Solid Waste Updates

City of Ann Arbor Environmental Commission Meeting

Speaker: Sarah Mason

December 5, 2024



Move Out Ann Arbor

- Researched over 26 universities and towns
- Had conversations with 7 of them





The University of Texas at Austin













SWARTHMORE





























University of New Hampshire



Sustainability at the University of Rochester







Move Out Ann Arbor

- Partners: This issue is very large and to address it comprehensively we need many stakeholders
 - Non-profits who can take materials for reuse, property owners/managers, apartment association, university, movers, storage facilities, student organizations
- Material stream are endless: food, textiles, furniture, mattresses, household good, open cleaning products, opened hygienic products and toiletries, school supplies, pet food, electronics, bikes
 - To manage all of these materials, we need a complex solution
 - A comprehensive program would include storage, moving, rental, donation, pickup, online sale, redistribution, transfer station drop off, swapping, and informal waste pickers (like scrap metal haulers)
- Outreach is essential and needs to be comprehensive, institutionalized, more frequent, and through many channels digital and otherwise
 - Regular communications can be done at move in, 2 months, 1 month, and 2 weeks before move out

Move Out Ann Arbor

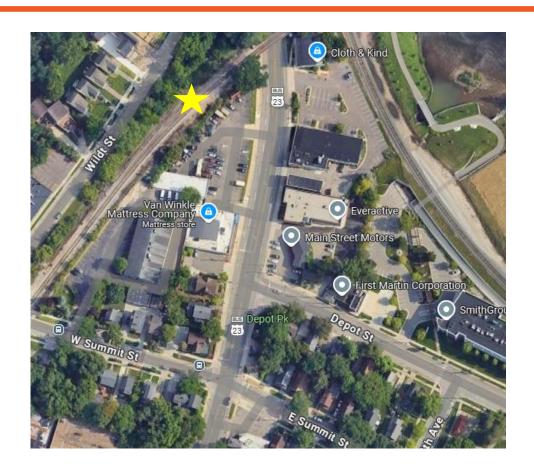
- Collaborators began meeting monthly January 2024.
- Decided to initially focus on streamlined communications and clothing recovery
- Over 1,215 volunteer hours were donated collecting and processing materials for reuse/repurposing
- 67 truckloads of collected materials (roughly 14 tons) were loaded from approximately 85 addresses
 including bedding, towels, dressers, desks and beds for repurposing through HouseN2Home, ultimately
 contributing to furnishing about 400 households serving people moving out of homelessness in our
 community
- ZeroWaste.Org, working with 11 local sororities and 9 high-rises, collected 112 bags of used clothing (approximately 2 tons) for donation to the **Kiwanis Thrift Sale** for sorting, cleaning and resale.
- The University of Michigan collected approximately 11 tons of material from on-campus (dormitory)
 housing, donating these materials to several non-profits in the area
- The City of Ann Arbor provided several days of free drop-off opportunities for students and campus
 property managers to drop off bulky items, trash, scrap metals and other recyclables. Over 150 tons of
 materials were delivered to this location with at least 24 tons diverted for recycling or reuse.

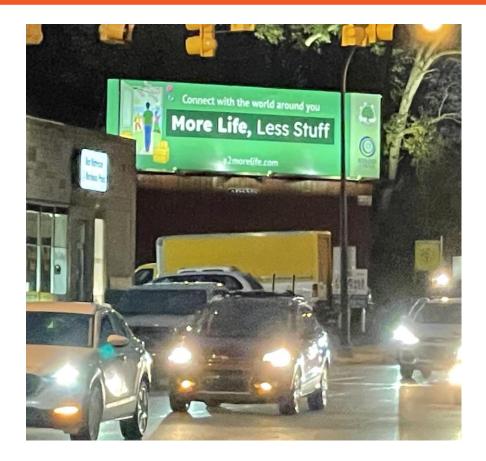
More Life, Less Stuff Campaign

- Launched on Earth Day 2024
- Published stories around reducing food waste by composting and food donation; the impact of micro-plastics in clothing on the environment; and how stuff can be reused and shared to welcome and build community.
- Placed ads on local radio, TV, in local newspaper and on area transit buses.
- Check out a2morelife.com



