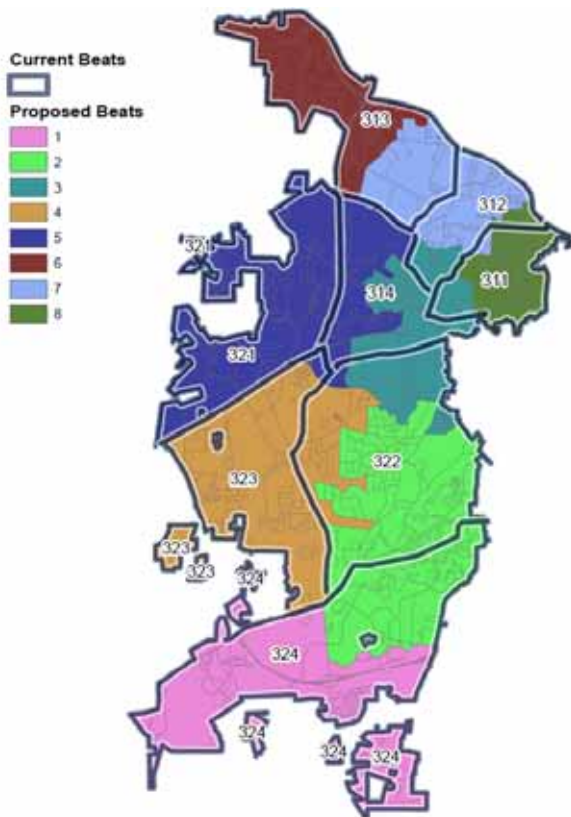




Durham Police Department

IACP Beat Realignment | January 1, 2019

History



- Current beat structure relatively unchanged since District 5 was created in February 2001
 - Beat 324 and 415 added in 2004
 - Beat 125 and 314 added in 2008
- District 3 beats were realigned in 2015
 - No improvement in response time

Priority P	JAN-DEC 2013				JAN-DEC 2014				JAN-DEC 2015**			
	Call Count	Avg. Response	% Under 5 Min	% By Beat Car	Call Count	Avg. Response	% Under 5 Min	% By Beat Car	Call Count	Avg. Response	% Under 5 Min	% By Beat Car
District 3*	1,026	6.53	42.88%	31.29%	1,497	6.34	46.49%	29.93%	1,718	6.56	43.60%	28.99%
Beat 311	151	5.94	50.33%	35.10%	182	5.93	53.30%	30.22%	168	5.67	53.57%	32.74%
Beat 312	97	6.19	46.39%	30.93%	144	5.87	47.92%	27.78%	202	6.1	46.53%	27.23%
Beat 313	233	6.61	39.48%	32.19%	282	6.56	41.13%	34.40%	268	6.85	34.33%	35.82%
Beat 314	98	5.58	59.18%	23.47%	148	5.27	59.46%	31.76%	201	5.42	57.71%	31.84%
Beat 321	63	7.61	31.75%	14.29%	99	6.52	43.43%	13.13%	231	6.07	48.48%	20.78%
Beat 322	113	5.21	57.52%	30.09%	207	4.85	63.77%	28.02%	199	7.52	31.16%	28.64%
Beat 323	100	5.62	45.00%	32.00%	195	6.84	42.05%	29.74%	256	5.82	52.73%	24.22%
Beat 324	171	8.67	22.81%	38.01%	240	8.16	28.75%	33.33%	193	9.21	24.87%	31.61%
Not D3	3,995	5.45	57.20%	27.86%	5,497	5.39	56.61%	26.23%	6,896	5.76	54.03%	24.74%
District 1	1188	4.76	66.08%	28.87%	1563	4.79	63.08%	25.08%	2,072	5.23	60.28%	25.34%
District 2	1261	5.77	52.10%	25.54%	1726	5.63	53.30%	21.90%	2,088	5.72	54.50%	23.28%
District 4	1229	6.05	50.45%	27.83%	1725	5.95	50.90%	28.99%	2,145	6.65	43.78%	25.50%
District 5	308	4.38	70.78%	34.42%	465	4.35	70.11%	36.99%	572	4.43	68.53%	25.87%
Citywide	5,021	5.67	54.27%	28.56%	6,994	5.6	54.45%	27.02%	8,614	5.92	51.95%	25.59%



