Bullets in the Projects: New York City Public Housing as Gun Violence Hot Spots

Christopher Herrmann
Assistant Professor
CUNY John Jay College of Criminal Justice
New York, NY
cherrmann@jjay.cuny.edu

New York City Public Housing Authority (NYCHA)

- Created in 1934
- Largest Public Housing Authority in the U.S.
- 31st Most Populated City in the U.S.
- NYCHA has 13,000+ Employees
- Low-Moderate income housing throughout NYC (mean household income in NYCHA is $23,672)
- Average Rent $483 / month
- 328 ‘Projects’ / ‘Developments’
- 181,581 housing units (apartments)
- NYCHA is 8.1% of the total NYC housing units

NYCHA Population (2015)

- Total Population: 401,093 (4.7% of NYC Population)
- Total 'Families' : 174,529
- Average Years in NYCHA: 20.5 years
- Total Minors (<18): 109,627
- Total 'Elderly' (>62) 76,964
- Average 26% unemployment

RACE	2015 POPULATION	Race as %
White	16,163	4.0%
Black	182,528	45.5%
Hispanic	178,848	44.6%
Asian	20,354	5.1%
Other	3,200	0.8%
Total Population	401,093	100%

Unofficial NYCHA (Ghost) Population

- Ghost Population includes ‘unofficial residents’
- 200,000+ ghosts living in NYCHA
- Unofficial Population of 600,000+
  (7% of NYC Population)
- Population based on pro-rated estimates using:
  - Utilities (water, electric, gas)
  - Trash
  - School Attendance

