

2026

Thomas Jefferson Planning District Commission
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Regional Solid Waste Management Plan

Thomas Jefferson Solid Waste Planning Unit

Albemarle County · City of Charlottesville · Fluvanna County · Greene County



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1 Executive Summary

The Thomas Jefferson Solid Waste Planning Unit Regional Solid Waste Management Plan establishes the region's principal framework for managing solid waste, recycling, reuse, and related materials management activities through 2046. The Thomas Jefferson Solid Waste Planning Unit (TJSWPU) includes Albemarle County, Fluvanna County, Greene County, the City of Charlottesville, and the incorporated Towns of Scottsville and Stanardsville. The Thomas Jefferson Planning District Commission coordinates the plan on behalf of the member localities.

The plan is prepared to meet the Commonwealth of Virginia's solid waste planning requirements and to support an integrated materials management system that is understandable to the public, useful to local governments, and practical for implementation. It documents existing facilities and programs, summarizes reported recycling and disposal data, identifies known data limitations, evaluates future needs, and establishes a structure for coordinated regional action.

This plan recognizes that the region is not a single-service waste system. Charlottesville and the urbanized portions of Albemarle County are served by a mix of municipal, regional authority, institutional, and private-sector services. Fluvanna and Greene Counties rely more heavily on convenience centers, transfer facilities, and private haulers. The University of Virginia, Rivanna Solid Waste Authority, private haulers, recyclers, composters, and permitted solid waste facilities are important partners in the system.

2 History of Solid Waste Planning in the TJSWPU

The Thomas Jefferson Planning District Commission's (TJPDC) regional solid waste planning efforts formally began with the adoption of its first Solid Waste Management Plan in 1983. These efforts were initiated in response to regulations established by the Virginia Department of Waste Management, now the Virginia Department of Environmental Quality (DEQ), which require all localities within the Commonwealth to meet minimum standards for solid waste management and long-range planning.

Today, the Thomas Jefferson Solid Waste Planning Unit (TJSWPU) includes Albemarle, Fluvanna, and Greene Counties; the City of Charlottesville; and the Towns of Scottsville and Stanardsville. Regional solid waste planning and implementation efforts are supported by key partners and stakeholders, including the Rivanna Solid Waste Authority (RSWA) and the University of Virginia (UVA).

The regional Solid Waste Management Plan framework was adopted by the TJPDC on June 29, 2004. Additional planning and implementation work continued following adoption because the planning unit had not yet achieved the state-required recycling rate of 25 percent. The plan was deemed complete by DEQ in 2006 after the planning unit met the required recycling benchmark.

As required by state regulations, the plan has since undergone periodic updates every five years. Subsequent updates were adopted by the TJPDC on:

- October 6, 2011
- October 6, 2016
- October 7, 2021

The plan has also been amended to reflect changes in regional waste management infrastructure and operations, including:

Major Amendment – Dominion Energy Captive Industrial Landfill (Fluvanna County): A major amendment was initiated to incorporate a proposed Dominion Energy captive industrial landfill in Fluvanna County into the regional plan. The TJPDC held a public comment period during its March 3, 2022 meeting and adopted the amendment by resolution the same day. In 2025, DEQ notified the TJPDC that the amendment process did not fully satisfy major amendment requirements. In response, Fluvanna County initiated additional public notice procedures, including a public comment period in March 2025 and a required public hearing at the Fluvanna County Board of Supervisors meeting on March 19, 2025.

Minor Amendment – Troy Transfer Station: A minor amendment was submitted to DEQ in November 2024 to reflect a change in ownership of the Troy transfer station from Republic Services to GFL Environmental of Virginia, as well as a proposed increase in operating capacity from 500 tons per day to 850 tons per day. GFL Environmental is currently pursuing the associated permit modifications.

3 Waste Management Hierarchy and Plan Requirements

Virginia law requires all local governments to develop and adopt solid waste management plans. To improve efficiency and regional collaboration, the local governments in the region work together to prepare a single regional plan. This plan describes how the region manages solid waste in accordance with Virginia's waste management hierarchy (9VAC20-130-30), which prioritizes reducing waste at its source, reusing materials, recycling, resource recovery, and, as a last resort, disposal. The hierarchy provides a framework for developing programs and services that reduce the amount of waste sent to landfills. The plan considers and addresses the following six areas, prioritizing lower-numbered options as required:

1. Source Reduction: Minimizing waste generation.
2. Reuse: Extending the life of products through reuse.
3. Recycling: Processing materials for reuse.
4. Resource Recovery (Waste-to-Energy): Generating energy from waste.
5. Incineration: Burning waste for disposal.
6. Landfilling: Disposing of waste in landfills.

The plan does and must also include:

- Integrated Waste Management Strategy: A comprehensive approach to solid waste management, including objectives, implementation strategies and schedules, and identification of responsible parties.
- Minimum Recycling Rate: A plan to achieve the state's required minimum recycling rate.
- Funding: A strategy for the provision of funds and resources related to solid waste management activities.
- Public Education and Involvement: A strategy for public education and information on source reduction, reuse, and recycling.
- Public-Private Partnerships: Consideration of collaborative efforts between government and private entities in plan implementation.
- Waste Generation Estimates: Historical waste generation details and projections of future waste generation and management strategies.

To obtain permits for new or expanded solid waste facilities (such as landfills, incinerators, or waste-to-energy facilities), the planning unit must have an approved solid waste management plan that complies with Virginia's solid waste regulations (9 VAC 20-130-10). Changes to solid waste facility permits require a major or minor amendment. See the Plan Amendments section for more information.

3.1 Plan Maintenance

This section outlines the procedures and responsibilities for maintaining the Regional Solid Waste Management Plan (SWMP). Ongoing plan maintenance ensures that the Thomas Jefferson Solid Waste Planning Unit (TJSWPU) remains compliant with state regulations, responsive to changing regional conditions, and aligned with long-term waste reduction and recycling goals.

The plan maintenance and amendment process is guided by the following objectives:

- **Compliance with State Regulations:** Ensure participating local governments continue to meet the requirements of the Virginia Waste Management Act and the Regulations for Solid Waste Management Planning.
- **Plan Adaptability and Responsiveness:** Maintain an up-to-date planning framework that reflects current data, regional conditions, emerging technologies, regulatory changes, and evolving waste management practices. The Plan will be reviewed annually and updated at least every five years, as required by state regulations.
- **Public Participation and Transparency:** Encourage meaningful public participation and stakeholder engagement throughout the planning, amendment, and implementation processes.
- **Regional Coordination and Sustainability:** Support coordinated regional action among local governments, public agencies, private partners, and community stakeholders to improve materials management, conserve resources and reduce greenhouse gas emissions.

The Thomas Jefferson Planning District Commission (TJPDC) is responsible for coordinating plan maintenance activities, preparing required updates and amendments, and ensuring compliance with state planning requirements.

TJPDC staff work closely with the Technical Advisory Committee (TAC), which provides technical guidance and oversight related to planning and implementation of the Plan. The TAC supports ongoing review of regional waste management trends, regulatory changes, infrastructure needs, and implementation progress.

Annual Reviews: State regulations require annual computation and reporting of the regional recycling rate. Data will be collected and calculated by TJPDC staff and reported to the commission and technical advisory committee for review and input. Once comments are received, staff will make an annual report and share the information with the public.

Five Year Update: In accordance with Virginia solid waste planning regulations 9VAC20-130-173, the Regional Solid Waste Management Plan must be formally updated every five years. The original Solid Waste Management Plan was approved by the Thomas Jefferson Planning District Commission in June 29, 2004 and subsequently reviewed and approved by the Virginia Department of Environmental Quality (DEQ). Plan updates become effective upon approval by both the TJPDC and DEQ.

3.2 Plan Amendments

Amendments to the Regional Solid Waste Management Plan may be classified as either major or minor amendments in accordance with 9VAC20-130-175.

3.2.1 Major Amendments

Major amendments include:

- Any addition, deletion, or cessation of any solid waste disposal facility;
- Any increase in landfill capacity;
- Any change that moves toward implementation of a state management strategy lower in the waste management hierarchy;
- Action plan(s), including an action plan to address a planning unit's recycling rate that has fallen below the statutory minimum; or

- Any change to membership in the approved area.

Requests for major amendments related to facility changes or landfill capacity may be initiated by the TJPDC, member jurisdictions, or private entities.

For major amendments:

- TJPDC staff will prepare documentation summarizing the proposed amendment;
- The amendment will be publicly advertised and made available for review;
- A formal public hearing will be held by the TJPDC Commission or the locality in which the amendment is being made;
- Public comments will be considered prior to action; and
- Approved amendments will be submitted to DEQ for final review and approval.

3.2.2 Minor Amendments

Minor amendments include:

- The addition, deletion, or closure of facilities that are not classified as solid waste disposal facilities;
- Changes that move toward implementation of waste management strategies higher in the waste management hierarchy, such as increased recycling or reuse efforts; or
- Non-substantive administrative revisions, including name changes or similar updates.

Minor amendments may be submitted directly by the TJPDC to DEQ and incorporated into the Plan following agency review, without requiring the public hearing process associated with major amendments.

3.3 Recycling Rate Requirements

Virginia's solid waste management regulations (9VAC20-130-125) establish minimum recycling requirements for all solid waste planning units. The required municipal solid waste (MSW) recycling rate is based on population density and unemployment criteria established in state regulations.

Planning units are required to maintain a minimum MSW recycling rate of 25 percent unless they have a population density of fewer than 100 persons per square mile, based on the most recent United States Census, or a not seasonally adjusted civilian unemployment rate for the immediately preceding calendar year that is at least 50 percent greater than the statewide average reported by the Virginia Employment Commission. Based on these criteria, the Thomas Jefferson Solid Waste Planning Unit (TJSWPU) is required to achieve and maintain a minimum 25 percent MSW recycling rate.

The TJPDC coordinates the annual regional recycling rate reporting process on behalf of the planning unit by collecting and compiling information submitted by participating localities and reporting partners and preparing the regional recycling rate report for submission to the Virginia Department of Environmental Quality (DEQ).

State regulations also allow planning units to claim certain recycling rate credits, up to a maximum of five percentage points, that may be applied to the achieved MSW recycling rate. These credits include:

- Certified source reduction programs: up to a two-percentage-point credit for implementation of a DEQ-certified source reduction program.
- Recycling residue: a credit of one ton for each ton of recycling residue generated in Virginia and disposed of in a permitted landfill.

- Non-municipal solid waste recycling: a credit of one ton for each ton of non-MSW material recycled.
- Reuse: a credit of one ton for each ton of solid waste material diverted through reuse.

The participating localities and regional partners within the TJSWPU intend to continue maintaining compliance with the applicable state recycling rate requirement through the ongoing operation and enhancement of existing materials management systems. The planning unit's decentralized approach relies on a combination of local government programs, regional authority facilities, institutional initiatives, private-sector services, and community participation to support waste reduction and diversion.

Factors that contribute to achieving and maintaining the required recycling rate include:

- Maintaining convenient recycling access through curbside services, drop-off centers, convenience centers, and transfer facilities;
- Supporting partnerships among local governments, regional entities, institutions, private businesses, and nonprofit organizations;
- Encouraging participation by residents, schools, universities, businesses, and industries;
- Continuing regional coordination and cooperative service arrangements where appropriate;
- Expanding education and outreach related to waste reduction, reuse, recycling, and proper disposal;
- Increasing recovery of electronics and other nontraditional recyclable materials;
- Supporting commercial and residential composting, mulching, and yard waste diversion efforts;
- Improving monitoring and reporting at facilities and collection sites where recyclable materials are managed; and
- Enhancing data collection, tracking, and reporting practices to improve understanding of regional material flows and diversion activities.

4 The Planning Area

All localities provide a variety of information regarding source reduction, reuse, and recycling. This information is disseminated at public events, in schools, on locality websites and social media platforms. Localities also utilize grant money to buy materials and create special programs to promote public awareness and recycling opportunities.

For additional information regarding solid waste or recycling programming for each locality please visit:

City of Charlottesville: www.charlottesville.gov/1061/Waste-Management

Albemarle County: www.albemarle.org/government/facilities-environmental-services/environmental-services/solid-waste-and-recycling

Fluvanna County: www.fluvannacounty.org/publicworks/page/solid-waste-and-recycling-convenience-center

Greene County: www.greenecountyva.gov/196/Solid-Waste-Management

Rivanna Authorities: www.rivanna.org/recycling-and-waste-disposal/

Thomas Jefferson Planning District Commission: www.tjpd.org/our-work/solid-waste/

4.1 Population, Growth Projections, Urban Concentrations, and Economic Development

The Thomas Jefferson Solid Waste Planning Unit is a regional solid waste planning unit in Central Virginia. Its member localities include Albemarle County, Fluvanna County, Greene County, the City of Charlottesville, and the incorporated towns of Scottsville and Stanardsville. The City of Charlottesville and the urbanized portions of Albemarle County, including the University of Virginia, form the region's primary economic, educational, medical, cultural, and employment center. Together, Charlottesville and Albemarle account for a majority of the planning unit's population and a substantial share of its commercial, institutional, and multifamily residential activity.

In 2023, the TJSWPU had an estimated population of 216,864. The accompanying map illustrates the planning unit and population density patterns across the region. Population density is highest in Charlottesville and the urbanized areas of Albemarle County, while Fluvanna and Greene Counties have more dispersed settlement patterns. These differences affect the feasibility, cost, and design of solid waste collection, recycling access, transfer facilities, convenience centers, and public education strategies.

Population change since 2010 is shown in Table 1. Overall, the planning unit has experienced notable population growth since 2010, exceeding the statewide growth rate (5%) over the same general period. Population growth generally correlates to an increase in the amount of municipal solid waste generated, recyclable materials collected, special waste handled, and disposal or transfer capacity needed.

