

SQL and Databases:

Project Report

By: Nancy Gupta

Overview

No of Precinct

54

No of total crimes
reported

1318

No of areas

11

No of offenders

1318

No of officers

54

Total population

62683

No of CCTV

2405

Total case status is IC

1189

No of Male Offenders

851

No of Female Offenders

467

No of Male Victims

587

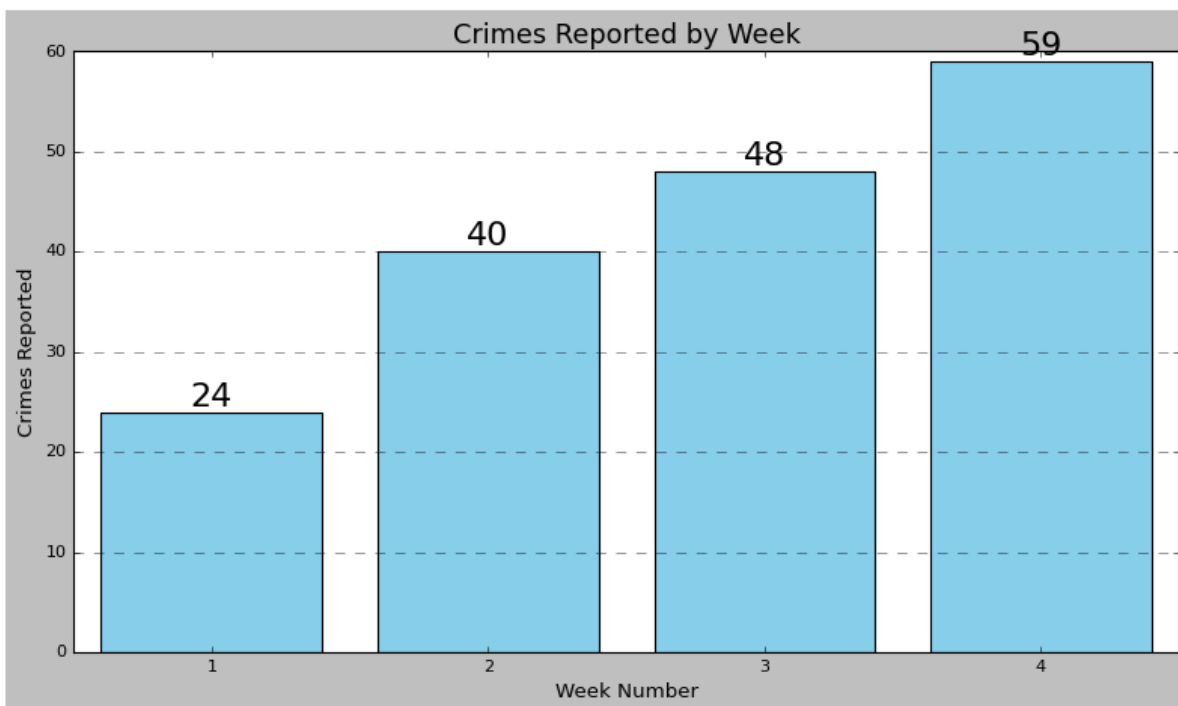
No of Female Victims

731

Metrics

Distribution of most frequent crimes occurred on weekly basis.

Result Grid			
	Filter Rows:	Export:	Wrap Cell Content:
week_number	crime_type	crimes_reported	
1	BURGLARY FROM VEHICLE	24	
2	BURGLARY FROM VEHICLE	40	
3	BATTERY - SIMPLE ASSAULT	48	
4	BURGLARY FROM VEHICLE	59	