IACP Beat Project Scope

- Beat boundaries for appropriate size
- Beat numbers (increase/decrease the number of beats)
- CFS within each beat (distribute more equitably throughout the Districts)
- Staffing within each beat
- Increase the ability of officers to respond to CFS within their beat at a percentage higher than the current 34%
- Current CFS data to help distribute personnel accordingly



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IACP Methodology

- Call for Service (CFS) data from two years; October 1, 2015 to September 30, 2016, and October 1 2016, to September 30, 2017
- For each dataset, all self-initiated activity was removed, along with cancelled calls, and those not indicative of a field response (e.g. notify police, jail, desk officer, etc.)
- Based on the 2014 study, all CFS types involving back-up were identified and duplicated within each dataset



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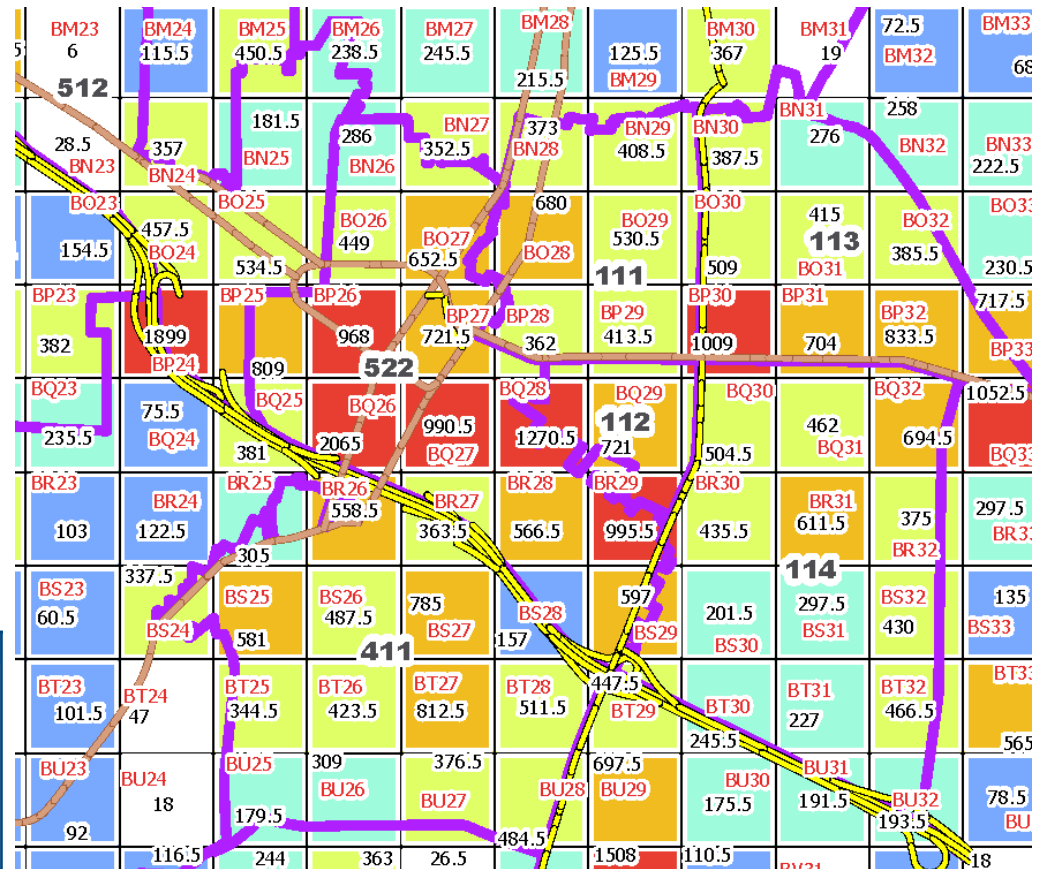
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Methodology

