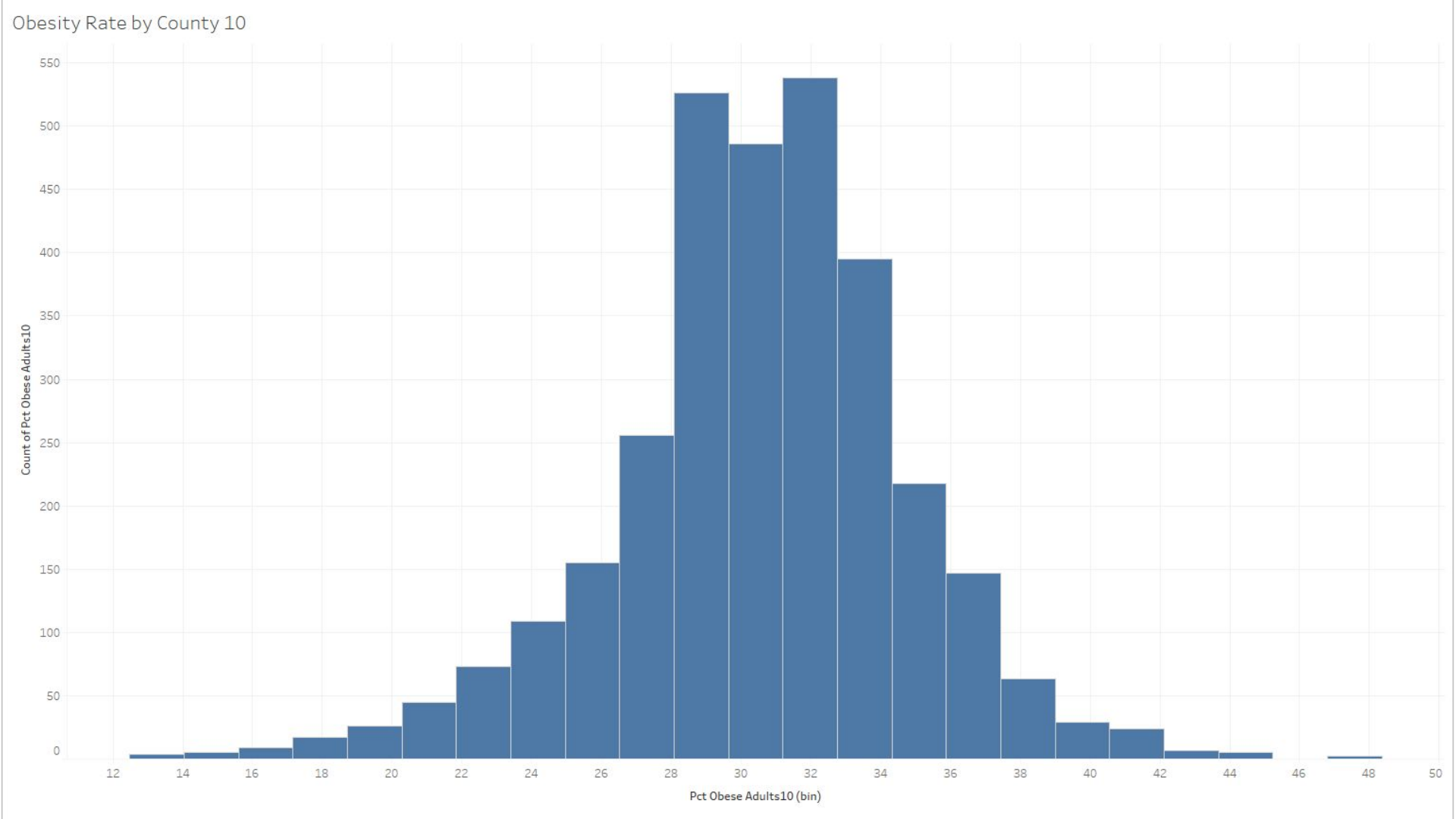
