



Reimagine Trash Sustainable Business Park

Our Journey to Zero



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Winner of the 2018 Decon+Reuse Independent Award

- *Abiding in the Shadow*, Jeff Best (Clare, MI). On display at Amway Grand Hotel.
- Reclaimed barbed wire from farm dumps.



KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS

*"Are **we** prepared..."*



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

*...to create a **paradigm shift** on
how we manage discards so **West
Michigan** becomes a truly
sustainable community"*



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

South Kent Landfill Expansion Property



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

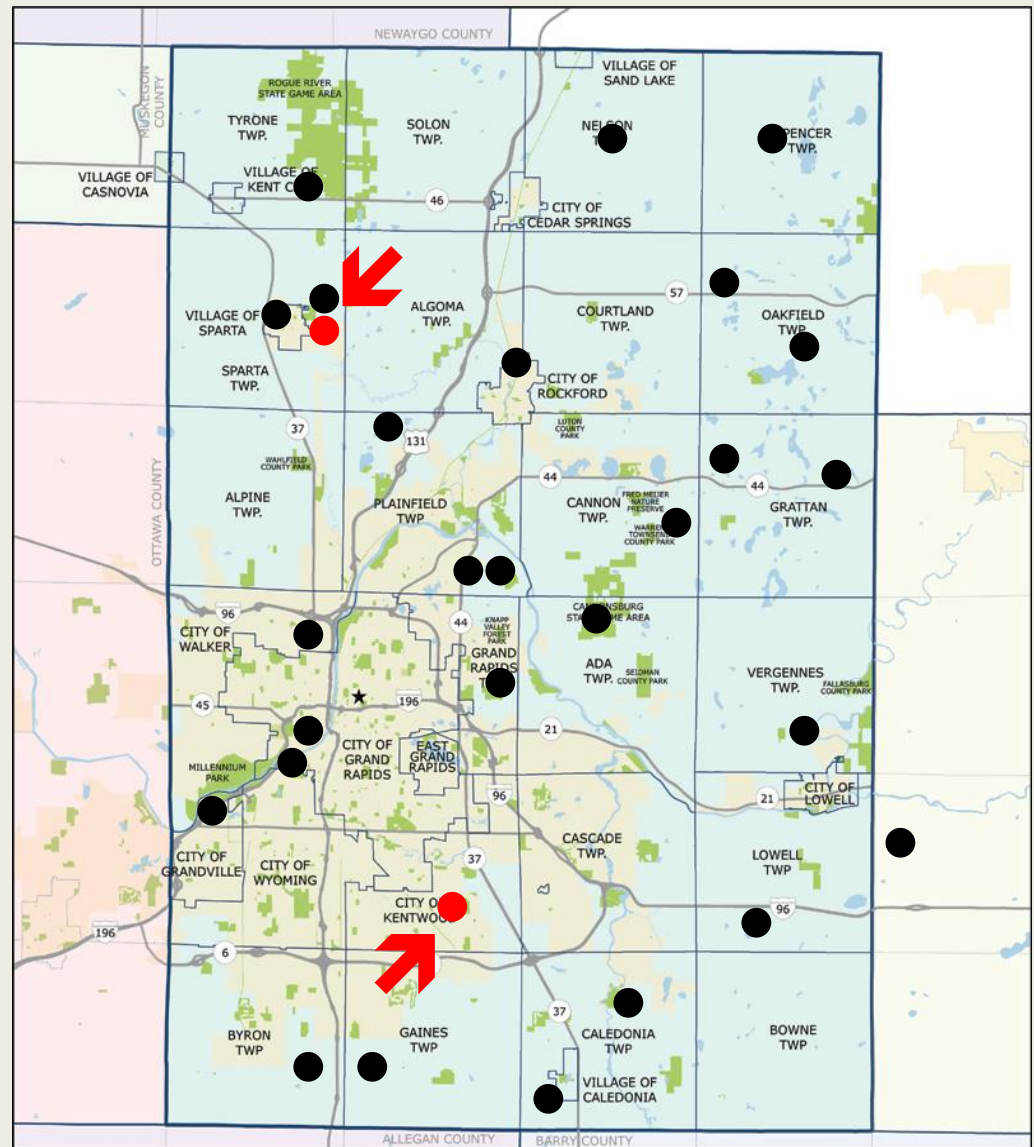


Source: City of Grand Rapids Community Archives and Research Center



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

By 1965,
29 municipal
and privately
owned open
dumps were
scattered
throughout
Kent County.



