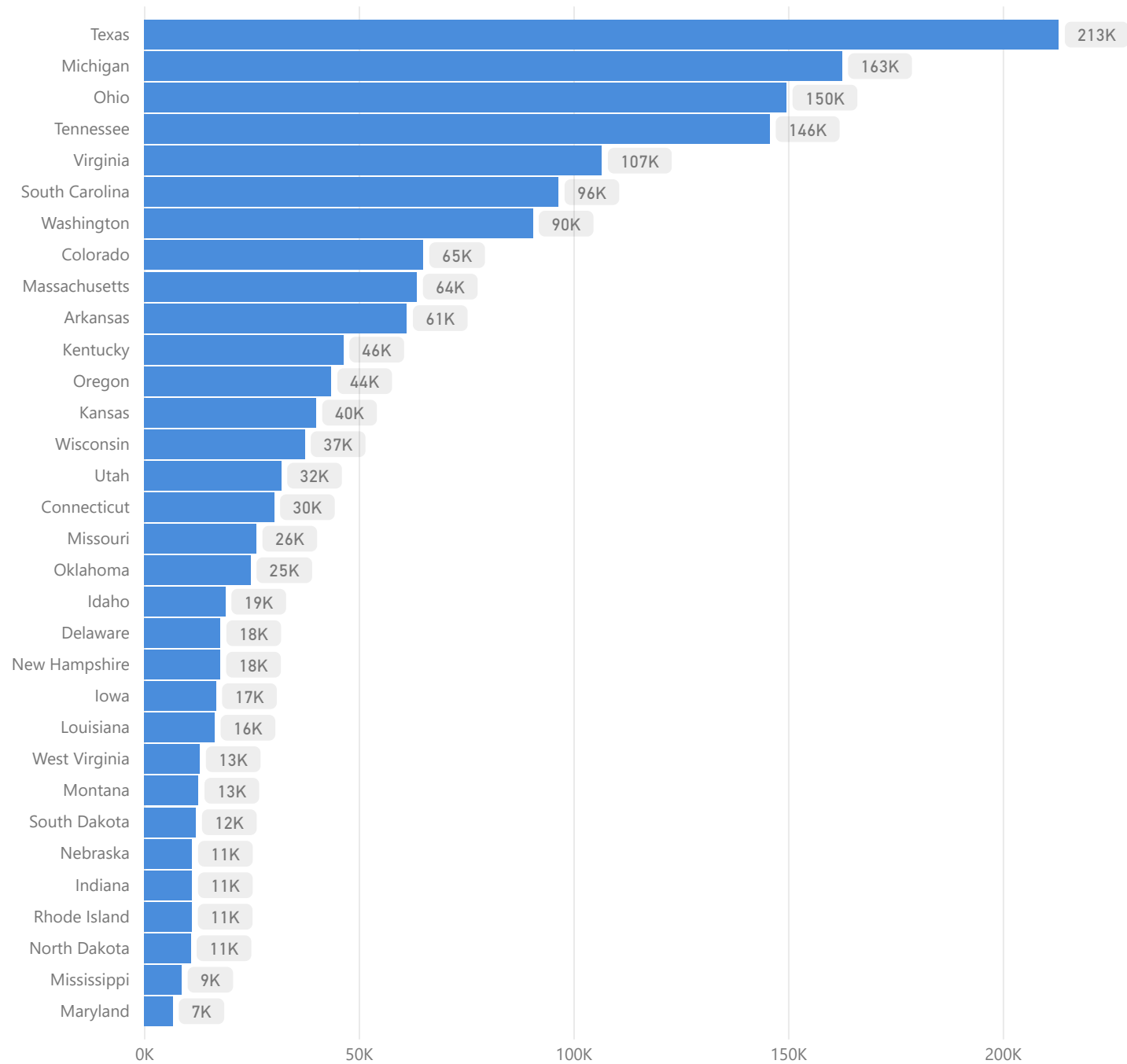


Forecasted Total Offenses by State



State

- ☐ Alabama
- ☐ Arizona
- ☐ Arkansas
- ☐ Colorado
- ☐ Connecticut
- ☐ Delaware
- ☐ Idaho
- ☐ Illinois
- ☐ Indiana
- ☐ Iowa
- ☐ Kansas
- ☐ Kentucky
- ☐ Louisiana
- ☐ Maine
- ☐ Maryland
- ☐ Massachusetts
- ☐ Michigan
- ☐ Minnesota
- ☐ Mississippi
- ☐ Missouri
- ☐ Montana
- ☐ Nebraska
- ☐ New Hampshire
- ☐ North Dakota
- ☐ Ohio
- ☐ Oklahoma
- ☐ Oregon
- ☐ Pennsylvania
- ☐ Rhode Island
- ☐ South Carolina
- ☐ South Dakota
- ☐ Tennessee
- ☐ Texas
- ☐ Utah
- ☐ Vermont

Total Offenses

1,725,358

FBI NIRBS Total [Quantifiable]

