



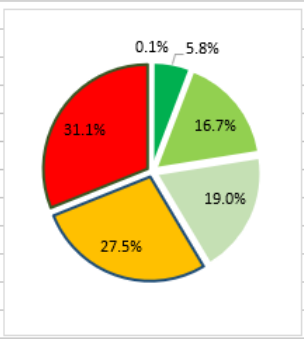
Municipal Residential Density

Residential Density is a critical variable in understanding the practicality of offering curbside pickup of organics in Vermont.

Twenty-eight Vermont municipalities include areas of relatively high density of residential structures (250 or more residential buildings per square mile).

Winooski and several others are virtually 100% high-density communities (i.e., have 250+ residences/sq.mi.), while Mendon, Westminster and others have small pockets of densely situated residences. As a mean value, 49.7% of the residential units in these 28 communities are densely situated.

Town/City	SWMD	<1	1 to 25	25 to 100	100 to 250	250 to 500	>=500	% Dense	
Middlebury	Addison County SWMD		149	906	394	936		39.2%	
Vergennes	Addison County SWMD			3	409	441		51.7%	
Bennington	Bennington County RPC		79	1034	988	1,007	2,115	59.8%	
Barre City	Central Vermont SWMD				10	490	2,040	99.6%	
Barre Town	Central Vermont SWMD		50	918	1384	538	218	24.3%	
Montpelier	Central Vermont SWMD			158	455	1,399	433	74.9%	
Burlington	Chittenden SWMD				19	608	9,935	99.8%	
Colchester	Chittenden SWMD	1	154	1489	2425	1,647	114	30.2%	
Essex	Chittenden SWMD		128	552	782	2,666	2,466	77.8%	
Milton	Chittenden SWMD	1	464	1231	1330	1,039		25.6%	
Shelburne	Chittenden SWMD		101	425	1479	864		30.1%	
South Burlington	Chittenden SWMD	1		6	658	3,355	2,256	89.4%	
Williston	Chittenden SWMD		46	1054	792	1,644	21	46.8%	
Winooski	Chittenden SWMD					151	1,446	100.0%	
Hartford	Greater Upper Valley SWMD		486	1424	1342	1,023		23.9%	
Newport City	Individual town with approved plan		11	128	1032	460		28.2%	
St. Johnsbury	Individual town with approved plan		527	409	242	1,238		51.2%	
St. Albans City	Northwest Vermont SWMD					228	1,963	100.0%	
St. Albans Town	Northwest Vermont SWMD	29	428	1024	362	729	257	34.9%	
Swanton	Northwest Vermont SWMD		772	862	166	1,096		37.8%	
Mendon	Rutland County SWD	15	143	275	126	5		0.9%	
Rutland City	Rutland County SWD				95	677	4,505	98.2%	
Rutland	Solid Waste Alliance Communities		13	572	655	317	4	20.6%	
Rockingham	Southern Windsor/Windham Counties SWMD		573	398	95	789		42.5%	
Springfield	Southern Windsor/Windham Counties SWMD		473	736	798	1,463		42.2%	
Windsor	Southern Windsor/Windham Counties SWMD		150	322	763	65		5.0%	
Brattleboro	Windham SWMD		179	820	826	786	1,311	53.5%	
Westminster	Windham SWMD		465	837	127	35		2.4%	
COUNT	28						AVG:	49.7%	
	# of Residences	47	5,391	15,583	17,754	25,696	29,084	93,555	
		0.1%	5.8%	16.7%	19.0%	27.5%	31.1%	100.0%	
		% of all Vermont residences							33.9%



Data sources: VT ANR/DEC and VT E-911 Board;
http://maps.vcgi.vermont.gov/gisdata/metadata/EmergencyE911_ESITE.htm etc.

Densely placed residences (54,780 structures) make up over **58%** of the residences in these twenty-eight (28) towns overall, and 20% of all Vermont residences. Nineteen (19) of those towns fall within the jurisdiction of five SWMEs: **Addison, Chittenden, Central VT, Northwest, and Southern W/W**. These 19 towns contain 75% of the densely situated residences in Vermont.

Density Matters – The most densely-populated sections of 28 Vermont municipalities produce a high proportion of household organic wastes within very few, compact areas.

Curbside hauler pickup of household organics waste in Vermont (currently mandated to commence July 2018) is not economically viable for haulers and for their potential customers in great swaths of rural Vermont. Offering curbside collection in areas that are densely populated with residential structures merits closer consideration.

