



Waste Diversion Opportunities

Presented by

Kristy Smith

Solid Waste



Agenda

- ✓ **Project Goal**
- ✓ **Current Programs**
- ✓ **Potential Diversion Initiatives**

Project Goal

“Identify and assess potential opportunities to divert waste from landfill disposal in order to extend the County’s landfill life and reduce greenhouse gas emissions”



Current Diversion Programs

Curbside Recycling



Drop-Off Centers



FOOD SCRAPS DROP-OFF

• LET'S MAKE COMPOST! •

INSTRUCTIONS

- Remove all produce stickers, rubber bands, wrappers, ties, bags, and plastics
- Empty food scraps and compostable waste into the cart
- Close and secure lid when finished
- Do not overfill!

More info? www.buncombecounty.org/composting

See an issue? Contact recycling@buncombecounty.org



Scan BC QR code for information.



LET'S MAKE COMPOST!

YES!

All foods (raw, cooked, scraps) and plant trimmings



Leave produce bags/stickers OUT of your collection.

YES!

Compostable paper and plastic products



MATERIALS CAN BE COLLECTED LOOSE AND FREE!

If you choose to bag your food scraps, use only paper bags or certified BPI compostable "bio bags."
NO OTHER TYPE OF BAGS WILL BE ACCEPTED.

NO!



Plastic bags
and wrappers



Plastic-coated (shiny)
take-out boxes and plates



To-go hot and cold
drink cups



Current Diversion Programs (cont.)


TV / Paint
Recycling

Special Waste


TV/PAINT RECYCLING EVENTS

Buncombe County Landfill also accepts the following items from residents* **ONLY** during TV/Paint Recycling events. Check our website for event details and dates.


 **Electronics:** Cell phones, keyboards, etc.

 **Televisions, computer monitors and CPUs:** Everyday drop-off is available for residents who are able to self-unload.

 **Paint:** Paint, paint thinners, water sealer, enamels, etc. 20-gallon limit per event.

 **Flammable liquids:** Gasoline and kerosene.

 **Pesticides:** Insecticides, herbicides, fungicides, etc.

 **Unbroken fluorescent bulbs:** 20 bulbs max per month. Check online for bulb disposal



How Much Waste Did Buncombe County Divert Last Year?