- The city, and the area around it, was broken into ¼ mile sections
- The data from the two years was averaged, and joined to each of the sections
- The sections were then plotted onto a map, along with current district and beat boundaries



District Size	Sq. Miles	*Population
1	19.23	44,351
2	30.77	65,684
3	30.33	77,283
4	30.69	68,967
5	1.34	8,120

*2017 Population Estimates



IACP Beat Design Considerations

- Minimize workload variation between patrol beats
- Target is no more than 5,000-5,500 events per beat
- Minimize response time for officers responding to CFS
- District boundaries unchanged, with minor exceptions
- Beat integrity and community policing efforts
- Committee formed of analysts and officers to draw boundaries

District	Total	% of Vol.	Beats				
			2	3	6	7	8
1	36065	22.54%			6011	5152	4508
2	42540	26.58%			7090	6077	5317
3	37820	23.63%			6303	5403	4728
4	43606	27.25%			7268	6229	5451
Sub-Total	160030						
Sp. Svcs.	14754	8.44%	7377	4918			
Total	174784						



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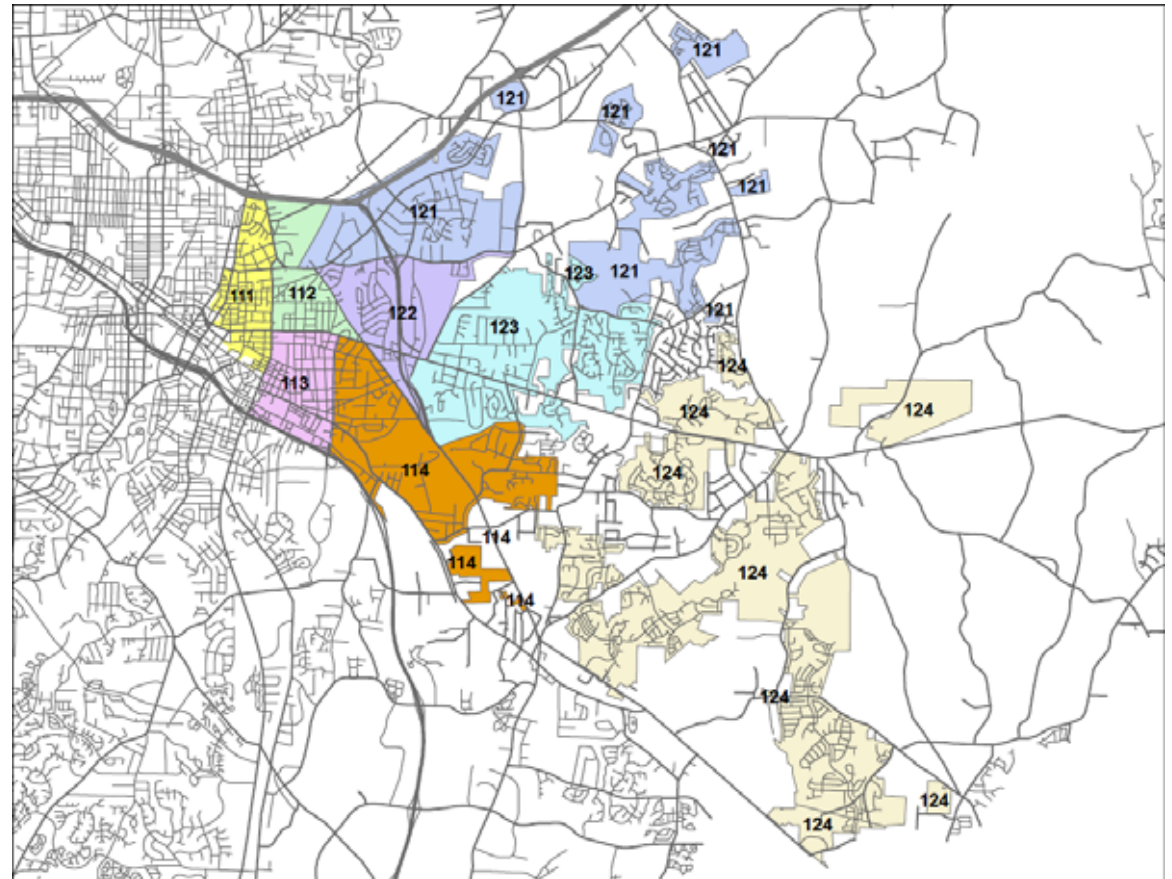
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District 1

