
# CRA ANNUAL REPORT 2024

PREPARED BY
THE CITY OF TROY RECYCLING DEPARTMENT

# Comprehensive Recycling Analysis – 2024 Report

## Introduction

As in the prior reporting years, this Comprehensive Recycling Analysis (CRA) report (as required by 6 NYCRR 360.11) (d) will serve as an overview of the City of Troy initiatives (and their respective results) in the areas of resource management, recycling, diversion, community engagement, and solid waste handling. This report is for the calendar year of 2024.

This document is meant to be an interactive and "living" document for the use of the community and City, not merely to fulfill reporting requirements for New York State. It will continue to be a roadmap through which the City's decisions are to be made, as well as an opportunity for the city to gauge the effectiveness of our objectives and intentions. The updated timeline, reflecting the accomplishments for 2024 associated with these objectives is included in City's submission (Annex 1).

The City of Troy continues to manage and maintain its recycling operations with the goal of maximizing materials reuse and recycling and the diversion of materials from disposal. This report will summarize how the city worked toward these goals in 2024 and plans to continue to do so in 2025 and beyond.

The primary areas of focus from past reports are delineated below and updated in this report:

1. Establish a recycling center
2. Establish organics/composting facility
3. Develop re-use center
4. Establish clear collection procedures and participation levels
5. Education and outreach
6. Maintain data collection and reporting
7. Create deconstruction permit and education/outreach plan

## Objective 1: Establish a recycling center

The Alamo/TRMF was officially purchased back from the Troy Land Development Corporation (TLDC) in July of 2023. The Recycling Department hopes to revisit discussions on revitalizing the facility with a physical structure/workspace for City employees. Additionally, the facility needs resurfacing.

## Objective 2: Establish organics/composting facility

A curbside food scrap diversion program was initiated in September 2021 through a cooperative agreement awarded by the United States Department of Agriculture (USDA) and National Resources Conservation Service (NRCS). The agreement was for a pilot program over two years; it was executed in three phases to gradually increase residential curbside food scrap diversion within the pre-approved budget. The city used local food scrap hauler FoodScraps360 to collect and transport food scraps and other accepted materials. FoodScraps360 had an existing arrangement with the Town of Bethlehem, where they brought the materials to be composted at the Town's composting facility. The city continues to evaluate and explore the opportunity to establish a composting facility within city limits.

The curbside food scrap diversion pilot program concluded in late September of 2023. In total, 50.54 tons of food scraps and accepted materials were collected. The city is exploring the option of starting the food scrap diversion program again in 2025.

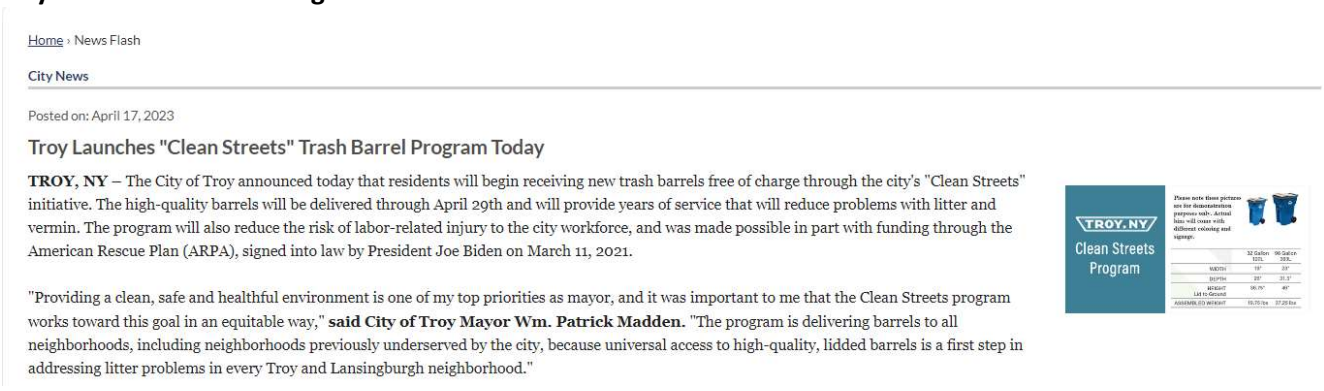
In addition, FoodScraps360 operates a drop off site at the Troy Farmer's market. Although the compost is not processed in the city of Troy they collect and divert about 600-800 pounds of food scraps each week (approximately 15 tons annually).

## Objective 3: Develop re-use center

The idea of developing a re-use center in the city remains an objective. However, with the recruitment of a recycling coordinator since early 2024, the position was not filled in 2024 and there has been no progress on meeting this objective. The city did participate in regional discussions about creating a Reuse Center in the Capital District. Filling this position is essential to moving forward with this objective.

## Objective 4: Establish clear collection procedures and participation levels

**Citywide Trash Barrel Program**



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City News

Posted on: April 17, 2023

Troy Launches "Clean Streets" Trash Barrel Program Today

**TROY, NY** – The City of Troy announced today that residents will begin receiving new trash barrels free of charge through the city's "Clean Streets" initiative. The high-quality barrels will be delivered through April 29th and will provide years of service that will reduce problems with litter and vermin. The program will also reduce the risk of labor-related injury to the city workforce, and was made possible in part with funding through the American Rescue Plan (ARPA), signed into law by President Joe Biden on March 11, 2021.

"Providing a clean, safe and healthful environment is one of my top priorities as mayor, and it was important to me that the Clean Streets program works toward this goal in an equitable way," **said City of Troy Mayor Wm. Patrick Madden.** "The program is delivering barrels to all neighborhoods, including neighborhoods previously underserved by the city, because universal access to high-quality, lidded barrels is a first step in addressing litter problems in every Troy and Lansingburgh neighborhood."



**Figure 3:** *the City of Troy's announcement for the citywide trash barrel program, "Clean Streets."*

The city rolled out a citywide trash barrel program to all residents with municipal collection service. This program addressed several long-standing priorities: reducing wind-blown litter, reducing pest and vermin access, and making sure residents had standardized containers. This program was greatly supported by

American Rescue Plan Act (ARPA) funding. The original roll-out was planned to be a right-sized container approach where residents could choose the appropriate sized container out of three sizes (96-gallon, 64-gallon, and 32-gallon). Due to budgetary restraints and logistical challenges, the implemented program was modified; two sizes (96-gallon or 32-gallon) were offered to residents with no price differential.

Regarding logistics, the majority of the roll-out was successful. There were pre-existing City-issued barrels for around 3,000 residents that needed to be accounted for in the final drop-off list. Errors in the list led to delayed container swap outs after the vendor's pre-scheduled drop-off days. Despite this, the city received many positive comments from residents on the initiative. Even into 2024, residents have provided feedback that it has helped "clean the streets."

**Intermunicipal Household Hazardous Waste Disposal Event Series**

Regarding special collection events, the City of Troy once again partnered with Rensselaer County and the Town of Bethlehem for an inter-municipal household hazardous waste disposal event series. In 2024 there were four events: one in Troy in May, one in Schodack in July, one in Brunswick in September, and the last in Bethlehem in October.

Troy event:

- 180 total attendees, 97 from Troy

Schodack event:

- 211 total attendees, 15 from Troy

Brunswick event:

- 204 total attendees, 26 from Troy

Bethlehem event:

- 248 total attendees, 4 from Troy


**Figure 4:** *a social media post promoting the City of Troy's hosted household hazardous waste disposal event.*

Event attrition is once again an area the city is looking to improve. There are several potential reasons for the levels were high: time slot emails, event access, and differences in municipal solid waste programs. To help control traffic for the event, the city assigns time slots via email (or by phone if requested). The Recycling Department asks residents to double-check spam and junk folders and to cancel in advance if they know they are unable to attend. Another potential reason is the increased accessibility/convenience. For Troy residents, household hazardous waste disposal events have been a regularity since 2019. Rensselaer County municipalities have not had the same opportunity for hosting these events due to insufficient staff support and financial barriers; as a result, their attrition levels are significantly lower. The last potential reason for high attrition levels is the difference in each municipality's solid waste collection program. The City of Troy has no price differential for trash barrel sizes. While residents are encouraged to divert as many materials as possible, there is not a financial incentive for residents to do so. For the program partners, the majority have private haulers which use tiered pricing for their containers.

The 2024 memorandum of agreement between the three entities (City of Troy, Town of Bethlehem, and Rensselaer County) is complete and approved, continuing the partnership for its third year.

An additional special collection event for paint recycling was discussed at length during 2023. During the household hazardous waste event series, the City of Troy wanted to ensure that any paint collected at the HHW events was being kept in New York State if possible. This is to ensure a lower carbon footprint from transportation of the materials, as well as offering them the opportunity to be recycled instead of used for waste.

Green Sheen, a local paint recycler under PaintCare, is looking to process the materials in-house. To do so, they need to collect a higher volume of the materials at special collection events. The Recycling Coordinator reached out to Rensselaer County to accomplish multiple objectives at once: host a paint recycling collection event and, hopefully, help increase the volume Green Sheen is collecting so the materials can be recycled locally.

There were no paint recycling events scheduled for 2024.

However, a household hazardous waste collection day was conducted at Hudson Valley Community College in April 2024 that involved GreenSheen New York and the collection of old paint. According to GreenSheen, 500-600 vehicles participated, 77 Cubic Yard/ Gaylord Boxes were collected, 59,534 lbs of Water/ Acrylic/ latex-based paint and 5,697 oil based paint were collected. A similar event is scheduled for April 2025.

**Other Diversion Data**
The Troy Resource Management Facility has bays for the following materials streams: leaves and yard materials; street sweepings; food scraps; tires; metals; and electronics. Provided below are the 2024 totals for each category:

- Leaves and yard materials: 1,000 tons
- Street sweepings (screened and diverted): N/A (holdover and screen/use in 2025)
- Tires: 2.48 tons
- Metals: 56.48 tons
- Electronics: 4.3 tons

The only materials that residents can bring to the facility during set hours are leaves/yard materials. The remaining streams in this list are outputs from City operations/programs.

## Objective 5: Education and outreach

In 2024, due to the City's inability to fill the positions for the City Recycling Coordinator and Recycling Specialist, additional education and outreach efforts have not been initiated. The city continues to maintain the website to explain the recycling program to residents and answer questions from calls to the Sanitation Department.

**Involvement in Statewide Association, NYSAR$^3$**
The City's participation in the statewide NYSAR$^3$ (NYS Association of Reduction, Reuse and Recycling) committees will continue when the recycling coordinator and recycling specialist positions are filled.

**Social Media and The City Website**
The recycling department's website is maintained and questions from the public are answered by the Sanitation Department. The previously designed "resources" page on the city website includes educational graphics, diversion program pamphlets, and other materials. Any Troy-based entities are welcome to download and use the information on the page. There are digital viewing and printable copies of all files.

