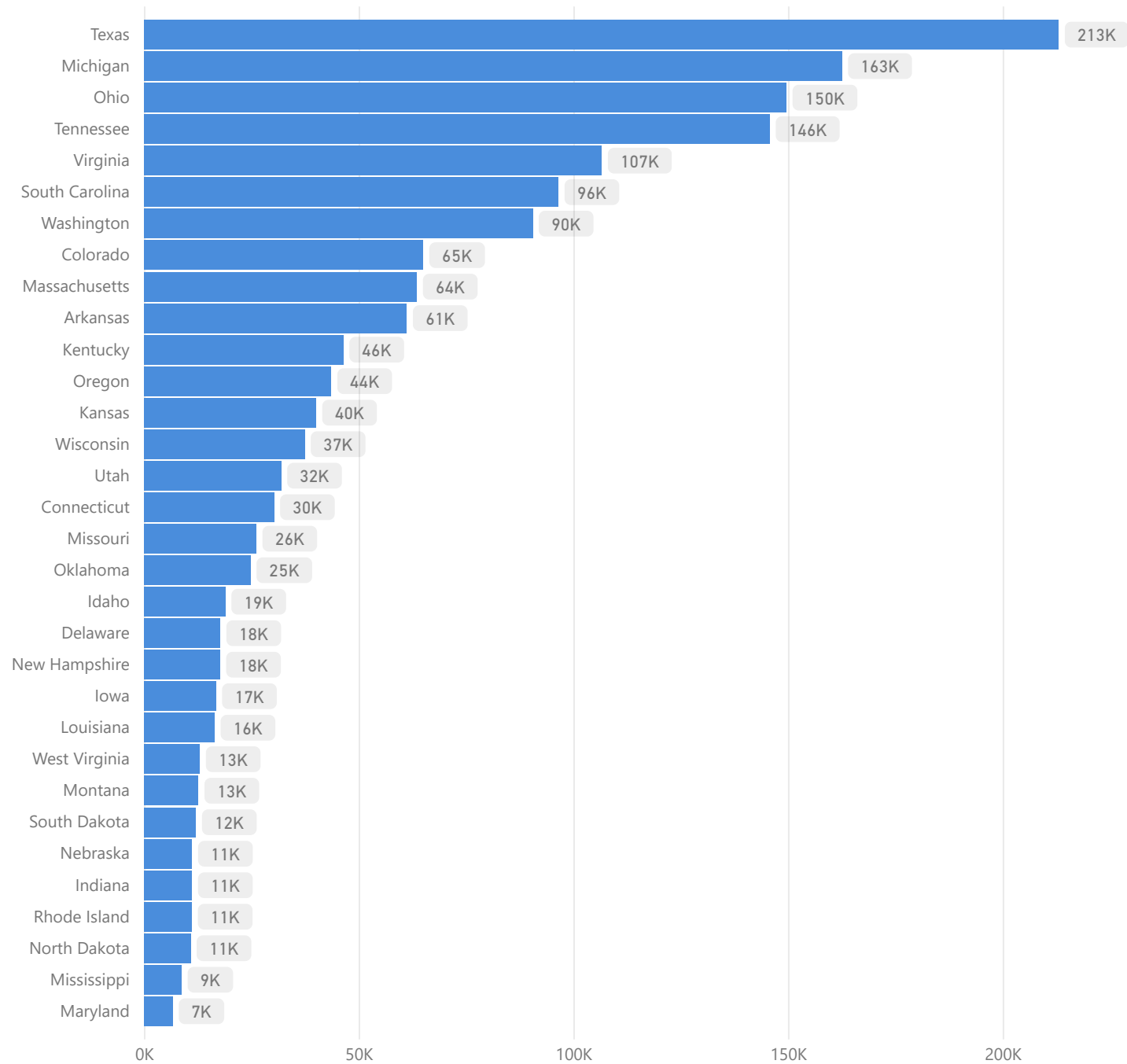


Forecasted Total Offenses by State



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 NIBRS Total [Quantifiable]