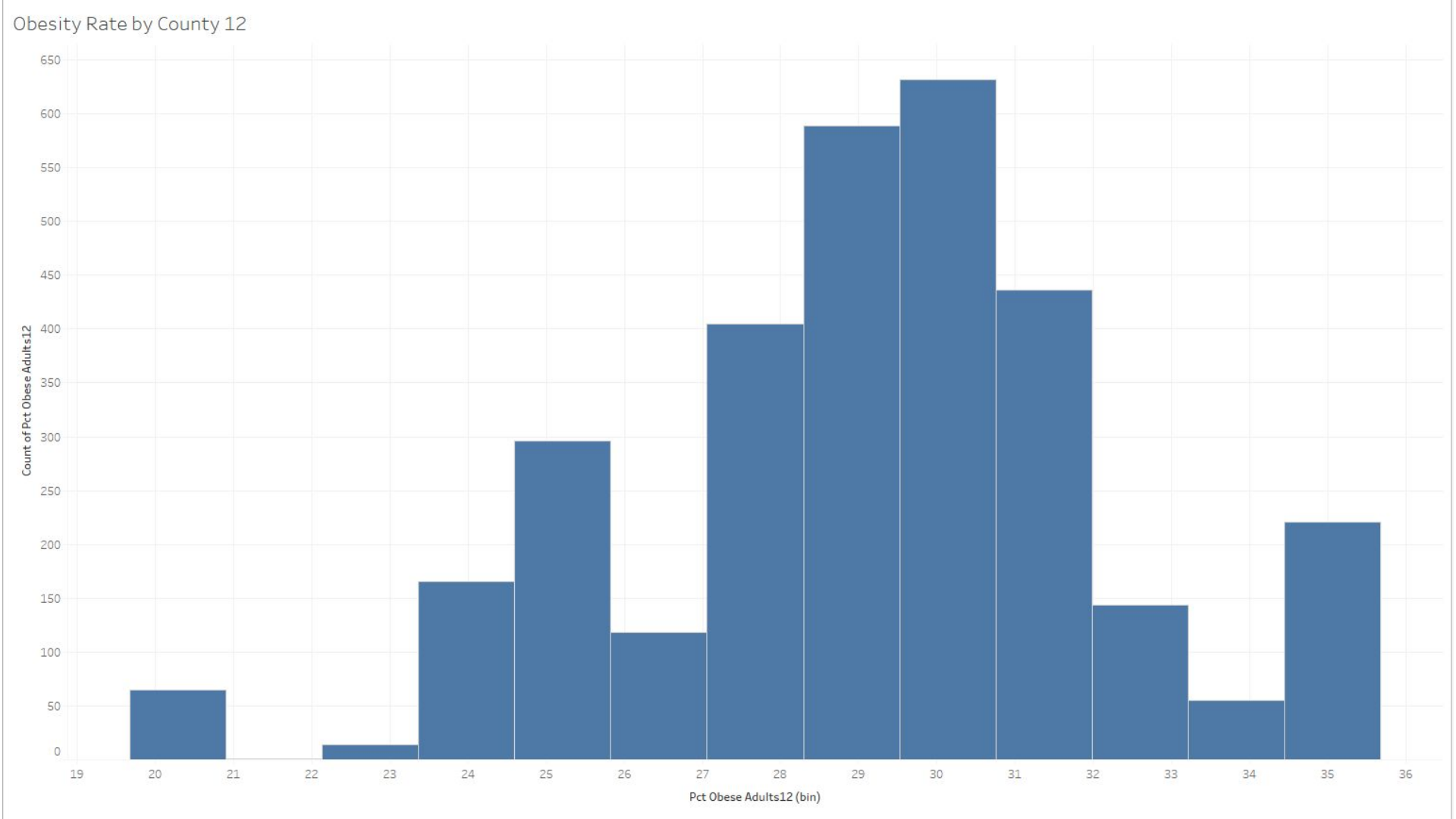
Tableau Challenge

