

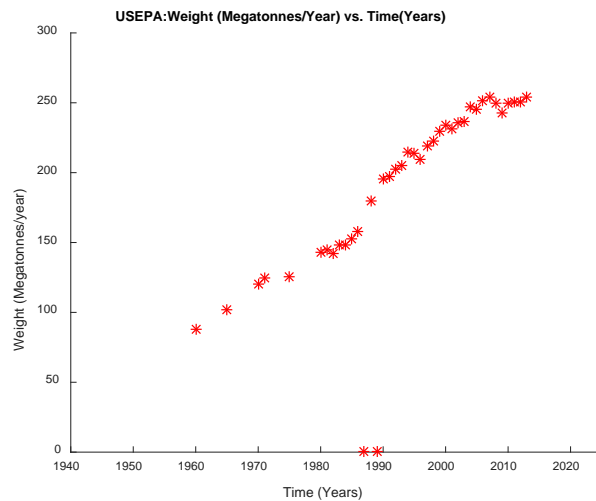
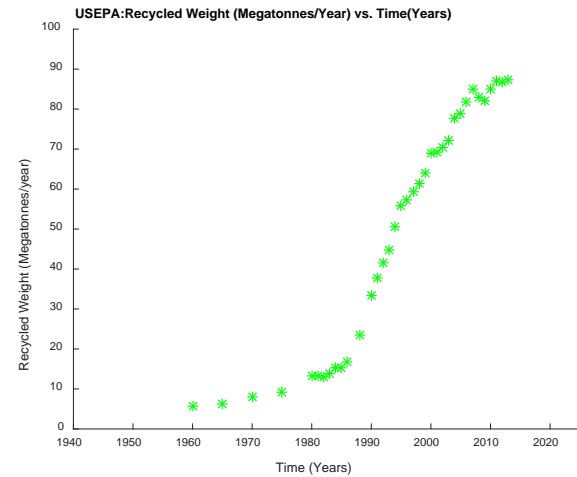
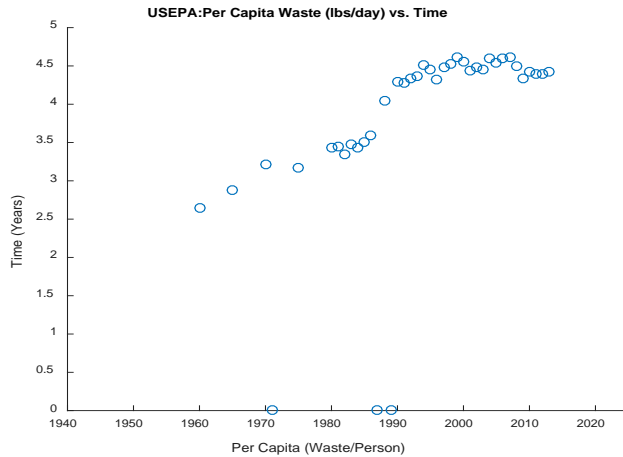


Changes In Waste Stream Size Over the Past Decade.

