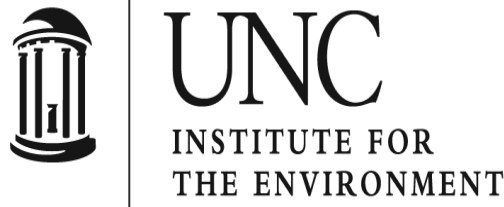


# Examining Recycling at Family & Student Complexes in Orange County, NC



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Kaitlin Finan, Will Leimenstoll, Kristy Sabo, Briana Steele,  
Matt Tucker, Lauren Twomey

# Goal

Assist Orange County Solid Waste Management Department in discovering, developing and testing **three approaches** for **increasing recycling weight** and **decreasing contamination** in a subset of multi-family units in Orange County, that have had limited to moderate success recycling, as defined by OCSWMD staff.



# Literature Review

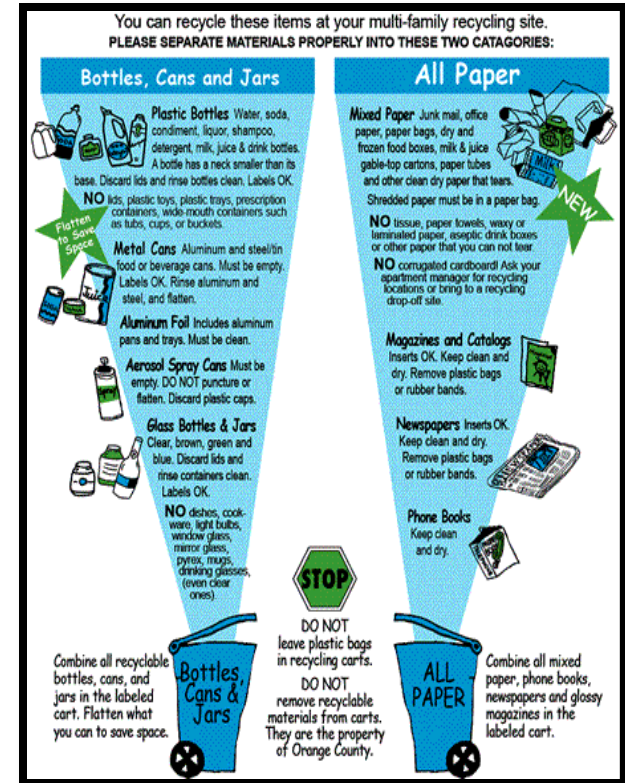
- Psychology studies show that campaigns should try to stimulate moderate interest
- Information doesn't translate into action
- Mass media ineffective
- Commitments, prompts, positive peer pressure, and incentives effective
- Barriers to desirable behavior need to be lowered and incentives increased



Apartment Name	Student or Family Complex	# of Units	Strategy Implemented	Goal
Airport Gardens	Family	26	Tote Bags	Increase total recycling weight
Dobbins Hill	Family	87	Tote Bags	Increase total recycling weight
Notting Hill	Family	200	Improve Signage	Decrease recycling contamination
Shadowood	Student	336	Improve Signage	Decrease recycling contamination
Chancellor's Square	Student	51	Recycling Ambassador	Foster recycling behavior and resident awareness
Warehouse	Student	55	Recycling Ambassador	Foster recycling behavior and resident awareness



# Strategies: Improved Signage



# Strategies: Tote Bags, Recycling Ambassadors



In conjunction with the Institute for the Environment, Orange County Solid Waste & Public Service Scholars

## Chancellor's Square Recycling Ambassador

Did you ever wonder what you can recycle at this apartment complex?

A photograph of four people (three women and one man) standing around a blue recycling bin. They are smiling and holding items to be recycled. One woman is holding a glass bottle, and another is holding a metal can. The bin has a white recycling symbol on it.