KENT COUNTY, MI

County Office:
300 Monroe Avenue NW 49525
Grand Rapids, MI 49503
Phone: (616) 632-7590
Website: www.accesskent.com

★ County Office
■ Parks
■ 2000 Urban Area
□ Municipal Boundary

0 2.5 5 10 Miles

Prepared by the Community Research Institute
www.cridata.org
Sources: REGIS, CRI, IT Department- Kent County, MI



Kent County's Integrated Solid Waste Management System

- Includes **Waste To Energy, Single Stream Recycling, Landfill, Transfer Station, and Recycling Service Centers.**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**DANGER
STAY
BACK
SIX FEET**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

South Kent Landfill

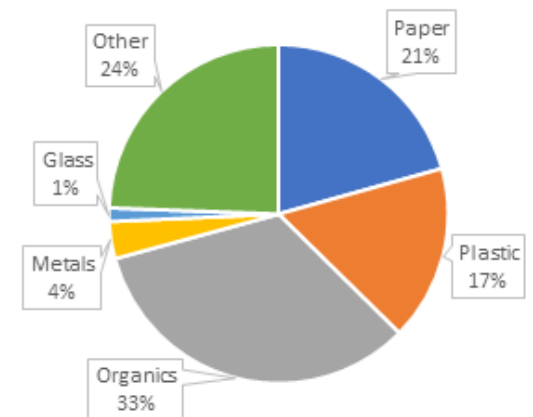
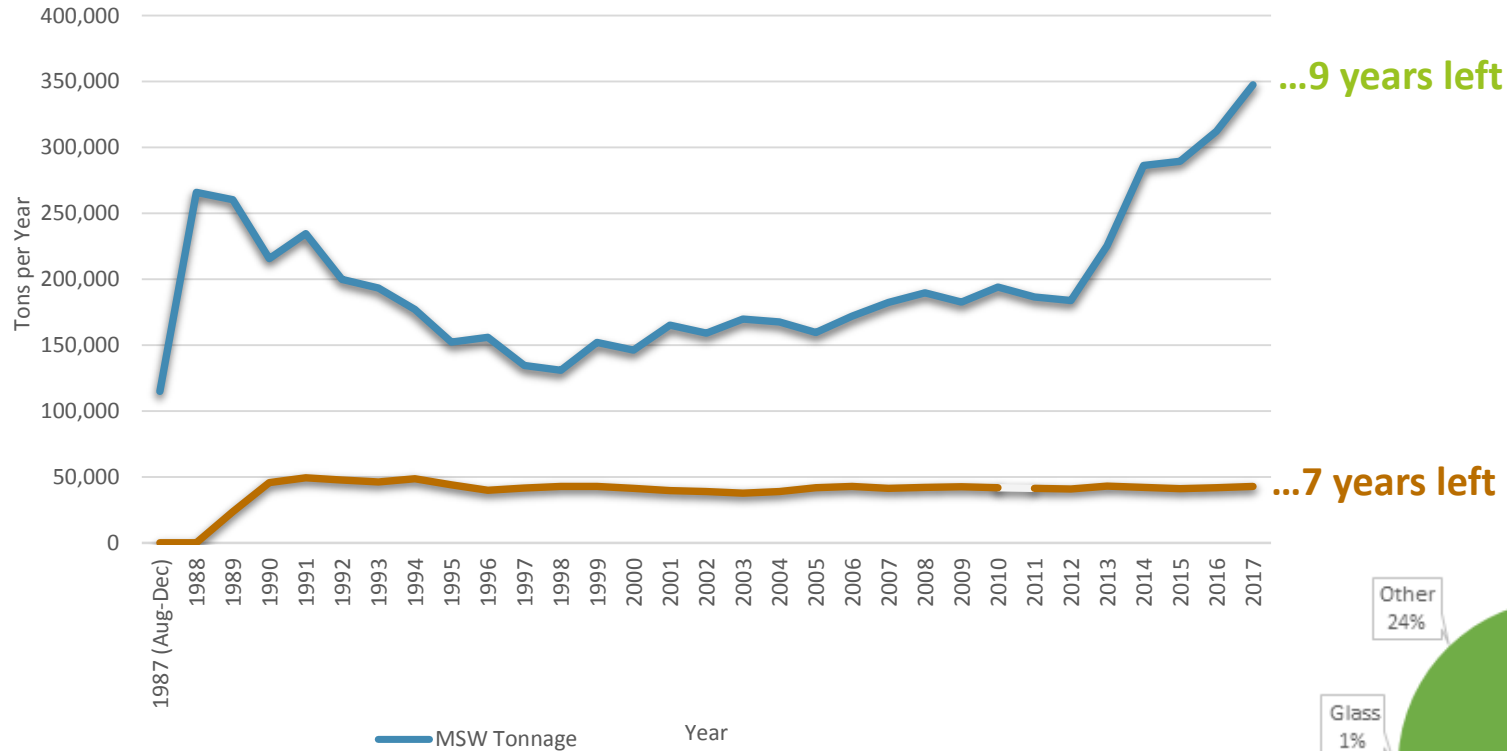
10 years of remaining airspace



