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TO: Mayor and Council

FROM: Howard S. Lazarus, City Administrator

CC: Craig Hupy, Public Services Area Administrator  
Marti Praschan, Chief of Staff, Public Services  
Cresson Sloten, Systems Planning Manager

SUBJECT: Council Agenda Responses – CA-8 – Resolution to Approve Execution of Articles of Incorporation for, and Becoming a Constituent Member of, the Washtenaw Regional Resource Management Authority (WRRMA)

DATE: March 4, 2019

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**CA-8 - Resolution to Approve Execution of Articles of Incorporation for, and Becoming a Constituent Member of, the Washtenaw Regional Resource Management Authority (WRRMA)**

**Question:** On April 16, 2018, the City Council approved a \$250,000 contract to hire a consultant to make recommendations for a solid waste master plan. The recommendations are expected in June or July 2019. Adopting the Articles of Incorporation and joining the multi-community authority before the consultant makes recommendations, seems premature.

Why is the Council being asked to pursue a particular course of action before receiving the consultant's recommendations?

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[https://www.mlive.com/news/ann-arbor/index.ssf/2018/04/ann\\_arbor\\_officials\\_express\\_re.html](https://www.mlive.com/news/ann-arbor/index.ssf/2018/04/ann_arbor_officials_express_re.html)  
(Councilmember Eaton)

**Response:** By way of background, staff raised the potential for a regional approach to recycling over two years ago, in a memo to the Environmental Commission regarding the future of the Material Recovery Facility (MRF). In January, 2018 staff again raised the issue in a memo to City Council and the Environmental Commission, noting the County's effort to examine the potential of a regional approach for solid waste. As a result, the staff-prepared Solid Waste Resources Management Plan (SWRMP) RFP contemplated the potential of a regional approach:

*This strategic approach is to be developed for a five-year planning period of 2019-2023 working within the established goal of a zero-waste framework. In addition, the approach is to be developed within the context of the recent Washtenaw County Solid Waste Management Plan Amendment, which among its goals includes:*

- *Reduce the overall amount of municipal solid waste (MSW) generated per capita in Washtenaw County by 5% in the year 2022 and by 10% in the year 2027, with a target of working towards zero waste.*
- *Operate collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy.*

#### **Documentation Review**

*In order to gain the broader regional context for this plan, the consultant shall gain background and understanding of recent and current planning efforts by Washtenaw County in areas that directly relate to, or impact, the City's solid waste programs by performing a review of pertinent documents, including:*

- *Results of Washtenaw County's Examination of Potential for Regional Approach to Recycling and Solid Waste (anticipated March 2018)*

The potential for working collaboratively on regional approaches was then included in the cover memo and resolution for Council Resolution R-18-138 (approved April 16, 2018) awarding the contract to APTIM for the SWRMP noting that one of the factors for the effort was that "the Washtenaw County Solid Waste Management Plan includes a goal of operating collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy."

In short then, Council is being asked to consider this issue because the decision as to whether to join the Authority will affect the direction and recommendations of the Solid Waste Resources Management Plan (SWRMP), not the other way around. Put another way, the consultant's recommendations are to take into account, and be developed within the context of, this regional authority and whether or not the City decides to become a

member. The consultant has been aware of, and monitoring, the City's potential to join this authority and is prepared to incorporate it into the SWRMP. This was identified and shared with the SWRMP Advisory Committee at its initial meeting on November 14, 2018 and again at its second meeting on January 15, 2019. The PowerPoint slides with this information (slide 7 from the 11/14/18 meeting and slides 14 and 15 from the 1/15/19 meeting) are attached.

**Question:** 2. Council passed a resolution on May 21, 2018 directing the City Administrator not to pursue contracting of solid waste services. This effort seems to contradict that resolution. The new authority would have the power to contract for solid waste services for all of the participating communities, including trash pick-up, recycle pick-up, MRF sorting and material sales, and organic waste collection and processing (composting).

Why is staff recommending an action that contradicts the direction from Council in the  
May 21 resolution?

<http://a2gov.legistar.com/LegislationDetail.aspx?ID=3504800&GUID=B186B70D-ED25-4EDE-94E5-0BD624FD4253&Options=&Search=&FullText=1>

[https://www.mlive.com/news/ann-arbor/index.ssf/2018/05/ann\\_arbor\\_council\\_shuts\\_down\\_t.html](https://www.mlive.com/news/ann-arbor/index.ssf/2018/05/ann_arbor_council_shuts_down_t.html)(Councilmember Eaton)

**Response:** Staff does not view this resolution as contradicting Resolution R-18-194. The latter did not in fact direct the City Administrator to not pursue contracting of solid waste services. Rather, it directed the Administrator to "cease all actions that further any plan to privatize for solid waste services currently performed by city staff." The resolution expressly disclaimed opposition to "the creation of partnerships with other public bodies or a regional authority to provide consolidated solid waste services ..."

As to the Authority's powers, it may enter into contracts, but only for itself. It cannot force the City, or any other member, into a contract. If the Authority does contract with a vendor to provide collection services, municipalities can contract with the Authority to utilize those services, or not. Any such contract would have to be approved by the City Council in the usual manner.

**Question:**3. The Articles of incorporation for the authority provide each participating unit of government the same representation and vote. The Articles of incorporation allow amendment only by unanimous consent. Ann Arbor has the biggest population, generates the most solid waste, and would pay the most for these services but would have the same single vote as Dexter or other small communities. If Ann Arbor adopts the current version of the Articles of Incorporation, it would need the consent of every other participating community to amend the Articles of Incorporation. The City's only alternative would be to completely withdraw from the authority, which seems extreme. Why is the Council being asked to agree to conditions in the articles of incorporation that disadvantage the City and would be so difficult to amend? (Councilmember Eaton)

**Response:** The examination of the potential for this authority was an outcome of the Washtenaw County Solid Waste Plan Amendment (2017), which included as one of its goals to “operate collaboratively within the County and regionally outside the County for a comprehensive sustainable materials management strategy.” In order for the authority to be developed by the multiple jurisdictions that participated, it required this voting methodology to be utilized. In addition, since the Authority cannot force the City, or any other member, into a contract as stated in an earlier response, and as all of the members are contributing the same \$5,000 amount to establish the Authority, it is not clear how this would disadvantage the City.

**Question: Q1.** The cover memo indicates that RRS completed a study on this in April 2018. Can you please provide a copy of that study? (Councilmember Lumm)

**Response:** This study is attached.

**Question: Q2.** The fourth resolved clause in the Environmental Commission’s resolution states that, “the City’s SWRMP process is aware of, and factoring in the status of the WRRMA’s formation in the development of its recommendations.” The phrase “factoring in the status of WRRMA’s formation” suggests a regional authority was to be a given for the consultant to work with in analyzing and making recommendations with regard to solid waste-related operations. Is that accurate? What, exactly, was the consultant told (or instructed) with regard to a regional authority, and if an authority was expressed as a given, how is that consistent with a “clean sheet” approach to analyzing operations? (Councilmember Lumm)

**Response:** By way of background, staff raised the potential for a regional approach to recycling over two years ago, in a memo to the Environmental Commission regarding the future of the Material Recovery Facility (MRF). In January, 2018 staff again raised the issue in a memo to City Council and the Environmental Commission, noting the County’s effort to examine the potential of a regional approach for solid waste. As a result, the staff-prepared SWRMP RFP contemplated the potential of a regional approach:

*This strategic approach is to be developed for a five-year planning period of 2019-2023 working within the established goal of a zero-waste framework. In addition, the approach is to be developed within the context of the recent Washtenaw County Solid Waste Management Plan Amendment, which among its goals includes:*

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In short then, Council is being asked to consider this issue because the decision as to whether to join the Authority will affect the direction and recommendations of the Solid Waste Resources Management Plan (SWRMP), not the other way around. Put another way, the consultant’s recommendations are to take into account, and be developed within the context of, this regional authority and whether or not the City decides to become a member. The consultant has been aware of, and monitoring, the City’s potential to join this authority and is prepared to incorporate it into the SWRMP. This was identified and shared with the SWRMP Advisory Committee at its initial meeting on November 14, 2018 and again at its second meeting on January 15, 2019. The PowerPoint slides with this information (slide 7 from the 11/14/18 meeting and slides 14 and 15 from the 1/15/19 meeting) are attached.

**Question: Q3.** Also related to the consultant’s analysis and the SWRMP, will the report include a financial analysis for the city comparing an authority vs. going it alone vs. another possible approach for solid waste, recycling, and composting individually or together? (Councilmember Lumm)

**Response:** The decision by the City of whether or not to join the Authority will be a factor in the direction and recommendations of the SWRMP, including the financial analysis, rather than the plan recommending whether or not the City should become a member of the Authority.

**Question: Q4** Article 3 outlines the scope of the authority. It states “For purposes of these Articles, “materials management” shall mean the management, including the “collection”,

of municipal solid waste, organics, (including yard waste) and recyclables”. If the City of Ann Arbor desired to participate in one regional service (say solid waste collection), but not others (say recycling or composting), would that be possible or must members participate in every regional service/contract the authority has? (Councilmember Lumm)

**Response:** That would be possible. The City has no obligation to contract with the Authority for any services, let alone all services it offers, if it ever does.

**Question: Q5.** The cover memo also indicated that UM was part of the original study group in January 2018. Will the UM be involved with the Authority at all (directly, indirectly, or as a participant/partner in any specific agreement)? (Councilmember Lumm)

**Response:** The Public Act (P.A. 179 of 1947) under which this authority was formed allows municipalities to join as members of the Authority, so universities such as The University of Michigan and Eastern Michigan University, which are not municipalities, cannot be voting members of the Authority. However, they are able to participate and contribute to the activities of the Authority, and even contract with the Authority as customers.

**Question: Q6.** What is the size of the present solid waste/recycling/composting annual expenditure budgets for the entities considering joining the authority budgets (City of Ann Arbor, Ann Arbor Township, City of Ypsilanti, Ypsilanti Township, City of Saline, City of Dexter, Scio Township, Pittsfield Township)? Which of these entities currently have a dedicated millage for Solid Waste? (Councilmember Lumm)

**Response: (*Response provided by Washtenaw County*)** The City of Ypsilanti has a dedicated millage for solid waste. We have not sought information on annual budgets, but a recent study out of Wisconsin found municipalities that provide or contract this service is around 2% of their total budget.

**Question: Q7.** Also in the cover memo, it mentions that the original resolution included the goal “operate collaboratively within the county and regionally outside the county for a comprehensive sustainable materials management strategy.” Have any entities outside the County been contacted for possible participation and if so, who were they and what was their reaction? (Councilmember Lumm)

**Response: (*Response provided by Washtenaw County*)** The approach has been to form an authority with Washtenaw communities first before expanding. This is a similar approach to the mid-Michigan Waste Authority (MMWA) which started with Saginaw County communities and has since expanded to 34 members in at least 3 counties. While we did not actively recruit members from outside the County, we were contacted by the Executive Director of the 12-community Conference of Western Wayne (CWW), and Commissioner Pratt met with Mayors or Supervisors from some of their member communities to exchange information. Until there is an operating authority, it is not recommended to work toward expansion. Expansion should be a decision made by the members.

**Question: Q8.** Who were the city representatives in the initial discussions with RRS in January 2018 and who represented the City on the Authority Formation Committee? (Councilmember Lumm)

**Response:** The City representatives at the January, 2018 Stakeholder Meetings were: City Administrator Howard Lazarus; Councilmember Chip Smith; Environmental Commissioner Allison Skinner; and, Environmental Commissioner Dan Ezekiel. The City was represented on the Authority Formation Committee by City Administrator Lazarus and his designees, Public Services Administrator Craig Hupy, Systems Planning/Special Projects Manager Cresson Slotten, Public Works Manager Molly Maciejewski and Senior Assistant City Attorney Matt Rechten. In addition, there was a Regionalization Stakeholder Kick-Off Session on August 2, 2017 which was attended by the following from the City: Mayor Christopher Taylor; Councilmember Chip Smith; Councilmember Jason Frenzel; and, staff members Craig Hupy, Molly Maciejewski and Cresson Slotten.

**Question: Q9.** In terms of benchmarking, what other regional solid-waste authorities were examined and what have we learned from their experience? (Councilmember Lumm)

**Response: (*Response provided by Washtenaw County*)** Authorities for which we reviewed documents include the mid-Michigan Waste Authority (MMWA) in the Tri-Cities area, two Oakland County entities (SOCCRA and RRASOC) and the Western Washtenaw Recycling Authority (WWRA) which is centered around Chelsea. We reviewed Articles of Incorporation and an example executed standard contract between these Authorities and their members. We also reviewed example executed contracts between these Authorities and their waste haulers. These documents were shared with all representatives of the 8 municipalities engaged in the process.

The main thing we have learned is that since the 1950s when solid waste authorities started to form, none have disbanded. In fact, we have only learned of a single community (Madison Heights) that sought to leave an authority (SOCCRA) in all of that time – and a legal mechanism had to be created in the 2000s to allow departure, since no other community had sought to leave an authority since the 1950s. It appeared that the reason none of the authorities disbanded was due to cost-efficiencies of working with neighboring communities on hauling route efficiencies, capital expenses, public education campaigns, etc. For example, SOCCRA has a similar population base to what is being considered for WRRMA, and over two successive 10-year hauling contracts, members saved 16% and 20+% on average respectively – savings varied in different communities based on differing particular needs/contract terms. Anecdotally, we have heard that SOCCRA and WWRA have operated in the black (positive cash flow) even through the end of 2018, despite all the headwinds in commodity prices the past 3-4 years.

**Question: Q10.** Article 8 states that each constituent member will have one designated representative on the Board and article 10 states that each constituent member will have one vote. Was any consideration given to proportional representation and voting (based on population, budgets, or physical measures of solid waste-related activity) – if so, why

was it not adopted and if not considered, why was it not raised by the Ann Arbor representatives? (Councilmember Lumm)

**Response:** While there was discussion of other distributions of voting power, other potential members insisted on one vote per member, no doubt in part because members' financial obligations under the Articles are equal. In a sense, the way the Articles are currently structured, each member will, at least at the outset, be an equal "investor" in the Authority, with an equal vote. Further, to mitigate any downsides of this structure, the City provided edits to the Articles that limited the commitments that may be imposed on the City without its further consent.

**Question: Q11.** Also on governance structure (Board representation and voting power), is it typical in regional solid waste authorities for their not to be proportional representation? (Councilmember Lumm)

**Response: : (Response provided by Washtenaw County and its Counsel for the Authority Formation Committee)** Yes, equal voting power is normal at the formation stage of the authority. Many if not most regional solid waste authorities function with the one community one vote for making decisions. If the role of the authority expands, voting may be amended by population or tonnages of materials addressed. It appears that most authorities share costs proportional to material volumes once the decisions are made, but this is not typically spelled out in bylaws. One of these four authorities did have language that only major capital expenditures (such as building a MRF) would be voted on based on proportion of material as of December 31 of the preceding year. So if the proposed Washtenaw Authority (WRRMA) members also found the method of sharing costs based on proportional material, the City might have the opportunity to have a lower capital outlay based on cost sharing. It appeared to us that the option to opt-out of contracts or the authority offered checks and balances to both the larger community and the smaller.

**Question: Q13.** The State's enabling act (Act 147 of 1947) is referenced in the first whereas clause. Can you please provide a summary of the key provisions / restrictions / requirements in the Act? Also, are there other regional authorities in Michigan and if so, do they also cover solid waste, recycling and composting? (Councilmember Lumm)

**Response: (Provided by Washtenaw County and its Counsel for the Authority Formation Committee)** Attached is a copy of the State Enabling Act and a table cross-referencing the applicable statutes from the Act and the WRRMA Articles of Incorporation. Below are some authorities in Michigan, primarily what they do and how many people they serve (or municipalities as a proxy), this is not an exhaustive listing.

**RRASSOC:** Recycling, Collection Events; Population served: 9 municipalities

**SOCRA:** Transfer Station, Recycling, Yard Waste, HHW; Population served: 280,000

**WWRA:** Recycling, Yard Waste, Transfer Station; Population served: 20,000

**MMWA:** Recycling, Trash, Yard waste, Collection Events; Population served: 34 municipalities



**MARQUETTE COUNTY SOLID WASTE MANAGEMENT AUTHORITY:**  
Recycling, Landfill, Yard Waste; Population served: 23 municipalities

**Question: Q14.** Article 4 outlines the powers of the authority and states, “WRRMA shall possess all the powers granted to it by these articles, and all powers necessary to, and incidental to, carrying out the currently stated and defined purposes of WRRMA.” That sounds awfully broad especially considering the wide scope and purpose. Does that include contracting and bonding/issuing debt that are obligations of members? Does it include hiring employees, proposing tax millages? (Councilmember Lumm)

**Response:** The Authority would be able to enter into some contracts, as described in earlier responses, and, within limits, issue debt. Any such debt would be the Authorities to repay. The Authority could hire employees, as described in the Articles, but it may not levy any taxes.

**Question: Q15.** If an authority is established, how are existing assets/facilities handled? Do they become assets of the authority or retained by the existing owner? Will the authority be acquiring/owning assets and if so, how will they be paid for, how will the share of acquisition costs be determined for the members, and how will the value of those assets be reported (if at all) by the members? (Councilmember Lumm)

**Response:** Upon establishment, the Authority’s only appreciable assets would be the monetary obligations to which its members commit by joining: \$5,000 each for the first year (arguably, the County’s promise to match those obligations would also be an asset). Those assets would in turn be obligations on each member. Whether the Authority acquires any assets after that would be up to the Authority and its Board. Acquisition of assets would typically (i.e., non-gifts) require the Authority to exercise its contracting power (see below). As described elsewhere in these answers, funds for the Authority will come from its members, in accordance with the provisions of the Articles, and from any of its customers. Finally, in terms of reporting, Article XV requires the Board to issue to each member a report of all Authority activities for the preceding year. Article XIX requires the Board to have an audit each year by a CPA, with copies sent to each member. Members would also obtain information about the Authority’s assets through their involvement in Authority governance and through the annual budget process.

**Question: Q16.** If an authority is established and it will contract for services or purchase assets, how will the purchasing function be handled? (Councilmember Lumm)

**Response:** The Articles invest the Authority with the power to enter contracts subject to the Articles’ provisions (e.g., contracts must further the Articles’ purposes). That power is ultimately reposed in the Authority’s Board. Contracts paid for by operating expenses could be approved by a majority vote, while those paid for beyond normal operating costs would require a 2/3 vote. Beyond that, the Authority’s process for contracting would be up to the Board, and anyone to whom the Board properly delegates its powers (see e.g., Article XII, which permits the Board to appoint and empower a General Manager).

## **CA-8 Questions Related to Process**

**Question: Q17.** Perhaps I missed it, but I do not recall any updates to Council from the City Administrator or anyone on what clearly has been substantial progress down the path towards a regional authority. Were there any communications to council and if so, can you please share then again, and if not, can you please explain why it was concluded that updates were not necessary? (Councilmember Lumm)

**Response:** The potential of a regional approach to recycling was initially raised by staff in February, 2017 in a memo to the Environmental Commission in regards the future of the City's Material Recovery Facility (MRF). On January 26, 2018 in a memo to City Council and the Environmental Commission it was noted that the County was leading an effort to examine the potential of a regional approach to solid waste, recycling and compost. The potential for working collaboratively on regional approaches was then included in the cover memo and resolution for Council Resolution R-18-138 (approved April 16, 2018) awarding the contract to APTIM for the SWRMP noting that one of the factors for the effort was that "the Washtenaw County Solid Waste Management Plan includes a goal of operating collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy." Updates on the County-led process were included in Solid Waste/Recycling Program Area Status Update memos to the Environmental Commission on July 20, 2018 and December 5, 2018. Copies of these items are attached.

**Question: Q18** Council initially received a memo from the Administrator regarding postponing or tabling this item suggesting there was a sense of urgency. Other than just a desire to move forward or the fact that other entities may be voting in the next month or so. what specific timing considerations related to specific actions (bids, further studies, contracts, etc.) are driving the need for Council to act so quickly and in advance of receipt or any discussion on the SWRMP? (Councilmember Lumm)

**Response:** The decision by City Council of whether or not to join the Authority will be a factor in the direction and recommendations of the SWRMP, rather than the plan recommending whether or not the City should become a member of the Authority. So making this decision will guide the SWRMP and allow that process to develop and complete its recommendations.

**Question: Q19.** How much staff time/cost has been spent to date on the potential authority? (Councilmember Lumm)

**Response:** The City contributed \$15,412.09 to the cost of the Regional Authority Study by RRS. Staff time was not tracked on this effort so that cost cannot be determined in the time allotted to respond.

**Question:** Q20. Can you please explain why a topic of this importance was placed on the consent agenda? (Councilmember Lumm)

**Response:** Staff generated items are placed on the Consent Agenda to allow City Council to determine what it would choose to remove for discussion and deliberation.

**Question:** When is our Solid Waste study due? (Councilmember Hayner)

**Response:** The Solid Waste Resources Master Plan is scheduled for completion July, 2019.

**Question:** Why has UM and EMU not be included in the regional authority, and shouldn't they be, as large potential partners for this project? How could they be included going forward? (Councilmember Bannister)

**Response:** The Public Act (P.A. 179 of 1947) under which this authority was formed allows municipalities to join as members of the Authority, so universities such as The University of Michigan and Eastern Michigan University, which are not municipalities, cannot be voting members of the Authority. However, they are able to participate and contribute to the activities of the Authority, and even contract with the Authority as customers.

**Question:** Please provide an update on the progress and timeline for the \$250K consultant APTIM (resolution 18-0457). Are they preparing a Solid Waste Master Plan for release in July 2019? How does this fit with the current 19-0226 resolution? ? (Councilmember Bannister)

**Response:** The Solid Waste Resources Management Plan is anticipated for completion in July, 2019. The decision by the City of whether or not to join the Authority will be a factor in the direction and recommendations of the SWRMP, rather than the plan recommending whether or not the City should become a member of the Authority.

**Question:** How does WRRMA fit with the 18-2058 Resolution passed by Council? Isn't 19-0226 in direct conflict/contradictory to 18-2058? ? (Councilmember Bannister)

**Response:** Legistar file item 18-2058 was a "*Resolution to Delay RFP Postings for Solid Waste Services Until Completion of APTIM Report*" passed by the Environmental Commission on December 6, 2018. Through this resolution the Environmental Commission requested that "the City Council of Ann Arbor to direct the City Administrator to consider postponing bundling all Solid Waste management activities into one single contract or other major changes in services or operations, until the Solid Waste Resource Management Plan has been completed and is actionable..." Approval of this resolution CA-8 (Legistar file item 19-0226) does not involve bundling any City solid waste activities into a single contract, which as noted in other responses would require City Council approval to enter into this, or any, contract with the Authority if such a contract were to be

offered. Therefore, approval of this resolution and joining the Authority does not conflict with the Environmental Commission Resolution contained in Legistar file Item 18-2058.



# WASHTENAW COUNTY REGIONAL AUTHORITY STUDY

MARCH 26, 2018

PREPARED BY:

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RRS  | [recycle.com](http://recycle.com)

COMMISSIONED BY:

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# EXECUTIVE SUMMARY

## PROJECT OVERVIEW

Washtenaw County Division of Public Works (referred to in this document as “the County” or “Washtenaw County”) contracted with Resource Recycling Systems (RRS), to explore regional cooperation options available among the governmental units within Washtenaw County, service providers, business stakeholders, and the local environmental groups with the purpose to offer a more comprehensive system of waste diversion and menu of services to the residents within a regional authority governance model. The goal of this study is to develop a set of recommendations for a sustainable regional system for management of solid waste and recycling and identify a role for stakeholders to participate in the creation of an intergovernmental partnership for implementation. The main objectives in the development of recommendations include:

- Interactive stakeholder meetings to discuss current concerns, common goals, and perceived barriers;
- Understanding of pros/cons of various public/private partnership systems-based models; and
- Develop recommendations for long term regional recycling solutions for Washtenaw County.

## STAKEHOLDER ENGAGEMENT

Two rounds of stakeholder engagement were conducted to gain a greater understanding of concerns and issues with waste and recycling collection; provide a forum for discussion of residential and business services areas; identify interest in potential partnerships in regional collaborations; and identify next steps. Stakeholders included local units of government, service providers, and local environmental groups. Overall, as a result of the meetings, the stakeholders in Washtenaw County are interested in collaboration to increase services and programs to residents, streamline or make components of waste and recycling management more efficient through contracting or regional facilities.

Many stakeholders also expressed an interest and willingness to participate in County-lead facilitation and coordination to help establish the vision of the stakeholders, including the options for owning and operating certain recycling facilities, either public or private. Local government stakeholders envisioned a collaborative ownership system, similar in nature to that of the Western Washtenaw Recycling Authority (WWRA). In that discussion, the stakeholders desired a strong partnership with WWRA, to avoid service overlaps and create collaboration and synergies in service delivery.

As a response to those expressed needs, this report includes steps to form an inter-governmental agency such as an Authority for public ownership that could allow for public or private operation; however similar steps could be followed to create a joint municipal agency requesting proposals for establishment of a privately owned and operated facility too. These choices will rest with the stakeholder communities in the spring to fall decision-making timeframe identified in the report. The core issue with either is long-term (10 to 20 year) contracts between each municipality and the facility owner (Authority or otherwise) for exclusive delivery of materials. These contracts allow for affordability by spreading capital costs over the life of the contract.



## RECOMMENDATION: THREE TIERS OF SERVICE

The input from the stakeholders' meetings yielded several distinctly different viewpoints expressed about the type of support services desired. The broad unanimous support was for a universal single list of recyclables collected County-wide to enable consistent public education and to reduce citizen confusion on the types of recyclables that are accepted for recycling. Beyond the universal recycling materials list, various stakeholders identified different local needs that can be summarized into three tiers of service:

- County-wide education and contract assistance;
- Convenience Drop-off Center expansion; and
- Permanent Material Recovery Facility operations.

During conversation, stakeholders expressed an understanding that these three levels of service interact with each other to provide a system of services, making it difficult to select a single preferred option. Again, the stakeholders desired collaboration amongst themselves, the local service providers, and with Western Washtenaw Recycling Authority. The contract assistance offers the ability to ensure the most favorable contract terms for a municipality or even exercising group purchasing power (typical to many other communities around the state) along with deploying best practices in collection. There is also the opportunity to reduce hauling costs by directing recyclable materials to a locally operated MRF, given that distance is a primary driver in all hauling and the larger MRF serving the region for roughly 23 years is not currently functioning. The recyclable material collected at the convenience centers can also be directed to and processed at the locally operated MRF. And finally, the MRF can be operated as the central pivot point for all the diversion system services of the County. The synergies of each of the tiered services supporting each other may create cost efficiencies within the created Authority or some other public private contractual arrangement.

The following are recommendations from the RRS project team, after analyzing the existing conditions and interviewing local stakeholders. These recommendations are based on the premise of building an Authority to address the unmet diversion needs of the Washtenaw County residents. The County and its partners may opt to pursue variations of these recommendations. A brief overview of the recommendations by the proposed tiers of service is provided here with a detailed description for each tier of service and an action implementation plan contained in the full report.

### **TIER ONE RECOMMENDATIONS – COUNTY COORDINATED TECHNICAL ASSISTANCE AND EDUCATION/OUTREACH**

- Develop a universally acceptable recycling list for the entire County
- Provide County coordinated technical assistance to LUGs to foster cost savings through no cost and support the goals of the County Solid Waste Management Plan including increased recycling and other beneficial reduction and reuse behaviors.
- Develop a comprehensive County-wide education and outreach program

### **TIER TWO RECOMMENDATIONS – EXPANSION OF DROP-OFF CENTERS**

- The development and operation of a comprehensive waste and recycling diversion system utilizing three levels of drop-off services including:
  - Two Comprehensive Drop-off Recycling facilities, one replacement, and one new, offering daily service;
  - Two (new) Limited-Service facilities (daily recycling, weekend or other added service)
  - A series of eighteen (18) Recycling Only Drop-off facilities, currently there are 15.

## TIER THREE RECOMMENDATIONS – PERMANENT MATERIAL RECOVERY FACILITY (MRF)

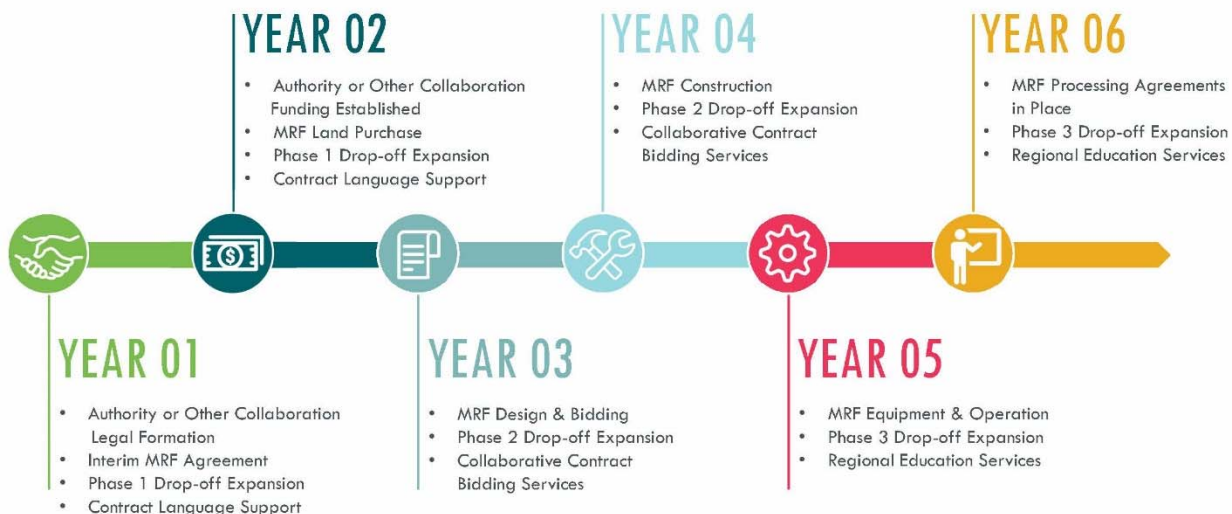
- Construction and operation of a MRF through a County regional authority, utilizing the quantity of recyclable material that would be recovered from community contractual agreements based on the estimated tonnage of 60,000 to 100,000 tons annually for processing.
- Recommend the formation of the Eastern Washtenaw Solid Waste Authority (EWSWA) in the creation of the new authority. (Recommended offering membership to these townships: Lodi, Saline, York, Pittsfield, Ann Arbor, Northfield, Salem, Superior, Ypsilanti, Augusta and Scio Township, and the following cities: Ann Arbor, Ypsilanti, Saline, Barton Hills, and Milan).

