

The Recycling Partnership

Growing Access and Providing Tools for a Stronger Recycling System

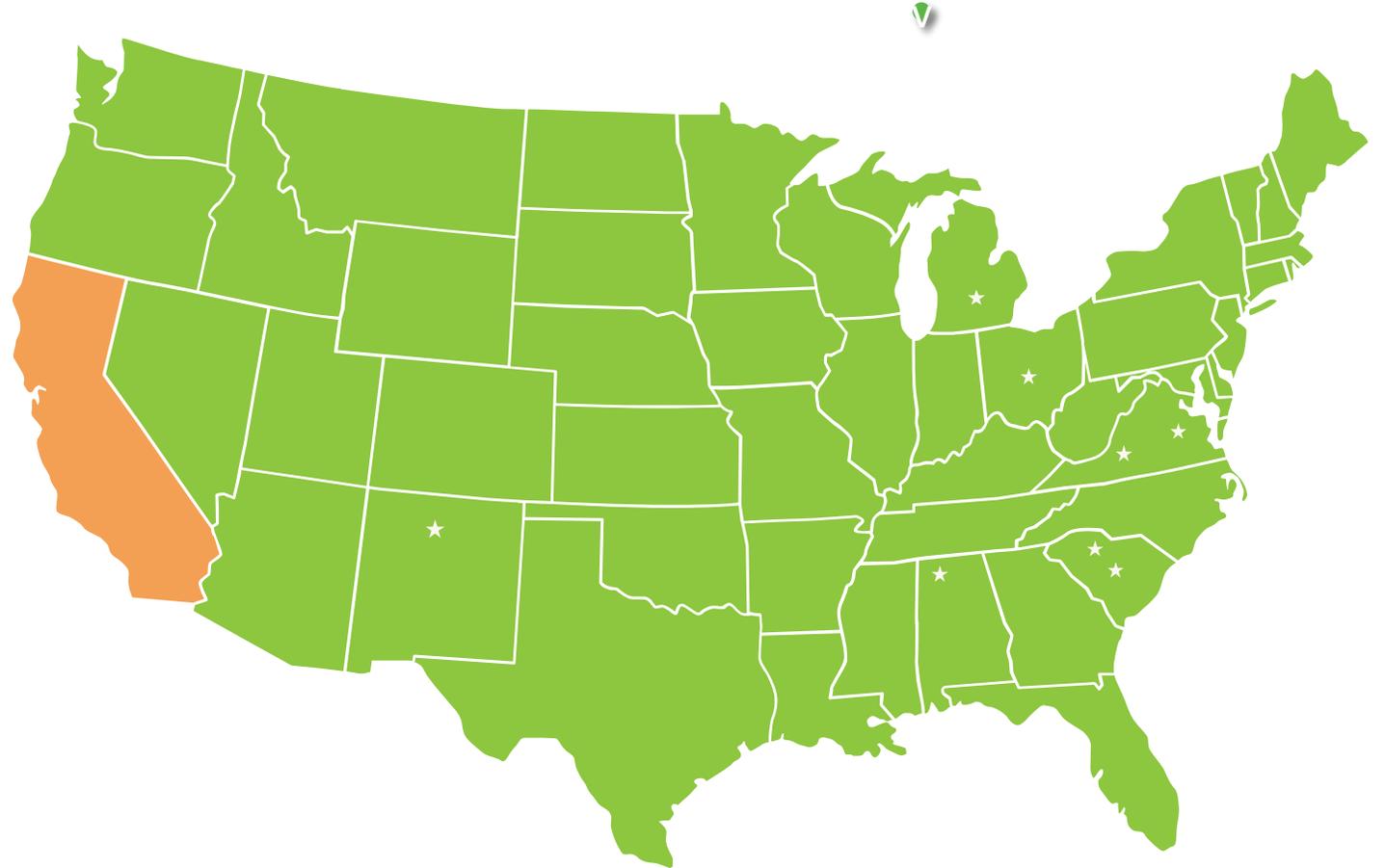
CalRecycle Packaging Workshop: Manufacturers Challenge

