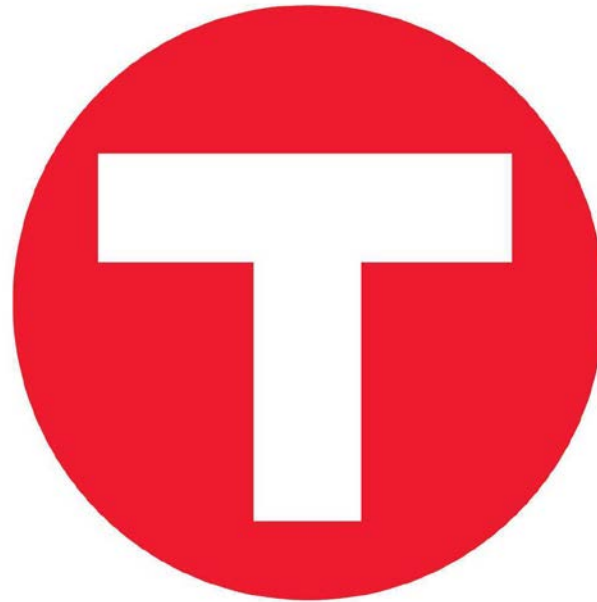




Aspirational to Bona Fide Sustainable Waste Management

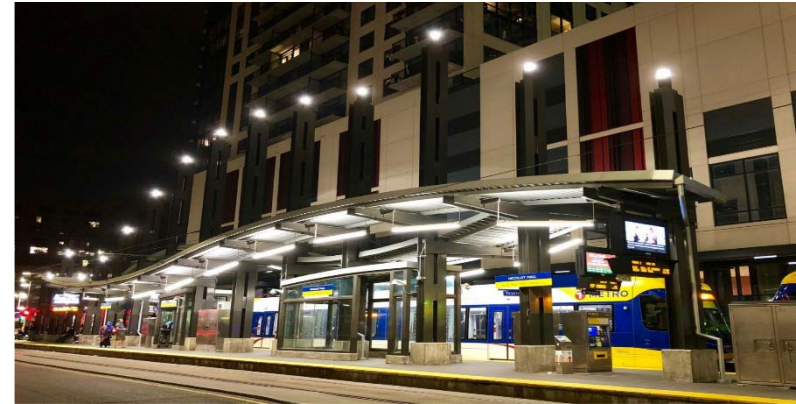


Jeff Freeman
Sr. Project Coordinator

Sustainability at Metro Transit

GHG and Conservation Focused

- Building Automation System
- LED Lighting Retrofit
- EV Pool Cars
- Electric Buses



Sustainability Drivers

Next Generation Energy Act 2007

- Set GHG Goals
- Renewable Energy Standards

Metropolitan Council MSP Thrive 2040

Governor's Executive Order 17-12

- Established Office Enterprise Sustainability
- Set Aggregated Goals for State Agencies