## Financials

The cost to operate the three tiers of service recommended in this report is based on typical examples but needs refinement based on the opt-in process that will take place from spring through early fall. Simply put, if more communities ultimately opt-in, capital costs can be spread more widely. This process envisions tentative, non-binding interest expressed by communities formally appointing a representative to a community workgroup (facilitated by the County), and ultimately by a formal commitment in the form of a Resolution to participate in the governance structure, project(s), and refined costs identified by the workgroup. Estimates are offered in this report, yet professional contractors will need to place bids and the purchase price of land is not estimated in this report. The report offers estimates for development of and annual expenses for a county-wide education program, convenience drop-off center developments, and MRF development. The report also offers next steps to develop fee structures and funding the authority or other appropriate governance structure.

## Phased Approach Timeline

The report provides for an estimated timeline for the implementation of the recommendations over a six-year period.



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# INTRODUCTION

## PROJECT OVERVIEW

Washtenaw County Division of Public Works (referred to in this document as “the County” or “Washtenaw County”) contracted with Resource Recycling Systems (RRS), to explore regional cooperation options available among the governmental units within Washtenaw County, service providers, business stakeholders, and the local environmental groups with the purpose to offer a more comprehensive system of waste diversion menu of services to the residents within a regional authority governance model. The goal of this study is to develop a set of recommendations for a sustainable regional system for management of solid waste and recycling and identify a role for stakeholders to participate in the creation of an intergovernmental partnership for implementation.

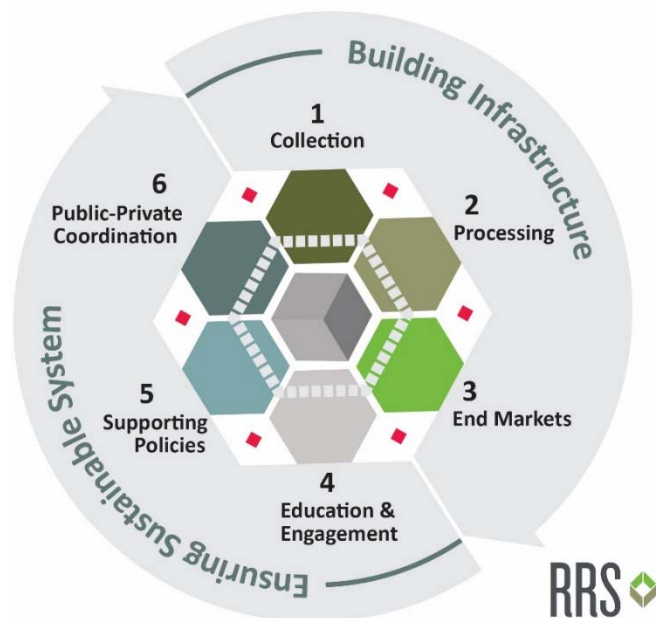
There are two current events that led to the conversation around regionalization: the amended County Solid Waste Management Plan and the status of the City of Ann Arbor Material Recycling Facility. The County recently amended its state-mandated Solid Waste Management Plan and set goals towards increased diversion, achieving zero waste, and increasing collaboration regarding solid waste and recycling services. Recent changes in the City of Ann Arbor solid waste and recycling operations, specifically the operation of their Material Recycling Facility, have raised questions and possible opportunities for regional cooperation toward a single recycling collection system, or coordination of services to gain operational efficiencies.

Both major developments provided the foundation to explore the advantages of a more regional, cooperative approach to increase diversion County-wide and improve services. Those advantages include:

- Service standardization;
- Increased County-wide recycling participation;
- Possible County-wide cost-sharing;
- Coordinated County-wide public education system; and
- Systems-based regional material recovery facility (MRF) operation.

The advantages of a regional approach are in alignment with the key components of effective municipal recycling programs (see Figure 1). The first three components support a strong system by building adequate infrastructure such as collection, processing, and end markets. The last three components are necessary to ensure the sustainability of the system through education and engagement, supporting policies, and public-private coordination. To be successful, communities must embrace at least four out of six of these components as they are all interdependent.

**Figure 1: Key Components of Effective Municipal Recycling Programs**



The goal of this study is to develop a set of recommendations for a sustainable regional system for management of solid waste and recycling. The main objectives in the development of recommendations include:

- Interactive stakeholder meetings to discuss current concerns, common goals, and perceived barriers;
- Understanding of pros/cons of various public/private partnership systems-based models; and
- Develop recommendations for long term regional recycling solutions for Washtenaw County.

## ENGAGING STAKEHOLDERS: CREATING A COMMON VISION


Washtenaw County is a diverse county comprised of six cities, two incorporated villages, and 20 townships, which are home to 354,000 citizens in urban, suburban, and rural settings. The two largest cities are also home to two major universities – the University of Michigan in Ann Arbor and Eastern Michigan University in Ypsilanti. Other waste generators within the County are businesses, who employ 250,000 people (source: County SWMP, Labor Bureau). Therefore, it is imperative to assemble and engage as many stakeholders as possible from local government, institutions, the commercial sector, waste and recycling service providers, and non-profit organizations to gather input and guidance towards a regional approach.

Meetings with stakeholders started with the local units of government, held on August 2, 2017. At the initial meeting, representatives from several of the cities, villages, and townships discussed the opportunity for regionalization. The desired meeting outcomes were to gain a greater understanding of concerns and issues with waste and recycling collection; provide a forum for discussion of residential and business services areas; identify interest in potential partnerships in regional collaborations; and identify next steps. More than 30 people attended, representing 22 communities. The discussion yielded a consensus toward a regional authority model to operate or manage a recycling and solid waste collection and processing system.

The second series of stakeholder meetings expanded its reach to include the private sector and non-profit service providers and environmental groups to discuss regional options. These stakeholder meetings were designed to gather input on an individual community or stakeholder basis regarding regional cooperation options including their local feasibility, public acceptance or resistance, and potential for County-wide adoption.

The input from the second set of stakeholder meetings revealed the following three distinctive points of view for consideration.

1. Communities that are more directly engaged in their waste and recycling services indicated a strong desire for a new recycling facility to be built. These communities identified gaps in the system, especially around near-by recycling capacity, and how better options will help maintain operations.
2. Education and outreach about recycling and waste reduction is needed within Washtenaw County and the County DPW is the natural choice to take the lead to support such efforts. Related, there was also a strong desire for a consistent list of recyclables for all communities to make recycling outreach more streamlined and easy for residents who may live in one part of the County and work in another.
3. Local governments that coordinate services for their residents are pleased with their level of services and the capabilities it provides residents for recycling and disposal. These stakeholders desired that either contracting on a County-wide basis or support to develop individual community contracts should be encouraged and coordinated by Washtenaw County.



In addition, Local government stakeholders envisioned a collaborative ownership system, similar in nature to that of the WWRA. In that discussion, the stakeholders desired a strong partnership with WWRA, to avoid service overlaps and create collaboration and synergies in service delivery.

Overall, as a result of the meetings, the stakeholders in Washtenaw County are interested in collaboration to increase services and programs to residents, streamline or make components of waste and recycling management more efficient through contracting or regional facilities, and are agreeable to County-lead facilitation and coordination.

## PUBLIC/PRIVATE PARTNERSHIP SYSTEM MODELS

As noted above, a facilitated discussion on August 2, 2017 involving more than 30 invited local officials' yielded consensus toward a regional authority model to operate or manage a recycling and solid waste collection and processing system. Within that discussion, there was an exploration of the role of private sector service providers. The group desired to respect the existing role of private sector service providers, yet explore the development of a regional authority that can organize the various governmental units into a unified service system. The group agreed that a follow-up task is to study and report what type of operating authority model is legally available for consideration and recommend to the County for consideration.

Public/Private Partnership system models are common in the delivery of solid waste services. The development of a regional authority does not preclude nor eliminate the opportunity to utilize private/public partnerships. There are a variety of services that can be considered within certain partnership models, each with a separate decision tree regarding governmental control and private sector service offerings. Appendix E offers a summary of possible public/private partnerships within a solid waste service system.

It is the primary recommendation of the stakeholders and governmental representatives that participated in the meeting to form a regional authority that can organize the various governmental units into a unified service system, yet respect the contractual ability of individual units of government to contract with private sector professional service providers. Some of the various services noted above can be performed through that Authority, and some of those services through service contracts. Authorities that coordinate or provide direct services are typically organized as an independent quasi-governmental organization with a Board appointed by the member municipal governments as stipulated in the organization bylaws and legal agreements. Decisions related to capital investment, fees and taxes, and contracted services will lie with the Board of Trustees of the organization.

# RECOMMENDATIONS

The following are recommendations from the RRS project team, after analyzing the existing conditions and interviewing local stakeholders. These recommendations are based on the premise of building an Authority to address the unmet diversion needs of the Washtenaw County residents.

## RECOMMENDATION: THREE TIERS OF SERVICE

The resulting analyses from the stakeholder discussions yielded several distinctly different viewpoints expressed about the type of support services desired. The broad unanimous support was for a universal single list of recyclables collected County-wide to enable consistent public education and to reduce citizen confusion on the types of recyclables that are accepted for recycling. Beyond the universal recycling materials list, various stakeholders identified different local needs that can be summarized into three tiers of service:

- County-wide education and contract assistance;
- Convenience Drop-off Center expansion; and
- Permanent MRF facility operations.

During conversation, stakeholders expressed an understanding that these three levels of service interact with each other to provide a system of services, making it difficult to select a single preferred option. The contract assistance offers the ability to ensure the most favorable contract terms for a municipality or even exercising group purchasing power (typical to many other communities around the state) along with deploying best practices in collection. There is also the opportunity to reduce hauling costs by directing recyclable materials to a locally operated MRF, given that distance is a primary driver in all hauling and the larger MRF serving the region for roughly 23 years is not currently functioning. The recyclable material collected at the convenience centers can also be directed to and processed at the locally operated MRF. And finally, the MRF can be operated as the central pivot point for all the diversion system services of the County. The synergies of each of the tiered services supporting each other may create cost efficiencies within the created Authority (or some other public private contractual arrangement).

## TIER ONE: COUNTY COORDINATED TECHNICAL ASSISTANCE AND EDUCATION/OUTREACH

The information gathered as a result of the stakeholder meetings related to this study revealed key areas of assistance that the local units of government (LUGs) would benefit from. The County has long championed its role with LUGs, residents, and businesses with technical assistance, and now has an opportunity to further enhance its efforts with a leading role in a County-wide education and outreach effort related to recycling, waste reduction, and reuse. These key areas of assistance identified include:

- County-wide acceptable recyclables list;
- Technical assistance with LUGs on contracts, programs and services; and
- County-wide education and outreach on waste reduction, reuse, and recycling for both residents and businesses.

## **COUNTY-WIDE ACCEPTABLE RECYCLABLES LIST**

From the stakeholder meetings, there was broad unanimous support for a universal single list of recyclables collected County-wide to enable consistent public education and to reduce citizen confusion on the types of recyclables that are accepted for recycling.

Best practices in the recycling industry state that programs should accept a common “suite” of materials for recycling. According to The Recycling Partnership’s 2016 State of Recycling Report, “harmonization of accepted program materials across communities and regions is essential to robust public participation without unnecessary and potentially damaging confusion.” The common materials to include are: paper (including cardboard), plastic bottles and jugs, metal cans, glass bottles and jars, and food and beverage cartons (drink boxes, milk cartons, etc.). Focusing on a common suite of materials simplifies the recycling message to residents and allows programs to focus on core common recyclables that consistently have regular outlets for processing. Identifying the common suite of materials for recycling will also support programs to maintain a certain level of service and not make rash program and collection decisions based on a short-term issue or challenge with markets.

Establishing this type of list could be accomplished in a couple of ways. The County could mandate a universal list of recyclables through an ordinance. However, what may be more effective, and more flexible to adapt to the variables that impact the state of recycling and end markets, is for the County to develop a universal recycling list in coordination with LUGs, service providers, Material Recycling Facilities, and other stakeholders and work with LUGs and others to include the list in service contracts related to recycling. Understanding where overlaps in acceptable materials exist, and where opportunities to expand or adjust lists would be part of the development process.

There may be challenges encountered in coming to agreement on a common suite of materials, which County facilitation should be prepared to support. For example, the different service providers in the County may deliver recyclables to different MRFs that each have a different list of acceptable items. Given that many communities do not coordinate or engage with their service providers, the County will be required to bring the right stakeholders to the discussion to ensure the best possible outcome. There are also potential challenges given the fluctuation in the recyclables end markets. As of this report, the state of recycling end markets in China are causing concern for many programs across the county. In the event of market changes, and as a general best practice, the list should be reviewed on an annual basis so that appropriate changes can be made. The County could also make changes more frequently if desired, or if the market dictates immediate changes in collection. The balance between markets and public education will need to be evaluated as part of this process – drastic changes cause confusion to the public and could impact the quality of the recyclable stream. Ultimately working together to create a universally acceptable recyclables list will streamline and reduce these issues, once the initial challenges are overcome.

Once the list is established and supported, it can then be distributed. Communities with their own collection services may include the acceptable recyclables list in the next update to its residents. Communities with contracts for services can include the universal list of recyclables in future contracts. The County can promote the list of recyclables through a County-wide education effort, described in greater detail later in this section. Distribution will require follow-up on the part of the County to ensure that the list is utilized and adhered to throughout all communities.

## **TECHNICAL ASSISTANCE FOR CONTRACTS, PROGRAMS, AND SERVICES**

Washtenaw County has a history of providing technical assistance to its local units of government. The County provides sample contract and policy language, conduct waste audit services and program implementation

recommendations to businesses/schools/institutions/LUGs, facilitate information-sharing and best practices on solid waste management programs and policies in various settings, offer annual 7-week master composter certification course, facilitate zero waste at public events, plus more. The County can capitalize on the momentum developed as part of this regional study process to renew its efforts to educate around the best practices for services, programs, and contracts for services. This technical assistance can foster cost savings through no cost to the local units of government and supports the goals of the County’s Solid Waste Management Plan.

During the stakeholder meetings the following observations were made. First, those communities with more engagement or coordination with their collection services were more invested in both good customer service and the desire to encourage waste reduction and recycling activities. Second, those communities with preferred haulers or their own contract for services were extremely satisfied with the level of services offered and the benefits gained by their residents.

Table 1 compares the three primary service types utilized today in Washtenaw County. There are advantages and disadvantages to each. Given the desire to support a regional recycling effort, increase recycling and diversion, and increase control over the types of services, including recycling and education/outreach, the contract service and public service models rise to the top as the best choices for communities within the County. Key words like “high degree of control over services” and “bundling of customers” can lead communities in Washtenaw County to better services, lower rates, and more consistency within the County. However, public service models involved a large amount of capital to set-up and require administrative and financial resources that would prove challenging to many of the communities in Washtenaw County. Therefore, it is recommended that the County continue to educate and encourage LUGs to seek community coordinated contracts for waste and recycling services to strike a balance of high degree of control over services and lower administrative and financial burdens

**Table 1: Advantages and Disadvantages of Service Arrangements**

Type	Advantages	Disadvantages
<b>Private Sector Model (Subscription Services)</b>	<ul style="list-style-type: none"> <li>• Tax dollars not used</li> <li>• Low municipal finances</li> <li>• Administrative resources redirected</li> <li>• Market driven efficiency</li> <li>• Resident selects their own level of service and service provider</li> <li>• Often preferred by smaller hauling companies</li> </ul>	<ul style="list-style-type: none"> <li>• Access for rural areas can be sparse</li> <li>• Multiple trucks per company per collection on community roads</li> <li>• May be higher fees for recycling services</li> <li>• Inconsistent services available to customers of different service providers</li> <li>• Lack of market competition can lead to less rate competition and higher fees</li> </ul>



<b>Contract Services Model (includes Preferred Hauler Approach)</b>	<ul style="list-style-type: none"> <li>• High degrees of control over services</li> <li>• Bundling of customers allows for lower costs and higher efficiencies</li> <li>• Specification of material management</li> <li>• Consistency of services</li> <li>• Potential for service provider to handle billing</li> <li>• Reduced truck traffic in community</li> </ul>	<ul style="list-style-type: none"> <li>• Residents may not have a choice in services</li> <li>• Buyer of services must secure funds to pay cost of contract</li> <li>• Demands financial and administrative resources</li> <li>• Haulers may oppose a transition from open-market to contracted services</li> </ul>
<b>Public Service Model</b>	<ul style="list-style-type: none"> <li>• High degree of control</li> <li>• Any desired service can be arranged</li> <li>• Service to every household can be provided</li> <li>• Workers can also lend a hand to other public works operations when needed</li> </ul>	<ul style="list-style-type: none"> <li>• Requires large capital investment for equipment, and ongoing costs for labor, safety measures, equipment maintenance</li> <li>• Demands financial and administrative resources</li> <li>• Customers have no choice</li> <li>• Services may be inefficient or poorly designed</li> <li>• Budgets can become inflated</li> <li>• Reduces/eliminates competition</li> </ul>

### COUNTY-WIDE EDUCATION AND OUTREACH

A common theme among the stakeholders was the need or gap in education and outreach in Washtenaw County. Stakeholders were quite vocal about the lack of consistency when it comes to funding and resources available to implement successful education and outreach campaigns, and that everyone in the County could benefit from more outreach highlighting available services and the positive impacts that reduction, reuse, and recycling can have on the community and its residents. Therefore, it is recommended that the County establish a County-wide education and outreach initiative for residents, communities, and businesses. To administer these services, the County should seek to develop a full-time position within the Solid Waste Program area with the necessary skill sets and knowledge base for successful development and implementation of education and outreach.

The County serves the public widely through its existing outreach and educational resources to promote reduction, reuse and recycling across several population sectors. The “Turning Trash Into Treasure – ‘3-Ts’ – Guide,” a comprehensive list of local reuse and recycling opportunities for a broad range of otherwise unrecyclable materials, is utilized by residents, businesses and institutions. The County disperses educational information to the public via the Green Room television program and Issues of the Environment local radio show, plus utilizes a robust social media network. The Waste Knot Program is a voluntary business networking program aimed to reward and recognize, plus provide technical assistance to, the business community; Waste Knot currently consists of over 400 County-based members. The County’s suite of education and outreach resources also include topics on household hazardous waste, pharmaceutical waste, zero waste events, county solid waste planning, and more.

To enhance its current efforts, the County should embark on the development of consistently themed materials and information that can be distributed and utilized no matter where residents live within the County, and the materials

designed to increase the desired behaviors of waste reduction, reuse, and recycling. By creating a universally accepted recyclables list, the County will have taken the first step towards this initiative. The County should pursue the addition of a full-time employee that operates out of the solid waste program area to coordinate, manage and implement education and outreach. This will enable the County to have an in-house subject matter expert and not require the education and outreach duties be covered by existing staff, who already provide a wealth of services to County residents and businesses. The County could also consider hiring a contractor to serve in this role, as an alternative.

There are four key steps in the development of communications for education and outreach. Often many communities jump into tactics like updating their website or creating an informational flyer. However, for a communications effort to be successful, the County must research, plan, implement, and evaluate. Research enables the County to define the target audience, goals, and success metrics of the outreach. This is where a survey of residents within the County may be conducted to understand the base level of knowledge about best practices for waste and recycling. Once the research is complete, the planning phase begins to determine how to deliver the message on multiple platforms. There are many ways to reach residents, and part of the research conducted will help to identify the best ways to do so. As the tactics are identified and developed, the plan is implemented. When looking at the four steps in the process, the implementation phase is often the shortest in length, and the majority of the time is spent on the other three steps. Finally, in order to know if the campaign and messages are successful, the efforts must be measured and evaluated.



The description of the communications process is not a small undertaking and there is a cost involved. On average, programs across the country spend about \$1.50 per household per year on education and outreach for recycling and waste programs, not including development of the programs. Development of programs are always initially higher for the research, planning and creative development of the materials. For the purposes of this study, the County should anticipate spending a minimum of \$100,000 for start-up costs, and an annual investment of \$25,000 - \$50,000 depending on the goals and tactics. The investment to developing a County-wide education and outreach initiative using this process will position the County for success and the desired results can be achieved. Focusing on tactics only without understanding the best ways to reach the target audience, and the messaging that will drive the target audience to action, will have the opposite effect and be limited in its success. To ensure results and make this investment successful, hiring or contracting for skills and knowledge in this area is necessary. Estimated costs for education and outreach are outlined in the section on Financials.

### TIER ONE RECOMMENDATIONS

- 1-A Develop a universally acceptable recycling list for the entire County
- 1-B Provide technical assistance to LUGs to support the desired goals of the County including increased recycling and other beneficial reduction and reuse behaviors.
- 1-C Develop a comprehensive County-wide education and outreach program

## TIER ONE ACTION PLAN

- Develop a universal accepted recycling list for the entire County
  - Compile acceptable recycling list from all LUGs and service providers within the County to identify similarities and gaps.
  - Assemble stakeholders to initiate discussions about a universally acceptable recycling list. Stakeholders at a minimum should include the recycling facilities that process recyclables generated in Washtenaw County, service providers that collect recyclables, and community representatives.
  - Develop list of materials that stakeholders agree with, balancing market forces with recycling behavior and outreach.
  - Design recyclables list for production. There are free resources available through organizations like The Recycling Partnership that can help to reduce design costs. Any new material should have consistent branding and messaging, which will be addressed under the Comprehensive County-wide Education and Outreach Program bullet point.
  - Develop distribution plan for acceptable recycling list including opportunities with existing communications provided by LUGs, the County, and relevant associations.
  - Investigate digital distribution outlets such as online search engines that the County and LUGs could host on their own websites (or link to).
  - Establish annual review cycle and process to evaluate the current list, make changes, and update distribution.
- Provide technical assistance to LUGs to support the desired goals of the County including increased recycling and other beneficial reduction and reuse behaviors.
  - Schedule meetings with LUGs for discussion.
  - Enlist champions of contracted services that have experienced success and can share with their peers in other communities.
  - Build resource library of sample contracts for use by interested LUGs.
  - Offer workshops, webinars, or meetings for LUGs for regular informational exchange and interactions on best practices in waste and recycling. For example, the Recycle 101 session the County coordinated in 2017 for LUGs about the process of recycling.
  - Explore County assistance (financial or other) for LUGs to make changes to services.
- Develop a comprehensive County-wide education and outreach program.
  - Investigate contracting for assistance in the strategic planning and execution for education and outreach campaign.
  - Create and hire new full-time equivalent (FTE) position for a recycling communications coordinator or similar title.
  - Initiate strategic planning for education and outreach including an analysis of strengths, weaknesses, opportunities, and threats.
  - Gather data about recycling and related behaviors within the County. Data collection could include a curbside assessment of participation rates and potential contamination, surveying recycling/solid waste drivers to discover target areas of low participation or potential contamination, and gathering data from recycling facilities on amount and types of contamination in the recycling stream.
  - Using the data from the research performed, set goals for the education and outreach campaign, and consider metrics that the County can quantify. For example, increase recycling by a certain percent or increase website traffic by a certain percent.

- Create County-wide branding (the look and feel) for any coordinated messaging and materials that will be developed and distributed in part by Washtenaw County.
- Identify tactics and materials to assist in achieving the goals. For example, if the goal is to increase website traffic, then some of the tactics may be to increase digital and print advertising to direct more people to the website.
- Develop an outreach calendar that identifies what tactics will be deployed and when, as well as when measurement of those tactics is tracked and evaluated. An annual calendar should be developed.
- Establish a County-wide group or utilize Washtenaw County Consortium on Solid Waste Management to be ambassadors of County-wide communications. Ideal participants are people responsible for the development and distribution of information to residents and businesses within the County from local units of government, as well as non-profit, public, and private service providers.
- Conduct regular evaluations as the plan is implemented and conduct an annual review to inform the next year's approach. For example, annual reporting of tons of recycling and tons of waste can help to determine if the recycling rate increased, decreased, or remained the same. Surveys of residents with questions about behavior will illustrate if tactics led to a change in habits or participation.

## TIER TWO: CONVENIENCE RECYCLING DROP-OFF CENTERS AND HOME TOXICS DROP-OFF COLLECTION EXPANSION

Drop-off recycling is a widely-adopted recycling program where designated sites are established to collect a range of recyclables. Drop-off recycling centers are less costly per residential use to operate compared to curbside programs. Residents are not charged a gate fee but the costs are covered through other funding mechanisms. The basic concept for a waste diversion program that compliments curbside recycling programs and provides service where no curbside programs are available is the development of a network of Convenience Drop-off Centers. A comprehensive center can also provide a waste disposal option for hard-to-recycle items (e.g., mattresses, furniture, appliances), organics, and bulky waste items.

A Comprehensive Drop-off Center would be a full-service facility that accepts recyclables, solid waste and yard wastes, and bulky wastes that would be open to the public and small businesses. Typical household recyclables could be dropped off for no fee, while fees would be charged for certain special materials (such as consumer electronics), bulky waste, and yard waste. A Recycling Drop-off Center, which is for the use of residents and small businesses, would only accept recyclable materials – solid waste and yard waste would be prohibited. The Recycling Drop-off Center would be a facility that is available on a 24-hour/seven day per week basis. The following are key criteria for developing potential facilities.

**Table 2: Site Characteristics for Convenience Centers**

	Full Service Center	Recycling Only
Potential Population Served	40,000-100,000 HH	<2,500 to 5,000 HH
Distance to Facility (Travel Time One Way)	40 minutes	20 minutes
Site Area	4-5 acres	Min .25 acre
Expected Vehicles/Day	40-200	20

## **TIER TWO RECOMMENDATIONS**

2-A We endorse the recommendations listed in the RRS report entitled *Waste Diversion Site Feasibility Study: An Assessment of Recovery Facilities to Manage Recyclables* (October 30, 2017)

## **TIER TWO ACTION PLAN**

The development and operation of a comprehensive waste and recycling diversion system utilizing three scales of drop-off services including two Comprehensive Drop-off Recycling facilities, two Limited-Service facilities, and a series of eighteen (18) Recycling Only Drop-off facilities.

- The implementation of a comprehensive system should occur in phases. The development of the system in phases allows for funding to be implemented in stages and further evaluation to be conducted at each phase.
- The first phase would be the development of the two comprehensive systems. These facilities provide a set of services where residents can bring any type of material for recovery or disposal. Given that the current Drop-Off Center operated by Recycle Ann Arbor (RAA) on City of Ann Arbor property is facing non-repairable structural deficits and there is a lack of comprehensive services on the west side of the County, the development of these facilities will address a critical need and service for County residents. In addition, several new recycling drop-off locations should be developed that complete the convenient availability of a County-wide recycling drop-off system utilizing the existing sites and locations. As part of this development of the recycling drop-off infrastructure the County will need to determine how funding will occur given that there are existing facilities that are currently funded under existing agreements.
- The second phase would be the development of one of the Limited Service Drop-off Center facilities. A facility on the east side of the County in Ypsilanti Township would provide more convenient services for those residents and will alleviate potential overuse of the comprehensive facility at the Wheeler Service Center. The development of this facility should not occur until the new comprehensive facility is operating on a schedule that meets the needs of the communities and data is available for review on the operating performance, including costs and use, of the selected contractor.
- The final phase would be the development of the second Limited Service Drop-off Center between Ann Arbor and Chelsea. Although a site has been identified in the initial analysis of site locations, the availability and final site use by the County is still in its initial phase of discussion. Evaluating how the two comprehensive sites are meeting Washtenaw County resident needs will help to determine the final need and location for a second limited service facility.

## **SITING AND DESIGN CONSIDERATIONS**

As local residents are concerned about nuisances and traffic in their neighborhoods, certain controls should be considered in the siting and construction of drop-off facilities. In addition, traffic flows should be considered through the selection of upgraded highway access and deceleration lanes. Below are a few siting and design standards for consideration, in addition to local siting requirements and zoning ordinances.

- Low impact on surrounding areas from noise and odor.
- Easy access to major highway and adequate existing roads and bridges to carry the increased truck traffic.
- All-weather paved access roads.
- Compatibility with existing development or zoning plans.
- Not located in a 100-year floodplain.
- Buffer Standards for operational facility:
  - 100 feet from all property lines;

- 500 feet from all residences;
- 500 feet from all wells determined to be downgradient and used as a source of drinking water by humans or livestock; and
- 200 feet from the normal boundaries of springs, streams, lakes.
- Capable of providing total site buffer (berms) with no constructed appurtenances within 50 feet of the property line.

***Siting and Design Considerations Interim Action Plan***

Given the extended time for access to funding, the site selection and acquisition, and construction of drop-off facilities, an interim action plan should be considered to provide upgraded facilities for public access to recycling and household toxin drop-off service.

***Siting and Design Considerations Recommendation***

Repair and upgrade existing drop-off sites with proper equipment and physical access to the public, prior to engaging in the phased development of new services.

## **TIER THREE: PERMANENT MATERIAL RECOVERY FACILITY (MRF)**

A regional recycling approach attempts to overcome many common barriers otherwise faced by individual communities to achieve increased waste diversion. The benefits of a regional approach include:

- Increased volumes of recyclables, which opens marketing opportunities;
- Potential for cooperative marketing, which can substantially increase revenues;
- Conserved landfill capacity and avoided tipping fees;
- Decreased transportation costs for haulers;
- Regional economic stimulus from new collection and processing jobs; and
- Shared costs for equipment, personnel, processing, transportation, marketing, and facility capital and operating costs.

**TIER THREE RECOMMENDATION**

3-A Construction and operation of a MRF through a County regional authority, utilizing the quantity of recyclable material that would be recovered from community contractual agreements based on the estimated tonnage of 60,000 to 100,000 tons annually for processing.

3-B RRS recommends that the minimum volume needed for an efficiently operated one-shift MRF is 60,000 tons annually, or 30 tons per hour (TPH) throughput, 8 hour shift, with 250 operational days per year. With 2 shifts, and planned down time for repairs and maintenance, the optimum maximum volume for this facility would be 100,000 tons.

This planned facility will receive 60,000 tons from Washtenaw County if residential and light commercial recyclables are flowed to the facility with an assumed growth to a recycling rate to 35%. This volume justifies the base operational volume of the proposed facility. Additional volumes may be obtained by contract through surrounding counties.