2030



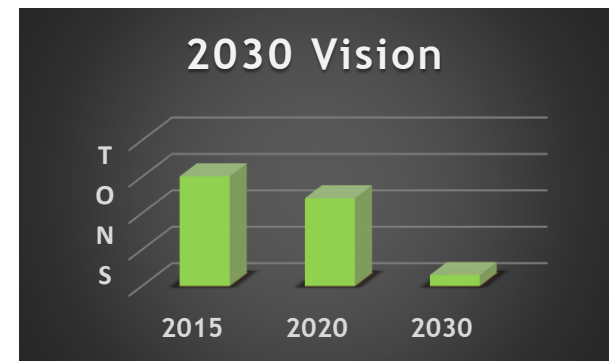
South Kent Landfill Tonnage (MSW and Ash)



Our Goal: Reduce waste going to landfill

- In 2015, Kent County disposed of **1.8 million** cubic yards of trash.
- In 2016... **1.9 million** cubic yards.
- In 2017, increased to **2.1 million** cubic yards.

OUR GOAL: TO REDUCE LANDFILL WASTE

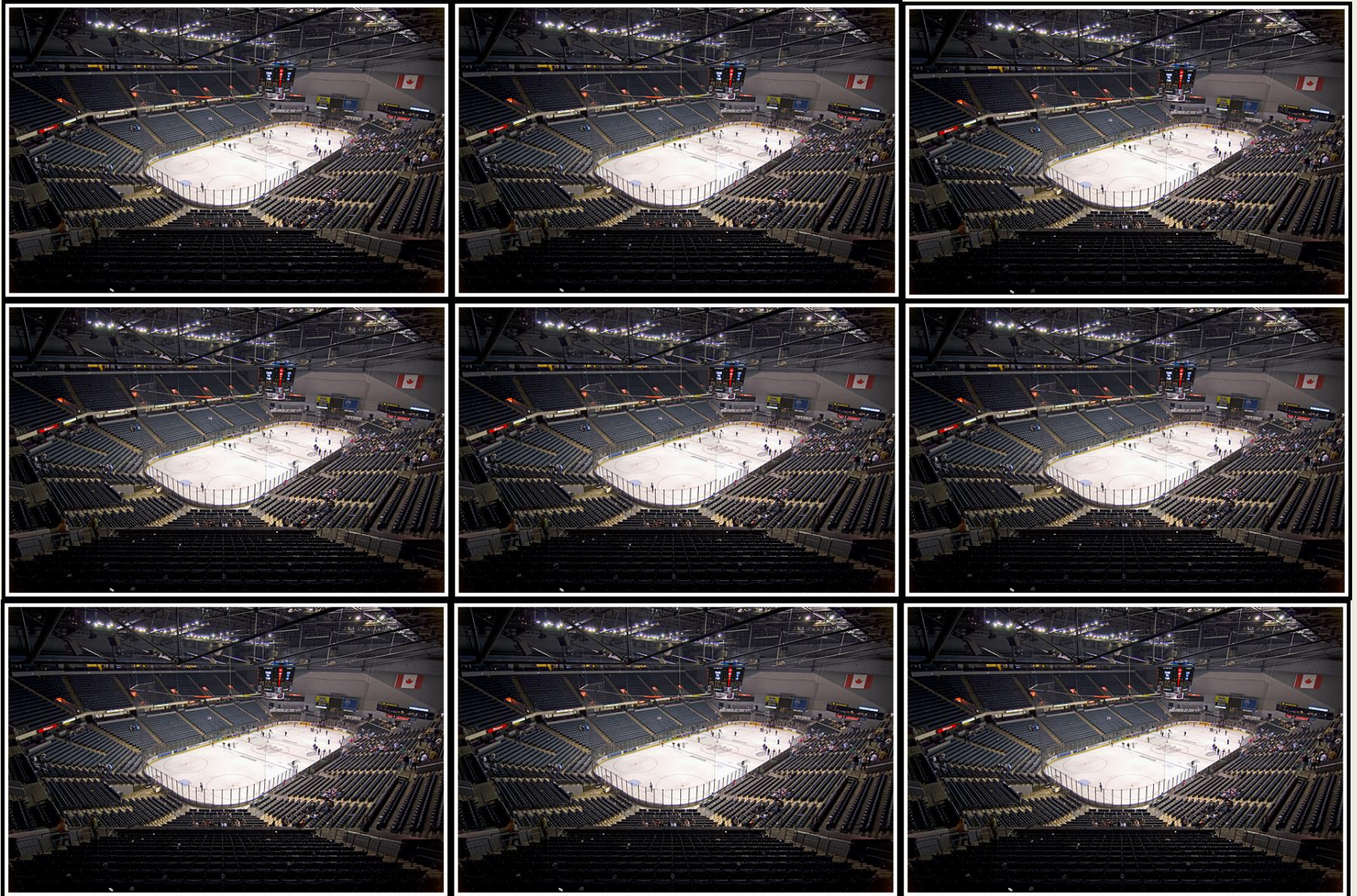




Kent County - two Michigan Stadiums Every Year...



... or nine Van Andel Arenas



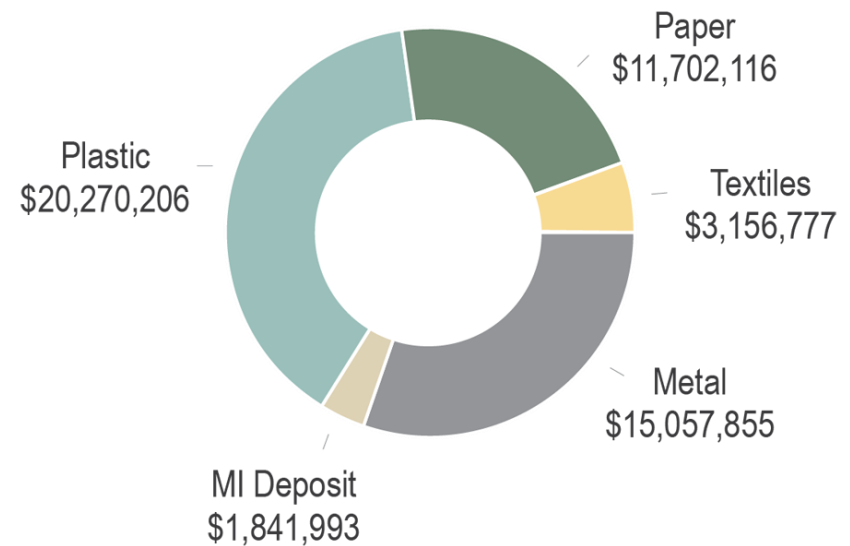
**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Landfill Characterization Study (WMSBF)



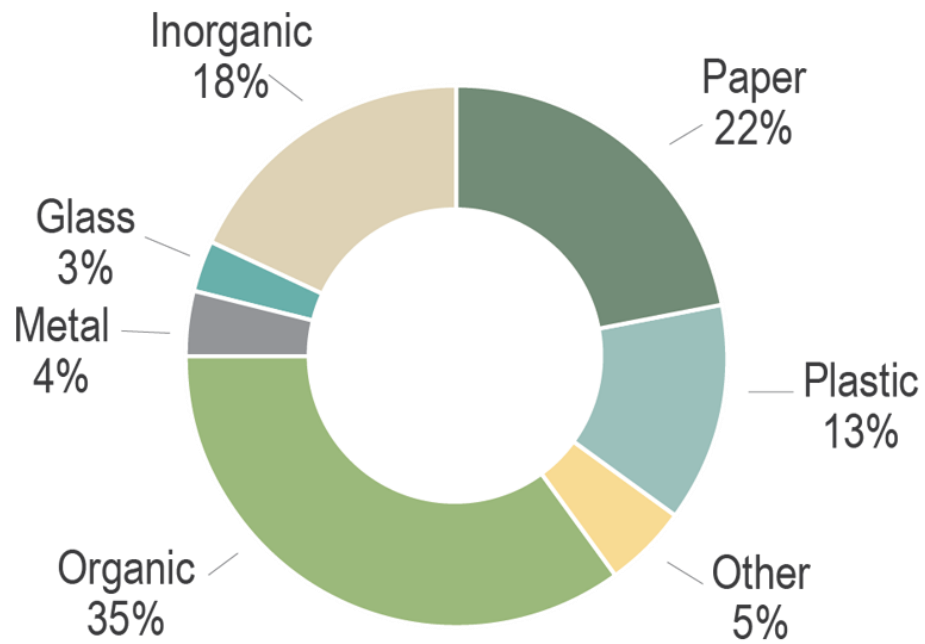
Total Value of W. Michigan MSW
Material Disposed (\$)