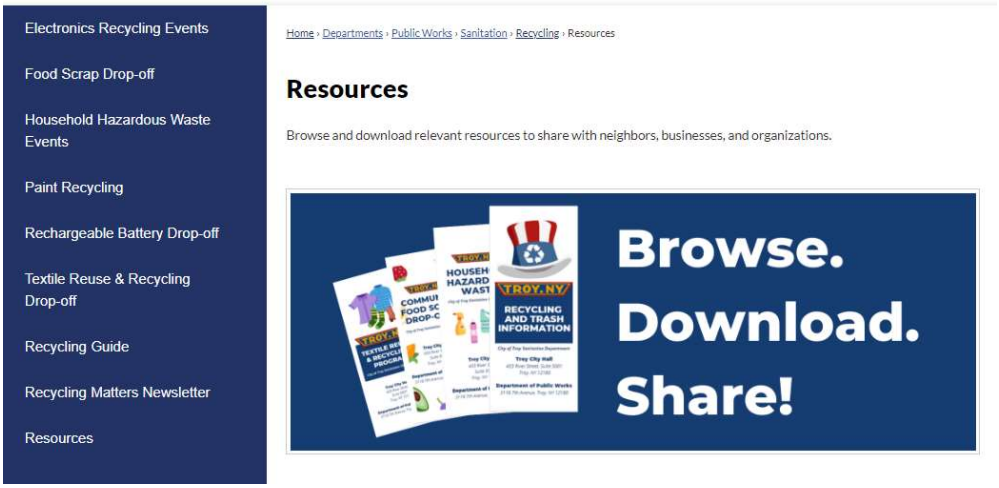


**Figure 12:** *A snippet of the City's "resources" web page.*

## Objective 6: Increase data collection and reporting

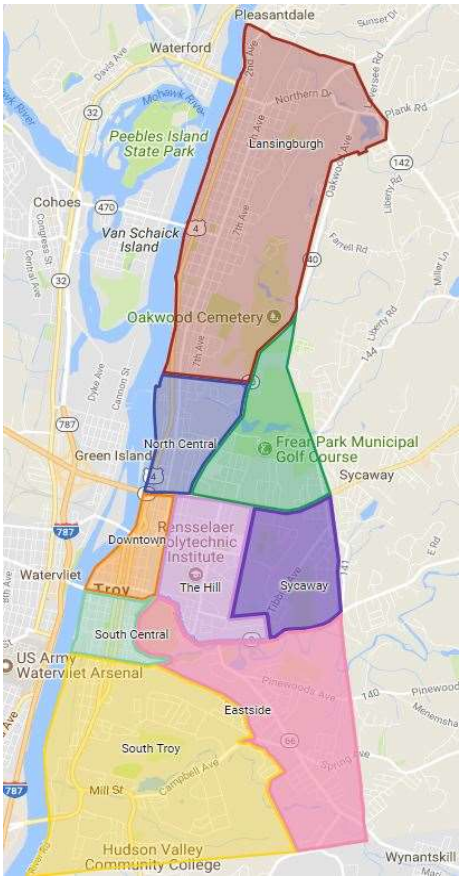


**Figure 13:** *A map of Troy's vibrant neighborhoods*

**Trash Audit Data**

Since 2021, the city has been interested in conducting a trash audit to better understand the composition of the City's municipal solid waste (MSW). Originally, the audit was to be in collaboration with SUNY Stonybrook, as a professor at the college is conducting them around the state. It was determined that a partnership with them would not be feasible as the city did not have the necessary personnel to support. In 2023, the city started conversations with the Recycling Partnership, who indicated that they could provide personnel both to collect materials and sort them. In the context of the food scrap diversion objective, an audit could help determine the feasibility of a permanent citywide food waste reduction program and how much food waste could potentially be diverted from disposal. However, the city was unable to coordinate a date with the Recycling Partnership but will try again in 2025 after the recently vacated recycling coordinator position is filled.

In the process of collecting 2024 data for this report, the city identified a data gap of approximately 286 tons in diversion tonnage (step 5, pg 21). This is due to the lack of staff in the Recycling department itself. There was no guidance or succession plan set up for data collection and documentation following the previous employee's departure from the city. An audit would help increase the understanding of the city's waste stream as well as create a standardized method of collecting data for more accurate future reports.

## Objective 7: Create deconstruction permit and education/outreach plan

In the absence of a recycling coordinator and recycling specialist the city has not been able to make any further progress on this initiative.

**Annex 1a:** *The Comprehensive Recycling Analysis timeline, with progress up to the end of 2023 continued on next three pages).*

| City of Troy Solid Waste Management Plan (2019-2028) - 10 Year Implementation Schedule | | | | | |
|---|---|---|---|---|---|
| **Objectives and associated tasks** | **2019** | **2020** | **2021** | **2022** | **2023** |
| **Recycling Programs** | | | | | |
| Monitor National Recycling Situation | Ongoing | | | | |
| *Recycling Contract* | | | renewed | | 5-year extension w/CW |
| *Annual Recycling Update* | Update | Update | Update | Update | Update |
| Textile Recycling | | | | | |
| *partner with K-12 schools to develop student liaisons* | | | In progress | Pilot with PS2 | PS2, Boys/Girls Club L'burgh |
| *create pilot program w/colleges for textile recycling expansion* | | | | RPI | RPI: 4 bins |
| Household Hazardous Waste | | | | | |
| *develop comprehensive RFP for HHW bidding process* | complete | | | | |
| *set up RFP review board* | complete | | | | |
| *Increase Annual Events* | complete | | | | |
| *2 events per year* | complete | | | | |
| *4 events per year* | | Inter-municipal partnership - complete | | | added Rensco to partnership |
| Recycling/drop-off Center | | | | | |
| *PILOT - Open Alamo April - Oct.* | | Report | open Thursdays 9a-1p | added Tuesdays 9a-1p | |
| *Ongoing facility upgrades (include in 5-year Capital Planning)* | | completed | | completed | |
| *Alamo Site Buy or Lease* | | | Process started | Transfer expected | purchase complete 6/23 |
| *Open Drop Center (Year Round)* | | | completed | | |
| *Expansion of hours* | | | | | |
| Additional diversion events | | | | | |
| *Electronic waste events* | | | completed | Ongoing | |
| *Paint-only diversion events* | | | | | |
| **Education & Outreach** | | | | | |
| Develop systems/strategies | | | | | |
| *prioritize tasks and objectives* | Ongoing | | | | |
| *Recycling Coordinator* | Ongoing | | | | |
| *"Recycling Matters" (monthly online newsletter)* | Ongoing | | | | |
| *Update forms (bulk pickup, annual solid waste fee) to reflect current info* | | | Completed | | |
| *Increased Event Offerings (other types of diversion events)* | | | Goal achieved | | |
| *partner with schools/colleges to brainstorm opportunities* | Ongoing | | | | |
| *Improved visibility of shared information* | Ongoing | | | | |
| *All portions of DPW pages of city website updated/linked to ReCollect* | | | ReCollect completed | Anticipated changes | |
| *Website maps and links also cross-linked to ReCollect* | | | completed | Improvements and upgrades | |
| *Develop phone-tree for DPW/DGS to reach correct personnel* | | complete | | Update | |
| *Regular neighborhood meeting visits/updates* | Ongoing | | | | |
| *Partner with RPI, Sage and New Visions to create curricula and databases* | | in process | completed | | |
| *Utilize Rubin Grant to develop community outreach toolkit* | | complete | | | received additional funds |
| *Outreach to public, private and charter schools to provide access to materials* | | | | Ongoing | |
| *Do waste audit for presentation to City Council* | | | Started | | |
| *Do community-based waste audits* | | | Started | In process | |
| *Design and order bin stickers for recycling bins* | | complete | | | updated and ordered |
| *Host "online store" for composter and rain-barrel orders* | | Ongoing | | | canceled: cost increase |
| *Design and order "food scrap" fridge magnets* | | complete | | | updated and branded |
| *Create social media account(s)* | | | complete | Facebook | Facebook |
| *Develop departmental branding and collateral material* | | | complete | Ongoing | |
| *Design and order reusable bags (5-cent bag tax revenues)* | | complete | complete | Quarterly orders | Quarterly orders |
| **Hauler Licensing** | | | | | |
| Research other county/municipal permit applications | Complete | | | | |
| *Hauler Permit developed and legislation approved* | | complete | | | |
| *Notification to Haulers* | | complete | Standard procedure created | | Updates made |
| *Permit stickers designed and ordered* | | complete | June, annually | | |
| *Permit requests from haulers* | | complete | | | |
| *Second request permit application completion* | | | | September, annually | |
| *Revise permit to reflect fee-uniformity* | | complete | | | |
| *Notify haulers of approval/send permit sticker* | | complete | As applications are approved | | |
| *Quarterly reports on hauler statuses (in violation or no)* | Ongoing | | | | |
| *Assign program maintenance to account clerk* | | | | | complete |
| *Annual Notice/Data Requests* | Ongoing | | | | |
| **Organics Recovery** | | | | | |
| Food Waste/ Source Separated Organics | | | | | |
| *Pilot Compost program with other municipalities/private hauler* | | | | Ongoing | |
| *Stumps re-located from Alamo to alternate site* | | | | complete | |
| *Fully implement compost program (citywide)* | | | | | Anticipated roll out |
| *Partner with food-gleaning agencies to divert edible food* | | | | | |
| *Partner with private or non-profit entity to develop community food-service program* | | | | | |
| Yard Waste | | | | | |
| *Create separate bays for storage at Alamo* | | complete | | completed | Hale (erosion barrier) |
| *Develop regular schedule for maintenance of areas* | Ongoing | | | | |
| *Separate out leaves (no charge to city from vendor to haul out)* | | complete | | outsource N/C | |
| *Screen Material* | Ongoing | | | | |
| *Open Alamo for Private Yard Waste drop-off and mulch pickup* | | | Pilot | | Open |
| Registered Mulch/Re-use/Transfer Facility | | | | | |
| *Permits for all functions of Alamo from DEC* | | | complete | | |
| *Determine viability of additional organics materials handling* | Research | | | relocate materials: Hale | complete |

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|---|---|---|---|---|---|
| **Incentive Based Pricing** | | | | | |
| Solid Waste Management Fees | Ongoing | | | | |
| *Determine area for "fair share" business/multi-unit program* | Research | complete | | | |
| *Set pricing for fair-share and send out notification/information* | | complete | | | |
| *Hold community meetings to inform property-owners for Q and A* | | complete | | | |
| *Roll out fair-share program* | | complete | | | |
| Hybrid PAYT | | | | | |
| *Research types and applicability* | research | research | | | |
| *Implement Hybrid PAYT* | | | implement? | | |
| *Evaluation* | | | | | report |
| Bulk Pricing | | | | | |
| *Implement Clear Bulk Waste Pricing* | complete | | | | |
| *Furniture Donation* | Ongoing | | | | |
| *Report* | | Report | | | |
| **Waste Disposal** | | | | | |
| Trash Disposal | | | | | |
| *New Equipment Investment* | Ongoing | | | | |
| *Order SSR signs for trucks to properly identify when MSW trucks re-deployed* | | | | | |
| *Provide residents with larger SSR bins (16g and 22g available)* | | | | | Ongoing |
| *Provide SSR receptacles with lids for residents* | | | | | |
| *Provide uniform barrels for waste disposal to all residents with municipal pickup* | | | | | completed |
| Bulk Disposal | | | | | |
| *New Equipment Investment* | Ongoing | | | | |
| *Integrate into specific pickup day (route-based) structure* | | | | | |
| *Access to information (pickup maps, etc)* | complete | | | | |
| Street Sweeps Disposal | | | | | |
| *Screen and divert maximum possible for erosion prevention (PREBUD)* | | complete | | complete | complete |
| **Enforcement Programs** | | | | | |
| Litter Patrol Officer | complete | | | | |
| *Add 2nd LPO* | complete | | | 3rd LPO added | |
| *Provide in-house work-space for LPO's at City Hall* | | complete | | | |
| Sanitation Workers | | | | | |
| *Utilize contamination stickers and hang-tags for doors* | Ongoing | | | | |
| Account Clerk | | | | | |
| *Provide billing and invoicing structure for violations* | | complete | | | additional account clerk |
| Visiblity of addresses (safety and accountability) | | | | | |
| *Research Cost of Implementation* | | | | | |
| *Implement across City* | | | | | |
| *Develop sufficient and satisfactory waste/recycling plan with zoning project applications* | | | | complete | |
| *Require enforcement of waste/recycling plan for approved properties* | | | | | |
| Solid Waste Advisory Board (after 2019-2028 plan approval) | complete | | | | |
| *Assist in New Plan (2029 Publication)* | | | | | |
| *Assist Recycling Coordinator with annual report to Mayor* | | | | | |
| **Data Collection & Evaluation** | | | | | |
| Collect Missing Data | | | | | |
| *Update Plan with New Data* | Ongoing (include in first year a more detailed timeline) | | | | |
| *Decide on and commit to platform as clearinghouse for data* | | complete | | | |
| Create accurate databases of various informational resources | | | | | |
| *GIS mapping (routes, violations, recycling bins, etc.)* | | | | | |
| *Create and maintain monthly MSW and SSR data from County Waste* | Ongoing | | | | |
| *Develop large-scale generator letter* | | complete | | | |
| *Deploy generator letter with response requirement* | | | | | |
| *Track quantities of materials divered from waste stream* | Ongoing | | | | |
| | | | | | |
| Regional Approach | | | | | |
| *Research Possible Regional Options* | | | | | |
| *Join or Create a Planning Unit or materials handling authority* | | | | | |
| **Flow Control** | | | | | |
| *Maintain Recycling Mandates* | Ongoing | | | | |
| *Private Sector Opportunities* | | | | | |
| *RFP for Services* | | | | | |
| *RFP for Solid Waste Services for Comparison* | 2x during 10-years | | | | |
| *Explore ReUse Partnership Opportunities* | | | | | begin |
| **C&D Demolition, Reuse & Recovery** | | | | | |
| **Research Deconstruction policies, ordinances and protocol** | | | | begin | continue research |
| *Host Deconstruction Summit* | | | | complete | |
| *Participate in regional and statewide deconstruction discussions and events* | | | | Ongoing | |
| *Generate a Deconstruction Permit* | | | | | |
| City Deconstruction RFP | | | | | |
| *Create an RFP for deconstruction* | | | | | |
| *Issue RFP for Demolition Jobs* | | | | | |
| Business and homeowner Education | | | | | |
| Salvage Yard | | | | | |
| *public-private opportunity research* | | | | | |
| *Salvage yard Opportunity Update* | | | | | |
| Recycling Clearinghouse | | | | | |
| *Online Database of Recycling and Reuse services* | Ongoing | | | | |
| **ReUse Programs** | | | | | |
| ReUse Center | | | | | |
| *Household Donation (private/non-profit) Options* | Ongoing | | | | |
| *Research Center/Partnership Plan* | | | | Report | |
| *Plan Update* | | | | Report | |
| *Affiliate with existing partners and agencies* | | | | In process | |
| **Thermal Treatment Technologies** | | | | | |
| No Plans | | | | | |
| **Waste Reduction Programs** | | | | | |
| Green Procurement | | | | | |
| NYC DEC Green Procurement Law-current | | | Ongoing | | |

