



**COMPREHENSIVE
RECYCLING
ANALYSIS:
2021 Report**

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 recycling, diversion, and solid waste management for the calendar year of 2021. It outlines the efforts to improve upon the handling of materials, resources, solid waste, and community outreach so this information is shared in an inclusive and accessible manner.

Recognizing the importance of land acknowledgement, we begin with our gratitude for this 11-mile-long City, located along the Eastern side of the mighty Hudson River. Long before we became Troy, this area was known as the Cahohatatea by the indigenous Iroquois. We reiterate from our 2020 report, The Great Law of the Haudenosaunee (Iroquois) Nation, stating that the impact of our decisions must be considered seven generations into the future. It is with this in mind that the City of Troy tackles the complicated issues surrounding solid waste, recycling, and resource management.

As it states on the city seal, “Ilium Fuit, Troja est” - Ilium was, Troy is. And with this City of 50,000 residents, we are, and will continue to be a regional leader. As a leader, our City is aware that it is both our privilege and duty to care for this corner of our planet.

As with our approved CRA remittal and our 2020 annual report, this document is meant to be an interactive and “living” document, for the use of community and City; not merely to fulfill reporting requirements for New York State. It will continue to be a roadmap by which our decisions are to be made as well as an opportunity for us to gauge the effectiveness of our objectives and intentions.

This report will outline many of the actions and benchmarking touchpoints completed and/or undertaken, as well as the objectives associated with those tasks.

As delineated in the CRA, the seven objectives are as follows:

- 1. Establish a recycling center**
- 2. Provide guidance for food diversion and a facility for mulch/compost**
- 3. Develop a plan and a re-use center**
- 4. Create clear waste collection procedures and increase collection participation**
- 5. Education and outreach**
- 6. Increase accurate data collection**
- 7. Create a deconstruction permit and provide deconstruction education**

This report will provide an overview of the 2021 calendar year actions, reflect on how they complement the 2020 achievements and preview some of the anticipated 2022 plans. The updated timeline, reflecting the accomplishments for 2021 are included in our submission (attachment #1)

As noted in our 2020 CRA report, our areas of focus primarily embody the parameters set forth by our seven objectives. It is our goal to remain aligned with these standards.

Establish a recycling center:

In the interest of making continued upgrades and improvements to the Troy Resource Management Facility (commonly known as the Alamo), the City worked with Troy Local Development Corporation (TLDC) in 2021 to plan purchase of the Alamo and transfer of deed and title between Troy Local Development Corporation and the City of Troy in 2022. Additionally, the City is working on creating a physical workspace at TRMF for ease-of-usage of the facility.

Provide guidance for diversion/gleaning for consumable foods and operate a mulch and/or compost facility:

As a municipality, we have taken the specific actions of:

Starting content development to create shared understanding of the importance of the regenerative cycle of food and the planet. We are doing this in a deliberate manner, considering multiple learning style approaches toward information-sharing.

The City of Troy was awarded \$88,000 from the USDA to initiate a food waste reduction and community composting pilot program (exhibit 1). This is in collaboration with the Town of Bethlehem and a local hauler to collect and transport the food scraps. Grant funding and expenses allowed for a total of 250 participants, with an additional 7 in-kind, courtesy of the food scraps hauler. The program is three phases over two years, which allows for the City Recycling Coordinator and Specialist to expand administrative capacity, and the hauler to expand capacity with its curbside food scraps recycling service. The curbside model was chosen in order to best accommodate Troy's urban population, where residents have limited space within their households.

A weekly food scrap drop-off at Troy Resource Management Facility was established for the convenience of residents unable to participate in the composting pilot (exhibit 2). Access to backyard-composting was increased by hosting a twice-annual (online) composter and rain-barrel sale (exhibit 3). Wood chips and pallets were picked up by residents with increasing regularity throughout the year at the Alamo.

To increase public engagement, residents to participate in the first-annual "pumpkin smash," at which they were able to select a "tool of destruction" to smash, clobber, and pummel their pumpkins in preparation for composting (exhibit 4). This collaboration with the Troy Waterfront Farmer's Market will continue in 2022.

