

URBANA POLICE DEPARTMENT: 2018 ANNUAL TRAFFIC REPORT

URBANA POLICE DEPARTMENT | CRIME ANALYSIS

PRESENTERS:

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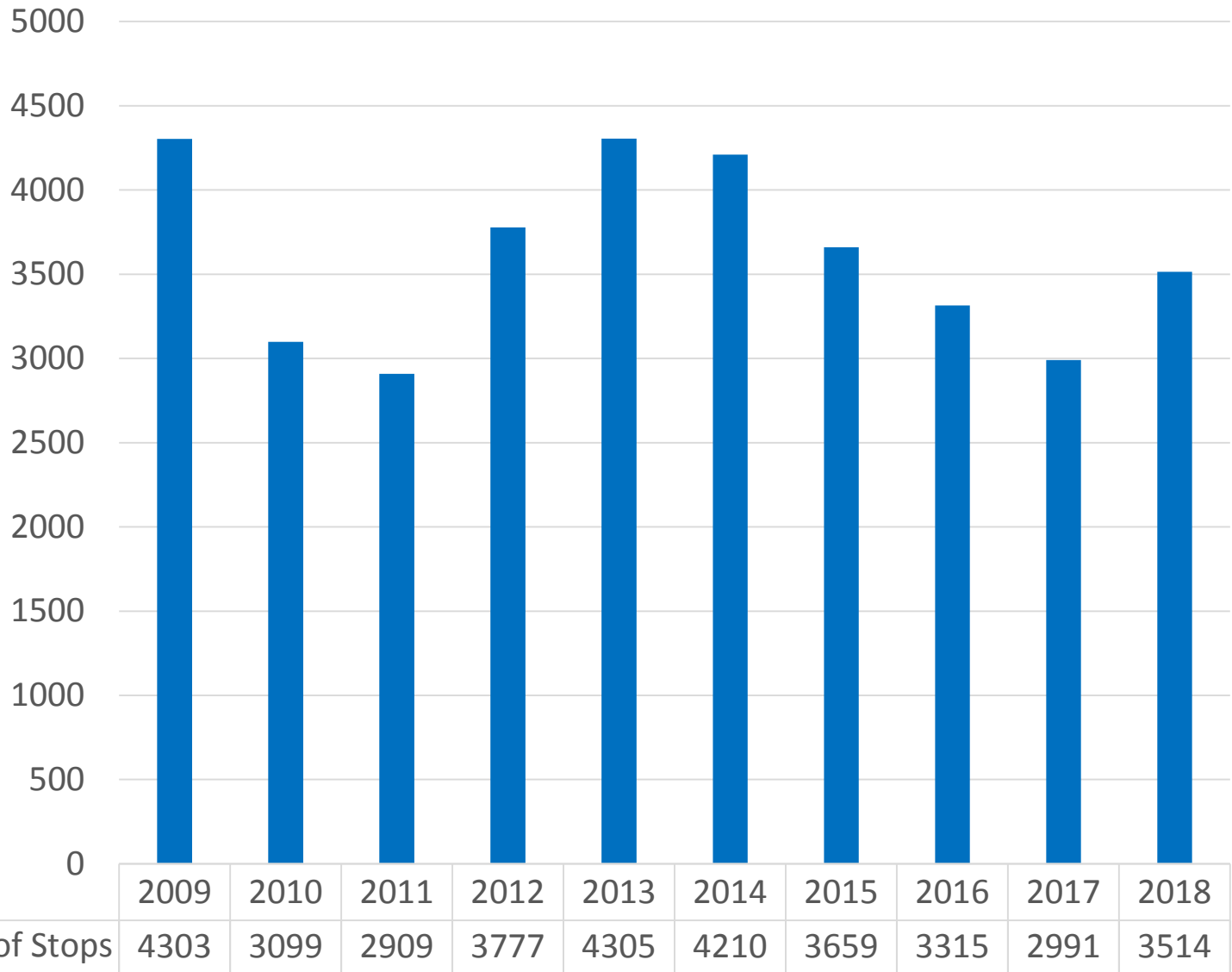


Traffic Stop Data | Overview

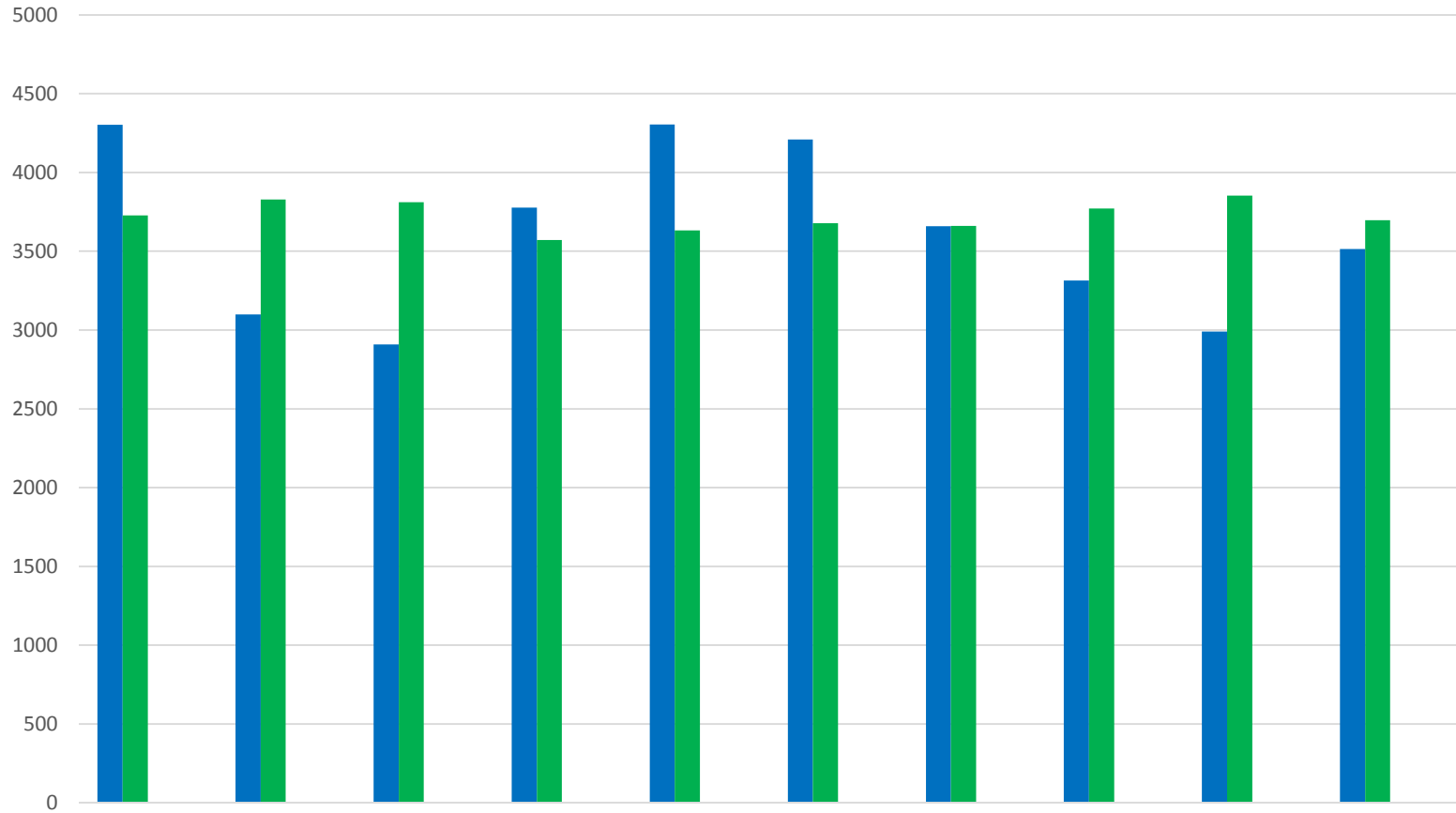
- **Number of Stops**
- **Benchmarks**
 - **Disparity ratio**
- **Decision to Stop**
 - **Motivation for Stop**
 - **Reason for Stop**
 - **STEP**
- **Outcomes of Stops**
 - **Citations vs. Warnings**
 - **Duration of Stops**
 - **More Serious**
- **Searches during Stops**
- **Arrests during Stops**