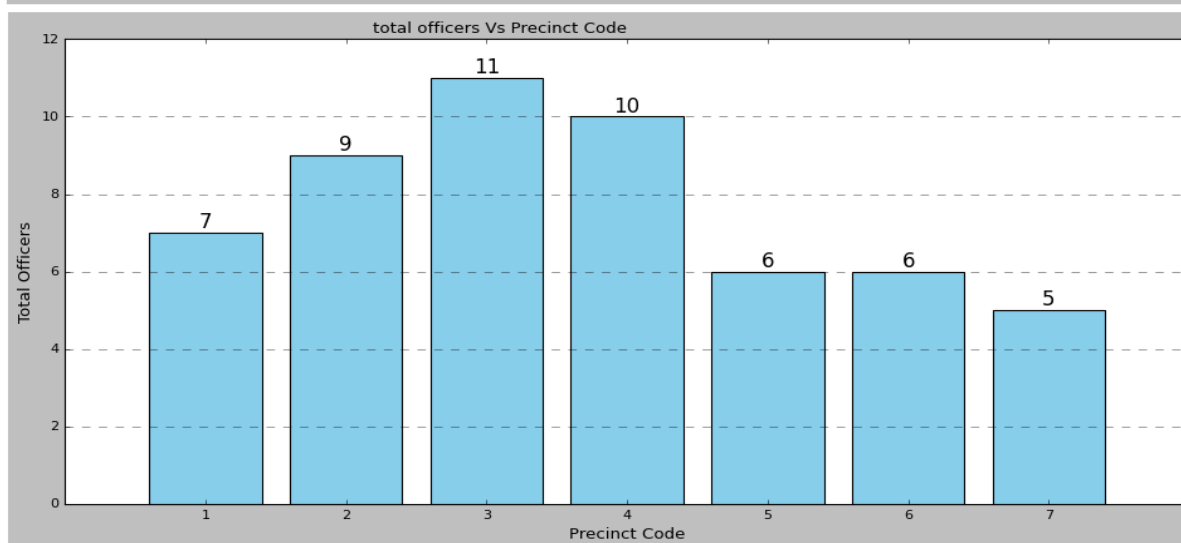
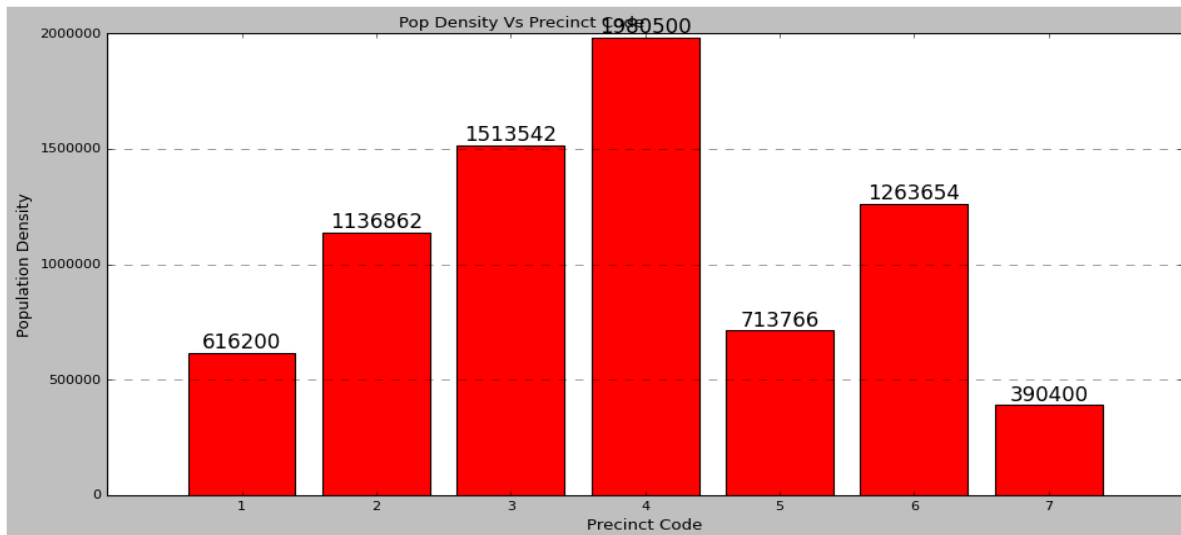


