Lessons Learned Across Different Public Space Venues

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Perspective

- Recycling Consultant for 20+ years
- Data driven analysis
- Began with residential recycling
- Expanded to commercial and then to public space/away from home in an effort to increase recovery rates for materials
- Design, pilot, monitor and train, but do not operate

DSM's Work with Public Space Venues

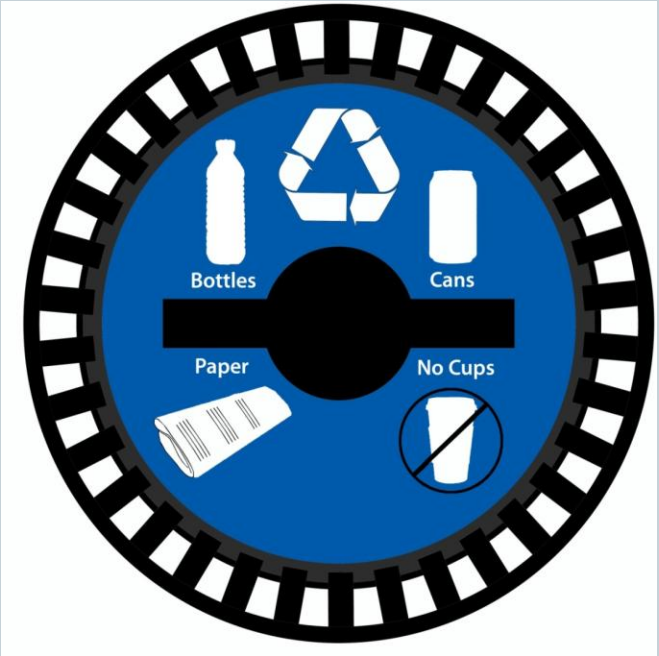
- Outdoor Recreation Areas:
  - Ski areas and outdoor malls
  - Urban and rural parks – state and national
  - Beaches and campgrounds
- Highway Rest Areas
- National Mall (most recent):
  - Trust for National Mall and KAB (client)
  - Coke/Coke Recycling sponsorship

Key Issues

- Audience and patterns of use
- Waste composition and target materials
- Current refuse/litter collection system
- Container type, placement and volume
- Change in collection method and frequency
- Processing limitations
  - May impact on collection options

Audience

- National Mall attracts visitors from across the globe, so messaging on recycling receptacle primarily iconic
- Repeat and long term stay visitors are different:
  - Pack it in, pack it out
  - Pledge to recycle
  - Work with vendors
  - Opportunity for theme



Patterns of Use

- Temporary vs. permanent containers
  - Two different systems for National Mall
- In both cases volume for both recycling and refuse must be sufficient

Waste Composition Differs

- Recreation Areas:
  - Campgrounds different from beaches
  - National Mall different from DC BID
  - Vendors/ Concessions play a role
- Highway Rest Areas
  - Lower % recoverable than expected

Target Materials and Recovery Rates

- Know what will be generated and can be recycled:
  - Newspaper and magazines
  - Beverage containers
- Materials that may be recycled or composted
  - Cups and food containers
  - Paper plates
- Avoid what cannot be recycled
  - Certain cups
  - Fast food packaging and food waste
  - Trash
  - Liquids

Ratio of Trash to Recycling

- Insufficient trash capacity will result in high contamination in recycling containers
- If trash is greater than recycling:
  - Increase ratio of trash to recycling collection
  - Or increase ratio of trash to recycling containers
- The key is to create a parallel system for trash and recycling
  - Recycling containers need to be next to trash containers – many users unlikely to go out of their way to recycle
  - Increases refuse collection efficiency

Container Type and Placement

- Aesthetics
- Paring
  - Distance between containers
- Container Volume
- Container is the message to recycle


TOW ZONE
PAPER ONLY


PLASTIC BOTTLES ONLY
Plastic bottles
Aluminum cans
Glass bottles


Recycle


RECYCLE
Plastic bottles
Glass bottles

Collection Method and Frequency

- Single vs. dual stream
  - Split trucks?
- Refuse and recycling vs. recycling only
- Container fullness rates
- Existing routes to add program on to?
- Controlling costs

Processing Limitations

- Contamination limits
- Impact on overall collection load

Important to Monitor

- Recovery rate by target material
- How much contamination, and type?
- Quantity recycled
  - Quantity disposed
- Adjustments needed?

Closing Thoughts

- If you have committed to collecting refuse, why not add recycling?
- You are not collecting more material, just collecting part of it differently (but must collect the recycling as efficiently as refuse)
- Be sure infrastructure is there beyond the pilot stage:
  - Monitor and regroup
  - Collection workers play critical role!
- The goal is to create an environment throughout the country where recycling is always available, and messages consistent