Closing out 2022, a new collaboration with local expert composter and the Troy Public Library Lansingburgh Branch was started to host a series of composting workshops in 2022.

Develop a re-use center:

By joining CR0WD, (a Western-NY based organization focused on Deconstruction and ReUse) in 2021, preliminary research has continued, to determine viability and appropriate time-lining. Information-gathering will assist in the determination of best-practices for ordinance development, as well as guidance toward potential public/private or public/non-profit partnerships.

Set clear waste collection procedures and increase collection participation:

The City felt it was important to continue collecting and expanding data gathered on monthly departmental allocation spreadsheets, and protocols to track tipping expenses and MSW/SSR percentages, so a comprehensive analysis of the information could be obtained. This has allowed us to make consistent and sustainable increases in our diversion percentages. This information is included with our submission (attachment #2)

During the 2021 calendar year, the City accomplished sustainable increase in diversion percentages by collaborating with the Towns of East Greenbush and Bethlehem to host a series of four inter-municipal household hazardous waste (HHW) events.

Additional actions included establishing a partnership with Capital Region Furniture Bank and RPI for (large-scale) end-of-year clean-outs of student residences, which will take place in May of 2022. This pilot project will be expanded to other vendors and non-profit organizations.

Education and outreach:

Included in the actions directed toward education and outreach, during the 2021 calendar-year, the Solid Waste Advisory Board (SWAB) continued remote (Zoom) meetings to continue work on the objectives as outlined in the CRA.

The City of Troy hired a Recycling Specialist to focus on three areas: 1. increase outreach and engagement initiatives; 2. create a cohesive plan for visibility and engagement; 3. create additional branding and visibility of diversion and recycling programs (exhibit 6).

This allowed both the Recycling Coordinator and Recycling Specialist to provide public information via new media channels. Such media includes the redesign of the Recycling Matters newsletter with new and additional features (exhibit 6); planning for a new 'From the Ground Up' newsletter for the city-wide composting pilot program participants (exhibit 7), and creation of a Facebook page to increase reach for information distribution and engagement (exhibit 8).

The Coordinator and Specialist participated in community meetings throughout the year via Zoom and in-person. These allowed for the opportunity to speak directly with residents, distribute recycling bins, and information.

To further engage community, the City designed and ordered re-usable bags utilizing paper-bag rebate funds for distribution. The first round of these bags was offered to local pantries and the Farmer's Market for SNAP clientele; the second round to non-profits and residents, as well 1,000 bags to the Troy Housing Authority.

The Farmer's Market received laminated signs from the City to assist in increasing recyclables collection with better barrel identification. The Recycling Coordinator and Recycling Specialist tabled quarterly at the Troy Farmer's Market, where residents were able to pick up recycling bins at the Saturday market. This improved opportunities for engagement with residents on weekends.

In understanding the effectiveness of a plan and its rollout needs to be attuned to the audience receiving or interacting with the programs, the City participated in statewide NYSAR3 (NYS Association of Reduction, Reuse and Recycling) Conference, (specifically, diversity, equity and inclusion) panel development and session.

Throughout 2021, the City continued its partnership with: Sage College, Sanctuary for Independent Media, and RPI for community initiatives and fulfillment of a grant from the Rubin's Foundation. The partnership with Sanctuary for Independent Media and its 'Uptown Summer' youth program allowed the City to begin the trash audit process and collaborate with participants to discuss various aspects of recycling and solid waste and to inform future efforts. The process started with Sanctuary led into the City performing a total of eighteen trash audits throughout the six districts in the City in the Fall of 2021 (exhibit 9).

The City coordinated the annual Earth Week city-wide cleanup, resulting in over 55 events hosted by residents and neighborhood groups.

These events set the stage to collaborate with SUNY Stonybrook to conduct larger-scale waste audits in the City to inform future programs and outreach.

Increase accurate data collection:

To increase the accuracy of the data collected, the City developed multiple ReCollect campaigns and outreach initiatives. This allowed for broader, active engagement from residents with online access to recycling/trash pickup information, as well as event notifications via ReCollect 'campaigns,' and the ability to aggregate and analyze information (exhibit 10). Within this process, widgets were also added onto City website for residents to look up proper disposal processes for over 250 different types of items through the 'Waste Wizard' (exhibit 11).

