



2018 Recycling Program Annual Report

Background

All In Program activities are focused around increasing participation and awareness of a wide variety of environmental programs that will help the city achieve the waste diversion goals set by the City Council in Resolution 14-519. In an effort to reinvigorate participation, educate the community about all opportunities to reduce waste, recycle more, and divert organic materials from the waste stream, the City established overall residential waste diversion goals of:

- 35% by 2016
- 50% by 2020
- 65% by 2025, and
- 80% by 2030

Included in the waste diversion goals resolution is a list of programs and initiatives identified to help reach the established goals. This All In Program report summarizes the current activities related to these targeted approaches.

Based on waste generation estimates from Ramsey County Public Health, Saint Paul's 2018 waste diversion remained at approximately 24%.

ENSURE ALL RESIDENTS HAVE CONVENIENT ACCESS TO RECYCLE A BROAD RANGE OF MATERIALS.

The City of Saint Paul provides recycling collection opportunities to all residents in single family(SUD)households, small multi-unit dwellings (MUDA 5-11 units) and large apartment buildings (MUDB 12+ units). Weekly collection is made in wheeled, lidded carts predominantly in the alley (65%). In addition, residents and small businesses have access to a recycling drop off center and residents can recycle large items such as scrap metal, appliances, electronics and mattresses at Citywide Drop-off Events.

The city holds a contract with Eureka Recycling for collection and processing of residential recyclable materials through April 30, 2022

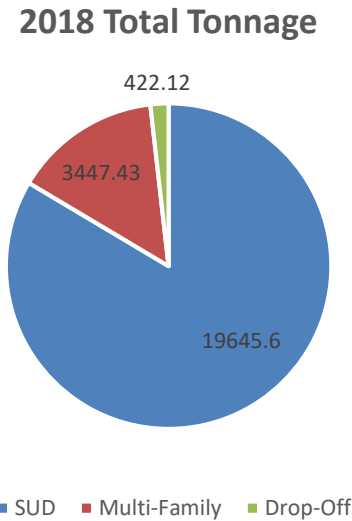
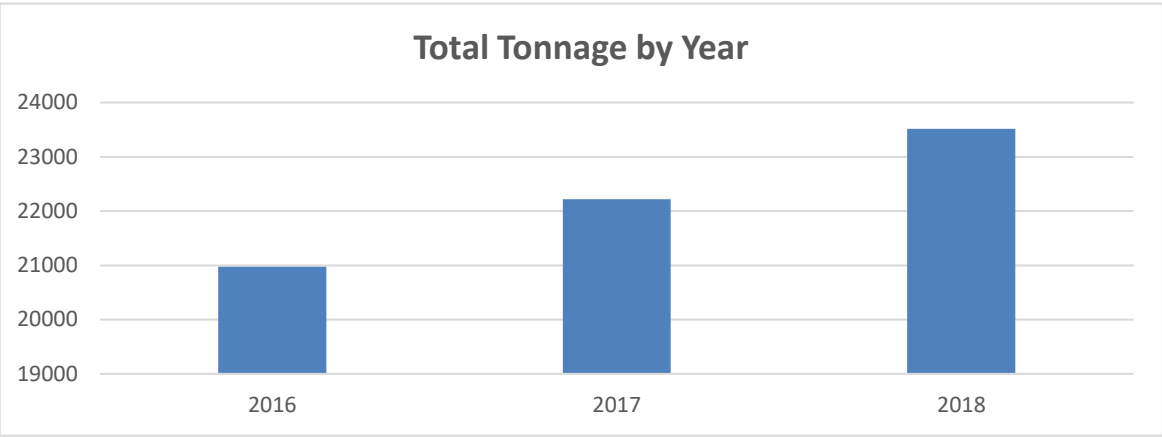
Tons of Material Collected

Currently all of the material collected in Saint Paul is marketed in North America with 90% handled in the Midwest and close to 80% of the sorted material going to markets within Minnesota. Recyclable materials are not being sent to landfills or Waste to Energy facilities. Revenue for material has decreased dramatically or occasionally been nonexistent but Eureka Recycling is still able to market all the recyclable materials they collect.



This year saw an increase in the tons of material collected and recycled in the city. There was a 12% increase of tons collected compared to the pre-transition tonnage from 2016. Tons collected (curbside, multi-unit, drop-off) totaled 23,515, up 1,296 tons from 2017. An additional 249 tons of materials were recycled from our drop-off events.

