



# Holyoke Waste Management Study Report and Recommendations to Keep Holyoke Green and Clean



# Acknowledgements

Thanks to:

**Mayor Joshua Garcia**

And the members of the Holyoke Waste Management Study Group

- **Joe Kietner** - Board of Public Works and Green Holyoke Mayoral Advisory Group
- **Meagan Magrath-Smith** - member of Green Holyoke Mayor's Advisory Council Group and Chair of the Holyoke Community Preservation Act Committee
- **Israel Rivera** - City Councilor At-Large
- **Dave Bartley** - Ward 3 City Councilor
- **Linda Pratt** - member of Public Health/Public Safety Mayoral Advisory Group
- **Jordan Hart** - Executive Director, Greater Holyoke Chamber
- **Jaime Cotto** - member of Public Health/Public Safety Mayoral Advisory Group
- **Amie Chrzanowski** - Acting Department of Public Works Superintendent
- **Michael Moriarty** - Executive Director, OneHolyoke, Community Development Corporation
- **Stephen Fay** - Mayor's Aide
- **Mary L. Monahan** - Chair, Holyoke Board of Public Works
- **Sean Gonsalves** - Board of Health Director
- **Carl Eger** - Holyoke Taxpayer Association Inc
- **Mike Sullivan** - Chair, Mayors Committee on Infrastructure and Economic Development
- **Matthew Mainville** - Executive Director Holyoke Housing Authority



**Catherine Ratté**, Director Land Use & Environment Department-Project Manager

**Eric Weiss**, Director Economic & Municipal Collaboration-Lead Researcher

**Mimi Kaplan**, Senior Environmental Planner

**Doug Hall**, Department of Economic Development

**Raphael Centeno**, Graphic/Web Designer



# Contents

---

|  |    |
|--|----|
| Acknowledgements.....  | 1  |
| Overview of Study/Purpose .....  | 3  |
| Priority Investments .....   | 4  |
| Overview of Municipal Waste Management & Recycling.....  | 5  |
| Current State of Municipal Waste Management in Holyoke .....   | 7  |
| Proposed Pathway to Improved Waste Management.....   | 8  |
| Best Practices in Municipal Waste Management.....  | 9  |
| Reducing Greenhouse Gas Emissions .....  | 10 |
| Envisioning a Zero Waste Future for Massachusetts .....  | 10 |
| Priority Investments – Waste Management Recycling .....  | 11 |
| Re-join the Springfield Massachusetts Materials and Recycling Facility (MRF).....  | 11 |
| Affirm that Holyoke is a Dual Stream City.....   | 11 |
| Detailed Action Plan to improve Waste Management and Recycling .....   | 11 |
| Advance Pay as you Throw (PAYT) .....  | 13 |
| Current State of Downtown Beautification: Litter/Dumping.....  | 14 |
| Main Issues Illuminated .....  | 14 |
| Initial Recommendations: .....   | 15 |
| Priority Investments – Beautification/Place-Making.....  | 16 |
| Start a Keep Holyoke Beautiful Chapter of Keep Massachusetts Beautiful.....  | 16 |
| Chamber of Commerce work with Existing Funding Streams and the High Street Business<br>Association to Reduce Litter and Clean and Beautify the Downtown..... | 17 |
| City Launch a Robust Public Information and Education Campaign to Coincide with Availability<br>of New Waste/Recycling Containers .....                      | 17 |
| Support Multi-Family Buildings with Recycling and Waste Diversion.....   | 18 |
| Additional Recommendations to Reduce Waste in Holyoke.....   | 19 |
| Continue Existing Downtown Beautification Work.....  | 19 |
| Expand Hours of the Recycling Center/Waste Collection Facility .....   | 19 |
| Assist Residents with Diverting Textiles from the Waste Stream. ....   | 19 |
| Textile Reuse and Recycling Options .....  | 19 |
| Divert Organic Waste from the City’s Waste Stream .....  | 20 |
| Research–Collecting Organics/Food Waste for Use as Feedstock at<br>Wastewater Treatment Plant .....  | 21 |
| City “Lead by Example” to Reduce Waste on a Municipal Level. ....  | 21 |
| Quantify GHG Emissions Reductions from Waste Reduction and Increased Recycling &<br>Diversion .....  | 21 |
| City Continue to Work to Expand Street Sweeping and Consider Supplementing as<br>Practicable .....   | 21 |
| Lift up and Highlight to Residents and Business Owners that the City has State-of-the-Art<br>Waste Management & Recycling Policies.....                      | 21 |
| Continue to Explore Innovative Opportunities for Re-use and Re-cycling .....   | 22 |
| Conclusions.....   | 23 |
| Engagement Summary.....  | 23 |
| Appendix .....   | 24 |
| Notes from Working Group Meetings.....   | 24 |
| Research Resources .....   | 24 |

## Overview of Study/Purpose

As the city of Holyoke emerged from the worst years of the COVID Pandemic Mayor Garcia launched this initiative with a goal of improving solid waste management in the city. Waste management, like so many aspects of daily life, was upended during the worst years of the pandemic. Many households chose to order goods on-line out of concerns for the health and safety of their families, producing significantly greater volume of paper and packaging for city staff to process. While the city was established as dual stream—sorting paper from plastics/glass when recycling, during the pandemic sorting by residents was not enforced. Coming out of the pandemic the city needed to decide whether to return to dual stream and facilitate sorting by residents or to stay with a de facto single-stream approach. Discussions with key stakeholders illuminated additional issues related to waste management and recycling. The scope of the study expanded as the Mayor and his team clarified that waste management in Holyoke is a two-pronged issue: a) solid waste and recycling collection provided by city staff who work at the Department of Public Works and the volunteers who serve on the Board of Public Works managing solid waste and recycling pickup and disposal and b) behavior of individuals who litter and illegally dump and/or fail to properly dispose of their own solid waste and recycling materials combined with the challenges of solid waste and recycling collections at Holyoke’s multi-family buildings. Resident activists, business owners and local multi-family property owners were becoming increasingly frustrated and motivated to address littering and illegal dumping in the city’s downtown area. As a result, this is a dual focused project.

We investigated municipal waste management and downtown beautification, as reducing litter and illegal dumping falls under the urban planning practice of place-making, to produce a list of top priority recommendations for the mayor, the city council, downtown businesses, residents and others to implement in the coming years.

