

Falcon Heights Community-Wide Carbon Baseline Assessment 2008-2010

Updated 05-05-11

		CO ₂ e 2008 Metric (tonnes) ¹³		CO ₂ e 2009 Metric (tonnes) ¹³		CO ₂ e 2010 Metric (tonnes) ¹³	
Population							
Residents (Capita) ¹		5,746		5,762		5,321	
Jobs ²		5,842		5,318		0	
Households		2,256		2,268		2,131	
Area (2.24 square miles)							
Res/sq.mi.		2,565		2,572		2,375	
Water (gallons)³							
Inches Rainfall ⁴		22.7		23.6		37.1	
Water (gallons/yr)	Res	80,781,756		81,335,525		0	
	C&I	242,755,920		238,537,948		0	
	Total	323,537,676	N/A	319,873,473	N/A	0	N/A
Res. Water (gallons/capita/day)	Res	39		39		0	
C&I Water (gallons/job/day)	C&I	114	N/A	123	N/A	#DIV/0!	N/A
Waste (pounds)⁵							
Recycled		6,805,767		6,560,407		0	
Incinerated		4,298,509	507	4,563,980	539	0	0
Landfill		4,250,223	1,713	3,324,988	1,340	0	0
Total		15,354,499	2,220	14,449,375	1,879	0	0
Waste (pounds/capita/yr)	Recycled	1,184.4		1,138.6		0.0	
	Incinerated	748.1		792.1		0.0	
	Landfill	739.7		577.1		0.0	
	Total	2,672.2	0.39	2,507.7	0.33	0.0	0.00
Waste PPD (pounds/person/day)		7.3		6.9		0.0	
Travel (VMT)⁶							
Travel (VMT) per Capita/day		17	0.01	16	0.01	0	0.00
Bike Counts⁷							
Bikers/day		27	-	27	-		-
Energy							
Cooling Degree Days ⁸		787		647		1,000	
Electricity (MWh/yr) ⁹	Res	13,596	7,681	12,913	6,867	0	0
	C&I	100,296	58,474	94,968	52,353	0	0
	Total	113,892	66,156	107,881	59,219	0	0
Heating Degree Days ⁸ Therms (Dth/yr) ¹⁰	Res	7,937		7,780		7,002	
	Res	138,702	7,705	132,224	7,345	0	0
	C&I	107,297	5,960	100,035	5,557	0	0
Total	245,999	13,665	232,259	12,902	0	0	
Total Energy (MBtu/yr) ¹¹	Res	185,092	15,386	176,283	14,212	0	0
	C&I	343,282	64,435	325,030	57,909	0	0
	Total	528,374	79,821	501,313	72,121	0	0
Total Energy (kBtu/Capita/day) ¹²	Res	88	7.3	84	6.8	0	0.0
	C&I	164	30.7	155	27.5	0	0.0
	Total	252	13.9	238	12.5	0	0.0
Total CO₂e (tonnes)							
CO ₂ e Total			82,044		74,003		0
CO ₂ e/yr Total per Capita			14.3		12.8		0.0

Keyed Notes on Sources:

1. Metropolitan Council of the Twin Cities, http://stats.metc.state.mn.us/data_download/DD_start.aspx
2. Employment values from Metropolitan Council of the Twin Cities for Falcon Heights, http://stats.metc.state.mn.us/data_download/DD_start.aspx
3. Ruth O'Brien, Financial Services Manager, Saint Paul Regional Water Services, ruth.obrien@ci.stpaul.mn.us
4. Minnesota Climatology Working Group, State Climatology Office
5. Minnesota Pollution Control Agency SCORE report and the Ramsey County Certification/Annual Report, 2008 and 2009.
6. Minnesota Department of Transportation
7. Falcon Heights Fall Bike Count, Location 902 - Larpenteur Ave, east of Cleveland
8. University of MN Climate Data. <http://climate.umn.edu/text/historical/mspcooldd.txt>
9. Source for electrical consumption data for residential, commercial & industrial: Xcel Energy.
10. Source for natural gas consumption data for residential, commercial & industrial: Xcel Energy.
11. Sum of total energy consumed in city in MBtu (10^6 Btu)
12. Total energy consumed in city per capita, based on annual residential population (Res) or jobs(C&I).
13. Sources for CO₂e estimates are as follows:
 - a) Clean Air Climate Protection (CACP) software, 2009, developed by ICLEI--Local Governments for Sustainability, as reported in Dakota County's county-wide carbon baseline assessment.
 - b) Final Report, Statewide MSW Composition Study: A Study of Discards in the State of Minnesota, Solid Waste Management Coordinating Board, Minnesota Pollution Control Agency, March 2000.
 - c) CO₂ emission factors for electricity from Xcel Energy. Emission factors for other greenhouse gases from the *International Local Government Greenhouse Gas Emissions Analysis Protocol* produced by the United Nations, ICLEI - Local Governments for Sustainability and The Climate Registry.