

TYPICAL USAGE OF COLOR IN DATA VISUALIZATION

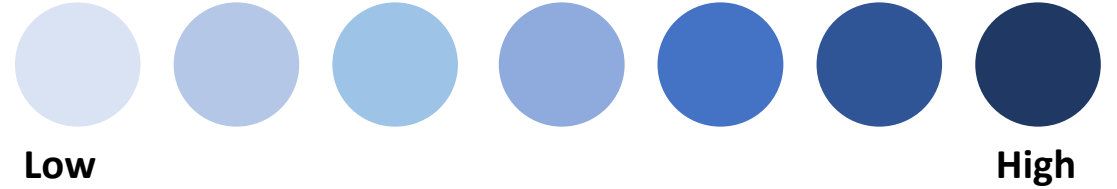
Categorical

Each color represents
a **different category**



Sequential

Color is ordered from
low to high



Diverging

Sequential color presented
in **opposite directions** from
a **mid-point**



Highlight

Color draws **attention**
to a **particular element** or
elements



Alarm

Color **alerts/ warns**
the reader or end-user
of some anomaly

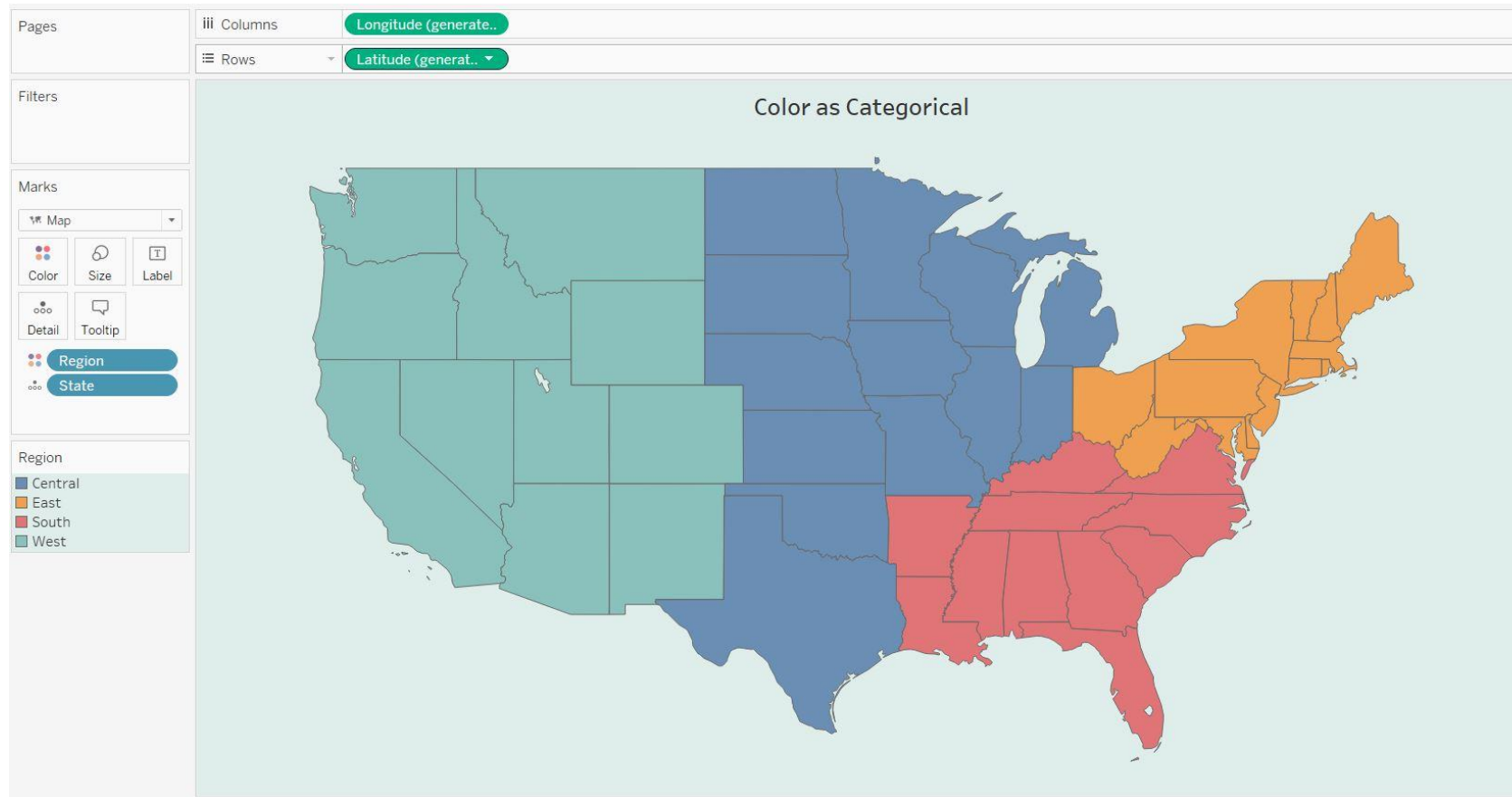


COLOR AS CATEGORICAL

Assume we have a Map with the below mentioned configuration

State in **Detail** of **Marks** card

Region in **Color** of **Marks** card



This results in each Region coded by **different colors**

Blue : **Central Region**

Orange: **East Region**

Red : **South Region**

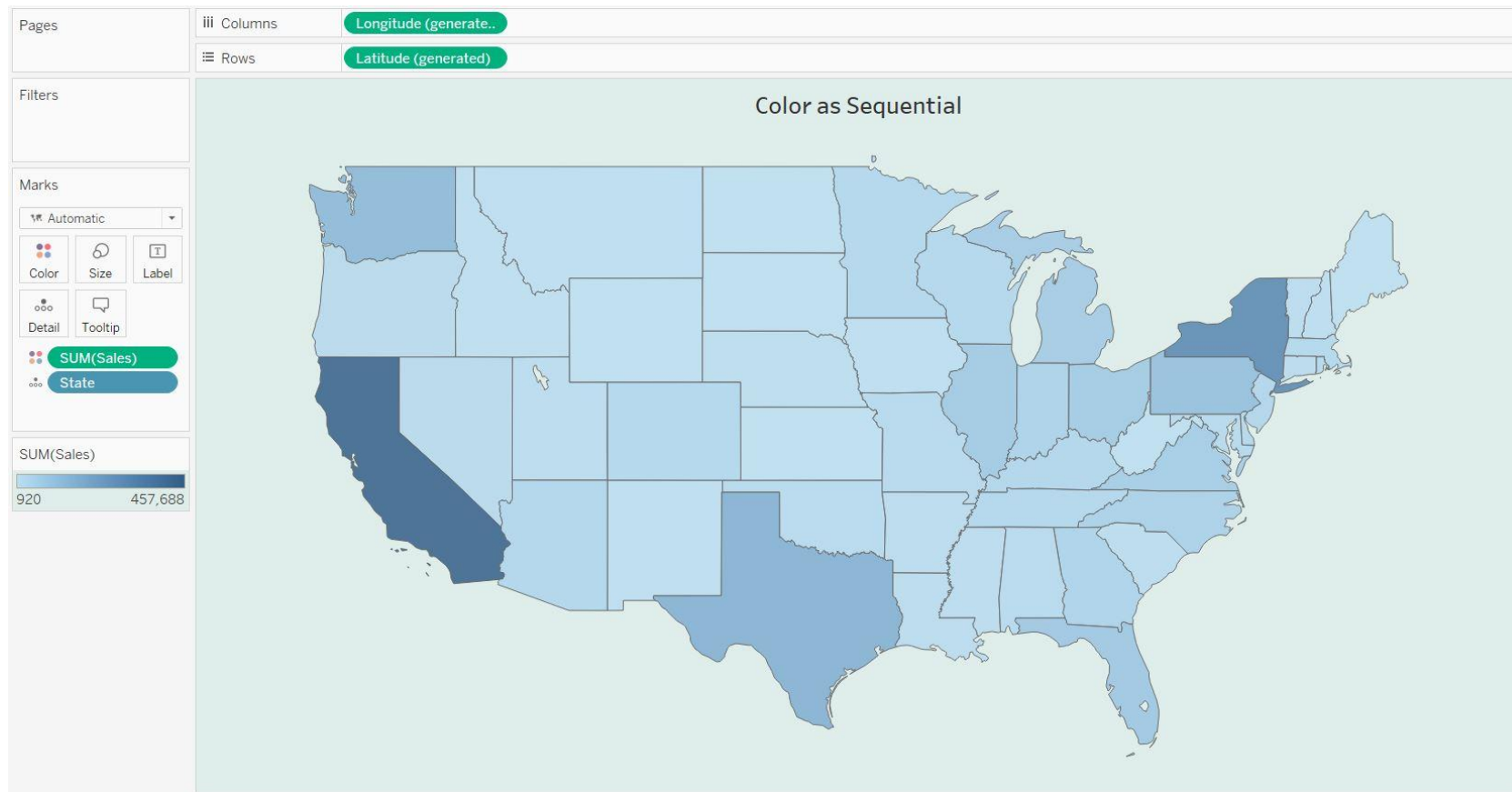
Green : **West Region**

COLOR AS SEQUENTIAL

Assume we have a Map with the below mentioned configuration

State in **Detail** of **Marks** card

Sales in **Color** of **Marks** card



This results in different shades of the same color to reflect the Sales across the States

Darker blue: Higher sales

Lighter blue: Lower sales

This can be confirmed with the Sales Color legend that shows the two extreme values

