

# Update on Current City of Harrisonburg

## Environmental Initiatives

### General Education and Outreach- Past Calendar Year

Group	Topic	Date
Rocktown High School Science Class	General Sustainability & Urban Heat Islands	8/30/2024
Levitt AMP Concert Series	Food Waste	9/4/2024
LHR Sustainability Panel	Agricultural and Food Systems	11/14/2024

*\*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 2024. Currently in procurement process
NASA DEVELOP National Program	Assessing Land Change and Impervious Surface Distribution for Future Tree Planting in Harrisonburg, Virginia). The project will utilize Landsat 8 Operational Land Imager (OLI), Landsat 9 OLI-2, Sentinel-2 Multispectral Instrument (MSI), to identify tree canopy and land surface temperature change in Harrisonburg from 2014 – 2024.	Staff worked with NASA Fellow Project completed in early April. Waiting for final report. Prelim findings- ~300 acres impervious increase and ~560 acres of tree canopy lost between 2014-2023.
Transportation/Bike-Ped Grants	More information about funded transportation related projects can be found at: <a href="https://www.harrisonburgva.gov/transportation-projects">https://www.harrisonburgva.gov/transportation-projects</a>	

### 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: 2023 inventory in progress*

*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	TBD	TBD	TBD
The Navigation Center	TBD	TBD	TBD
Fire Station 5	TBD	TBD	TBD
<b>Total kW Solar:</b>		<b>466.1</b>	

In addition, Friendly City Solar provides 1.755 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/>.

Bronze	60 Total Points	3 Prerequisite Criteria
	<input type="checkbox"/> 20 Points in Permitting & Inspection <input type="checkbox"/> 20 Points in Planning & Zoning <input type="checkbox"/> 20 Points from any other category	<input type="checkbox"/> Solar Statement (PR-1) <input type="checkbox"/> Solar permitting checklist (PI-1) <input type="checkbox"/> Zoning review (PZ-1)
Silver	100 Total Points	4 Prerequisite Criteria
	<input type="checkbox"/> Complete bronze designation requirements	<input type="checkbox"/> Permit staff training (PI-2) <input type="checkbox"/> Inspection staff training (PI-3) <input type="checkbox"/> Zoning clarification (PZ-4) <input type="checkbox"/> Solar landing page (CE-1)
Gold	200 Total Points	3 Prerequisite Criteria
	<input type="checkbox"/> Complete silver designation requirements	<input type="checkbox"/> Permit turnaround time (PI-4) <input type="checkbox"/> Zoning accessory use (PZ-5) <input type="checkbox"/> Zoning barrier removal (PZ-6)
Platinum	350 Total Points	4 Prerequisite Criteria
	<input type="checkbox"/> Complete gold designation requirements	<input type="checkbox"/> Instant permitting (PI-5) <input type="checkbox"/> Post metrics (PI-6) <input type="checkbox"/> Install solar (GO-1) <input type="checkbox"/> Community partnerships (CE-2)

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](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 2025 campaign is expected to kicked off April 15. More information about Solarize Virginia is available at: <https://solarizeva.org/>.

Year	Area	Total Signups	Total Executed Contracts
2022	Harrisonburg	29	4
2023	Harrisonburg	13	0
2024	Harrisonburg	6	1
2025	Harrisonburg	TBD	TBD

