

Update on Current City of Harrisonburg

Environmental Initiatives

General Education and Outreach- Past Calendar Year

Group	Topic	Date

**Note the above table is only for events. Educational messages on social media, newsletters, in the media, or in other formats are not included.*

Grant Updates

Grant	Project Description	Status/Update
EECBG Formula Grant	Install 50kW of solar on Turner Pavilion	Staff submitted application materials in April. Our application was approved in mid-June. Staff to work on equipment purchase and installation.
EPA- Community Change Grant	<p>Overall Question: How does Harrisonburg reach its Community Goals as well as develop and implement its Environmental Action Plan while building an equitable and inclusive city-wide response by 2050?</p> <p>The City's application to the Community Change Grants Program aims to meet several goals:</p> <ol style="list-style-type: none"> 1. Develop a comprehensive community education program focusing on environmental, resiliency, and climate change issues delivered through a variety of mediums in multiple languages. 2. Implement comprehensive community engagement effort through public meetings, surveys, focus groups, and interviews to inform education program and provide feedback for the development of the action plan. 3. Incorporate community in developing City action plans and setting environmental targets, including the EAP 	Staff working with collaborating partners to finalize application. Hope to submit in August (deadline is November but this grant is unique in that we are allowed to submit ahead of time and get feedback to make on a revision if EPA does not accept our application).
Virginia Energy CPRG	Multistate (15 states) application that seeks to invest in solar deployment, battery storage technologies, and other low-cost zero-emission energy solutions for government buildings.	Hawaii is the lead state on the application. Virginia Energy is our state's lead. Application has been submitted. Awards expected to be announced October 2024. If awarded, VA DOE would then develop the final guidelines and begin to accept grant applications from localities.

ACEEE’s Technical Assistance for Rental Home Energy Efficiency	The grant proposal aims to leverage technical assistance from ACEEE to develop rental energy efficiency strategies across nine Virginia municipalities. This assistance will involve analyzing the rental housing market, engaging historically and economically disadvantaged communities, formalizing partnerships, and creating action plans to improve energy efficiency and affordability. The initiative seeks to address housing affordability challenges, reduce energy burdens, and catalyze improvements in rental housing across the Commonwealth.	Harrisonburg applied in January 2024 with 8 other localities (Albemarle, Alexandria, Arlington, Charlottesville, Loudoun County, Norfolk, Richmond, Prince William County) through a coalition led by the Virginia Energy Efficiency Council. Unfortunately, our application was not selected for this technical assistance. The application process was very competitive.
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Focus Area 1: Buildings and Energy

Greenhouse Gas Emissions Inventory- Community & Municipal

The emissions inventory describes energy use of different areas of municipal operations, including, but not limited to: fleet vehicles, buildings, and street lighting. The emissions inventory also describes energy use of different areas and operations within the community.

The GHG Emissions Reports are available at: <https://www.harrisonburgva.gov/EAP>.

Current Status: 2022 Inventory Complete

Alignment: FA1 Goal 2

Staff Contact: Keith Thomas

Solar on City Facilities

Building	Solar System Size (kW)	Year Installed	Percentage of the Total Building Load (%)
Bluestone Elementary	340	2023	90
HCPS Central Office	35.1	2023	20
New PW Building	91	2024	TBD
Turner Pavilion	49.9	TBD	TBD
Homeless Services Center	TBD	TBD	TBD
Fire Station 5	TBD	TBD	TBD
Total kW Solar:	516		

In addition, Friendly City Solar provides 1755 MW DC (1.5 MW AC) solar to the City’s grid.

Current Status: Ongoing

Alignment: FA1 Goal 1, 3, 4 & 6

Staff Contact: Keith Thomas

SolSmart

The City has completed requirements needed for silver designation. City staff created a solar landing page: <https://www.harrisonburgva.gov/solar-resources>. More information about SolSmart is available at: <https://solsmart.org/>.

Read about the SolSmart designation press release here:

https://harrisonburgva.gov/sites/default/files/CMO/files/press_release/2024/01-17%20Harrisonburgs%20Hard%20Work%20Earns%20Solsmart%20Silver%20Designation.pdf

Current Status: Silver Designation

Alignment: Guiding Goal 2, FA1 Goal 6

Staff Contact: Keith Thomas, Thanh Dang

Solarize Campaign

The City partnered with LEAP to promote their Solarize Campaign. The 2024 campaign kicked off April 1. More information about Solarize Virginia is available at: <https://solarizeva.org/>.