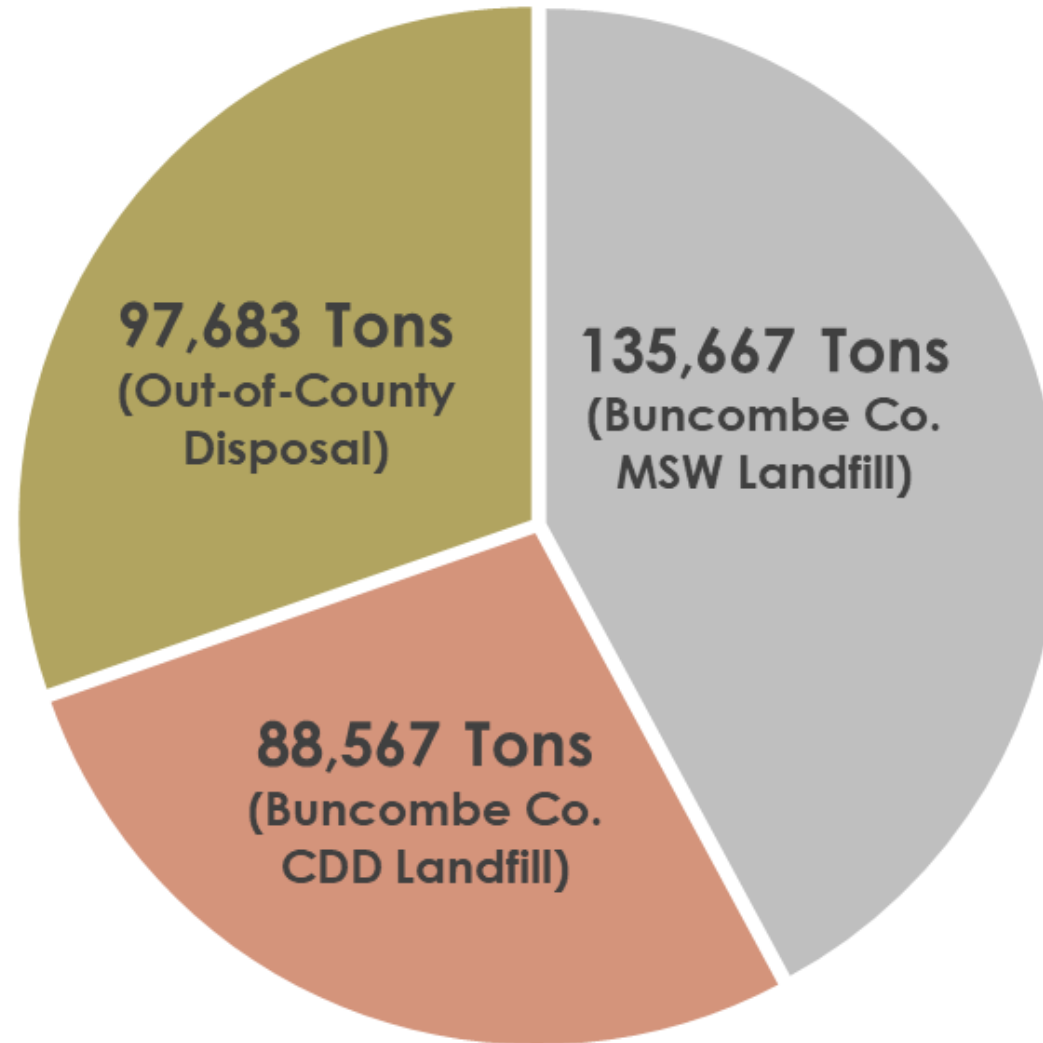


**Total Tons Diverted
FY'22:
16,840**

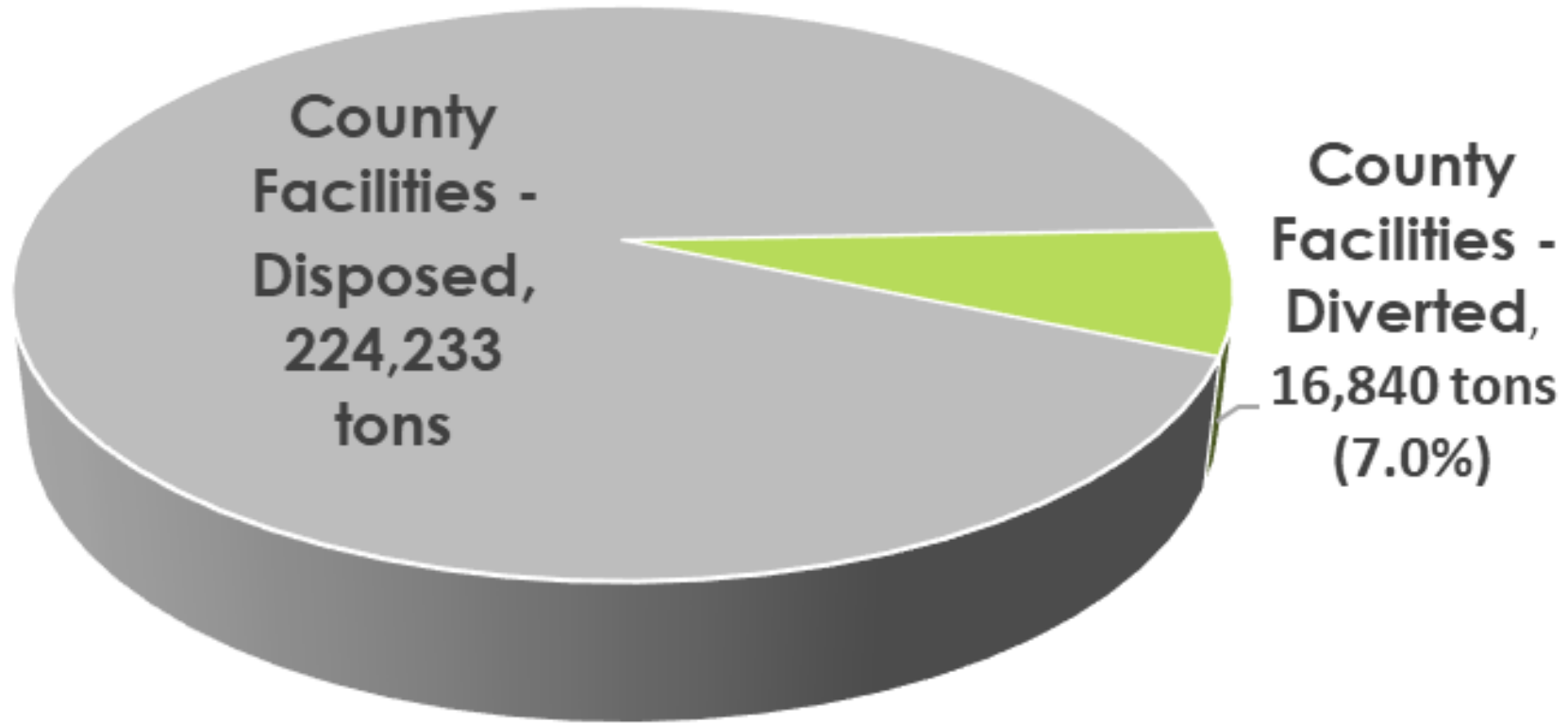


How Much Waste Did Buncombe County Dispose of Last Year?

Total Waste
Disposal Quantity
FY'22:
321,917 tons



What is Our Current Disposal Rate?