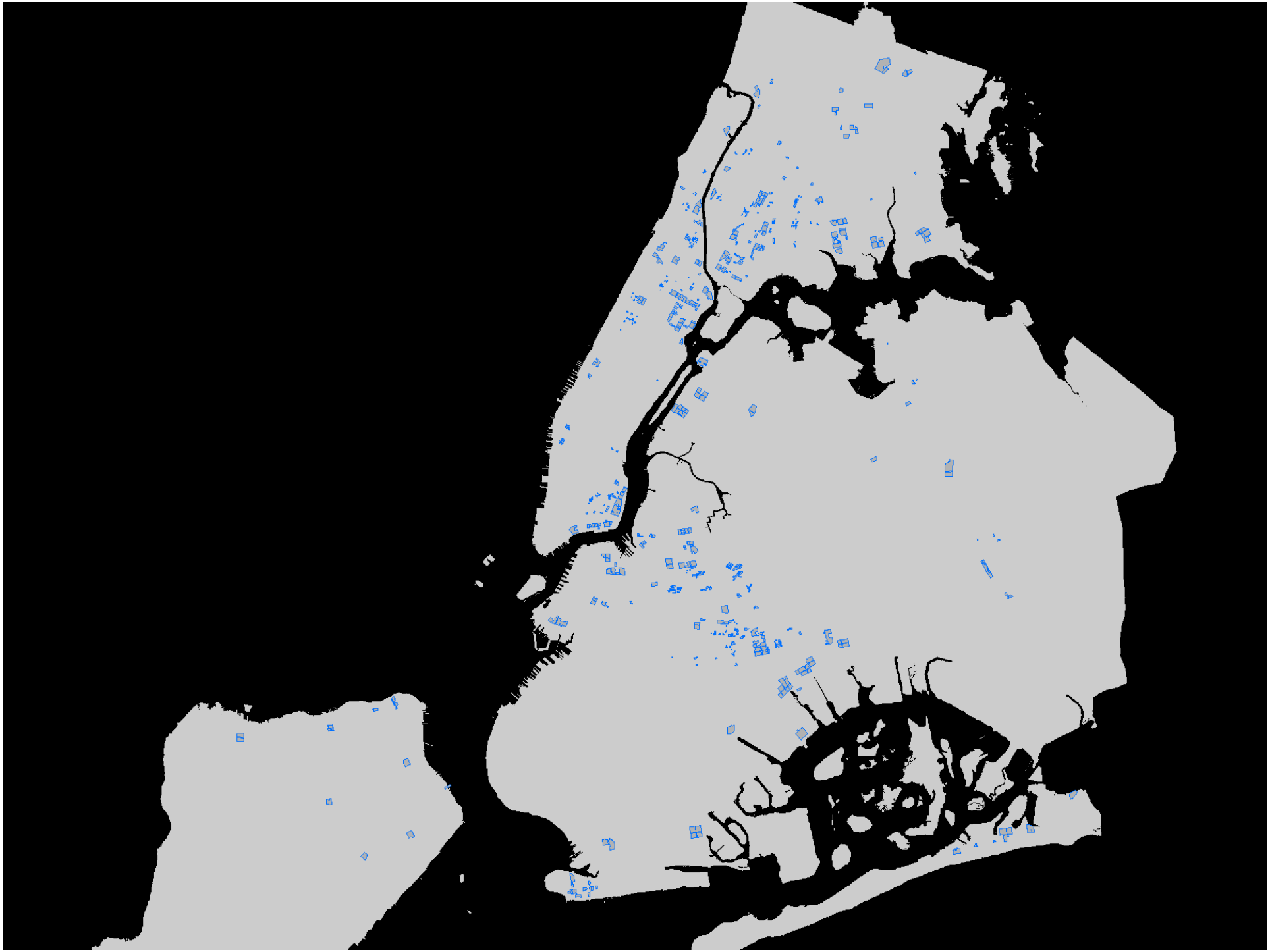
Crime in Public Housing

- Overall, trends show crime is going up…
- Some PJ's have significant increases
- More dangerous now, than in the last 10 years…
- 15 Projects (4.6%) make up 20% of violent crime