**Annex 1b:** *The Comprehensive Recycling Analysis timeline, with projected progress up to the end of 2028 (continued on next three pages).*

| City of Troy Solid Waste Management Plan (2024-2028) - Implementation Schedule | | | | | |
|---|---|---|---|---|---|
| **Objectives and associated tasks** | **2024** | **2025** | **2026** | **2027** | **2028** |
| **Recycling Programs** | | | | | |
| Monitor National Recycling Situation | Ongoing | | | | |
| *Recycling Contract* | 5-year extension w/CW | | | | |
| *Annual Recycling Update* | Update | | Update | | New Plan |
| Textile Recycling | | | | | |
| *partner with K-12 schools to develop student liaisons* | On Hold | | | | |
| *create pilot program w/colleges for textile recycling expansion* | No Action | | | | |
| Household Hazardous Waste | | | | | |
| *Increase Annual Events* | | Evaluation | | | |
| *2 events per year* | | | | | |
| *4 events per year* | 1 event | | | | |
| Recycling/drop-off Center | | | | | |
| *PILOT - Open Alamo April - Oct.* | Open | | | | |
| *Expansion of hours* | | | | | |
| Additional diversion events | | | | | |
| *Electronic waste events* | Ongoing | | | | |
| *Paint-only diversion events* | Complete | Ongoing | | | |
| **Education & Outreach** | | | | | |
| Develop systems/strategies | | | | | |
| *prioritize tasks and objectives* | Ongoing | | | | |
| *Recycling Coordinator* | Ongoing | | | | |
| *"Recycling Matters" (monthly online newsletter)* | Ongoing | | | | |
| *Increased Event Offerings (other types of diversion events)* | Added paint collection | | | | |
| *partner with schools/colleges to brainstorm opportunities* | Ongoing | | | | |
| *Improved visibility of shared information* | Ongoing | | | | |
| *All portions of DPW pages of city website updated/linked to ReCollect* | On Hold | | | | |
| *Website maps and links also cross-linked to ReCollect* | Improvements and upgrades | | | | |
| *Regular neighborhood meeting visits/updates* | Ongoing | | | | |
| *Outreach to public, private and charter schools to provide access to materials* | Ongoing | | | | |
| *Do waste audit for presentation to City Council* | On hold | | | | |
| *Do community-based waste audits* | On hold | | | | |
| *Design and order bin stickers for recycling bins* | updated and ordered | | | | |
| *Host "online store" for composter and rain-barrel orders* | Cancelled | | | | |
| *Create social media account(s)* | Facebook | | | | |
| *Develop departmental branding and collateral material* | Ongoing | | | | |
| *Design and order reusable bags (5-cent bag tax revenues)* | Quarterly orders | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Hauler Licensing** | | | | | | |
| Research other county/municipal permit applications | | | | | | |
| *Second request permit application completion* | | | | | | |
| *Quarterly reports on hauler statuses (in violation or no)* | Ongoing | | | | | |
| *Assign program maintenance to account clerk* | | | | | | |
| *Annual Notice/Data Requests* | Ongoing | | | | | |
| **Organics Recovery** | | | | | | |
| Food Waste/ Source Separated Organics | | | | | | |
| *Fully implement compost program (citywide)* | On Hold | | | | | |
| *Partner with food-gleaning agencies to divert edible food* | On Hold | | | | | |
| *Partner with private or non-profit entity to develop community food-service program* | On Hold | | | | | |
| Yard Waste | | | | | | |
| *Develop regular schedule for maintenance of areas* | Ongoing | | | | | |
| *Separate out leaves (no charge to city from vendor to haul out)* | Ongoing | | | | | |
| *Screen Material* | Ongoing | | | | | |
| *Open Alamo for Private Yard Waste drop-off and mulch pickup* | Open | | | | | |
| Registered Mulch/Re-use/Transfer Facility | | | | | | |
| *Permits for all functions of Alamo from DEC* | Registered as SW Facility 1/6/21 to 1/6/26 | | | | | |
| **Incentive Based Pricing** | | | | | | |
| Solid Waste Management Fees | Ongoing | | | | | |
| Hybrid PAYT | | | | | | |
| *Research types and applicability* | On Hold | | | | | |
| *Implement Hybrid PAYT* | On hold | | | | | |
| *Evaluation* | On hold | | | | | |
| Bulk Pricing | | | | | | |
| *Furniture Donation* | Ongoing | | | | | |
| *Report* | On hold | | | | | |
| **Waste Disposal** | | | | | | |
| Trash Disposal | | | | | | |
| *New Equipment Investment* | Ongoing | | | | | |
| *Order SSR signs for trucks to properly identify when MSW trucks re-deployed* | Separate fleet for recycling | | | | | |
| *Provide residents with larger SSR bins (16g and 22g available)* | | | | | | |
| *Provide SSR receptacles with lids for residents* | Residents are provided receptables fro SSR | | | | | |
| Bulk Disposal | | | | | | |
| *New Equipment Investment* | Ongoing | | | | | |
| *Integrate into specific pickup day (route-based) structure* | Streets department resumed bulk operations | | | | | |
| *Access to information (pickup maps, etc)* | Residents can schedule pickups online | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Enforcement Programs** | | | | | |
| Sanitation Workers | | | | | |
| *Utilize contamination stickers and hang-tags for doors* | Ongoing | | | | |
| Account Clerk | | | | | |
| Visiblity of addresses (safety and accountability) | | | | | |
| *Research Cost of Implementation* | On Hold | | | | |
| *Implement across City* | On Hold | | | | |
| *Require enforcement of waste/recycling plan for approved properties* | | | | | |
| *Assist in New Plan (2029 Publication)* | Pending | | | | |
| *Assist Recycling Coordinator with annual report to Mayor* | Pending | | | | |
| **Data Collection & Evaluation** | | | | | |
| Collect Missing Data | On Hold | | | | |
| *Update Plan with New Data* | Ongoing (include in first year a more detailed timeline) | | | | |
| Create accurate databases of various informational resources | | | | | |
| *GIS mapping (routes, violations, recycling bins, etc.)* | On hold | | | | |
| *Create and maintain monthly MSW and SSR data from County Waste* | Ongoing | | | | |
| *Deploy generator letter with response requirement* | On hold | | | | |
| *Track quantities of materials divered from waste stream* | Ongoing | | | | |
| | | | | | |
| Regional Approach | | | | | |
| *Research Possible Regional Options* | On Hold | | | | |
| *Join or Create a Planning Unit or materials handling authority* | On Hold | | | | |
| **Flow Control** | | | | | |
| *Maintain Recycling Mandates* | Ongoing | | | | |
| *Private Sector Opportunities* | On Hold | | | | |
| *RFP for Services* | On Hold | | | | |
| *RFP for Solid Waste Services for Comparison* | On Hold | | | | |
| *Explore ReUse Partnership Opportunities* | On Hold | | | | |
| **C&D Demolition, Reuse & Recovery** | | | | | |
| **Research Deconstruction policies, ordinances and protocol** | | | | | |
| *Participate in regional and statewide deconstruction discussions and events* | Ongoing | | | | |
| *Generate a Deconstruction Permit* | On Hold | | | | |
| City Deconstruction RFP | | | | | |
| *Create an RFP for deconstruction* | On Hold | | | | |
| *Issue RFP for Demolition Jobs* | On Hold | | | | |
| Business and homeowner Education | | | | | |
| Salvage Yard | | | | | |
| *public-private opportunity research* | On Hold | | | | |
| *Salvage yard Opportunity Update* | On Hold | | | | |
| Recycling Clearinghouse | | | | | |
| *Online Database of Recycling and Reuse services* | Ongoing | | | | |
| **ReUse Programs** | | | | | |
| ReUse Center | | | | | |
| *Household Donation (private/non-profit) Options* | Ongoing | | | | |
| *Research Center/Partnership Plan* | Report | | | | |
| *Plan Update* | Report | | | | |
| *Affiliate with existing partners and agencies* | In process | | | | |
| **Thermal Treatment Technologies** | | | | | |
| No Plans | N/A | | | | |
| **Waste Reduction Programs** | | | | | |
| Green Procurement | On Hold | | | | |
| NYC DEC Green Procurement Law-current | | | | | |

**Annex 2:** *Diverted materials summary (annual comparison).*

**DIVERTED MATERIALS SUMMARY (year to year)**

| | Diverted (in tons) | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Single stream recycling | 1,174 | 1,283 | 1,326 | 1,194 | 1,245 | 1,053 |
| Scrap metals | 35 | 26 | 7 | 9 | 17 | 56 |
| Textiles | | 5 | 19 | 21 | 28 | 32 |
| Yard materials | 1,267 | 273 | 1,103 | 326 | 663 | 1,000 |
| Food scrap | | | 0 | 22 | 53 | 0 |
| Tires | 43 | 23 | 28 | 21 | 32 | 2 |
| Electronic waste | 9 | 9 | 32 | 29 | 14 | 4 |
| | | | | | | |
| | | | | | | |
| Sub-Total Annual Diversion excluding asphalt millings, brush, biosolids, sweeps | 2,493 | 1,592 | 2,508 | 1,613 | 2,051 | 2,148.39 |
| | | | | | | |
| Asphalt milling | 100 | | 1,282 | 1,549 | 1,801 | 1,214 |
| Brush, trunks, stumps | | 415 | 244 | 324 | 440 | 295 |
| Biosolids | 50 | 4,590 | 2,680 | 1,396 | 876 | 998 |
| Sweeps | 324 | | 238 | 102 | 127 | |
| | | | | | | |
| Sub-total, non household waste | 474 | 5,005 | 4,444 | 3,371 | 3,244 | 2,507 |
| | | | | | | |
| Total Diversion | 2,967 | 6,597 | 6,952 | 4,984 | 5,296 | 4,656 |

| Source | Weight (tons) |
|---|---|
| **MSW City of Troy hauler totals** | **13325.87** |
| **MSW Bulk Pickups & Violations** | **386** |
| **MSW Private Hauler totals** | **8748.75** |
| **Total disposal tonnage** | **22460.62** |
| **Total generation (disposal + diversion)** | **24902.62** |