January 5, 2016

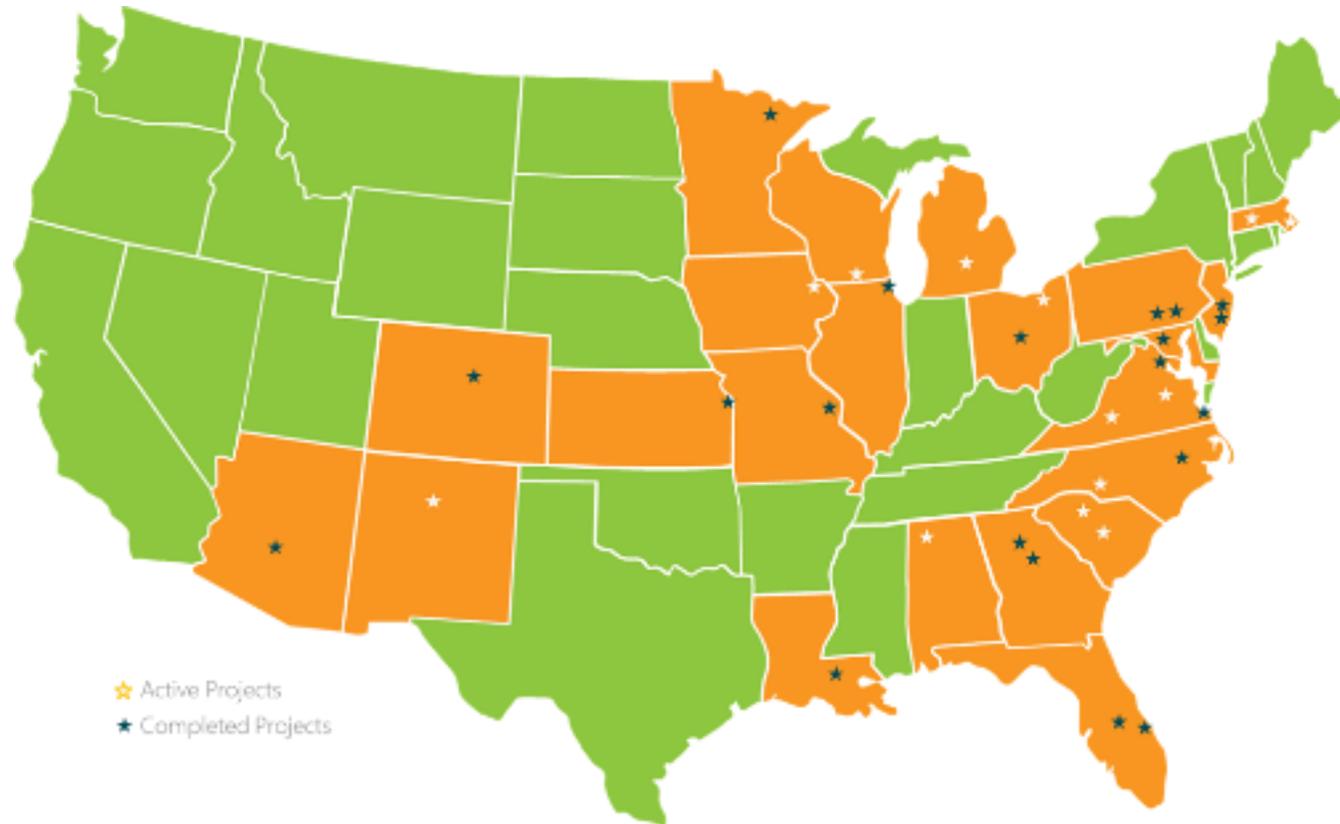
Karen Bandhauer, Project Director

Topics

- Introduction
- Recycling Partnership Approach
- State-Level Work
- 2016 and Beyond



Since 2003



- National 501(c)3
- Formerly Curbside Value Partnership
- 4 main BMP resources:
 - Organizational Experience
 - Technical Council
 - City Partner Network
 - State Leaders Group
 - Growing MRF Network

Our staff



KEEFE HARRISON
Executive Director



KAREN BANDHAUER
Project Director



LIZ BEDARD
Technical Council Coordinator



JASON HALE
Communications



CODY MARSHALL
Technical Assistance Director



JEFF MEYERS
Development Director



ELIZABETH SCHUSSLER
Communications Director

Our funders



Mission Driven

Since July, 2014

7 total grants resulting in **\$11MM** worth of new infrastructure

Average projected increase
in the pounds per
household recovered: **164%**



Resulting in **248,200**
tons of new material
collected over 10 years

An additional **\$6MM** of community improvements, with more in the pipeline



OVER 10 YEARS, THE ADDITIONAL DIVERTED MATERIALS EQUATE TO THESE IMPRESSIVE SAVINGS

	City Partners
WATER SAVED	1.3 B GALLONS
ENERGY SAVED	7 M MBTUs
GHG SAVED	568,000 METRIC TONS CO₂e
ECONOMIC VALUE	\$18.5 M

Columbia, SC
Florence, AL
Richmond, VA
Roanoke, VA
East Lansing, MI
Greenville, SC
Santa Fe, NM

Our Approach

Increase true curbside access. Integrate education with operations.

Driving more, better, recycled material at the curb.

