

SPEED CAMERA ANALYSIS

FROM JULY 6 2015 – AUGUST 26 2015



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QUESTIONS

- WHO WOULD BE INTERESTED IN THIS ANALYSIS ?
- WHAT INTERSECTIONS GENERATE THE MOST FINES?
- WHAT DAY WAS THE MOST FINES GENERATED?
- HOW MANY OFFENCES WERE ISSUED TO PEOPLE WHO'S CAR IS REGISTERED OUT OF STATE?
- WHAT TIMES HAVE THE MOST OFFENCES?
- WHAT CAR MAKE APPEARS THE MOST IN THE DATA SET?

WHO WOULD BE INTERESTED IN THIS ANALYSIS

- INSURANCE COMPANIES
- CITY AGENCIES SUCH AS :
- NYPD
- DOT
- TL&C
- CITY HALL

PROGRAMS USED

- R FOR ANALYTICS
- TABLEAU FOR VISUALIZATIONS AND MAPPING
- EXCEL FOR CLEANING THE DATA

Data Source:

- NYC open data

A	B	C	D	E	F	G	H	I	J	K	L	M
Summons.Nr	Plate.ID	Registration	Issue.Date	Vehicle.Make	Violation.Tn	Street.Name	Intersecting.Vehicle	Year	hour	min	sec	P
1	4608517582	M64258	NY	7/6/15	CHEVR	0732A	NB 1 AV E10:110 ST	2010	7			32 A
2	4608517594	GW8748	NY	7/6/15	INFIN	0339P	SB WOODHA FURMANVILI	2012	3			39 P
3	4608517612	GM3386	NY	7/6/15	HYUND	0421P	SB WOODHA FURMANVILI	2015	4			21 P
4	4608517650	GKJ3903	NY	7/6/15	HONDA	0425P	SB WOODHA FURMANVILI	2013	4			25 P
5	4608517661	GWJ1065	NY	7/6/15	FORD	0425P	SB WOODHA FURMANVILI	2008	4			25 P
6	4608517673	GFN7466	NY	7/6/15	TOYOT	0431P	WB GOETHA ULES DR	2010	4			31 P
7	4608517685	GHW4007	NY	7/6/15	GMC	0433P	WB GOETHA ULES DR	2011	4			33 P
8	4608517697	GZU7877	NY	7/6/15	HONDA	0433P	WB JAMAICA TH ST	2001	4			33 P
9	4608517703	GL85149	NY	7/6/15	HONDA	0434P	WB GOETHA ULES DR	2013	4			34 P
10	4608517715	GLY1221	NY	7/6/15	FORD	0434P	WB JAMAICA TH ST	2010	4			34 P
11	4608517727	GQC2771	NY	7/6/15	HYUND	0435P	WB JAMAICA TH ST	2013	4			35 P
12	4608517740	GKY6087	NY	7/6/15	TOYOT	0436P	NB KINGS HWY ST	2001	4			36 P
13	4608517752	GVS7113	NY	7/6/15	ACURA	0436P	WB JAMAICA TH ST	2015	4			36 P
14	4608517776	GCV7209	NY	7/6/15	CHEVR	0437P	WB GOETHA ULES DR	2013	4			37 P
15	4608517788	GLW3035	NY	7/6/15	SUBAR	0438P	WB JAMAICA TH ST	2014	4			38 P
16	4608517806	GUW9830	NY	7/6/15	NISSA	0439P	WB GOETHA ULES DR	2007	4			39 P
17	4608517818	GZV3352	NY	7/6/15	TOYOT	0441P	WB GOETHA ULES DR	2011	4			41 P
18	4608517820	GSD8223	NY	7/6/15	CHEVR	0441P	SB WOODHA FURMANVILI	2006	4			41 P
19	4608517843	GCM3940	NY	7/6/15	HONDA	0442P	WB GOETHA ULES DR	2013	4			42 P
20	4608517892	KW93982	NJ	7/6/15	FORD	0444P	WB GOETHA ULES DR	2011	4			44 P
21	4608517910	GKMS030	NY	7/6/15	CHEVR	0446P	WB GOETHA ULES DR	2009	4			46 P
22	4608517922	GCK4474	NY	7/6/15	ACURA	0446P	WB GOETHA ULES DR	2013	4			46 P
23	4608517934	T828638C	NY	7/6/15	UNICO	0446P	WB JAMAICA TH ST	2007	4			46 P
24	4608517946	GAB8462	NY	7/6/15	BUICK	0450P	NB MIDLAND CN AVE	2008	4			50 P
25	4608517971	GDW2697	NY	7/6/15	NISSA	0451P	WB GOETHA ULES DR	2015	4			51 P
26	4608518008	GLH2153	NY	7/6/15	AUDI	0452P	WB GOETHA ULES DR	2014	4			52 P
27	4608518094	HN85657	PA	7/6/15	CHRY5	0458P	WB GOETHA ULES DR	2015	4			58 P
28	4608518112	GMH9044	NY	7/6/15	LEXUS	0459P	NB KINGS HWY ST	2014	4			59 P
29	4608518124	GVC8411	NY	7/6/15	HONDA	0459P	WB JAMAICA TH ST	2009	4			59 P
30	4608518148	GN33009	NY	7/6/15	HONDA	0500P	WB GOETHA ULES DR	2002	5			0 P
31	4608518150	GMK6045	NY	7/6/15	FORD	0500P	WB GOETHA ULES DR	2014	5			0 P
32	4608518197	JPF4167	PA	7/6/15	HYUND	0502P	WB GOETHA ULES DR	2015	5			2 P
33	4608518239	GZ77198	NY	7/6/15	INFIN	0503P	WB GOETHA ULES DR	2003	5			3 P

