



San Francisco Crime Data Visualization

CS 235-User Interface Design

UX-Plorers:

Neha Rajkumar

Poonam Mehetrey

Poonkodi Ponnambalam

Shruti Sharma

About the project

☐ Dataset

- San Francisco Police Dept.(SFPD)
- Data Format : CSV files
- Time range for Crime Statistics : 2003 - 2014 (Nov)

☐ User

- Chief of the San Francisco Police Department.



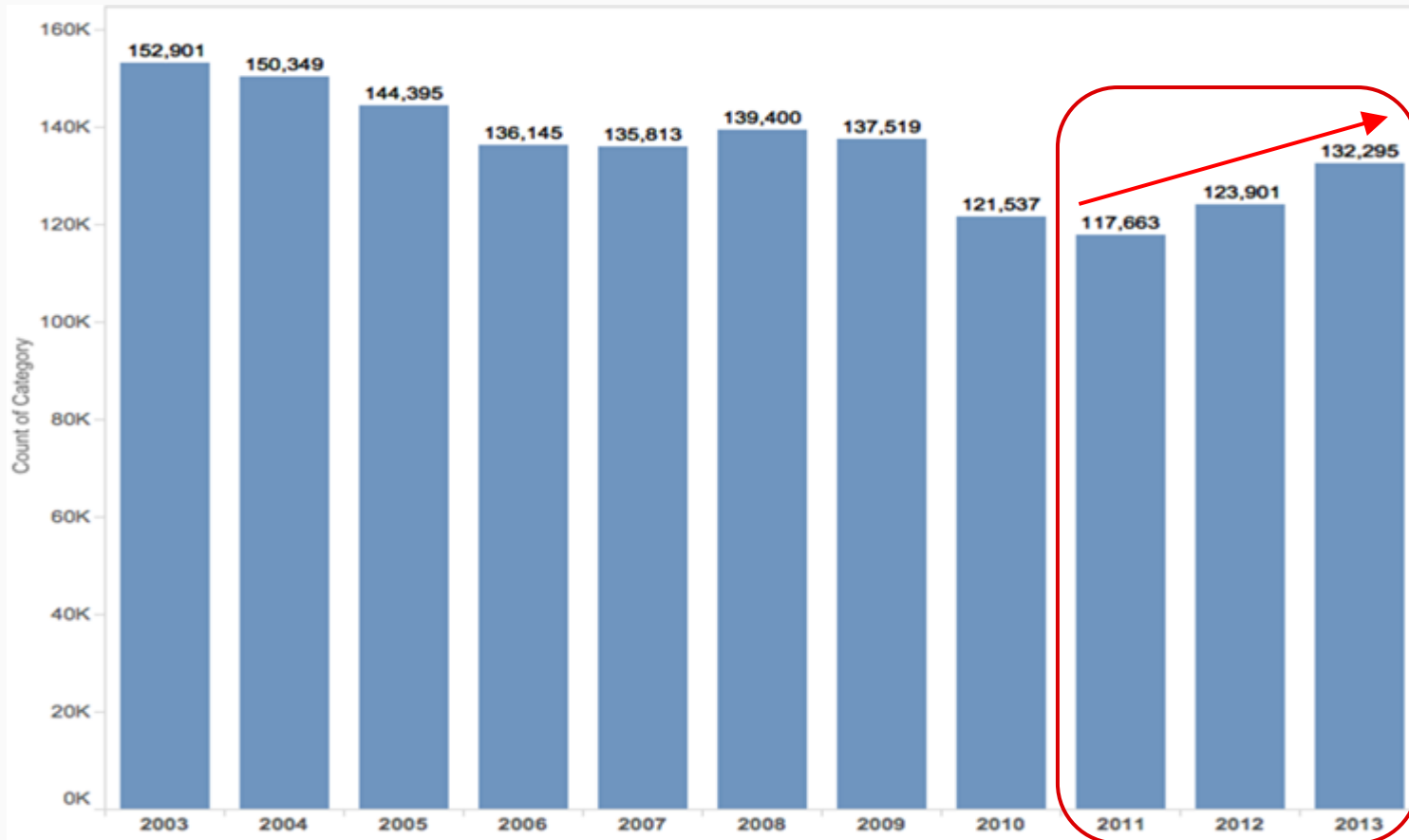
☐ Tools used

- Pig, Splunk Enterprise to query the data, Netbeans, JS
- Tableau , HighCharts and Google API to Visualization.