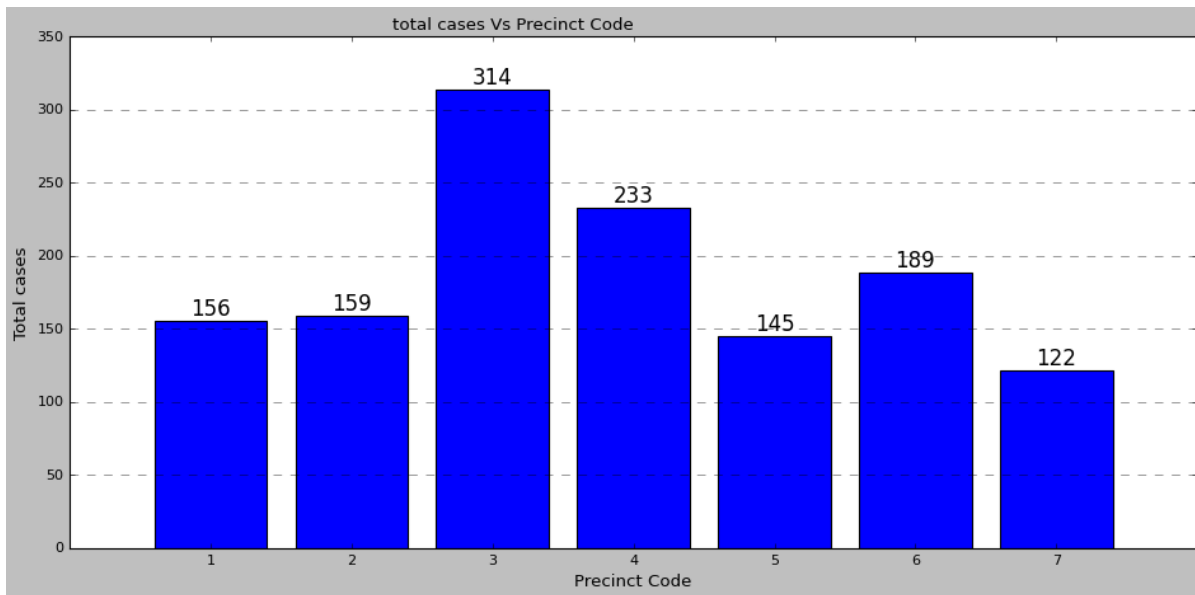
Observations and Findings

- Week 4 has the greatest number of crimes reported.
- Week 1 has the least number of crimes reported.

Chart to compare population density, precinct area, officer's count with crime rate.

Result Grid					
		Filter Rows:	Export:	Wrap Cell Content:	
	precinct_code	pop_density	total_areas	total_officers	total_cases
▶	3	1513542	2	11	314
	4	1980500	1	10	233
	6	1263654	1	6	189
	2	1136862	3	9	159
	1	616200	1	7	156
	5	713766	2	6	145
	7	390400	1	5	122