Number of Traffic Stops



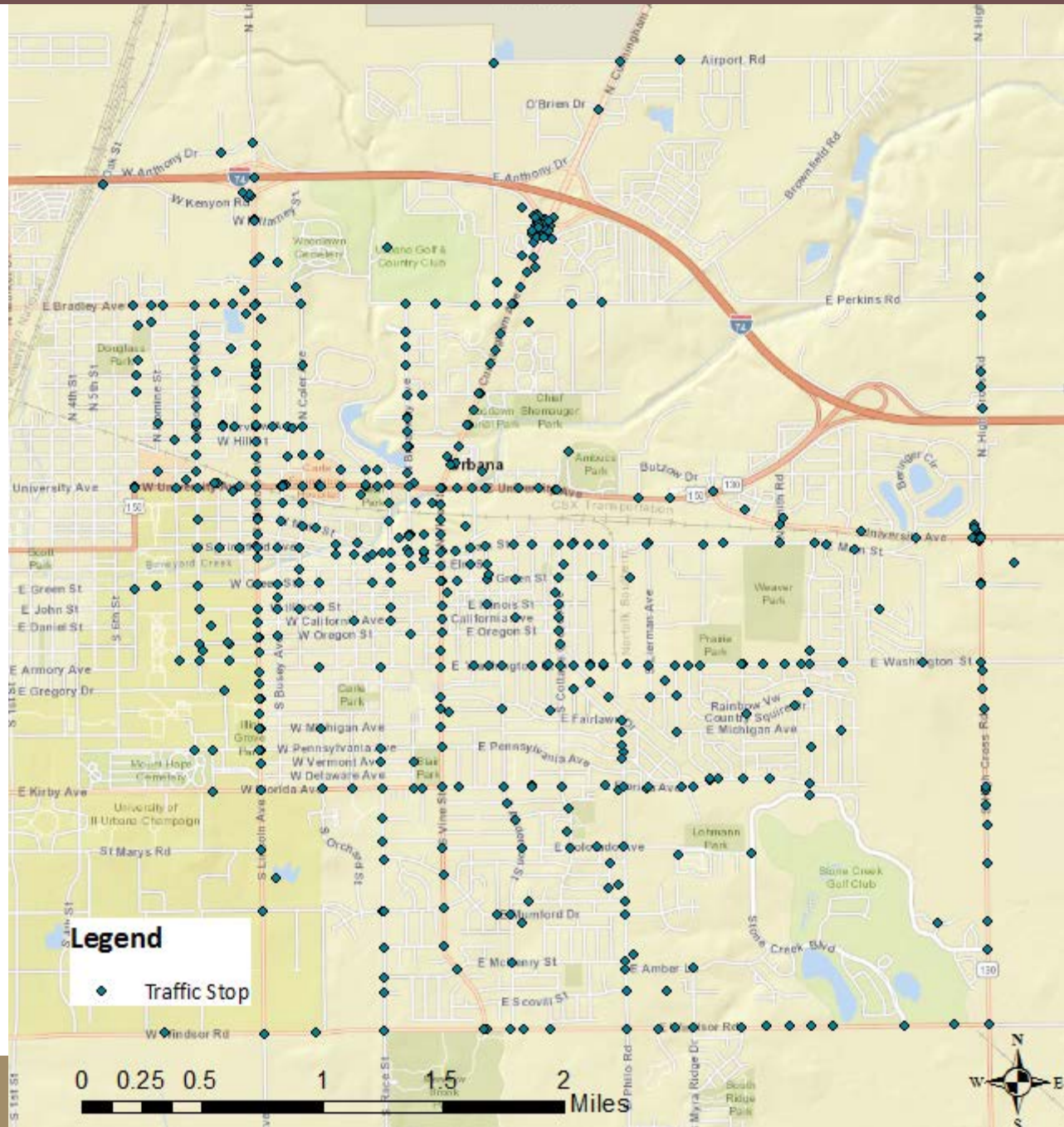
Number of Traffic Stops



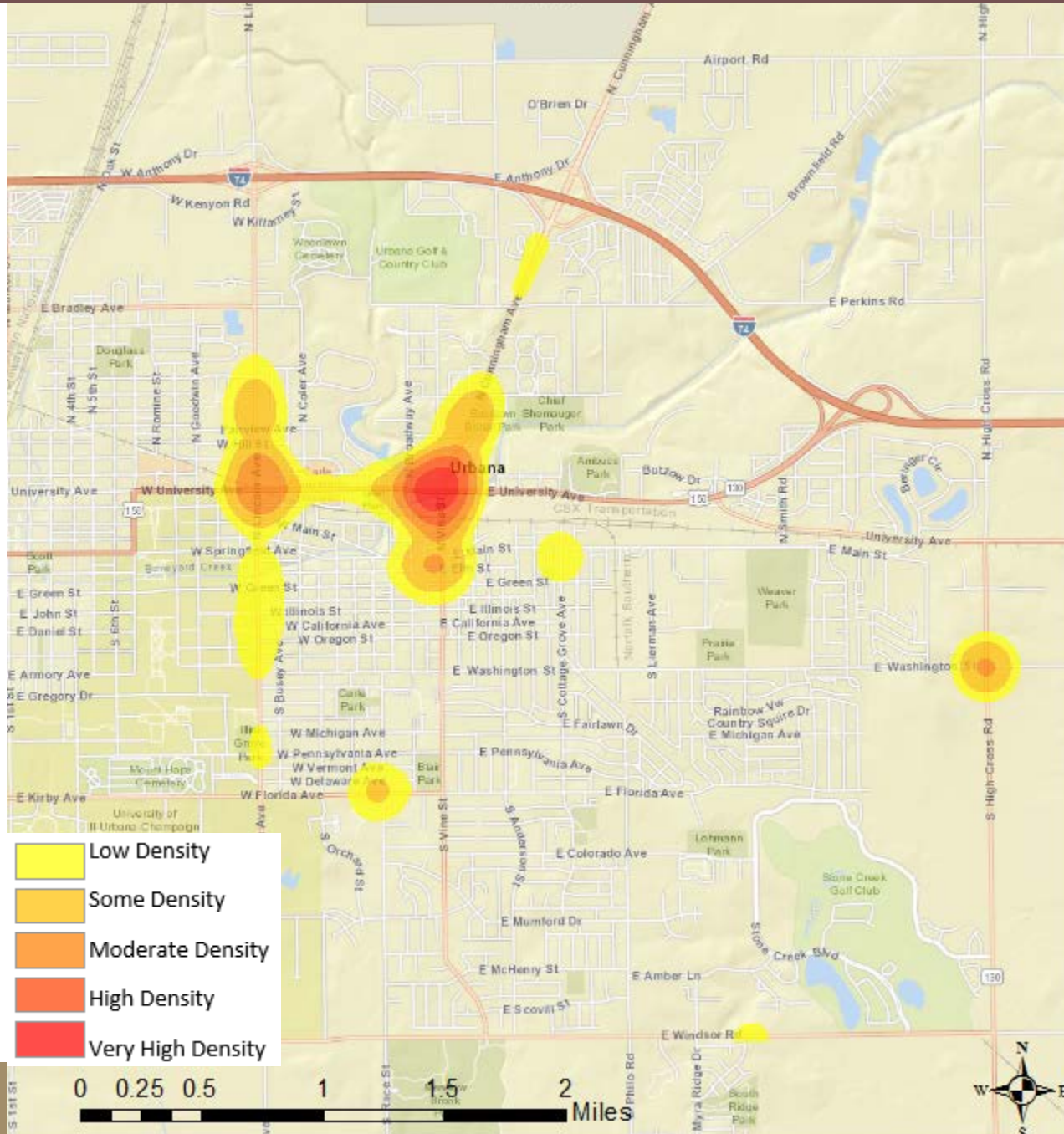
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Yearly Stops	4303	3099	2909	3777	4305	4210	3659	3315	2991	3514
5-year Average	3727	3829	3811	3571	3632	3679	3660	3772	3853	3696
Stdev	354	424	453	540	543	587	568	497	365	506
z-score	1.63	-1.72	-1.99	0.38	1.24	0.91	0.00	-0.92	-2.36	-0.36



Plotting All Traffic Stops



Density of All Traffic Stops



Demographics of Stopped Drivers

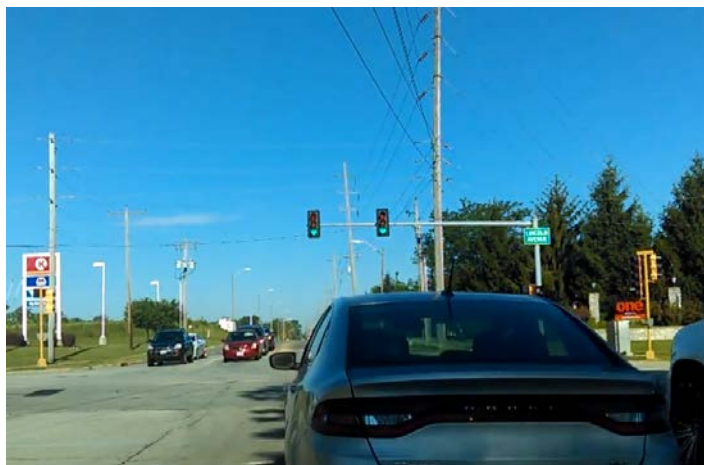
	African American	American Indian	Asian	Hispanic	Caucasian	Total Stops
2009	34.16%	0.05%	9.13%	4.39%	52.27%	4303
2010	38.17%	0.06%	9.45%	4.49%	47.82%	3099
2011	34.62%	0.03%	8.80%	4.64%	51.91%	2909
2012	29.68%	0.13%	8.92%	3.55%	57.72%	3777
2013	29.71%	0.19%	11.45%	3.69%	54.94%	4305
2014	28.03%	0.29%	10.52%	4.89%	56.27%	4210
2015	29.54%	0.14%	10.63%	4.59%	55.10%	3659
2016	28.33%	0.27%	10.86%	4.86%	55.69%	3315
2017	29.42%	0.20%	9.76%	4.55%	56.07%	2991
2018	30.02%	0.26%	8.96%	5.41%	55.35%	3514



Disparity Ratio Calculation



$$\frac{\% \text{ race of stopped drivers}}{\% \text{ race of all drivers on Urbana city streets}} = \text{disparity ratio}$$