*Current Status: Ongoing*

*Alignment: Guiding Goal 2& 3, FA1 Goal 6*

*Staff Contact: Keith Thomas*

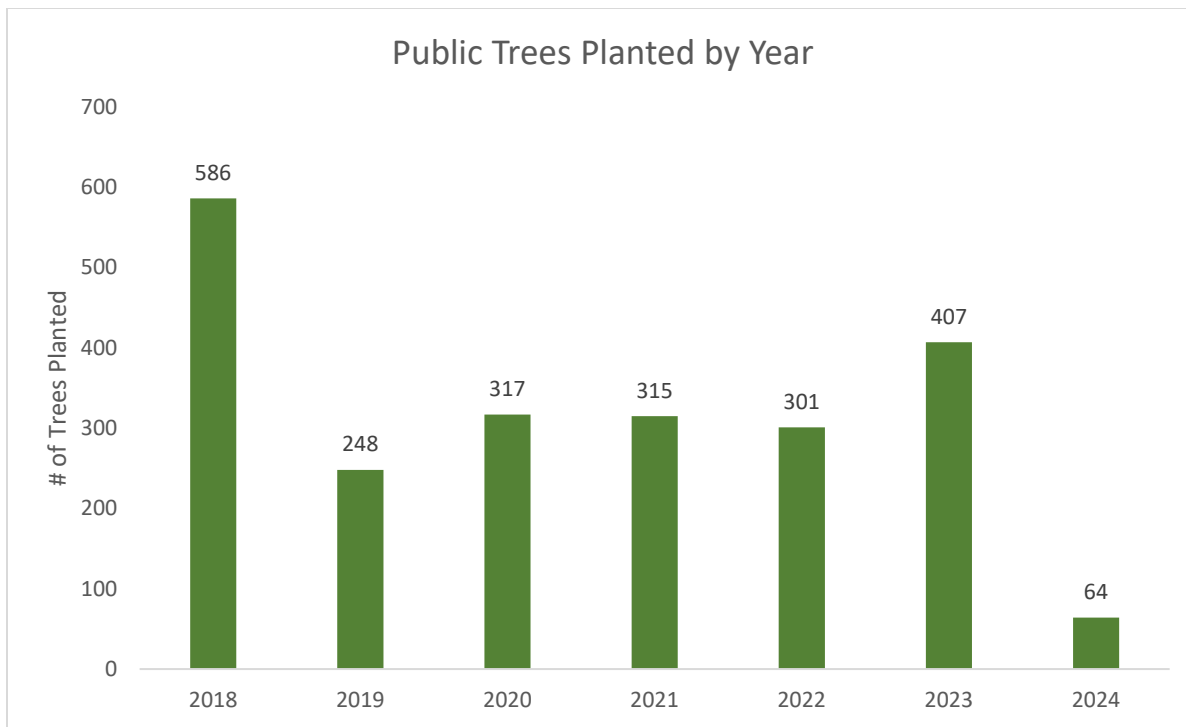
## Focus Area 2: Land Use and Green Space

### 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.

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)	0



*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.

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 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

*There are no updates. Staff shared Staunton's community garden ordinance with Community Development for consideration in their zoning update work.*

## 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: Jakob zumFelde*

### 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*	570
Black Globe Haul	386
<b>Total</b>	<b>956</b>

*\*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 in 2023.*

Current status: Ongoing  
 Alignment: FA4 Goal4  
 Staff Contact: Keith Thomas

### Fleet EVs

Vehicle	#	Year
Chevy Bolt EUV	2	2022
Ford F-150 Lightening	3	2023
International CE Series EV school buses	2	2024
<b>Total</b>	<b>7</b>	

## 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. More information about the program is available at:

<https://www.harrisonburgva.gov/EATS>.

Certified Establishments		
Establishment	Level	Year Certified
Drifters Cafe	3- Harvest	2024
Grilled Cheese Mania	3- Harvest	2024
Bowl of Good	3- Harvest	2024
Friendly City Co-op Food Bar	3- Harvest	2024
Black Sheep Coffee	3- Harvest	2025
Aristocat Cafe	3- Harvest	2025

### Recycling Year to Date

January- March 2025	
Item	tons
Plastic #1	5.8
Plastic #2	6.7
Mixed Paper	20.3
Cardboard	85.7
Plastic Bags	3.7
Aluminum	2.5
Tin/Scrap	7.3
Glass	27.3
<b>Total</b>	<b>159.4</b>