Another measure toward fulfilling this objective was making significant improvements to hauler permit processing. This included:

- ♦ Established a waste-hauling permit exemption (exhibit 12);
- ♦ Developed comprehensive procedure for applicants;
- ♦ Developed streamlined processing of permits;
- ♦ Created and added exemption language in City ordinances

The City will be making changes to the hauler permit exemption form in 2022 to keep more comprehensive records.

Create a deconstruction permit and education/outreach plan:

The Recycling Coordinator researched other municipal examples of deconstruction permits to compare and use to inform what the City of Troy's permit may look like. This work will continue throughout 2022 with the hopes of creating and passing ordinances and a deconstruction summit in late 2022 or in 2023. This review will help the City of Troy to determine what permit(s) and related ordinances might look like for a municipality with our demographics.

Plans will be made in the 2022 or 2023 calendar year to host a Deconstruction Summit with other planning entities to look at collaborative solutions to creating a more comprehensive approach for this initiative.

The City of Troy, NY values the relationship with the NYSDEC and the residents of our municipality and looks forward to collaborating with both stakeholders to continue our work toward a cleaner, greener Troy.

**Exhibit 1, referencing objective 2:
provide guidance for food diversion and a facility
for mulch/compost**



The City-wide composting program logo.

**Exhibit 2, referencing objective 2:
provide guidance for food diversion and a facility
for mulch/compost**



The community food scrap drop-off site at the Troy Resource Management Facility.

**Exhibit 3, referencing objective 2:
provide guidance for food diversion and a facility
for mulch/compost**

**CITY TO OFFER FINAL BACKYARD
COMPOSTER AND RAIN BARREL
SALE OF 2021**

OCTOBER 14, 2021 | by Troy City Hall |



Snapshot of the City of Troy's website; press release announcing 2021 rain barrel and composter sale.

**Exhibit 4, referencing objective 2:
provide guidance for food diversion and a facility
for mulch/compost**



Remnants of a clobbered pumpkin at the first-annual Troy Pumpkin Smash.

**Exhibit 5, referencing objective 4:
create clear waste collection procedures and increase collection**

**CITY OF TROY TO HOST FOURTH
HOUSEHOLD HAZARDOUS WASTE
COLLECTION EVENT OF 2021**

SEPTEMBER 22, 2021 | by Troy City Hall |



A snapshot of a press release promoting the last inter-municipal HHW event of 2021.

**Exhibit 6, referencing objective 5:
education and outreach**



A snapshot of the October 2021 monthly newsletter.

Exhibit 7, referencing objective 5: education and outreach



A snapshot of the 2022 From the Ground Up newsletter.

Exhibit 8, referencing objective 5: education and outreach



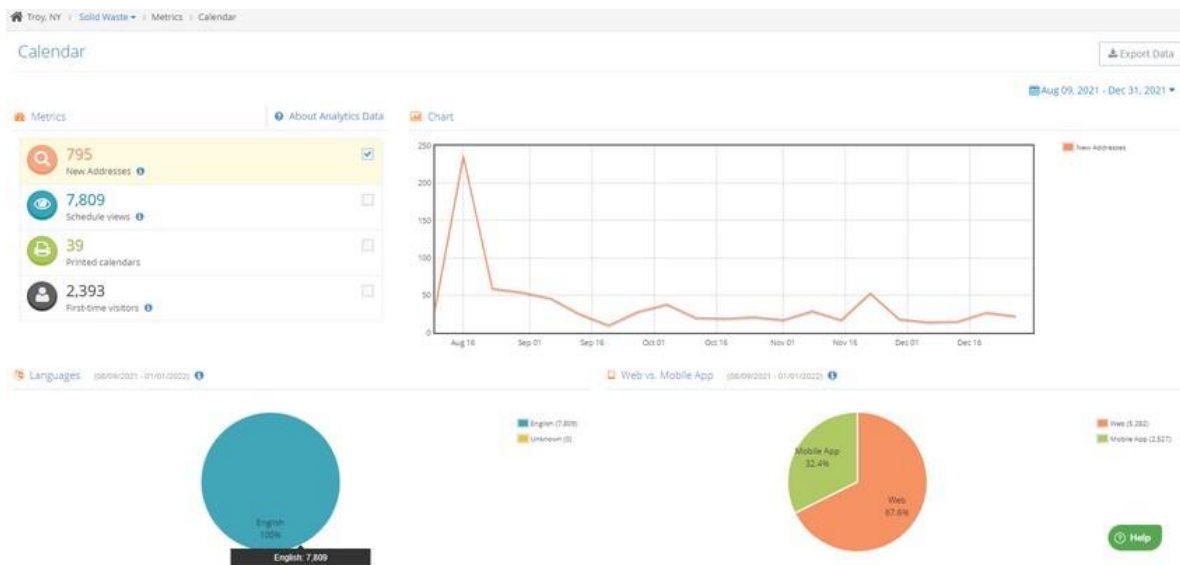
The Recycling and Resource Management Department's Facebook page.

