1775 Census Demographics Overview Salomon Talgham Cohen, Mika Nguyen, Carlos Ponce, Benjamin Rice, Songrui Liu

Project Summary

The vibrant, culturally rich community of Charlestown offers a glimpse into the demographic makeup of the neighborhood prior to the Battle of Bunker Hill. This exploration provides a detailed overview of the 1775 census demographics of Charlestown through the analysis of a reconstructed census derived from historical records provided by the City of Boston Archaeology Program. Unlike today, where the United States Census Bureau conducts a comprehensive census every decade to gather demographic data on its population, no formal system for conducting a detailed population census existed in 1775. Nevertheless, the City of Boston Archaeology team painstakingly sifted through historical census records to construct an informative demographic overview which forms the basis for this analysis.

By examining the data on family structures, individual residents, and enslaved people, we aim to uncover significant historical sites that tell unique stories. This analysis is intended to support further in-depth study of the demographic makeup of Charlestown in 1775 and assist the archaeological teams in identifying potential excavation sites.

Additionally, this project seeks to compare the socio-economic dynamics of Charlestown in 1775 with its present-day conditions. In making this comparison, we aim to showcase Charlestown's transformation from a colonial settlement to the modern neighborhood it is today. Through this comparative approach, we can enhance our understanding of the area's historical and cultural evolution, providing valuable insights into how Charlestown has transformed as a community over the centuries.

Background

In 1775, Charlestown played a pivotal role during the early stages of the American Revolutionary War. It was the site of the Battle of Bunker Hill fought on June 17, 1775, an early conflict between British and American forces. Despite the Americans suffering heavy casualties and the town being lost to flame, the battle marked a turning point in American history as it boosted morale and American confidence in the Revolution. The historical significance of this Boston neighborhood emphasizes the importance of our analysis as it offers insight into the community of Charlestown during this transformative period.

Data

The data analyzed is a historical census that details information on the individuals living in certain households in Charlestown in the 18th century, including last name, first name, age, sex, race, occupation, and household identification. The analysis also incorporates data extracted from historical records that detail enslaved individuals in the 18th century. This information consists of their names, genders, and the names of their enslavers. The data offers detailed insights on 18th-century households and enslaved individuals in Charlestown which is essential in our project team's goal to create an accurate historical census overview of Charlestown in 1775.

To offer a comparative analysis of Charlestown in 1775 and present-day, US Census data of Charlestown from 2018-2022 is utilized. This data details information on the present-day demographics of Charlestown including information on race, age, sex, household sizes, and occupations of the population.

Data Cleaning

Through meticulous manual data cleaning and preprocessing of the data, we ensured a high standard of interpretability, particularly for data points that were more difficult to analyze using Python or Tableau. We streamlined the dataset by removing tabs unrelated to creating a census overview and focusing on "Census," "Census – Household Population," and "Enslaved People". We then filtered and cleaned the data, removing columns and rows

that lacked sufficient information for robust conclusions. Additionally, we corrected minor discrepancies, such as inconsistent capitalizations and null cells, to organize the data more effectively and ensure high-quality visualizations with minimal complications. Another major issue that we faced with the data was misinformation that we were informed was because of the AI that went about filtering the genders based on names. Although we identified many clear-cut cases, some were more nuanced, such as a wife taking over her husband's leather-making business, becoming the only employed woman in a male-dominated industry. With this in mind, we continued to filter and clean the data, ultimately achieving the most accurate dataset possible. In the more recent census dataset, we added total columns to aggregate categorized data, making visualization more efficient when coding. This was especially useful in the Boston neighborhood tab, where redundant categories like "white, single, 0-17" were unnecessary on their own. We embraced the archaeologists' approach of preferring complete data over partial data, ensuring that what we have is guaranteed to be accurate.

