In [5]:
```
!pip install geopy
```

```
Collecting geopy
  Downloading geopy-2.4.1-py3-none-any.whl (125 kB)
Collecting geographiclib<3,>=1.52
  Downloading geographiclib-2.0-py3-none-any.whl (40 kB)
Installing collected packages: geographiclib, geopy
Successfully installed geographiclib-2.0 geopy-2.4.1
```

In [16]:
```
import plotly.express as px
import pandas as pd
from geopy.geocoders import Nominatim
from geopy.exc import GeocoderTimedOut

# Load your data from the CSV file
data = pd.read_csv("902nonprofitdata.csv")

# Function to geocode addresses and handle timeouts
def geocode_address(address):
    geolocator = Nominatim(user_agent="my_geocoder")
    try:
        location = geolocator.geocode(address, timeout=10)
        if location:
            return location.latitude, location.longitude
        else:
            return None, None
    except (GeocoderTimedOut, AttributeError):
        return None, None


data['lat'], data['lon'] = zip(*data['Address'].apply(geocode_address))

# Assuming your CSV has columns like 'Name', 'Address', 'Phone'
fig = px.scatter_geo(data, locationmode='USA-states', text='Name',
                     lon='lon', lat='lat',
                     hover_name='Name', hover_data=['Phone', 'Name'],
                     color='Name',
                     scope='usa')


fig.update_traces(marker=dict(size=8, opacity=0.7, line=dict(width=1, color='b


fig.update_geos(showland=True, landcolor="rgb(255, 243, 204)")
fig.update_geos(center=dict(lon=-71.0589, lat=42.3601), projection_scale=20)


fig.update_layout(hoverlabel=dict(bgcolor="rgba(255, 255, 255, 0.8)", font_siz

# Save the Plotly visualization as HTML
fig.write_html("heatmap.html")
```

In [9]:

In [ ]: