



# Mapping in the Power BI

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# INSTRUCTOR



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  - *Azure Map*
  - *Arc GIS Map for Power BI*
- ✓ *Other options*
  - *MapBox*

## Additional Information

## Conclusion and QA

# POWER BI – LET'S START

File H  
Paste Copy For Clipboard  
AU  
Data

## Power BI Desktop

Power BI has recovered files that you might want to keep

- Show recovered files
- Get data
- Recent sources

sample.pbix  
C: » Users » svetl » Desktop » CCIAA

SFPD\_2018\_20201127.pbix  
C: » Users » svetl » Desktop » PO...

Open other reports

Svetlana Gubin

### Getting started with Power BI Desktop

- Building reports
- Query view concepts
- Uploading your reports
- Create a Phone report

VIEW ALL VIDEOS

✓ Show this screen on startup

#### WHAT'S NEW

Take a look at what's new and improved in Power BI in this month's update.

#### FORUMS

Visit the Power BI Forum to ask questions or interact with other users in the Power BI community.

#### POWER BI BLOG

Keep up to date with the latest news, resources, and updates from the Power BI team.

#### TUTORIALS

Ready to learn more about Power BI?

- Get started with Power BI Desktop
- Download a sample
- Watch our training videos
- See what others have built
- All guided learning

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# POWER BI – DATA SET

Source:

<https://data.oaklandca.gov/PublicSafety/CrimeWatch-Data/ppgh-7dqv>

## CrimeWatch Data

Public Safety

View Data

Visualize ▾

Export

API

⋮

A full dataset of CrimeWatch data.

The Oakland Police Department provides crime data to the public through the City of Oakland's Crime Watch web site. This site presents the data in a geographic format, which allows users of

[More](#)

**Updated**

February 7, 2023

**Data Provided by**

Oakland Police Department

### About this Dataset

Mute Dataset

Updated

**February 7, 2023**

Data Last Updated

February 7, 2023

Metadata Last Updated

February 7, 2023

**Topics**

Category

Public Safety

Tags

crime

Date Created

June 17, 2021

# POWER BI – GET DATA

The screenshot displays the Microsoft Power BI Desktop application interface. At the top, the title bar reads "Untitled - Power BI Desktop" and "Svetlana Gubin". The ribbon menu includes "File", "Home", "Insert", "Modeling", "View", "Optimize", "Help", and "External tools". The "Home" ribbon is active, and the "Get data" group is highlighted with a blue box. This group contains icons for "Excel workbook", "Data hub", "SQL Server", "Enter data", "Dataverse", and "Recent sources".

In the center of the workspace, a rounded rectangle contains the text "Add data to your report" and "Once loaded, your data will appear in the Data pane." Below this text are four buttons: "Import data from Excel", "Import data from SQL Server", "Paste data into a blank table", and "Try a sample dataset". A link "Get data from another source" is located at the bottom of this panel.

On the right side, the "Visualizations" pane is open, showing a grid of visualization options and a "Filters" section. The "Values" section has a text input field "Add data fields here". The "Drill through" section has a "Cross-report" toggle set to "Off" and a "Keep all filters" toggle set to "On". The "Add drill-through fields here" section has a text input field.

At the bottom left, the "Page 1" tab is visible with a "+" button. At the bottom right, a zoom level of "63%" is shown.



# POWER BI – TEXT/CSV

The screenshot displays the Microsoft Power BI Desktop interface. The top ribbon includes tabs for File, Home, Insert, Modeling, View, Optimize, Help, and External tools. The Home ribbon is active, showing various data source and visualization options. The 'Get data' button is circled in red. Below the ribbon, the 'Common data sources' list is visible, with 'Text/CSV' also circled in red. The central workspace area displays the 'Add data to your report' dialog, which includes options for importing data from Excel, SQL Server, or a blank table, and a link to 'Get data from another source'. On the right side, the 'Data' pane is open, showing a search bar and a message: 'You haven't loaded any data yet. Get data'. The bottom status bar shows 'Page 1' and a zoom level of 63%.

# POWER BI – DATA

Open

This PC > Desktop > IACA Webinar 2023 > 7\_Simple Visuals

Search 7\_Simple Visuals

Organize · New folder

Name	Date modified	Type	Size
CrimeWatch_2023.txt	6/14/2023 7:26 PM	Text Document	80 KB

File name:  Text Files (\*.txt;\*.csv;\*.prn)

Open Cancel



# POWER BI – LOAD DATA

CrimeType\_2023.txt

File Origin: 1252: Western European (Windows) | Delimiter: Tab | Data Type Detection: Based on first 200 rows

Address	CaseNumber	City	CrimeType	DateTime	Description	Page
1300 MADISON ST	12-004282	Oakland	TOWED VEHICLE	1/25/2023 11:30:00 AM	BURGLARY-AUTO	03
1400 JACKSON ST	22-000412	Oakland	STOLEN VEHICLE	1/2/2023 8:00:00 PM	VEHICLE THEFT - AUTO	04
400 23RD ST	22-002001	Oakland	BURG - AUTO	1/12/2023 12:37:00 PM	BURGLARY-AUTO	08
800 ISABELLA ST	23-000003	Oakland	ROBBERY	1/1/2023 12:37:00 AM	CARJACKING - STRONGARM	07
1500 MADISON ST	23-000024	Oakland	BURG - COMMERCIAL	1/1/2023 3:28:00 AM	BURGLARY-FORCIBLE ENTRY	04
800 MILTON ST	23-000033	Oakland	MISDEMEANOR ASSAULT	1/1/2023 3:00:00 AM	BATTERY	07
2900 MCCLURE ST	23-000036	Oakland	OTHER	1/1/2023 4:15:00 AM	SC UNEXPLAINED DEATH	08
400 7TH ST	23-000038	Oakland	OTHER	1/1/2023 7:55:00 AM	VIOLATION CUSTODY DECREE	03
500 39TH ST	23-000055	Oakland	THREATS	1/1/2023 8:36:00 AM	CRIMINAL THREATS THREATED CRIME W/INTENT TO TE...	08
500 39TH ST	23-000055	Oakland	THREATS	1/1/2023 8:36:00 AM	EXHIBIT F/ARM THRTNG MANR	08
1400 JACKSON ST	23-000073	Oakland	DOMESTIC VIOLENCE	1/1/2023 11:40:00 AM	BATTERY:SPOUSE/EX SPOUSE/DATE/ETC	04
1400 JACKSON ST	23-000073	Oakland	DOMESTIC VIOLENCE	1/1/2023 11:40:00 AM	KIDNAPPING	04
400 6TH ST	23-000074	Oakland	ROBBERY	1/1/2023 12:02:00 PM	ROBBERY-FIREARM	03
3400 ADELINE ST	23-000154	Oakland	STOLEN VEHICLE	1/1/2023 5:49:00 PM	VEHICLE THEFT - AUTO	07
600 23RD ST	23-000159	Oakland	VANDALISM	1/1/2023 4:00:00 PM	VANDALISM:DEFACE PROPERTY	06
100 14TH ST	23-000183	Oakland	MISDEMEANOR ASSAULT	1/1/2023 2:43:00 AM	FORCE/ADW-OTHER DANGEROUS WEAPON:GBI	04
1000 CLAY ST	23-000190	Oakland	BURG - COMMERCIAL	1/2/2023 4:38:00 AM	BURGLARY-FORCIBLE ENTRY	03
100 13TH ST	23-000193	Oakland	HOMICIDE	1/2/2023 7:16:00 AM	SC UNEXPLAINED DEATH	03
200 29TH ST	23-000195	Oakland	STOLEN VEHICLE	1/2/2023 7:34:00 AM	VEHICLE THEFT - AUTO	08
400 7TH ST	23-000200	Oakland	STOLEN VEHICLE	1/2/2023 8:52:00 AM	VEHICLE THEFT - AUTO	03

Extract Table Using Examples | **Load** | Transform Data | Cancel

# POWER BI – REPORT VIEW

Untitled - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Optimize Help External tools

Paste

Clipboard

Get data Excel workbook OneLake data hub SQL Server Enter data Dataverse Recent sources

Data

Transform data Refresh data

Queries

New visual

Insert

Text box More visuals

Calculations

New measure Quick measure

Sensitivity Publish

Sensitivity Share

Build visuals with your data

Select or drag fields from the Data pane onto the report canvas.

Page 1

Page 1 of 1

63%

**Data**

Search

Filters

CrimeWatch\_2023

# MAPS IN POWER BI

## Maps



*Map*



*Filled Map*



*Azure Map*



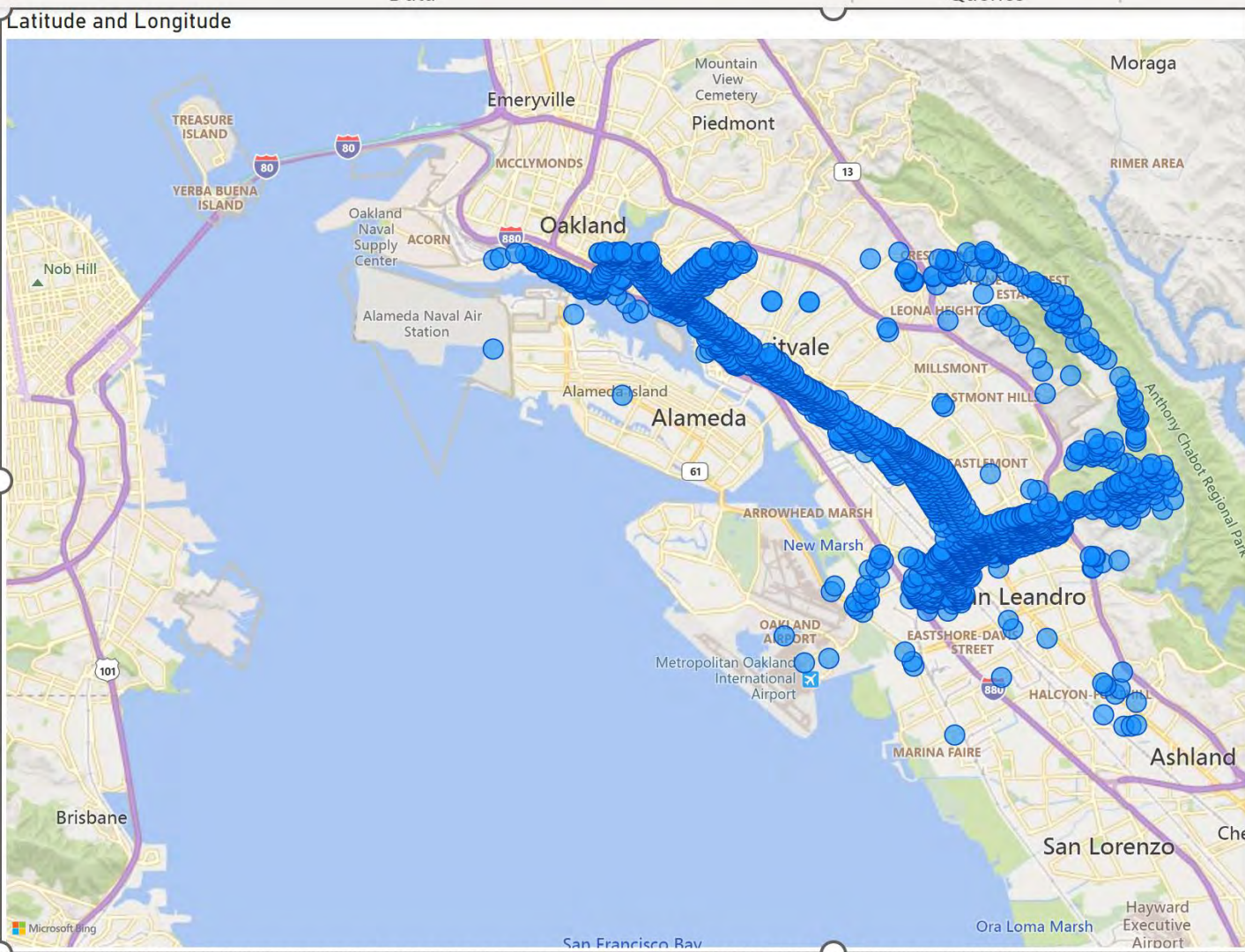
*Arc GIS Map for Power BI*



*Shape Map*



# MAP - LATITUDE AND LONGITUDE



## Build a visual

Visual types

Map, Table, Grid, and other visual type icons.

Off Suggest a type

Location

+Add data

Legend

+Add data

Latitude

Latitude X | >

Longitude

Longitude X | >

Bubble size

Map does not work with X and Y coordinates

# MAP - ADDRESS

## Address structure:

Street name - usually exist

City

County (not mandatory)

State

Country

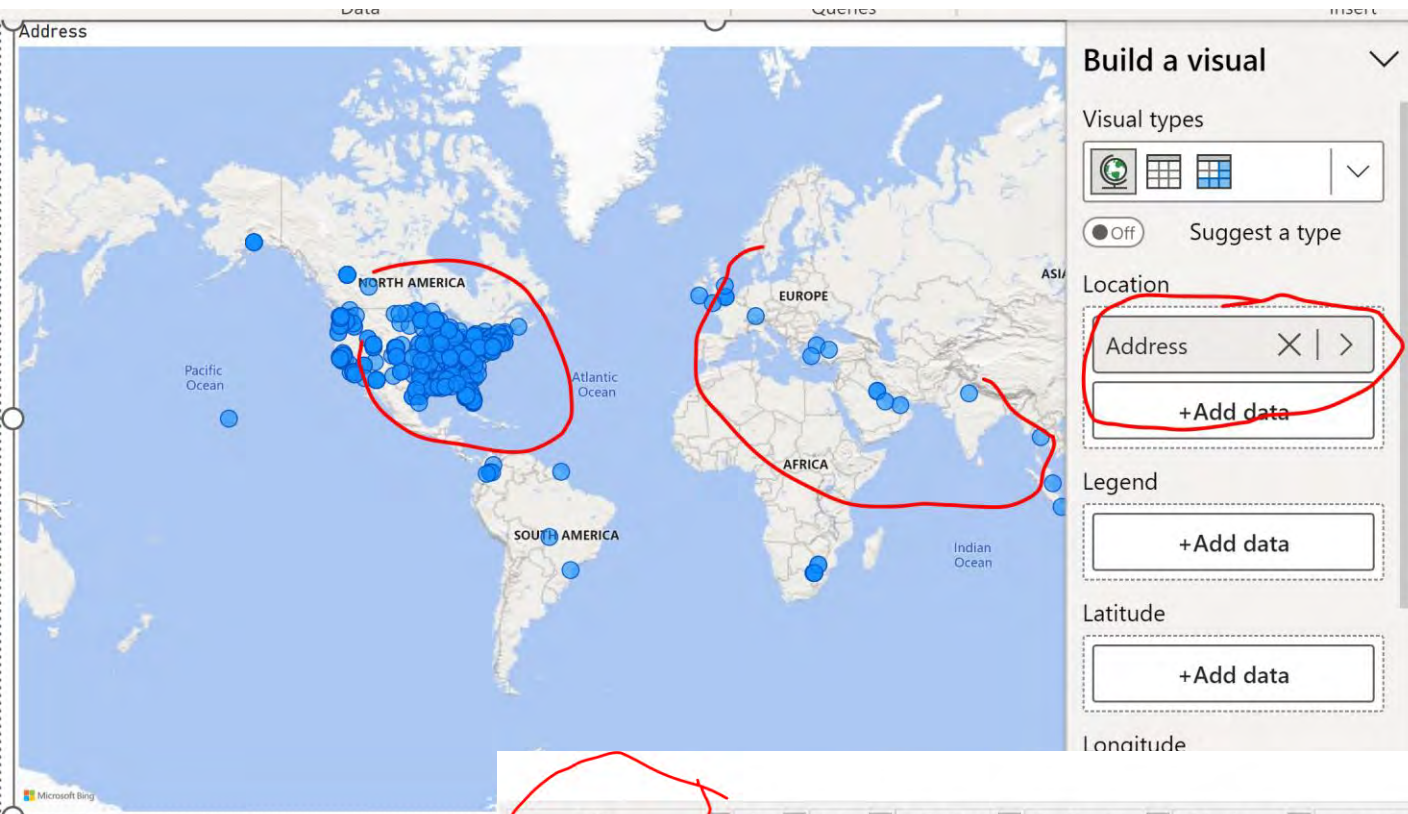
## Add Column:

City = "Oakland"

State = "CA"

Country = "USA"

# MAP



Address	City	State	PoliceBeat	CaseNumber	CrimeType	Description	DateTime	Description (groups)
100 E 12TH ST	Oakland	CA	19X	20-033252	STOLEN VEHICLE	VEHICLE THEFT - AUTO	7/7/2020 17:38	Other
100 INTERNATIONAL BLVD	Oakland	CA	19X	20-021909	STOLEN VEHICLE	VEHICLE THEFT - AUTO	5/30/2020 17:30	Other
100 INTERNATIONAL BLVD	Oakland	CA	19X	20-052672	STOLEN VEHICLE	VEHICLE THEFT - AUTO	10/25/2020 11:15	Other
1000 22ND AV	Oakland	CA	19X	20-027455	STOLEN VEHICLE	VEHICLE THEFT - AUTO	5/21/2020 00:30	Other
1000 22ND AV	Oakland	CA	19X	20-031356	STOLEN VEHICLE	VEHICLE THEFT - AUTO	6/26/2020 19:30	Other
1000 4TH AV	Oakland	CA	19X	20-000441	STOLEN VEHICLE	VEHICLE THEFT - AUTO	1/2/2020 17:30	Other
1000 4TH AV	Oakland	CA	19X	20-028743	STOLEN VEHICLE	VEHICLE THEFT - AUTO	6/11/2020 20:30	Other
1000 4TH AV	Oakland	CA	19X	20-042405	STOLEN VEHICLE	VEHICLE THEFT - AUTO	8/23/2020 17:00	Other
1000 5TH AV	Oakland	CA	19X	20-017362	STOLEN VEHICLE	VEHICLE THEFT - AUTO	4/1/2020 15:00	Other
1000 5TH AV	Oakland	CA	19X	20-027512	STOLEN VEHICLE	VEHICLE THEFT - AUTO	6/4/2020 09:00	Other
1000 8TH AV	Oakland	CA	19X	20-005607	STOLEN VEHICLE	VEHICLE THEFT - AUTO	1/29/2020 13:00	Other
1000 9TH AV	Oakland	CA	19X	20-009786	STOLEN VEHICLE	VEHICLE THEFT - AUTO	2/18/2020 22:00	Other
1000 COTTON ST	Oakland	CA	19X	20-012500	STOLEN VEHICLE	VEHICLE THEFT - AUTO	3/3/2020 17:00	Other
1000 COTTON ST	Oakland	CA	19X	20-059404	STOLEN VEHICLE	VEHICLE THEFT - AUTO	12/3/2020 17:00	Other



# MAP

City

Build a visual

Visual types

Location

City

Address

+Add data

Legend

+Add data

Latitude

+Add data

Longitude

Microsoft Bing

**City: Oakland**

# MAP

State

Build a visual

Visual types

Off Suggest a type

Location

State × | >

City × | >

Address × | >

+Add data

Legend

+Add data

Latitude

+Add data

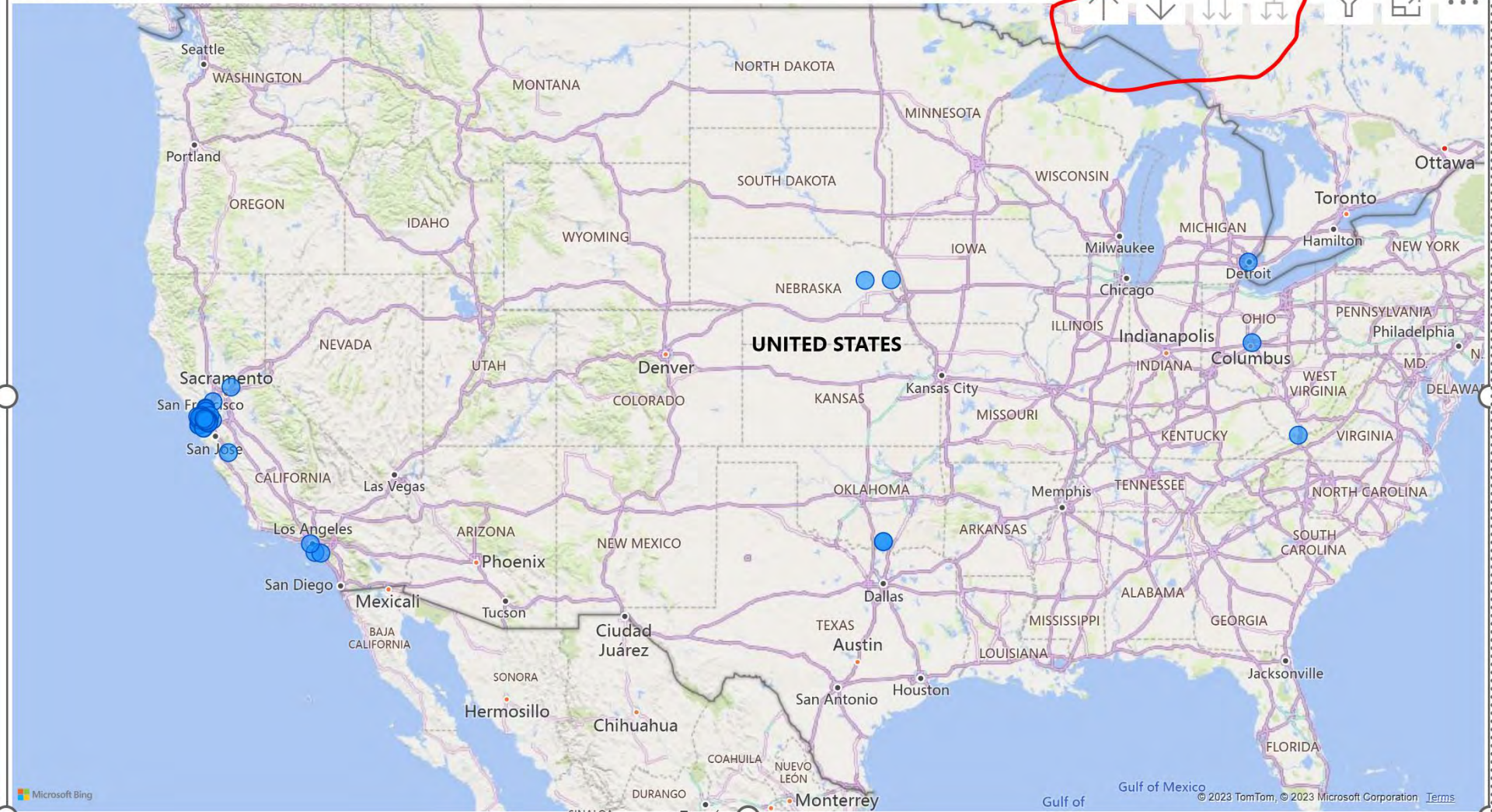
Microsoft Bing

**State: California**



# MAP

State, City and Address

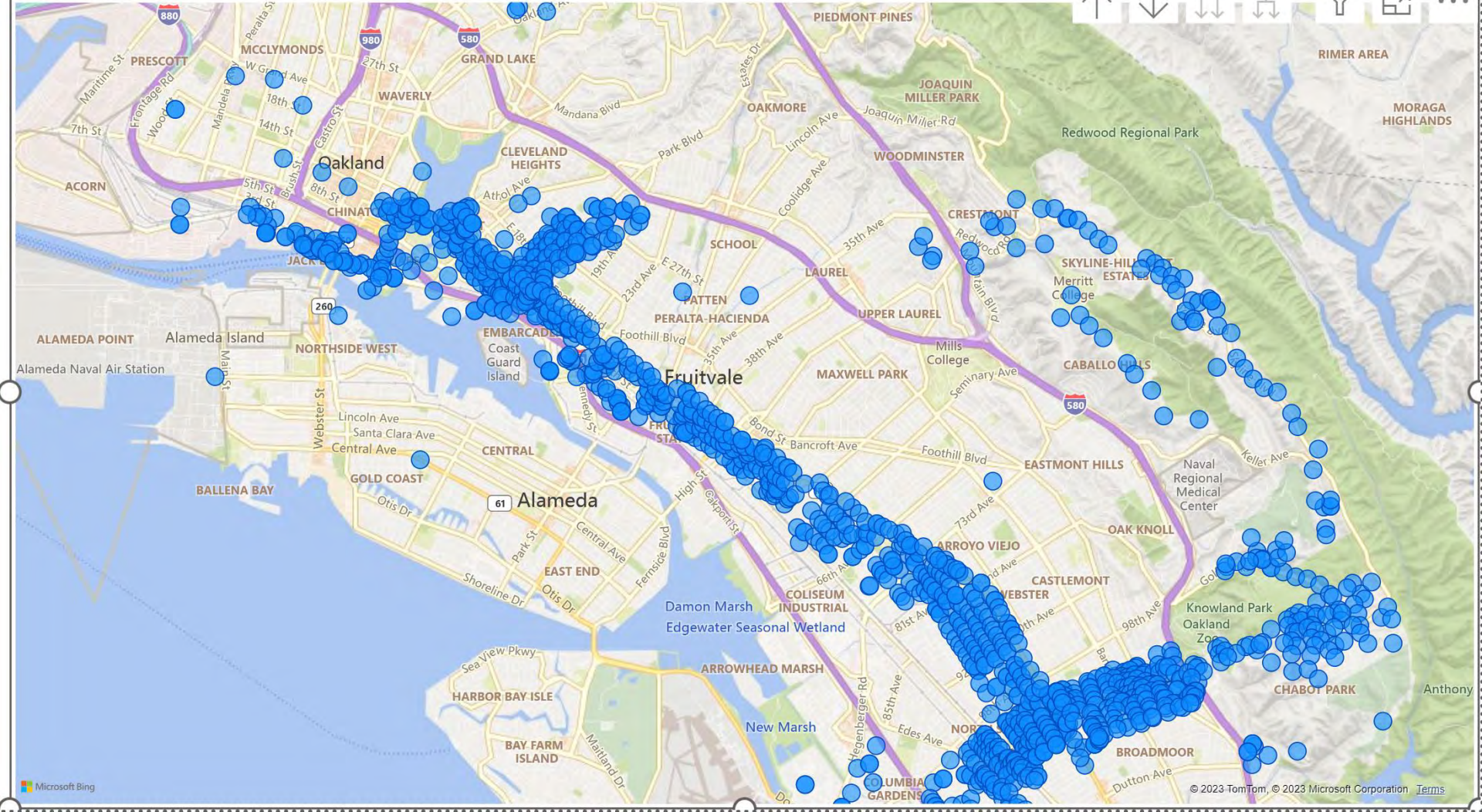


**Still not Ideal!!!**



# MAP

State, City and Address



**Better than nothing!!!**

# MAP

Visual Properties ...

Map settings

Style

Style

Road

Show labels On

Controls

Auto zoom On

Zoom buttons Off

Lasso button Off

Geocoding culture

Auto

Style

Road

Show labels On

Controls

Auto zoom Off

Zoom buttons On

Lasso button On

Geocoding culture

Auto



# MAP

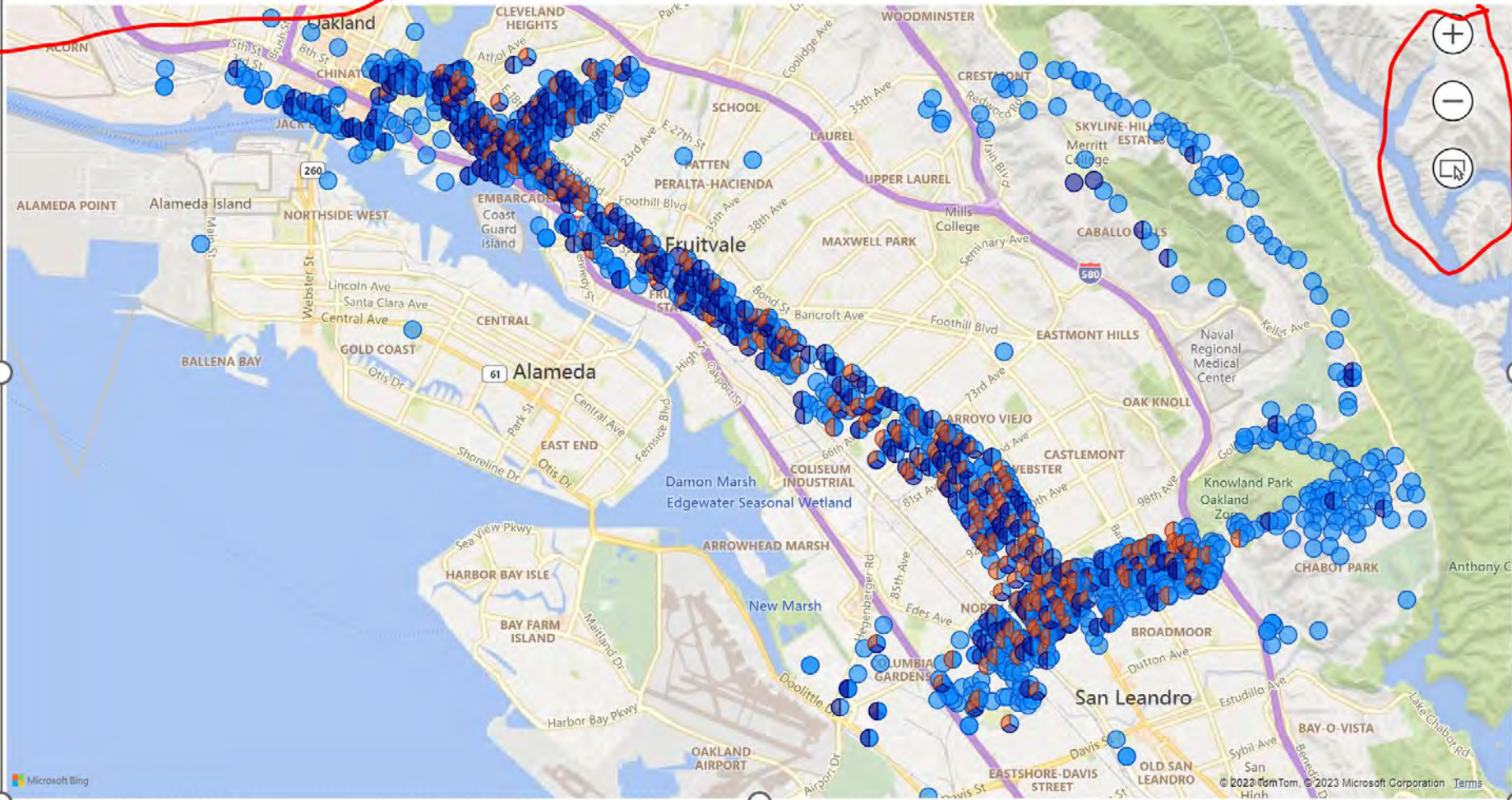
Data

Queries

Insert

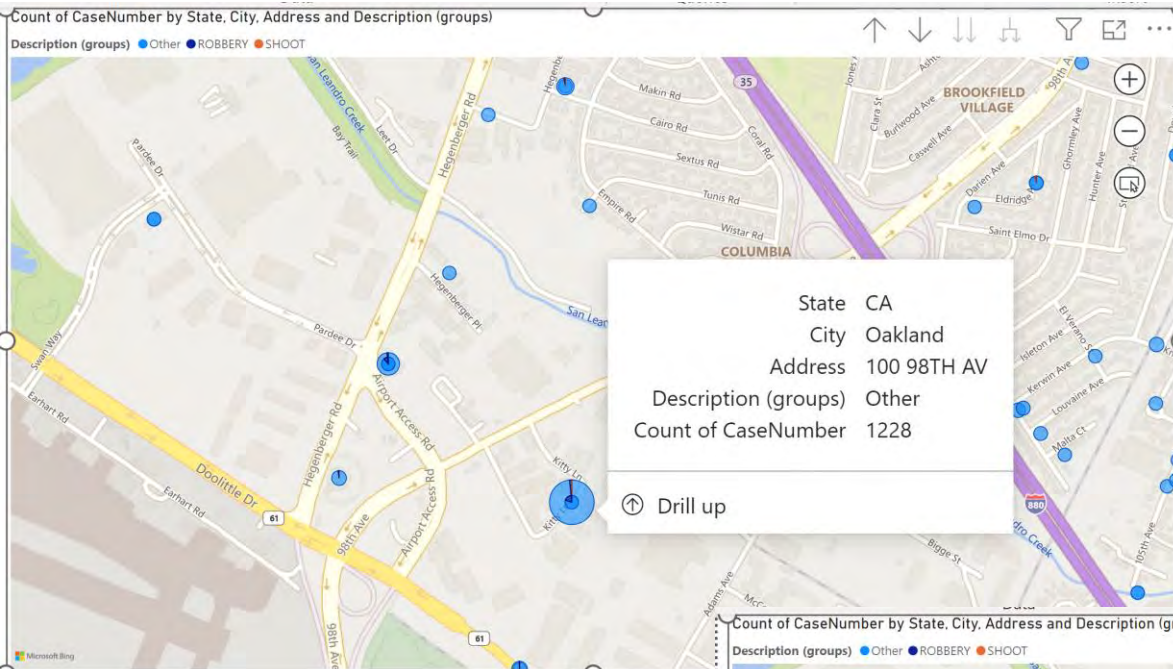
State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT



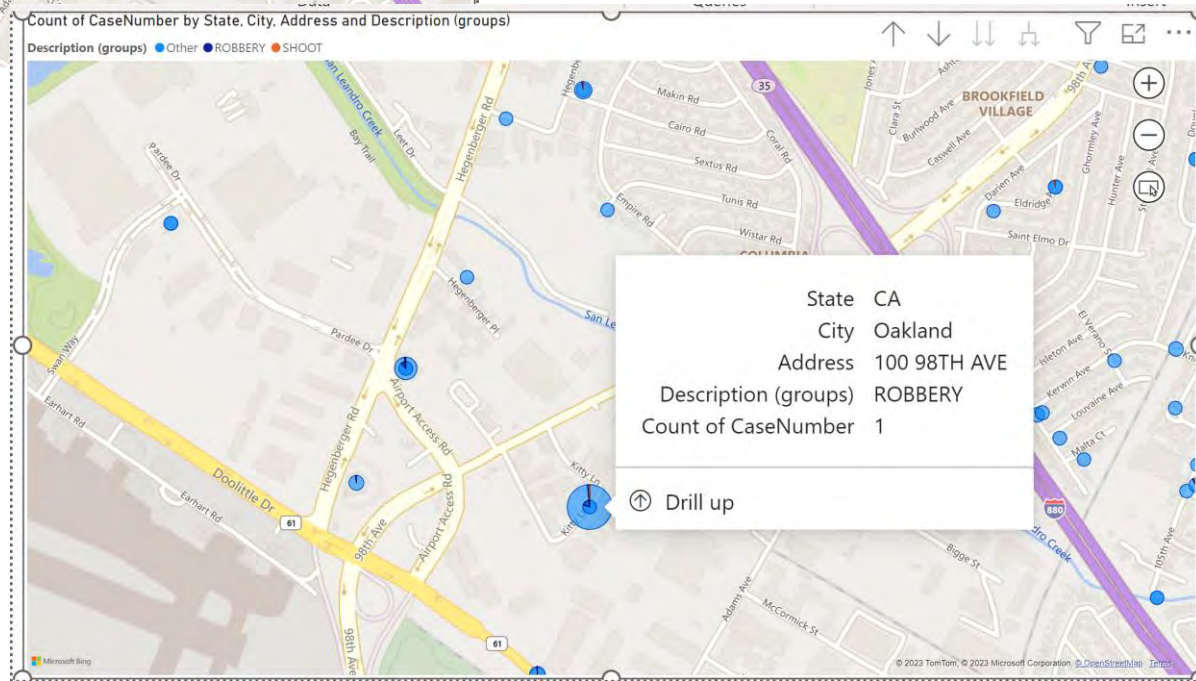


# MAP



The issue with address:

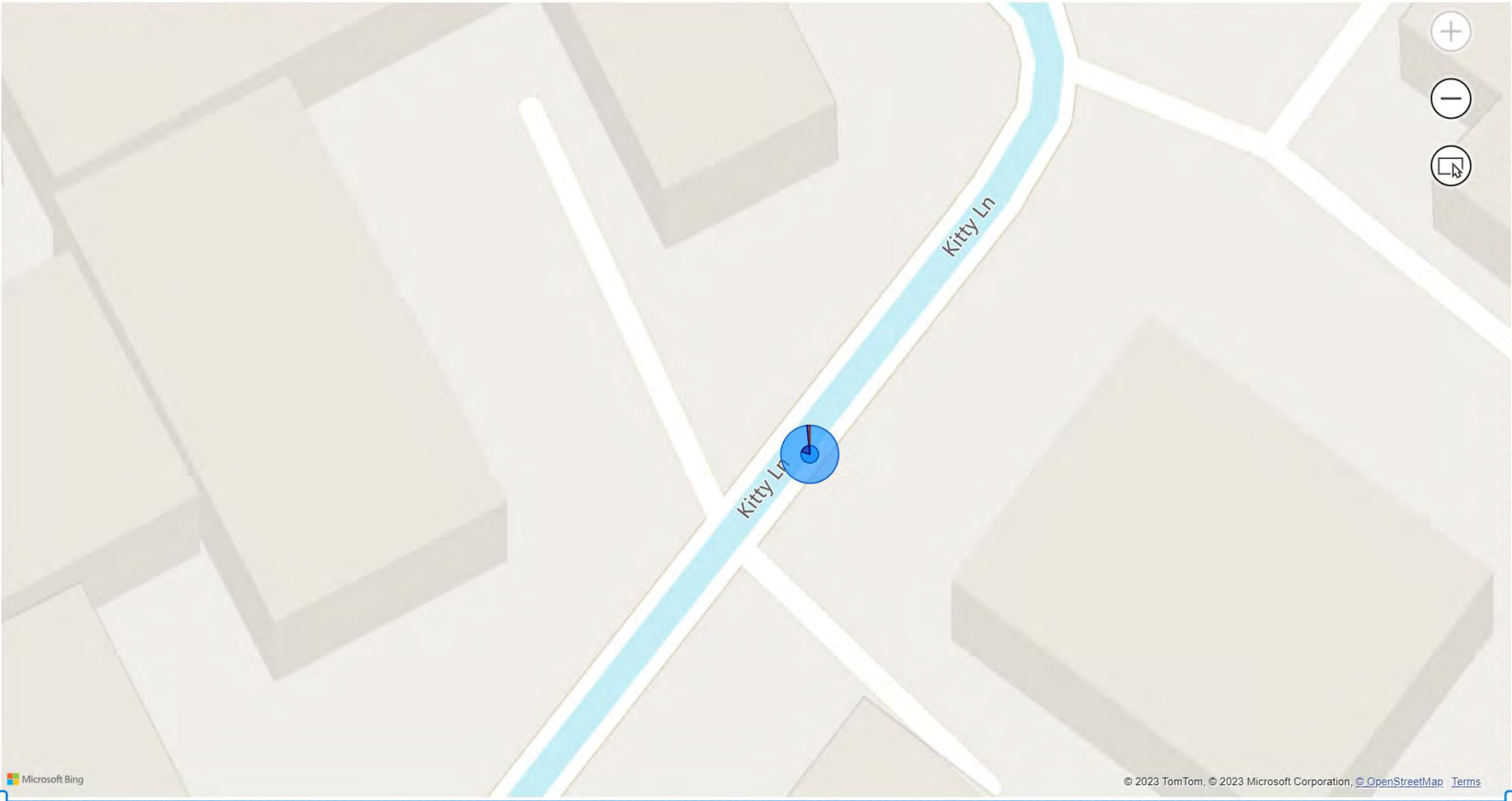
AV vs AVE



# MAP

Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT





Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT



9825 Kitty Ln, Oakland, CA 94603, United States

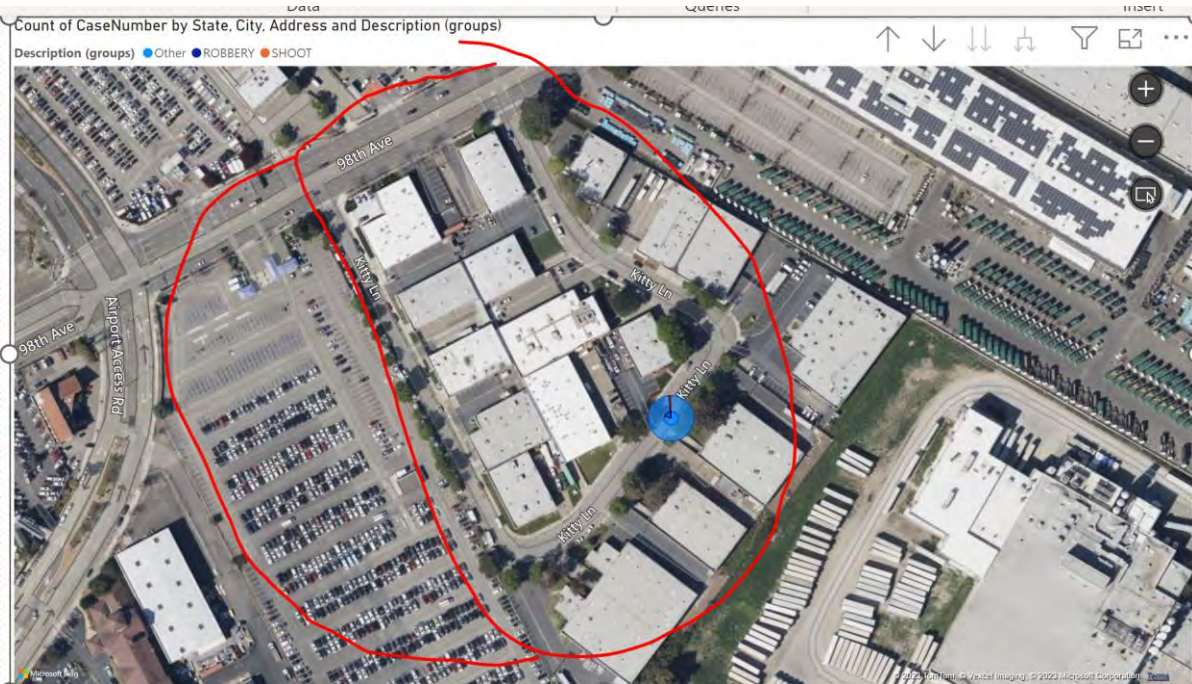


[Report a privacy concern with this image](#)

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# MAP



The figure shows the configuration panels for the map. On the left is the "Filters" panel, which contains a search bar and three filter conditions: "Count of CaseNumber is (All)", "Description (groups) is (All)", and "State is (All)". Below these are two "Add data fields here" buttons. On the right is the "Format" panel, which also has a search bar. Under the "Style" section, the "Style" dropdown menu is set to "Aerial" and is circled in red. Below the style dropdown, there are options for "Show labels" (which is turned "On"), "Controls", "Reset to default", "Legend" (turned "On"), and "Bubbles".

# MAP

## Map settings

### Style

Style

Dark



Aerial

Dark

Light

Grayscale

Road

ZOOM buttons

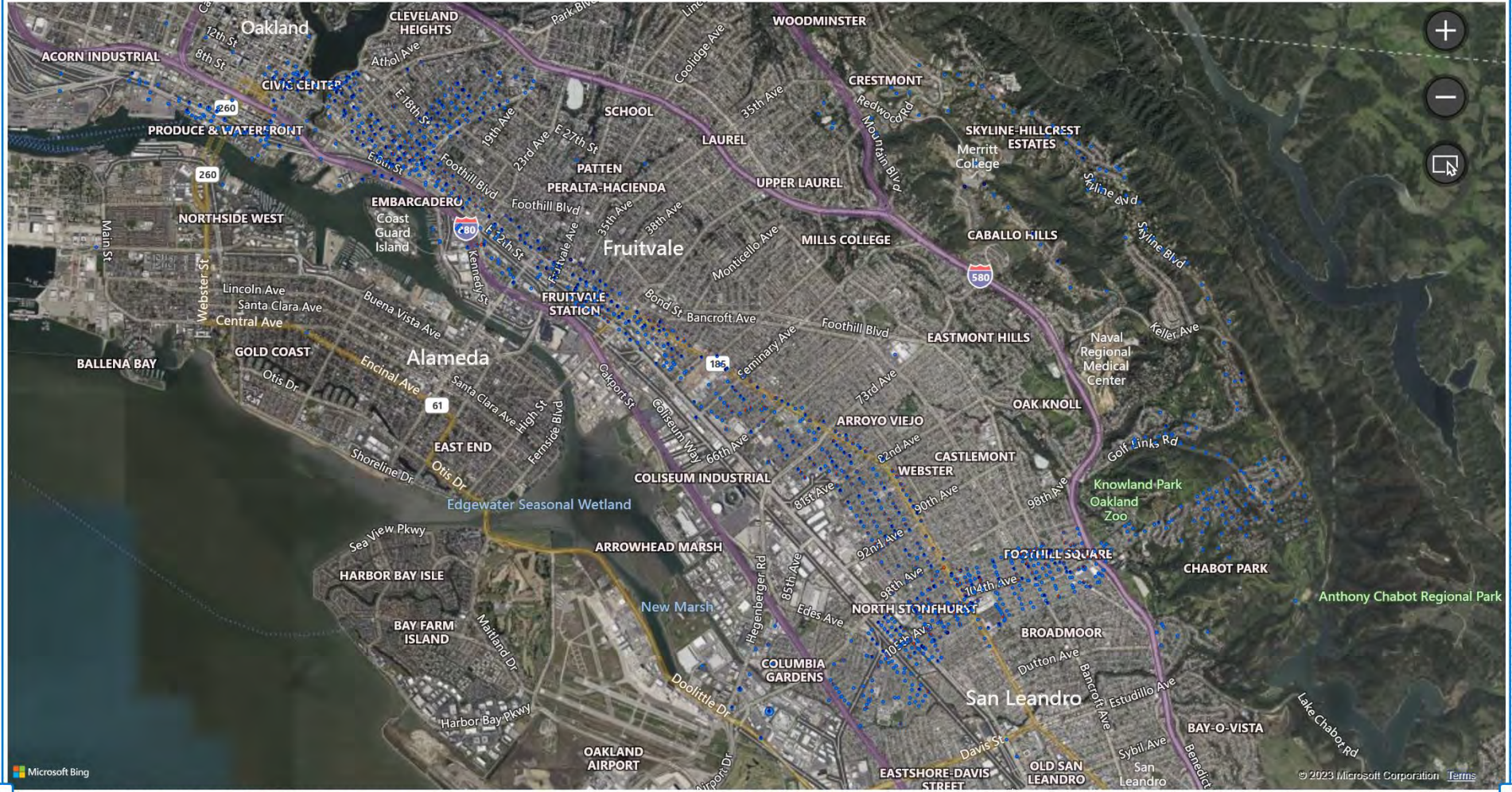
On



# MAP

Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT





# MAP

Count of CaseNumber by State, City, Address and Description (groups)