Source: West Michigan Sustainable Business Forum
2016 Michigan MSW Valuation Study. wmsbf.org/msw

What's In Our Trash?

**Kent Municipal Solid Waste
Composition (mean % by weight)**





21,000 tons of
OCC delivered to
Waste-to-Energy
facility annually.



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

SRC

**Stakeholder
Review
Committee**

srg



**SOLID WASTE
MANAGEMENT
CONSULTANTS**



pfm



BYRUM & FISK
ADVOCACY COMMUNICATIONS



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**


GRAND RAPIDS NEWS

23 respond to Kent County's call for 'sustainable' garbage proposals

Posted Apr 30, 12:30 PM



EXHIBIT B SITE OVERVIEW

 Properties Proposed for Development



2020

20%

REDUCE LANDFILL WASTE
20% by 2020 | 90% by 2030

2030

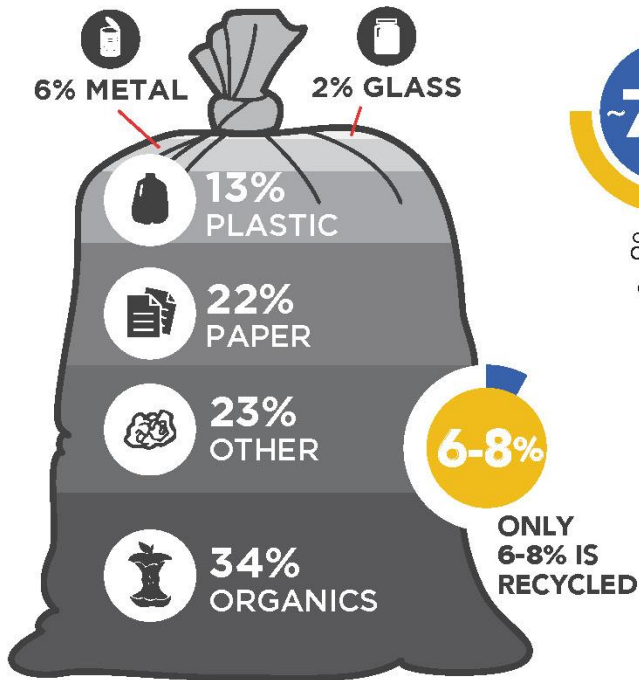
90%



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

WHAT WE DO NOW

KENT COUNTY
DEPARTMENT OF PUBLIC WORKS
PROCESSES OVER
525,000 TONS
= 1 BILLION LBS
OF WASTE EACH YEAR



WHAT WE *COULD* BE DOING

OUR GOAL: **REDUCE LANDFILL WASTE**
20% by 2020 | 90% by 2030



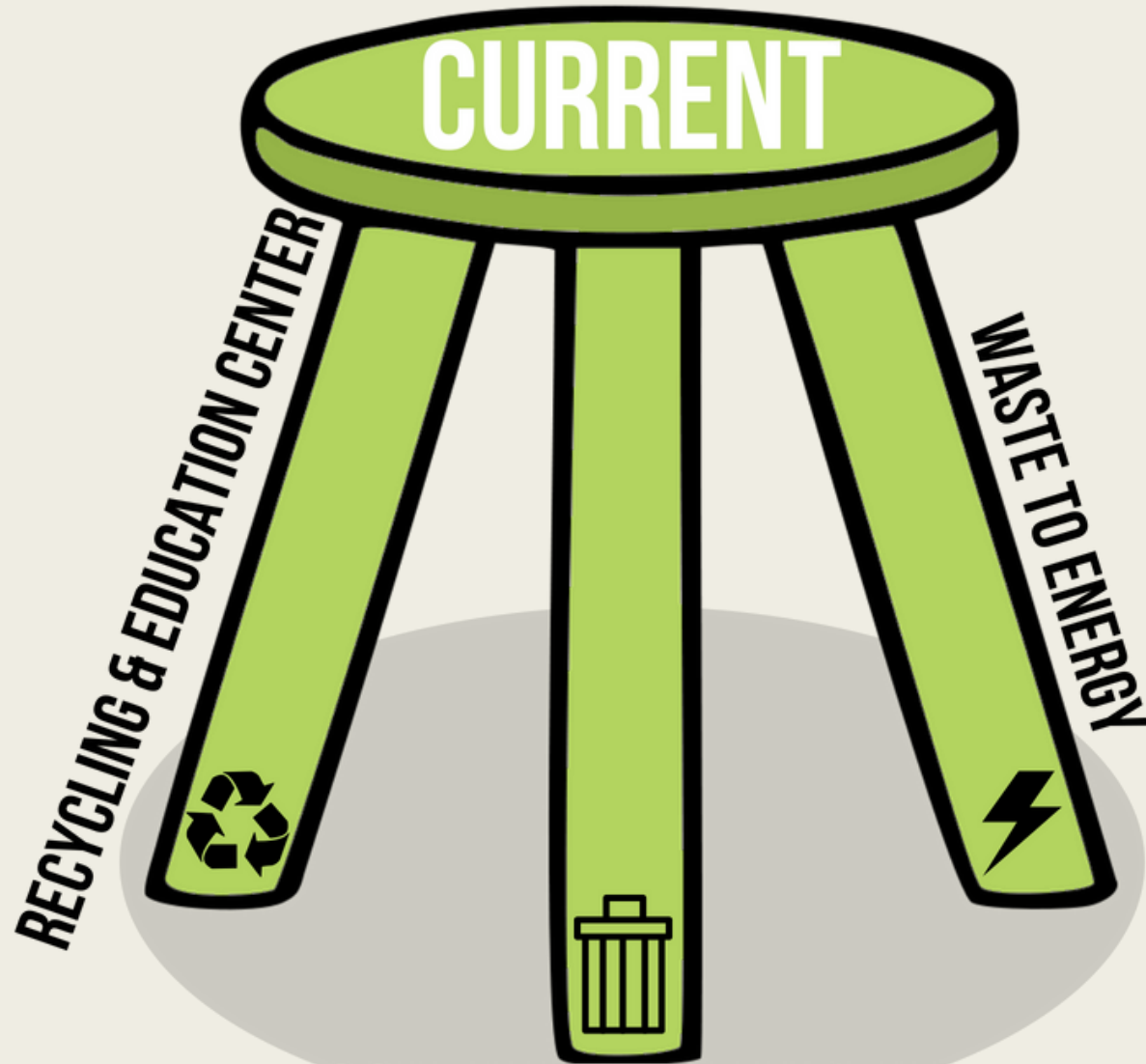
200-ACRE SUSTAINABLE BUSINESS PARK



Potential Public, Private and Nonprofit Partners of the Proposed Sustainable Business Park