**TIER THREE ACTION PLAN**

- Creation of a County regional authority, or some other type of public/private contractual arrangement, governed for managing a solid waste, recycling, and composting diversion system.
- Construction and operation of a regional MRF.

- Transfer of contracting authority from participating municipalities to the Eastern Washtenaw Solid Waste Authority (Authority) to manage the contracts for processing and material sales with the regional MRF.
- Establishment of intergovernmental management structure with all municipalities within the County with the Authority participation and managing recycling collection contracts, the transfer of the recyclable material to the regional MRF, and cost sharing agreements with participating communities.
- Processing of recycled materials to the highest value.
- Coordination of municipal operated curbside collected recyclables would be managed under agreements for recyclables processing.

## **SITING, DESIGN, AND CONSTRUCTION CONSIDERATIONS**

The current location of the City of Ann Arbor MRF may not a suitable location for expansion or modification to serve as the regional MRF. Recent walk-through evaluations have indicated that the current facility is restricted in size and possibly cannot be expanded to include more volume, and the current equipment is not considered safe to operate in its current condition. Further design and engineering analysis need to be conducted to determine the type, scale, and feasibility of any modifications possible at this location. Given the constraints observed on the current MRF site, it is RRS's recommendation to search for a new location for a MRF with the capacity to operate with the recycling diversion volumes from the eastern half of the County, with the Western Washtenaw Recycling Authority (WWRA) continuing operations for the western half of the County. However, this location is recommended for an interim location for modified MRF operations, such as transloading loose and/or baled recyclables as is being performed there currently, until a separate permanent MRF is constructed (see Interim Action Plan noted below). In addition, this facility, through modifications, may also have a secondary life as a transfer facility for recyclables and possibly as a reuse center.

As local residents are concerned about nuisances and traffic in their neighborhoods, certain controls should be considered in the siting and construction of a MRF facility. In addition, traffic flows should be considered through the selection of upgraded highway access and deceleration lanes. Below are a few siting and design standards for consideration, in addition to local siting requirements and zoning ordinances.

- Low impact on surrounding areas from noise and odor.
- Easy access to major highway and adequate existing roads and bridges to carry the increased truck traffic.
- All-weather paved access roads.
- Truck Scale, capable to handle 52-foot tractor trailer trucks and modern electronic weight systems
- Compatibility with existing development or zoning plans.
- Not be located in a 100-year floodplain.
- Buffer Standards for operational facility:
  - 100 feet from all property lines;
  - 500 feet from all residences;
  - 500 feet from all wells determined to be downgradient and used as a source of drinking water by humans or livestock; and
  - 200 feet from the normal boundaries of springs, streams, lakes;
- Capable of providing total site buffer (berms) with no constructed appurtenances within 50 feet of the property line.

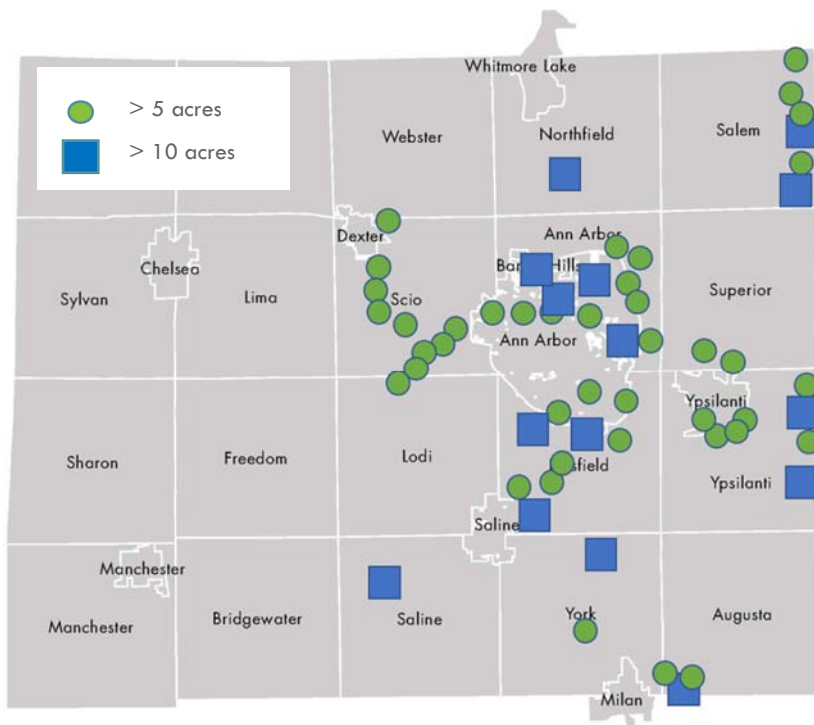
### ***Siting, Design, and Construction Considerations Recommendation***

RRS recommends that a preliminary conceptual design of a new MRF should be developed that includes an estimated throughput, building foot print, space requirements for ingress and egress, site uses, and other engineering and site requirements. These preliminary design parameters would be utilized in the site selection process.

A siting committee is recommended to be formed to seek a suitable location for a regional MRF. Site parameters to seek include light industrial zoning if possible, although a modified trucking terminal with a zoning variance could be considered. New construction is desirable to seek the specifications needed for placement of the MRF equipment, however, modifying an existing building can save capital funds. Location on a major highway with direct access is an advantage, as the site will be serviced through 52-foot trucks. If the MRF will double as a public drop-off facility, then a deceleration lane is desirable with a frontage area for public access. The MRF location is ideally suited between Ann Arbor and Ypsilanti due to the balance of population and the access to transportation routes, yet the selection of a site is balanced with property availability, costs per acre, zoning, and other factors. In addition, building fresh from a clean site or retrofitting an existing building is also a decision to be made based on a search of available properties and cost options. The siting committee can best sort out the community values and factors involved in locating the site of the MRF.

The following county map (Figure 2) delineates the available industrial tracts that might be suitable to construct a Regional MRF. The proposed siting committee would consider regional transportation routes, location to the proposed service area, cost to purchase land, as well as other factors.

**Figure 2. Available Parcels for Facility**



**MRF CONSTRUCTION AND OPERATION**

The construction and operation of a MRF requires professionally trained staff in a facility that is designed to meet the community diversion needs as well as the next two decades of increased population growth. In addition, the capacity of the MRF can be designed to operate in one shift for current needs and expanded to two shifts to adjust for additional incoming volumes. The second shift can also accommodate additional volumes of recyclables



from contracted areas outside the authority region. This flexibility is necessary to avoid reconstruction expenses in the future.

A basic approach to designing the MRF for Washtenaw County begins with an estimate of residential recyclables that can be diverted to the two regional MRFs. For purposes of this report, we are recommending the expansion of the existing WWRA MRF from 8,000 to 15,000 tons annually, and the construction of the EWSWA MRF to operate initially at 60,000 tons annually, for a total of 75,000 tons annual capacity. As the diversion total increases, the MRF can operate through a second shift. RRS recommends constructing a MRF to the specs of 35 TPH, but operating the facility at 30 TPH to obtain higher quality output. Table 3 depicts the basic specifications for a typical 35 TPH modern MRF:

**Table 3: Basic Specifications for One MRF Facility**

Tons per Hour (TPH)	35
Throughput Tons per Year (TPY) (1 Shift/day)	68,250
Marketable Tons per Year (TPY) (1 Shift/day)	61,250
Throughput Tons per Year (TPY) (2 Shifts/day)	136,500
Marketable Tons per Year (TPY) (2 Shifts/day)	122,500
Sq. ft. tipping floor	6,000
Sq. ft. building	60-75,000
Acreage	10-15

As the Authority is formed and considers the operation of the MRF, there are typically two options for operations: Authority employee staff, or contracted staffing. Both options are deployed throughout the nation; therefore, there are working models to emulate.

***MRF Construction and Operation Recommendation***

We recommend contracting with a professional MRF operator through a long-term contractual agreement, whereby the Authority owns the property and equipment, and sets the operational requirements through a contract with the private operator. Typically, the operator agreement is for a minimum of 10 years with a renewal clause to establish stability in pricing and relationship.

***MRF Construction and Operation Interim Action Plan***

Given the extended time period for access to funding, the site selection and acquisition, and construction of the MRF facility, an interim action plan is required to provide continued and uninterrupted recycling processing service. As there is a severe deficit of processing capacity in the region, the current City of Ann Arbor facility, operated through a contract with RAA, there is an opportunity to provide continuation of current services, potentially expanded to serve part or all of the Authority members, until full operation of the new MRF. As noted above, the current condition of the City of Ann Arbor MRF is inoperable, thus the current contractor is utilizing the facility through a modified approach of transloading loose-loaded residential single-stream recyclables for long-haul transport to a Rumpke MRF in Cincinnati, Ohio and loose-loading and/or baling commercial single-stream recyclables to Royal Oak Recycling in Romulus, Michigan.

***Current Contract and Facility Recommendation***

Renegotiate the current processing contract with the existing contractor for a long term (3-5 years) operation of the City of Ann Arbor Facility, with the condition of disposing of the existing MRF equipment. This approach serves multiple purposes. First, with the removal of the unusable MRF equipment, the City reduces its on-site safety liability concerns. Second, the contractor sale of the equipment allows for salvage of usable conveyors where possible (beneficial to the contractor), and resale value on sold equipment (beneficial to the City). In addition, the operator could make investments to make the current transfer of materials more efficient and possibly separate certain materials for direct shipment to market (e.g. OCC, plastics, glass) thus creating a higher revenue stream to offset

costs. The longer term of the contract provides stability of the processing capacity for the area until the regional MRF is operational. The City might need to research the legal capacity to extend and renegotiate its current contract, or it may need to rebid the contract under the new conditions.

**PROGRAM IMPLEMENTATION TIMELINE**

The following is a recommended timeline for implementation of activities for construction of the proposed MRF.

<b>Years 1-2</b>	Establish funding mechanism for construction and operation of MRF	Establish siting committee, select site, select general contractor	Negotiate & deploy interim MRF processing agreement
<b>Years 3-5</b>	Construct MRF facility	Contract for operations	Develop education and outreach plan

***Conceptual Design and Expense Study Recommendation***

The RRS Project Team recommends a MRF conceptual design and expense projection study that specifically examines the services desired that are realistic to implement. The decision factors to calculate program expenses were not examined in the scope of this project yet are important in determining the proper revenue flow to fund the Authority.

***Fee Structure Recommendation***

The RRS Project Team recommends the development of a funding action plan study that specifically examines the fee structures that are realistic to enact. The decision factors to determine the Authority funding sources were not examined in the scope of this project yet are important in determining the proper revenue flow to fund the Authority. An examination of the available options noted above through an action team analysis is recommended.

**REGIONAL AUTHORITY**

A Solid Waste Regional Authority is a functioning governmental body established to plan and operate solid waste management projects. The advantages of a Regional Authority include interlocal cooperation, universal collection standards throughout the region, economies of scale, and a combination of environmental responsibility and fiscal soundness.

**AUTHORITY PURPOSE**

Solid Waste Regional Authorities are public agencies, created by the Michigan Legislature in 1947 under Act Number 179 of the Michigan Public Acts (as amended by Act Number 92 of the Michigan Public Acts of 1955 and by Act Number 598 of the Michigan Public Acts of 2002). Although Regional Authorities are technically not a State or County government, they are public governmental bodies and considered a form of local government. Authorities are not non-profit corporations. They should abide by State laws and rules that govern local governmental bodies.

The legal and administrative purpose in creating an Authority is to protect the public health and welfare through comprehensive programming of solid waste collection, processing, recycling, and disposal, managed on the local level through direct control (either through Authority employees or through contracts). Responsibilities of the authorities include but are not limited to: acquisition, construction of and/or operation of solid waste facilities; local and/or regional solid waste planning; siting approval of commercial solid waste facilities; coordinating public education and awareness; solid waste and litter control project coordination/ management; and other activities consistent with state code and regulations. The Authorities also exist to establish and administer programs based on

source reduction, recycling, reuse, composting toxin reduction, and material recovery in the implementation of the regional solid waste plan.

### **ADVANTAGES OF ESTABLISHING AN AUTHORITY**

As stated above, it was the primary recommendation of the stakeholders and governmental representatives interviewed for this report to form a regional authority that can organize the various governmental units into a unified service system. The exploration of the advantages of a more regional, cooperative approach to increase diversion County-wide and improve services yielded the following list of advantages:

- Service standardization;
- Increased County-wide recycling participation;
- Possible County-wide cost-sharing;
- Coordinated County-wide public education system; and
- Systems-based regional MRF operation.

The Project Team recommends the formation of an Authority, with the consideration of contracted services where possible and practical. The formation of the Authority will offer local units of government the ability to synchronize their services and offer a coordinated and universal suite of diversion services with possible cost savings to residents and businesses. RRS also recommends, noted above, the construction of a MRF to increase recycling processing capacity within the County and stabilize the recycling collection programs. The MRF operations will be a primary operational function of the new Authority and can be directly operated by Authority staff or contracted through a professional service contract (see recommendations below).

### **PURPOSE: COORDINATION OF SERVICE**

One of the convincing arguments toward establishing a regional authority is the ability to share resources to eliminate duplication and provide maximum utilization of funds and resources. This concept has been elusive under traditional boundaries of governance because local governments prefer exclusive rights and use of their own equipment and staff for liability concerns and fiscal control. The Authority's regional planning board can be a mechanism to bridge any resource gaps among their local governments since they represent the entire region and can provide a consistent vision across the region. Solid waste regions that exercise resource sharing have benefited economically by not duplicating resources.

An additional benefit, and primary to this report, is that regional solid waste planning at the Authority level can be done from a materials management approach leveraging the integrated solid waste management systems of the region. The long-term goal is to remove as much material from the waste stream as possible to lengthen the life spans of landfills and to leverage more sustainable methods of using the material collected. The long-term plan is also to remove potential toxic materials by diverting them to other programs. If effective, the region can have more of its "waste" diverted from the landfill through a systems approach that includes reuse, composting, and recycling.

The Authority has the ability to review the available solid waste systems and options, advise the various governmental units on contractual opportunities, and make sound collaborative planning decisions on how the region needs to proceed. Many of these choices create or sustain local jobs in recycling and manufacturing. The lack of a well thought out plan costs taxpayers' money in higher costs associated with disposal, repetitive systems, incompatible equipment, higher transportation costs, and potential lost revenues from the sale of commodities. Washtenaw County has recently adopted a County-wide Solid Waste Management Plan, which will be a leap off point for the creation of the Authority.

When solid waste planning is done from a regional level, the region will benefit from economies of scale. More cost efficient and service attractive contracts may be obtained due to the combined, larger population of a region.

The increased knowledge base of a varied solid waste planning board helps to solve problems in favor of the solid waste planning region. Keeping equipment purchases to a minimum while maximizing utilization of existing resources within the region will further benefit the local governments by freeing funds and making them available for other services or programs.

## **LEGAL FRAMEWORK OF AN AUTHORITY**

The State of Michigan authorizes the formation of an Authority for the regional governance of solid waste management under Act Number 179 of the Michigan Public Acts of 1947 (as amended by Act Number 92 of the Michigan Public Acts of 1955 and by Act Number 598 of the Michigan Public Acts of 2002). The Authority may provide waste disposal and recycling services to municipal communities in Washtenaw, Michigan, as a charter is established that declares its purpose and member communities. The Authority would be governed by a Board of Trustees, one member representing each member township and municipality. Principal funding for the Authority is derived from various fees and funds authorized by the Authority, as described below. The Authority must follow the financial guidelines of the Governmental Accounting Standards Board's Standards (GASB).

## **ARTICLES OF INCORPORATION AND BYLAWS**

The mechanism for Authority legal structure, including its by-laws, needs to be very flexible and streamlined, providing for clean contractual arrangements for agreements with local units of governments, primarily through membership in the Authority and adoption of the Authority's articles of incorporation and bylaws.

Solid Waste Regional Authorities are required to adopt by-laws governing the election of officers, duties, special committees, meetings, etc. The by-laws also govern the composition of the Board of Trustees of the Authority. It is common for the Authority to be represented by the member Townships and Municipalities on the Board of Trustees. The management and control of an Authority is vested in and governed by the Board of Trustees, and the elected trustees should make every effort to attend every meeting.

In addition, RRS recommends the establishment of a Citizens Advisory Committee, comprised of interested citizens, educators and local experts that can advise the Board of Trustees on matters before the Authority. A citizen committee is not required under Michigan Code; however it is required by many other states, and is considered a best practice in allowing citizens to be active in governmental matters. RRS recommends this citizen committee because of the uniqueness of the topics, and because there are special talents and knowledge of citizens from the local community that can be useful to the Board in the formation of new programs. It is especially noted that school teachers of all grade levels bring forth knowledge of waste diversion and public motivation techniques that can be helpful for the planning and implementation of new diversion programs.

An Authority structure allocates power and responsibility to the various participants in a formal decision-making structure. Bylaws clearly detail administrative procedures to be followed, providing a basis for long-term stability.

An Authority structure can insulate system decision making from the more political and sometimes less predictable legislative process of each individual participating local unit of government. The Authority creates its own institutional memory, overall mission, and organizational momentum - creating long-term system stability.

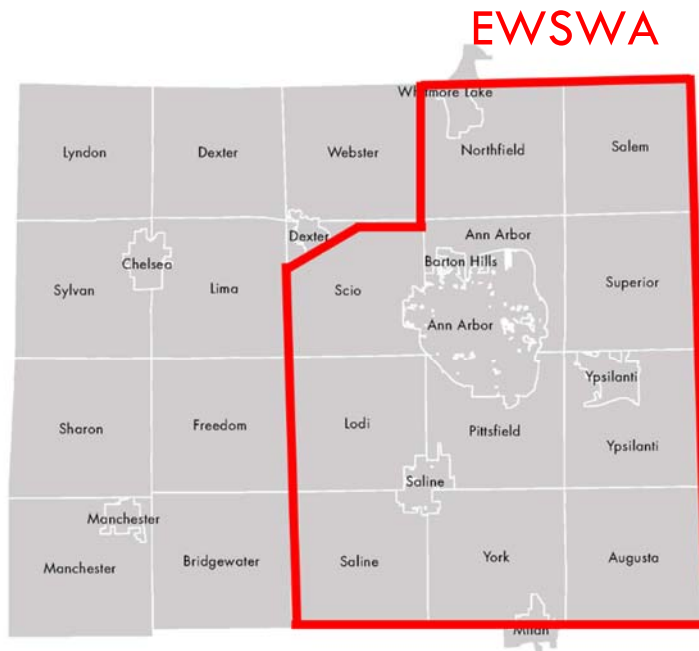
## **BOND FINANCING CAPABILITY**

Authorities provide access to bond financing capabilities independent of those capabilities held by its member local units of government. These members can also use their own public-sector funding mechanisms to fulfill their financial obligations to the Authority. An Authority also can access private sector finance and funding methods through public/private agreements. Other measures of funding are also explored in this Report.

## REGIONAL AUTHORITY MEMBERSHIP RECOMMENDATIONS

- Recommend the formation of the Eastern Washtenaw Solid Waste Authority (EWSWA) in the creation of the new authority. (Recommended townships: Lodi, Saline, York, Pittsfield, Ann Arbor, Northfield, Salem, Superior, Ypsilanti, Augusta and Scio Township, and the following cities: Ann Arbor, Ypsilanti, Saline, Barton Hills, and Milan – see Figure 3).
- Recommend working collaboratively with WWRA to determine mutually beneficial agreements or arrangements so that both authorities can work collectively to better serve Washtenaw County in waste and recycling.
- Recommend seeking legal counsel in the formation of the EWSWA.
- Recommend creation a Board of Trustees that is representative of the member Townships and Municipalities.
- Recommend establishment of a Citizens Advisory Committee, comprised of interested citizens, educators, and local experts that can advise the Board of Trustees on matters before the Authority. (not required under Michigan Code)

Figure 3: Recommended Target Membership for EWSWA



## FLOW CONTROL RESTRICTIONS

Flow control of solid waste flows are legal provisions that allow state, local, and regional governments to designate the places where municipal solid waste (MSW) is taken for processing, treatment, or disposal. For purposes of this report, this includes the designation of processing facilities for collected recyclables. Because of flow control authority, designated facilities may hold monopolies on local solid waste and recoverable materials

(e.g., recyclable, compostable). This type of governmental monopoly has been successfully challenged in many courts, including several US Supreme Court rulings. Consequently, flow control – waste flow and facility designation by legislative authority - has become a heavily debated issue among state and local governments, the waste management and recycling industries, and environmental groups.

Congress has directed the USEPA to review flow control as it pertains to municipal solid waste management. EPA's 1995 Report to Congress on Flow Control and Municipal Solid Waste indicates that flow controls are an administratively efficient tool for local governments to plan and fund solid waste management systems. The Agency examined flow control nationwide, finding that 35 states, the District of Columbia, and the Virgin Islands authorize flow control directly. Four additional states authorize flow control through mechanisms such as solid waste management plans and home rule authority. Eleven states have no flow control authority.

It is important to recognize that the USEPA Report presents a national perspective on flow control, and that state and district court rulings since 1995 have significantly restricted the ability to use the designation of flow control in certain situations, based on the interstate trade restrictions of the Commerce Clause. The U.S. Supreme Court has upheld the right of local governments to direct the flow of solid waste to publicly owned and operated waste facilities without running afoul of the Commerce Clause. The case, *United Haulers Association, Inc. v. Oneida-Herkimer Solid Waste Management Authority* (Case No. 05-1345, released April 30, 2007), clarifies that local governments may use monopoly controls over solid waste facilities as a tool to achieve solid waste management policy goals.

#### ***Flow Control Restrictions Recommendation***

There are three pathways toward guaranteeing recycling material flows to the newly constructed MRF: through contracts, economic flow control through rate setting, and through flow control measures through designation of material to a publicly owned facility. In general, contractual obligations where independent parties have agreed to the conditions, designation of facilities are allowable, but we recommend legal counsel on the formation of those contracts. If the material flows based on rate setting, RRS recommends a professional rate study and legal advice regarding flow control concerns. Overall, RRS recommends that the Authority seek legal counsel for the formation of contracts, and to seek legal counsel before pursuing flow control designation of facilities.

#### **POTENTIAL MATERIAL FLOWS FROM OUTSIDE THE COUNTY**

Although the intent of the construction of the proposed MRF is to service the Eastern half of Washtenaw County, the sizing of the capacity of the planned facility may offer cost efficiencies through increasing the volume throughput. To add additional volume may require additional equipment or footprint sizing to the building, or the addition of a second shift in operations. The added volume of material may offer more ability to market the material to brokers and end markets, as well as spread fixed costs over a larger base of tons, thus lowering the operational cost per ton of the facility.

Additional tons can be sought from surrounding counties throughout Southern Michigan, as there is a shortage of MRF capacity. In addition, the City of Toledo and its surrounding area have been identified as MRF deficit and shipping their collected recyclables a great distance at large costs. A regional contract for acceptance of material from the Toledo area could be advantageous toward adding volume and creating a cost reduction per ton in the operation of the facility.

#### ***Potential Material Flows from Outside the County Recommendations***

Explore outside the County for regional cooperative opportunities to add recycling tons before sizing the MRF facility for construction.

# FINANCIALS

The cost to operate the three tiers of service recommended in this report is largely unknown at this time. Estimates are offered in this report, yet professional contractors will need to place bids and the purchase price of land is not estimated in this report. Below is an estimate of expenses for planning purposes.

## EDUCATION AND OUTREACH ANNUAL EXPENSES

There are three main considerations for cost for education/outreach and staffing annual expenses.

- Program Development: for strategic planning, creative development for branding, and initial research.
  - Estimated initial investment = \$100,000.
  - Annual investment = \$25,000 - \$50,000.
- Annual Operating Costs: estimated range of \$1.00 - \$1.50 per household per year for education and outreach. With approximately 150,000 household in Washtenaw County, the estimated spend required per year ranges between \$150,000 - \$225,000. This amount would cover development, production, and distribution of education and outreach.
- Annual Staffing Costs: salary range with benefits of \$50,000 - \$75,000; or could contract for services at a similar cost.

## CONVENIENCE DROP-OFF DEVELOPMENT AND ANNUAL EXPENSES

Financial Impact per Facility (No Revenue)

	Comprehensive	Recycling Only
Annual Capital Cost*	\$310,000	\$6,000
Operating Cost	\$850,000	\$50,000
Total Cost (per facility)	\$1,160,000	\$56,000

\*Building and electrical, stationary equipment and rolling stock, engineering, contingency, and land costs for the Comprehensive facility are included in the capital. The building is amortized over 20 years; Equipment is amortized over 10 years; land is amortized over 40 years.

## MRF DEVELOPMENT AND ANNUAL EXPENSES

Financial Impact per MRF Facility

Annual Capital Cost*	\$2,350,000
Operating Cost	\$6,100,000

\*The capital includes building and electrical, stationary equipment and rolling stock, engineering, and contingency. There are no land costs included in the capital. The building is amortized over 20 years; Equipment is amortized over 10 years.

## FEE STRUCTURE RECOMMENDATION

The RRS Project Team recommends a cost and fee study that specifically examines the services desired and the fee structures that are realistic to enact. The decision factors were not examined in the scope of this project yet are important in determining the proper revenue flow to fund the Authority.

## FUNDING THE AUTHORITY

The fundamental key to success in the formation and operation of the Authority is the source of on-going sustained funding to provide for these intended services. The following identifies potential funding sources that could be utilized to meet the necessary management, capital, operational, and maintenance requirements for each applicable component of the solid waste management system.

### **Optional Fee Systems**

Each community within Washtenaw County facilitates its own method of coordinating solid waste collection and disposal. Many communities allow their residents to individually contract with a service provider. Some communities choose to negotiate a community contract with a service provider to collect and dispose of a community's waste. A few communities have chosen to fund their own services through a combination of the following funding options.

1. **Advance Disposal Capacity Fee**  
The Washtenaw County Department of Public Works supports many community programs with the Advanced Disposal capacity fee that is collected by the County.
2. **Volume Based Fee Structures (commonly referred to as "Pay-As- You-Throw")**  
Generators pay in proportion to the amount of waste they set out for collection. Volume based rate systems typically require that residents purchase special bags or stickers, or they offer generators a range of service subscription levels. When generators pay for the amount of waste they produce, they have an incentive to reduce it.
3. **Special Assessments through Public Act 185 and Public Act 188**  
Municipalities, or the Authority through the Washtenaw County Board of Public Works at the request of a municipality, could establish special assessments, to fund local solid waste and recycling programs. The special assessment must be linked to a benefit to the property owner and would be collected through the property tax bill.
4. **Hauler Licensing**  
With its existing authority under the state Public Health Code, the County may adopt policies or ordinances to regulate haulers and establish associated fees for public health purposes; or, with the participation of individual local units of government, the County may create a licensing program and establish fees for haulers operating within the County.
5. **Countywide Ordinances**  
Under the County's existing authority, the County has the ability to adopt policies or ordinances in furtherance of Plan goals, such as to establish fees for landfill surcharges and County provided services, or with the participation/cooperation of individual local units of government for other solid waste and recycling related programs.
6. **Public Act 138 (limited to residential households)**  
A county, through an inter-local agreement with municipalities, may impose a surcharge on households within the county of not more than \$2.00 per month or \$25 per year per household for waste reduction programs and for the collection of consumer source separated materials for recycling, composting, or household hazardous waste.
7. **Matching contributions of funds from municipalities through the pooling of resources from municipalities may be an option to fund regional programs.**
8. **Public/private partnerships can provide long-term, sustainable funding mechanisms.**

(source: Washtenaw County Solid Waste Plan 2017, page 117)

A summary of funding opportunities is listed in Appendix D.

## **LEGAL AUTHORITY TO ENACT FEES**

### ***Use of Special Assessments to Fund Solid Waste/Recycling***

A special assessment is a charge against real property (i.e., immovable property such as land and structures - not personal property) for an improvement or service that confers a benefit to those living within the special assessment district. Special assessments are used by municipalities to fund projects or services that would otherwise not be possible, such as road repairs, water and sewer mains, street lighting, police and fire protection, and garbage and recycling services. Special assessments can be used in conjunction with general fund revenues, service fees, user charges, grants, or other sources of funding.



### ***How Does a Special Assessment Differ from a Tax or Fee?***

Special assessments are often confused with property taxes, since most municipalities find it easiest to include special assessments on the property tax bill. Unlike taxes, special assessments are not levied on personal property, are not subject to constitutional/statutory limitations like the Headlee Amendment, do not require a vote of the electors, and are not tax deductible under the State Homestead Tax Credit or on Federal Income Tax. Unlike a tax, a special assessment must convey a specified benefit. In addition, special assessments can be included in the tax effort used to qualify for shared state revenues. Special assessments differ from user fees in that they are imposed in advance of a project or service. This is a general statement only and should not take the place of consultation with a municipal law specialist.<sup>1</sup>

The amount levied in a special assessment is determined by the authorized government unit. Typical methods of assessment are based on front footage, total land area or value, per parcel, per dwelling, degree of accessibility/distance from project, or a combination of several methods or weighted factors. Often, the public may also benefit from a special assessment project or service. In these cases, a government unit may decide to cover part of the cost through general funds, service fees, grants, or other funding sources.

The amount levied does not have to be uniform or applied to all parcels in the government unit – it is based on a determination of how much each parcel benefits from the project/service. This does not mean that strict dollar equality must be used, but the assessment needs to be reasonably proportionate to the benefit (L. Thomsen, Michigan Township News, Oct. 2005). Property that is tax exempt, such as churches, schools, and public service properties, may not be exempt under special assessment statutes.

Careful consideration of apportionment should be done before holding any public hearings, especially if there are large differences in the amounts levied on parcels. Initial over-estimation of assessments is recommended, as it is easier to reduce estimates than to increase them.

Assessments that cover recurring expenses are often imposed one year at a time. This is generally done for services such as recycling, police and fire protection, weed control, and street lighting. This requires a new assessment roll to be reviewed by the government unit at a public hearing each year.

### ***Public Act 69***

The State of Michigan requires every Michigan county to develop and implement a solid waste management plan. The purpose of solid waste management plans includes protecting public health, assuring adequate disposal capacity for all waste generated within the county, and establishing goals for waste prevention and recycling. Providing county residents with a cost-effective, standardized recycling program that is accessible county-wide is the goal of the PA69 of 2005 Program. When most communities are participating, recycling can be accessible throughout Washtenaw County and open to all residents regardless of the city, village, or township that they reside in. The costs can be shared equally across the program. This will allow for more consistent recycling program services and education.