**Annex 3:** *Household hazardous waste schedule of purchases.*

**HHW State Assistance Program**
**SCHEDULE OF PURCHASES**

| | |
|---|---|
| Applicant: | City Of Troy, NY (as lead agency; with Town of Bethlehem and Rensselaer County |
| Calendar year covered by request: (January-December): | 2024 |

**a. Contractual Expenses for HHW Collection or disposal (contractual costs)**

| Description of expense and vendor | Invoice/manifest number | Invoice date | Check number | Check date | Total amount | Ineligible amount | Eligible Amount | Comments |
|---|---|---|---|---|---|---|---|---|
| MXI, Inc. HHW Vendor (Troy hosted event) | 121269 | 06/03/24 | | | $26,507.02 | $1,320.00 | $25,187.02 | |
| MXI, Inc. HHW Vendor (Rensselaer County/Schodack hosted event) | 121721 | 07/31/24 | | | $23,197.50 | $1,720.00 | $21,477.50 | |
| MXI, Inc. HHW Vendor (Rensselaer County/Brunswick hosted event) | 122043 | 09/19/24 | | | $22,803.00 | $1,620.00 | $21,183.00 | |
| MXI, Inc. HHW Vendor (Bethlehem hosted event) | 122262 | 10/24/24 | | | $25,076.96 | $960.00 | $24,116.96 | |
| | | | | | | | | |
| **Subtotal** | | | | | **$97,584.48** | **$5,620** | **$91,964.48** | |
| Subtract costs for CESQG, farm and municipality's wastes | N/A | | N/A | | N/A | N/A | N/A | |
| Subtotal ineligible materials collected by vendor | | | | | | $5,620 | | |
| Funds received directly from participants, or other assistance (additional ineligible expenses) | Resident checks from non-participating municipalities (PII information) | | | | | N/A | | |
| **All ineligible expenses** | | | | | | **$5,620** | | |
| State grant funds (50% of eligible amount for **contractual expenses**) | | | | | | N/A | $45,982.24 | |
| Local match funds (50% of eligible amount for **contractual expenses**) | | | | | | N/A | $45,982.24 | |
| **Total:** | | | | | **$97,584.48** | **$5,620** | **$91,964.48** | |

NEW YORK STATE | Department of Environmental Conservation

## HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT ANNUAL REPORT

Submit the Annual Report no later than March 1, 2025.

This annual report is for the year of operation from January 01, 2024 to December 31, 2024

### SECTION 1 – EVENT INFORMATION

| | | | |
|---|---|---|---|
| **SPONSOR NAME:** City of Troy, Rensselaer County, Town of Bethlehem | | | |
| **SPONSOR ADDRESS:** 433 River Street, Suite 5001 | **SPONSOR CITY:** Troy | **STATE:** NY | **ZIP CODE:** 12180 |
| **SPONSOR CONTACT:** Joseph Mazzariello | **SPONSOR CONTACT PHONE NUMBER:** 518-279-7158 | **SPONSOR CONTACT FAX NUMBER:** n/a | |
| **COSPONSOR:** Ann Shaughnessy | **COSPONSOR PHONE NUMBER:** 518-270-2888 | **COSPONSOR FAX NUMBER:** n/a | |
| **CONTRACTOR INFORMATION** | | | |
| **CONTRACTOR NAME:** Maumee Express Inc. &/or MXI Environmental Services, LLC | | | |
| **CONTRACTOR ADDRESS:** 26319 Old Trail Road | **CONTRACTOR CITY:** Abingdon | **STATE:** VA | **ZIP CODE:** 24210 |
| **CONTRACTOR CONTACT:** Marc Kodrowski | **CONTRACTOR CONTACT PHONE NUMBER:** 732-328-0320 | **CONTRACTOR CONTACT FAX NUMBER:** n/a | |
| **EVENT LOCATION INFORMATION (Attach additional sheets if necessary)** | | | |
| **LOCATION OF COLLECTION:** Troy Resource Management Facility | | **DATE:** 5 / 18 / 24 | |
| **TOWN:** (City of) Troy | | **COUNTY:** Rensselaer | |
| **LOCATION OF COLLECTION:** Schodack Highway Dept | | **DATE:** 7 / 27 / 24 | |
| **TOWN:** Schodack | | **COUNTY:** Rensselaer | |
| **LOCATION OF COLLECTION:** Brunswick Highway Dept | | **DATE:** 9 / 14 / 24 | |
| **TOWN:** Brunswick | | **COUNTY:** Rensselaer | |
| **LOCATION OF COLLECTION:** Bethlehem Town Highway Garage | | **DATE:** 10 / 19 / 24 | |
| **TOWN:** Bethlehem | | **COUNTY:** Albany | |
| **LOCATION OF COLLECTION:** | | **DATE:** / / | |
| **TOWN:** | | **COUNTY:** | |
| **LOCATION OF COLLECTION:** | | **DATE:** / / | |
| **TOWN:** | | **COUNTY:** | |

## SECTION 2 – GENERAL INFORMATION

| | |
|---|---|
| Total population of area served: | 185,000 |
| Number of participants during the year: Households | 1172 |
| Farmers | 0 |
| CESQGs (Conditionally exempt small quantity generators) | 0 |

| | |
|---|---|
| Disposal costs, including contractor fees: | 97,584.48 |
| Publicity and educational costs: | |
| Other costs: | |
| Total cost: | 97,584.48 |

*Comments: _____

*List any restrictions on the type of household hazardous waste that was collected. Also, include any other relevant comments/information not included elsewhere on this form.

## SECTION 3 – HOUSEHOLD HAZARDOUS WASTE COLLECTION DETAILS

| Household Hazardous Waste | Weight/Volume* | Units |
|---|---|---|
| Antifreeze | 550 | Gallons |
| Hazardous Paint | 8,080 | Gallons |
| Automotive Batteries | 0 | Pounds |
| Hazardous Household Batteries | 455 | Pounds |
| Pesticides (Solids) | 5,400 | Pounds |
| Pesticides (Liquids) | 2,255 | Gallons |
| Mercury Thermostats | 0 | Number Collected |
| Other Mercury Containing Devices | 0 | Pounds |
| Bulk Mercury | 91 | Pounds |
| CRT TVs/Monitors | 0 | Pounds |
| Non-CRT TVs/Monitors | 0 | Pounds |
| Other Electronics | 0 | Pounds |
| Other HHW (Solids) | 8,433 | Pounds |
| Other HHW (Liquids) | 12,775 | Gallons |
| Miscellaneous Solid Waste (Solids) | 0 | Weight/Volume*_Other HHW (Liquids) |
| Miscellaneous Solid Waste (Liquids) | 0 | Gallons |
| Fluorescent Bulbs | 844 | Pounds |
| Other (specify) | | |
| Total Disposed For Year | 15,222/23,660 | Pounds/Gallons |

*Please report the weight/volume of household hazardous waste in the container, not the size of the container.

# Step 1. Planning Unit and Plan Period Selection

Please, select from the drop-down list the name of your **planning unit** and the **planning period** of your **LSWMP**. Be aware that a LSWMP must be developed for a **10-year period**, and that your selection will be replicated on each one of the following tabs.

| | |
|---|---|
| **Planning Unit** | City of Troy |
| **Planning Period** | 2025-2034 |

# Step 2. Waste Generation Rate

In order to project how the amount of waste generated in the planning unit will change over time, data regarding the current amount of waste generated by the planning unit is needed. This can be the total tons of waste generated by the planning unit in the current year **(Tons/yr)**, or this can be the estimated daily quantity of waste generated per person in the planning unit **(lb/person/day)**. If both the total annual generation and the estimated generation rate per person are unknown, the state average for MSW generation rate can be used along with the planning unit's population to estimate the total amount of waste generated in the planning unit.

For this step, select **one** of the options that describes the known information about the planning unit. Enter the waste generated in Tons (MSW disposed & Recycled Materials) or the waste generation rate in lb/person/day) in the purple cell. If no data on the waste generated in the planning unit is available, choose the corresponding option from the list. The calculator will estimate the total amount of waste generated based on the state's average generation rate and the planning unit's population.

## City of Troy

The amount of waste generated (by all residents, institutions, etc.) in the planning unit will be based on what is known. If the MSW generation amount and the generation rate are unknown, the state average for MSW generation rate will be used.

- (●) I know the amount of MSW generated (Tons/year): — Enter tons disposed here: 22,461
- ( ) The planning unit Average MSW Generation Rate (lb/person/day) is:
- ( ) The amount of MSW Generated and the planning unit Average MSW Generation Rate are unknown. — Enter tons diverted here: 2,442

# Step 3. Planning Unit Population - Projections & Municipal Solid Waste (MSW) - Projections

This tab will provide you with population projections and MSW generation projections for the planning period you had previously selected. It is recognized that Municipal Solid Waste (MSW) generation is reliant on population changes, hence, it is necessary to project both and identify their correlation.

In the first purple cell enter the total tons of MSW that was disposed in the year immediately before your plan period starts. For example: If the plan period is 2016-2026, the MSW disposed data should be from 2015.

**Population Projection:**

Calculations are determined by a linear regression based on the latest **census population data** and an **annual growth rate percentage** specific to the planning unit. If it is anticipated that the population is going to decrease overtime, the minus sign (-) will be used.

**MSW Generation Projection:**

The MSW generation rate (Lb/person/day) calculated on the previous tab from the **Waste Generation Rate** will serve as a start point for the planning period. On the calculator, three options are considered to anticipate the MSW generation over time, and one must be selected according to the goals of the planning unit:

First Option:

MSW generation **rate** does not change. Consequently, MSW generation fluctuates with the population of the planning unit. If the population increases, waste generation will rise as well, and vice versa. By selecting this option, the planning unit is in **"status quo"**, meaning that is not making any improvements, and consequently is getting far from reaching the State's goal by 2030.

Second Option:

MSW generation **amount** remains the same, regardless of whether or not the planning unit's population changes.

Third Option:

As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of …

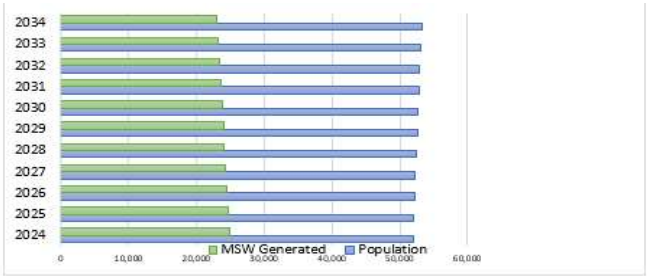
An **Annual Factor of Reduction (%)** should be calculated, defined, and selected by the planning unit. This factor will be the numerical representation of one of the planning unit's **goals** for the planning period. Once calculated, the Annual Factor of Reduction can be chosen from the drop down list provided.