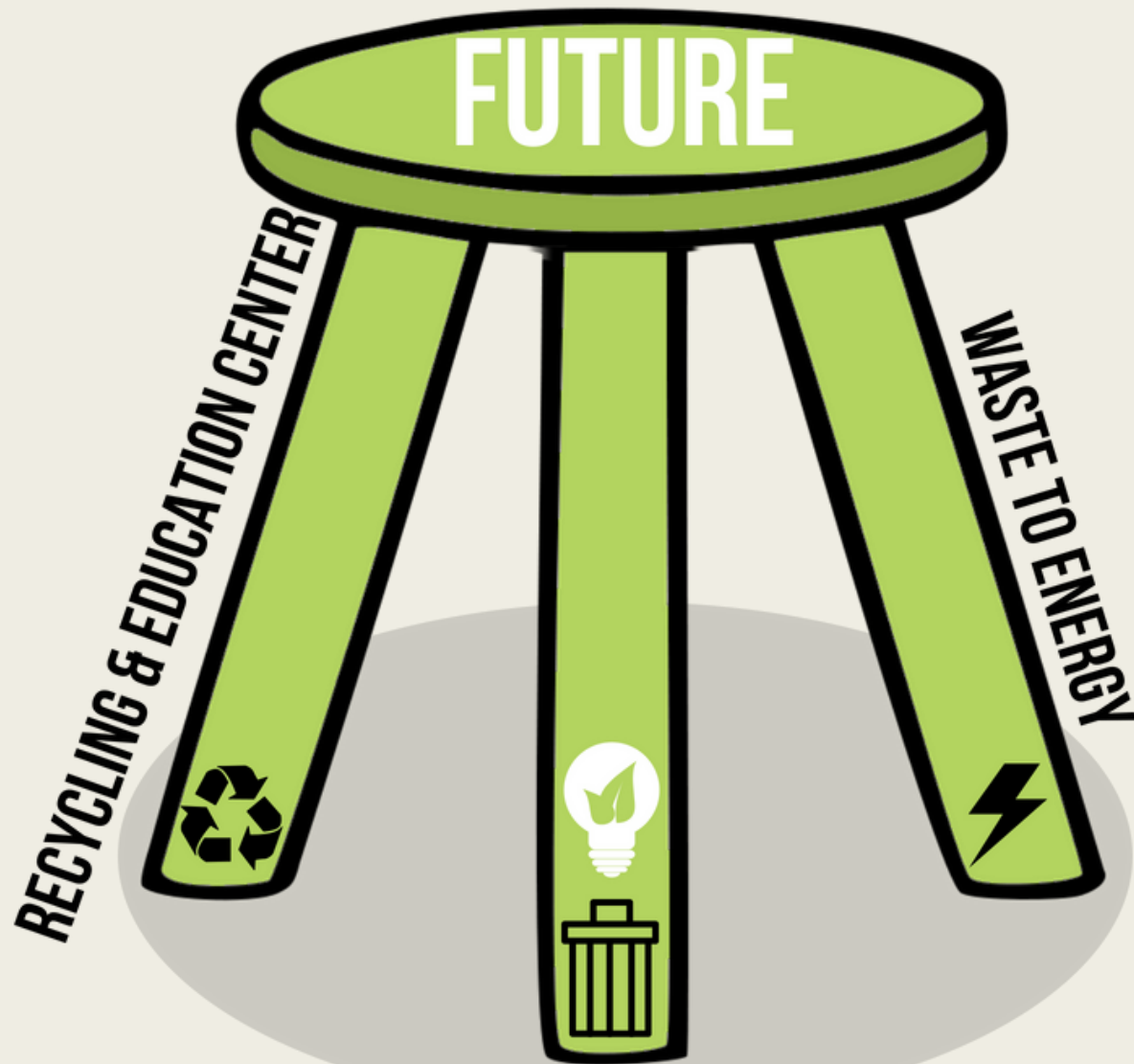
KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS



**SOUTH KENT LANDFILL
& NORTH KENT TRANSFER STATION**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



**SUSTAINABLE BUSINESS PARK
& NORTH KENT TRANSFER STATION**



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS

Sustainable Business Park Master Plan

Kent County Department of
Public Works



DRAFT

July 27, 2018



Submitted to:
Darwin Baas
Director
Kent County Department of Public Works
1500 Siskiwit Ave NW
Grand Rapids, Michigan 49504

Mixed MSW Company

Mustang Renewable Power Ventures
Urbaser
Sacyr Rooney
Enerkem
Ecohub
Entsorga
OWS, Inc.
Plexus Recycling Technologies

Partners

SIMS, OWS, Inc., Herhof GMBH, BioCNG
Synagro, Waste Management, Veolia
Komptech, ET Environmental, and Hammond Farms