The Washtenaw County Solid Waste Management Plan identifies that the County, the Cities of Ann Arbor, Ypsilanti, Chelsea, Milan, Saline, and Dexter, as well as the Townships and Villages, are responsible for providing recycling, composting, and hazardous waste collection programs in Washtenaw County. Adequate funding is necessary to provide recycling programs that are consistent with the County Solid Waste Management Plan. Recycling opportunities that are available throughout Washtenaw County are currently funded independently by the Cities, Townships, or Villages, or through inter-local agreements (WRRRA) with the County. Public Act 69 (PA69) allows Michigan Counties, townships, and municipalities to voluntarily enter into an inter-local agreement to fund local residential recycling drop-off programs. If a Township chooses to participate, the County will work with the Township to design, set up and implement a recycling drop-off location within that community.

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<sup>1</sup> Residential Recycling Initiative, Michigan Department of Environmental Quality – Recycling Program: [www.michigan.gov/mirecycles](http://www.michigan.gov/mirecycles)

PA69 offers each township board the option of placing a fee on the tax bills of residential improved parcels in order fund their community's recycling program. PA 69 limits the fees to no more than \$25.00 per improved parcel per year. The revenues collected for this program are held with the County Treasurer and used solely for recycling program administration, collection and processing of recyclables, site monitoring and public education. The benefits to communities participating in PA 69 include:

- Minimal program administration and improved use of Township staff: under PA69, recycling collection service is negotiated and contracted by the County, providing the opportunity for townships to reduce expenditures in staff time to oversee and manage a township-run recycling program.
- Site Monitoring: Local site monitors are hired to inspect and maintain PA69 recycling sites on a weekly basis to maximize space, minimize contamination, and keep the site clean.
- Recycling education and information is essential to the success of recycling programs by providing consistent, accurate information and guidelines to reduce contamination and increase recovery.
- PA69 provides communities and its residents with access to a County-contracted recycling coordinator and centralized information on all available recycling and special waste handling.
- Recycling volume and financial reports provided quarterly.
- Recycling guidelines flyer and toll-free recycling hotline for communities and residents.
- Recycling and waste reduction presentations to groups and organizations.
- Residential recycling surveys.
- Educational display booth at events.
- Volunteer opportunities for residents at [volunteermatch.org](http://volunteermatch.org).
- Detailed recycling information available through Washtenaw information programs.
- Coordinated recycling services and economies of scale: Currently Cities, Townships and Villages are independently negotiating recycling services and pricing for the exact same service varies among local communities. If more Townships participate in the PA69 Recycling Program, the County will have more negotiating power for contracted collection services and increase the shared benefit of cost savings.

### **Public Act 185**

PA 185 of 1957 (MCL 123.731, et seq.) and PA 342 of 1939 (MCL 46.171, et seq.) authorize a county to issue bonds for public water and sewer, refuse/recycling and related environmental projects by counties that have a Department of Public Works organized through Act 185. Projects are developed following required procedures, development of an engineer's estimate, and confirmation of necessary county and local approvals prior to establishing the assessment roll for the project. An Act 185 contract is not subject to a right of referendum. Deciding whether to request a county to issue bonds under Act 185 or Act 342 for a project can depend on whether the municipality wants to avoid a referendum petition (Act 185) or be subject to a right of referendum (Act 342).

The Washtenaw County Board of Commissioners created a Board of Public Works under Act 185 of Michigan Public Acts of 1957. This Act authorizes the establishing of a department and board of public works in counties; to prescribe the powers and duties of any municipality subject to the provisions of this act; to authorize the incurring of contract obligations and the issuance and payment of bonds or notes; to provide for a pledge by a municipality of its full faith and credit and the levy of taxes without limitation as to rate or amount to the extent necessary; to validate obligations issued; and to prescribe a procedure for special assessments and condemnations. The WWRA was established under the provisions of PA 185.

Contract bonds are a good way to finance capital improvements if a municipality or an established authority is limited by the 3 percent annual limit on special assessment bonds. A municipality can also combine different revenue sources—such as special assessments, rates and charges—to repay bonds. Bonds issued by a county are particularly attractive to a municipality because they can generally be sold at lower interest rates than a similar

municipal issue, thereby benefiting municipal residents and property owners. Assessment bonds are issued by a county board.

## **OTHER APPROACHES**

Following is a list of statutes commonly used to fund garbage and recycling collection and facilities. This list should not be considered exhaustive – there may be other statutes that are a better fit for a project or community.

### ***Act 138 of 1989 (Urban Cooperation Act of 1967) – County***

1989 PA 138, as amended, allows the County Board of Commissioners, by resolution, to impose a surcharge not to exceed \$25.00 per year, per household, for waste reduction programs and for the collection of consumer source separated materials, as defined in Part 115 of 1994 PA 451, household hazardous wastes, tires, batteries, and yard clippings; PA 138, as amended, requires the County to defer the imposition and collection of a surcharge in a local unit of government within the County until the County has entered into an interlocal agreement relating to the collection and disposition of the surcharge with the local units of government.

### ***Act 342 of 1939 (County Public Improvement Act of 1939) – County***

Authorizes a county board of commissioners to establish garbage or rubbish collection and disposal facilities; or services within or between cities, villages, townships, charter townships, or any combination of government units within or outside of the county. Actions issued under Act 342 can be subject to a right of referendum

### ***Act 233 of 1955 (Municipal Sewage and Water Supply Systems) – County, City, Village, Township***

Authorizes an incorporation of municipal authorities to acquire, operate, and improve solid waste management systems, form contracts between such authorities and public corporations, and raise funds through bonds or assessments.

### ***Act 76 of 1965 (Joint Water Supply and Waste Disposal Systems) – All Local Units***

Authorizes units of government to construct waste disposal systems or contract for use of such facilities through agreements with governmental units, entities, or agencies of another state.

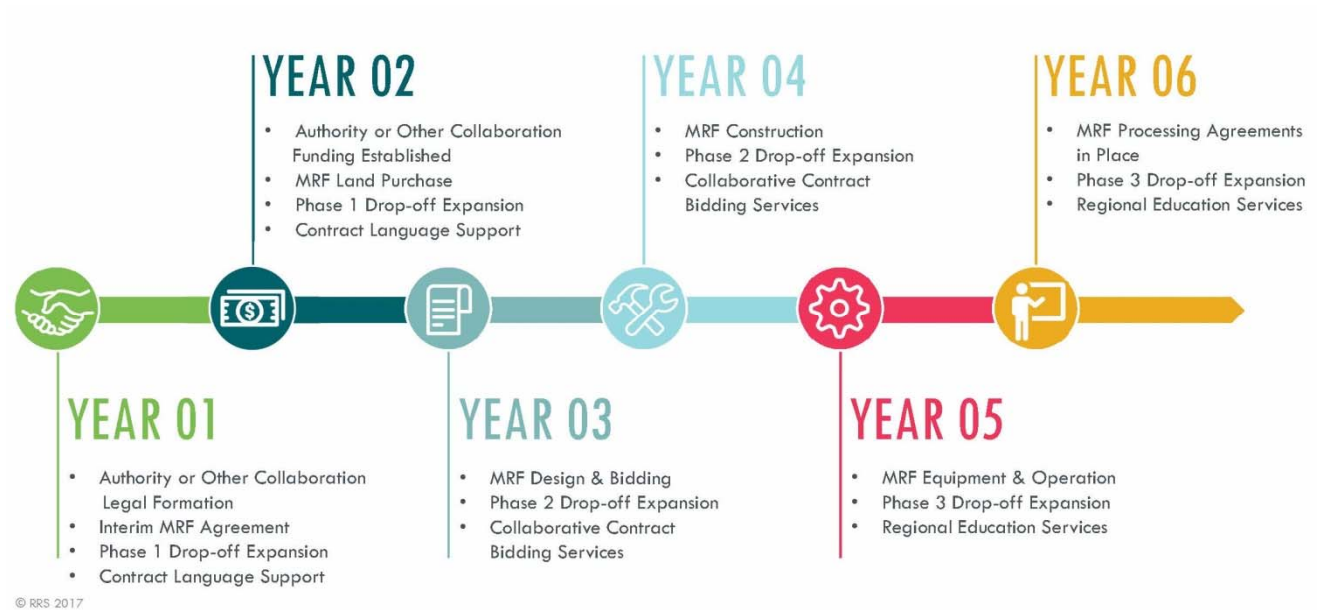
Along with the authorizing statute, special assessments for public projects must also adhere to these statutory requirements:

- PA 162 of 1962 – Notice of assessment prior to each hearing.
- PA 267 of 1976 – Notice and meeting requirements of the Open Meetings Act must be observed throughout.
- PA 64 of 1988 – Notification of right to protest and appeal.
- PA 65 of 1988 – Property owners must first protest a special assessment at a public hearing held to confirm the assessment roll before appealing to the Michigan Tax Tribunal.

# PHASED APPROACH TIMELINE

As the Authority is formed, each service will need to be phased in based on the formation timeline of the Authority. Figure 4 displays an estimated timetable for the first six years.

**Figure 4: Authority Timeline for First Six Years**



The years following the initial six-year period will require attention to reviews, upgrades, and re-evaluations. There will need to be annual reviews of existing service contracts by the Board of Trustees. In addition, MRF maintenance and safety schedules require quarterly review and inspections, annual upgrades, and periodic equipment replacements. Contractor and employee performance reviews should be performed annually at a minimum. An Authority Operational Plan update and review should be scheduled every five years, based on the ever-changing commodities markets. The 2017 County Solid Waste Plan should be reviewed and amended in 2027. In addition, as community hauling contracts expire, there should be consideration in synchronizing the expiration date of the contracts to allow for collective bidding, which might lend for better pricing and service agreements.

# APPENDICES

- A. Glossary of Terms
- B. Summary of Local Unit of Government Solid Waste Collection Systems
- C. Sample of Education and Outreach Materials and Resources
- D. Funding Opportunities Overview
- E. Public/Private Partnerships Matrix
- F. Stakeholder Meeting Information
- G. Measurement for Success

# APPENDIX A

## GLOSSARY OF TERMS

**Composting:** mixture of decayed or decaying organic matter used to fertilize soil such as leaves, grass clippings, brush, and food waste.

**Drop-off Site:** A method of collecting recyclable or compostable materials in which the materials are taken by individuals to collection sites and deposited into designated containers.

**End Markets:** Mills, manufacturers and other facilities, which acquire recyclable materials for conversion to new products or raw materials.

**Environmental Management Systems:** is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency.

**Hazardous Waste:** Waste material that may pose a threat to human health or the environment, the disposal and handling of which is regulated by federal law.

**Material Recovery Facility (MRF):** Any type of facility used for separating, sorting or processing waste in order to segregate materials with value (e.g. aluminum, glass, plastics). The type of processing conducted at a MRF can range widely from buildings in which recyclables are sorted primarily by hand, to mechanical facilities that attempt to recover recyclables from mixed solid waste (sometimes called a “dirty MRF”).


**Municipal Solid Waste (MSW):** solid waste resulting from the operation of residential, commercial, industrial, governmental, or institutional establishments that would normally be collected, processed, and disposed of through a public or private solid waste management service. Municipal solid waste does not include hazardous waste, sludge, industrial waste managed in a solid waste management facility owned and operated by the generator of the industrial waste for management of that waste, or solid waste from mining or agricultural operations.

**Non-recoverable refuse:** portion of the waste stream that is not able to be recovered through waste diversion or recycling practices and therefore must be disposed.

**Organics:** means material containing carbon compounds and typically originating from plant or animal sources, which may be degraded by other living organisms.

- **Food waste:** food unfit for human consumption that is sent for disposal. Examples include food that has spoiled, uneaten plate-scrappings from served food; fats, oils and greases used to cook food; by-products of the food and beverage processing industries unfit for human consumption.
- **Yard waste:** grass clippings, yard vegetation, sod without dirt, and leaves. The State of Michigan prohibits yard waste from being disposed of in the landfill.

**Pollution Prevention:** a practice that reduces, eliminates, or prevents pollution at its source. Pollution prevention approaches can be applied to all potential and actual pollution-generating activities.



**Recycling:** The systematic collection, sorting, decontaminating and returning of waste materials to commerce as commodities for use or exchange. Recycling also means to use, reuse or reclaim a material. It does not include incineration.

**Regionalization:** Working collaboratively with neighboring communities to elevate services.

**Reuse:** Reutilization of a material in an environmentally sound manner that will not result in a hazard to human health or the environment.

**Solid Waste Regional Authority:** A functioning governmental body established to plan and operate solid waste management projects.

**Source Reduction:** means the practice of minimizing waste through responsible product design, production, purchasing and consumerism, to reduce or prevent the generation of waste.

**Sustainable Materials Management:** systematic approach to using and reusing materials more productively over their life cycle, from the point of resource creation to material disposal.

**Transfer Station:** means any storage or collection facility which is operated as a relay point for solid waste which ultimately is to be transferred to a central solid waste management facility.

**Type II Landfill:** An on-land disposal facility designed and operated to accommodate general types of solid waste, such as garbage and rubbish, but not hazardous waste.

**Type III Landfill:** An on-land disposal facility designed and operated to accommodate large volumes of certain solid waste that has minimal potential for groundwater contamination.

**Waste Generation:** This term refers to the amount (weight, volume, or percentage of the overall waste stream) of materials and products as they enter the waste stream and before materials recovery, composting, or combustion takes place.

# APPENDIX B

## ASSESSMENT OF CURRENT SERVICES AND FACILITIES

### SERVICES

Washtenaw County is serviced by public, non-profit, and private service providers for the collection and transportation of waste, recycling, and yard waste for residents. The responsibility of collection and transportation services varies by community. Appendix B provides a summary of the services currently provided within the County through an array of service providers. In Washtenaw County, collection is categorized as follows:

1. Municipality Coordinated Collection: Collection is automatically provided to residents by the municipality or contracted service provider. The largest percent of County residents are provided service in this manner.
2. Preferred Hauler: Communities secure a contract with a service provider, but it is not required that residents utilize the service and may contract with a different service provider if desired. Two townships currently offer a preferred hauler.
3. Subscription services: Residents secure collection services with the service provider of their choice. There is no community provided option. Residents in fifteen different communities within the County receive services by subscription.

City of Chelsea collects trash under a “Pay as You Throw” model. Under this program, individual residents can control their own costs when it comes to disposal – if they want to throw away more, they pay more. If they throw away less, they pay less. Residents purchase special bags from the city to place out for collection.

### RECYCLING SERVICES

Curbside residential recycling is easiest for single-family households throughout the County. Two-thirds of the County’s populations are automatically provided curbside recycling service through municipal or contracted collection. The remainder of the County’s population is serviced through a preferred hauler arrangement, subscription service, or drop-off recycling. For residential recycling, drop-off recycling is more common where population density is low, whereas curbside service is offered where density is high.

Less prevalent across the County is multi-family and commercial recycling, however, the commercial sector is generating most of waste in the County. The City of Ann Arbor offers services to both sectors but not all communities offer the same level of services. Drop-off recycling locations are accessible to anyone in the County, including commercial and multi-family generators, with sites in more than half the communities. In addition to drop-off locations, service providers operating in the County offer commercial recycling services for a fee which County businesses may elect to pay for recycling collection.

### SERVICE PROVIDERS

The Washtenaw County Solid Waste Management Plan has identified the following companies, non-profits or local units of government as “active service providers” within the County. For additional information on where service providers are active, please see Appendix B.

- Advanced Disposal – [www.advanceddisposal.com](http://www.advanceddisposal.com)
- City of Ann Arbor (Public) – [www.a2gov.org](http://www.a2gov.org)



- City of Chelsea (Public) – [www.city-chelsea.org](http://www.city-chelsea.org)
- City of Ypsilanti (Public) – [www.cityofypsilanti.com](http://www.cityofypsilanti.com)
- Granger Disposal – [www.grangernet.com](http://www.grangernet.com)
- Green for Life (GFL) – [www.gflenv.com](http://www.gflenv.com)
- Modern Waste – [www.modernwastesystems.com](http://www.modernwastesystems.com)
- Recycle Ann Arbor (Non-profit) – [www.recycleannarbor.org](http://www.recycleannarbor.org)
- Republic Services – [www.republicservices.com](http://www.republicservices.com)
- Stevens Disposal – [www.stevensdisposal.com](http://www.stevensdisposal.com)
- Titans Trash – [www.titanstrash.com](http://www.titanstrash.com)
- University of Michigan Waste Management Services – [ltp.umich.edu/wm](http://ltp.umich.edu/wm)
- Village of Barton Hills (Public) – [www.vil-bartonhills.org](http://www.vil-bartonhills.org)
- Waste Management – [www.wm.com](http://www.wm.com)
- Western Washtenaw Recycling Authority (WWRA) (Public) – [www.wwrarecycles.org](http://www.wwrarecycles.org)

## **FACILITIES**

Within Washtenaw County there are two Material Recycling Facilities (MRF), one Landfill, two Trash Transfer Stations, three Compost sites, and 15 recycling drop-off locations. These facilities are primarily owned and operated by local units of government individually or working together under an agreement, with a few exceptions – the landfill is privately owned and operated by Advanced Disposal and while the City of Ann Arbor owns a MRF, it is not currently being used for processing, but previously was operated by a private company under contract.

A list of these facilities is provided here, and a map of the facility locations is provided for in Figure 6. The map also identifies communities that collect yard debris at their municipal yard locations – Barton Hills, Chelsea, and Milan.

### Material Recycling Facilities (MRF)

- City of Ann Arbor
- Western Washtenaw Recycling Authority

### Landfill

- Arbor Hills Landfill

### Trash Transfer Stations

- City of Ann Arbor
- City of Chelsea

### Compost Sites

- Arbor Hills Compost Facility
- City of Ann Arbor
- Ypsilanti Township

## **MRF FACILITIES**

The City of Ann Arbor MRF is currently contracting operations with Recycle Ann Arbor and being used as a recycling transfer loading location rather than a true MRF where the sorting and processing of all recyclables occurs. This current situation provides a gap in recycling processing capacity within the County borders, as the materials being loaded are then driven to southern Ohio for processing. The site possesses certain challenges

including transportation, safety and site restrictions. Recent studies have indicated that the site cannot be expanded to include more volume, and the current equipment is not considered safe to operate in its current condition. This site is currently being utilized for light processing of recyclables and transfer outbound to another MRF. (see MRF interim action plan for further details).

The Western Washtenaw Recycling Authority (WWRA) operates a MRF in the Northwest corner of the County. It currently processes approximately 8,000-10,000 tons annually, and can expand to an operational capacity of 15,000 tons annually. Currently WWRA member communities are the Townships of Lyndon, Dexter, Lima, Manchester, and Bridgewater, and the City of Chelsea.. This site is not considered suitable as a regional location for residential collection operators and processing, due to its remote location and small physical footprint.

There is one additional MRF facility in the County, but it is primarily dedicated to commercial and industrial recycling. The Arbor Hills Materials Recovery Facility (MRF), operated by Advanced Disposal Services, continues to operate in the Northeast corner of the County. It has the capacity to process 100,000 tons annually, but currently operates at a lower throughput through contractual agreements, and is leased to Great Lakes Recycling.

**DROP-OFF FACILITIES**

Drop-off recycling locations are contracted for either through WWRA or a private company that places a container, usually at a community owned property, for community use. The largest drop-off facility is in Ann Arbor, and while it services the entire County, many of the users are from within a 20-minute drive of the facility.

**Figure 5: Waste Collection Type by Community**

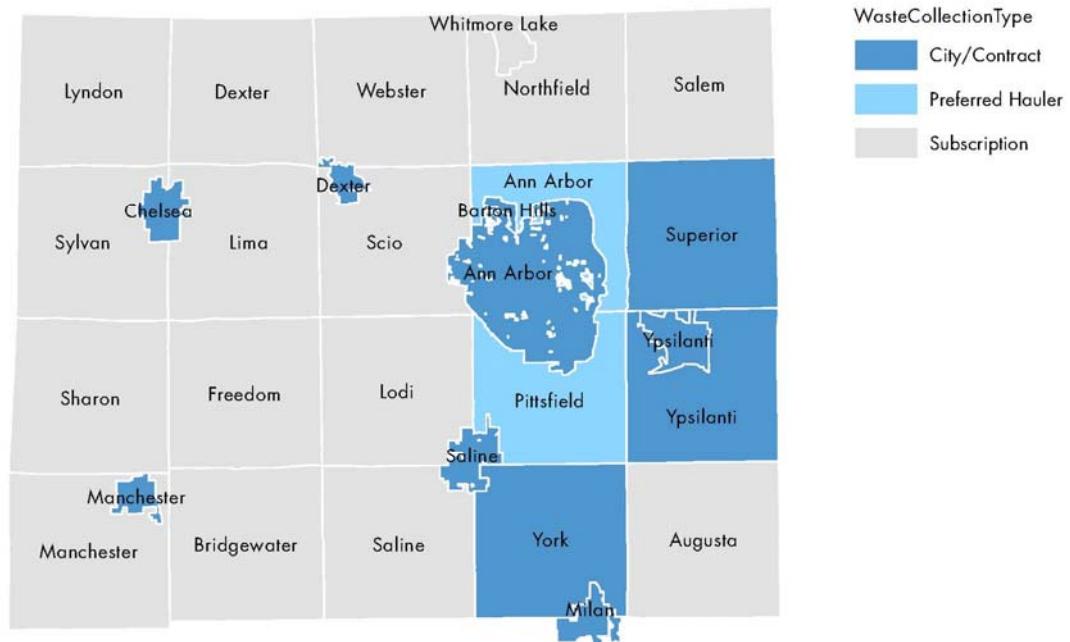
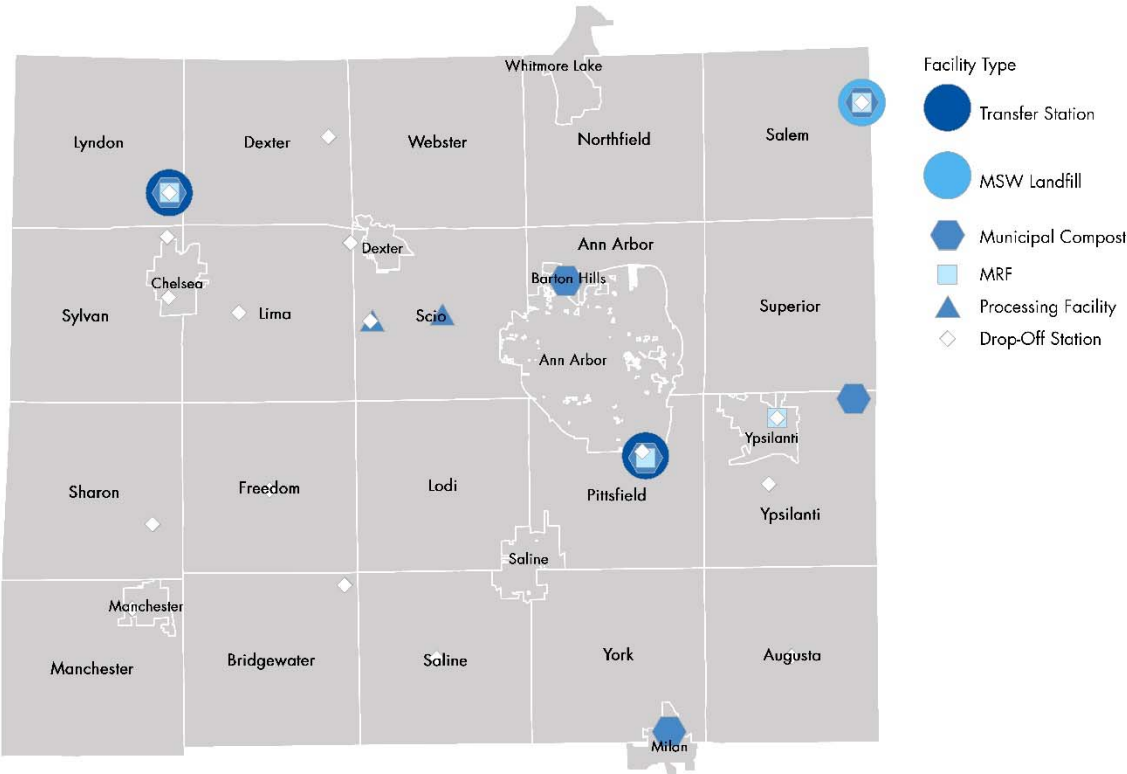


Figure 6: Washtenaw County Facility Locations



**Residential Waste/Recycling Services - Cities and Villages (Townships listed below)  
2017**

	Pop.	HH.	Hauler (as of 1/2017)	Collection Type	Services Included	Franchise Contract Expiration	Approximate Cost/ Household/ Year	Notes
<b>Cities</b>								
Ann Arbor	118,017	49,789	M, RAA	M	TR/R/YW		Millage based - large variance	
Chelsea	4,934	2,436	M/WWRA	M	TR/R		assume 2 bags trash/ week = \$340 assume 3 bags trash/week = \$460	Pay As You Throw (\$2.50/bag). Recycle costs are built into taxes (Approximately \$100/year).
Dexter	4,911	1,704	WM	C	TR/R/YW			
Milan	3,920	1,611	WM	C	TR/R/YW			
Saline	8,897	3,923	WM	C	TR/R/YW	6/30/2019	millage based - large variance	
Ypsilanti	19,985	9,271	M/RS	M/C	TR/R/YW		millage based - large variance	
<b>Villages</b>								
Barton Hills	318	137	M	M	TR/R/YW			
Manchester	2,080	1,029	MW	C	TR/R		\$ 137.40	

**Hauler Name:**

AD – Advanced Disposal  
 GFL – Green For Life  
 GR- Granger  
 MW – Modern Waste  
 RAA – Recycle Ann Arbor  
 RS – Republic Services  
 SD – Steven’s Disposal  
 TT- Titan’s Trash  
 WM – Waste Management

**Services Included:**

TR – Trash  
 R – Recycling  
 YW – Yard Waste  
 DOH – Depends on hauler in  
 subscription areas where residents  
 select their own services and provider.

**Collection:**

S - Subscription  
 M - Public Collection  
 C - Contracted  
 Preferred

**Residential Waste/Recycling Collection Services - Townships (Cities and Villages listed above)  
2017**

	<b>Pop.</b>	<b>HH.</b>	<b>Hauler (as of 1/1/17)</b>	<b>Collection Type</b>	<b>Services Included</b>	<b>Franchise Contract Expiration</b>	<b>Approximate Cost/ Household/ Year</b>	<b>Notes</b>
<b>Townships</b>								
Ann Arbor	4,271	1,963	RS	Preferred/S	TR/R/YW	3/31/2018	\$ 219.00	Cost based on preferred hauler.
Augusta	6,948	2,613	WM	C	TR	6/30/2020		
Bridgewater	1,663	672	MW/SD/WM	S	DOH		\$ 281.66	
Dexter	6,905	2,612	AD/GFL/GR/ TT/WM	S	DOH		\$ 272.96	
Freedom	1,461	649	GFL	S	DOH		\$ 243.00	
Lima	3,690	1,250	GFL/GR/ TT/WM	S	DOH		\$ 262.84	
Lodi	6,238	2,287	AD/GFL/ SD/WM	S	DOH		\$ 281.08	
Lyndon	2,947	1,141	GR/WM/TT	S	DOH		\$ 269.45	
Manchester	2,603	2,069	AD/MW/SD	S	DOH		\$ 287.52	
Northfield	8,133	3,601	AD/GFL/WM	S	DOH		\$ 284.10	
Pittsfield	38,309	14,808	RS	Preferred/S	TR/R/YW	9/30/2019	\$ 227.00	Cost based on preferred hauler.
Salem	5,724	2,209	AD/GFL/WM	S	DOH		\$ 284.10	
Saline	2,057	791	AD/SD/WM	S	DOH		\$ 293.48	
Scio	17,050	8,251	AD/GFL/RS/ SD/TT/WM	S	DOH		\$ 268.86	
Sharon	1,729	705	GR/MW	S	DOH		\$ 284.81	
Superior	13,026	5,322	RS	C	TR/R/YW	9/30/2017	\$ 209.16	
Sylvan	2,896	1,236	GR/MW/ TT/WM	S	DOH		\$ 271.37	
Webster	6,405	2,479	AD/GFL/WM	S	DOH		\$ 284.10	
York	9,003	2,438	SD	C	TR/R/YW		\$ 344.02	(1)
Ypsilanti	55,334	23,447	WM	C	TR/R/YW	6/30/2020	millage based - large variance	

(1) York Twp - Residents deal directly with hauler. Cost based on all services being used.

**Hauler Name:**

AD – Advanced Disposal  
 GFL – Green For Life  
 GR- Granger  
 MW – Modern Waste  
 RAA – Recycle Ann Arbor  
 RS – Republic Services  
 SD – Steven’s Disposal  
 TT- Titan’s Trash  
 WM – Waste Management

**Services Included:**

TR – Trash  
 R – Recycling  
 YW – Yard Waste  
 DOH – Depends on hauler in  
 subscription areas where residents  
 select their own services and provider.

**Collection:**

S - Subscription  
 M - Public Collection  
 C - Contracted  
 Preferred

# APPENDIX C

## SAMPLE OF EDUCATION AND OUTREACH MATERIALS AND RESOURCES

The Recycling Partnership Toolkit, click [here](#).

City of Largo Mixed Recycling Campaign, click [here](#).

Miami-Dade *Recycle This, Not That!*, click [here](#).

Online Tool “Waste Wizard” recycling information directory in use by RRRASOC, the regional authority with members in southwest Oakland County, Michigan, click [here](#).

SOCRRA’s website utilized during program changes in 2017, called a “microsite”, click [here](#).

