



Kent County Solid Waste System and Proposed Tipping Fee Increases

City of Grand Rapids –
Department of Public Works





Purpose of Briefing

- Update City Commission on solid waste activity within the county and proposed tip fee increases by Board of Public Works.
- Proposed increased tip fees to support \$42 million capital. improvement costs over five years at the Waste to Energy facility and offset operating losses occurring in recycling due to decreased commodity value.
- Board of Public Works approved FY2022 budget on June 3, 2021 with assumed increases in tipping fees. Consider tip fees on October 7.
- Discuss options to cover proposed tip fee increases.
- Review strategic options to achieve diversion goals and outcomes.



Historical Context – Waste to Energy

- 1950's to 1973 – waste material generated in the City was disposed of at the City of Grand Rapids Butterworth landfill.
- 1973 – 1990 - waste material was transported to Kent County landfill.
- 1985: City entered Combustible Waste Agreement with Kent County Board of Public Works.
- Partnership with the core six cities (Grand Rapids, Kentwood, Wyoming, Grandville, Walker and East Grand Rapids) and Kent County Board of Public Works.
- Construction completed in 1990 and facility accepted trash at \$39.07/ton.
- 40 year agreement that expires in 2025.



Historical Context – Waste to Energy cont.

- WTE tip fees steadily increased up to \$79.37/ton in 2008, primarily due to debt service, and then decreased to \$45/ton in 2013
- Current WTE Tip Fee = \$55/ton plus a landfill legacy surcharge of \$1.68/ton
- Approximately 31% of material received at WTE is transported to South Kent Landfill due to overcapacity
- Kent County Department of Public Works FY2022 Proposed WTE Tip Fee = \$80/ton (45.45% increase)
- FY2022 Proposed WTE rate would result in an approx 82% increase since 2012, while landfill tipping fee increased 23% in same period



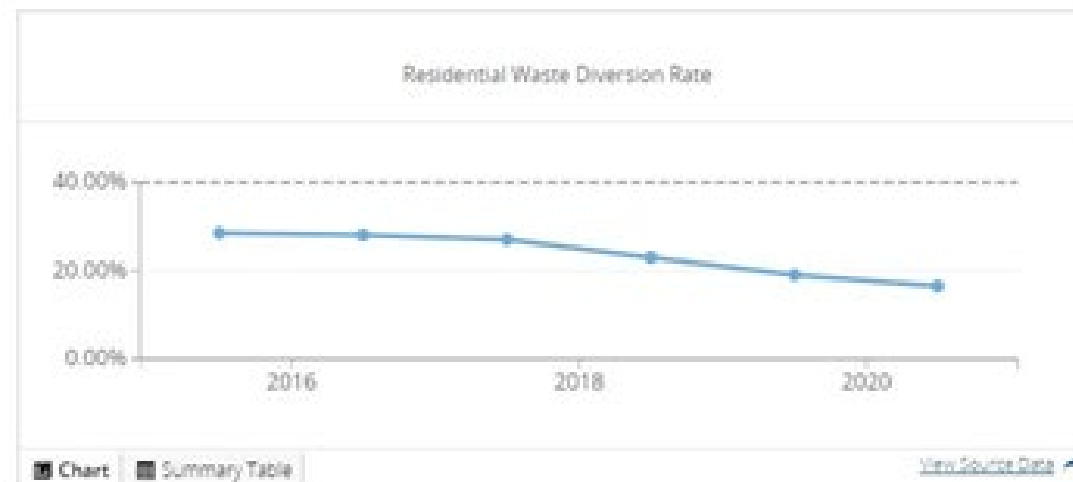
Historical Context – Material Recovery Facility

- 2010 - Established partnership agreement with Kent County thru 2030, unless terminated by either party.
- 2010 – Kent County Single-Stream Material Recovery Facility (MRF) opens - \$0 tip fee
- 2016 – MRF implements a recycling tip fee - \$10/ton
- 2017 – Tip fee increases to \$35/ton (71% increase)
- 2019 – Tip fee increases to \$65/ton (46% increase)
- 2022 – Proposed tip fee = \$90/ton (38% increase) annual increase of approximately \$200,000