CRIME	3-Year Average	NYCHA (% of NYC)
Murder	53	16%
Shooting (Vics)	253	19%
Rape	148	11%
Robbery	1144	7%
Assault	2142	11%
TOTAL VIOLENT	5173	10%

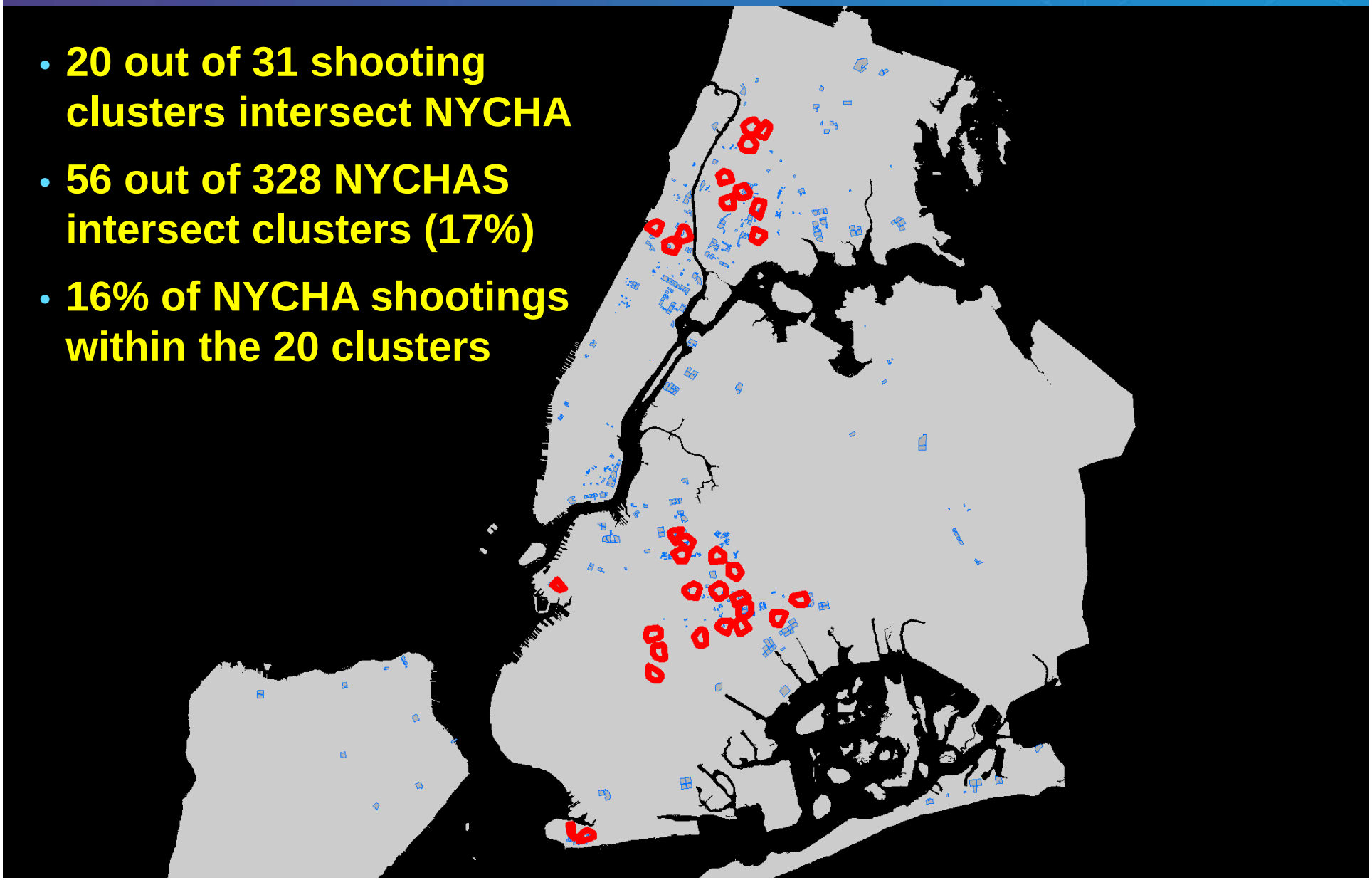
Gun Violence in NYCHA – 'Tale of Two Cities'

