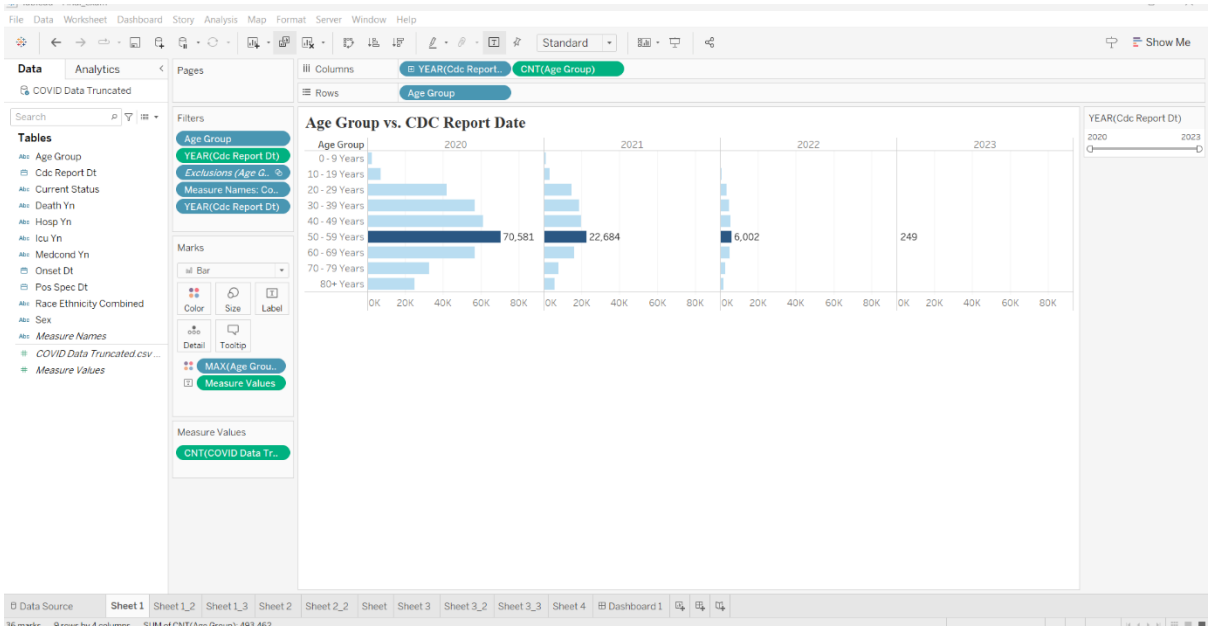
FINAL EXAM

Chosen Audience: The Board

Visual 1

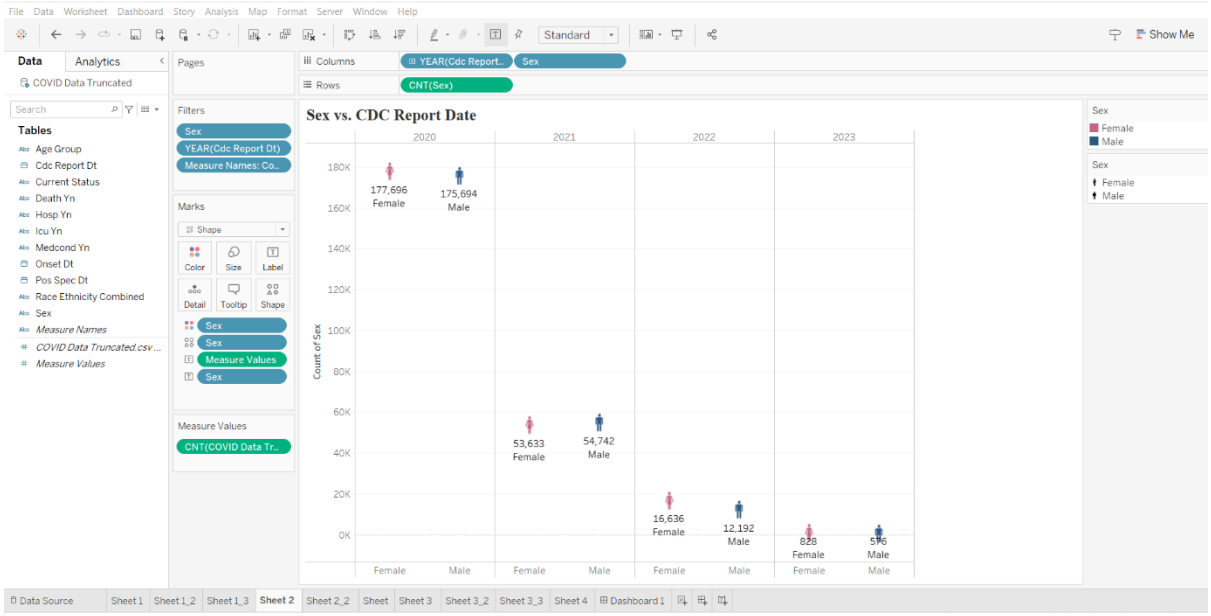


The chart presents a breakdown of the number of individuals in different age groups based on the CDC Report Date. It aims to highlight the age category that experienced the highest impact during the COVID-19 pandemic from 2020 to 2023. The chart follows two Gestalt Principles for visualization: **ENCLOSURE AND SIMILARITY**.

The Enclosure principle is employed by bounding the Age Group data within a distinct boundary, visually grouping them together.