Revenue from the sale of recyclable materials after processing costs totaled \$49,402, averaging \$4,117 per month. This is a very significant reduction from 2017 due to extremely depressed markets and increased processing and transportation costs.



While the increase in tons collected was positive, the total tons collected falls short of our anticipated increase of 35% over 2016. There are several factors that attribute to the lower than anticipated tonnage number. These include, but are not limited to: the lighter weight of many materials including aluminum and plastic; less glass generated; a significant reduction in newspaper in the recycling stream; and increased efforts by residents to reduce overall waste generated.

In addition, the 2018 residual rate (materials remaining after the sorting process that are not marketable as recyclable) increased slightly since 2017. Moving to collection in larger, covered carts provides opportunity for more non-recyclable materials to be placed out for collection. With more automation, there is less opportunity for the driver to observe contamination at the time of collection which reduces the immediate opportunity to educate residents about the error.

We continue to see a small increase in tons collected from SUD and MUDA households. There was a slight decrease in tons collected from our MUDB households and drop off center. We believe most of the decrease is due to the lighter weight of many recyclable materials and a continued shift in the recycling stream from heavier materials like paper and glass to lighter plastic containers.

While the overall tonnage numbers increased only slightly, there is a positive story to tell related to participation and tons collected from our historically lower performing neighborhoods. Comparing tonnage numbers by collection day, the tonnage increases were the highest in areas of the city that, in the past, had less participation in the recycling program. The largest increase in tonnage occurred in Tuesday, Wednesday and Thursday collection zones. Our new recyclers did not increase as much as in 2017 but still more people are recycling each week and recycling more materials.

Participation Trend Study of Historically Low Participation Neighborhoods

In 2018, a participation trend study was conducted in districts 2, 3, 4, 6 and 7. The participation trend study was conducted over a six-week period in the fall. Each week the number of carts set out for recycling collections were counted in a targeted study area of approximately 200 households.

| Collection Day | Comm. Council District | Average Set Out | | | Average Participation | | |
|----------------|------------------------|-----------------|------|------------|-----------------------|------|------------|
| | | 2017 | 2018 | Difference | 2017 | 2018 | Difference |
| Tuesday | 3 | 63% | 62% | -1% | 91% | 87% | -4% |
| Wednesday | 2 | 52% | 64% | 12% | 89% | 89% | 0% |
| Wednesday | 4 | 54% | 58% | 4% | 84% | 88% | 4% |
| Thursday | 7 | 58% | 63% | 5% | 89% | 87% | -2% |
| Friday | 6 | 59% | 61% | 2% | 87% | 88% | 1% |

The set-out rate is the average number of households that set out their cart each week. The participation rate is the percentage of households in the study areas that set out recycling at least once during the six-week period of the study. The participation number is larger because not every household sets out recycling every week

INCREASE PUBLIC SPACE RECYCLING OPPORTUNITIES

The Department of Public Works continues to service 120 recycling containers on the city's Right of Way. The Parks and Recreation Department services more than 200 recycling containers in our parks system; including those at regional parks, recreation centers, municipal athletic complexes, golf courses and aquatic centers.

In an effort to encourage event organizers to reduce waste, recycle more and consider capturing organics for recycling, Waste Management Plans are required for all permitted events held within the City on public property. All Block Party, parade and race organizers must submit a WMP for review and approval by Public Works staff. Numerous community events including Highland Fest, Rondo Days, WaterFest, Irish Fest, Saint Paul Bike Classic, Grand Old Days and the Dragon Boat Festival are making great strides to reduce waste, recycle more and capture organic material when appropriate. These plans support the policy goal adopted by the City Council for licensed community events to provide recycling opportunities to participants.