The oversight group met six times in late 2022 to February 2023 with the purpose of identifying a set of measurable and achievable actions the city and its collaborators and partners will undertake to improve solid waste management and materials recycling and to reduce littering and illegal dumping to keep Holyoke beautiful. The meetings were well attended and included lively discussions and debates. Outside of regular meetings members engaged with Pioneer Valley Planning Commission (PVPC) staff in interviews, tours, meetings, conversations and sharing of numerous resources to help the project staff understand the issues of waste management, littering and illegal dumping in the context of the city’s past efforts and challenges, available funding, access to resources, regulatory environment, and the appetite for change. We see this report as a 1–2-year prioritization process, with the ‘additional recommendations’ needing to be analyzed and considered for action by the city, including the mayor’s office, city council, city departments and staff, and the business and residential community in the coming 3-5 years.

The purpose of this work is to get Holyoke Beautiful and keep the city Clean and Green.



# Priority Investments

The nine actions summarized below are the top recommendations of the study group to improve waste management and recycling services while also improving the built environment to make it easier to not litter and inspiring and motivating people to stop littering and illegal dumping. In addition to these recommendations the Study Group is also urging the Police department and the court system to take charges of illegal dumping and littering seriously and to enforce available fines and other penalties to deter this destructive behavior as ignoring this illegal behavior fosters a culture of lack of care at multiple levels.

1. **Re-join the Springfield Massachusetts Materials and Recycling Facility (MRF)** as a cost-effective way to facilitate the city's disposal of recycled and diverted materials.
2. **Affirm that Holyoke is a dual stream city** and move forward with new truck delivery and roll-out to improve residential pick of recycled materials.
3. **Launch a comprehensive Public Information and Education campaign** explaining and encouraging action on both how the new dual stream trucks will work and how residents can get new recycling containers combined with why one should not litter or dump illegally and how the city is supporting multi-family building owners to manage waste and recycling.
4. **Identify funding source and provide new containers to households** who need them to assure sorted materials and efficient pick up by the city.
5. **Research and consider a "Pay as You Throw" (PAYT) program** for waste management. The city is considering going to a cart-based model in which the first cart is no additional cost and anything more than that will be an additional cost to the resident.
6. **Join Keep Massachusetts Beautiful** and significantly expand city clean-up activities to keep the downtown clean and green and nurture a culture of care for the city and its public spaces.
7. **Integrate beautification and anti-littering into the new High Street Transformative Development Institute (TDI) district action plan** including expanding number of waste and recycling receptacles adopted and maintained by businesses.
8. **Support Multi-Family Buildings** with Recycling and Waste focused on identifying funding for a pilot project to off-set funding gap to achieve regular recycling pick-up eliminating the problem of overflowing containers in the city's downtown.
9. **Explore expanding existing recycling program to** include the schools, composting, textiles and other materials



# Overview of Municipal Waste Management & Recycling

Municipal solid waste (MSW) loosely refers to non-hazardous waste generated from residential, commercial, institutional, and some industrial activities. MSW often comprises both inorganic (e.g., glass, metals, and many synthetics) and organic (e.g., food, yard trimmings, paper, cardboard, and timber) components. Construction and demolition debris (C&D) is increasingly managed separately. MSW can include toxic materials such as fluorescent lamps, paint, batteries, and other electronics. “Solid” waste, as regulated by the U.S. EPA, can also include liquids, semisolids, or gases.

Local definitions of MSW can be highly variable. The composition and volume of MSW varies by geographic location, economic structure, the extent of urbanization, and the socioeconomic status of individual communities. It can also change over time due to changes in MSW regulations (e.g., landfill bans for certain materials), recycling programs, and citizens’ lifestyles, as well as population and economic growth.

The Commonwealth of Massachusetts has stated goals of maximizing recycling and composting throughout the commonwealth in the state’s Solid Waste Master Plan. Before 1990, almost all trash in Massachusetts was disposed of in more than 150 landfills and nine “municipal waste combustors” (which burn trash and generate some electricity). Most of the landfills were owned and operated by municipalities. They generally lacked liners and modern controls for the leachate and gas produced as the waste decomposes. Only small quantities of waste were being recycled. Today, Massachusetts has a modern solid waste



Image petovarga-Getty images/ istockphoto

management system that promotes waste reduction and recycling and ensures that facilities that handle and dispose of waste are properly designed and operated.

In 1990, Massachusetts adopted its first Solid Waste Master Plan, a blueprint for managing solid waste that is generated, reused, recycled, recovered, and disposed in the Commonwealth. Since then, efforts by citizens, businesses, and state and local government have led to a 47% recycling rate overall, which is among the best in the nation. Massachusetts solid waste management facilities have installed modern pollution control equipment and adopted operating practices that minimize their environmental impact. However, waste generation continues to increase while the growth in recycling has leveled off, and the Commonwealth and its communities continue to dispose of materials that have significant value.

Dramatic increases in energy costs, heightened concerns about climate change, renewed interest in more efficient use of waste as second-hand materials, and diminishing public resources are prompting the Department of Environmental Protection (MassDEP) to fundamentally reexamine the way they think about solid waste management and the state is committed to taking advantage of new market opportunities and providing a framework for improving the overall environmental performance of the state’s solid waste management system. (from [Overview of Solid Waste in MA](#))

*Reducing Waste and Improving Our Recycling Rate Saves Money, Reduces Litter, and Conserves Natural Resources (from Keep Massachusetts Beautiful)*

Most people haul their trash out to the curb or place it in a dumpster each week with little thought as to where their trash goes or what it costs to dispose of it. Yet each year, consumers, municipalities, and businesses in Massachusetts spend millions on solid waste disposal fees. Most of this waste ends up in landfills or incinerators. According to the Massachusetts Department of Environmental Protection, the state incinerates about 60% of its trash each year, while about 40% goes to landfills<sup>1</sup>. As recently as the 1980s, there were more than 300 operating landfills in Massachusetts. Today, Massachusetts is down to 6 landfills, and most are due to reach capacity and close by 2030. As a result, the state is now shipping approximately 20% of the state's trash to other states. That's a costly and inefficient system. While there is no silver-bullet solution, every city and town can take steps to reduce the amount of trash generated as we all move from a linear waste economy to a circular waste economy.