No Silver Bullets

6

**ASPECTS OF A
HEALTHY
RECYCLING
SYSTEM
APPROACH**

1

**COMMITTED
COMMUNITIES**

Provide ample access and
opportunity for expansion

2

**PUBLIC-PRIVATE
PARTNERSHIPS**

Coordinate across sectors

3

**SUPPORTIVE
POLICY**

Recognizes the value of the
recovery supply chain

4

**ROBUST MRF
PROCESSING**

Creates quality bales through
dependable flow of clean matter

5

**STRONG
END MARKETS**

Drive demand and appealing price

6

**THOUGHTFUL
OUTREACH**

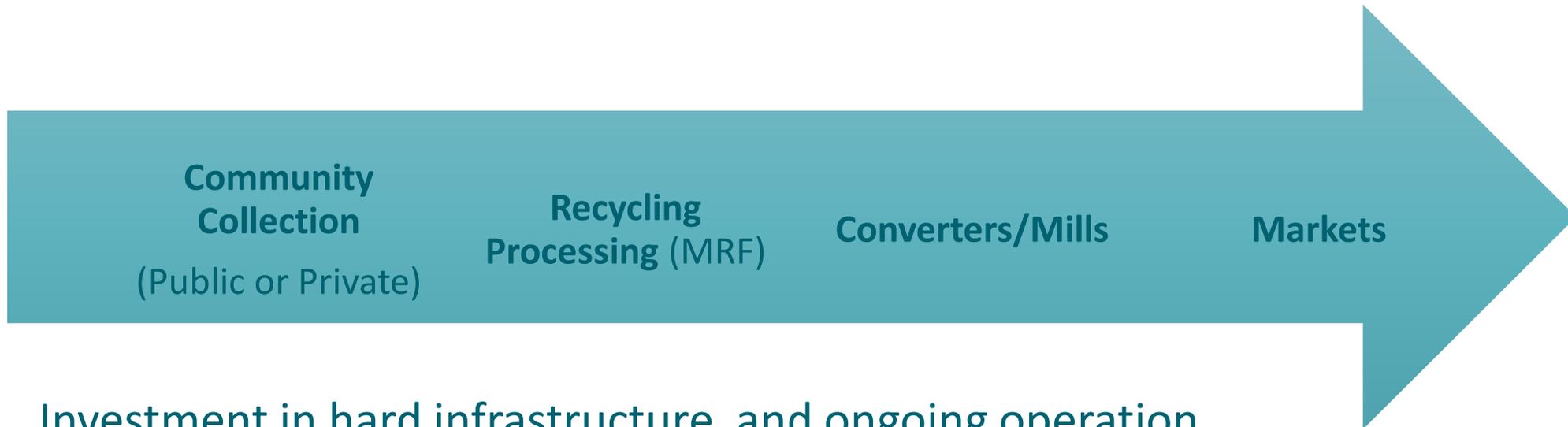
Boosts participation,
reduces contamination

6

**ASPECTS OF A
HEALTHY
RECYCLING
SYSTEM
APPROACH**

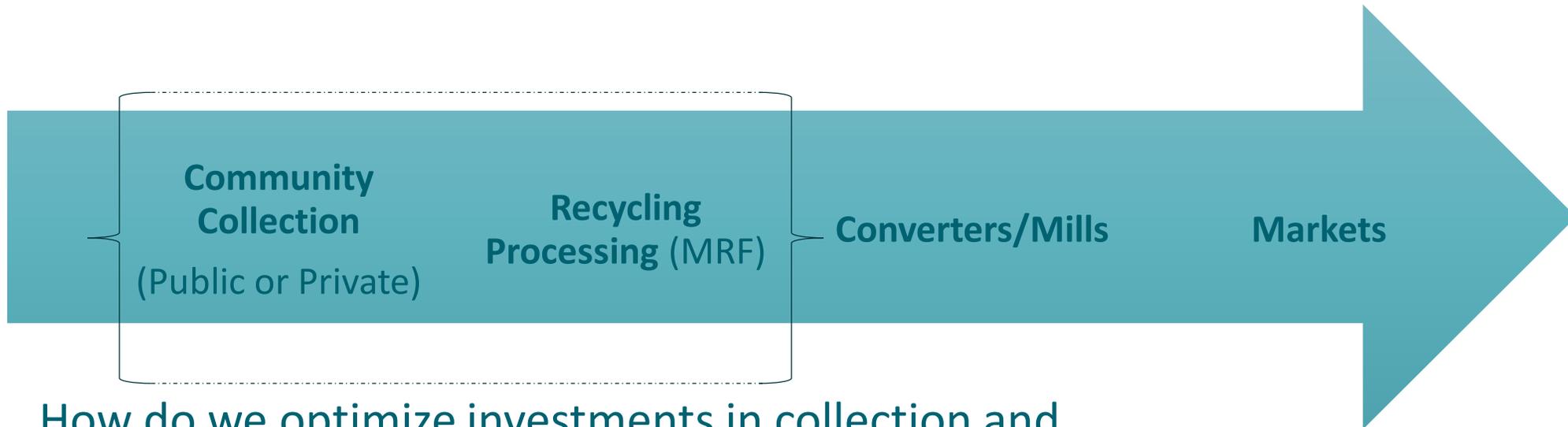


Reverse Supply Chain



Investment in hard infrastructure, and ongoing operation and maintenance.