1,647,195

Forecasted Total Count

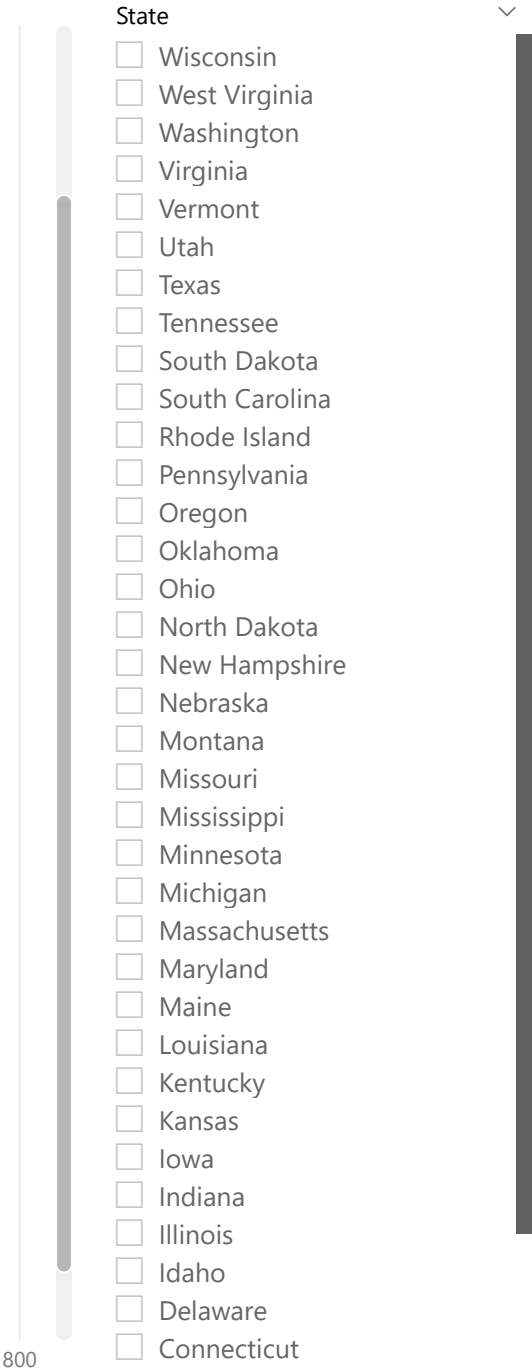
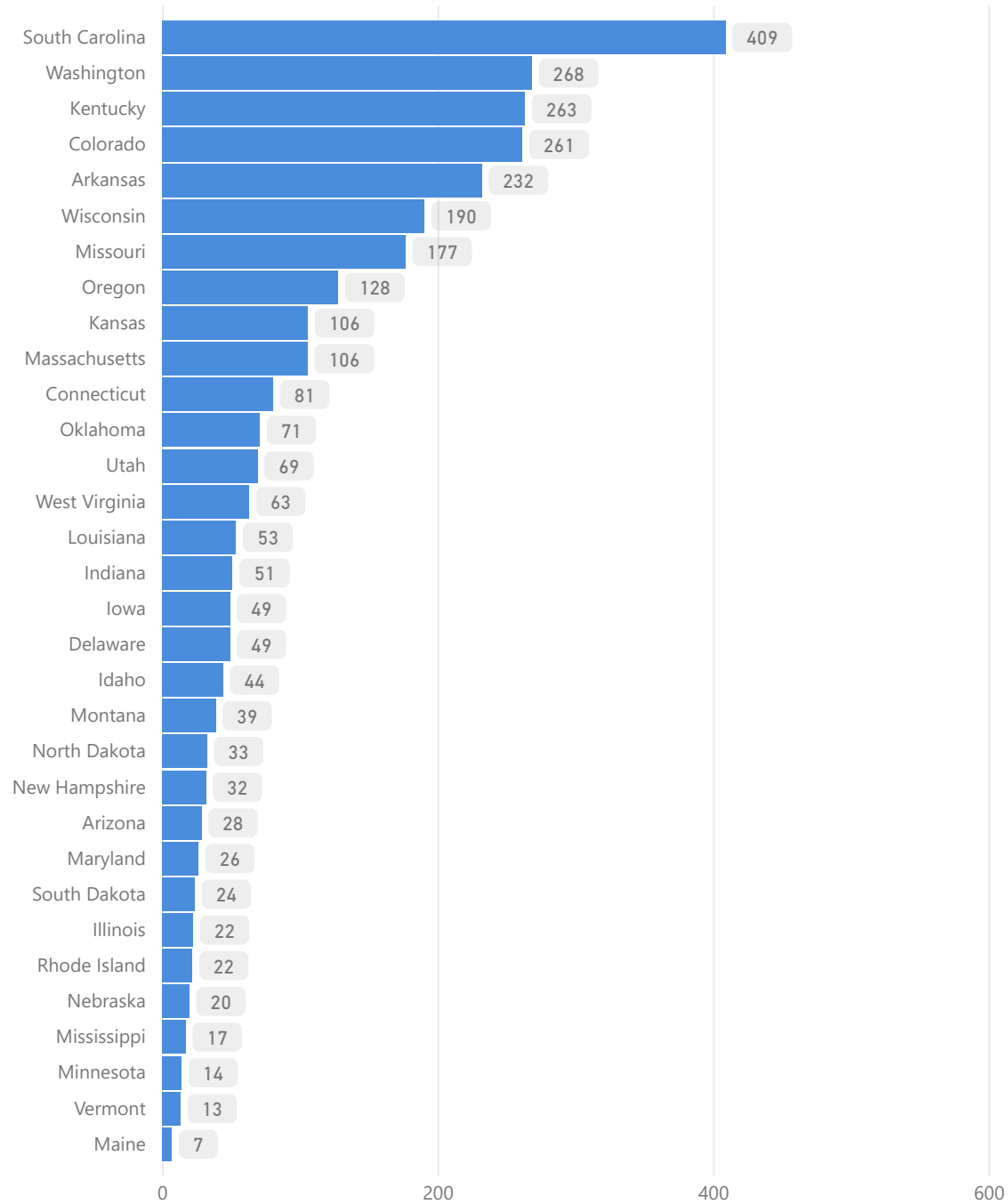
-4.53%

Forecasting Error

91.69%

Forecasting Accuracy

Forecasted Homicide Offenses by State



Homicide Offenses

6719

FBI NIRBS Homicide [Quantifiable]