Keep Massachusetts Beautiful supports and promotes all efforts to reduce consumption of single-use plastic and increase recycling rates in Massachusetts homes, schools, and businesses through a variety of programs, including:

- [Zero Waste in Massachusetts](#) Zero waste is not simply a fad and it's not some pie-in-the-sky idea. It's our future. Learn more about efforts to achieve a zero-waste Massachusetts.
- [RecycleSmartMA](#) RecycleSmart serves as a hub of information that helps to demystify the recycling process here in Massachusetts. Visit [www.recyclesmartma.org](http://www.recyclesmartma.org) to get answers to your recycling questions.
- [RecyclingWorks in Massachusetts](#) A recycling assistance program that helps businesses and institutions maximize recycling, reuse, and food waste diversion opportunities.
- [Household Hazardous Waste Management](#) Disposing of HHW products in the trash or by adding them to recycling bins is harmful to the health of humans, animals, and the environment. Learn how to manage these items in your household.
- [America Recycles Day](#) Event organizers educate neighbors, friends, and colleagues about the benefits of recycling through thousands of recycling events across the U.S. on November 15 each year.

---

<sup>1</sup> <https://keepmassbeautiful.org/what-we-do/waste-reduction-recycling/>



# Current State of Municipal Waste Management in Holyoke

Currently the city collects trash and recycling from over 9950 households (out of a total of 16,200). This includes 7,331 tons/year of municipal solid waste (MSW) and 2952.7 tons of recycled or diverted material. The estimated recycling rate is 28.7 % of households that compares to a 47% rate for the Commonwealth as a whole. Costs for waste management and processing of recycling are a significant concern and it is widely recognized that the city of Holyoke’s waste management and recycling system needs to be upgraded and improved. The city wants to improve the collection of solid waste and decrease the amount of material going into the waste stream through a combination of recycling, improved handling, diversion of textiles and eventually food waste. During the time of this study the city was actively searching to fill the vacant position of Director of the city Department of Public Works, elevating the importance of completing this work as waste management and recycling decisions were being made, and are being made in real time even as the study group was conducting our work, with transparency and full cooperation of all parties.

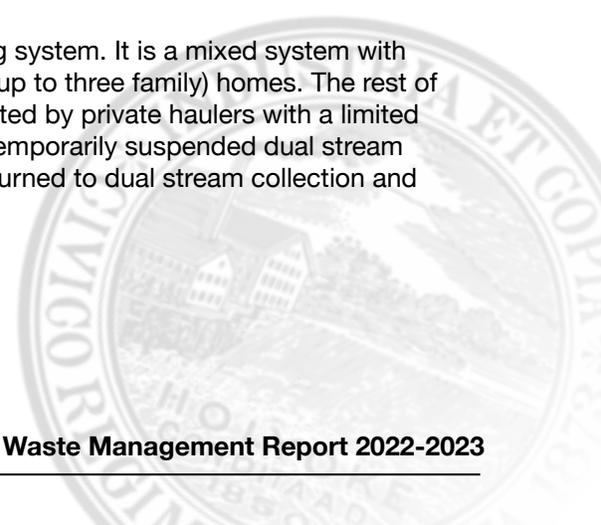
## Amount of Waste Processed in the City of Holyoke (2021)

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>Population</b>                 | <b>38,238 people</b>     |
| Municipal solid waste (MSW)       | 7,331 tons/yr            |
| Recycled or Diverted              | 2952.7 tons/yr           |
| Estimated Disposal Costs          | \$598,210 \$/yr          |
| Estimated Recycling Rate          | 28.7%                    |
| Single Stream Recycling           | 968.5 tons/yr            |
| Dual Stream recycling             | 272.9 tons/yr            |
| Yard Waste                        | 1620 tons/yr             |
| Electronic/Mattresses             | No tonnage available     |
| Households Served                 | 9950 Households          |
| <b>Total Number of households</b> | <b>16,200 households</b> |

The Mayor, the Study Committee, City Council, and Department of Public Works are committed to dual stream recycling for the benefit of all City residents. Dual stream recycling is mandated by ordinance. Challenges associated with the success of this process are outlined below.

## Current Structure

The city of Holyoke has a complex trash disposal and recycling system. It is a mixed system with the city collecting trash and recycling from 9950 single family (up to three family) homes. The rest of the multi-family, apartment complexes and business are collected by private haulers with a limited amount of recycling service offered by area haulers. The City temporarily suspended dual stream disposal during COVID due to staff shortages. The City has returned to dual stream collection and disposal.



# Proposed Pathway to Improved Waste Management

The initial impetus behind this work was the decision for the city to move back to dual stream recycling or to consider a move towards single stream. The pros and cons for each system is summarized below and was presented as a power point to the Committee on January 5, 2023. After considerable discussion the decision was made to remain with the more economical and manageable dual stream system.

## *Single Stream vs. Dual Stream (pros and cons)*

### *Single Stream:*

- + Easier for the resident
- + City needs only one type of truck
- Creates dirtier product
- Generates less revenue, costs more (short and long term, current cost = \$75/ton)

### *Dual Stream:*

- Two containers set out by residents, not one
- City needs split truck (two arriving in next couple of months)
- + Results in Cleaner Product
- + Better revenue deal (short and long term)

## *Recycling Contracting Opportunities*

**Option #1:** City can continue as it is doing—costly and no real long-term plan. Cost to the city this year will be at least \$125,000/year, approximately \$75/ton. City must also change ordinance to single stream to continue collecting single stream.

**Option #2:** City changes ordinance and formalizes single stream collection. This option will not utilize 2 new (\$260,000/each) dual stream recycling trucks properly (to be delivered soon) and will be more costly with lower revenue and higher disposal costs over the long run.

**Option #3:** City stays with dual stream ordinance and goes back to dual stream collection over the next few months and properly utilizes new recycling trucks. Program will have higher revenue and lower disposal costs. Holyoke signs 18 month contract (June 30, 2024) with Springfield MRF for delivery of recyclables to MRF on Bernie Avenue and re-engages with well-established regional recycling program.