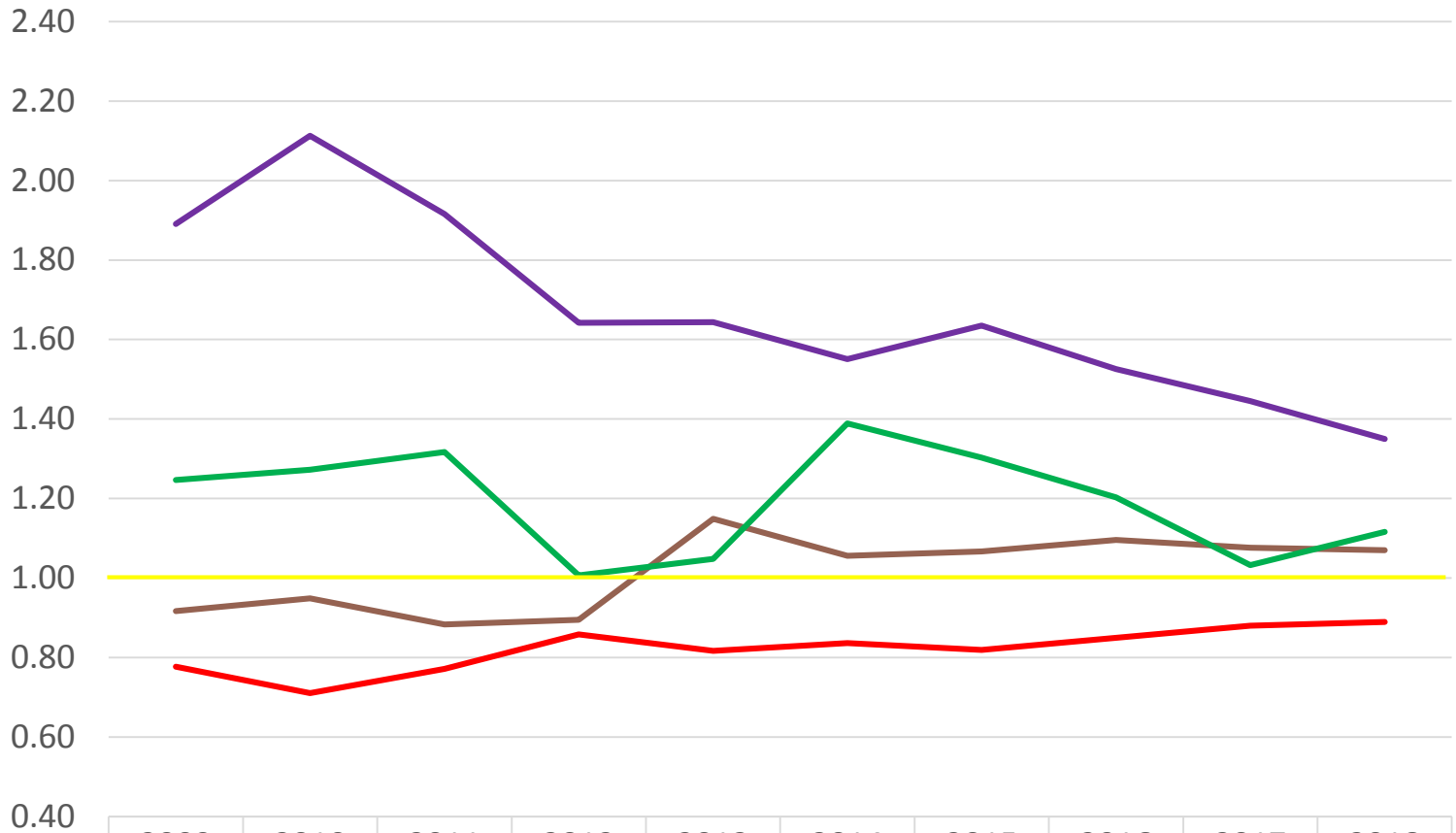
Demographics of Driving Population

2010 Census (Used by IDOT)	Percent
American Indian/Alaskan Native	0.15%
Asian	19.22%
Native Hawaiian/OPI	0.16%
African American	14.83%
Hispanic	5.14%
Caucasian	60.50%
Total Population	100.00%

Accidents (Used by UPD)	2013 - 2015	2014 - 2016	2015 - 2017	2016 – 2018
Asian	9.96%	9.91%	9.07%	8.37%
African American	18.07%	18.56%	20.36%	22.26%
Hispanic	3.52%	4.04%	4.40%	4.84%
American Indian	0.18%	0.24%	0.24%	0.24%
Unknown	1.01%	1.68%	2.20%	1.99%
Caucasian	67.26%	65.54%	63.70%	62.23%
Total Drivers Involved in Accidents	3974	3866	3828	3682



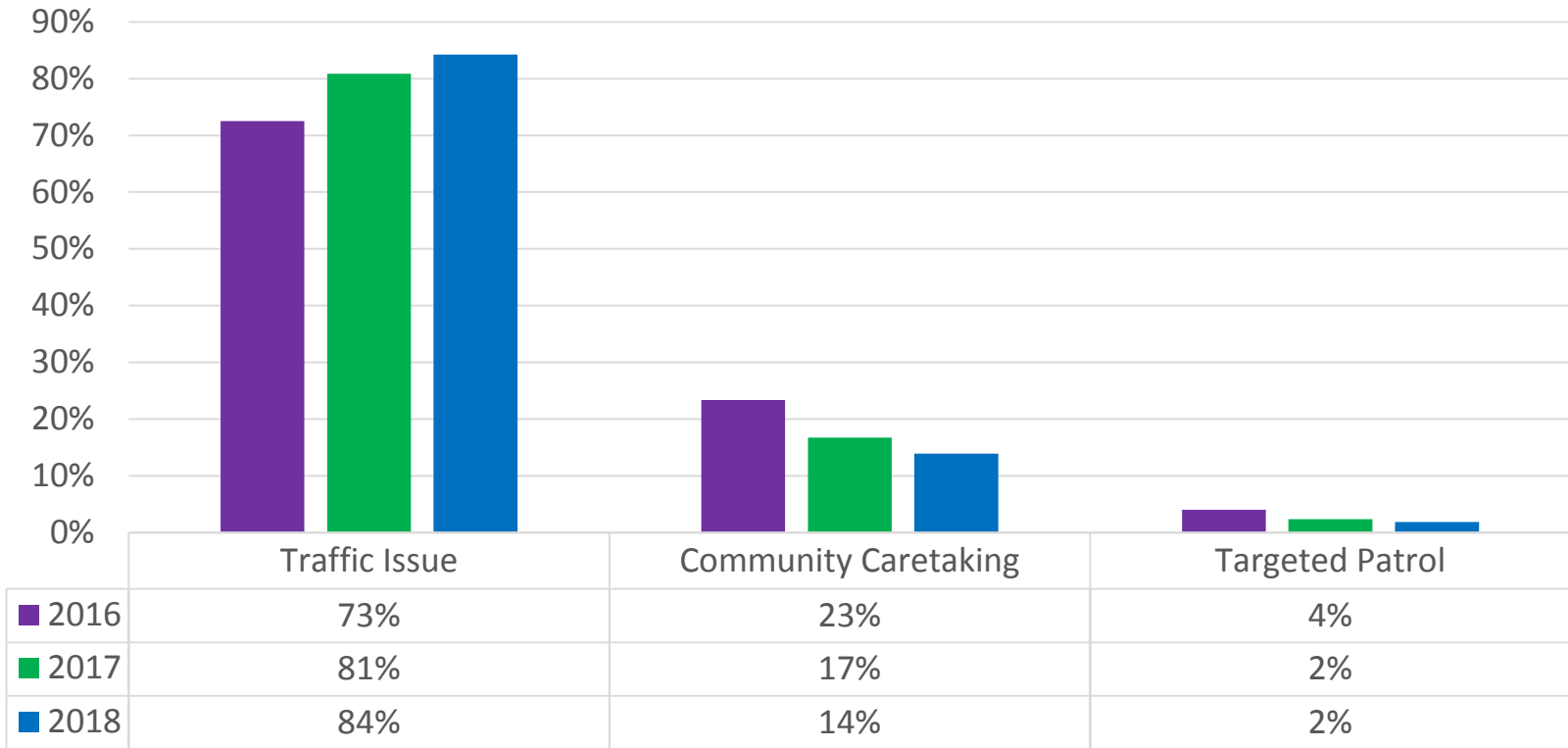
Disparity Ratios



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
African American	1.89	2.11	1.92	1.64	1.64	1.55	1.63	1.53	1.45	1.35
Asian	0.92	0.95	0.88	0.90	1.15	1.06	1.07	1.10	1.08	1.07
Hispanic	1.25	1.27	1.32	1.01	1.05	1.39	1.30	1.20	1.03	1.12
Caucasian	0.78	0.71	0.77	0.86	0.82	0.84	0.82	0.85	0.88	0.89