Table 1. TJSWPU Population Projections (persons)

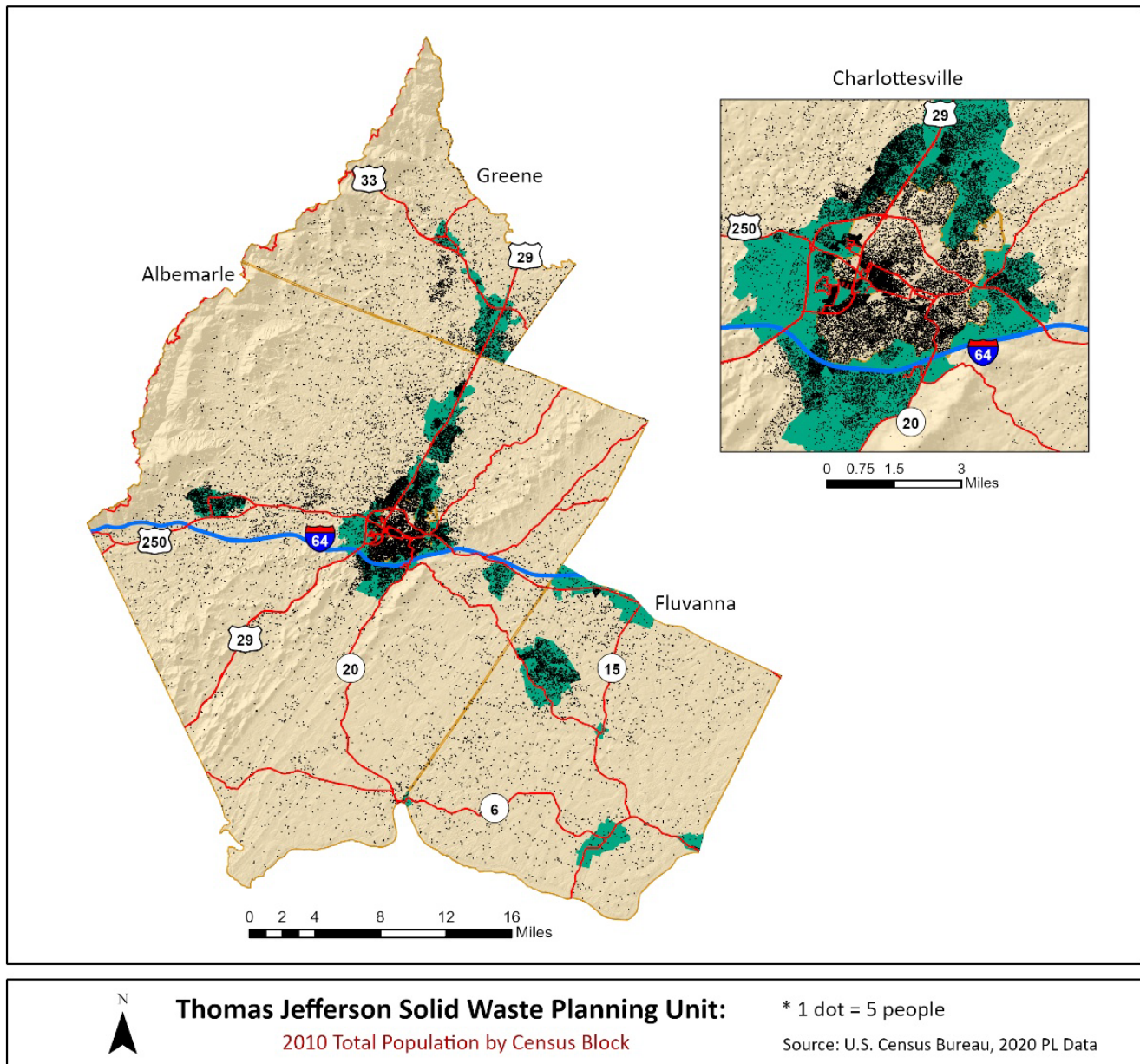
Locality	2000	2010	2020	2030	2040	2050
Charlottesville	40,099	43,475	46,553	54,717	57,427	57,832
Albemarle	84,186	98,970	112,395	124,560	137,105	152,770
Fluvanna	20,047	25,691	27,249	29,125	30,487	33,885
Greene	15,244	18,403	20,553	22,887	24,876	27,366
TJSWPU	159,576	186,539	206,750	231,289	249,895	271,853

Source: Weldon Cooper Center, Virginia Population Estimates & Projections

In 2023, approximately 77 percent of the planning unit's population lived in Albemarle County and the City of Charlottesville. This distribution is expected to continue through the long-range planning horizon based on population projections for 2030, 2040, and 2050.

The projections shown in this section are based primarily on historical trends and standard demographic methods. Current development activity may differ from those baseline projections. For example, Greene County has experienced increased construction activity and has active site plans that could result in additional household growth beyond the baseline projection.

Overall, the planning unit is projected to continue growing through 2050, with most long-term growth expected in Albemarle County and additional localized growth pressures in Greene and Fluvanna Counties.



Map 1. Population Density in the Thomas Jefferson Solid Waste Planning Unit

4.2 Housing and Economic Development

Housing characteristics are an important part of solid waste planning because collection systems, recycling participation, bulky waste generation, yard waste generation, and public education needs can vary by housing type, household size, and development pattern. Single-family detached homes, rural residences, townhomes, multifamily buildings, student housing, and institutional housing may all generate and manage materials differently.

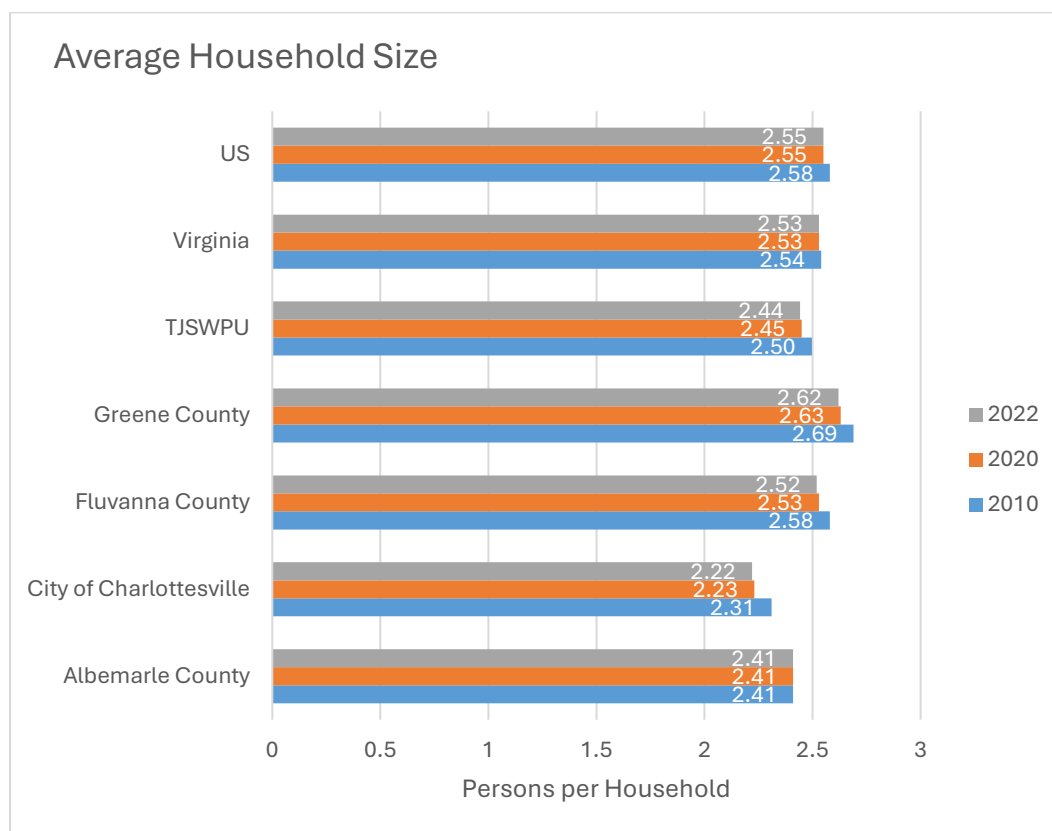
There were 88,295 housing units in the planning unit in 2020, reflecting steady growth since 2000. Albemarle County and the City of Charlottesville account for the largest number of housing units, consistent with their population share and concentration of urban and suburban development. Greene County has the fewest housing units but has experienced meaningful percentage growth over time.

Table 2. TJSWPU Number of Housing Units and Percent Change

Locality	2000	2010	2020	Change from 2010
Albemarle County	31,876	42,122	47,291	12%
City of Charlottesville	16,851	19,189	21,413	12%
Fluvanna County	7,387	10,383	11,127	7%
Greene County	5,574	7,509	8,464	13%
TJSWPU	61,688	79,203	88,295	11%

Source: Decennial Census

Average household size in the planning unit is slightly below the state and national averages. Greene County has the highest average household size in the region, while Charlottesville has the lowest. Average household size decreased across the region from 2010 to 2020, consistent with broader state and national trends. Smaller average household sizes can reflect several demographic factors, including aging households, smaller family sizes, and increases in one- or two-person households.

Figure 5. Average Household Size

Source: Decennial Census

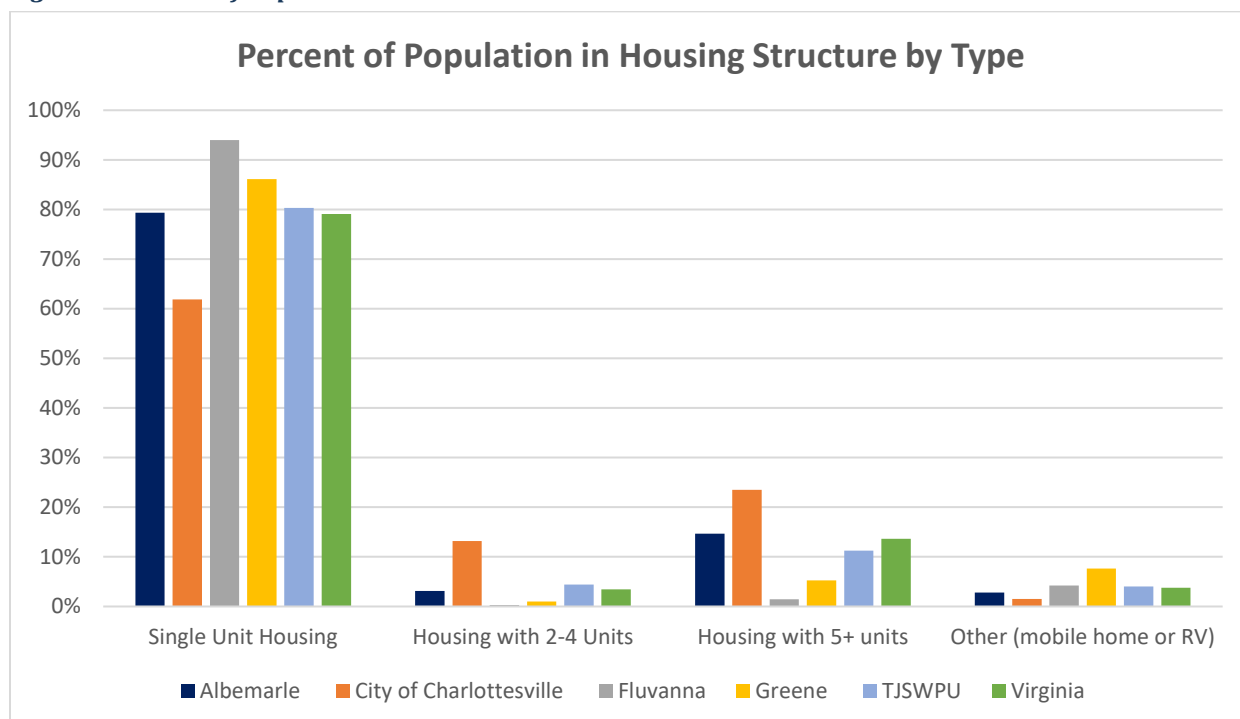
Multifamily housing is also relevant to recycling and solid waste management. Multifamily buildings may require different collection infrastructure, property-manager coordination, tenant education, space for carts or dumpsters, and clear signage. Albemarle County and Charlottesville account for the overwhelming majority of multifamily units in the planning unit, while multifamily housing is more limited in Fluvanna and Greene Counties.

Table 4. Multifamily Residential Market Metrics – 2022

County	Number of Buildings	Number of Units	Percent Vacancy	Regional Share
Albemarle	69	8,889	4.40%	66.4%
Charlottesville	126	3,752	1.50%	28.0%
Fluvanna	3	30	3.30%	0.2%
Greene	7	706	6.30%	5.3%
TJSWPU	205	13,377	3.88%	100%

Source: TJPDC Comprehensive Economic Development Strategy, Camion Associates

Figure 6. Percent of Population - 2022



Source: Community Resilience Assessment Tool

The Thomas Jefferson Planning District has experienced steady economic growth in recent years. Between 2017 and 2022, regional employment increased by approximately 3 percent, outpacing both Virginia (1.3 percent) and the nation (1.9 percent). Employment growth exceeded population growth during 2021 and 2022, reflecting the region's continued economic expansion and its role as a regional employment center.

The regional economy is anchored by government, education, healthcare, and research institutions. Government is the largest employment sector, accounting for nearly one-third of all regional jobs, including employment associated with public education and major institutions such as the University of Virginia. Health Care and Social Assistance is the second-largest employment sector and has also experienced significant growth in recent years. Together, these sectors contribute to a stable employment base and generate substantial institutional and commercial waste streams that differ from typical residential waste patterns.