As noted, the study group recommends the city commit to reintroducing dual stream recycling and roll it out as soon as possible/reasonable. Step one in this process is to sign back onto the MRF contract, a process which is already underway.

## Summary of Dual Stream MRF Contract

1. 18 months left on the regional MRF contract (lasts until June 30, 2024).
2. No bid required, which buys city time to invest and reach out on Annual Recycling Tonnage = 1150 tons.
3. Recycling Revenue based on Average Market Value of Recyclables, based on recycling markets (Current cost = \$75/ton/set price contract for single stream).
4. City will need to plan outreach effort to switch back to Dual Stream, given the need to avoid contaminated loads.
5. Contamination rate is 15% or greater; contaminated loads result in additional cost, totaling \$120/ton for contaminated loads.
6. Reload fee = \$300/ton

Current Dual Stream (revenue/cost per ton) = Average Market Value – Processing Fee

Current Dual Stream Recycling Cost = (\$34.00 – \$98.23) = –\$63.23/ton

Over the long-term as recycling markets improve, City will pay lower recycling costs and could eventually receive some recycling revenue under MRF contract. (Since start of contract recycling revenue has been as high as \$32/ton.)

Recommitting to dual stream necessitates a cohesive dual stream outreach plan that should be integrated into the no litter/no dumping campaign as part of a comprehensive outreach and beautification effort.

## Best Practices in Municipal Waste Management

Cheap energy, mass-produced items, and a linear “take, make, waste” attitude led previous generations to believe that throwing stuff away would have minimal ecological or financial consequences. The “waste” part of this expression, however, turns out to be much larger than anyone anticipated. Every ton of garbage that we throw “away” generated about 5 tons of waste during its manufacture and 20 tons of waste at the site of resource extraction (mining, pumping, logging, farming.)

A more energy- and resource-efficient, pollution-reducing urban metabolism model resulting in lower GHG emissions seeks first to lower consumption (the quantity of bought stuff), prevent the generation of waste, and then moves to a cyclical, biological approach whereby product and waste reuse and recycling is optimized, and landfill disposal/incineration is minimized. In this emerging sustainable materials management model, products and wastes are designed to be reused, and either composted or recycled.<sup>2</sup>

---

<sup>2</sup> <https://greenstep.pca.state.mn.us/bp-detail/81733>



### *Reducing Greenhouse Gas Emissions*

Waste reduction can lead to significant greenhouse gas emission reductions, particularly when viewed from a lifecycle perspective. Based on the EPA Waste Reduction Model (WARM), if Massachusetts achieves the 2030 waste reduction goals, it could prevent over 1,700,000 metric tons of carbon dioxide (CO<sub>2</sub>) equivalent from entering the atmosphere. This reduction is equivalent to removing annual emissions from over 370,000 passenger vehicles or conserving nearly 200 million gallons of gasoline. The waste management work of the Massachusetts Department of Environmental Protection (DEP) is aligned with 2030 Clean Energy & Climate Plan and the 2050 Decarbonization Roadmap, as well as the greenhouse gas emissions reductions requirements in the recently enacted “An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy.” This includes achieving a reduction of 300,000 metric tons of CO<sub>2</sub> equivalent emissions annually from municipal waste combustors by reducing disposal of plastics at these facilities. Reducing and phasing out the use of single-use plastic products and packaging will help contribute to this goal.<sup>3</sup> The city of Holyoke should investigate the GHG emissions reductions benefits of increasing recycling and other approaches to waste diversion as the city starts work on a comprehensive plan update.

### *Envisioning a Zero Waste Future for Massachusetts*

MassDEP recognizes that a zero waste future requires systemic changes in how we produce, distribute, sell, and use products and services as a society. This would require Massachusetts to move toward policies encouraging and requiring any reusable, recyclable or compostable material to be diverted from disposal at a very high rate, while eliminating the use of products or packaging that are not reusable, recyclable, or compostable. These types of changes will require significant policy actions and significant cultural and societal change. The building blocks for a zero-waste future are in our hands today. Setting priorities in order to reach aggressive waste reduction goals effectively and efficiently, MassDEP has conducted analyses to identify priority materials based on the following criteria: 1. significant additional diversion potential on a tonnage basis, 2. opportunities to reduce waste by phasing out use of single use products and disposable packaging, 3. potential for increased reuse and donation, and 4. existing underutilized capacity, or opportunities for local market development potential.<sup>4</sup>



<sup>3</sup> <https://www.mass.gov/doc/2030-solid-waste-master-plan-working-together-toward-zero-waste/download>

<sup>4</sup> <https://www.mass.gov/doc/2030-solid-waste-master-plan-working-together-toward-zero-waste/download>

# Priority Investments—Waste Management Recycling

## *Re-join the Springfield Massachusetts Materials and Recycling Facility (MRF)*

The [Springfield Materials Recycling Facility Advisory Board \(MRF\)](#), a recycling organization in Western Massachusetts, exists to promote recycling and to advise the Department of Environmental Protection and the Materials Recycling Facility about enhancing and sustaining recycling in the region. We are inspired by a concern for our environmental future and we strive to communicate the importance of recycling. The Western Massachusetts Regional Recycling Program serves over 65 communities in the four western counties of the state. The cornerstone of the program is the Springfield Materials Recycling Facility (MRF). The MRF was started as a state program to promote recycling by making it readily accessible to the communities of western Massachusetts.

## *Affirm that Holyoke is a dual stream city*

For the City of Holyoke, the best path forward is to put back in place the dual stream program which will help the City lead by example. The new recycling program should encompass as many users as possible and should, over time, keep adding materials to be diverted/recycled from the waste stream as described in the previous section. The city can stake a multi-step approach to accomplish this goal.

Identify funding source and provide new recycling containers to households who need them.

The city has ARPA funds for the purchase of trash containers which will be distributed to all residents and is now researching funding sources for new recycling containers which could be picked up by residents as needed.

