To estimate the median P-T ratio for each group, we should determine the middle value of the data set for each histogram. The median is the value that separates the higher half from the lower half of the data.

For the \*\*west\*\* group, there are 24 states. The median will be the average of the 12th and 13th values when the ratios are ordered. Observing the histogram, we see that the tallest bar spans the ratios from 14 to 16, and counts include the 12th and 13th values. Thus, the estimated median for the west is between 14 and 16, likely around 15.

For the \*\*east\*\* group, there are 26 states. The median will be the average of the 13th and 14th values. The tallest bar in the histogram spans the ratio from 14 to 16, accommodating the 13th and 14th values as well. Thus, the estimated median for the east is also between 14 and 16, likely around 15.

### Comparison of Distributions

Upon examining the distributions, both groups show a concentration of P-T ratios around 15. However, the west group displays a slightly more spread distribution, with a few states having higher ratios ranging up to 22. The east group has a tighter distribution, with no ratios exceeding 20, indicating less variability among the eastern states compared to the western states.

### Comparison of Mean P-T Ratios

Considering the shapes of the distributions, the mean P-T ratio in the east might be slightly lower than in the west due to the tighter concentration and lack of extreme higher values in the east group. The presence of more higher ratios in the west could pull the mean of the western distribution slightly above the median, unlike in the east, where it is anticipated to align more closely with the median.