RACIAL DISPROPORTIONALITY IN POLICE TRAFFIC STOPS

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WHAT DO WE LOOK FOR?

- **Disproportionality in Stops**
  - A difference between police traffic stop percentages and a reliable benchmark
- **Disproportionality in Outcomes**
  - A difference between groups in things like citations, arrests and searches

DISPROPORTIONALITY IN STOPS

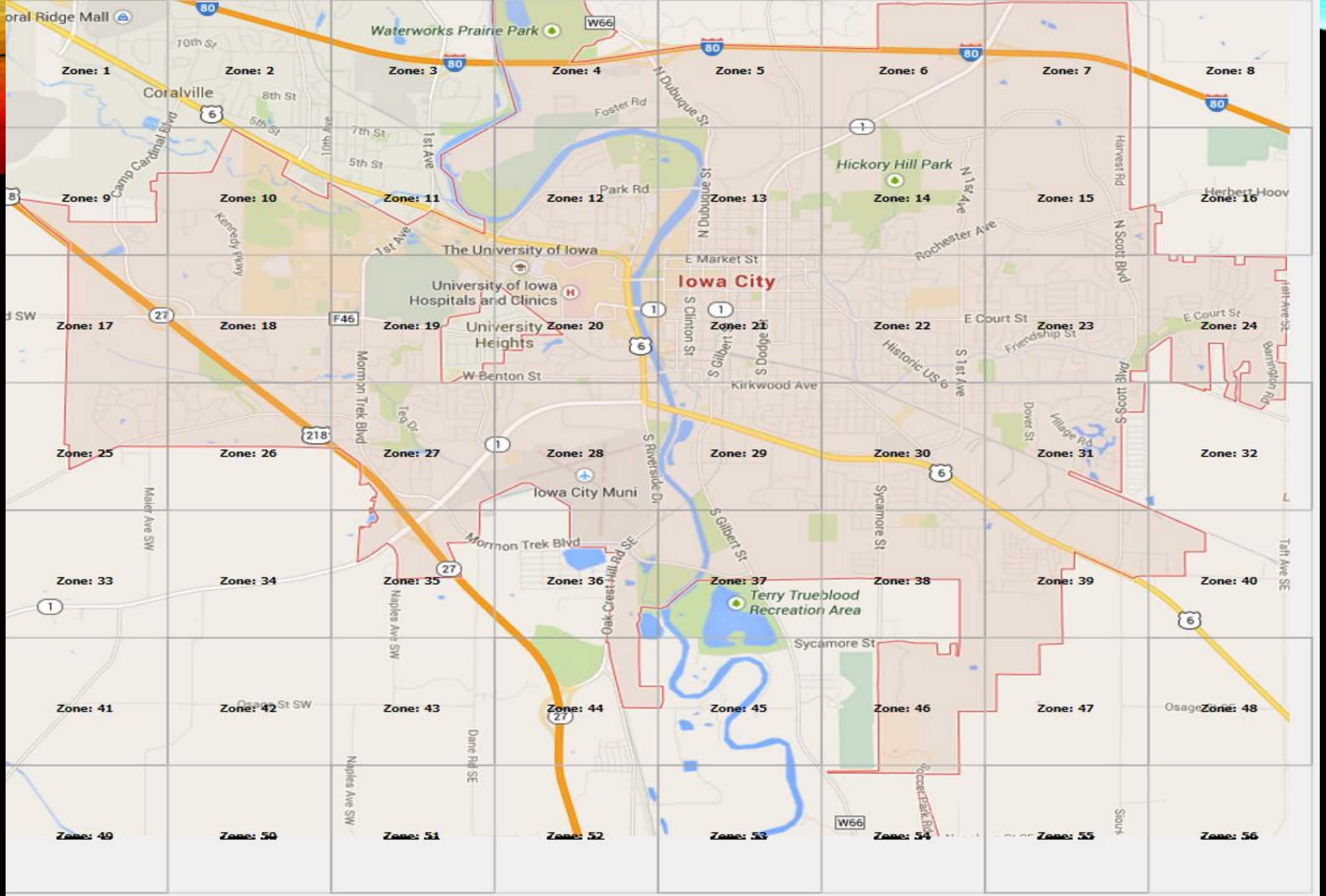
- Need to construct a valid benchmark

TYPES OF BENCHMARKS

- Roadside Observations
- Census Data
- Internal Benchmarks

AN EXAMPLE

- Iowa City, Iowa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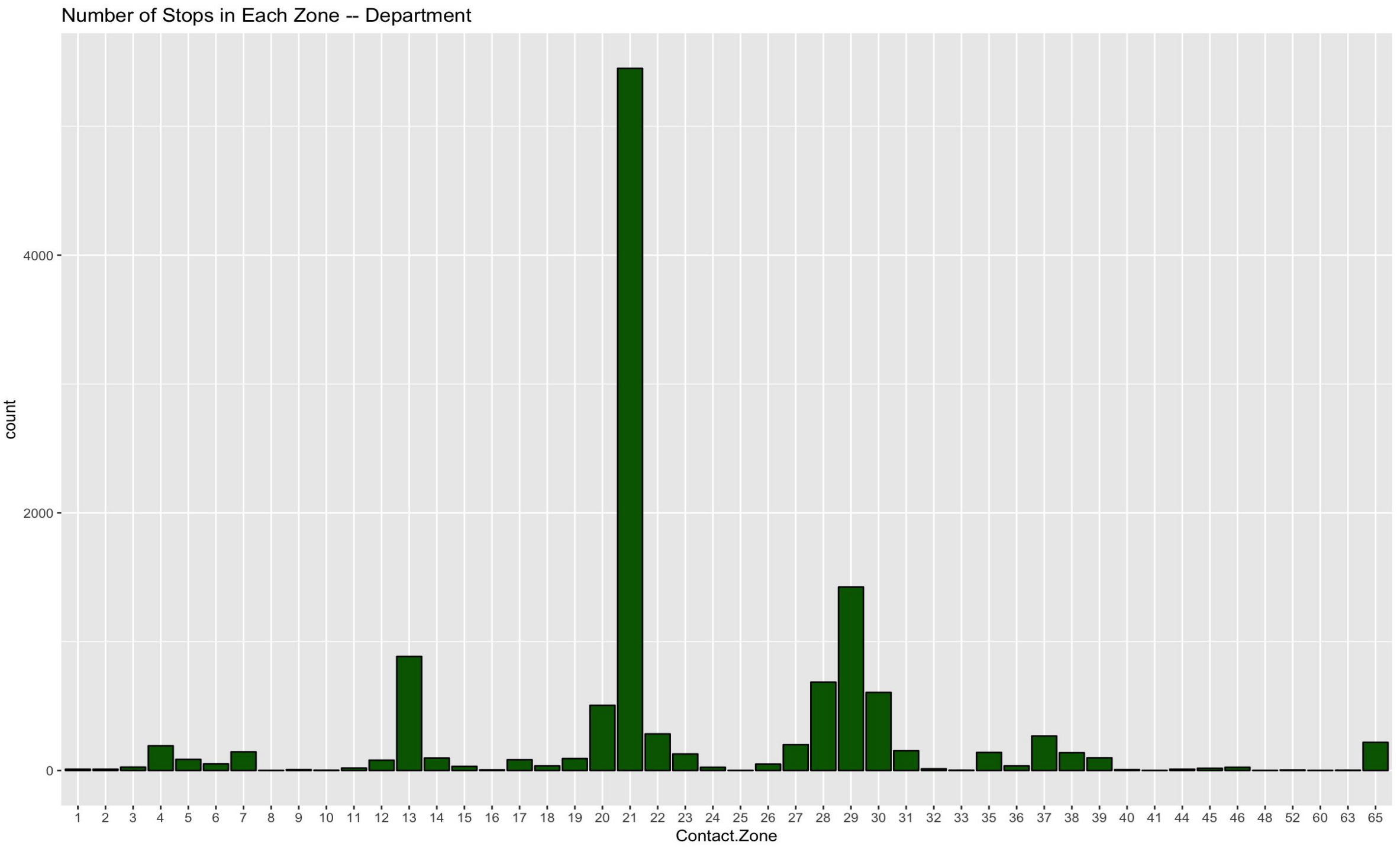
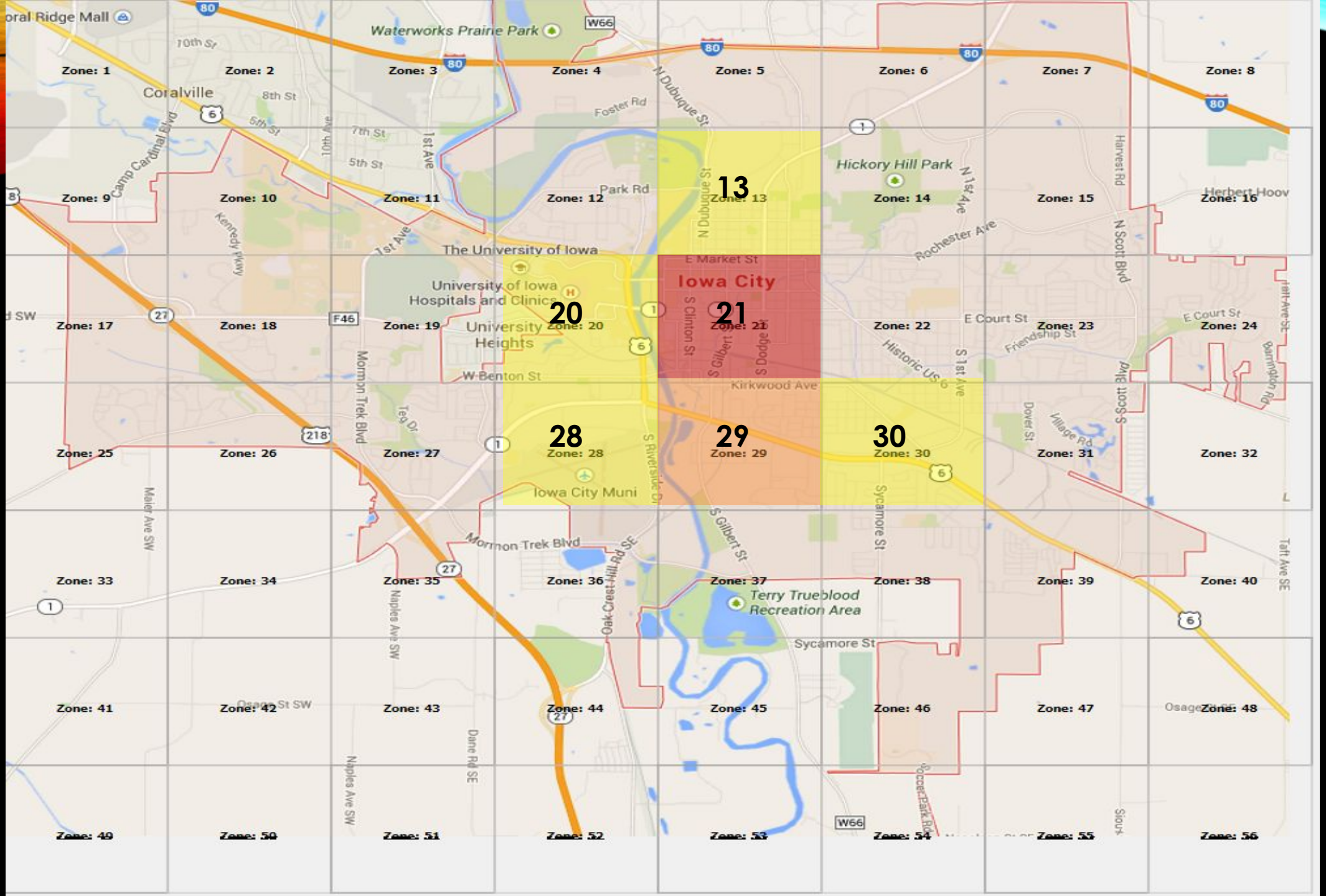
Coralville
Iowa City
The University of Iowa
University of Iowa Hospitals and Clinics
University Heights
Waterworks Prairie Park
Hickory Hill Park
Terry Trueblood Recreation Area
Iowa City Muni
Coral Ridge Mall
Herbert Hoov
10th St
8th St
5th St
7th St
Foster Rd
Park Rd
E Market St
Rochester Ave
E Court St
Friendship St
Kirkwood Ave
W Benton St
Mormon Trek Blvd
Sycamore St
Osage St SW
Osage St SE
Kennedy Pkwy
Camp Cardinal Blvd
1st Ave
10th Ave
N Dubuque St
S Clinton St
S Gilbert St
S Dodge St
S Riverside Dr
Historic US 6
S 1st Ave
N 1st Ave
N Scott Blvd
S Scott Blvd
Harvest Rd
Taft Ave SE
Barrington Rd
Dover St
Village Rd
Maier Ave SW
Tega Dr
Naples Ave SW
Dane Rd SE
Oak Crest Hill Rd SE
Soccer Park Rd
Sioux
W66
F46
80
6
1
27
218

