Solid Waste Management Division Master Plan 2020 Update Planning Process

Date: September 11, 2019



What we do...



Denver Solid Waste Management

- SWM Service Area
- Trash Collection
- Extra Trash Collection
- Recycle Collection
- Compost Collection
- •Graffiti Abatement
- Dead Animal
- Keep Denver Beautiful
- •Special Programs- HHW, Electronics, Appliances, Etc.





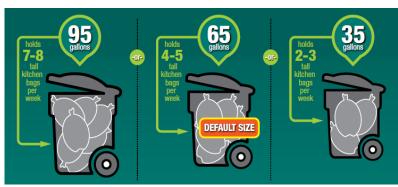




Denver Solid Waste Management

- Weekly Trash Collection
- 179,000 Single Family Homes (7 units or less)
- Cart conversion reduced per household waste generation by 387 lbs/HH/per year







Recycle Collection Program

- 94% participation
- Every-other-week collection
- Single stream 95-gallon carts (many 65-gallon carts still in circulation)
- No fee
- Dec. 2018 automatic recycle cart delivery





Compost Collection Program

- Weekly collection
- Started in Fall 2008 1 Route Pilot Program
- Funding ended March 2010
- Became fee-based \$9.75/month
- 2014 compost expansion 3 routes
- 2015 expansion 5 routes
- 2017 expansion 11 routes total
- 21,000 homes approximately participating (12% participation rate)





Check-In: 2010 Solid Waste Master Plan Progress



Solid Waste Master Plan: Short Term Options

- ✓ Phased Standardization of Refuse Collection
- √ Hauler Licensing Program

- ☐ Citywide Household Composting (Organics) Collection (No fee)
- ☐ Add Second New Drop-Site (Central Denver)
- Trash Collection) Extra
- Explore eliminating refuse overflow collections
- Explore Denver Restaurants Diverting Food Waste
- Explore Large Multi-Family Units (MFUs) Verifying Refuse Collection Service



Solid Waste Master Plan: Long Term Options

- □ Add Third New Drop-Site (Northeast Denver)
- ☐ Construct a New Refuse Transfer Station in Northeast Denver

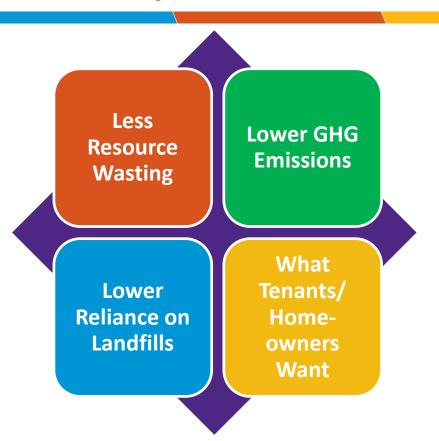


Solid Waste Master Plan: Additional Options to Consider

- □ Variable Rate Collection Pricing (or Pay-As-You-Throw, PAYT)
- □ Construction and Demolition (C&D) Waste Diversion Policy



What Do We Need to Accomplish?