Year	Area	Total Signups	Total Executed Contracts
2022	Shenandoah Valley	129	5
2022	Harrisonburg	29	4
2023	Shenandoah Valley	113	8
2023	Harrisonburg	13	0
2024	Shenandoah Valley	TBD	TBD
2024	Harrisonburg	TBD	TBD

Current Status: Ongoing

Alignment: Guiding Goal 2& 3, FA1 Goal 6

Staff Contact: Keith Thomas

Building Energy Audits

Buildings

#	Facility Name	Status
1	Lucy F Simms Continuing Education Center	
2	Community Activities Center	
3	Westover Pool	
4	Park View Administration Building	
5	Park View Maintenance Shop-Grounds	
6	Par View Maintenance Shop- PR Facilities and PW Warming Room	
7	Heritage Oaks Golf- Pro Shop	
8	Heritage Oaks Golf- Maintenance Building (shared with HCPS)	
9	Fire Station #1	Completed 2023
10	Fire Station #2	Completed 2023

11	Fire Station #3	Completed 2023
12	Fire Station #4	Pending renovations
13	Fire Station #5	New Construction
14	HPU- Water Treatment Plant	
15	HPU- Water Operation Center	Completed 2023
16	HDPT- Administration Building	
17	HDPT- Garage	
18	Hardesty-Higgins House	
19	City Hall	Completed 2023
20	Public Safety/ECC	Completed 2023
21	Recycling Center	
22	Central Stores	
23	PW Admin Building	New Construction
24	PW Shop	
Harrisonburg City Public School Facilities		
25	HCPS Central Office	
26	Harrisonburg High School	
27	Skyline Middle School & Smithland Elementary complex	
28	Thomas Harrison Middle School	
29	Bluestone Elementary	
30	Keister Elementary	
31	Spotswood Elementary	
32	Stone Spring Elementary	
33	Waterman Elementary	
34	Elon Rhodes Early Learning Center	

Focus Area 2: Land Use and Green Space

Expanding & Protecting Tree Canopy

Staff applied for and received funding from the [Urban and Community Forestry Grant Program](#) to create an urban forest management plan. Staff have worked with our consultants, Urban Canopy Works LLC, to develop and finalize the plan. An urban forestry management plan is essential to the City of Harrisonburg because it helps guide city staff to care for and manage single trees and tree populations in urban settings for the purpose of improving the urban environment. Urban forestry involves both planning and management, including the programming of care and maintenance operations of the urban forest. Urban forestry advocates the role of trees as a critical part of the urban infrastructure including stormwater mitigation. Urban foresters plant and maintain trees, support appropriate tree and forest preservation, conduct research and promote the many benefits trees provide. The final report is planned to be presented to City Council in late November or December.

As part of I-81 improvements, trees will be planted along interchange ramps.

Citizen Tree Plantings: The City provides opportunities for citizens to plant trees through our Harrisonburg Conservation Assistance Program (HCAP) (<https://www.harrisonburgva.gov/hcap>). Staff previously worked with the program managers for the Anne Arundel County Community Tree Planting Grant Program to understand ways in which we could

improve our program design based on lessons learned from the Maryland program. Advantages of our HCAP program is that citizens get the value of a certified arborist to evaluate the site and make recommendations on where to plant and what to plant. This helps ensure that the right tree for the right place principle is followed and does not place the burden on a landowner to design their own planting plan.

Public Trees Planted	
Trees planted this year (YTD)	TBD
Trees planted last calendar year	351

Current Status: Ongoing

Alignment: FA2 Goal 1, FA2 Goal 2, FA2 Goal 3, FA2 Goal 4, FA6 Goal 4

Staff Contact: Jeremy Harold, Keith Thomas

Pollinator Habitat

Between 2017 and 2023, staff have converted 2.55 acres of traditional landscaped areas and turfgrass into pollinator habitat spaces. Many of these spaces have been in road medians. View our interactive webmap: <https://arcg.is/0HuTS1>

