

An aerial night view of a city with a complex network of orange and white lines overlaid on the map, representing a network or data flow. The city lights are visible in the background.

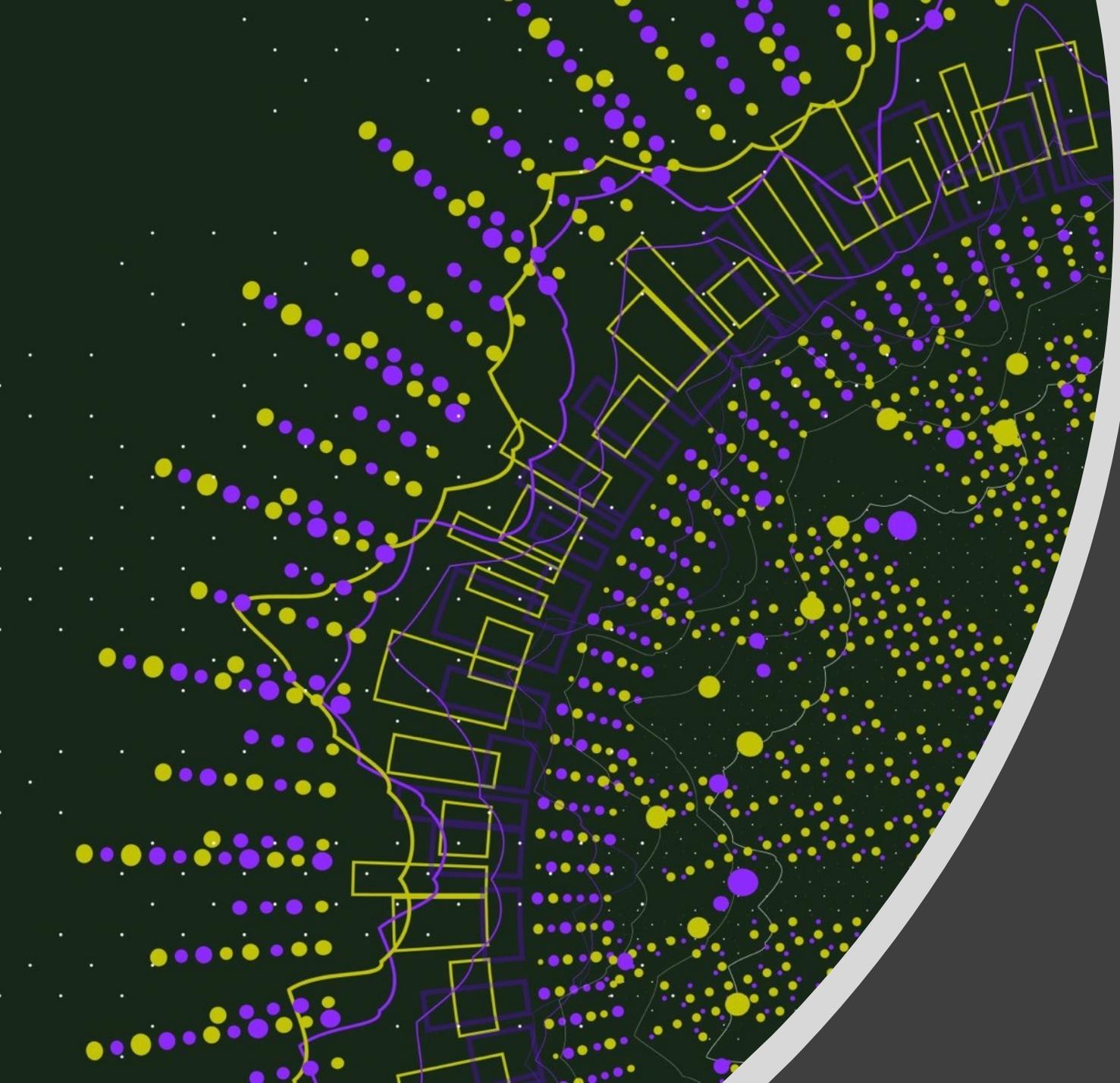
Place Network Investigations to Secure Risky Facilities

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University of Nevada, Las Vegas

Safeplaces Network Seminar Series





Risky Facilities

Bars



Photo by [Elevate](#) on [Unsplash](#)



Photo by [Spencer Pugh](#) on [Unsplash](#)



Photo by [Adam Wilson](#) on [Unsplash](#)

Bakeries



Photo by [Andy Li](#) on [Unsplash](#)



Photo by [Nick Karvounis](#) on [Unsplash](#)



Photo by [Adrien Olichon](#) on [Unsplash](#)

Bookstores



Photo by [Jason Leung](#) on [Unsplash](#)



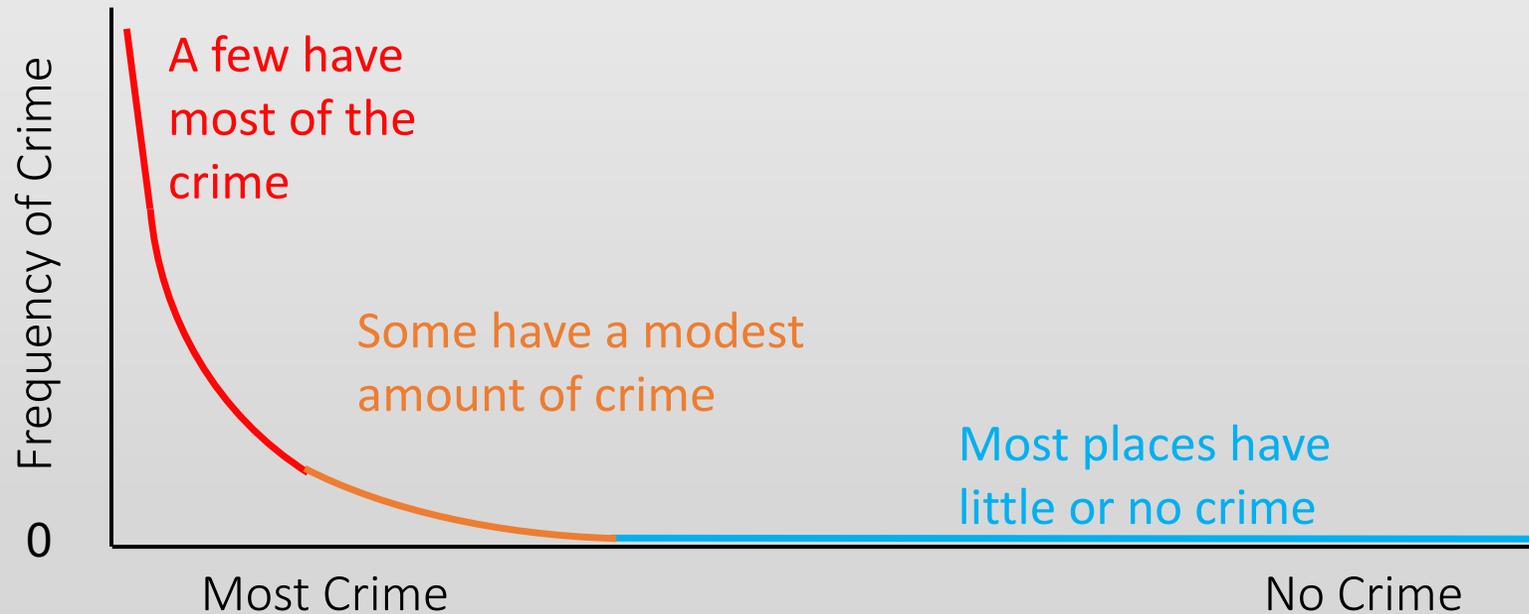
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Risky Facilities

