# plotting\_w\_plotly

### August 23, 2019

```
[1]: import plotly.express as px import pandas as pd from pathlib import Path
```

#### 1 Plot Foreclosures

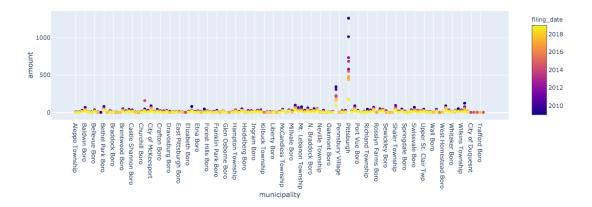
```
[2]: # Read in data
foreclosures = pd.read_csv(
    Path("../../Resources/alleghany_foreclosures.csv"),
    infer_datetime_format=True,
    parse_dates=True,
    index_col="filing_date",
)

# Slice data and group
foreclosures_grp = (
    foreclosures[["municipality", "amount"]]
        .groupby([foreclosures.index.year, "municipality"])
        .count()
        .reset_index()
)
foreclosures_grp.head()
```

```
[2]:
       filing_date
                         municipality
                                        amount
              2009
                      Aleppo Township
    1
              2009
                       Aspinwall Boro
                                              4
    2
              2009
                          Avalon Boro
                                            22
    3
              2009
                         Baldwin Boro
                                            47
    4
              2009
                    Baldwin Township
                                             11
```

## 1.1 Plot relationship between municipality and the number of foreclosures

```
[3]: # Create scatter plot px.scatter(foreclosures_grp, x="municipality", y="amount", color="filing_date")
```



## 1.2 Plot the relationship between filing date and municipality

[4]: # Create scatter plot
px.scatter(foreclosures\_grp, x="municipality", y="filing\_date", size="amount")