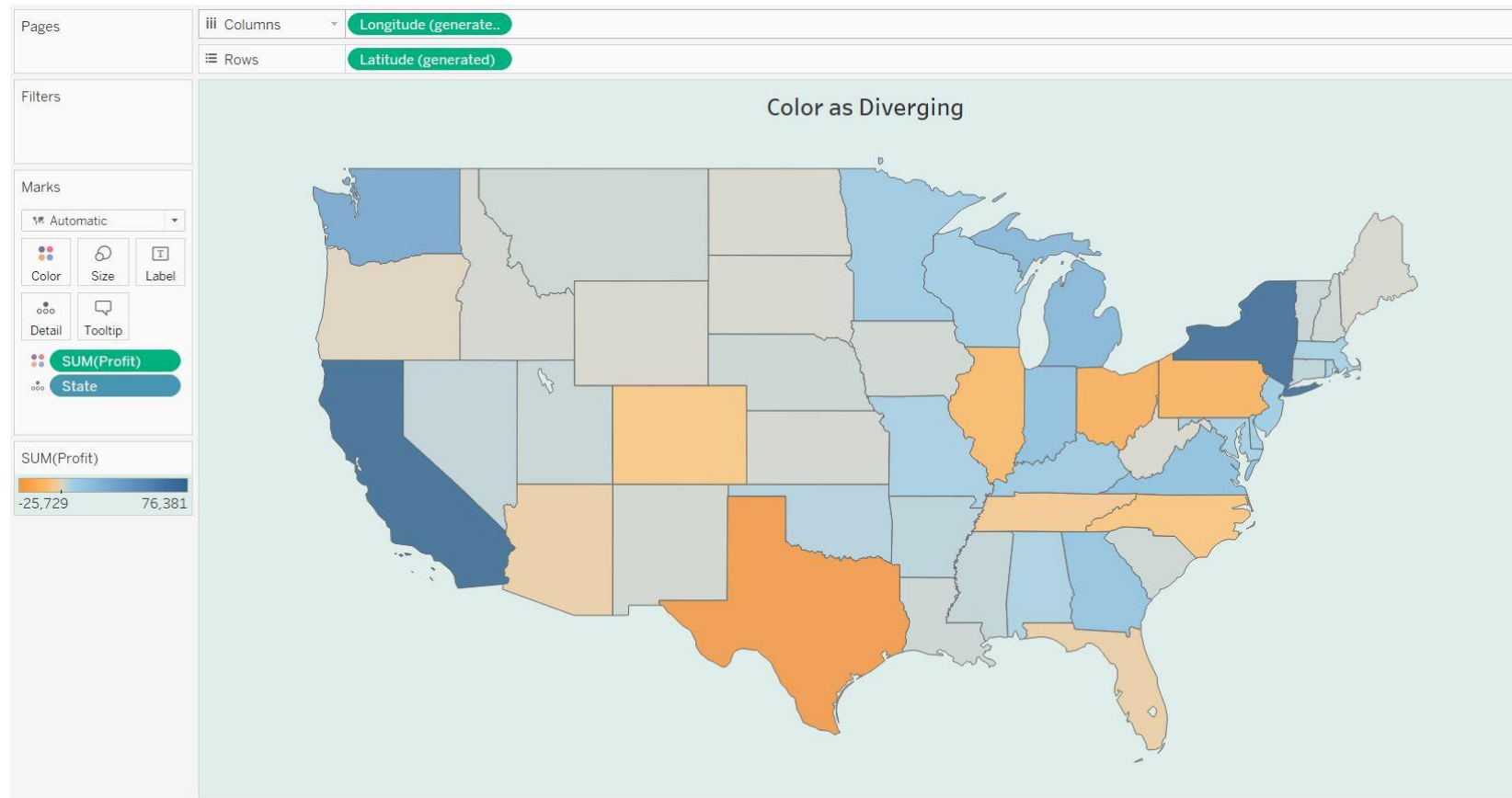
Sequential color works when we want to show low to high values using a continuous scale.