Additionally, the chart adheres to the Similarity principle by employing highlighting techniques. Elements within the visualization that share similar characteristics are visually accentuated. By integrating these Gestalt Principles, the chart helps viewers get insights regarding the age-related impact of the pandemic over time.

Visual 2

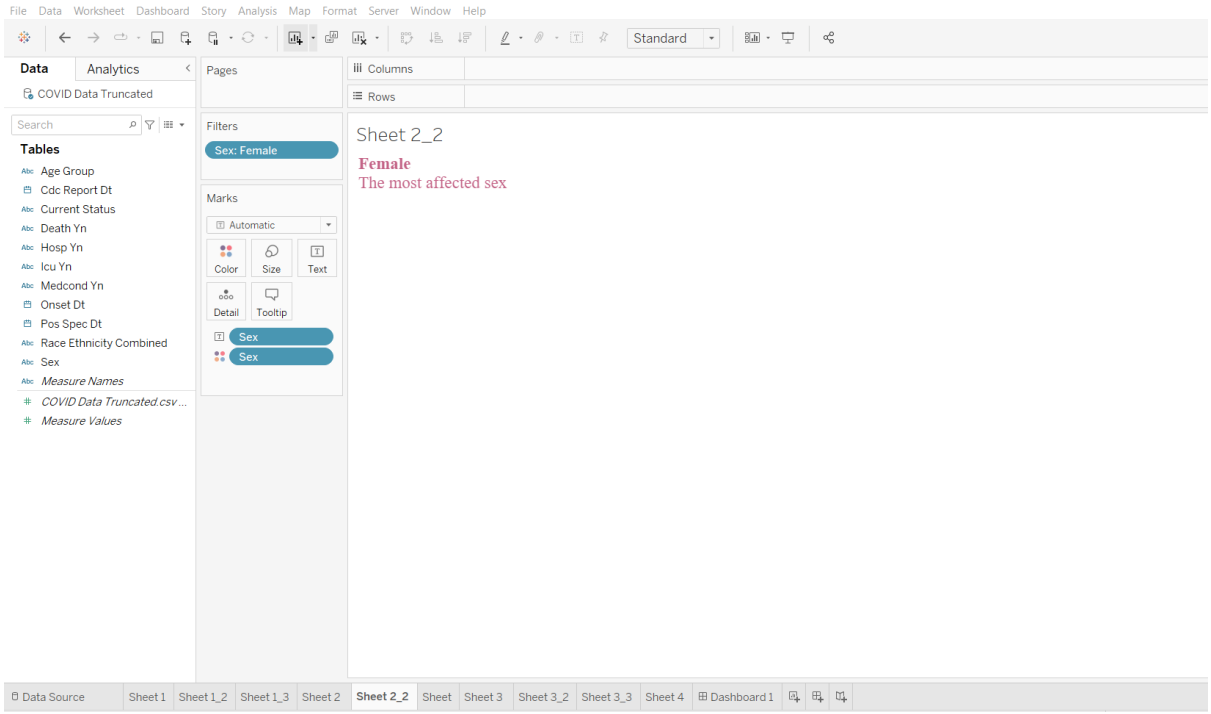


The initial chart provides a detailed breakdown of the number of COVID-19 cases affecting males and females based on the CDC Report Date from 2020 to 2023. The visualization applies two fundamental Gestalt Principles: **ENCLOSURE AND SIMILARITY.**