- NYC Averages 1345 shooting victims annually
- NYCHA Averages 253 shooting victims (19%)
- NYC 5-year trend is -24.2% decrease
- NYCHA 5-year trend is +8.2 increase
- NYC Victimization rate 12.8 / 100,000
- NYCHA Victimization rate 63.3 / 100,000

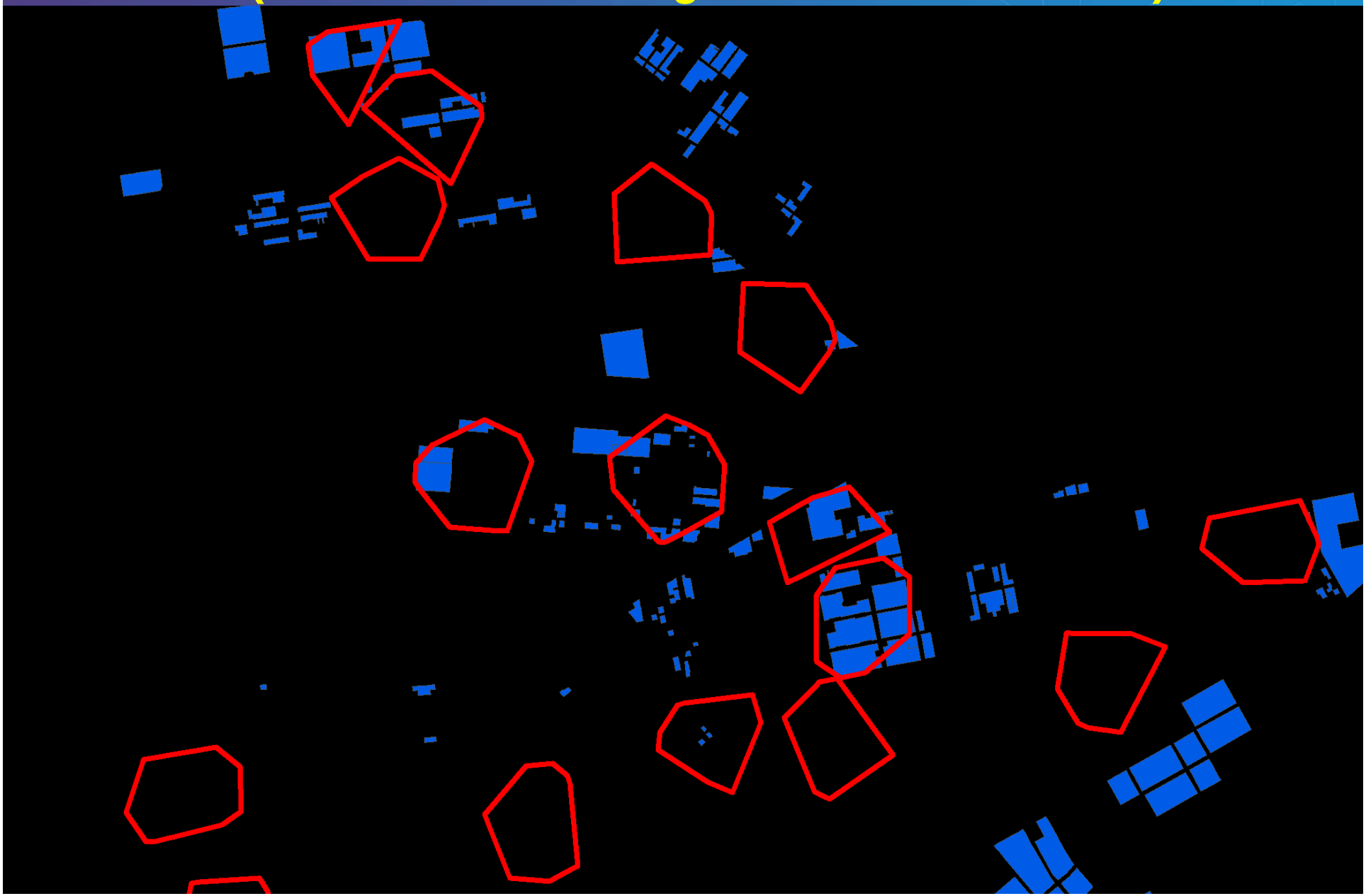