**Note:**

• The graphic will display the Population and MSW Generation projections over the selected planning period. It has been designed to visualize the contrast of the final outcomes, based on the selections of each planning unit

## City of Troy — 2025-2034

| Current Data | |
|---|---|
| 2020 Population Census | 51,401 |
| 2024 Population | 51,925 |
| 2024 MSW Generated (Tons/yr) | 24,903 |
| 2024 MSW generation rate (Lb/person/day) | 2.37 |
| 2024 MSW Disposed (Tons/yr) | 22,461 |
| 2024 MSW Diverted (Tons/yr) | 2,442 |




| Annual rate of population growth (%) | 0.25% |
|---|---|

**Population Projection**

| 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|
| 51,925 | 52,057 | 52,189 | 52,322 | 52,455 | 52,588 | 52,722 | 52,856 | 52,990 | 53,124 | 53,259 |

**Forecasting future conditions...** What do you expect to happen to the MSW generation rate over the next 10 year period plan?

- ○ MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit, if the population increases, waste generation will rise as well, and vice versa.
- ○ MSW generation amount remains the same, regardless of whether or not the planning unit's population fluctuates.
- ◉ As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

Reduction Factor (per year): 1.0%

| MSW generation rate (Lb/person/day) | 2.62 |
|---|---|

**MSW Generation Projection**

| 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.62 | 2.60 | 2.57 | 2.55 | 2.52 | 2.49 | 2.47 | 2.45 | 2.42 | 2.40 | 2.37 | (Lb/person/day) |
| 24,860 | 24,674 | 24,489 | 24,306 | 24,124 | 23,943 | 23,764 | 23,586 | 23,410 | 23,235 | 23,061 | Tons/yr |

# Step 4. Municipal Solid Waste (MSW) Detailed Composition Analysis

The next step is to *Identify the Materials Composition of the Waste Stream* based on population density, and demographic characteristics of the Planning Unit.
This tab will provide the PU with a more detailed estimate of the materials present in the waste stream, which could be crucial when prioritizing the initiatives and programs of the LSWMP.

The population density distribution has been calculated based on the 2010 Census data and will be auto populated when a planning unit is selected. The following parameters were used and are defined in 6 NYCRR Part 360.2:

- Rural: <325 persons/mi$^2$
- Suburban: >325 and <5,000 persons/mi$^2$
- Urban: >5,000 persons/mi$^2$

Under **Density Population Distribution**, the user has the option to modify the percentage values for the **Sector** *(Residential and Commercial/Institutional)* based on land use and specific characteristics of each planning unit. For example: A rural population in Westchester County could be 64% Residential and 36% Commercial / Institutional, while in Wyoming County might be 50% Residential and 50% Commercial / Institutional.

The results are presented on the last right column under **MSW Materials Composition**. Be aware of color changes on the cells, whenever a category represents over 15% of the total waste generation, the cell will turn red to easily identify key categories of the waste stream. It will also facilitate the selection of initiatives, programs, and infrastructure for the solid waste management system.

**Note**: If no data exists, use the pre-populated information in the worksheet.

## City of Troy 2025-2034

| Material | Density Population Distribution | | Rural | | | Suburban | | | Urban | | | MSW Materials Composition (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.00% | | | 68.00% | | | 32.00% | | | |
| | | | Residential | Comm/Inst. | Combined | Residential | Comm/Inst. | Combined | Residential | Comm/Inst. | Combined | |
| | | | 60.00% | 40.00% | 100.00% | 60.00% | 40.00% | 100.00% | 60.00% | 40.00% | 100.00% | 100.00% |
| | Newspaper | | 5.20% | 1.90% | 3.88% | 5.00% | 1.90% | 3.76% | 6.60% | 2.00% | 4.76% | 4.08% |
| | Corrugated Cardboard | | 6.60% | 13.90% | 9.52% | 6.60% | 13.90% | 9.52% | 6.90% | 13.70% | 9.62% | 9.55% |
| | Other Recyclable Paper | Paperboard | 3.20% | 1.10% | 2.36% | 3.30% | 1.00% | 2.38% | 3.60% | 0.90% | 2.52% | 2.42% |
| | | Office Paper | 0.80% | 3.80% | 2.00% | 0.90% | 4.20% | 2.22% | 1.10% | 5.80% | 2.98% | 2.46% |
| | | Junk Mail | 3.00% | 0.70% | 2.08% | 3.20% | 0.70% | 2.20% | 3.50% | 0.70% | 2.38% | 2.26% |
| | | Other Commercial Printing | 1.70% | 2.30% | 1.94% | 1.70% | 2.40% | 1.98% | 2.30% | 2.60% | 2.42% | 2.12% |
| | | Magazines | 1.10% | 0.90% | 1.02% | 1.00% | 0.80% | 0.92% | 1.10% | 1.00% | 1.06% | 0.96% |
| | | Books | 0.50% | 0.30% | 0.42% | 0.50% | 0.30% | 0.42% | 0.60% | 0.40% | 0.52% | 0.45% |
| | | Paper Bags | 0.50% | 0.20% | 0.38% | 0.50% | 0.20% | 0.38% | 0.60% | 0.20% | 0.44% | 0.40% |
| | | Phone Books | 0.30% | 0.30% | 0.30% | 0.30% | 0.30% | 0.30% | 0.30% | 0.20% | 0.26% | 0.29% |
| | | Poly-Coated | 0.20% | 0.30% | 0.24% | 0.20% | 0.20% | 0.20% | 0.30% | 0.20% | 0.26% | 0.22% |
| | Other Recyclable Paper (Total) | | 11.30% | 9.90% | 10.74% | 11.60% | 10.10% | 11.00% | 13.40% | 12.00% | 12.84% | 11.59% |
| | Other Compostable Paper | | 6.80% | 6.80% | 6.80% | 6.40% | 6.40% | 6.40% | 6.80% | 6.80% | 6.80% | 6.53% |
| | ***Total Paper*** | | ***29.90%*** | ***32.50%*** | ***30.94%*** | ***29.60%*** | ***32.30%*** | ***30.68%*** | ***33.70%*** | ***34.50%*** | ***34.02%*** | ***31.75%*** |
| | Ferrous/Aluminum Containers | Ferrous Containers | 1.90% | 1.00% | 1.54% | 1.20% | 0.70% | 1.00% | 1.40% | 0.70% | 1.12% | 1.04% |
| | | Aluminum Containers | 0.70% | 0.40% | 0.58% | 0.60% | 0.30% | 0.48% | 0.50% | 0.40% | 0.46% | 0.47% |
| | Ferrous/Aluminum Containers (Total) | | 2.60% | 1.40% | 2.12% | 1.80% | 1.00% | 1.48% | 1.90% | 1.10% | 1.58% | 1.51% |
| | Other Ferrous Metals | | 5.20% | 5.40% | 5.28% | 5.00% | 5.80% | 5.32% | 3.30% | 3.70% | 3.46% | 4.72% |
| | Other Non-Ferrous Metals | Other aluminum | 0.20% | 0.30% | 0.24% | 0.20% | 0.30% | 0.24% | 0.20% | 0.30% | 0.24% | 0.24% |
| | | Automotive batteries | 0.80% | 0.50% | 0.68% | 0.70% | 0.40% | 0.58% | 0.20% | 0.20% | 0.20% | 0.46% |
| | | Other non-aluminum | 0.50% | 0.30% | 0.42% | 0.30% | 0.40% | 0.34% | 0.40% | 0.20% | 0.32% | 0.33% |
| | Other Non-Ferrous Metals (Total) | | 1.50% | 1.10% | 1.34% | 1.20% | 1.10% | 1.16% | 0.80% | 0.70% | 0.76% | 1.03% |
| | ***Total Metals*** | | ***9.30%*** | ***7.90%*** | ***8.74%*** | ***8.00%*** | ***7.90%*** | ***7.96%*** | ***6.00%*** | ***5.50%*** | ***5.80%*** | ***7.27%*** |
| | PET Containers | | 1.10% | 0.80% | 0.98% | 0.90% | 0.80% | 0.86% | 1.20% | 1.00% | 1.12% | 0.94% |
| | HDPE Containers | | 1.10% | 0.60% | 0.90% | 0.90% | 0.70% | 0.82% | 1.00% | 0.70% | 0.88% | 0.84% |
| | Other Plastic (3-7) Containers | | 0.20% | 0.10% | 0.16% | 0.20% | 0.20% | 0.20% | 0.20% | 0.20% | 0.20% | 0.20% |
| | Film Plastic | | 5.70% | 5.90% | 5.78% | 5.50% | 5.80% | 5.62% | 5.80% | 5.80% | 5.80% | 5.68% |
| | Other Plastic | Durables | 3.10% | 3.20% | 3.14% | 3.00% | 3.20% | 3.08% | 3.20% | 3.30% | 3.24% | 3.13% |
| | | Non-Durables | 1.60% | 1.80% | 1.68% | 1.60% | 1.80% | 1.68% | 1.80% | 1.90% | 1.84% | 1.73% |
| | | Packaging | 1.40% | 1.10% | 1.28% | 1.40% | 1.10% | 1.28% | 1.50% | 1.10% | 1.34% | 1.30% |
| | Other Plastic (Total) | | 6.10% | 6.10% | 6.10% | 6.00% | 6.10% | 6.04% | 6.50% | 6.30% | 6.42% | 6.16% |
| | ***Total Plastics*** | | ***14.20%*** | ***13.50%*** | ***13.92%*** | ***13.50%*** | ***13.60%*** | ***13.54%*** | ***14.70%*** | ***14.00%*** | ***14.42%*** | ***13.82%*** |
| | Glass Bottles, Jars and Containers | | 4.10% | 3.80% | 3.98% | 3.90% | 3.80% | 3.86% | 4.30% | 3.80% | 4.10% | 3.94% |
| | Other Glass (Flat glass, dishware, light bulbs, etc.) | | 0.50% | 0.40% | 0.46% | 0.30% | 0.40% | 0.34% | 0.40% | 0.40% | 0.40% | 0.36% |
| | ***Total Glass*** | | ***4.60%*** | ***4.20%*** | ***4.44%*** | ***4.20%*** | ***4.20%*** | ***4.20%*** | ***4.70%*** | ***4.20%*** | ***4.50%*** | ***4.30%*** |
| | Food Scraps | | 12.70% | 13.30% | 12.94% | 12.90% | 15.50% | 13.94% | 17.20% | 25.20% | 20.40% | 16.01% |
| | Leaves and Grass / Pruning and Trimmings | | 3.10% | 1.10% | 2.30% | 11.30% | 9.10% | 10.42% | 4.20% | 1.50% | 3.12% | 8.08% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ***Total Organics*** | ***15.80%*** | ***14.40%*** | ***15.24%*** | ***24.20%*** | ***24.60%*** | ***24.36%*** | ***21.40%*** | ***26.70%*** | ***23.52%*** | ***24.09%*** |
| Clothing Footwear, Towels, Sheets | 4.60% | 3.00% | 3.96% | 4.40% | 3.20% | 3.92% | 4.80% | 2.50% | 3.88% | 3.91% |
| Carpet | 1.40% | 1.30% | 1.36% | 1.70% | 1.40% | 1.58% | 1.70% | 0.90% | 1.38% | 1.52% |
| ***Total Textiles*** | ***6.00%*** | ***4.30%*** | ***5.32%*** | ***6.10%*** | ***4.60%*** | ***5.50%*** | ***6.50%*** | ***3.40%*** | ***5.26%*** | ***5.42%*** |
| ***Total Wood*** (Pallets, crates, adulterated and non-adulterated wood) | ***4.10%*** | ***9.00%*** | ***6.06%*** | ***2.90%*** | ***4.10%*** | ***3.38%*** | ***2.00%*** | ***3.50%*** | ***2.60%*** | ***3.13%*** |
| DIY - Construction & Renovation Materials | 8.00% | 7.60% | 7.84% | 3.80% | 2.70% | 3.36% | 4.40% | 3.80% | 4.16% | 3.62% |
| Diapers | 1.90% | 1.10% | 1.58% | 2.10% | 1.20% | 1.74% | 2.30% | 1.10% | 1.82% | 1.77% |
| Electronics | 1.30% | 1.40% | 1.34% | 1.60% | 1.70% | 1.64% | 1.30% | 1.30% | 1.30% | 1.53% |
| Tires | 1.80% | 1.80% | 1.80% | 1.70% | 1.40% | 1.58% | 0.50% | 0.40% | 0.46% | 1.22% |
| HHW | 0.60% | 0.00% | 0.36% | 0.60% | 0.00% | 0.36% | 0.50% | 0.00% | 0.30% | 0.34% |
| Soils and Fines | 0.60% | 0.60% | 0.60% | 0.10% | 0.20% | 0.14% | 0.10% | 0.10% | 0.10% | 0.13% |
| Other Composite Materials - Durable and/or Inert | 1.90% | 1.70% | 1.82% | 1.60% | 1.50% | 1.56% | 1.90% | 1.50% | 1.74% | 1.62% |
| ***Total Miscellaneous*** | ***16.10%*** | ***14.20%*** | ***15.34%*** | ***11.50%*** | ***8.70%*** | ***10.38%*** | ***11.00%*** | ***8.20%*** | ***9.88%*** | ***10.22%*** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ***Total*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** | ***100.00%*** |

