

## **How Did the U.S. Age and Gender Distribution Shift from 1900 to 2000?**

This chart shows how the age and gender makeup of the U.S. population changed between 1900 and 2000. I chose a population pyramid because it's one of the clearest ways to compare age distributions across two time periods. Each bar represents a five-year age group, with males on the left and females on the right. I used lighter shades for the 1900 data and darker ones for 2000 so the changes are easier to see.

One of the biggest takeaways from the chart is how much the population aged over the century. In 1900, the pyramid is widest at the bottom, showing high birth rates and shorter life expectancy. In 2000, the shape is much broader toward the top, which reflects more people living longer lives. You can also see that in the older age groups, there are more women than men. This lines up with the fact that women tend to live longer than men.

To build the visualization, I grouped ages into five-year ranges and labeled them to make the axis easier to read. I also flipped the values for males to create a mirrored effect, which helps with side-by-side comparison. Compared to Homework 1, where I worked with rough estimates and an early sketch, this version is much cleaner. It uses exact population counts and has a more polished design. It also takes the best parts of the line graph, stacked bar graph, and pie chart that I used last time and combines it all into one with the benefits of each.

Overall, the final chart gives a clear view of how the U.S. population changed over time. It helps highlight big trends, like the shift toward an older population and the growing difference in life expectancy between men and women. This shows how thoughtful design choices like color, layout, and grouping can make data easier to understand.