

VIRGINIA ANNUAL RECYCLING SUMMARY REPORT

Calendar Year 2014



October 2015

Table of Contents

Executive Summary	3
Introduction	3
Areas Reporting Highest Rates	4
Mandated Recycling Rates	4
Solid Waste Management Planning and Recycling Action Plans	4
Recycling Success Stories	5
Calculated Recycling Rates for 2014	6
Solid Waste Planning Units Not Reporting	8
Recycling Rate Calculation – 2014	9

Virginia's State Recycling Summary Report for Calendar Year 2014

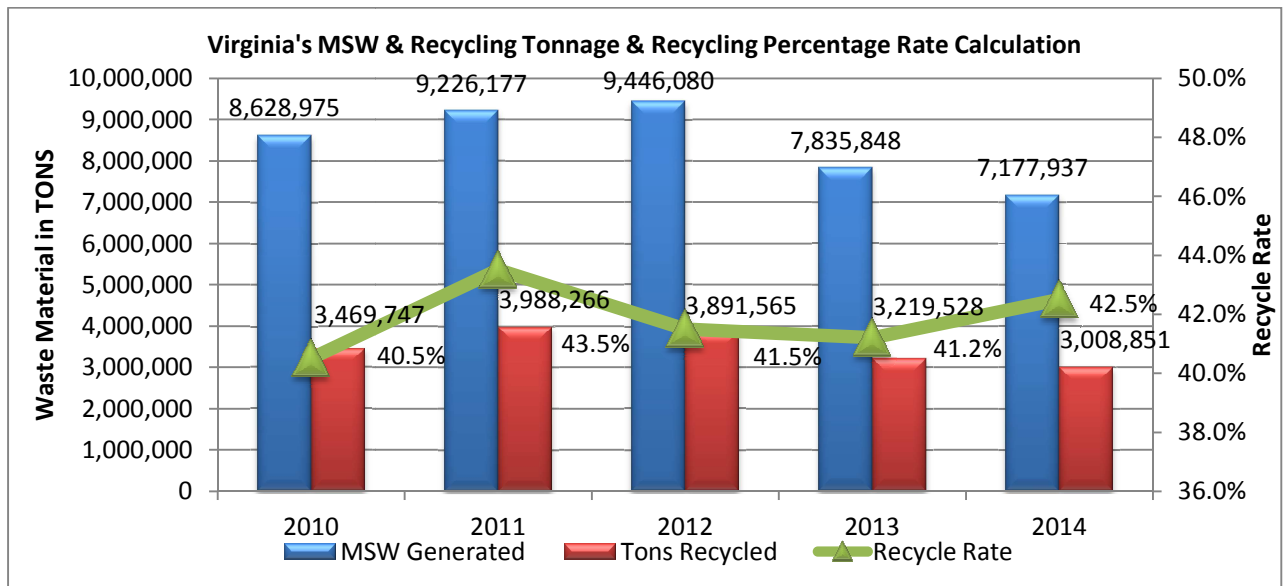
Executive Summary

The calendar year 2014 Annual Recycling Rate reporting by Virginia Solid Waste Planning Units (SWPUs) with populations above 100,000¹ established a calculated recycling rate for Virginia of 42.5%. This calculation included credits for solid waste reused, non-MSW recycled, recycling residues, and source reduction programs. This rate was based on the data submitted by the 17 SWPUs required to report for 2014.

Introduction

The Virginia Department of Environmental Quality (DEQ) has completed its review of the recycling rate data reported for calendar year 2014. DEQ has reviewed 42 submitted reports. The data represent recycling information from 113 Virginia cities, counties and towns.¹ Recycling rate reports were also submitted by 27 SWPUs that were not required to report for 2014. This data is also included in the data table for reference. In some cases, reported data was adjusted for consistency with the Virginia solid waste planning regulation (9VAC20-130 *et seq.*).

Virginia's annual recycling rate for 2014 as seen on the graph below is based only on data from the required reports submitted by the 17 SWPUs with populations above 100,000. Based upon previous years' reporting, it is estimated that the submitted data from the 17 SWPUs represent about 83 percent of materials collected for recycling in Virginia.