## *Detailed Action Plan to improve Waste Management and Recycling*

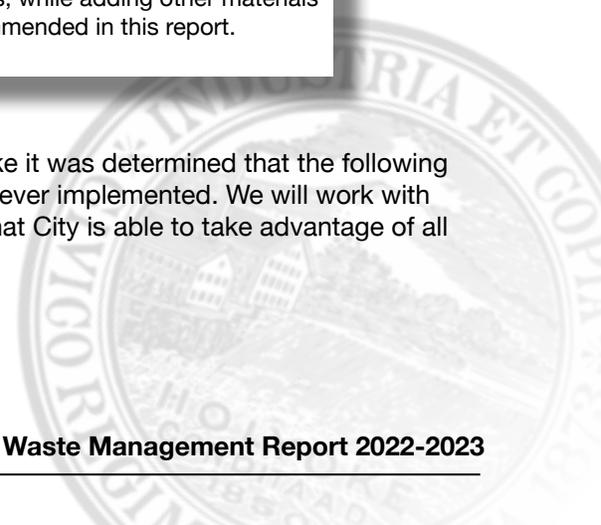
The following 8 steps are needed as part of the overall effort to make dual stream recycling the best recycling system for the city that it can be and to improve the city's solid waste and recycling management systems. It should also be noted here that the city must continue to adequately fund and support these critical programs going forward to create a more sustainable system for the long term. The city had made great strides forward in the areas of clean/green energy. This effort must parallel that effort to help the city achieve green credibility in more than just energy production.

*In Summary the 8 important steps are:*

- Sign new contract with Springfield MRF for dual stream recycling
- Continue to look at potential recycling grants and recapture unused DEP grants
- Look into expanding multi family recycling program
- Integrate the new split roll off trucks into system
- Ensure residents know how to collect remaining blue recycling bins
- Research a new pay as you throw system
- Examine potential of composting
- Continue adequate funding

|                |  |  |
|----------------|--|--|
| <b>Step #1</b> | Sign new contract with Springfield MRF for dual stream recycling                                   | Sign new contract with Springfield MRF for dual stream recycling access, with assistance and guidance from PVPC. This contract will then be in place for 18 months until the new MRF contract is developed, no bidding required.   |
| <b>Step #2</b> | Continue to look at potential recycling grants and recapture unused DEP grants. *(See table below) | Continue to look at potential recycling grants and recapture unused DEP grants (with additional assistance from the PVPC potentially funded by a portion of this grant money) which was previously awarded (at least \$30,000 is currently unused and possibly more) to Holyoke by DEP. Other potential grant sources including The Recycling Partnership at Recycling Partnership.org and EPA will also be examined). |
| <b>Step #3</b> | Look into expanding multi family recycling program.  | Look into expanding multi family recycling program. There are a number of multi-family units which would like to be added to the City system. Determining costs and logistics will be the key.   |
| <b>Step #4</b> | Integrate the new split roll off trucks into the cities fleet of waste collection vehicles.        | Integrate the new split roll off trucks into the city's fleet of waste collection vehicles. The new trucks are to be delivered any day and must be properly integrated into the dual stream collection program.  |
| <b>Step #5</b> | Distribute existing/remaining blue bins  | Distribute existing/remaining blue bins. There is an existing supply which can be properly distributed as part of the announcement to move ahead with returning to dual stream recycling   |
| <b>Step #6</b> | Research a new pay as you throw system   | Potentially implement a new pay you throw system, maintain outreach program and decide process for adding new carts to the system.   |
| <b>Step #7</b> | Examine potential of composting /reusing the organic portion of the waste stream locally           | Examine potential of composting / reusing the organic portion of the waste stream locally potentially with cooperation from the city's sewage treatment facility.  |
| <b>Step #8</b> | Continue to adequately fund the recycling and solid waste disposal programs                        | Continue to adequately fund the recycling and solid waste disposal programs, while adding other materials as recommended in this report.   |

After numerous conversations with DEP and the City of Holyoke it was determined that the following recycling grants (\$34,700 total) were awarded to the City but never implemented. We will work with the City on how to best utilize these funds and to make sure that City is able to take advantage of all Grant programs offered by DEP.



List of Unused DEP Grant money For the City of Holyoke as of 2/23/2023

| Year         | Grant                       | Amount             |
|--------------|-----------------------------|--------------------|
| 2020         | Recycling Dividends Program | \$12,600.00        |
| 2022         | Recycling Dividends Program | \$14,400.00        |
| 2023         | Recycling Dividends Program | \$7,700.00         |
| <b>Total</b> | <b>All Unused Grants</b>    | <b>\$34,700.00</b> |

Advance Pay as you Throw (PAYT)

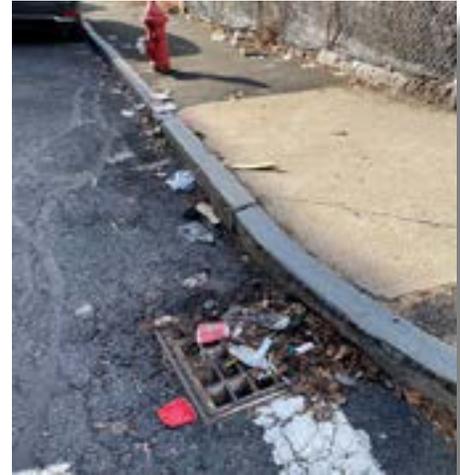
Pay-as-you-throw is one of local governments’ most effective tools for reducing waste, controlling waste disposal costs and giving residents an incentive to participate in recycling and composting programs. Once households begin paying directly for waste services, they tend to rapidly reduce how much they throw away. In Massachusetts towns with pay-as-you-throw systems generated an average of 1,239 pounds of trash per household in 2020, a 30% reduction from other towns.<sup>5</sup> The city of Holyoke plans to research and design a system that does not unduly burden economically and structurally disadvantaged households.



<sup>5</sup> <https://www.weforum.org/agenda/2022/01/pay-as-you-throw-waste-expert-pollution-trash>

# Current State of Downtown Beautification: Litter/Dumping

Holyoke is experiencing a significant amount of illegal dumping, littering, and overflowing waste and recycling containers especially in the downtown High Street commercial business district. This area is the 'center' of the city, and its appearance sets a tone for how visitors and residents feel about the city. Right now, many residents and stakeholders feel that parts of the city look like a place that people do not care about. Members of this study group and other stakeholder interviewed and engaged throughout this process emphasize that appearance matters. If the city streets, alleys, parks and sidewalks are clean, people will be more likely to keep them clean, especially if there are adequate numbers and placement of receptacles clearly identified for waste and recycling. The city has a strong history of civic pride, community clean-ups, previous participation in Keep America Beautiful, and has many regulations in place to assure adequate recycling and waste pick up at multi-family buildings and to penalize illegal dumping and disincentivize littering.