*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*

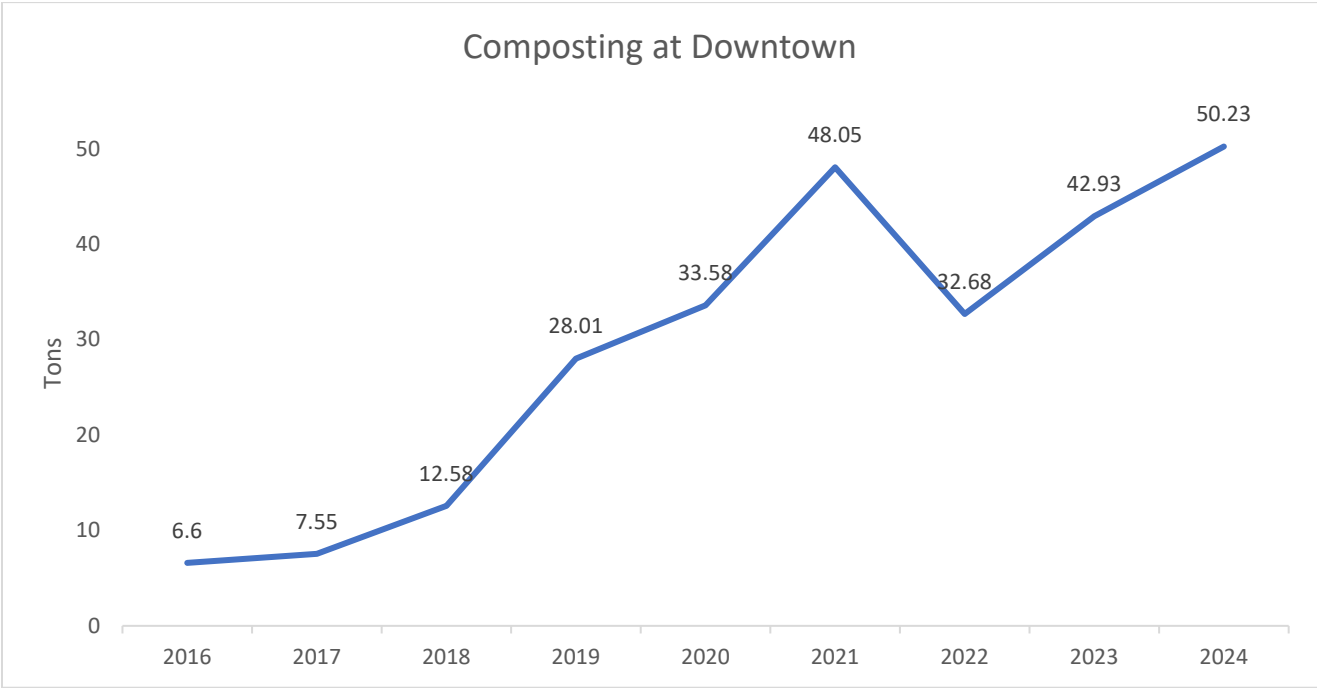
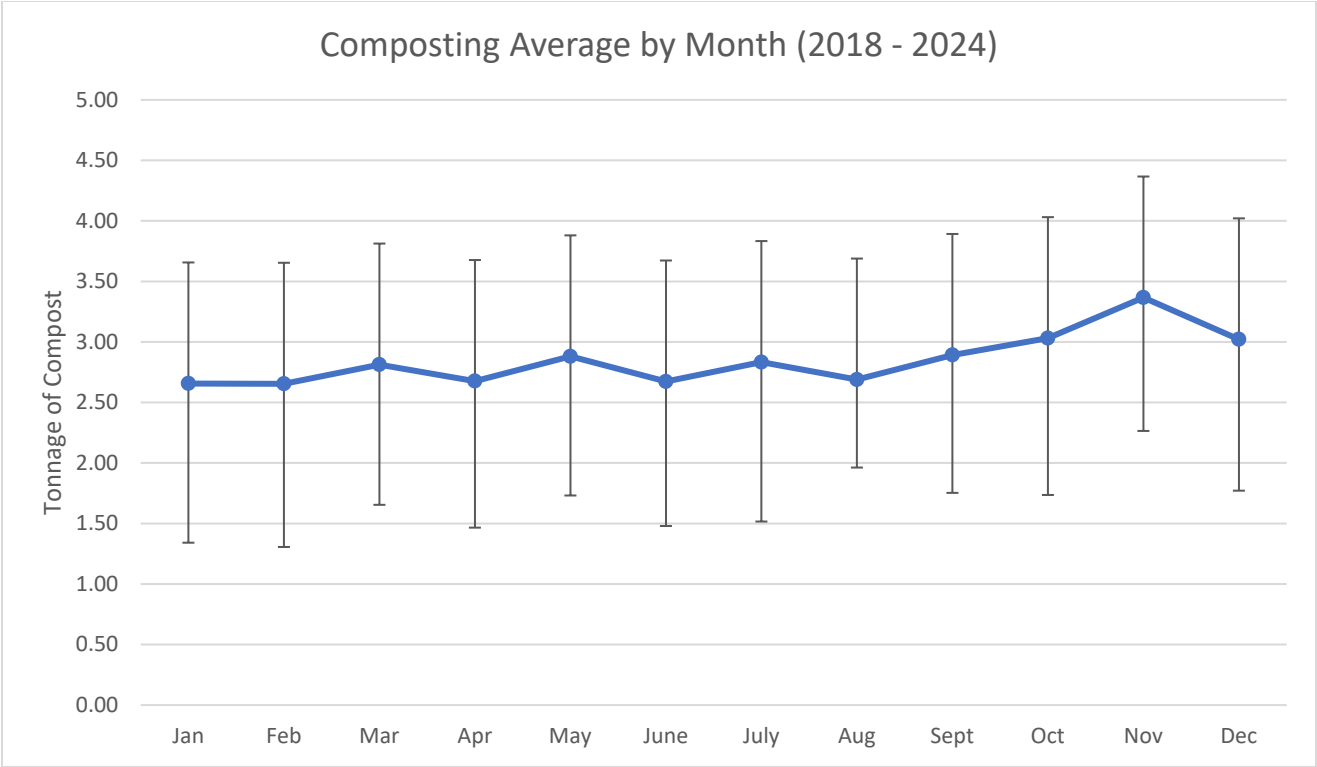
*Alignment: FA 5 Goal 1; FA 5 Goal 2*