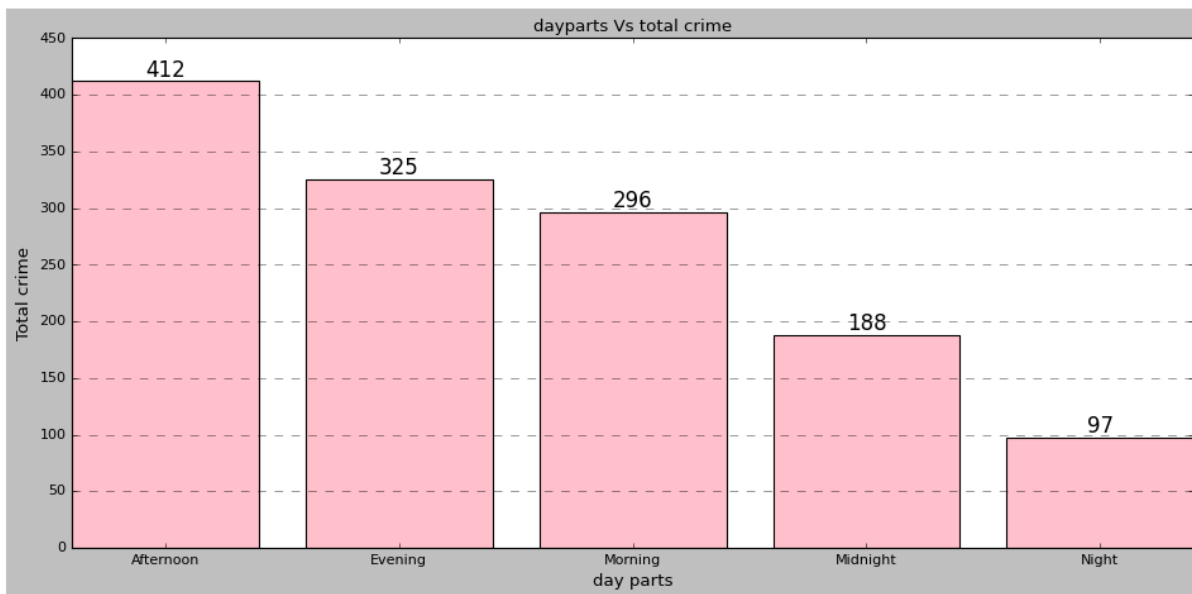


Observations and Findings

- Area code 4 has maximum and 7 has minimum population density.
- There are maximum 11 officers available at precinct code 3 and minimum 5 at precinct code 7
- Total cases reported is maximum at precinct code 3 and minimum at precinct code 7.
- There is no pattern between population density Vs officers available or crime however higher number of officers are available at places where total cases are high.

Distribution to see which crime types are most prevalent throughout the day.

Result Grid		Filter Rows:
dayparts	total_crimes	
Afternoon	412	
Evening	325	
Morning	296	
Midnight	188	
Night	97	

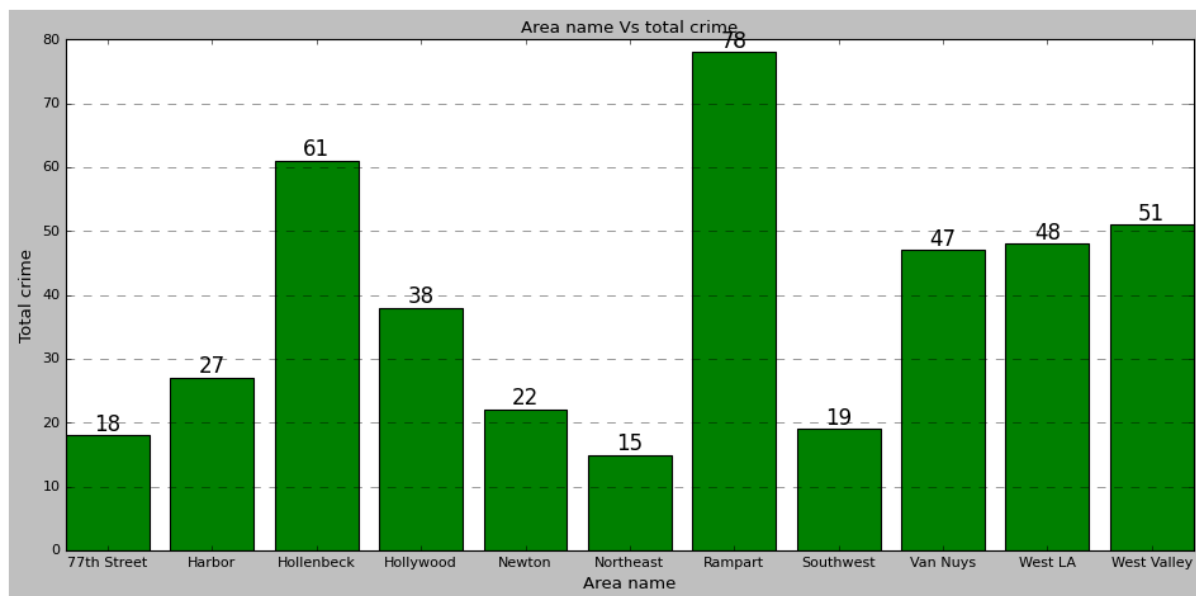


Observations and Findings

- At afternoon we see the highest number of crimes occurring and is 412 in number followed by Evening that is 325.
- At Night the number of crimes is least.
- Burglary from vehicle is the crime type which has mostly happened in all the crime type category