Read this article about the City of Harrisonburg's Pollinator Program: <https://www.nrpa.org/blog/the-buzz-in-the-burg/>

NRPA published a new resource for other professionals which features our program on page 21 and a case study on page 30. For more information visit: <https://www.nrpa.org/blog/create-more-sustainable-parks-through-pollinator-and-native-habitat/>

Current Status: Ongoing

Alignment: FA2 Goal 1; FA2 Goal 4

Staff Contact: Jeremy Harold, Keith Thomas

Zoning and Subdivision Ordinances Update Project

The Zoning and Subdivision Ordinances regulate how land is used and is developed. These ordinances are the primary tools in implementing the vision, goals, and objectives of the Comprehensive Plan and other city plans. In July 2020, the City contracted with Kendig Keast Collaborative to partner with city staff to update the Ordinances. However, the project was stalled between late 2021 through late 2023.

Topics that the Zoning Ordinance could address that may be of interest to the EPSAC include, but are not limited to: regulations that promote higher density, compact, and mixed use development; regulations that allow community gardens as a principal use; regulations that allow beekeeping as an accessory use; regulations effecting the location and design of solar installations; regulations that require landscaping and trees; regulations that encourage tree preservation during development; and regulations that require less off-street parking or that establish a maximum number of parking spaces. More information is available at: <https://www.harrisonburgva.gov/zoning-subdivision-ordinances-update>.

Current Status: The project is anticipated to continue through Spring 2025 and will include opportunities for public engagement and input.

Alignment: FA 2 Goal 1; FA 4 Goal 5; FA 4 Goal 6; (could also support) FA 1 Goal 6; FA 2 Goal 3; FA 3 Goal 1

Staff Contact: Thanh Dang

Riparian Buffer

Staff continue to plant new and care for existing trees and native vegetation within city maintained riparian buffers. In 2023, approximately 3 acres were re-planted in a section of the Northend Greenway stream restoration project where the previous tree planting failed. In addition, trees were planted along a 5.5 acre buffer for the Blacks Run South stream restoration project.

Current status: Ongoing

Alignment: FA2 Goal 4

Staff Contact: Keith Thomas

Continued Expansion of Sidewalks, Shared Use Paths, and Trail Facilities

Refer to: Alternative Transportation Infrastructure (Shared Use Paths, Safe Routes to School, etc.) under Focus Area 4.

Focus Area 3: Regional Food Systems

Updates from HCPS

There are food gardens at all elementary and middle schools within the City.

*What are some ways that HCPS sources food locally? **Local vendors include: Portwood Gardens (all lettuce for HCPS schools), Shenandoah Valley Produce Auction (several purchases of seasonal veggies for the first few weeks of the year), Showalter Apples (fall), Portwood Acres (broccoli, romanesco, cauliflower in the fall), Saunders Brother Orchards (Asian pears), Seven Hills (ground beef), 4P Foods (flour)***

*How are the gardens at the Elementary and Middle schools incorporated into Learning - **Teachers incorporate garden based learning at both levels.***

*Meals served at the school - **School garden produce is occasionally incorporated into and highlighted as a part of the school meal program.***

*How many schools compost? Where is the compost used? **HCPS is partnering with community members at Vine and Fig to construct compost bins at several schools. Some of the compost is used by HPW in our pollinator program.***

*What are some measures that HCPS uses to reduce material waste related to food service? **We use washable trays and silverware to the maximum extent practicable. We evaluate how we are serving foods to reduce individual packaging as practicable (for example - self-service veggie bars instead of pre-portioned veggies). We use milk machines at Bluestone Elementary.***

*What are some measures that HCPS uses to reduce food waste? **offer-vs-serve is utilized at meals so students are not required to take all items, utilizing meal counts, historical data, and batch cooking to reduce back-of-house food waste. Schools have share bins where students may place whole, unopened items. Other students may select items and some schools have an avenue for donation of unclaimed items.***

*Is there anything else that HCPS does to help “Promote Accessibility to Local, Healthy, and Sustainably Produced Food” **All meals are served to all students at no cost. Therefore, all students have equal access to our meals (which contain locally sourced items).***

Alignment: FA3 Goal 1; FA5 Goal 1

Staff Contact: Keith Thomas, Andrea Early

Focus Area 4: Sustainable Transportation

Alternative Transportation Infrastructure (SUPs, Safe Routes to Schools)

