

# Best Practices for Maximizing Recycling in Public Spaces

### Presented By: Syvannah Vine & Lindsay Jones





# The Issue

- Since the 60's, waste generation in the U.S. has tripled
- People generate 4.4 pounds of material per person/day
- Only 34.5% of refuse find their way to a recycling center or compost facility
- Recycling has become harder over the years
- With more complex packaging, confusion builds at the consumer level



# Benefits to Recycling in Outdoor Spaces

- Meeting community expectations
- Making events marketable to sponsors
- Instill positive change in visitors
- Diverting material from landfill
- Increase environmental awareness
- Reduce landfill hauling costs
- SAVE \$\$



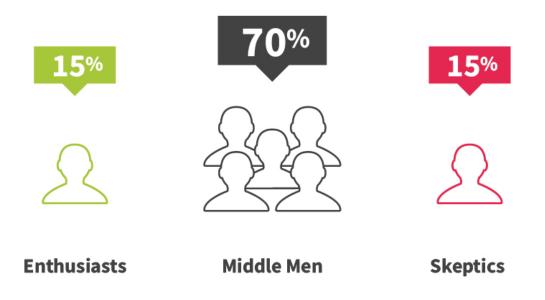
# Keep America Beautiful Study

- Contamination ranged 26-70%
- 20% of refuse was food packaging, wrappers, non recyclable plastics and cups



# How To Get Visitors to Recycle

- Make recycling easy!
- Remove all possible barriers
- People who recycle in their home are more likely to recycle in public



# Considerations To Encourage Recycling

### Location

- Conveniently placed containers
- Directly beside waste containers



# Considerations To Encourage Recycling

### Position

- Position containers to anticipate foot traffic
- Openings facing toward where the highest volume of people will be walking by
- Consider where and what will be entering the container



# **Considerations To Encourage Recycling**

### Consistency

- Visuals that communicate the message and the proper action again and again
- Engraining the behavior and keeping it simple = SUCCESS!
- Bin colour increases recycling
- Restrictive lids improve recycling rates











#### Study conducted by University of Michigan

# It Matters A Whole Lot

- Analyzed the effect of restrictive openings on recycling and waste containers on a university campus
- Two sets of 3 bins were placed throughout the building, one set had no lids and the other had a flap for trash, 6 inch hole for cans and bottles, narrow slot for paper
- Containers with restrictive openings showed a 34% increase in the amount of recycled materials
- Concept of accordance, the property of an object that informs us of its proper use



# Como Park Zoo, Minnesota

- Placed a lid on container with hope of making the garbage less convenient
- Capture rate increased from 62% to 72%
- Maintenance staff costs increased, 30 seconds per container



Source: Eureka Recycling, Development of Best Practices in Public Space Recycling. 2011

























Green glass bottles & jars



# Contamination

The containers in public settings are often unsupervised drop off sites and often look just like trash containers.

### Challenges

- No difference between waste and recycling containers
- Keeping the containers clear of contamination
- Communicating clearly with people who use the containers

#### Lack of standardization -> Contamination

• Degrades the quality of the end-recycled material



## Language Barriers

- Use photos and icons on all signage takes the guess work out
- Clarifies what goes where
- Avoid information overload



# Simple, Effective Signage

- Education moment needs to happen at the moment of discard
- Simple, easy to read signs are most effective
  - Graphic representation of materials
  - Short list of items on signage
  - Use same format as existing city signage, for standardization
  - "We recycle" to create a sense of community
  - Education can be tailored to reflect the specifics of your program. For example, use single serve containers as images on labels and signs pilot locations



# Outreach

- Recycling info on programs
- Signage throughout the grounds
- Post about recycling success
- Adding education at additional locations where visitors interact with your space:
  - Literature websites, maps, reservation forms, brochures, flags
  - Banners on poles
  - Display information at lobby, gathering space or reception area
  - Educate staff working in public space
- Gather feedback from local community