Nearest Neighbor Hierarchical Cluster Map (30 or more shootings within .25 mile area)

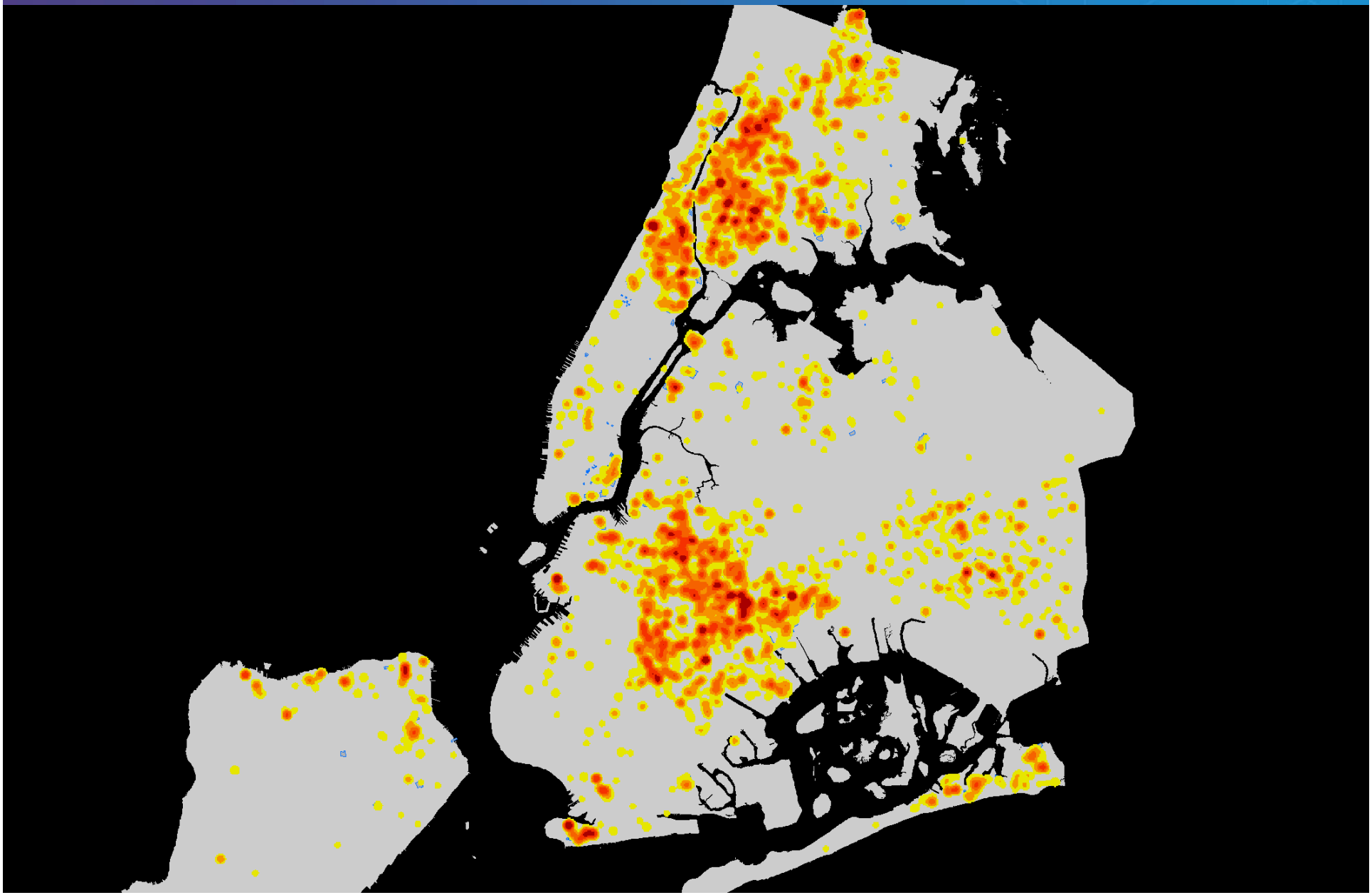
- 20 out of 31 shooting clusters intersect NYCHA
- 56 out of 328 NYCHAS intersect clusters (17%)
- 16% of NYCHA shootings within the 20 clusters