NUMBER OF STOPS PER ZONE


Number of Stops in Each Zone -- Department
count
4000
2000
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 35 36 37 38 39 40 41 44 45 46 48 52 60 63 65
Contact.Zone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Waterworks Prairie Park
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Hickory Hill Park
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S Dodge St
E Market St
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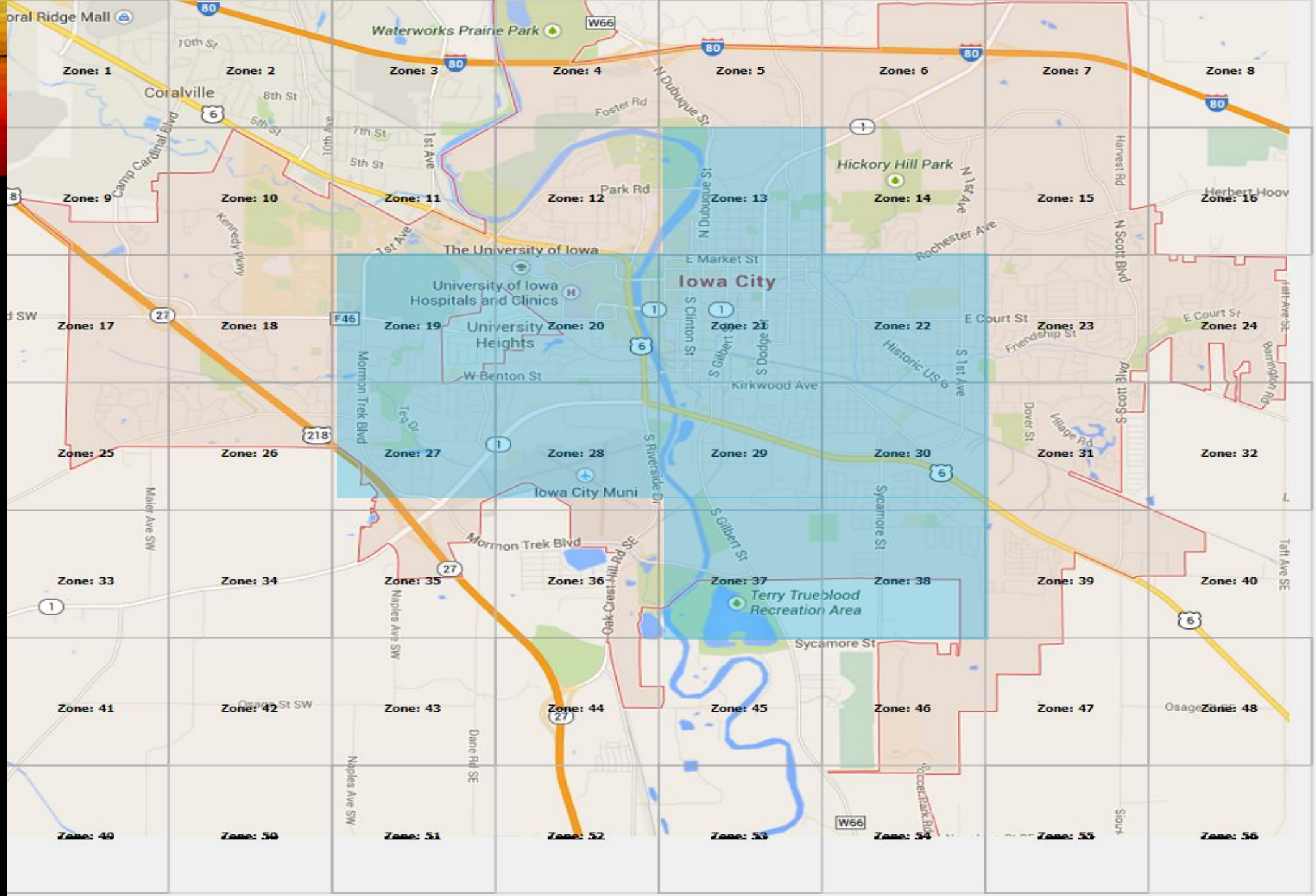
E Court St
Rochester Ave
N Scott Blvd
S Scott Blvd
Historic US 6
S 1st Ave
Friendship St
W Benton St
Kennedy Pkwy
Camp Cardinal Blvd
1st Ave
Maier Ave SW
Naples Ave SW
Oak Crest Hill Rd SE
Dane Rd SE
Taft Ave SE
Harvest Rd
Dover St
Village Rd
Barrington Rd
Soccer Park Rd
W66
F46
218

TRAFFIC OBSERVATIONS 2007-2015

- 2018 traffic observations = 54,218
- 2015 traffic observations = 27,032
- 2007-2012 traffic observations = 28,951
- Total traffic observations = **110,201**

ZONES WHERE OBSERVATIONS WERE CONCENTRATED

- Zone 13
- Zone 19
- Zone 20
- Zone 21
- Zone 22
- Zone 27
- Zone 28
- Zone 29
- Zone 30
- Zone 37
- Zone 38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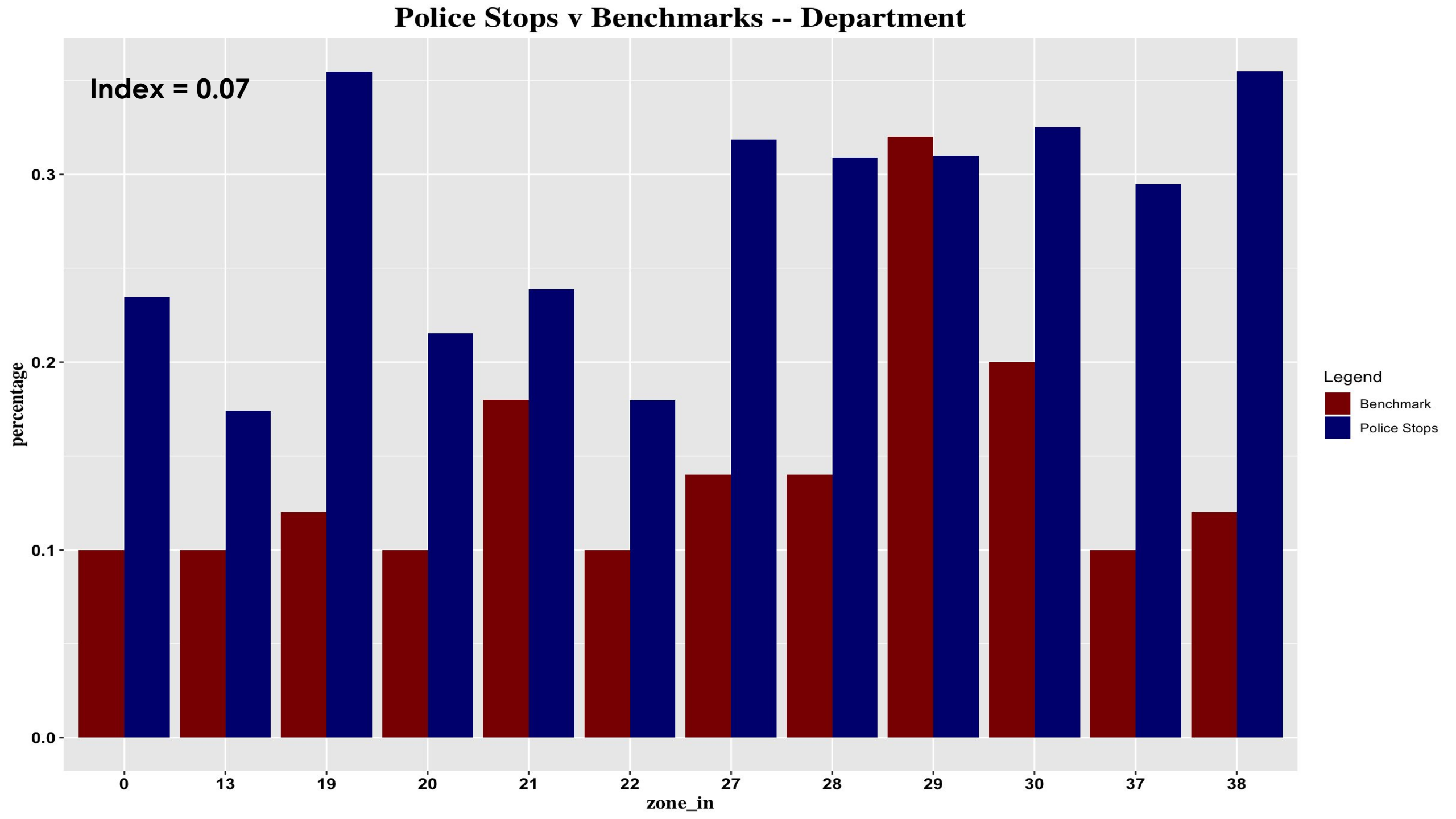
Harvest Rd
Taft Ave SE
Barrington Rd
Soccer Park Rd
Sioux
Herbert Hoov
80
W66
6
1
27
218
F46