Motivation for Stops

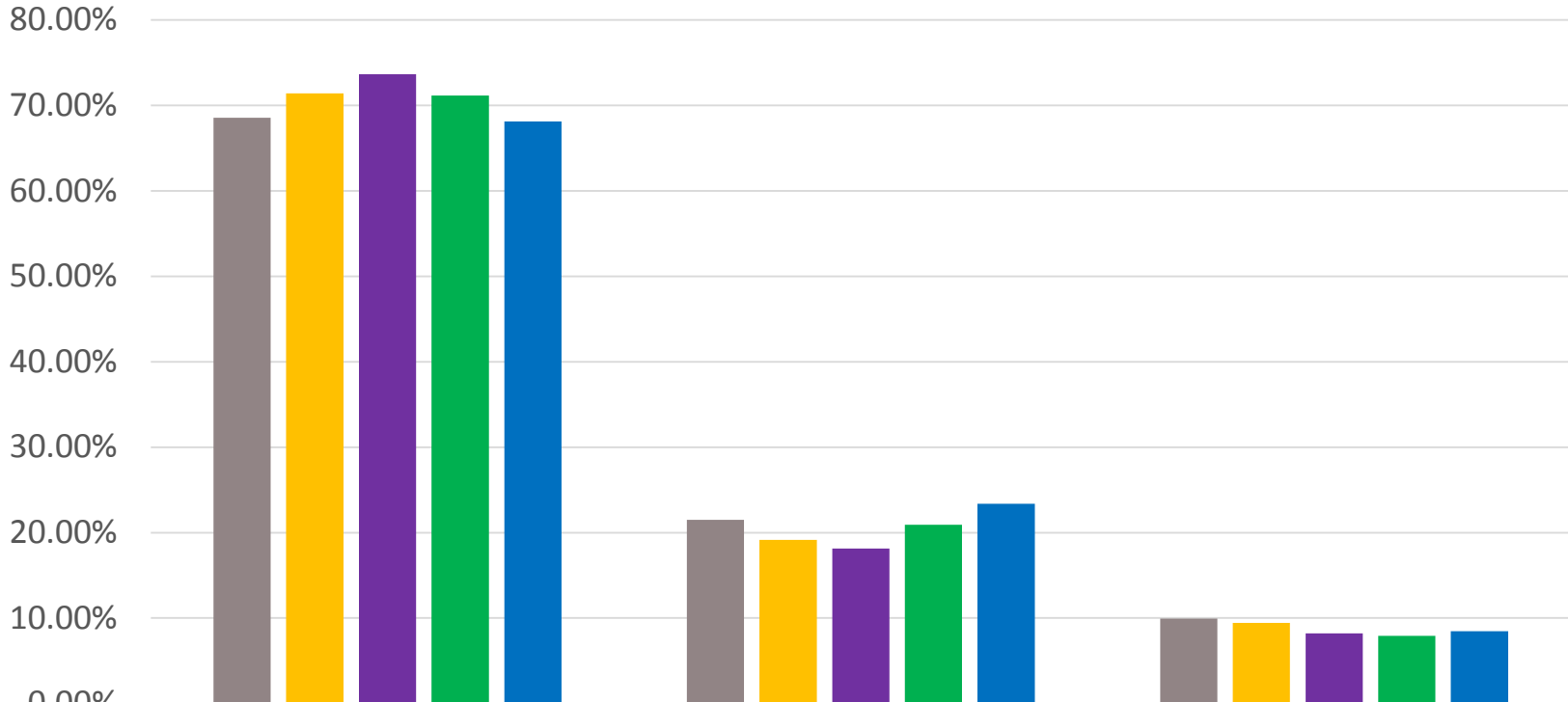


2018

	Traffic Issue	Community Caretaking	Targeted Patrol	Total
Asian	85.71%	13.97%	0.32%	315
African American	81.52%	15.26%	3.22%	1055
Hispanic	85.79%	11.58%	2.63%	190
Caucasian	85.30%	13.37%	1.34%	1945



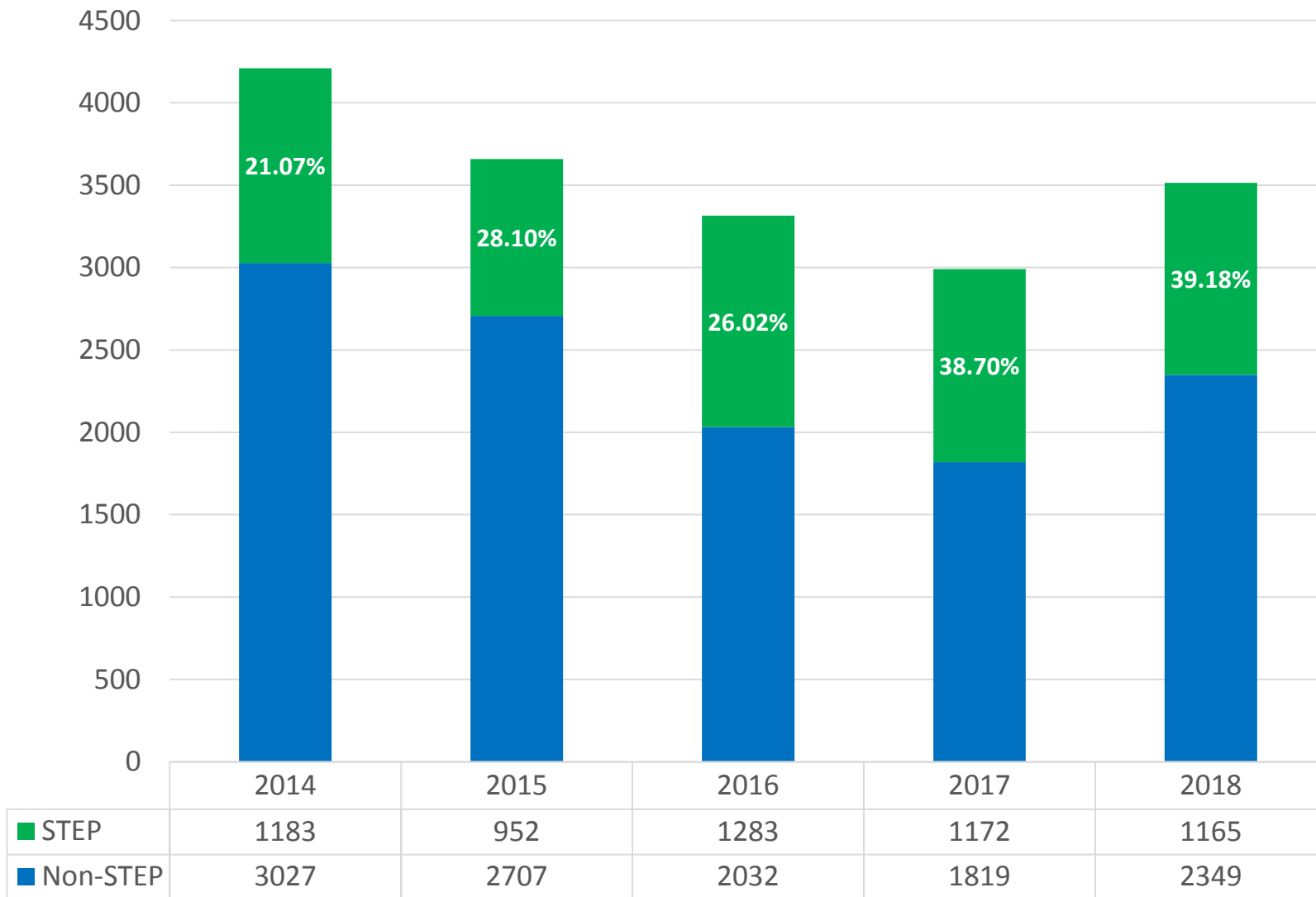
Reason for Stop



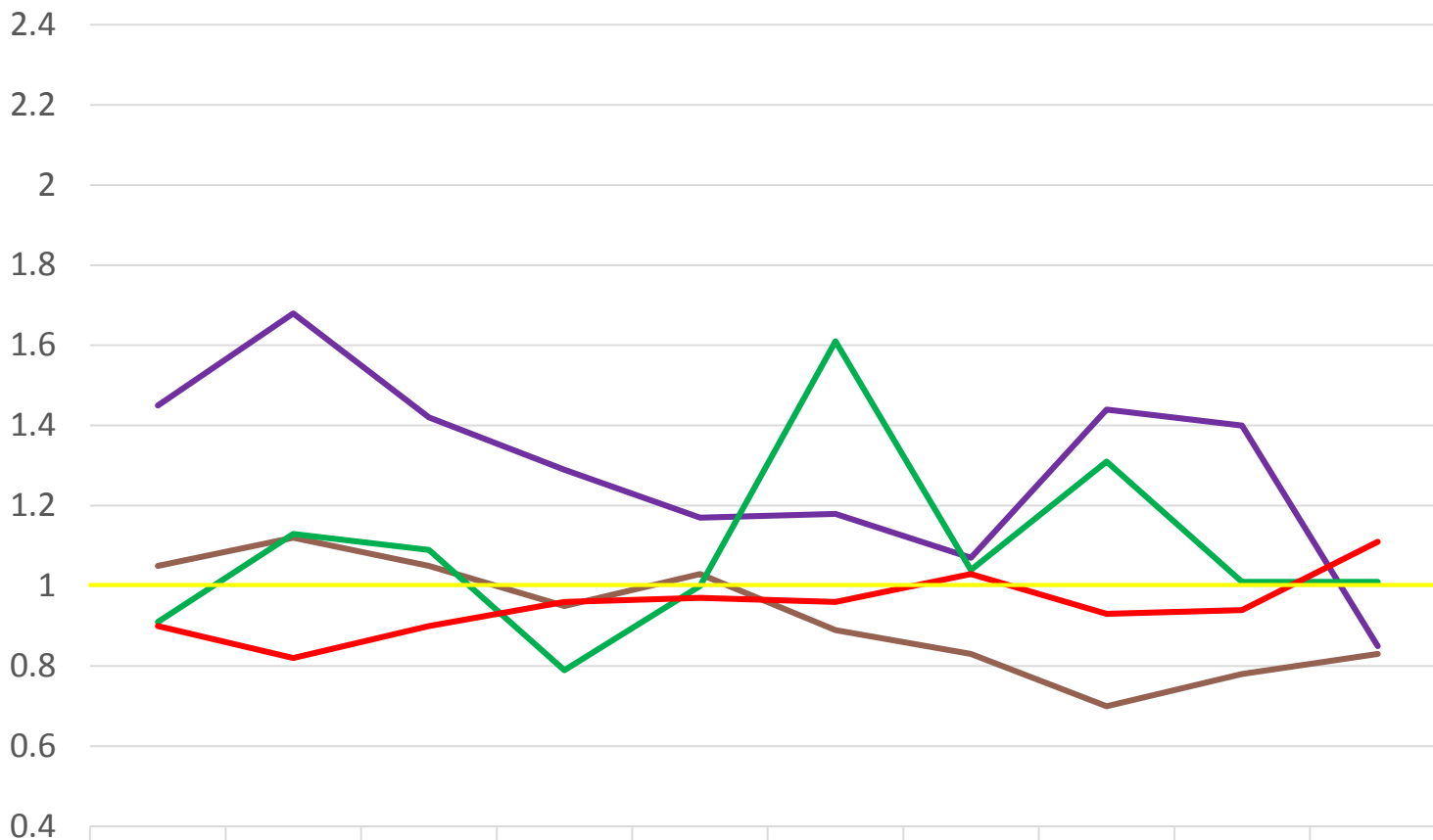
	Moving Violation	Equipment Violation	Licence/Reg Violation
■ 2014	68.55%	21.50%	9.95%
■ 2015	71.41%	19.16%	9.43%
■ 2016	73.63%	18.16%	8.21%
■ 2017	71.15%	20.93%	7.92%
■ 2018	68.13%	23.39%	8.48%