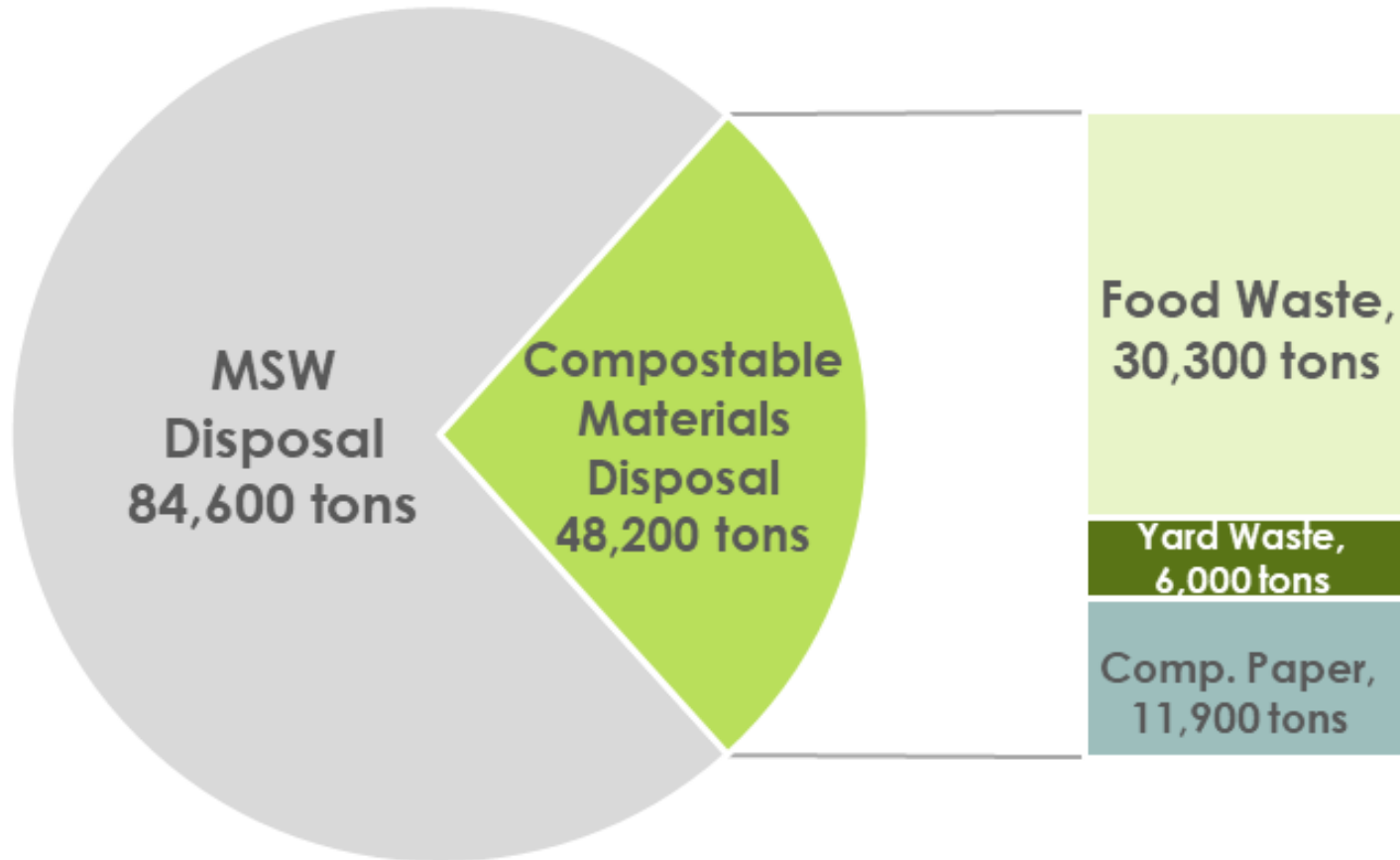


Waste Diversion Initiatives

1. Organics Management
2. Construction & Demolition Debris
3. Multi-Family / Commercial Diversion
4. Data Collection & Enforcement
5. Convenience Center Services



Focus Area 1: Organics Management



Potential Impact: Organics Diversion

Organic Diversion Level	Estimated Tons	Impact to Diversion Rate
Existing Rate		7.4%
5%	2,400	9.2%
10%	4,800	10.4%
25%	12,000	14.2%
50%	24,000	21.2%
75%	36,000	29.0%



Organics Processing Options



Windrow Composting



Aerated Static Pile (ASP) Composting



Organics Processing Options



In-Vessel Composting



Anaerobic Digestion



Greenhouse Gas Impacts

Composting	Anaerobic Digestion
-13,390 (metric tons of carbon dioxide equivalent)	-11,220 (metric tons of carbon dioxide equivalent)
2,800 Equivalent to passenger vehicles removal from roads	2,400 Equivalent to passenger vehicles removal from roads

Based on EPA's WARM Model



Next Steps: Organics Management

- Continue expanding Community Compost Drop-off Program
- Continue supporting start-up of County Campus Compost Ambassador Program
- Investigate implementation of Pilot ASP Program at landfill
 - Develop budgetary figures
 - Pursue grant opportunities
 - Investigate regulatory implications