Gasification

Synova

Composting and Organics

Synagro
Cocoa Corporation
Spurt Industries
Engineered Compost Solutions

Ash Processing

Lab USA
Inashco
Pure Recovery Group

Mixed MSW Demonstration/Pilot Plants

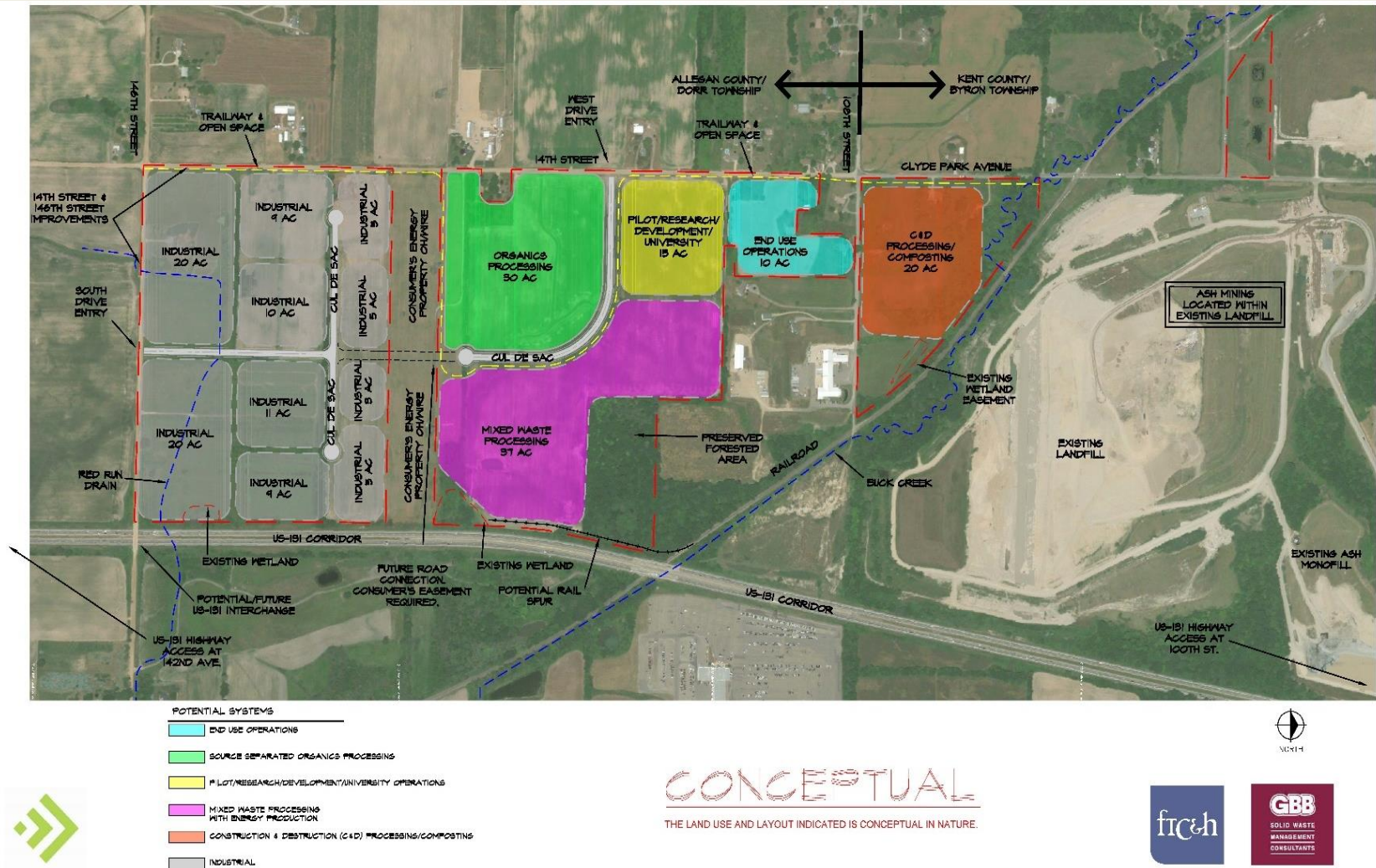
Michigan Tech University
Fresh Technologies
Toterra
Green Energy Experts
QCI-Estch
Convergen Energy
Energy-Inc Park
Energy-Inc Park

Materials Processing

Fibr
Emterra
Odom Re-USE Co.

Sustainable Business Park By the Numbers

- **250 acres:** set aside for the Sustainable Business Park to serve as a hub and catalyst for waste utilization and conversion development in West Michigan.
- **23:** 30 companies via 23 responses who replied to the RFI and are anxious to hear an update from us. The number of respondents from around the world to the formal Request for Information (RFI) for the Sustainable Business Park Master Plan:



Kent County Sustainable Business Park - Grouping A

Concept Plan

fishbeck, thompson, carr, & huber, inc.

July 27, 2018

171566



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

AERIAL OVERVIEW BOURG-EN-BRESSE PLANT



Courtesy Organic Waste Systems (OWS)



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**



Courtesy Organic Waste Systems (OWS)



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

<http://www.reimaginetrash.org/wp-content/uploads/2018/08/Sustainable-Business-Park%20-Draft-Master-Plan.pdf>



**KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS**

2020



REIMAGINETRASH.ORG

2030