1,647,195

Forecasted Total Count

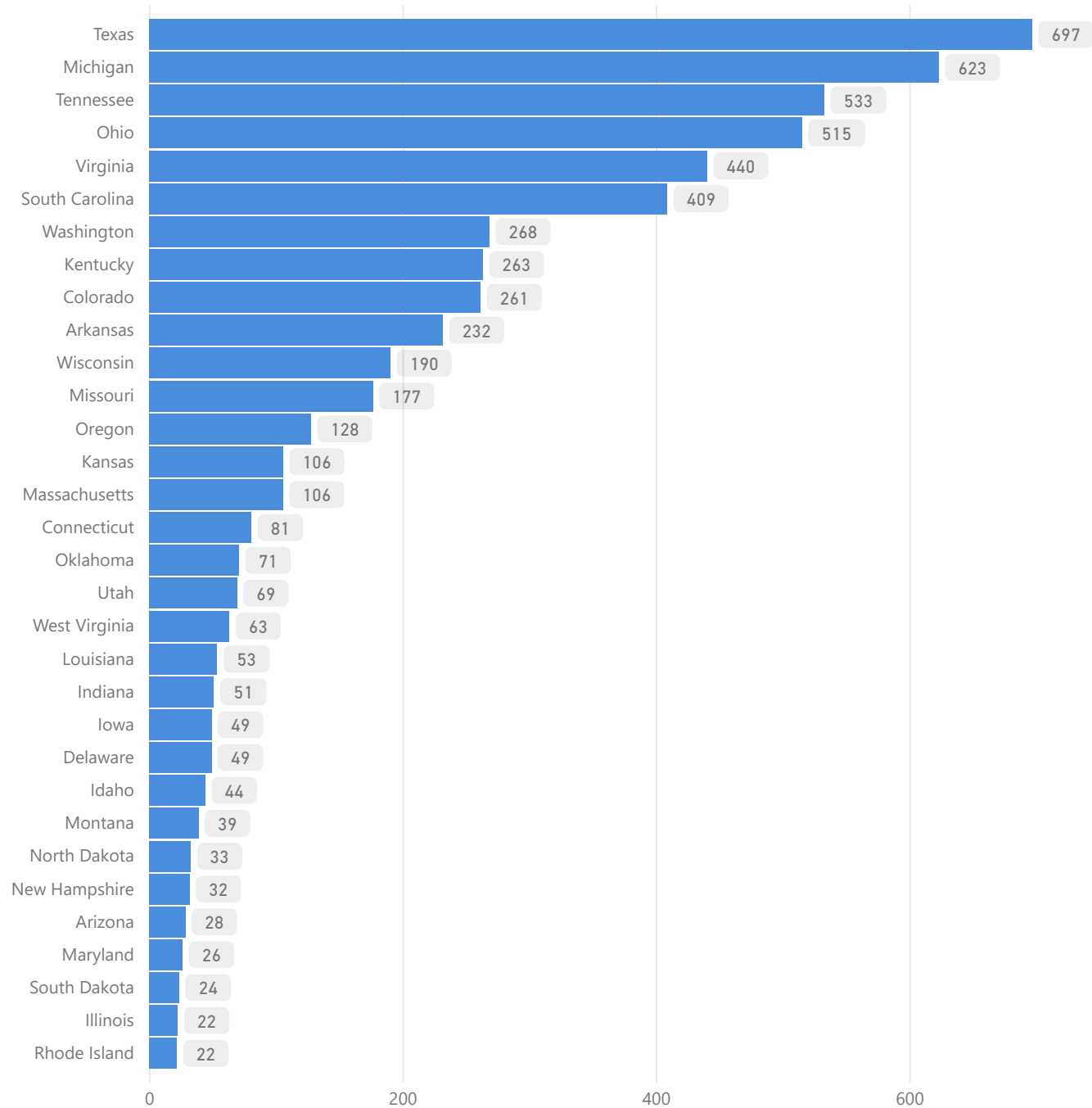
-4.53%

Forecasting Error

91.69%

Forecasting Accuracy

Forecasted Homicide Offenses by State



State

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

Homicide Offenses

6719

FBI NIBRS Homicide [Quantifiable]

5781

Forecasted Homicide Count

-13.96%

Forecasting Error

82.45%

Forecasting Accuracy

ERROR MAGNITUDE

HIGHER = WORSE

96.58%

Linear regression produced nearly double the error of the autoregressive model.