☐ Data Visualization method – Dashboard

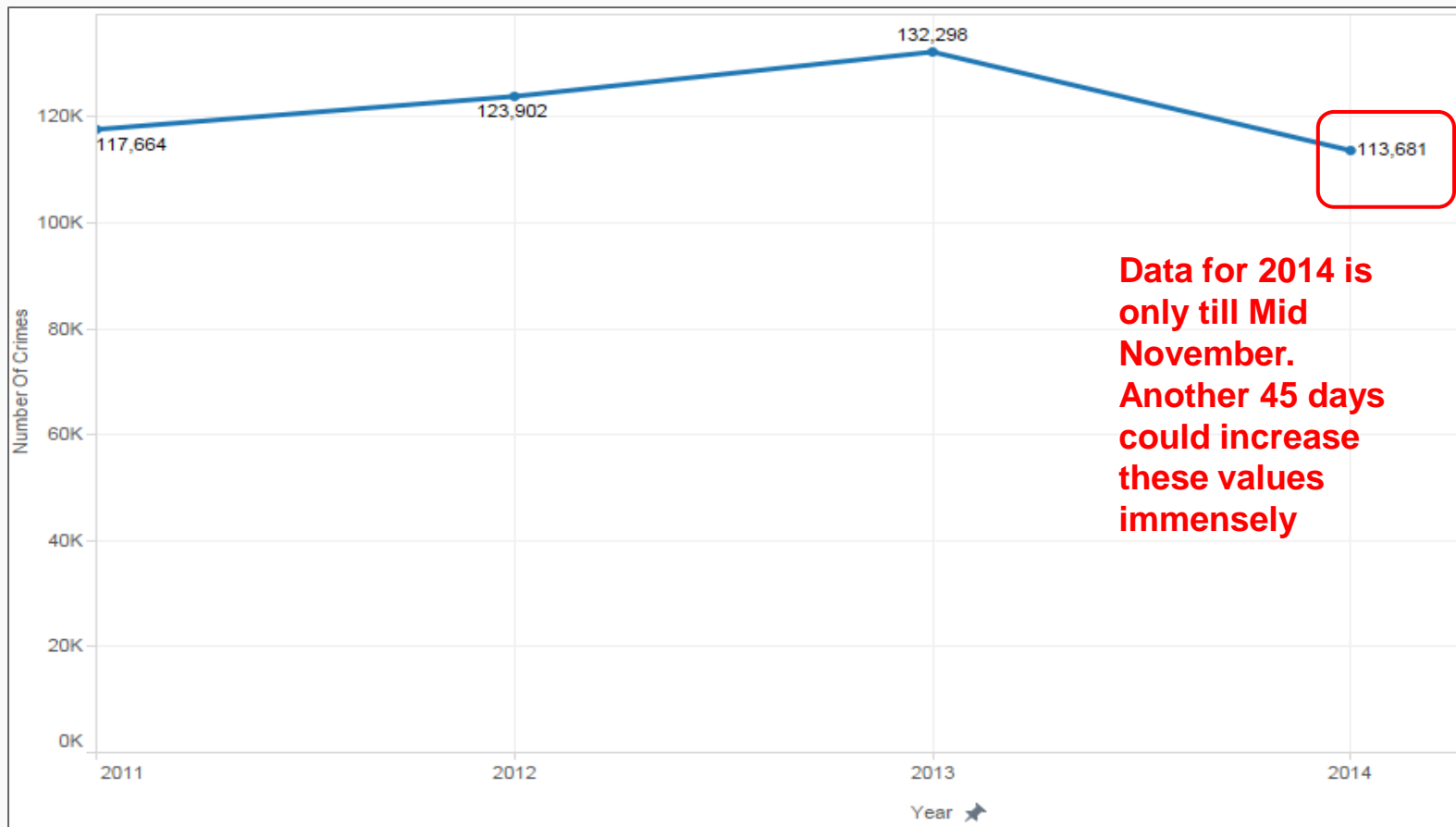
- Chief is a busy person
- Dashboard gives him Real time visualization of Crimes

Analysis of Crimes Over The Past Decade



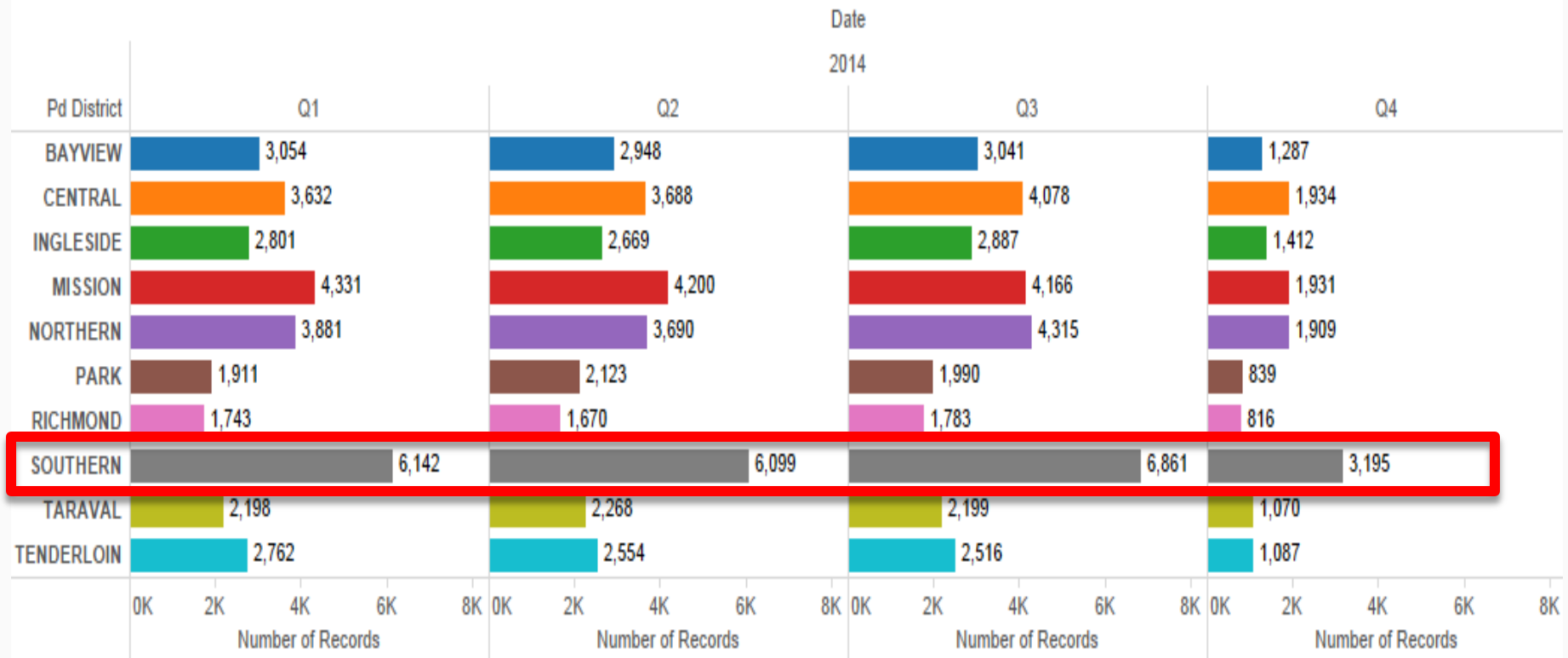
Major Concern :
Number of crimes
in San Francisco
have seen an
upward trend
since 2011.