*Staff Contact: Jeremy Harold*

### Composting at City Hall

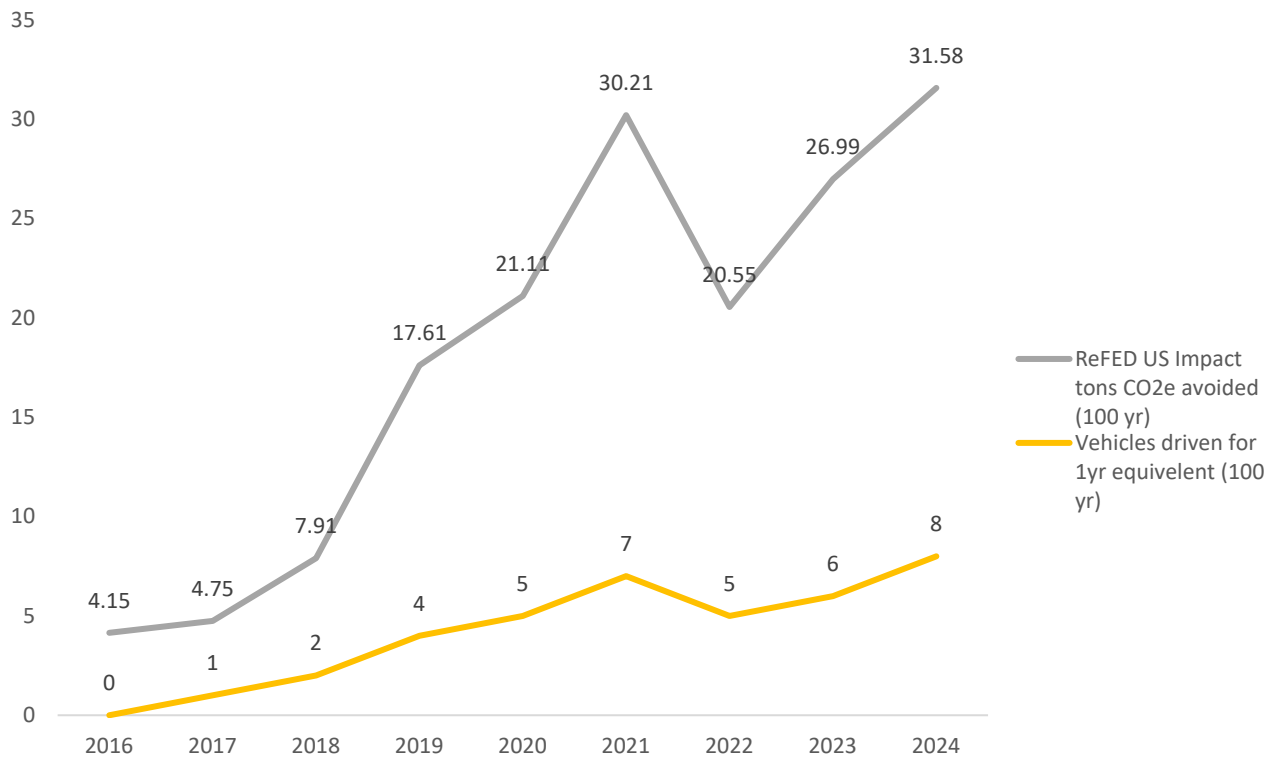
Composting YTD Total	
Item	tons
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
<b>2025 Total</b>	