STEP and Non-STEP Stops



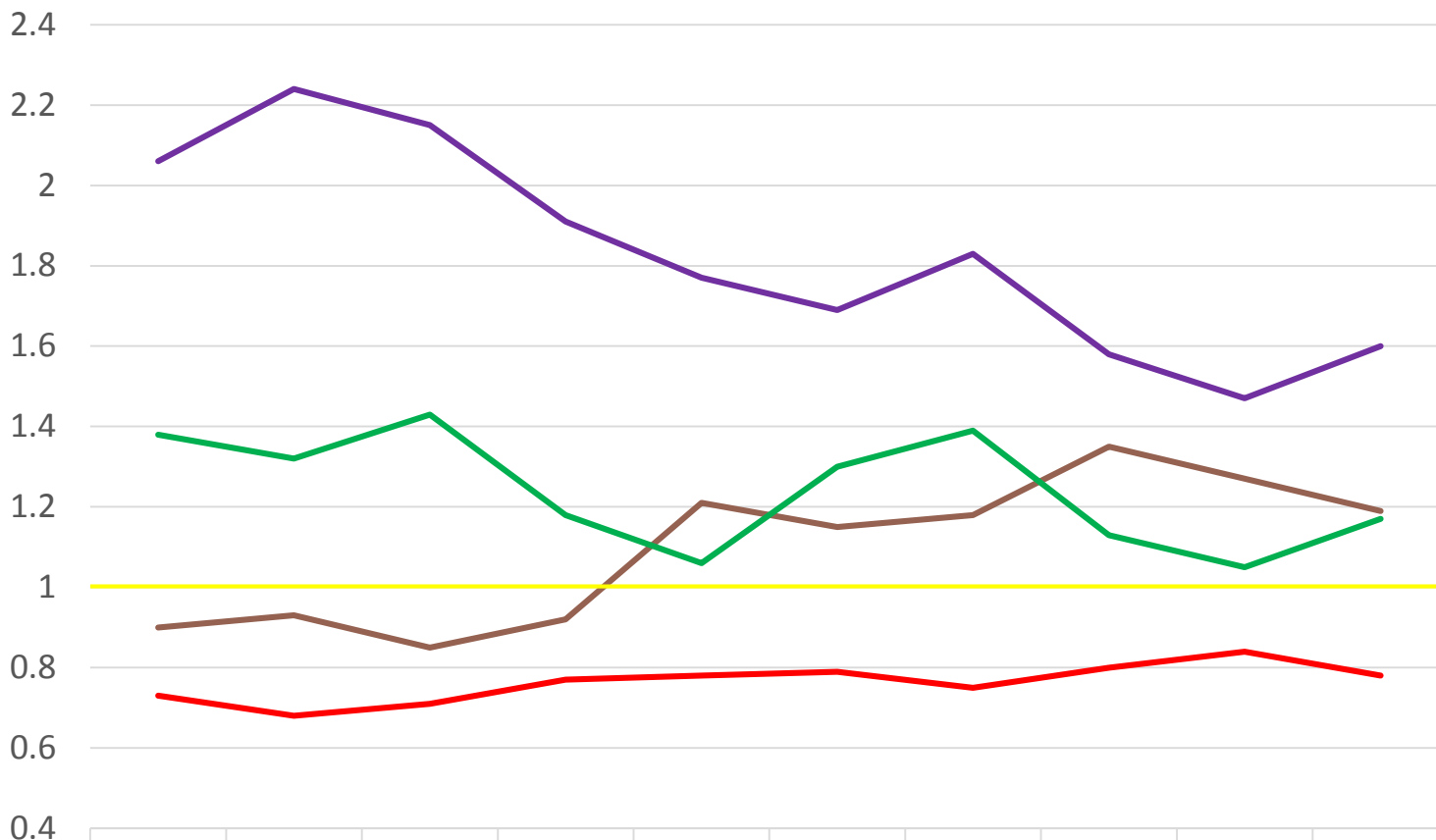
Disparity Ratios: STEP



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asian	1.05	1.12	1.05	0.95	1.03	0.89	0.83	0.7	0.78	0.83
African American	1.45	1.68	1.42	1.29	1.17	1.18	1.07	1.44	1.4	0.85
Hispanic	0.91	1.13	1.09	0.79	1	1.61	1.04	1.31	1.01	1.01
Caucasian	0.9	0.82	0.9	0.96	0.97	0.96	1.03	0.93	0.94	1.11



Disparity Ratios: Non-STEP



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asian	0.9	0.93	0.85	0.92	1.21	1.15	1.18	1.35	1.27	1.19
African American	2.06	2.24	2.15	1.91	1.77	1.69	1.83	1.58	1.47	1.6
Hispanic	1.38	1.32	1.43	1.18	1.06	1.3	1.39	1.13	1.05	1.17
Caucasian	0.73	0.68	0.71	0.77	0.78	0.79	0.75	0.8	0.84	0.78



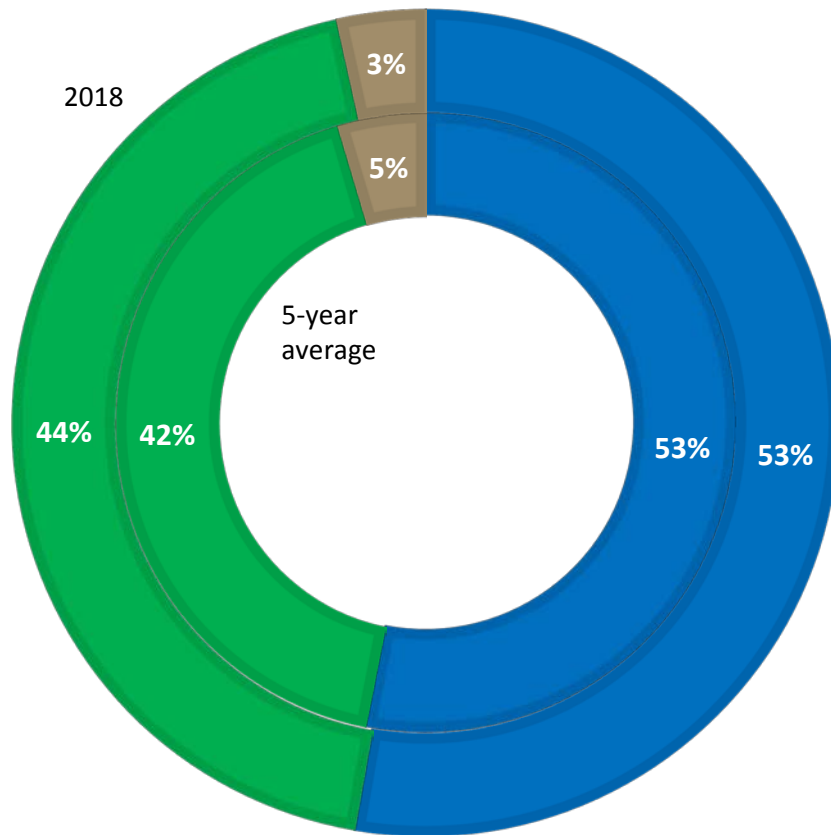
Duration of Stops, 2014 - 2018

	Citation	Warning	More Serious
African American	14.79	10.61	31.61
Asian	13.41	9.81	28.04
Caucasian	11.88	9.57	27.49
Hispanic	15.75	10.11	28.11
Overall Average	13.15	9.93	29.75