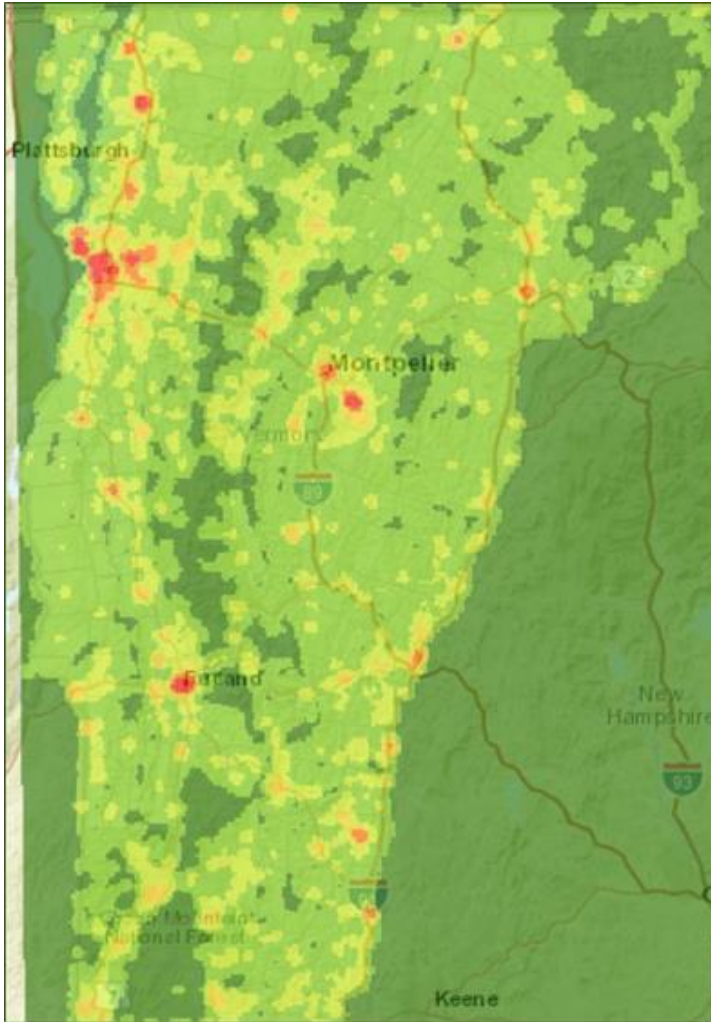
- **The hauler perspective:** Offering curbside residential pickup in dense areas lessens addresses valid concerns about the costs of providing services over long distances, allows haulers to focus marketing and service efforts within compact and well-defined areas, and offers economic viability. Success in these areas will spread interest and demand; that is, the potential market for such services will grow -- PARTICULARLY as we approach a 2020 benchmark for all households to compost or find alternatives to putting food scraps in the landfill.
- **The customer perspective:** Residents in areas of higher residential density are more likely than rural residents to rely on hauler pickup services (rather than composting). Such residents may be less likely to have personal transportation, may be elderly or otherwise find it more difficult to take advantage of alternative services away from their homes. Residents of more dense neighborhoods will have the same disposal alternatives as do rural residents (space considerations and health ordinances notwithstanding), and will not pay for any organics pickup service that they do not feel they need.

Assuring that licensed haulers offer curbside organics pickup for residents of densely-populated areas can provide an important alternative that will help keep organics out of household waste, minimize concerns about odor and vector control, offer incentives to haulers, support Green Job creation and provide nutrients to Vermont farmers. Failure to offer this service would increase the amount of food scraps that are mingled with household waste, would fail to boost both Green Job opportunities in Vermont, and would significantly reduce the nutrients re-cycled back into our soil and our food stream.

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Welcome to the
**Universal Recycling
 Materials Management Map.**

This map was developed to connect residents, businesses, and institutions with solid waste services; and to connect haulers, composters, and food rescue agencies to sources of food and food scraps. The goal is to make it easier to reduce waste and save natural resources.

Here you will find facilities that accept various materials for food rescue, recycling, composting, and disposal, such as food shelves, transfer stations and composters. As you zoom in closer, you will find businesses and institutions (such as restaurants, grocery stores, markets, hospitals, schools, food manufacturers, assisted living facilities, correctional facilities, and more) with the estimated tons of food scraps they might generate. Zooming in will also reveal local food shelves where quality food can be donated for people in need. You can map and find your local solid waste management entity by clicking on the box in the map layers section.



<http://anrmaps.vermont.gov/websites/Organics/default.html>

Housing Density (Res. Units per Square Mile)	
■	0 - 1
■	1 - 25
■	25 - 100
■	100 - 250
■	250 - 500
■	>500

- Fully 1/3 of all Vermont residential structures fall in such high-density areas.
- 28 Vermont Communities include high density residential areas,
- In these communities, an average of 49.7% of residential structures fall in such high-density areas.