COLOR AS DIVERGING

Assume we have a Map with the below mentioned configuration

State in **Detail** of **Marks** card

Profit in **Color** of **Marks** card with "Orange-Blue Diverging" color palette

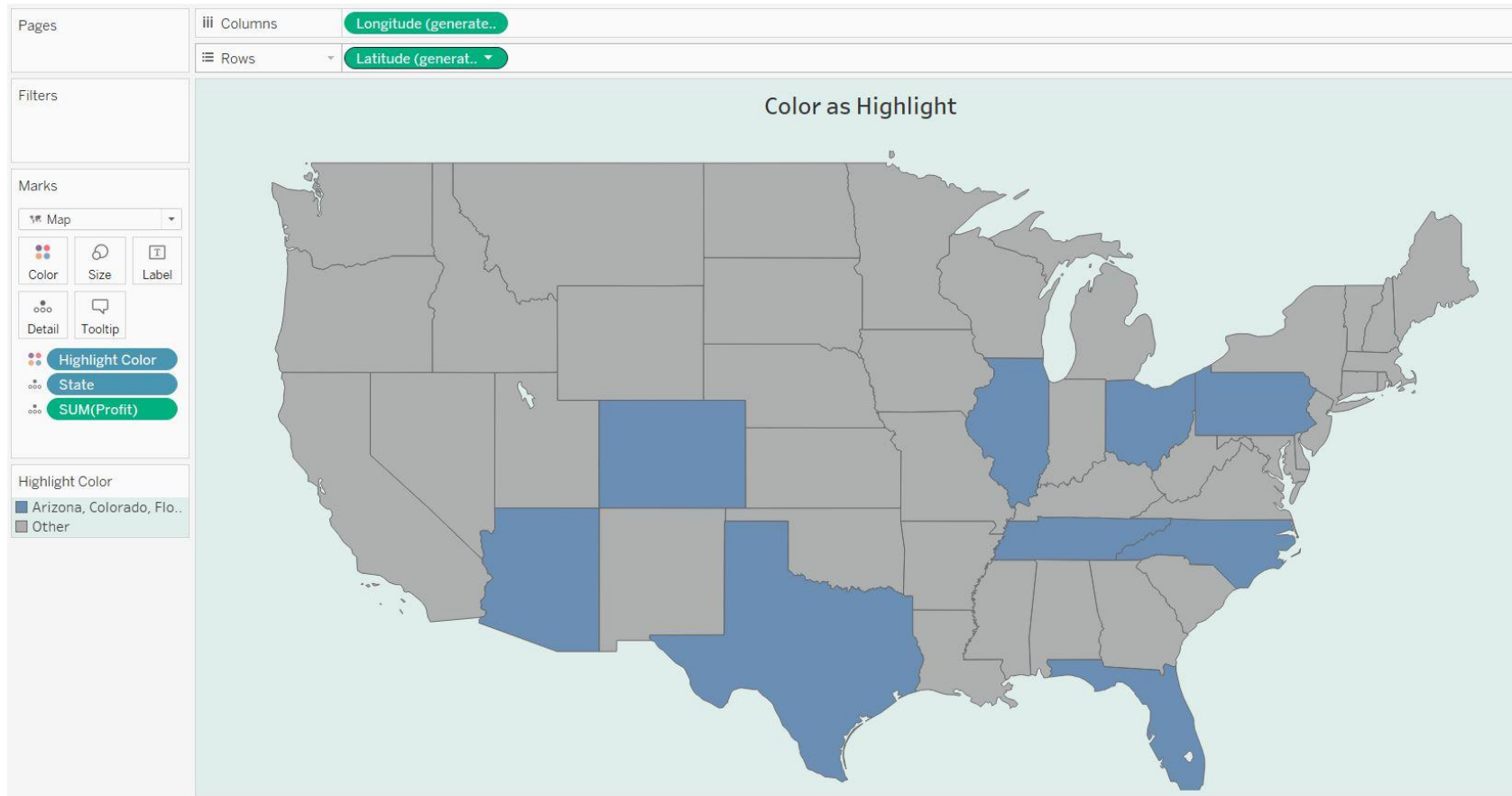


Blue colored states have higher Profits than the average profit
Orange colored states have lower Profits than the average profit

This can be confirmed with the Profit Color legend and note that the mid-point does not have to point to a zero value.

COLOR AS HIGHLIGHT

Highlight colors are a special case of Categorical color when we want to instantly **draw attention** to something that we want people to notice.