The region has largely recovered from employment disruptions associated with the COVID-19 pandemic, with unemployment rates returning to near pre-pandemic levels. Growth in employment, commercial activity, and institutional services is expected to continue generating demand for waste collection, recycling, composting, and disposal services throughout the planning area.

Business activity has also expanded across the region. The number of payroll business establishments increased by approximately 5 percent between 2017 and 2021, with particularly strong growth occurring in Fluvanna County. Continued business development can increase demand for commercial waste management services while also creating opportunities for expanded recycling, organics diversion, and other resource recovery programs.

Construction activity remains an important consideration for long-range solid waste planning. Population growth, housing development, institutional expansion, and infrastructure investment contribute to the generation of construction, demolition, and debris (CDD) materials. As development continues throughout the region, maintaining adequate capacity for the recovery, processing, and disposal of CDD materials will remain an important component of the regional solid waste management system.

4.3 Climate, Geography and Transportation Conditions

The TJSWPU is located in Central Virginia, approximately 115 miles southwest of Washington, D.C., and 70 miles northwest of Richmond. The planning area includes Albemarle, Fluvanna, and Greene Counties, the City of Charlottesville, and the incorporated towns of Scottsville and Stanardsville. Much of the region lies within the James River watershed, specifically the Rivanna River watershed, which is a major tributary of the James River and part of the larger Chesapeake Bay watershed. Greene County spans two major watersheds, with areas draining to both the Rivanna and Rappahannock Rivers.

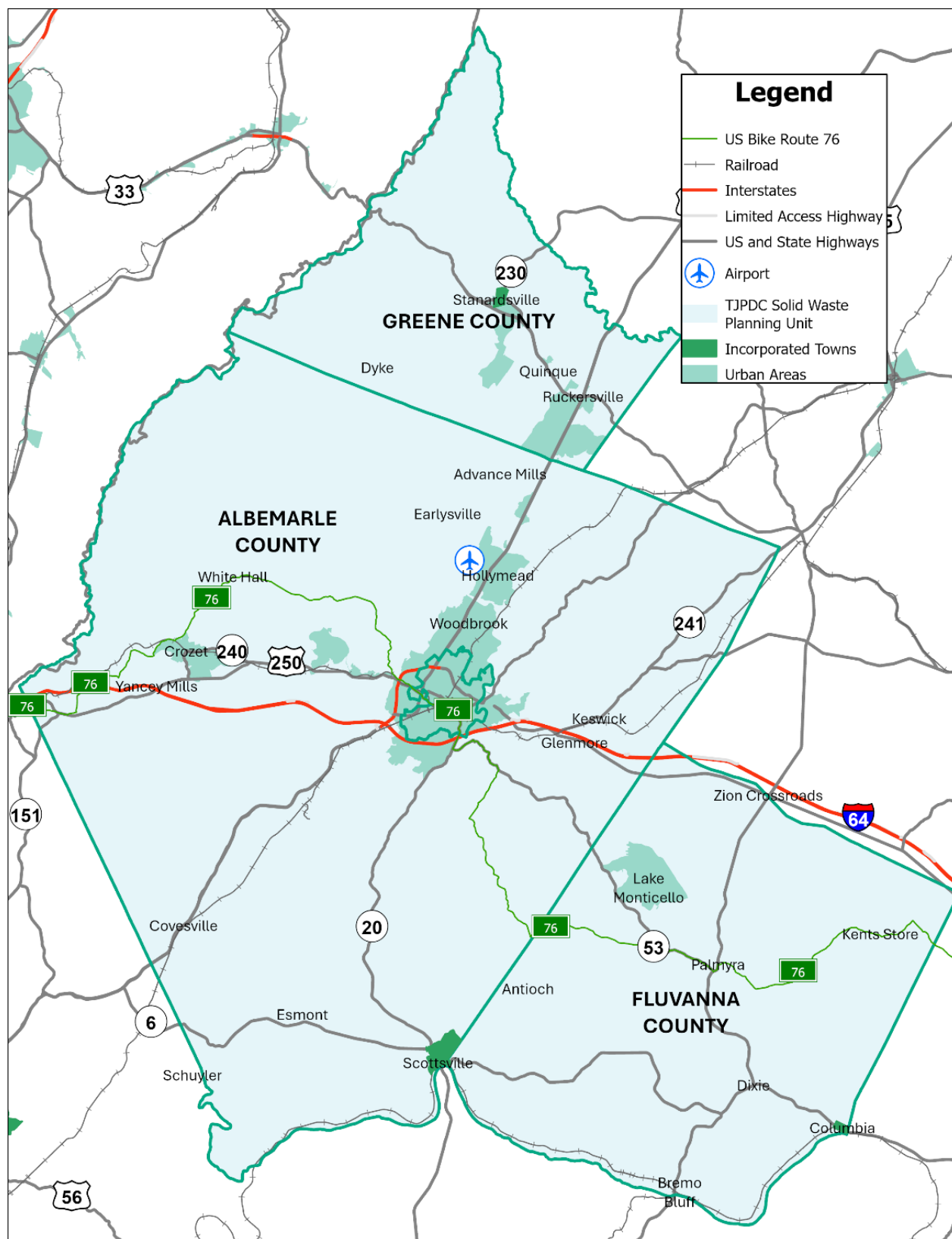
The region's geography includes urban centers, suburban development areas, rural communities, agricultural lands, forested areas, rivers, streams, and hilly terrain. These conditions shape how solid waste and recyclable materials are collected and transported. In urbanized areas, higher density can support curbside collection, shared recycling services, commercial collection routes, and centralized drop-off options. In rural areas, lower density and longer travel distances often make convenience centers, transfer stations, self-haul options, and private hauling more practical.

The region also places a high value on protecting its natural resources and environmental quality. Strong community interest in environmental stewardship underscores the importance of effective solid waste management practices. Proper waste handling, recycling, litter prevention, and management of special wastes help protect the region's natural resources, support community quality of life, and reduce potential impacts on local ecosystems.

Transportation infrastructure is another key factor in solid waste planning. Interstate 64 provides the region's primary east-west connection, while U.S. Route 29 provides a major north-south corridor. Other routes, including U.S. Route 250, U.S. Route 15, U.S. Route 522, and Route 33, serve rural areas and connect communities to transfer stations, convenience centers, disposal facilities, recycling sites, and regional markets.

Some rural roads in the planning unit are narrow, hilly, or served by secondary road systems that may be challenging for larger collection and transfer vehicles. These conditions can affect collection efficiency, travel time, fuel use, road wear, safety, and service reliability. Seasonal weather conditions can further exacerbate these challenges.

The planning area is also served by rail, air, public transportation, and active transportation networks. Rail lines operated by or connected with Amtrak, Buckingham Branch, CSX, and Norfolk Southern support passenger and freight movement through the region. Commercial air service is available at Charlottesville-Albemarle Airport. Public transportation services include Charlottesville Area Transit, University of Virginia Transit Service, JAUNT, Afton Express, and Greene County Transit.



Map 2. Transportation Corridors in the Thomas Jefferson Solid Waste Planning Unit

5 Current System of Solid Waste Management Programs and Markets

The Thomas Jefferson Solid Waste Planning Unit is served by a decentralized materials management system that combines local government services, regional authority facilities, institutional programs, private haulers, private recycling and composting providers, and permitted transfer and disposal facilities. Because services vary by locality, the plan describes the regional system by function rather than assuming one uniform service model.

TJPDC serves as the coordinating entity for regional solid waste planning, plan maintenance, public information, and annual recycling rate reporting. TJPDC collects and compiles data submitted by member localities and reporting partners, prepares the regional recycling rate report for the Virginia Department of Environmental Quality, maintains plan records, and supports implementation coordination among local governments and partner organizations.

5.1 Regional Roles and Service Delivery

Rivanna Solid Waste Authority. RSWA provides solid waste and recycling services that support Charlottesville and Albemarle County, including regional drop-off recycling, household hazardous waste collection, special waste collection events, transfer operations, and related public information. RSWA facilities are central to the urbanized portion of the planning unit and support regional diversion and safe disposal options.

Member localities. Albemarle County, Fluvanna County, Greene County, and the City of Charlottesville each retain responsibility for local service decisions, public information, collection models, facility operations or contracts, and local coordination with residents, businesses, haulers, and regional partners. As the most urbanized locality in the TJSWPU, the City of Charlottesville manages curbside refuse and recyclables programs, as well as a large item pick up program.

TJPDC. TJPDC coordinates regional planning and reporting, facilitates the Technical Advisory Committee, maintains the regional planning record, and supports public-facing communication about regional waste reduction, reuse, recycling, and disposal resources.

5.2 Source Reduction and Reuse

Source reduction and reuse are the preferred materials management strategies for the TJSWPU because they prevent materials from becoming waste and reduce demand for collection, transfer, processing, and disposal capacity. Local governments, regional partners, institutions, private businesses, and community organizations all support reuse through a decentralized network of programs and markets rather than through a single regional system.

Regional reuse opportunities include thrift stores, consignment shops, antique dealers, community swaps, donation drives, reusable goods exchange programs, surplus property resale, repair and resale businesses, and drop-off locations where usable materials can be diverted before disposal.

The City of Charlottesville and Albemarle County benefit from regional reuse infrastructure supported by RSWA, including the Encore Shop at the Ivy Solid Waste and Recycling Center, which diverts reusable household goods, building materials, and other durable items from disposal. Additional reuse opportunities throughout the region

include building-material reuse organizations, thrift and consignment stores, creative reuse outlets, book and media exchanges, sporting goods resale, medical equipment recovery programs, and online exchange platforms.

Fluvanna County's reuse network includes thrift and resale stores, antique businesses, community free-swap opportunities, and a low-maintenance reuse facility. Greene County's reuse markets include thrift stores, consignment and antique businesses, garage sales, and community-based reuse options.

UVA contributes to regional source reduction and reuse through institutional programs that reduce single-use materials, support reuse of office supplies and surplus property, collect reusable goods during student move-out, recover usable medical supplies, and support reusable dining-container and student swap programs.

5.3 Recycling and Materials Recovery

Recycling and materials recovery in the planning unit are provided through a combination of municipal collection, convenience centers, regional authority facilities, institutional programs, private haulers, transfer stations, processors, and end markets. Because the system is decentralized, recycling access, accepted materials, reporting practices, and market pathways vary by locality and provider.

Commonly recovered materials include paper, cardboard, commingled recyclables, metals, glass, plastics, yard waste, waste wood, tires, used oil, oil filters, antifreeze, batteries, electronics, textiles, white goods, and selected special materials.

RSWA supports recycling and materials recovery for Charlottesville and Albemarle County through regional facilities and programs, including the McIntire Recycling Center, the Ivy Solid Waste and Recycling Center, the Southern Albemarle Convenience Center, source-separated recycling centers, the Paper Sort facility, household food waste composting, used cooking oil collection, special collection days, household hazardous waste collection, appliance and e-waste recovery, vegetative waste management, mulch production, and other diversion services.

Charlottesville's solid waste management system includes a free residential curbside recycling program. Businesses in designated service areas who use the City's trash service can also use the curbside recycling service. GFL handles collection and transportation through their designated transfer and MRF facilities. Upon collection the recycling material is transported to a local transfer station before ultimately arriving at their Materials Recovery Facility located in Chester, VA where the material is processed, sorted, and filtered for quality/contamination.

Fluvanna County's recycling system includes the County convenience center, private hauling services, Lake Monticello curbside recycling, Van der Linde's Zion Crossroads facility, GFL service, tire recovery options, and other private-sector material handling.

Greene County's recycling and materials recovery system includes voluntary recycling service, free drop-off opportunities, the County transfer station, private haulers, and local scrap metal recovery.

UVA manages institutional recycling and materials recovery through multiple streams, including plastic, metal, glass, paper, cardboard, batteries, bulbs, ink cartridges, compostable materials, pallets, specialty laboratory materials, and selected event-based or department-led recovery programs.

Table 5. Local Reuse and Recycling Options by Jurisdiction and Regional Partner

Jurisdiction or Partner	Reuse Options and Markets	Recycling and Materials Recovery Options
Albemarle County, City of Charlottesville, and Rivanna Solid Waste Authority (RSWA)	RSWA Encore Shop at Ivy Solid Waste and Recycling Center; Habitat Store; thrift stores, consignment shops, and donation organizations; creative reuse outlets such as Scrappy Elephant; medical equipment reuse programs and community medical supply recovery; sporting goods resale businesses; book donation and resale programs; online exchange and resale platforms; community donation and swap opportunities; mulch reuse from vegetative waste processing; clean fill reuse opportunities; and public education resources on local reuse options.	RSWA source-separated recycling centers; McIntire Recycling Center; Ivy Solid Waste and Recycling Center; Southern Albemarle Convenience Center; Paper Sort facility; municipal and contracted recycling collection programs; materials recovery facility processing pathways; household food waste composting; used cooking oil collection; household hazardous waste programs; special collection events; appliance, e-waste, tire, pallet, vegetative waste, mulch, and clean fill management; refrigerant recovery for white goods; scrap metal recycling; and other specialty material recovery programs. Tri City Appliance refrigerant recovery; Computer Recycling of Virginia e-waste management; Gerdau scrap metal recycling.
Fluvanna County	Goodwill Store at Lake Monticello; MACA Thrift Store; Oldies and Goodies Thrift Store; Hensley's Antiques; Fluvanna Free Swap at Lake Monticello Fire Department; Light Academy; PODS; other local resale and reuse opportunities.	Fluvanna County Convenience Center; Lake Monticello curbside recycling service; Van der Linde Recycling in Zion Crossroads; GFL countywide trash and recycling service; Campbell Equipment and Wholesale Tire Solutions for tires; private hauling and transfer services.
Greene County	Thrift stores, consignment shops, garage sales, antique dealers, and community-based reuse opportunities, including Qute Scraps, Another Time Around, Goodwill, Kim's Consignment, J & J Antiques, Snow's Feed Store Antiques, The Wooly Lam, Greene House Shops, Gateway Antique Center, Ruckersville Gallery, Rummage 33, and the Community Medical Supply Closet.	Greene County Transfer Station; voluntary paid recycling service; free drop-off opportunities; private haulers; M&M Salvage for scrap metal recovery.
University of Virginia	Goodwill for Hoos Reuse move-out donation drive; UVA ReUSE Store; Reusable Office Supply Exchange; UVA Surplus; MERCI medical supply recovery; ReusePass dining container program; UVA SWAP student exchange events.	Plastic, metal, glass, paper, and cardboard recycling; battery, bulb, ink cartridge, pallet, compostable material, and specialty stream recycling; department and event-based programs.