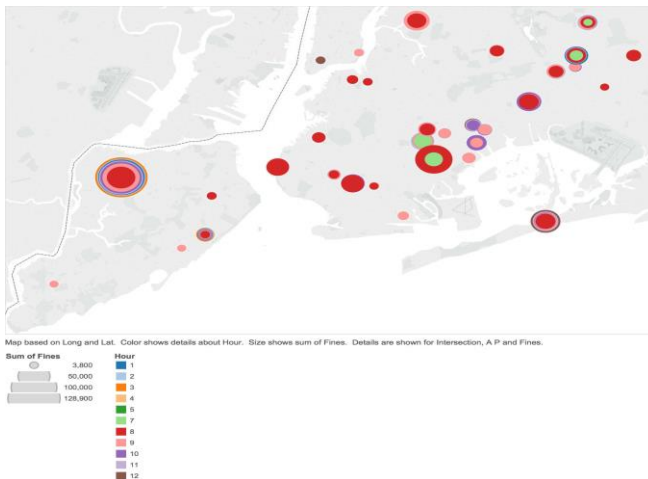
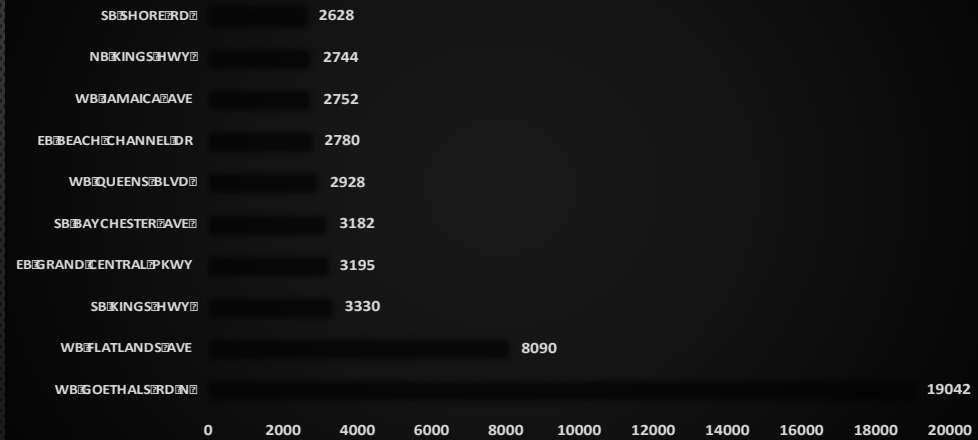
HOW THE DATA SET LOOKED AFTER SOME CLEANING