We specialize in building systems solutions within this bracket



How do we optimize investments in collection and processing infrastructure, ensuring more good quality material moves along the chain?

QUANTITY

Access:

- Point of access
- Volume

QUALITY

Reduced

Contamination:

- Operations
- Education

Cart = COST SAVINGS.

Budgets benefit from decreased disposal costs, smaller collection crews, more efficiency on the route, and decreased workers' compensation.



Decreased disposal costs



Smaller collection staff



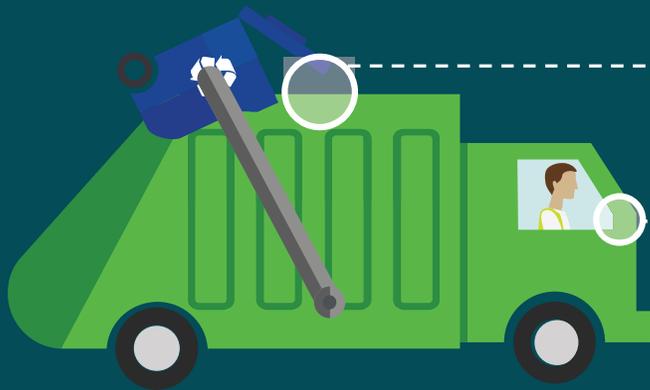
Automation & compaction mean more efficient routes



Flexibility to collect bi-weekly



Decreased Workers' Compensation claims



Manual lifting/
twisting minimized

Crew is less exposed
to traffic

Increased safety

Safety = Savings

Carts In California?

- Most population centers have carts.
- Potentially some opportunity in parts of CA.

Then What About Education to Drive Recycling Behavior?

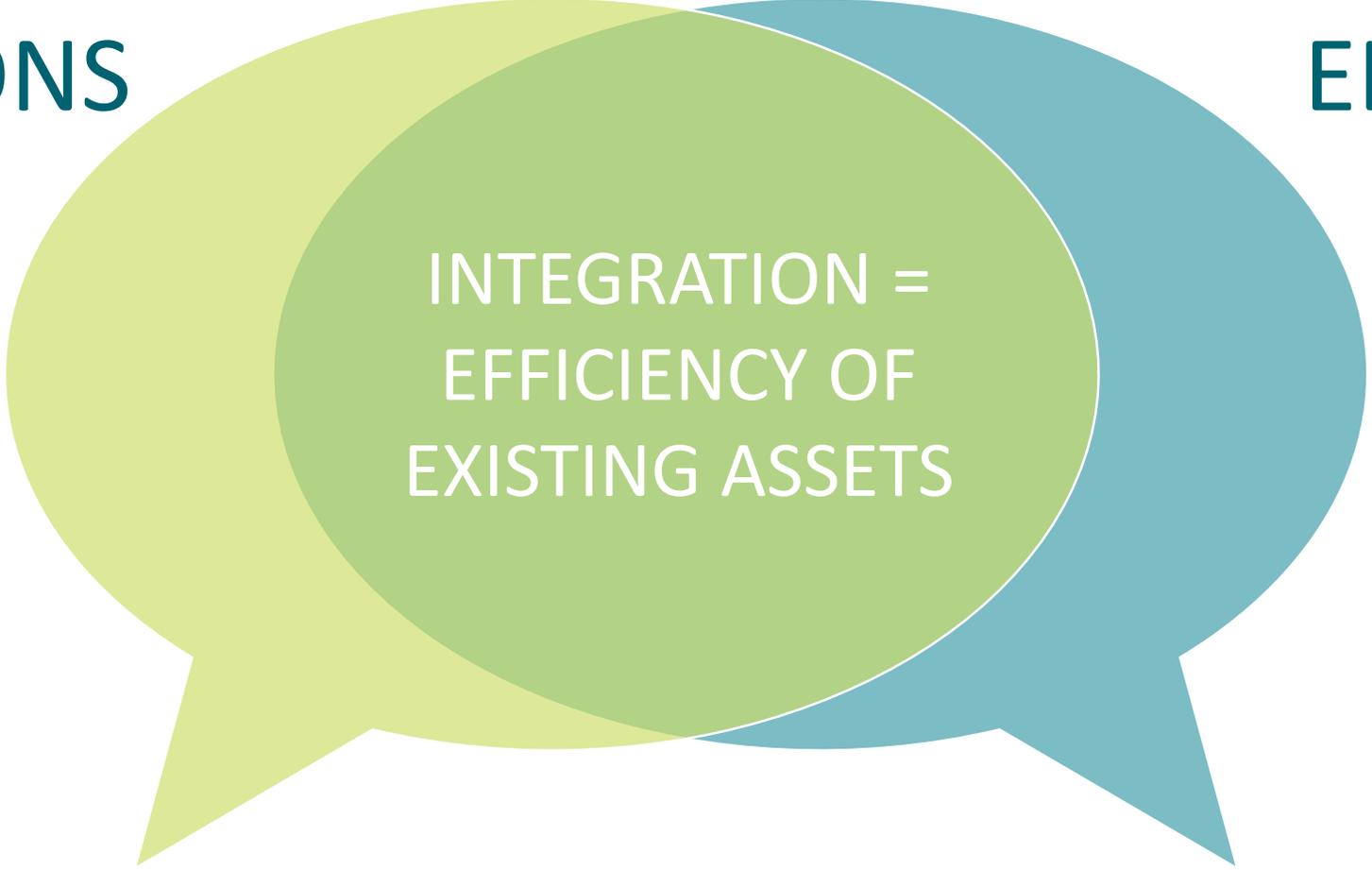
- We can't only educate ourselves out: Awareness and knowledge do not change behavior.
- Many people feel like they are recycling right when they actually aren't.
- Enforcement without education is frustrating and disenfranchising.
- Teaching children is good, but doesn't change recycling behavior in the home.
- Confusion centers around plastics terminology and changes to packaging types and rules of what and how to recycle.
- Norms are powerful (guilt is not) for sustainable change.
- Convenience, Relevance, Positive Perception must outweigh any barriers.