The Enclosure principle is effectively utilized in the chart by enclosing the data within distinct boundaries, creating visual groupings that aid in the comprehension of the information presented.

Furthermore, the chart adheres to the Similarity principle by using shapes and colours to represent the data in a manner that accentuates their similarities. It provides insight into the distribution of COVID-19 cases among males and females and helps in recognizing the gender that experienced the highest impact during the pandemic.

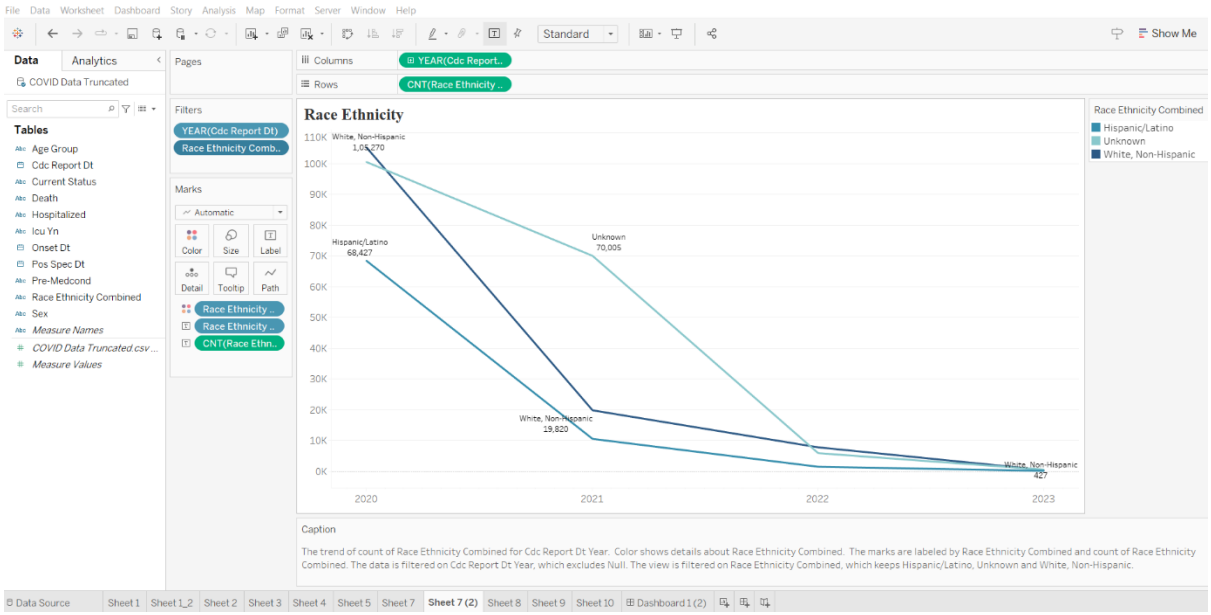
Visual 3



The provided Single Value Chart focuses on determining the gender that bore the greatest impact during the pandemic (2020-2023).

It also adheres to the Gestalt principles of Visualization. By employing colours based on the **SIMILARITY** principle, the chart visually highlights the conclusions. The color-coded approach enhances comprehension, making it easier to discern which gender experienced the highest impact throughout the specified time frame. As a result, the chart offers valuable insights into identifying the gender that experienced the highest consequences during the pandemic, presenting a clear and easily understandable portrayal of the data