Why does the Chief want this Dashboard?



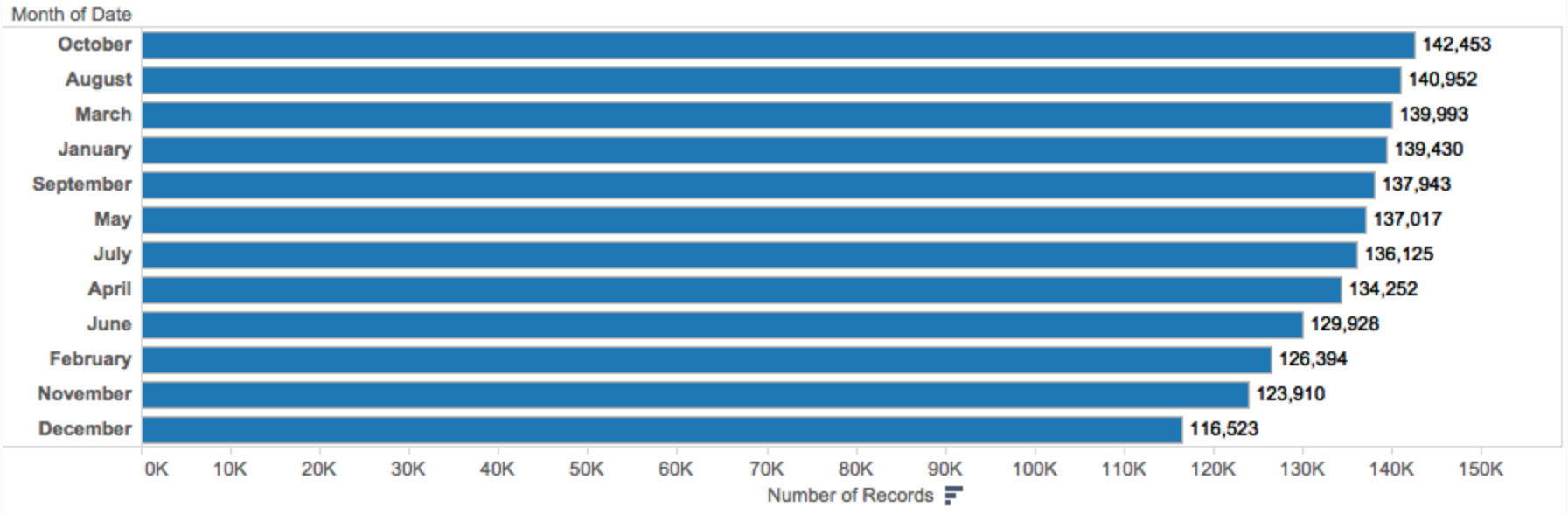
- Devise strategies to reduce crimes

How are we doing currently : 2014 !!