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





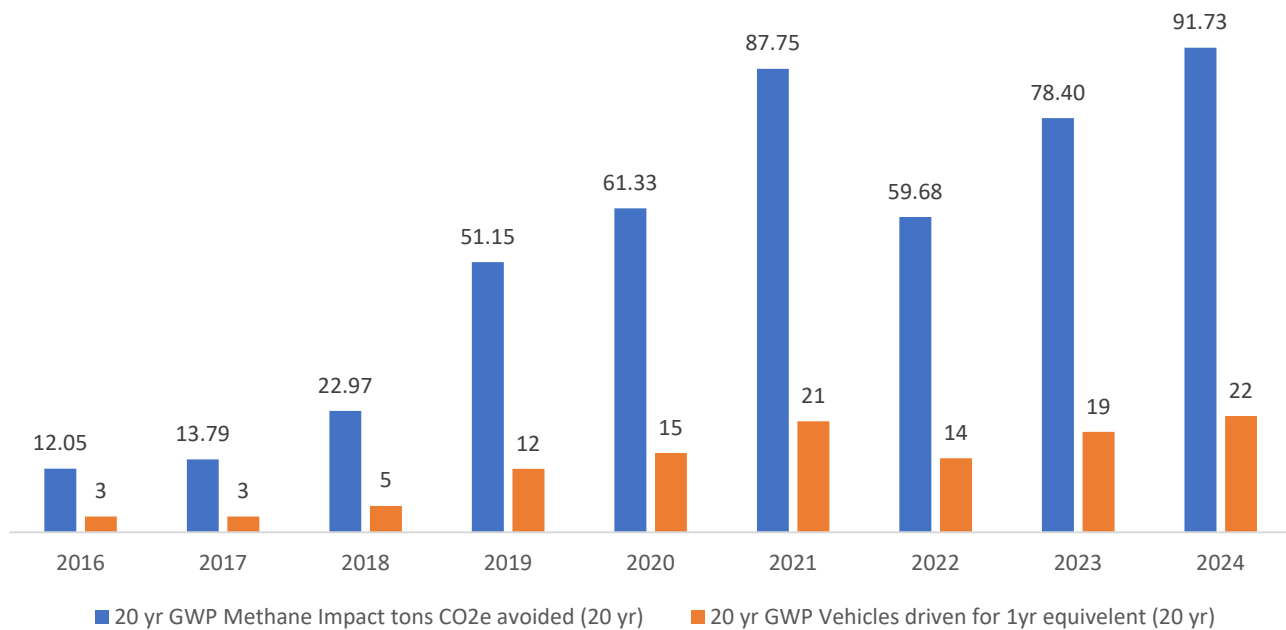
## Avoided GHG Impact of Composting



Source: Calculated by ReFED based on data from various sources. See <https://insights.refed.com/methodology> for more information. Data last updated November 02 2023.

<https://insights.refed.com/methodology?section=impact-calculator>.

## Methane Impact of Composting



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: Summer 2025
<b>Total:</b>	<b>12,287 (2.33 miles)</b>	

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	Approved Projects	Completed Projects	Cancelled Projects	Carryover Projects	Total Project Payment
2020	5	3	2	0	\$23,918.07
2021	3	3	0	0	\$38,503.71
2022	3	1	2	0	\$352.10
2023	8	7	0	1	\$7,492.69
2024	25	17	0	8	\$21,204.18
2025 (YTD)	24	8	2	N/A	\$21,793.85

Current status: Ongoing

Alignment: FA 6 Goal 4

Staff Contact: Keith Thomas

### Septic to Sanitary Reimbursements

Year	Completed Connections
2006 - 2016	30
2017-2024	32
2025 (YTD)	0

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*