Nathan Johnson


Obesity Rate by County 10
Count of Pct Obese Adults10
550
500
450
400
350
300
250
200
150
100
50
0
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
Pct Obese Adults10 (bin)

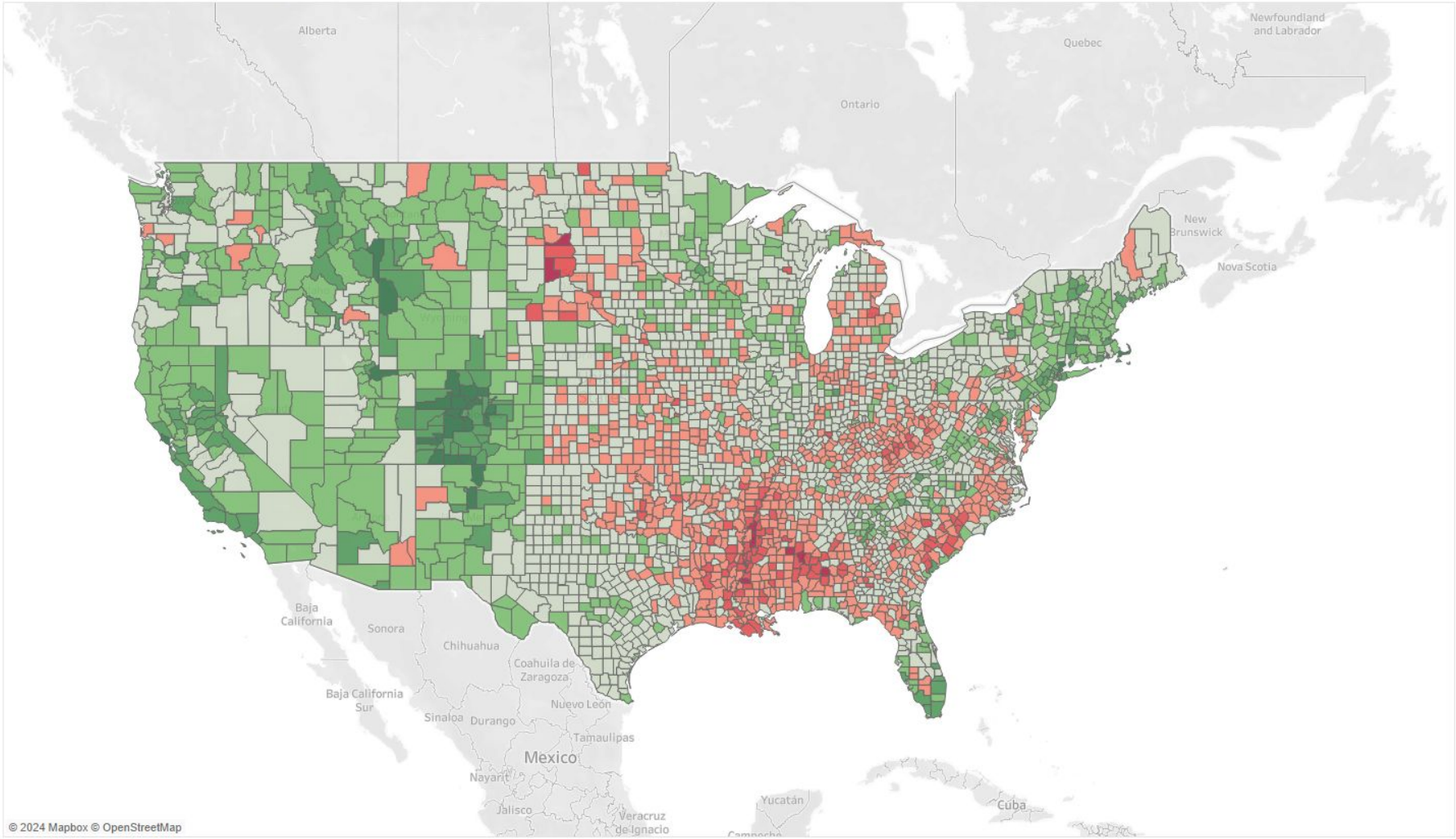

Obesity Rate by County 12
Count of Pct Obese Adults12
650
600
550
500
450
400
350
300
250
200
150
100
50
0
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
Pct Obese Adults12 (bin)