Nearest Neighbor Hierarchical Cluster Map
(30 or more shootings within .25 mile area)

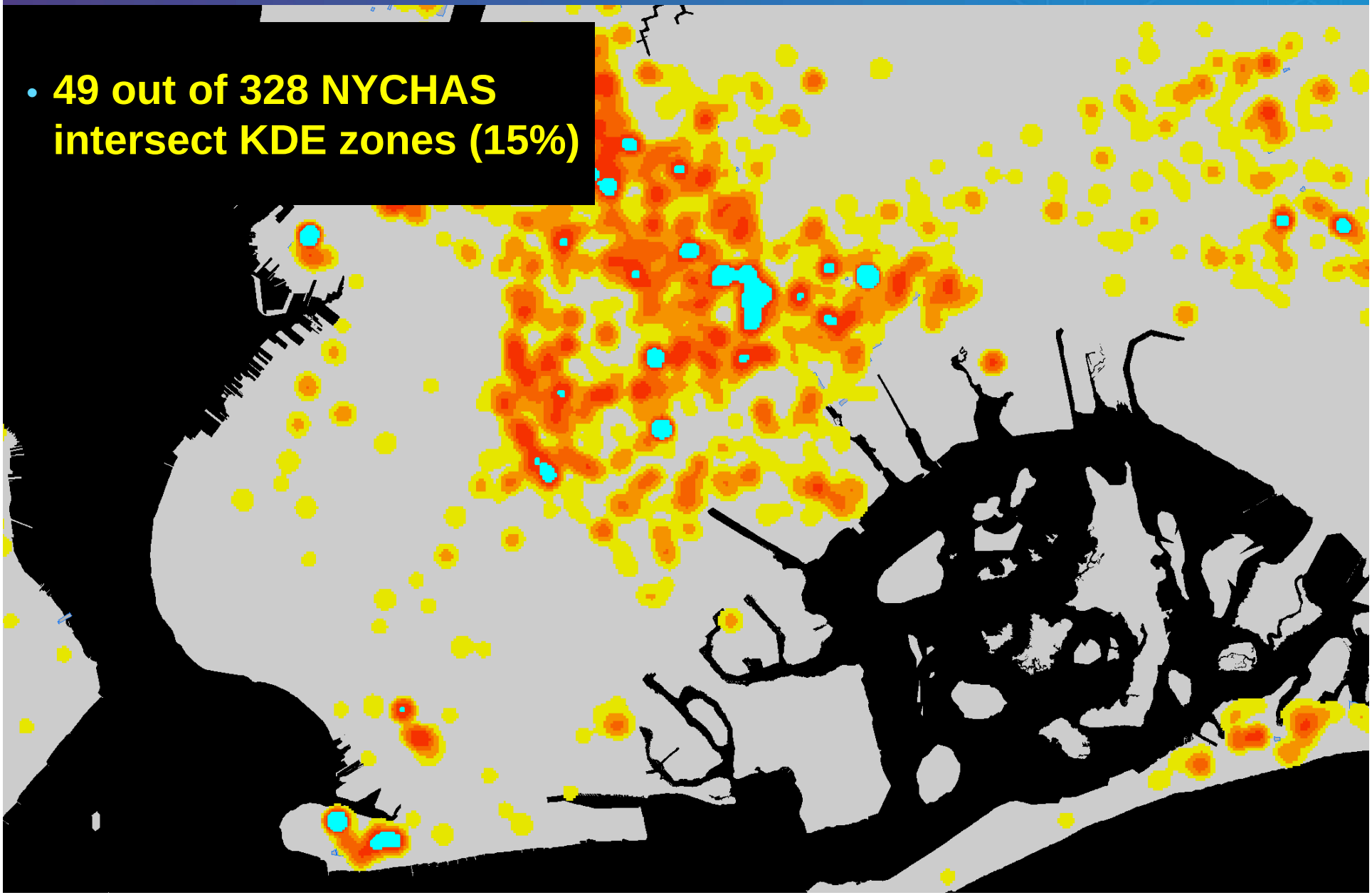


Single Kernel Density Estimation