5.4 Organics, Yard Waste, and Composting

Organics management within the Thomas Jefferson Solid Waste Planning Unit includes yard waste, vegetative material, food scraps, and other compostable materials managed through a combination of regional authority programs, institutional initiatives, private service providers, and self-directed practices.

RSWA supports organics diversion for the Charlottesville-Albemarle service area through vegetative waste processing at the Ivy Solid Waste & Recycling Center (ISWRC), where brush, stumps, and other accepted landscape and yard waste materials are processed into mulch for beneficial reuse. There is also a food waste composting program at [McIntire Recycling Center](#) and [Ivy Solid Waste and Recycling Center \(ISWRC\)](#).

Charlottesville's waste management system addresses organic waste through leaf collection and Christmas tree collection. Additionally, the City engages private-sector services to support the collection and processing of food scraps and other organic materials at the City Market and a 24/7 residential drop-off site. Private providers are also directly available to the community through direct contract. Leaf collection is composted by Panorama Paydirt and Christmas trees are ground into mulch and made available for free to community members.

Fluvanna County residents may manage yard waste through self-haul options and private providers. Greene County does not currently operate dedicated organics recovery programs but residents may utilize private services where available.

UVA contributes substantially to regional organics recovery through a variety of institutional programs. Composting initiatives include back-of-house dining operations, athletics events, zero-waste events, outdoor public compost bins, paper towel compost collection, specialized composting of selected animal bedding, and pilot programs for emerging organic material streams.

Organic materials comprise a significant portion of the municipal waste stream and may be diverted through prevention, donation, composting, and other recovery methods as markets, infrastructure, and community interest evolve. Food recovery represents an important waste prevention strategy, and a network of local food banks and food pantries serves the region by redistributing edible food that might otherwise be discarded. Once food is no longer suitable for donation, additional diversion opportunities may include composting and other organics recovery methods.

Table 6. Existing Organics, Yard Waste, and Composting Programs

Jurisdiction or Partner	Organics and Composting Activities
Albemarle County	RSWA vegetative waste mulching operation at Ivy Solid Waste & Recycling Center (ISWRC); Panorama Farms composting; Black Bear Composting; N.O.P.E./McGill Environmental partnerships; private composting subscriptions.
City of Charlottesville	Municipally supported organics collection programs; private food waste collection; public information related to composting opportunities.
Rivanna Solid Waste Authority (Albemarle County and City of Charlottesville Service Area)	Vegetative waste collection and mulch production at Ivy Solid Waste and Recycling Center (ISWRC). There is a food waste composting program at the McIntire Recycling Center and ISWRC . For more information, please visit RSWA Composting 101 .
Fluvanna County	No dedicated public organics program identified; self-haul and private management of yard waste; resident backyard composting opportunities.

Jurisdiction or Partner	Organics and Composting Activities
Greene County	No dedicated public organics program identified; self-haul and private management of yard waste; resident backyard composting opportunities.
University of Virginia	Dining composting; athletics and zero-waste event composting; public compost bins; paper towel composting; animal bedding composting; specialty organics pilot programs.

5.5 Collection, Transfer, and Disposal

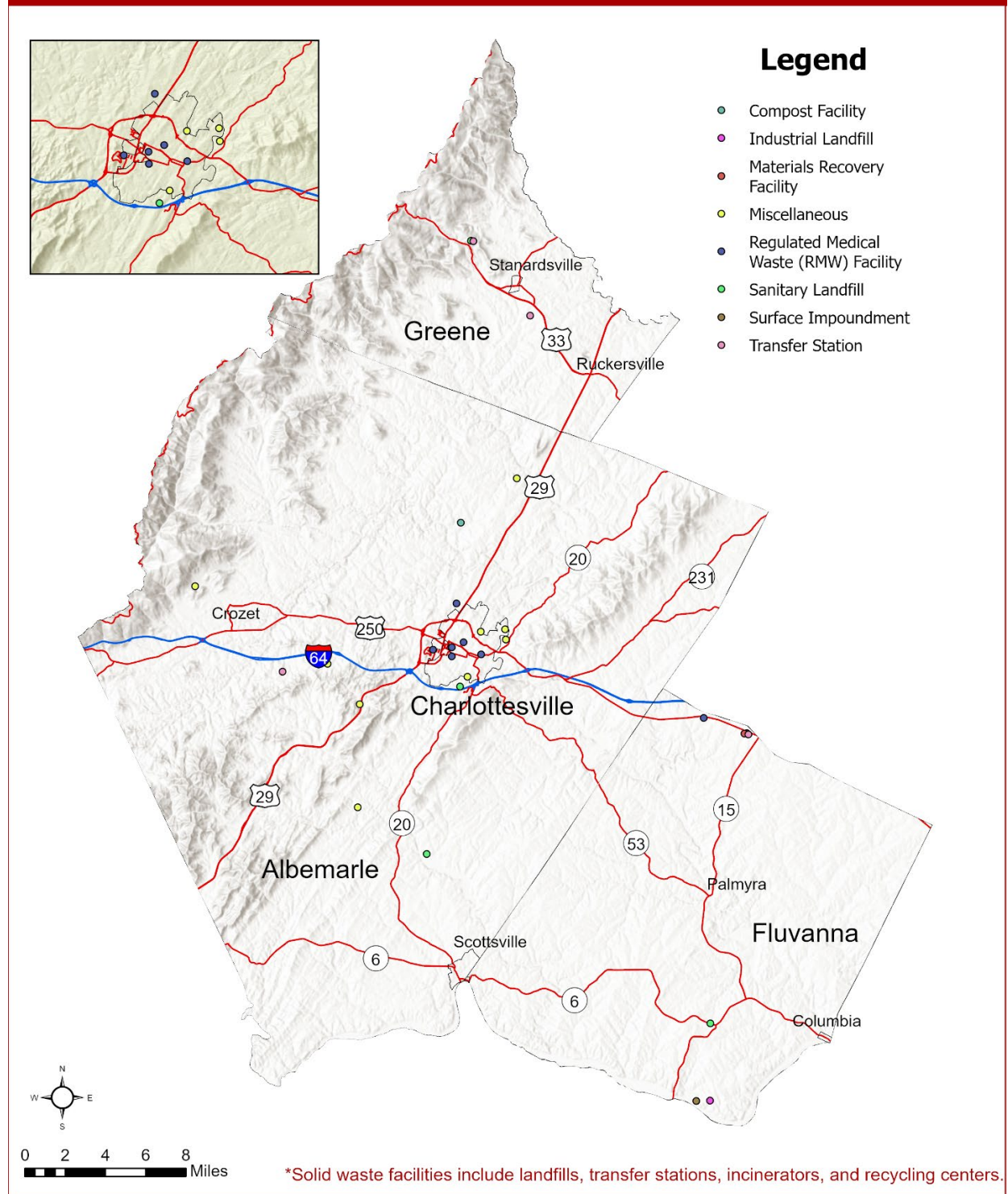
Collection, transfer, and disposal services differ across the planning unit and reflect both urban and rural service patterns. The City of Charlottesville provides municipal curbside trash collection for eligible residential customers and designated service areas. Some private haulers service City customers as well. Albemarle County relies primarily on private haulers, self-haul options, and RSWA-supported facilities. Fluvanna and Greene Counties utilize convenience centers, transfer stations, and private-hauler models suited to lower-density development patterns.

RSWA operates the Ivy Materials Utilization Center, which serves as a major transfer and convenience facility for Charlottesville and Albemarle County residents. The facility includes a transfer station, convenience center, special collection areas, and diversion programs for reusable and recyclable materials.

Fluvanna County residents and businesses generally arrange collection through private contracts or self-haul materials to the County convenience center in Fork Union. Additional transfer and disposal services are provided through facilities operated by Van der Linde Recycling and GFL. Greene County residents utilize the County transfer station, self-haul options, and a variety of private collection providers.

UVA contracts with private haulers to manage institutional waste streams generated through academic, healthcare, residential, and operational activities.

Active & Closed Solid Waste Facilities* in the TJSWPU



Map 3. Solid Waste Management Facilities in the TJSWPU

5.6 Solid Waste Management Facilities

Table 7. Solid Waste Management Disposal Sites in the TJSWPU

Jurisdiction	Status	Facility Name	Address	Facility Type	Permit Year	Capacity	Expected Life
Albemarle		Darden Towe Park Debris Site					
		Mint Springs Valley Park Debris Site					
	Closed	Keene Sanitary Landfill		Sanitary Landfill	1974		
	Active	Panorama Paydirt	398 Panorama Rd	Composting Facility			
Charlottesville	Active	Ivy Solid Waste and Recycling Center (RSWA)	4576 Dick Woods Rd	Transfer Station	2018	450 tons/day	2048
	Active	University of Virginia Health System	1215 Lee Street	RMV Autoclave			
	Closed	UVA Recycling Sort Facility	2456 Old Ivy Road		No permit required		
	Closed	Virginia Ambulatory Surgery Center	337 15th Street SW				
	Closed	Martha Jefferson Hospital	459 Locust Ave	RMW Incineration			
	Closed	Ivy Sanitary Landfill	4576 Dick Woods Road	Sanitary Landfill	1997	0	0
	Closed	Eldercare Gardens Nursing Home	1150 Northwest Dr				
	Inactive	Avon Street Debris Site	1525 Avon Street				
	Inactive	Melbourne Road Shop Debris Site					

Jurisdiction	Status	Facility Name	Address	Facility Type	Permit Year	Capacity	Expected Life
	Inactive	Pen Park Shop Debris Site					
	Closed	Avon Landfill	Interstate 64/Avon Street				
		Arboristry - Organic Matters	2392 Clements Hollow Lane				
	Closed	HCMF Heritage Hall - Charlottesville					
	Inactive	Dominion Energy VA – Bremo Power Station	1038 Bremo Road	Landfill			
Fluvanna	Under development	Dominion Energy VA – Bremo Power Station	1038 Bremo Road	Landfill			
	Active	Fluvanna County Convenience Center	11206 West River Rd	Transfer Station			
	Post Closure	Fluvanna County Sanitary Landfill	11206 West River Rd	Landfill			
	Active	Van der Linde	73 Hunters Branch Rd	Transfer Station			
	Active	GFL	5498 Richmond Road	Transfer Station			
	Active	Republic Services	131 Hunters Branch Rd	Transfer Station			
	Closed	Fluvanna Correctional Center for Women	144 Prison Ln	Transfer Station			

Jurisdiction	Status	Facility Name	Address	Facility Type	Permit Year	Capacity	Expected Life
		Greene County Emergency Permit					
Greene	Active	Greene County Transfer Station	386 Mays Rd	Transfer Station			
	Clean Closed	Greene County Transfer Station	386 Mays Rd				
	Closed	Greene County Transfer Station	386 Mays Rd				
	Post Closure	Greene County Transfer Station/Sanitary Landfill	386 Mays Rd	Landfill			

5.7 Special Waste and Household Hazardous Materials

Special waste streams require separate handling to protect public health, worker safety, infrastructure, and the environment. These materials include household hazardous waste, electronics, tires, used oil, antifreeze, batteries, medical sharps, regulated medical waste, white goods, bulky items, and selected automotive or household materials.

Existing programs throughout the planning unit include permanent drop-off options, collection events, retailer take-back programs, institutional programs, private services, and specialized handling at permitted facilities. RSWA provides household hazardous waste collection events and special collection days serving the Charlottesville-Albemarle area. Fluvanna County conducts annual tire collection events and biannual household hazardous waste collection. Greene County residents may access private-sector services and special handling opportunities through regional providers. UVA manages specialized institutional waste streams through Environmental Health and Safety and other operational units.

5.8 Construction, Demolition, and Debris

Construction, demolition, and debris (CDD) materials are generated through building construction, renovation, repair, demolition, land clearing, and related activities. CDD materials may include wood, concrete, brick, asphalt, metals, drywall, roofing materials, and other building-related materials.

CDD materials are not comprehensively reflected in the recycling data reported by Virginia Solid Waste Planning Units (SWPUs). Under Virginia's recycling rate reporting system, SWPUs primarily report recycling associated with the municipal solid waste (MSW) stream, which consists largely of residential, commercial, and institutional wastes. Although some CDD recycling activities may be captured through statewide reporting mechanisms, CDD materials are generally managed through separate collection, processing, and disposal systems and are not often or consistently included in local recycling rate calculations. As a result, recycling rate data may not fully represent the extent of CDD recovery occurring within the region.

Despite these reporting limitations, CDD materials remain an important consideration for long-range solid waste planning because they can represent a significant portion of the regional waste stream and may require

dedicated reuse, recycling, processing, and disposal capacity. Population growth, redevelopment, infrastructure investment, and building activity can all influence future CDD generation rates.