Distribution to see each area's maximum crimes reported across a day

	area_name	dayparts	total_crimes
▶	77th Street	Evening	18
	Harbor	Afternoon	27
	Hollenbeck	Afternoon	61
	Hollywood	Afternoon	38
	Newton	Afternoon	22
	Northeast	Afternoon	15
	Rampart	Afternoon	78
	Southwest	Afternoon	19
	Van Nuys	Afternoon	47
	West LA	Evening	48
	West Valley	Afternoon	51



Observations and Findings

- Rampart is the area in which maximum crimes are reported each day specially during the afternoon.
- Minimum Cases are reported in the Northeast Area.

Distribution of the crime rate for victims of various ages over the course of a day.

Result Grid

Filter Rows:

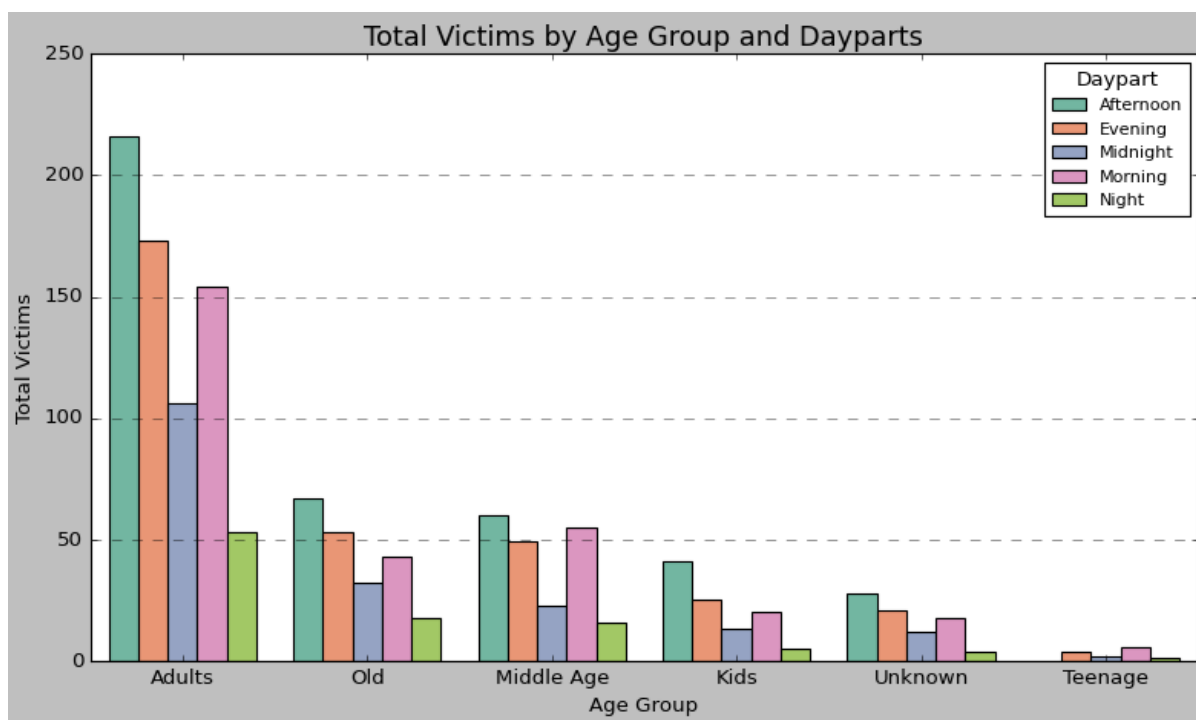
	age_group	dayparts	total_victims
▶	Adults	Afternoon	216
	Old	Afternoon	67
	Middle Age	Afternoon	60
	Kids	Afternoon	41
	Unknown	Afternoon	28
	Adults	Evening	173
	Old	Evening	53
	Middle Age	Evening	49
	Kids	Evening	25
	Unknown	Evening	21
	Teenage	Evening	4