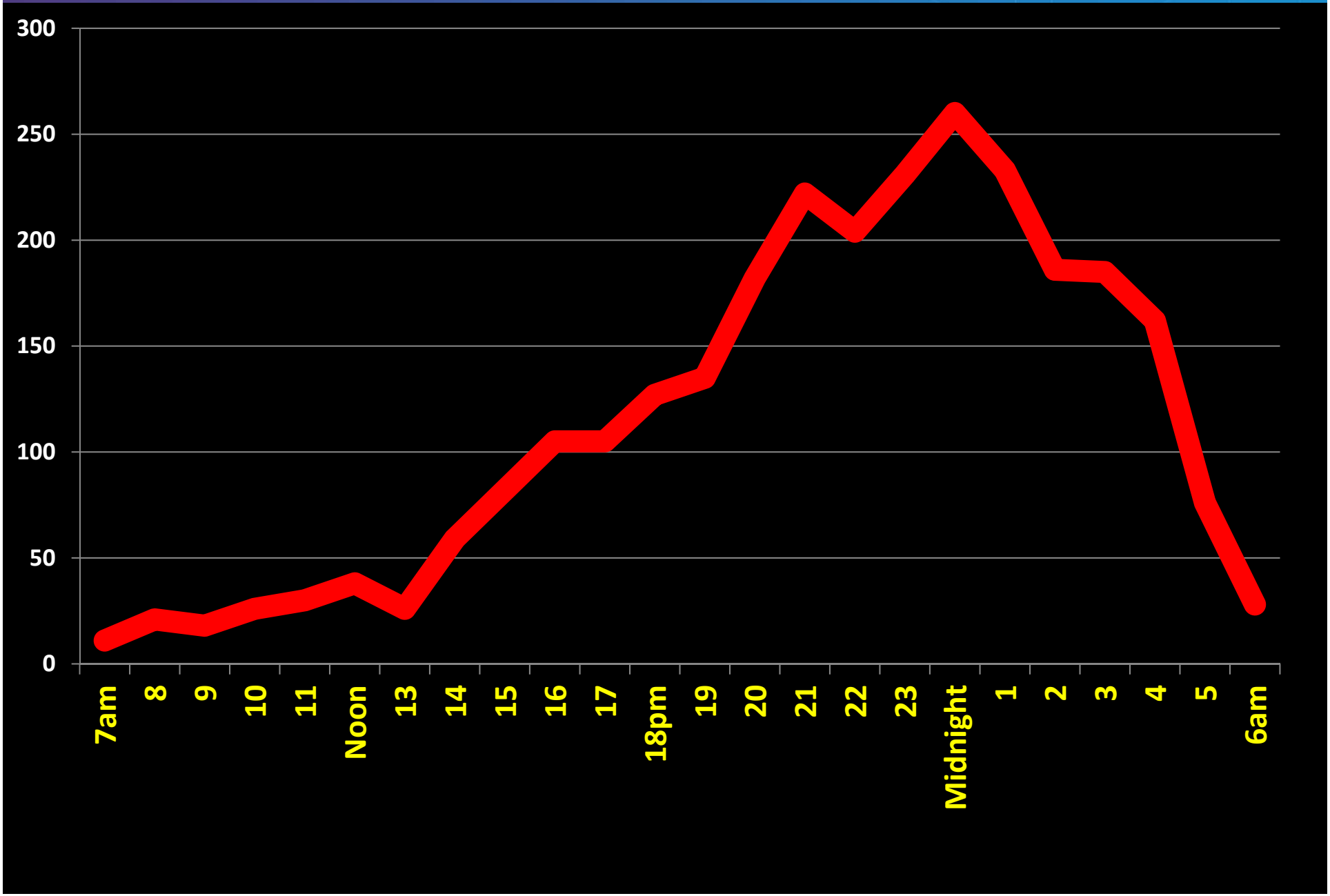


Raster Calculator, Export, Dissolve, Intersect

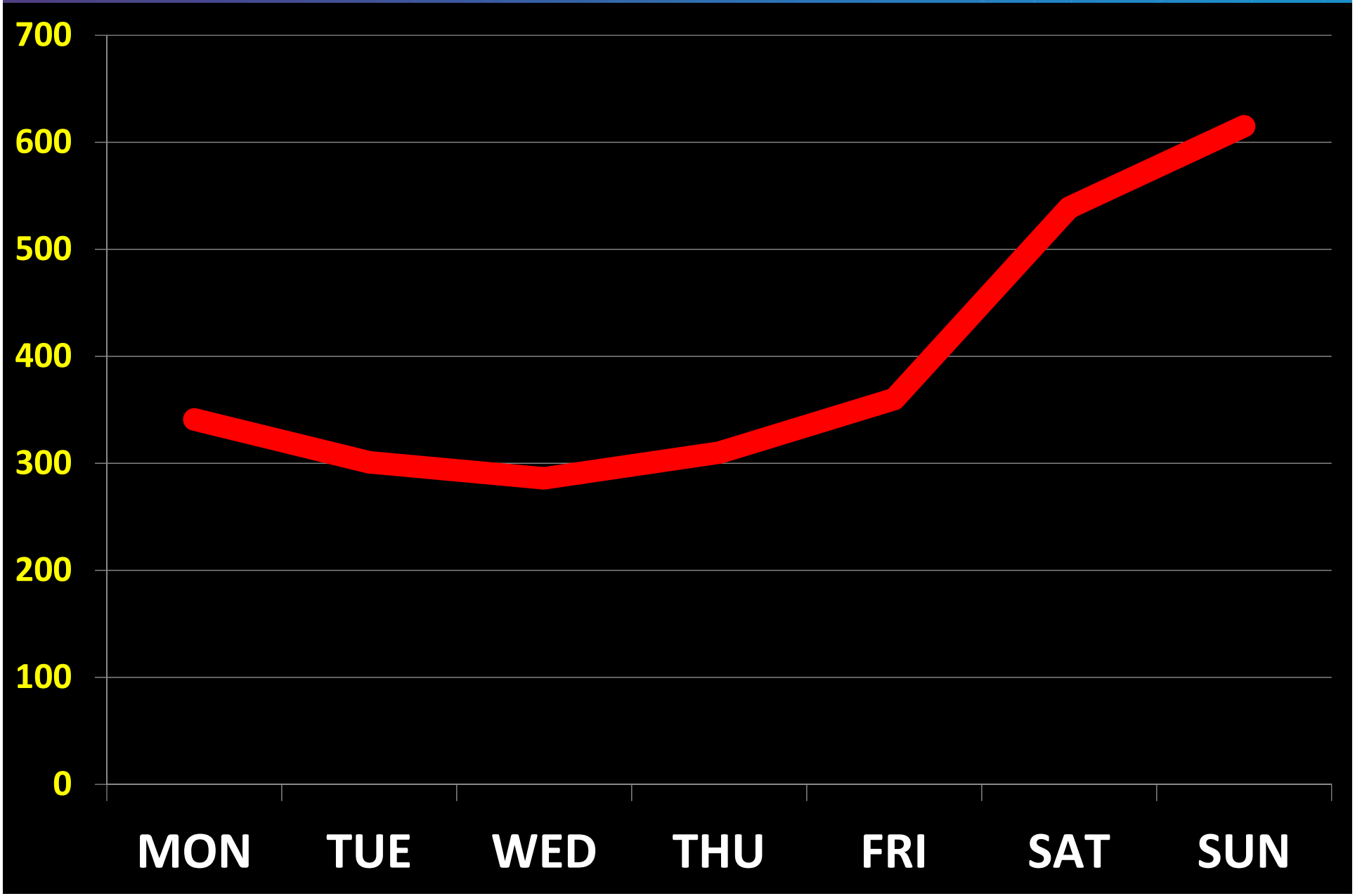
- 49 out of 328 NYCHAS intersect KDE zones (15%)