We don't need people to think about recycling, we need them to recycle without having to think about it.

OPERATIONS

EDUCATION



INTEGRATION =
EFFICIENCY OF
EXISTING ASSETS

Therefore...

We recommend as best practices:

- Setting goals. Establishing baseline data. Measuring results.
- Positive messaging that leads with the correct behavior, simple instructions, and saves the “no” message for the core problematic materials.
- A modern look and feel that focuses on positive feelings and norm setting. Recycling is part of life, not an extra burden.
- Coupling awareness messaging and general education with very specific resident feedback at the curb by the drivers.
- Creating common lists of accepted materials with clear language.



#RealHeroesRecycle

(when you inspire, equip and support them)

Current Related Work

Positive, modular, and comprehensive.

Driving frequency and accuracy by resident recyclers.

DISTRICT



59

Local Governments



500k

Single Family Homes



1.3M

People

4
MRFs



CONTAINERS



1 cart/bin mix program



2 bin programs



3 with no curbside



7 bin/bag mix programs

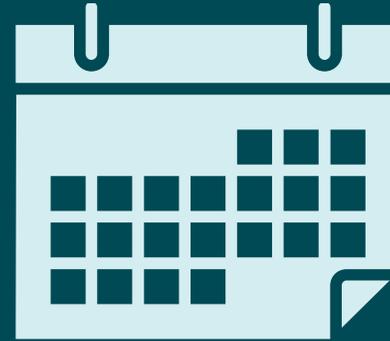


14 blue bag programs



32 cart programs

COLLECTION FREQUENCY



1 twice per week

5 every other week

50 weekly

HAULERS



5
private

18
municipal

OUTSIDE THE BIN



drop-off

special



THE GOAL – Cuyahoga County Project



One Common Voice for
the Solid Waste District

- Reduce Confusion
- Create Consistent Message



Increase
Participation



Improve
Material
Quality

GETTING TO A COMMON SUITE OF MATERIALS:



THE RECYCLING PARTNERSHIP

ACCEPTABLE MATERIALS WORKSHEET

MRF: _____

CITY: _____ DATE: _____

Please go through each item on the list and check whether the item is acceptable or not accepted to get the local governments and the MRF on the same page. It can set the framework (answering the phone or driving the collection vehicles) to better inform the community. It also building educational materials that are consistent throughout the community.

You will see two categories under the "Do Not Accept" column. Here is how they are defined:
Not Dangerous: Item is not sent to a market for recycling, but does not cause any major problems.
Dangerous: Item can shut down or damage equipment, harm employees, and/or degrade the quality of the material.

ACCEPTABLE MATERIALS

GLASS PRODUCT

	ACCEPT	DO NOT ACCEPT NOT DANGEROUS	DO NOT ACCEPT DANGEROUS	DO NOT WANT ON LIST BUT ACCEPT
Bottles and Jars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Window	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinking Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ALUMINUM PRODUCT

	ACCEPT	DO NOT ACCEPT NOT DANGEROUS	DO NOT ACCEPT DANGEROUS	DO NOT WANT ON LIST BUT ACCEPT
Can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foil or Foil like container (e.g. aluminum trays)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other aluminum containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aerosol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STEEL PRODUCT

	ACCEPT	DO NOT ACCEPT NOT DANGEROUS	DO NOT ACCEPT DANGEROUS	DO NOT WANT ON LIST BUT ACCEPT
Can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aerosol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pots and pans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scrap metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do you educate what plastic is accepted:

- By object shape and/or size. (e.g. bottles – neck smaller than base)
- By resin type #1-7
- By resin type #1 and #2
- By resin type #1, 2, 3, 4, and 5
- Other:

ACCEPTABLE MATERIALS

PLASTIC PRODUCT

	ACCEPT	DO NOT ACCEPT NOT DANGEROUS	DO NOT ACCEPT DANGEROUS	DO NOT WANT ON LIST BUT ACCEPT
PET Bottles & Jars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-bottle PET Containers & Lids (e.g. Clear plastic fast food cups)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PET thermoform (e.g. fruit container)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HDPE Bottles & Jars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-bottle HDPE Containers & Lids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PP Bottles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PP Containers & Lids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Drink Bottles (e.g. juice in #7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Food bottles & Jars (e.g. items in #3,4,6 or 7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Household bottles & Jars (e.g. #3 shampoo bottle)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Tubs & Lids (e.g. tubs that are #3,4,6, or 7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Produce, Deli & Bakery Containers, cups, trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other containers & Packaging (ie baskets, molded packaging, food storage containers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ACCEPTABLE MATERIALS

PLASTIC PRODUCT

	ACCEPT	DO NOT ACCEPT NOT DANGEROUS	DO NOT ACCEPT DANGEROUS	DO NOT WANT ON LIST BUT ACCEPT
Bulky plastic (e.g. crates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buckets (any size)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flower Pots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bags, wraps, film (bag in bag)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plastic bags (loose or bag in bag)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EPS Foam Blocks & Shapes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EPS Foam food Service & Other containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOP 5 COMMON PROHIBITIVE ITEMS

PROHIBITIVE ITEMS

If you could only tell citizens 5 things not to put at the curb -

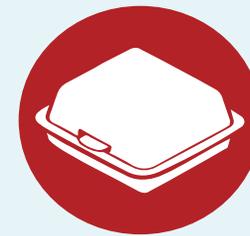
Rank the top five (5) unacceptable items that are causing the most problems in your facility. I.e. Degrades other commodities significantly, causes damage to MRF equipment, dangerous to staff, etc. Please rank with numbers "1" through "5." Put a "1" in the box of the worst contaminant. Only rank the top five and leave everything else blank.

PROHIBITIVE ITEMS	TOP 5
Plastic Bags	
Shredded Paper	
Propane Tanks	
Aerosol Cans	
EPS Foam (block and/or food service containers)	
Yard Waste	
Food Waste	
Bulky Plastics	
Wire, hose, cords, rope, chains	
Scrap metal	
Pots and Pans	
White Goods	
Textiles/clothes	
Flexible Packaging	
Motor oil containers	
Glass	
Fluorescent Bulbs	
Plastic toys	
Plastic furniture	
Electronics	
Cartons	
Ink/printer cartridges	
General hazardous waste	
Needles	
Pet food bags	
Mercury containing objects	
Dishes	
Wood	
Other	
Other	
Other	

The RIGHT materials



DISTILL INTO EASY TO UNDERSTAND IMAGES FOR FOR A YES/NO LIST:



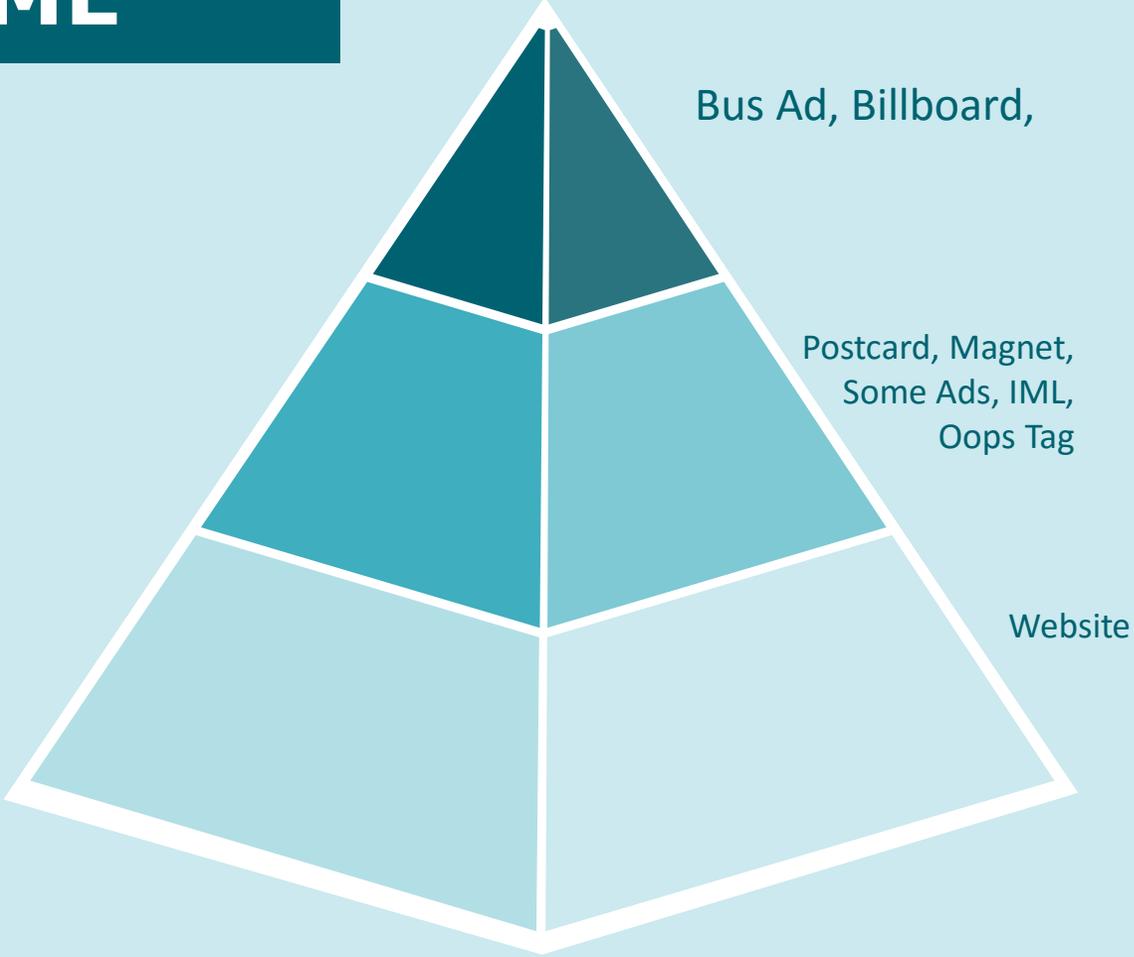
COMMUNICATING THE RIGHT THING AT THE RIGHT TIME

AWARENESS	1
UNDERSTANDING	5
	50

RECYCLE
 “For more info...”

HOW TO RECYCLE MOST COMMON ITEMS
 Categories of 3-5 “yes” / 3 “no”
 Simple Instruction, set out
 “For more info...”

RECYCLING FAQs
 Easy to find “yes” and “no”
 Non curbside: drop off, HHW,
 electronics, textiles, etc



COMMUNICATING THE RIGHT THING AT THE RIGHT TIME

AWARENESS

1

RECYCLE
"For more info..."

Bus Ad, Billboard

UNDERSTANDING

5

HOW TO RECYCLE MOST COMMON ITEMS
Categories (3-5 "yes" / 3 "no")
Simple Instruction, set out
"For more info..."

