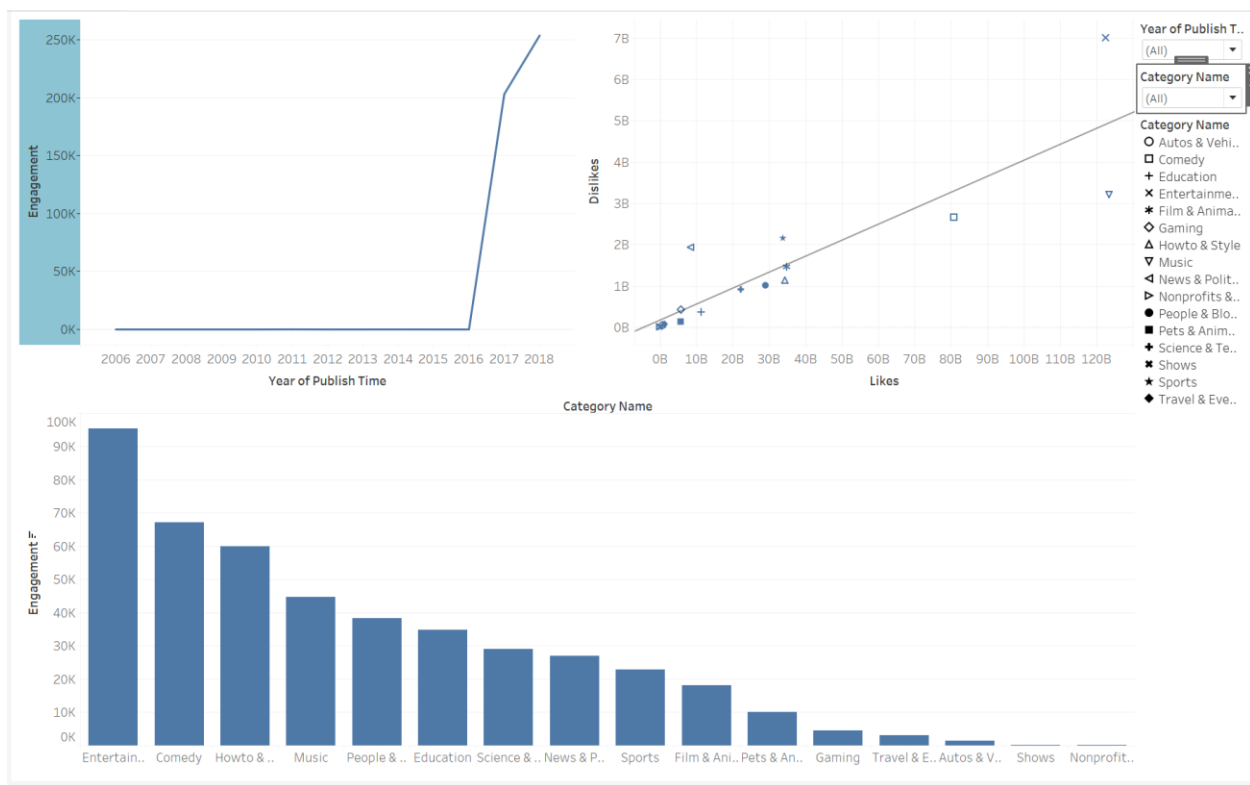


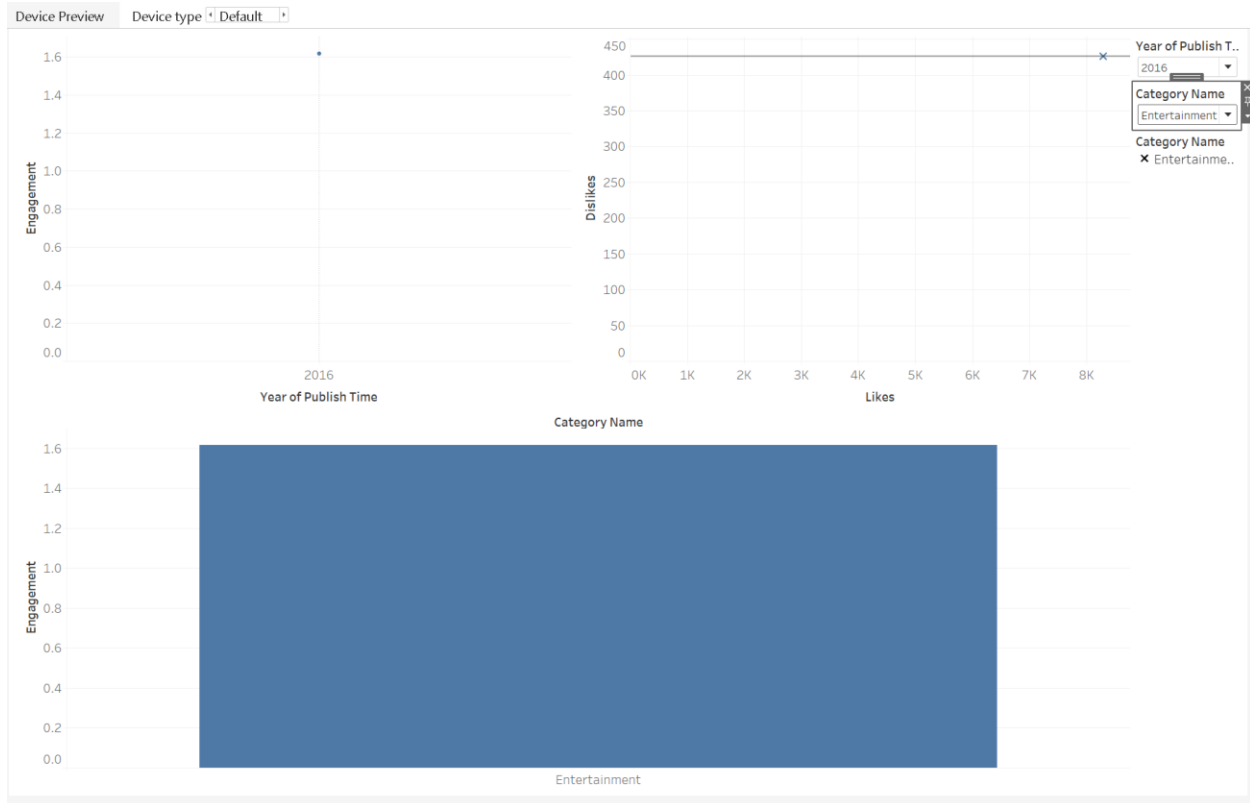