For 2

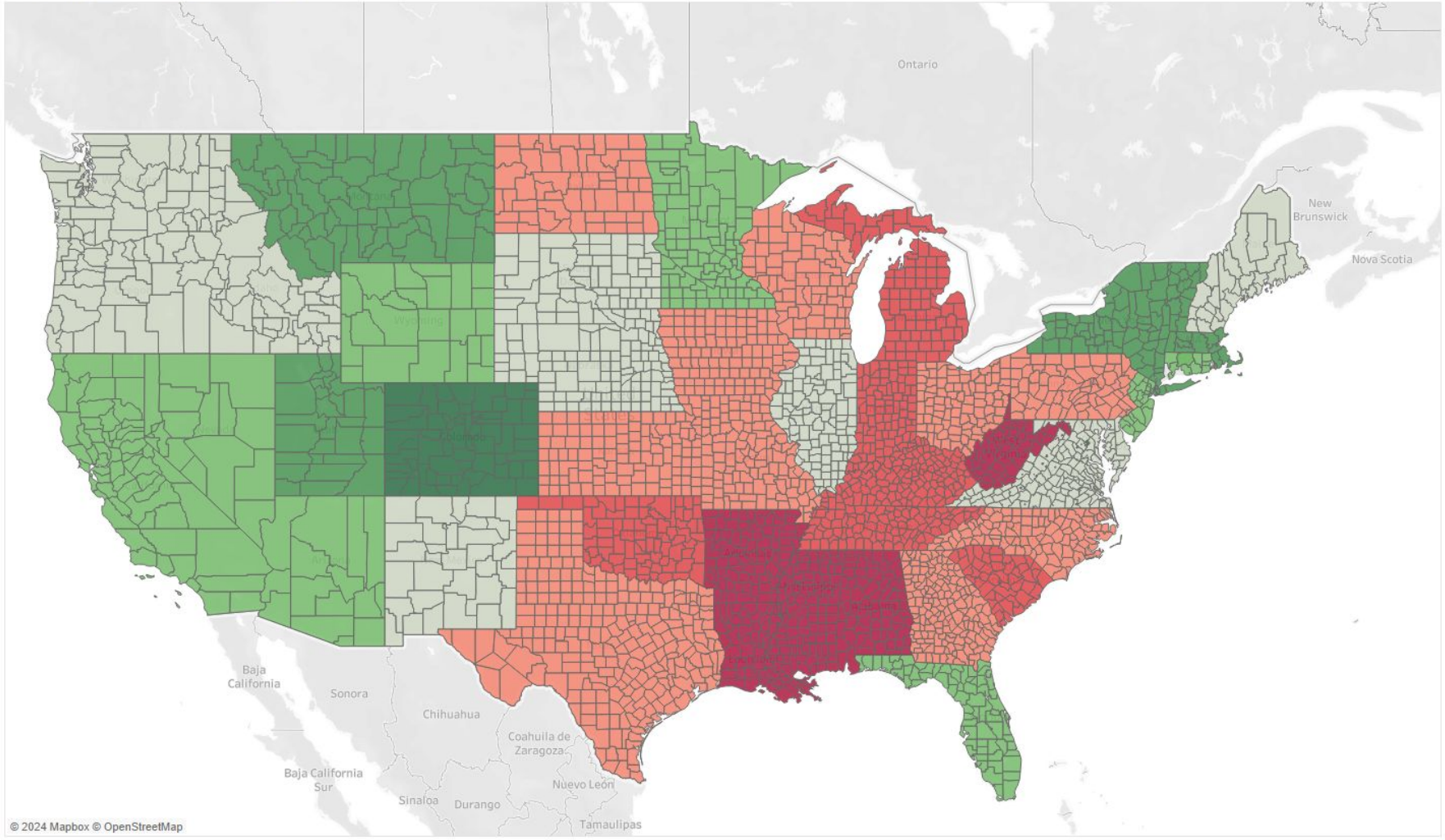
What is different about these two histograms?