Result 47 ×

Result Grid

Filter Rows:

	age_group	dayparts	total_victims
	Adults	Midnight	106
	Old	Midnight	32
	Middle Age	Midnight	23
	Kids	Midnight	13
	Unknown	Midnight	12
	Teenage	Midnight	2
	Adults	Morning	154
	Middle Age	Morning	55
	Old	Morning	43
	Kids	Morning	20
	Unknown	Morning	18

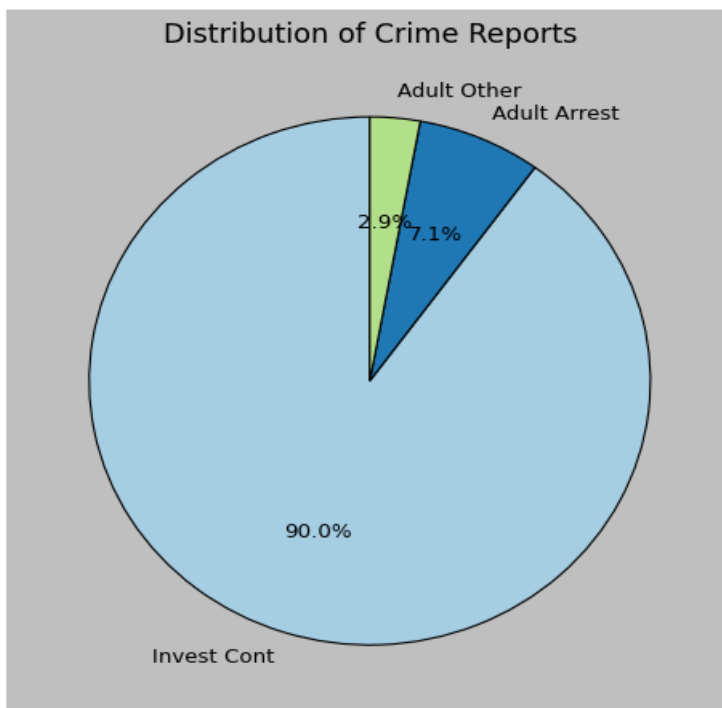


Observations and Findings

- Victims are mostly Adults.
- Most of the crimes occurring to the Adults in the afternoon
- Least crime has been observed among teenagers during all dayparts.

Distribution of the case status across a week.

Result Grid			Filter Rows:
	case_status	total_crimes	
▶	Invest Cont	1186	
	Adult Arrest	94	
	Adult Other	38	