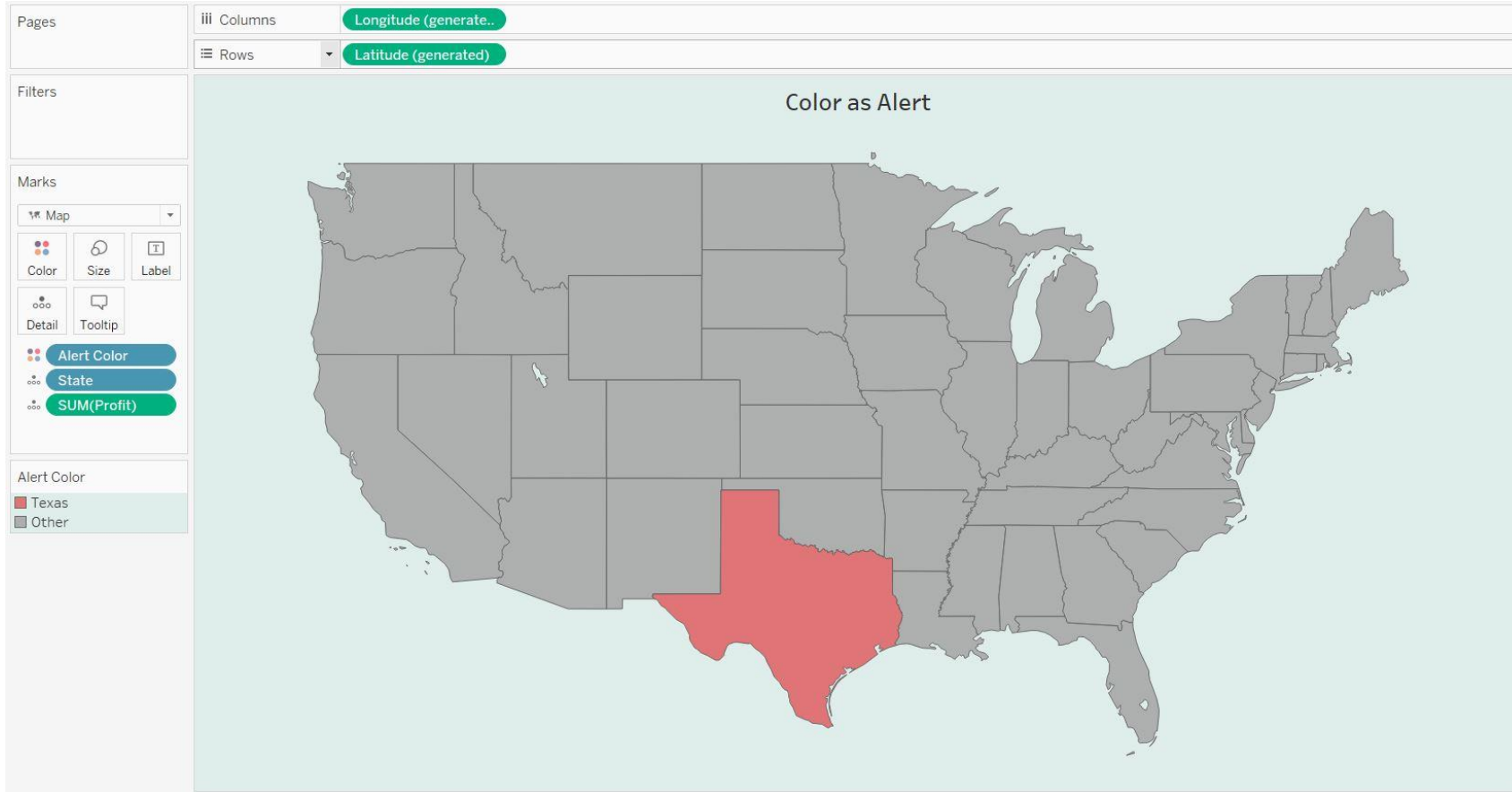


The map shows the **States with lesser profits** highlighted in **blue color**. We do this as we believe that there is something about these states that might interest the audience.

NOTE: The state segregation was achieved by creating groups

COLOR AS ALERT

Alert colors are a special case of Categorical color when we want to instantly **draw attention** to something that we want people to notice.



The map shows the **least profitable state** i.e., **Texas** is highlighted in **Red color**

NOTE: The state segregation was achieved by creating groups

COLOR AS ALERT

But we need to be careful when making use of colors especially **red for alerting purpose**.

In **western culture** we normally equate **Green with something positive or good** and **Red with something negative or bad**

Stock Market: Green is up; Red is down

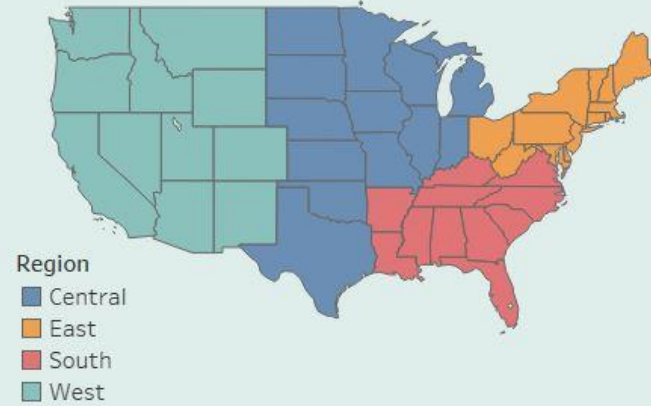
Traffic lights: Green means go; Red means stop

But this is not universal as in many **Asian nations** the associations with **red and green are sometimes reversed**.

