Your estimated current diversion is 10%, and does not include the concrete cylinder waste that is generated and recycled. At present, we do not yet have a benchmark from which to compare your organization against others in the West Michigan area. However, based on our experience, we believe that your facility’s waste reduction efforts are below average, aside from concrete recycling efforts.

Based on our findings, we estimate that in a year this facility generates 21.7 tons of waste material (does not include concrete). We estimate that you divert 600 tons of recyclable concrete material from the landfill in a year, and an additional 0.12 tons of recyclable materials generated by your office, based on information provided by personnel.

- **Landfill:** 1, 4 cu.yd. Dumpster, 1x per week = 16 cu.yds./month @ 225 lbs./cu.yd. = Approx. 3600 lbs./month
- Evidence of the following materials was found in your trash containers: Organics, plastic bottles, paper/paperboard
- **Single-stream recyclables:** Estimate is based on an average amount of paper waste generated in a small office = Approx. 20 lbs./month
- Currently recycle: Paper (falls on responsibility of employees)
- OFI – Implement a single-stream recycling program and engage janitorial service in your efforts.
- **Organics:** = Approx. 0 lbs./month
- OFI – Implement composting curb-side composting capabilities

Of the 21.6 tons of landfill waste generated annually by your office, you can reduce the amount of waste sent to landfill by at least 60% or 13 tons per year by implementing a single-stream recycling and composting program following the waste reduction and optimization action items recommended in this report. This would give you an estimated diversion rate of 60%.
## Audit Data

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Republic Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>4705 Clyde Park Ave SW, Grand Rapids, MI 49509-5114</td>
</tr>
<tr>
<td>Waste Hauler(s):</td>
<td>SME - Grand Rapids</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Casey Smith</td>
</tr>
<tr>
<td>Audit Date:</td>
<td>11/4/2016</td>
</tr>
</tbody>
</table>

### Waste Hauler(s):
- Case Smith

### Container Information:
- **Re-use / Return**: X
- **Shred**: X
- **Waste/Recycling Streams**:
  - **Recyclable glass containers**: X
  - **Recyclable metal containers & foil**: X
  - **Recyclable plastics 1-7**: X
  - **Plastic stretch wrap**: Not Applicable
  - **Styrofoam**: Not Applicable
  - **Organics**: X
  - **Electronic equipment**: X
  - **Universal waste - bulbs, batteries**: X
  - **Returnable beverage containers**: X
  - **Corrugated cardboard**: X
  - **Office paper**: X
  - **Magazines/Catalogs**: X
  - **Newspaper/Phone Books**: X
  - **Plastic banding**: Not Applicable
  - **Wooden skids**: X

### Notes:
- **Saved for bottle deposit return.**
- **Employees drop off paper recyclables at a local Paper Gator.**
- Not Applicable
<table>
<thead>
<tr>
<th><strong>Recycling &amp; Composting</strong>:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there evidence of recyclable and/or compostable materials in the trash containers?</td>
<td>NO - A system for recycling and composting does not exist for this facility, other than for paper</td>
</tr>
<tr>
<td>Review waste invoice size/frequency</td>
<td>NO - discussed pick-up frequency, visible evaluation of container size</td>
</tr>
<tr>
<td>What does a visual inspection of the trash dumpster reveal?</td>
<td>Unusual materials in waste dumpster (not typical), Recyclable containers/materials evident in waste bins</td>
</tr>
<tr>
<td>Is there a recycling dumpster/container?</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Are there recycling/composting instructions?</td>
<td>NA - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Is recycling/composting training offered?</td>
<td>NA - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Are there recycling/composting containers/centers appropriately located?</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Are personal waste containers the appropriate size?</td>
<td>Small waste containers and boxes for paper recycling are located near every personal workstation. Suggested that these be used for single-stream recyclables only and have a centrally located waste bin.</td>
</tr>
<tr>
<td>Are collection schedules appropriate for volume generated?</td>
<td>Could not be determined based on condition at time of site visit. Suggest monitoring dumpsters before they are picked up to determine % capacity full before disposal; continue monitoring to measure reduction when recycling opportunities are initiated.</td>
</tr>
<tr>
<td>Are trash, recycling, composting dumpsters labeled?</td>
<td>NA - Opportunity for improvement in this area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Janitorial Services</strong>:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What role do they play in recycling, any?</td>
<td>Janitorial workers are service providers, they should will be able to help with any organizational diversion goals.</td>
</tr>
<tr>
<td>Who controls janitorial practices</td>
<td>Hired by the organization</td>
</tr>
<tr>
<td>Has the janitorial staff been trained on recycling/waste reduction?</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Does janitorial service have authority to enforce recycling policies?</td>
<td>NO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Printing/Copying</strong>:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email/PDF default</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Electronic Scan hard copies instead of copy</td>
<td>YES</td>
</tr>
<tr>
<td>Double-sided printing/copying default</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Recycle container</td>
<td>YES - paper recycled by employees</td>
</tr>
<tr>
<td>Shredding container</td>
<td>YES</td>
</tr>
<tr>
<td>Reuse pile</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
<tr>
<td>Refilled ink/toner cartridges</td>
<td>NA</td>
</tr>
<tr>
<td>Recycle Ink/toner cartridges</td>
<td>NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Purchasing</strong>:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the company have a policy or procedure that requires the purchase of environmentally responsible products or products containing recycled content vs conventional products.</td>
<td>NO - Opportunity for improvement in this area.</td>
</tr>
</tbody>
</table>
Dear Friends,