Staff continue to expand infrastructure for alternative transportation methods such as biking or walking. These include building shared use paths, bike lanes, protected bike lanes, road reconfigurations, sidewalk, pedestrian crossing features, etc. The goal is to create more accessible, safe, and convenient methods of traveling throughout the city with alternative methods of transportation. More information: <https://www.harrisonburgva.gov/transportation-projects>

Current status: Complete

Alignment: FA4 Goal 5

Staff Contact: Erin Fisher

Traffic Signal Optimization

Five corridors received signal optimization between 2020 and 2022 which helps to decrease the time and fuel needed to traverse through the corridor.

Corridor	Completion Year	CO2 savings (lbs/yr)
E. Market St corridor (Vine St to Chestnut Ridge Dr)	2020	4,609
High St corridor (3rd St to Garber's Crossing/Walmart)	2020	4,748
S. Main St corridor (MLK Jr Way to Mosby Rd)	2021	2,806
Port Republic Rd corridor (S. Main St to Neff Ave)	2021	7,675
Reservoir St corridor (MLK Jr Way to Stonewall Dr)	2022	14,897

Current status: Complete

Alignment: FA4 Goal4

Staff Contact: Tim Mason/Erin Fisher

Fleet E-Bikes

PW purchased two e-bikes. These bikes are used in lieu of fleet vehicles for staff to get to meetings, site visits, and other city business around town. The following miles chart represents the total miles ridden on the bikes. While the mileage on a bike is not exactly correlated to the miles that would have been driven on the road, the miles do represent general usage and a reduction in vehicle mileage. Furthermore, fleet e-bike use represents our commitment to bike-ped infrastructure and multimodal transportation.

Total Miles	
Bike	Miles
Red Como*	333
Black Globe Haul	220
Total	553

**exact mileage prior to PW use is unknown. It is estimated between 30-50 miles were on the bike prior to PW purchasing the bike.*

Current status: Ongoing

Alignment: FA4 Goal4

Staff Contact: Keith Thomas

Fleet EVs

Vehicle	#
Chevy Bolt EUV	2
Ford F-150 Lightning	3
International CE Series EV school buses	2
Total	7

Focus Area 5: Waste Reduction and Recycling

Eateries Acting Towards Sustainability (EATS)

Certification program designed as a voluntary initiative for proprietors within the food service sector to opt into. The objective of this certification is to recognize the dedication and efforts of these establishments. The aim is for the Eateries Acting Towards Sustainability (EATS) program to serve as a valuable tool in steering sustainability efforts within food service operations, potentially igniting further environmentally friendly business endeavors.

Furthermore, the EATS Program aims to prioritize waste reduction and position the Harrisonburg restaurant industry and broader hospitality sector as pioneers in sustainable practices and environmental stewardship. By fostering a culture of practical sustainability, this initiative not only benefits the environment but also enhances the overall quality of life for all residents in Harrisonburg. Through public education on minimizing single-use waste and empowering restaurants to adopt cost-effective waste reduction measures, this program will tackle waste-related challenges.

This certification program has three levels to highlight everyone's level of sustainability. The first level, called the Sprout Level, is a very low-barrier entry to reward people for making the small but necessary steps towards sustainability. The second level, Bloom, pushes businesses to take an even bigger step to reduce their single-use plastic. The final level, Harvest, will show how businesses are putting sustainability at the forefront of their everyday operation. At the Harvest Level, businesses will hopefully be able to start reaping the rewards of their hard work and will be able to share their experience with others. The points system is based on categories that align with the six focus areas of The City of Harrisonburg's Environmental Action Plan.