Strategic Plan Priorities - Diversion Goals

- Health and Environment Priority
 - Objective 1: Reduce carbon emissions and increase climate resiliency
 - Strategy 1: Create carbon reduction goals and integrate goals into appropriate City plans
 - Objective 4: Minimize waste generation and promote waste diversion practices
 - Strategy 2: Improve the quality and amount of recycling collected throughout the City
- Department of Public Works established a diversion rate goal of 40%



Current State

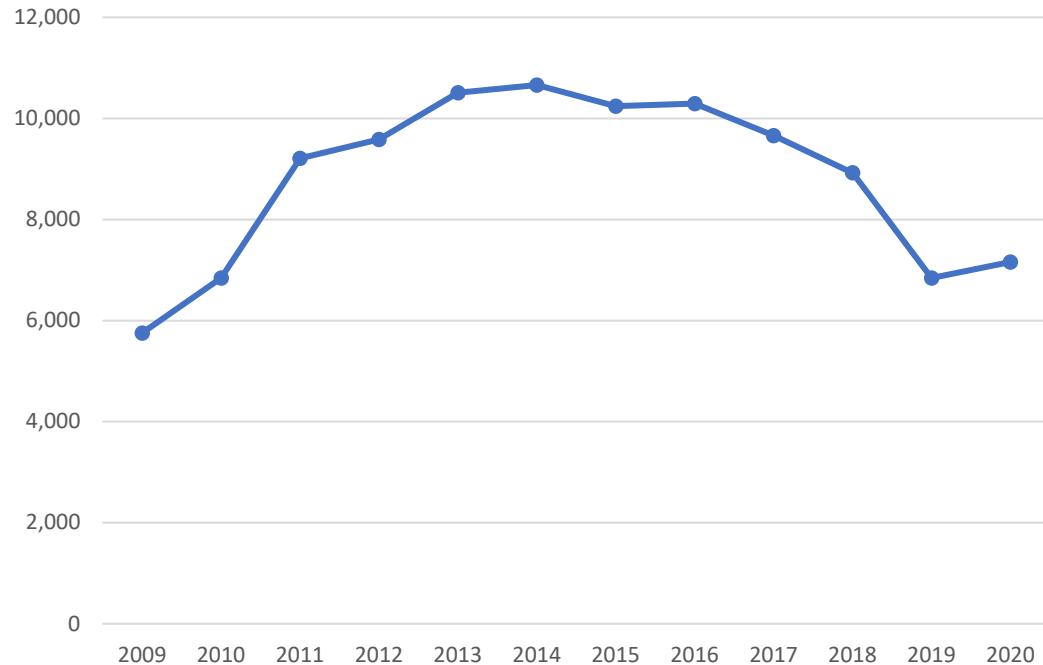


FY 2021 Recycle Disposal Cost = \$462,205

GR = Approx 24% Incoming Material

Total Cost of Service = \$4,280,205

Recycling Tonnage - City of Grand Rapids

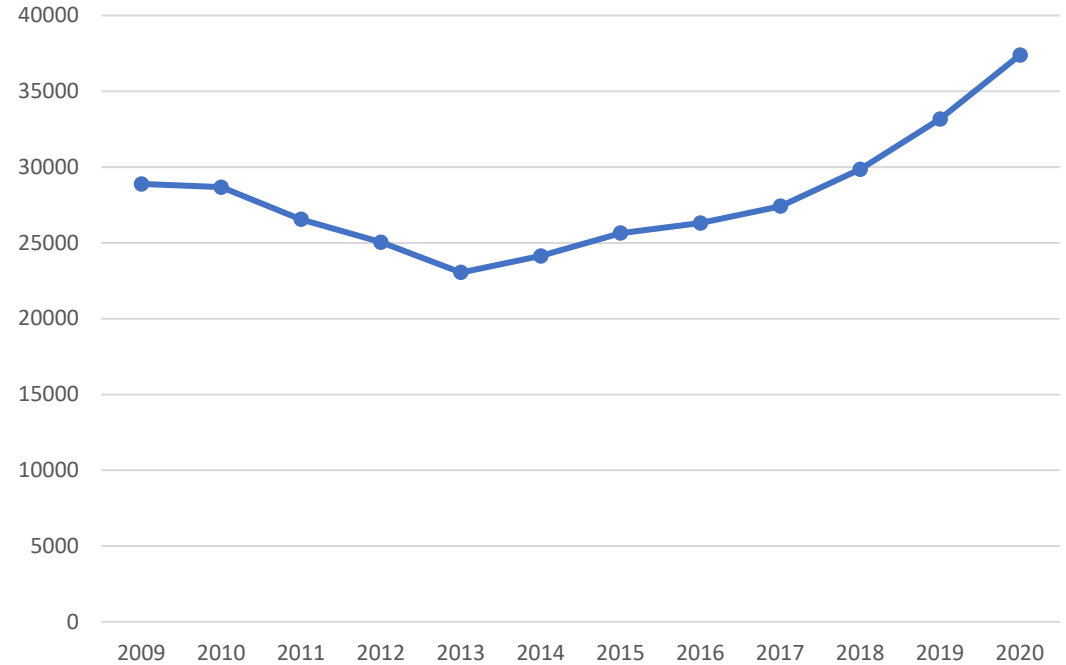


FY 2021 Cost to Incinerate Trash = \$2,119,435

GR = Approx 14% Incoming Material

Total Cost of Service = \$6,182,666

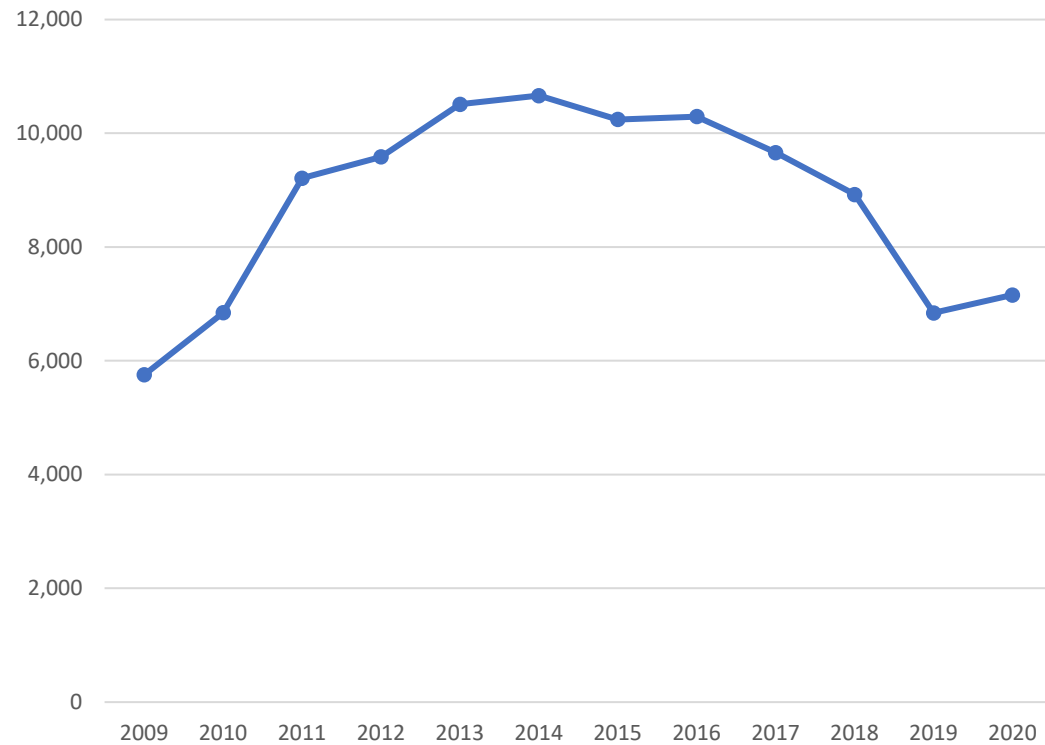
Refuse Tonnage – City of Grand Rapids



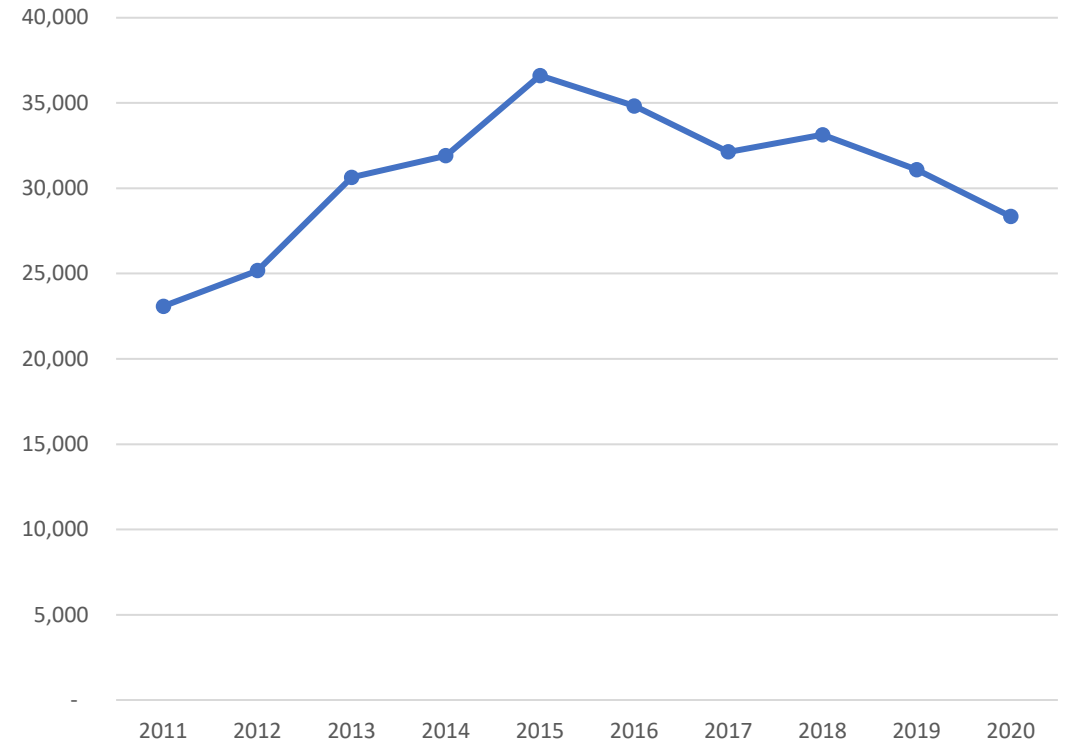
Recycling Tonnage Comparison