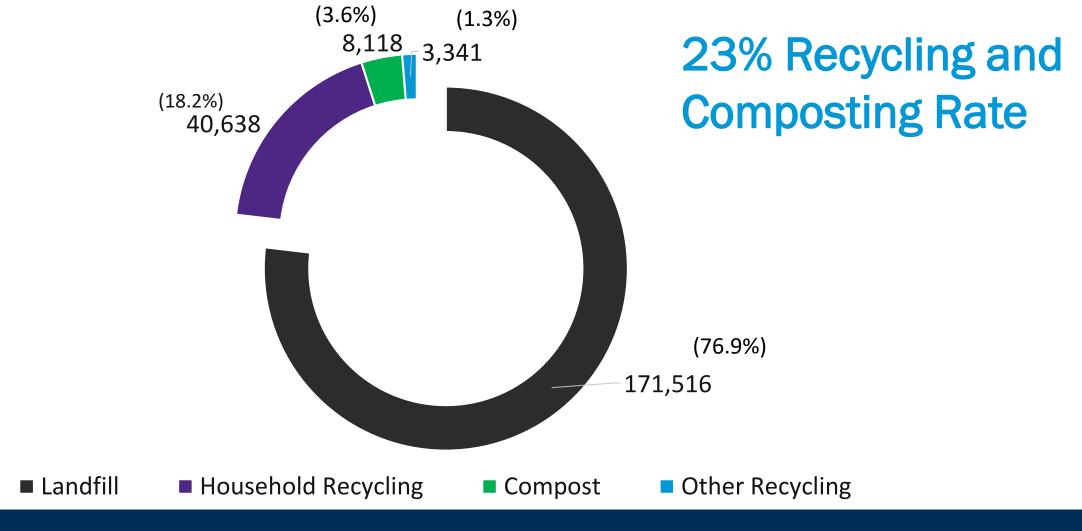
- DSWM will complete its Solid
 Waste Strategy Update in 2020
 - Targets include all residential, business & construction properties/projects
- Address closing the loop in CO
 - Infrastructure and material challenges, market conditions, technical assistance and policy opportunities
- Establish new City-wide goals



Where is Denver Today?