# APPENDIX D

## FUNDING OPPORTUNITIES OVERVIEW

Funding System/Description	Which Michigan Counties Use	Best Uses and Least Preferred Uses
<p>Hauler License Resource Recovery Fee:</p> <p>Licensed haulers can be charged a "Resource Recovery Charge" for each household and commercial account and be required to pass through that charge as a line item to their customers. The charge would be set as part of the annual budgeting process to cover all costs for Resource Recovery Programs. Each hauler's share is then based on their percentage of the market.</p>	<p>Used in Eaton County for over 10 years (\$9.60 household/yr. and \$40/commercial account per year). No other known users of this approach in the state.</p>	<p>Best Used for:</p> <ul style="list-style-type: none"> <li>• Recycling Program Expenses (drop-offs, curbside)</li> <li>• Special Material Programs (HHW, e-Scrap, Batteries, etc.)</li> </ul> <p>Also, Works for:</p> <ul style="list-style-type: none"> <li>• Admin Expenses (e.g. staff, planning)</li> <li>• Outreach/Education/Promotion</li> </ul>
<p>Act 185 County Public Works Assessment: This funding mechanism is used in water, sewer, refuse/recycling and related environmental projects by counties that have an organized an Act 185 Department of Public Works. Specific procedures must be followed to develop a project including an engineer's cost estimate and required public hearings and county/local approvals. This allows collection of a flat fee assessment for the project over a set period. (Public Act 185, 1957, MCL 123.732).</p>	<p>Act 185 assessments are used in many counties across the state for a variety of projects. Washtenaw County uses the Act 185 fee process to fund the programs of the Western Washtenaw Resource Recovery Authority (WWRA) including MRF operation and recycling drop-off collections.</p>	<p>Best Used for:</p> <ul style="list-style-type: none"> <li>• Recycling Program Expenses (MRFs, drop-offs, cleanups, curbside)</li> <li>• Special Material Programs (HHW, e-Scrap, Batteries, etc.)</li> </ul> <p>Also Works for:</p> <ul style="list-style-type: none"> <li>• Admin Expenses (e.g. staff, planning)</li> <li>• Outreach/Education/Promotion</li> </ul> <p>Can be used for trash system costs as well</p>

<p>Act 69 and Act 138 Resource Recovery Fees: With Act 69, through County and local unit resolutions, voters in each jurisdiction are asked to approve this resource recovery charge (up to \$50) per household/business per year that can then be collected (if voters approve in that local unit) by the County as part of winter taxes. This is similar to a PA 138 fee that is limited to households only with a maximum of \$25/year, but just requires approval by the elected officials of the local unit. (Act 69, 2005, Act 138, 1989, Urban Cooperation Act 7 of 1967, MCL 124.508a)</p>	<p>Leelanau County is the first to use the Act 69 fee. They previously used the Act 138 fee and have an active landfill surcharge. Act 138 is also used by Benzie County, Allegan County and Clinton County – all to fund local drop-off programs, HHW, etc. No other users in the state.</p>	<p>Best Used for:</p> <ul style="list-style-type: none"> <li>• Recycling Program Expenses (drop-offs, curbside)</li> <li>• Special Material Programs (HHW, e-Scrap, Batteries, etc.)</li> </ul> <p>Also, Works for:</p> <ul style="list-style-type: none"> <li>• Admin Expenses (e.g. staff, planning)</li> <li>• Outreach/Education/Promotion</li> <li>• Cannot be used for trash disposal costs</li> </ul>
<p>Landfill Surcharge: A Resource Recovery Fee can be imposed by ordinance/licensing mechanism (e.g. Grand Traverse County), by contract (e.g. Clinton County) or as part of the budget of publicly owned facilities (like Wexford and Emmet). Applies to all incoming tons (residential and commercial) and varies with incoming waste volumes.</p>	<p>This is the most common approach used by Michigan Counties (Emmet, Wexford, Saginaw, Grand Traverse, Leelanau, Sanilac, Clinton, Genesee, Ottawa, Berrien, Macomb, Wayne, Washtenaw, Monroe, Kent, and more)</p>	<p>Best Used for:</p> <ul style="list-style-type: none"> <li>• Admin Expenses (e.g. staff, planning)</li> <li>• Outreach/Education/Promotion</li> </ul> <p>Can Work for:</p> <ul style="list-style-type: none"> <li>• Special Material Programs (HHW, e-Scrap, Batteries, etc.)</li> </ul> <p>Least Suited for:</p> <ul style="list-style-type: none"> <li>• Recycling Program Expenses (drop-offs, curbside) due to higher program costs but may offset some costs</li> </ul>
<p>Voter Approved County-wide Millage: The majority of voters in the County can approve a millage to fund resource recovery programs, either for capital or operating costs. Majority approval of voters would implement this funding mechanism county-wide. Almost always has a sunset clause (e.g. 5 years) to require re- evaluation and re-voting by citizens.</p>	<p>Emmet County used a temporary millage for the capital costs of its original recycling program start-up. Charlevoix County (drop-offs and HHW). Chippewa County (drop- offs/MRF operated by disabled worker non-profit); Tuscola County (drop-offs, HHW and MRF operated</p>	<p>Best Used for:</p> <ul style="list-style-type: none"> <li>• Recycling Program Expenses (drop-offs, curbside)</li> <li>• Special Material Programs (HHW, e-Scrap, Batteries, etc.)</li> <li>• One Time Capital Costs (e.g. Building)</li> </ul> <p>Also Works for:</p> <ul style="list-style-type: none"> <li>• Admin Expenses (e.g. staff, planning)</li> <li>• Outreach/Education/Promotion</li> </ul>



# APPENDIX E

## PUBLIC/PRIVATE PARTNERSHIPS MATRIX

Opportunities for contracting with professional service providers through public/private partnerships.

Collection Hauling Service	Service Provider	Concerns / Risks	Opportunities for Improvement
Subscription Hauling Services: Residents secure collection services with the provider of their choice	Private Service Provider (contracted by resident)	No price bargaining power, various different company vehicles travel street all days of week	Collective Bid contracting can offer cost savings and organized universal service to residents
Preferred Hauler: Communities secure a contract with a service provider, but it is not required that residents utilize the service and may contract with a different service provider if desired	Private Service Provider (contracted community and residents)	Price bargaining power with preferred hauler, various different company vehicles travel street all days of week	Collective Bid contracting can offer cost savings and organized universal service to residents
Collective Bid Contracting: Communities secure a contract with a service provider, and residents are required to utilize the service provided	Private Service Provider (contracted by community)	Competitive bid pricing with service specs, single hauler, no resident choice, single day service per week with reduced truck travel from other options	Contract specification changes can offer residents service improvements, cart size choices, monthly billing changes, and local government intervention if needed.
City Coordinated Collection: Collection is automatically provided to residents by the city employees	Public Service Provider	City billed utility, service complaints through City Council offices, no resident choice, single day service per week	Service standardization and metrics with reporting to City Council, monthly billing changes, cart size choices, predictable service schedule.
City Coordinated Collection: Collection is automatically provided to residents by the city through contracted service provider.	Private Service Provider (contracted by community)	City billed utility, service complaints through City Council offices, no resident choice, single day service per week	Service standardization and metrics with reporting to City Council, monthly billing changes, cart size choices, predictable service schedule.

Professional Services	Service Provider	Concerns / Risks	Opportunities for Improvement
Hazardous Waste Bulking & Hauling	Public Service Provider	Public employees may not be fully trained and with proper PPE to handle home-based toxins collection, bulking and disposal	Contracting to professionally trained staff – or training public staff with proper equipment
Hazardous Waste Bulking & Hauling	Private Service Provider	Contractor may be unavailable when needed	Consider collaborative contract with other local governments
Convenience Center Operations	Public Service Provider	Staffed by local government employees with other duties	Consider dedicated hired staff for Convenience Center Operations
Convenience Center Operations	Private Service Provider	Contractor may be unavailable when needed	Consider collaborative contract with other local governments
Public Education & Outreach	Public Service Provider (Ad agency)	Staff may not be experts in topic or stretched in other duties	Consider dedicated hired staff for Educ & Outreach, such as retired teacher
Public Education & Outreach	Private Service Provider (Ad agency)	Contractor may be unavailable when needed	Consider collaborative contract with other local governments
MRF Processing and Operations	Public Service Provider	Public employees may not be fully trained and with proper PPE to handle MRF equipment	Contracting to professionally trained staff – or training public staff with proper equipment
MRF Processing and Operations	Private Service Provider	Contractor will need equipment and staff, liability concerns, etc.	Provide long-term service contract to address service needs
Financials	Public Service Provider	Added duty to existing County treasurer / comptroller	Hire professional accounting staff.
Financials	Private Service Provider	Local companies may not understand MRF financial risks and needs	Hire professional accounting company to perform financial tasks.
Janitorial / Landscaping	Public Service Provider	City/County staff may not be available and/or trained and with proper PPE to perform tasks	Contracting to professionally trained staff – or training public staff with proper equipment
Janitorial / Landscaping	Private Service Provider	Local contractors may be unavailable when needed	Hire local non-profit job training corp to perform task

# APPENDIX F

## Stakeholder Meeting Information

### Washtenaw County / City of Ann Arbor Regional Recycling Discussion

July 11<sup>th</sup>, 2017

Discussion Notes

Facilitator: Bob Gedert – RRS Sr. Consultant

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**Purpose:** to begin coordinated dialogue and discussion of a regional recycling system

**Objective:** county/city partnership and to prepare for county-wide stakeholder discussions

#### Discussion of Goals and Expectations

- What does a Regional Recycling System look like to us?
  - Waste Management Systems Approach
  - Collaborative
  - Best bang for the buck
  - Holistic support for the community
  - Quilt approach – might have intentional gaps based on community needs
  - Receptive to staged approach
  - Flexibility in timing of services
  - Questions on collection service needs, processing. Disposal, ala carte concept, or all-in-one bundled services
  - Regional could be outside of County boundaries
  - Waste authority a possibility
- Why do we need to regionalize? Advantages?
  - Coordination and collaboration of services provided
  - Less heavy vehicles on the roads through coordinated contracts
  - Better coordinated access and convenience to residents
  - Consistent education and outreach across all jurisdictions
  - Higher level of recovery of recyclable and diversion from landfilling
  - Better access to data and measurement of solid waste and recyclables
  - Coordination of contract bids creating cost sharing to residents
  - Cross-jurisdictional contracts for consistent comprehensive services
  - Operational efficiencies based on larger volumes through larger region
- Disadvantages?
  - Perceived control loss

- Different desire for service levels
- Need same rules for everyone
- Need same consistent package
- What would happen if we did not regionalize recycling services?
  - A<sup>2</sup> replace MRF – contract out and/or offer as ground lease
  - County franchise slowly as needed – not much change
  - Airspace at LF fills – limits lifespan
  - Urban vs. rural authorities
- How do we regionalize? (conceptual discussion)
  - Reginal Drop-offs on City property HHW/Bulky
  - Map dots – smaller drop-offs
  - Intergrade / joint solicitation
- How do private service providers fit into the regionalized approach?
  - Privatize services? Public/private debate?
  - Franchise districts?
  - Management oversight – Authority districts
  - Collection systems / MRF Processing systems / Marketing to end markets
- What does each party need from a regional partnership?
  - Focus on Outcomes x% diversion cost
  - Asset – space on ground – not rolling stock
  - Emissions measured
  - Glass separation (?)
- How will the residents be best served?
  - Make it easier for residents
  - Same or better services
  - Cost considerations – affordability issue
  - Environmental goals vs. costs
  - Keeping it here not to OH
  - More opportunities – HHW & Bulky collection services
  - Service provider standards
  - A<sup>2</sup> / Ypsilanti / UM / School Districts
  - Opportunity for all
  - Unknown future markets – protect residents from costs swings
- Expectations regarding economics of a regional system?
  - Incremental cost vs, environmental benefit
  - Are residents willing to pay?
  - Forced on residents vs. Choice
  - Bundled cost packages
  - Consolidated / Cost efficiencies
  - Unknown future markets – protect residents from costs swings
  - Political will

- Reduced trash trucks on road – reduced road wear
- Living Wage
- Does local history interfere or pose obstacles in the regionalization discussion?
  - MRF site limited in footprint
  - “expandable” as stakeholder
  - A2 “out of the business”
  - U of M in the conversation
  - Schools in too
  - Food waste in schools should be considered
- Disposition of A2 recycling MRF assets?
  - MRF reconstruction issue
  - Sizing issue
  - Design / Build / Operate?
  - Sell to Operator?
  - Repurpose to Regional?
  - Need decision by June 2018
- Recycle Ann Arbor and other environmental interests?
  - Branding (?)
- Political Dynamics of a regional system?
  - East / West divide
  - Pittsville & Scio
  - A2 / Ypsilanti / UM / School Districts

#### **Next Steps**

- Partnership Check-in: Go or No-Go?
  - Go forward
- Where do we go from here?
  - Prep for August 2<sup>nd</sup> Stakeholder Meeting
  - Next steps beyond August 2<sup>nd</sup>

## Washtenaw County Regional Solid Waste & Recycling Stakeholder Discussion

August 2, 2017

Discussion Notes

Facilitator: Bob Gedert – RRS Sr. Consultant

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**Purpose:** Open dialogue and discussion of a regional solid waste & recycling system

### **Desired Meeting Outcomes:**

- Greater understanding of concerns and issues with waste and recycling collection
- Discussion of residential (single-family and multi-family) and business service areas
- Stakeholder discussion and interest with potential partnerships in regional collaboration
- Discussion of next steps
  
- Why regionalize? Advantages?
  - Coordination and collaboration of services provided
  - Less heavy vehicles on the roads through coordinated contracts
  - Better coordinated access and convenience to residents
  - Consistent education and outreach across all jurisdictions
  - Higher level of recovery of recyclable and diversion from landfilling
  - Better access to data and measurement of solid waste and recyclables
  - Coordination of contract bids creating cost sharing to residents
  - Cross-jurisdictional contracts for consistent comprehensive services
  - Operational efficiencies based on larger volumes through larger region
  - Consistency in service to renters in & out of jurisdiction
  - After Use End Markets
  - Entity with a single mission can focus better on that single mission
- Disadvantages?
  - Inability to respond to market changes at macro and micro levels
  - Customer service – larger area can cause delays
  - Time consuming set up of authority
  - Consistency of service may not be wanted – maybe tiered service provided
  - Unstable secondary markets
  - Different jurisdictions impacting SW issues in different ways
  - Independence needs of different jurisdictions
  - Insecurity / risks / giving up by certain jurisdictions
  - Major player withdrawal concerns
- What does a regional recycling system look like to us?
  - Authority – taxing ability through PA185
  - Individual negotiated service contracts
  - WWRA – operating assessments, capital assessments, sale of commodities
  - Utility operation – Solid Waste and Recycling & Composting

- Contractual arrangements
- Wayne model
- What would happen if we did not regionalize recycling services?
  - Service stay the same
  - Recycling Diversion less or stay the same
  - Inadequate service to residents
  - Forced to charge more at LF and/or haul far
  - Sustainability concerns
  - Recycling will cost more
  - Lose big thinking
  - Lose cost efficiency
- How do we regionalize? (conceptual discussion)
  - WWRA could be expanded – good model
  - Another regional authority
  - Place a transfer facility on eastern side of county
  - Consider transportation costs, capital costs, life cycle costs, road surfaces
  - Regional Authority with multiple facilities
  - Who is the Authority? What are the services to be provided?
  - What are each jurisdictions priorities for service?
- How do private service providers fit into the regionalized approach?
  - They are important stakeholders
- What does each stakeholder “need” from a regional partnership?
  - Alignment with objective goals
  - Residents want it
  - Timeline concerns – sooner the better
  - Coordinate with existing contract expiration dates
  - Concerned about impacts on union, living wage, equity issues
  - Desire more consistent service and cost of service
  - Consider past discussions on regulatory authority
  - More comprehensive recycling
  - Less cost of service
  - Satisfied on costs / services
  - More electronics collection & more difficult to recycle items collected
- How will the residents be best served? (skipped for time)
- What are your expectations regarding the economics of a regional system? (skipped)
- What local barriers interfere or pose obstacles in the regionalization discussion? (skipped)
- What support systems can be offered to create a regionalized solution? (skipped)

### Next Steps

- Are you willing to move forward toward a regionalized systems approach?
  - Universally yes toward studying the issue – some concerned on cost

- Are you collectively “in” for supporting a study to determine the best path forward?
  - Mostly “thumbs up” – a few did not participate – there were no “thumbs down”
- Where do we go from here?
  - Study – cost – direct & indirect, environmental impacts, short term & long term, local & non-local impacts, more sustainable model
  - Next step – meet at WWRA location
  - Need to hear from national waste hauler association
  - Also hear from former MRF operator
  - WRAA Partnership
  - More expansion of service to residents
  - Increase in material types recycled
  - Collection of hazardous materials from residents (HHW)
  - Collaboration for service and cost
  - Opportune time to examine expansion
  - Maximize benefit regionally
  - Expand HHW drop-offs
  - Make it easier to recycle
  - Grow the WWRA
  - Revising the County SW Plan
  - Multi-Family – space for recycling
  - Encourage single haulers
  - AA Opportunity Point
  - Lofty goals of residents on diversion rates
  - What are the top ways to regionalize?
  - Extend to MF and Businesses
  - Expand composting opportunities
  - Traffic considerations
  - Use Sweden as model



## MEMO

TO: NOELLE BOWMAN AND JEFF KRCMARIK, WASHTENAW COUNTY  
FROM: BOB GEDERT AND ANNA LYNOTT  
DATE: 12.1.2017  
RE: STAKEHOLDER MEETING PLANNING AS OF 12/1/17

### PROPOSED MEETING DATES

Wednesday, January 17, 2018 and Thursday, January 18, 2018

### PROPOSED MEETING LOCATION

Washtenaw County Learning Resource Center

### PROPOSED SCHEDULE

Wednesday, January 17th

8:30 am – 11:30 am – One on One Meetings with Municipal Stakeholders

11:30 am – 1:30 pm – Open House Meeting w/Lunch for Service Providers and Industry representatives

1:30 pm – 5:00 pm – One on One Meetings with Municipal Stakeholders

Thursday January 18th

8:30 am – 11:30 am – One on One Meetings with Municipal Stakeholders

11:30 am – 1:30 pm – Open House Meeting w/Lunch for Institution and Environmental Group representatives

1:30 pm – 5:00 pm – One on One Meetings with Municipal Stakeholders

### PROPOSED GUEST LIST

Washtenaw County staff will coordinate invitations and RSVP.

Municipal – groups indicate a joint meeting of different municipalities, if possible to schedule, to maximize time over the two days.

- City of Ypsilanti, Ypsilanti Township, Augusta Township
- City of Saline, Pittsfield Township, Saline Township
- Ann Arbor Township, Northfield Township, Superior Township, Salem Township
- City of Dexter, Dexter Township, City of Chelsea, and WWRA
- City of Ann Arbor
- Washtenaw County

### Service Providers and Industry Representatives

- Advanced Disposal
- Amcor
- Ann Arbor/Ypsi Chamber of Commerce
- Ann Arbor SPARK
- DDA's (e.g. West Washtenaw Business Association)
- Green for Life (GFL)
- Recycle Ann Arbor
- Republic Services
- Waste Management

- WWRA (invited under “Municipalities”)

**Institutions**

- Concordia College
- Eastern Michigan University
- St. Joseph Hospital
- University of Michigan
- University of Michigan Hospital
- Washtenaw County Community College
- Washtenaw Intermediate School District

**Environmental Groups**

- Ann Arbor Environmental Commission
- Ecology Center
- League of Conservation Voters
- Saline Environmental Commission
- Sierra Club

**PROPOSED QUESTIONS**

The following are questions that could be posed in the meetings with the different target audiences. These are not final questions, but drafts to illustrate the types of conversations to be had and the topics to be covered.

**Questions for Municipalities**

- Working across community boundaries/political jurisdictions:
  - What are the concerns?
  - What will make this enticing for your community to participate?
  - What would make your community most comfortable to participate?
  - What are you not willing to compromise on?
  - Do you have any recommendations for us as we work towards a regional effort?
- Questions about services:
  - In an ideal world, what should be on the menu of services offered by a regional effort?
  - What are your thoughts and ideas on standardization for solid waste and recycling services across the county?
- Timing of effort:
  - What is the perspective on how much time this might take and more importantly, is there timing such as contract renewals or elections that might be drivers for communities?

**Questions for Waste and Recycling Service Provider Stakeholders**

- Would a regional MRF and transfer station be of benefit to your operations?
- What would make a facility desirable to use, from your standpoint?
- Do you see any issues with a regional facility?
- What are your thoughts about residential recycling (trash, yard waste, bulky collection) in the areas you service?
- How would you like to engage in the process, if at all?
- Other questions or comments?



### **Institutional Stakeholders**

- Would a regional MRF and transfer station be of benefit to your operations?
- What would make a facility desirable to use, from your standpoint?
- Do you see any issues with a regional facility?
- What are your thoughts about the solid waste and recycling services provided at your facilities?
- How would you like to engage in the process, if at all?
- Other questions or comments?

### **Environmental Groups**

- What do you think of the idea of a regional collaboration on waste and recycling coordinate by the County? What are your recommendations?
- What are opportunities or benefits to the idea?
- What are weaknesses or threats to the idea?
- What are we missing? Are there things that you think take priority over this type of effort?
- How would you like to engage in this process, if at all?
- Other questions or comments?

## Regionalization Stakeholder Kick-Off Meeting: August 2, 2017

Name		Organization   Position	Attended?
<b><u>Municipal Participation</u></b>			
1	Christopher Taylor	<b>Ann Arbor City</b>   Mayor	Yes
2	Jason Frenzel	<b>Ann Arbor City</b>   Council Member	Yes
3	Chip Smith	<b>Ann Arbor City</b>   Council Member	Yes
4	Craig Hupy	<b>Ann Arbor City</b>   Public Services Administrator	Yes
5	Molly Maciejewski	<b>Ann Arbor City</b>   Public Works Manager	Yes
6	Cresson Slotten	<b>Ann Arbor City</b>   Systems Engineer	Yes
7	Michael Moran	<b>Ann Arbor Township</b>   Township Supervisor	Yes
8	Amanda Edmonds	<b>Ypsilanti City</b>   Mayor	Yes
9	Pete Murdock	<b>Ypsilanti City</b>   Council Member	Yes
10	Darwin McClary	<b>Ypsilanti City</b>   City Manager	Yes
11	Chris Simmons	<b>Ypsilanti City</b>   Solid Waste Manager	Yes
12	Karen Lovejoy Roe	<b>Ypsilanti Charter Township</b>   Clerk	Yes
13	Brenda Stumbo	<b>Ypsilanti Charter Township</b>   Township Supervisor	Yes
14	Monica Ross-Williams	<b>Ypsilanti Charter Township</b>   Board of Trustees	Yes
15	Jeff Fordice	<b>Saline city</b>   Director, Public Works	Yes
16	Lynette Findley	<b>Superior Township</b>   Clerk	Yes
17	Brenda McKinney	<b>Superior Township</b>   Treasurer	Yes
18	Craig Lyon	<b>Pittsfield Charter Township</b>   Director of Utilities and Municipal Services	Yes
19	Mike Compton	<b>Dexter Township</b>   Board of Trustees; <b>WWRA</b>   Board Member (alternate)	Yes
20	Harley Rider	<b>Dexter Township</b>   Township Supervisor	Yes
21	Bryce Kelley	<b>Scio Township</b>   Township Manager	Yes
22	Evan Pratt	<b>Washtenaw County</b>   Public Works Director	Yes
23	Steve Feinman	<b>Washtenaw County</b>   Board of Public Works	Yes
242	Mona Walz	<b>Washtenaw County</b>   Board of Public Works	Yes
52	Jason Morgan	<b>Washtenaw County</b>   Board of Commissioners	Yes
26	Michelle Deatrck	<b>Washtenaw County</b>   Board of Commissioners	Yes
27	Ricky Jefferson	<b>Washtenaw County</b>   Board of Commissioners	Yes
<b><u>Institutional, Non-profit and Service Provider Participation</u></b>			
28	Diane Sevigny	Washtenaw Intermediate School District (WISD)	Yes

29	Alison Richardson	University of Michigan	Yes
30	Jason Maciejewski	WWRA   Board Chair	Yes
31	Marc Williams	WWRA   General Manager	Yes

**Participating municipalities:** Ann Arbor City, Ann Arbor Township, Ypsilanti City, Ypsilanti Charter Township, Saline City, Dexter City, Chelsea City, Superior Township, Pittsfield Township, Scio Township, Augusta Township, Western Washtenaw Recycling Authority (includes Townships of Dexter, Lyndon, Dridgewater, Manchester, Lima and the Dexter City)

## Participation at "Recycle 101" Class: September 21, 2017

Name		Organization   Position	Attended?
<b><i>Municipal Participation</i></b>			
1	Craig Hupy	Ann Arbor City   Public Services Administrator	Yes
2	Molly Maciejewski	Ann Arbor City   Public Works Manager	Yes
3	Cresson Sloten	Ann Arbor City   Systems Engineer	Yes
4	Christopher Simmons	Ypsilanti City   Solid Waste Manager	Yes
5	Mike Compton	Dexter Township   Board of Trustees; WWRA   Board Member (alternate)	Yes
6	Bryce Kelley	Scio Township   Township Manager	Yes
7	Jeff Fordice	Saline City   Director, Public Works	Yes
	Jeff Wallace	Village of Manchester   Village Manager	Yes
10	Evan Pratt	Washtenaw County   Public Works Director	Yes
11	Mona Walz	Washtenaw County   Board of Public Works	Yes
12	Jeff Krcmarik	Washtenaw County   Solid Waste Supervisor	Yes
13	Noelle Bowman	Washtenaw County   Solid Waste Specialist	Yes
<b><i>Institutional, Non-profit and Service Provider Participation</i></b>			
14	Samuel Moran	University of Michigan	Yes
15	Joe Kohn	Advanced Disposal Services	Yes
16	Jason Maciejewski	WWRA   Board Chair	Yes
17	Marc Williams	WWRA   General Manager	Yes

## Participation at 2-Day Stakeholder Meeting: January 17th-18th, 2018

Name		Organization   Position	Attended?
<b><i>Wednesday January 17, 2018 - Learning Resource Center (4135 Washtenaw Ave)</i></b>			
<b><i>Municipal Participation</i></b>			
1	Howard Lazarus	Ann Arbor city   Administrator	Yes
2	Christopher Taylor	Ann Arbor city   Mayor	No
3	Chip Smith	Ann Arbor city   City Council/Environmental Commission	Yes
4	Allison Skinner	Ann Arbor city   Environmental Commission	Yes
5	Dan Ezekiel	Ann Arbor city   Environmental Commission	Yes
5	Darwin McClary	Ypsilanti City   City Manager	No
6	Stan Kirton	Ypsilanti City   Public Services Director	Yes
7	Frances McMullan	Ypsilanti City   Clerk/Deputy Treasurer	Yes
8	Christopher Simmons	Ypsilanti City   Solid Waste Manager	Yes
9	Peter Murdock	Ypsilanti City   City Council	Yes
10	Julia Bayha	Ypsilanti City   Sustainability Commission	Yes
11	Karen Lovejoy Roe	Ypsilanti Charter Township   Township Clerk	Yes
13	Michael Moran	Ann Arbor Township   Supervisor	Yes
15	Lynette Findley	Superior Township   Clerk	Yes
16	Jeff Fordice	Saline city   Director, Public Works	Yes
17	Craig Lyon	Pittsfield Charter Township   Director of Utilities and Municipal Services	Yes
18	Evan Pratt	Washtenaw County   Public Works Director	Yes
18	John Hanifan	City of Chelsea   Public Works Director	Yes
<b><i>Institutional, Non-profit and Service Provider Participation</i></b>			
20	Mike Garfield	Ecology Center	Yes
21	Kirk Lignell	Recycle Ann Arbor	Yes
22	Andrew Berki	University of Michigan	Yes
23	Tracy Artley	University of Michigan	Yes
24	Nadeen Sayed	Advanced Disposal Services	Yes
25	Steven Brown	Sierra Club of Huron Valley	Yes
26	Jan Wright	Interfaith Council for Peace & Justice	Yes

Name	Organization   Position	Attended?
<b><i>Thursday January 18, 2018 - MSU-Extension Classroom (705 N. Zeeb Road, LL)</i></b>		
<b><i>Municipal Participation</i></b>		
27	Bryce Kelley   Scio Township   Township Manager	No
28	Evan Pratt   Washtenaw County   Public Works Director	Yes
29	Brian Shelby   Augusta Township   Supervisor	Yes
30	Jason Maciejewski   WWRA   Board Chair	Yes

**Participating municipalities:** Ann Arbor City, Ann Arbor Township, Ypsilanti City, Ypsilanti Charter Township, Saline City, Chelsea City Superior Township, Pittsfield Township, Scio Township, Augusta Township, Western Washtenaw Recycling Authority (includes Townships of Dexter, Lyndon, Dridgewater, Manchester, Lima and the Dexter City)

Follow-up Phone Conversations: Feb 2018	
Bryce Kelley	Scio Township
Nadeen Sayed	Advanced Disposal Services
Jason Maciejewski	WWRA Board Chair
Marc Williams	WWRA Operations Manager

# APPENDIX G

## MEASUREMENT FOR SUCCESS

### Measurement Challenges

There is limited data for programs related to solid waste management, diversion, and recovery within Washtenaw County. Data collection requires effort and can be time consuming, but the information collected can offer valuable insights. To move beyond estimates and projections, better systems must be put in place for data collection and measurement.

Through the County's Solid Waste Management Plan process during 2015-2017, it was observed that the more direct involvement local units of government have with their trash, recycling, and yard waste services, the more data is tracked and available. Both Washtenaw County and City of Ann Arbor have data on the programs they operate. For the County, participation and amount of materials collected is tracked for County sponsored programs for household hazardous waste, clean-up days, and other hard to recycle materials. For the City, trash, recycling, and yard waste are easily tracked as the city operates facilities with scales. In communities where subscription-based services are offered, it is less likely for data to be tracked. On a given day, one vendor may service households in several different communities, and therefore it is difficult to attribute tons collected to one community versus another.

There is no local or state level reporting required compared to other states. In neighboring states like Ohio, reporting is required on an annual basis to the state by the Solid Waste District (counties or groups of counties that oversee waste and recycling in their jurisdictions). Even if there is not a mandate in Michigan, counties and communities in Michigan can mimic other states reporting processes on their own. The State of Michigan recently launched the use of an online data collection tool available for use by any program in the state, which is a positive gain for the state and data collection, but its effectiveness has not yet been determined.

If tracking/measurement is available, the residential streams are often targeted ahead of commercial streams, primarily because in comparison residential streams are easier to track. There are best practices to encourage data collection from residential streams which include establishing reporting rules and building relationships within the industry. If there was a hauler licensing program in place, it could require annual reporting. Communities should require reporting as part of their contracts for services. Building relationships with facilities and service providers can also prove beneficial and yield reporting as well (if not already required by an established rule).