¹ Virginia Code §10.1-1411 was amended by legislation introduced during the 2012 Session of the Virginia General Assembly and requires annual recycling rate reporting by each SWPU or locality with a population of greater than 100,000 according to the most recent U.S. Census. Each SWPU or locality with a population of 100,000 or less according to the most recent U.S. Census must submit a recycling survey report once every four years. Planning units in this latter category will next report in 2017 for calendar year 2016.

Areas Reporting Highest Rates

Historically, higher recycling rates have been reported in the more densely populated areas of the state. These areas are represented primarily by the 17 SWPUs with populations over 100,000.¹ These areas include:

Calculated Regional Recycling Rates by Year			
<u>Area</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Fredericksburg Area	43.6%	46.3%	55.9%
Hampton Roads/Tidewater Area	31.3%	33.5%	35.7%
Lynchburg Area	41.5%	38.9%	31.3%
Northern Shenandoah Valley	41.4%	40.4%	41.6%
Northern Virginia	45.4%	46.0%	47.3%
Richmond Area	57.7%	57.4%	57.4%
Roanoke Area	27.8%	35.4%	37.6%

Mandated Recycling Rates

Pursuant to Virginia Code § 10.1-1411.D, each SWPU is required to achieve and maintain a minimum 25 percent annual recycling rate *unless*:

- Its population density is less than 100 persons per square mile, or
- Its civilian unemployment rate is 50 percent or more above the state unemployment average.

SWPUs meeting these criteria are required to achieve and maintain a minimum 15 percent recycling rate.

Solid Waste Management Planning and Recycling Action Plans

DEQ continues to review the required solid waste management plans and any updates submitted by the SWPUs for completeness, including locality or regional recycling program information. All SWPUs are required to maintain or exceed the mandated recycling rate for their jurisdiction(s). If at any time the SWPU reports less than the required 15 percent or 25 percent recycling rate, DEQ will require that a Recycling Action Plan be developed and submitted as an amendment to the SWPU's solid waste management plan.

Visit

<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms/MandatoryRecyclingRates.aspx> for additional information.

Recycling Success Stories and Related Report Information

Information provided by localities, from web-based resources, or other data sources.

City of Manassas: In 2014, the City of Manassas reviewed its programs and the outreach materials and other communications media provided to City residents. By introducing two new seasonal recycling events and improving the quality and content of outreach/educational materials, the City was able to engage more residents and increase the recycling rate. New information and events focused on celebrating the community through positive environmental action. Information provided by: **Monica Boehringer**, Refuse and Recycling Coordinator, Public Works - mboehringer@ci.manassas.va.us.

City of Richmond: In July 2015, the City of Richmond began distribution of some 57,000 new 95 gallon recycling carts to city residents. These carts were provided to residents as part of grant for a first-of-its-kind private/public recycling agreement with The Recycling Partnership, (formerly Curbside Value Partnership or CVP). Richmond is one of only four cities in the southeast to receive grant money. In addition to increasing the amount residents can recycle, the program will enable the City to provide alley collection in neighborhoods where trash is picked up in alleys. Until now, all recycling collections have been curbside. In January 2015, the City implemented the initial phase of the new recycling program with delivery of 95-gallon recycling carts to 6,000 homes in select neighborhoods with alley collection. All eligible households (single family dwelling or multi-family housing with fewer than four units) are scheduled to have carts by the end of the year. Information from the **City of Richmond's** web site – <http://www.richmondgov.com/RichmondRecycles>.

City of Roanoke: The City of Roanoke will begin single-stream recycling collection in October. It currently has a dual-stream collection system in which residents separate out fibers and containers. In Roanoke, carts are funded by Recycling Disposal Solutions, which also opened a MRF recently to handle the expected increase in material volumes, according to the City. Cart distribution to more than 32,000 households will begin in mid-August. The industry-funded Recycling Partnership provided a \$40,000 grant for printing and media placement of advertising for the new approach to the public. The nonprofit group also stated it is providing services and support worth an additional \$139,000. The city agreed to spend \$30,000 of its own funds for education and outreach. Roanoke is The Recycling Partnership's fourth partner city from the 2014 grant cycle. The three other grant recipients are Florence, Ala.; Columbia, S.C.; and Richmond, Va. – all are making the switch to single-stream recycling collection. Information from **Resource Recycling** - <http://resource-recycling.com/node/6258>.