Addressing issues of littering and illegal dumping will help restore pride in the city and send a message to residents, businesses, and visitors alike that Holyokers care about their city and everyone who lives, works, goes to school, and visits here will be more likely to behave respectfully and considerately. Several members of the study group were joined by additional stakeholders in the City, contributing their ideas and experience to understand and identify solutions to these issues.

*Special thanks to:*

- **Kathy Anderson** – Former Chamber of Commerce President and Director of Planning for City of Holyoke
- **Jordan Hart** – Director of the Holyoke Chamber of Commerce
- **Michael Moriarty** – Executive Director of OneHolyoke CDC.
- **Linda Pratt** – Board member, OneHolyoke CDC and member of the Public Health and Safety Advisory Board
- **Nayroby Rosa-Soriano**- Director of Community Engagement and Resident Services, OneHolyoke CDC, and coordinator of neighborhood and city-wide clean-ups
- **Neil Rheim**, Executive Director, Keep Massachusetts Beautiful
- **Gabrielle Gould**, Executive Director Amherst BID director

## Main Issues Illuminated

Over the course of six study group meetings and numerous additional stakeholder interviews and conversations with community-based organizations, several issues emerged as top priorities and the specific characteristics of the littering and dumping problems the city is facing became increasingly clear. These issues are detailed below.

- Excessive litter on downtown streets and sidewalks
  - . Causes - Lack of trash cans, lack of education/awareness, complacency.
  - . Consequences – People do not enjoy strolling/being downtown as much as they would if the sidewalks were clean and trashcans were not overflowing
- Illegal dumping/Overflowing dumpsters/Trash blowing and contributing to litter issue.
  - . Causes – Cost and scarcity of haulers available in region for hire to collect recycling at multi-family apartment buildings.
  - . Causes - Lack of enforcement of current city statute that requires recycling at all multi-family apartment buildings.
  - . Consequences - People do not enjoy strolling/being downtown as much as they would if the sidewalks were clean and dumpsters were not overflowing and alleys were alternative walkways between buildings.
- Abandoned/vacant properties/blight – these attract trash, contribute to complacency issue
- Lack of resources – Not enough DPW staffing, infrequent street sweeping, lack of funding for more downtown trash cans and additional services to reduce waste.



### Initial Recommendations:

1. Re-join Keep America Beautiful – Start Keep Holyoke Beautiful chapter, run more city-wide and neighborhood cleanups
2. Consider starting a BID, OR other such business support organization to engage businesses to participate in keeping the downtown beautiful
3. Launch a robust Public Information and Education anti-litter and illegal dumping campaign to coincide with the distribution of the new waste containers

After the study group homed in on these three priorities staff from the Pioneer Valley Planning Commissions (PVPC) conducted additional research and stakeholder interviews and meetings with community-based organizations to elaborate these recommendations into detailed actions and refine them as necessary.



# Priority Investments – Beautification/Place-Making

## *Start a Keep Holyoke Beautiful chapter of Keep Massachusetts Beautiful*

Holyoke should join Keep Massachusetts Beautiful (KMB), which is a state affiliate of Keep America Beautiful (KAB) and launch a Keep Holyoke Beautiful (KHB) chapter. The process to join is simpler and less costly than joining KAB. There are low suggested annual dues. KMB provides cleanup supplies, a web page platform, and will publicize events on their website and on social media. They also provide technical support and educational materials (although not currently available in Spanish, they may be able to translate the materials).

To form a chapter, the city needs to appoint a board/committee that will be the core team to coordinate and publicize clean-up events. Nayroby Rosa from OneHolyoke CDC already runs regular clean-up events in the Flats neighborhood. The KHB team should coordinate with Nayroby so they can combine forces to do the most comprehensive outreach and get maximum participation in the clean-up events. It will also be important to partner with businesses and community-based organizations for outreach and volunteer participation.

KMB suggests having a big kickoff cleanup event in the spring (ideally around Earth Day), and then organize a range of cleanups from spring through fall, culminating in a final fall cleanup day in November. The city should consider having an “adopt-a-street” or “adopt-a-block” initiative as part of KHB. A map on the KHB website can show who is cleaning which street or block, and the website can have instructions on how to join a group and how to adopt a street or block. Framingham is a KMB city that seems to be an exemplar city from whom Holyoke can learn with respect to community clean-ups as they successfully engage hundreds of volunteers.

### *Tips For A Successful Community Clean Up*

- larger scale community clean-ups work best when coordinated across all components of the city: government, including public works and public health, community-based organizations, resident volunteers, schools, boys and girls scouts, faith based institutions, businesses, youth sports teams
- start planning now (in January) for a Spring Clean-up—considering coinciding with Earth Day 4/22/23.
- Aim high with goal of engaging 1000’s of people to participate.
- Use traditional and social media—Keep MA Beautiful can help with web page platform, messaging, and possible Spanish translation materials (eventually).
- Celebrate success—VIP tent and party with food afterwards.
- Contests to recognize participation and make it fun—weirdest item, etc.
- Consider placing all the trash collected in a highly visible place for a day or two so everyone can see what a great job they all did.
- Keep MA Beautiful also provides liability insurance for clean-ups.
- Consider a big kick off and then a range of clean-ups from Earth Day to Labor Day and perhaps a Nov 1-15 Fall Clean-up organized so individuals and groups of neighbors, friends, and family can clean up on their own.
- Adopt a street with a street map on the Keep Holyoke Beautiful webpage showing who is cleaning which streets and how to join a group and/or claim your street or portion of street.

### ***Chamber of Commerce work with existing funding streams and the High Street Business Association to reduce litter and clean and beautify the downtown***

Jordan Hart, Executive Director of the Holyoke Chamber of Commerce, clarified that there is currently not enough tax revenue among downtown property owners to support a [Business Improvement District](#) (BID). Until it is possible for a BID to be established, the Chamber of Commerce will be the primary entity responsible for coordinating efforts to clean and beautify the downtown. The Chamber will utilize funding from MassDevelopment to focus efforts on the TDI (Transformative Development Initiative) District, which encompasses [High Street between Jackson and Suffolk Streets](#). The Chamber can also utilize Urban Agenda grant funding, if necessary, which EforAll (<https://eforall.org/ma/holyoke/>) received from the Executive Office of Housing and Economic Development (EOHED). The Chamber will collaborate with the TDI District Fellow, Kevin Moforte, as well as the newly formed High Street Business Association to implement the downtown beautification and cleanup initiatives.