Crime Across Homogeneous Sets of Places



Iron Law of Troublesome Places

Eck & Wilcox



University Hill

Boulder, CO USA – Student Housing

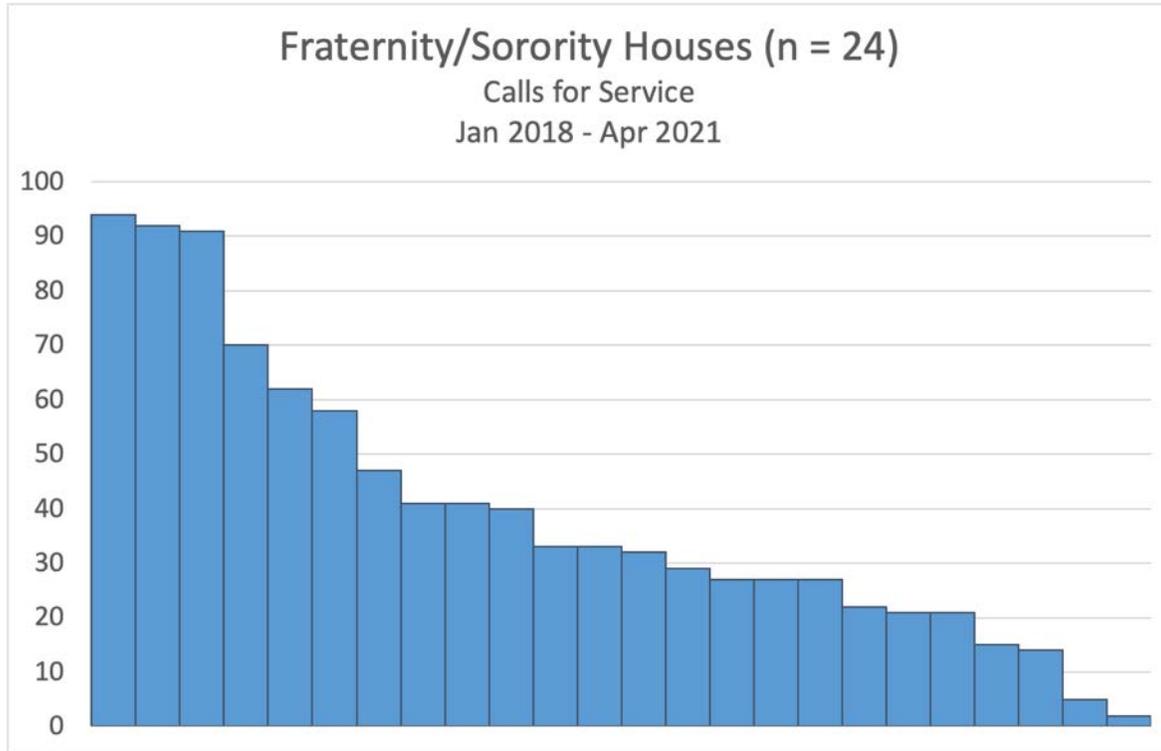
*** SPECIAL THANKS TO JULIE WARTELL**

1,539 rental properties

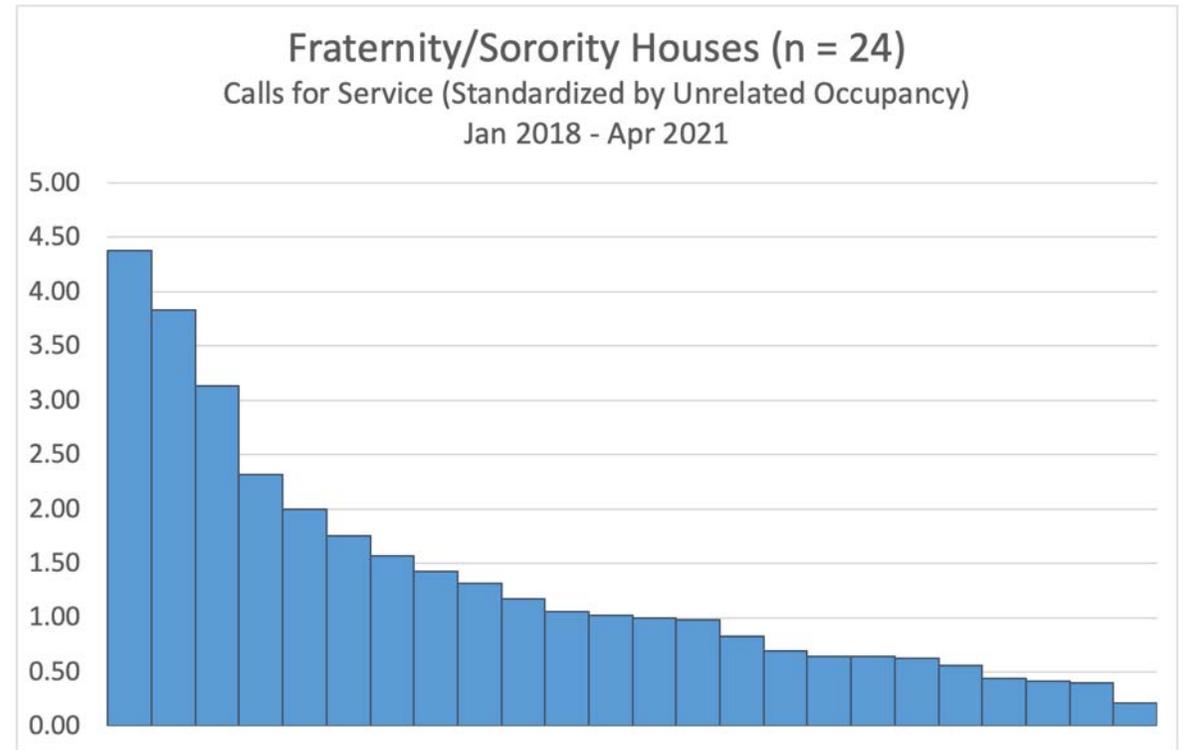
January 2018-April 2021

18,415 calls for police service

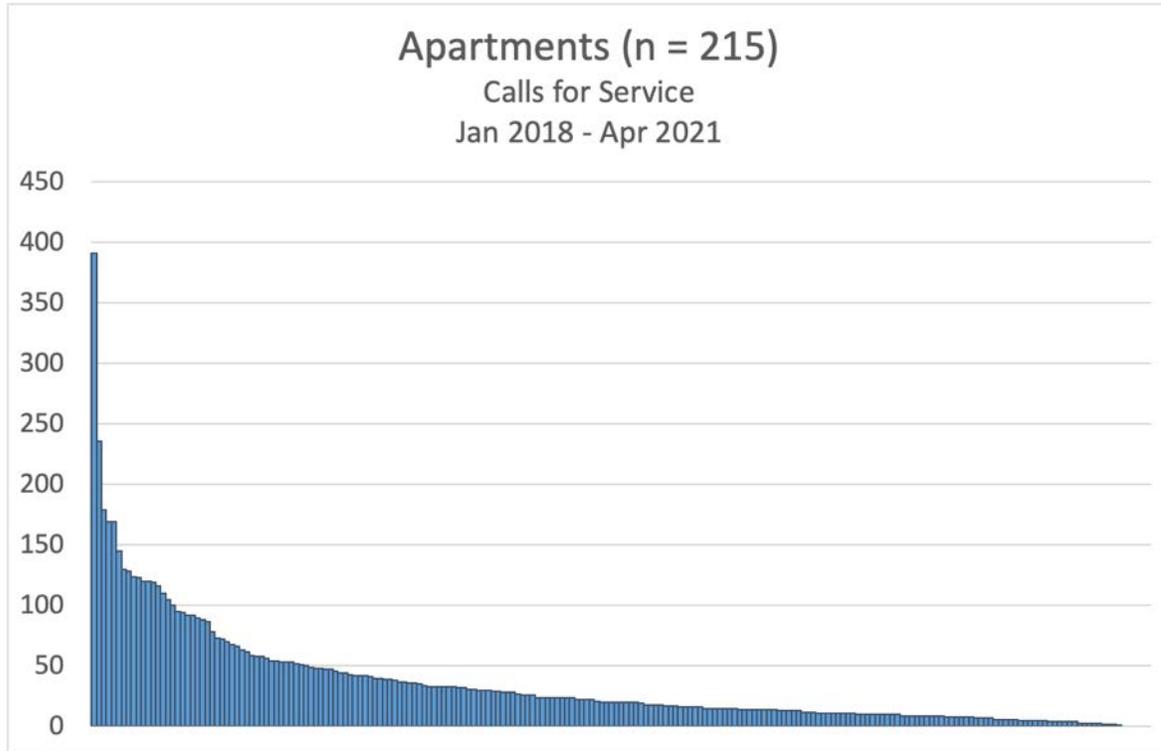
**There were 944
calls for service to
24 Fraternity/Sorority Houses.**



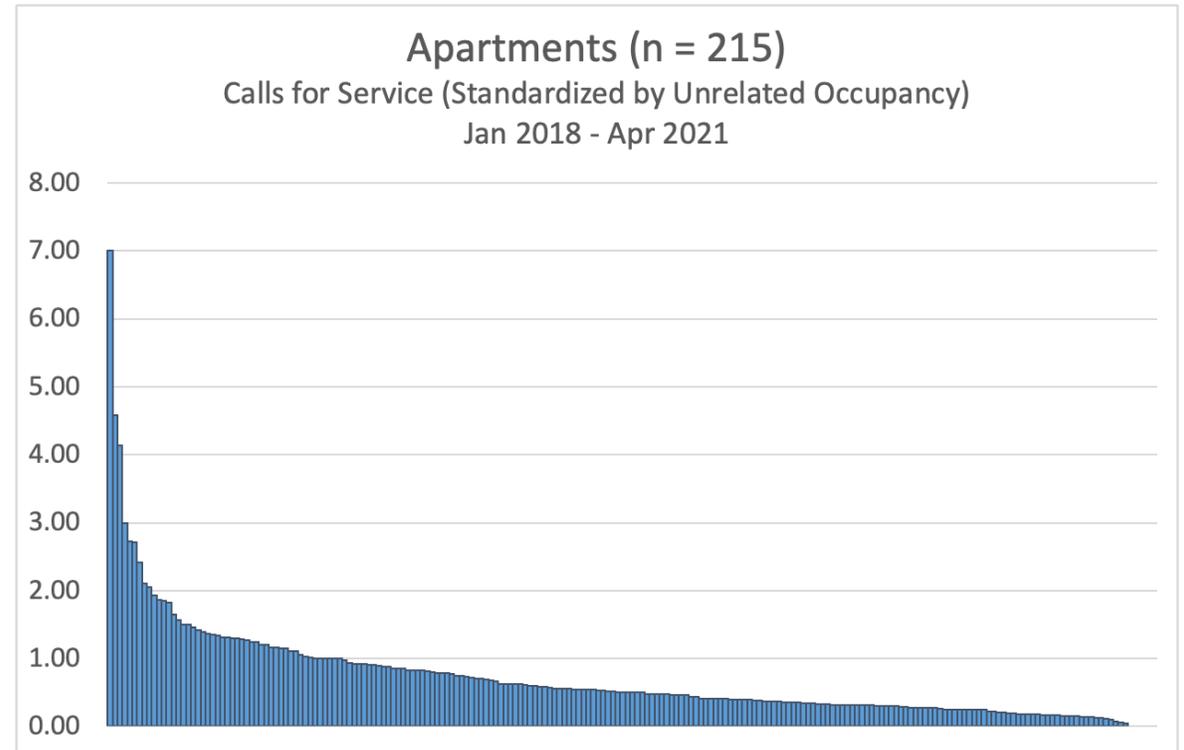
**The top 20% account for 43.3%
of calls for service for this
housing type.**

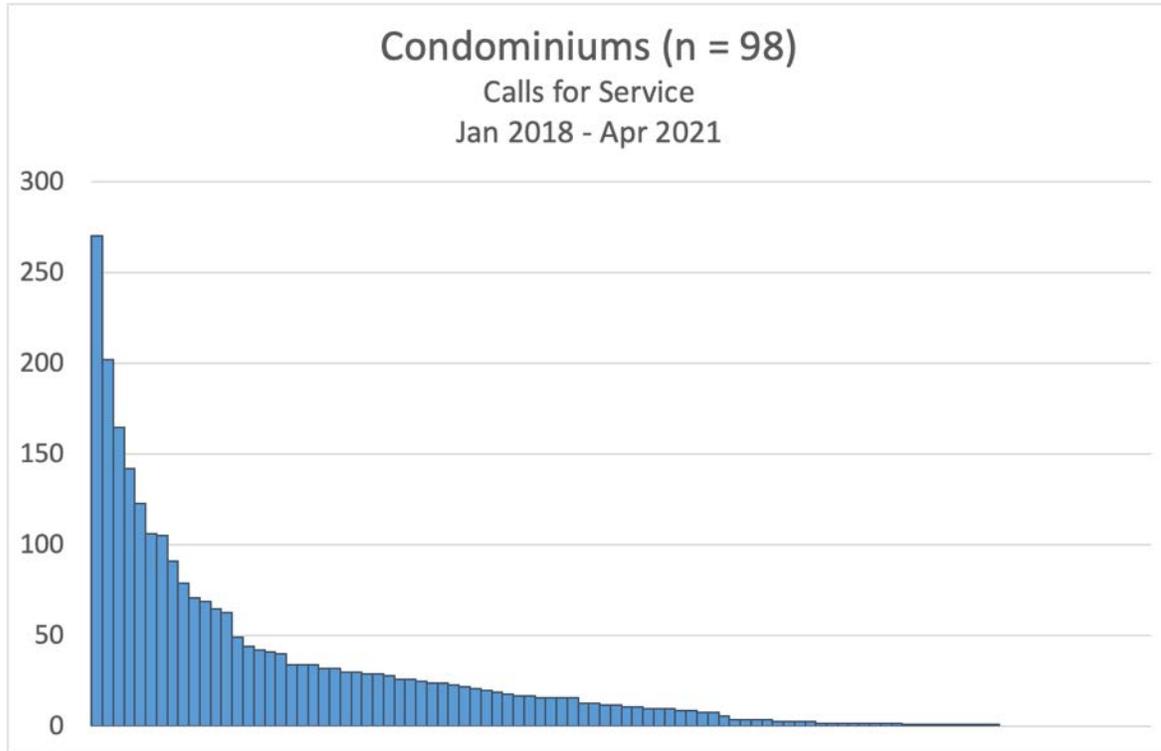


**There were 7,522
calls for service to
215 Apartment Complexes.**



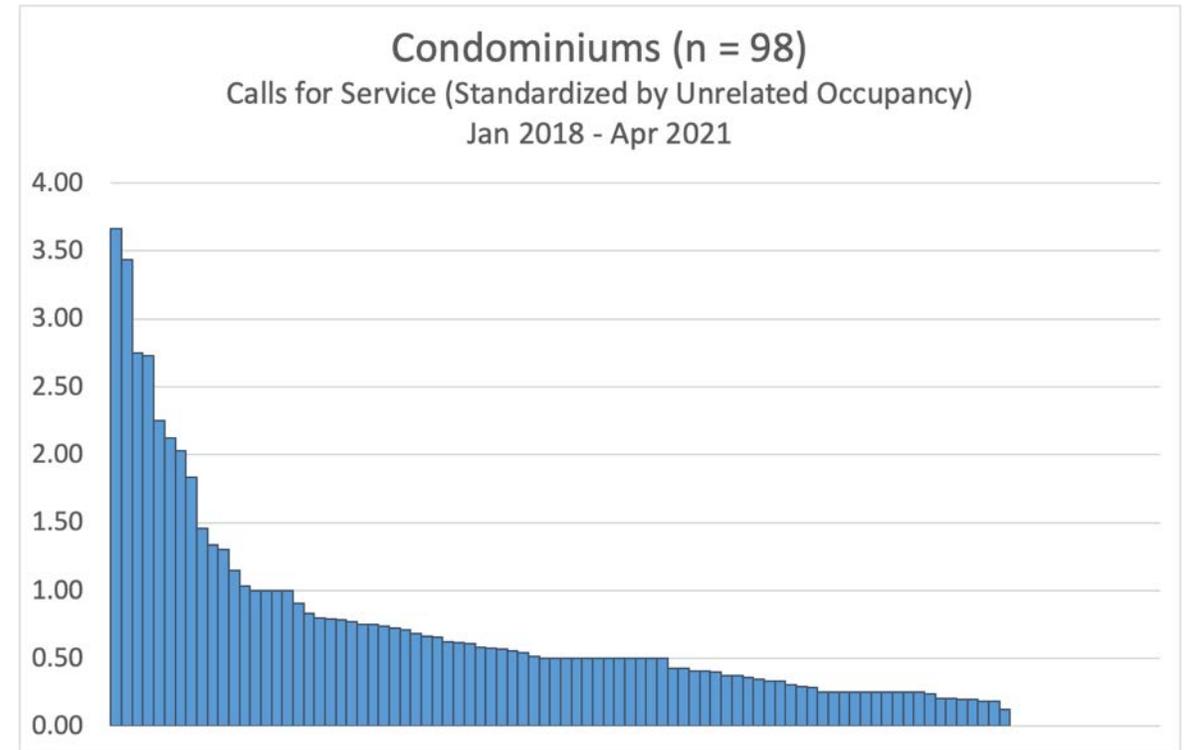
**The top 20% account for 57.5%
of calls for service for this
housing type.**