Governor's Executive Order 18-01

- Refined duties and governance

Governor's Executive Order 19-27

- Requires goal setting and retro-commissioning

Focus Areas of Governor's Executive Orders

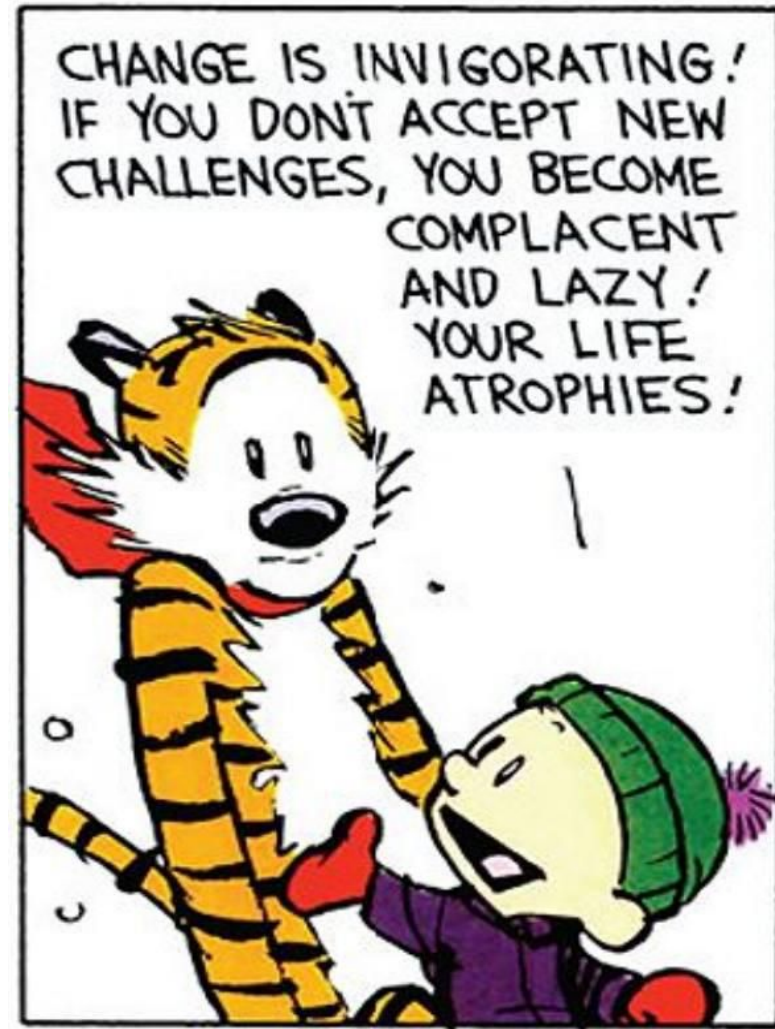
- Greenhouse Gas Emissions: 30% reduction of greenhouse gas emissions by 2025 relative to a 2005 calculated baseline.
- Energy Consumption: 30% reduction in consumption of energy per square foot by 2027 relative to a 2017 adjusted baseline.
- Sustainable Procurement: 25% of total spend on Priority Contracts are sustainable purchases by 2025.
- Reduce Fleet Fossil Fuel Consumption: 30% reduction of State Fleet consumption of fossil fuels by 2027 relative to a 2017 adjusted baseline.
- **Reduce Solid Waste: 75% combined recycling and composting rate of Solid Waste by 2030.**
- Reduce Water Consumption: 15% reduction of water use by 2025 relative to a 2017 adjusted baseline.

Compliance with the Governor's Executive Order cannot be achieved under the framework of the existing waste contract. It will require a more data driven approach.

We will need to figure out how to measure things that are not being measured well, if at all.

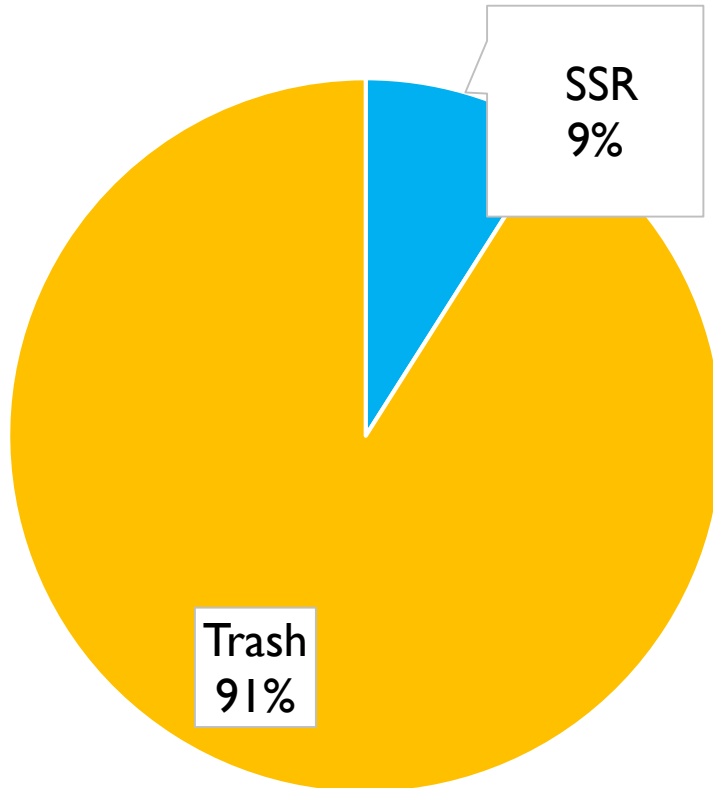
What can our current vendor do for us, and is it in the current contract?

