

Improving Solid Waste Practices in the City of College Park



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What can YOU recycle?

Our Project

*Improve solid waste practices in
the city of College Park*

Based on **Maryland Zero Waste Plan**



Develop **3-YEAR PLAN** for the city to implement

Our Focus

Three sections:

- Education
 - Residents
 - School Students
- Outreach
 - Permanent Residents
- Composting
 - Cost-Benefit Analysis
 - Backyard Composting



Compost at DPW ready to be sold

Background On College Park's MSW

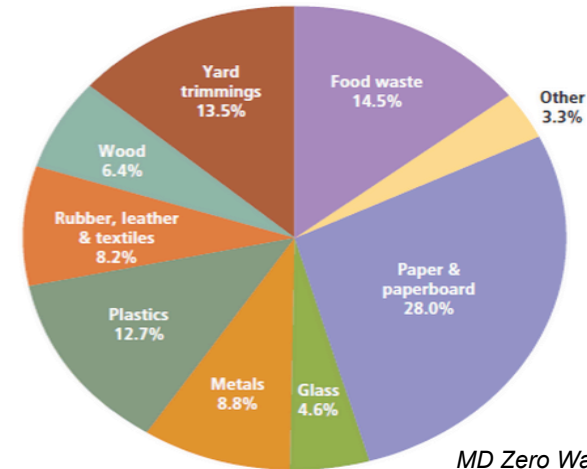
● Sources:

- 4,400 single-family homes
- 53 multi-family units
- 33 businesses

● Disposal:

- *Trash* ⇒ Brown Station Landfill
- *Recycling* ⇒ Waste Management
Recycle America
- *Compost* ⇒ On-site

Total MSW Generation by Material in the U.S., 2011



MD Zero Waste Plan 2014

2014 MSW Composition (CP)

Trash: 4,788.84 tons

Recycling: 1,423.48 tons

Compost: 3,461.05 tons

Zero Waste

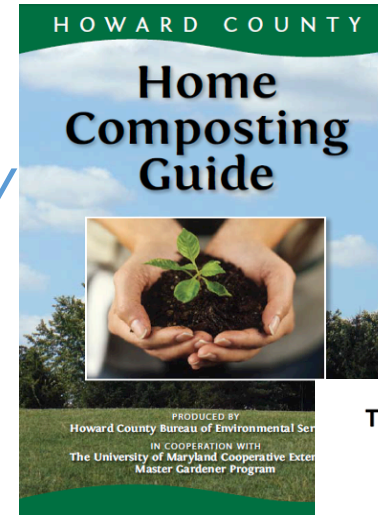


- **Maryland Zero Waste plan:**
 - Eliminate need for solid waste disposal by 2040
- **Waste disposal hierarchy**



Methods: Education and Outreach

- Analyzed *Resident Satisfaction Survey*
- Administered and analyzed a *survey for 8th grade students* at the College Park Academy
- Researched sample *educational materials* developed by other groups or municipalities



TRASH FREE SCHOOLS Guidebook



City of College Park Resident Satisfaction Survey

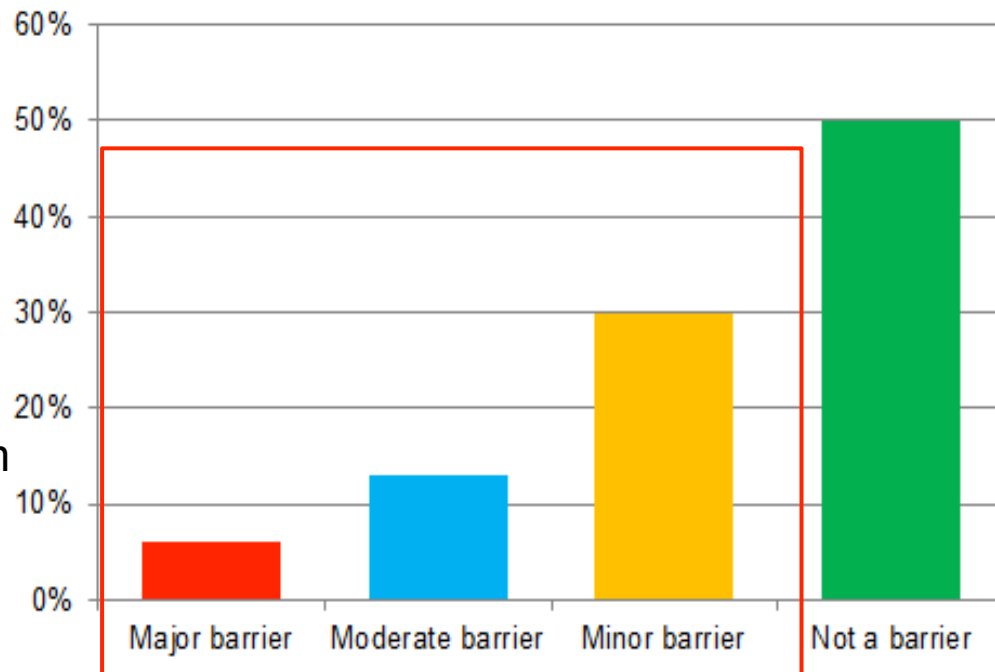
Communication Preference:

- Email: 64%
- Website: 46%
- Newspaper: 25%
- Post Mail: 21%

Rating Public Works Services:

- SMARTLEAF/Compost Program
- 48%: "I don't know"