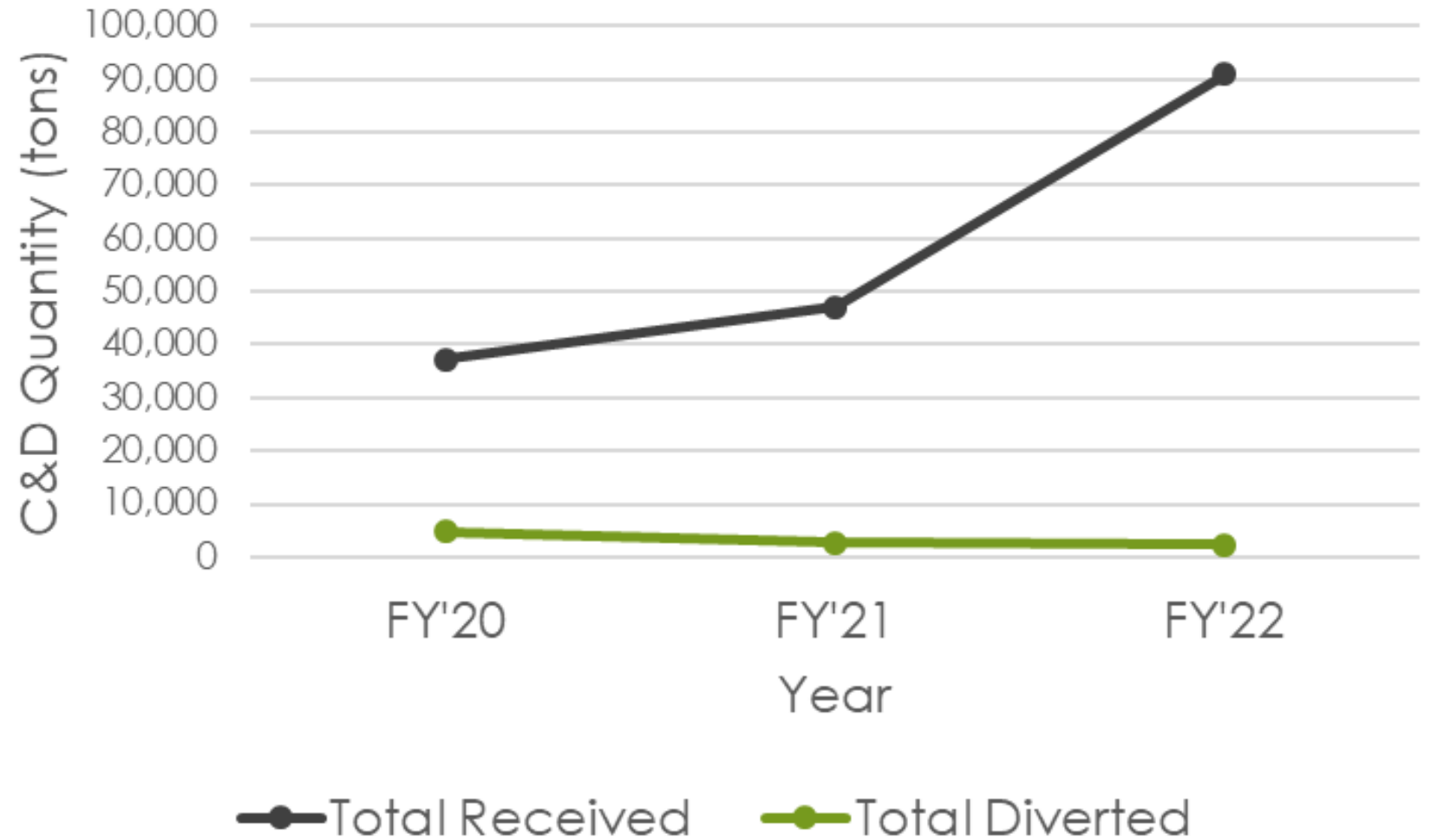


Focus Area 2: Construction & Demolition Debris

- C&D generation proportional to construction activity
- Significant growth in C&D material quantities
- C&D growth expected to continue



Material Quantities: Construction & Demolition Debris



Next Steps:

Construction & Demolition Debris

- Develop educational information to contractors
- Modify operations for recovery of select materials
- Encourage C&D load delivery to landfill
- Continue supporting the implementation of C&D diversion requirements for County projects
- Promote reduced tipping fee for source-separated materials
- Require C&D diversion plan by contractors



Focus Area 3: Multi-Family/Commercial Diversion

Multi-Family

- Plan for sufficient capacity
 - Working with BC Planning Dept. on incorporating recycling infrastructure into the planning phase for developers
- Multi-lingual distribution

Commercial

- Enforce cardboard recycling
- Develop commercial recycling guide
- Plan for sufficient capacity



Focus Area 4:

Data Collection and Enforcement

- Collect program data:
 - Continued partnership with our haulers and local recycling companies to capture additional recyclables within our community
 - Recycling contamination rates
 - Per capita waste generation
 - C&D material tonnages
- Enforce commercial cardboard recycling ordinance



Focus Area 5: Convenience Center Services



Next Steps: Convenience Center Services

- Consider central location(s) to surrounding community
- Prioritize locations that may not be adequately served by curbside collections
- Provide for consistent material collection operations
- Staff convenience centers



Timeline

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Organics	Continue Expanding Community Compost Drop-Off Program			
	Continue Supporting start-up of County Campus Compost Ambassador Program			
	Implement Pilot ASP Program			
C&D	Develop educational information to contractors			
	Modify operations for recovery of select materials			
	Encourage C&D load delivery to landfill			
	Continue supporting implementation of C&D diversion requirements for County projects			
	Promote reduced tipping fee for source-separated materials			
	Require C&D diversion plan by contractors			



Timeline

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Multi-Family	Multi-Lingual Education Distribution			
	Plan for Sufficient Capacity			
Commercial	Enforce Cardboard Recycling			
	Create Commercial Recycling Guide			
	Plan for Sufficient Capacity			
Data Collection	Collection Program Data			
	Enforce commercial cardboard recycling ordinance			



Timeline

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Convenience Centers	Consider Central Locations			
	Prioritize Areas Not Adquately Served by Curbside Collections			
	Provide for Consistent Material Collection			
	Staff Sites			