Let's start with something we know.

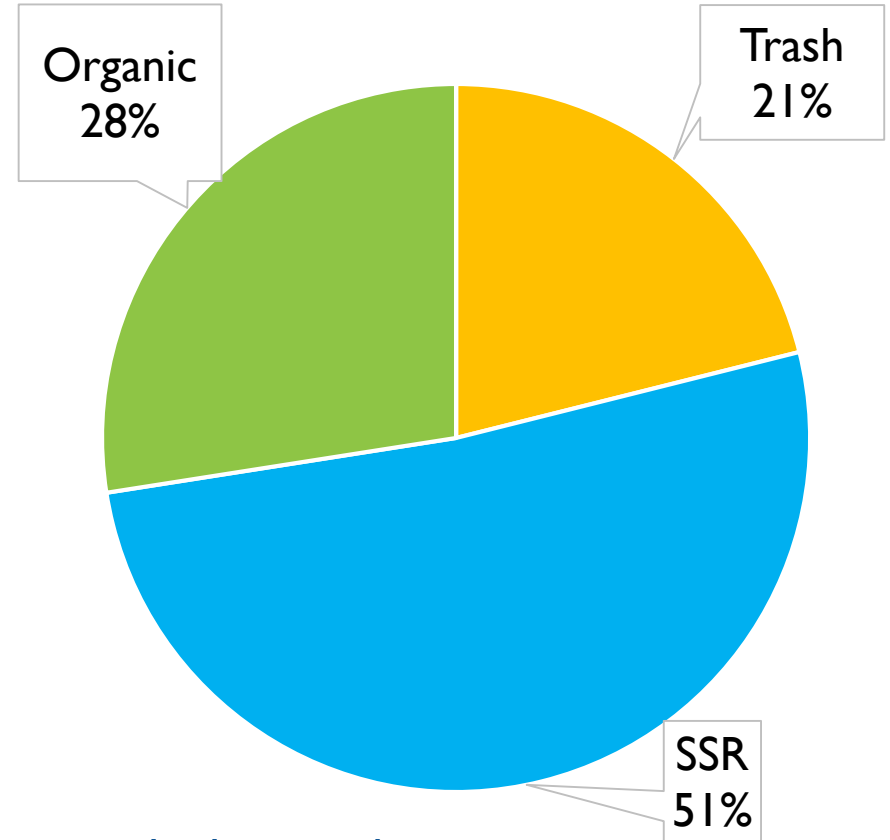


Diversion Rate – Heywood Office Building

Prior to new sorting program



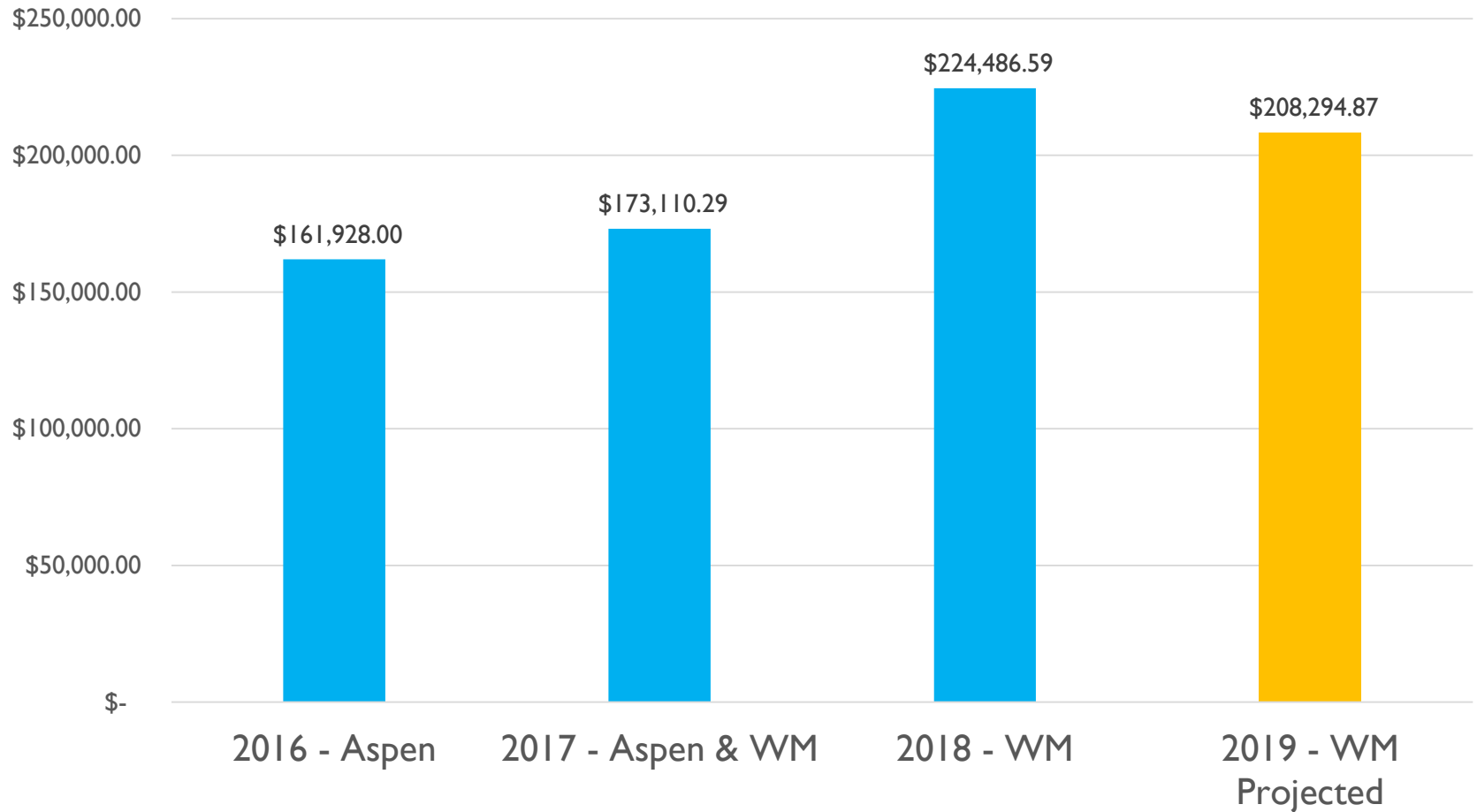
