# Mattress Recycling Summit Sept. 17, 2014





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# **Mattress Recycling Supply Chain**

Generator

Collector

Processor
/Recycler

End
Market

**Generator**: Make, sell or dispose of mattresses

Collector: Collect mattresses for, or transport to, disposal / recycling

Processor / Recycler: De-construct mattresses into recyclable components

**End market**: Make a product out of, or find other uses for, mattress components



### King County LinkUp

#### Facilitate development of

- end markets for recyclable materials
- collection and processing infrastructure that supplies markets

2011-14 focus: mattresses, textiles, carpet, asphalt shingles







- 2011 Mattress Recycling Summit
- 2012 mattress Take it Back Network
- Ongoing outreach, research, assistance:
  - end market research (shoddy cloth, cotton)
  - survey of consumer behavior
  - retail direct mail, online advertising, other outreach
  - review of public disposal policies

# **Mattress Collection and Processing**

2011: 1 processor (CI), 1-2 collection locations

• 2013: 3 processors, 6 locations

• 2014: 4 processors, 6 locations

Not yet geographically convenient

# King County Solid Waste Division

Operates 1 landfill, 8 transfer stations, 2 drop boxes





# **Consumer Survey**

- 67% got rid of old when buying new mattress
- Disposal / Removal method:
  - 55% old mattress removed by *retailer* of new
  - 20% sold or gave it away
  - 10% took to dump (transfer station)
  - 4.5% junk removal company
  - 3% special pick-up with garbage collector

#### **Consumer Survey**



- 70% more likely to purchase a mattress from a retailer who recycles
- 52% willing to pay for mattress recycling, even if disposal costs less
- 90% unaware of mattress recycling options



# **Mattress Generation & Disposal**

- ~1-10% of region's population
- Puget Sound metro: 4 million
   = ~400,000 used mattresses / year
- 3000 tons or ~90,000 mattresses at KCSWD Transfer Stations (2011) + Seattle
   <150,000 / year</li>



### Other Mattress Management

- City of Tacoma landfill transfer station
  - Recycling by Spring Back NW (2014)
- Disposal ban
  - Metro Vancouver (BC), Santa Cruz County (CA)
- Product stewardship (legislation)
  - Statewide stewardship in CT, RI, CA (2015-16)
  - Federal stewardship (all furniture) in France (2013)



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#### MATTRESS RECYCLING COUNCIL (MRC)

**Used Mattress Recovery and Recycling** 

September 17, 2014

Mike O'Donnell MRC Program Director

9)(17/2014



#### What is the MRC?

- Mattress Recycling Council (MRC) was created by International Sleep Products Association (ISPA), the trade association for the mattress industry
- Non-profit organization tasked with implementing mattress recycling laws in states with supporting legislation. Seeks standardization among states.
- Connecticut, California, Rhode Island



# **MRC Program Objectives**

- Design and implement programs that:
  - ✓ Increase number of mattresses recycled
  - ✓ Reduce illegal dumping
  - ✓ Is efficient and cost effective to minimize consumer recycling fee
  - ✓ Recycles most of the mattress components

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# How will the program work?

- Mattress recycling fee established by MRC, approved by state regulating agency
- Retailers charge the visible fee on each unit sold in the state
- The fee is remitted to MRC
- Retailers and solid waste programs consolidate units
- Transporters and recyclers manage program logistics
- MRC uses the fee revenues to pay these service providers



#### **Collection**

- Consumers will continue to dispose of mattresses through traditional methods:
  - Retailer take back with new purchase
  - Transfer station drop-off
  - Curbside pick-up
  - Incentivized drop-off
- Large volume consolidators provided with storage containers for efficient packaging



# **Transportation**

- RFP process for transportation services from consolidation locations to recyclers
- Trailers most preferable storage container
- Efficient packaging important to minimize costs
- Programs must service all area of each state;
   presenting logistical challenges



# Recycling

- RFP for recycling services
- Multiple processors preferred
- Encourage competition and geographically diverse locations
- Uncontaminated feedstock to maximize recovery

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# **Mattress Composition**

- Steel: strong local markets
- Cotton, natural fibers, felt pads: limited domestic markets
- Urethane and memory foam: strong markets driven by carpet pad re-bonders
- Quilting: sophisticated recyclers separate foam for carpet pad
- Non-recyclable: 5-15%



# **How is the Program Funded?**

- The recycling fee is developed and set with approval and oversight from state agency
- Visible recycling fee collected from consumers at point of sale
- Retailers remit fees to the MRC
- Collected revenues fund transportation, recycling, and program administration



# Retailer Recycling Fee Remittance

- Recycling fee amount is non-negotiable
- Taxable event
- Fee applies to both mattresses and foundations
- Secure on-line reporting system for remittance
- Educational materials regarding the fee targeted to retailers and consumers



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	5% HST	\$	0.00	
	OLD 5% GST	\$	0.00	
	OLD 8% PST	\$	0.00	
2014	TOTAL	\$	5.77	



#### **Connecticut Status**

- Regional coordinator hired to coordinate program logistics
- Program Plan submitted July 1, 2014 amended
   September 15
- Consumer Fee approved by auditor and proposed at \$9.00 per unit
- Plan approval process Fall 2014
- Anticipated start date February 1, 2015 pending regulatory approval



#### **Rhode Island**

- Regional coordinator hired to coordinate program logistics
- RFP for recycling/transportation Spring 2015
- Program Plan due July 1, 2015
- Consumer Fee dependent on projected revenue and expenses specific to Rhode Island
- Anticipated start date early 2016



#### **California**

- Hiring Program Coordinators for S. and N. California
- Working closely with CalRecycle Advisory Committee
- RFP for recycling/transportation Spring 2015
- Program Plan due July 1, 2015
- Consumer Fee dependent on projected revenue and expenses specific to California
- Anticipated start date early 2016







# MATTRESS RECYCLING COUNCIL (MRC)

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