The County could also consider a hands-on, in-the-field approach to data collection. Activities like auditing curbside recycling and conducting waste sorts provide immediate insights into what is working in programs and what requires attention.

### Measuring Reduction and Diversion Efforts

As discussed above, most measurement tools for recycling are through tonnage records. By utilizing several measurement tools simultaneously, and comparing those measures over time, a more accurate calculation of the effect of waste reduction efforts are realized. These measurements revolve around four metrics: (1) waste diversion, (2) waste reduction, (3) recovered material streams, and (4) public service effectiveness. The central measurements associated with each metric are diversion activity, waste disposal reduction, waste stream composition, and service expectations, respectively. Some of these measurements identified would be more



applicable if the program owned their own facility or required specific data from a recycling facility, but is useful to include here regardless.

Measurement	Metric	Measurement Instrument
Waste Diversion	Percent of Generated Waste Diverted	Waste Characterization Study, Hauler Tonnage Reports, MRF Material Composition Study
Waste Reduction	Decreased Tons Landfilled	Landfill Tonnage Reports
Recovered from Material Waste Stream	Percent of Marketable Materials	Waste Characterization Study, MRF Material Composition Study
Public Service Effectiveness	Level of Customer Satisfaction	Customer Surveys

# CONCURRENT & CORRELATED ACTIVITIES

## **Ongoing activities being monitored and incorporated in SWRMP development:**

- Service changes being made to address issues (e.g., Three Chairs alley, Sava's / Michigan Theater)
- Downtown alley service options being studied by others
- Regionalization being considered in collaboration with Washtenaw County and interested communities
- MRF options continuing to be explored
- Procurement of expiring contracts (recycling collection, recycling processing, commercial waste franchise) beginning

# REGIONAL COLLABORATION OPTIONS

## Authority Formation Committee

- Facilitated by Washtenaw County Public Works
- Eight jurisdictions participated

City of Ann Arbor	Ann Arbor Township	City of Dexter	Pittsfield Township
City of Saline	Scio Township	City of Ypsilanti	Ypsilanti Township

## Developed *Articles of Incorporation* for anticipated regional authority

- Washtenaw Regional Resource Management Authority (WRRMA)
- Will be shared with other jurisdictions for their consideration as well
- To be presented to Boards and Councils for action on acceptance
  - Anticipated presentation to Ann Arbor's Environmental Commission in January, 2019 and City Council in February/March, 2019

# REGIONAL COLLABORATION OPTIONS

## **Committee's discussions on potential initial efforts include:**

- Education and outreach
  - Common, consistent recyclables across member communities
  - Improved quality and quantity of recyclables
- Data and metrics for member communities and Authority as a whole
  - Create common accepted system
  - Gather baseline data and ongoing tracking of materials
- Future potential of shared collections contracting
- Work on member communities becoming attractive for recycling processing contractor
  - Providers of high quality and high quantity recyclable materials
  - Contract collaboratively or through the Authority for recyclables processing

## ARTICLES OF INCORPORATION

<u>PROVISION</u>	<u>RATIONALE</u>	<u>STATUTE</u>
<u>Article I</u> Legal name	Required by law.	123.302
<u>Article II</u> Constituent Members	Required by law.	123.302
<u>Article III</u> Defined Purposes of WRRMA	Required by law.	123.302
<u>Article IV</u> Powers of WRRMA	Required by law.	123.302 123.303
<u>Article V</u> Definitions	Not required by law. Only adopting certain definitions that are required by law.	123.311(12)
<u>Article VI</u> Dissolution of WRRMA	Required by law.	123.311(11)
<u>Article VII</u> Fiscal Year	Not required by law.	N/A
<u>Article VIII</u> The Board	Required by law.	123.302
<u>Article IX</u> Vacancies	Not required by law.	N/A
<u>Article X</u> Voting Power	Not required by law.	N/A
<u>Article XI</u> Meetings and Voting	Not required by law.	N/A
<u>Article XII</u> General Manager	Not required by law.	N/A
<u>Article XIII</u> Finances	Not required by law.	N/A
<u>Article XIV</u> Constituent Member Contracts	Required by law.	123.305
<u>Article XV</u> Third-Party Contracts	Required by law.	123.306
<u>Article XVI</u> Employment Contracts	Not required by law.	N/A
<u>Article XVII</u> Annual Audit	Not required by law.	N/A

<u>Article XVIII</u> Insufficient Income	Required by law.	123.308
<u>Article XIX</u> Withdrawal of Constituent Member	Required by law.	123.311(11)
<u>Article XX</u> Publication of Articles	Required by law.	123.301
<u>Article XXI</u> Amendment of Articles	Required by law.	123.307
<u>Article XXII</u> New Members	Required by law.	123.307

**JOINT GARBAGE AND RUBBISH DISPOSAL**  
**Act 179 of 1947**

AN ACT to provide for the incorporation of certain municipal authorities for the collection or disposal, or both, of garbage or rubbish, or both, and for the operation of a dog pound; and to prescribe the powers, rights and duties thereof.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—Am. 1955, Act 92, Imd. Eff. June 2, 1955.

*The People of the State of Michigan enact:*

**123.301 Garbage and rubbish disposal and dog pound authority; incorporation by municipality.**

Sec. 1. Any 2 or more cities, villages or townships, hereinafter referred to as “municipalities”, or any combination thereof, may incorporate an authority for the purpose of the collection or disposal, or both, of garbage or rubbish, or both, and for the establishment and operation of a dog pound, by the adoption of articles of incorporation, by the legislative body of each such municipality. The fact of such adoption shall be endorsed on such articles of incorporation by the mayor and clerk of the city, the president and clerk of the village, or the supervisor and clerk of the township, as the case may be, in form substantially as follows:

“The foregoing articles of incorporation were adopted by the ..... of the ..... of ..... county, Michigan, at a meeting duly held on the ..... day of ....., 19.... of said ..... Clerk of said .....”

The authority shall be comprised of the territory within such incorporating municipalities. The articles of incorporation shall be published at least once in a newspaper designated in said articles and circulating within the authority. One printed copy of such articles of incorporation certified as a true copy by the person or persons designated therefor, with the date and place of such publication, shall be filed with each the secretary of state and the clerk of the county within which such authority or the major portion thereof is located. Such authority shall become effective at the time provided in said articles of incorporation. The validity of such incorporation shall be conclusively presumed unless questioned in a court of competent jurisdiction within 60 days after the filing of such certified copies with the secretary of state and the county clerk.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.301;—Am. 1955, Act 92, Imd. Eff. June 2, 1955.

**123.302 Authority; articles of incorporation, contents.**

Sec. 2. Said articles of incorporation shall state the name of such authority, the names of the various municipalities creating the same, the purpose or purposes for which it is created, the powers, duties and limitations of the authority and its officers, the method of selecting its governing body, officers and employees, the person or persons who are charged with the responsibility of causing the articles of incorporation to be published and printed copies to be certified and filed as above provided or who are charged with any other responsibility in connection with the incorporation of said authority, all of which shall be subject to the provisions of the constitution and statutes of the state of Michigan and particularly of this act.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.302.

**123.303 Authority; corporate powers; construction of act.**

Sec. 3. Such authority shall be a body corporate with power to sue or be sued in any court of this state. It shall possess all the powers necessary to carry out the purposes of its incorporation, and those incident thereto. The enumeration of any powers in this act shall not be construed as a limitation upon such general powers.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.303.

**123.304 Authority; acquisition, management, sale or lease of land; condemnation.**

Sec. 4. For the purposes of its incorporation, the authority may acquire private property by purchase, lease, gift, devise or condemnation, either within or without its corporate limits, and may hold, manage, control, sell, exchange or lease such property. For the purpose of condemnation, it may proceed under the provisions of Act No. 149 of the Public Acts of 1911 as now or hereafter amended, or any other appropriate statute.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.304.

**123.305 Authority; contracts; time limitations; charges.**

Sec. 5. (1) The authority may contract with any municipality that is a part of the authority for the collection

or disposal, or both, by the authority of garbage or rubbish, or both, originating in the municipality, or for the establishment and operation of a dog pound for the municipality, for a period not exceeding 40 years. The charges specified in the contract shall be subject to increase by the authority, if necessary, in order to provide funds to meet its obligations.

(2) For the purposes provided in subsection (1), the authority may also contract with a city, village, or township that is not a part of the authority. The contract may provide for charges greater than those to the municipalities that are a part of the authority. The contract shall be for a period not exceeding 40 years. The charges under the contract shall be subject to change from time to time.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.305;—Am. 1955, Act 92, Imd. Eff. June 2, 1955;—Am. 1962, Act 16, Imd. Eff. Mar. 26, 1962;—Am. 1992, Act 106, Imd. Eff. June 25, 1992.

### **123.306 Authority; right to make subcontracts.**

Sec. 6. The authority shall have the power to contract with any person, firm or corporation for the performance by the latter of any part of the work of collecting or disposing, or both, of garbage or rubbish, or both.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.306.

### **123.307 Authority; articles of incorporation, amendment.**

Sec. 7. Any city, village or township may become a part of such authority by amendment to the articles of incorporation, adopted by the legislative body of such city, village or township and by the legislative body of each city, village or township of which such authority is composed. Other amendments may be made to such articles of incorporation if adopted by the legislative body of each city, village or township of which the authority is composed. Any such amendment shall be endorsed, published and certified printed copies filed in the same manner as the original articles of incorporation, except that the filed printed copies shall be certified by the recording officer of the authority.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.307.

### **123.308 Power to raise and expend moneys; payment of contracts; taxing power denied authority.**

Sec. 8. The legislative body of each city, village or township which is a part of such authority is authorized to raise by tax or pay from its general funds, any moneys required to be paid by the articles of incorporation or by the terms of any contract between it and the authority, unless some other method is provided therefor in such articles of incorporation or contract. The authority shall have no direct taxing power.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.308.

### **123.309 Self-liquidating revenue bonds; issuance.**

Sec. 9. For the purpose of acquiring, constructing, improving, enlarging or extending facilities for the collection or disposal, or both, of garbage or rubbish, or both, or for the purpose of refunding bonds previously issued, the authority may issue self-liquidating revenue bonds in accordance with the provisions of Act No. 94 of the Public Acts of 1933, as amended, being sections 141.101 to 141.139 of the Compiled Laws of 1948. No such bonds shall be a general obligation of the authority but shall be payable from revenues only.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.309;—Am. 1959, Act 205, Imd. Eff. July 23, 1959.

### **123.310 Powers additional.**

Sec. 10. The powers herein granted shall be in addition to those granted by any statute or charter.

**History:** 1947, Act 179, Eff. Oct. 11, 1947;—CL 1948, 123.310.

### **123.311 Entering or extending contract, obligation, bond, or note; sale or transfer of property; determination of current market value; withdrawal of member from qualified authority; payment; dissolution of authority; payment of environmental activities; distribution of assets; articles of incorporation; definitions.**

Sec. 11. (1) After the effective date of the 2002 amendatory act that added this section, a qualified authority shall not enter into or extend any contract, obligation, bond, or note that has, or as extended would have, a termination date after the termination date of the authority's most recently approved contract under section 5(1), unless the contract, obligation, bond, or note or extension thereof, is approved by all members.

(2) Within 90 days after a qualified authority decides to sell or transfer real property located within the territory of a member or former member, the member or former member may exercise the right of first refusal to purchase the real property at a price not less than the greater of the real property's current market value or



the highest price offered for the real property in an arm's length, bona fide offer by a third party. The current market value of such real property shall be determined by an appraiser acceptable to the authority and the interested member. Any dispute regarding a determination of current market value shall be resolved by independent arbitration.

(3) Unless its withdrawal would cause an impairment of any contract, a member may withdraw from a qualified authority if all of the following requirements are met:

(a) The legislative body of the member adopts a resolution stating that the authority is no longer effectively serving the member's needs and declaring its decision to withdraw from the authority on a date specified in the resolution.

(b) The withdrawal date specified in the resolution under subdivision (a) is not either of the following:

(i) Less than 60 days after the date the resolution is adopted.

(ii) Within 1 year before the termination date of the authority's most recently approved contract under section 5(1) unless the filings required by subdivision (c) are made more than 1 year before the specified withdrawal date.

(c) The clerk of the member promptly files a certified copy of the resolution adopted under subdivision (a) with the authority and the secretary of state.

(4) By the withdrawal date, the withdrawing member, at its option, either shall pay to the authority the amount of the withdrawing member's fair share of the negative equity of the authority, if any, determined as of the withdrawal date, or shall provide the authority with a bond or other independent, insured guarantee that any such amount will be paid not later than 30 days after the expiration date of the authority's most recently approved contract under section 5(1). This subsection does not relieve the withdrawing member from either of the following:

(a) The member's fair share of any obligation to reimburse the authority following the member's withdrawal for any environmental liabilities subsequently incurred by the authority, to the extent that the environmental liabilities result from the authority's disposal of the withdrawn former member's municipal solid waste, recyclable materials, or yard waste.

(b) The member's payment of any money damages, owed on account of its or the authority's default under a contract under section 6 if the default and damages result directly and solely from the member's withdrawal and are necessary to prevent an impairment of the contract. If 2 or more members withdraw, they are jointly liable for damages under this subdivision.

(c) The member's fair share of any obligation to reimburse the authority following the member's withdrawal for liability incurred by the authority as a result of litigation or arbitration proceedings that were initiated before the date of withdrawal, or litigation or arbitration involving a cause of action arising before the date of withdrawal, if the total amount of the member's fair share of the obligation cannot be exactly determined by the date of withdrawal.

(5) At the option of the authority, by the withdrawal date, the authority shall pay to the withdrawing member the withdrawing member's fair share of the equity of the authority, determined as of the withdrawal date, or shall provide the withdrawing member with a bond or other independent, insured guarantee that such amount will be paid no later than 30 days after the expiration date of the authority's most recently approved contract under section 5(1). If an authority elects to provide such a bond or other guarantee, the withdrawn former member may direct the bonding company or guarantor at any time thereafter to pay from the bond or other guarantee any obligation or liability owed to the authority by the withdrawn former member, including, but not limited to, an obligation described in subsection (4)(a) or (b).

(6) Unless it would cause an impairment of an authority contract under section 6, a qualified authority shall dissolve if both of the following requirements are met:

(a) The legislative bodies of 60% of the members, weighted by the percentage of recent waste delivery, each adopt a resolution stating that the authority is no longer effectively serving the public good for which it was created and directing that the authority be dissolved pursuant to this subsection and subsections (7) to (9).

(b) The clerk of each member whose legislative body adopts a resolution under subdivision (a) promptly files a certified copy of the resolution with the authority and the secretary of state.

(7) Within 6 months after the requirements of subsection (6) are met, the qualified authority shall establish a mechanism to manage and pay for environmental activities required under existing law and cease the activities described in section 1 for which it was incorporated. Within 6 months after ceasing activities described in section 1, the authority shall settle its accounts, including, but not limited to, all vested or accrued employee benefits, employment contracts, collective bargaining agreements, and unemployment compensation, and, subject to subsection (2), shall sell all of its property. In addition, the authority shall establish a mechanism for handling future environmental liabilities. A qualified authority with respect to which the requirements of subsection (6) have been met and a new authority incorporated under subsection

(10) may agree to the assignment of contracts from the qualified authority to the new authority.

(8) After the requirements of subsection (7) are met, the qualified authority shall distribute to each member that member's fair share of the authority's remaining assets.

(9) Upon distribution of the qualified authority's assets under subsection (8), both of the following apply:

(a) The authority is dissolved.

(b) All liabilities of each member and former member of the authority are terminated, except for both of the following:

(i) Any environmental liabilities attributed to the authority to the extent that the environmental liabilities result from the authority's disposal of the member's or former member's fair share of municipal solid waste, recyclable materials, or yard waste.

(ii) The member's fair share of any obligation to reimburse the authority following the dissolution for liability incurred by the authority as a result of litigation or arbitration proceedings that were initiated before the date of dissolution, or litigation or arbitration involving a cause of action arising before the date of dissolution, if the total amount of the member's fair share of the obligation cannot be exactly determined by the time the requirements of subsection (7) are met.

(10) Subsections (6) to (9) do not prevent the incorporation of a new authority by some or all of the members or former members of an authority with respect to which the requirements of subsection (6) have been met.

(11) If, after the effective date of the amendatory act that added this section, a qualified authority is incorporated or amends its articles of incorporation, the qualified authority shall include in its articles the provisions of subsections (3) to (9).

(12) As used in this act:

(a) "Appraiser" means an individual licensed under article 26 of the occupational code, 1980 PA 299, MCL 339.2601 to 339.2637.

(b) "Authority" means an authority incorporated under this act.

(c) "Corrective action" means that term as defined in section 11502 of the natural resources and environmental protection act, 1994 PA 451, MCL 324.11502.

(d) "Environmental liabilities" means the costs of landfill closure and postclosure obligations, the costs of corrective action, response activity costs, and fines, penalties, or damages required or assessed by the state under the natural resources and environmental protection act, 1994 PA 451, MCL 324.101 to 324.90106.

(e) "Equity of the authority" means the total fund equity of the authority excluding contributions of capital attributed to the clean Michigan initiative bond fund as set forth in an audit conducted for this purpose except that liabilities shall be reduced by any estimated liabilities that were included in determining total fund equity.

(f) "Former member" means a member that has withdrawn from a qualified authority under this section or a prior member of a qualified authority that has been dissolved under this section.

(g) "Impairment", in reference to an authority contract, means a material default in the contract that cannot be cured by the payment of monetary damages.

(h) "Member" means a municipality that incorporated a qualified authority under section 1 or that became part of a qualified authority under section 7 and that has not withdrawn from the authority under this section.

(i) "Member's fair share" means the percentage determined by taking the tonnage of municipal solid waste, recyclable materials, and yard waste contributed by the member and disposed of by the authority since its incorporation and dividing that amount by the tonnage of municipal solid waste, recyclable materials, and yard waste contributed by all members and disposed of by the authority since its incorporation, as determined, in the event of a dispute, by statutory and binding arbitration.

(j) "Percentage of recent waste delivery" means the amount of municipal solid waste, recyclable materials, and yard waste generated within a particular member's territory and disposed of by the authority during the latest full calendar year for which the authority disposed of such materials or waste generated within the territory of that member, divided by the sum of such amounts for all members, as determined, in the event of a dispute, by independent arbitration.

(k) "Qualified authority" means an authority that as of the effective date of this section or thereafter is composed of 10 or more members and has a population residing within its territory of 250,000 or more.

(l) "Response activity costs" means that term as defined in section 20101 of the natural resources and environmental protection act, 1994 PA 451, MCL 324.20101.

**History:** Add. 2002, Act 598, Imd. Eff. Dec. 16, 2002.

**Compiler's note:** Former MCL 123.311 to 123.319, deriving from Act 345 of 1978, were repealed by Act 60 of 1995, Imd. Eff. May 24, 1995.



# City of Ann Arbor

301 E. Huron St.  
Ann Arbor, MI 48104  
<http://a2gov.legistar.com/Calendar.aspx>

## Master

**File Number: 18-0457**

**File ID:** 18-0457

**Type:** Resolution

**Status:** Passed

**Version:** 1

**Reference:**

**Controlling Body:** City Council

**File Created Date :** 04/16/2018

\* **File Name:** 4/16/18 Solid Waste Resource Management Plan  
2019-2023

**Final Action:** 04/16/2018

**Title:** Resolution to Approve a Services Agreement with Aptim Environmental and Infrastructure, Inc. (Aptim) for Solid Waste Resource Management Plan (2019-2023) (\$250,000.00)

### Notes:

### Sponsors:

**Enactment Date:** 04/16/2018

**Attachments:** PSA\_APTIM\_SWRMP2019-2023\_docx.pdf

**Enactment Number:** R-18-138

### Drafter/Contact:

**Hearing Date:**

\* **Admin/Mgr:** Craig A. Hupy, Public Services Area Administrator

**Effective Date:**

## History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	City Council	04/16/2018	Approved				Pass
	<b>Action Text:</b>	A motion was made by Councilmember Lumm, seconded by Councilmember Eaton, that the Resolution be approved. On a roll call, the vote was as follows with the Mayor declaring the motion carried:					
		Yeas: 7	Councilmember Warpehoski, Mayor Taylor, Councilmember Grand, Councilmember Krapohl, Councilmember Westphal, Councilmember Ackerman, and Councilmember Smith				
		Nays: 4	Councilmember Lumm, Councilmember Kailasapathy, Councilmember Eaton, and Councilmember Bannister				

**Text of Legislative File 18-0457**

Resolution to Approve a Services Agreement with Aptim Environmental and Infrastructure, Inc. (Aptim) for Solid Waste Resource Management Plan (2019-2023) (\$250,000.00)

Attached for your consideration is a resolution to approve a contract with Aptim Environmental and Infrastructure, Inc. (Aptim), for professional services to develop a comprehensive Solid Waste Resource Management Plan (2019-2023) for the City. This plan will layout a strategic approach for the City on how best to provide solid waste, recycling and compost/organics management programs that meet the needs and desires of the community in a fiscally responsible and sustainable manner. The City's Solid Waste Resource Management Plan will be more than a solid waste plan update - it will serve as a business plan to guide solid waste operations for the next five years and beyond.

There are several factors underlying the need to undertake this effort, which was anticipated and budgeted in the FY18 Solid Waste budget. First, the planning horizon for the last plan, the Solid Waste Resource Plan Update, went through 2017, which has now passed. Also, the Washtenaw County Solid Waste Management Plan includes a goal of operating collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy; and with the condition of the equipment and changes to the recycling processing at the City's Material Recovery Facility (MRF) since mid-2016, there is an opportunity for potentially utilizing the MRF or developing another site to support such a collaborative effort. In addition, there is a desire in the community for expanded programs within the solid waste program area, such as expanded food waste/organics collection; however, with current annual operating expenses exceeding annual operating revenues, program expansions are not prudent without a holistic strategy for the entire set of solid waste programs and services that can be sustained financially.

The City issued Request for Proposal (RFP) No. 18-04 to solicit proposals from consultants to provide strategic planning services for the development of the City Solid Waste Resource Management Plan (2019-2023). The City received proposals from four firms. A staff review committee reviewed all four teams' proposals, and interviewed each of the four proposers.

Following review of the proposals and the interviews, the recommendation of the committee is to award the contract to Aptim as their proposal meets the needs and requirements identified in the RFP, as well as their related experience and the quality of their work plan was found to be superior to the other firms.

Budget/Fiscal Impact

Funding for these services is available in the approved FY18 Solid Waste Operating Budget.

Sustainability Framework

The work under this contract is essential to supporting the Engaged Community, Sustainable Systems and Responsible Resource Use goals of the City's Sustainability Framework.

Prepared by: Christina Gomes, Solid Waste & Recycling Program Coordinator

Reviewed by: Craig Hupy, Public Services Administrator

Approved by: Howard S. Lazarus, City Administrator

Whereas, The guiding principles for Ann Arbor's solid waste program focus on providing services that are cost-efficient and customer-friendly;

Whereas, The planning horizon for the City's last Solid Waste Resource Plan Update ended in 2017;

Whereas, The recent amendment to the Washtenaw County Solid Waste Management Plan, which was supported by the Environmental Commission and approved by the City Council (R-18-001) includes a goal of operating collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy;

Whereas, Funding was included in the FY18 Solid Waste Operating Budget for the development of an updated City solid waste plan;

Whereas, Staff issued RFP (Request for Proposal) No. 18-04 to procure outside resources needed to develop the Solid Waste Resource Management Plan (2019-2023), including funding and program recommendations, coordinated through the Environmental Commission and engaging the wider community;

Whereas, Aptim Environmental and Infrastructure, Inc. (Aptim) was selected to manage the City's Solid Waste Resource Management Plan (2019-2023) as requested in the City's Request for Proposal (RFP) No. 18-04;

Whereas, Aptim Environmental and Infrastructure, Inc. (Aptim) complies with the City's Non-Discrimination and Living Wage Ordinances; and

Whereas, Funding for this work is available in the approved the FY18 Solid Waste Fund Operating Budget;

RESOLVED, That City Council approves a contract with Aptim Environmental and Infrastructure, Inc. (Aptim) for the Solid Waste Resource Management Plan (2019-2023) in the amount of \$ 250,000.00;

RESOLVED, That the funding for the contract amount be made available without regard to fiscal year;

RESOLVED, That the Mayor and City Clerk be authorized and directed to execute the agreement for services after approval as to substance by the City Administrator and approval as to form by the City Attorney; and

RESOLVED, That the City Administrator be authorized to take the necessary administrative actions to implement this resolution.



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TO: Environmental Commission

FROM: Howard S. Lazarus, City Administrator

DATE: February 10, 2017

SUBJECT: Ann Arbor MRF Status Update and  
Staff Recommendations for Next Steps

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On July 7, 2016 the contract with the City's previous on-site operator of the City-owned Material Recovery Facility (MRF) and waste Transfer Station was terminated, which resulted in an end to their services on July 11, 2016. In the subsequent time period, the City staff has been working to provide uninterrupted and continued single-stream recycling collection and processing of those collected materials to the Ann Arbor community. In addition, efforts have been made to determine the feasibility and needs to resuming full processing operations at the MRF. The following updates on these efforts are provided to the Environmental Commission for your review and consideration.

### **INTERIM OPERATIONS RFP PROCESS**

Following the termination of the contract with the previous on-site operator, on August 4, 2016, City Council approved Resolution R-16-311, which ratified an emergency purchase order to Waste Management of Michigan for a six-week period that was put in place at the time of the termination, thus providing uninterrupted services to the community. On September 9, 2016, City Council approved Resolution R-16-360, which approved a contract with Waste Management of Michigan to perform short-term operations of the MRF and Transfer Station for a period of approximately six months, until the completion of the City's procurement process to obtain the services of an Interim Operator for the MRF and Transfer Station.

On August 12, 2016 the City issued RFP (request for proposal) No. 980 to solicit and select a contractor to perform interim operations of the MRF and solid waste Transfer Station until the City completes a thorough and well-defined process to procure a long-term, multi-year operator for these essential City services. The condition of the sorting equipment at the MRF is such that it cannot be operated in a safe manner; therefore, the

RFP requested proposals from firms to receive the City's single-stream recyclable material at the MRF and to use the City's baler (which was replaced in June, 2016) to bale the single-stream material and transport it to the proposer's facility for sorting and delivery to market.

In addition, the scope of work requested in the RFP included operation of the City's Transfer Station Facility, which entails handling the City's municipal solid waste (MSW) delivered to the Transfer Station, loading the MSW into transfer trailers and delivering it to the Woodland Meadows Landfill in Wayne, Michigan.

The RFP was modified and clarified through four separate addenda. The major revisions to the scope of work requested in the RFP included:

- Adding that the work plan was to include providing an on-line computerized scalehouse tracking system.
- Adding that the work plan was to include provisions for the contractor to provide the labor, maintenance equipment and material to perform on-site processing of recyclable in the event that if the City is able to complete the repairs and adjustments to the sorting line and related equipment during the term of this contact. The repairs of the equipment were not included in the RFP.

The other major aspects included in the addenda was to provide written responses to the 69 questions from potential proposers and to extend the due date for proposals. The final due date for submitting proposals was October 28, 2016.

### **Evaluation of Proposals**

Three proposals were submitted to the City in response to this RFP No. 980. The proposers were Emterra Environmental USA, Recycle Ann Arbor and Waste Management of Michigan. The proposals were reviewed by a staff committee, who then decided to interview all three proposers. Following the review of the proposals, fee submittals and interviews, the staff committee evaluated and scored the proposers based on their Professional Qualifications (20%), Past Involvement with Similar Projects (40%), Proposed Work Plan (30%) and Fee Proposal (10%).

#### ***Emterra Environmental USA***

The staff committee's review of the proposal and interview by Emterra Environmental USA determined this proposer to be quite strong in the professional qualifications of the staff and firm to perform the requested work (composite score: 17.6), as well as past experience with similar projects/work (composite score: 36.4). The committee noted the strong commitment to the team's advanced use of leading edge technology explained in detail during their interview (work plan composite score: 27.4).

Evaluation of all of the base fee proposals for recycling services (baling, transloading and processing at their facility) and transfer station operations was performed by taking the submitted fees and applying them to the tons of recycleables and municipal solid waste (MSW) processed at the MRF and transfer station in September 2016 as a base, or



sample month. By performing this calculation using Emterra Environmental USA's fee proposal resulted in a cost of \$242,138.69 (second highest of the proposers, 25% higher than the lowest cost, composite score: 6.4)

The staff evaluation committee's total composite score for Emterra Environmental USA following the proposal review, interview and fee calculation comparison was 87.8.

### ***Recycle Ann Arbor***

The staff committee's review of the proposal and interview by Recycle Ann Arbor determined this proposer to not be as strong with the professional qualifications of the staff and firm to undertake the requested work (composite score: 12.6), and less so in past experience with similar projects/work (composite score: 18).

The committee noted the team's strong preference to perform the recycling services through an alternate method of loose loading and transporting the recyclables to the processing facility instead of baling and transloading as requested in the RFP. This work activity would be performed at the Transfer Station rather than at the MRF. The Recycle Ann Arbor team indicated that this would reduce the amount of residual material at the end of the material processing. In evaluation of this alternative method, staff has estimated that the additional trucking needed to transport the loose loaded material compared to the trucking for the baled method would result in 2.45 times more greenhouse gas (GHG) emissions being generated with the loose loading method. Additionally, the residual rate found in the material audit of the current baled and transport operations under the short-term operations contract indicate an 11% residual rate for the recyclable material, which is in line with the rate realized by the City's former contract operator when recyclables were processed at the MRF. Another consideration is that beginning in July 1, 2017 the operation of the Transfer Station will be performed by the new Landfill Disposal Services contractor (RFP anticipated to be issued by February 17, 2017). Based on the higher resulting GHG, compared to the anticipated relatively low reduction in residual rate, and that the transfer station will be operated by a different contractor beginning July 1, 2017 creating logistical/coordination concerns, this optional method is not being selected for the interim operations contract.