# Case Study: Mears Park, Minnesota

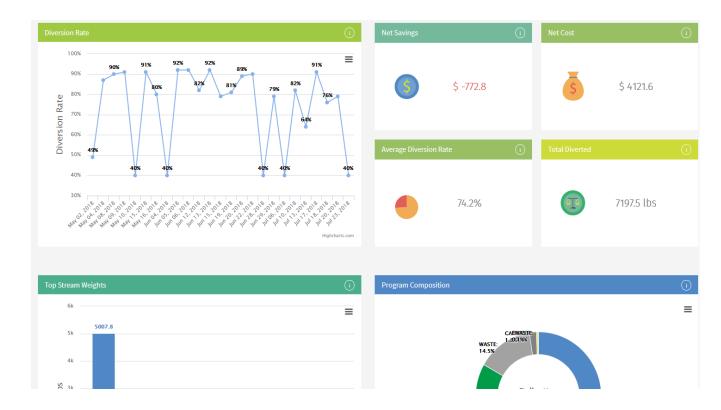
- Questionnaire was given to 112 park visitors on the new recycling program & container
- 30% of respondents claimed to carry their recycling home if it was not made publicly available to them
- 23% indicated that recycling is the best way to reduce litter in the park



Source: Eureka Recycling, Development of Best Practices in Public Space Recycling. 2011

# Tracking Recycling & Waste Weights

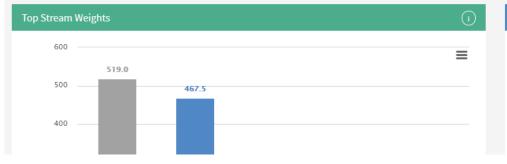
- Free, online collection analytics software
- Ability to track your event's progress year to year
- Discover key metrics such as diversion rates, total diverted rates and stream compositions
- Make adjustments to your program at the individual container level
- Environmental dashboard feature

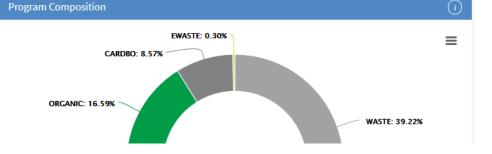


### **RESOURCE CENTER**

POWERED BY BUSCH







# **Container Choices**

### **Clear Container Option**

• Offers transparency and allows staff to gauge when container needs servicing

#### Concerns include:

- Not aesthetically pleasing
- Labor and time needed for a two person bag removal
- Rainwater infiltration into the bag through mesh containers
- Physical stress on staff from manually delivering bags from the containers to the vehicles themselves
- Scavenging animals to access the bags through mesh containers



### Outdoor Containers

- Dual or Triple Stream Options
- Higher capacities for less frequent servicing
- Slates with liners to prevent scavengers from pulling out bag





# Container Choices

#### **Weather Resistant Containers**

- Prepare for a worst case scenario
- Drilled hole option or canopy
- If it does rain, prepare for longer servicing requirements



# Lack of Participation

- How do you approach the issue of lack of participation and general awareness when it comes to recycling?
- Never going to have success unless the general public is on board



https://lanierecoschool.files.wordpress.com/2015/10/img\_4461.jpg

# Psychology

- Scientific study of the human mind and its functions, especially those affecting behaviour in a specific context
- Mental characteristic or attitude of a person
- How the human mind is encouraged to participate in specific recycling and sustainability behaviors
- How can we ensure the message gets across and leads to behavioral change?

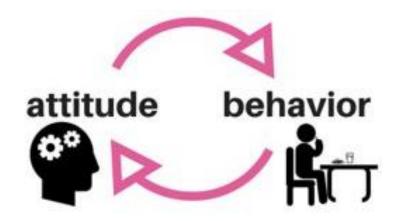


# Attitudes vs. Behaviours

Attitudes: characteristic used to define one's thoughts and feelings towards someone or something

**Behavior:** the way in which one acts in response to a particular situation, as a result of their attitude

- Might have a positive attitude on a subject, but doesn't translate into a behavior
- You know what actions you should take, but choose not to



Source: Social Psychology and Stimulation of Recycling Behavior. Shawn M. Burn.

### How to Influence Users

Understand	Develop	Make	Segment
Your audience	A message that speaks to them	Them reflect on their choices as an individual	Your audience and develop a strategy for each group

Source: Recycling Behaviour: The Present Brain Focus and a Framework to Undestand Personal Differences in Recycling, Antonis Mavropoulos.

# The Power of Influence

- Very clean parking lot vs. very dirty parking lot
- 54% followed suit with the accomplice and threw flyer on the ground at the heavily littered parking lot
- 6% followed suit with the accomplice and threw flyer on the ground at the clean parking lot
- The common factor is that the subjects were following suit with how they perceived their environments



# Conclusion

- Recycling is a fantastic way to start to reduce our environmental impact
- Referred to as "above ground mining"
- Difference is that we are not using any new or virgin resources; we are reusing what has already been made



### Contact our Waste Diversion Team!

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