Thank you for participating in the Imagine Trash Partner Program and helping the business community reduce landfill waste in West Michigan.

In 2015, Kent County disposed of 1.8 million cubic yards of trash, a staggering volume that would fill the University of Michigan’s Big House twice over. This year the West Michigan Solid Waste Economic Impact Study affirmed that 75 percent of what we call ‘trash’ can readily be diverted, and that this material could be worth some $56 million to our economy.

This sobering one-year statistic, is a sure call to action. We can no longer perpetuate landfilling discards as the solution in Kent County.

The Imagine Trash Partner Program is intended to support the business community in deploying economically and environmentally beneficial approaches to waste management. In the first section of this report you will find information on your facility, followed by a set of overarching recommendations and an action plan that we hope you will find helpful. The recommendations and action plan are also available as a PowerPoint slide deck if you would like to use this to make a presentation to your workforce.

I invite you to learn more about our Strategy to Reimagine Trash at imaginetrash.org and to take advantage of the resources and support offered by West Michigan Sustainable Business Forum and Sustainable Research Group.

Sincerely,

Dar Baas
Director
Kent County Department of Public Works
WASTE REDUCTION
RECOMMENDATIONS
Consider a Zero Waste-to-Landfill stretch goal
- Potential to provide both environmental & economic benefits, market your efforts, and engage employees

Establish a Green Team
- Formalize your efforts by meeting, discussing, addressing, and communicating sustainability needs and goals, either at the facility level or at the corporate level.

Develop a strategy to measure waste sent to landfill and recycled
- Monitor and report your waste diversion progress. “You can’t manage what you don’t measure”.

Integrate green office procedures into new hire orientation
- Build your expectations into the culture right from the start

Engage and inform janitorial services
- Ensure all users of the Museum and those responsible for final disposition are aware of your goals

Institute an Environmentally Preferable Purchasing (EPP) Policy
- Help close the loop; purchasing materials with recycled content creates a demand for recyclable commodities

Demonstrate your support for Kent County's 20x20/30x90 landfill diversion goals
- Sign-on to www.imaginetrash.org and pledge your organization’s support and commitment. Incentivize or encourage individuals, working on behalf of the organization, to take a personal pledge towards waste reduction using the same means.
WASTE REDUCTION ACTION PLAN
Action #1: Adopt, develop, maintain, and promote waste diversion program

Action #2: Implement recycling disposal system

Action #3: Implement recycling container system

Action #4: Eliminate personal waste bins

Action #5: Add signage that is bold, simple, and sends a clear message

Action #6: Provide a higher level of recycling instruction

Action #7: Engage janitorial staff to help reduce/sort waste

Action #8: Purchase products with post-consumer recycled content & other environmentally preferable attributes
■ **Action #1: Adopt, develop, maintain, and promote waste diversion program**
  - Monitor waste dumpsters to determine if pick-up schedule is appropriate. Could it be lessened if the items in the waste container were recycled or composted?
  - Research local single-stream recycling, composting, and trash services; compare cost; negotiate contracts to meet your needs
  - Formalize the program; Involve staff in setting up a recycling/composting program
  - After you’ve established your program, provide progress reports and promote waste reduction successes to staff and upper management