Greatest Barrier: Unsure of what can be recycled

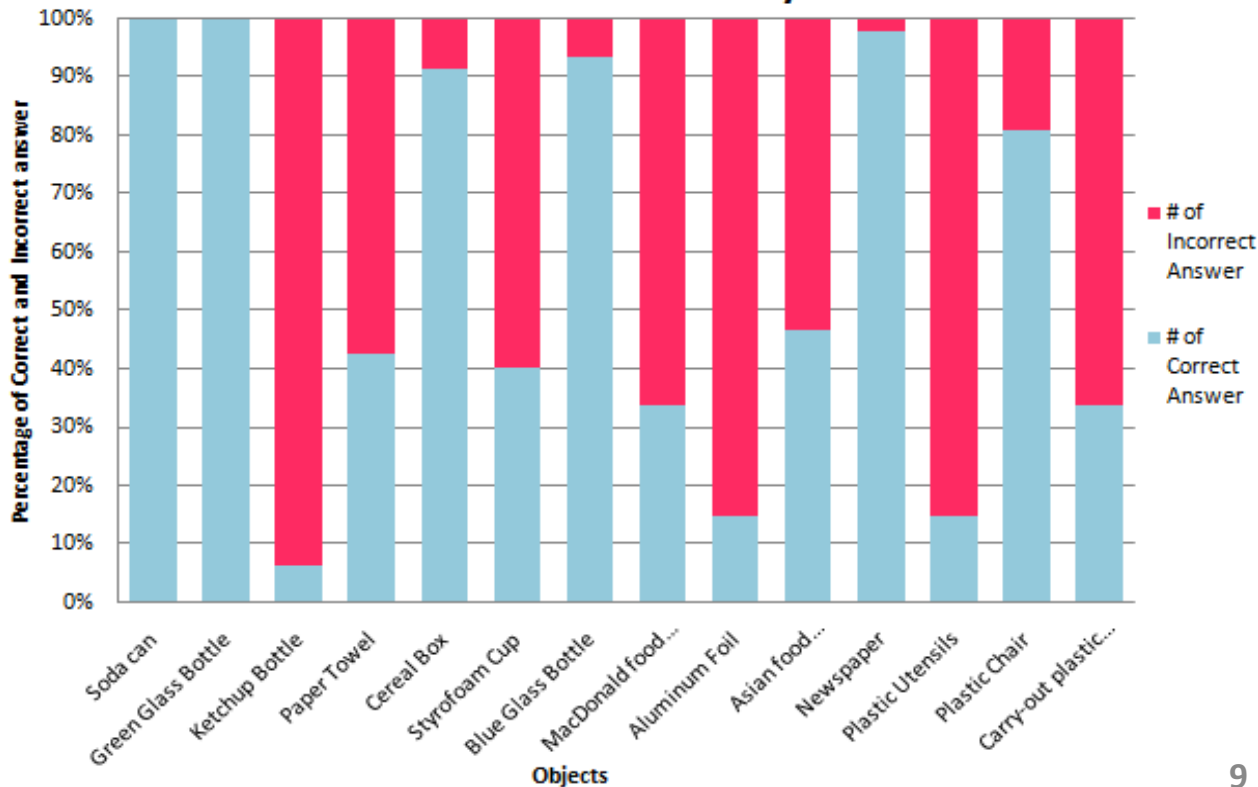


College Park Academy Survey

What can YOU recycle?



'What can YOU recycle?'



Methods: Public Works Composting



Cost-Benefit Analysis:

- Collected and organized available city data on current composting operations
- Analyzed data to determine total relevant expenses and revenue
 - *Expenses:* \$159,440.00
 - *Revenue:* \$301,392.08
 - *Net Savings:* \$141,952.08
- Suggest recommendations for improvement based on findings

Plan Goals

- *Train residents* (440 households) on waste reduction
- *Reduce expenses* for composting operations
- *Implement programs* at the two elementary schools within the city
 - 7-8% waste reduction
 - 7-8% recycling increase

3 Year Plan: Permanent Residents

Goal: *Educate residents on proper sorting for efficient recycling*

- Year 1
 - Conduct waste audit
 - Develop educational materials
 - Develop waste sorting workshop
- Year 2
 - Distribute materials
 - Run workshop
- Year 3
 - Conduct another waste audit
 - Determine changes in waste content



3 Year Plan: Schools

Goal: *Educate students on waste-reduction strategies*

- Year 1
 - Develop materials with CPA
 - Baseline: “Trash Free Schools” program
 - Create a sustainable, environmentally-aware school culture through waste reduction and education
- Year 2
 - Implement materials
 - Expand to include all grades taught at CPA
 - +1 Elementary School
- Year 3
 - +1 Elementary School
 - Compare and contrast from Years 1 and 2
 - Complete and expand plan



3 Year Plan: Compost Education

Goal: *Educate residents on backyard compost start-ups*

- Year 1
 - Develop educational materials and workshop
 - Obtain funds for bins
- Year 2
 - Distribute materials and bins
- Year 3
 - Use compost
 - Community gardens
 - Lawns



3 Year Plan: Public Works Composting

Goal: *Improve data collection and cost-effectiveness of composting operation*

- Year 1
 - Centralize and organize all data
- Year 2
 - Conduct another cost-benefit analysis
 - Suggest changes or cuts
- Year 3
 - Implement recommendations
 - Use savings on other community projects



Summary

Work With:

- Permanent residents
- Schools

Improve:

- Compost education
- DPW Compost operation

Achieve:

- 7-8% Municipal Solid Waste reduction



Questions?



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