Electronics Recycling: Though not included in the recycling rate, Computer Manufacturers are required to report to DEQ the amount of electronics recovered through their recycling networks. For calendar year 2014 they reported 3,179,233 pounds (1,590 tons) of electronics recovered. For more information about this program, visit <http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms/ElectronicsRecycling/VirginiasComputerRecoveryandRecyclingAct.aspx>.

Private Sector reporting: Both Wal-Mart and Target provided recycling data for their Virginia stores to DEQ. This information was made available to all SWPUs on DEQ's recycling webpage for inclusion in their recycling reporting. Visit their links on the following webpage under Featured Topics: <http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms.aspx>

Calculated Recycling Rates for 2014

Solid Waste Planning Unit Recycling Rates and Data

REPORTING ENTITY (17 Solid Waste Planning Units required to report annually)	2014 Recycling Rate* (%)	2014 Total Recycled Tons (PRMs + Credits)	2014 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
State Totals	42.5	3,008,851 tons	7,177,937 tons
Alexandria (City) SWPU	48.8 *	109,228	202,439
Arlington County SWPU	47.2 *	145,073	263,815
Augusta –Staunton-Waynesboro SWPU	40.6	60,278	148,597
Central Virginia Waste Management Authority SWPU (counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George; cities of Richmond, Hopewell, Colonial Heights and Petersburg)	57.7	567,014	982,528
Fairfax County SWPU	48.3 *	512,255	1,107,550
Loudoun County SWPU	38.5	133,125	345,579
Montgomery Regional Solid Waste Authority SWPU (Montgomery County, Blacksburg and Christiansburg)	28.1	22,547	80,267
Mount Rogers PDC SWPU (counties of Bland, Smyth, Washington and Wythe)	24.9	17,612	70,717
Newport News (City) SWPU	39.6 *	77,965	187,896
Northern Shenandoah Valley Regional Commission SWPU (counties of Clarke, Frederick, Shenandoah, Warren and Page; City of Winchester)	41.4	95,959	231,923
Prince William County SWPU	38.7 *	198,899	518,687
Rappahannock Regional Solid Waste Management Board SWPU (Stafford County and city of Fredericksburg)	49.1	72,868	154,685
Region 2000 (counties of Nelson, Appomattox and Campbell; cities of Lynchburg and Bedford)	41.5	132,144	318,445
Southeastern Public Service Authority SWPU (counties of Isle of Wight and Southampton; cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk and Virginia Beach)	30.8 *	519,114	1,683,427
Spotsylvania County SWPU	36.9 *	72,330	178,303
Thomas Jefferson PDC SWPU (counties of Albemarle, Fluvanna and Greene; city of Charlottesville)	42	159,466	306,377
Virginia Peninsulas Public Service Authority SWPU (counties of Essex, James City, King and Queen, Mathews, Middlesex and York; cities of Hampton, Poquoson and Williamsburg)	27.7	112,972	396,700
The calculated recycling rate is based only on data from the 17 SWPUs above required to report for CY 2014.	2014 Recycling Rate* (42.5 %)	2014 Total Recycled Tons (PRMs + Credits)	2014 Total MSW Generation Tons (PRMs + Credits + MSW disposed)

REPORTING ENTITY (27 SWPUs with populations 100,000 or less not required to report, but Voluntarily Reporting)	2014 Recycling Rate* (%)	2014 Total Recycled Tons (PRMs + Credits)	2014 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Amherst County SWPU	23.3	6,866	29,496
Bedford County SWPU	39.5	2,265	45,216
Botetourt County SWPU	18.1	3,652	20,129
Brunswick County SWPU	27.4	4,147	15,123
Carroll-Grayson-Galax SWPU	15.3	4,754	31,078
Craig County SWPU	18.5	513	2770
Cumberland Plateau Regional Waste Management Authority SWPU (Buchanan, Dickenson and Russell counties)	29.8	20,546	68,963
Danville (City) SWPU	48.8	12,190	24,971
Fairfax (City) SWPU	58.8	32,455	55,216
Falls Church (City) SWPU	66.1	9,301	14,519
Fauquier County SWPU	42.9	34,854	81,316
Floyd County SWPU	18*	2,814	13,816
Franklin County SWPU	33.4	17,871	53,495
Greater Rockingham SWPU	31.1	23,018	73,923
Herndon (Town) SWPU	43	10,799	25,108
Lunenburg County SWPU	15.8	2,530	16,011
Madison County SWPU	37.1	2,641	7,127
Manassas (City) SWPU	41	16,698	40,734
Manassas Park (City) SWPU	27.9	3,563	12,792
New River Resource Authority SWPU (counties of Pulaski and Giles; city of Radford)	24.6 *	26,893	109,363
Nottoway County SWPU	15.9	2,383	17,186
Orange County SWPU	17.9	3,781	17,126
Roanoke (City) SWPU	34.6	22,757	65,726
Salem (City) SWPU	38.9	13,462	34,582
Tazewell County SWPU	17.1	10,325	60,276
Vienna (Town) SWPU	58.9	9,082	13,632
Vinton (Town) SWPU	60.7	5,580	9,200