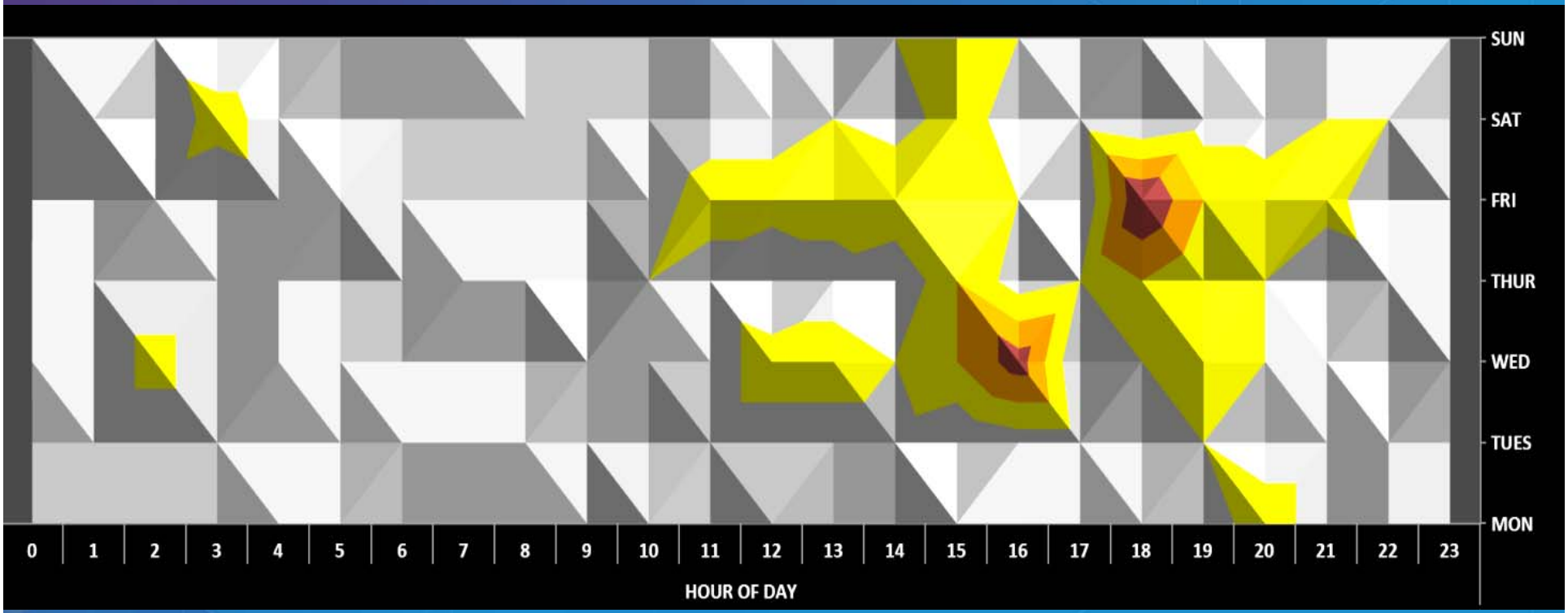
Shootings - Hour of Day Trends



Shootings - Day of Week Trends



Hour of Day and Day of Week - MS Excel Surface Chart



- **78% of shootings occur between 5:30pm – 7pm on Thursdays and Fridays**

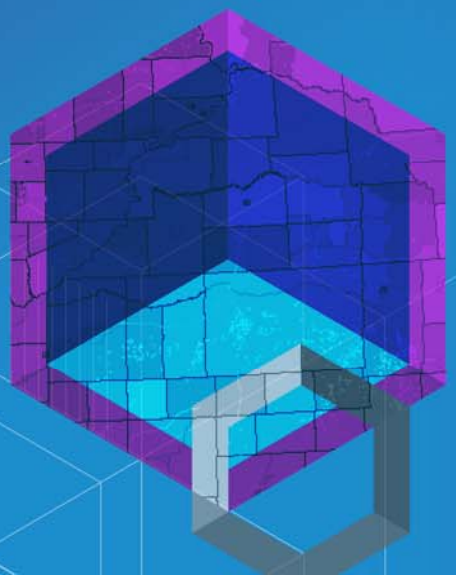
Public Policy Implications

- In some gentrified neighborhoods in NYC, crime is going down significantly and respective NYCHA crime is going up significantly.
- Space-Time Crime Analysis saves time, money, resources, and is much more effective.
- Improved lighting
- ‘Not Wanted List’
- CCTV locations
- Shotspotter locations
- Improved NYPD / NYCHA partnerships

Thank you and enjoy the rest of the UC !

Christopher Herrmann

cherrmann@jjay.cuny.edu



Bullets in the Projects:
New York City Public Housing
as Gun Violence Hot Spots