# Step 5. Municipal Solid Waste (MSW) Detailed Composition Analysis

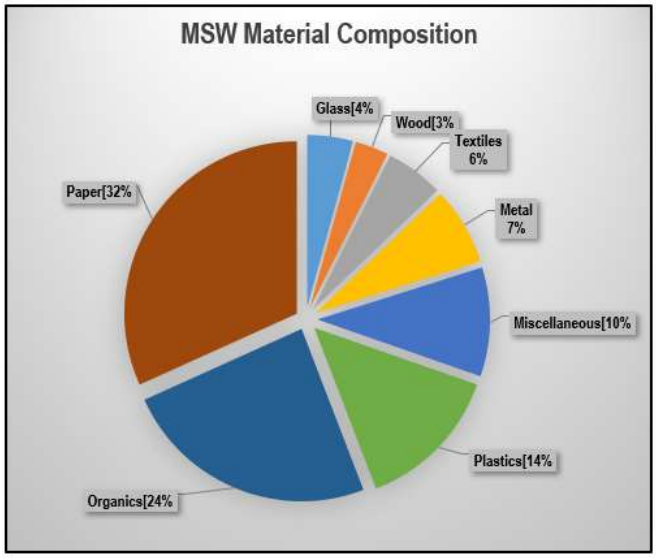
On this tab, the composition of the municipal waste stream will be estimated based on the amount of material generated in the planning unit and the state average of the different waste materials. A pie chart will be generated to clearly show the composition of the waste stream and to identify key categories of the waste stream for the planning unit.

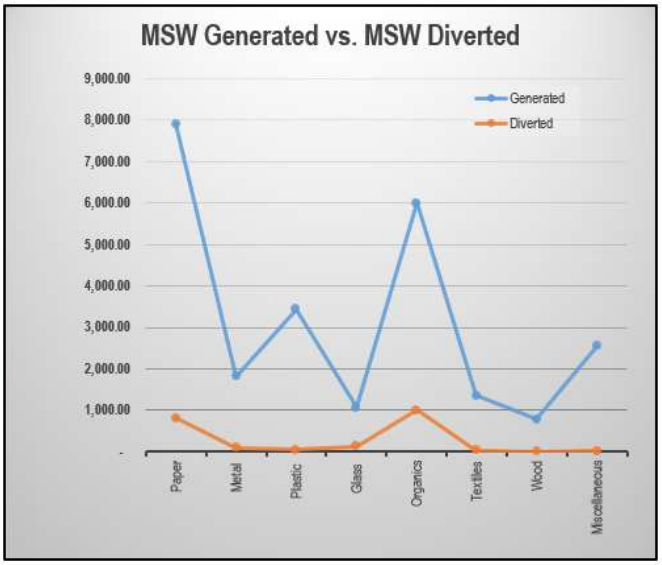
The total tons of MSW diverted per year will be auto populated based on previous data inputs, while the amount tons diverted for each material by category should be populated by the user. Purple should be used for amounts of diverted waste by type of material, and a totaled number by category (e.g. paper, metal) should be put in the green cells. After inputting the data, a graphic will be generated to show the MSW generation and diversion streams in Tons.

Make sure that the total amounts at the bottom of the page are consistent with the data you already put into the calculator. If the cell is highlighted in red, you should revise the amounts of diverted waste by category.

**City of Troy** **2025-2034**

| | | 2024 | | |
|---|---|---|---|---|
| | | MSW Materials Composition (%) | MSW Generated (Tons) | MSW Diverted (Tons) |
| | **Material** | **100.0%** | **24,903** | **2,442.00** |
| Paper | Newspaper | 4.1% | 1,016 | 127.14 |
| | Corrugated Cardboard | 9.6% | 2,379 | 319.49 |
| | Other Recyclable Paper (Total) | 11.6% | 2,886 | 374.91 |
| | Other Compostable Paper | 6.5% | 1,626 | 0.00 |
| | *Total Paper* | 31.7% | 7,906 | 821.54 |
| Metal | Ferrous/Aluminum Containers (Total) | 1.5% | 377 | 48.90 |
| | Other Ferrous Metals | 4.7% | 1,177 | 56.48 |
| | Other Non-Ferrous Metals (Total) | 1.0% | 257 | 0.00 |
| | *Total Metals* | 7.3% | 1,810 | 105.38 |
| Plastic | PET Containers | 0.9% | 235 | 29.34 |
| | HDPE Containers | 0.8% | 209 | 26.08 |
| | Other Plastic (3-7) Containers | 0.2% | 50 | 0.00 |
| | Film Plastic | 5.7% | 1,414 | 0.00 |
| | Other Plastic (Total) | 6.2% | 1,534 | 0.00 |
| | *Total Plastics* | 13.8% | 3,442 | 55.42 |
| Glass | Glass Bottles, Jars and Containers | 3.9% | 980 | 127.24 |
| | Other Glass (Flat glass, dishware, light bulbs, etc.) | 0.4% | 89 | 0.00 |
| | *Total Glass* | 4.3% | 1,070 | 127.24 |
| Organics | Food Scraps | 16.0% | 3,986 | 0.00 |
| | Leaves and Grass / Pruning and Trimmings | 8.1% | 2,013 | 1,000.00 |
| | *Total Organics* | 24.1% | 5,999 | 1,000.00 |
| Textiles | Clothing Footwear, Towels, Sheets | 3.9% | 973 | 32.00 |
| | Carpet | 1.5% | 378 | 0.00 |
| | *Total Textiles* | 5.4% | 1,351 | 32.00 |
| Wood | *Total Wood* (Pallets, crates, adulterated and non-adulterated wood) | 3.1% | 780 | 0.00 |
| Miscellaneous | DIY Construction & Renovation Materials | 3.6% | 900 | 0.00 |
| | Diapers | 1.8% | 440 | 0.00 |
| | Electronics | 1.5% | 381 | 4.30 |
| | Tires | 1.2% | 304 | 2.48 |
| | HHW | 0.3% | 85 | 7.60 |
| | Soils and Fines | 0.1% | 32 | 0.00 |
| | Other Composite Materials - Durable and/or inert | 1.6% | 403 | 0.00 |
| | *Total Miscellaneous* | 10.2% | 2,545 | 14.38 |
| | ***Total*** | **100.0%** | **24,903** | **2,155.96** |




The city has identified a data gap of approximately 286 tons in the 2024 diversion tonnage (see objective 6). The chart above represents the data that has been verifiably collected.

# Step 6. Municipal Solid Waste (MSW) Diversion Projections

This tab will be used to create goals for the amount of material the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated will be diverted for recycling or beneficial use.

The diversion goal percentages will be entered in the purple cells for each material and each year of the planning period.

## City of Troy 2025-2034

| Year | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|
| Projected MSW Generation (Tons/yr) | 24,860 | 24,674 | 24,489 | 24,306 | 24,124 | 23,943 | 23,764 | 23,586 | 23,410 | 23,235 |
| MSW Diverted (Tons/yr) | 2,184 | 2,194 | 2,235 | 2,269 | 2,306 | 2,356 | 2,461 | 2,550 | 2,640 | 2,732 |