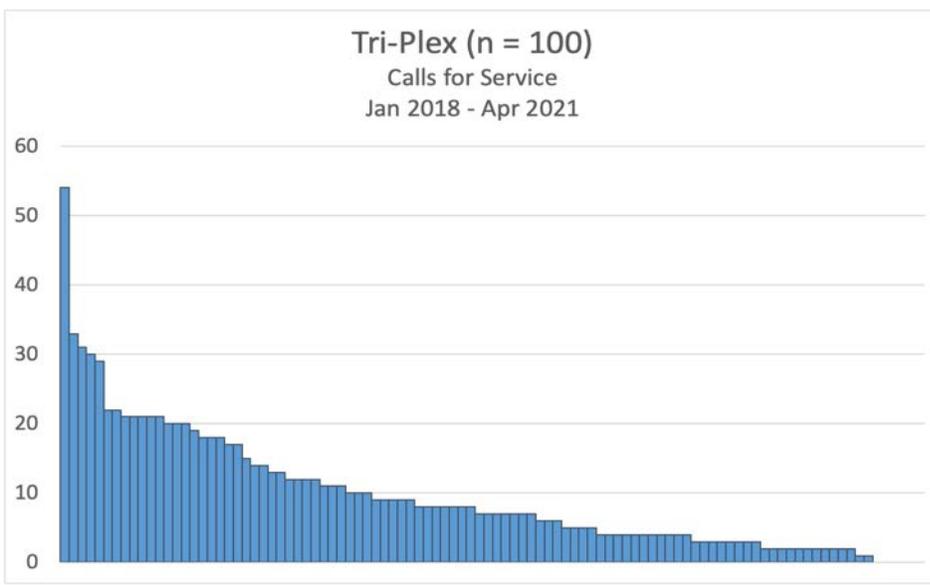
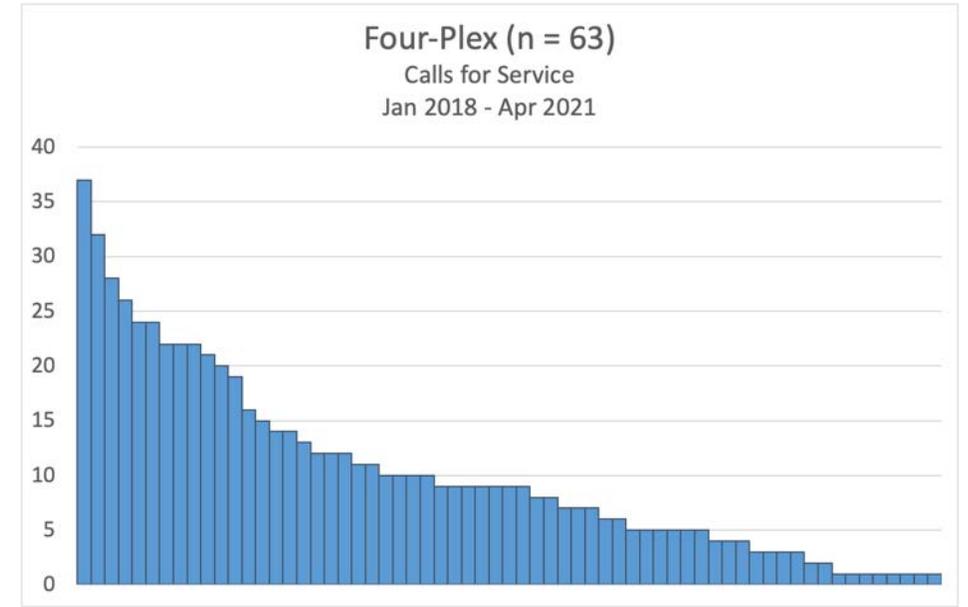
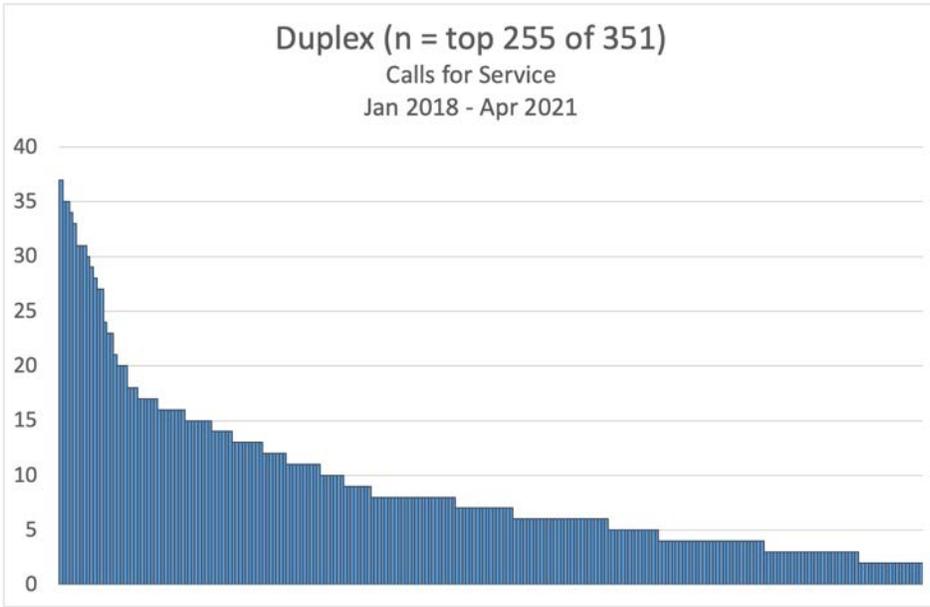




**There were 2,620
calls for service to
98 Condominiums.**

**The top 20% account for 70.0%
of calls for service for this
housing type.**



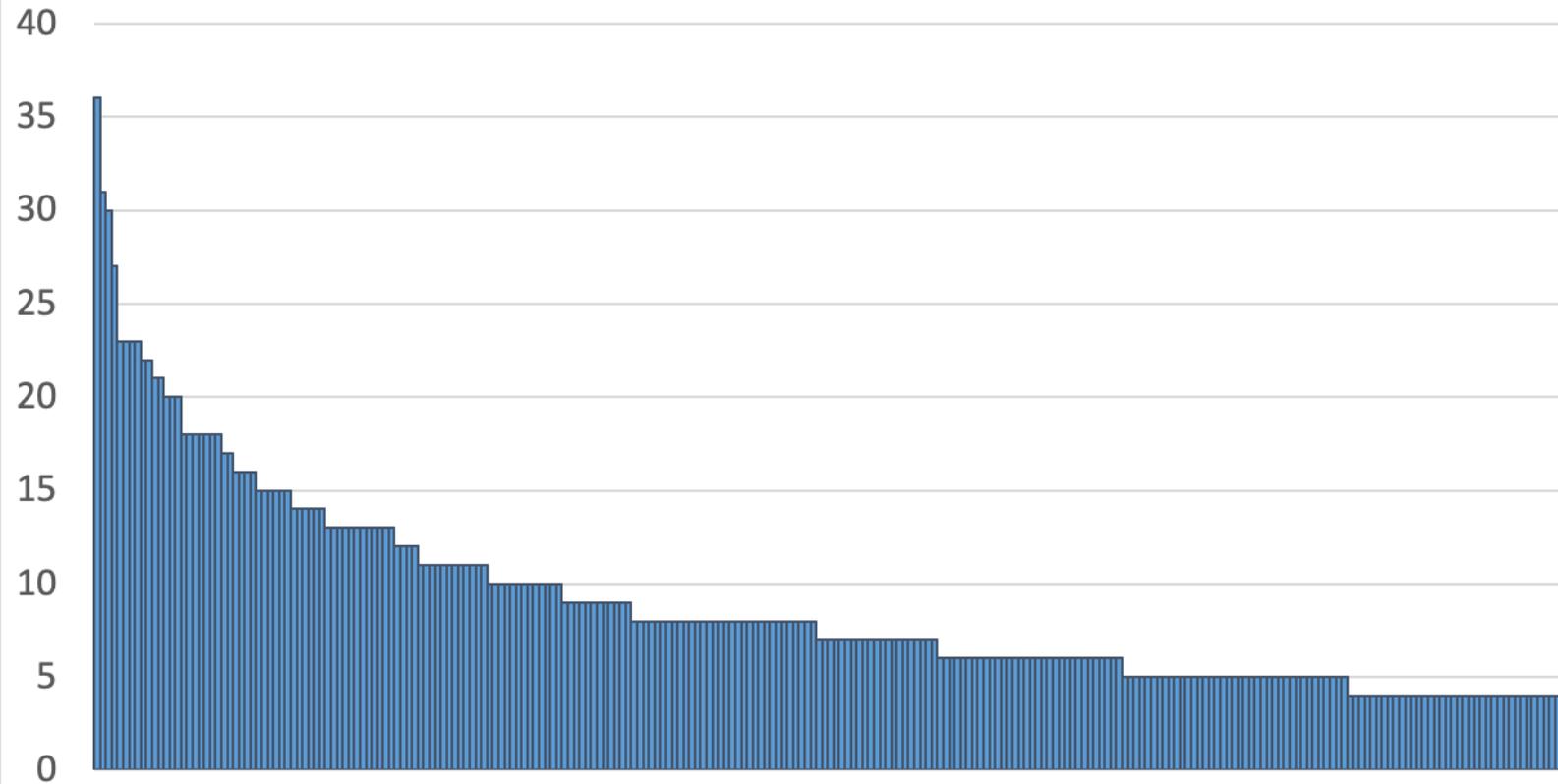


**There were 4,004
calls for service to
514 Du/Tri/Four Complexes.**

**The top 20% account for 52.0% of
calls for service for this housing type.**

Single Family Dwelling (n = top 255 of 602)

Calls for Service
Jan 2018 - Apr 2021



There were 2,811 calls for service to 602 Single Family Dwellings.

The top 20% account for 55.4% of calls for service for this housing type.



Addressing
Troublesome
Places

Place Management

O.R.C.A.