More Life, Less Stuff





Multi-Family Compost Expansion

- **Purpose**: to develop a program to provide more convenient access to food scrap collection to the nearly 50% of Ann Arbor residents who live in multi-family residences.
- Opportunity: Multi-family units generally waste more food per capita, and do not have yard waste, therefore we have a significant opportunity to capture food waste which is the most common material in US landfills and divert it to composting instead.
- Progress: Applied for one state and one federal grant to fund the development of a drop-off program which would put a collection site within one mile of 98% of multi-family properties; provide a starter kit including counter-top collection caddy; and deliver a citywide education campaign on the importance of food waste reduction.

Washtenaw County Materials Management Plan

- https://www.washtenaw.org/3903/Materials-Management-Planning
- First meeting was November 14, 2024
- Second meeting will be December 11, 2024, at 10am
 - Location: MSU Extension Washtenaw County Classroom 705 N. Zeeb Road, Ann Arbor, 48103, First Floor
- City of Ann Arbor Representation:
 - Official Member: Council Member Jennifer Cornell
 - Ex Officio Member: Sarah Mason, Resource Recovery Manager

Washtenaw County Materials Management Plan

- Hired RRS to lead the plan development.
- Emphasized it will be a data driven plan.
- All meetings are open to the public.
- Targeting to have several meetings dedicated to specific focuses:
 - □ Area of Focus #1: Recycling, ~3-4 meetings, targeted for May July 2025
 - Area of Focus #2: Organics, ~3 meetings, targeted for July October 2025
 - Area of Focus #3: Special Materials Handling, ~2 meetings, targeted for November –
 December 2025
- Planning to hold two evening meetings to serve as engagement sessions. Tentatively scheduled for 1/22/26; and 5/22/26.

Washtenaw County Materials Management Plan

Washtenaw County Materials Management Plan - DRAFT Work Plan

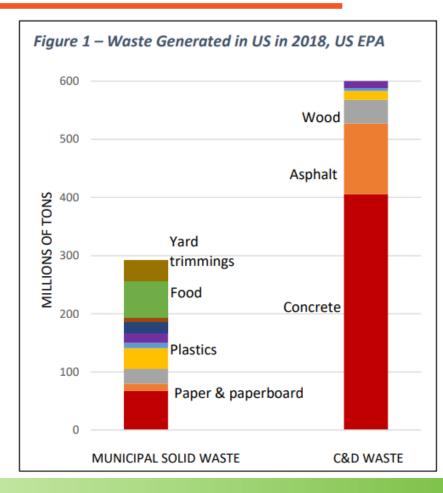
Phase	Timeline	Tasks
Initiation Phase	July-November 2024	Inform EGLE of intent to prepare a Materials Management Plan. Identify stakeholders and form a committee. Appoint DPA. Develop work plan.
Data Collection and Analysis	November 2024 - January 2025	Gather data on waste generation, composition, and management practices. Analyze data to identify trends, opportunities, and challenges. Conduct stakeholder survey(s)
Goal Setting and Strategy Development	January - March 2025	Develop SMART goals, Identify strategies to achieve goals, including education and outreach, infrastructure development, and policy changes
Plan Development	March 2025-May 2026	Write the MMP document, including an executive summary, introduction, and chapters on waste reduction, reuse, recycling, and disposal. Develop an implementation plan and timeline.
Public Comment & Hearing	June 2026 - August 2026	Have a 60-day minimum public comment period, allowing stakeholders to review and provide feedback on the draft MMP. During the public comment period, hold a public hearing.
MMP Approval and Adoption	September 2026 - July 2027	Review and revise the MMP document based on stakeholder feedback. Ensure the plan is consistent with state and local regulations. Adopt the MMP and begin implementation. Establish a system for tracking progress and evaluating the effectiveness of the plan.

Summary of C&D Ordinance Work

- ► The SWRMP recommends the City evaluate the need for a Construction & Demolition (C&D) ordinance.
- ► The Circular Economy Working Group of the Environmental Commission took on the task of assisting staff with research on C&D ordinances.