The committee also noted the Recycle Ann Arbor work plan noted that it included an attachment that outlined an "assessment of the Ann Arbor MRF currently," and "recommendations for making the facility whole again as quickly as possible." This section of the work plan continued by indicating that "with a relatively small investment of time and money by the City... the facility can be operational in 30-60 days, saving the city tens of thousands of dollars per month in recycling transfer costs in the process. This assessment confirms the report of the CP Group, which stated in their report from July 2015 that 'the equipment is performing as designed and the equipment is in good operating condition overall.'" The referenced attachment stated that "repair work would take no longer than 60-days and cost no more than \$200,000 to bring the Ann Arbor MRF back into safe and efficient operation. Based on that conclusion, we strongly recommend that Recycle Ann Arbor provide a price proposal for operating the Ann Arbor MRF in order to recover the City's recyclables."

When asked by the staff committee during the interview if the team would include this time duration and cost figure as fixed, guaranteed contract items, Recycle Ann Arbor declined to include that provision to the contract. In addition, the team's major sub-contractor, Rumpke Recycling, indicated that they would want to inspect the equipment before they would suggest any estimate or provision for repair of the equipment. This inconsistency among the proposing team members as well as with the submitted proposal raised concerns among the staff committee members. (Work plan composite score: 19.2).

By performing the cost proposal evaluation as described earlier using Recycle Ann Arbor's fee proposal resulted in a cost of \$285,092.92 (highest of the proposers, 47% higher than the lowest cost, composite score: 6.6)

The staff evaluation committee's total composite score for Recycle Ann Arbor following the proposal review, interview and fee calculation comparison was 56.4.

### ***Waste Management of Michigan***

The staff committee's review of the proposal and interview by Waste Management of Michigan determined this proposer to be strongest in the professional qualifications of the staff and firm to perform the requested work (composite score: 18.8), as well as past experience with similar projects/work (composite score: 38). The committee noted the reduced depth and detail in the written work plan submittal. The Waste Management team explained in the interview that their work plan was based on the scope of the current short-term operations contract and indicated that in hindsight they should have added more detail in their work plan (work plan composite score: 15).

By performing the cost proposal evaluation as described earlier using Waste Management of Michigan's fee proposal resulted in a cost of \$193,341.47 (lowest of the proposers, composite score: 9.6)

The staff evaluation committee's total composite score for Waste Management of Michigan following the proposal review, interview and fee calculation comparison was 81.4.

### **Staff Recommendation**

Following the review of all of the submitted proposals, interviews of all the proposers, and evaluation of all of the fee proposers, noting the close total composite scores between Emterra Environmental USA and Waste Management of Michigan, but the 25% cost differential (\$48,797.22 savings in the sample monthly cost) favoring Waste Management of Michigan, staff recommends that the interim operations contract be awarded to Waste Management of Michigan.

Funding for these services was budgeted under the previous contract pricing in the Solid Waste Operation and Maintenance Budget at a monthly cost of approximately \$60,000.00 or \$720,000.00 annually. Since the termination of the existing contract, short-term

operating costs through January 2017 are \$1,381,303 for the recycling (8,457 tons of recyclables) and transfer station (30,531 tons of MSW) operations and interim monthly costs are estimated to be \$200,000.00 monthly or an additional \$1,000,000.00 through June 2017 and the end of the current fiscal year. It will therefore be necessary for City Council to appropriate the difference between budgeted and estimated contract costs, approximately \$1,700,000, from the available Solid Waste Fund Balance. Future contract costs will be budgeted in the annual budgeting process.

### **RETURNING THE MRF TO FULL OPERATIONS**

Following the termination of the contract with the City's previous on-site operator, City staff has undertaken work of immediate need at both MRF and Transfer Station, such as repairs and replacements of numerous doors at both facilities and repair of the truck scale. City safety staff as well as operational staff have identified several other items that need to be addressed at both facilities through inspections and observations. A high-level summary of these items is provided below:

#### ***MRF Facility - Currently Known Needs***

- Roof needs repair (existing leak onto tip floor) and full inspection
- Downspouts damaged, disconnected, and missing
- Siding needs to be repaired
- Building needs to be powerwashed (excessive dust)
- Multiple safety electrical repairs/replacements
- Multiple safety signage repairs/replacements
- Water infiltration needs to be eliminated
- Equipment needs to be rearranged/adjusted to provide adequate egress
- Broken windows need to be replaced
- Ceiling tiles over conveyor equipment need to be replaced
- Debris needs to be removed from ceiling
- Unused equipment needs to be removed from around facility
- Crumbling concrete barrier at the back side of the tip floor needs to be replaced

Current planning level cost estimate: \$300,000 – \$350,000

#### ***Transfer Station Facility - Currently Known Needs***

- Roof needs full inspection, and potential repairs
- Downspouts damaged, disconnected, and missing
- Siding needs to be repaired
- Building needs to be powerwashed
- Grinder pumps not functioning
- Sewer drain located in middle of tip floor filled in with concrete and needs to be replaced, including redesign and replacement of tip floor
- The truck entrance needs to be widened
- Entrance/Exit Gates need to be repaired/replaced

Current planning level cost estimate: \$270,000 – \$300,000

### ***Sorting and Processing Equipment***

Two independent equipment evaluations have been conducted - - one by Waste Management and their subcontractor Alexander Industrial Technologies, Inc. (AIT) at the end of 2016, and the second by CP Manufacturing (manufacturer of the single-stream equipment), which was recently completed at the site on February 3, 2017. As of the writing of this report, staff has not yet been received the written assessment report from CP Manufacturing. However, staff was present during portions of the two-day inspection and had verbal conversations with the CP technical staff that performed the assessment, and those verbal conversations are included in the following summary of findings.

Both assessments noted limitations on space to access and safely perform proper preventative maintenance on the equipment resulting from the configuration of the system and the footprint of the building. With the condition of the equipment from the apparent lack of maintenance that it has received, neither of the separate assessors/inspectors would operate the equipment due to its unsafe condition. As a result, the full scale of repairs needed to bring the existing equipment back to full operation has not been determined by either assessment. An initial level of investment would be needed to put the equipment into a state that it would be safe enough to activate and then allow for further inspection and assessment of the equipment under operating conditions.

The Waste Management assessment provided a minimum estimated range of \$50,000 - \$200,000 for the most critical initial repairs to allow the equipment to be activated, with an additional minimum estimated range of \$50,000 - \$200,000 for other repairs noted under static conditions. In other words, the estimated minimum range of investment to perform repairs observed without the equipment being operated is \$100,000 - \$400,000. It is anticipated that there would be additional repairs at an unknown cost identified after the equipment is operated. Based on the discussions with the CP Manufacturing staff member at the site, city staff are preparing for an even larger estimate of costs for repairs in the CP Manufacturing report.

Both assessments noted the vintage of the equipment. Both indicated that the front portion of the system is part of the original dual-stream process equipment and that there is a lack of available replacement parts for this portion of the system. In addition, the CP Manufacturing staff member described the existing MRF equipment as early-generation style equipment, correctly noting that it is very dependent on a high level of manual labor to operate properly, while current equipment designs utilize technology to a much higher degree, greatly reducing the amount of manual labor necessary for its operation.

### **Staff Recommendation**

Staff recommends the following next steps with regards to the MRF and Transfer Station:

- Focus staff efforts on repairs at the Transfer Station facility
- City staff engage Washtenaw County staff regarding the potential for regional MRF/recycling program and facility
- City staff develop and present a recommendation to policymakers regarding how to restart full processing at the MRF



## MEMORANDUM

TO: Mayor and City Council  
Environmental Commission

FROM: Craig Hupy, Public Service Area Administrator

SUBJECT: Solid Waste Fund/Program Update

DATE: January 26, 2018

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The City has experienced recent challenges in the operation and financial planning within the Solid Waste Fund. After securing three new operating contracts, final resolution to anticipated OPEB liability, and recycling market stabilization, information has been prepared to share regarding the Solid Waste Fund current and projected financial position and the ongoing operational and long-term planning efforts of the Solid Waste Fund.

### FINANCIAL POSITION

As of June 30, 2017, the Solid Waste Fund reported an unrestricted fund balance of \$11,351,180, which represents 64% of operating expenditures. The unrestricted fund balance is projected to be approximately \$6,832,066 at the end of FY 2019, which represents 38% of operating expenditures. This is well within range of the City's fund balance policy recommendation of maintaining a reserve of 25% of operational expenditures. The decrease in unrestricted fund balance is primarily due to the \$3.3M OPEB financial adjustment. As indicated in the table below operational expenditures are forecasted to exceed revenues in FY 2019. In an effort to control operating costs and to improve service delivery, alternative service delivery models, including outsourcing all collections, are currently being explored. In addition, regionalization/partnerships opportunities are continuing in conjunction with Washtenaw County.

FINANCIAL SUMMARY					
(All figures in millions of \$\$\$)					
	ACTUAL			PROJECTED	
	FY2015	FY2016	FY2017	FY2018	FY2019
<i>Revenues</i>					
Solid Waste Millage	\$11.7	\$12.0	\$12.3	\$12.6	\$12.9
Recycling Processing Credit	0.1	-	1.1	1.0	1.0
Waste Collection – Commercial	2.4	2.5	2.6	2.6	2.6
All Other	0.6	1.9	0.5	0.5	0.7
<b>Total Revenues</b>	<b>\$14.8</b>	<b>\$16.4</b>	<b>\$16.5</b>	<b>\$16.7</b>	<b>\$17.2</b>
<i>Expenses</i>					
Waste	\$5.5	\$5.7	\$6.4	\$6.0	\$6.3
Material Recovery	3.6	3.6	6.6	5.9	5.9
Compost	1.2	1.4	1.3	1.3	1.4
Depreciation	1.0	0.8	0.9	0.9	0.9
Misc. Operating Expenses	2.1	2.8	2.9	2.6	3.1
<b>Total Operating Expenses</b>	<b>\$13.4</b>	<b>\$14.3</b>	<b>\$18.1</b>	<b>\$16.7</b>	<b>\$17.6</b>
<b>Operating Net</b>	<b>\$1.4</b>	<b>\$2.1</b>	<b>\$(1.6)</b>	<b>\$0</b>	<b>\$(.4)</b>
Other Adjustments*	\$(.5)	\$(4.4)	\$0.2	\$(3.6)	\$(.5)
Unrestricted Fund Balance (net position)	\$15.1	\$12.8	\$11.4	\$7.8	\$6.9

\*Includes Changes in Capital Assets & Liabilities (GASB & OPEB).

The above financials do not include any estimates for repairs and/or replacement of the MRF. The outcomes of the Solid Waste Management Plan update, potential partnerships/regionalization in the provision of solid waste services (see discussion in later sections), and the business plan to outsource all collection service will influence future financial planning.

## ONGOING OPERATIONAL PLANNING STATUS

### ***Solid Waste Resource Management Plan***

RFP #18-04 soliciting proposals for the Solid Waste Resource Management Plan was issued on January 3, 2018. The scope included all of the elements outlined by and discussed at the Environmental Commission meeting of December 7, 2017.

A pre-proposal meeting was held on January 19, 2018 and representatives from four separate firms attended. An addendum with updated scope items and clarifications to the RFP, as well as responses to questions submitted by firms was issued on January 31, 2018.

Proposals are due to the City on Thursday, February 8, 2018. Staff will review the proposals and if necessary schedule interviews with selected firms/teams likely the week of February 19, 2018. Following negotiations of the final scope of work for the contract, a resolution will be presented to City Council to award the contract for the work. The target to present this resolution is late March/early April.

## **LONG-TERM PLANNING EFFORTS UPDATE**

### ***Contract Collection Operations***

Currently, City staff supports collections along with multiple contracted collections, which complicates service delivery and contract management efforts. In an effort to control costs, streamline operations, and improve service delivery, it is the intent to combine all collection services in one single collection contract. Staff has begun preparations for this transition, which would be effective July 1, 2019.

### ***Regionalization/Partnerships***

Washtenaw County is leading an effort to examine the potential of undertaking a regional approach to solid waste, recycling and compost services. This effort began in August, 2017 with an initial discussion session with representatives of multiple jurisdictions within the County to assess interest among these stakeholders to further examine and potentially participate in such an approach. There was strong interest in continuing this examination, but a need was identified for more information before detailed discussions regarding participation in such an approach are undertaken. To address this need, the County sponsored a *Recycling 101 Session* in September, 2017 by Kelly Rooney of Advanced Disposal, who held the same session at the Environmental Commission work session of February 1, 2018. The County also organized MRF facility tours at the City's and Western Washtenaw Recycling Authority's MRFs in November, 2017.

The next step to address this information need was to undertake a study to provide clear options for community participation in a regional solid waste authority, to enable the shortest timeframe possible to obtain commitments from communities to participate. The County has contracted with Resource Recycling Systems, Inc. (RRS) to perform this study of potential models for regional authority governance and financing of the potential regional systems, including facilitation of stakeholder meetings with representatives of local governmental units and service providers to inform the examination of potential options for the region. The City is assisting the County with the funding of this effort.

The stakeholder meetings were held over a two-day period (January 17 and 18, 2018) with nine governmental units participating: The City of Ann Arbor, The City of Saline,

The City of Ypsilanti, Ann Arbor Township, Pittsfield Charter Township, Scio Township, Ypsilanti Charter Township, Washtenaw County and the Western Washtenaw Recycling Authority (WWRA); three service providers: Ecology Center, Recycle Ann Arbor, and Advanced Disposal; as well as the University of Michigan. RRS is compiling the feedback and discussion notes from these sessions and will be utilizing them in their study. The study is anticipated to be completed by the end of March 2018.

City staff are currently working with Washtenaw County to prepare a schedule of steps after release of the study to define a process and deadlines to determine partner interest, as well as preliminary steps and timelines through completion of a joint MRF project. This schedule of next steps will be forwarded after they are determined, which is anticipated by the end of March.





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TO: Environmental Commission

FROM: Howard S. Lazarus, City Administrator

DATE: July 20, 2018

SUBJECT: Solid Waste/Recycling Program Area Status Updates

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**PURPOSE:** This memo provides information and status updates on various projects and program efforts in the City's Solid Waste Fund program areas.

### **Examination of Potential for Regionalization of Recycling, Composting & Solid Waste Efforts**

The Washtenaw County Department of Public Works is continuing to facilitate discussions among representatives from various communities in the County to determine if a regional approach to solid waste efforts can and should be established. The County has contracted with Resource Recycling Systems (RRS) to facilitate these discussions as well as to develop recommendations on such a regional approach. RRS has completed their *Washtenaw County Regional Authority Study*, which includes three tiers of recommendations:

- County coordinated technical assistance and education/outreach
- Expansion of Drop-Off Centers
- Permanent Material Recovery Facility (MRF) operations

A pdf copy of the report is attached included as a separate attachment.

Moving forward, communities that are potentially interested in participating in a regional approach to solid waste and waste diversion have formed a Waste Authority Formation Committee, and held their first meeting on June 7, 2018. The entities that are participating include: Ann Arbor Township, Scio Township, Pittsfield Township, City of Dexter, City of Saline, City of Ypsilanti, Ypsilanti Township, and the City of Ann Arbor. All of the participants expressed interest in working to develop a formalized regional approach for consideration by their boards/councils this coming fall. The next meeting of this committee is scheduled for July 19, 2018.

### ***SEMCOG Planning Assistance Program Award***

Washtenaw County has recently received notification from SEMCOG that they have been awarded a “Multi-Community Planning Grant” in the amount of \$40,000 for the Washtenaw County Regional Solid Waste Authority Formation examination. This is the first year of this grant program where SEMCOG is looking to award \$500,000 in increments of up to \$50,000 per award with a minimum 20% match, for joint planning efforts undertaken by multiple communities. Though the example areas suggested in the grant information were more focused on transportation, water resources, zoning and other items for which SEMCOG has regional plans, SEMCOG awarded the full \$40,000 requested for the “planning process to define mission and implementation mechanism for regional solid waste collaboration” with the City of Ann Arbor, City of Ypsilanti, City of Saline, Ann Arbor Township, Pittsfield Township, Scio Township and Ypsilanti Township all participating in the planning process.

### **Solid Waste Resource Management Plan**

The Solid Waste Resource Management Plan (SWRMP) kicked off at the end of May. Staff has been gathering data and materials for the Aptim consultant team to review and compile, including information for the development of the solid waste financial model.

The community engagement strategy is being developed, which will begin with various stakeholder interviews in late July/early August. These interviews will inform the discussion for the Environmental Commission Work Session on the SWRMP. This work session is scheduled for Thursday, August 23, 2018 beginning at 5:00pm due to the City Council meeting that evening starting at 7:00pm. Following this work session, a focus group meeting will be held with downtown business stakeholders, and another will be held with residents. Following these sessions, building from interested participants in the stakeholder interviews and focus group meetings, as well as other interested individuals, a Plan Advisory Committee will be formed in September with their first meeting targeted in October.

The staff lead/project manager for this project is Cresson Sloten, so specific questions regarding this effort may be directed to him.

### **End of Fiscal Year and the Solid Waste Program**

With the end of the FY18 fiscal year occurring on June 30, 2018 staff is be able to compile information that has been of particular interest to the Environmental Commission.

### ***Diversion Rate***

In June, the City’s Waste Diversion Rate for FY18 was projected to be 29%. Based on the final tonnages collected through June 30<sup>th</sup>, the final calculated diversion rate for FY18 is indeed 29%. This diversion rate is the first calculated using data collected and managed by a City-owned data management system, and calculated including all of the material collected from the community.

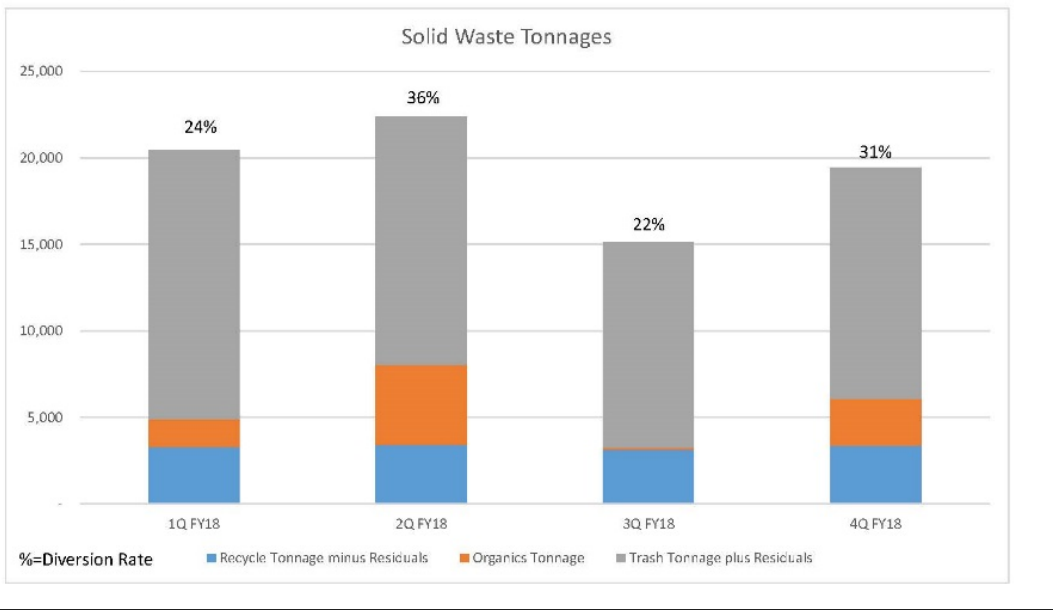
Prior to July 1, 2017, the City weight data collected at the City’s scalehouse was captured and stored in data systems owned by the contract operator. This resulted in a need for City staff to transfer the data into Excel spreadsheets for analysis and reporting.

The tonnages used in calculating the City’s waste diversion rate in the past have not included the full amount of trash generated by the community. Prior to the establishment of the City’s commercial solid waste franchise, commercial customers contracted individually with a private waste hauler to service

their property for solid waste collections. Those collection trucks were not required to deliver their trash to the City’s waste transfer station, and if they did it would likely have material from sites outside of the City. It is with this understanding and the difficulty/impossibility to accurately capture this data that staff believes why tonnages for commercial trash have not previously been included in the waste diversion rate calculation. These tonnages are now included in the total material generated by the City. In addition, the residual material removed from the processing of the collected recyclables is also included in the total material generated. These previously unaccounted for tonnages significantly increase the total tonnage of material generated by the community used in the denominator of the calculation, thus decreasing the percentage of the total that is diverted from landfills.

FY Quarter	Recycle Tonnage	Recycle Tonnage minus Residuals	Organics Tonnage	Trash Tonnage	Trash Tonnage plus Residuals	Diversion Rate
1Q FY18	3,695.44	3,288.94	1,599.62	15,158.64	15,565.14	24%
2Q FY18	3,855.64	3,431.52	4,584.37	13,934.52	14,358.64	36%
3Q FY18	3,550.50	3,159.95	101.02	11,495.37	11,885.93	22%
4Q FY18	3,794.73	3,377.31	2,688.50	12,969.21	13,386.63	31%
Total (FY18):	14,896.31	13,257.72	8,973.51	53,557.74	55,196.33	29%

\*Recycling tonnage has residuals removed. Residuals are estimated at 11% based on audits conducted by the recycling vendor.  
 \*\*Trash tonnage has residuals added to it.



**Solid Waste Fund**

Another item of interest to the Commission is the value of the Solid Waste Fund’s Reserve Fund Balance. With the close of the fiscal year, the final accounting for revenues and expenditures will be performed over the next several weeks. With the various unplanned items that occurred in the solid waste program area, such as the safety repair and clean-up items at the MRF last fall, it is important to complete this process before forwarding information regarding the status of the fund balance. Once this final accounting has been completed, the information will be provided to the Commission, perhaps by the August 23<sup>rd</sup> SWRMP work session.

## **Ann Arbor Material Recovery Facility (MRF)**

Two of the City's contractor operators -- Advanced Disposal and Recycle Ann Arbor, along with their subcontractor Rumpke Waste & Recycling -- separately toured the MRF facility reviewing the site and equipment condition and configuration this spring. It is anticipated that both parties will provide the City with opinions/findings/recommendations from an operator's perspective regarding the potential of restarting processing operations in the current facility.

As part of the *Washtenaw County Regional Authority Study* by RRS, it is recommended that if a regional approach to recycling is undertaken that a new location be found for a regional MRF with the capacity to operate with the recycling volumes anticipated from the eastern portion of the County. It further recommends that the City's MRF be used as an interim location for modified MRF operations, such as transloading loose and/or baled recyclables as are currently being performed, until a separate permanent MRF is sited and constructed.

As materials are received from the contractors and reviewed by staff, as well as the regionalization discussions advance, the evolution of opportunities and potential directions for the MRF will be shared with the Commission.

### ***Baler Repair***

The horizontal feed conveyor that is needed to operate the baler at the MRF became inoperable last August due to a fire incident at the MRF. In February, City Council approved a service purchase order with Speed Tech Equipment to perform the repair on this conveyor, and to perform scheduled and preventative maintenance (PM) on the two baler feed conveyors. As part of the conveyor repair, the replacement conveyor belt had to be custom-made resulting in a lengthy lead time for this required component. Once the belt was manufactured, the conveyor repairs and modifications were performed on May 14<sup>th</sup> and 15<sup>th</sup>. Since this date, the City's Interim MRF Operator, Recycle Ann Arbor (RAA), has been able to once again bale commercial OCC recyclables as part of their modified loose-loading operations at the MRF.

On July 2<sup>nd</sup>, the first monthly PM was performed on both the vertical and horizontal baler feed conveyors.

## **Drop-Off Station (DOS)**

The City continues to perform quarterly structural inspections of the current Drop-Off Station (DOS) facility at 2950 East Ellsworth Road. As this building was built partially, and expanded on top of the closed landfill, it has been experiencing differential settlement for many years. The City has been performing necessary repairs to the facility identified in these inspections in order to keep the facility and the programming performed by Recycle Ann Arbor (RAA) in operation. Once the direction of the regionalization discussions mentioned earlier in this report is determined, it is expected that the timeframe for replacing this facility will be identified.

The no-cost contract with RAA to operate the DOS expired and has been continued through administrative change orders for several months. RAA and the City are nearing the end of discussions to put a replacement no-cost contract in place based on the current site situation and programming.

## **Landfill Scale and Entrance Improvements Project**

The City has contracted with The Mannik & Smith Group, Inc., to design a new scale/weigh station near the Platt Road Entrance that services the three solid waste facilities at the W.R. Wheeler Operations Center, including the Material Recovery Facility (MRF), Transfer Station, and the Compost Center as well as fleet trucks. The current scale is located at the MRF, requiring all vehicles to travel to the MRF to be weighed before and after loading or unloading material at their respective facility, requiring additional travel time on the site resulting in added fuel consumption/GHG emissions, traffic and potential safety conflicts on the site. The existing scale was installed in 1995, and during its annual service and inspection in December, 2016 it was noted that the remaining life of the scale was estimated at approximately 2-3 years.

The replacement scale will be relocated to the Platt Road entrance to the facilities for more efficient and secure operations. In addition, the design will enable unattended operations to control and monitor the site access through the Platt Road entrance from the Wheeler Operations Building on Stone School Road. Construction is anticipated to begin in early 2019.

## **Chapter 119 Noise Ordinance Revision for Solid Waste**

On May 7, 2018 City Council approved at second reading a revision to City Code Chapter 119 (Noise Control), Section 9:366, expanding the available times for solid waste collection services in the downtown as noted below:

*(d) Equipment and activities creating sound from the collection of solid waste, as defined in Chapter 26, within the Downtown District, as defined in Chapter 7, in the following locations:*

*(i) in any location after 6:00 a.m. and before 10:00 p.m., and,*

*(ii) in alleys from 4:00 a.m. to 6:00 a.m. and from 10:00 p.m. to 12:00 a.m., provided the equipment and activity in the alley are approved in advance and in writing by both the department head or agency director and the Administrator.*

The City's commercial solid waste franchisee, Waste Management of Michigan, Inc., has requested to adjust their alley collection start times in the City's downtown to help reduce potential for conflicts with dumpster service. This change is expected to begin on, or near, August 6, 2018. City crews are also adjusting their scheduled start times.

## **Expiring Contracts in the Solid Waste Program Area**

Several contracts in the solid waste program area are expiring or will be expiring in a timeframe that will require undertaking the procurement process soon.

### ***Education and Outreach***

The City currently has two multi-year contracts with the Ecology Center to provide various forms of education and outreach, particularly in regards to solid waste, recycling and compost topics. Both of these contracts, one for In-School Recycling Education and the other for MRF Education Tours (which since the closing of the MRF for tours only includes monthly open-house style workshops), expired on June 30, 2018.

The SWRMP will be examining the City's education and outreach methods for the various aspects of the City's solid waste programs, and providing recommendations on these efforts as part of that project's deliverables, but this examination is taking place during the 12-15 month duration of the SWRMP. It is desired to continue to utilize the contracted services by the Ecology Center for the current education services without interruption, so resolutions were presented to the City Council, and approved at their July 16, 2018 meeting to extend these contracts for one more year, with an option for a second one-year extension in the event that the SWRMP recommendations for outreach and education have a lengthy lead time to implement. The contract already includes a minimum 30-day notice to end the contract, which could be utilized if the SWRMP recommendations are implemented prior to the end of the new contract term.

### ***Collections***

The City currently has two separate contracts with two different contractors for portions of the solid waste program's collection services. The City's contract with Recycle Ann Arbor for Municipal Resource Recovery Services for collection of single-stream recyclable materials was set to expire on June 30, 2018 but was extended through June 30, 2019. The amendment providing this one-year contract extension was approved by City Council (Resolution R-18-218) at their meeting on June 4, 2018. The City's contract with Waste Management of Michigan for the Commercial Collection Services is scheduled to expire on June 30, 2019.

In light of these expiration dates, the Aptim consulting team will be assisting staff as part of the SWRMP in developing the strategy and materials to procure the necessary contracted collection services within the context of City Council's recent direction for City staff to continue to provide collection services.

### ***Interim MRF Operations***

The City's base contract with Recycle Ann Arbor for providing Interim Operation Services at the Ann Arbor MRF expired on June 30, 2018, but it includes provisions for administrative approval of two 6-month extensions. Therefore, it is anticipated that this contract will be extended to its full potential two-year term and expire on June 30, 2019.

Work on scoping a replacement contract based on the evolution of opportunities and potential directions for the MRF discussed above will begin as soon as that direction becomes clearer.

### **Staffing and Solid Waste Program Area**

With City Council's approval of Resolution R-18-194 on May 21, 2018, staff in the City's Public Works Unit will continue to provide collection services. For now, staff to manage and support those collection services, as well as to continue the management of the contracted services in the solid waste program area for collection, processing and final disposition, will also be located in the Public Works Unit. These staff include Public Works Manager Molly Maciejewski Recycling and Solid Waste Program Coordinator Christina Gomes, and Solid Waste Outreach & Compliance Specialist Jennifer Petoskey.

On July 16, 2018 Melissa (Missy) Stults started as the City's new Sustainability and Innovation Strategy Manager, overseeing the current sustainability staff members in the Systems Planning Unit - - Environmental Coordinator Matt Naud, and Sustainability Analysts Emily Drennan and Josh MacDonald. As this group is established and takes shape, particularly in its interactions with the Environmental Commission, its role and involvement in the solid waste program area will evolve.

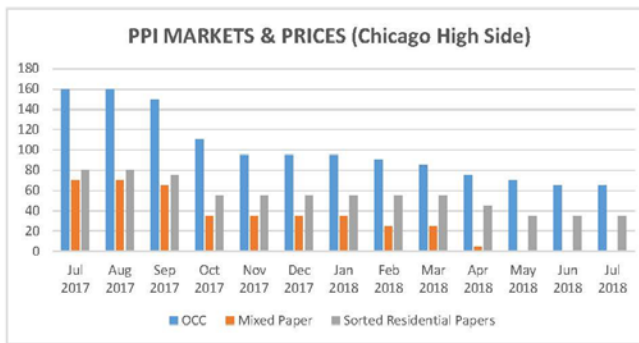
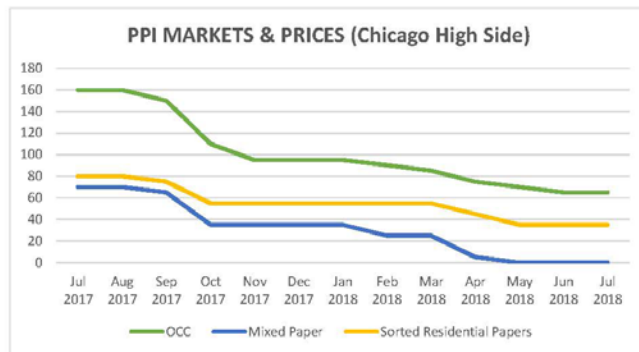
In addition to leading the SWRMP as noted earlier in this memo, Systems Planning Manager Cresson Slotten will be taking a major role in the upcoming procurement processes. In addition, Mr. Slotten, Molly Maciejewski, and Public Services Administrator, Craig Hupy, have been, and will continue to support the City's involvement in the Regionalization discussions.