BENCHMARK VALUES

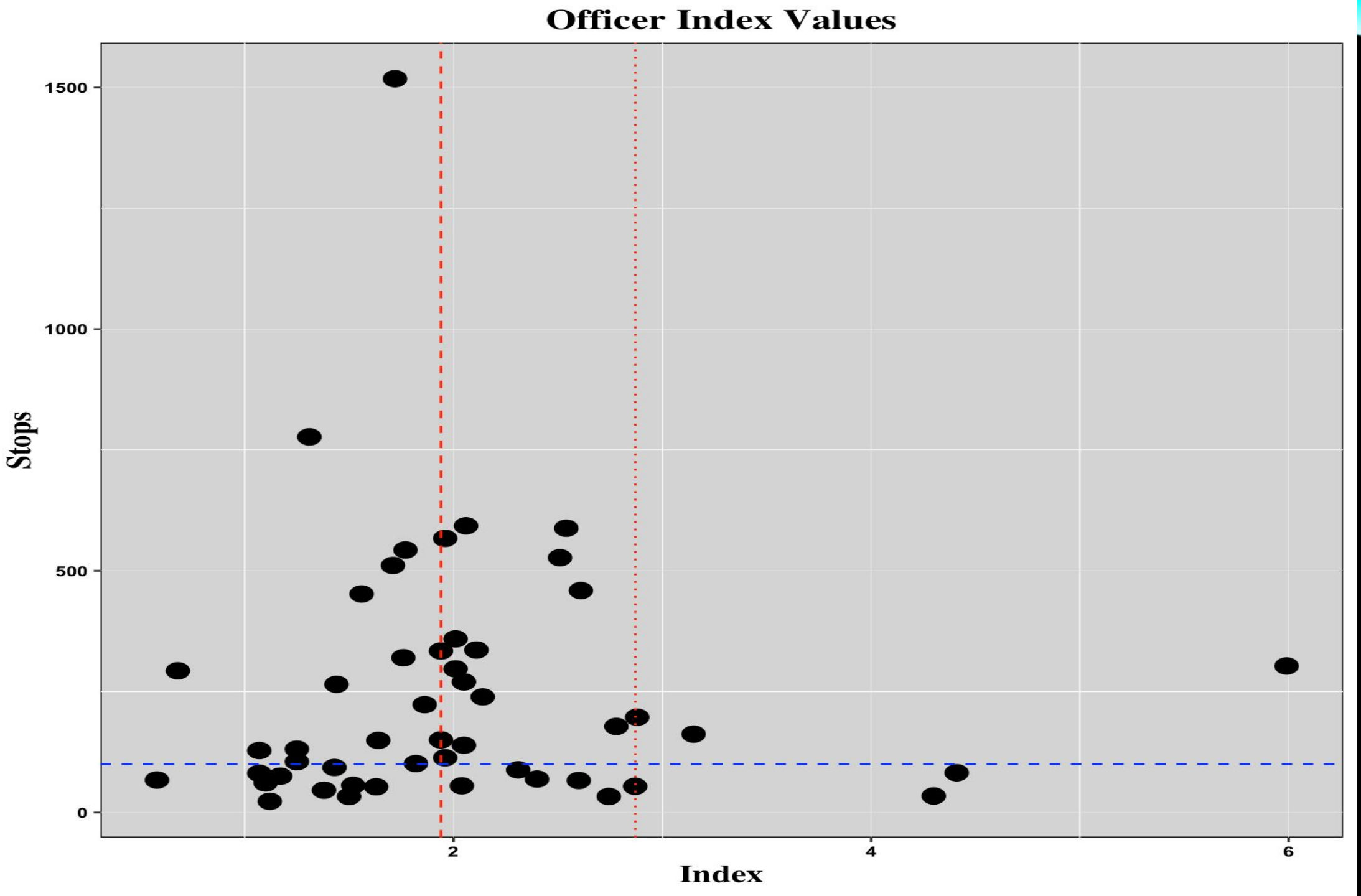
Zone	Days	Nights
13	0.10	0.10
19	0.12	0.12
20	0.10	0.10
21	0.10	0.18
22	0.10	0.10
27	0.14	0.14
28	0.14	0.14
29	0.25	0.32
30	0.20	0.20
37	0.10	0.10
38	0.12	0.12

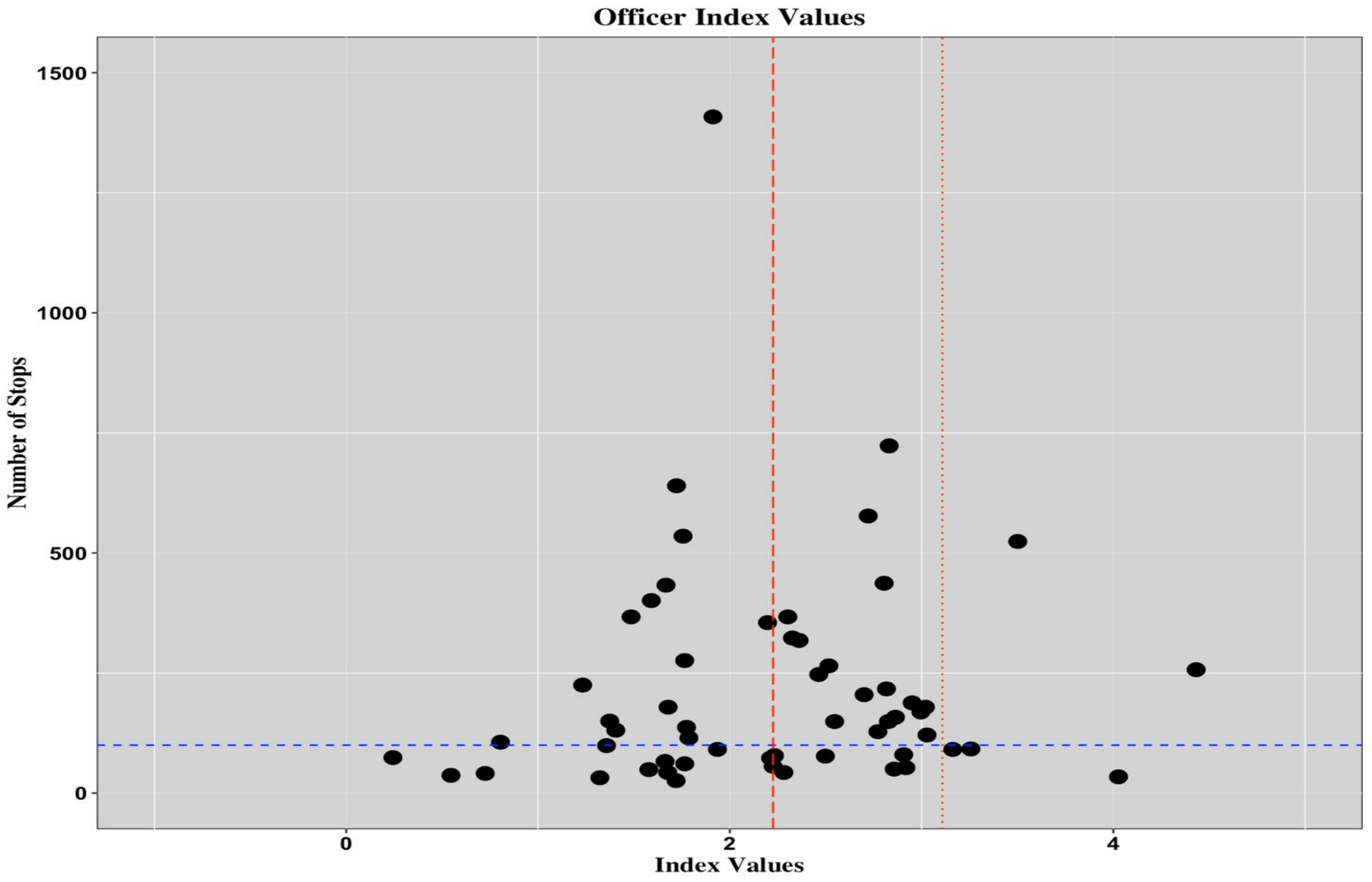

Police Stops v Benchmarks -- Department
Index = 0.07
percentage
0.0
0.1
0.2
0.3
0
13
19
20
21
22
27
28
29
30
37
38
zone_in
Legend
Benchmark
Police Stops