Highest Fine Generating Intersections



Frequency of offences at highest fine generating intersections

Frequency of offenders

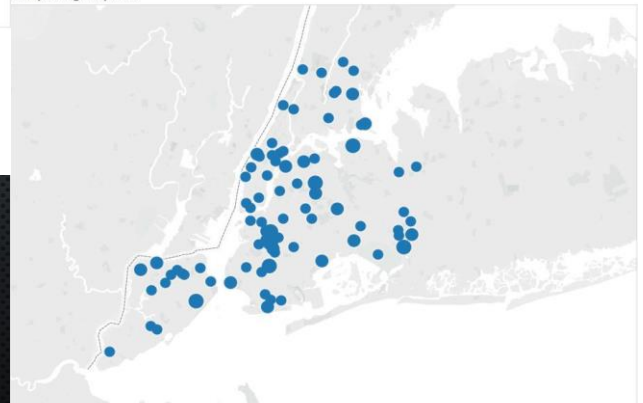


This map is of 311 complaints of chronic speeding in NYC for comparison

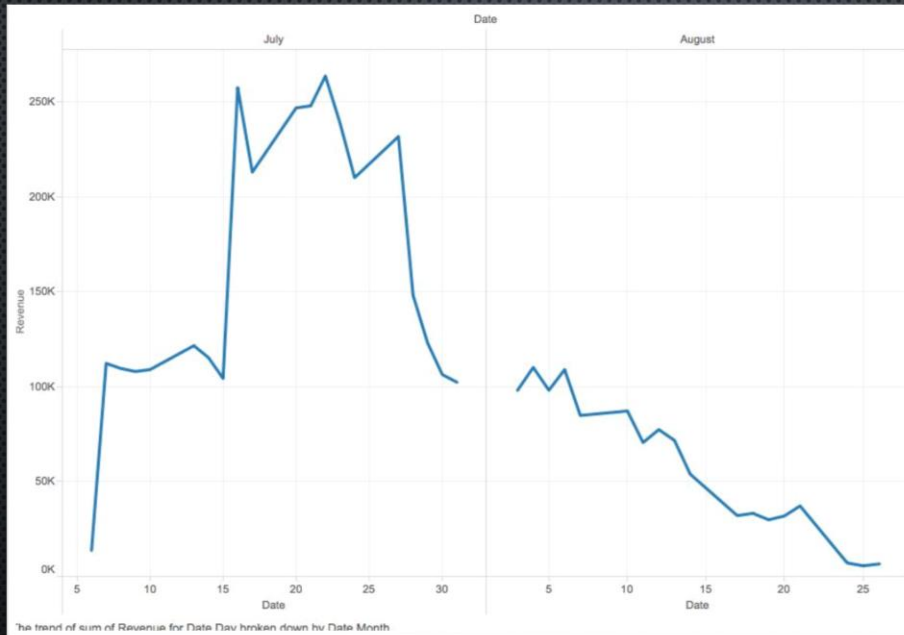
This map shows intersections with highest frequencies in NYC also shows :

- time of day
- fines generated at that intersection
- direction

311 speeding complaints

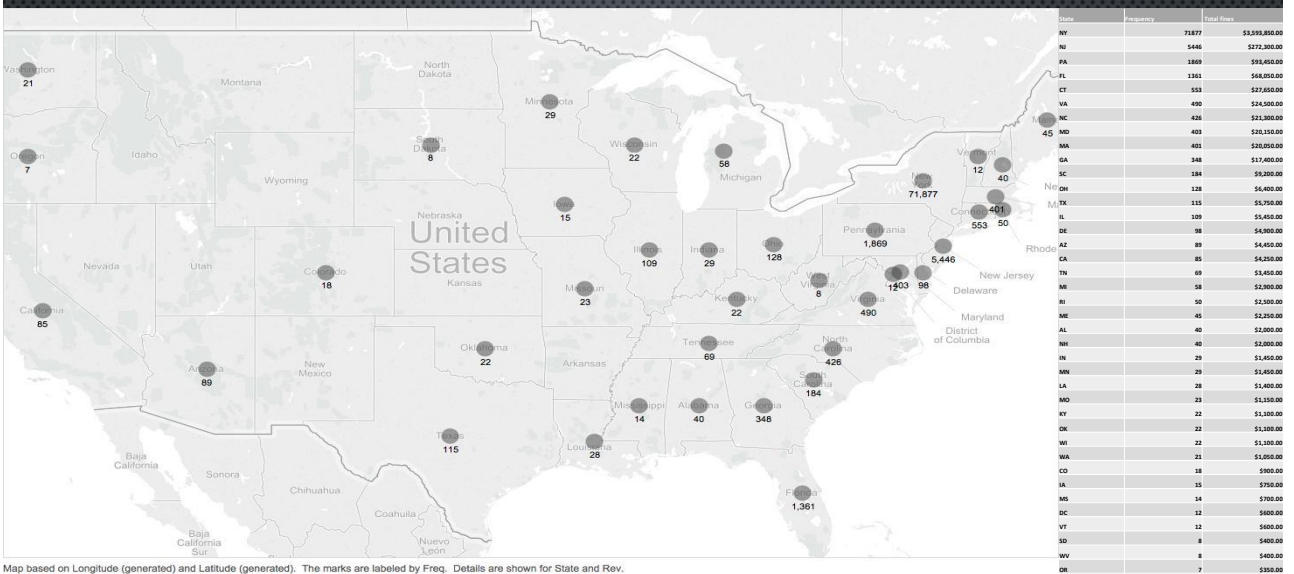


Fines accrued



This graph shows the Fines issued for the entire data set.
 The busiest day being July 22nd generating in \$267,700.00
 And the slowest being August 25th Generating \$5,700.00
 And total amount generated is \$4,230,550.00

State map showing number of offenders in all states



Offences by time

This chart shows Fines and Frequency By time and Direction with 11 am traveling west bound being the largest with 4,788 offenders

