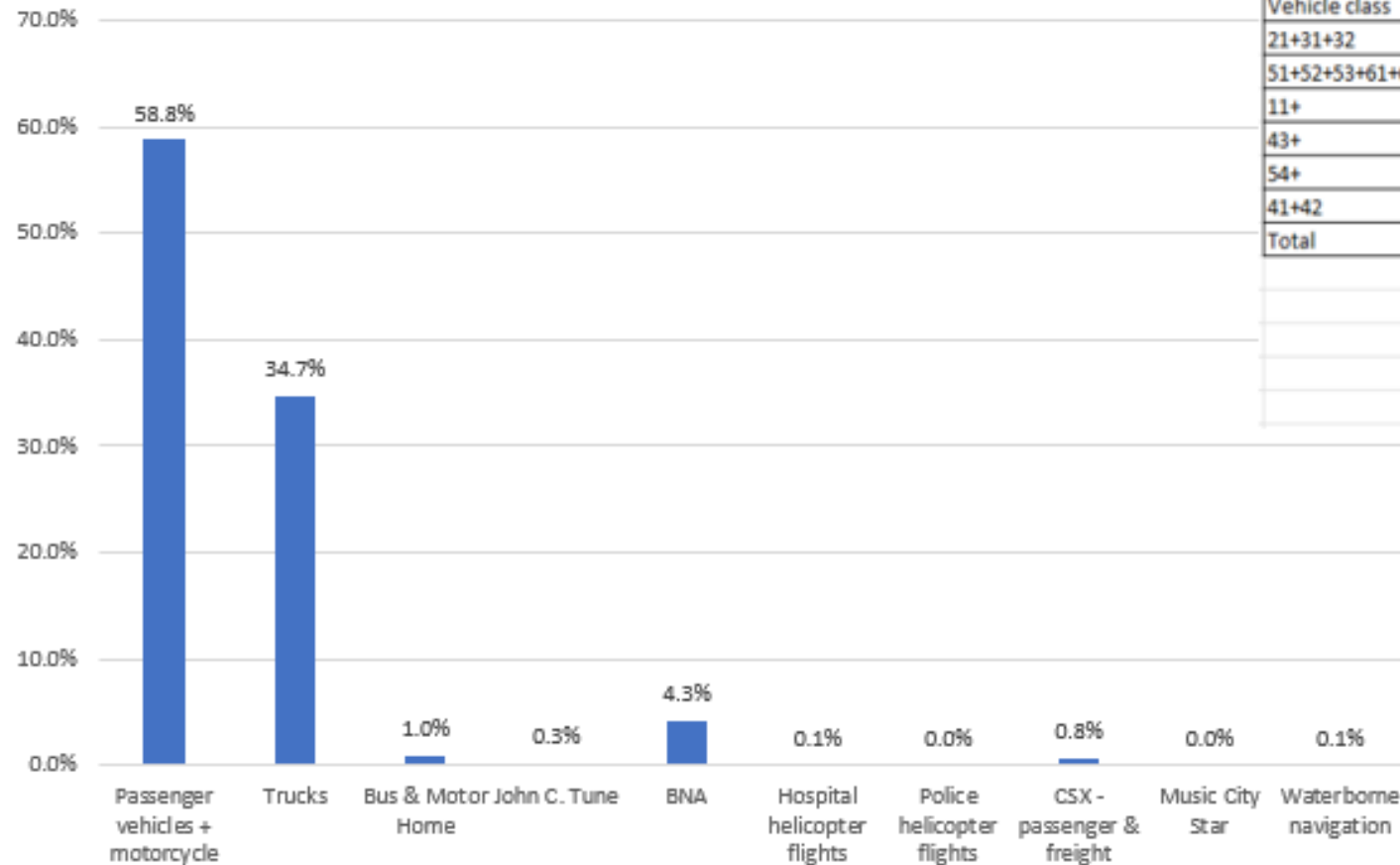
### Natural Gas decatherms

	2014	2017	2019
Residential	10,557,668	7,675,375	7,408,135
Commercial	6,884,781	5,161,238	6,182,429
Industrial	9,264,313	9,401,128.3	11,753,939
Total	26,706,762	22,237,742	25,344,503