The Chamber will purchase new trash/recycling containers with grant funds for locations along High Street (within the TDI District), and many businesses have agreed to “adopt” a trash can. These businesses will take responsibility for emptying the trash/recycling cans and putting new trash bags in every day.

*Other initiatives the Chamber will coordinate include:*

- Recognizing and highlighting businesses that keep their area of downtown clean
- Removing graffiti
- Hanging planters, putting up holiday lights and decorations
- Installing benches (if funding is available)
- Collaborating with the KHB team on downtown cleanup events



### ***City launch a robust public information and education campaign to coincide with availability of new waste/recycling containers***

The city has set aside American Rescue Plan Act funds for this purpose. The Study Group recommended the city work with Holyoke Media on the public information and education campaign but learned that they specialize in public service announcements for television and radio and could not complete the work developing and managing the media campaign or producing the print media materials. This work should include a review of the city’s existing public information and other materials about waste management with a goal of consistency across all platforms and should include recommendations and best practices for messaging and communicating regarding waste and recycling including specifics such as how do households get their ‘dump cards’, recycling bins and other materials as well as possible training/orientation for city staff and volunteers.



*Implementation details:*

- Prepare and issue RFP for marketing/media entity to develop, oversee, and implement a multi-purpose multi-media public information and education campaign communicating the dual messages of the two-pronged initiative:
  - . Returning and affirming dual stream recycling—separating paper and plastic/glass
  - . Schedule and distribution of new containers as needed
  - . Keep Holyoke Beautiful launch with dates of events, trash collection goals, contests, awards etc
  - . Engagement and involvement of youth and schools, clubs, CBOs etc.
  - . Integration with TDI District and efforts to adopt a trash can/recycling bins on High Street
- Engage consultant
- Oversee consultant to have materials ready for April /May 2023
  - . Engage residents in materials development using Holyoke Media space
- Evaluate campaign September December 2023

***Support Multi-Family Buildings with Recycling and Waste Diversion***

The city of Holyoke has an ordinance that requires multi-family buildings to provide recycling services for their residents. However, enforcing the ordinance is very challenging. There are six providers serving the city who charge based on the size of the container they provide to the multi-family building and the frequency of emptying the container. The smaller the container, the lower the price, and the fewer the times it is emptied, the lower the cost. This pricing system results in undersized containers with too few times being emptied for the volume of material people have to recycle. The multi-family building owners pass the cost of providing recycling on to their tenants. Many people who live in multi-family buildings are structurally and economically disadvantaged and not able to pay additional fees for recycling. The city only provides trash and recycling services to residential properties under 4 families. Residences with 4 families or more are classified as commercial properties and the city does not provide trash or recycling services to commercial properties.

The study group recommends that the city convene a group of multi-family property owners, DPW staff, BPW members, city council, and Mayor's office staff to solve the problem of how to provide comprehensive recycling services to their tenants. We recommend the city secure pilot funds to cover the gap cost of providing comprehensive recycling services to Holyoke's multi-family properties for two years. During the time the city would evaluate the change in the downtown environment and how the change impacts visits, feelings of being in the downtown as reported on in surveys the Chamber would administer and other means to provide a complete benefit cost analysis and understanding of the economic value of a cleaner downtown. We recommend the city investigate the downtown alley pedestrian walking system in Saratoga Springs as a potential way to develop and profit off of clean alleys in the city's downtown. The goal is to quantify the cost and benefit of solving the problem and then secure long-term financing and shared agreement on responsibility going forward.



# Additional Recommendations to reduce waste in Holyoke

## *Continue existing downtown beautification work.*

The study group recognizes and applauds the existing efforts of city staff, businesses, and others to keep Holyoke's streets and sidewalks clean and we recommend continuing these efforts and expanding them where possible.

## *Expand hours of the Recycling Center/Waste Collection Facility*

Residents, especially newcomers to the city have shared challenges in accessing the Recycling Center/Waste Collection Facility (dump). The study group recommends the city consider including possible evening and/or weekend times.

## *Assist residents with diverting textiles from the waste stream.*

On November 1, 2022 a new waste ban was enacted that makes it illegal in Massachusetts to dispose of textiles in the trash. While individual residents will not be fined, the municipality could face penalties if large amounts of textiles are found to be part of the waste stream. There are many options for both reusing and recycling textiles, and the city should make these easily available to residents and educate residents about these options.

## *Textile Reuse and Recycling Options*

*Install Collection Boxes in various locations around the City:*

- Baystate Textiles (Set up at municipal locations and/or schools – percentage of revenue goes to municipality/schools: <https://www.baystatetextiles.com/>)
- Hartsprings Foundation (percentage of revenue funds Big Brothers/Big Sisters: <https://hartsprings.org/> )
- Planet Aid (<https://www.planetaid.org/>)

*Collection Events/Clothing Drives – Can host monthly collection events or special events:*

- Hartsprings Foundation
- Pay It Forward Recycling (percentage of revenue goes to non-profits/charities: <https://www.payitforwardrecycling.org/>)

*Curbside Collection – Residents can call and schedule pickups:*

- Hartsprings Foundation
- Pay It Forward Recycling
- Salvation Army

Weekly Curbside Collection (contract with municipality): Simple Recycling (<https://simplerecycling.com/curbside-clothing-recycling/>) offers this service for no cost to the municipality or residents. Collection trucks follow existing trash/recycling schedule. Residents place bags with textiles and small (non-electronic) household items at the curb, and Simple Recycling trucks collect them. A number of municipalities in Massachusetts utilize this service, including the City of Chicopee.

### *Divert organic waste from the city's waste stream*

*This could be achieved by a variety of approaches:*

- a. providing opportunities for residents to drop off food waste at a city or privately run location
- b. collecting food waste as part of residents/small business waste pick-up
- c. assisting residents and small businesses to compost organic waste themselves.