Existing regional infrastructure supports the management and recovery of CDD materials through both public and private providers. The Rivanna Solid Waste Authority (RSWA) accepts construction and demolition debris at the Ivy Solid Waste & Recycling Center, providing local disposal capacity for residents and contractors within the Charlottesville-Albemarle area. The facility accepts construction debris, demolition debris, clean fill materials, and other bulky waste streams for management.

Private-sector facilities also play an important role in CDD recovery and recycling. Van der Linde Recycling accepts construction and demolition materials through its Zion Crossroads operations and processes recoverable materials for beneficial reuse and secondary markets. In addition, contractors throughout the planning region may utilize a variety of permitted transfer stations, landfills, recycling facilities, material recovery operations, and salvage businesses to manage CDD materials.

5.9 Public Education, Outreach, and Participation

Public education and outreach are provided through locality websites, regional resources, social media, school and institutional programs, community events, collection-event notices, recycling guidance, and direct communication with residents and businesses.

TJPDC serves an important regional outreach role by maintaining and sharing information related to waste reduction, reuse, recycling, composting, and disposal resources across the planning unit. Regional outreach efforts include the TJPDC webpage, electronic newsletters, social media communications, and updates to regional information resources that help residents and businesses navigate a decentralized materials management system.

RSWA conducts facility tours and presentations for schools, community groups, and other organizations. The City of Charlottesville and Albemarle County collaborate on litter and plastic pollution reduction initiatives and support community-based efforts such as stream cleanups, volunteer litter collection, and partnerships with organizations such as the Rivanna Conservation Alliance and Charlottesville Litter Pickers.

UVA engages students, faculty, and staff through tabling events, social media outreach, reuse and recycling communications, and a wide range of volunteer and educational programs including Zero Waste Ambassadors, Green Games at athletic events, Corner Clean Ups, the Green Workplace Program, and Sustainability Passport Program.

Table 8. Outreach and Participation Programs

Jurisdiction / Partner	Education and Outreach Activities
Albemarle County	Environmental Stewardship Hub waste reduction resources for the community; volunteer support for public school recycling and composting programs through the County’s Advisory Committee on Environmental Sustainability; Sustainability Ambassadors on public schools’ staff; participation through the Solid Waste Alternatives Advisory Committee (SWAAC); partnership with the City of Charlottesville on anti-litter campaigns funded by the Plastic Bag Tax.
City of Charlottesville	Promoting RSWA special collection events, promoting composting information; Adopt-a-Stream; litter cleanup partnerships; street sweeping communication; Recycle Coach partnership.

Jurisdiction / Partner	Education and Outreach Activities
Fluvanna County	Rivanna River Cleanup; Hands on Fluvanna volunteer activities.
Greene County	Promotion of voluntary recycling opportunities; community cleanup and litter prevention messaging where applicable.
University of Virginia	Social media outreach; Zero Waste Ambassadors; Green Games; Corner Clean Ups; Green Workplace Program; Sustainability Passport Program; Lunch and Learns; Green Purchasers Community of Practice; reuse and recycling communications.
TJPDC	Regional recycling and disposal information on our website; social media announcements; electronic newsletters; support for Technical Advisory Committee coordination.
Community and Volunteer Organizations	Home composting education; stream and roadside cleanups; litter prevention activities; waste reduction outreach.

5.10 Funding Arrangements

Solid waste management in the region is funded through a combination of user fees, general fund revenues, material sales, and grant funding. Each locality determines the appropriate balance between these funding sources based on local service levels, facility needs, and budget priorities.

Tipping fees charged at transfer stations and convenience centers provide a primary source of revenue for waste management operations. These fees help cover the costs of waste collection, transfer, transportation, disposal, and facility operations. In many cases, tipping fee revenue also helps offset the costs of recycling programs, particularly during periods when revenues from the sale of recyclable materials are insufficient to fully support program administration and processing costs.

General fund revenues are often used to supplement tipping fee income and support services and facilities that do not generate adequate user-fee revenue. These may include recycling centers, reuse programs, public education efforts, and other waste diversion initiatives. Localities are also responsible for funding long-term environmental obligations, including landfill closure, post-closure care, and other regulatory requirements. The City of Charlottesville utilizes a pay-as-you-throw approach for residential trash collection, requiring residents to purchase official trash stickers for curbside collection. Similarly, RSWA sells trash stickers for residents who self-haul municipal solid waste to the Ivy Solid Waste and Recycling Center (ISWRC). Revenue from these programs helps support operational and administrative costs.

Recycling services are generally provided at little or no direct cost to residents. However, the financial performance of recycling programs depends heavily on fluctuating commodity markets. While revenues from the sale of recyclable materials help offset collection and processing costs, market conditions vary significantly over time and across material types. Some recyclable commodities generate positive revenue, while others require ongoing subsidy to remain economically viable.

Reuse programs operate under similar conditions. For example, the Encore Shop at the ISWRC resells reusable items to recover a portion of the costs associated with collection, storage, and program administration. Although these programs help divert materials from disposal and provide community benefits, they generally do not fully fund themselves through sales revenue alone.

Grants provide an additional source of funding for specialized programs and events, including household hazardous waste collections, bulky waste amnesty events, and targeted recycling initiatives. State funding also supports activities such as tire collection and recycling.

6 Recycling Rates

6.1 State and National Landscape of Waste Management

At the national level, the U.S. Environmental Protection Agency (EPA) estimated that approximately 292.4 million tons of municipal solid waste (MSW) were generated in 2018, equivalent to about 4.9 pounds per person per day. Of that amount, approximately 69 million tons were recycled and 25 million tons were composted, resulting in a combined recycling and composting rate of 32.1 percent. EPA reported that approximately 50 percent of MSW was landfilled and 11.8 percent was combusted with energy recovery. These national figures provide useful context for evaluating local and regional waste management trends.

EPA's MSW statistics do not represent the entire non-hazardous waste stream. Construction, demolition, and debris (CDD) materials are tracked separately and can exceed municipal solid waste generation by weight. EPA estimated that approximately 600 million tons of CDD materials were generated nationally in 2018, more than twice the amount of municipal solid waste generated during the same year. As a result, recycling rates based solely on municipal solid waste should not be interpreted as representing all materials generated, recovered, or disposed within a community.

Virginia's reported recycling rate has generally remained above the state minimum recycling rate requirements. DEQ reported a statewide recycling rate of 39.5 percent for calendar year 2024.

6.2 Virginia Reporting Framework

Virginia uses two complementary reporting programs to track waste management activity: the Recycling Rate Report and the Solid Waste Information and Assessment (SWIA) Report. Both are administered by the Virginia Department of Environmental Quality (DEQ), but each serves a different purpose and collects different types of information.

Recycling Rate Report. The Recycling Rate Report is submitted by solid waste planning units (SWPUs) and is used by DEQ to calculate compliance with Virginia's recycling rate requirements. Planning units with populations greater than 100,000 report annually, while smaller planning units report every four years. DEQ uses the reported information to calculate local and statewide recycling rates and assess progress toward statutory recycling goals related specifically to municipal solid waste (MSW).

Solid Waste Information and Assessment Report. The SWIA Report is facility-based. DEQ requires permitted solid waste management facilities to report annually on the amount and types of waste received, transferred, processed, recycled, stored, combusted, or disposed during the previous calendar year. SWIA data are primarily used to evaluate waste flows, facility utilization, disposal capacity, and long-term planning needs.

Because these reporting systems measure different aspects of waste management activity, they should not be interpreted as direct equivalents. Together, however, they help provide a broader understanding of waste generation, recycling activity, and disposal patterns throughout Virginia and within the Thomas Jefferson Solid Waste Planning Unit (TJSWPU).

6.3 Calculating the Recycling Rate and Meeting the 25% Minimum

The Solid Waste Planning Unit calculates recycling rates using reported municipal solid waste disposal and recycling data in accordance with DEQ regulations. Reported quantities may be based on measured weights or approved conversion factors.

The recycling rate is calculated using the following formula:

$$\frac{(\text{PRM} + \text{Credits})}{(\text{PRM} + \text{Credits} + \text{MSW Disposed})} \times 100 + \text{Source Reduction Credit} = \text{Final Recycling Rate}$$

Where PRM represents principal recyclable materials reported to DEQ.

Participating localities and the region are committed to attaining or exceeding the minimum recycling rate of 25% of the total municipal solid waste generated annually, consistent with § 10.1-1411 of the Code of Virginia and applicable DEQ regulations. Achieving and demonstrating compliance with this requirement depends on the availability of accurate and comprehensive disposal and recycling data from both public and private sector sources.

Improving the quality and completeness of recycling and waste generation data remains an ongoing priority for the Planning Unit. Efforts include evaluating mechanisms to enhance reporting of solid waste and recycling activities, including coordination with private haulers, waste management service providers, and other stakeholders. These efforts will support the establishment of a reliable baseline, improve tracking of recycling performance, and inform future waste reduction and recycling initiatives.

The Planning Unit will continue implementing existing recycling programs and the objectives identified in the implementation framework in Appendix D, while strengthening data collection, reporting, and program evaluation.

If the Planning Unit does not meet the applicable recycling rate requirement, DEQ may require preparation of a Recycling Action Plan identifying strategies, responsible parties, resources, and implementation schedules necessary to improve performance.

6.4 Historic Recycling Rates

Historical waste generation and recycling data provide an important foundation for evaluating existing waste management programs, identifying trends in material recovery, and forecasting future infrastructure and service needs. The following tables and figures summarize municipal solid waste disposal, recyclable materials recovered, and recycling rates reported for the Thomas Jefferson Solid Waste Planning Unit between calendar years 2021 and 2024.

These data are compiled annually by the Thomas Jefferson Planning District Commission (TJPDC) from participating local governments, regional agencies, institutions, private-sector participants, and other reporting partners to satisfy DEQ's recycling reporting requirements.

The recycling rates presented in this section are based on municipal solid waste as defined by DEQ reporting requirements. Municipal solid waste generally includes residential, commercial, and institutional waste streams but excludes several significant categories, including most industrial process waste, hazardous waste, and construction, demolition, and debris materials.

As with many recycling reporting programs nationwide, the completeness of available data varies among waste streams, jurisdictions, and service providers. While significant quantities of waste and recyclables are reported annually through local governments, public agencies, institutions, and participating private facilities, portions of

the regional waste stream are managed through private hauling and processing systems for which reporting is limited or voluntary.

Several local factors influence the interpretation of recycling rate data:

Albemarle County and the City of Charlottesville are reported together because much of the available waste and recycling data are associated with facilities operated by the Rivanna Solid Waste Authority (RSWA), which serves residents and businesses in both jurisdictions. While the City's contracted residential waste and recycling collection is primarily delivered to a separate transfer station rather than RSWA facilities, many residents, private haulers, and commercial entities in both Charlottesville and Albemarle County continue to utilize RSWA facilities. Because waste and recycling flows overlap across jurisdictions and reporting sources, the data are combined to provide the most comprehensive and consistent representation of regional waste management activities. Additionally, not all waste collection, disposal, and recycling activities conducted by private businesses and institutions are captured through local reporting efforts.

Fluvanna County reports relatively low disposal tonnage and low per-capita waste generation rates. A significant portion of waste and recycling services are provided through private-sector arrangements, limiting the availability of comprehensive local data.

Greene County reports comparatively higher disposal tonnage because much of the county's waste management activity is captured through publicly reported disposal facilities, while comparatively less recycling activity is documented through available reporting channels.

These limitations affect both local and statewide recycling rate calculations. Reported recycling rates should therefore be viewed as indicators of documented recycling activity and regulatory compliance rather than precise measurements of all material generated, recycled, or disposed within the planning unit.

Improving data transparency remains an important opportunity for future planning efforts. Continued collaboration with private haulers, recycling processors, major commercial generators, and other waste management stakeholders could help increase participation in annual reporting programs, improve the consistency of regional datasets, and establish a more complete baseline for evaluating waste generation, recycling performance, and future infrastructure needs. Such efforts would support more informed decision-making while maintaining consistency with DEQ reporting requirements and methodologies.