# Community GHG Emissions Comparisons

Transportation emissions breakdown



Vehicle class	Population	Sources	
21+31+32	523,787	metro	21 Passenger Car 31 Passenger Truck 32 Light Commercial Truck
51+52+53+61+62	10,193	tdot	51 Refuse Truck 52 Single Unit Short-haul Truck 53 Single Unit Long-haul Truck 61 Combination Short-haul Truck 62 Combination Long-haul Truck
11+	9,662	metro	11 Motorcycle
43+	834	tdec	41 Intercity Bus 42 Transit Bus
54+	573	tdot	43 School Bus
41+42	3,513	metro	54 Motor Home
Total	548,562		



# Municipal GHG Emissions Comparisons

## CO2e Emissions Comparisons of 2005, 2011, 2014, 2017, & 2019 Municipal GHG Inventories

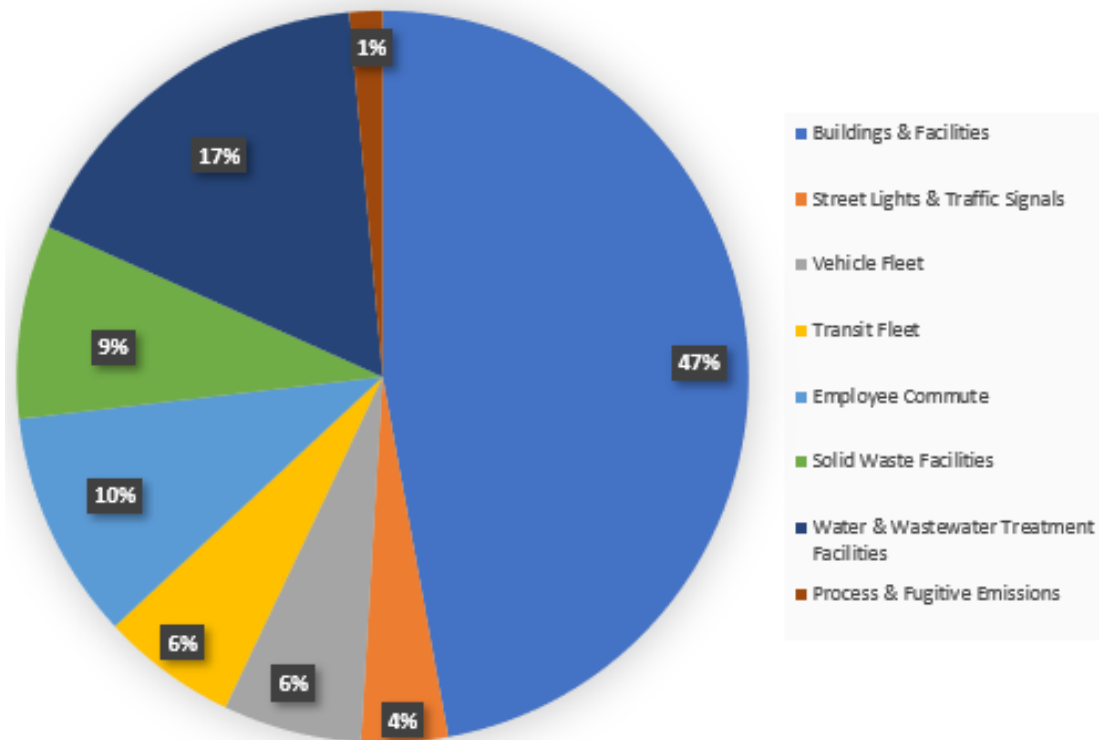
### Municipal Inventories

Sectors	2005	2011	2014	2017	2019
<i>Buildings &amp; Facilities</i>	282,436	253,846	334,030	268,015	275,835