# UDACITY BAND DATA VISUALIZATION PROJECT

## Links

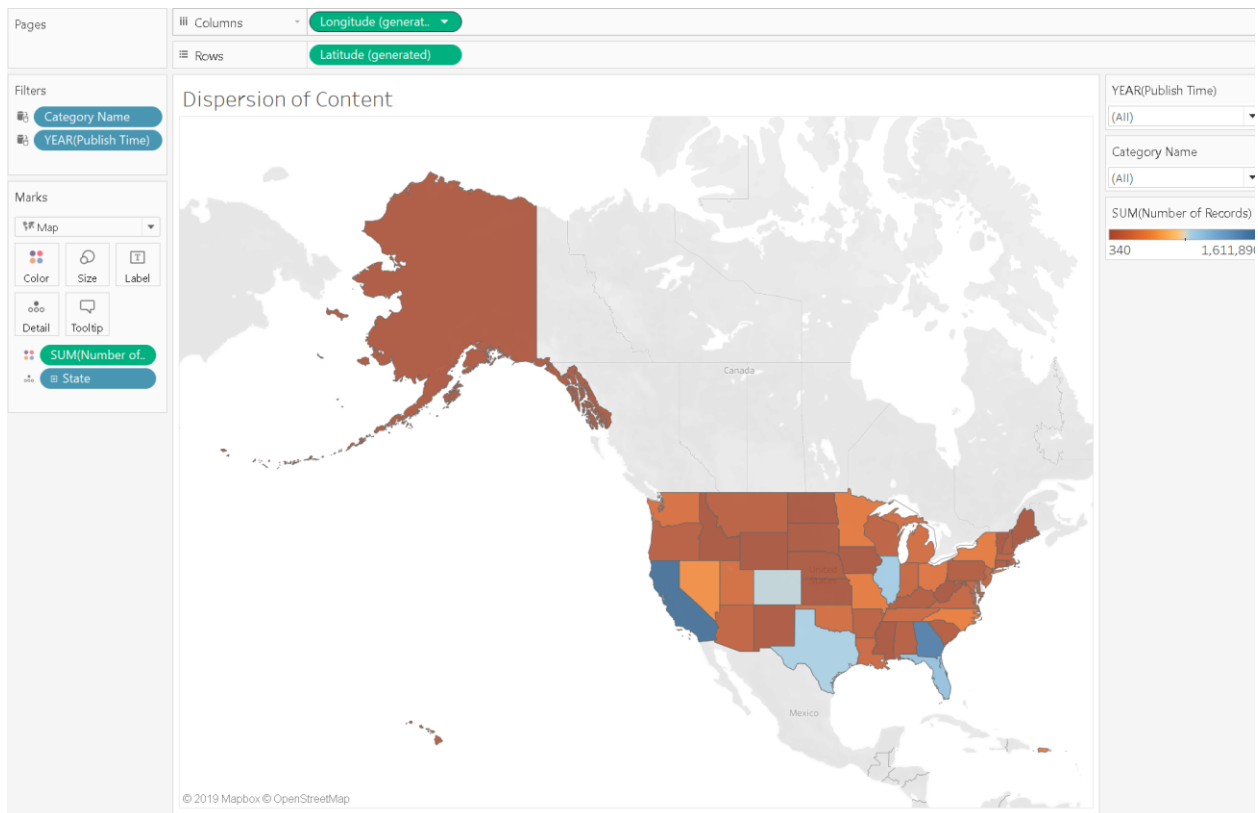
Dashboard:



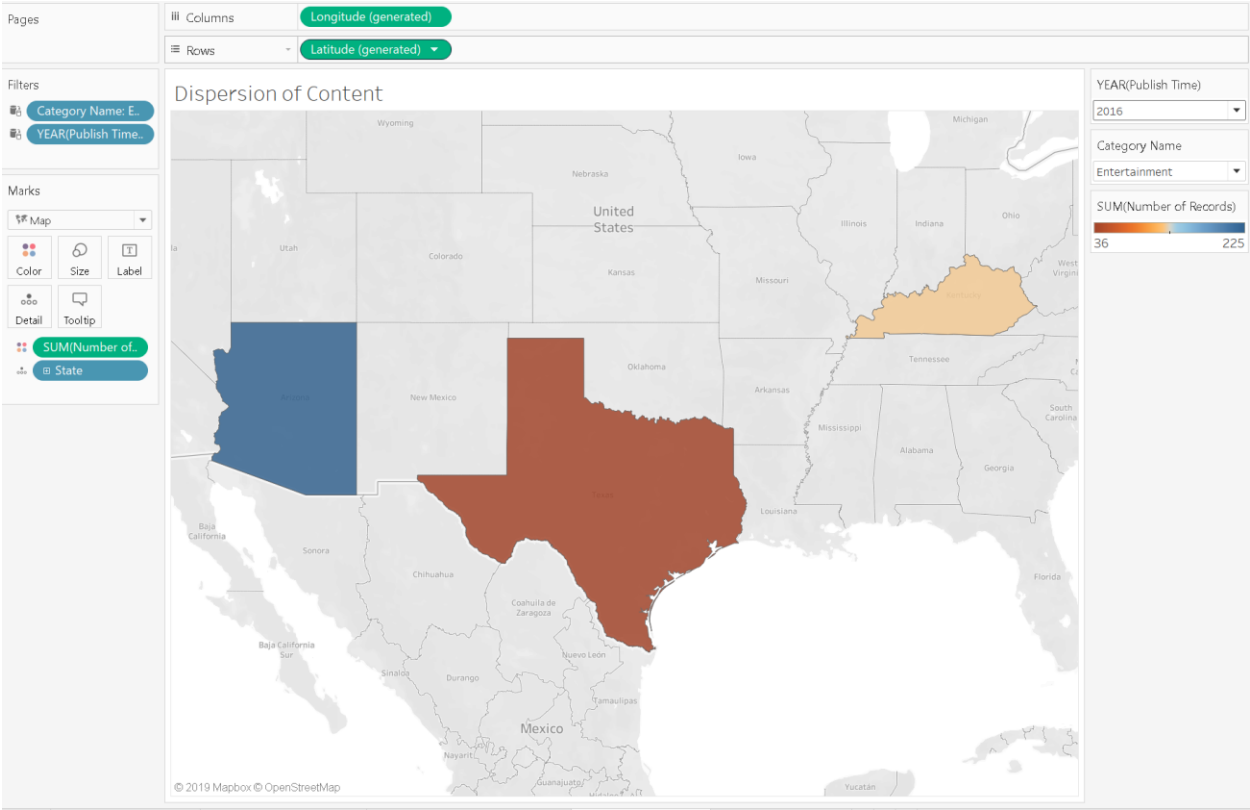
After Filter Applied Across All Worksheets:



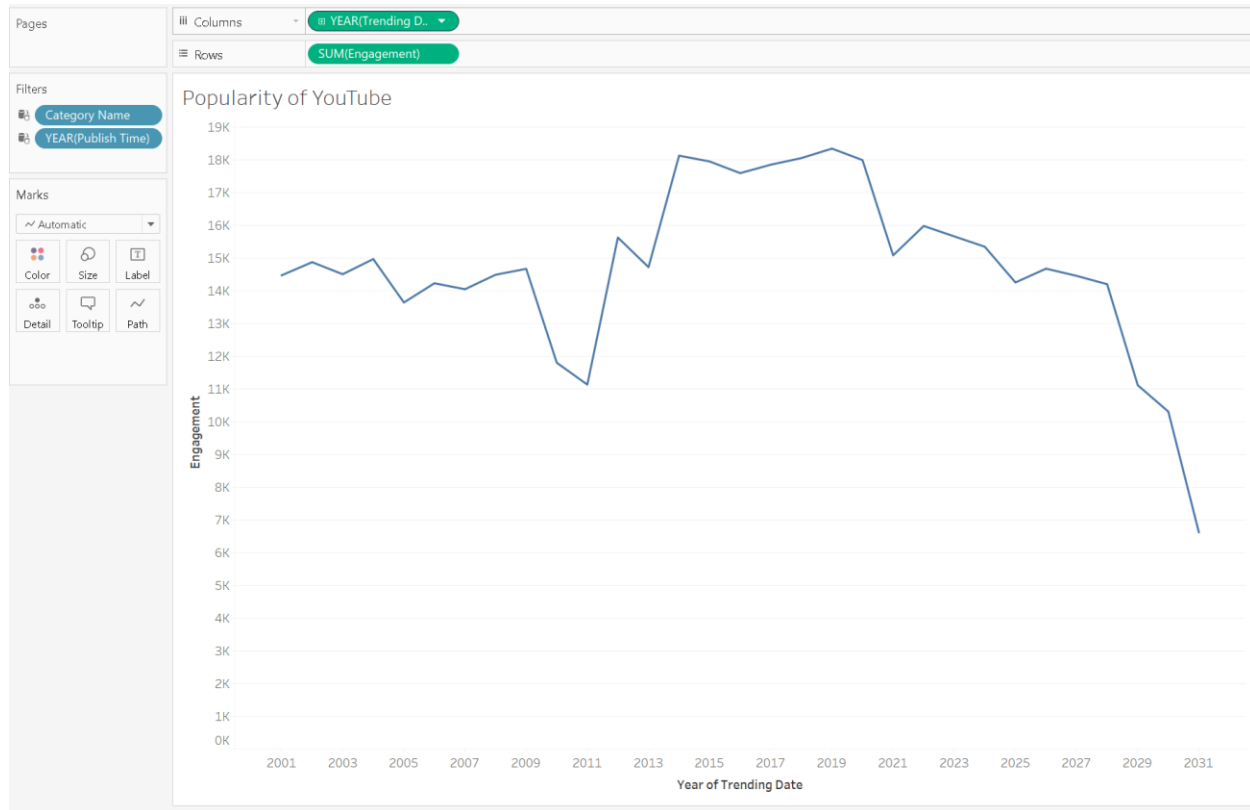
## Worksheet #1:



After Filter:



Worksheet #2:



## Summary

I set out to answer the question, “Which types of YouTube channels have the most engaged viewers at any given time?” To measure engagement, I used the metric pulled from the resource listed below – which defines engagement as the number of likes, comments, and shares divided by the number of views. I created a calculated field, “Engagement”, as my main metric for the dashboard. As displayed in the dashboard, I utilized three graphs: a line graph to depict viewer engagement over video publication year, a bar chart displaying engagement by YouTube channel category, and a scatter plot to demonstrate the correlation between the number of likes against the number of dislikes among the various channel categories. Across all years, the “Entertainment” category had the most engaged viewers, with 95,339 interactions per view. It was also the category that was an outlier in terms of the relationship between likes and dislikes for any given video, with far more likes (122 billion) than dislikes (70 billion) on record. Engagement rate over time had virtually the same trend across all channel categories. For “Entertainment”-related videos, the trend matched the trend across all category types in the sense that viewer engagement reached a large peak in videos published in 2017 and continues to increase through videos published in 2018.

In worksheet #1, I wanted to provide a map for the audience that displays the areas within the United States that generate the most content within a given YouTube channel category. As shown in the sheet, users may filter by Publication Year and Category name to see which states produced the most content at any given point in time. Overall, the state of California had the highest number of videos generated across all publication years. However, users can play with the filters shown to the right side of the map to see how

trends differ by category and by publication year. For example, Florida generated the most “Entertainment” videos across all years, however in 2016, Arizona led in generating “Entertainment”-related videos.

Worksheet #2 depicts the trend of YouTube over time and how viewer engagement may change over time as video trends fluctuate. The line graph shows a dip in viewer engagement in videos that were trending in 2011 (~11,000 interactions), steadily increasing in 2013 (~18,000 interactions), and reaching its apex in 2019 (18,346). From there, viewer engagement is anticipated to steadily drop through 2031. This prediction may change, if YouTube continues to find ways to reinvent the platform via paid subscription content or interactive content. However, like several other social media platforms (e.g., MySpace, Vine) before it, YouTube may garner less attention as the latest and greatest in social media technology emerges in future years.

## Design

I chose to utilize a blue color scheme consistently throughout both my dashboard and worksheets’ graphics to ensure that those who are color-blind are able to more easily interpret the graphs.

## Resources

YouTube Analytics Metrics: <https://www.octoboard.com/reports/youtube-engagement>