- Beats reduced 9 to 8
- Small area moved D2
- Old call volume range
 - Beat 112 = 1,869
 - Beat 122 = 6,010



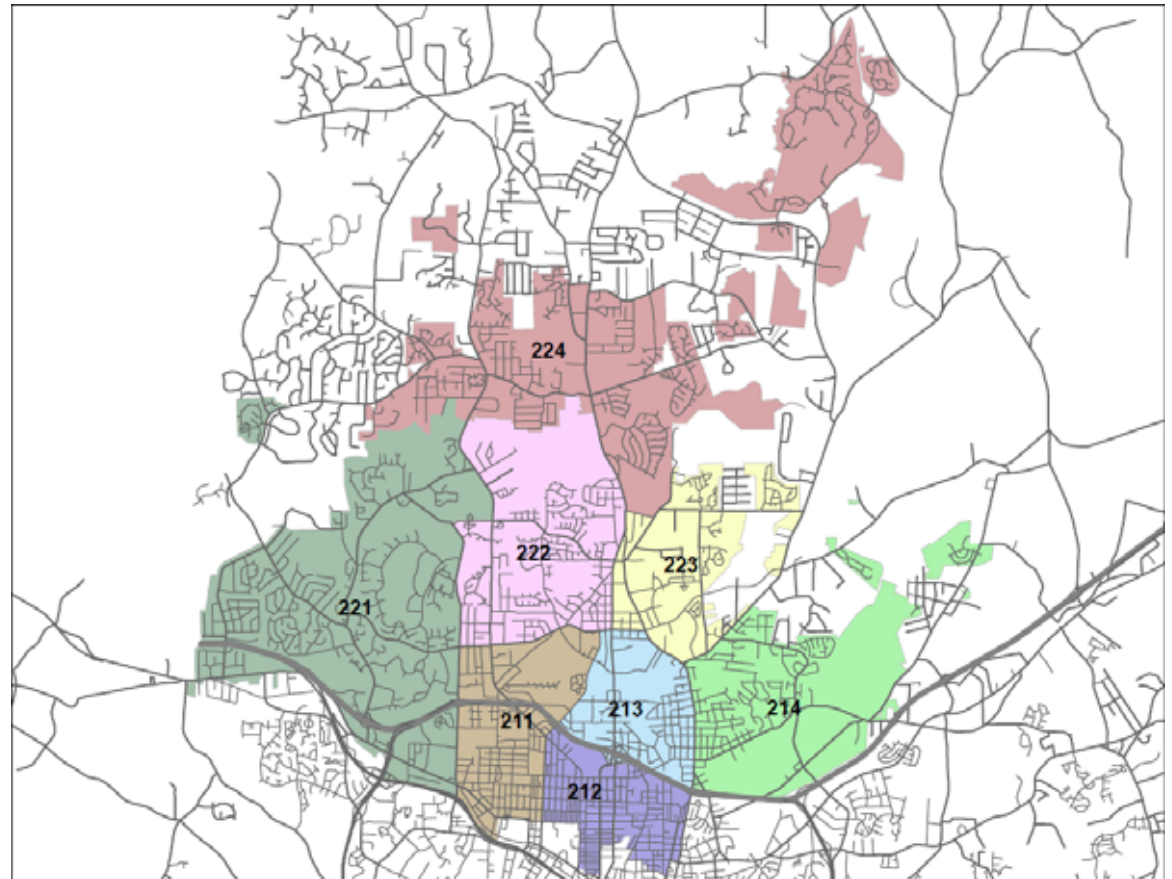
NEW DISTRICT 1		
Beat	Calls	Sq. Mi.
111	5,170	0.72
112	5,021	0.74
113	5,252	0.78
114	4,620	2.36
121	4,098	3.68
122	4,896	1.22
123	4,963	2.72
124	2,352	6.42
Total	36,370	18.65