## Recycling Markets

The recycling industry continues to feel the impacts of China's changes on import policies and requirements for recovered materials. Beginning January 1, 2018 China prohibited twenty-four (24) categories of recyclables from being imported into the country, and on March 1, 2018 they imposed much stricter quality standards on all scrap/recycled materials still being imported into the country. This has already impacted the recycled fiber markets, such as Old Corrugated Containers (OCC) and paper. The impact on these markets can be seen below.

PPI MARKETS & PRICES (Chicago High Side)

	OCC	Mixed Paper	Sorted Residential Papers
Jul 2017	160	70	80
Aug 2017	160	70	80
Sep 2017	150	65	75
Oct 2017	110	35	55
Nov 2017	95	35	55
Dec 2017	95	35	55
Jan 2018	95	35	55
Feb 2018	90	25	55
Mar 2018	85	25	55
Apr 2018	75	5	45
May 2018	70	0	35
Jun 2018	65	0	35
Jul 2018	65	0	35



This trend is anticipated to continue and even worsen as China has announced that they will be banning an additional sixteen (16) categories of materials beginning December 31, 2018 and another sixteen beginning a year later on December 31, 2019.

The decline in these markets affects Ann Arbor, and the industry as a whole, as it results in a reduced rebate to the City from the City's Interim MRF Operator, Recycle Ann Arbor. Thus, the net cost of recycling increases.

## **State Recycling Conference Coming to Ann Arbor in 2019**

The Michigan Recycling Coalition will host its 37th Annual Conference in Ann Arbor in 2019. The City has volunteered to be on the conference planning committee, and looks forward to actively participating and providing tours of City facilities and items of interest for the conference.

Participants in the conference include representatives from the public, private and NGO sectors at the local, regional, and state levels involved in recycling, composting/organics and resource management. The multi-day conference has included tours, training, presentations, speakers and networking, as well as updates from the Michigan Department of Environmental Quality (MDEQ).

## **State Update to Part 115 Rules**

The State of Michigan's current *Natural Resources and Environmental Protection Act* (1994 Public Act 451) and particularly its Part 115 rules administered by the Michigan Department of Environmental Quality (MDEQ) concerning solid waste and resource management are focused almost exclusively on landfills and disposal, with little mention of recycling and reuse, and have not been updated in decades. In early 2017, the State began work to update these regulations. One of the groups formed to help in this effort was the Solid Waste and Sustainability Advisory Panel. The Michigan Municipal League (MML) was one of the panel members, and they requested that Ann Arbor represent them on this group. As a result, both Christina Gomes and Matt Naud participated in this seat on the Panel.

The revised Part 115 rules are now in their sixth draft form and are still under review. Some of the key aspects of the proposed revisions include:

- Required County-level planning will now be broadened to *materials management* rather than *solid waste and landfilling*
- Increased State oversight of materials management facilities
- Increased State landfill tipping fee from \$0.36 per ton to (currently proposed) \$4.44 per ton

For more information about the Part 115 updates please see the links below.

[https://www.michigan.gov/documents/deq/deq-tou-mecc-presentation-Part115Update\\_625393\\_7.pdf](https://www.michigan.gov/documents/deq/deq-tou-mecc-presentation-Part115Update_625393_7.pdf)

[michigan.gov/swra](http://michigan.gov/swra)

cc: Craig Hupy, Public Services Area Administrator  
Marti Praschan, Public Services Chief of Staff  
Cresson Sloten, Systems Planning Manager  
Molly Maciejewski, Public Works Manager  
Missy Stults, Sustainability and Innovation Strategy Manager  
Matt Naud, Environmental Coordinator  
Christina Gomes, Recycling and Solid Waste Program Coordinator  
Jennifer Petoskey, Solid Waste Outreach and Compliance Specialist





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TO: Environmental Commission

FROM: Cresson S. Sloten, P.E., Public Services Area

DATE: December 5, 2018

SUBJECT: Solid Waste/Recycling Program Area Status Updates

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**PURPOSE:** This memo provides information and status updates on various project and program efforts of the City in the Solid Waste Fund program areas.

### **Potential for Regionalization of Recycling, Composting & Solid Waste Efforts**

The Washtenaw County Department of Public Works has continued to facilitate discussions among representatives from various communities in the County to determine if a regional approach to solid waste and recycling efforts can, and should be established. A Waste Authority Formation Committee was formed and has been meeting since June. The entities that have been participating are: Ann Arbor Township, Scio Township, Pittsfield Township, Ypsilanti Township, City of Dexter, City of Saline, City of Ypsilanti, and the City of Ann Arbor.

The group has been developing proposed Articles of Incorporation to establish such an authority, the Washtenaw Regional Resource Management Authority (WRRMA). It is anticipated that the final articles will be completed in the next few weeks. Once completed, the Articles of Incorporation will be presented to the council/board of each jurisdiction for action to determine if that community will participate as constituent members of the authority. It is expected that the Articles of Incorporation and a presentation by the County will be provided to the Environmental Commission at the January, 2019 or February, 2019 commission meeting. The Commission will be presented with a proposed resolution for its action recommending that City Council resolve to become a constituent member of WRRMA.

### **Solid Waste Resource Management Plan (SWRMP)**

The City's Solid Waste Resource Management Plan (SWRMP) is well underway. The project team has completed its stakeholder engagement and input task. A total of twenty-two stakeholder interviews with over thirty individuals were completed. In addition, the team engaged the full Environmental Commission

at the Commission's August 23, 2018 work session, and held a focus group of downtown businesses, property owners and the downtown merchant associations on September 27, 2018.

From these stakeholder interviews and other sources, the SWRMP Advisory Committee has been formed. The first meeting of the Committee was held on November 14, 2018 with thirty-four committee members participating in the session. The meeting summary and video, as well as other project information and materials, are available at [a2gov.org/swrmp](http://a2gov.org/swrmp).

The Advisory Committee will be meeting again on Tuesday, January 15, 2019, Tuesday, March 12, 2019 and Tuesday, May 14, 2019. These meetings will all be held from 1:00pm – 3:00pm in the DDA Conference Room at the DDA Offices, 150 South Fifth Avenue, Suite 301. The meetings are open to the public.

The project team is reviewing the City's current resource management practices and quantities, including a financial analysis and development of a financial model of the City's solid waste programs. The team is commencing its task of benchmarking the City compared to other peer communities and forming program and service options for consideration.

### **Contracted Services in the Solid Waste Programs Area**

As has been stated previously, the delivery of services in the solid waste programs area has evolved over the years resulting in multiple parties, City staff and multiple contractors, providing similar and even overlapping services. The City currently has eleven separate contracts through seven contractors in the solid waste programs area.

Three of the current contracts for collections and processing services will be expiring at the end of the current fiscal year: the commercial solid waste collection franchise contract with Waste Management of Michigan (WM); the recycling collections contract with Recycle Ann Arbor (RAA); and, the interim operations contract for the Materials Recovery Facility (MRF) with RAA. A specific task in the contract with APTIM for the SWRMP is for their team to assist the City staff in developing a Request for Proposals (RFP) to procure contractor services as these contracts will be expiring.

On May 21, 2018 City Council passed Resolution R-18-194 that directed that City staff will continue to perform solid waste collection services and that the full collection services for the solid waste programs area could not be privatized through outside contractors. With this direction, and the still existing situation of the upcoming expiration of the above-mentioned contracts, staff and the Aptim team have discussed a scope of work for an RFP to replace these expiring contract that includes:

- Collections for trash dumpsters
- Collections for all recyclables
- End processing of all recyclables
  - The MRF will be available for transfer loading of material to another processing MRF, either by loose loading or baling
  - Alternatives/proposals for re-utilization of the Ann Arbor MRF as a sorting/processing facility would be accepted and reviewed but are not required
- Full collections (i.e., single-service provider) of trash and recycling collections in the downtown core (a subarea of the DDA boundary) at a separate pricing structure
- A 5-year term is what we are looking at, with "flexibility" language in the event that a regional solid waste authority is formed and it is determined that these services may be provided to, or through that authority in the future during the term of the contract

City crews and equipment would continue to be used for residential trash (curb cart) collections, and compost collections with that program expanding to year-round collections, as this would be staffed through reassignment of existing staff doing a portion of the collections in the downtown and dumpsters outside of the downtown.

With this approach, staff is proceeding in a manner that is consistent with the spirit of the May Council action. City staff will continue to provide service in the areas they are currently working, however there is currently, and will still be, a mix of in-house and contract service providers. By exercising management's right to assign work and with an eye on evolving the "means and methods" to embrace best practices, the City will be able to both engage with AFSCME to develop a beneficial plan for in-house services (at a minimum protecting current positions) and efficiently expand services (e.g., being able to extend residential organics collection to year-round service at no additional cost). Staff will be reporting back to Council as these changes are made to ensure that there is no perceived conflict with the Council resolution. However, if Council further acts to narrow the Administrator's ability to provide responsive and efficient delivery of these core services, many of the goals of the Environmental Commission and the community may not be achieved without additional costs.

Staff is targeting to have the RFP issued in December with proposals due late January/early February and contractor selection by early March.

#### **Staffing Roles and Responsibilities for Solid Waste Programs Area**

As the City continues to examine and evolve its methods of service delivery and performing the work necessary to support those services, the matter of which area of the City organization should be responsible for the City's solid waste programs area has been raised. As noted above, City Council Resolution R-18-194 calls for City staff to continue performing solid waste services, including residential trash collection. As this operational function requires field staff and equipment to perform this work, it has been determined that the Public Services Area's Public Works Unit will be the group responsible for this program area.

As with many other programs/services in the City, other groups within the organization will continue to support Public Works in the delivery of these key services and programs. The Fleet & Facilities Unit will support the necessary fleet and equipment for City staff collections, and the upkeep and routine maintenance of the Material Recovery Facility (MRF), Transfer Station and Compost Facility buildings. The Customer Service Center will continue to manage customer accounts and billing as necessary by the City, as well as be the initial point of contact for customer inquiries and service requests. The City's Communications Office will support the delivery of informational material to the community. The Sustainability and Innovations Office will work with the Environmental Commission and Public Works staff in developing policies and programs, as well as monitoring metrics and implementation of the SWRMP.

As part of the SWRMP, the project team will be providing recommendations on staffing related to the solid waste programs area. However, the following staffing items are already in place, or being considered even in advance of the completion of the SWRMP recommendations:

- The City's Solid Waste and Recycling Programs Coordinator, Christina Gomes, has moved from the Systems Planning Unit to Public Works.
- In early 2018, the Solid Waste Outreach and Compliance Specialist position was established in Public Works, and is staffed by new City staff member, Jennifer Petoskey.

- As part of the upcoming FY20/21 Budget process, it is anticipated that a new solid waste code enforcement position will be requested.
- Cresson Sloten has shifted from his role of Systems Planning Unit Manager to focus on tasks and aspects of the solid waste programs area, including managing the SWRMP effort, among others. As he has indicated his intention to retire from the City in early 2020, once the outcome of the establishment of WRRMA is known and the set of recommendations from the SWRMP become clear in mid-2019, Public Services staff will examine what, if any, position/role is needed to provide management and oversight of the solid waste program area specifically within the broader purview of the Public Works Unit.

### **Financial Position**

A memorandum dated October 22, 2018 from Public Services Administrator Craig Hupy to Executive Policy Advisor for Sustainability and Environmental/Energy Commissioner John Mirsky regarding the City's Solid Waste Fund was previously sent to the Environmental Commission, and a copy is attached to this memo for reference. Following the distribution of that memo, the following additional questions were raised:

*What accounts for the big jump in Recycling Processing Credit revenue up FY17? Presumably it has to do with the contract shift from ReCommunity to RAA. This line item reflects a fundamental ~ 10x increase in revenue for this line item over the period shown at a time when commodity prices collapsed.*

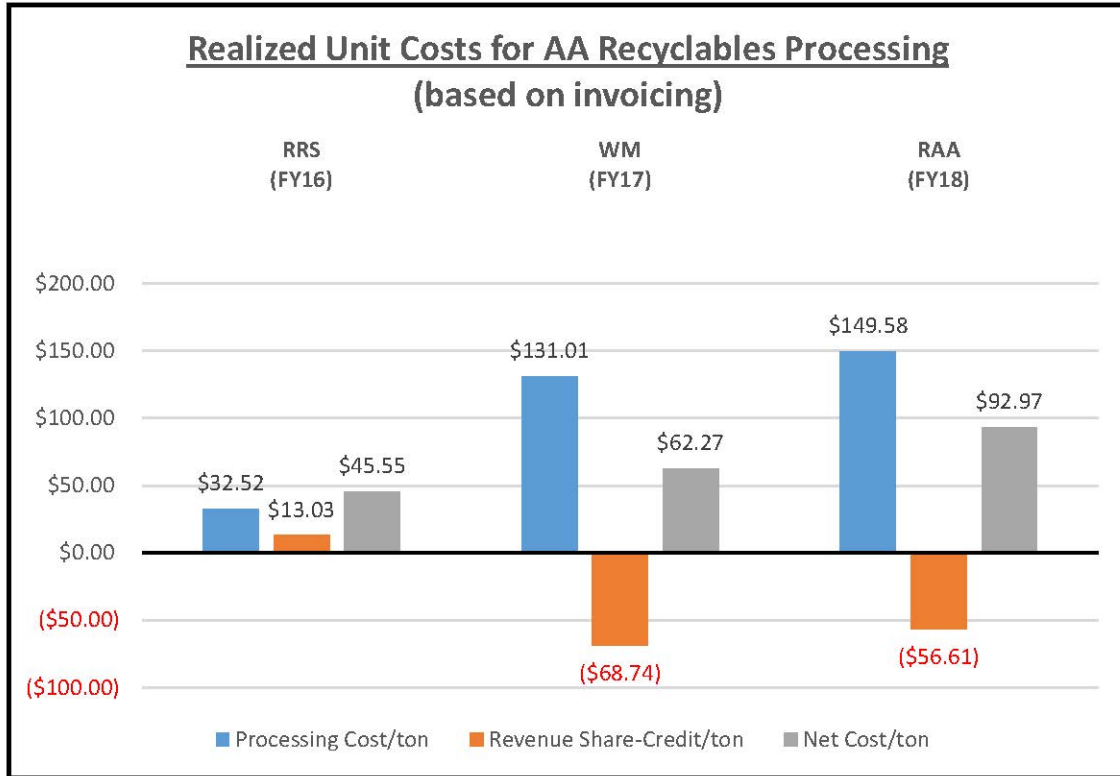
In FY16 the MRF was being operated by Resource Recovery Systems/ReCommunity (RRS), the City's original contract operator. The contract in place for these operations was a much different contract model for determining revenues than the contract in place over FY17 with Waste Management (WM) and that for FY18 and FY19 with Recycle Ann Arbor (RAA). The key aspects of the contract with RRS included:

- The City paid a tipping fee to RRS per ton of City single-stream material delivered to the MRF
- The contract allowed for third-party material outside of the City to be brought to the MRF
- The City received a share of the net revenues of RRS' sale of the sorted recyclables, at varying percentages based on the values of the material and whether it was City or third-party material
- Costs to RRS were deducted from the revenue, including transportation costs and acquisition costs in securing third-party tonnage into the MRF
- The net revenue value could be negative resulting in payment to RRS by the City
- Funding for equipment repair and replacement was funded separately, and was at an inadequate level to appropriately maintain the facility and equipment

Comparatively, the contracts with WM and RAA include:

- Only City single-stream material, with no outside third-party material
- An processing fee per ton of material, inclusive of costs such as transportation and equipment repair and replacement
- A revenue share to the City, that cannot be negative

The result of these contract changes for revenue, as well as processing expenses, is illustrated in the graphic below



*Why is investment income in FY19 projected to be so much higher (2.5+ times) than the Actuals for FY17 and 18? The balance of the Unrestricted Fund Balance has decreased over time and it's my understanding financial market returns have not changed to a degree that would offset that.*

The FY18 and FY19 budgeted amount for the Solid Waste Fund Investment Income was forecasted by the Financial Services Area as part of the two-year budgeting process to develop the FY18-FY19 City Budget in the fall of 2016. As previously explained in the attached memorandum, the forecasted/budget amounts do not take into account the required Generally Accepted Accounting Principles (GAAP) entry each year for an "unrealized loss" based on the sale of the investments as of June 30th each year.

As for the decreasing balance of the Unrestricted Fund Balance, this continues to be a concern to City staff as operating expenditures continue to exceed revenues in the solid waste program areas necessitating the use of fund balance to cover the difference.

*Finally, why did Actual FY18 Compost expenditures drop so significantly (~20%) and is this expected to carry over to FY19?*

The greatest contributor to this reduction was due to a greater proportion of the staffing for this area being temporary labor rather than regular staff. As a result there were lower expenses for wages and benefits in FY18 than in FY17. In addition, the expenses for the Compost Operations, WeCare Denali, for FY18 were approximately \$15,000 less than in FY17.

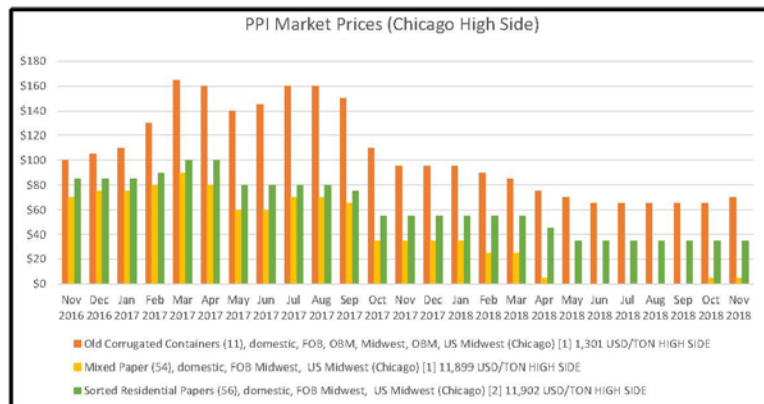
For FY19, it should be expected that expenditures will be closer to historical figures as the City continues to look to bring Public Works to its full regular staffing levels.

### Recycling Markets

The recycling industry continues to deal with the impacts of China’s changes on import policies and requirements for recovered materials. Beginning January 1, 2018 China prohibited twenty-four (24) categories of recyclables from being imported into the country, and on March 1, 2018 they imposed much stricter quality standards on all scrap/recycled materials still being imported into the country. This continues to impact the recycled fiber markets, such as Old Corrugated Containers (OCC) and paper, though the Mixed Paper market has rebounded slightly to now at least a positive value.

PPI MARKETS & PRICES (Chicago High Side)

	OCC	Mixed Paper	Sorted Residential Papers
Nov 2016	\$100	\$70	\$85
Dec 2016	\$105	\$75	\$85
Jan 2017	\$110	\$75	\$85
Feb 2017	\$130	\$80	\$90
Mar 2017	\$165	\$90	\$100
Apr 2017	\$160	\$80	\$100
May 2017	\$140	\$60	\$80
Jun 2017	\$145	\$60	\$80
Jul 2017	\$160	\$70	\$80
Aug 2017	\$160	\$70	\$80
Sep 2017	\$150	\$65	\$75
Oct 2017	\$110	\$35	\$55
Nov 2017	\$95	\$35	\$55
Dec 2017	\$95	\$35	\$55
Jan 2018	\$95	\$35	\$55
Feb 2018	\$90	\$25	\$55
Mar 2018	\$85	\$25	\$55
Apr 2018	\$75	\$5	\$45
May 2018	\$70	\$0	\$35
Jun 2018	\$65	\$0	\$35
Jul 2018	\$65	\$0	\$35
Aug 2018	\$65	\$0	\$35
Sep 2018	\$65	\$0	\$35
Oct 2018	\$65	\$5	\$35
Nov 2018	\$70	\$5	\$35



### State Level Items

#### Governor Snyder’s Recycling Funding Initiative (Senate Bill 943)

On November 19, 2018 City Council approved Resolution R-18-466 based on the Environmental Commission’s resolution of October 25, 2018 supporting Governor Snyder’s recycling initiative and requested the Mayor and City Administrator communicate this support to Ann Arbor’s Representatives in the State Legislature. At the time of this report, the Bill is in Committee and has not yet been brought forward to the Senate before the House but staff will continue to monitor this item for progress, particularly until the end of this calendar year and the current lame duck session of the Legislature.

### ***House Bill 6532 to Repeal the MI Bottle/Can Deposit***

On November 27, 2018 Representative Jim Lilly of the 89<sup>th</sup> District (which includes the townships of Grand Haven, Olive, Park, Port Sheldon, Robinson, Blendon, Crockery and Spring Lake, and the cities of Ferrysburg and Grand Haven) introduced House Bill No. 6532 which if approved as submitted would repeal the State's \$0.10 bottle deposit for beverage containers on January 1, 2023 and close the State's Bottle Deposit Fund on December 31, 2025.

With this being a newly introduced item staff has not yet studied it in detail or developed a position regarding it. It could be anticipated that a repeal of the deposit law may increase the amount of aluminum in the general recycling stream, which is currently a high-value commodity item. However, the matter of this material that is now separated by the consumer when they return their aluminum containers becoming part of the typically comingled single-stream recyclable materials stream and that impact on its value will need to be considered. Another consideration is that additional glass beverage containers moving from the "deposit return" stream to the single-stream recyclable materials stream could have a detrimental impact as glass is currently a negative (cost) revenue item among the materials in the recycling stream, as well as being a very abrasive material that adds significant wear to processing equipment at MRFs.

Staff will continue to monitor this item for progress, particularly until the end of this calendar year and the current lame duck session of the Legislature.

### ***Michigan Recycling Coalition (MRC) 2019 State Conference***

The Michigan Recycling Coalition (MRC) will be holding its annual statewide conference in Ann Arbor next year. The event will be held at the Ann Arbor Sheraton, 3200 Boardwalk Drive beginning on Tuesday, May 14<sup>th</sup> and running through Thursday, May 16<sup>th</sup>. City staff (Solid Waste and Recycling Programs Coordinator, Christina Gomes) and staff from Recycle Ann Arbor (Outreach & Zero Waste Coordinator, Angela Porta) are members of the MRC's Planning Committee working to develop the program and schedule for the conference.



## MEMORANDUM

TO: John Mirsky  
Executive Policy Advisor for Sustainability

FROM: Craig Hupy, Public Service Area Administrator

SUBJECT: Solid Waste Fund Financials

DATE: October 22, 2018

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### FINANCIAL POSITION

With the final financial closure of fiscal year 2018, the staff's financial model of the Solid Waste Fund has been updated. Below you will find a table that provides revenue and expenditure detail by category that is reflective of actual costs expensed for FY 2015- FY 2018 and the current budget amount as approved for FY 2019. The below detail provides the explanations for variances, anomalies, and other items of interest related to the financials.

**Revenue:** The forecasted revenue is a projection based on market interest rates and available fund balance. The forecast at the time of budget does not take into account the required Generally Accepted Accounting Principles (GAAP) entry each year for an "unrealized loss" based on the sale of the investment as of June 30<sup>th</sup> each year. Because the City holds all investments until maturity, the loss is not ever realized.

The FY 17 increase in the Recycling Processing Credit was due to improved market conditions and a new contractual operating model initiated by City Staff and our emergency operator, Waste Management, after the previous operator's contractual default and termination by the City. As discussed previously, the recycling market is extremely volatile and subject to fluctuations, and the credit will not trend consistently and will often be subject to variance from budget estimates.

#### **Expenditures:**

The FY 2019 Administration category includes solid waste program management costs. The large increase in FY 19 is in large part due to the recategorization of "administrative" costs associated with the Public Works Unit and the program reorganization within the



Public Service Area. Portions of these costs have previously been reported under the waste category or the System Planning category. Costs included in this category include program IT charges, facility maintenance & debt costs, as well as personnel costs associated with management/supervision and administrative support of the program. In addition, FY 2018 actuals included a Landfill Liability Change resulting in a decrease in FY 2018 actual expenditures of \$172,799.

Under the Waste category, increased collection costs in FY 2019 are attributable to increased staffing costs, including benefits, associated with the planned use of permanent City employees, contractually required increases for tipping fees and contracted services, and increased equipment repair and fueling costs, particularly those associated with reliability issues with CNG fueling for the front-load trucks .

The reduction in expenditures experienced in the Compost category in FY 17 are as a result of reduced equipment leasing costs, the increased use of temporary labor for the fall and spring compost pick-ups, and the favorable weather conditions. The trend is not anticipated to continue as the City is in the process of hiring multiple Public Works full-time employee vacancies.

Material Recovery cost increases since FY17 are attributable to the current contract having significantly higher MRF operating contract/transport costs, contractually mandated collection contract increases, and continued repairs necessary at the deteriorated facility. As previously discussed, the previous MRF contractual/business model that was in operation during FY 13 – FY16 period resulting in what appears as reduced expenditures, but in hindsight can be seen as underinvestment, significantly comprised the condition and safety of the City owned facility and equipment. As a result, the previously avoided significant investment in the facility and the equipment would now be required in order to reactivate the facility. Re-investment in the facility is not recommended until the Solid Waste Resource Management Plan is completed and regionalization planning is further along. At this point, no plan from Recycle Ann Arbor regarding a mini-MRF has been shared with the City for review and/or consideration.

As of June 30, 2018, the Solid Waste Fund reported an unrestricted fund balance of \$9,474,703, which represents a decrease of \$1,876,479 from the previous year. The unrestricted fund balance projection is \$9,003,065 at the end of FY 2019, and is well within the range of the City recommended fund balance recommendation. However, operating expenditures are forecasted to continue to exceed operating revenue and is not a sustainable operating model as this will result in continued unprogrammed reductions of the unrestricted fund balance to offset the lack of revenue to cover the operating expenditures. Alternative service delivery models and regionalization/partnership opportunities continue to be explored in an effort to control operating costs and are a deliverable of the Solid Waste Resource Management Plan Update.

<b>FINANCIAL SUMMARY</b>						
<b>SOLID WASTE FUND - #0072</b>						
	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Budget</b>	
	<b>FY 15</b>	<b>FY 16</b>	<b>FY 17</b>	<b>FY 18</b>	<b>FY 19</b>	
<b>REVENUES</b>						
Solid Waste Millage	\$11,729,340	\$ 12,072,979	\$ 12,307,175	\$ 12,635,609	\$ 12,899,600	
Recycling Processing Credit	\$104,636	\$43,806	\$1,097,178	\$794,557	\$958,000	
Investment Income	\$199,624	\$259,100	-\$498	\$96,477	\$268,049	
Waste Collection - Commercial	\$2,406,490	\$2,508,067	\$2,664,342	\$2,760,171	\$2,702,233	
Miscellaneous	\$225,798	230,656	241,624	342,582	267,350	
Compost Cart Sales/Revenue Share	\$27,654	21,306	21,767	6,380	16,665	
Compost Equipment Lease/Sale		-	-	-	-	
DDA/Commercial Trash Cart Fees	\$110,336	\$166,453	\$138,970	\$132,125	\$132,000	
Equipment Replacement Contribution					\$0	
Equipment/Auction Sales			\$10,189	-\$92,452		
Operating Transfers		\$1,086,720				
Prior Year Fund Balance/Refund of Prior Year Exp						
<b>TOTAL REVENUES</b>	<b>\$14,803,879</b>	<b>\$ 16,389,087</b>	<b>\$ 16,480,746</b>	<b>\$ 16,675,449</b>	<b>\$ 17,243,897</b>	
<b>EXPENDITURES</b>						
Administration	\$552,414	\$855,023	\$649,501	\$770,124	\$1,587,757	
Retiree Medical Insurance & Self Insurance	\$331,944	\$288,816	\$355,476	\$321,432	\$336,083	
Waste	\$5,498,305	\$5,762,284	\$6,384,219	\$5,682,488	\$6,258,756	
Material Recovery	\$3,620,503	\$3,569,780	\$6,618,307	\$6,063,527	\$5,915,668	
Compost	\$1,218,554	\$1,400,338	\$1,292,031	\$1,085,238	\$1,436,181	
Landfill	\$389,736	\$534,140	465,473	\$369,724	\$379,210	
Customer Service	\$340,133	\$325,118	\$319,981	\$266,222	\$293,886	
Systems Planning	\$235,382	\$219,002	\$484,037	\$349,493	\$104,373	
Municipal Service Charge	\$262,128	\$295,555	\$304,428	\$443,856	\$457,171	
Depreciation	\$948,054	\$838,488	\$887,120	\$888,508	\$942,450	
Capital Projects	\$2,651	\$332,481	\$1,389,378			
Bad Debt/Tax Refund	\$30,970					
Capital Asset Credit	-\$70,834	-\$88,354	-\$1,070,427			
<b>OPERATING EXPENSES</b>	<b>\$13,359,940</b>	<b>\$14,332,672</b>	<b>\$18,079,525</b>	<b>\$16,240,612</b>	<b>\$17,711,535</b>	
GASB Pension Liability	\$1,436,000	\$236,741	\$168,293	\$337,009	\$254,000	
OPEB				\$3,096,076	-\$250,000	
Change in Landfill Liability	\$75,596	\$4,905,142	-\$576,645	-\$172,799		
Change in Capital Assets, net of related debt	-\$791,653	-\$707,829	\$223,799	-\$948,972		
Change in Equipment Replacement Restriction	-\$251,628					
Change in Landfill Restriction	\$771					
<b>FINANCIAL ADJUSTMENTS</b>	<b>\$469,086</b>	<b>\$4,434,054</b>	<b>-\$184,553</b>	<b>\$2,311,314</b>	<b>\$4,000</b>	
<b>TOTAL EXPENDITURES</b>	<b>\$13,829,026</b>	<b>\$18,766,726</b>	<b>\$17,894,972</b>	<b>\$18,551,926</b>	<b>\$17,715,535</b>	
Unrestricted fund balance	\$15,143,045	12,765,406.42	11,351,180.24	9,474,703.24	9,003,065.24	