The mean of both histograms appears to be roughly the same. The 2012 data seems to have a lot less variance than the 2010 data largely in part due to the change in how the data was collected for 2012.

US Map with County Obesity 10



US Map with County Obesity 12

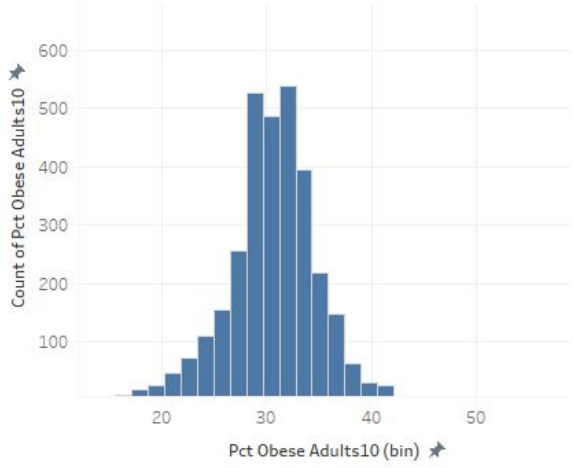


For 3

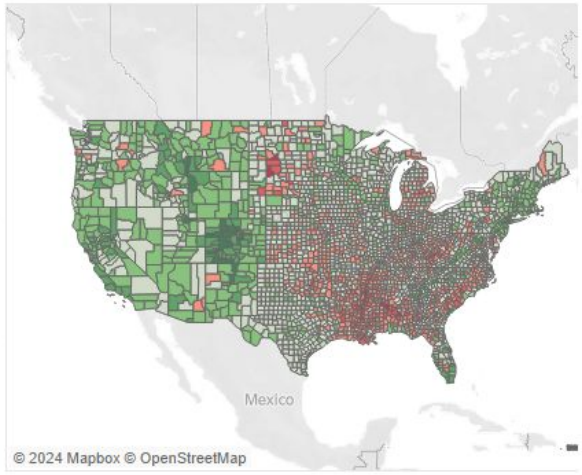
What is the most striking difference between the two maps?

As mentioned in my answer to question 2, the way the data was collected resulted in differences in how the way the data is portrayed. The 2010 data was collected by county while the 2012 data was collected by state.