Outcomes of Traffic Stops

■ Ticket ■ Warning ■ More Serious
z = -0.42 z = 1.03 z = -1.53

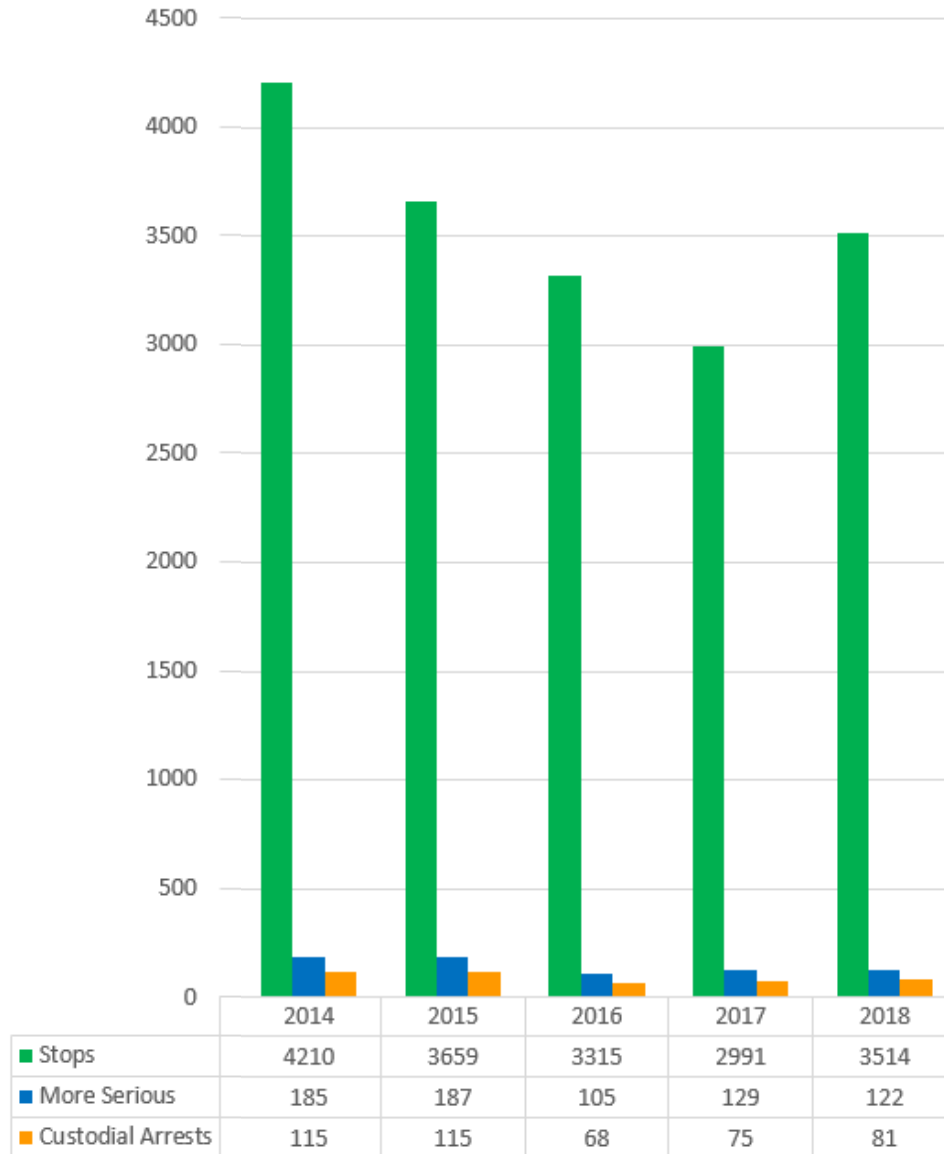


Disparity Ratios of Outcomes

	5-year average	2018	z-score
Citation Total	1986	1848	
Asian	1.01	1.04	0.56
African American	0.92	0.87	-1.02
Hispanic	1.14	1.11	-0.42
Caucasian	1.03	1.06	1.64
Warning Total	1532	1526	
Asian	1.08	1.03	-0.71
African American	0.99	1.08	2.99
Hispanic	0.75	0.84	1.13
Caucasian	1.01	0.97	-5.42
More Serious Total	183	122	
Asian	0.23	0.18	-0.25
African American	1.96	2.07	1.39
Hispanic	1.66	1.36	-1.10
Caucasian	0.60	0.52	-1.22



Outcomes of Traffic Violations



More Serious than Traffic Violations, 2014 - 2018

Traffic Offenses	
Operate Uninsured Motor Vehicle	12.63%
Driving Under Suspended License	6.85%
No Driver's License	3.57%
Operate MV W/Suspend Registration	3.32%
Traffic Sign Violation	2.63%
Improper Lane Usage	2.63%
No Rear Registration Light	2.50%
Speeding (Radar)	2.26%
Failure To Signal	2.26%
Expired Registration	2.09%
Electronic Communication-Voice	2.05%
Driving Without Lights	1.68%
Improper Lighting/One Headlight	1.39%
Seat Belt-Driver & Passenger	1.27%
More Serious Offenses	
Driving Under Revoked License	8.41%
Cannabis Offenses (all)	5.53%
Warrant-In State	5.41%
Driving Under The Infl-Alcohol	3.86%
Cancel/Suspend/Revoked Registration	2.58%
Driving Under Influence-Drugs	2.17%
Drug Equipment-Possession	2.05%
Illegal Transportation Of Liquor	1.89%
Controlled Substance-Possession	1.56%
Breath Alcohol Over Limit	1.39%

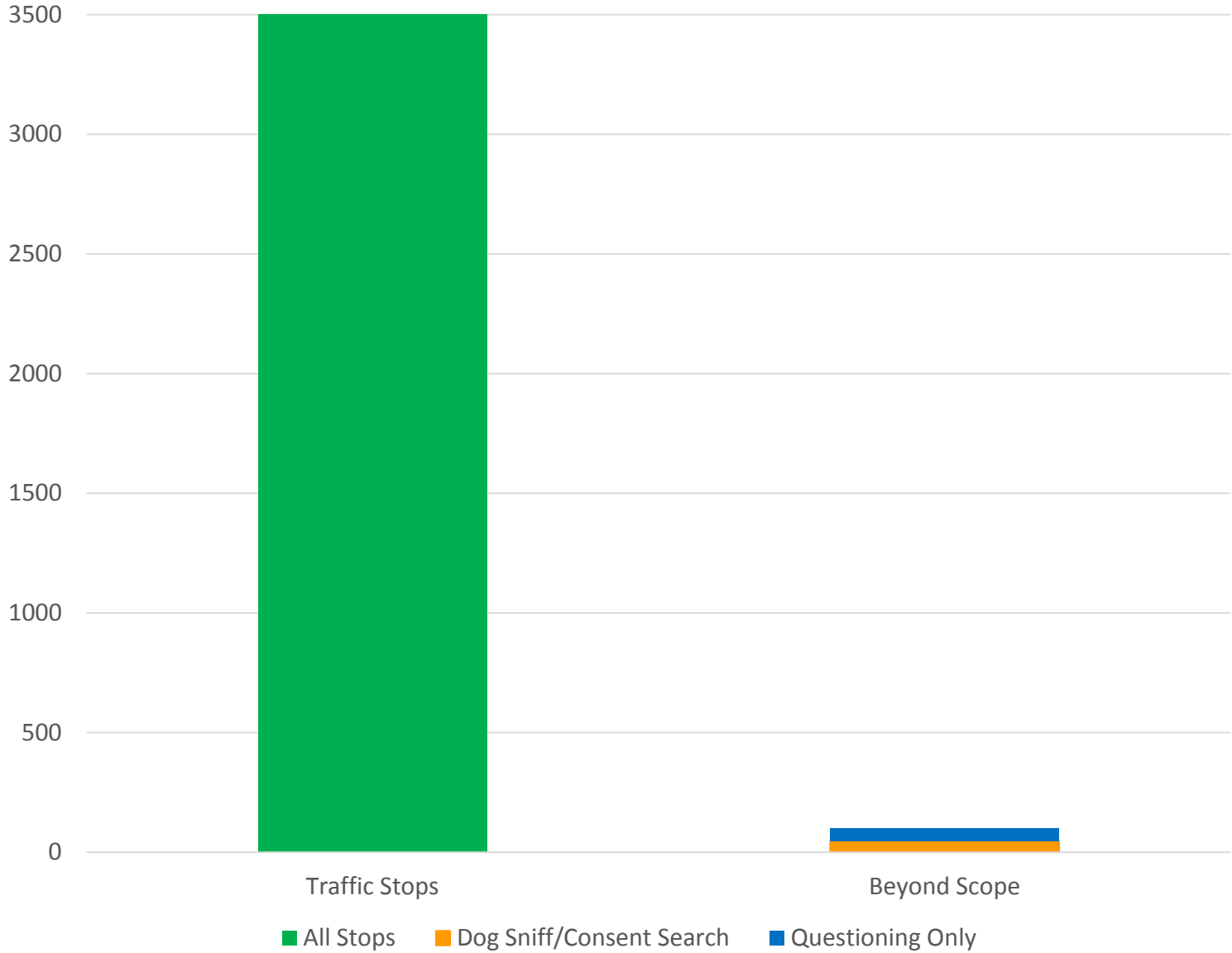


Arrests from Traffic Stops, 2014 - 2018

	2014	2015	2016	2017	2018	Total
African American	62.61%	65.22%	63.24%	61.33%	59.26%	62.56%
	72	75	43	46	48	284
Asian	1.74%	0.87%	0.00%	1.33%	2.47%	1.32%
	2	1	0	1	2	6
Caucasian	27.83%	27.83%	32.35%	32.00%	29.63%	29.52%
	32	32	22	24	24	134
Hispanic	7.83%	6.09%	4.41%	4.00%	8.64%	6.39%
	9	7	3	3	7	29
Grand Total	115	115	68	75	81	454



