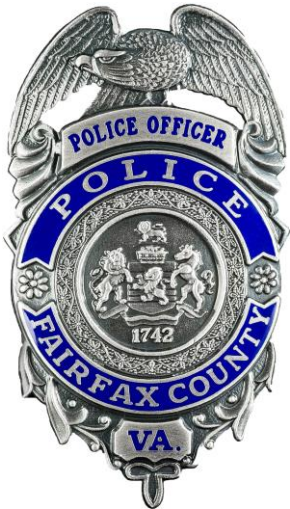


Data Driven Traffic Enforcement

Fairfax County Police Department
July 20, 2021

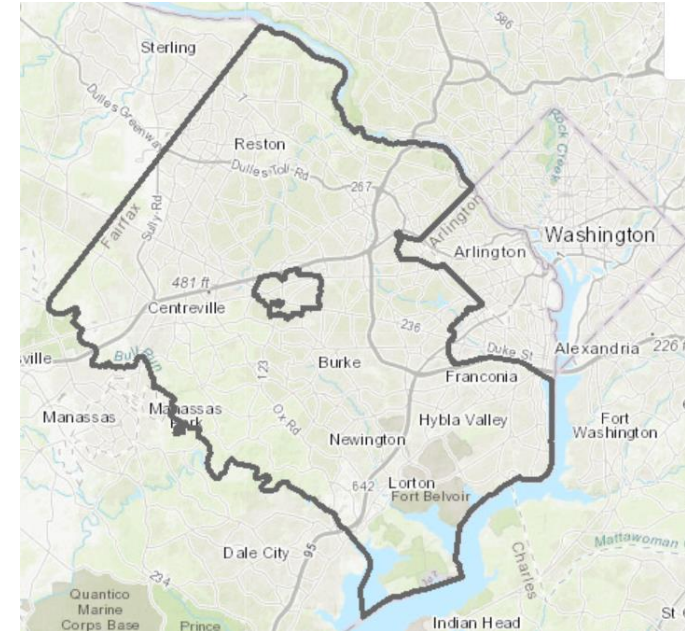


Second Lieutenant Jason A. Long
Traffic Safety Section Supervisor
Traffic Division
Phone: (703) 280-0535
jason.long@fairfaxcounty.gov



Background

- Fairfax County
 - 399 square miles
 - Population – 1,171,848
 - Over 7,169 miles of VDOT maintained roadways
- Traffic Safety Section Supervisor – 8 years
 - Supervise Crash Reconstruction Unit, Motor Carrier Safety, Crime Analyst
 - Project Director for Highway Safety Office grants
 - Nearly 23 years with FCPD





Background

- Fairfax County Police Department
 - 1,459 sworn officers
 - Fully transitioned to electronic reporting in 2017
 - No local ownership of crash data