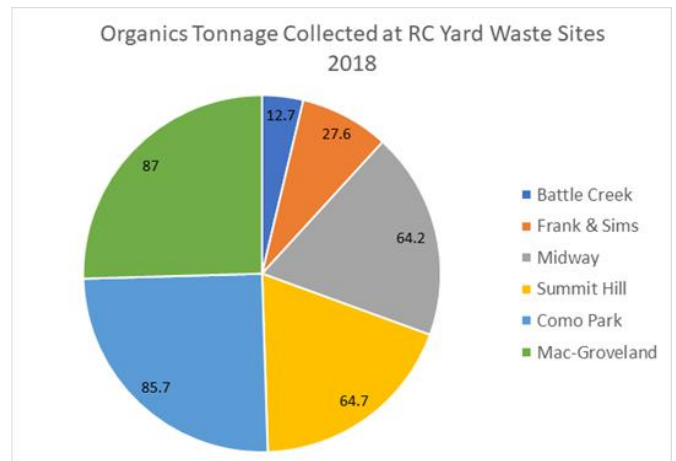
The All In program also offers a free container lending program for small and large events. Most District Councils also maintain a small number of recycling and organics collection containers and supplies for use at small gatherings. An online web form assists the reservation process and makes this program more accessible to the community. Over the year, we provided 246 recycling containers and 192 organics recycling containers - as well as bags and signage - for 65 separate events. Program staff also provided containers to numerous internal, staff events as well as City sponsored events including open houses and Safe Summer Nights gatherings.

SIGNIFICANTLY INCREASE OPPORTUNITIES TO DIVERT ORGANIC MATERIALS FROM THE WASTE STREAM.



The City collaborates with Ramsey County Environmental Health to promote the benefits of composting organic materials and drop off opportunities for source separated organics (SSO)

(food scraps, meat, dairy, bones, and non-recyclable paper). Ramsey County operates four Yard Waste Drop Off Sites within Saint Paul that accept SSO materials. The County provides free compostable bags and master gardeners frequent all locations during peak usage times to offer composting advice. The four Yard Waste Sites collected 169 tons of SSO in 2018.



Two additional drop off locations are also available to Saint Paul residents and those that work in the community. With support from Ramsey County, the Macalester Groveland Community Council and the Como District 10 Community Council provide site management for locations on Grand Ave. near Macalester College and on Beulah Ave. on the west end of McMurray play field. These sites are accessible 24/7 and captured an additional 87 and 86 tons respectively in 2018.

In 2018, program staff completed recycling and waste diversion assessments in 19 municipal facilities to update signage and containers, and to identify strategies to increase capture of recyclable materials.

Expanded organics collection Pilot program in City buildings

Staff also expanded an organics recycling pilot program in municipal buildings. All but two floors in the City Hall Annex are now participating, as well as Parks Central Services and Forestry division and the George Latimer Central Library. In all, the pilot program diverted over 8,000 lbs. of organics material for composting in 2018.

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EDUCATION AND OUTREACH

As part of the Recycling Program marketing strategy, new communications tools and activities were used to improve knowledge of recycling program changes, encourage recycling of all acceptable materials and increase participation. Activities included:

- Direct mail sent to all residents
 - Annual Recycling Guides (SUDs/MUDA and MUDB)
 - Winter Recycling Guide (cart placement, winter set out responsibilities,)
 - Citywide Drop off Events brochure
 - Ramsey County Going Green Guide with four pages of City of Saint Paul specific information mailed to all households.
- Materials developed and readily available in 4 different languages.
- Updated web pages
- Provided new labels with “No Plastic Bags” focused message for carts at apartment buildings.
- Presentations provided at elementary and high school classrooms as well as at District Council boards and committees.
- Personal contact and tabling at more than 100 events including Safe Summer Nights, WaterFest, and the Public Works Open House.
- Staff had approximately 2,045 conversations with residents at events and collected 157 surveys at our recycling Pop Up meetings, giving us a better idea of what information needs to be targeted in educational campaigns.
- Eureka Recycling launched ReCollect, a web based communication tool to send collection alerts, allow residents to ask questions about recyclable materials, schedule a clothes and linens collections and more. The tool is also available as an App on smart phones.