Grand Rapids Recycling Tonnage



County Wide Recycling Tonnage



Future State with Increased Tipping Fees

- Assumes equal tonnage collected as FY2021
- Diversion rate remains 16.50%
- FY2023 Recycle Disposal Cost = \$641,130
- Total Cost of Recycle Service = \$4,459,130
 - Net Increase of \$178,925 from FY2021

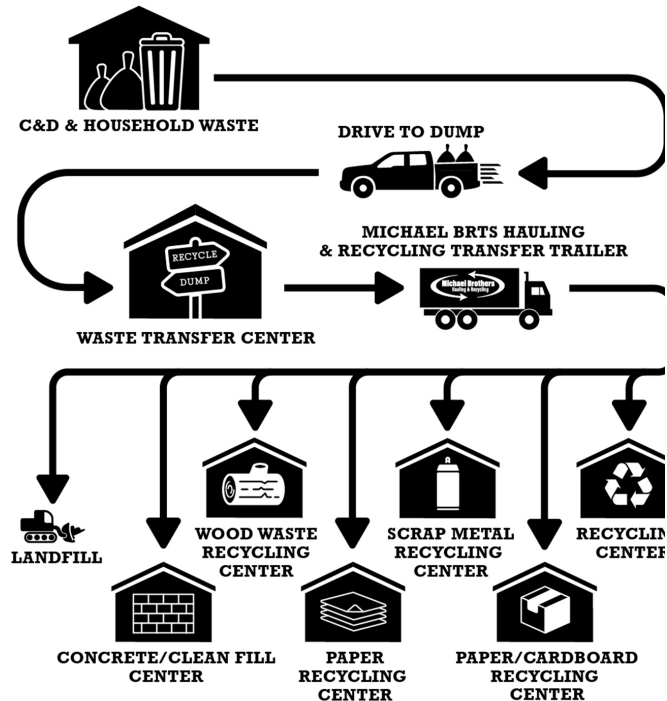
- FY2023 Cost to Incinerate Trash = \$3,054,260
- Total Cost of Refuse Service = \$7,117,491
 - Net Increase of \$934,825 from FY2021