Visual 4

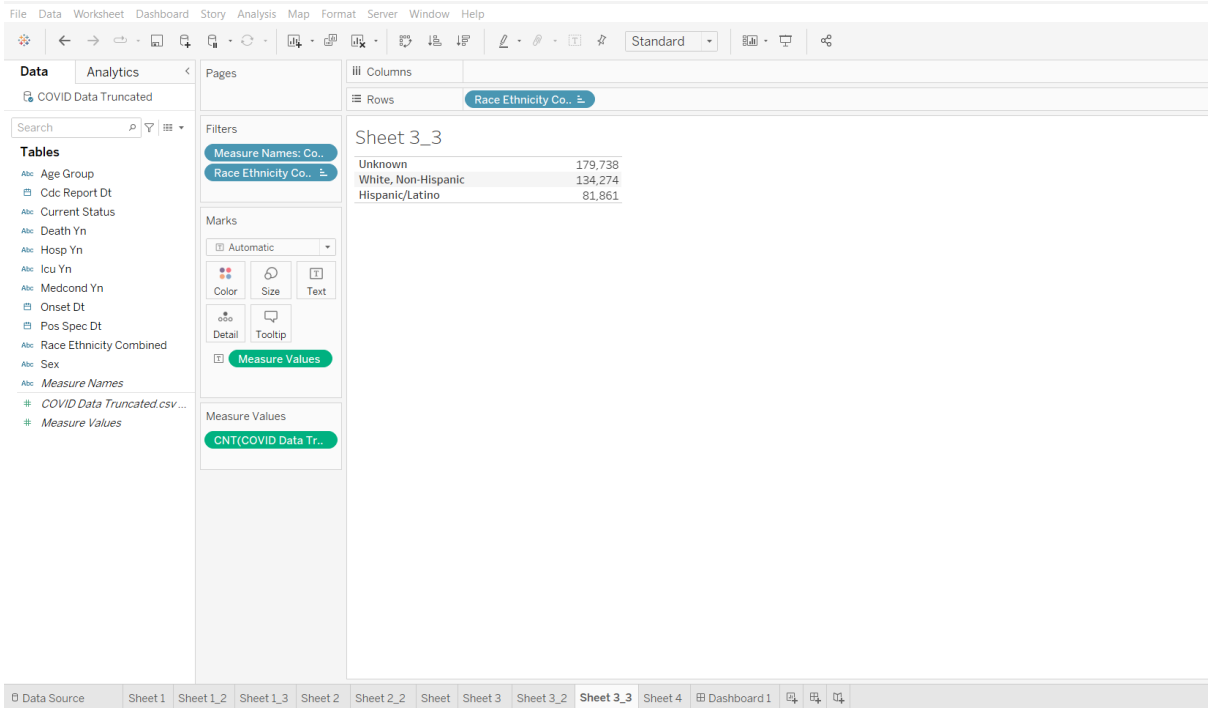


The presented chart displays the impact of the pandemic on the (top 3 affected) racial groups, showcasing the numbers within each category.

The visualization adheres to the **PROXIMITY** Principle, effectively employing the concept of spacing to enhance visual clarity and readability. By arranging the data points in a manner that ensures appropriate proximity, the chart facilitates a seamless understanding of various racial groups and their respective pandemic effects.

Through this thoughtful use of spacing, the chart not only provides an insightful overview of how the pandemic affected different races but also enhances the overall readability and comprehension of the visual representation

