

### WELCOME **Maryland Recycling** Network Members











# How did we get here?

































# How big is the problem?





- Approx. 20,000,000 units discarded in the U.S. annually (Source: MRC)
- □ Total U.S. population (Source: 2020 census): **331,449,281**
- **3**31,449,281 / 20,000,000 = **.06 mattresses / person annually**
- **Total Maryland population:** 6,177,224 x .06/person = <u>370,633</u> waste
  - units produced annually in Maryland
- **Approx. 70% capture rate (with legislative mandate-- e.g. California)** 
  - x <u>370,633</u> = 259,443 units to recycle annually in Maryland





## What are the challenges?



#### **Recycling Challenges**



- Contamination: Water, dirt, bugs, animals, mold, bodily fluids, etc.
- Handling: Heavy, bulky, awkward, non-uniform
- □ Process: Difficult & extremely labor intensive
- ❑ Space: Need large warehouse + large yard for trucking
- □ Materials: Mixed, varying, low to no-value



### Negative Value Recyclable

# Must be supported by budget or fees





# Is it really worth it?



#### A COSTLY PROBLEM



- Bulky, non-compactible material eats up valuable, diminishing landfill space
- □ Buried units create flammable pockets of gas by disrupting flow & recovery
- Destabilizes landfill edge
- Non-biodegradable synthetic material
- Flame retardant and other chemicals can leach into water table
- Costly damage and downtime to heavy equipment
- Increased transfer costs- difficult to max out payload
- Mandated diversion goals– MRA in Maryland







"...mattresses have caused damage to several pieces of equipment... If a mattress is found in a load the customer will receive an additional charge of \$250 for each mattress."





"A recent analysis of our California program's

environmental footprint from collection to recycling

shows that each mattress recycled saves 500 gallons of

water, conserves enough energy to power a house for

three days, and reduces greenhouse gas emissions

equivalent to driving 60 fewer miles."

-- Mike O'Donnell, COO, Mattress Recycling Council



# What does it take?





#### THE FOUR C's OF A SUSTAINABLE MATTRESS RECYCLER

- 1. <u>Competence</u>: Knowledge & Experience
- 2. <u>Collection</u>: Trucking & Technology
- 3. <u>Capacity</u>: Sufficient Warehouse & Operations
- 4. <u>Completion</u>: Every unit recycled, regardless of type or condition





# REDUCE REUSE RECYCLE

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### OUR GOAL

# ZERO WASTE





#### Mattress Remanufacturing, Rebuilding, or Renovating

Bulk Trash. Gone

- Not a comprehensive solution for recycling programs
  - Only certain units are used for rebuild
  - Remaining are entered back into waste stream
  - Rejection will increase with increase in supply
- Unscrupulous players: <u>https://www.youtube.com/watch?v=KHqvht8npmQ</u>
- Can play a critical part
- Legislation needed Regulation & certification of processes and facilities to ensure public health equity.