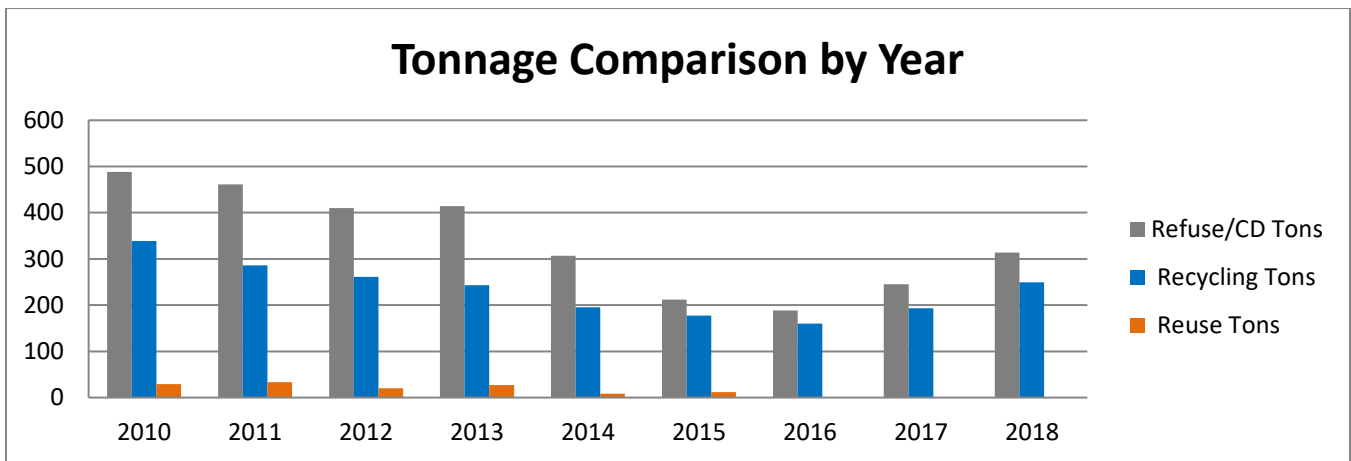
Minnesota GreenCorps Member

Public Works hosted a MN Green Corps member September of 2017 through August of 2018. Our GreenCorps member focused work on our small (MUDA) and large (MUDB) multi-unit apartment building programs. A few key projects included: data base research and updating, additional outreach, new “no plastic bag” decal promotion and distribution, a pilot program to collect film plastics (plastic bags, shrink wrap, etc.), as well as supporting our container lending program and helping event organizers meet recycling requirements.

IMPROVE OPPORTUNITIES TO REUSE AND RECYCLE BULKY ITEMS

Citywide Drop-off Events

In 2018, the City of Saint Paul hosted four Citywide Drop-off Events for recycling and proper disposal of bulky items and one mini event to collect electronics, appliances and shred confidential documents. Events were held in partnership with District 1 Community Council at Harding High School; District 6 Planning Council at Washington Technology High School; Highland District Council on Shepard Road, District 10 Como Community Council at the MN State Fairgrounds and the mini event with Summit-University District Council at Sears. Participation increased by 21% and overall tons collected were up 28% over 2017.



*A separate, more detailed 2018 Drop-off Events Summary can be found at stpaul.gov/recycle

ComeClean!



The ComeClean! program works to create cleaner, safer and more livable neighborhoods throughout the City of Saint Paul. ComeClean! encompasses all efforts to address litter, abandoned wastes, and problem material disposal. The program also strives to engage community support for these efforts. Staff continues to support the program by working with local businesses, District Council staff, and residents as well as supporting the Parks Department Annual Spring Citywide Clean Up event. In 2018, the Come Clean! program supported 290 volunteers at 10 individual clean up events and added three organizations to the adopt-a-block program.

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ENSURE RECYCLING REQUIREMENTS ARE BEING MET AT EVENTS, PARADES, RACES AND PUBLIC ASSEMBLIES

By City Ordinance, city permitted events must provide a Waste Management Plan (WMP) 30 days prior to the event date. Public Works (PW) staff is responsible for WMP review and approval. Both Public Works and Parks & Recreation support waste management activities with technical assistance and equipment when appropriate. PW staff reviewed approximately 66% of the potential number of WMP's required for permitted events, races, parades and assemblies in 2018. The end of 2018 saw the initiation of a refined permitting process administered by the Saint Paul Police Department. Staff anticipates 100% review of all WMPs required for block parties, races, and parades in 2019. Our goal is to improve outreach, provide technical assistance as needed, increase the number site visits conducted during events and the number of final reports submitted by organizers to better track compliance and tonnages.



ENVIRONMENTAL BENEFITS ASSOCIATED WITH SOLID WASTE MANAGEMENT PROGRAMS.