What is a Construction & Demolition Ordinance?

- A C&D ordinance regulates the process of constructing and demolishing buildings, primarily to minimize construction waste going to landfills
- ► The amount of C&D waste generated is more than twice the amount of MSW by weight.
 - Recycling or reusing materials = less virgin materials = reduction in greenhouse gas emissions



Why is the City evaluating a C&D Ordinance?

- Component of City Plans
 - Solid Waste Resources Management Plan (SWRMP) recommendation
 - A²Zero Strategy 5
- Improved City and region resilience
 - Increased material availability
 - Minimizes vulnerability to supply chain disruptions
- Potential to create new economic market(s)

Research Approach

- Literature review of existing ordinances, paired with interviews of local jurisdictions with ordinances to:
 - Learn about a both incentive-based and penalty-based approaches to C&D
 - Learn about staffing and other resources needed to develop a C&D ordinance
 - Learn about successful education and outreach strategies
- Market research of local outlets for potentially regulated materials.

Sources of Data

- Eleven reference communities:
 - One state-level
 - One county-level
 - Nine city-level
- Interviews:
 - Three cities and one county
 - Recycle Ann Arbor about their EPIC park
 - C&D expert from Resource
 Recycling Systems on the national landscape and policy

- Existing compiled research:
 - Steve Brown
 - City Fellow working with Public Works
- University of Michigan

Reference Communities

- Portland, Oregon
- 2. King County, Washington
- 3. Austin, Texas
- 4. San Diego, California
- 5. Ferndale, Michigan
- 6. Madison, Wisconsin
- State of Iowa Department of Natural Resources

- 8. Washington D.C.
- 9. San Francisco, California
- 10. Chicago, Illinois
- 11. San Antonio, Texas

**Bolded communities were interviewed.

Interview Questions

- Timeline of ordinance creation to implementation also, what motivated the creation of the ordinance?
- Who was engaged prior to creation of the ordinance?
- 3. What opposition was there, if any?
- 4. How was your ordinance implemented? Any staging?
- 5. What sort of business development was done and how? Any education or training that was (or would have been) helpful?
- 6. What costs are added to projects, any surprising benefits/costs recouped?

- 7. What is the compliance rate? Did that drive a meaningful reduction in C&D waste? Do you expect it to down the line?
- 8. What additional positions or infrastructure did you need to create to support the ordinance?
 - What, if any, upstream tactics were helpful (allowing for salvaged materials in new construction, etc.)?
- 10. If you could do it over, what would you change?

Key Take Aways

- Early stakeholder engagement is key, this was nearly universal in reference communities.
- Likely need additional staff.
- Having a local C&D MRF is a great asset; this is a resource used in Madison and being pursued by Austin.
- Reporting is challenging to non-existent
- Phasing of implementation around volumes, types of materials and size of project is common
- Financial nudges such as fees, penalties, incentives are needed.
 - Refundable fees for compliance used in San Diego

Key Take Aways

- Versatility of funding: permitting and/or penalties
- Review and revise ordinance plan every 5 years, Austin built this in and was glad to have the opportunity due to changes in the marketplace and lessons learned on reporting.
- Incentivize material reuse; keep existing buildings standing
- Create grant program to support/enable transition, builder/hauler innovations
- Align with market forces to avoid pursuit of ordinance work-arounds
- Some focus on historic features, some keep construction and demolition separate, lots of ways to structure.

Key Take Aways

- Integrate objectives into permitting process
- ▶ Hire staff for education, permitting, and inspection:
 - Policy specialist, data specialist, C&D specialist for contractor relations, and enforcement person
- Establish clear metrics, tracking system, and reporting early on (diversion, carbon, jobs)
- End markets for diverted materials are critical.
- Can offer training and resources to contractors, builders, deconstructors help with implementation and compliance. This also drives economic development related to the industry.

Conclusion

- A City only ordinance may be limited in ability to drive demand for the necessary end markets.
- ► The scale of a County ordinance would be regional and likely better support the end market/processing demand.
- As the County begins the process of developing its' MMP, bring forward C&D as an area of interest and opportunity.



THANK YOU