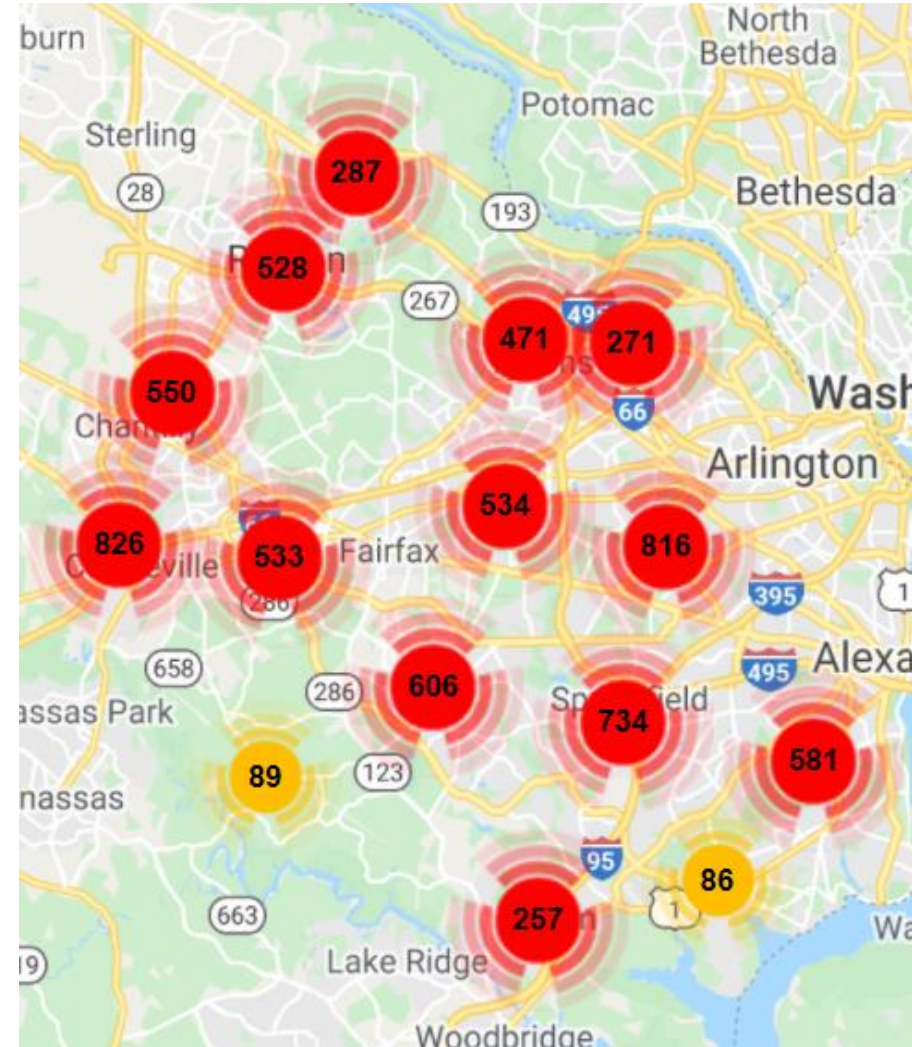
Data Driven Enforcement

- High Visibility
- Narrow Focus
- More Efficient Use of Resources, Officers



Defining the Problem

- 7,171 crashes investigated by Fairfax County Police in 2019
- 32 fatal crashes (33 fatalities)
- 3,497 injuries





Defining the Problem

- Where to start
 - Alcohol
 - Speed
 - Pedestrian/Bicycle
 - Occupant Protection
 - Motorcycle
 - CMV

Month	2019		
	Crashes	Fatalities	Injuries
January	28	0	15
February	36	6	10
March	42	0	19
April	29	2	11
May	37	1	16
June	29	0	24
July	28	2	15
August	33	1	21
September	42	1	20
October	29	2	15
November	41	0	19
December	37	0	27
Totals	411	15	212

Alcohol Related Crashes by Month

Month	2019		
	Crashes	Fatalities	Injuries
January	54	0	28
February	54	3	18
March	67	0	40
April	46	0	37
May	62	1	33
June	60	0	39
July	60	2	40
August	79	2	54
September	80	1	45
October	74	2	52
November	64	1	39
December	97	0	55
Totals	797	12	480

Speed Related Crashes by Month

- Alcohol
- 45.4% of fatalities

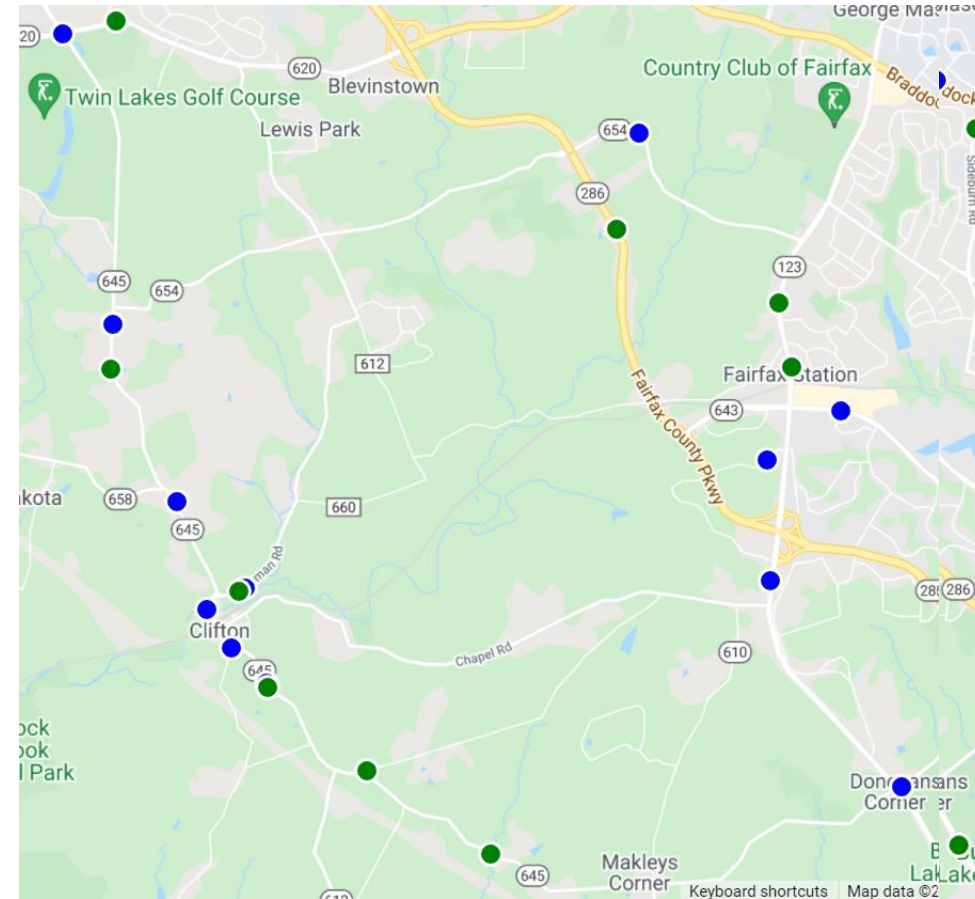
- Speed
- 36.3% of fatalities

- Pedestrians
- 48.5% of fatalities



Defining the Problem

- Location
 - Officer's knowledge
 - Community Complaints
 - Crash Data
 - Other Data Sources
- When to Enforce
 - Day of Week
 - Time
 - Month