- Combined cost increase \$1,113,750

Future State with Increased Tipping Fees and Achieving Diversion Goals

- Assumes equal tonnage collected as FY2021
- Diversion rate 40% or 17,820 tons collected
- FY2023 Recycle Disposal Cost = \$1,603,800
- Total Cost of Recycle Service = \$5,421,800
 - Net Increase of \$1,141,595 from FY2021
- FY2023 Cost to Incinerate Trash = \$2,183,306
- Total Cost of Refuse Service = \$6,246,537
 - Net Increase of \$63,871 from FY2021
- Combined cost increase of \$1,205,466

Potential Options



Short-Term Solutions

- Option 1 Increase Refuse Millage to cover all increased costs.
 - 1.6 mills to 1.9 mills (3.0 authorized millage max less: Headlee Rollback) Average home value of \$52,000 would pay an annual increase of \$15
- Option 2 Increase PAYT fee and implement recycling fee
 - Refuse cart PAYT fee increased to cover \$934,825 in WTE tipping fee increase - 22% cart PAYT fee increase to cover cost or \$18 annual cost increase
 - Recycle cart fee implemented to cover \$178,925 MRF tipping fee increase or about \$3 annually per customer
- Option 3 Increase refuse millage to only cover recycling tip fee changes – raise millage to 1.65. Increase PAYT tip fees to cover WTE tip fee changes, 22% or \$18 annual cost increase
- Option 4 Research potential transportation of recyclable material to an alternative (Holland or Lansing) Material Recovery Facility

Long-Term Sustainability Considerations

- Work with Kent County Department of Public Works to evaluate Sustainable Business Park as an option to achieve goal of 40% diversion rate
- Evaluate alternative processing/disposal options for trash/recycling that includes transporting material to a regional processor. This effort requires further analysis but could include the following:
 - Engagement of a Materials Management Expert to advise
 - Strive for zero waste goals, public/private partnership, RFP Process
 - Landfilling of waste material
 - Curbside organic collection pilot program
- Development of a comprehensive material management plan for recycling to achieve 40% diversion rate of reusable material.
 - Enhance public engagement/education
 - Invest in the creation of a recycling education specialist



How does the Kent County Sustainable Business Park Impact the Solid Waste System

- Kent County Department of Public Works recommended Continuus Material & Anaergia as the anchor tenant at their September 2, 2021 meeting
 - Tenant will process 400,000 tons of municipal solid waste – manufacturer of roof coverboard out of material
 - Anerobic digestion
 - Financial model presented a \$76/ton tipping fee
 - Public investment of \$70 million
 - Private investment of \$280 million
 - Phase 1 infrastructure investment of \$19 million
 - Board of Public Works would bond for 25 years
- WTE is planned to remain operational and slated for \$42 million capital investment over next five years. \$15 million planned in FY2022
- It is unclear whether the Recycling Center will remain a viable alternative for the County's Solid Waste System

Next Steps

- Collaborate with Urban Metro Mayors and Managers (“UMMM”) on joint response
- September 15, 2021 - Waste to Energy Advisory Board Meeting to discuss proposed tipping fee increase
- October 7, 2021 – Board of Public Works Meeting to consider adoption of tip fee increases
- Engage materials management experts to advise the City and recommend course of action by 1st Quarter, 2022
- Build short-term option in FY2023 budget





Questions and Comments