Certified Establishments	
Establishment	Level
Drifters Cafe	2- Bloom
Grilled Cheese Mania	3- Harvest
Bowl of Good	3- Harvest

Recycling Year to Date

January- June 2024	
Item	tons
Plastic #1	13.7
Plastic #2	8.6
Mixed Paper	38.6
Cardboard	153.6
Plastic Bags	2.8
Aluminum	6.8
Tin/Scrap	18.8
Glass	59.7
Total	302.6

Alignment: FA 5 Goal 1; FA 5 Goal 2; FA 5 Goal 3

Staff Contact: Harsit Patel

(Note for Keith: Spreadsheet: [Located here](#))

Urban Wood Program

The Urban Wood Program seeks to reuse trees that must be removed because of insect, pest, disease, or weather damage. The goal is to keep this material out of landfills by repurposing the material and offsetting the need to harvest new material. Between 2020 and 2022, the program has kept an estimated 46 tons of wood out of our landfill through public auction of logs and firewood. Additionally, another 5-10 tons of woody debris was used as woodchips around pollinator habitat and newly planted trees throughout the City. For their hard work and innovation, staff were awarded the Gold Medal for the Governor’s Environmental Excellence Award for the Urban Forestry and Urban Wood programs. More information can be found in this press release: [04-05 Public Works Honored with Gold Medal for Urban Forestry and Wood Program.pdf \(harrisonburgva.gov\)](#).