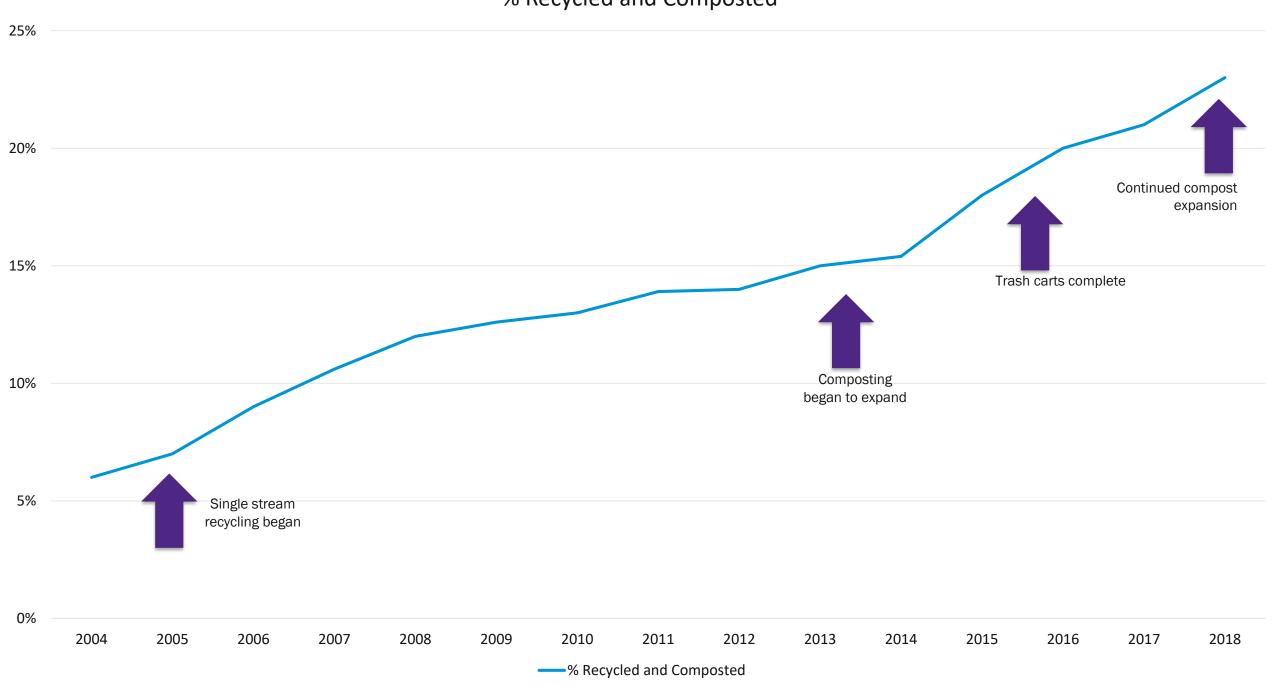


2018 Recycling and Composting Rate



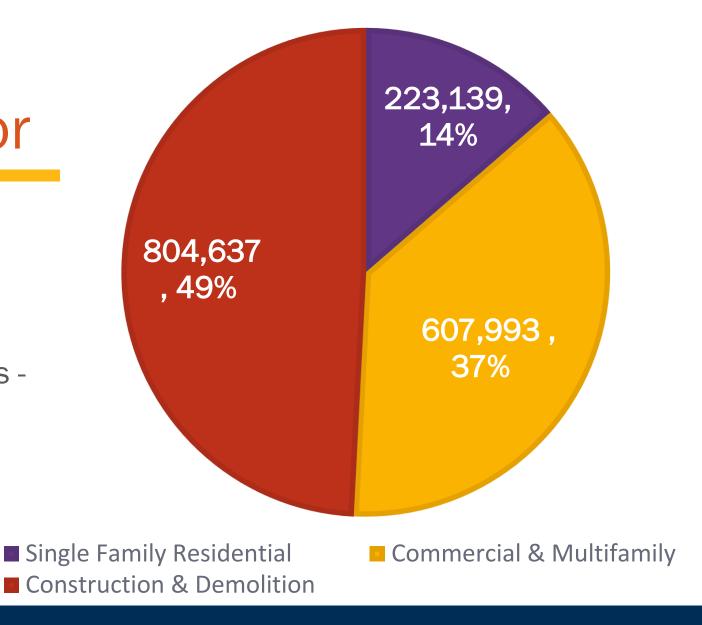


% Recycled and Composted



2018 Waste Generation by Sector

- Single family residential is a small percentage
- Lead by example
- SWM Master Plan update in progress will recommend next steps for Commercial/MF and C&D

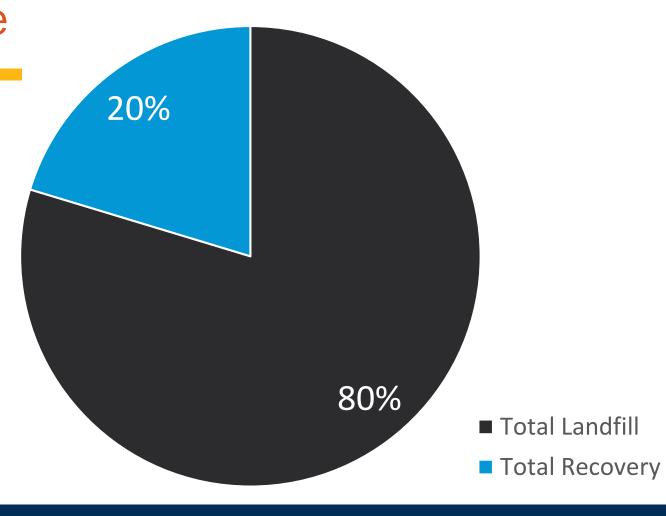




2018 Entire City of Denver Recycling/Composting Rate

 All the waste together brings the City's recycling rate down from 23% to 20%

 The City needs to play a bigger role in the rest of the waste sectors if we want to significantly increase the City's recycling and composting rate





Update Progress and Findings so Far



Denver Solid Waste Masterplan Update Timeline

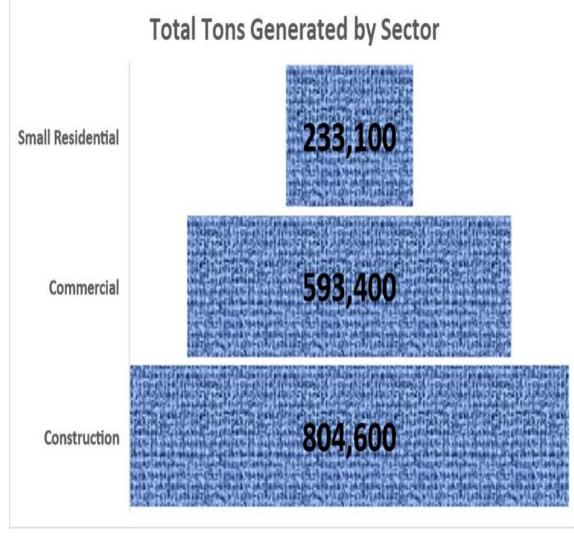
Q2 Q3 Kickoff Q1 2019 Research and Analysis Commercial Construction Waste Audit Complete Q1 2019 Waste Audit Complete Q2 2019 **Quantity and Waste Analysis** Today Stakeholder Engagement Q3/Q4 2019 Final Report Stakeholder/ Community Input Q3 2020