Beyond Scope



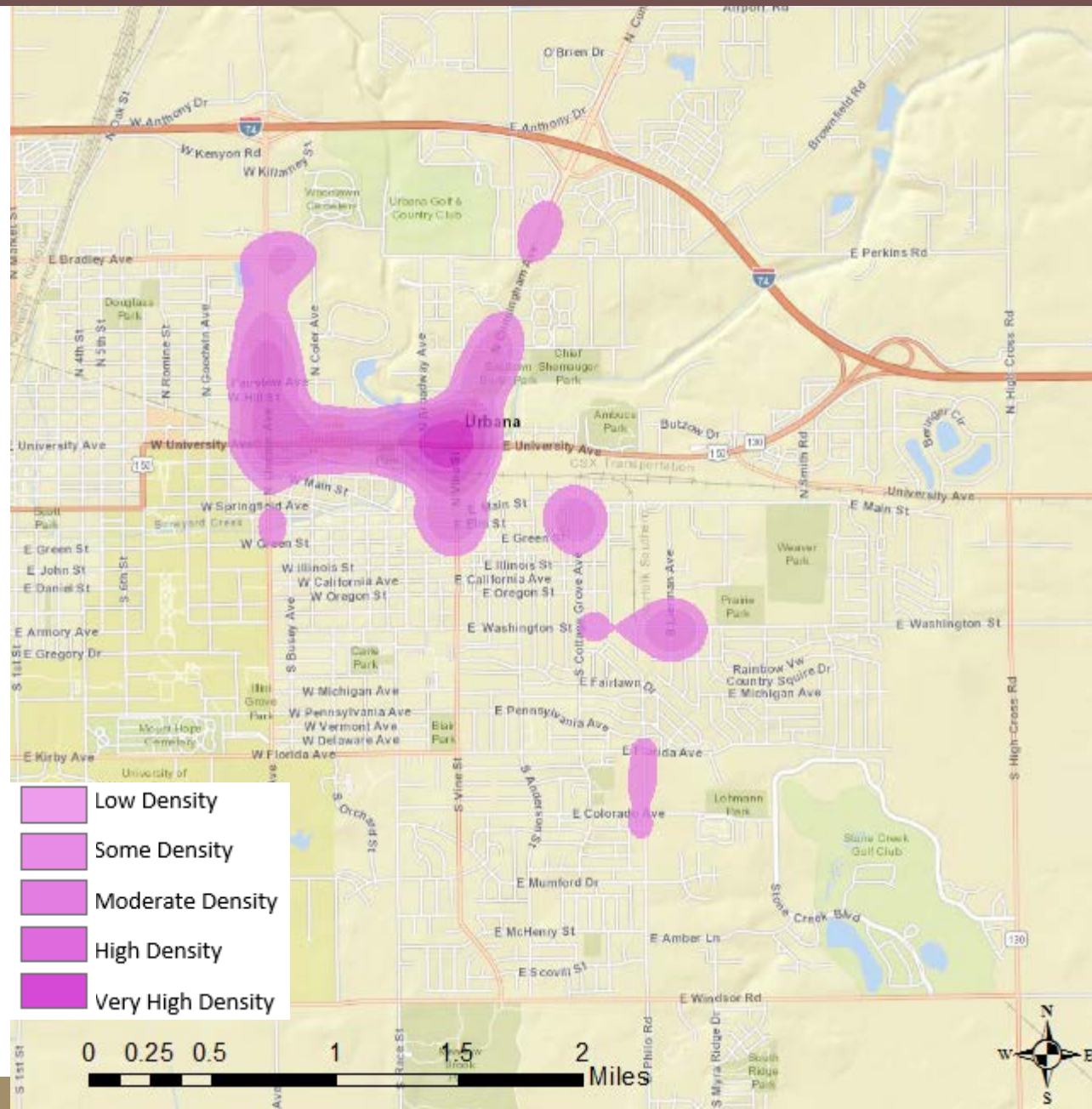
Consent Searches & Dog Sniffs

	Total Stops	Consent Searches	% of All Stops
2014	4195	26	0.62%
2015	3650	10	0.27%
2016	3314	10	0.30%
2017	2990	14	0.47%
2018	3504	23	0.66%

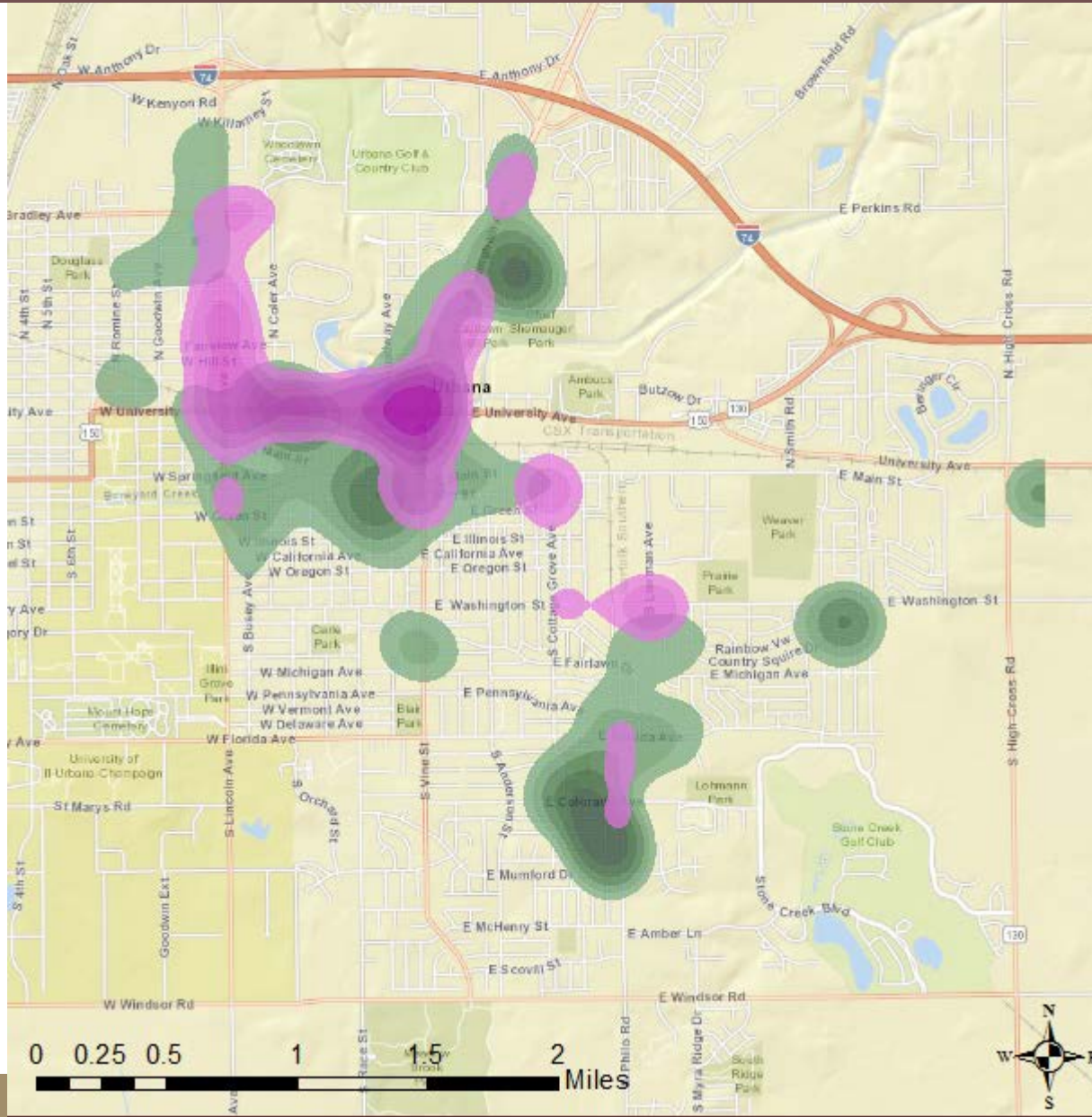
	Total Stops	Canine Sniffs	% of All Stops
2014	4195	57	1.36%
2015	3650	38	1.04%
2016	3314	17	0.51%
2017	2990	14	0.47%
2018	3504	24	0.68%



Density of Non-STEP Stops of African American Drivers



Density of Citizen-Initiated Calls for Service And Non-STEP Stops of African American Drivers



Citizen-Initiated Calls for Service

- Low Density
- Some Density
- Moderate Density
- High Density
- Very High Density

Non-STEP Traffic Stops of African American Drivers

- Low Density
- Some Density
- Moderate Density
- High Density
- Very High Density