Kim K. Smith

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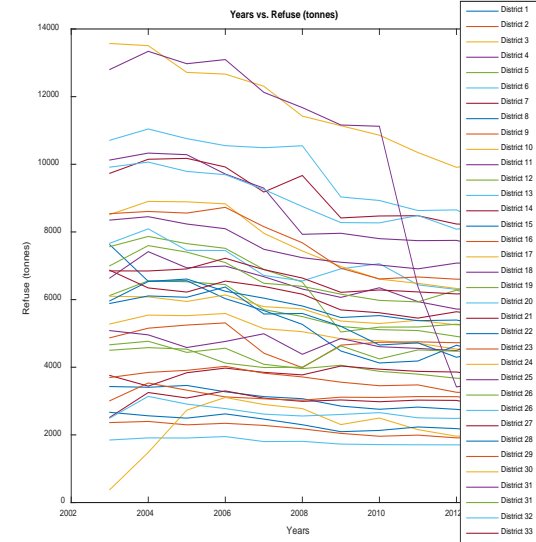
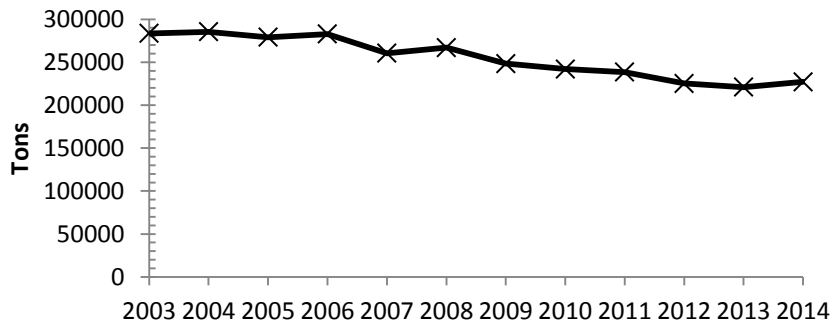
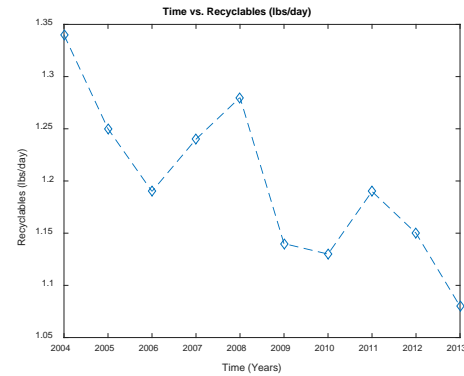
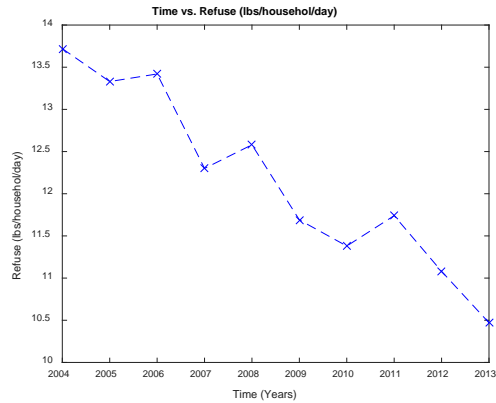
$$Waste\ Generation = k(PCE * Population)$$

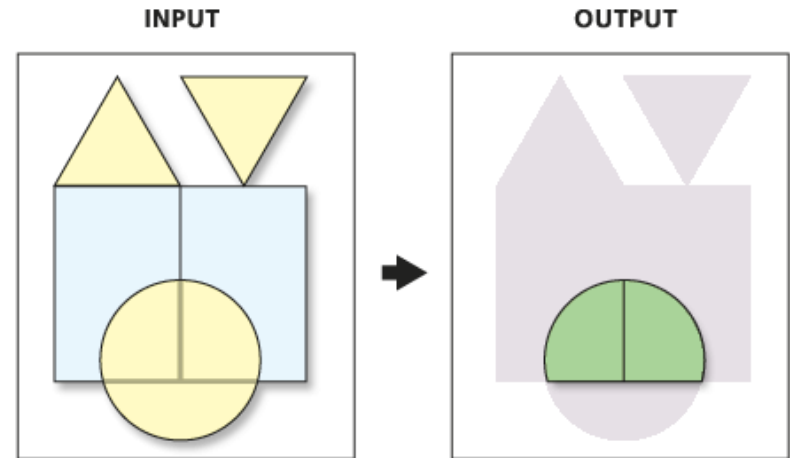
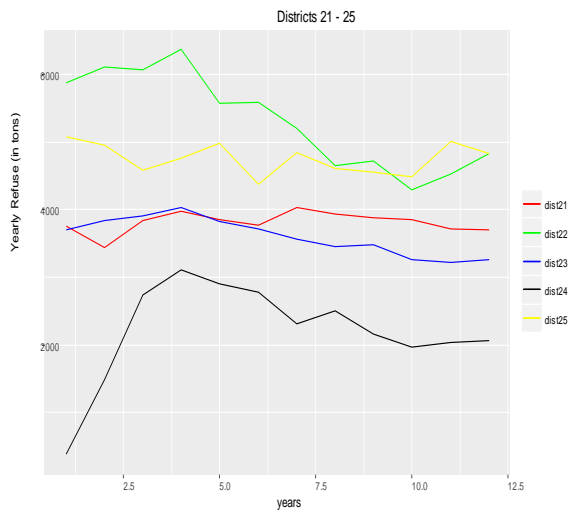
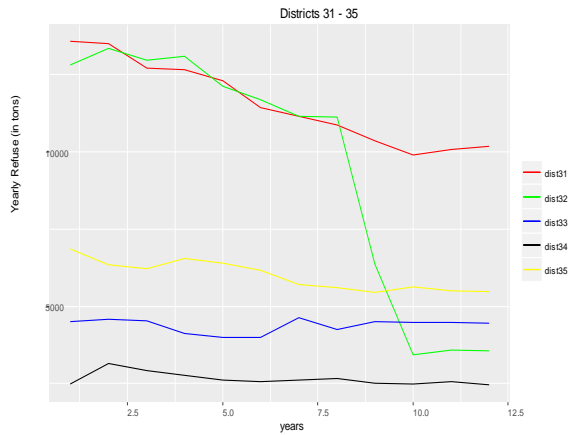


The Town of Brookhaven



- Dataset includes the years 2003:2013
- Same management practices
- Amount of waste disposed shows a falling recycling trend.

