WASTE PRODUCTION IN THE US

1960 - 2010

QUESTIONS

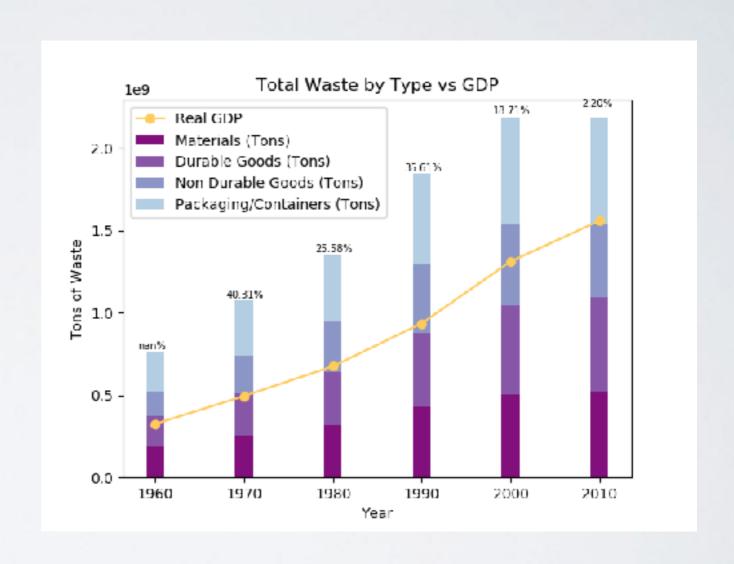
- How has the volume of waste produced in the US changed?
- How have our processing methods shifted (recycling vs landfill vs combustion)?
- Has the % increase in waste produced tracked with GDP or Population increases?
- How has our preferred material changed for packaging and containers?

DATA: SOURCES AND ISSUES

- EPA Data on Waste Generated and Recycling Rates
 - Excel format with data spread across multiple sheets
 - Header year half integer, half strings
 - Null values in some rows
 - All years of waste data not provided
- GDP
 - Convert strings to integers
- US Population
 - Converting "20 million" to an integer
 - · Inevitably did not use however as there was no interesting correlation between US Population and Waste

WASTE PRODUCTION

- Waste has somewhat tracked with GDP however GDP growth has been steeper
- Percentage growth in waste was steep through 2000 but has leveled off

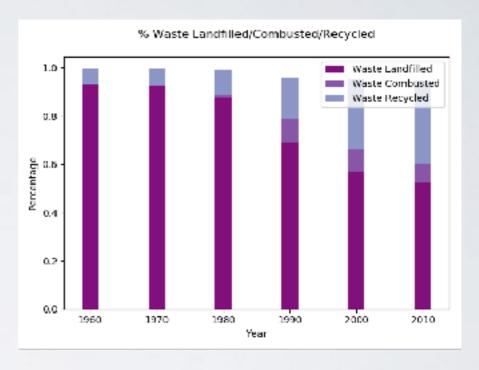


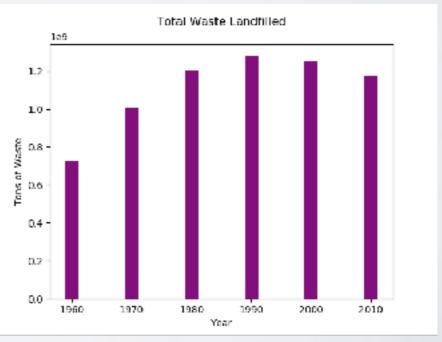
Durable Goods: goods not for immediate consumption and able to be kept for a period of time.

Non Durable Goods: products that are consumed or are only useable for a short period of time because they wear out or become useless

% WASTE RECYCLED

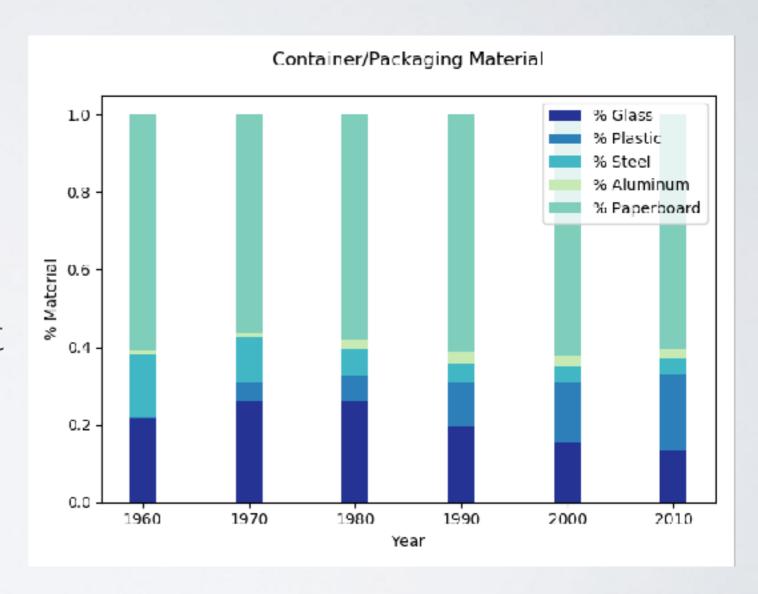
- Significant increases in the % waste recycled
- Overall waste landfilled still high however





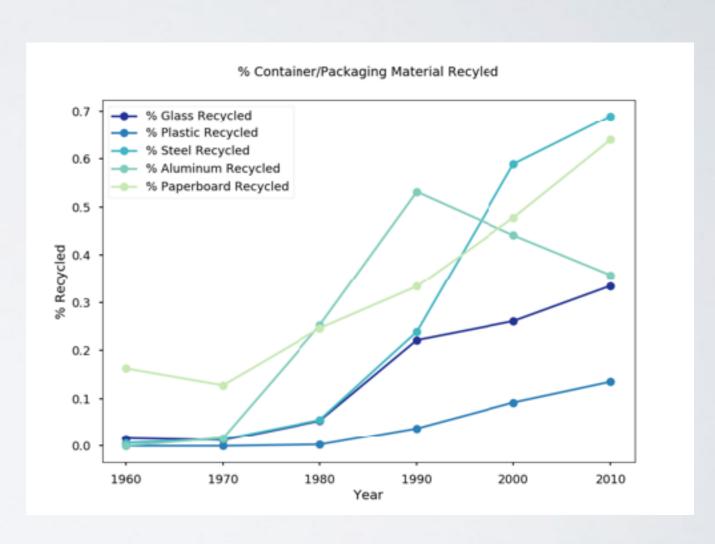
PACKAGING/CONTAINERS

- Steel and Glass have had larger decreases in use while plastic has increased
- Use of Paperboard has stayed relatively consistent



CONTAINER/PACKAGING RECYCLING RATE

- We were not into recycled in the 60s and 70s
- Dramatic increases in recycling made for Steel and Paperboard
- Plastic, while increased in recycling rates, is still significantly lower



NEXT STEPS

- Find waste generation/recycling rates by region and market type (residential vs industrial etc..)
- Compare residential waste/recycling rates for geographic areas and compare with population density and income