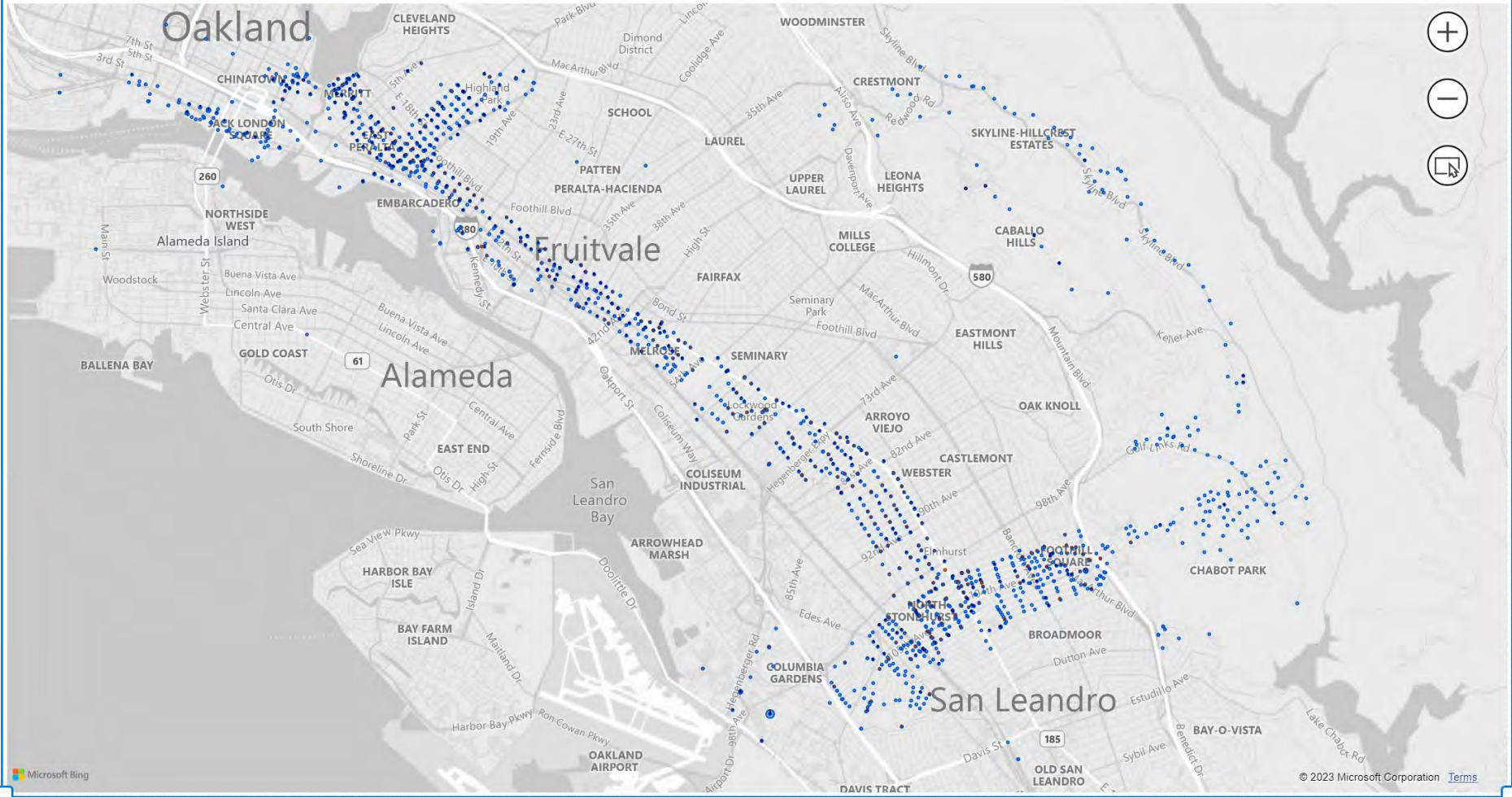
Description (groups) ● Other ● ROBBERY ● SHOOT



# MAP

Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT

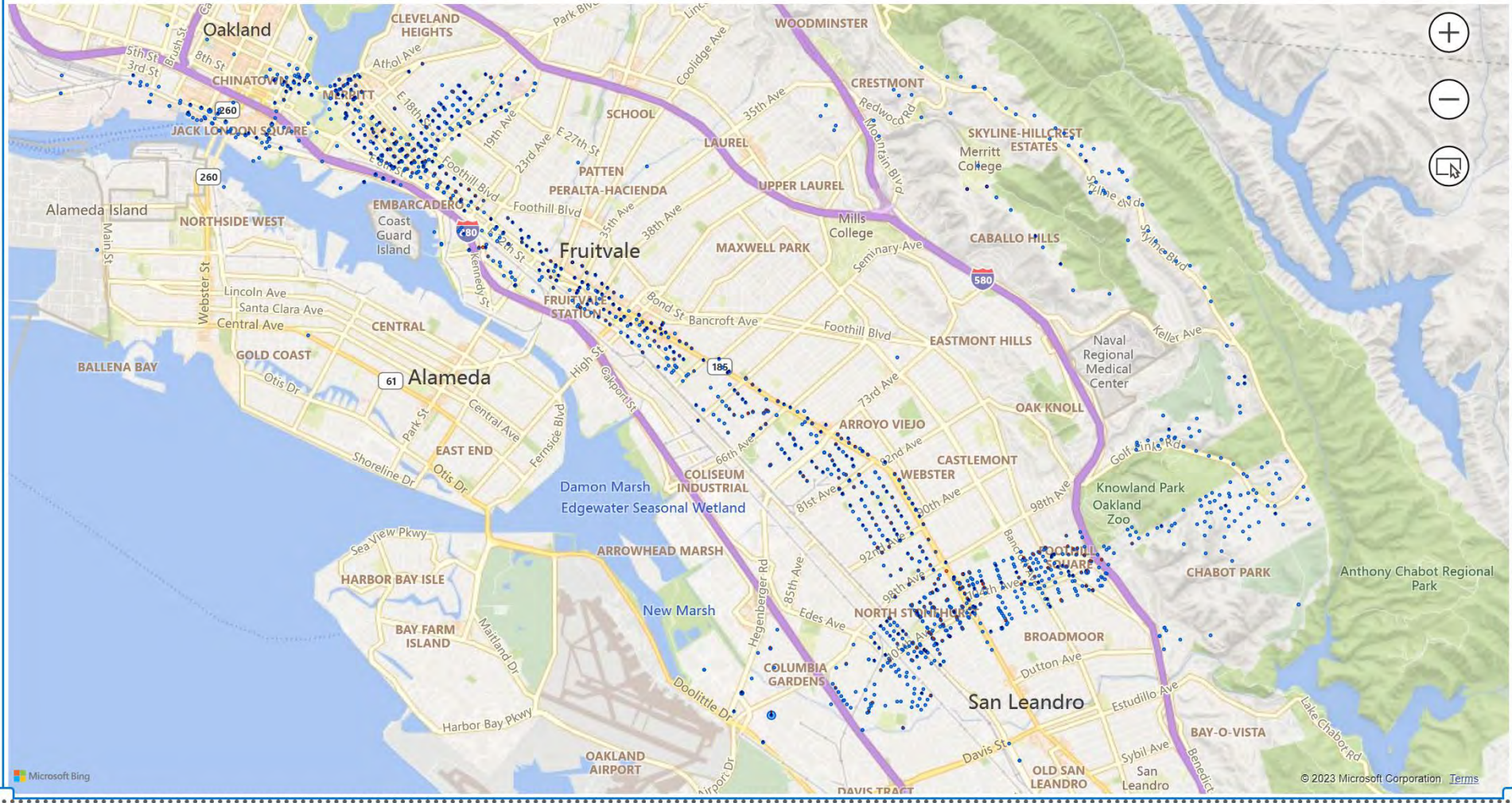




# MAP

Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT





# MAP

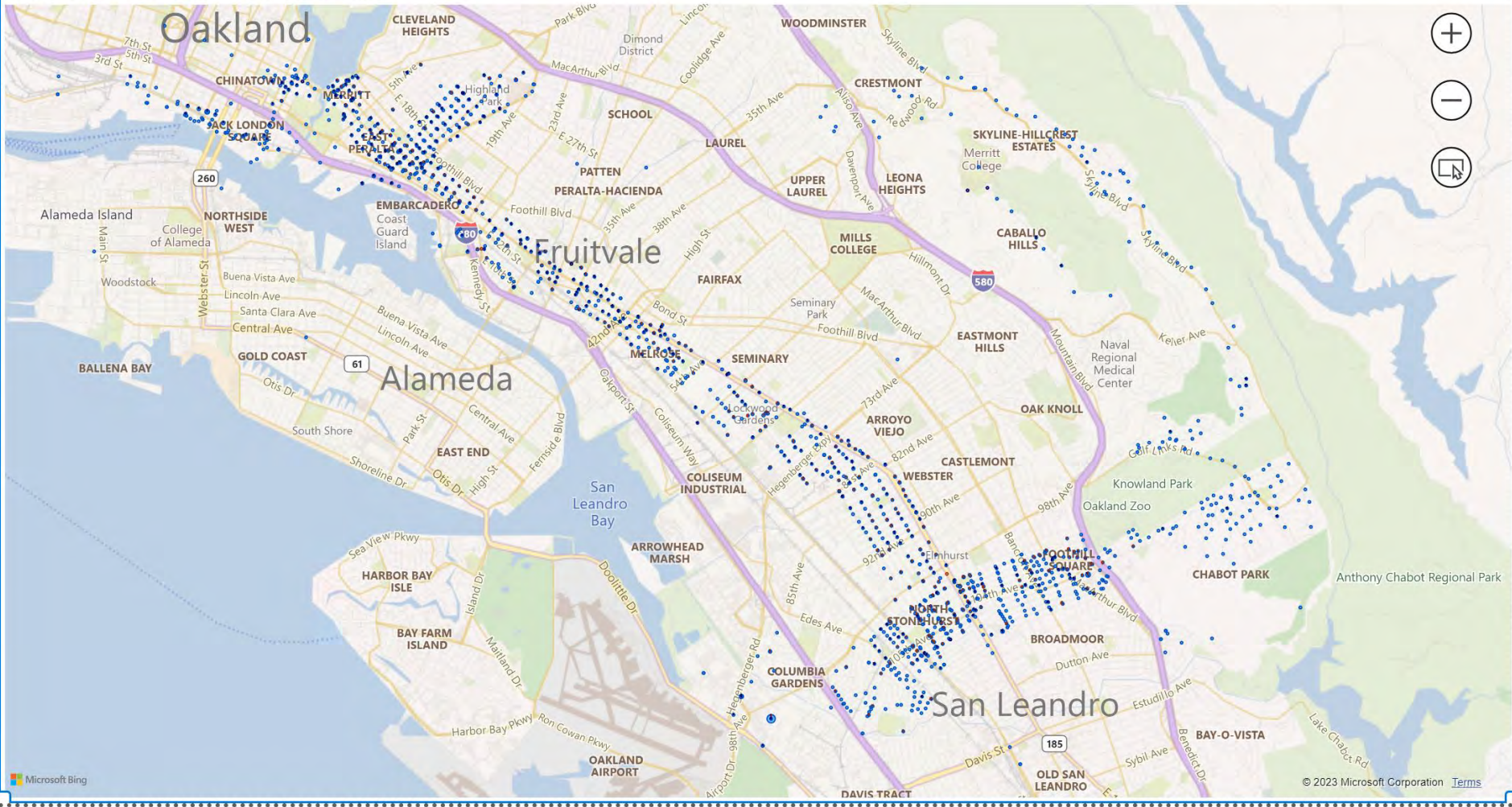
Data

Queries

Insert

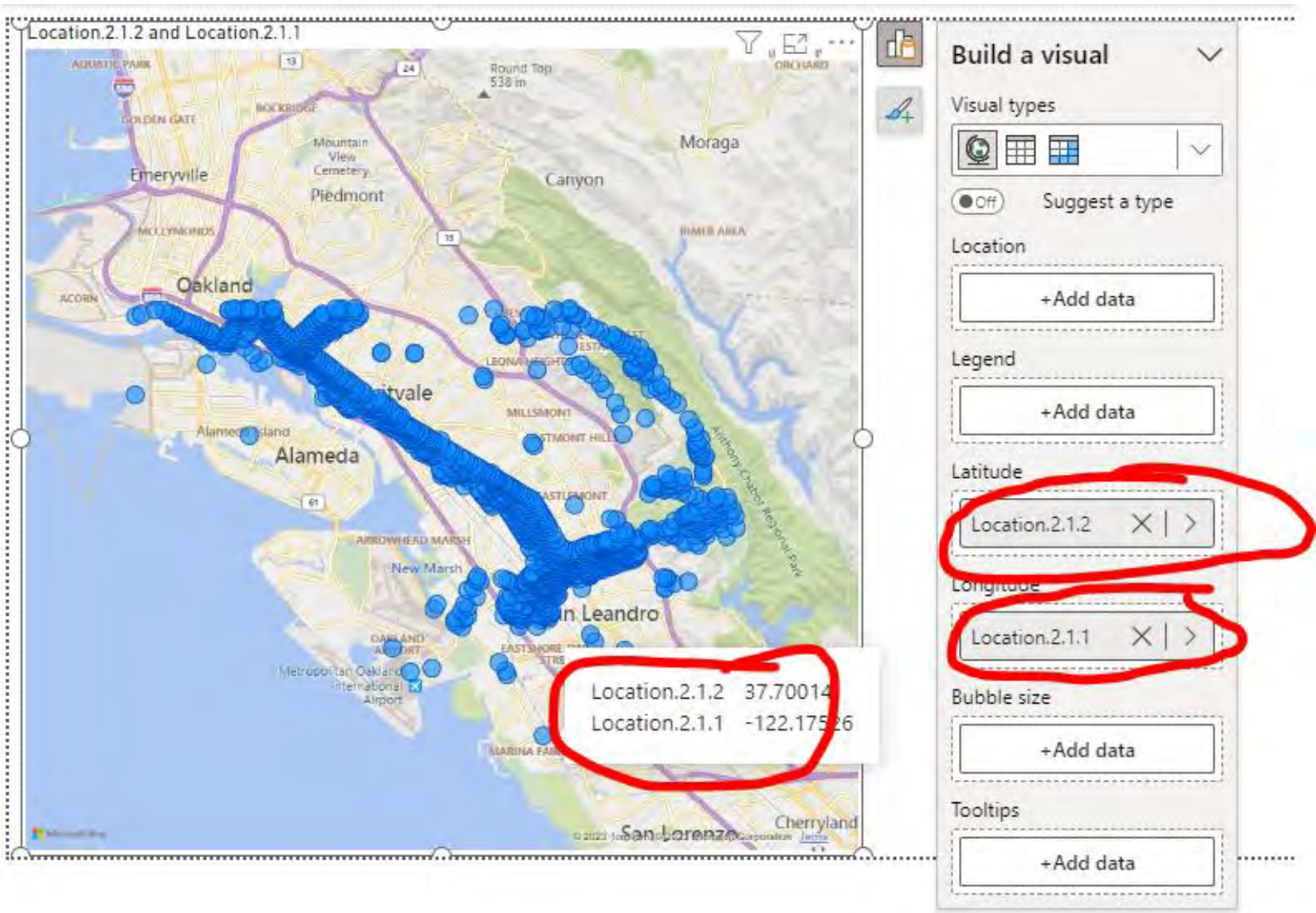
Count of CaseNumber by State, City, Address and Description (groups)