Obesity Rate by County 10



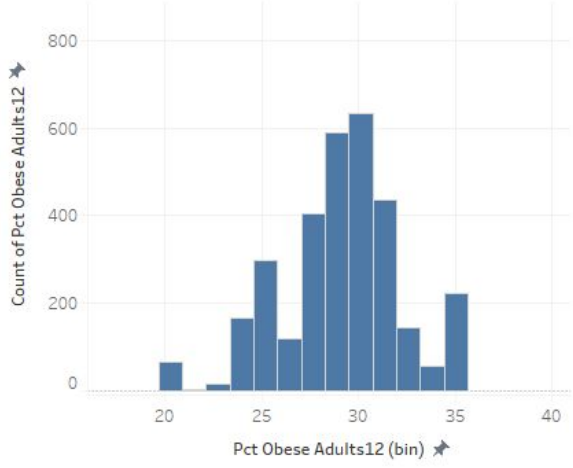
US Map with County Obesity 10



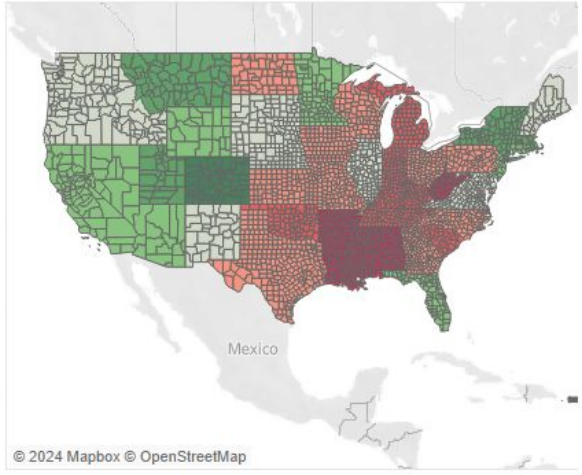
Avg. Pct Obese Adult..
13.10 47.90

Avg. Pct Obese Adult..
20.50 34.70

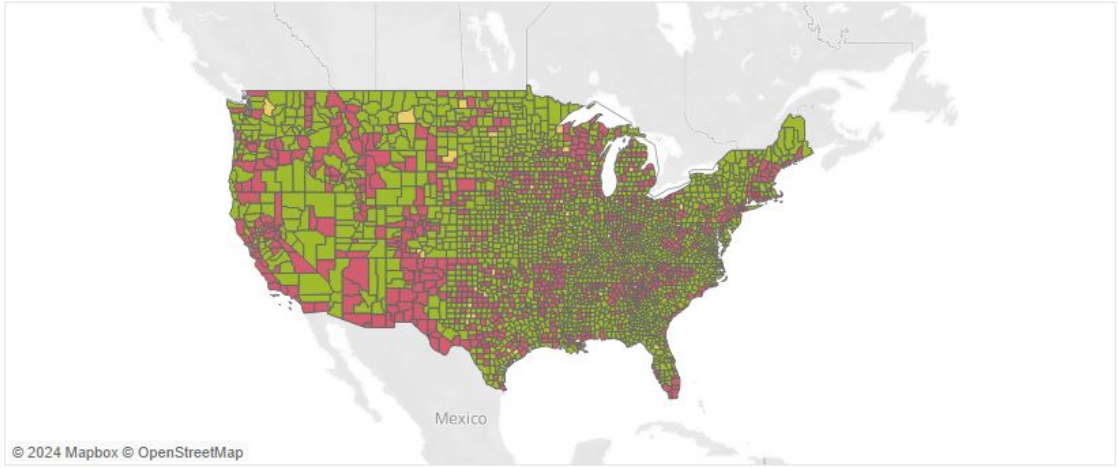
Obesity Rate by County 12



US Map with County Obesity 12



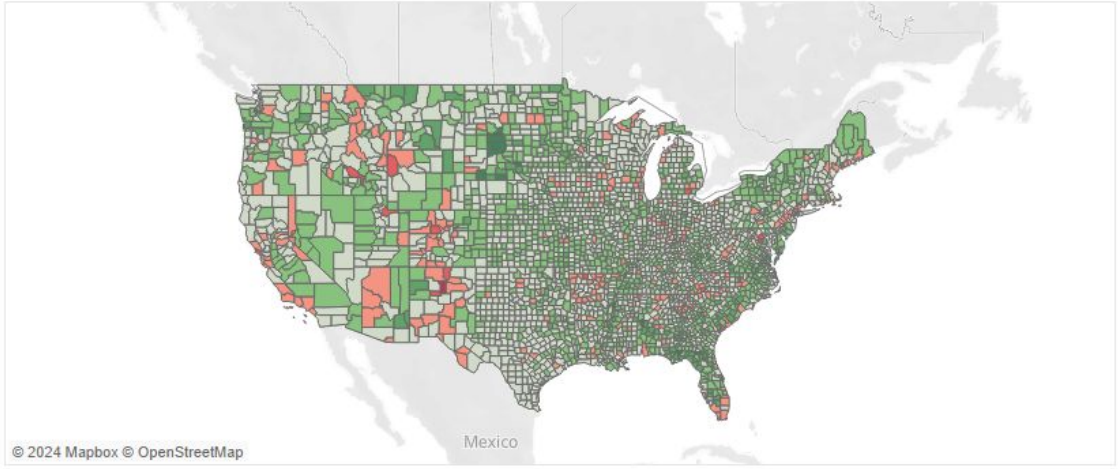
US Map with County Obesity 10 Categorical Calculated Field



Obesity Rate by County 2..
Better
Same
Worse

Obesity Rate by County 2..
-16.60
16.60

US Map with County Obesity 10 Continuous Calculated Field

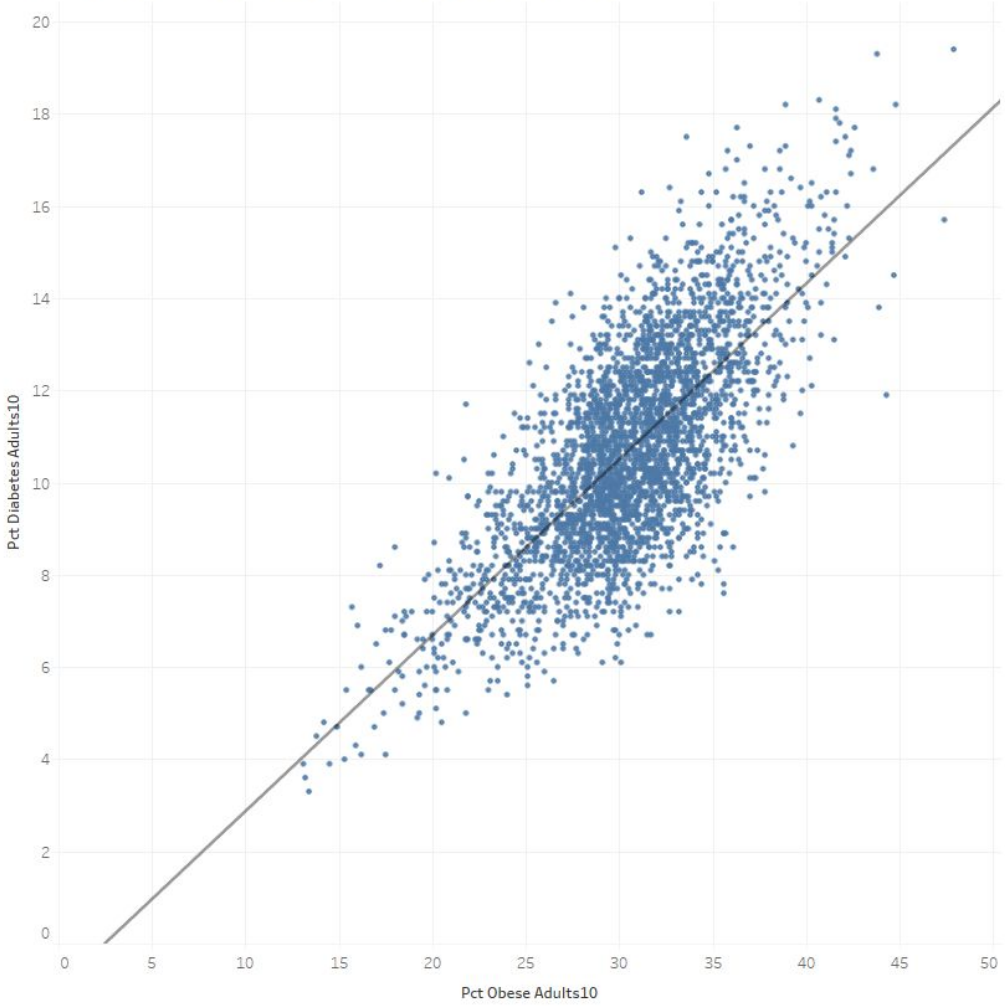


For 8

Which calculated field do you think better communicates which counties got better and worse?

I believe the categorical calculated field does a better job. If we are purely looking for which has gotten better, which has stayed the same, and which has gotten worse, the continuous calculated field adds unnecessary information. If we were to ask a different question, “How much have counties changed since 2010?” Then the continuous calculated field would be a better fit.

Adult Obesity vs Adult Diabetes Rate by County 2010



For 9

Visually, does there seem to be a correlation? What do the trend line attributes tell you about the fit of this line? Is there a correlation?

There appears to be a strong positive correlation. The trend line attributes read:

R-squared: 0.515806
P-value: <0.0001
The R-squared value being 0.516 with hundreds of data points indicates that our model fit is great.