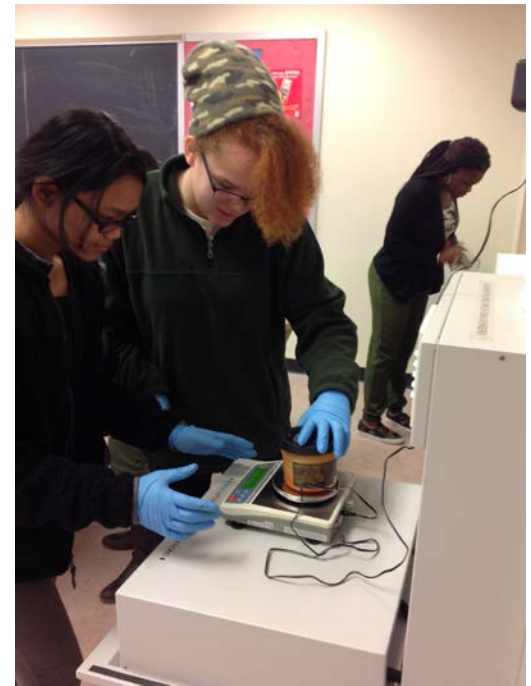






The trends in waste management can be attributed to:

1. Household Income?
2. Education Levels?
3. Age?
4. Number of children per household?
5. Party affiliation?
6. Language?
7. Tax districts?
8. Retail spending?
9. Employment?





How is the waste stream changing over time?

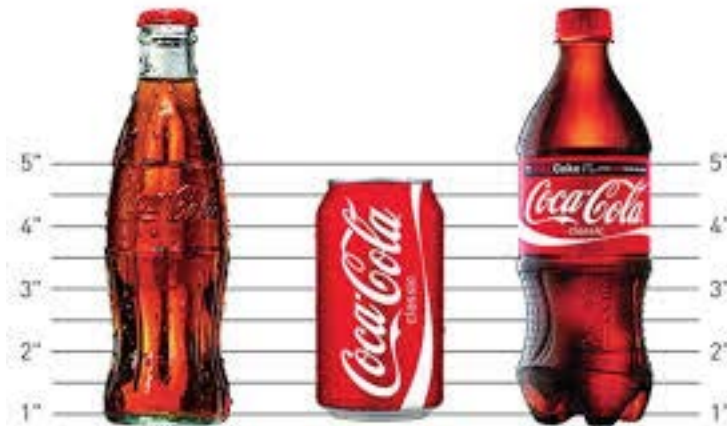
PACKAGING	CHARACTERISTICS	INITIAL YEAR OF DATA	INITIAL CHARACTERISTICS	FINAL YEAR OF DATA	FINAL CHARACTERISTICS
Plastic grocery sack	Thickness	1976	2.3 mils	2009	0.5 mils
Plastic fruit sack	Thickness	1970	1.05 mils	2009	0.4 mils
Plastic trash bag	Thickness	1975	2.5–3.0 mils	2009	0.4–1.1 mils
PET 2-liter bottle	Weight	1978	68 grams	2009	48 grams
HDPE milk jug	Weight	1965	120 grams	2009	64 grams
Aluminum can	Weight	1972	20.8 grams	2009	13.3 grams

Item #	Item Description	M_1 (g)	M_2 (g)	M_3 (mL)
1	Campbell's Chili	487.6	58.14	414.03
2	Morton's Salt	737	35.39	560
3	Tide	3,311.20	205.22	3,000
4	Whole Milk Success	1,890	52.09	1,920
5	White Rice	665	68.64	1,100
6	Lipton Tea	334.8	35.28	2.59



- ❑ In 1992 Bill Rathje's year of New York Times 520 lbs/year
- ❑ My findings - 229.84 lbs/year

- ❑ Differences in paper circulation and digital subscription.





- Why is the waste generation trend different in the Town of Brookhaven?
- Why has there been a change in packaging over time?
- What has caused the change in packaging over time?
- How can we use demographics to explain the change in waste management trends over time?
- Can we use household income as an indicator of the amount of waste generated over time?



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