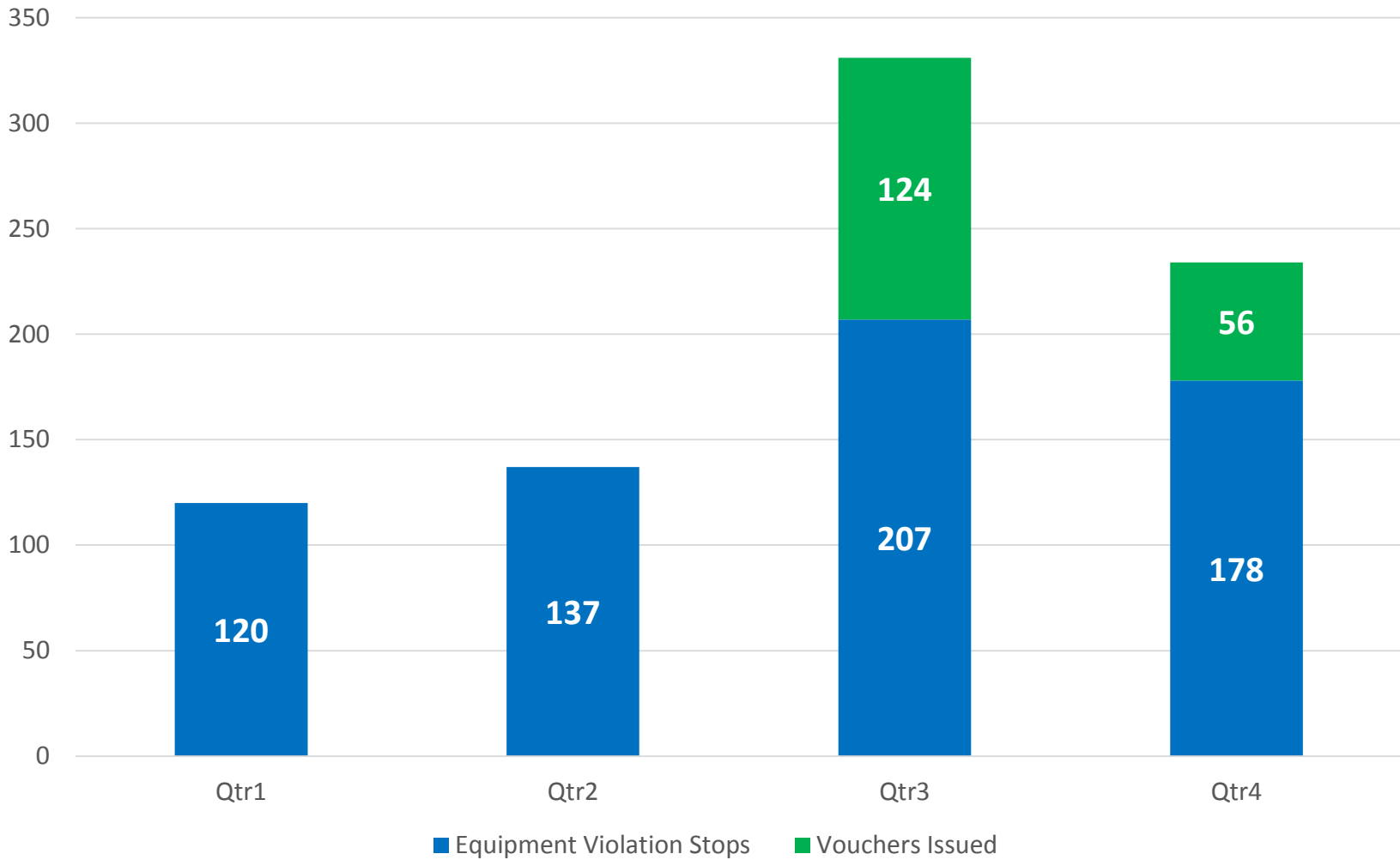


Changes in Equipment Violation Stops

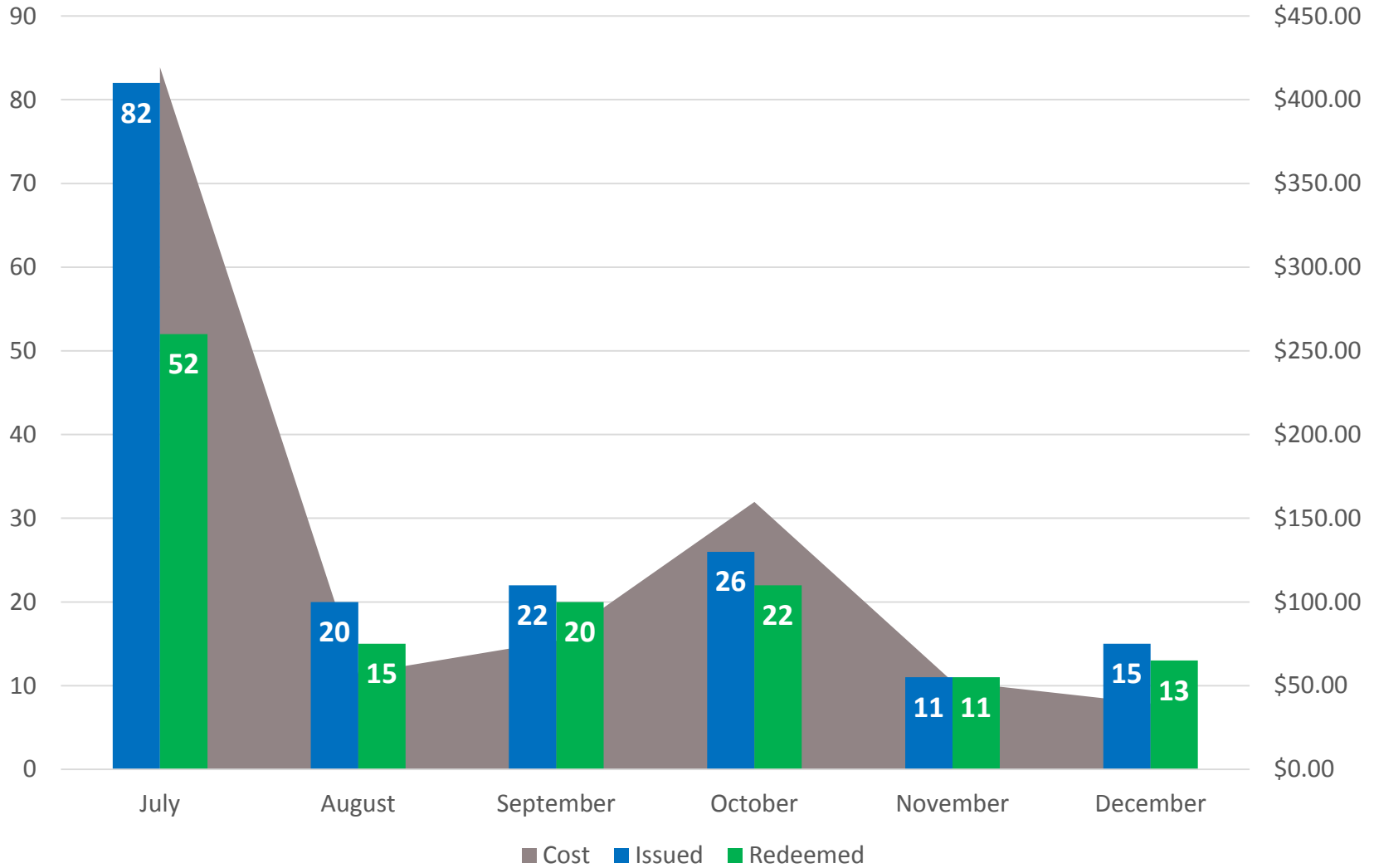
Moving Violations	5-year average	2018	z-score
Asian	68.70%	69.84%	1.20
African American	64.19%	59.62%	-1.07
Hispanic	70.26%	72.11%	0.25
Caucasian	74.13%	72.19%	-1.32
Equipment Violations	5-year average	2018	z-score
Asian	24.77%	26.35%	1.45
African American	24.13%	30.90%	3.56
Hispanic	21.57%	22.11%	0.11
Caucasian	17.37%	18.82%	0.96
License/Registration Violations	5-year average	2018	z-score
Asian	6.53%	3.81%	-3.88
African American	11.68%	9.48%	-0.90
Hispanic	8.17%	5.79%	-0.53
Caucasian	8.50%	9.00%	0.72



Changes in Equipment Violation Stops



Fix-It Vouchers Issued and Redeemed



Fix-It Vouchers Comments

I think it is a very good program. Brings in clients for Advanced and keeps drivers safe on the road especially those who can't always afford them. Thank you.

Seems to be a very kind & caring program. Thank you!!

Very thankful & blessed, giving back to the community is great. Thanks to the officer. Glad to know police officers care. He really made my day 😊

I appreciate the officer informing me, as well as giving me the voucher.

This definitely needs to be continued. Helps build relationships with the cops & allows people to get the replacements they need.

Knowing that the city is willing to help instead of ticket right away builds confidence in the police.

Good program, minor repair on light bulb for license plate light, didn't threaten with ticket.

I love that they started this program. The officer was very friendly and approachable which I found extremely relieving.



Summary

- Increase in overall traffic stops, increase in percentage of STEP stops
- Decrease in overall disparity ratio
 - 30% of our stops are with African American drivers
 - African Americans make up 22% of the Urbana driving population
 - Overall disparity ratio 1.35 for African American drivers, decrease from 1.45 in 2017
- Non-STEP stop disparity ratio is higher, and is correlated geographically with citizen-initiated calls for service
- At the decision-point of the outcome of the stop, African American drivers are less likely to receive a citation
- Successful new Fix-It Voucher program