143.35K

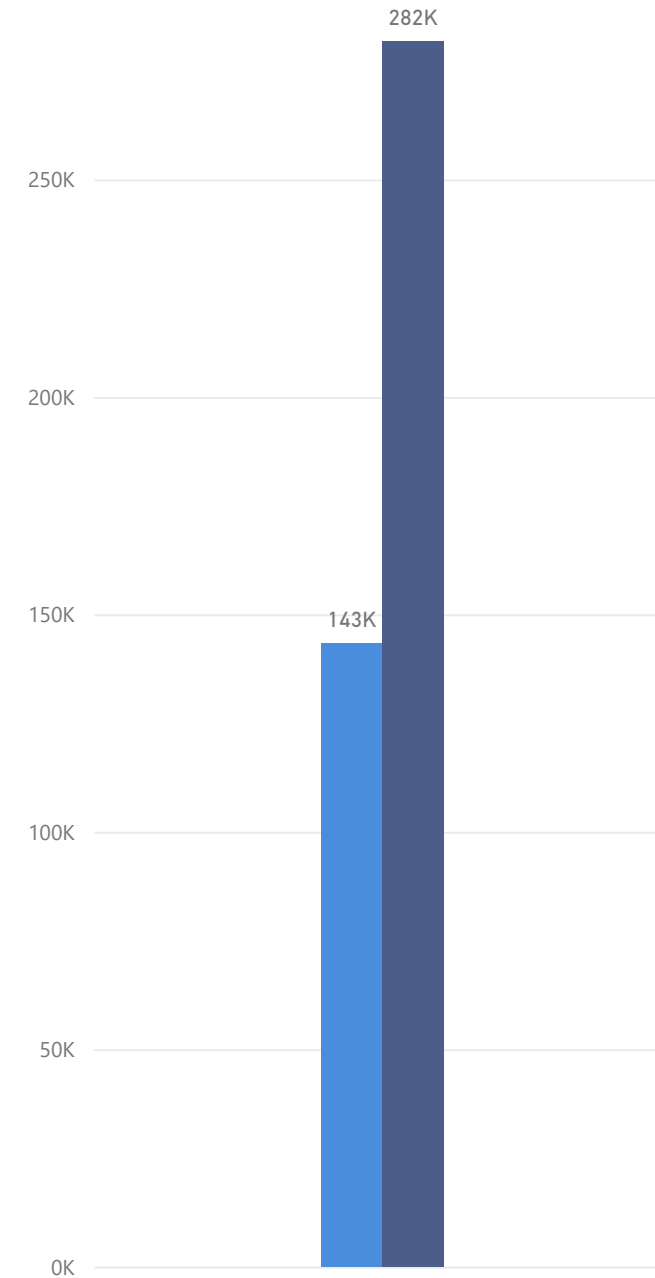
Autoregression MAE

281.80K

Linear Regression MAE

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%

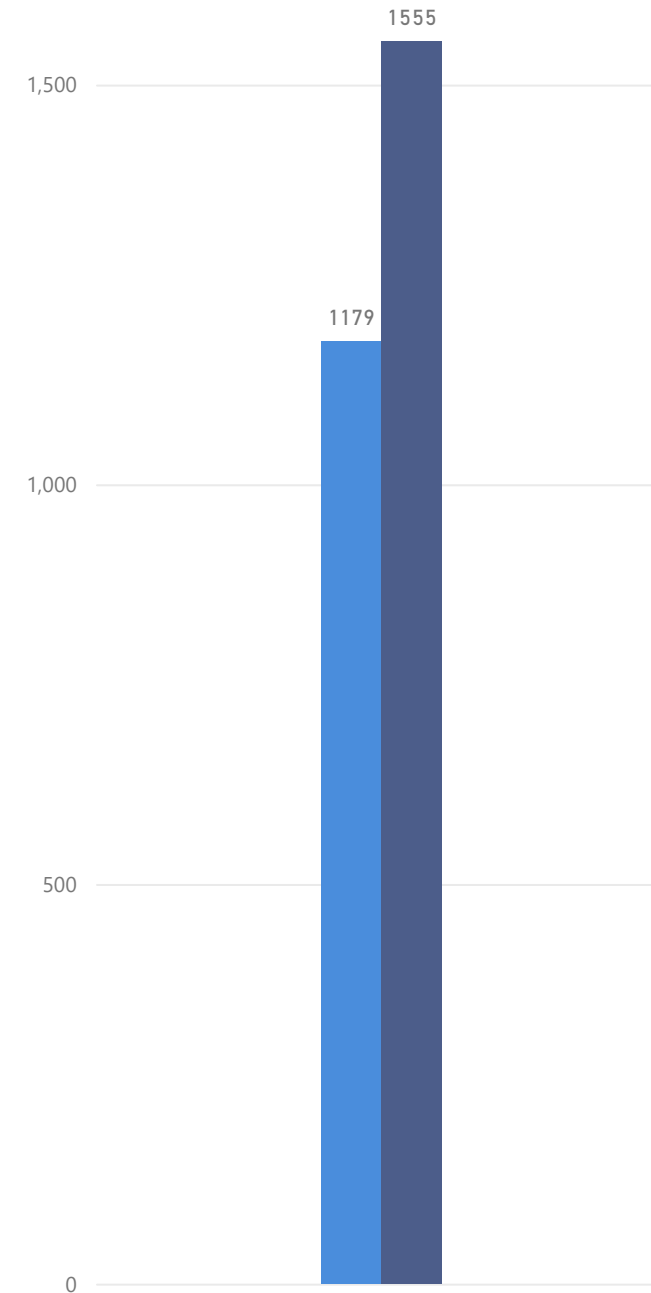
Linear regression showed moderately higher error compared to the autoregressive model.

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