Organization of Space



Regulation of Conduct



Control of Access



Acquisition of Resources

Non-traditional “Facilities”



Photo by [Matt Hoffman](#) on [Unsplash](#)



Photo by [Brandi Alexandra](#) on [Unsplash](#)



Photo by [Yonghyun Lee](#) on [Unsplash](#)

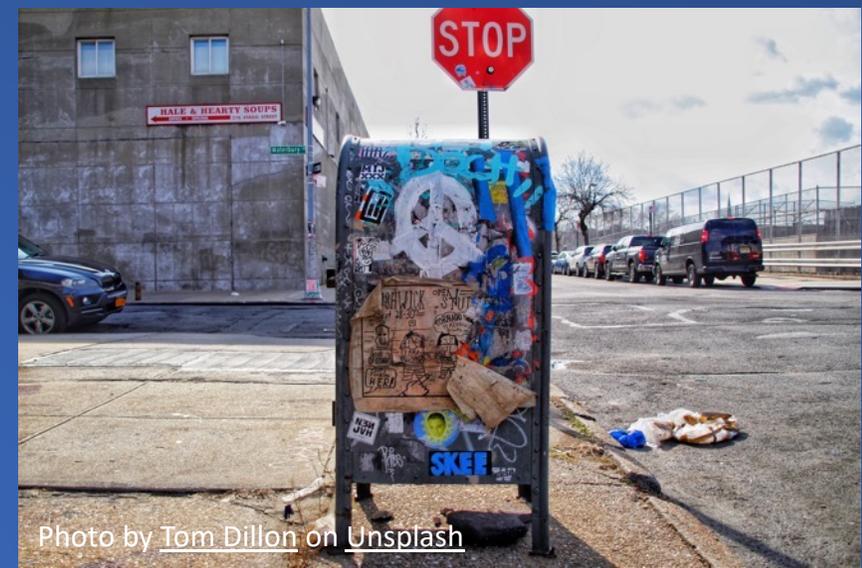


Photo by [Tom Dillon](#) on [Unsplash](#)



Photo by [Ethan Hoover](#) on [Unsplash](#)

Public Spaces

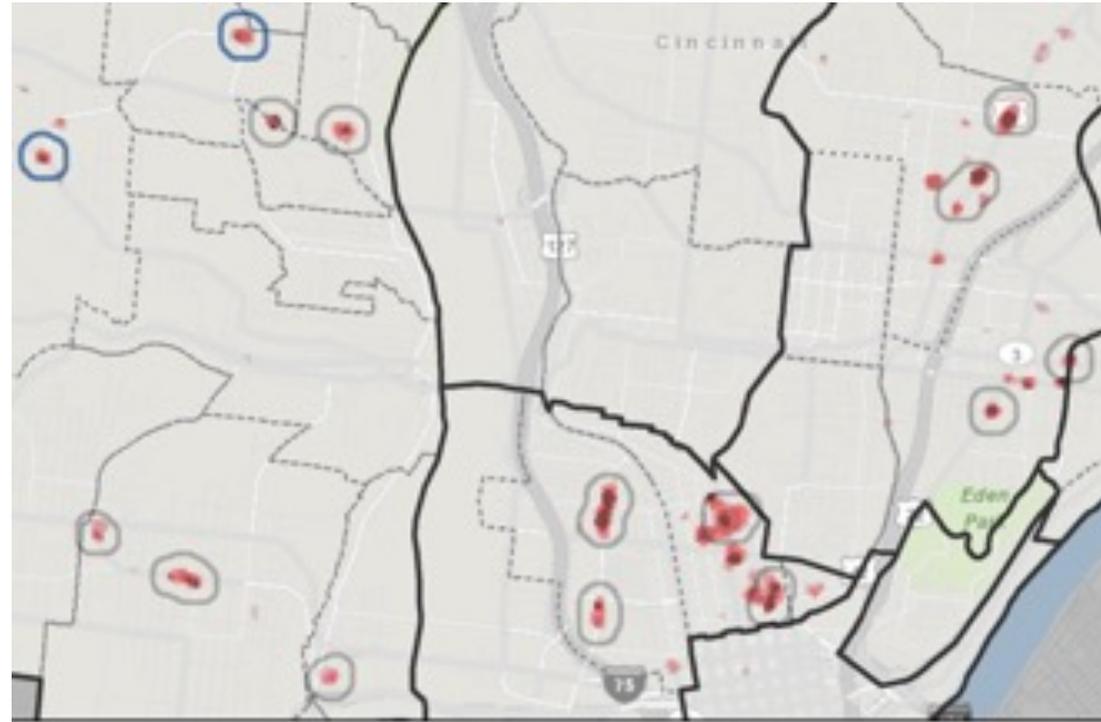
5 Pressing Questions About Risky Facilities

1. How does serious crime concentrate in public spaces?
2. Why do crimes “stick” to certain locations?
3. Why are offenders attracted to specific clusters of risky facilities?
4. What are some implications for theory and research?
5. What are some implications for “fair and equitable” policing?



How does serious crime
concentrate in
public spaces?

Cincinnati, OH 2015



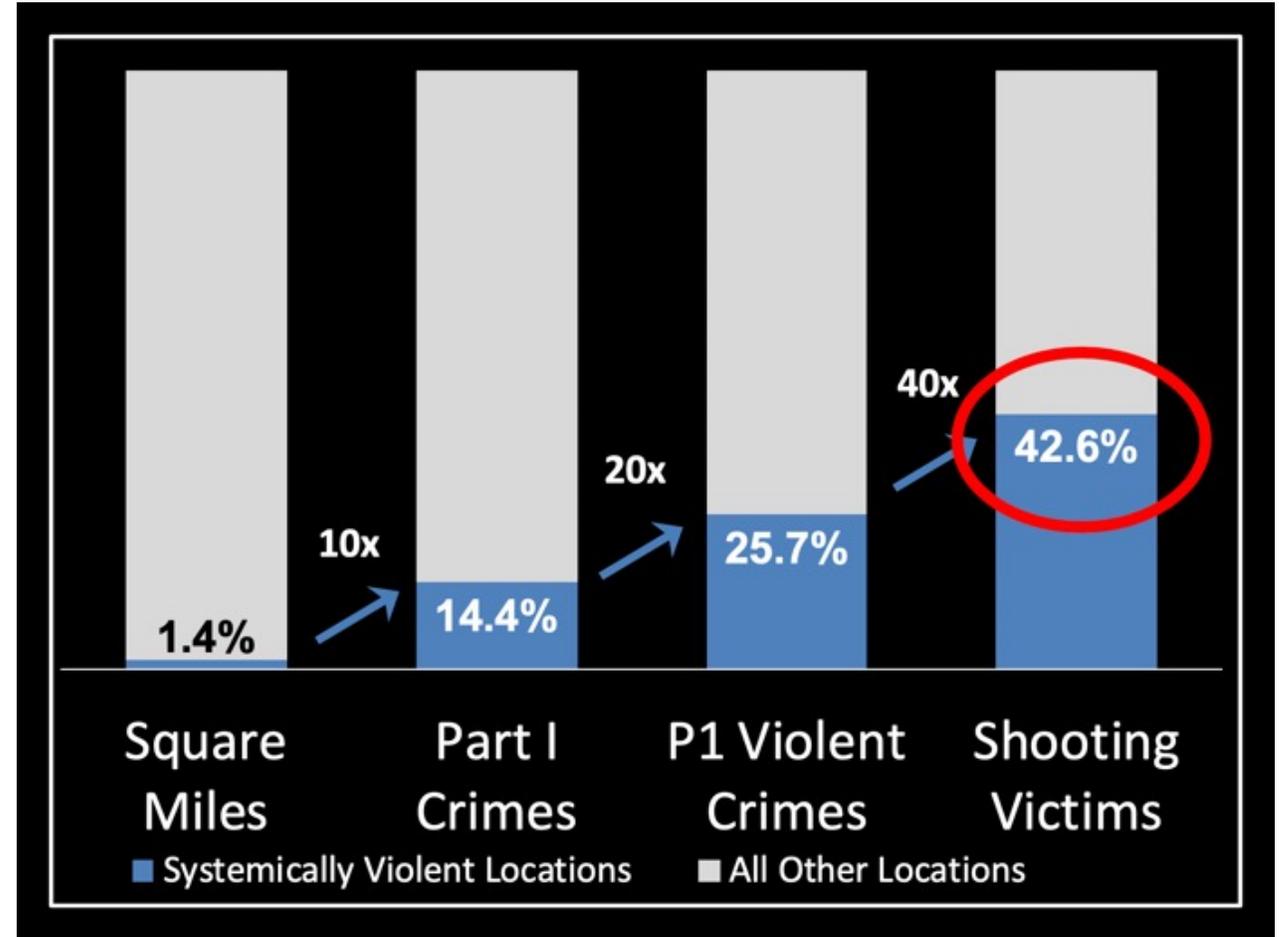
Gun Violence
23 Micro-Locations

- Crime is concentrated across places, offenders, victims
 - 80-20 Rule

- Most violent crime, across any city, occurs in small, identifiable micro-locations.

