West Michigan Recycling & Landfill Diversion Survey Report
Why did we survey the community?

GOAL: DIVERT 90% OF TRASH FROM THE LANDFILL BY 2030

Each year, Kent County DPW processes over 1 billion pounds of trash, of which 75% could be reused, recycled or repurposed. In order to achieve our shared community goal we need to better understand an individual organization’s challenges, obstacles and barriers for diverting waste from the landfill.

We have to understand the barriers to be able to overcome them. We need to know what the obstacles are to eliminate them.

We want to inspire investments in West Michigan and become a national leader in recycling, waste reduction, protection of our air, land, and the waters of the Great Lakes while helping regional business lower their costs. Developing a Sustainable Business Park (SBP) is key to achieving our goal: it will extend the life of the current landfill, protect our environment, create new jobs and spark the beginnings of a Circular Economy in the region.

This survey helps us be as informed as possible so we can make the right decisions for the good of the entire community.
The Sustainable Business Park

A TRIPLE BOTTOM LINE WIN

It’s a win for the people of West Michigan who can rest assured that their waste will continue to be managed responsibly and in a way that benefits future generations instead of burdening them.

It’s a win for the planet when we look toward innovative ways to reintroduce discards back into the value stream as feedstock, plastic pellets, fuels and more.

It’s a win for the economy when we localize the processing of materials. The SBP will support local jobs and our West Michigan economy, all while capturing the $52M in "easily recoverable" materials of value that are currently going into a landfill.
About the Sustainable Business Park

250 Acres of Opportunity

We are seeking the best and brightest companies and partners from across the globe to help create a national model of a regional circular economy.

We’re looking for companies that take waste materials headed for the landfill and reuse or recycle those materials into products, biofuels, textiles and more.

Companies could begin locating in the SBP as early as 2023.
**Survey Introduction**

Kent and Allegan Counties are developing a Sustainable Business Park that will be located on the border between Byron and Dorr townships in west Michigan. The Sustainable Business Park will host innovative companies that have proven technologies and operational qualifications to partner with the Kent County Department of Public Works (DPW) to help meet the goal of reducing landfill disposal by 90 percent by 2030. Companies that are selected to locate in the park will have leading-edge technologies and approaches that help the region manage and extract value from reclaimed materials in order to help us move closer to a circular economy. This survey was conducted to assess the types of waste materials available in the region and to identify potential barriers being experienced by organizations.
Survey Snapshot

• This survey was intended to inform the Request for Proposals for an “anchor tenant” for the Kent/Allegan Sustainable Business Park.

• Its purpose was to highlight the barriers and opportunities for increasing access to recycling and landfill diversion actions through the development of alternative processing technologies at the Sustainable Business Park.

• During the survey period, 164 respondents provided feedback to some or all of the 14 survey questions.

• The survey was open from May 11 to June 1, 2020.

• The target audience of the survey was organizations representing commercial, industrial, municipal or other stakeholders. Residential waste generators were not the target.

• Survey distribution occurred organically through the efforts of community partners and like-minded sustainability organizations. The survey was open to anyone.

• Responses to questions are presented in this report in a different order than they were asked in the survey.
How do you see the Sustainable Business Park assisting your organization to reduce its landfill waste by 2030?

- Providing Guidance on Waste Reduction & Diversion
- Offering Specific Technologies or Facilities
- Streamlining Logistics and Ease of Waste Diversion Operations
- Encouraging Behavior Change
Providing Guidance on Waste Reduction & Diversion

It will contribute to the Circular Economy....which is very important.

We would love to be zero waste by 2030.

Generating ideas, for us, in reducing waste by recycling more.

By providing an efficient and cost effective service for unwanted items that have further use in a circular economy.

This would be a welcomed operation for our facilities to avoid landfill of materials that have second lives.

Giving us guidance on how to implement more sustainable policies in areas where we are rather ignorant of the way to go about it.
A glass recycler that can take more than jars and bottles would be great.

Offer solutions for plastic film and organics

Would be nice to see a C&D and hard to recycle facilities

Probably access to building demolition and construction waste

By possibly adding additional material processing capabilities to the region and providing more outlets for recyclables.

Business that will run routes for organic waste pickup and create compost products

If we can bring window glass, we would have a lot for you

Find an alternative use to our sawdust than solidification and building roads at the landfill; find an alternate, LOCAL source to accept our compostable waste streams.