Current status: Ongoing

Alignment: FA 5 Goal 1; FA 5 Goal 2

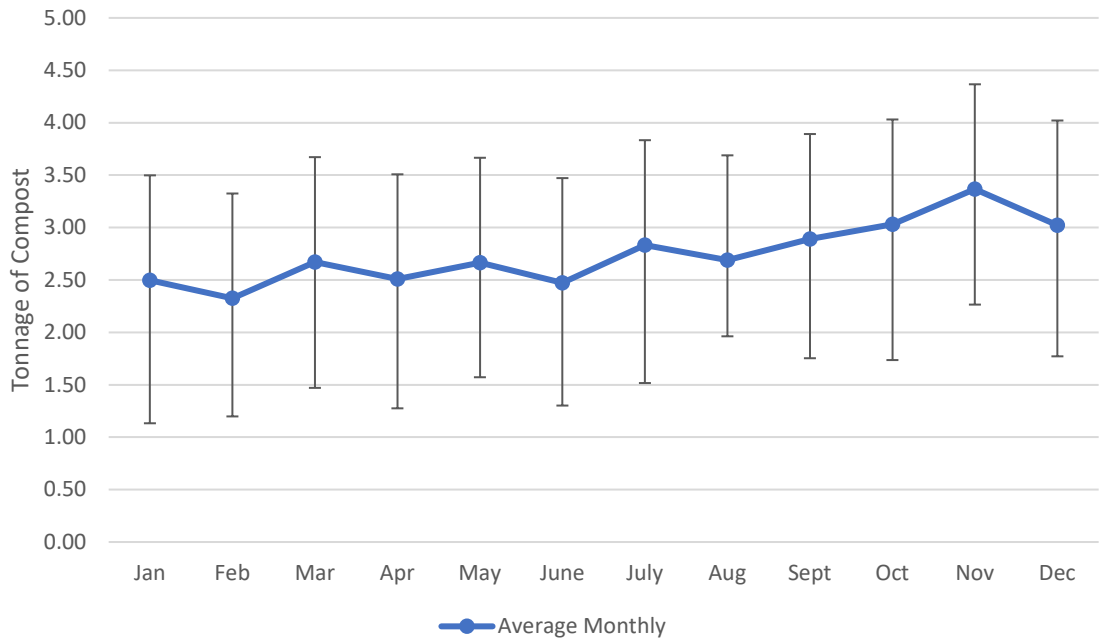
Staff Contact: Jeremy Harold

Composting at City Hall

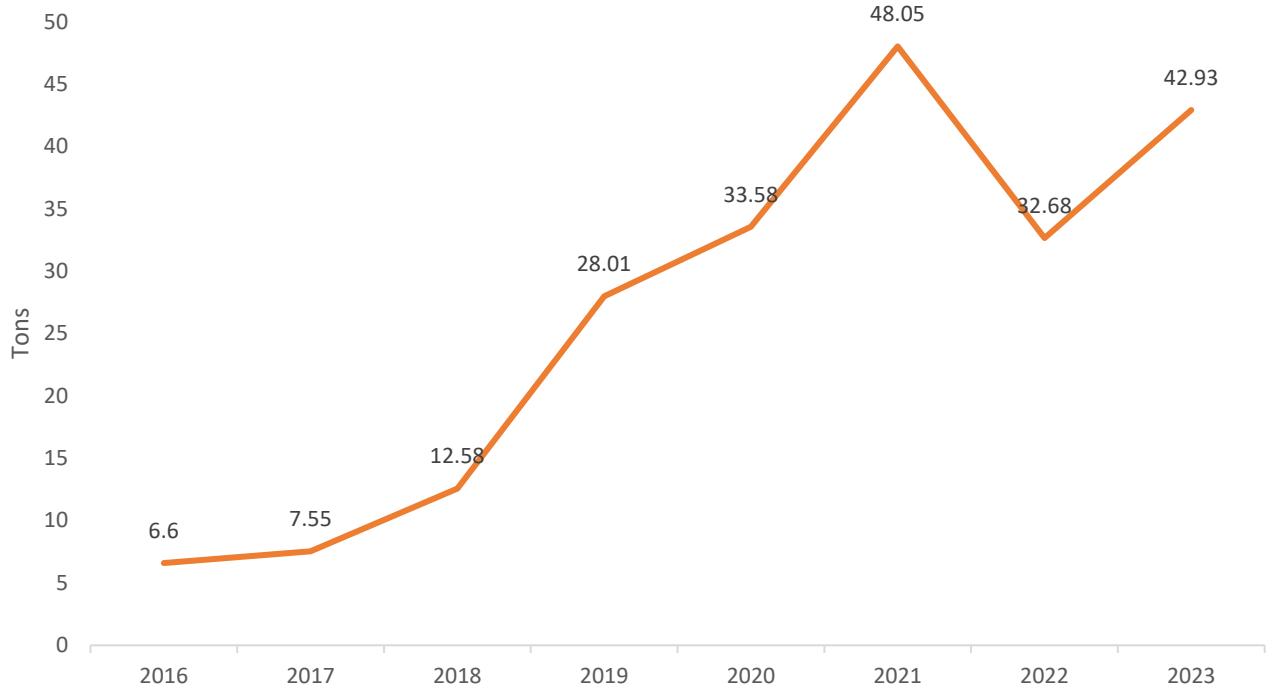
Composting YTD Total	
Item	tons
January	3.61
February	4.63
March	3.66
April	3.69
May	4.17
June	3.88
July	
August	
September	
October	
November	
December	
2024 Total	23.64

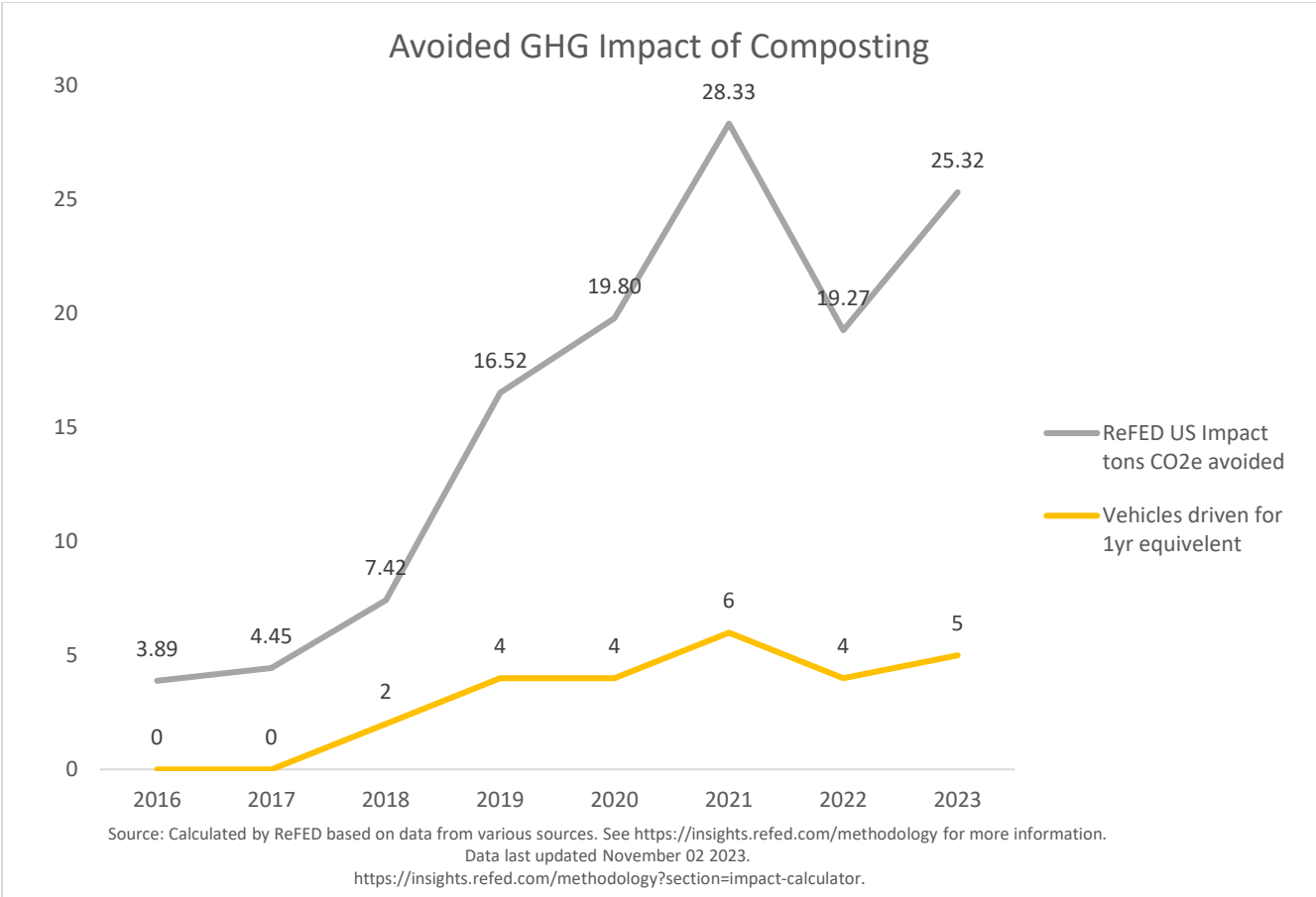
The following annual tons and GHG charts will be calculated at the end of every calendar year.