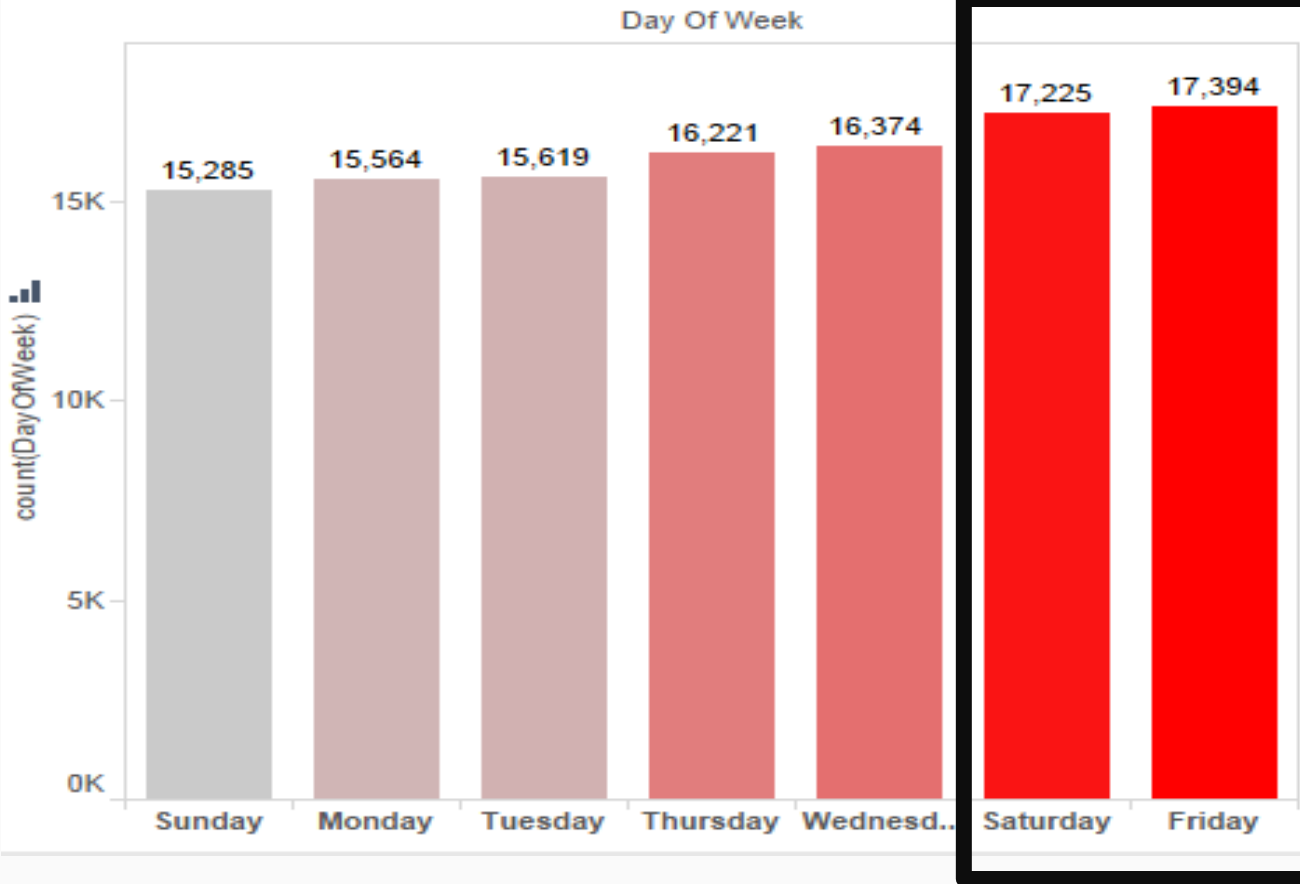
- Southern San Francisco tops the list !

Monthwise analysis of Crimes



- **December is the Safest month !!!**

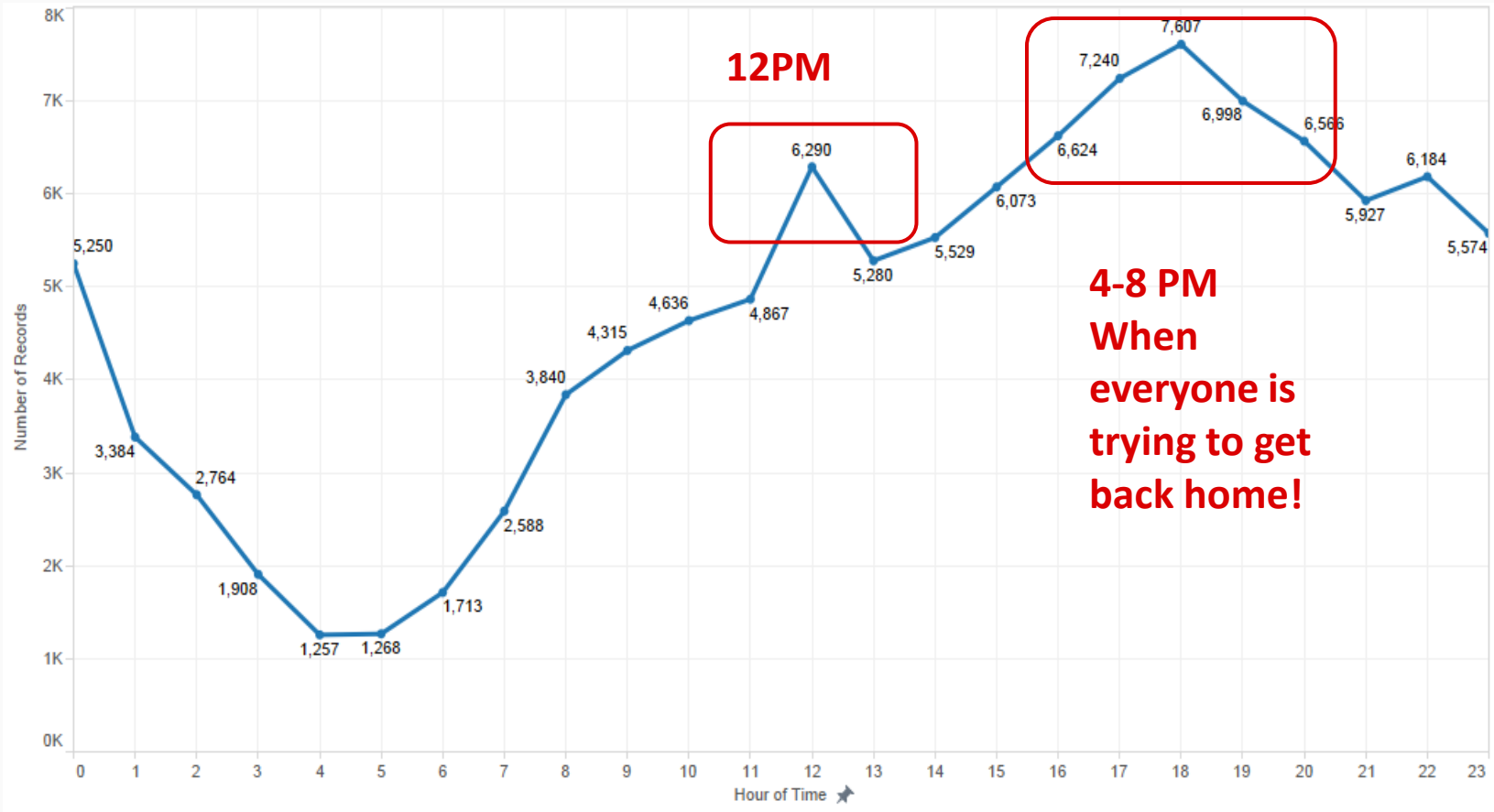
Days you need to be Careful on:



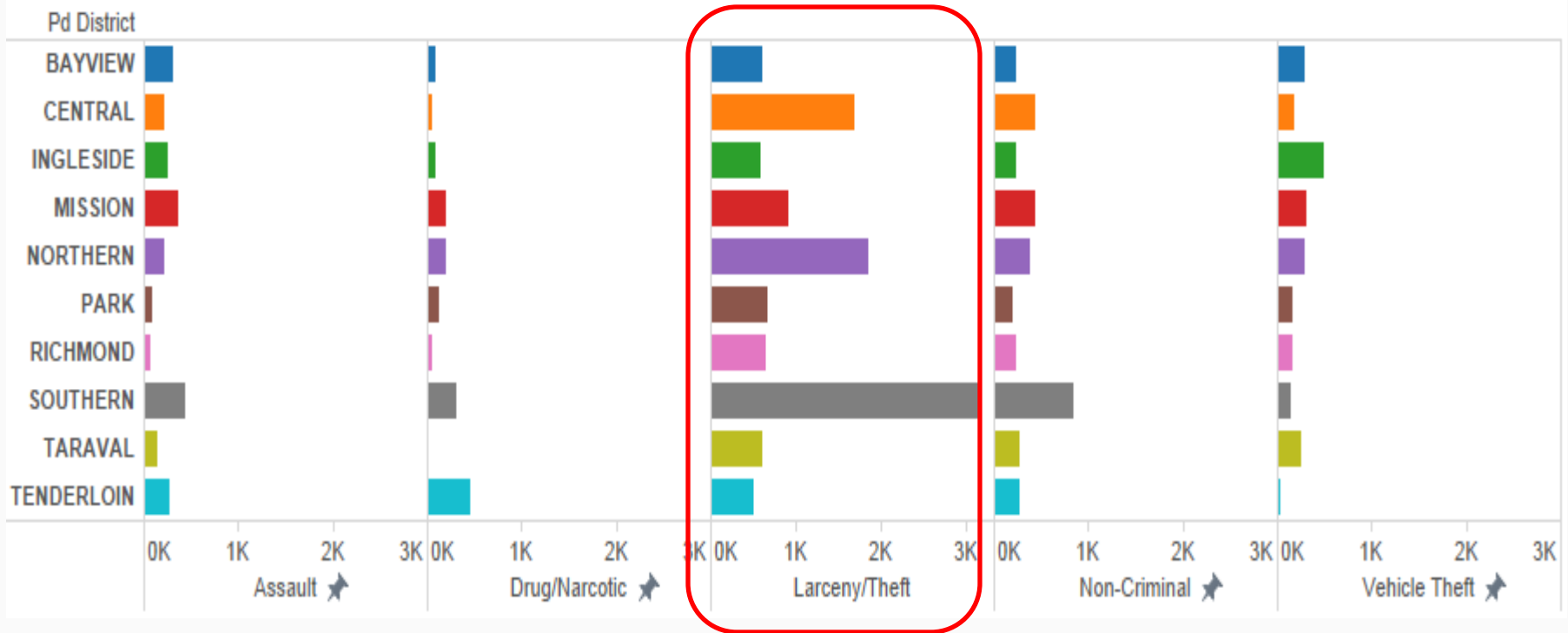
Whenever the 49ers or the Giants have a home game, there's a 20% spike in crime.

- Not everybody is partying, like you do..!!