5781

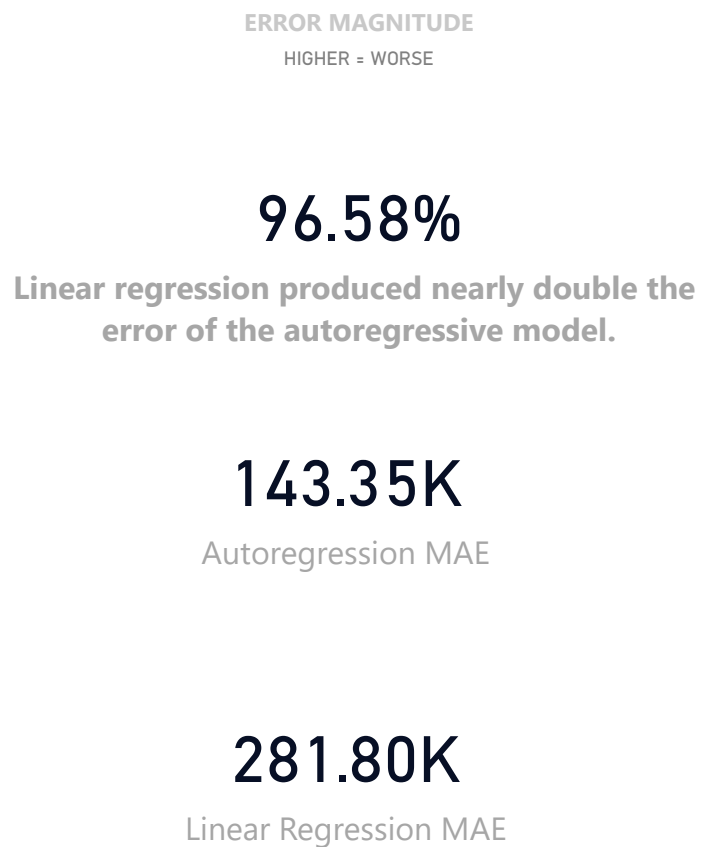
Forecasted Homicide Count

-13.96%

Forecasting Error

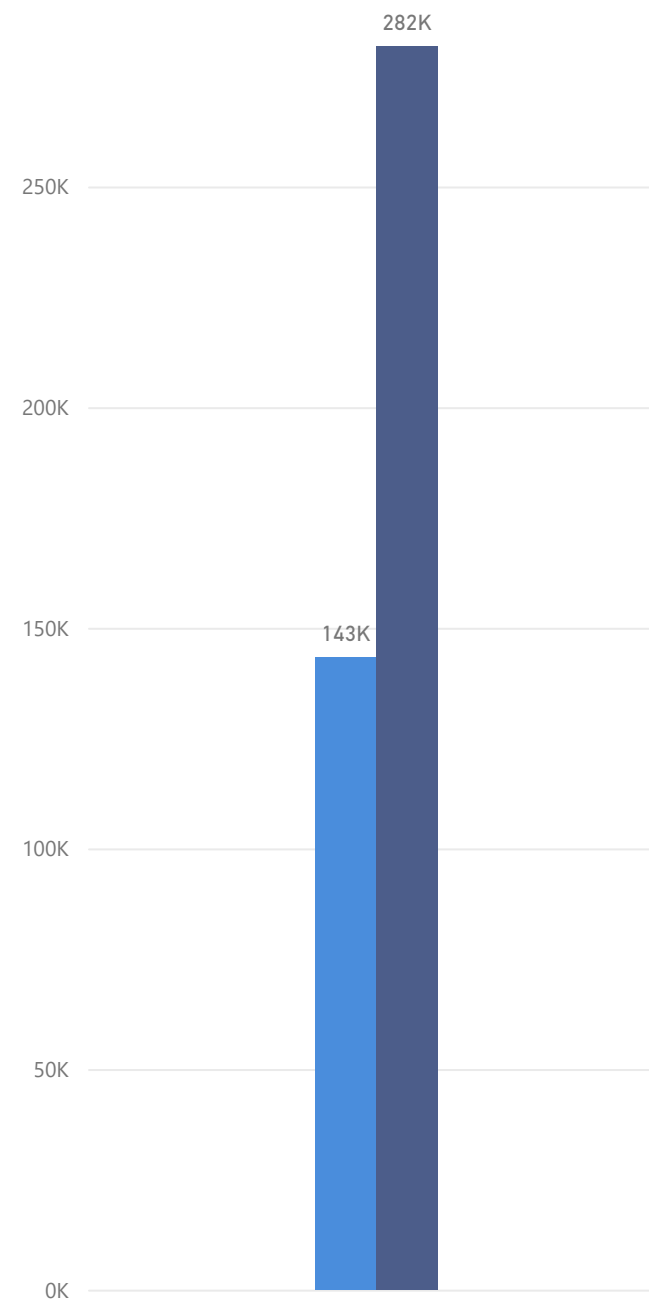
86.04%

Forecasting Accuracy



Model MAE Forecasting | Total

● Autoregression ● Linear Regression



Forecasting Accuracy | Total

**91.69%**

Autoregression Model

**83.67%**

Linear Regression Model

ERROR MAGNITUDE  
*HIGHER = WORSE*