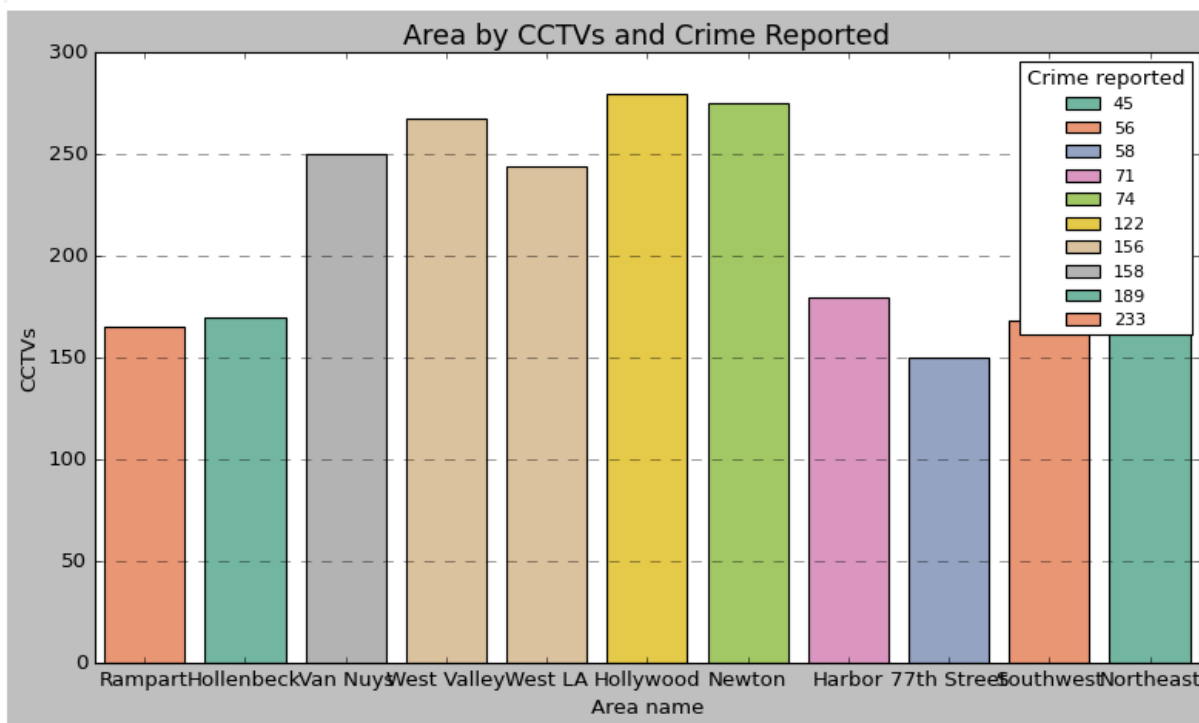


Observations and Findings

- 1186 out of 1318 cases are at Investigation Continues status which is 90%
- 7.1% of the adults are arrested.

Distribution of area and CCTV count in relation to crime rate




Result Grid					
		Filter Rows:		Export:	Wrap Cell Content:
	area_name	total_cctvs	total_crimes	crimes_with_cctv	cctv_coverage_percentage
▶	Rampart	165	233	0	0.00
	Hollenbeck	170	189	0	0.00
	Van Nuys	250	158	0	0.00
	West Valley	268	156	0	0.00
	West LA	244	156	0	0.00
	Hollywood	280	122	0	0.00
	Newton	275	74	0	0.00
	Harbor	180	71	0	0.00
	77th Street	150	58	0	0.00
	Southwest	168	56	0	0.00
	Northeast	255	45	0	0.00



Observations and Findings

- CCTV counting are not according to the case reported
- Most of the CCTV are installed in the Hollywood area and minimum CCTV counting are available in the 77th Street.

Distribution to see whether CCTV footage is available or not at the crime scene for each area

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 					
	area_name	total_cctvs	total_crimes	crimes_with_cctv	crimes_without_cctv
▶	Rampart	165	233	0	0
	Hollenbeck	170	189	0	0
	Van Nuys	250	158	0	0
	West Valley	268	156	0	0
	West LA	244	156	0	0
	Hollywood	280	122	0	0
	Newton	275	74	0	0
	Harbor	180	71	0	0
	77th Street	150	58	0	0
	Southwest	168	56	0	0
	Northeast	255	45	0	0

Observations and Findings

- In every area CCTV footage are not available at the time of crime.
- CCTV management is not good as per above data to reduce the crime.
- In the area with higher rates of crime like Rampart do not have sufficient CCTV available.

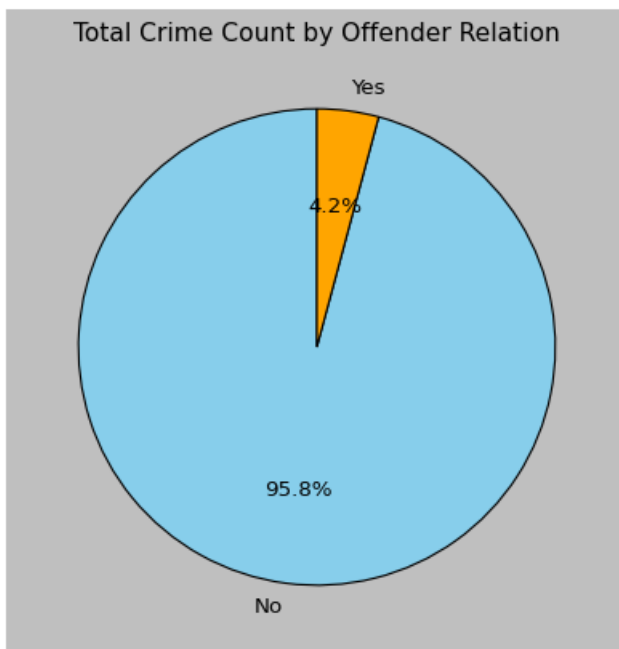
Crimes committed by relation of victim or strangers