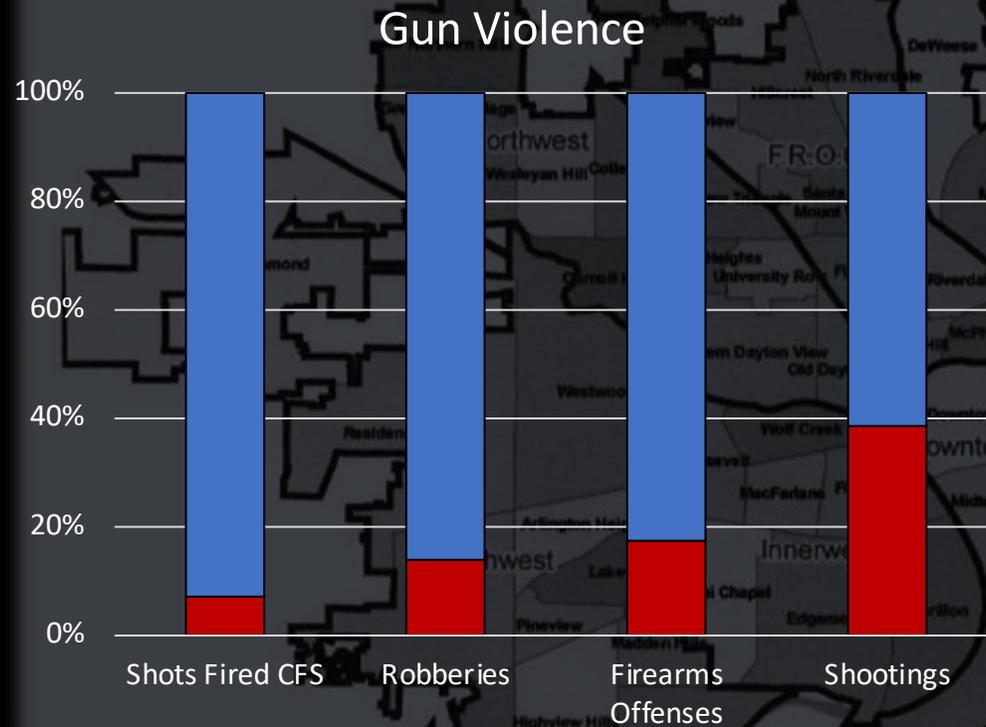
Law of Crime Concentration

Across Scales



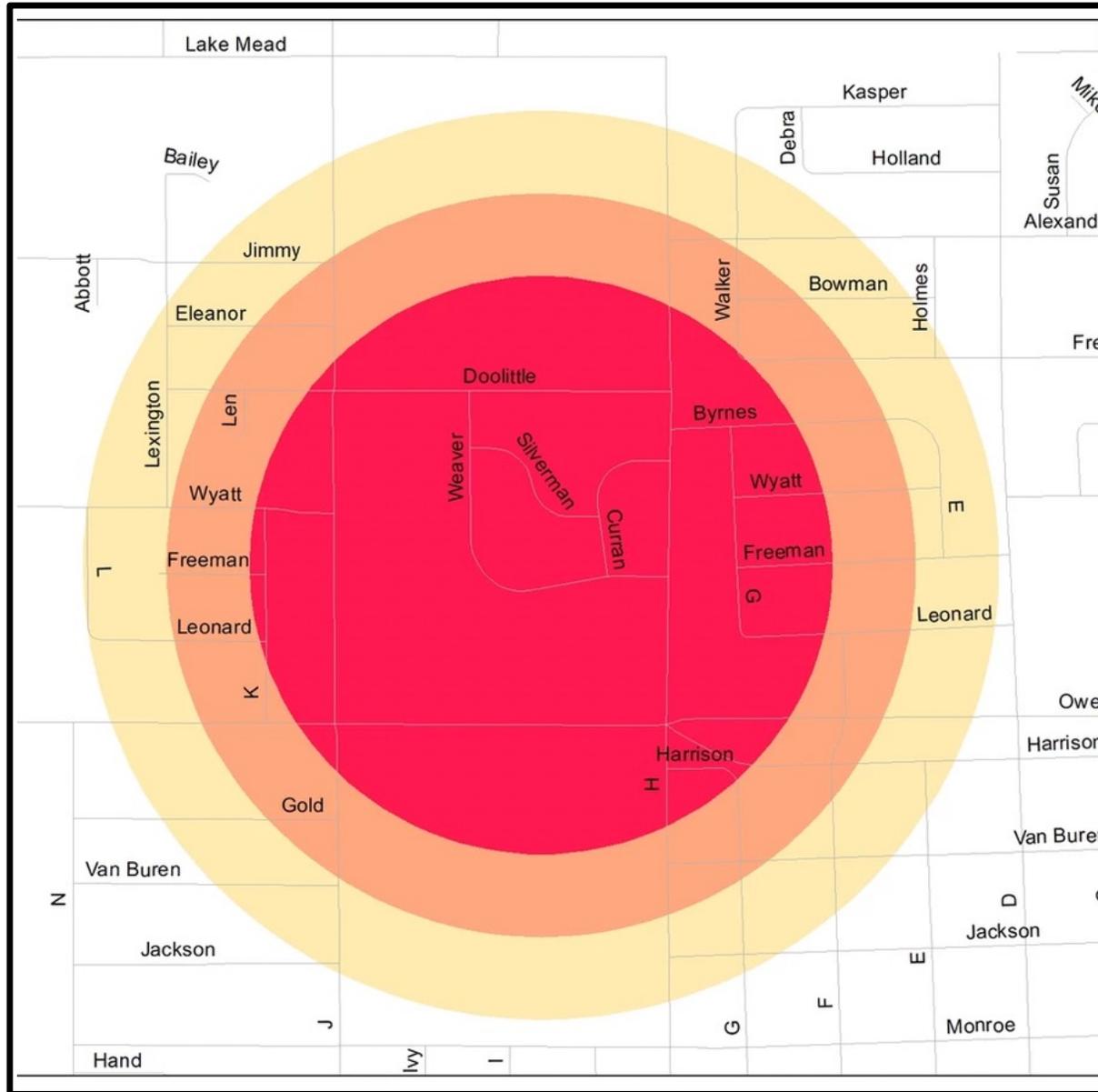
Violence Concentration in Dayton

1.3% of Dayton's total land mass (<0.7 sq mi)*:



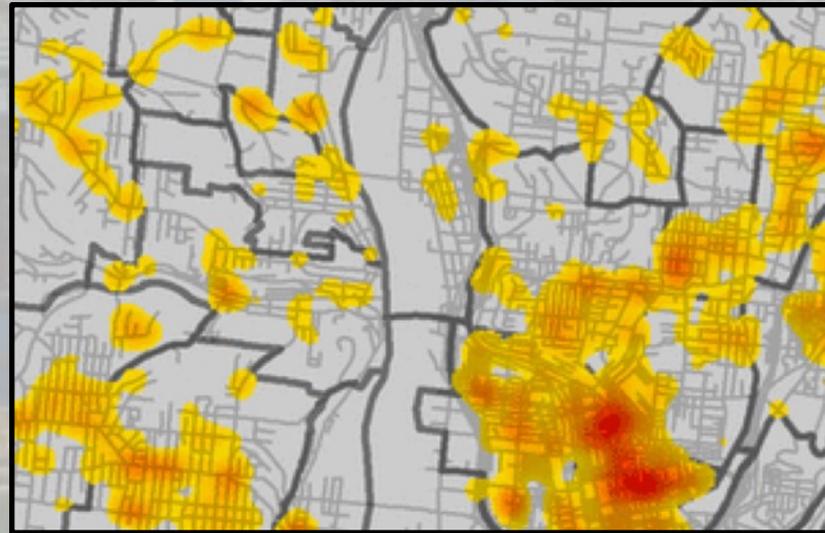
- 7.1% of shots fired calls-for-service
- 13.9% of robberies
- 17.2% of firearms offenses
- 38.6% of shootings

*Excludes airport land use



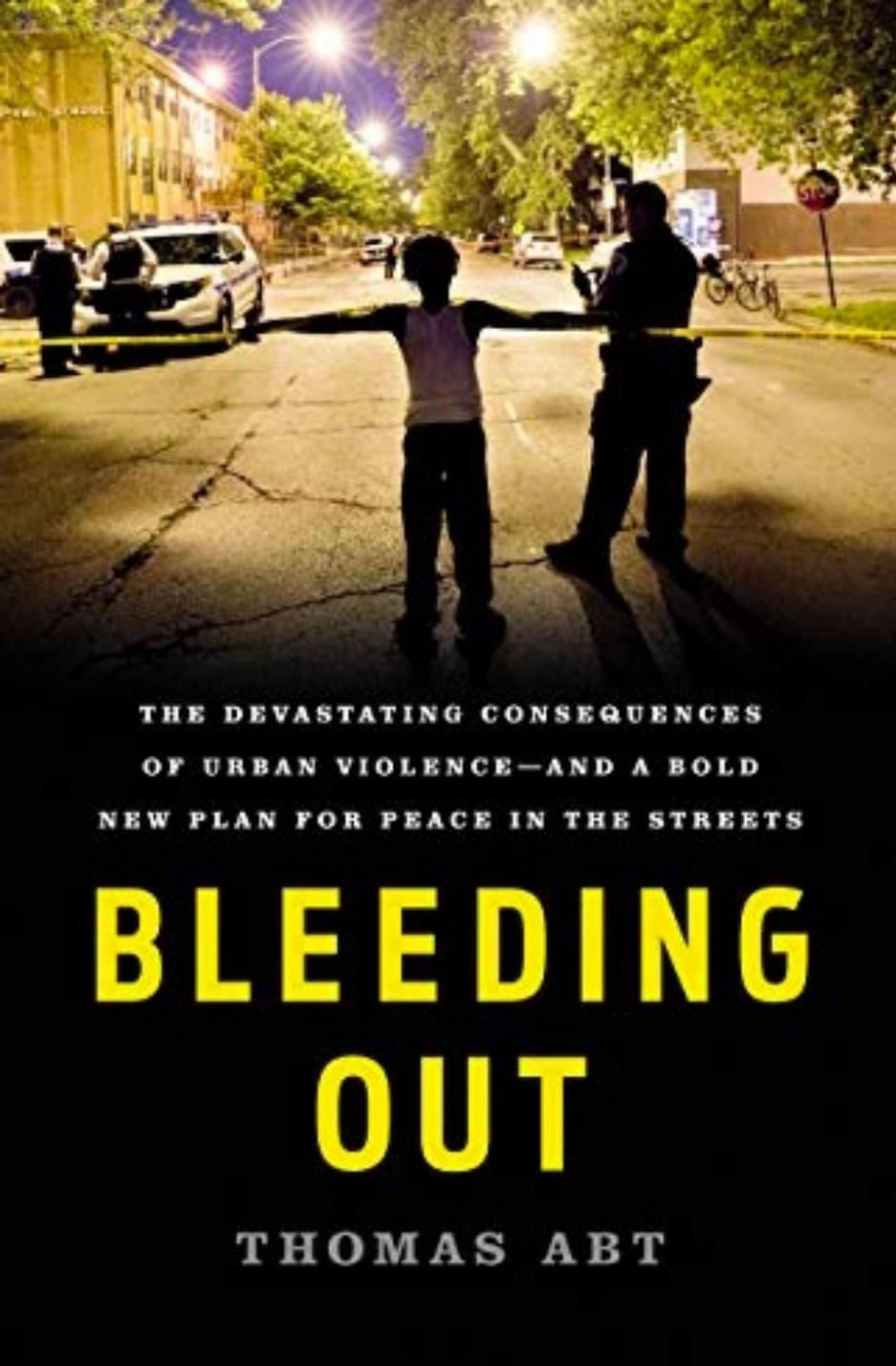
Why do crimes “stick” to
certain locations?

Why do the same places remain “hot” over time?



Hotspots

Persistent - Durable - Systemic - Historical



What makes violence “stick” in particular places?

- Offenders and victims are networked.

Our hypothesis:

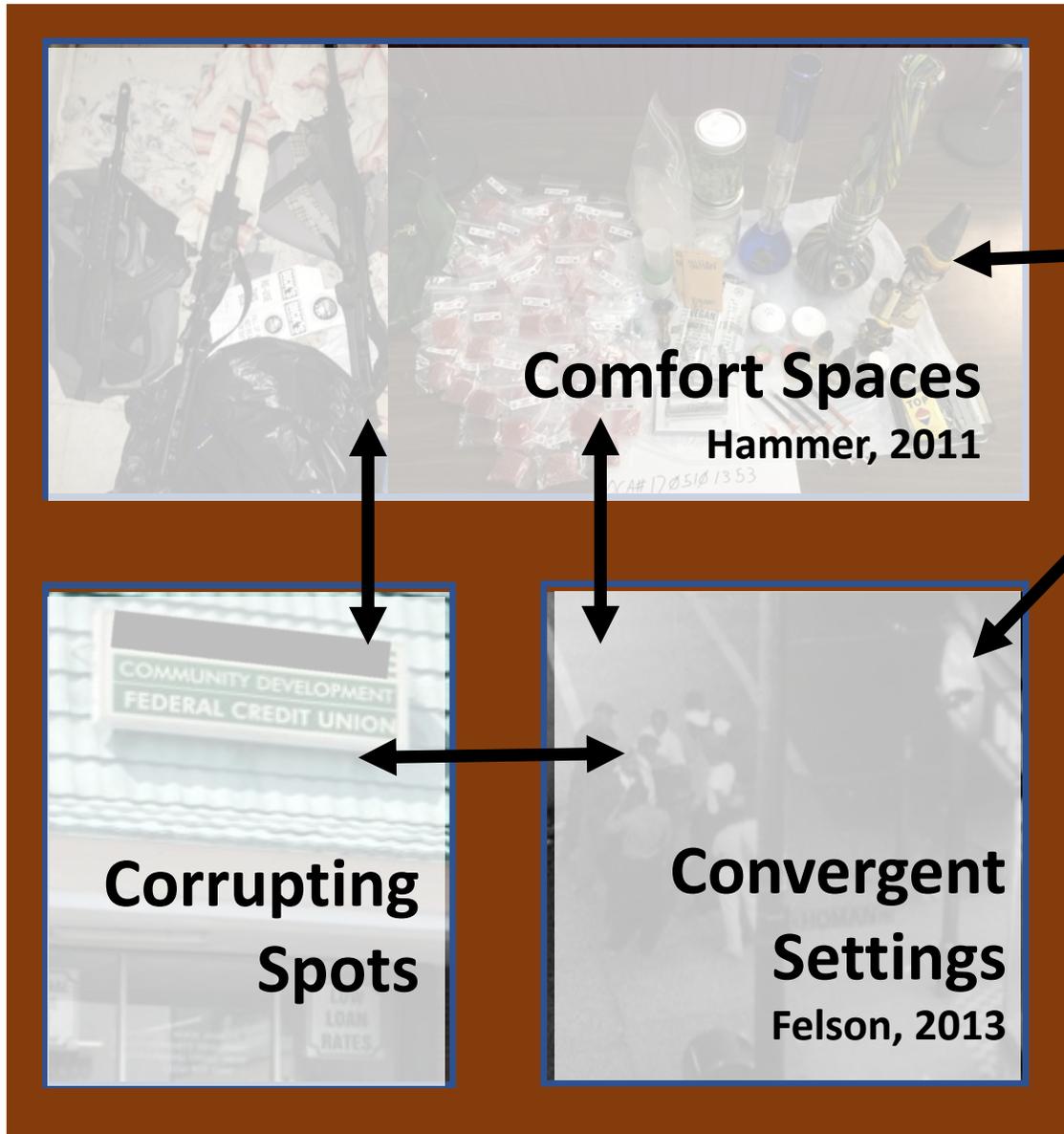
- Persistent crime hotspots result from overlapping offender/victim AND crime place networks.