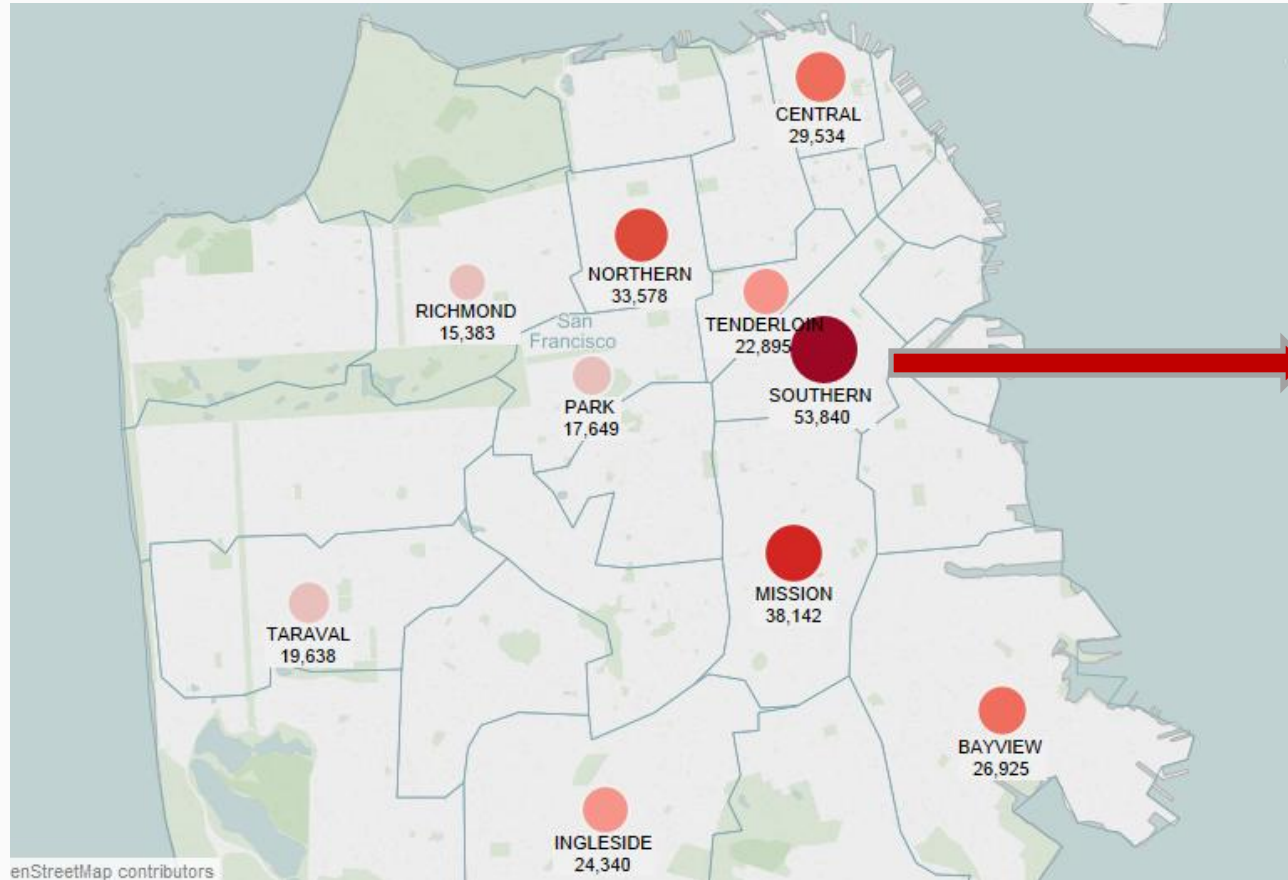
Crimes per hour in 2014 :