District 2

- Beats reduced 9 to 8
- Small area moved D1
- Old call volume range
 - Beat 225 = 435
 - Beat 223 = 8,554

NEW DISTRICT 2		
Beat	Calls	Sq. Mi.
211	5,601	2.32
212	5,410	1.54
213	5,191	1.70
214	5,568	4.09
221	5,005	7.38
222	5,445	3.82
223	5,636	2.29
224	4,512	8.21
Total	42,365	31.36

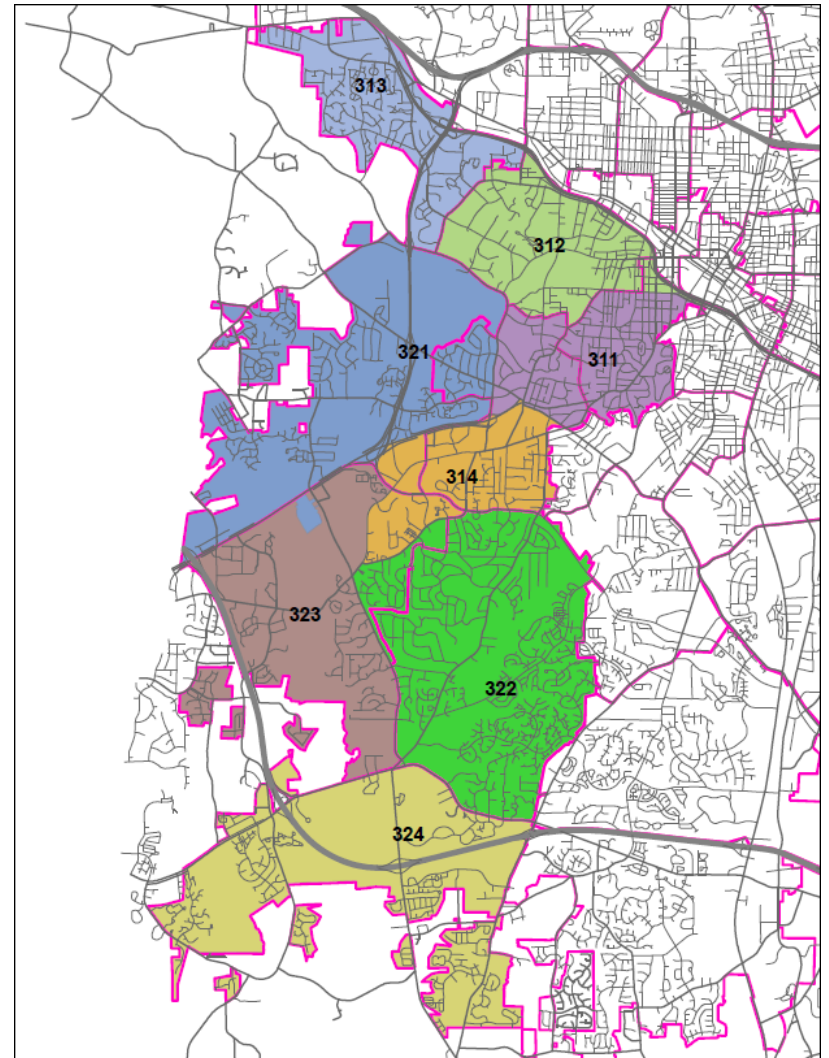


District 3

- Beats unchanged at 8
- Old call volume range
 - Beat 311 = 3,311
 - Beat 323 = 6,632