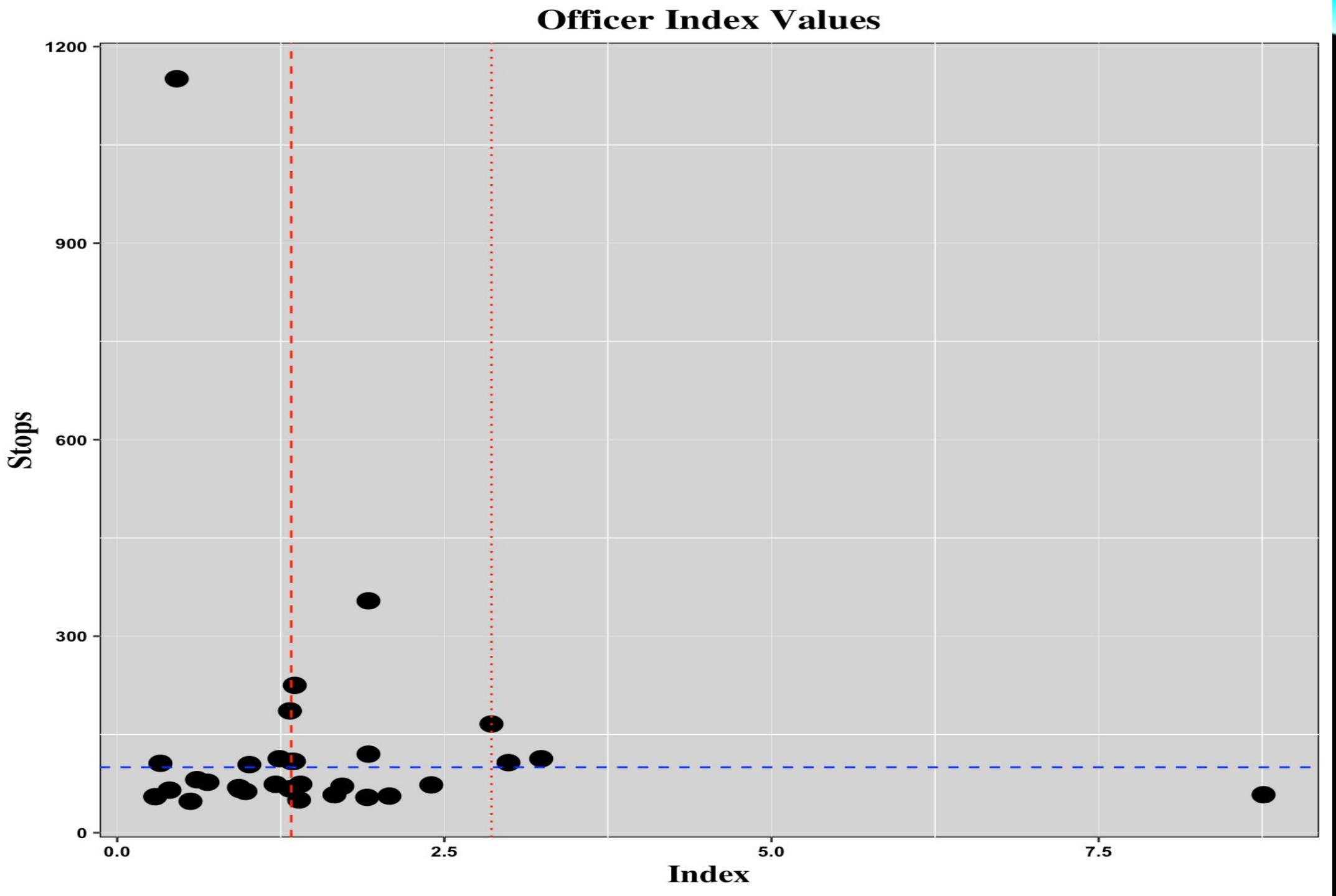
INDIVIDUAL OFFICER LEVEL ANALYSIS

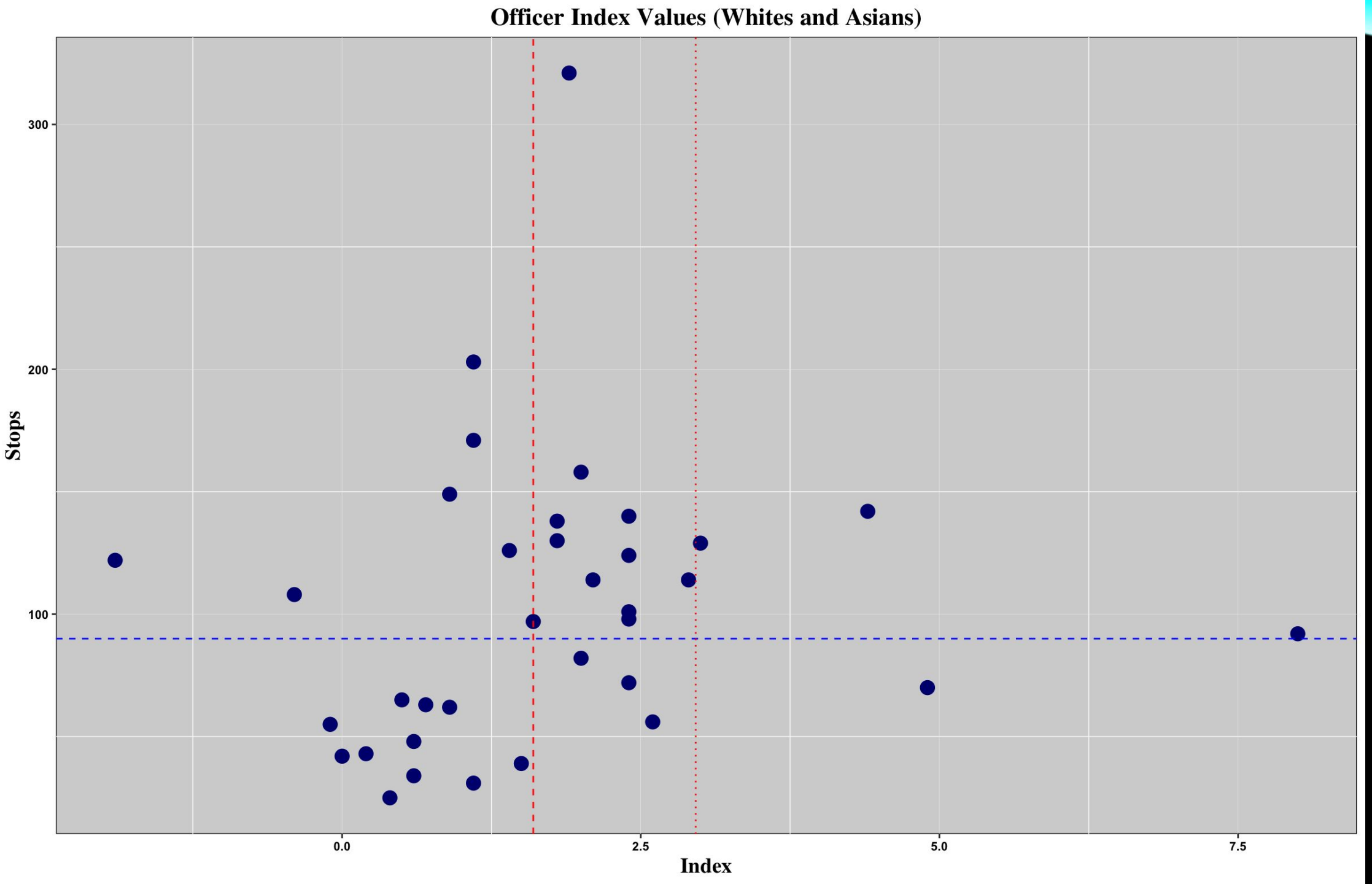