**31.82%**

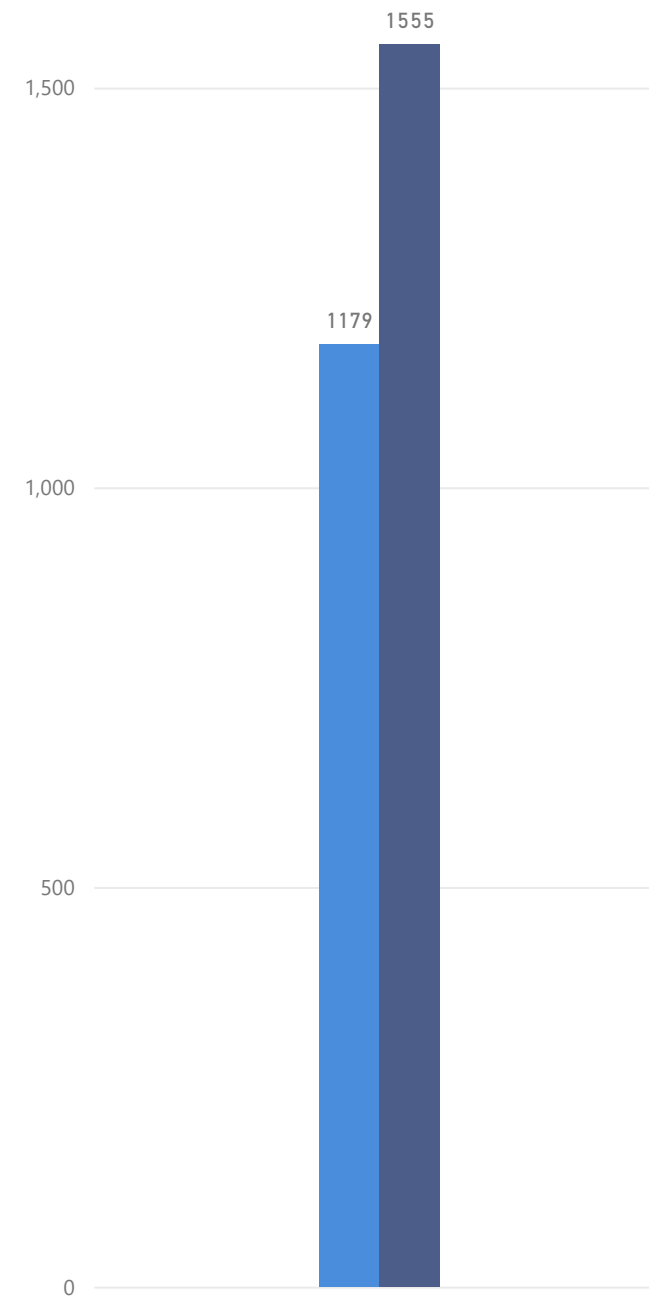
Linear regression showed moderately higher error compared to the autoregressive model.

**1.18K**  
Autoregression MAE

**1.55K**  
Linear Regression MAE

Model MAE Forecasting | Homicide

● Autoregression ● Linear Regression



Forecasting Accuracy | Homicide

**82.45%**

Autoregression Model

**76.86%**

Linear Regression Model