Data Links

Census Charlestown 1775:

https://docs.google.com/spreadsheets/d/1IAaTM7NF9_j91XobqakBxpxweSZft4ZAUKAQrE34 CYk/edit?usp=sharing

Census Charlestown 2017:

https://www.census.gov/about/what/census-at-a-glance.html

Data Types

Categorical: Sex, Occupation, Race, Relation to Head of Household

Nominal: First Name, Last Name, Unique ID

Quantitative: Age, Enslaved People in Each Family, Total People Enslaved in Record, Total Population

Task Analysis

Task Abstraction Table

The tasks in our table are prioritized based on their ability to provide a comprehensive overview of Charlestown's demographics, which is the main objective of our project. As we address these tasks, they should effectively narrate the story of the individuals present in 1775 Charlestown, delivering the most insightful information possible. This task table prioritizes uncovering the types of diversity present in Charlestown, information on various households, employment data, and comparing these metrics to those reported in present-day Charlestown.

Index (ID#)	"Domain" Task	Analytic Task (Low-level, "Query")	Search Task (Mid-level)	Analyze Task (High-level)
1	What kind of diversity of people was present?	Filter the data by demographics: How many children? How many women? How many men? How many are single? How many are in a relationship? How many widows? These are a few questions we can ask	Lookup	Present. We could make a square chart to compare the sizes of racial groups. We could make bar charts comparing single women to married women to widowed women.
2	How does the demographics of people in 1775 compare to the people of 2024?	Correlate the demographics of 1775 to 2024 to find the relationships that might apply to different aspects of the study	Lookup	Create pie charts or area charts to present different demographics concerning the whole town.
3	How many families, individuals, enslaved people?	Filter the amount of families, people, and enslaved people from the data set.	Browse	We could create a bar chart or pie charts to present the respective values for families, individuals, and enslaved people present in the data set.

How many people were employed? Filter out the data based the different jobs each how many were employed what kind of jobs did people have?	ad. ed and	Discover how many people were employed in each occupation.
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Observations & Insights

Employed Population of Charlestown

The majority of occupations listed in Charlestown are male-dominated, aligning with the historical context of male-dominated employment (Figure 3). The working population of Charlestown does not solely consist of men as women also took on prominent roles in society. A significant observation from the data reveals a high number of women recorded as widows, as seen in Figure 1 and 3. This trend indicates a high mortality rate among men during this period, which can be attributed to the onset of the Revolutionary War. These battles resulted in a substantial loss of life, affecting the household compositions of 1775 Charlestown. Widows became prominent figures within the household, often taking on the role of the Head, supporting their family in the absence of their husbands. This highlights the adaptability of women and their capabilities to extend beyond traditional domestic roles.

Servant roles were the second most common occupation, emphasizing the reliance on domestic help within households. Servants, who were often enslaved individuals, were essential in helping families maintain and manage their estates more effectively. In contrast, modern households have witnessed a shift from servant dependency to household dynamics in which domestic chores are commonly distributed among family members.

The nature of employment in Charlestown has undergone a dramatic transformation from 1775 to the present-day. Occupations in 1775 primarily involved manual labor, domestic services, trade and commerce, and craftsmanship among others, reflecting the status of the economy and social structure of the period. In stark contrast, modern employment is largely characterized by professional and technical occupations, indicating a shift towards the tertiary and quaternary sectors of the economy (Figure 2).

Figure 1:

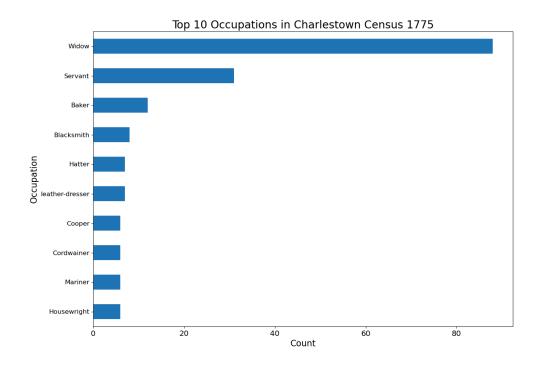


Figure 2:

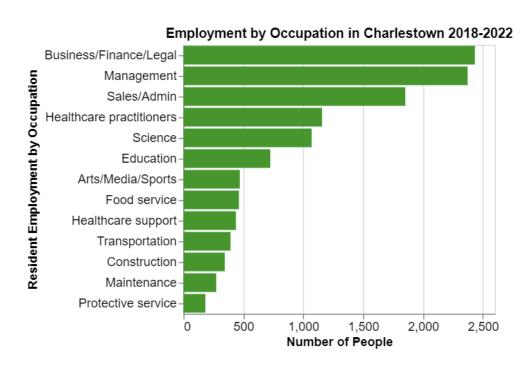
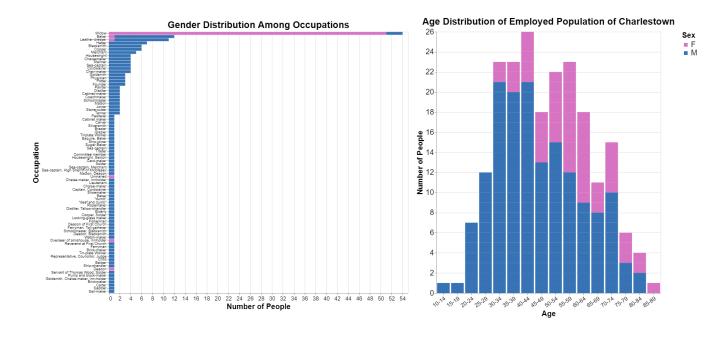


Figure 3:



Average Household Size in Charlestown

Household sizes in the 18th century varied significantly as compared to modern households. The distribution of household sizes in 1775 Charlestown as depicted in Figure 4, reveals that the majority of households consisted of one or two individuals, however, households exceeding 5 people make up a significant proportion. These larger household sizes may be attributed to living with members of extended family and other non-relatives such as enslaved individuals. This reflects the familial structures in 1775 Charlestown and the lifestyles they managed which required domestic help within the household. Modern households, in contrast, often consist of smaller family units, reflecting a change in socio-economic structures over time. Shown in Figure 5, household sizes in 2018-2022 Charlestown show significantly higher frequencies of 1-person and 2-person households. Space constraints and economic factors promote smaller nuclear units. Since the modern economy has shifted towards service and technological industries, the need for larger households has reduced as the economy now supports smaller, independent units. Furthermore, the urbanization of Charlestown has resulted in smaller living spaces and

therefore smaller household sizes. In 1775, larger properties accommodated bigger households.

Figure 4:

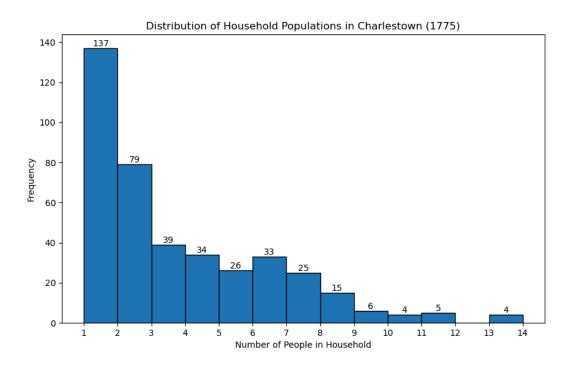
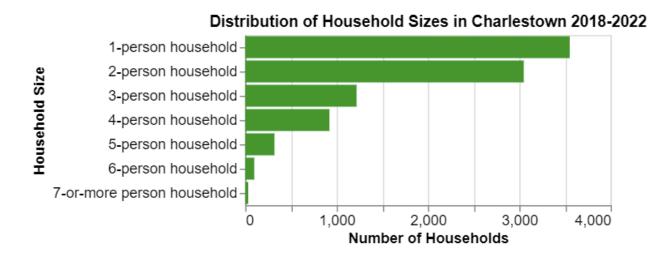