DISPARITY INDEX

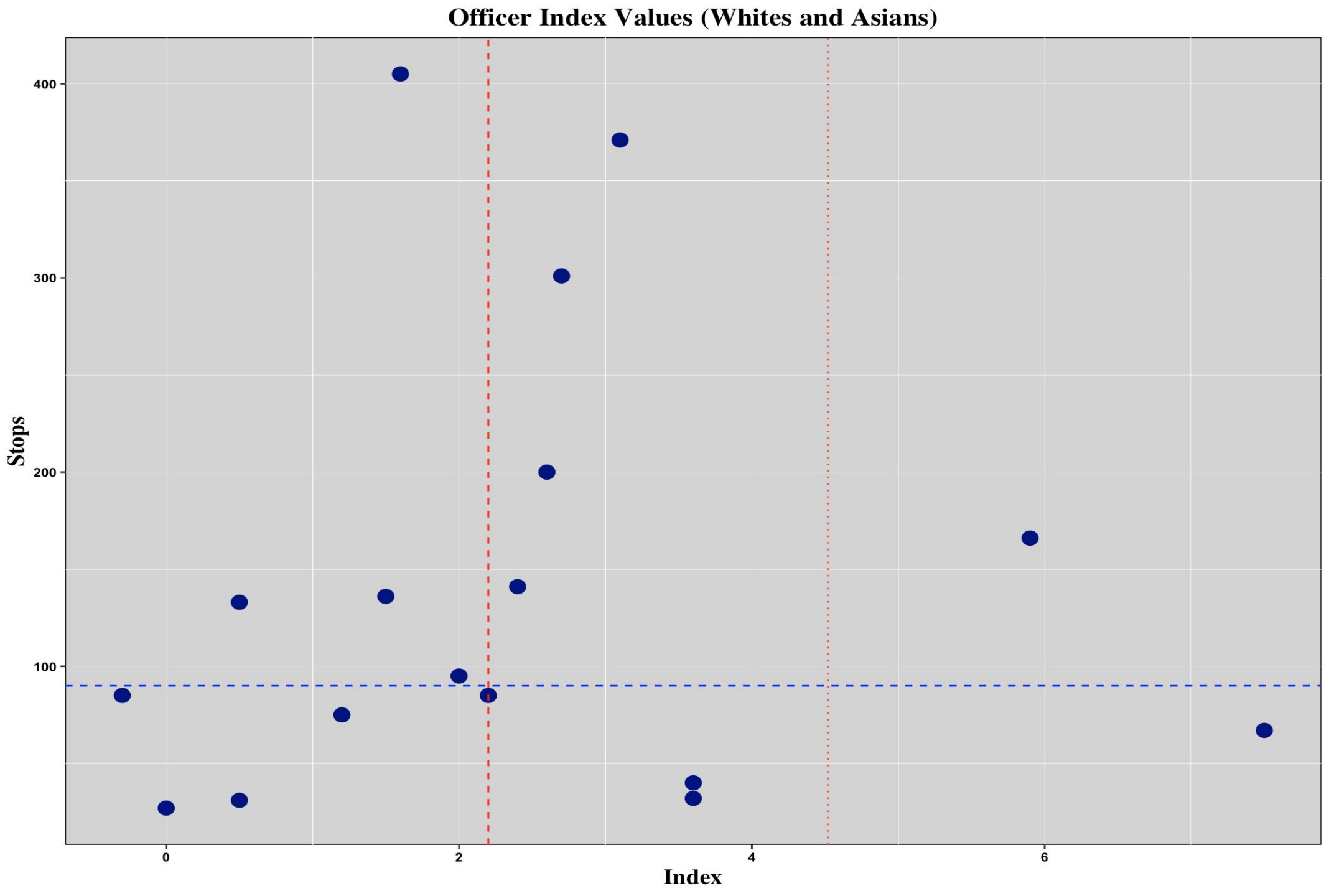
- **(% Minority / Min. Benchmark) ÷ (% W&A / W&A Benchmark)**