	offender_relation	crime_type	crime_count
0	No	BATTERY - SIMPLE ASSAULT	158
1	No	VANDALISM - MISDEAMEANOR (\$399	33
2	No	RAPE, FORCIBLE	5
3	No	SHOPLIFTING - PETTY THEFT (\$95	58
4	No	OTHER MISCELLANEOUS CRIME	20
...
77	Yes	ASSAULT WITH DEADLY WEAPON, AG	1
78	No	COUNTERFEIT	1
79	No	CHILD ABUSE (PHYSICAL) - SIMPL	1
80	No	HUMAN TRAFFICKING - COMMERCIAL	1
81	Yes	STALKING	1



82 rows x 3 columns

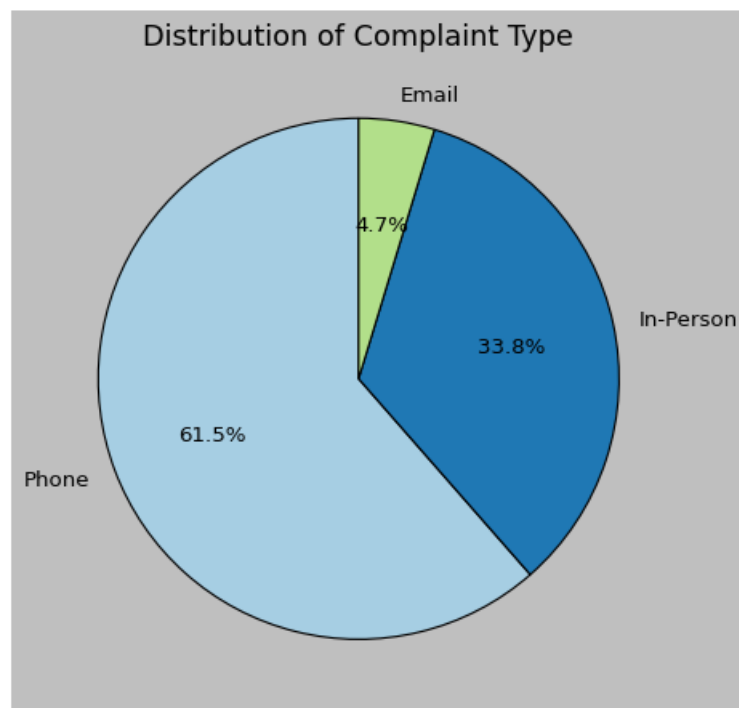


Observations and Findings

- 95.8% of the offenders are strangers
- 4.2% of the offenders are in relation to the victim.

Distribution for the complaint type and the crime rate.

Result Grid			Filter Rows:
	complaint_type	crime_count	
▶	Phone	810	
	In-Person	446	
	Email	62	



Observations and Findings

- Maximum complaints have been done by phone which is 61.5% alone.
- 33.8% people have complained in person.
- Only 4.7% complaints have been made through E-Mail.

Insights and Recommendations

Insights

- There is no pattern between population density Vs case reported and officers available in those areas.
- In the afternoon most of the crimes are reported throughout the day.
- Rampart is the area where maximum cases are reported in the afternoon and as per data less CCTV are available as per case reported in this area.
- Most of the victims are from adult age group.
- Maximum 1186 cases are under investigation out of 1318 cases.
- Burglary from Vehicle is most frequent crime which is reported throughout the data.

Recommendation

- 90% cases are under Investigation hence need to assign more officers to complete running cases so that offenders are punished.
- Insufficient CCTVs are available in the areas where most cases are reported as compared to other area hence need to provide more CCTV so that the number of reported cases is reduced.
- Rampart area needs more attention in terms of CCTV, assigning officers and planting control rooms for proper management.
- Number of Female Victims are more as compared to the Male victims hence special force or female officers should be encouraged.