Description (groups) ● Other ● ROBBERY ● SHOOT

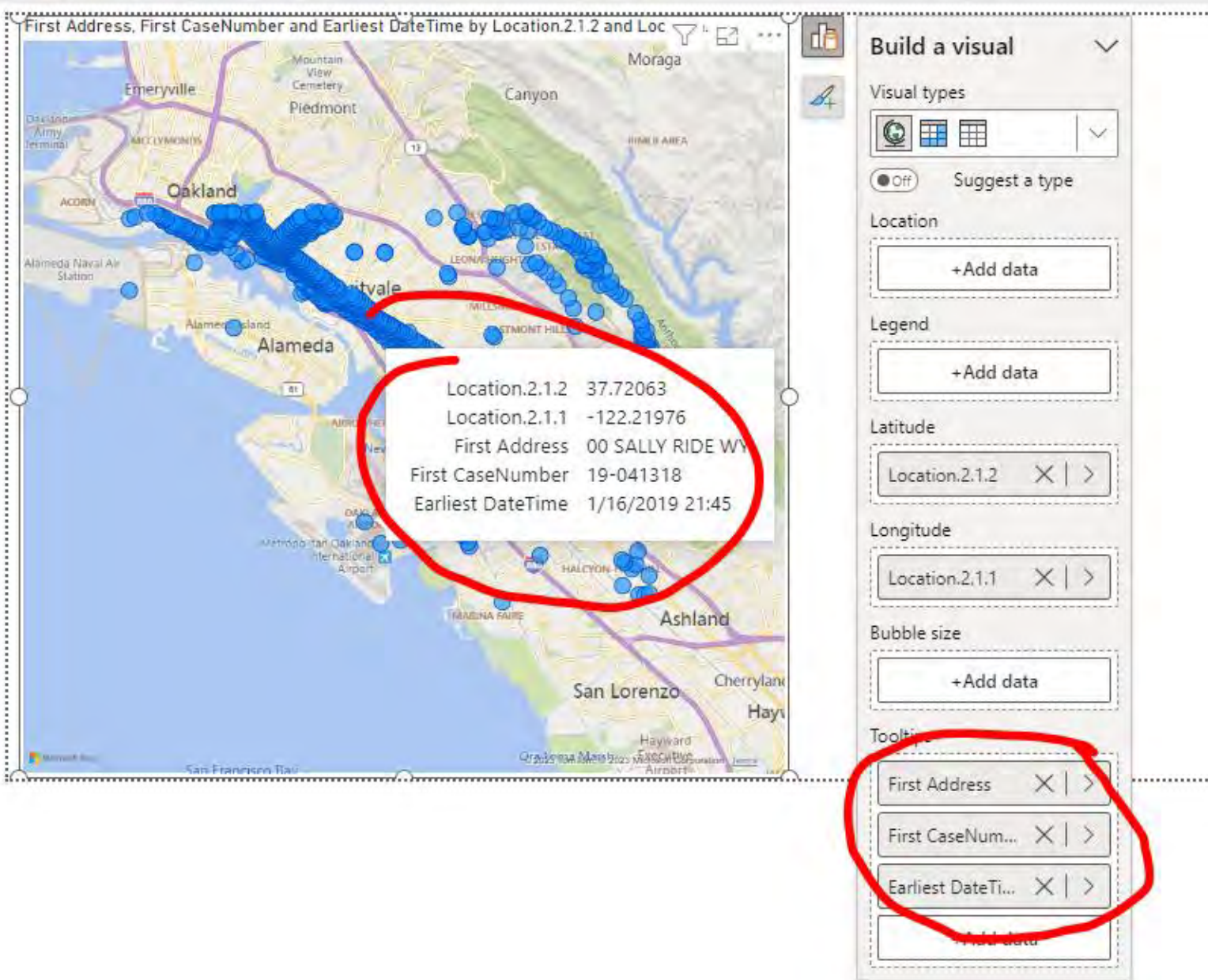




# STANDARD TOOLTIPS

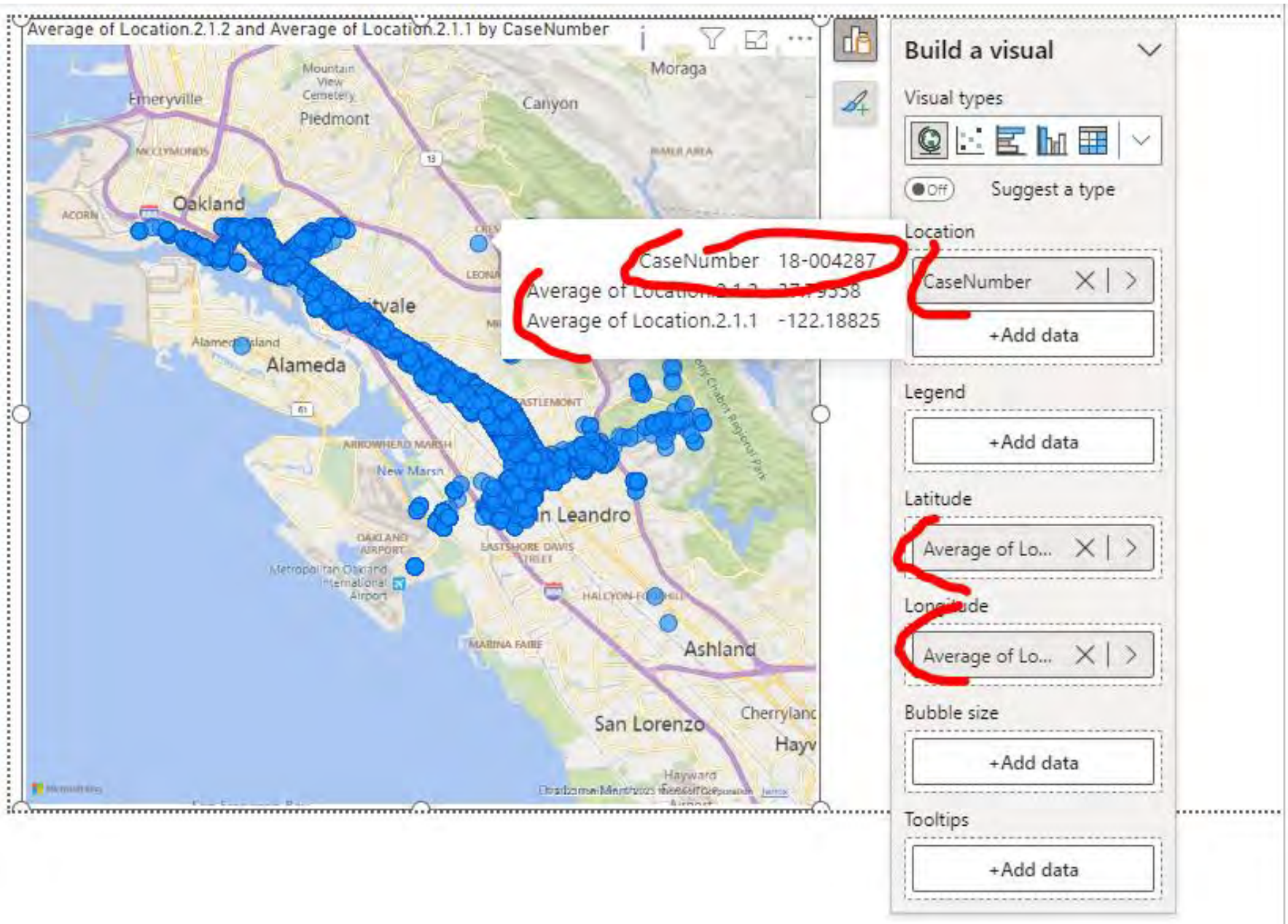


# CUSTOM TOOLTIPS





# CUSTOM TOOLTIPS



# TOOLTIPS WITH TOOLTIP PAGE

The image shows the Power BI Desktop interface with a red hand-drawn line highlighting a tooltip page configuration. The main canvas displays a tooltip page with a dashed border and a central graphic. The right-hand pane is the 'Format' pane, with the 'Filters' section expanded to show 'Page information'. The 'Name' field is set to 'Tooltip Page', and the 'Page type' dropdown is set to 'Tooltip'. The 'Keep all filters' toggle is turned on. Below these settings are options for 'Show tooltip on' (+Add data), 'Show tooltip when', 'Allow Q&A' (Off), and 'Page synonyms'.

**Format**

Search

Filters

Page information

Name  
Tooltip Page

Page type  
Tooltip

Keep all filters **On**

Show tooltip on  
**+Add data**

Show tooltip when

Allow Q&A **Off**

Page synonyms  
Add terms that might be used to refer to this page. Separate your list with commas.

Reset to default

Canvas settings

Canvas background

Wallpaper

Filter name

# TOOLTIPS WITH TOOLTIP PAGE

## Create Tooltip Visual

The screenshot shows a data visualization tool interface. On the left, a table displays data with columns for Address, CaseNumber, and DateTime. On the right, the 'Build a visual' panel is open, showing visual types and a list of columns. A red circle highlights the columns section in the 'Build a visual' panel.

Address	CaseNumber	DateTime
00 WEBSTER ST	22-921124	9/23/2022 12:00
00 10TH ST	18-018835	4/15/2018 11:30
00 10TH ST	18-062031	12/9/2018 08:30
00 10TH ST	18-902771	2/18/2018 13:55
00 10TH ST	19-007535	2/12/2019 13:28
00 10TH ST	19-012622	3/13/2019 00:20
00 10TH ST	19-014312	3/22/2019 22:49
00 10TH ST	19-014502	3/21/2019 21:00
00 10TH ST	19-053070	10/11/2019 20:38
00 10TH ST	19-059909	11/14/2019 22:30

**Build a visual**

Visual types

Off Suggest a type

Columns

- Address X | >
- CaseNumber X | >
- DateTime X | >
- +Add data



# TOOLTIPS WITH TOOLTIP PAGE

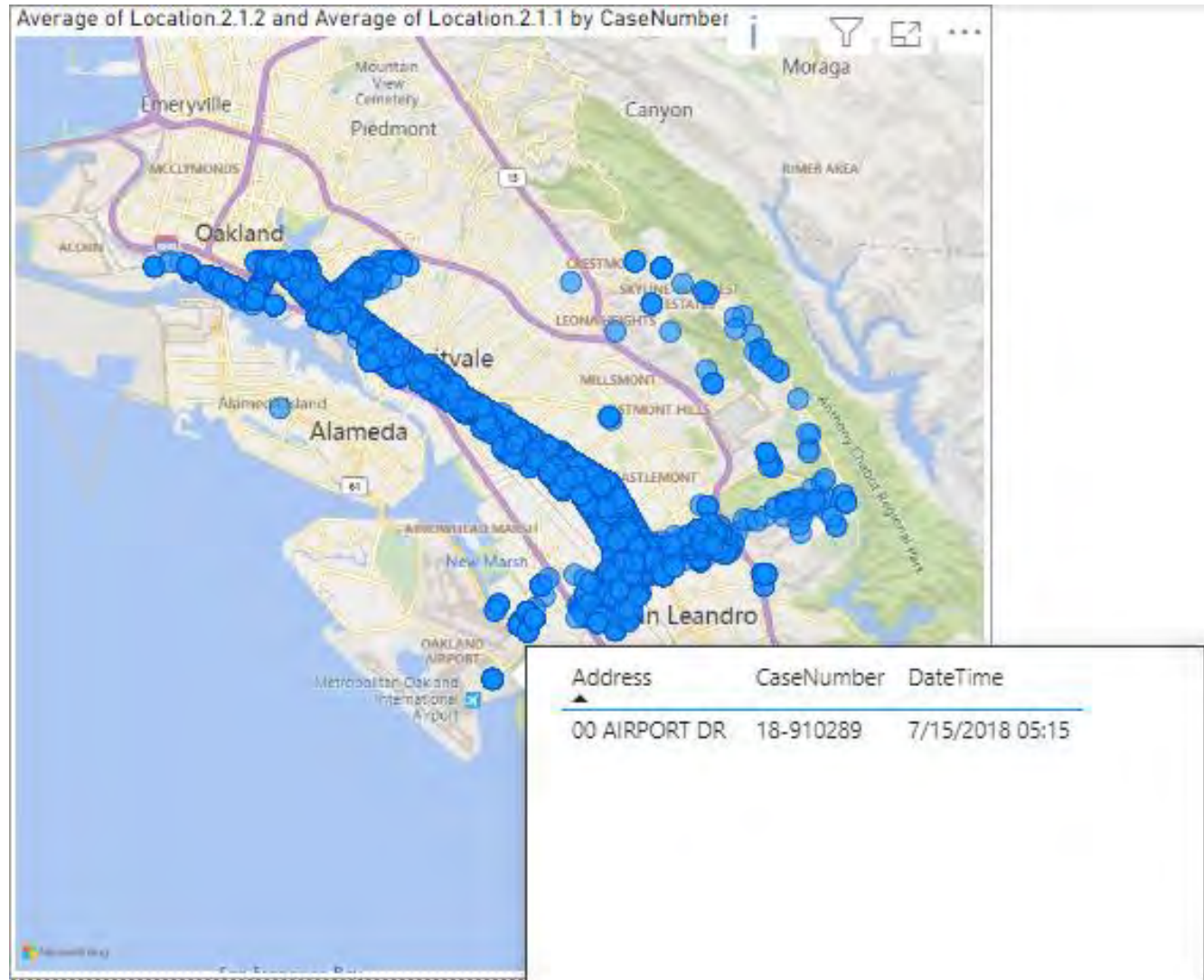
Connect Tooltip page to Main page

The image shows a screenshot of the Microsoft Power BI Desktop interface. The main window displays a map visualization titled "Average of Location 2.1.2 and Average of Location 2.1.1 by CaseNumber". The map shows a geographical area with various cities and regions, including Oakland, Alameda, San Leandro, and Ashland. Numerous blue circular data points are plotted on the map, primarily concentrated in the Oakland and Alameda areas.

The right-hand side of the interface shows the "Format" pane, which is used for configuring the visual's appearance. The "Visual Properties" section is expanded, and the "Page" dropdown menu is set to "Tooltip Page". This dropdown is circled in red. Other options visible in the "Format" pane include "Header icons", "Tooltips", "Options", "Text", "Background", "Reset to default", "Alt text", and "Advanced options".

The top of the interface shows the standard Power BI ribbon with tabs for "File", "Home", "Insert", "Modeling", "View", "Optimize", "Help", "External tools", "Format", and "Data / Drill". The "Home" tab is currently selected, showing options for "Paste", "Clipboard", "Data", and "Queries".

# TOOLTIPS WITH TOOLTIP PAGE





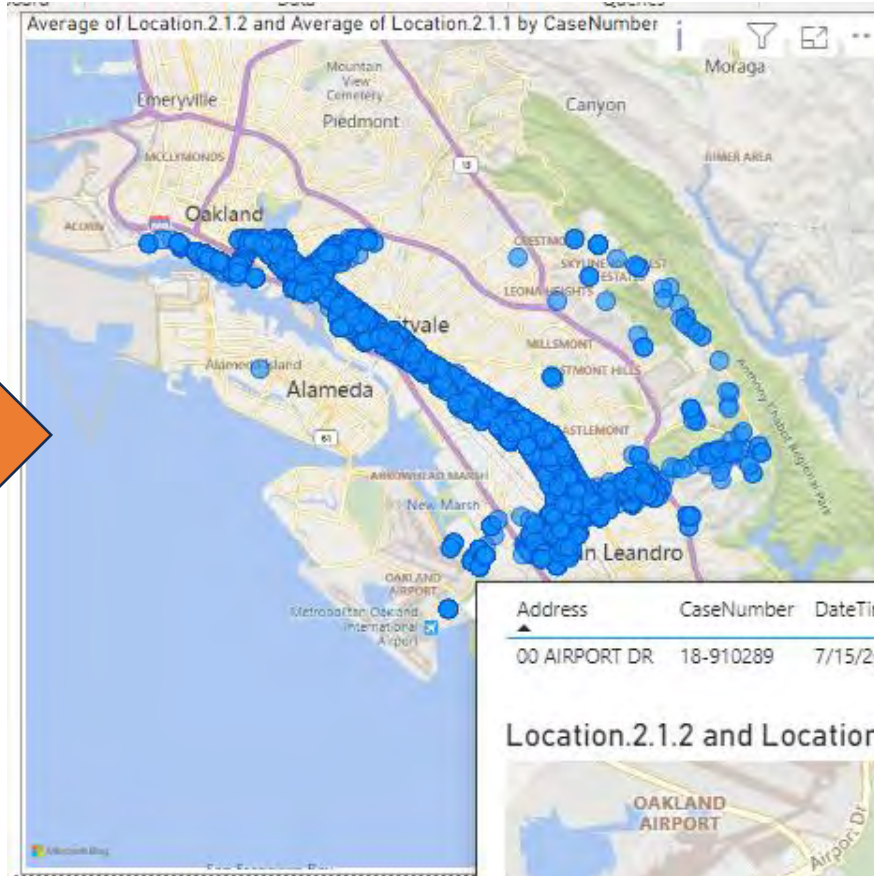
# TOOLTIPS WITH TOOLTIP PAGE

## Map with custom tooltip

### Tooltip page

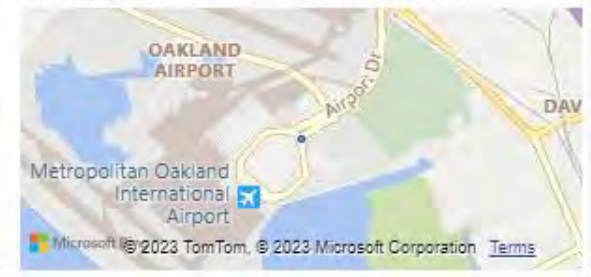
Address	CaseNumber	DateTime
00 WEBSTER ST	22-921124	9/23/2022 12:00
00 10TH ST	18-018835	4/15/2018 11:30