Organization of Crime Places



4 Types of Crime Places

(Madensen & Eck, 2013)



What we see
on crime maps

What is unseen
without systematic
investigations

Crime
Places are
Networked

Crime Places and Copper Theft

Crime Sites →

Copper condensing
air-conditioning units



Light/telephone poles &
power stations



Stolen Catalytic Converter



Vacant/foreclosed
properties



Churches

Crime Places and Copper Theft

What we see

What we don't see

Crime Sites



Comfort Space



Staging location
where offenders park &
meet close to crime sites

Corrupting Spot



Recycling Plant

Convergent Setting

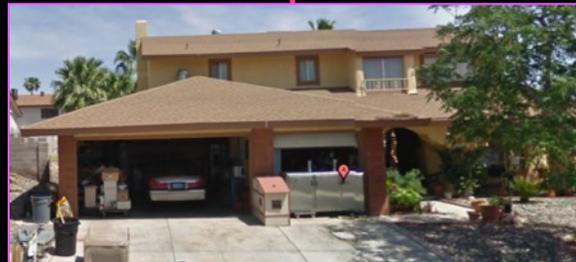
extra cash and removal of your recycle items - S1 (valley wide pick up)

Date: 2011-10-03, 10:13AM PDT
Reply to: see below

i will buy and haul off your unwanted junk such as any metal and recycle items, batterys, old car parts, cans please call 702

craigslist

Comfort Space



Supplying location
where metal is stored

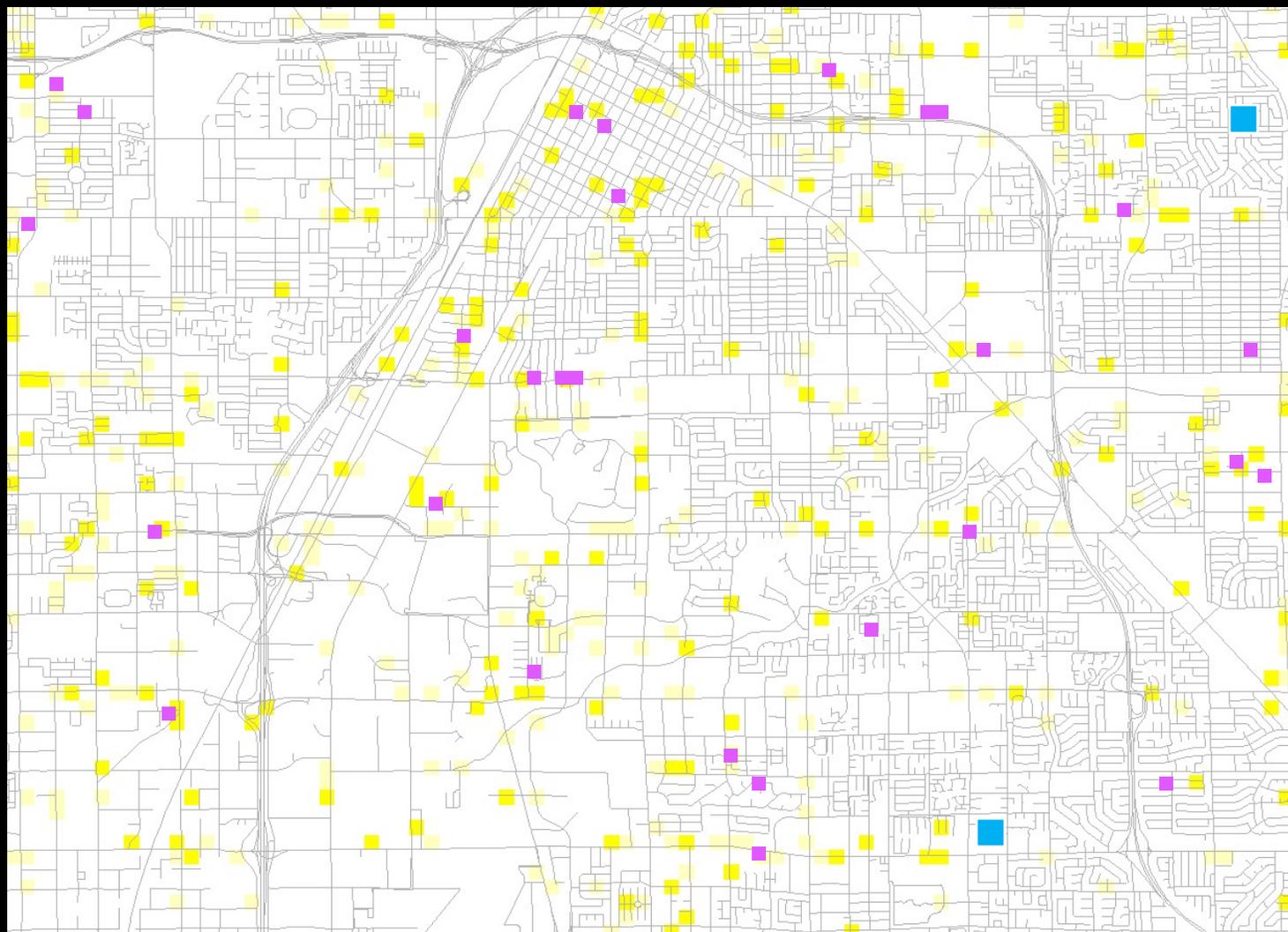
Crime Hotspot Map

■ Crime Sites

■ Comfort Spaces

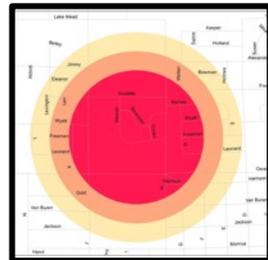
■ Convergent Settings

■ Corrupting Spots

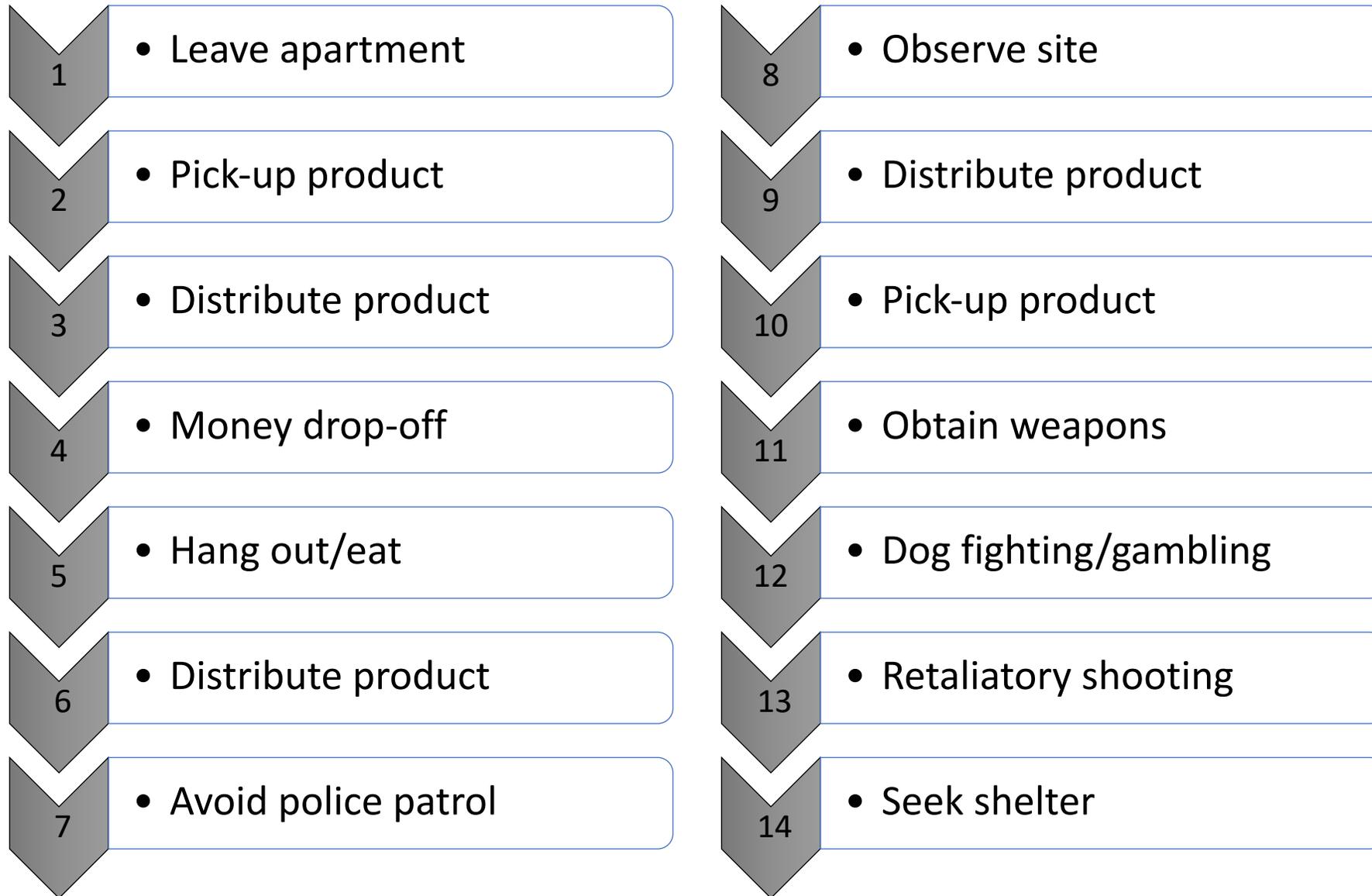


■ Single virtual location

Why are offenders
attracted to specific
clusters of
risky facilities?



A Day in the Life...