NEW DISTRICT 3		
Beat	Calls	Sq. Mi.
311	4,502	2.18
312	4,507	2.47
313	4,753	2.44
314	5,047	1.94
321	4,471	5.72
322	4,914	5.88
323	4,599	4.03
324	5,209	5.43
Total	38,001	30.10

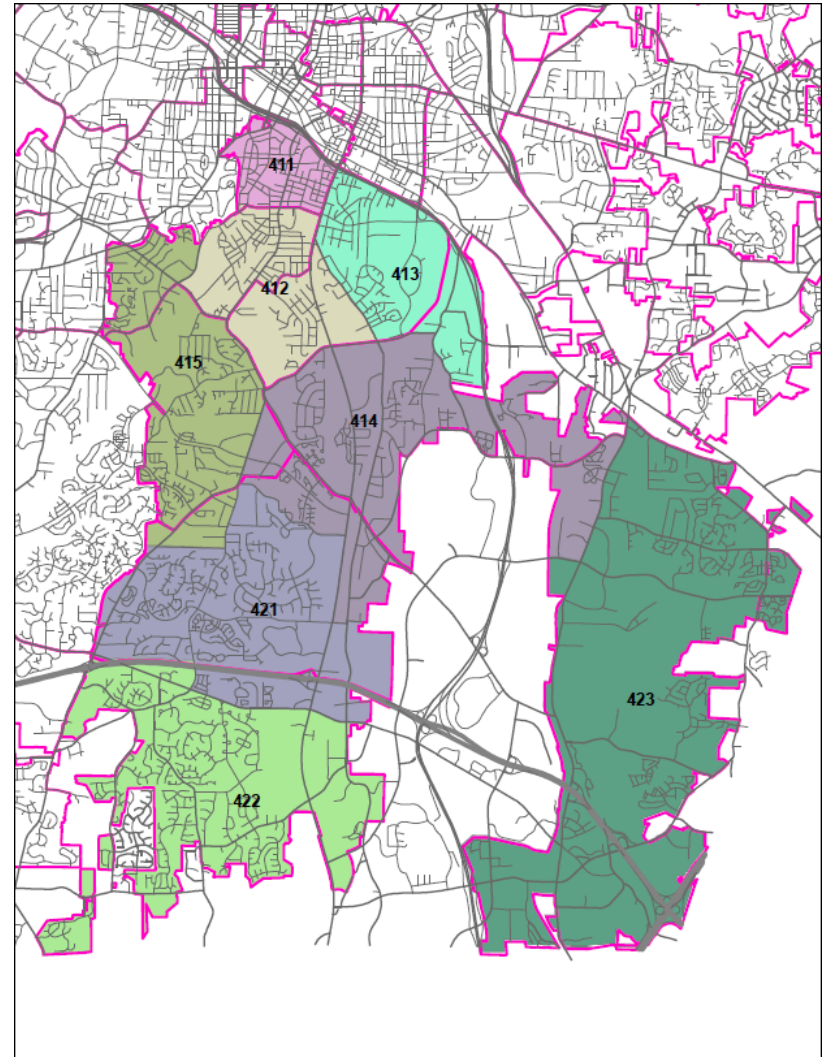


District 4

- Beats unchanged at 8
- Old call volume range
 - Beat 414 = 3,054
 - Beat 422 = 6,876