Officer Index Values
Stops
1500
1000
500
0
2
4
6
Index

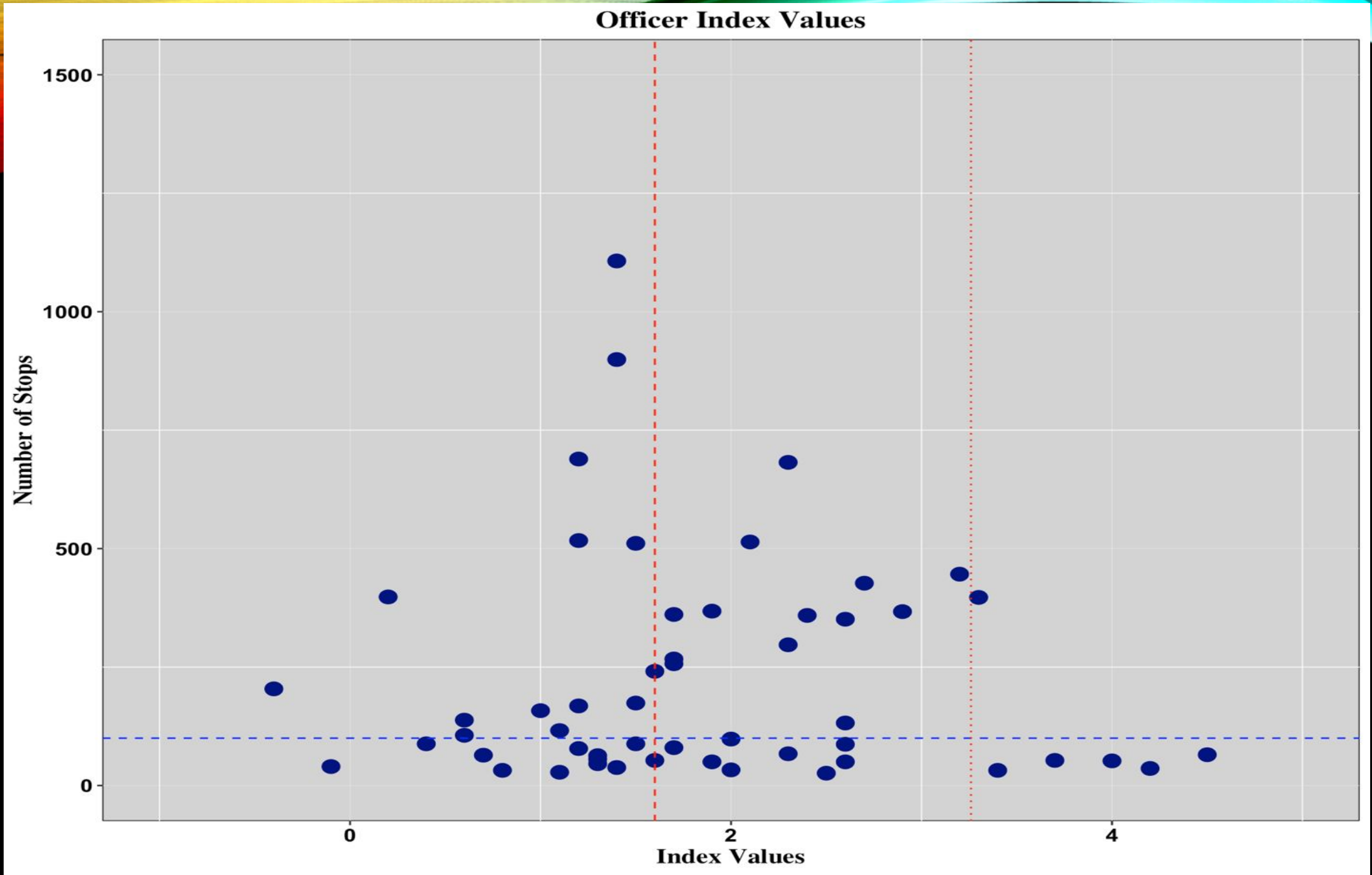

Officer Index Values
1500
1000
500
0
Number of Stops
0
2
4
Index Values

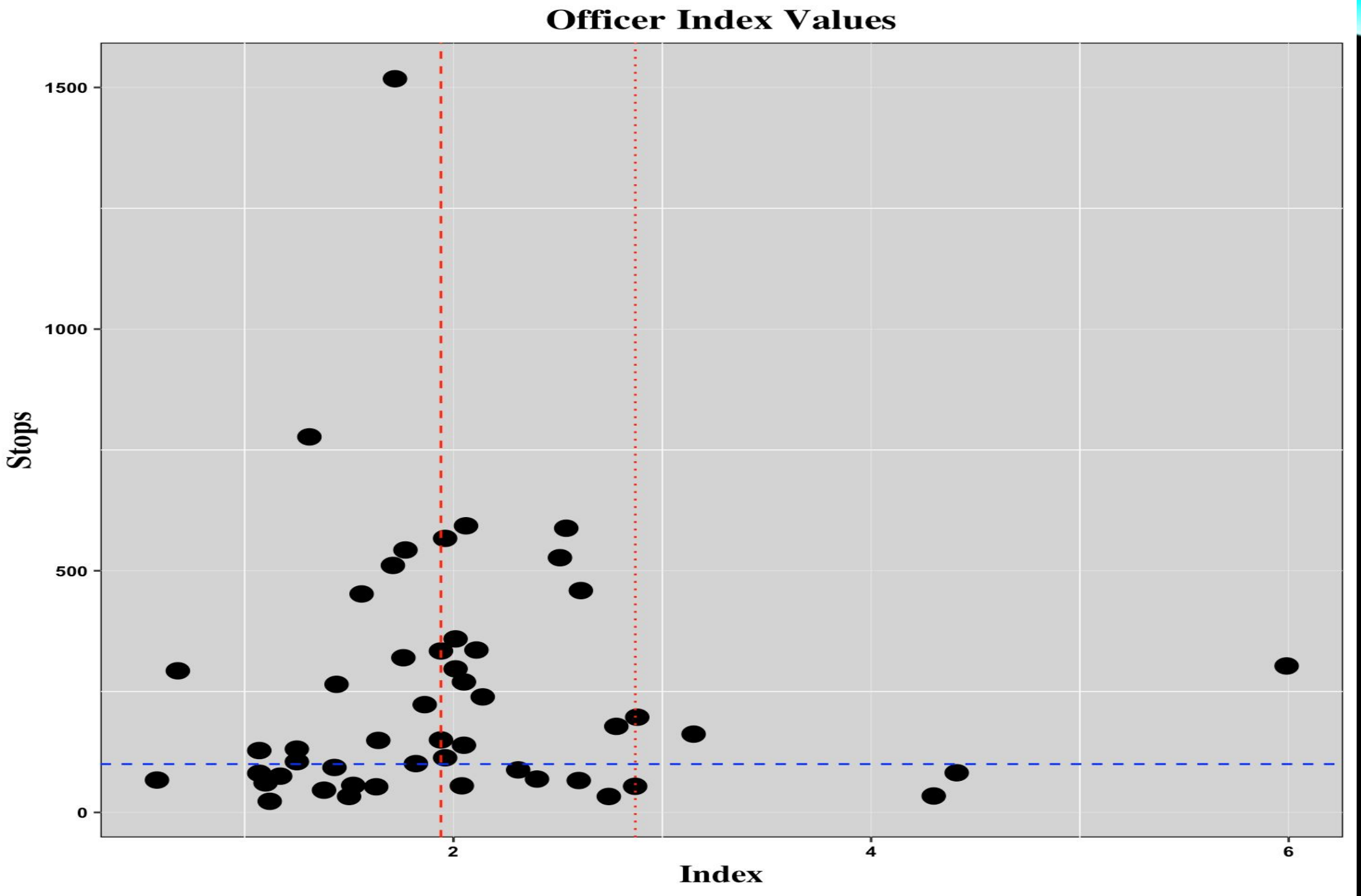

Officer Index Values
1200
900
600
300
0
Stops
0.0
2.5
5.0
7.5
Index


Officer Index Values (Whites and Asians)
Stops
300
200
100
0.0
2.5
5.0
7.5
Index

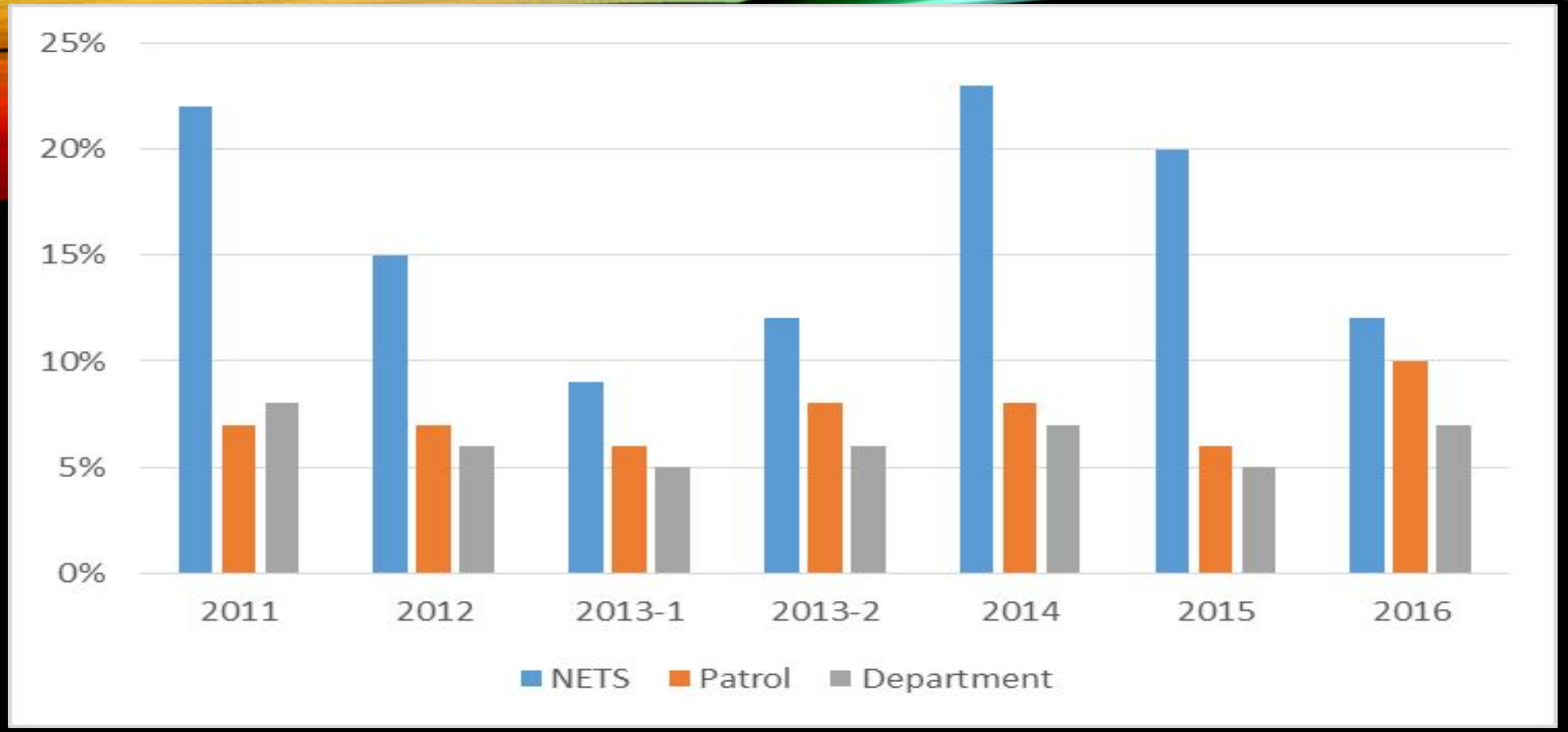

Officer Index Values (Whites and Asians)
Stops
400
300
200
100
0
2
4
6
Index

AFTER INTERVENTION

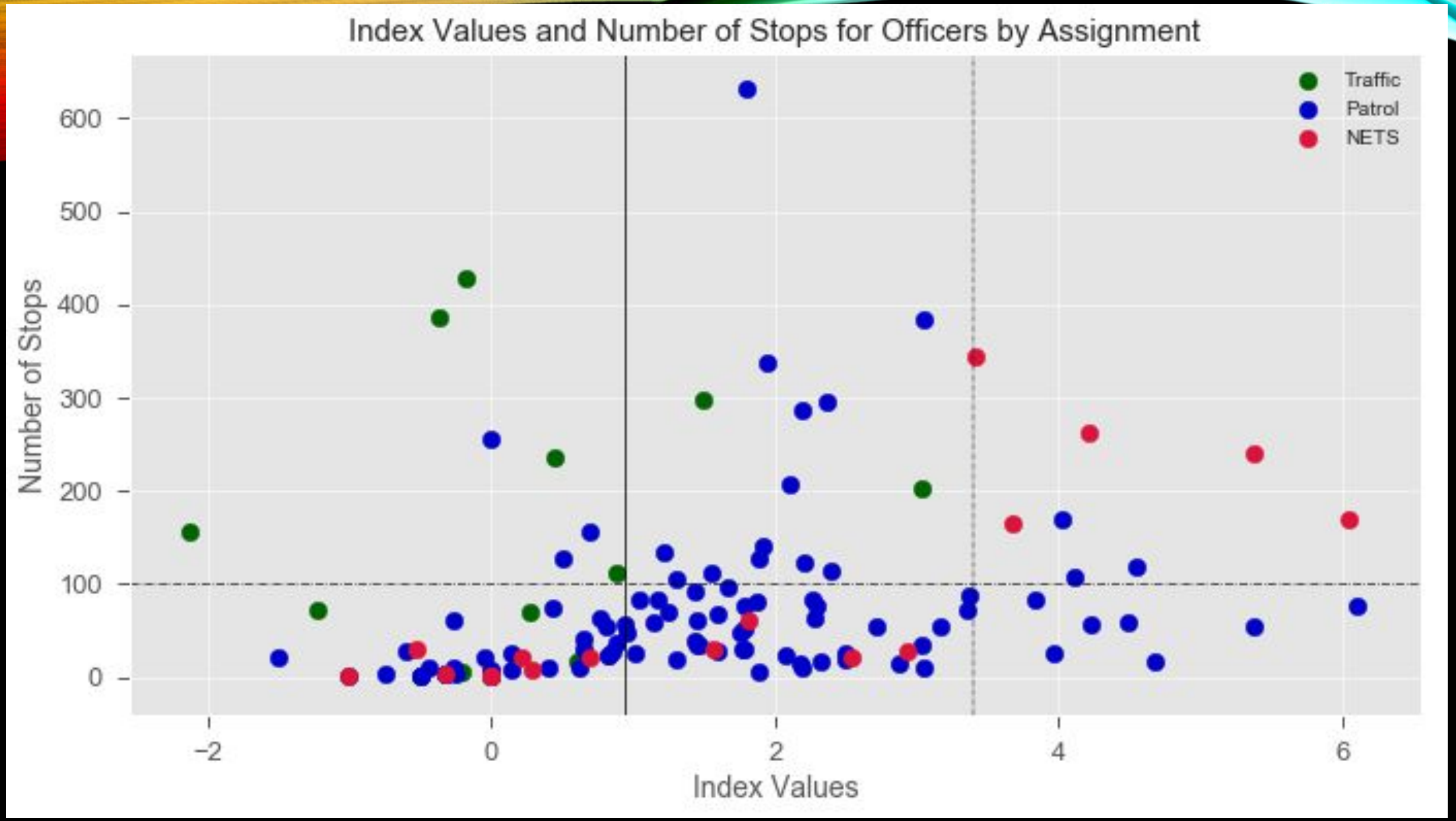

Officer Index Values
1500
1000
500
0
Number of Stops
0
2
4
Index Values


Officer Index Values
Stops
1500
1000
500
0
2
4
6
Index

SHIFT ASSIGNMENTS MATTER



Assignment	2011	2012	2013-1	2013-2	2014	2015	2016	2017
All	8%	6%	5%	6%	7%	5%	7%	9%
NETS	22%	15%	9%	12%	23%	20%	12%	24%
Patrol	7%	7%	6%	8%	8%	6%	10%	9.7%
Traffic	-4%	1%	0%	8%	0%	0%	1%	0%
Raw	29%	29%	28%	29%	29%	28%	28%	32%


Index Values and Number of Stops for Officers by Assignment
