

LAPD Crime

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R Markdown on Posit Cloud

To explore the Tableau Dashboard instead of seeing the steps listed out, [click here](#)

Set up the data source page

- Connected to the clean LA excel sheet that was made in the Jupyter notebook
- Added the shape file for LAPD districts as a connection and data source
- Joined the two tables with a left join to make sure my data wasn't altered
 - Joined on fields 'AREA' and 'PREC' since these both were just numbers 1-21 for each district
- Added a data source filter to remove 2024 data since there were only 3 months of data

Created charts

Map

- Changed 'AREA' to discrete dimension
- Set 'Dr No' (report number) default aggregation to COUNT
 - This way I could use it as a count of crimes committed
- Added 'Geometry' as a detail to create a map from the districts
- Added 'Dr No' to color, changed color to red with 5 steps and 80% transparency
 - This colored my districts based on how many crimes were committed
- Added 'Area Name' as a label to display the district name over its area on the map
- Changed background map to 'street'
 - I felt people are most comfortable looking at a street map
- Adjusted labels and tooltip for better readability
- Added 'datetime_OCC' as a filter by year

Sex Treemap

- Used 'Vict Sex' and 'Dr No' to make the treemap
 - This allowed me to get essentially a single stacked bar
- Edited 'Vict Sex' aliases from 'M' and 'F' to 'Male' and 'Female'
- Added 'Vict Sex' as a filter to remove 'Unknown' sex values
- Added 'Vict Sex' to colors to color by gender
- Adjusted labels, tooltip, and colors

Age Histogram

- Used 'Vict Age' and 'Dr No' for a histogram
- Added a calculated field that would make a range for bins
 - The auto generated bins showed up as just the range's start value in the tooltip
 - This way the tooltip would show me the range of ages for each bin
- Since the calculated field was discrete, I had to use a bar chart
 - I increased the bar sizes so they could be close to one another like a histogram
- Added 'Vict Age' to filter to exclude '0' values which were just missing data

- Adjusted axis titles, colors, removed lines to look cleaner

Descent Packed Bubbles Chart

- Used 'Vict Desc' and 'Dr No' for a packed bubbles chart
- Added 'Vict Desc' to filter to exclude 'Other'
- Adjusted colors, titles, tooltip

Weapon Donut Chart

- Used 'Weapon Desc' and 'Dr No' to create a pie chart
- Filtered using 'Weapon Desc' to remove 'none' as to show the weapon type as a proportion of crimes where a weapon was used
- Adjusted colors, titles, tooltip
- Created an empty value circle chart
- Joined the two charts on dual axes
- Hid all lines and adjusted circle chart size to make a blank area inside the pie chart

Premise Packed Bubbles Chart

- Used 'Prem Desc' and 'Dr No' to create a packed bubbles chart
- Adjusted aliases for readability
- Adjusted tooltip, labels, colors

Crime Type Treemap

- Used 'Crm Cd Desc' and 'Dr No' to make a treemap
- Filtered using 'Crm Cd Desc' to remove 'drug' since there were 11 occurrences over the 4 years
- Adjusted aliases for readability
- Adjusted colors, labels, tooltip
- Added the weapon premise chart and sex treemap into the tooltip

Created a Dashboard

- I dragged all charts except weapon and sex onto my dashboard
 - These 2 charts will appear when hovering the mouse over the Crime treemap since they are in its tooltip
- Sized and organized for readability
- Added a select action to the map to update all charts on the dashboard
- Made the map's year filter float to position it better
- Linked all charts as filters so a selection on any chart would filter the dashboard