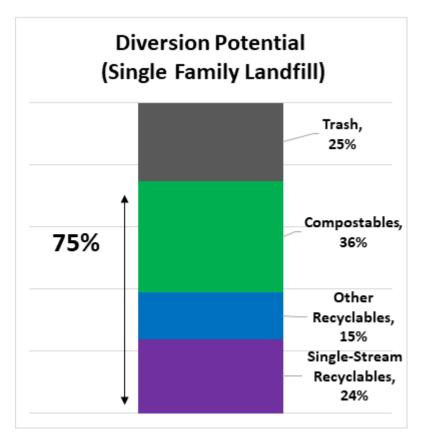
What is our starting point?

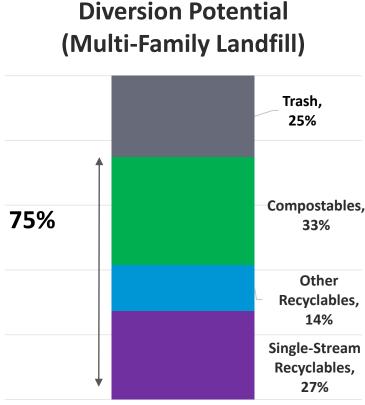
Existing Waste Diversion Rates 83% 90% 77% 77% 80% 70% 60% 50% 40% 30% 23% 23% **17**% 20% 10% 0% **Small Residential** Commercial Construction (city service) (large MFUs & business) Landfilled ■ Recycled or Composted

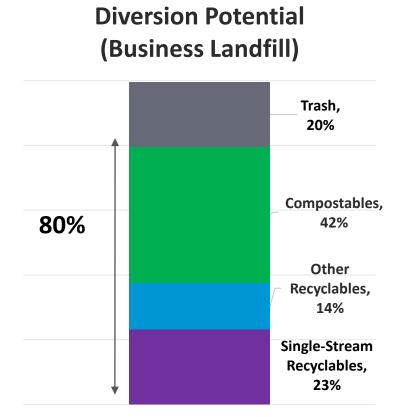




What is in the trash?









Construction and Demolition Challenges & Opportunities

- No processing capabilities exist
- Need market development for difficult materials (ex. gypsum/drywall, roofing shingles)
- Get valuable materials out of the stream
 - Aggregate
 - Cardboard
 - Landscaping
 - Scrap Metal
 - Untreated Wood



Revisit and Adopt New Goals



Proposed City-wide Goals

23% today

50% by 2030

Zero Waste by 2050





Completed to date:

- Quantities measured
- Composition evaluated
- Best practices researched

Next Steps



Currently underway:

- One-on-one & group stakeholder meetings
- Market analysis

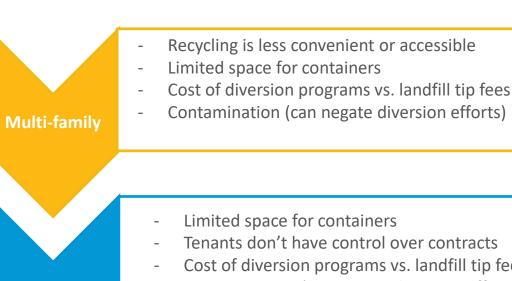


Next steps:

- Identify options to meet goals
- Conduct analysis
- Develop strategies schedule



Stakeholder Engagement Findings **To-Date**



- Limited space for containers
- Tenants don't have control over contracts
- Cost of diversion programs vs. landfill tip fees
- Contamination (can negate diversion efforts)

Construction & Demolition

Business

- Lack of project site space
- Limited processing abilities locally
- Lack of cost-effective markets for most materials
- Variabilities between projects





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