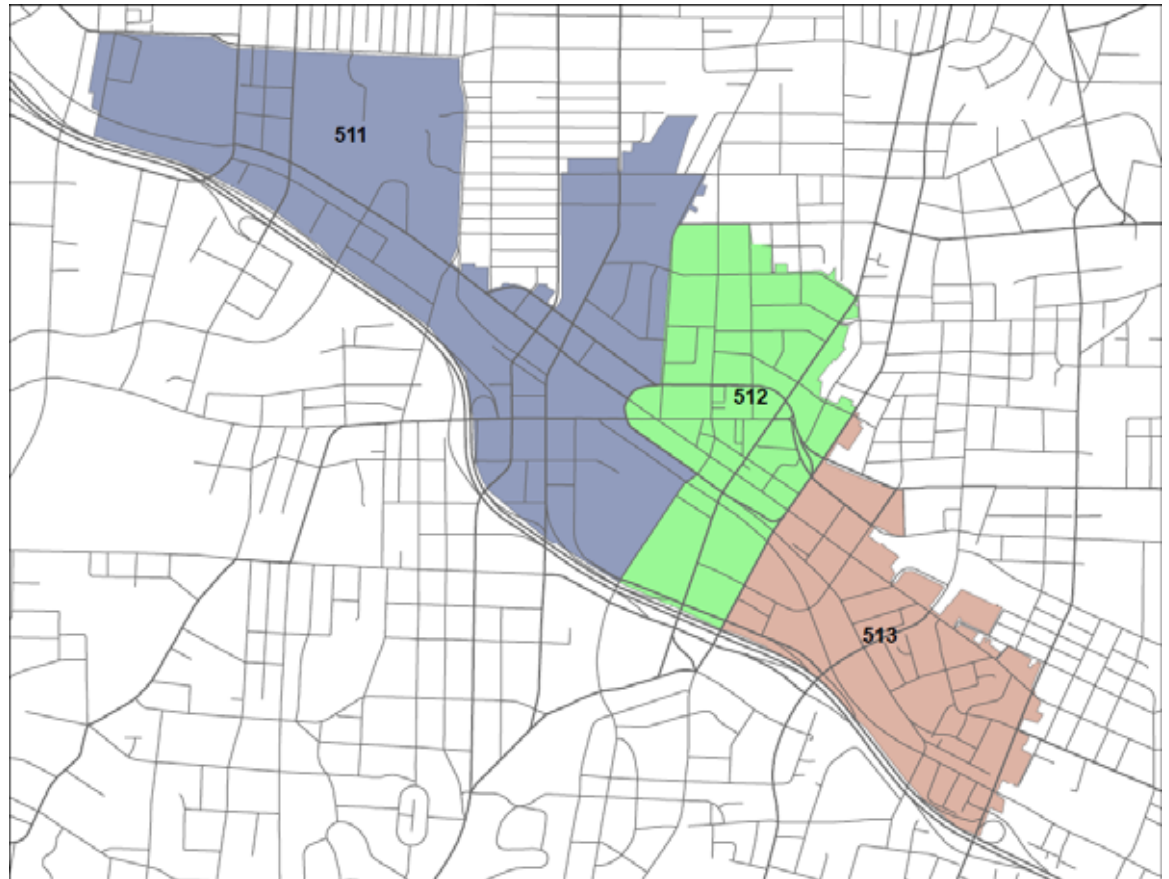


NEW DISTRICT 4		
Beat	Calls	Sq. Mi.
411	5,972	0.77
412	5,685	2.08
413	5,631	2.15
414	4,624	4.83
415	5,145	3.17
421	5,786	4.22
422	5,356	4.76
423	5,620	8.85
Total	43,817	30.83



District 5 (Special Services)

- Beats increased 2 to 3
- Adjustments made for HQ, D5 station and jail
- Old call volume range
 - Beat 512 = 5,151
 - Beat 522 = 9,602



NEW DISTRICT 5		
Beat	Calls	Sq. Mi.
511	4,407	0.76
512	3,465	0.33
513	4,223	0.33
Total	12,095	1.43