<i>Street Lights &amp; Traffic Signals</i>	3,306	80,332	28,313	21,723	19,115
<i>Vehicle Fleet</i>	75,805	51,382	41,088	34,835	30,571
<i>Transit Fleet</i>	-	-	34,096	34,060	27,327
<i>Employee Commute</i>	99,227	54,663	20,731	57,432	65,471
<i>Solid Waste Facilities</i>	100,507	90,859	81,224	48,590	71,198
<i>Water &amp; Wastewater Treatment Facilities</i>	139,403	143,072	114,819	95,723	79,244
<i>Process &amp; Fugitive Emissions</i>	48	1,422	5,979	8,299	1,319
<b>Total CO2e Emissions (metric tons)</b>	<b>700,732</b>	<b>675,576</b>	<b>660,280</b>	<b>568,677</b>	<b>570,080</b>

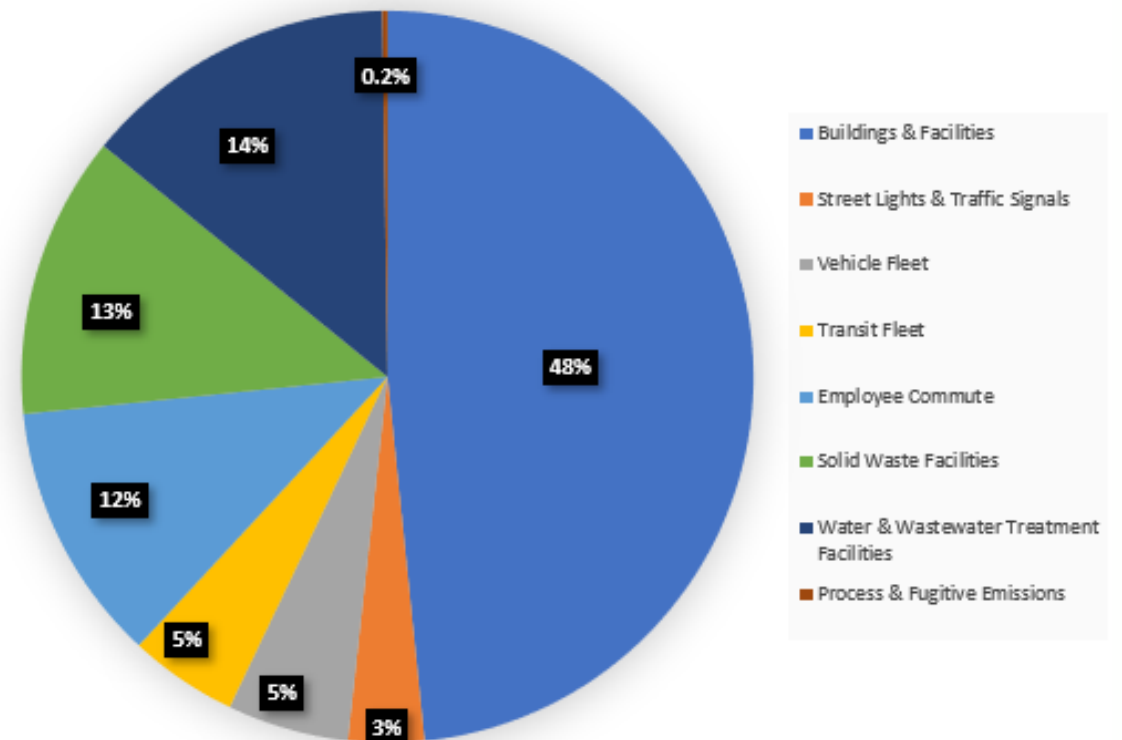


# Municipal GHG Emissions Comparisons

## 2017 Municipal GHG Inventory



## 2019 Municipal GHG Inventory







**Thank you!**

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