Composting Average by Month (2018 - 2023)



Composting at Downtown





Staff also encourage at home composting in social media posts and flyers.

Current status: Ongoing
Alignment: FA 5 Goal 1; FA 5 Goal 2
Staff Contact: Shayna Carter, Harsit Patel, Keith Thomas
(Note for Keith: Spreadsheet: [Located here](#))

Household Hazardous Waste Collection Events

Staff work with the Rockingham County Landfill to offer two household hazardous waste collection days in April and October. More information: <https://www.harrisonburgva.gov/hazardous-waste-collection>

Alignment: FA 5 Goal 1; FA 5 Goal 2; FA 5 Goal 4
Staff Contact: Shayna Carter, Harsit Patel, Keith Thomas

Focus Area 6: Water Resources

Stream Restoration Work

Work started on the Mountain View Drive stream restoration project and is completed. In addition, work on the Blacks Run South stream restoration is about 70 percent completed and will continue through this year. Stream restorations are part of the suite of BMPs the City is constructing to help reduce erosion, filter pollutants, and improve water quality. Additionally, some stream restoration projects are designed to protect infrastructure.

Stream Segment	Length Restored (lin ft)	Year Complete
Purcell Park	Approx. 2000	2009
Northend Greenway	3,137	January 2021
Mountain View Drive	1,650	February 2024
Blacks Run South	5,500	Expected: August 2024
Total:	12,287 (2.33 miles)	

Current status: Ongoing

Alignment: FA 6 Goal 4

Staff Contact: Tom Hartman, Keith Thomas

Harrisonburg Conservation Assistance Program (HCAP)

HCAP provides funding for private landowners to voluntarily install best management practices (BMPs) on their property to help treat or reduce runoff from their property.

FY Year	Completed Projects
2020	3
2021	3
2022	1
2023	7
2024	15

Current status: Ongoing

Alignment: FA 6 Goal 4

Staff Contact: Keith Thomas

Septic to Sanitary Reimbursements

Year	Completed Connections
2006 - 2016	30
2017-2023	29
2024 (YTD)	2

Septic systems tend to leach bacteria and nutrients into waterways which contributes to water pollution. Connecting to sanitary sewer diverts these pollutants from the ground to the sanitary sewer systems which is treated at the waste treatment plant and improves local water quality.

Alignment: FA 6 Goal 4

Staff Contact: Keith Thomas