■ Benefit: Divert a significant amount of the waste stream from ending up in the landfill; Easy to implement; Build employee morale, Improved public image

■ Cost: Low – Investment of time
Action #2: Implement recycling/composting disposal system

- Obtain single-stream recycling and/or compost dumpsters

Benefit: Easy to implement; Improved public image, reduce employee burden of taking paper to local paper-gator

Cost: Low - Organicycle composting pick-up service costs less than $250 annually, time invested in bringing carts to curb for pick-up (https://www.organicycle.org/services.html), potential cost to obtain 2nd GRCity Recycling Cart

Overall, the cost to add single-stream recycling and composting, combined with reduced costs for fewer landfill pick-ups or a smaller waste dumpster, could amount to about the same price that the company is currently paying for a trash only disposal method.
**Action #3: Implement recycling/composting container system**

- Add three/four system Recycle Box Bin containers (or a similar system) to all rooms where multiple people congregate/work
- Suggested use locations in or near the office break and conference rooms, paper only in the copy room, compostable only in the restrooms (paper hand towels)

**Benefit:** Streamlining and providing consistent options for disposal will likely improve waste diversion efforts

**Cost:** Low/Mid - Recycle Box Bin offers a 3-bin for $115, 2-bin for $97, 1-bin for $79. Suggest 4 bin-system (trash, recycle, compost, deposit return) [http://recycleboxbin.com/t/bins](http://recycleboxbin.com/t/bins).
Action #4: Eliminate personal waste bins

- Requires a person to use the multi-container system and think about which container their waste should end up in, versus using the closest/easiest option.
- Include a set of waste, recycle, compost, and deposit bins in commonly used areas (See Action #3)

Benefit: Easy to implement, no cost

Cost: None, other than some “getting used to” time
Action #5: Add signage that is bold, simple, and sends a clear message

- Use consistent, attention-grabbing signage and instructions; provide a simple statement regarding your waste diversion efforts in areas where any recycling, compost, or waste containers are located to act as a reminder of the organization's goals; include specific signage depicting what goes where

■ Benefit: Ensures that people using the building understand which waste streams go in which bin

■ Cost: Low - Cost to purchase paper/ink or purchase signage available on the market
Action #6: Provide a higher level of recycling & composting instruction

- Research options for training or develop your own training to introduce, educate, and engage all staff on recycling/composting expectations in the facility, include ideas and ask for feedback from other staff members
- Include information/training about the organization's sustainability culture and waste diversion goals in all new-hire orientation trainings
- Show the video: www.storyofstuff.com at a staff meeting

Benefit: Divert a significant amount of your waste stream from ending up in the landfill; engage staff

Cost: Low - Time invested for research and training
**Action #7: Engage janitorial staff to help reduce/sort waste**

- Work with janitorial service to inform them of the organization's goals and solicit their help in the proper disposal of compostable and recyclable items and items destined for landfill, so that responsibility does not fall on staff.

**Benefit:** Ensures that efforts of the company's efforts are not squandered and that the final disposition of your waste streams end up where they were intended

**Cost:** Low - Time invested for training janitorial staff
■ **Action #8: Purchase products with post-consumer recycled content & other environmentally preferable attributes**

- Create an EPP Policy that requires anyone purchasing materials on behalf of the organization to take into consideration raw materials acquisition, packaging, distribution, reuse, disposal, energy efficiency, product performance, durability, safety, the needs of the purchaser, and cost.
- Consider the entire lifecycle of the product. Does it contain recycled content? Can it be reused? Can it be recycled? Can it be composted?

■ Benefit: An increase in demand for environmentally preferable products, including those containing recycled content, creates a demand for recyclable commodities from the consumer market and encourages manufacturers to create more of them. Leverage your buying power.

■ Cost: Low-Mid – You may pay a slightly higher price for office paper that is Forest Stewardship Certified (FSC) or that contains a higher percentage of recycled content.