| | | | 2024 | | | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MSW Materials Composition (%) | MSW Generated (Tons) | MSW Diverted (Tons) | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted | % MSW Diverted |
| | Material | 100.0% | 24,903 | 2,156 | 8.7% | 8.8% | 8.9% | 9.1% | 9.3% | 9.6% | 9.8% | 10.4% | 10.8% | 11.3% | 11.8% |
| Paper | Newspaper | 4.1% | 1,016 | 127 | 12.5% | 12.5% | 12.6% | 12.7% | 12.7% | 12.8% | 13.0% | 13.5% | 14.0% | 14.5% | 15.0% |
| | Corrugated Cardboard | 9.6% | 2,379 | 319 | 13.4% | 13.4% | 13.5% | 13.5% | 13.6% | 13.7% | 14.0% | 14.5% | 15.0% | 15.5% | 16.0% |
| | Other Recyclable Paper (Total) | 11.6% | 2,886 | 375 | 13.0% | 13.0% | 13.1% | 13.1% | 13.2% | 13.3% | 13.5% | 13.8% | 14.0% | 14.5% | 15.0% |
| | Other Compostable Paper | 6.5% | 1,626 | 0 | 0.0% | 1.0% | 1.1% | 1.1% | 1.2% | 1.3% | 2.0% | 2.5% | 2.8% | 3.0% | 3.5% |
| | *Total Paper* | 31.7% | 7,906 | 822 | 10.4% | 10.6% | 10.7% | 10.7% | 10.8% | 10.9% | 11.2% | 11.6% | 12.0% | 12.4% | 12.9% |
| Metal | Ferrous/Aluminum Containers (Total) | 1.5% | 377 | 49 | 13.0% | 13.0% | 13.1% | 13.1% | 13.2% | 13.3% | 13.5% | 14.0% | 14.5% | 15.0% | 15.5% |
| | Other Ferrous Metals | 4.7% | 1,177 | 56 | 4.8% | 4.8% | 4.9% | 5.0% | 5.1% | 5.2% | 5.4% | 5.8% | 6.0% | 6.5% | 7.0% |
| | Other Non-Ferrous Metals (Total) | 1.0% | 257 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% | 2.0% | 2.0% | 2.5% | 3.0% |
| | *Total Metals* | 7.3% | 1,810 | 105 | 5.8% | 5.8% | 5.9% | 6.0% | 6.1% | 6.3% | 6.5% | 7.0% | 7.2% | 7.7% | 8.2% |
| Plastic | PET Containers | 0.9% | 235 | 29 | 12.5% | 12.5% | 12.6% | 12.6% | 12.7% | 12.8% | 13.0% | 13.5% | 14.0% | 14.5% | 15.0% |
| | HDPE Containers | 0.8% | 209 | 26 | 12.5% | 12.5% | 12.6% | 12.6% | 12.7% | 12.8% | 13.0% | 13.5% | 14.0% | 14.5% | 15.0% |
| | Other Plastic (3-7) Containers | 0.2% | 50 | 0 | 0.0% | 0.0% | 1.0% | 1.5% | 2.0% | 2.5% | 2.8% | 3.0% | 3.5% | 3.8% | 4.0% |
| | Film Plastic | 5.7% | 1,414 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% | 2.0% | 2.5% | 3.0% | 3.5% |
| | Other Plastic (Total) | 6.2% | 1,534 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% | 2.0% | 2.5% | 3.0% | 3.5% |
| | *Total Plastics* | 13.8% | 3,442 | 55 | 1.6% | 1.6% | 1.6% | 1.6% | 1.7% | 2.5% | 2.6% | 3.5% | 4.0% | 4.5% | 5.0% |
| Glass | Glass Bottles, Jars and Containers | 3.9% | 980 | 127 | 13.0% | 13.0% | 13.1% | 13.2% | 14.0% | 14.5% | 15.0% | 16.0% | 16.5% | 17.0% | 17.5% |
| | Other Glass (Flat glass, dishware, light bulbs, etc.) | 0.4% | 89 | 0 | 0.0% | 0.0% | 1.0% | 1.5% | 1.6% | 1.7% | 1.8% | 2.0% | 3.0% | 3.5% | 4.0% |
| | *Total Glass* | 4.3% | 1,070 | 127 | 11.9% | 11.9% | 12.1% | 12.2% | 13.0% | 13.4% | 13.9% | 14.8% | 15.4% | 15.9% | 16.4% |
| Organics | Food Scraps | 16.0% | 3,986 | 0 | 0.0% | 0.0% | 0.0% | 1.0% | 1.5% | 1.6% | 1.8% | 2.0% | 2.5% | 3.0% | 3.5% |
| | Leaves and Grass / Pruning and Trimmings | 8.1% | 2,013 | 1,000 | 49.7% | 50.0% | 50.5% | 50.5% | 51.0% | 51.0% | 52.0% | 53.0% | 54.0% | 54.5% | 55.0% |
| | *Total Organics* | 24.1% | 5,999 | 1,000 | 16.7% | 16.8% | 16.9% | 17.6% | 18.1% | 18.2% | 18.6% | 19.1% | 19.8% | 20.3% | 20.8% |
| Textiles | Clothing Footwear, Towels, Sheets | 3.9% | 973 | 32 | 3.3% | 3.4% | 3.5% | 3.5% | 3.6% | 3.7% | 3.9% | 4.0% | 4.5% | 5.0% | 5.5% |
| | Carpet | 1.5% | 378 | 0 | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% | 1.2% | 1.4% | 2.0% | 2.5% | 3.0% | 3.5% |
| | *Total Textiles* | 5.4% | 1,351 | 32 | 2.4% | 2.4% | 2.5% | 2.8% | 2.9% | 3.0% | 3.2% | 3.4% | 3.9% | 4.4% | 4.9% |
| Wood | *Total Wood* (Pallets, crates, adulterated and non-adulterated v | 3.1% | 780 | 0 | 0.0% | 1.0% | 1.1% | 1.1% | 1.3% | 1.4% | 1.6% | 2.0% | 2.5% | 3.0% | 3.5% |
| Miscellaneous | DIY Construction & Renovation Materials | 3.6% | 900 | 0 | 0.0% | 0.0% | 0.0% | 1.0% | 1.1% | 1.2% | 1.4% | 2.0% | 2.5% | 3.0% | 3.5% |
| | Diapers | 1.8% | 440 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | Electronics | 1.5% | 381 | 4 | 1.1% | 1.2% | 1.5% | 2.0% | 2.3% | 2.5% | 2.7% | 3.0% | 3.5% | 4.0% | 4.5% |
| | Tires | 1.2% | 304 | 2 | 0.8% | 1.0% | 1.1% | 1.1% | 1.2% | 1.3% | 1.4% | 2.0% | 2.5% | 3.0% | 3.5% |
| | HHW | 0.3% | 85 | 8 | 9.0% | 9.0% | 9.1% | 9.1% | 9.2% | 9.3% | 9.5% | 10.0% | 10.5% | 11.0% | 11.5% |
| | Soils and Fines | 0.1% | 32 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | Other Composite Materials - Durable and/or inert | 1.6% | 403 | 0 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | *Total Miscellaneous* | 10.2% | 2,545 | 14 | 0.6% | 0.6% | 0.7% | 1.1% | 1.2% | 1.3% | 1.4% | 1.7% | 2.1% | 2.4% | 2.7% |

# Step 7. Municipal Solid Waste (MSW) Generation and Diversion - Detailed Projections

The final result of the Population and Municipal Composition Calculator is presented on the last tab. This tab contains data for the current year regarding waste generated and waste diverted from disposal. This tab also shows the projected waste diversion percentages, and the amount of waste in tons these percentages will divert for recycling. Total amounts of waste diverted will be calculated for each material and each year of the planning period.

**City of Troy** 2025-2034

| | | | 2024 | | | 2025 | | | 2026 | | | 2027 | | | 2028 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Material | MSW Materials Composition (%) | MSW Generated (Tons) | MSW Diverted (Tons) | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted |
| | **Material** | **100.00%** | **24,903** | **2,156** | **8.7%** | **24,860** | **2,184** | **8.8%** | **24,674** | **2,194** | **9%** | **24,489** | **2,235** | **9.1%** | **24,306** | **2,269** | **9.3%** |
| Paper | Newspaper | 4.08% | 1,016 | 127 | 12.5% | 1,014 | 127 | 12.5% | 1,007 | 127 | 13% | 999 | 127 | 12.7% | 992 | 126 | 12.7% |
| Paper | Corrugated Cardboard | 9.55% | 2,379 | 319 | 13.4% | 2,375 | 318 | 13.4% | 2,357 | 318 | 14% | 2,339 | 316 | 13.5% | 2,322 | 316 | 13.6% |
| Paper | Other Recyclable Paper (Total) | 11.59% | 2,886 | 375 | 13.0% | 2,881 | 375 | 13.0% | 2,859 | 375 | 13% | 2,838 | 372 | 13.1% | 2,817 | 372 | 13.2% |
| Paper | Other Compostable Paper | 6.53% | 1,626 | 0 | 0.0% | 1,623 | 16 | 1.0% | 1,611 | 18 | 1% | 1,599 | 18 | 1.1% | 1,587 | 19 | 1.2% |
| Paper | *Total Paper* | 31.75% | 7,906 | 822 | 10.4% | 7,893 | 836 | 10.6% | 7,834 | 837 | 11% | 7,775 | 832 | 10.7% | 7,717 | 833 | 10.8% |
| Metal | Ferrous/Aluminum Containers (Total) | 1.51% | 377 | 49 | 13.0% | 376 | 49 | 13.0% | 373 | 49 | 13% | 370 | 49 | 13.1% | 368 | 49 | 13.2% |
| Metal | Other Ferrous Metals | 4.72% | 1,177 | 56 | 4.8% | 1,175 | 56 | 4.8% | 1,166 | 57 | 5% | 1,157 | 58 | 5.0% | 1,148 | 59 | 5.1% |
| Metal | Other Non-Ferrous Metals (Total) | 1.03% | 257 | 0 | 0.0% | 257 | 0 | 0.0% | 255 | 0 | 0% | 253 | 0 | 0.0% | 251 | 0 | 0.0% |
| Metal | *Total Metals* | 7.27% | 1,810 | 105 | 5.8% | 1,807 | 105 | 5.8% | 1,794 | 106 | 6% | 1,780 | 106 | 6.0% | 1,767 | 107 | 6.1% |
| Plastic | PET Containers | 0.94% | 235 | 29 | 12.5% | 234 | 29 | 12.5% | 233 | 29 | 13% | 231 | 29 | 12.6% | 229 | 29 | 12.7% |
| Plastic | HDPE Containers | 0.84% | 209 | 26 | 12.5% | 209 | 26 | 12.5% | 207 | 26 | 13% | 206 | 26 | 12.6% | 204 | 26 | 12.7% |
| Plastic | Other Plastic (3-7) Containers | 0.20% | 50 | 0 | 0.0% | 50 | 0 | 0.0% | 49 | 0 | 1% | 49 | 1 | 1.5% | 49 | 1 | 2.0% |
| Plastic | Film Plastic | 5.68% | 1,414 | 0 | 0.0% | 1,411 | 0 | 0.0% | 1,401 | 0 | 0% | 1,390 | 0 | 0.0% | 1,380 | 0 | 0.0% |
| Plastic | Other Plastic (Total) | 6.16% | 1,534 | 0 | 0.0% | 1,532 | 0 | 0.0% | 1,520 | 0 | 0% | 1,509 | 0 | 0.0% | 1,498 | 0 | 0.0% |
| Plastic | *Total Plastics* | 13.82% | 3,442 | 55 | 1.6% | 3,436 | 55 | 1.6% | 3,410 | 56 | 2% | 3,385 | 56 | 1.6% | 3,359 | 56 | 1.7% |
| Glass | Glass Bottles, Jars and Containers | 3.94% | 980 | 127 | 13.0% | 979 | 127 | 13.0% | 971 | 127 | 13% | 964 | 127 | 13.2% | 957 | 134 | 14.0% |
| Glass | Other Glass (Flat glass, dishware, light bulbs, | 0.36% | 89 | 0 | 0.0% | 89 | 0 | 0.0% | 89 | 1 | 1% | 88 | 1 | 1.5% | 87 | 1 | 1.6% |
| Glass | *Total Glass* | 4.30% | 1,070 | 127 | 11.9% | 1,068 | 127 | 11.9% | 1,060 | 128 | 12% | 1,052 | 129 | 12.2% | 1,044 | 135 | 13.0% |
| Organics | Food Scraps | 16.01% | 3,986 | 0 | 0.0% | 3,979 | 0 | 0.0% | 3,950 | 0 | 0% | 3,920 | 39 | 1.0% | 3,891 | 58 | 1.5% |
| Organics | Leaves and Grass / Pruning and Trimmings | 8.08% | 2,013 | 1,000 | 49.7% | 2,010 | 1,005 | 50.0% | 1,995 | 1,007 | 51% | 1,980 | 1,000 | 50.5% | 1,965 | 1,002 | 51.0% |
| Organics | *Total Organics* | 24.09% | 5,999 | 1,000 | 16.7% | 5,989 | 1,005 | 16.8% | 5,944 | 1,007 | 17% | 5,900 | 1,039 | 17.6% | 5,856 | 1,060 | 18.1% |
| Textiles | Clothing Footwear, Towels, Sheets | 3.91% | 973 | 32 | 3.3% | 971 | 33 | 3.4% | 964 | 34 | 4% | 957 | 33 | 3.5% | 950 | 34 | 3.6% |
| Textiles | Carpet | 1.52% | 378 | 0 | 0.0% | 377 | 0 | 0.0% | 374 | 0 | 0% | 371 | 4 | 1.0% | 368 | 4 | 1.0% |
| Textiles | *Total Textiles* | 5.42% | 1,351 | 32 | 2.4% | 1,348 | 33 | 2.4% | 1,338 | 34 | 3% | 1,328 | 37 | 2.8% | 1,318 | 38 | 2.9% |
| Wood | *Total Wood* (Pallets, crates, adulterated and | 3.13% | 780 | 0 | 0.0% | 778 | 8 | 1.0% | 772 | 8 | 1% | 767 | 8 | 1.1% | 761 | 10 | 1.3% |
| Miscellaneous | DIY Construction & Renovation Materials | 3.62% | 900 | 0 | 0.0% | 899 | 0 | 0.0% | 892 | 0 | 0% | 886 | 9 | 1.0% | 879 | 10 | 1.1% |
| Miscellaneous | Diapers | 1.77% | 440 | 0 | 0.0% | 439 | 0 | 0.0% | 436 | 0 | 0% | 432 | 0 | 0.0% | 429 | 0 | 0.0% |
| Miscellaneous | Electronics | 1.53% | 381 | 4 | 1.1% | 381 | 5 | 1.2% | 378 | 6 | 2% | 375 | 7 | 2.0% | 372 | 9 | 2.3% |
| Miscellaneous | Tires | 1.22% | 304 | 2 | 0.8% | 304 | 3 | 1.0% | 301 | 3 | 1% | 299 | 3 | 1.1% | 297 | 4 | 1.2% |
| Miscellaneous | HHW | 0.34% | 85 | 8 | 9.0% | 85 | 8 | 9.0% | 84 | 8 | 9% | 83 | 8 | 9.1% | 83 | 8 | 9.2% |
| Miscellaneous | Soils and Fines | 0.13% | 32 | 0 | 0.0% | 32 | 0 | 0.0% | 31 | 0 | 0% | 31 | 0 | 0.0% | 31 | 0 | 0.0% |
| Miscellaneous | Other Composite Materials - Durable and/or inert | 1.62% | 403 | 0 | 0.0% | 402 | 0 | 0.0% | 399 | 0 | 0% | 396 | 0 | 0.0% | 393 | 0 | 0.0% |
| Miscellaneous | *Total Miscellaneous* | 10.22% | 2,545 | 14 | 0.6% | 2,541 | 15 | 0.6% | 2,522 | 17 | 1% | 2,503 | 27 | 1.1% | 2,484 | 29 | 1.2% |

| | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|
| Population | 51,925 | 51,925 | 52,057 | 52,189 | 52,322 |
| MSW Generated (tons) | 24,903.00 | 24,860 | 24,674 | 24,489 | 24,306 |
| Per Capita MSW Generated (lbs/person/year) | 959 | 958 | 948 | 938 | 929 |
| MSW Diverted (tons) | 2,155.96 | 2,184 | 2,194 | 2,235 | 2,269 |
| Per Capita MSW Diverted (lbs/person/year) | 83 | 84 | 84 | 86 | 87 |
| MSW Disposed (tons) | 22,747.04 | 22,676 | 22,480 | 22,255 | 22,037 |
| Per Capita MSW Disposed (lbs/person/year) | 876 | 873 | 864 | 853 | 842 |
| Per Capita MSW Disposed (lbs/person/day) | 2.40 | 2.39 | 2.37 | 2.34 | 2.31 |

| | | 2029 | | | 2030 | | | 2031 | | | 2032 | | | 2033 | | | 2034 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted | MSW generated (Tons) | MSW Diverted | % MSW Diverted |
| | **Material** | **24,124** | **2,351** | **9.7%** | **23,943** | **2,356** | **9.8%** | **23,764** | **2,461** | **10.4%** | **23,586** | **2,550** | **10.8%** | **23,410** | **2,640** | **11.3%** | **23,235** | **2,732** | **11.8%** |
| Paper | Newspaper | 984 | 126 | 12.8% | 977 | 127 | 13.0% | 970 | 131 | 13.5% | 962 | 135 | 14.0% | 955 | 138 | 14.5% | 948 | 142 | 15.0% |
| | Corrugated Cardboard | 2,304 | 316 | 13.7% | 2,287 | 320 | 14.0% | 2,270 | 329 | 14.5% | 2,253 | 338 | 15.0% | 2,236 | 347 | 15.5% | 2,219 | 355 | 16.0% |
| | Other Recyclable Paper (Total) | 2,796 | 372 | 13.3% | 2,775 | 375 | 13.5% | 2,754 | 380 | 13.8% | 2,733 | 383 | 14.0% | 2,713 | 393 | 14.5% | 2,693 | 404 | 15.0% |
| | Other Compostable Paper | 1,575 | 20 | 1.3% | 1,563 | 31 | 2.0% | 1,551 | 39 | 2.5% | 1,540 | 43 | 2.8% | 1,528 | 46 | 3.0% | 1,517 | 53 | 3.5% |
| | *Total Paper* | 7,659 | 834 | 10.9% | 7,602 | 853 | 11.2% | 7,545 | 879 | 11.6% | 7,488 | 898 | 12.0% | 7,432 | 924 | 12.4% | 7,377 | 954 | 12.9% |
| Metal | Ferrous/Aluminum Containers (Total) | 365 | 49 | 13.3% | 362 | 49 | 13.5% | 359 | 50 | 14.0% | 357 | 52 | 14.5% | 354 | 53 | 15.0% | 351 | 54 | 15.5% |
| | Other Ferrous Metals | 1,140 | 59 | 5.2% | 1,131 | 61 | 5.4% | 1,123 | 65 | 5.8% | 1,114 | 67 | 6.0% | 1,106 | 72 | 6.5% | 1,098 | 77 | 7.0% |
| | Other Non-Ferrous Metals (Total) | 249 | 2 | 1.0% | 247 | 2 | 1.0% | 245 | 5 | 2.0% | 243 | 5 | 2.0% | 242 | 6 | 2.5% | 240 | 7 | 3.0% |
| | *Total Metals* | 1,754 | 110 | 6.3% | 1,740 | 112 | 6.5% | 1,727 | 120 | 7.0% | 1,714 | 123 | 7.2% | 1,702 | 131 | 7.7% | 1,689 | 138 | 8.2% |
| Plastic | PET Containers | 228 | 29 | 12.8% | 226 | 29 | 13.0% | 224 | 30 | 13.5% | 222 | 31 | 14.0% | 221 | 32 | 14.5% | 219 | 33 | 15.0% |
| | HDPE Containers | 202 | 8 | 4.2% | 201 | 26 | 13.0% | 199 | 27 | 13.5% | 198 | 28 | 14.0% | 196 | 28 | 14.5% | 195 | 29 | 15.0% |
| | Other Plastic (3-7) Containers | 48 | 6 | 13.3% | 48 | 1 | 2.8% | 48 | 1 | 3.0% | 47 | 2 | 3.5% | 47 | 2 | 3.8% | 46 | 2 | 4.0% |
| | Film Plastic | 1,370 | 71 | 5.2% | 1,359 | 14 | 1.0% | 1,349 | 27 | 2.0% | 1,339 | 33 | 2.5% | 1,329 | 40 | 3.0% | 1,319 | 46 | 3.5% |
| | Other Plastic (Total) | 1,486 | 15 | 1.0% | 1,475 | 15 | 1.0% | 1,464 | 29 | 2.0% | 1,453 | 36 | 2.5% | 1,442 | 43 | 3.0% | 1,432 | 50 | 3.5% |
| | *Total Plastics* | 3,334 | 130 | 3.9% | 3,309 | 85 | 2.6% | 3,285 | 115 | 3.5% | 3,260 | 130 | 4.0% | 3,236 | 145 | 4.5% | 3,211 | 160 | 5.0% |
| Glass | Glass Bottles, Jars and Containers | 950 | 138 | 14.5% | 943 | 141 | 15.0% | 936 | 150 | 16.0% | 929 | 153 | 16.5% | 922 | 157 | 17.0% | 915 | 160 | 17.5% |
| | Other Glass (Flat glass, dishware, light bulbs, | 87 | 1 | 1.7% | 86 | 2 | 1.8% | 85 | 2 | 2.0% | 85 | 3 | 3.0% | 84 | 3 | 3.5% | 83 | 3 | 4.0% |
| | *Total Glass* | 1,036 | 139 | 13.4% | 1,029 | 143 | 13.9% | 1,021 | 151 | 14.8% | 1,013 | 156 | 15.4% | 1,006 | 160 | 15.9% | 998 | 163 | 16.4% |
| Organics | Food Scraps | 3,862 | 62 | 1.6% | 3,833 | 69 | 1.8% | 3,804 | 76 | 2.0% | 3,776 | 94 | 2.5% | 3,747 | 112 | 3.0% | 3,719 | 130 | 3.5% |
| | Leaves and Grass / Pruning and Trimmings | 1,950 | 995 | 51.0% | 1,936 | 1,007 | 52.0% | 1,921 | 1,018 | 53.0% | 1,907 | 1,030 | 54.0% | 1,892 | 1,031 | 54.5% | 1,878 | 1,033 | 55.0% |
| | *Total Organics* | 5,812 | 1,056 | 18.2% | 5,768 | 1,075 | 18.6% | 5,725 | 1,094 | 19.1% | 5,682 | 1,124 | 19.8% | 5,640 | 1,144 | 20.3% | 5,597 | 1,163 | 20.8% |
| Textiles | Clothing Footwear, Towels, Sheets | 943 | 35 | 3.7% | 936 | 36 | 3.9% | 929 | 37 | 4.0% | 922 | 41 | 4.5% | 915 | 46 | 5.0% | 908 | 50 | 5.5% |
| | Carpet | 366 | 4 | 1.2% | 363 | 5 | 1.4% | 360 | 7 | 2.0% | 358 | 9 | 2.5% | 355 | 11 | 3.0% | 352 | 12 | 3.5% |
| | *Total Textiles* | 1,308 | 39 | 3.0% | 1,299 | 42 | 3.2% | 1,289 | 44 | 3.4% | 1,279 | 50 | 3.9% | 1,270 | 56 | 4.4% | 1,260 | 62 | 4.9% |
| Wood | *Total Wood* (Pallets, crates, adulterated and | 755 | 11 | 1.4% | 750 | 12 | 1.6% | 744 | 15 | 2.0% | 738 | 18 | 2.5% | 733 | 22 | 3.0% | 727 | 25 | 3.5% |
| Miscellaneous | DIY Construction & Renovation Materials | 872 | 10 | 1.2% | 866 | 12 | 1.4% | 859 | 17 | 2.0% | 853 | 21 | 2.5% | 846 | 25 | 3.0% | 840 | 29 | 3.5% |
| | Diapers | 426 | 0 | 0.0% | 423 | 0 | 0.0% | 420 | 0 | 0.0% | 416 | 0 | 0.0% | 413 | 0 | 0.0% | 410 | 0 | 0.0% |
| | Electronics | 369 | 9 | 2.5% | 367 | 10 | 2.7% | 364 | 11 | 3.0% | 361 | 13 | 3.5% | 358 | 14 | 4.0% | 356 | 16 | 4.5% |
| | Tires | 295 | 4 | 1.3% | 292 | 4 | 1.4% | 290 | 6 | 2.0% | 288 | 7 | 2.5% | 286 | 9 | 3.0% | 284 | 10 | 3.5% |
| | HHW | 82 | 8 | 9.3% | 82 | 8 | 9.5% | 81 | 8 | 10.0% | 80 | 8 | 10.5% | 80 | 9 | 11.0% | 79 | 9 | 11.5% |
| | Soils and Fines | 31 | 0 | 0.0% | 30 | 0 | 0.0% | 30 | 0 | 0.0% | 30 | 0 | 0.0% | 30 | 0 | 0.0% | 30 | 0 | 0.0% |
| | Other Composite Materials - Durable and/or inert | 390 | 0 | 0.0% | 387 | 0 | 0.0% | 384 | 0 | 0.0% | 382 | 0 | 0.0% | 379 | 0 | 0.0% | 376 | 0 | 0.0% |
| | *Total Miscellaneous* | 2,465 | 31 | 1.3% | 2,447 | 34 | 1.4% | 2,429 | 42 | 1.7% | 2,411 | 50 | 2.1% | 2,392 | 57 | 2.4% | 2,375 | 64 | 2.7% |

| | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|
| Population | 52,455 | 52,588 | 52,722 | 52,856 | 52,990 | 53,124 |
| MSW Generated (tons) | 24,124 | 23,943 | 23,764 | 23,586 | 23,410 | 23,235 |
| Per Capita MSW Generated (lbs/person/year) | 920 | 911 | 901 | 892 | 884 | 875 |
| MSW Diverted (tons) | 2,351 | 2,356 | 2,461 | 2,550 | 2,640 | 2,732 |
| Per Capita MSW Diverted (lbs/person/year) | 90 | 90 | 93 | 97 | 100 | 103 |
| MSW Disposed (tons) | 21,773 | 21,587 | 21,303 | 21,036 | 20,770 | 20,503 |
| Per Capita MSW Disposed (lbs/person/year) | 830 | 821 | 808 | 796 | 784 | 772 |
| Per Capita MSW Disposed (lbs/person/day) | 2.27 | 2.25 | 2.21 | 2.18 | 2.15 | 2.11 |