Table 9. TJSWPU Principal Recyclable Materials and Waste Generation, 2021 (tons)

Calendar Year 2021	Albemarle & Charlottesville	Fluvanna	Greene	Region
Municipal Solid Waste Disposed	44,394	1,451	39,079	84,924
Household	36,693	1,451	35,289	73,432
Commercial	406	-	3,790	4,196
Institutional	7,295	-	-	7,295
Primary Recyclable Materials	40,098	2,211	6,547	48,855
Paper	3,920	-	2,558	6,478
Metal	11,849	95	3,900	15,844
Plastic	179	-	-	179
Glass	657	-	-	657
Commingled	3,583	-	18	3,600
Yard Waste	10,516	93	-	10,609
Waste Wood	776	2,000	-	2,776
Textiles	841	-	-	841
Waste Tires	526	2	25	553
Used Oil	1,241	13	18	1,272
Used Oil Filters	702	-	-	702
Used Antifreeze	276	-	5	281
Batteries	392	7	14	413
Electronics	118	-	0	118
Fats/Bone/Greases	37	-	9	-
Compost/Food Waste	4,485	-	-	4,485
Base Recycling Rate	47%	60%	14%	37%
Total Waste	84,491	3,661	45,626	133,779
Population	165,503	27,556	21,030	214,089
Per Capita (lbs/person/day)	2.80	0.73	11.89	3.42

Table 10. TJSWPU Principal Recyclable Materials and Waste Generation, 2022 (tons)

Calendar Year 2022	Albemarle & Charlottesville	Fluvanna	Greene	Region
Municipal Solid Waste Disposed	51,695	1,354	40,432	93,482
Household	43,116	1,354	36,760	81,230
Commercial	814	-	3,672	4,486
Institutional	7,766	-	-	7,766
Primary Recyclable Materials	35,911	1,685	1,559	39,155
Paper	4,045	-	1,108	5,152
Metal	11,795	-	235	12,030
Plastic	539	-	23	562
Glass	28	-	-	28
Commingled	3,582	-	-	3,582
Yard Waste	12,919	166	-	13,084
Waste Wood	0	1,500	-	1,500
Textiles	958	-	-	958
Waste Tires	280	0	95	375
Used Oil	33	11	61	105
Used Oil Filters	11	-	-	11
Used Antifreeze	0	-	-	0
Batteries	190	-	15	205
Electronics	100	8	-	108
Fats/Bone/Greases	33	-	16	50
Grease Trap	11	-	6	17
Compost/Food Waste	1,387	-	-	1,387
Base Recycling Rate	41%	55%	4%	30%
Total Waste	87,607	3,039	41,991	132,636
Population	166,773	27,843	21,165	215,781
Per Capita (lbs/person/day)	2.88	0.60	10.87	3.37%

Table 11. TJSWPU Principal Recyclable Materials and Waste Generation, 2023 (tons)

Calendar Year 2023	Albemarle & Charlottesville	Fluvanna	Greene	Region
Municipal Solid Waste Disposed	49,869	235	41,040	91,145
Household	46,497	96	40,145	86,738
Commercial	996	139	895	2,031
Institutional	2,376	-	-	2,376
Primary Recyclable Materials	44,802	1,510	5,742	52,054
Paper	2,079	-	1,673	3,752
Metal	18,313	-	3,810	22,123
Plastic	120	-	19	139
Glass	437	-	-	437
Commingled	3,312	1,367	-	4,679
Yard Waste	12,427	143	-	12,570
Waste Wood	1	1,580	-	1
Textiles	744	-	-	744
Waste Tires	487	0	100	587
Used Oil	1,075	17	16	1,091
Used Oil Filters	10	-	-	10
Used Antifreeze	43	-	3	46
Batteries	411	-	13	424
Electronics	60	-	0	60
Compost/Food Waste	5,255	-	107	5,362
Other/Solvent	28	-	-	28
Base Recycling Rate	47%	87%	12%	36%
Total Waste	94,671	1,745	46,782	143,198
Population	167,280	28,214	21,370	216,864
Per Capita (lbs/person/day)	3.10	0.34	12.00	3.62

Table 12. TJSWPU Principal Recyclable Materials and Waste Generation, 2024 (tons)

Calendar Year 2024	Albemarle & Charlottesville	Fluvanna	Greene	Region
Municipal Solid Waste Disposed	60,452	1,209	37,434	99,095
Household	46,353	1,209	37,434	84,996
Commercial	2,579	-	-	2,579
Institutional	11,520	-	-	11,520
Primary Recyclable Materials	58,335	3,640	6,357	68,332
Paper	4,875	-	-	4,875
Metal	22,841	79	5,000	27,920
Plastic	177	-	-	177
Glass	806	-	-	806
Commingled	3,767	1,974	-	5,741
Yard Waste	17,148	-	1,121	18,269
Waste Wood	136	1,568	165	1,869
Textiles	648	-	3	651
Waste Tires	776	1	61	837
Used Oil	1,550	18	4	1,572
Used Oil Filters	14	-	-	14
Used Antifreeze	222	-	3	225
Batteries	400	-	-	400
Electronics	97	-	-	97
Compost/Food Waste	4,874	-	-	4,874
Other/Solvent	3	-	-	3
Base Recycling Rate	49%	75%	15%	41%
Total Waste	118,787	4,849	43,791	167,427
Population	169,056	28,746	21,744	219,546
Per Capita (lbs/person/day)	3.85	0.92	11.04	4.18

6.5 Analysis

The Thomas Jefferson Solid Waste Planning Unit maintained recycling rates above Virginia's required minimum recycling rate of 25 percent throughout the reporting period (Figure 1). Regional recycling performance declined from approximately 39 percent in 2021 to 34 percent in 2022 before improving to 41 percent in 2024.

The statewide recycling rate remained relatively constant at approximately 43 percent, while the TJSWPU remained slightly below the statewide average. The improvement observed in 2023 and 2024 corresponds with increases in reported recyclable tonnage, particularly scrap metal, yard waste, and compost.

Individual jurisdictions exhibited substantially different recycling rates. Albemarle County and the City of Charlottesville maintained relatively consistent recycling performance between 41 and 49 percent, closely tracking the statewide average. Greene County reported substantially lower recycling rates, ranging from 4 to 15 percent, largely reflecting the dominance of landfill disposal data within its reporting system.

Fluvanna County consistently reported the highest recycling rates, ranging from 55 to 85 percent. However, these values should be interpreted cautiously because much of the county's waste management system is privately operated and therefore not reflected in public reporting. Consequently, relatively small changes in reported disposal or recycling tonnage produce large changes in the calculated recycling rate.

Overall, the regional trend demonstrates gradual improvement in recycling performance while highlighting the influence that reporting practices have on calculated recycling rates.

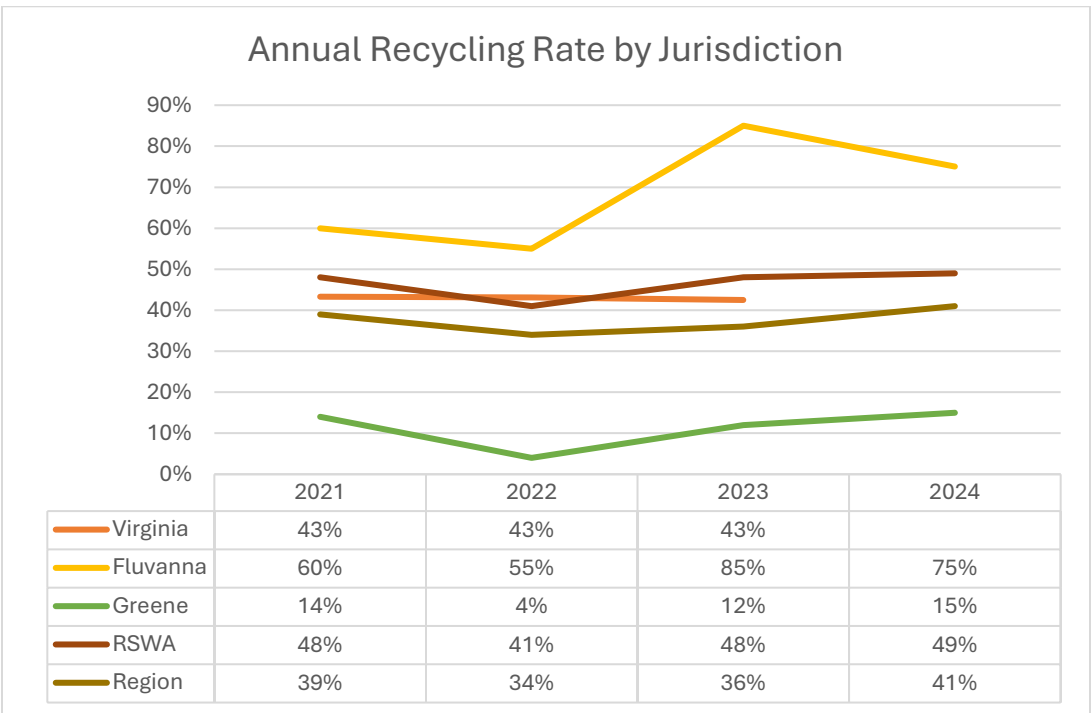


Figure 1. Annual Recycling Rate by Jurisdiction

Source: Local Recycling Rate Reports and Virginia DEQ

Figure 2 illustrates reported municipal solid waste disposal and recycling tonnage by jurisdiction. Albemarle County and the City of Charlottesville account for the majority of the planning unit's reported waste stream,

consistently representing approximately two-thirds to more than seventy percent of all reported waste managed during the study period.

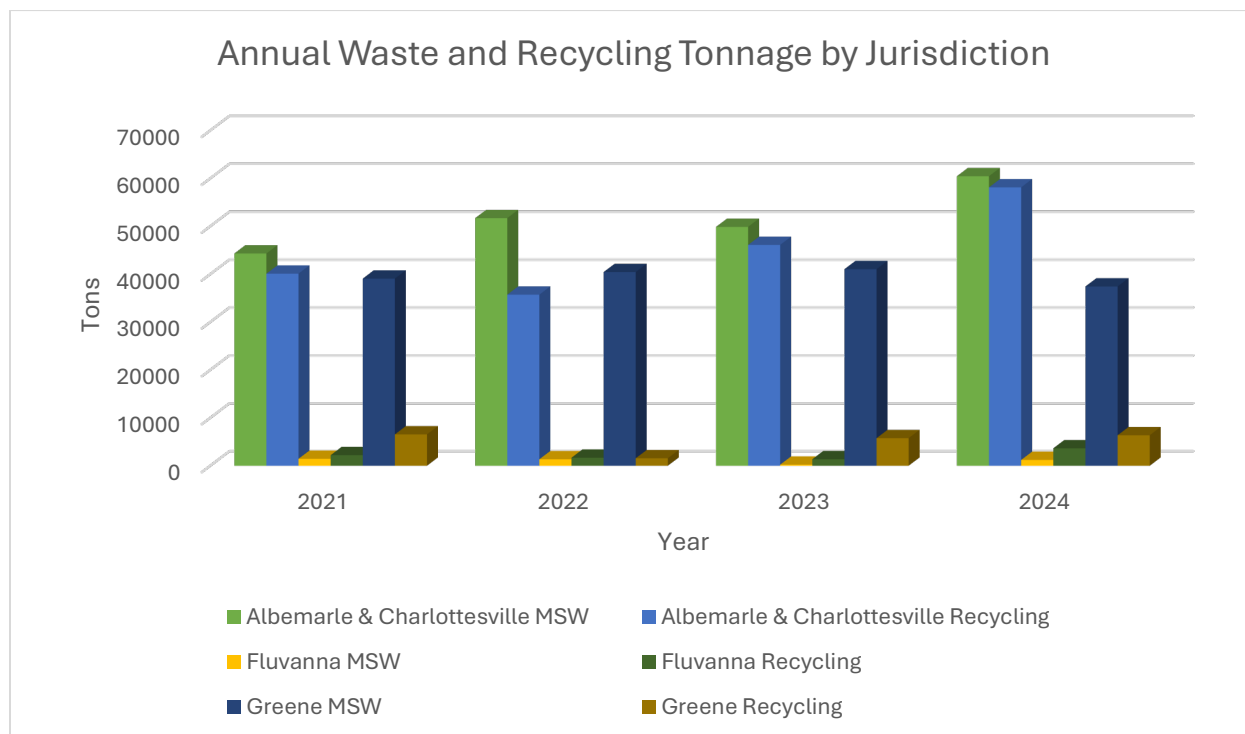


Figure 2. Annual Waste and Recycling Tonnage by Jurisdiction

Source: Local Recycling Rate Reports

Following a decline in reported recycling during 2022, total recyclable tonnage increased substantially in both 2023 and 2024. By 2024, reported recycling reached its highest level during the reporting period, increasing to more than 68,000 tons regionally. Municipal solid waste disposal also increased during this period, suggesting that both waste generation and recycling activity grew simultaneously.

Greene County maintained relatively consistent disposal tonnage throughout the study period while reporting comparatively little recycling. Fluvanna County reported both the smallest disposal and recycling tonnage, reflecting the limitations associated with private-sector reporting rather than actual waste generation.

The overall trend suggests increasing material generation throughout the region, reinforcing the importance of expanding waste reduction, recycling, composting, and diversion programs as population and economic activity continue to grow.

Per capita waste generation provides an indicator of how much municipal solid waste is generated relative to population. Between 2021 and 2024, the TJSWPU's reported per capita waste generation increased from approximately 3.4 pounds per person per day to 4.2 pounds per person per day.

Although regional waste generation remains below the 2018 national average of 4.9 pounds per person per day, the increasing trend suggests that waste generation is growing proportionally faster than population growth. Continued monitoring will help determine whether this increase reflects changing consumer behavior, economic growth, or improved reporting of waste management activities.