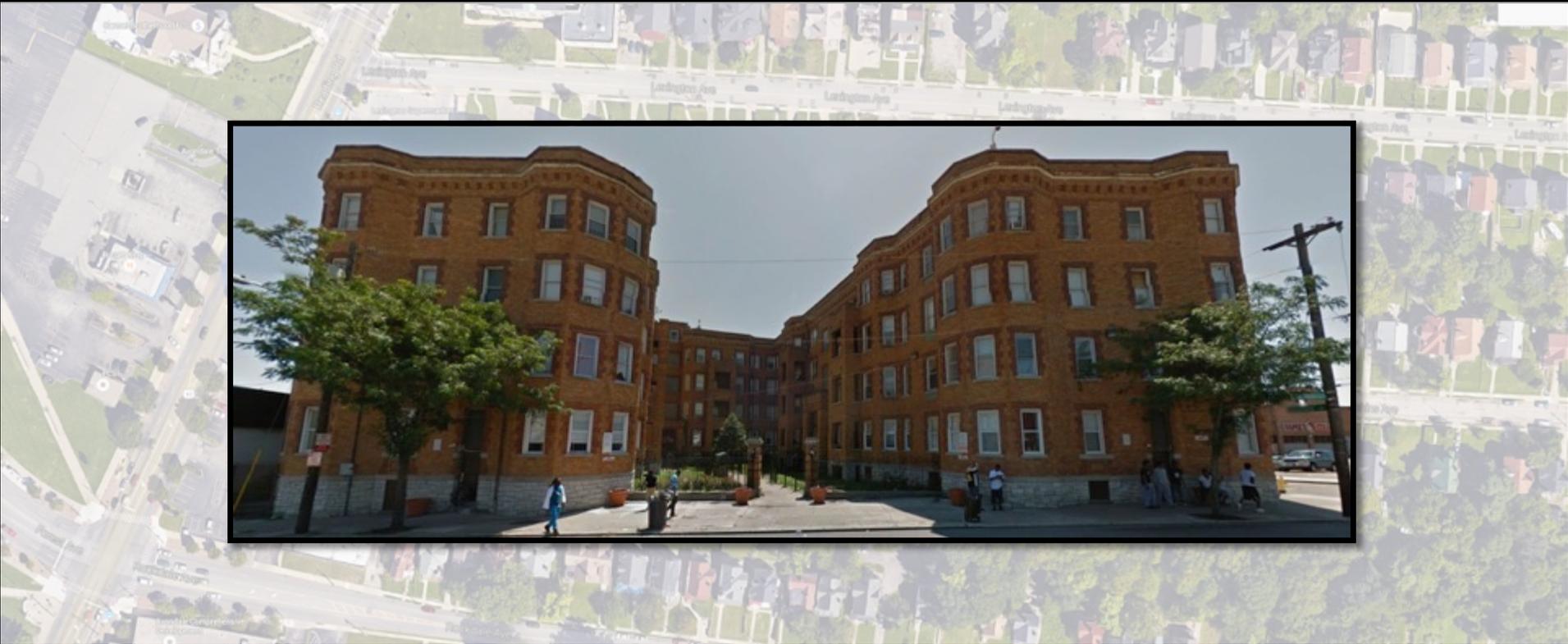
Place-Based Investigation Example



Poinciana Apartments
3522 Reading Road

Afghanistan Gang Territory





Crime Site – Most violent proprietary location in Avondale neighborhood



- Crime Site – Most violent proprietary location in Avondale neighborhood
- Convergent Settings – Lincoln Statue, Lexington Supermarket

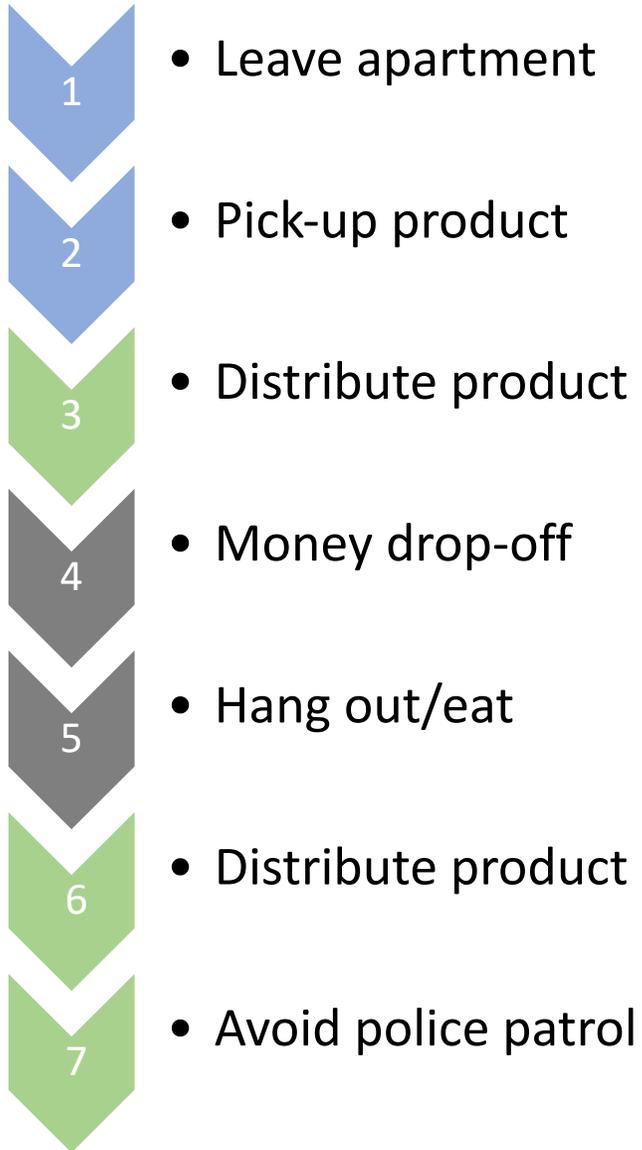


- Crime Site – Most violent proprietary location in Avondale neighborhood
- Convergent Settings – Lincoln Statue, Lexington Supermarket
- Comfort Spaces – Specific apt. units, Nearby residences

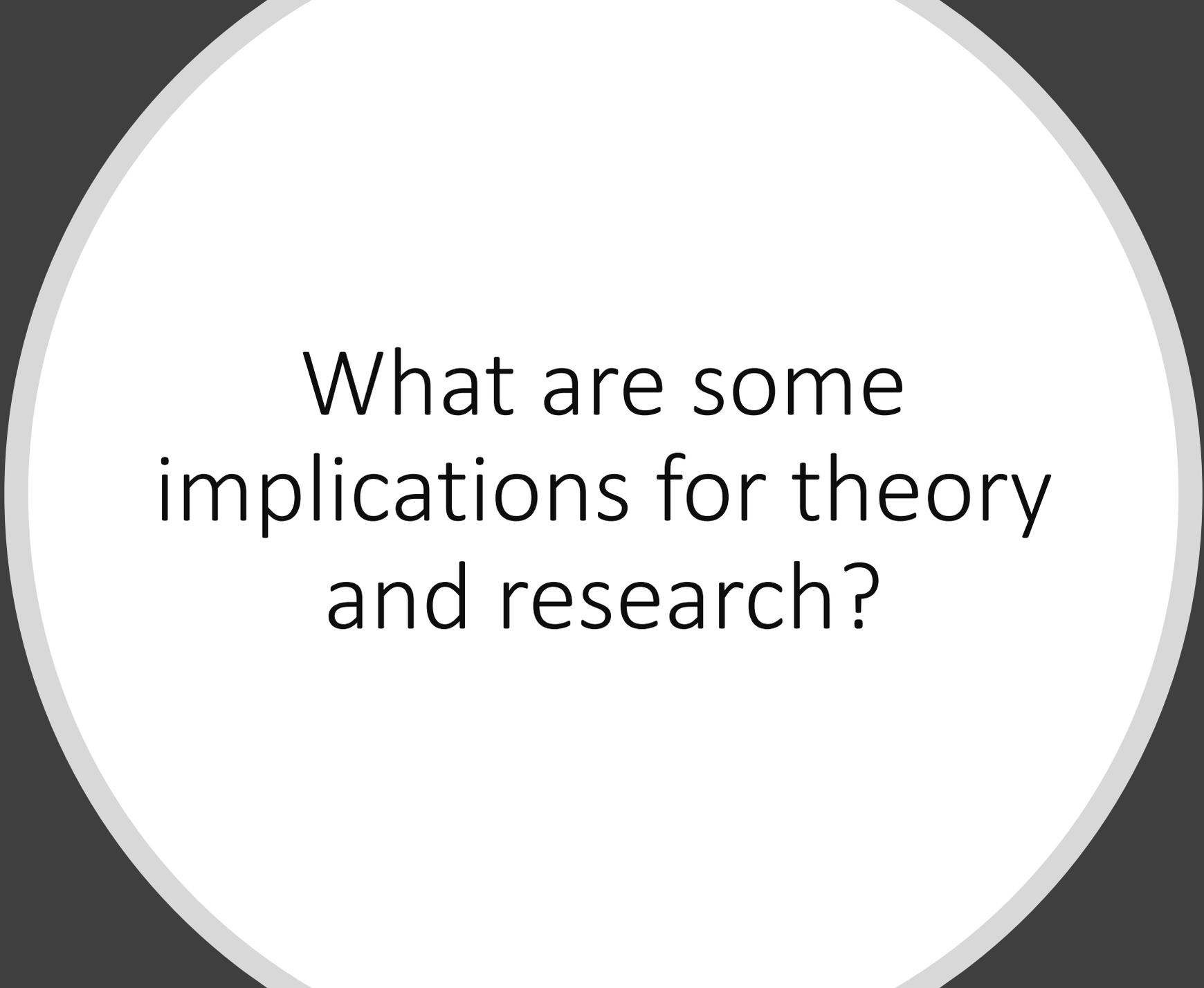


- Crime Site – Most violent proprietary location in Avondale neighborhood
- Convergent Settings – Lincoln Statue, Lexington Supermarket
- Comfort Spaces – Specific apt. units, Nearby residences
- Corrupting Spots – Nearby businesses (some facilitators)

A Day in the Life...At Places



-  Crime Site
-  Convergent Settings
-  Comfort Spaces
-  Corrupting Spots



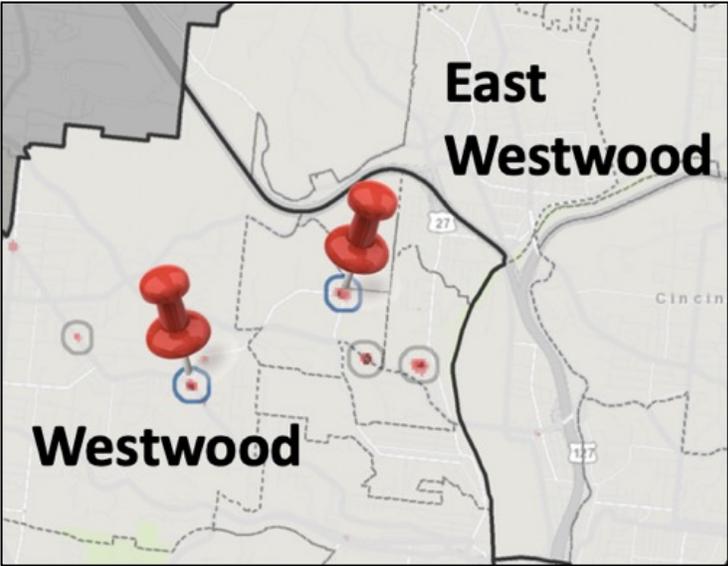
What are some
implications for theory
and research?



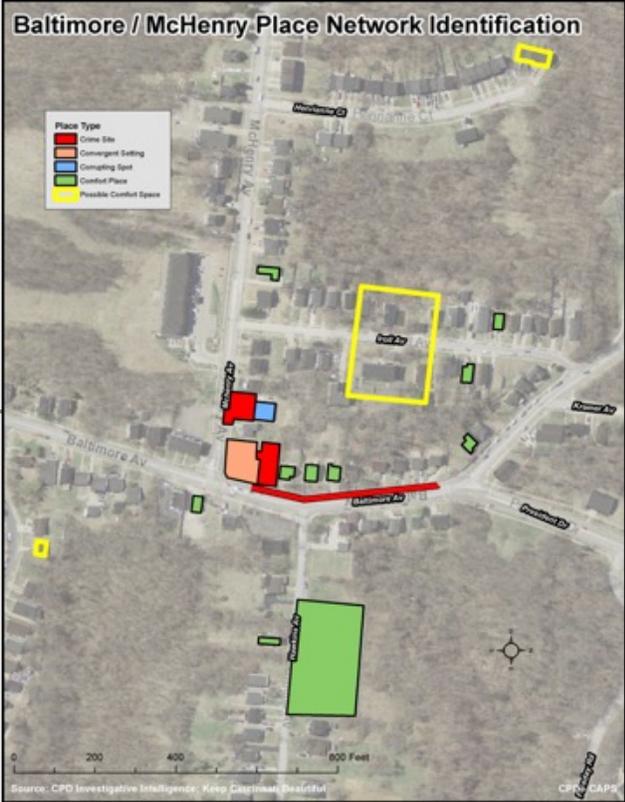
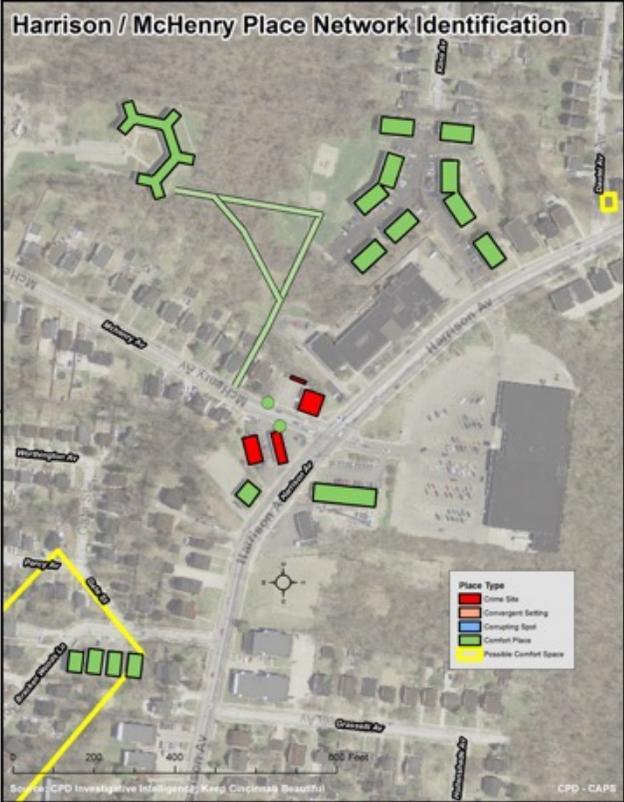
#1

Uncovering Crime Place
Networks Requires
Investigations

Place Network Investigations



Cincinnati, Ohio



Questions Unanswered: Research

- Are there commonalities among crime place networks?
- Is geographic profiling possible?
- How does the Iron Law of Troublesome Places apply to “hidden” crime place network locations?