All data based on adjustments by DEQ for consistency with 9VAC-20-130-125, with a 5 percent maximum percentage allowed for credits to the base recycling rate calculated by a solid waste planning unit. A 2 percent source reduction credit has been added to the calculated recycling rates for those planning units with a documented source reduction program.

PRMs (principal recyclable materials): paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other.

Credits: recycling residues, solid waste reused non-MSW recycled (includes construction and demolition material, ash and debris), and source reduction initiatives. Source reduction initiatives must be documented as SWPU policy and promoted across the SWPU.

Municipal Solid Waste (MSW) disposed: Municipal solid waste delivered to sanitary landfills or incinerators for disposal.

Solid Waste Planning Units Not Reporting

27 SWPUs with populations of 100,000 or less and not required to report for CY 2014.

Accomack County SWPU
Alleghany Highlands SWPU
Amelia County SWPU
Bath County SWPU
Bristol (City) SWPU
Buckingham County SWPU
Caroline County SWPU
Culpeper County SWPU
Gloucester County SWPU
Harrisonburg (City) SWPU
Highland County SWPU
King George County SWPU
Lee County SWPU
Louisa County SWPU
Martinsville (City)/Henry County SWPU
Northampton County SWPU
Northern Neck PDC SWPU (counties of Lancaster, Northumberland, Richmond and Westmoreland)
Patrick County SWPU
Pittsylvania County SWPU
Prince Edward-Cumberland County SWPU
Rappahannock County SWPU
Roanoke County SWPU
Rockbridge – Lexington – Buena Vista SWPU
Scott County SWPU
Southern Crater Region SWPU (counties of Dinwiddie, Greensville, Surry, and Sussex; city of Emporia)
Southside Regional PSA SWPU (counties of Charlotte, Halifax and Mecklenburg)
Wise County SWPU

Recycling Rate Calculation – 2014

Seventeen recycling rate reports, representing 113 Virginia localities, were received pursuant to the requirements of § 10.1-1411 of the Code of Virginia. This represents a return rate of 100 percent of the required reports. Totals for these reports are presented below:

Principal Recyclable Material (PRM) in tons					Total MSW Disposed in tons	
Paper	609,871	Credits			Household Waste	3,503,915
Metal	531,031		Recycling Residue	17,509		
Plastic	21,946		Solid Waste Reused	273,045	Commercial Waste	608,271
Glass	7,855		Non-MSW Recycled	225,072		
Commingled	500,163		TOTAL CREDITS (C) (Tons)	515,626	Institutional Waste	56,741
Yard Waste	488,902				Other:	159
Waste Wood	200,644					
Textiles	13,903					
Waste Tires	30,767					
Used Oil	35,607	2% Source Reduction Credit	0.14% overall		TOTAL MSW (M) (Tons)	4,169,086
Used Oil Filters	789				CY 2014 Calculated State Recycling Rate*	
Used Antifreeze	3,911					
Auto Bodies	31	((P+C)/(P+C+M) x 100) + Source Reduction Credit (3,008,851/7,177,937)X100)+0.14%			42.5%*	
Batteries	11,435					
Electronics	8,602					
Other:	27,768					
		<i>(rounding of individual data entries may affect sums in Totals)</i>				
Total PRM (P) (Tons)	2,493,225					

* All data based on adjustments by DEQ for consistency with 9VAC-20-130-125. Chart represents data only from the 17 SWPUs required to report for CY 2014. Twenty-seven SWPUs which were not required to report also submitted data for CY 2014.