1 year into new sorting program



*Percentages are based on a single day sample



Metro Transit Annual Waste Costs

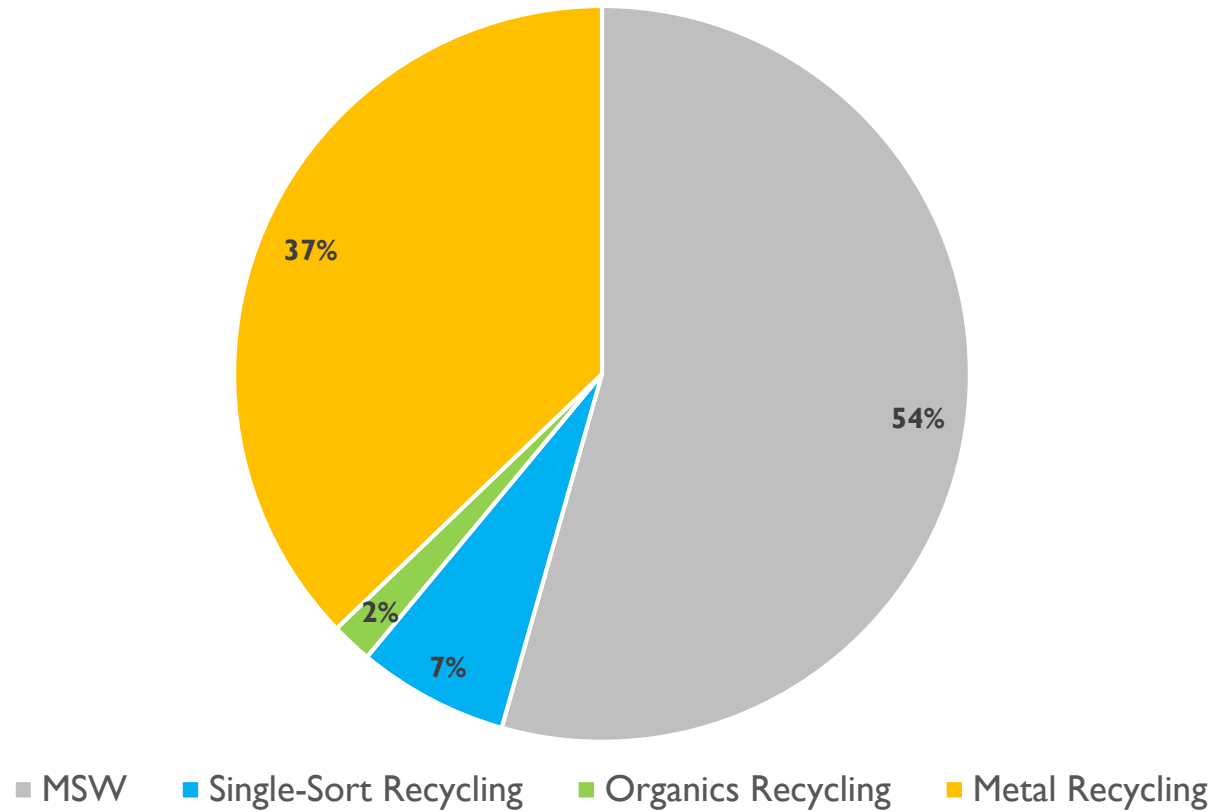


New Contract Development and Challenges

- Right-sizing containers & frequencies (aka “The Math”)
- Understanding our Opportunities
- Changing what we do
- Employee Education
- Global recycling issues