**What to Recycle?**  
Glass bottles, metal cans, and plastic bottles – bottles are smaller at the top.



# Resident Survey Data

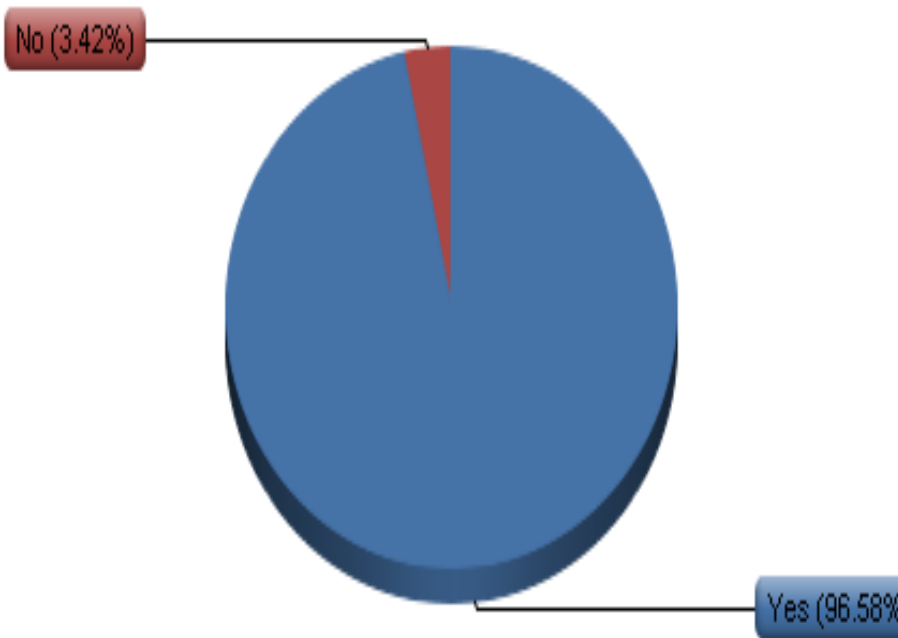


Figure 1. Do you know where to recycle at your complex?

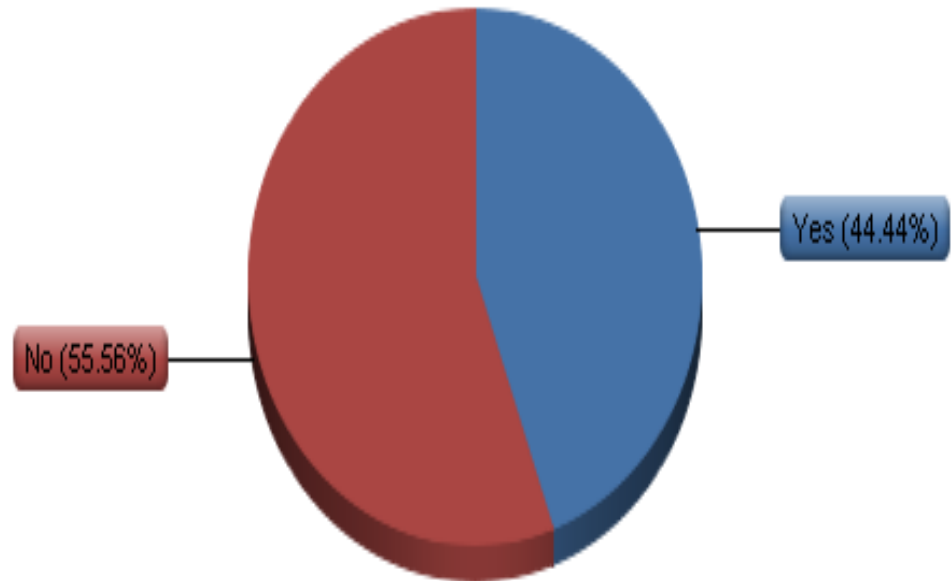


Figure 2. Did you receive information about recycling upon moving in to your apartment?