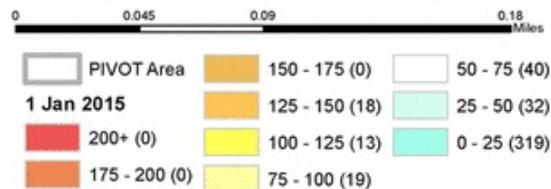
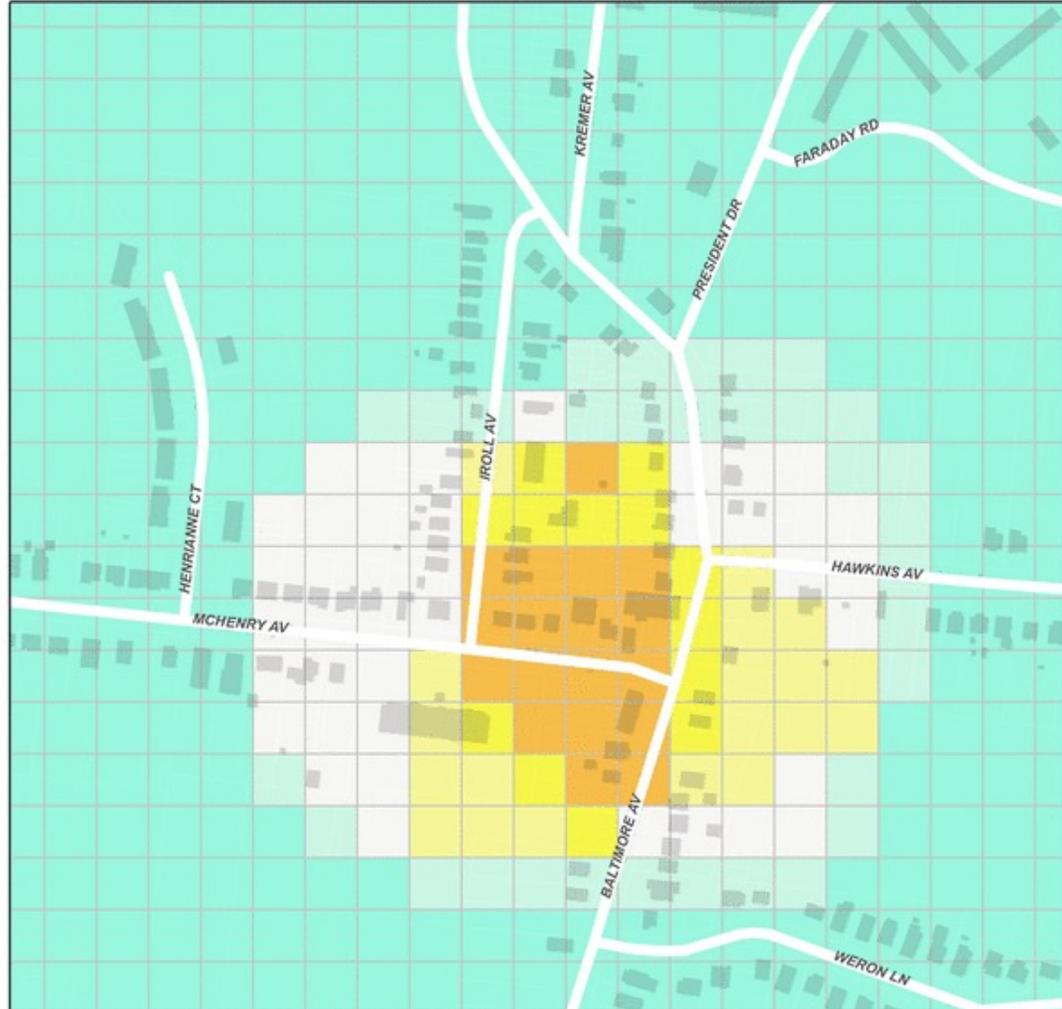
#2

Focusing on Crime Place
Networks Leads to a Diffusion of
Benefits

Baltimore/McHenry Violence Scores January 1, 2015



*Violence Score is a composite metric derived from shootings, robberies, gun offenses, and weapon-related calls-for-service



Data prepared on: 9/21/2017

Prepared by: SCRM B. Christenson

Site #1: East Westwood

Overall Trends

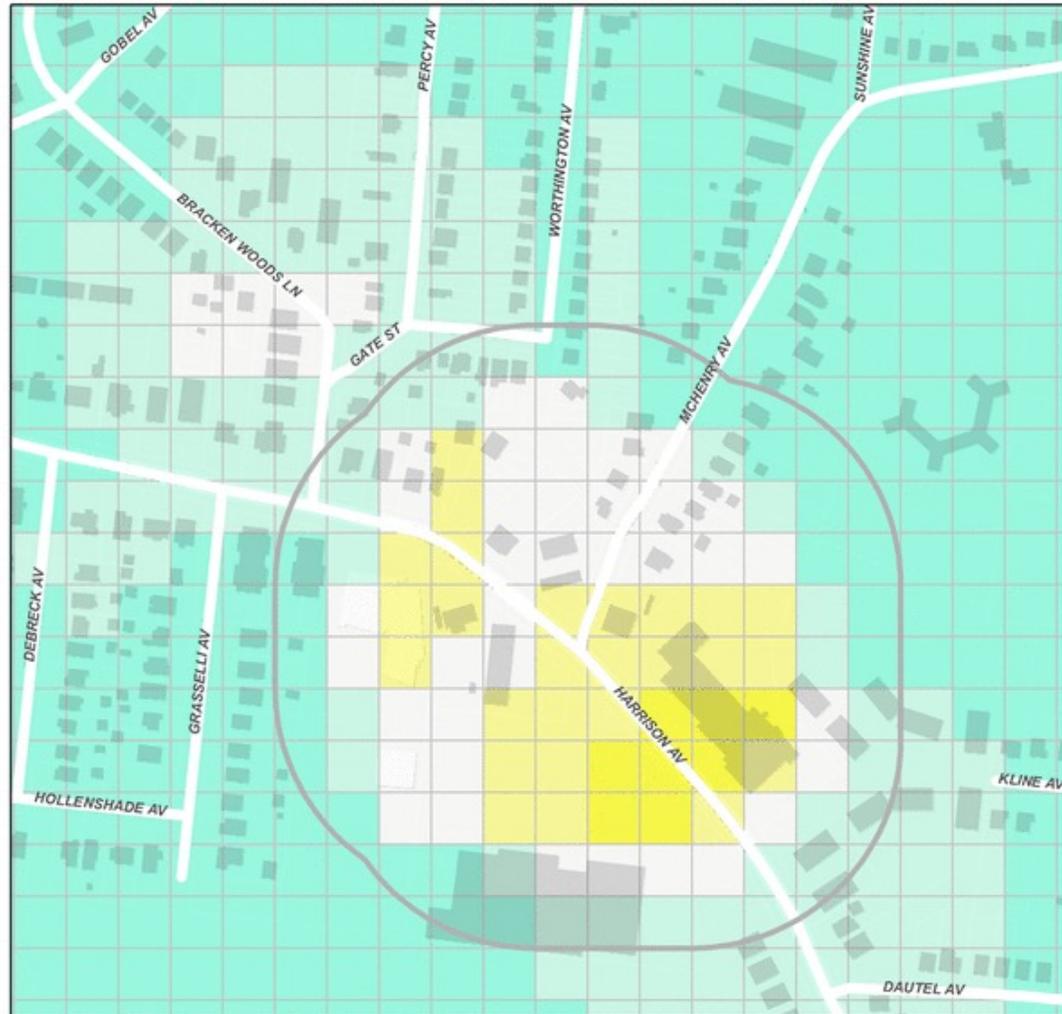
Rest of city = - 8.7%

E. Westwood = - 88.9%

Weighted Displacement
Quotient = -0.139

Target area improved; slight
increase in the buffer area

*Violence Score is a composite metric derived from shootings, robberies, gun offenses, and weapon-related calls-for-service



Site #2: Westwood

Overall Trends

Rest of city = - 7.9%

Westwood = - 71.4%

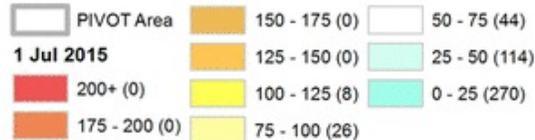
Weighted Displacement

Quotient = 0.811

Buffer area improved;
strong evidence of diffusion
of benefits



0 0.045 0.09 0.18 Miles



Questions Unanswered: Research & Theory

- Why, if we use place network investigations to secure crime locations, is crime less likely to displace geographically?
- What factors make diffusion of benefits more likely?
- How do offenders adapt to the removal of crime place networks?

What are some
implications for
“fair and equitable”
policing?

A photograph of a police car at night with its emergency lights flashing. The car is in the foreground, and the background shows a city street with other vehicles and buildings. The text is overlaid on the right side of the image.

#1

Highlights Limitations of Enforcement-Only Approach to Public Space Risky Facilities

Enforcement in Historically Violent Crime Sites

- Drives down crime (momentarily)
- Generates large numbers of (costly) arrests
- Leaves the rest of the criminogenic place infrastructure intact
- If aggressive and sustained, damages police-community relations
- Continually places officers at-risk for injury and negative public interactions
- Over time, creates substantial racial disparities in justice-related outcomes



#2

Endorsement for
Holistic Governance
Public Safety Models

Dynamics of Opportunistic Violence

Poor Place Management

Illegal dice games

- Unsecured dumpster

Fire department

Accessible illegal guns

- Unkept grass, Abandoned property

Buildings/Inspections

Non-resident Vehicles as Barricades

- Lack of parking restrictions

Traffic/Engineering

Loitering/Intimidation

- Unmanaged parking lots

City Solicitor



Fundamentally alters role of police

Community Ambassadors

Questions Unanswered: Practical Implications

- What types of crime place networks are best addressed by Holistic Governance Public Safety Models?
- What level of supplemental enforcement is necessary at risky facilities?
- Will racial (and other) disparities increase, decrease, or remain the same?



Place Network Investigations

A citywide chronic violence
reduction initiative.

CHAT WITH US!

⚡ We'll reply as soon as we can



www.placenetnetworkinvestigations.com