2018 Agency Wide Diversion Rate = 46%

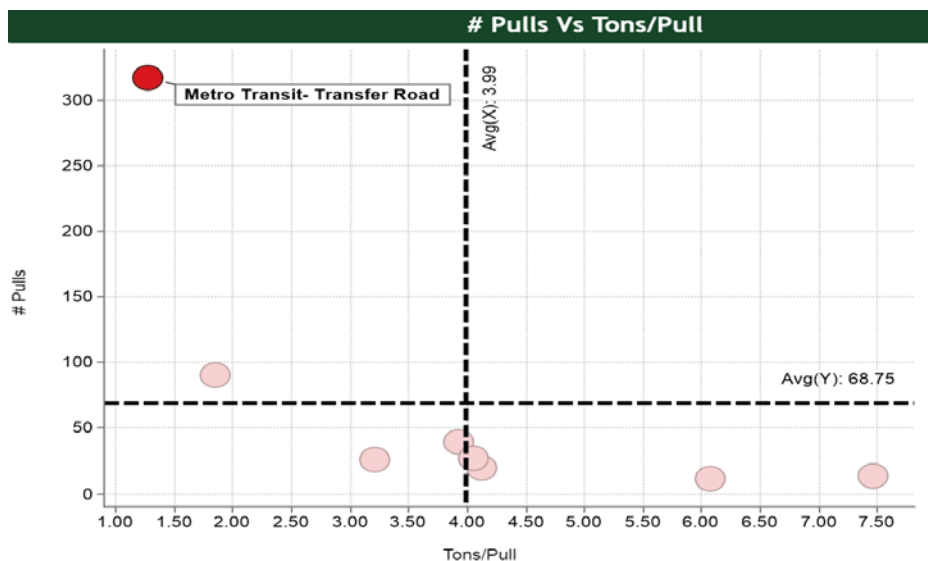
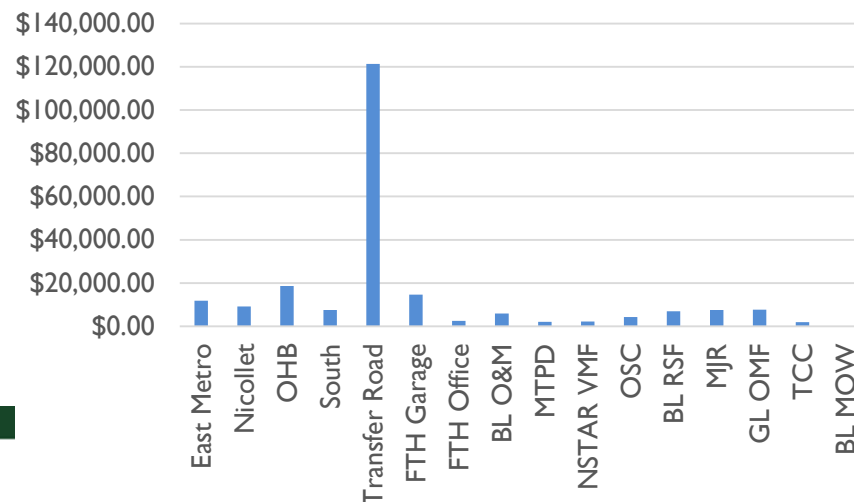
Waste Profile



Data-Driven Economic Analysis

- Measure to Manage
 - Tracking monthly cost and weight data for all facilities/waste streams
 - MSW, SSR, ORG, C&D, Metals, Film, E-Waste

Waste Costs by Facility



- Metrics include facility-specific diversion, tons per haul, pounds per cubic yard, and comparisons across vendors

Understanding Our Opportunities

- Facility Audits
 - Container placement
 - Recognition of workgroup differences
 - Special waste streams
 - Equipment opportunities
- Expansion of organics recycling
- Better SSR practice



Changing what we do and don't do

- Recycling – to bag or not to bag
- Better bags for waste
- Public facilities compactor
- Employee beverage can collections



REVOLUTION BAG[®]

This trash can liner is brought to you by Revolution Bag straight from America's farms.

Revolution Bag diverts used agriculture film that's headed to landfills and recycles it into a high-quality post-consumer resin that is then converted into liners like this one.

This liner - and all of our liners - are ECOLOGO certified.

revolutionbag.com

PRODUCT CERTIFIED FOR REDUCED ENVIRONMENTAL IMPACT. VIEW SPECIFIC ATTRIBUTES EVALUATED: UL.COM/EL.U.L.126

ECOLOGO



Education & Outreach

- **"When in Doubt Throw it Out"**
 - Campaign to decrease contamination in recycling bins
 - **\$2,596.00** in contamination fees for 2019 (Jan thru Jun)
- **"Know Your Container"**
 - Recycling education materials for individual workgroups that reflect our vendors capabilities.



The Global Challenge





Questions?

Jeff Freeman
Senior Project Coordinator
jeff.freeman@metrotransit.org
612-349-7527