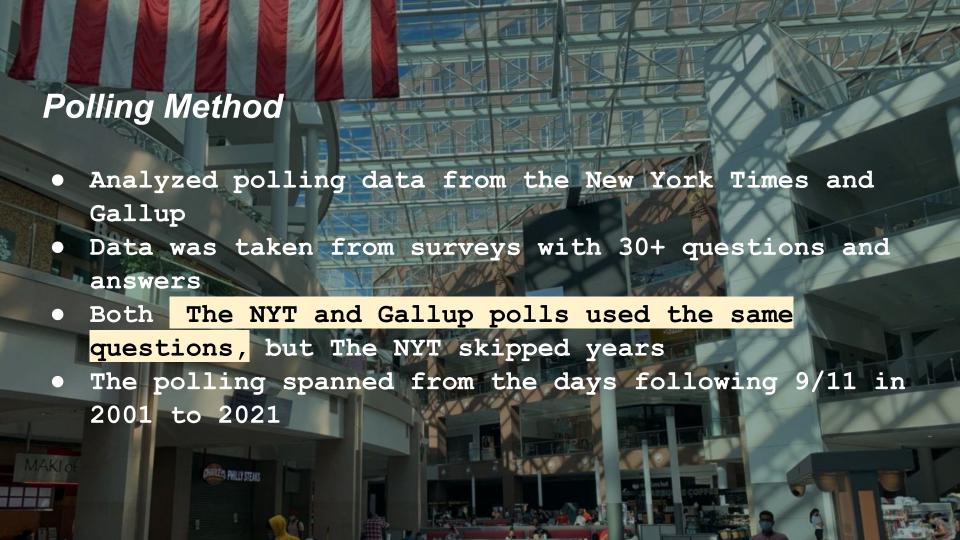
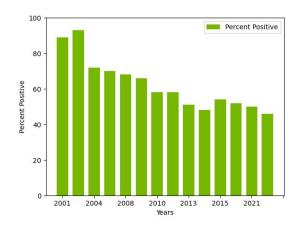


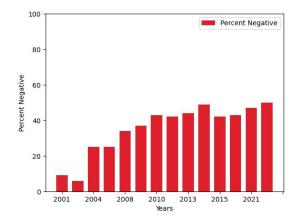
Sentiment Analysis

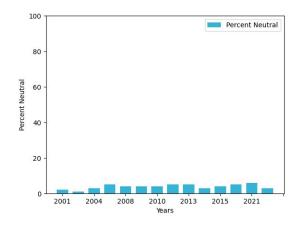


#### **Polling Graphs**

Thinking now about U.S. military action in Afghanistan that began in October 2001, do you think the United States made a mistake in sending military forces to Afghanistan, or not?

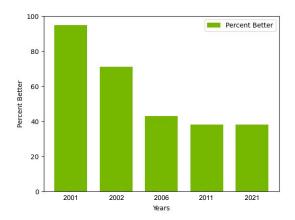


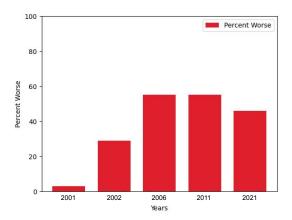


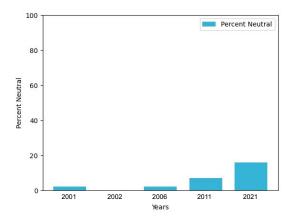


## Polling Graphs

Do you think the events of September 11th, 2001 have changed this country in a lasting way, or not? (IF YES) Is it a change for the better or a change for the worse?





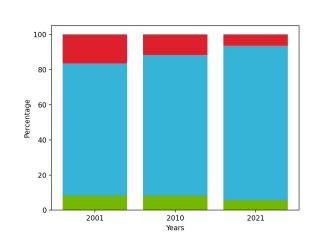


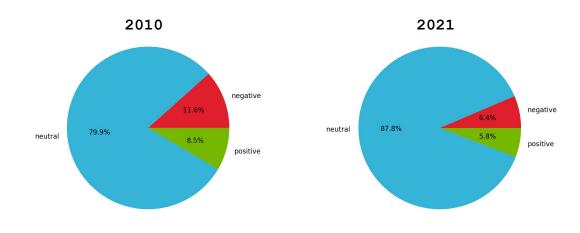
# Sentiment Analysis Method

- Conducted a sentiment analysis on three comparable articles from the NYT over a span of 20 years
- Used Python's VADER model from the NLTK library, which divides sentiment into positive, negative, neutral, and compound.
  - Words are scored from -4 to +4
  - Neutral words and phrases are closer to 0
  - "Compound" is the sum normalized between -1 for the most extreme negative and +1 for the most extreme positive

# Sentiment Analysis Graphs

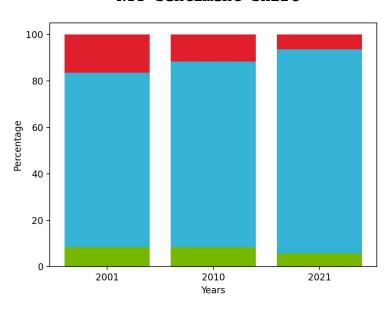
#### NYT Sentiment Shift





## Sentiment Analysis Graphs

#### NYT Sentiment Shift



- Negative Sentiment
- Neutral Sentiment
- Positive Sentiment

### Analysis

#### Sentiment Analysis:

- Some variance in positive versus negative attitudes, but most significantly, increase in neutrality
- Perhaps due to less requirements for vivid language with the development of the internet?

#### • Polling Analysis:

- O The data collected does not show an increase in negative sentiment around 9/11.
- O It is mostly a decrease in positive sentiment. The negativity shown is around the aftermath.
- The polling data also shows that neutral sentiment increases overtime.