Offering Specific technologies or Facilities

Bio waste gasification or digestion

By providing alternatives to landfills- tires, shingles, textiles, glass, non-container plastics

Hopefully by finding ways for us to recycle items which cannot be recycled currently
One place to bring our waste

At our company we envision utilizing space capacity and partnered industry participants to limit logistical barriers.

We may be able to coordinate dump days to bring recyclables to your site. It may be better teamed with our recycling center in Ionia. They have suspended services due to lack of funding.

It will help tremendously. Currently we send our non-recyclable label waste to a WTE facility in Green Bay, WI. A local solution will reduce our shipping costs by $10,000/yr.

STREAMLINING LOGISTICS & EASE OF WASTE DIVERSION OPERATIONS

We would love to divert from landfill/WTE to businesses in the SBP, but are unsure about transportation/hauling of the material and any other costs.

I hope it will help us help other organizations to reduce their waste.
A streamlined approach to any waste we have-transportation, logistics, knowledge.

Currently the cost is going up and at some point we are going to just be sending all our material to the landfill and no longer recycle.

STREAMLINING Logistics & Ease of Waste Diversion Operations

Increasing waste diversion options and new resources for communities

It will be crucial to help support our waste to landfill diversion, and our total waste reduction goals. We need help with simple items like plastic PET water bottles and wood waste.

Any additional landfill diversion opportunities that minimize cost and logistics (sorting, bins, staff training)
By making zero waste a norm in the region it will assist us in our logistics.

Commitment to waste reduction; waste reduction as priority over revenue at least temporarily.

I hope that it provides not only education but some incentives to nonprofits that struggle to divert waste. Currently, my organization only recycles if the location is within the City of Grand Rapids because it provides the free service. None of us currently compost.

More businesses/orgs/individuals need to think about REDUCING the usages of these materials in the first place.
Kent & Allegan county will be creating a sustainable business park model for others to emulate if successful.

I support the SBP 100%

Other ways...

It should help everyone.

[It will] provide [a] consumer of materials we generate
What type of organization do you represent?

- Manufacturing (21%)
- Government (13%)
- Nonprofit Organization (10%)
- Service Provider (waste hauler, recycler, energy provider) (8%)
- Education (7%)

Less than 5% each:
- Professional Services
- Healthcare
- Retail
- Consulting
- Other - miscellaneous
- Construction
- Food Service (restaurant, food prep, food supplier)
- Warehouse/Distribution
From those that responded: In what county is the operation where the mentioned waste is generated?
How does your organization prioritize waste reduction / recycling initiatives?

- We will do it only if it is cost neutral: 27%
- We have a zero waste to landfill policy: 16%
- We will do it only if it saves us money: 3%
- I don’t know or no response: 54%
Does your business currently recycle or divert from landfill some of the waste generated during normal daily operations?

- Yes: 73%
- No: 3%
- No Response: 24%
What materials do you collect for recycling or landfill diversion?

- Typical curbside recyclable materials: 88
- Shredded paper (for confidentiality): 64
- Electronics: 49
- Only cardboard: 43
- Plastic bags: 41
- Manufacturing cutoffs (plastic, metal, paper, wood): 32
- Plastic film: 31
- Expanded polystyrene foam (i.e. Styrofoam): 29
- Uneaten food: 28
- Plastic banding/strapping: 25
- Other organic material (yard waste/animal bedding): 23
- Construction & demolition material: 18
- Textiles: 14
- Glass (windows, doors, windshields): 12
- Other (HHW/batteries/paint/light bulbs): 5
- Other (scrap metal): 3
- Other (Terracycle – chip bags & wrappers): 1
- Other (tires): 1
- Other (wood pallets): 1
Industry Focus

Healthcare

Government

Manufacturing
In order of response frequency:

- Typical Curbside Recyclable Materials (metal cans, plastic containers/bottles, glass jars/bottles, cardboard, papers)
- Shredded Paper (for confidentiality)
- Food Scraps from Food Prep
- Only Cardboard
- Plastic Bags
- Expanded Polystyrene Foam (Styrofoam)
- Plastic Film
- Uneaten Food
- Construction & Demolition Material
- Glass (windows, doors, windshields)
In order of response frequency:

- Typical Curbside Recyclable Materials (metal cans, plastic containers/bottles, glass jars/bottles, cardboard, papers)
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- Food Scraps from Food Prep
- Expanded Polystyrene Foam (Styrofoam)
- Plastic Film
- Other organic material (yard waste/animal bedding)
- Textiles
- Uneaten food
- Glass (windows, doors, windshields)
- Manufacturing Cutoffs
Commonly Diverted Materials from:

In order of response frequency:

- Manufacturing Cutoffs
- Only cardboard
- Electronics
- Typical Curbside Recyclable Materials (metal cans, plastic containers/bottles, glass jars/bottles, cardboard, papers)
- Shredded Paper (for confidentiality)
- Plastic Film
- Plastic Banding/Strapping
- Plastic bags
- Expanded Polystyrene Foam (Styrofoam)
- Food scraps from food prep
- Uneaten food
- Textiles
- Glass (windows, doors, windshields)
- Construction & Demolition material
- Other organic material (yard waste/animal bedding)
- Other – HHW / Batteries / Paint / Light bulbs
- Other – Scrap Metal
97% of manufacturing respondents said they divert manufacturing cutoffs:

In order of response frequency:

- Metal
- Plastic
- Paper
- Wood
- Cardboard
- Textiles
- Adhesives
- Polystyrene
- Vinyl Siding
What do you estimate is the quality of the recyclable materials collected?

*(Not mixed with non-recyclable material)*

<table>
<thead>
<tr>
<th>Contamination Level</th>
<th>Percentage</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10% contamination</td>
<td>34%</td>
<td>56 respondents</td>
</tr>
<tr>
<td>10-25% contamination</td>
<td>8%</td>
<td>13 respondents</td>
</tr>
<tr>
<td>25-50% contamination</td>
<td>3%</td>
<td>5 respondents</td>
</tr>
<tr>
<td>I don’t know – we don’t track this information</td>
<td>15%</td>
<td>24 respondents</td>
</tr>
<tr>
<td>no response</td>
<td>40%</td>
<td>66 respondents</td>
</tr>
</tbody>
</table>
What materials do you want to recycle or divert but don't or can't?

- Expanded polystyrene foam (i.e. Styrofoam) 42
- Plastic bags 37
- Plastic film 27
- Construction & demolition material 27
- Plastic banding/strapping 25
- Uneaten food 22
- Food scraps from food prep 19
- Typical curbside recyclable materials 16
- Textiles 15
- Electronics 14
- Glass (windows, doors, windshields) 11
- Shredded paper (for confidentiality) 10
- Other organic material (yard waste) 10
- Manufacturing cutoffs (plastic, metal, paper, wood) 8
- Only cardboard 6
- Other 2
What barrier(s) prevent you from diverting these items from the landfill?

- I’m not able to find a recycling or landfill diversion outlet (27%)
- Transportation and/or logistics (21%)
- The cost of service by the provider (tipping fee) is too high (16%)
- We don’t have the staffing capacity (6%)
- I don’t have the storage space (7%)
- I’m not sure (2%)
- Education/lack of interest (1%)
- Infrastructure (1%)
- Contracts (0%)
Survey Conclusions

• The availability of recycling services and the cost of hauling/logistics are the top two barriers to higher diversion efforts.

• Two-thirds (66%) of respondents report over 10% contamination of collected recyclables (including those who do not know or did not respond, suggesting they do not know), acknowledging that their company is not recycling as well as they should be.

• Survey respondents said they recycle plastic bags (41), plastic film (31) and expanded polystyrene (29). However, none of these are accepted in typical curbside recycling. Depending on the volume generated, this could be ‘wish-cycling’ that is causing contamination of the recycling stream.

• Those who are recycling want greater access to reclaim a wider array of materials.

• Many respondents are experiencing a limited ability to expand their reduction efforts.
Survey Conclusions

• Most respondents know that their organization recycles. (73%)
• Many respondents do not know how their organization prioritizes waste reduction and recycling goals. (54%)
• Some questions had a higher ‘unanswered’ rate, suggesting that the organization does not have protocols for
  • Participating in landfill diversion activities
  • Tracking landfill diversion activities
  • Evaluating if the material they are diverting is actually being recycled
  • Understanding barriers impacting landfill diversion
• Assorted plastics, food waste and construction & demolition materials were the three largest categories most respondents wanted to recycle but couldn’t.