# Multi-Family Solid Waste Diversion Strategy

City of Scottsdale - Policy 2

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#### Diversion

- Work with the city of Scottsdale Dan Worth
- Increase diversion of solid waste in multi-family housing by 30% by 2030
- Develop clever strategies that address the issue of solid waste throughout the city of Scottsdale, Arizona.
- Implement feasible and cost effective methods to support these strategies.
- Incentivize multi-family homes to participate in these methods.





#### Boulder

- 33% landfill diversion rate
- Different from S.F. yet multiple stakeholders working together
  - City of Boulder partnered with Eco-Cycle (non-profit) and Western Disposal Services
  - o Goal: create the Boulder Waste Project
    - Pilot program to increase recycling and composting in multi-family units
- Identified barriers
  - Infrastructure
    - Lack of bins and pickups so bins were being excessively used
    - B ins were in inconvenient or hidden location
  - Culture
  - High turnover





#### **Boulder**

- Solutions
  - Infrastructure
    - Added more bins, and increased pickups
    - Moved bins inside of buildings
    - Gave recycling bags to MFU
    - Posted new signs

#### Education and Culture

- Community trainings held both in English and Spanish
- Literature distribution
- Door-to-door education
- Turnover
  - Created incentives such as pledge cards
  - Hosted meetings, cookouts, and parties to educate







#### Northeast Michigan

- 54% landfill diversion rate
- Worked Stakeholders
  - o MFU
  - City Sanitations
  - Environmental Orgs (Zero Waste)
- Identified barriers
  - Infrastructure
    - Lack of coordinated pick up
    - Bins were in inconvenient or hidden location
    - MFU and Single families on separate routes
  - Cost
  - High turnover







#### Northeast Michigan

- Solutions
  - Infrastructure
    - Mandated Recycling plans by MFU
    - Smaller bins for individuals to leave exchange for empty at transfer station
    - Forced convenient bin location

#### Education and Culture

- Door to Door training
- Free Literature distribution
- Standardized labeling and signage
- Incentives
  - "Rewards for Recycling"





# Impact of Diversion

"Recycling Good, Landfill Bad" - Dan Worth

 "The paper recycling industry alone saves 17 trees for every ton of paper it keeps out of the landfill. If all morning newspapers read around the country were recycled, 41,000 trees would be saved daily an ' vaste

would never end up in landfills (Martin 2003)."





# CITY OF STATE SCOTT SDALE.

# Strategies to Reach 30%

- Educate Residents and Managers
  - Signage
  - Commercials
  - Newsletter
  - Prepare MFU management
  - School programs through SUSD
- Accessibility and Ease of Use
  - Bins and Collection
  - Easy to understand signs and marking







# Strategies to Reach 30%

- Tax credits
- Mandates

#### Incentivise

- Utility credits for diversion
- The IRS states that to qualify as a deductible a business expense must be both ordinary and necessary
- Act Section 305 is titled "Manufacturers' Energy Efficient Appliance Credit", meaning a deductible can be claimed from any process that aids in these endeavors





# Challenges and Remaining Questions

- Are the citizens of Scottsdale in multi-family units willing to participate in waste diversion?
- In the future will there be new policy that mandates more recycling and composting?
- Are there non-profits in Scottsdale who are willing to test pilot projects?
- Is it possible for sectors of the city government and outside organizations to coordinate actions together?





### Questions?



Thank you!

#### References

Abrams, H. (2001). *Recycling in multifamily dwellings:A model for local government recycling and waste reduction* (Model Study). California: California Integrated Waste Management Board.

Environmental LA Sanitation. (2017). Multi-Family Recycling Program. Retrieved from <a href="https://goo.gl/tpYDyF">https://goo.gl/tpYDyF</a>

U.S. Environmental Protection Agency, 2016. "Recycling Basics"

Fridland, D., & Moorman, R. (2015). *Boulder Zero Waste Project Multi-Family Unit Outreach*. Boulder, Colorado: Eco-Cycle.

http://www.calrecycle.ca.gov/LGCentral/Reports/juris diction/diversiondisposal.aspx

Martin, Sam. "Recycling Benefits the Environment." Opposing Viewpoints: Garbage and Recycling. N.p.: n.p., 2003. N. pag. Web. 23 Feb. 2017.

Northeast Michigan Council of Governments. (2016). *Recycling in michigan.* (Environmental). Michigan: Michigan Department of Environmental Quality.

San Francisco Reports Record 80 Percent Diversion Rate. (2012). Solid Waste Report, 43(17), 3.

Zero Waste - Frequently Asked Questions (FAQs). (2016, September 26). Retrieved February 22, 2017, from https://sfenvironment.org/article/zero-waste-frequently-asked-questions-faqs

Zero Waste Strategic Plan ACTION PLAN. (2015, February). Retrieved February 19, 2017, from https://www-static.bouldercolorado.gov/docs/DRAFT\_Action\_Plan\_final-1-201506301425.pdf