Visual 5

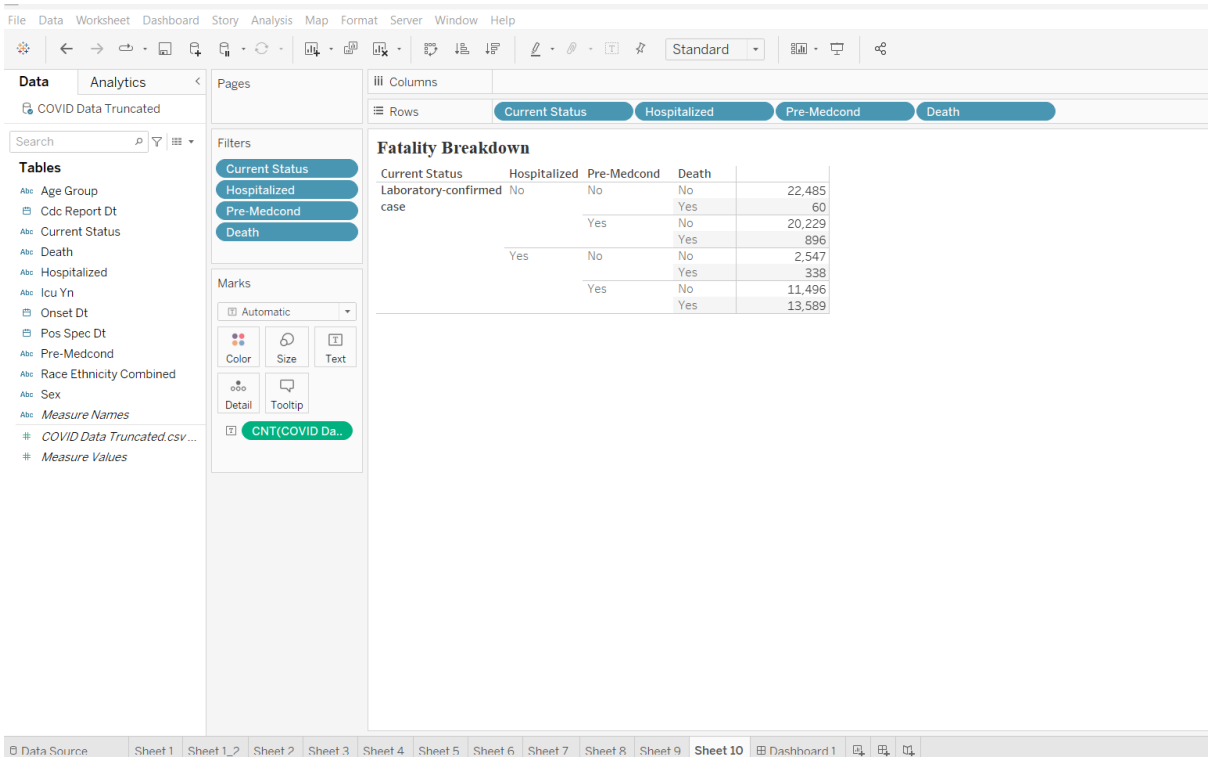


The Table chart presented here highlights the top 3 racial groups most affected by the pandemic, based on their respective counts.

The chart adheres to the **PROXIMITY** principle, utilizing its principles to enhance the visual organization and comprehension of the data.

By placing the data for each racial group in close proximity, the table facilitates a clear and concise representation of the top affected races. This grouping of related data creates a visual connection between the racial categories, enabling viewers to quickly identify and compare the impact on each group.