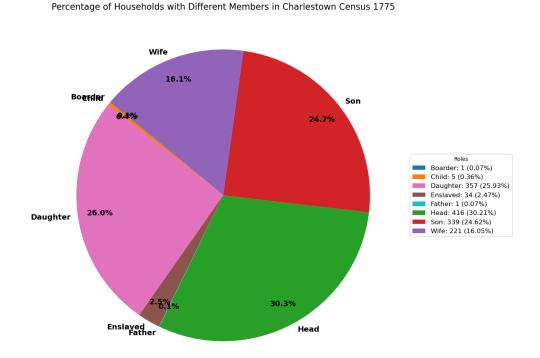
Figure 5:



Distribution of Household Members in Charlestown 1775

The largest segment of the population for household roles is composed of Heads of household. During this period, households were viewed as individual units led by a single figure, reflecting the traditional family structure in which one individual is recognized as the primary authority. This is consistent with the male-dominant occupational structure of the time, as indicated by Figure 3. Sons and daughters represent a significant portion of household members, suggesting a balanced presence of both male and female individuals. The smaller proportion of wives can be attributed to the high number of widows and female heads of household present in Charlestown. Household roles in 1775 Charlestown emphasizes the presence of traditional family structures with clear roles established for each household member. Figure 6 reinforces the presence of "nuclear families" in Charlestown, as there were very few outliers in the data.

Figure 6:



Age, Sex, and Racial Diversity in Charlestown

Age demographics in 1775 Charlestown revealed a significant proportion of young individuals ranging from 5 to 17 with lower frequencies in the older populations. This young demographic present in 18th century Charlestown may be attributed to shorter life expectancies, therefore, resulting in a comparatively smaller elderly population. Present-day Charlestown displays an aging population with significantly high numbers of individuals in the age range of 30-39 and ages exceeding 60. Improvements in healthcare and living conditions over time have extended life spans, increasing the proportion of older adults in the population. Figure 9 presents a cross-category representation of the age, sex, and racial demographics in Charlestown, comparing 1775 to 2018-2022.

The gender distribution of Charlestown in 1775 comprised a larger female proportion compared to males. Historically, the early stages of the American Revolution could have impacted gender demographics, as male individuals participated in wartime roles. Present-day Charlestown continues to exhibit a higher percentage of females. Despite the passage of time and significant societal changes, the gender distribution in Charlestown suggests continuity in demographic patterns. Figure 8 offers a comparative analysis of gender distribution in Charlestown, highlighting the percentages of males and females in both historical and modern contexts.

In 1775, the population of Charlestown was predominantly white, with a small minority of black individuals, reflecting the historical context of the period. The racial homogeneity present in 1775 can be traced back to colonial immigration patterns. The black population comprised enslaved individuals, as the institution of slavery was pervasive in this 18th-century society.

Modern-day Charlestown presents a more diverse racial composition, although the majority of residents are still white. Figure 7 offers a comprehensive visual representation of racial demographics in Charlestown, contrasting the homogeneity of 1775 with the more diverse present-day population. The modern demographic has broadened to include racial groups such as Hispanic or Latino, Asian American/Native Hawaiian/Pacific Islander, Black, and others. This change in racial demographics can be attributed to factors such as

immigration throughout the 19th and 20th centuries, altering the demographic landscape. Although present-day Charlestown reveals a more diverse community, the consistent majority of white residents may be linked to socio-economic factors such as income levels, educational opportunities, and property values in the area. Economic barriers can restrict other racial or ethnic groups from moving into more affluent neighborhoods.