4:00 pm – 8:00 pm



Famous neighborhoods = More Crime

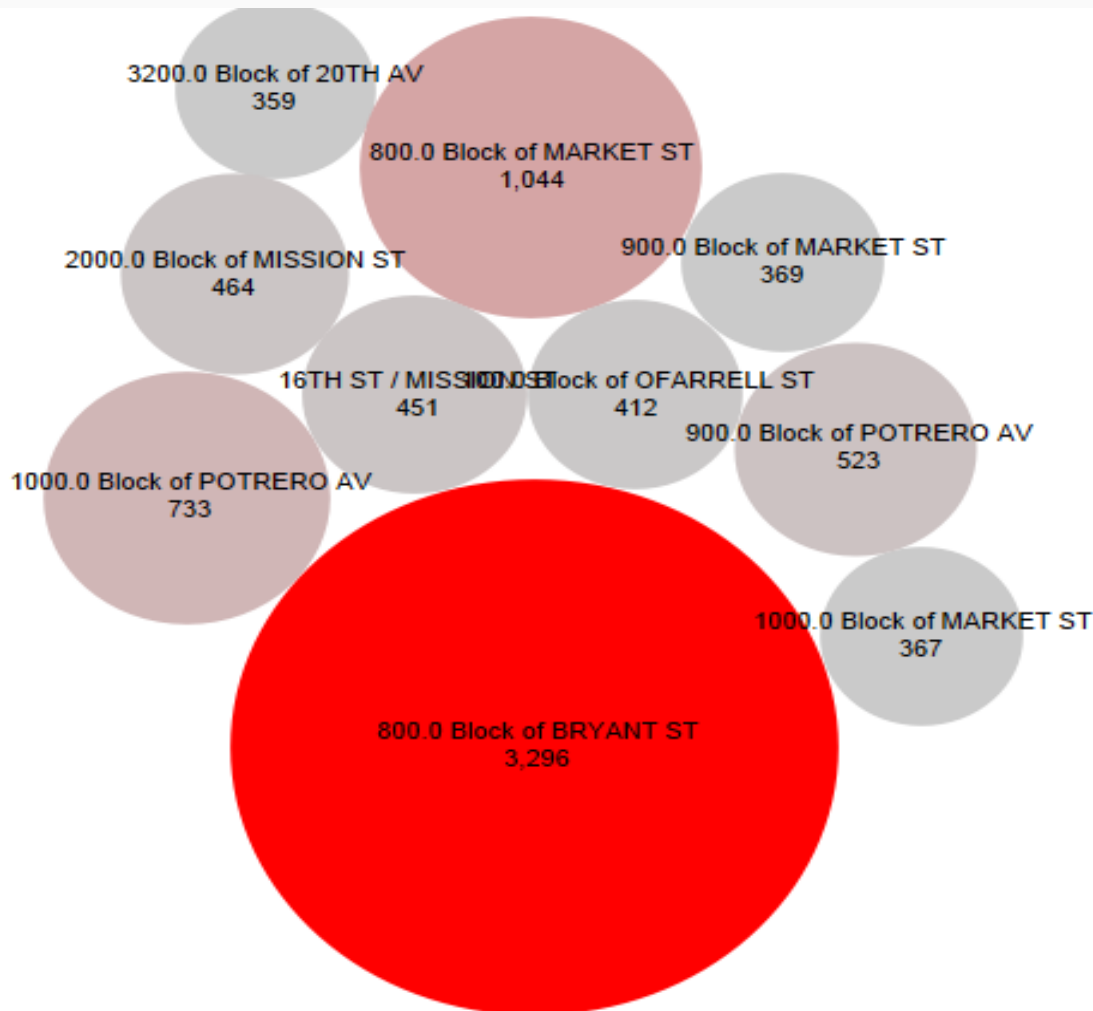


Hot Spot for Crimes :
Southern San Francisco

Why???

- San Francisco International Airport
- Financial District
- 6 of San Francisco's Fortune 500 companies
- Luxury Hotels

Top 3 streets with Maximum Crimes



1. Bryant Street

2. Market Street

3. Potrero Av

Interesting Facts : Analysing of Crimes over the past Decade

- **800 block of Bryant Street** has had over 30,000 documented instances of crime in the last 10 years, which translates to about 1 every 3 hours
- Next on the list is the **800 Block of Market Street** with about 7,000 crimes, or a crime every 12 hours
- Larceny/theft and vehicular theft account for **27%** of the City's reported crime incidents.
- There are **10 liquor stores** where a vast majority of crime occurs — within a mere **0.2 mile radius**.

SF police officer kills auto burglary suspect

A man suspected of auto burglary was fatally shot by a San Francisco police officer Tuesday night near South Park after police say he pointed a handgun at them, Police Chief **Greg Suhr** said.

Another suspect was injured in the shooting, which occurred around 9 p.m. near 2nd and Bryant streets, just blocks from AT&T Park where fans were leaving after watching the Giants win their Division Series.

Suhr said police officers were patrolling the neighborhood because of the crowds from the ball game when they spotted a four-door sedan driving around the block several times. Suhr said the officers began watching the