Visual6

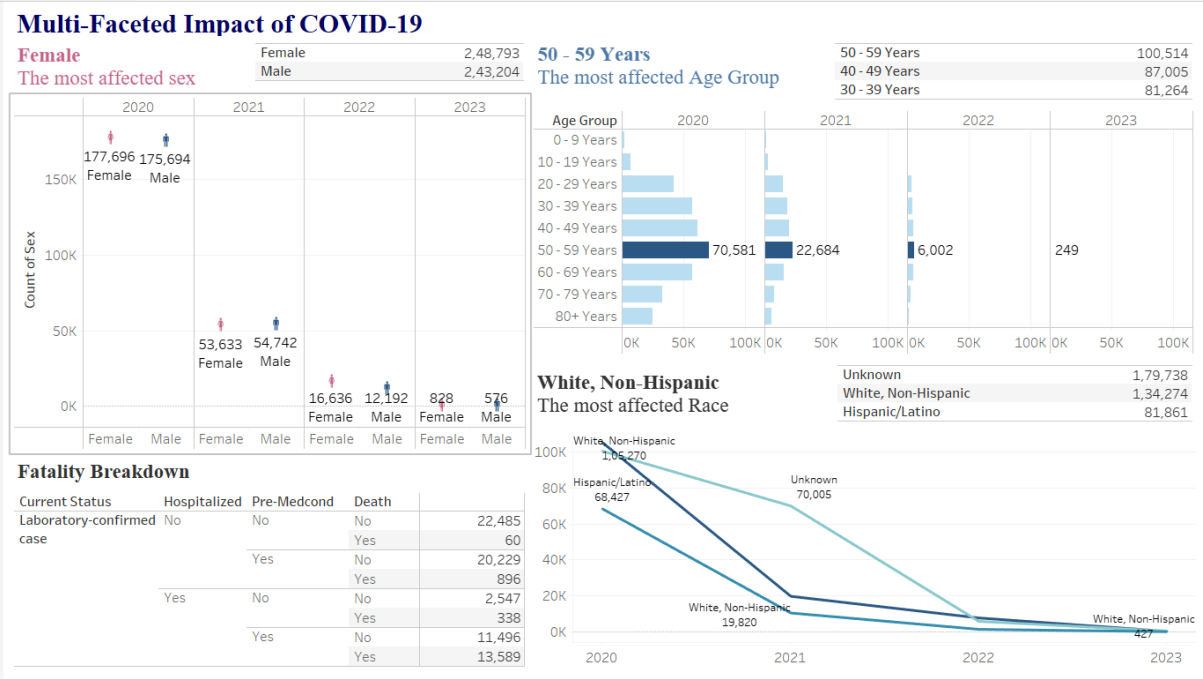


The table chart provides us with a comprehensive overview of complete data, concentrating on values categorized as either "yes" or "no." It combines three vital aspects related to the patients' experiences during the pandemic: hospital admissions, pre-existing medical conditions, and mortality status. The visualization adheres to two crucial visualization principles: **PROXIMITY AND ENCLOSURE**.

Proximity plays a significant role in organizing the data effectively. By arranging related information in right spacing, the chart ensures that viewers can readily perceive the associations between hospital admissions, medical conditions, and mortality status.

Additionally, the Enclosure principle is applied by visually grouping the data within distinct boundaries or cells. This encapsulation aids in perceiving each combination of "yes" or "no" values as cohesive units, further enhancing the chart's readability and clarity.

DASHBOARD



The dashboard provides a comprehensive and insightful analysis of the COVID-19 pandemic, covering age, gender, race-specific impacts, and key patient-related factors. Its diverse range of charts and tables ensures a holistic understanding of the crisis and facilitates informed decision-making.

By incorporating various visuals together, the dashboard adheres to essential design principles such as Proximity, Similarity, and Enclosure and Connectivity. Proximity is utilized to group related visuals together, fostering easier comprehension and allowing viewers to discern connections between different data points. The principle of Similarity is applied to highlight similarities between visual elements, facilitating the identification of patterns and trends. Furthermore, Enclosure is employed to create distinct boundaries around data points, presenting them as cohesive units and enhancing overall visual organization. These design principles collectively contribute to the effectiveness of the dashboard with valuable insights into the multi-faceted impact of COVID-19 across various demographic dimensions.

In developing the visuals for this dataset, I encountered several challenges due to the presence of unknown and missing values. To ensure the charts and tables are as accurate as possible, I made decisions on excluding certain missing values from categories. For example, I excluded missing data from the age group categories, as it constituted only a minuscule part of the larger dataset and would not greatly impact the chart's results.

Additionally, I opted to exclude null values from the CDC Report date category to provide a more precise and cleaner chart. Similarly, I excluded unknown and other sex categories from the dataset to focus solely on the relevant data for analysis. For race-specific impacts, I chose to showcase the top 3 races most impacted during COVID-19.

Throughout the process, the main goal was to enhance data accuracy and provide a clear understanding of the pandemic's impact on different aspects, such as age, gender, and race. By excluding irrelevant or incomplete data, I aimed to present a more reliable and informative dashboard.

However, it is important to acknowledge that the data has limitations due to the presence of unknown and missing values, which might have hindered a comprehensive analysis. The conclusions drawn from the available data should be approached with caution, recognizing that the dataset's incompleteness may not fully represent the actual impact of the pandemic.

Despite these challenges, the developed visuals aimed to provide CEOs and executives with a clear and comprehensive understanding of the COVID-19 pandemic's impact on different demographic factors. The visuals were designed to facilitate informed decision-making and to highlight areas that require attention to effectively address the challenges posed by the pandemic. The focus on accuracy and reliability ensures that the visuals presented valuable insights, enabling the audience to make data-driven decisions in response to the ongoing crisis.