Location.2.1.2 and Location.2.1.1



Address	CaseNumber	DateTime
00 AIRPORT DR	18-910289	7/15/2018 05:15

Location.2.1.2 and Location.2.1.1



# DRILLTHROUGH PAGE

## Map with Drillthrough

Address	CaseNumber	Date/Time	Description	Description (groups)	PoliceBeat	Year
00 WEBSTER ST	22 921124	9/24/2022 12:00	VANDALISM	Other	77X	2022
00 10TH ST	18 018835	4/15/2018 11:30	VEHICLE THEFT - AUTO	Other	05X	2018
00 10TH ST	18 062031	12/9/2018 08:30	BATTERY-SPOUSE/EX SPOUSE/DATE/ETC	Other	05X	2018
00 10TH ST	18 062057	12/9/2018 08:30	THREAT CRIME/INT.TERRORIZE	Other	05X	2018
00 10TH ST	18 902771	2/18/2018 15:55	GRAND THEFT	Other	19X	2018
00 10TH ST	19 007555	2/12/2019 13:28	BATTERY-SPOUSE/EX SPOUSE/DATE/ETC	Other	05X	2019
00 10TH ST	19 012622	3/13/2019 00:20	BATTERY	Other	05X	2019
00 10TH ST	19 012622	3/13/2019 00:20	CRIMINAL THREATS THREATED CRIME W/INTENT TO TERRORIZE	Other	05X	2019
00 10TH ST	19 014313	3/22/2019 22:49	BATTERY	Other	05X	2019
00 10TH ST	19 014312	3/22/2019 22:49	THREAT CRIME/INT.TERRORIZE	Other	05X	2019

Location.2.1.2 and Location.2.1.1

**Format**

Search

**Filters**

**Page information**

Name: Drill Through

Page title: Drillthrough

Keep all filters:

Cross-report:  Off

Drill through from: CaseNumber

**Drill through when**

CaseNumber is: Used as category

**Allow Q&A**  Off

Page synonyms

Reset to default

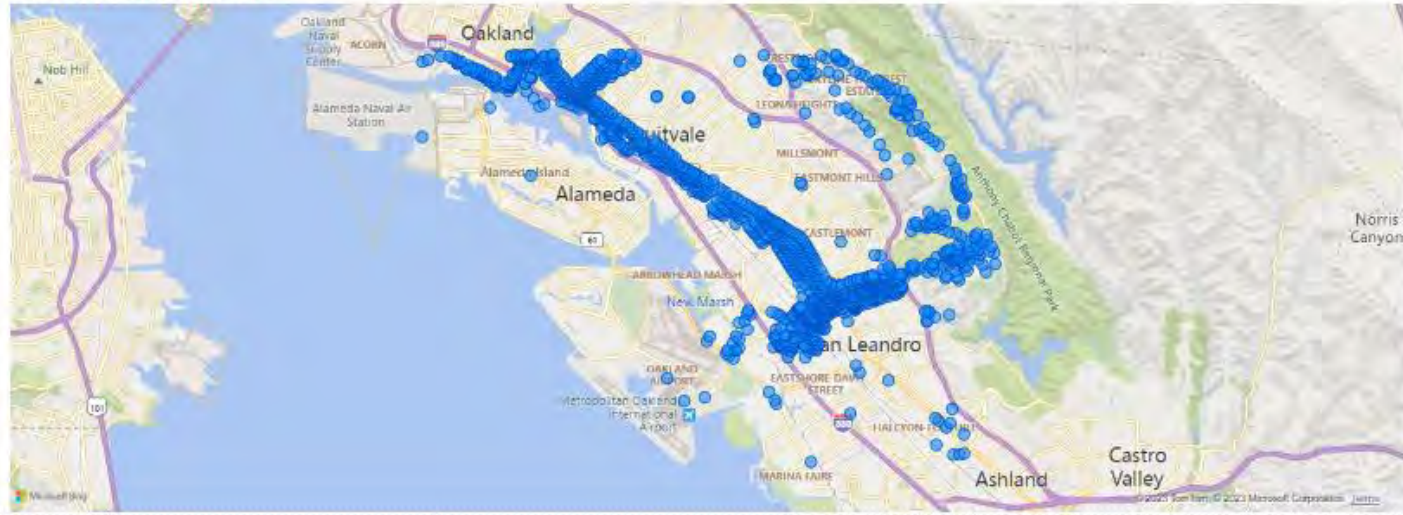
Canvas settings



# DRILLTHROUGH PAGE

Address	CaseNumber	DateTime	Description	Description (group)	PoliceBeat	Year
00 WEBSTER ST	22 921124	9/23/2022 12:00	VANDALISM	Other	77X	2022
00 10TH ST	18 018855	4/15/2018 11:30	VEHICLE THEFT - AUTO	Other	05X	2018
00 10TH ST	18 062051	12/9/2018 08:30	BATTERY-SPOUSE/EX SPOUSE/DATE/ETC	Other	05X	2018
00 10TH ST	18 062051	12/9/2018 08:30	THREAT CRIME/INT.TERRORIZE	Other	05X	2018
00 10TH ST	18 902271	2/18/2018 13:55	GRAND THEFT	Other	19X	2018
00 10TH ST	19 007535	3/12/2019 13:28	BATTERY-SPOUSE/EX SPOUSE/DATE/ETC	Other	05X	2019
00 10TH ST	19 012622	3/13/2019 00:20	BATTERY	Other	05X	2019
00 10TH ST	19 012622	3/13/2019 00:20	CRIMINAL THREATS THREATED CRIME W/INTENT TO TERRORIZE	Other	05X	2019
00 10TH ST	19 014812	3/22/2019 22:49	BATTERY	Other	05X	2019
00 10TH ST	19 014812	3/22/2019 22:49	THREAT CRIME/INT.TERRORIZE	Other	05X	2019

Location.2.1.2 and Location.2.1.1



**Format**

Search

**Filters**

**Page information**

Name: Drill Through

Page title: Drillthrough

Keep all filters:

Cross-report:  Off

Drill through from: CaseNumber

Drill through when: CaseNumber is Used as category

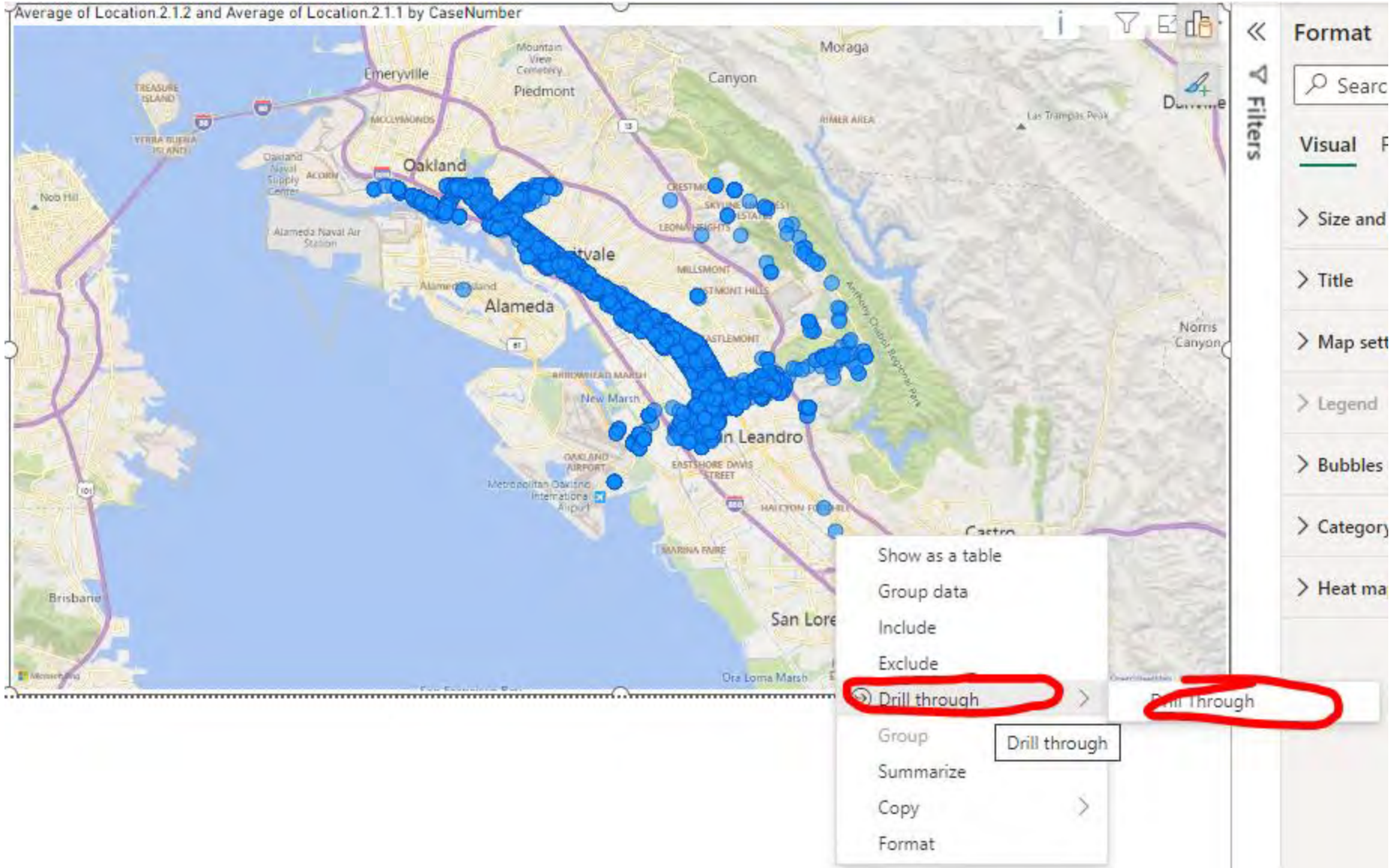
Allow Q&A:  Off

Page synonyms: Add terms that might be used to refer to this page. Separate your list with commas.

Reset to default

Canvas settings

# DRILLTHROUGH FEATURE



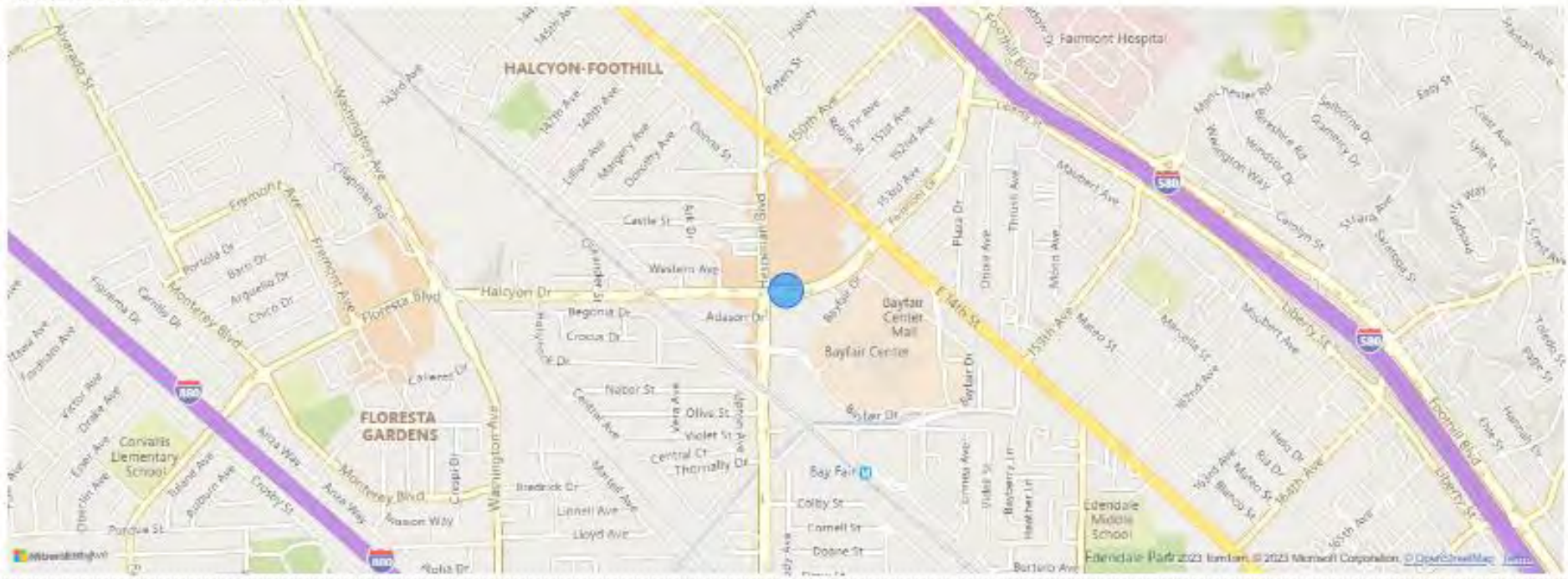


# DRILLTHROUGH RESULT










Address	CaseNumber	DateTime	Description	Description (groups)	PoliceBeat	Year
1200 FAIRMONT DR	18-034160	7/9/2018 00:00	OBT CREDIT/ETC:OTHER'S ID	Other	99X	2018

Location.2.1.2 and Location.2.1.1





# SHAPE MAP

<input type="checkbox"/>	Name	Date modified	Type	Size
<input type="checkbox"/>	 Oak_PoliceBeats.dbf	9/17/2023 9:52 AM	DBF File	42 KB
<input type="checkbox"/>	 Oak_PoliceBeats.prj	9/17/2023 9:52 AM	PRJ File	1 KB
<input type="checkbox"/>	 Oak_PoliceBeats.sbn	9/17/2023 9:52 AM	SBN File	1 KB
<input type="checkbox"/>	 Oak_PoliceBeats.sbx	9/17/2023 9:52 AM	SBX File	1 KB
<input checked="" type="checkbox"/>	 Oak_PoliceBeats.shp	9/17/2023 9:52 AM	SHP File	259 KB
<input type="checkbox"/>	 Oak_PoliceBeats.shp.xml	9/17/2023 9:52 AM	XML Document	16 KB
<input type="checkbox"/>	 Oak_PoliceBeats.shx	9/17/2023 9:52 AM	SHX File	1 KB