Defining the Problem

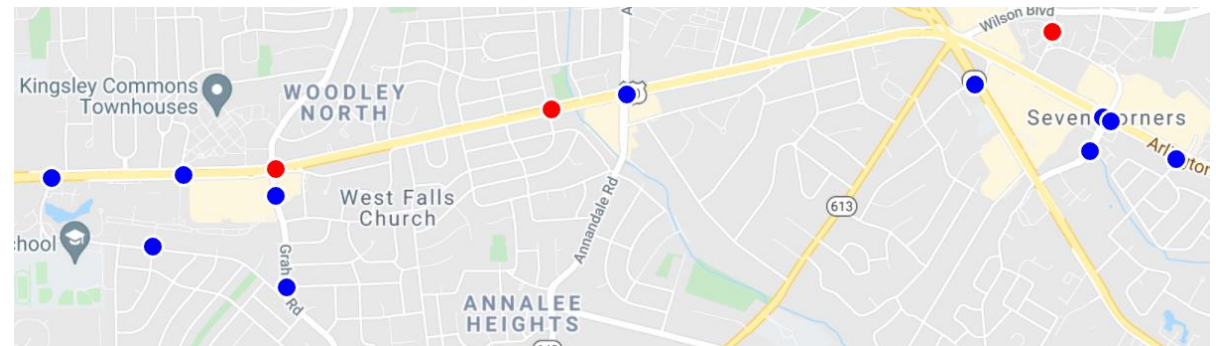
Three Hour Window	2019		
	Crashes	Fatalities	Injuries
Midnight - 2:59am	103	3	49
3:00am - 5:59am	44	2	14
6:00am - 8:59am	13	1	5
9:00am - 11:59am	6	0	4
Noon - 2:59pm	15	2	23
3:00pm - 5:59pm	31	1	24
6:00pm - 8:59pm	81	3	47
9:00pm - 11:59pm	118	3	46
Totals	411	15	212

Day Of Week	2019		
	Crashes	Fatalities	Injuries
Sunday	76	1	44
Monday	44	0	19
Tuesday	38	1	24
Wednesday	48	1	19
Thursday	49	4	21
Friday	66	2	25
Saturday	90	6	60
Totals	411	15	212



Day Of Week	2019		
	Crashes	Fatalities	Injuries
Sunday	22	1	25
Monday	18	1	20
Tuesday	24	3	27
Wednesday	21	0	23
Thursday	36	5	43
Friday	22	3	25
Saturday	22	3	23
Totals	165	16	186

Three Hour Window	2019		
	Crashes	Fatalities	Injuries
Midnight - 2:59am	10	1	10
3:00am - 5:59am	7	0	7
6:00am - 8:59am	33	3	41
9:00am - 11:59am	16	1	17
Noon - 2:59pm	10	1	16
3:00pm - 5:59pm	32	3	35
6:00pm - 8:59pm	41	3	45
9:00pm - 11:59pm	16	4	15
Totals	165	16	186





Finding and Using the Data

- TRENDS
 - My Department vs. My Jurisdiction
 - Specific Roadways
 - Involved vs. "At Fault"
- Departmental Data Sources
 - Traffic/Speed monitoring devices
 - Internal RMS



Evaluation

- Did it work?
 - Reduction of Crashes, injuries, or fatalities
- Community Feedback
 - Fewer arrests, summonses issued
- Lower speeds observed
 - Increased seat belt usage

Month	2018			2019			2020		
	Crashes	Fatalities	Injuries	Crashes	Fatalities	Injuries	Crashes	Fatalities	Injuries
January	2	0	0	8	0	5	3	0	3
February	4	0	1	4	0	1	5	0	2
March	2	0	1	4	0	1	4	0	1
April	2	0	0	2	0	0	0	0	0
May	8	1	7	2	0	0	2	0	1
June	5	0	2	3	0	0	1	0	0
July	3	2	3	3	1	1	4	0	1
August	2	0	0	1	0	0	5	0	0
September	4	0	4	2	0	0	2	0	1
October	1	0	0	6	1	4	5	0	0
November	6	0	7	5	0	1	2	0	0
December	3	0	1	5	0	1	3	0	1
Totals	42	3	26	45	2	14	36	0	10