Data from the US Environmental Protection Agency- WARM Model provides an estimate of environmental benefits of waste diversion efforts as compared to disposal. Residential waste reduction, recycling and organics diversion activities accomplished the following in 2017. City of Saint Paul efforts contributed to small increases in all areas listed.

| <i>Recycling benefits were equivalent to:</i> | 2017 | 2018* |
|--|-----------------------|----------------------|
| Greenhouse gas emissions saved from this many passenger vehicles: | 9,930 vehicles | 9,414 |
| Annual emissions from the energy consumption of this many households: | 2,245 households | 3,359 households |
| Acres of standing forest (based on CO2 sequestration per tree): | 368 acres | <i>Not Available</i> |
| Reduction of Carbon Emissions: | 13,194 metric tons | 13,526 metric tons |
| Reduction of Carbon Dioxide Emissions: | 47,664 metric tons | 49,595 metric tons |
| Overall Energy Saved (by million BTU's): | 351,810 million BTU's | 386,275 million BTUs |

*2018 equivalents reflect residential recycling tonnage only.

PROGRAM ACTIVITIES AND PRIORITIES FOR 2019

- Reduce winter collection problems.
- Develop focused education campaign targeting non-recyclable plastics (bags) and other top contaminants (scrap metal) to reduce residual levels.
- Start or restart service and increase outreach to multi-unit apartment buildings.

- Finish developing a comprehensive database of all multi-unit buildings with updated service and contact information
- Increase All In education and outreach to low participation areas, and to residents with limited English proficiency.
- Increase public event/race site visit and final report compliance by 25%
- Increase tons at Citywide Drop-off events by 15%.
- Expand public space recycling opportunities by 20%.
 - 25 containers added in downtown and priority areas
 - Assist Parks Dept. with recycling container acquisition
 - Conduct a ROW container assessment to repair, update decals or replace as needed
- Conduct a citywide participation study.
- Conduct an annual composition study.
- Support the expansion of organics drop-off opportunities.
 - Prioritize downtown area
- Support organics diversion initiatives at municipal buildings/facilities.
- Support internal and city sponsored Green Gathering efforts.
- Support municipal building/in house recycling program operations.

*** Eureka Recycling Market Outlook for 2019**

2018 was a difficult year for the sale of recyclable materials. From a zero-waste perspective, we appreciate the efforts China is making to insist on quality materials and build their internal recycling system. In the long run, this could help the U.S. clean up our recycling stream and build up our capacity to recycle plastics and paper domestically. We see investment in increased capacity but it is yet to be determined how exactly these investments will impact capacity and pricing for both paper and plastics. Furthermore, until that capacity is built, we can expect to continue to see depressed paper markets.

Although there were predictions that China's National Sword and Blue Sky policies would impact plastics pricing, we were fortunate not to see that in 2018 and that helped counter some of the decrease from significantly depressed fiber prices. That said, oil prices have been decreasing and that tends to bring lower plastic pricing so we expect those commodities to depress a bit.

Metals markets were thrown into chaos the fall of 2018, and we expect to see that volatility continue in 2019 and likely get even worse. This depression was caused by a few different factors including:

- one of the major aluminum markets deciding to close one of their aluminum can manufacturing facilities, thus flooding the market with aluminum cans that had limited places to go,
- the uncertainty around tariffs which discouraged businesses from making investments and made it difficult to consistently market metals to other countries,
- and the decreased production in the auto market which has historically been a large purchaser of recycled steel and aluminum.

We expect the metals market to continue to decrease at least through the beginning of the year and are unsure of what will happen long term. There are plans to increase beverage can manufacturing in the U.S. but it will take a few years before that has an impact on aluminum demand so won't impact pricing in 2019.

Trucking also continues to impact pricing negatively as there is a shortage of truck drivers and much stricter limits on how long they can drive. This is increasing the cost of transportation which can negatively impact pricing – especially for materials that are shipped out of state such as tin and aluminum.

Although the pricing for recyclable materials is not very optimistic, Eureka Recycling continues to have good relationships with our end markets and has not had any problem moving material in 2018. We have at least three markets interested in each material except for glass and regularly get positive comments regarding the quality of the recyclables we sell. Additionally, we continue to focus on local markets when possible – in 2018, 85% of the material we processed stayed in Minnesota, 90 percent in the Midwest, and all of it stayed in North America. These business practices have been in place for years as a reflection of our values around the environmental, economic, and human impacts of recycling, and we have seen the benefit of these relationships even more than usual in the current market environment. The current policies in place in China and the flooded domestic markets have created an industry-wide focus on reducing the contamination in our recycling stream, and the focus is now on “recycling better” rather than simply “recycling more”.

[*Shared by Eureka Recycling](#)

[May, 2019](#)