# SHAPE MAP – GET JSON FILES

<https://mapshaper.org/>

# SHAPE MAP – GET JSON FILES

<https://mapshaper.org/>

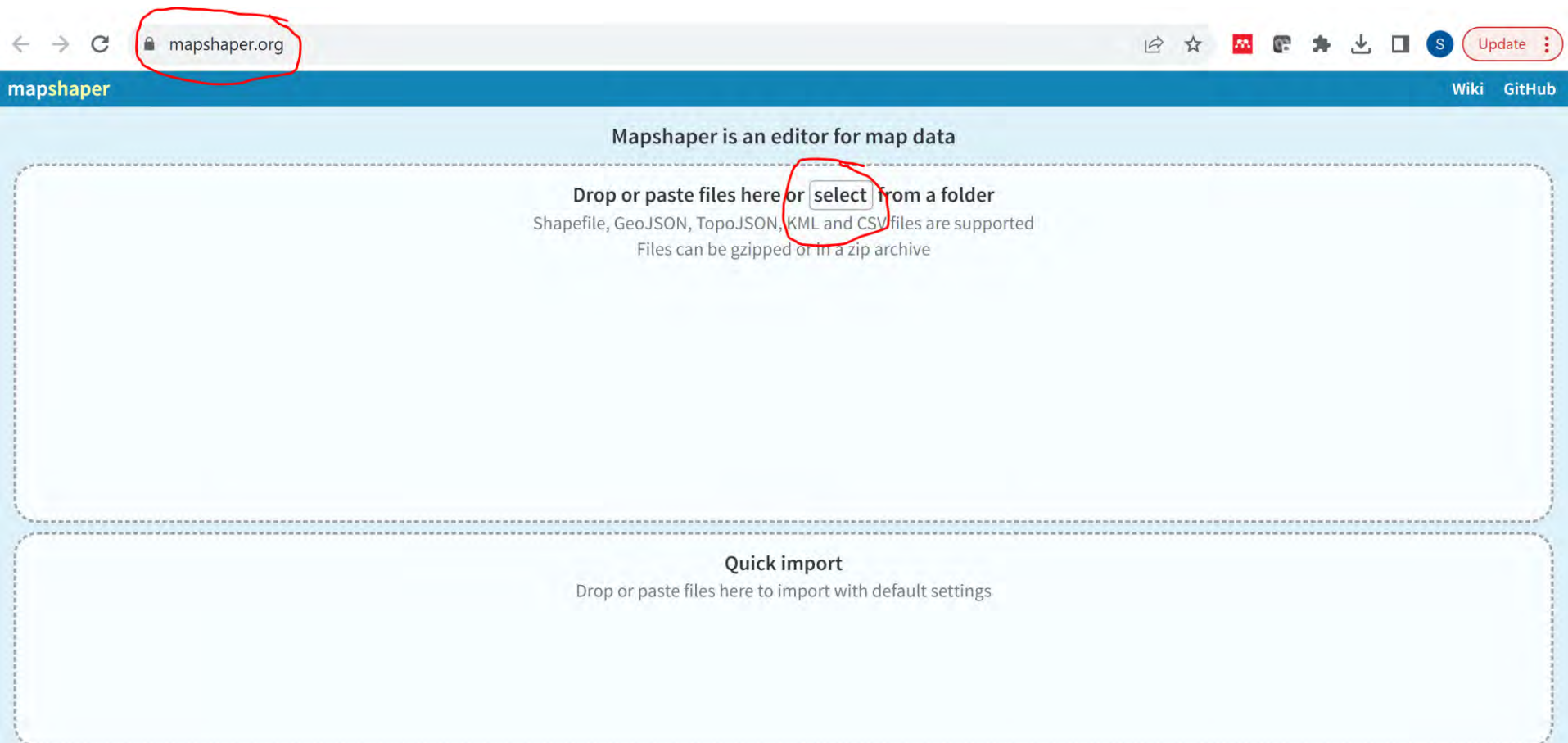
Shapefile  GeoJson file  TopoJson file



# SHAPE MAP – GET JSON FILES

<https://mapshaper.org/>

Shapefile  GeoJson file  TopoJson file



The screenshot shows the Mapshaper website interface. The browser's address bar contains the URL [mapshaper.org](https://mapshaper.org/), which is circled in red. The website header includes the 'mapshaper' logo and navigation links for 'Wiki' and 'GitHub'. The main content area features a large dashed box with the text: 'Mapshaper is an editor for map data'. Below this, it says 'Drop or paste files here or **select** from a folder', with the word 'select' circled in red. Further text indicates that Shapefile, GeoJSON, TopoJSON, KML, and CSV files are supported, and that files can be gzipped or in a zip archive. A second dashed box at the bottom is titled 'Quick import' and contains the text 'Drop or paste files here to import with default settings'.

# SHAPE MAP

Oak\_PoliceBeats ▼



# SHAPE MAP

Export options

Layers

- Oak\_PoliceBeats
- OPD\_CommunityPolicingBeats

File format

- Shapefile
- GeoJSON
- TopoJSON
- JSON records
- CSV
- KML
- SVG
- Snapshot file

command line options ?

Export  choose directory





# SHAPE MAP

## Export options

Layer name

Oak\_PoliceBeats

File format

Shapefile

GeoJSON

TopoJSON

JSON records

CSV

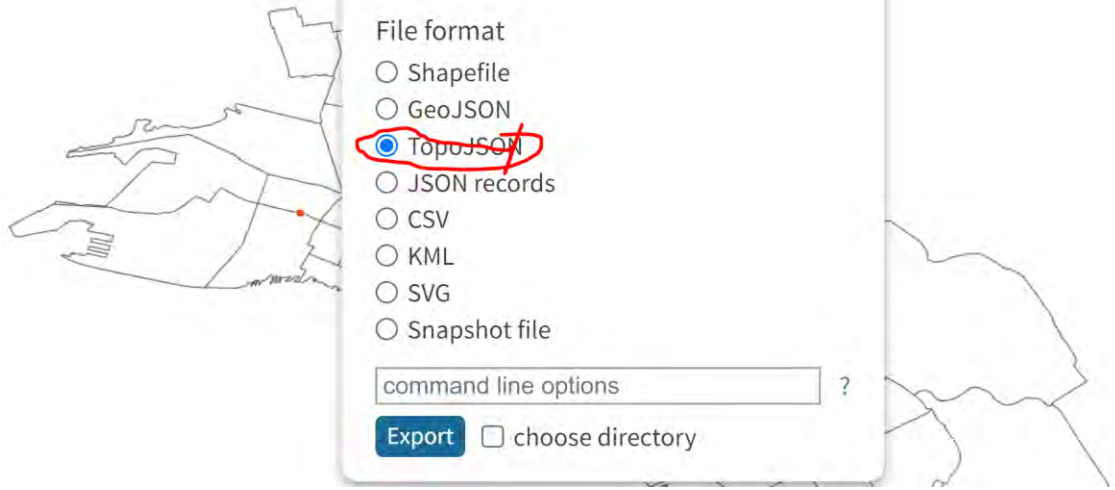
KML

SVG

Snapshot file

command line options ?

**Export**  choose directory



# SHAPE MAP

**Build a visual**

Visual types

Map  Table  Matrix

Off Suggest a type

Location

PoliceBeat X | >

Legend

+Add data

Color saturation

+Add data

Tooltips

+Add data

**Filters**

Search

Filters on this visual

PoliceBeat is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

**Format**

Search

**Visual** Properties

Map settings

Map type

Custom map

View map type key

Add a map type

Oak\_PoliceBeats.js... X

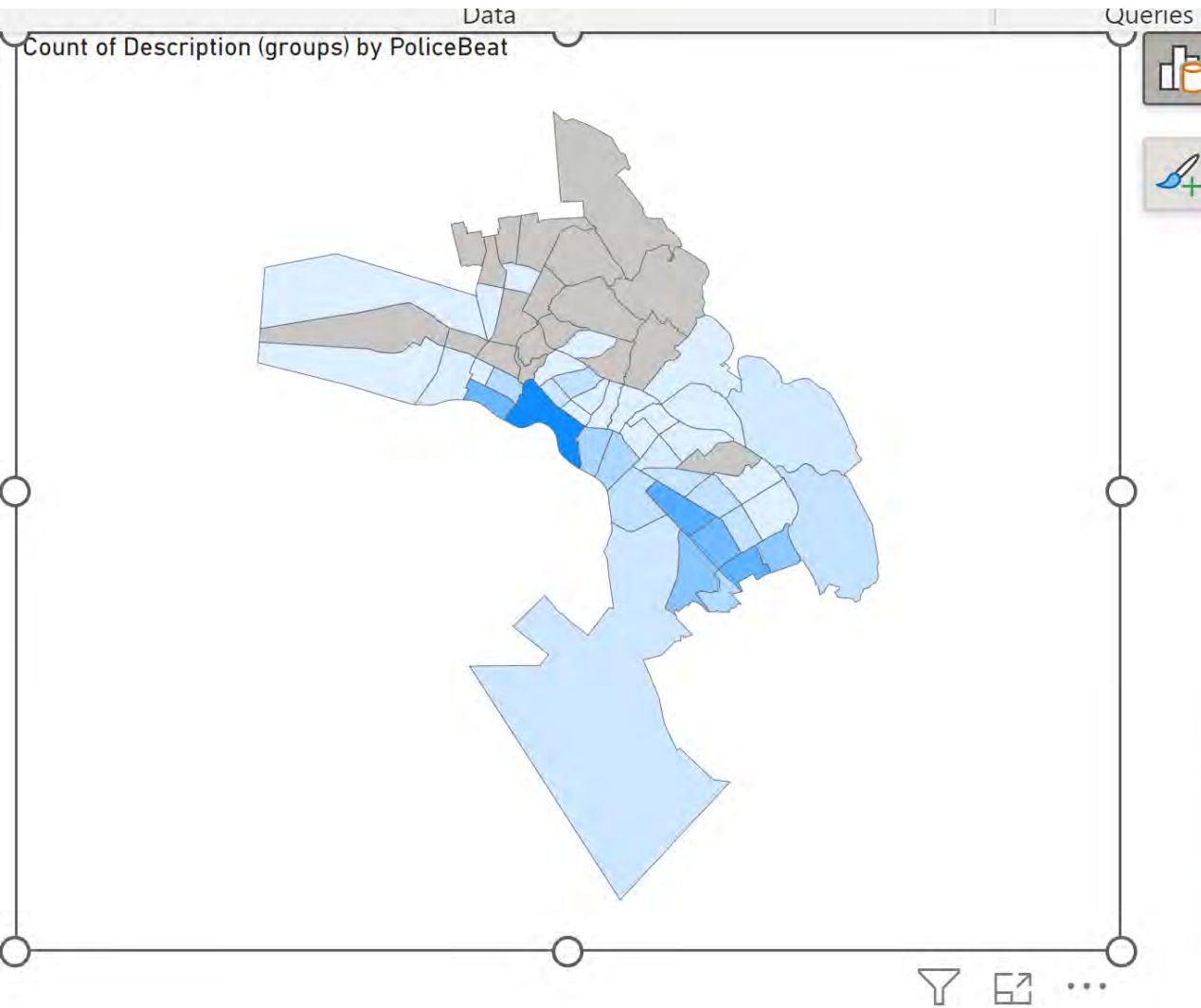
Projection

Mercator

> Zoom

Reset to default

# SHAPE MAP



## Build a visual

Visual types

Off Suggest a type

Location

PoliceBeat X | >

Legend

+Add data

Color saturation

Count of Desc... X | >

Tooltips

+Add data



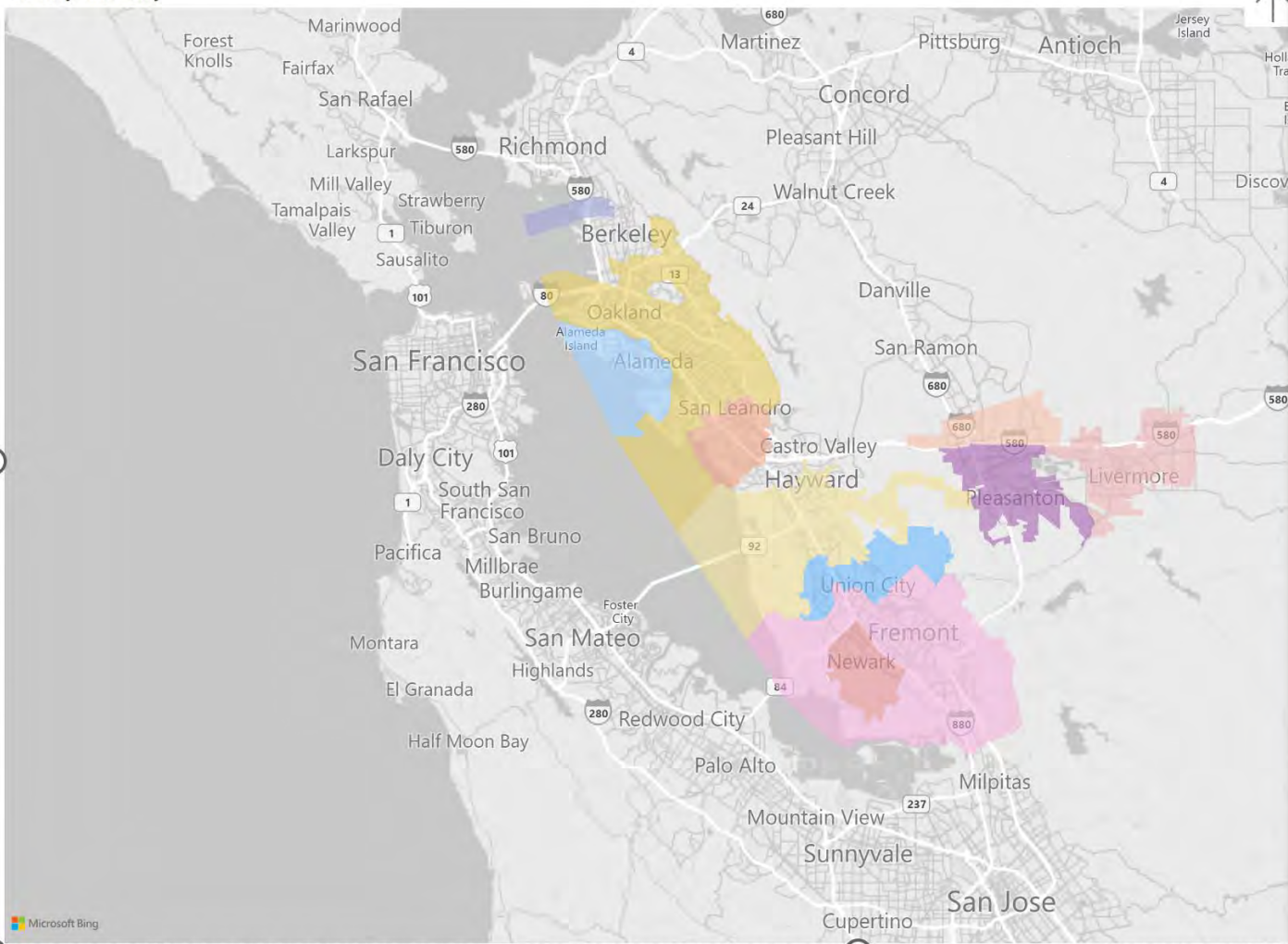
# FILLED MAP

Data

Queries

Insert

County and City



## Build a visual

Visual types



Off

Suggest a type

Location

County X | >

City X | >

+Add data

Legend

+Add data

Latitude

+Add data

Longitude

# AZURE MAP

<https://learn.microsoft.com/en-us/azure/azure-maps/power-bi-visual-get-started>

Check with your organization if it is available to use it.