In winter 2022 the city engaged the Conway School to complete a spatial analysis supporting Holyoke's Food System. That report included a section on "The Physical Parameters of Establishing a City-wide Composting Program". As mentioned in the report, the US EPA affirms that food waste constitutes approximately 22 percent of municipal solid waste streams in the United States. While we do not know the precise percent of food waste in Holyoke's waste stream, we can surmise that the city could reduce its own waste processing costs by as much as 1/5 if food waste was removed. Funds would be required to start up and run a city food composting program, but food waste is a valuable resource as it can be turned into rich healthy soil for which people will pay.

*Research into existing food/organic waste collection initiatives yields the following approaches for Holyoke to consider:*

- Food waste drop off: Provide totes/small dumpster at the DPW Recycling Center for residents to drop off food waste, and contract with a hauler to collect the food waste on a regular schedule. Possible haulers: Triple T Trucking (<https://ttvt.com/>) and USA Waste (<https://www.usarecycle.com/municipalities>). Triple T currently services 8 of the 14 organics programs of this type in Franklin County.
- Provide backyard compost bins to residents: The City can use grant funds from MassDEP to sell compost bins to residents at a reduced rate. The most commonly available bins are the Earth Machine with a 10 Cu. Ft. capacity, and the New Age Composter, with a 24 Cu. Ft. capacity. (<https://www.mass.gov/service-details/ask-your-municipality-about-a-low-cost-compost-bin>)
- Make curbside collection of food waste available to residents. While the DPW does not currently have the capacity or resources to provide this service, it could be a long-term goal to plan for. The City can also partner with private haulers that collect food waste. USA Waste provides this service. The Compost Cooperative (<https://thecompostcooperative.com/>), based in Greenfield, piloted a curbside compost collection program in Holyoke in 2021, but it proved not to be financially feasible for the company.



## *Research—collecting organics/food waste for use as feedstock at wastewater treatment plant*

### *City “Lead by Example” to reduce waste on a municipal level.*

- Encourage use of refillable water bottles by installing water bottle refill stations at City buildings
- Work with the schools to reduce solid waste
  - Eliminate Styrofoam food trays – either move to reusable or compostable
  - Set up composting at the schools – train students and staff to compost leftovers, and contract with a hauler to collect food waste weekly (Triple T Trucking, mentioned above, is one hauler that collects food waste from schools. USA waste is another option).
  - Make sure paper and containers are recycled at all of the schools – train staff and students and provide curriculum/programming
- Consider enacting city ordinances to ban plastic bags and other single use plastics, to only provide straws upon request, etc.
- Set up reuse center/swap shop at the DPW recycling center
- Set up a “library of things” at the public library so people can borrow/rent tools, electronics, etc.
- Hold “fix-it clinics” where residents can bring broken items and learn to repair them, or have experts on hand who can repair them.

### *Quantify GHG emissions reductions from Waste Reduction and Increased Recycling & Diversion*

The city of Holyoke should investigate the GHG emissions reductions benefits of increasing recycling and other approaches to waste diversion as the city starts work on a comprehensive plan update and as part of the city’s ongoing efforts to reduce fossil fuel energy use and related GHG emissions as the city does its part to decarbonize. There are a variety of ways that people get motivated to change their behavior. Adapting to the climate crisis will motivate a lot of people to act and there will be a subset of the population who will be motivated to reduce waste once they understand the magnitude of the GHG emissions produced processing waste and recycling materials.

### *City continue to work to expand street sweeping and consider supplementing as practicable*

The study group provided details on personal research conducted in several cities of comparable size to Holyoke that have much cleaner streets resulting from what appears to be much more frequent street sweeping.

### *Lift up and Highlight to Residents and Business Owners that the City has State-of-the-Art Waste Management & Recycling Policies*

The study group affirmed that the city of Holyoke has recommended waste management ordinances and other regulations in place and there are no significant recommendations pertaining to improving the city’s waste management regulatory environment at this time. City officials and staff and volunteers concerned about waste management and anti-littering are encouraged to stay up-to-date on regulatory improvements.



*Continue to Explore Innovative Opportunities for Re-use and Re-cycling*

The city is home to an innovative private sector effort to generate electricity from plastic bottles and this and other such creative ways of re-using ‘waste’ should be encouraged. The study group was especially interested in their plastics recycling operation as it suggests that if the company had a source of recycled plastic materials, the owners are confident they could get an operation up and running in 24 months. The study group is not endorsing any one company, but rather encouraging the city to stay informed of these opportunities. Future market conditions could make recyclables a product that dischargers get paid for and there may be multiple buyers interested in these recyclables.



## Conclusions

---

Implement the Priority Strategies and maintain a version of the study group to meet quarterly (or more often as they decide) to oversee implementation of the plan and to be charged with producing an annual report to the Mayor and the city council and the DPW on the status of priority recommendations every year for the next three years.

## Engagement Summary

The Pioneer Valley Planning Commission (PVPC) staff who worked on behalf of the Mayor and the study group relied heavily on study group members for their broad, diverse and comprehensive understanding of and engagement with the topics of this work.

*We engaged with staff and/or volunteers at the following:*

- Amherst Business Improvement District (BID)
- Green Holyoke Mayoral Advisory Group
- Holyoke Chamber
- Holyoke City Council
- Holyoke Board of Health
- Holyoke Board of Public Works
- Holyoke Department of Public Works
- Holyoke Health Center
- Holyoke Hospital
- Holyoke Housing Authority
- Holyoke Media
- Holyoke Senior Center
- Holyoke Taxpayer Association
- Keep America Beautiful
- Keep Massachusetts Beautiful
- Massachusetts Department of Environmental Protection (MA DEP)
- One Holyoke Community Development Corporation (CDC)
- Public Health/Public Safety Mayoral Advisory Group
- Springfield Business Improvement District (BID)
- Springfield Massachusetts Materials and Recycling Facility (MRF)
- Waste Haulers
- Zero Waste Massachusetts

# Appendix

---

## Notes from Working Group Meetings

[Click here](#)

## Research Resources

[Massachusetts Business Improvement Districts](#)

[Holyoke's TDI District](#)

[Massachusetts Solid Waste Master Plan](#)