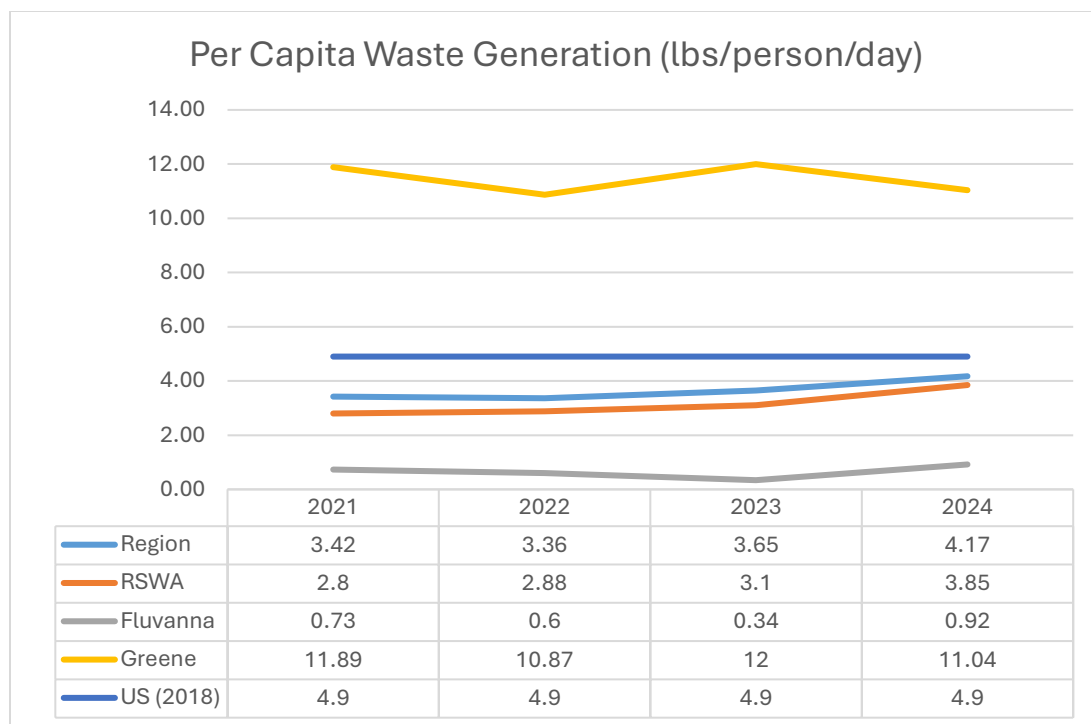


Figure 3. Per Capita Waste Generation

Source: EPA and Local Recycling Rate Reports

Jurisdictional differences again illustrate reporting limitations. Albemarle County and Charlottesville increased steadily from 2.8 to 3.85 pounds per person per day, remaining below both the regional and national averages. Greene County consistently reported unusually high per capita disposal rates—between 11 and 12 pounds per person per day. These elevated rates may be influenced by factors such as limited local waste diversion opportunities and the possibility that some haulers dispose of waste generated outside the county at local facilities. In contrast, Fluvanna County reported exceptionally low per capita waste generation, a result that likely reflects incomplete reporting rather than actual disposal patterns, as much of the county is served by private haulers that do not report their waste and recycling tonnage annually.

These differences indicate that per capita values are influenced not only by actual waste generation but also by the completeness of reported data.

The composition of reported recyclable materials remained relatively consistent throughout the study period, with a relatively small number of material categories accounting for the majority of recovered tonnage.

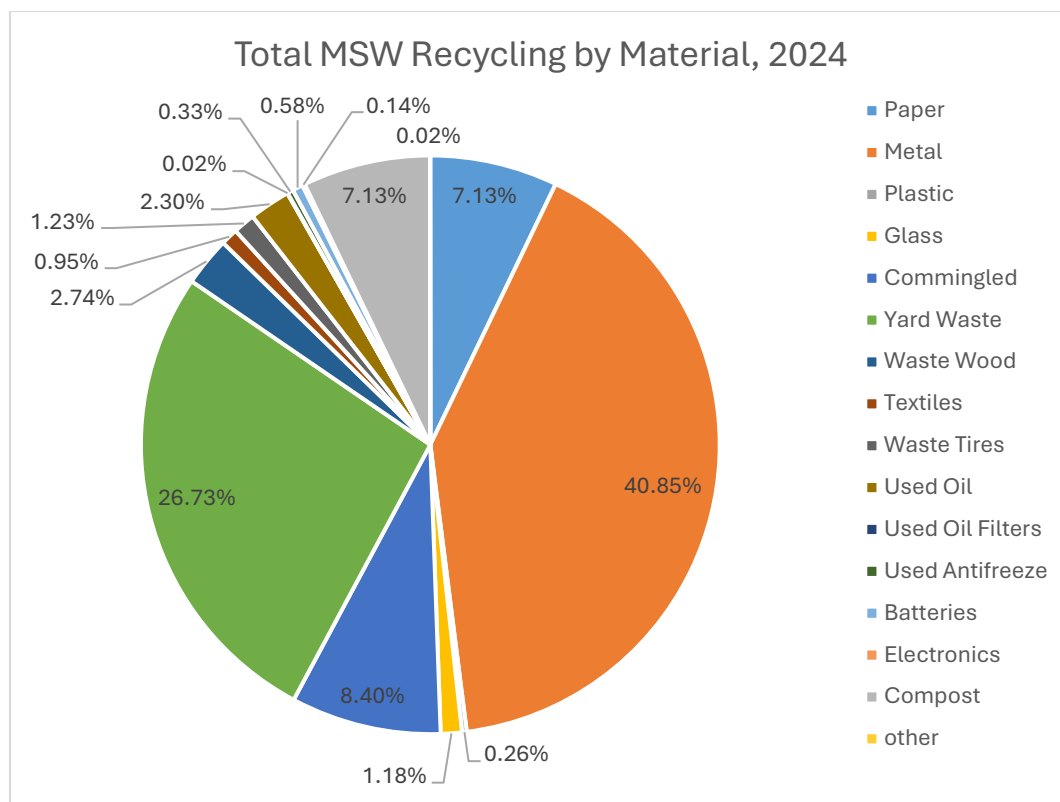


Figure 4. Total MSW Recycling by Material, 2024

Source: TJSWPU Annual Recycling Report (Calendar Year 2024)

In 2024, scrap metal represented the largest recyclable material, accounting for approximately 41 percent of all reported recycled materials. Yard waste was the second largest category at 27 percent, followed by commingled recyclables (8.4 percent) and paper (7.1 percent). Compost and food waste also represented a significant portion of the reported waste stream. Together, these five material categories accounted for more than 90 percent of all reported recyclable tonnage in the region.

Other materials—including electronics, batteries, used oil, tires, textiles, plastics, glass, and antifreeze—represented relatively small percentages individually but remain important components of comprehensive waste diversion programs because they often require specialized collection and management.

The historical data indicate that the Thomas Jefferson Solid Waste Planning Unit consistently exceeded Virginia's required 25 percent recycling rate between 2021 and 2024, while both municipal solid waste disposal and reported recycling tonnage generally increased over the planning period, reflecting continued population and economic growth. However, differences among jurisdictions are influenced by variations in reporting practices and the voluntary nature of private-sector reporting, which likely results in an incomplete picture of the region's overall waste stream. Because recycling rates are calculated by weight, heavier materials such as scrap metal and yard waste account for a significant share of the reported recycling rate, while lighter but commonly recycled materials such as paper and plastics have a comparatively smaller influence. As the region plans for future waste management needs, improving data collection and coordination with private haulers and recycling facilities will provide a more accurate understanding of material flows, strengthen performance measurement, and better inform decisions regarding future collection, processing, recycling, and disposal infrastructure.

6.6 Future Needs and Projected Waste Generation

Future solid waste and recycling needs were estimated using reported regional waste and recycling totals from 2021 through 2024. The four-year average was used as a baseline and applied to long-range population projections to estimate future tonnage. This method provides a planning-level estimate rather than a precise forecast.

The projection assumes that per capita waste generation and the reported recycling rate remain generally consistent over time. Actual future conditions may differ due to population growth, economic activity, housing patterns, institutional activity, construction and demolition activity, changes in service models, changes in reporting participation, recycling market conditions, waste prevention efforts, composting expansion, and facility capacity decisions.

Because of these limitations, the projections should be used to identify the scale and direction of future needs, support facility and service planning, and guide implementation priorities. The estimates should be reviewed during annual reporting and updated during each five-year plan review as better data become available.

Table 13. Planning-Level 2050 Projected Waste Generation by Type (tons)

Material / Metric	Region 2021	Region 2022	Region 2023	Region 2024	2021–2024 Avg.	2050 Projection
Municipal Solid Waste Disposed	84,924	93,482	91,145	99,095	92,161	113,636
Household	73,432	81,230	86,738	84,996	81,599	100,613
Commercial	4,196	4,486	2,031	2,579	3,323	4,097
Institutional	7,295	7,766	2,376	11,520	7,239	8,926
Primary Recyclable Materials	48,855	39,155	52,054	68,332	52,099	64,239
Paper	6,478	8,627	3,752	4,875	5,933	7,316
Metal	15,844	50,044	22,123	27,920	28,983	35,736
Plastic	179	316	139	177	203	250
Glass	657	1,243	437	806	786	969
Commingled	3,600	10,420	4,679	5,741	6,110	7,534
Yard Waste	10,609	30,839	12,570	18,269	18,072	22,283
Waste Wood	2,776	1,870	1	1,869	1,629	2,008
Textiles	841	1,395	744	651	908	1,119
Waste Tires	553	1,424	587	837	850	1,049
Used Oil	1,272	2,663	1,091	1,572	1,650	2,034
Used Oil Filters	702	25	10	14	188	232

Material / Metric	Region 2021	Region 2022	Region 2023	Region 2024	2021–2024 Avg.	2050 Projection
Used Antifreeze	281	271	46	225	206	254
Batteries	413	823	424	400	515	635
Electronics	118	157	60	97	108	133
Compost/Food Waste	4,485	10,237	5,362	4,874	6,240	7,693
Solvent	-	31	28	3	16	19
Base Recycling Rate	37%	30%	36%	41%	36%	36%
Total Waste	133,779	132,636	143,198	167,427	144,260	177,875
Population	214,089	215,781	216,864	219,546	216,570	267,232
Per Capita (lbs/person/day)	3.42	3.37	3.62	4.18	3.65	3.65

6.6.1 System Capacity for the 20-Year Planning Period

Table 14. Solid Waste Management System Capacity

Facility Name	Permitted Capacity (tons/day)	Current Daily Intake (tons/day)	Current Annual Intake	% of Daily Permitted Capacity Used	Projected Capacity (tons/day) (2046)	Projected Percent Capacity Used (2046)
RSWA Ivy MUC	450	114	41,503	25%	143	32%
Greene County MRF	450	182	66,453	41%	237	53%
GFL Virginia Transfer Station	850	321	83,418	38%	418	49%

Source: Virginia Department of Environmental Quality

The Fluvanna County Convenience Center is not a permitted facility, and its capacity is constrained only by physical space at the facility. Fluvanna County estimates that between 3 and 4 tons of waste is handled at the convenience center daily. The GFL Transfer Station and the Zion Crossroads Recycling Center also receive waste from the TJSWPU. However, waste received from this planning unit constitutes only a fraction of the waste handled by these facilities. Thus, it is not possible to calculate the capacity of those facilities based on waste received from this region.

The Amelia County landfill currently receives most of the region's solid waste from transfer stations. According to the EPA in 2016, the Maplewood Landfill in Amelia County has significantly increased its capacity and can be expected to operate until 2164. The landfill's annual maximum intake is approximately 7,000 tons per day per its April 2021 Solid Waste and Recycling Plan. The Amelia County landfill has sufficient capacity over the 20-year horizon of this Plan to accommodate solid waste from the TJSWPU.

6.6.2 Future Facility Development

Existing public transfer stations and convenience centers currently operate within their permitted capacities, and no publicly owned facilities are projected to face significant capacity constraints through 2046. In recent years, the region has increasingly relied on both public and private-sector facilities to manage municipal solid waste and recyclable materials. Many private haulers and contracted collection services deliver materials directly to privately operated transfer, processing, or disposal facilities, reducing demand on publicly owned infrastructure.

As waste management and recycling systems continue to evolve, the private sector is expected to play an increasingly important role in material processing, transportation, and recovery. This trend may reduce the need for major expansions of publicly owned facilities while providing additional flexibility and capacity for regional waste management services.

Should future facility expansions or new infrastructure investments become necessary, localities are expected to continue funding these projects through a combination of tipping fees, general fund revenues, grants, and other available funding sources. Because recycling markets remain volatile and frequently do not generate sufficient revenue to fully cover program costs, local governments will likely continue to subsidize recycling and other waste diversion programs to achieve broader environmental and sustainability goals.

7 Public Involvement in the Planning Process

Public engagement in the development of the 2026 Regional Solid Waste Management Plan followed a structured process designed to incorporate community input at multiple stages and provide meaningful opportunities for residents, businesses, and stakeholders to comment on existing conditions, draft goals, and proposed implementation actions.

The following sources of stakeholder input were used:

- Five meetings of the Technical Advisory Committee (TAC)
- One public workshop
- An online survey
- Recommendations from existing plans and documents
- A public comment period
- A public hearing
- Presentations and feedback local boards and councils

Public engagement materials and supporting documentation are included in Appendix B, including meeting notices, survey instruments, public comments, workshop materials, hearing notices, and comment summaries.

Table 14. Public Engagement Activities

Engagement Activity	Purpose	Timeline	Outcome
Online Public Survey	Understand current waste reduction behaviors, priorities, barriers, and opportunities related to reuse, recycling, and disposal	October – December 2025	257 responses received
Website and Social Media Outreach	Provide project updates, meeting notices, and opportunities for participation	Throughout Plan Update	Notices shared throughout the planning process
Community Workshop	Review existing conditions and refine draft goals and objectives	January 22, 2026	Public feedback incorporated into draft goals and implementation actions
Local Presentations and Adoptions	Present draft to gather locality-specific input	August – September 2026	Comments addressed; Plan adoption by members of the SWPU
Public Comment Period	Provide an opportunity for review and comment on the draft plan	August 2026	Comments summarized and addressed prior to plan adoption
TJPDC Public Hearing	Provide an opportunity for formal review and comment on the draft plan	September 2026 Commission Meeting	Comments addressed; plan adoption by TJPDC

Common themes from public input

Across surveys, workshops, presentations, and public comments, several themes consistently emerged:

- Residents strongly support waste reduction, reuse, and recycling efforts and view environmental stewardship as an important community value.
- Participants expressed a desire for clear, consistent, and easily accessible information regarding local waste management options.
- Many residents requested greater transparency regarding what happens to recyclable materials after collection.
- Convenience and accessibility influence participation, particularly in areas without nearby collection opportunities.
- Participants highlighted the importance of reuse opportunities, including donation centers, creative reuse organizations, thrift stores, repair services, and community sharing networks.
- Stakeholders supported continued regional coordination and information sharing among local governments and partner organizations.