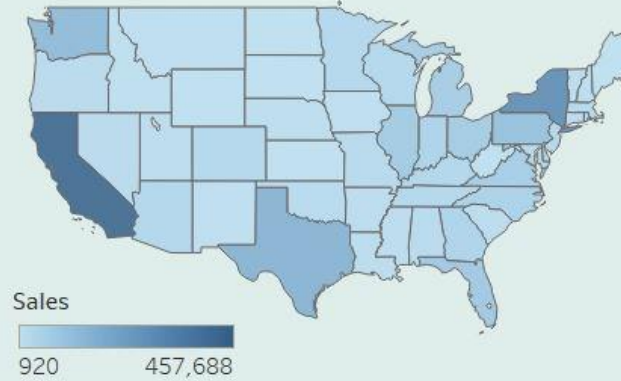
Sometimes organizations that have **red logos** tend to use **red to mean something good**.

PUTTING IT ALL TOGETHER

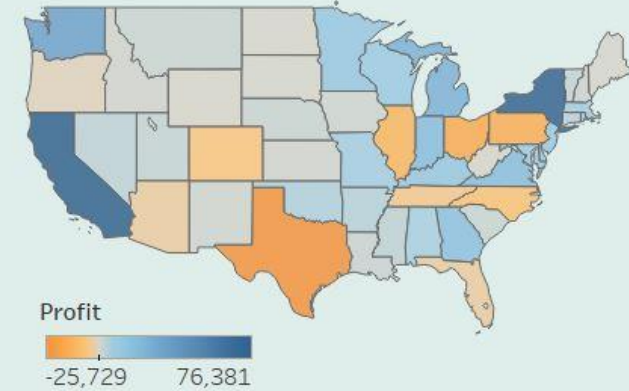
Color as Categorical



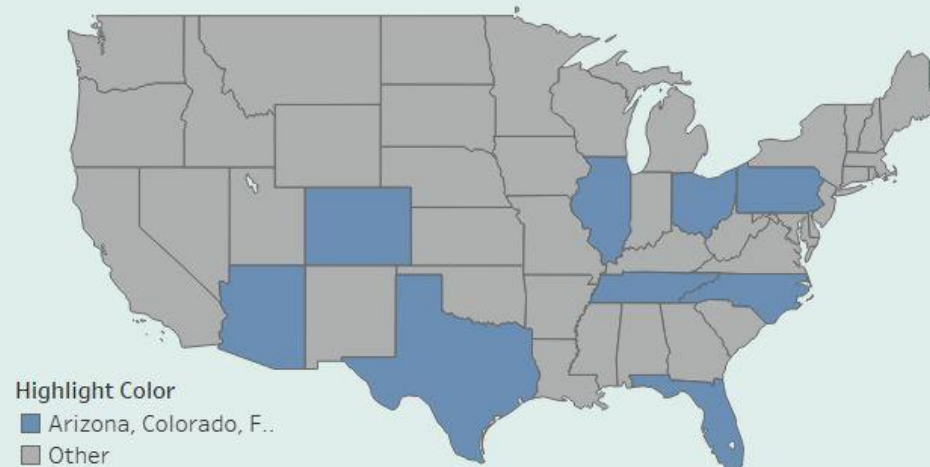
Color as Sequential



Color as Diverging



Color as Highlight



Color as Alert