1. San Francisco Police Department

★★★★★ 34 reviews

Police Departments

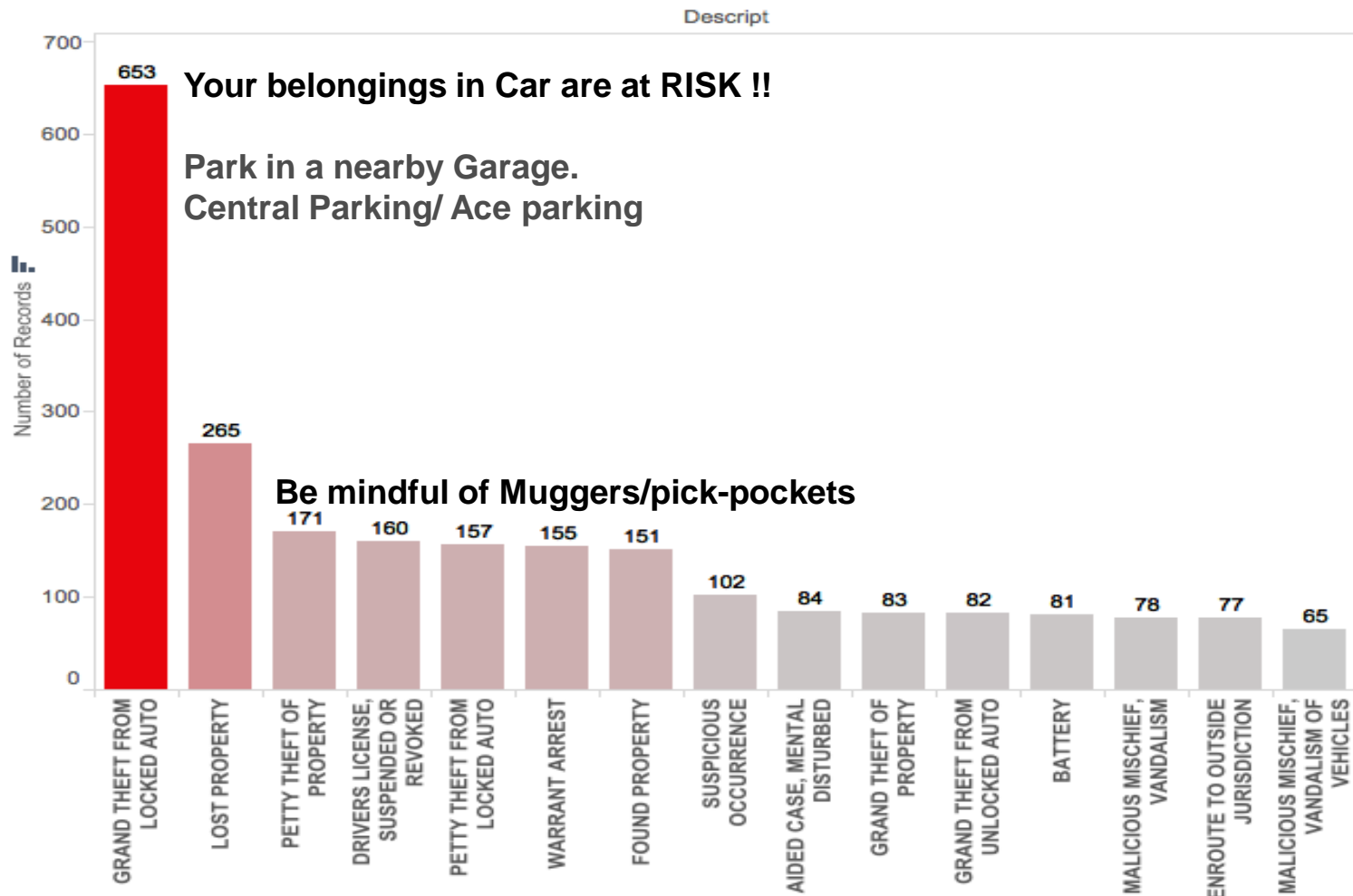
SoMa

850 Bryant St
San Francisco, CA 94103
(415) 553-1373



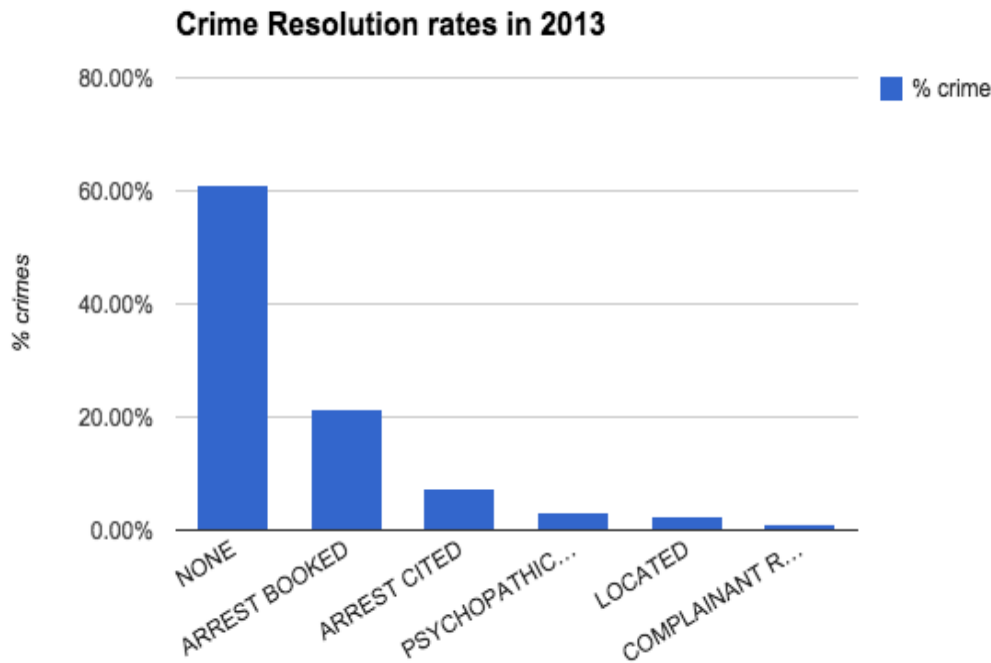
station: Southern Station on **850 Bryant St**. There are several officers who seem too lazy to do their job and would rather not do anything to avoid writing a report. One night, I once called...

Analysis of Crimes in Bryant Street



Something to worry about !!

Why are More than 61% of crimes,
have Resolution as “None”.



Resolution	% crime
NONE	61.02%
ARREST BOOKED	21.29%
ARREST CITED	7.47%
PSYCHOPATHIC CASE	3.26%
LOCATED	2.54%
COMPLAINANT REFUSES TO PROSECUTE	1.11%



Demo

Conclusion



- This is the recipe for living safely in San Francisco.
- Be careful when you go to Bryant and Market street.
- Try to have early lunch.
- Try to start early or late from the office.

References



- <http://www.tableausoftware.com/public/faq>
- <http://www.tableausoftware.com/public/how-it-works>
- <http://kb.tableausoftware.com/articles/knowledgebase/mapping-basics>
- <http://kb.tableausoftware.com/articles/knowledgebase/combining-sheet-links-and-dashboards>
- <http://www.highcharts.com/>

Thank you !