# Resident Survey Data

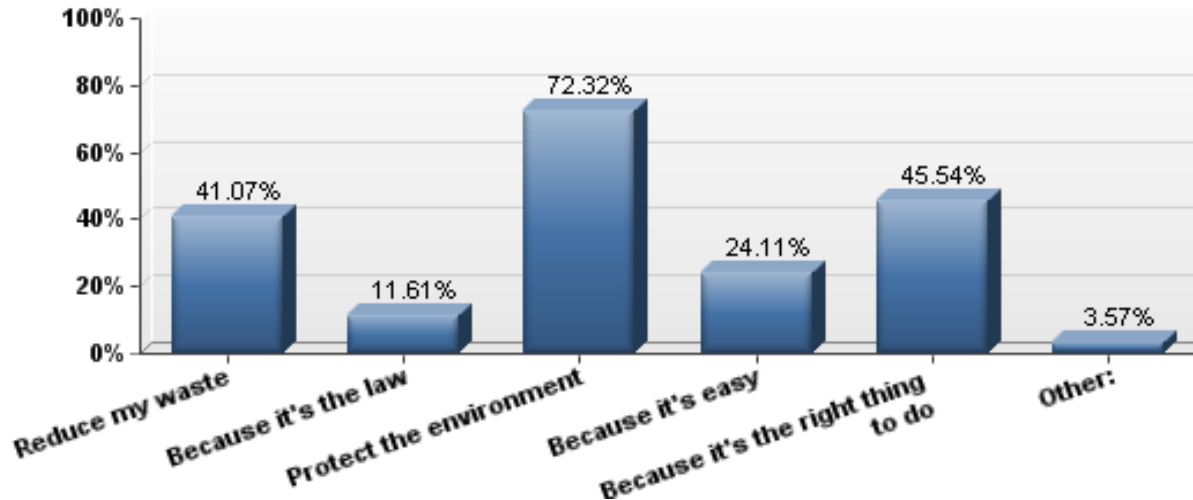
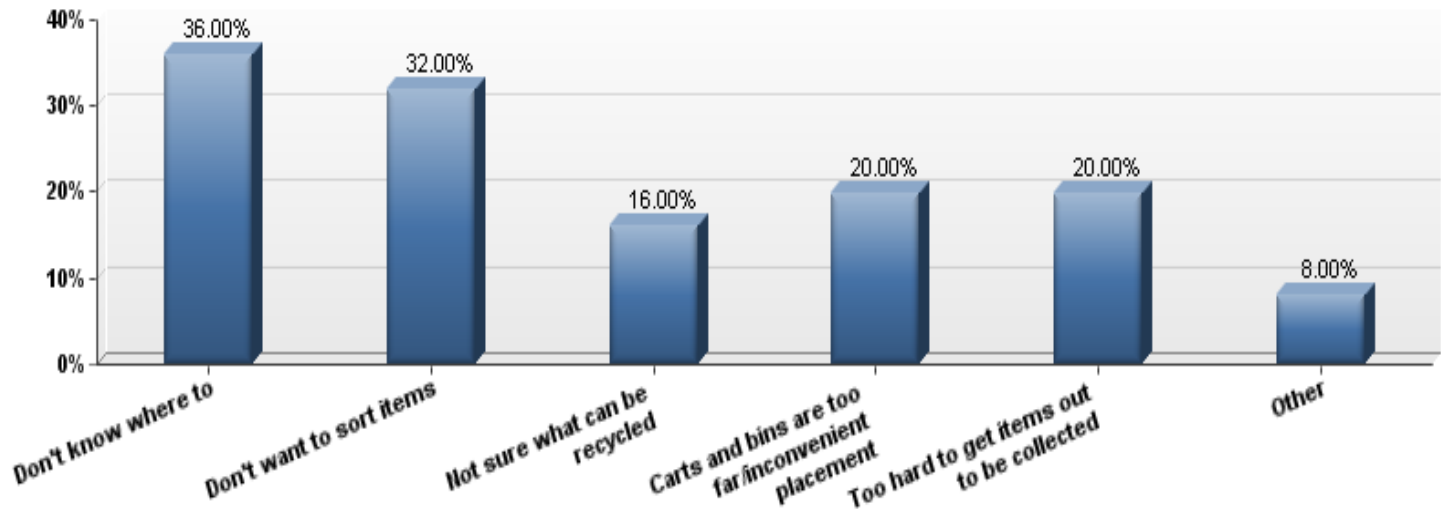


Figure 3. Why do you recycle?

Figure 4. If you don't recycle, why not?