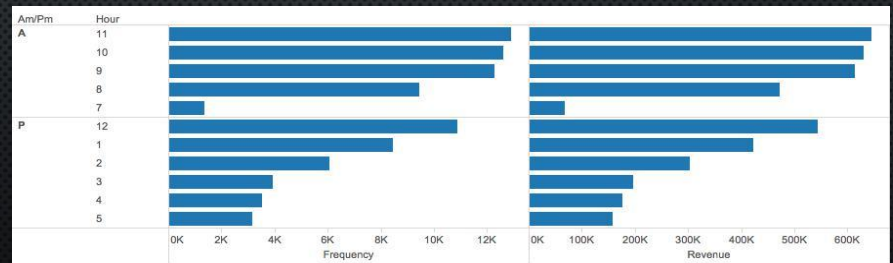
Am/Pm	Hour	Direction							
		EB		NB		SB		WB	
		Frequency	Revenue	Frequency	Revenue	Frequency	Revenue	Frequency	Revenue
A	11	2,849	142,450	2,179	108,950	3,104	155,200	4,788	239,400
	10	2,754	137,700	2,208	110,400	2,965	148,250	4,688	234,400
	9	2,577	128,850	2,124	106,200	3,070	153,500	4,506	225,300
	8	1,776	88,800	2,046	102,300	2,151	107,550	3,488	174,400
	7	196	9,800	110	5,500	582	29,100	486	24,300
P	12	2,334	116,700	1,619	80,950	2,618	130,900	4,293	214,650
	1	836	41,800	803	40,150	2,255	112,750	4,551	227,550
	2	567	28,350	591	29,550	1,088	54,400	3,824	191,200
	3	35	1,750	598	29,900	142	7,100	3,147	157,350
	4			507	25,350	139	6,950	2,866	143,300
	5			535	26,750	81	4,050	2,535	126,750

Frequency and Revenue broken down by Direction vs. Am/Pm and Hour.

This chart is just showing times with also 11 am being the largest with 12,920 offenders

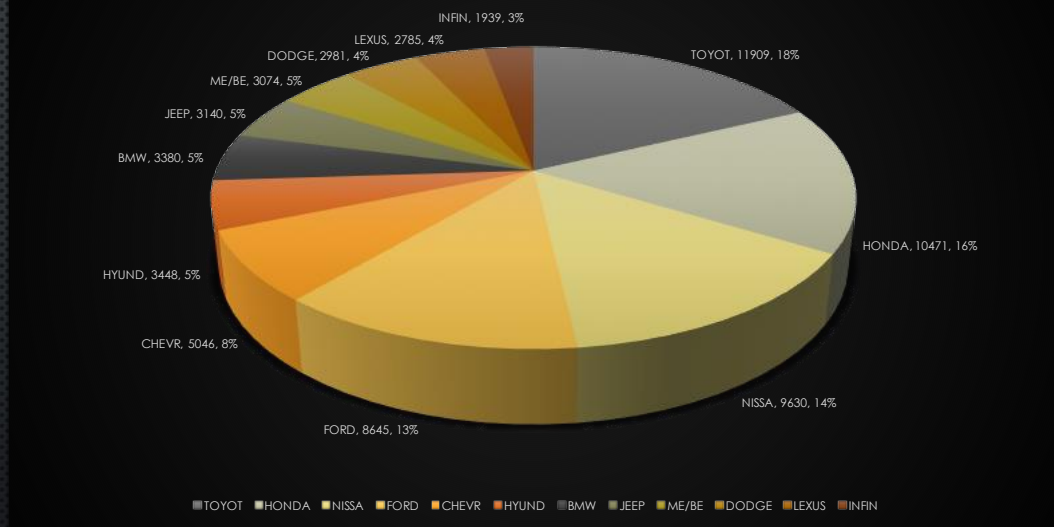
Hour	Am/Pm	Frequen..	Revenue
11	A	12,920	646,000
10	A	12,615	630,750
9	A	12,277	613,850
12	P	10,864	543,200
8	A	9,461	473,050
1	P	8,445	422,250
2	P	6,070	303,500
3	P	3,922	196,100
4	P	3,512	175,600
5	P	3,151	157,550
7	A	1,374	68,700

Frequency and Revenue broken down by Hour and Am/Pm.



Sum of Frequency and sum of Revenue for each Hour broken down by Am/Pm.

Frequency of car types



POTENTIAL INSURANCE FRAUD?

- AFTER FILTERING NY FROM THE DATA SET THE YOU CAN SEE THE TOP 10 INDIVIDUAL REPEAT OFFENDERS ARE MOSTLY FROM STATES WITH LOWER INSURANCE PREMIUMS.

Plate ID	State	
DFJ9199	NC	11
CKD7374	NC	10
JTH0187	PA	9
DAE3731	NC	8
GDD989	SC	8
3122MY	VA	7
KXL771	SC	7
EYV6869	PA	6
JNG5850	PA	6
JRZ6380	PA	6