#### WASTE PRODUCTION IN THE US

1960 - 2010

## QUESTIONS

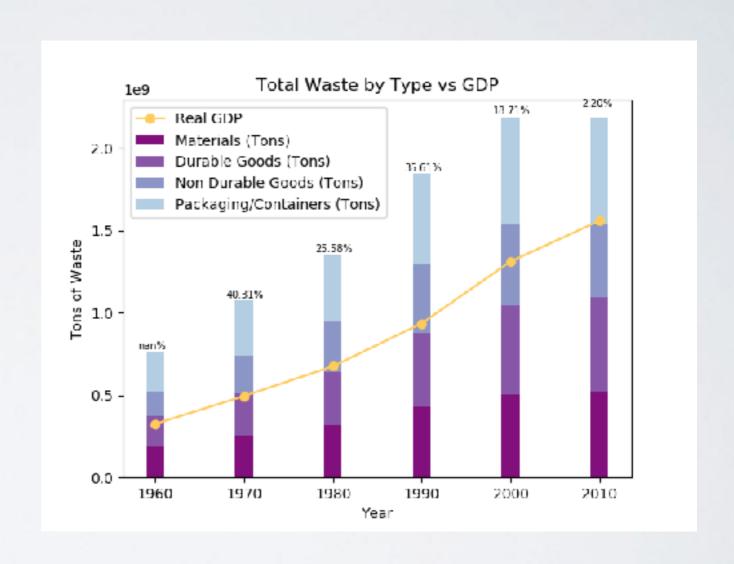
- How has the volume of waste produced in the US changed?
- How have our processing methods shifted (recycling vs landfill vs combustion)?
- Has the % increase in waste produced tracked with GDP or Population increases?
- How has our preferred material changed for packaging and containers?

#### 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

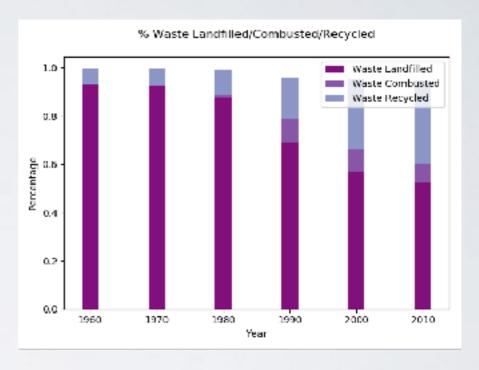


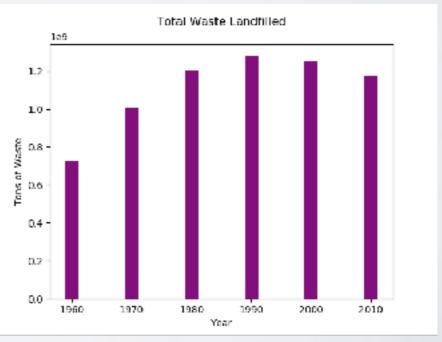
**Durable Goods**: goods not for immediate consumption and able to be kept for a period of time.

**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



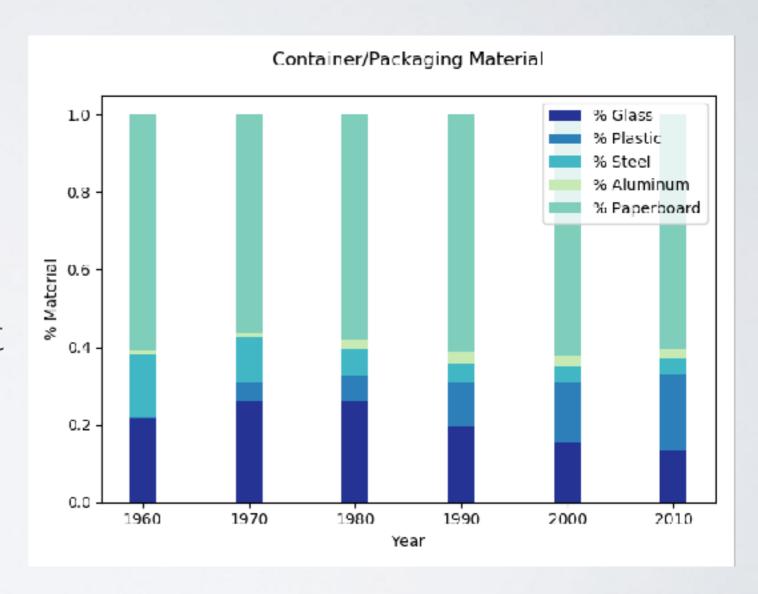


### % RECYCLED BY TYPE

	% Materials Recyled	% Durable Goods Reycled	% Non Durable Goods Recycled	% Packaging/Containers Recycled
1960	0.060248	0.062151	0.083694	0.072908
1970	0.064544	0.066127	0.087281	0.068786
1980	0.094921	0.093515	0.112629	0.113189
1990	0.162668	0.156693	0.171129	0.183995
2000	0.287680	0.270118	0.284907	0.306509
2010	0.340825	0.316954	0.335691	0.371324

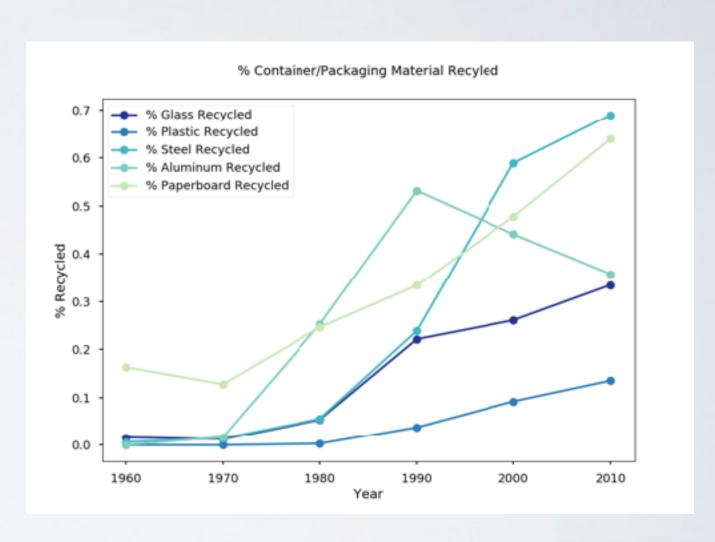
#### PACKAGING/CONTAINERS

- 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