Traffic
Patrol
NETS
600
500
400
300
200
100
0
Number of Stops
−2
0
2
4
6
Index Values

STOP OUTCOMES

Odds Ratio												
	2005	2006	2007	2010	2011	2012	2013	2014	2015	2016	2017	2018
Citations	-1.4	-1.5	-1.2	1.2	1.4	1.4	1.6	1.5	1.3	1.4	1.07	1.0
Arrests	2.5	2.8	2.6	3.1	3.2	2.5	2.3	2.1	1.9	1.5	1.82	1.98
Search	2.5	3.4	5.6	2.7	3.9	2.4	1.9	1.5	1.9	2.1	----	---
Hits	-1.6	1.2	-2.9	-2.3	-1.3	-1.2	1.1	-1.1	1.1	1.1	----	---

CONCLUSIONS

STOPS □ GENERAL FINDINGS

- Some disproportionality
- Highest amounts among special enforcement units (NETS, SCAT)
  - Especially when levels of crime fluctuates
- Very low levels among traffic officers: why?
- Disproportionality initially decreases, but then creeps back up

DO THESE RESULTS INDICATE BIAS?

- Benchmark is a sample, so there will be some error associated with it
- Trends over time give better indication
- Comparisons among duty assignments are very useful

CONTACT INFORMATION.

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