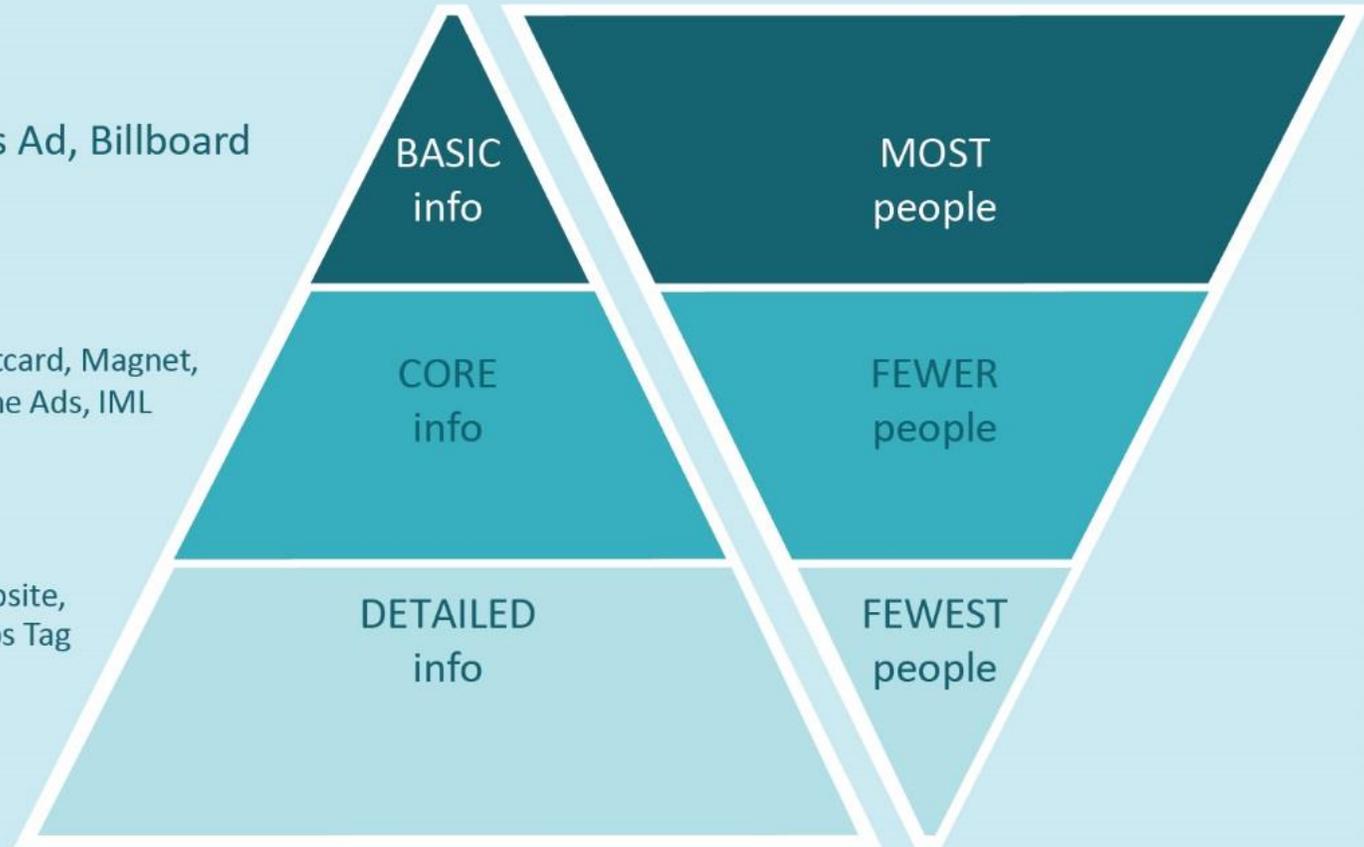
Postcard, Magnet,
Some Ads, IML

DETAILS

50

RECYCLING FAQs
Easy to find "yes" and "no"
Non curbside: drop off, HHW,
electronics, textiles, etc

Website,
Oops Tag



Campaign Message and Brand

Energetic, relatable images that say “recycling is a part of life”.



CONSISTENT QUALITY CONTROL

Truck Kits for Drivers, Field Supervisors, and Enforcement Officers:



BEHAVIOR TOOL:
Pledge Card



BEHAVIOR TOOLS:
Oops & Congrats Tags,
Rejection Sticker

THE GOAL – MassDEP Project



Scale Up and Develop An Actionable Toolkit

- Maximize state grant funds
- DIY with BMPs
- Reduce Confusion
- Create Consistent Message



Increase Participation

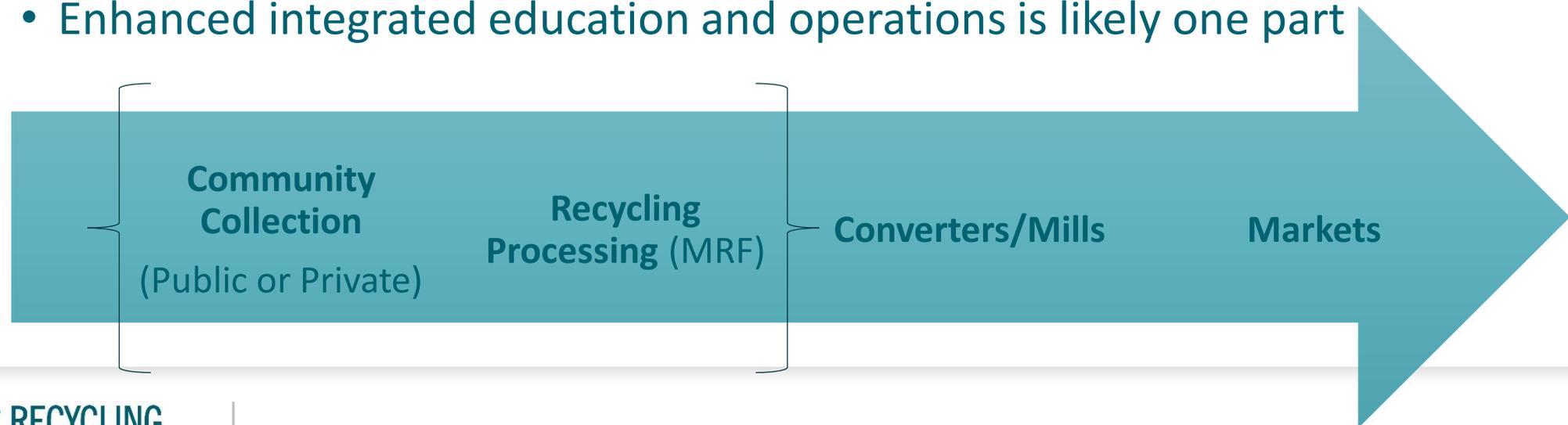


Improve Material Quality

California Context

What Will It Take To Make Change?

- California has infrastructure and end markets.
- Not enough material is pushing through the system.
- Why?
 - Assess the situation across collections and processing
 - Develop best practices that fit the situation
 - Enhanced integrated education and operations is likely one part



Challenges/Opportunities

To Make Recycling Work Better.

- California is big and diverse.
 - Work would likely be regional versus a unified state program.
- Getting to scale in CA would require adequate funding.
- The commitment would have to come primarily from local governments, then the haulers and the MRFs.
- This approach is dependent on full integration of education and operations with measurement and continuous improvement.
 - Shift in relationships and culture.

Thank you!

Karen Bandhauer

kbandhauer@recyclingpartnership.org

970-672-7660