Figure 7:

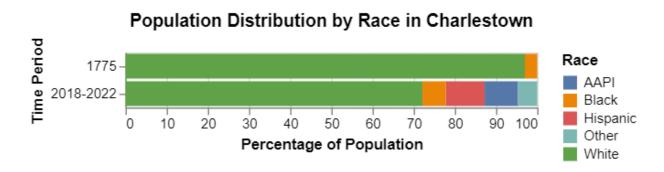


Figure 8:

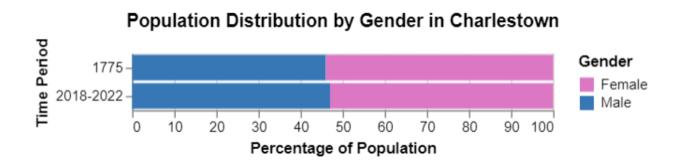
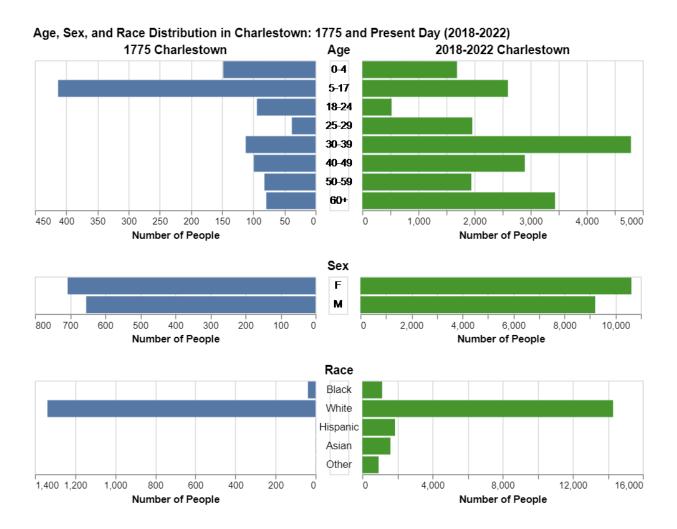


Figure 9:



Conclusion

This analysis provides an overall summary of the census of Charlestown in 1775 and reveals demographic and social changes from 1775 to the present day. Our visualizations reveal a fascinating snapshot of Charlestown in 1775, illustrating key demographic insights. There was a surprisingly large proportion of households that were small, with one or two members. Another takeaway was that a significant number of women were widows, reflecting the era's high male mortality, likely due to the Revolutionary War. The racial composition was predominantly White, with a minority of Black individuals, highlighting the

presence of slavery. Comparatively, modern Charlestown exhibits greater racial diversity but maintains a White majority. Gender distribution has remained relatively consistent, with females slightly outnumbering males both in 1775 and today. These visualizations underscore the social and demographic shifts over centuries, offering valuable historical context. Future follow-up work could be conducted to further analyze the specific factors that influence the trends found. Examining socio-economic trends could provide insight into these demographic changes.

Suggested Dig Sites

Based on our analysis it is difficult to determine specific dig sites. However, one area that we believe the archaeology team should focus on is uncovering the stories of the widows who lived in Charlestown. In looking at households composed of widows, and larger household sizes, we have determined that these households provide a unique insight into the social dynamics and strategies of women during this period. The presence of a significant number of widows suggests a high mortality rate among men. The reason might be the Revolutionary War.

Potential dig sites could include areas where historical records indicate a higher concentration of widow-led households or households of widows that had unique roles in society. Discovering these sites may uncover artifacts and structures that provide a glimpse into their daily lives and roles within the household. These findings could provide a deeper understanding of the social and economic impacts of the war on normal people and the shifts in household dynamics. In our analysis we found that Elizabeth Webb Phipps (RES.308) could be an interesting story to uncover. Elizabeth is the widow of Joseph Phipps and was the only female baker in the town of Charlestown. She was also the mother of 4 children: Sarah (17), Bethiah (15), Hannah (12), and Samuel (8). Similarly Martha King Gardner (RES.158) was the only female leather-dresser and the widow of James Gardner. Additionally, focusing on areas of house and work sites of enslaved people could reveal more about the conditions at that time. It could help uncover enslaved people's living site, personal items, and other material culture that lead to their daily lives and problems. This could significantly contribute to our understanding of the institution of slavery in Charlestown and its effects on the community.