Since Azure exchanges some information with Microsoft it might not be available in your organization

# Arc GIS MAP FOR POWER BI

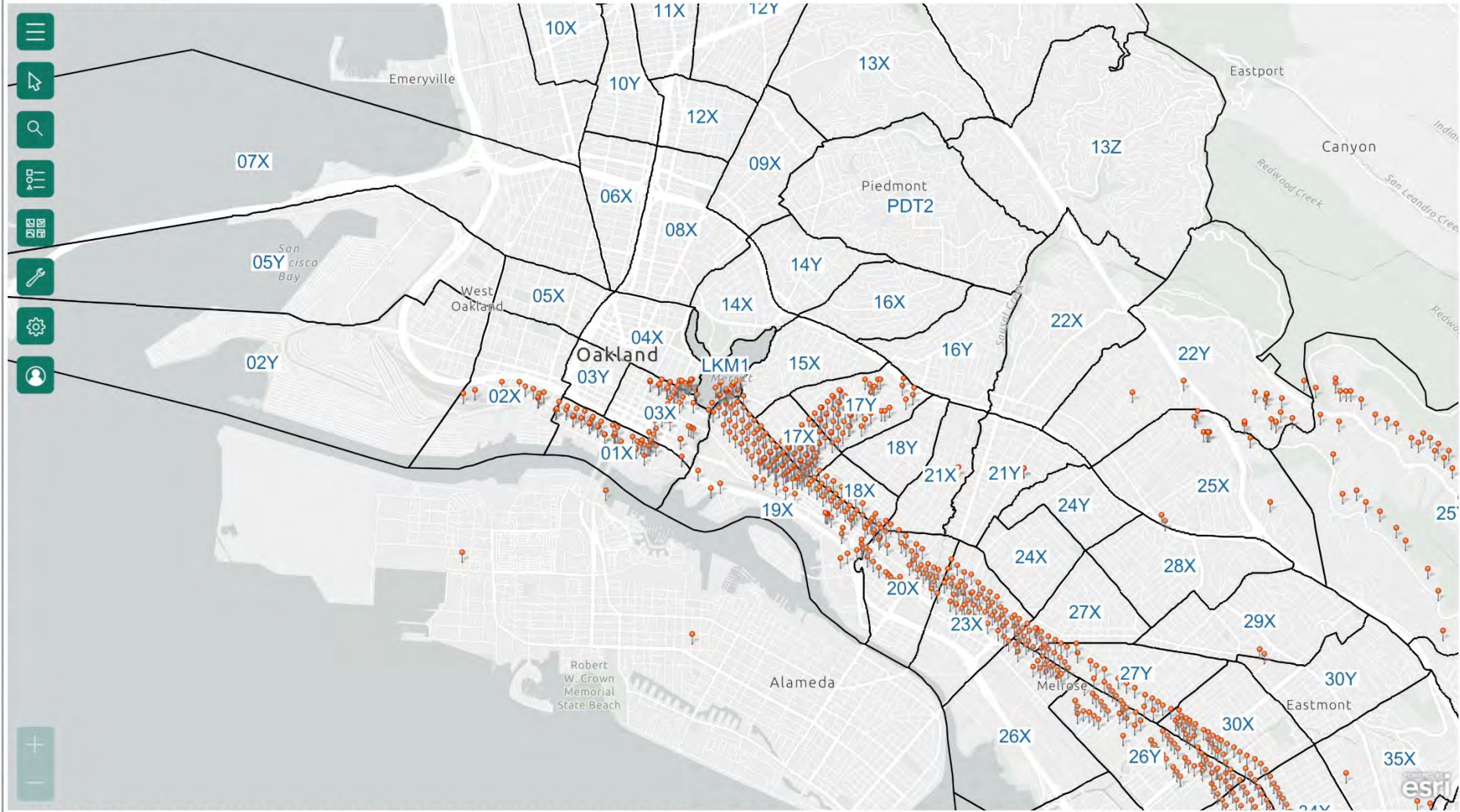
You have to sign in to a valid, licensed ArcGIS account





# ARC GIS MAP FOR POWER BI

Latitude and Longitude



# MAPBOX

The image shows the Microsoft Power BI ribbon, specifically the 'Visualizations' tab. The ribbon contains various icons for different visual types, including slicers, tables, matrices, AI visuals, and other specialized visualizations. The 'Get more visuals' button is highlighted with a red circle. Below the ribbon, a map is visible, showing a portion of the United States with city names like 'Quet', 'ronla', 'New', 'ington', 'edellin', and 'Colom' partially visible. The 'Text box' icon is also visible on the right side of the ribbon.

Visualizations

Slicer

Table and matrix

AI visuals

Other

R Py

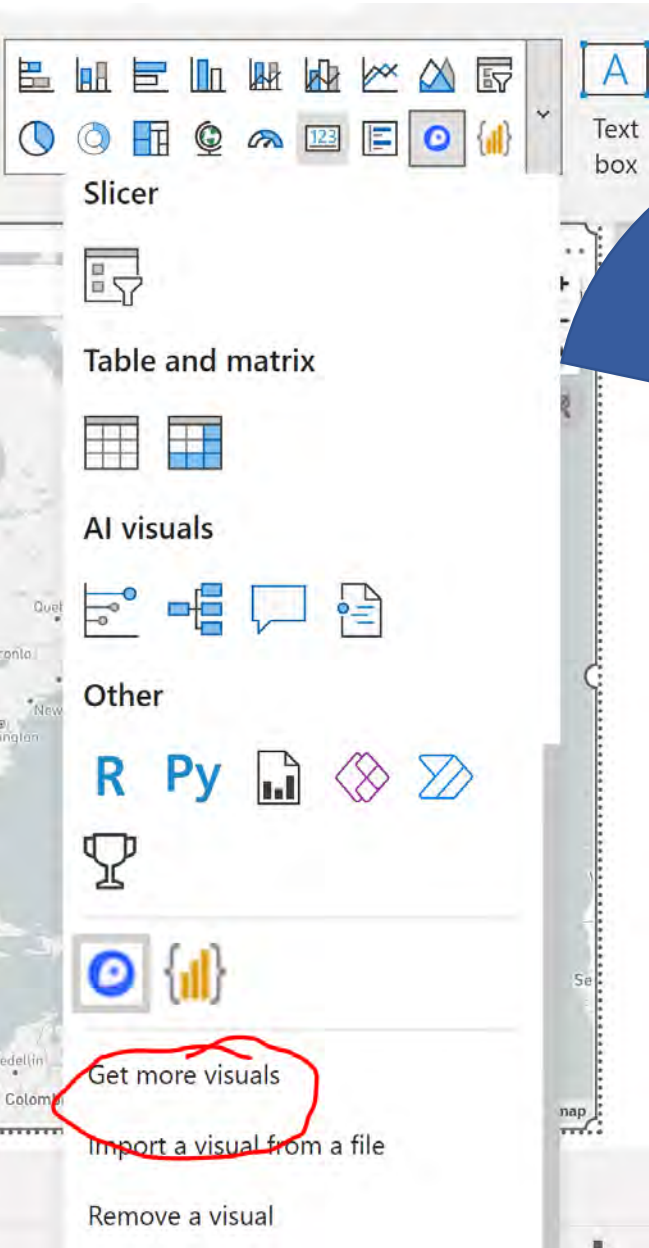
Get more visuals

Import a visual from a file

Remove a visual

Text box

# MAPBOX



The image shows the visualization pane in Power BI. At the top, there is a 'Text box' icon. Below it are several categories of visualizations: 'Slicer', 'Table and matrix', 'AI visuals', and 'Other'. The 'Other' category includes icons for R, Python, a file icon, a diamond icon, and a ribbon icon. At the bottom of the pane, there are three options: 'Get more visuals', 'Import a visual from a file', and 'Remove a visual'. The 'Get more visuals' option is circled in red.

Text box

Slicer

Table and matrix

AI visuals

Other

R Py

Get more visuals

Import a visual from a file

Remove a visual





# MAPBOX

Text box

Slicer

Table and matrix

AI visuals

Other

R Py

Get more visuals

Import a visual from a file

Remove a visual

### Power BI visuals

By clicking 'Add' and/or 'Download Sample' and downloading a visual, you agree to the provider's Terms and Conditions and Privacy Policy on the visual's page and agree Microsoft can share your account details to provider for their transactional purposes. Use of Microsoft's AppSource is subject to the [Microsoft Commercial Marketplace Terms](#) and [Privacy Statement](#).

All visuals Organizational visuals AppSource visuals

mapbox

Explore all available visuals to magnify your business insights [Learn more](#)

Filter by All

Sort by: Popularity

Mapbox Custom Vi...  
Starschema Kereskedelmi ...  
★★★★★ (1)

▼ Viz Settings

Access Token

pk.eyJ1Ijoic2d1YmluliwiYS

Map Style

Light

Auto Zoom

On

Mapbox Controls

On

Mapbox API URL

https://api.mapbox.com

Label position

Above data

# MAPBOX - CIRCLES

Latitude and Longitude

Search

**Add to your visual**

- Title
- Geocoder
- Circle
- Heatmap
- Cluster
- Choropleth
- Raster

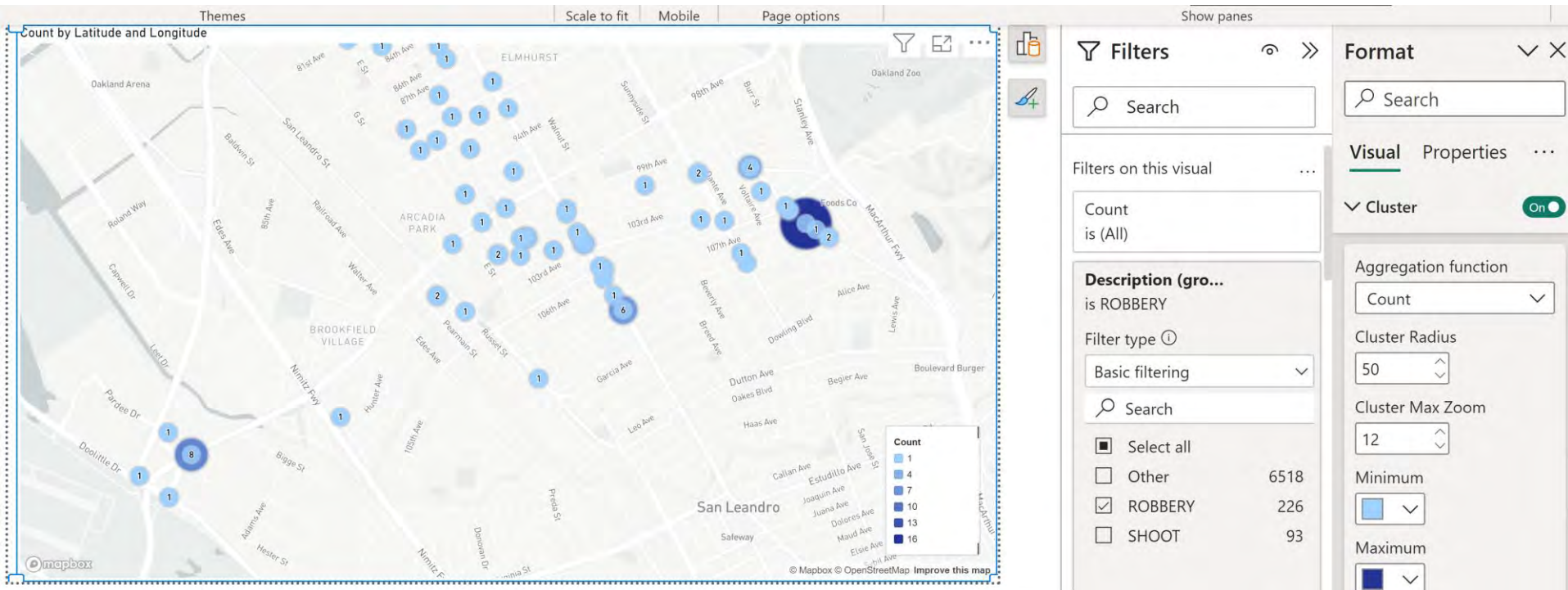
[More options](#)

mapbox San Francisco

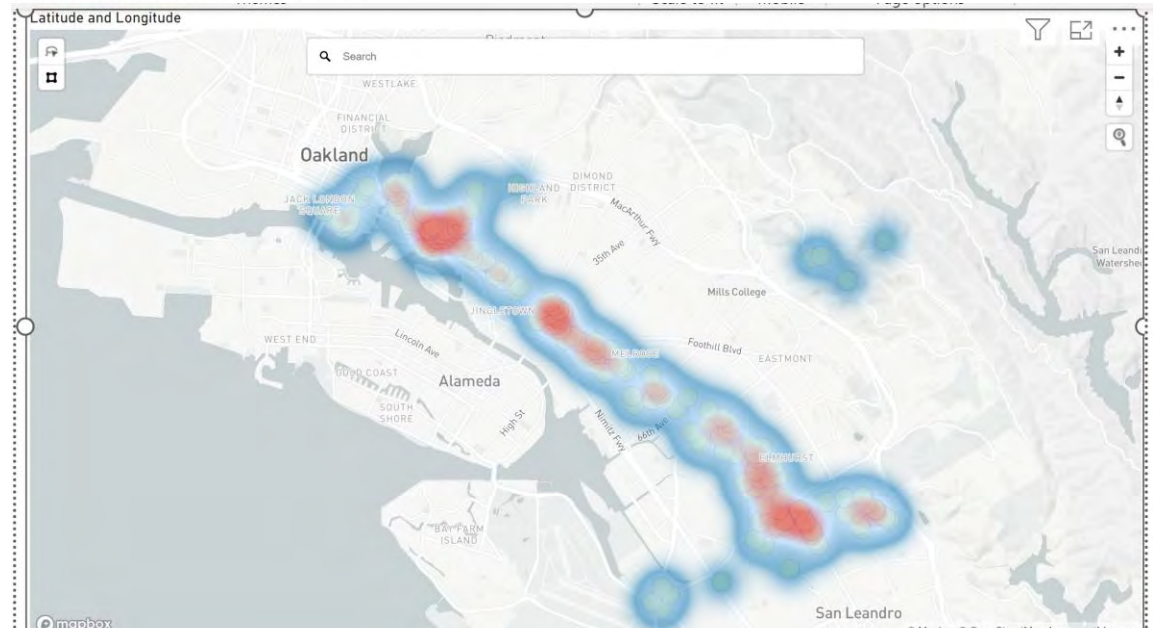
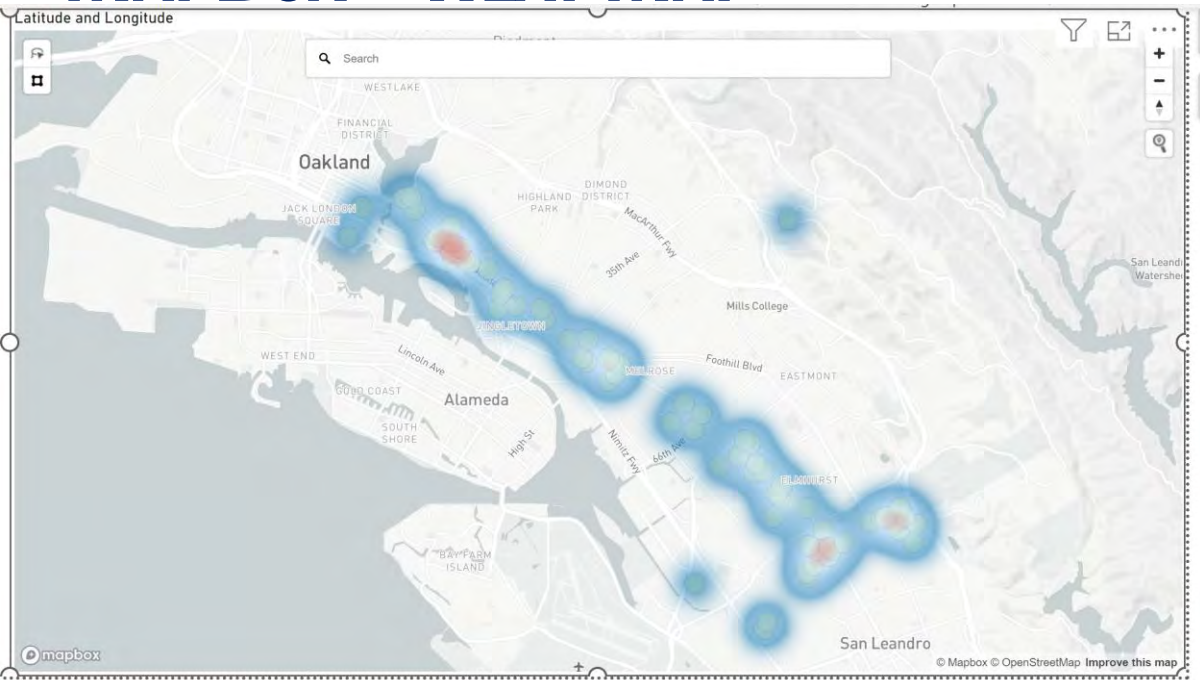
© Mapbox © OpenStreetMap Improve this map



# MAPBOX - CLUSTER



# MAPBOX - HEAT MAP



# ADDITIONAL INFORMATION (LINKS)

- ✓ Websites, Blogs, and YouTube channels
  - ✓ Power Query documentation  
<https://docs.microsoft.com/en-us/power-query>
  - ✓ Power BI documentation  
<https://docs.microsoft.com/en-us/power-bi/>
  - ✓ Power BI Tips  
<https://powerbi.tips/>
  - ✓ RADACAD  
<https://radacad.com/>
  - ✓ SQLBI  
<https://www.sqlbi.com/>
  - ✓ Guy in a Cube  
<https://guyinacube.com/>
  - ✓ Curbal  
<https://www.youtube.com/channel/UCJ7UhloHSA4wAqPzyi6TOkw>



# NEXT WEBINAR

## Temporal Analysis in Power BI

- ✓ Date table
- ✓ Day of week
- ✓ Time of day
- ✓ Matrix of time of day/day of week

# CONCLUSIONS & QUESTIONS

Svetlana Gubin, Oakland PD

[Sgubin@OaklandCA.gov](mailto:Sgubin@OaklandCA.gov)