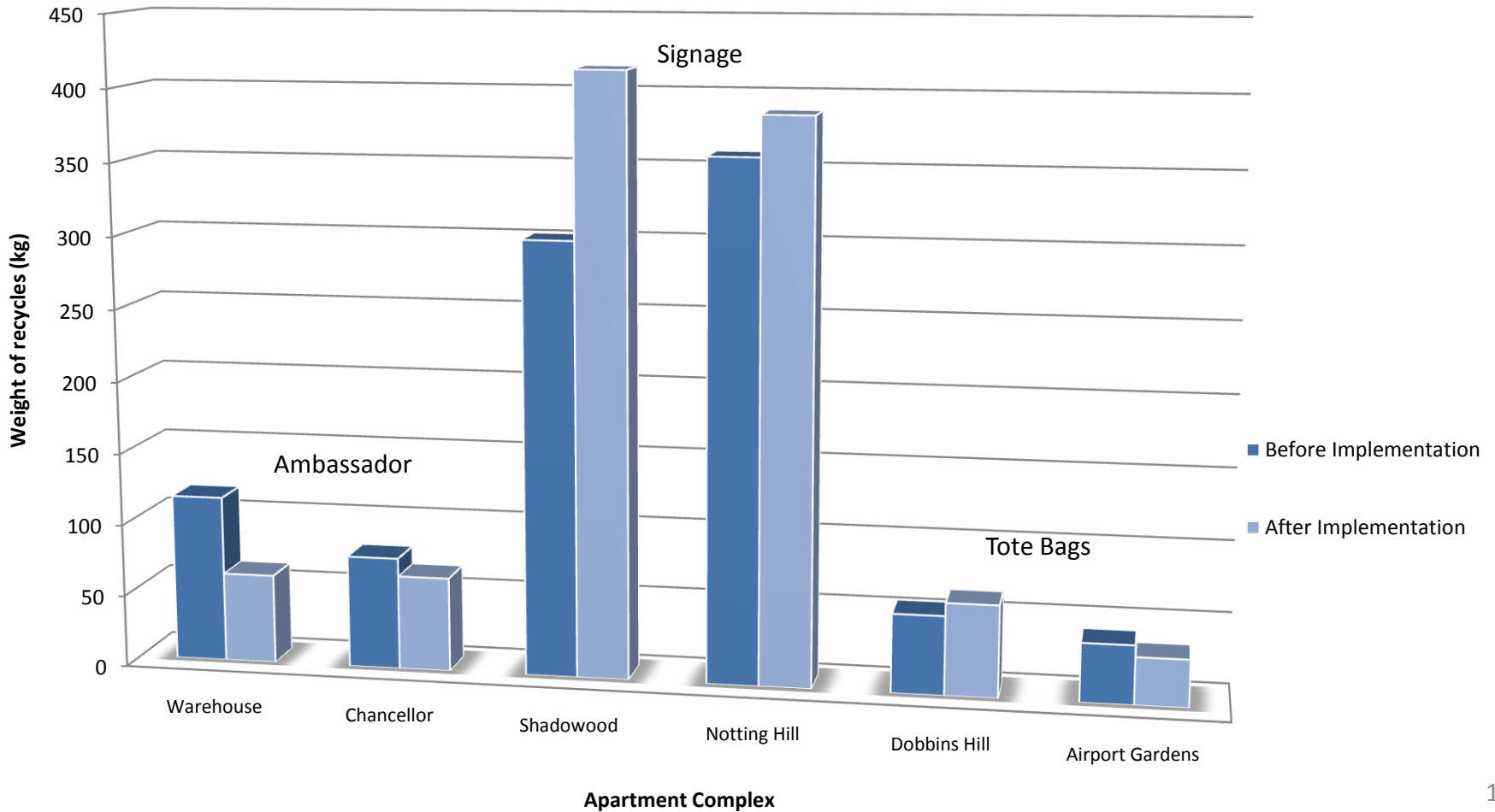
# Manager Interview Data

- No new insight discovered
- Most common communication with residents is newsletters/flyers
- No perceived barriers to recycling at their complexes



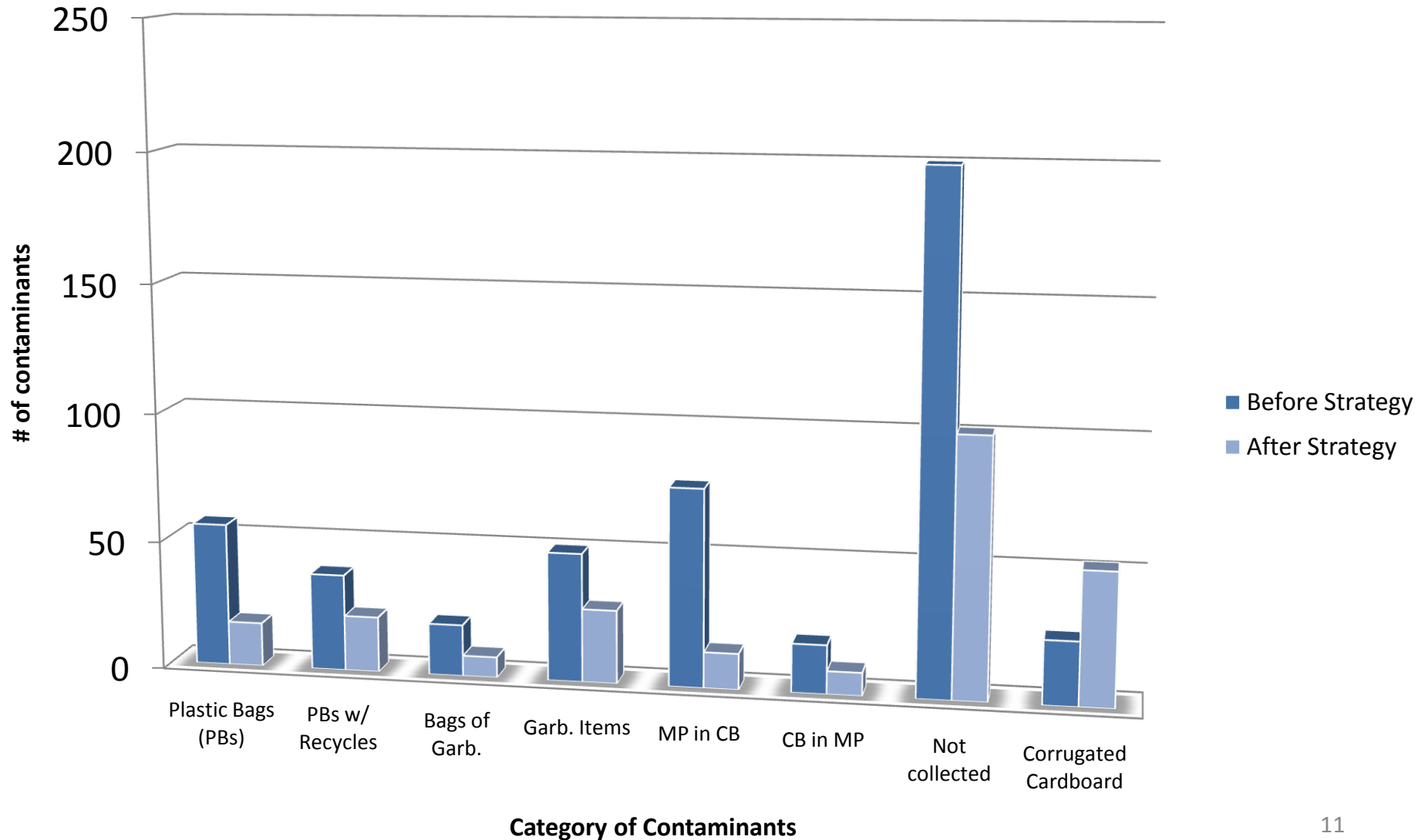
# Weight Data

## Total Average Recyclables



# Contamination Data

## Notting Hill Contamination (3D Signage)



# Conclusion

- Due to time constraints, the data collected was not sufficient to draw significant conclusions
- Positive correlation between provided information and recycling behaviors
- Improved signage showed positive results



# Recommendations:

- Co-locate trash & recycling at complexes
- Better education defining contamination
- Create signs in multiple languages
- Stronger relationships between complexes & OCSWMD



# Recommendations:

- Publicize **classification** of recycling performance
- **Repeat** project again in the fall:
  - Allow for a longer data collection horizon
  - Continue to improve signage at complexes
  - Continue the Recycling Ambassadors program
  - Survey using a third-party surveyor



# Acknowledgements

Many thanks given to our client and mentors of this capstone:

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- Kathleen Gray, IE's Associate Director for Outreach and Public Service



# QUESTIONS?