Exhibit 9, referencing objective 5: education and outreach



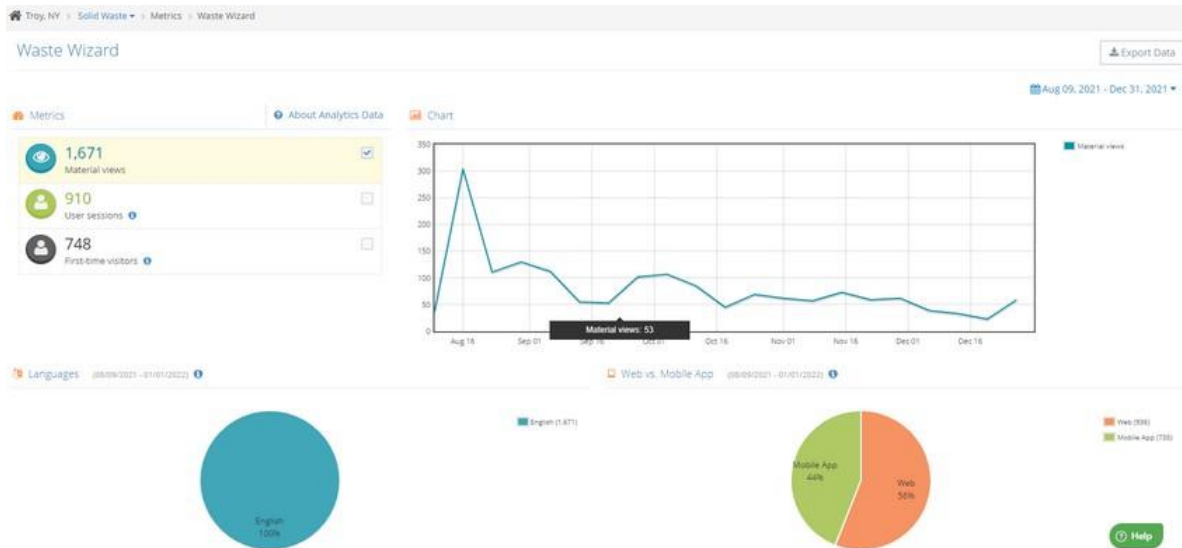
Recycling Coordinator, Professor Obuya from Russell Sage College, and RPI intern Dasha Serdyuk conducting waste audit.

Exhibit 10, referencing objective 6: increase accurate data collection



Metrics from ReCollect software, detailing number of downloads, mobile versus web use, and first time visitors.

Exhibit 11, referencing objective 6: increase accurate data collection



Metrics from ReCollect's Waste Wizard feature, including mobile versus web use, number of searches, and first time users.

Exhibit 12, referencing objective 6: increase accurate data collection

The form is titled 'CITY OF TROY Solid Waste Hauler Permit Fee Exemption Form' and is dated 2022. It includes a contact information section with fields for Entity name, Contact person, Address, Phone, Email, and Other phone. The form also contains several numbered questions regarding waste hauling, including entity type, waste type, origin, end location, and frequency of hauling. The bottom section provides the return address for the completed form: Office of General Services, Troy City Hall, 433 River Street, Suite 5001, Troy, NY 12180.

The hauler permit exemption form.