7.1 Public Survey Findings

A regional public survey was conducted to better understand residents' experiences, attitudes, and priorities related to solid waste management. The survey was distributed through TJPDC communication channels, local government partners, community organizations, and the Jefferson-Madison Regional Library network.

A total of 257 individuals participated in the survey. Participation was voluntary and was promoted through community networks. The survey results are not statistically representative of the region's population; however, the responses provide valuable insight into community values, perceived barriers, and opportunities for improvement.

Residents value recycling and waste reduction

Environmental stewardship was the strongest motivation for recycling among respondents. More than four out of five respondents indicated that environmental protection motivated their recycling behavior, while nearly three-quarters cited conserving resources for future generations.

Table 15. Motivation for Recycling

Motivation for Recycling	Percent of Respondents
Environmental protection	83%
Sustainability and conserving resources	72%
Efficiency – Recycling seems wasteful not to do	46%
Long-standing habit	38%
Cost savings	16%
Not motivated to recycle	5%

Information and trust remain barriers

Although nearly half of respondents indicated that nothing currently prevents them from recycling, many expressed uncertainty about what can be recycled and skepticism about whether materials are ultimately diverted from disposal.

Table 16. Barriers to Recycling More

Barrier to Recycling More	Percent of Respondents
Nothing prevents me from recycling	49%
Lack of trust that materials are actually recycled	36%
Uncertainty about what can be recycled	31%
Lack of storage space	16%
Recycling services not available	14%
Mental exhaustion or competing priorities	11%
Additional costs	7%

These findings suggest that clear communication, transparency, and education remain important components of successful waste diversion efforts.

Residents want clearer information and convenient options

Respondents expressed interest in practical improvements that make participation easier and reduce confusion.

Table 17. What Would Help Residents Recycle More?

What Would Help Residents Recycle More?	Percent of Respondents
Clearer instructions and labeling	52%
More recycling education and outreach	29%
Recycling drop-off closer to home	28%
Curbside recycling service	21%
No improvements necessary	16%
Reduced costs	14%

7.1.1 City of Charlottesville

Respondents reported high rates of recycling participation and strong interest in waste reduction initiatives. Satisfaction with waste collection services was generally positive, while satisfaction with composting services was notably lower. Comments frequently focused on expanding municipal composting opportunities, increasing transparency about what happens to recyclable materials after collection, improving recycling

education, and improving services particularly for residents living in multifamily housing and businesses. Many respondents expressed skepticism about whether recyclable materials are ultimately recycled. Residents also identified a desire for clearer guidance on accepted materials and expanded opportunities for recycling hard to recycle items. Overall, Charlottesville respondents appeared highly supportive of waste diversion efforts and were primarily focused on improving convenience, transparency, and composting access.

- 57 survey responses
- The overwhelming majority of respondents reported currently recycling through either curbside collection, McIntire Recycling Center, or both.
- Composting familiarity was very high, with most respondents indicating they were familiar with composting and many already participating through home composting, community composting, or private services such as Black Bear Composting.
- Satisfaction with waste collection and recycling services was generally positive, while composting satisfaction was noticeably lower.

7.1.2 Albemarle County

Respondents generally reported high levels of recycling participation and familiarity with available recycling programs. However, many residents expressed concern about convenience, particularly the distance to recycling facilities in some areas of the county, such as Crozet, White Hall, Hollymead, and northern Albemarle. Requests for additional convenience centers, expanded curbside recycling options, and increased composting opportunities were common themes. Many respondents also requested clearer recycling guidance and expressed concerns regarding the reliability and transparency of recycling systems. Similar to Charlottesville respondents, Albemarle residents frequently discussed composting, including requests for expanded public composting opportunities such as drop off sites and curbside collection. Responses also demonstrated strong support for reuse programs, public education, and efforts to expand acceptance of additional recyclable materials.

- 97 survey responses
- Recycling participation was very high, with many residents reporting regular use of McIntire Recycling Center, Ivy Solid Waste and Recycling Center, and curbside services.
- Composting familiarity and participation were also high, with many respondents composting at home.

7.1.3 Fluvanna County

A recurring theme throughout the survey responses in Fluvanna was convenience and accessibility. Many respondents expressed interest in additional recycling and composting opportunities but noted challenges associated with travel distance, facility access, and service availability. Composting emerged as one of the most frequently discussed topics, with residents expressing interest in community compost drop-off opportunities and affordable compost collection services. Affordability was also a recurring concern, particularly regarding private hauling services and waste disposal costs. Several respondents requested additional information regarding what happens to recyclable materials after collection and expressed interest in greater transparency regarding program outcomes.

- 89 responses.
- Recycling participation was generally strong, although more respondents reported barriers to access and convenience.
- Satisfaction with composting services was consistently lower than satisfaction with waste collection and recycling services.

7.1.4 Greene County

Although the sample size was limited, several themes emerged. Respondents generally supported recycling and waste reduction efforts but identified barriers related to access and convenience. The most common feedback involved requests for additional recycling opportunities, particularly expanded acceptance of materials such as glass and plastics. Several respondents expressed a desire for additional services closer to home. Residents also requested clearer information about what materials are accepted for recycling and where recyclable materials ultimately go after collection. Compared to respondents from more urbanized areas of the region, Greene County residents were less focused on composting and more focused on strengthening core recycling infrastructure and reducing barriers to participation.

- 14 responses.
- Most respondents reported recycling regularly despite limited infrastructure.
- Residents requested expanded collection options and additional services at the Greene County facility.

8 Implementation Plan

The Implementation Plan translates the plan's findings into coordinated goals and actions for the 2026–2046 planning horizon. The implementation plan is organized to meet Virginia solid waste planning requirements, support the waste management hierarchy, improve public understanding, strengthen data quality, and identify practical steps that can be advanced by local governments and partners.

The implementation plan considers the following six areas, prioritizing lower-numbered options as required:

- Source Reduction
- Reuse
- Recycling
- Resource Recovery (Waste to Energy)
- Incineration
- Landfilling

Table 18. Regional Plan Goals (2026–2031)

Regional Plan (2026–2031) Goals
Data and Information Sharing
Goal 1: Provide residents and businesses with clear, accessible information to support waste reduction, reuse, and recycling efforts.
Goal 2: Develop best practices to enhance the collection, verification, and sharing of local waste and recycling data.
Planning
Goal 1: Maintain an accessible, efficient, and effective solid waste management system.
Goal 2: Reduce the quantity of waste generated through source reduction, reuse, and other techniques.
Waste Diversion
Goal 1: Utilize improved data systems to establish a measurable baseline and continually increase local waste diversion.
Goal 2: Stimulate demand for a circular economy, collaborate to expand markets for recovered materials, and expand sustainable business practices.
Goal 3: Provide environmentally sound solid waste collection facilities that are equitably distributed for residents.

Associated with each goal, are locally specific actions that identify the responsible party, supporting partners, timeframe, relative cost, and potential funding or resources.

Timeframes. Short-term actions are intended for completion within 0–2 years after plan adoption. Mid-term actions are intended for 3–5 years. Long-term actions are intended for 6–20 years. Ongoing actions are continuing responsibilities or recurring activities that may occur throughout the life of the plan.

Lead party. The lead party is the agency, department, locality, authority, institution, or partner responsible for coordinating the action. Supporting partners may include other localities, RSWA, UVA, private haulers, facility operators, community organizations, businesses, state agencies, and regional partners.

Cost and resources. Cost categories should be used for planning-level comparisons only. Low-cost actions generally rely on existing staff time or communication tools. Medium-cost actions may require consultant support, new program materials, limited equipment, or expanded outreach. High-cost actions may require capital investment, new facilities, major contracts, or long-term dedicated funding.

See Appendix D: Regional Implementation Plan Actions for detailed jurisdiction-level implementation actions.

Glossary

Agricultural Waste: Solid waste produced from farming operations, or related commercial preparation of farm products for marketing.

Commingled: Refers to the collection of recyclable materials in a manner so that the producer does not have to separate the materials by type; this is done after collection.

Commercial Waste: Solid waste generated by establishments engaged in business operations other than manufacturing or construction. This category includes, but is not limited to, stores, markets, offices buildings, restaurants, and shopping centers.

Compost: A stabilized organic product produced by the controlled aerobic decomposition of organic material so that the product can be handled, stored and applied to the land.

Construction and Demolition Debris (CDD): Solid waste produced during construction, remodeling, repair or destruction of pavements, houses, commercial buildings, and other structures. CDD includes, but is not limited to, lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metals and plastics if they are part of the construction material or empty containers for such materials.

Debris Waste: Waste resulting from land clearing operations, including, but not limited to, stumps, wood, brush, leaves, soils and road spoils.

Domestic (or Household/Residential) Waste: Any waste material, including garbage, trash and refuse from households, such as single and multiple residences, hotels, and motels.

Disposal: Discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or any constituent of it may enter the environment or be emitted into the air or discharged into any waters.

Hazardous Waste: Defined by the Virginia Hazardous Waste Management Regulation, 9VAC20-60-12 et seq.

Incineration: Controlled combustion of solid waste for disposal.

Industrial Waste: Any solid waste generated by manufacturing or industrial processes that is not a regulated hazardous waste.

Inert Waste: Solid waste that is physically, chemically, and biologically stable, including dirt, concrete, and rock, which are not regulated.

Integrated Solid Waste Management: The practice of managing solid waste using several complementary components, including source reduction, reuse, recycling, resource recovery, and incineration.

Landfill: An area of land where solid waste is buried.

Materials Recovery Facility (MRF): A solid waste facility for the collection, processing and recovery of material such as metals from solid waste or for the production of fuel from solid waste.

Monitoring Well: A well point below the ground surface at a landfill site used for obtaining periodic water samples from groundwater for analysis.

Mulch: Woody waste consisting of stumps, trees, limbs, branches, bark, leaves and other clean wood waste that has undergone size reduction by grinding, shredding, or chipping.

Municipal Solid Waste (MSW): Waste that is normally composed of residential, commercial and institutional solid waste and residues derived from the combustion of these wastes.

Non-Regulated Landfill: A landfill accepting certain inert materials not regulated by the state, including rubble, concrete, broken bricks, and bricks and blocks.

Principal Recycled Material (PRM): Paper, metal (except automobile bodies), plastic, glass, yard waste, wood, and textiles. This does not include large diameter tree stumps.

Recycling: The process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling does not include processes that only involve size reduction.

Resource Recovery: The creation of usable energy from solid waste through the burning of solid waste to produce steam or electricity or other fuels.

Re-use: The practice of repeating use of a material rather than disposing of or recycling it.

Sanitary Landfill: An engineered land burial facility for the disposal of solid waste which is so located, designed, constructed and operated to contain and isolate the solid waste so that it does not pose a substantial present or potential hazard to human health or the environment.

Septage/Sludge: Any solid, semisolid, or liquid waste with similar characteristics and effects generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, air pollution control facility, or any other waste producing facility.

Solid Waste: Any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations, and from community activities.

Solid Waste Management: Systematic administration of activities which provide for the collection, source reduction, storage, transportation, transfer, processing, treatment, and disposal of solid waste or resource recovery.

Source Reduction: Reducing the amount of waste generated by an activity at the point of creation. This may occur through the design, manufacture, and sale of products and packaging with minimal volume and toxicity and longer lifetimes.

Source Separation: The segregation of various materials from the waste stream at the point of generation for recycling.

Supplemental Recyclable Material (SRM): Waste tires, used oil, used oil filters, used antifreeze, automobile bodies, construction waste, demolition waste, debris waste, batteries, ash, sludge or large diameter tree stumps.

Tipping Fee: A fee levied in the disposal of solid waste, generally at a landfill. The fee is usually on a per ton basis.

Transfer Station: Any solid waste storage or collection facility at which solid waste is transferred from collection vehicles to haulage vehicles for transportation to a central solid waste management facility for disposal, incineration, or resource recovery.

Treatment: Process designed to change the physical, chemical, or biological nature or composition of any waste to render it more stable, safer for transport, or more amenable to use, reuse, reclamation, or recovery.

Vegetative Waste: Decomposable materials generated by yard and lawn care or land-clearing activities and including, but not limited to, leaves, grass trimmings, and woody wastes such shrub and tree prunings, bark, limbs, roots, and stumps.

Waste Hierarchy: The EPA and State regulatory ranking of methods for handling solid waste in order of preference. The top of the hierarchy is source reduction and reuse, followed by recycling, with waste combustion and/or landfilling at the bottom.

White Goods: Stoves, refrigerators, water heaters, and other large appliances.

Yard Waste: Decomposable waste materials generated by yard and lawn care and including leaves, grass trimmings, brush, wood chips, and shrub and tree trimmings. Yard waste is a kind of vegetative waste; yard waste shall not include roots or stumps that exceed six inches in diameter.

Appendix A: Local Resolutions of Plan Adoption

Local resolutions of plan adoption from Albemarle County, the City of Charlottesville, Fluvanna County, Greene County, and the Thomas Jefferson Planning District Commission are provided as a separate attachment.

Appendix B: Public Engagement Opportunities and Results

Public engagement materials including the survey results, public comment period documentation, public hearing materials, and comment summaries are provided as separate attachments.

Appendix C: Applied Policy Project

Dollars, Distance, and Diversion: Rural-Tailored Solutions for the Thomas Jefferson Solid Waste Planning Unit. The Applied Policy Project report is provided as a separate attachment.

Appendix D: Regional Implementation Plan Actions

The Implementation Plan table presents jurisdiction-level implementation actions for solid waste management within the planning unit organized by goal area, including lead parties, timeframes, stakeholders, and cost estimates. This table is provided as a separate landscape-formatted attachment.