

~~DON'T GO THERE...~~

Hot Spots, Dens of Iniquity and
Risky Facilities,

or

**Why Do So Many Bad Things Happen
at a Few Places**

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WHAT IS COMMON ABOUT THESE PLACES?

Gas Station, E. Liberty



University Hospital



Drop-In Center



Corryville Shopping Cntr



Alms Apartment



Greyhound Station, Downtown



**They are among the
Top 10 Call Locations
for Cincinnati, 2003**

- 1. University Hospital – 824 calls**
- 2. Corry St. Shopping Ctr – 734 calls**
- 3. Drop-In Center – 532 calls**
- 4. W. Liberty Gas Station – 429 calls**
- 5. Alms Apartments – 419 calls**
- 6. Westwood Apt Complex – 347 calls**
- 7. Westwood Apt Complex – 296 calls**
- 8. Greyhound Bus Station – 288 calls**
- 9. Kenard Ave. Grocery Store – 268 calls**
- 10. Childrens Hospital – 250 calls**

Thanks to Cincinnati PD for data

OVERVIEW

- **Problem**
- **80-20 rule**
- **Theories**
- **Responding**

PROBLEM

- **Crime & Disorder are concentrated**
- **Concentration at places**
- **Why would some places be worse than others?**
- **Concept confusion** (Is this just another hot spot lecture?)

“HOT SPOT” COVERS A MULTITUDE OF SINS IN MANY SCALES

1997 Calls for Service per 1000
Population by Neighborhood

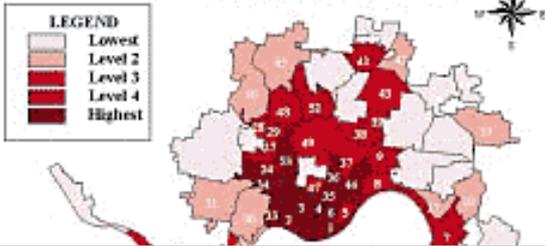


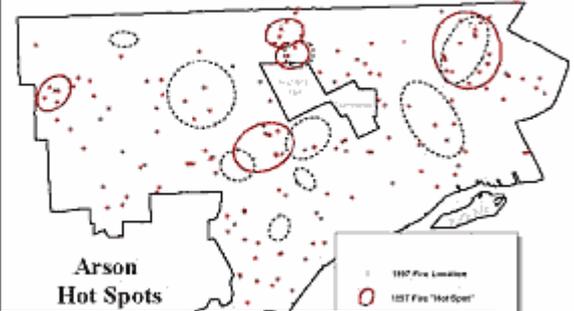
Figure 5.16

(Top) A map showing calls for service in 1997 per 1,000 people by neighborhood in Baltimore.

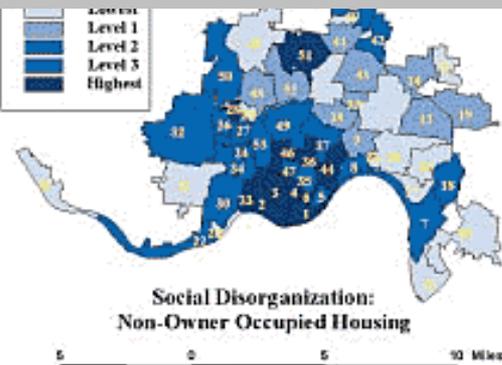
Areas within Neighborhoods

Figure 4.16

Map showing hot spot changes over time: Detroit, 1994 and 1997. Source: Martin, Barnes, and Britt, 1998, figure 3. Reproduced by permission.



Neighborhoods within cities



Map showing hot spot changes over time: Detroit, 1994 and 1997. Source: Martin, Barnes, and Britt, 1998, figure 3. Reproduced by permission.

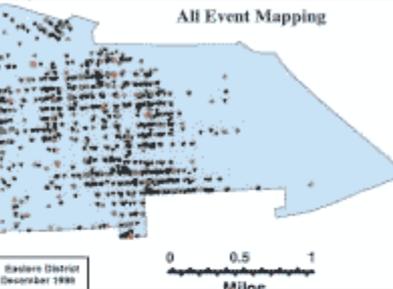
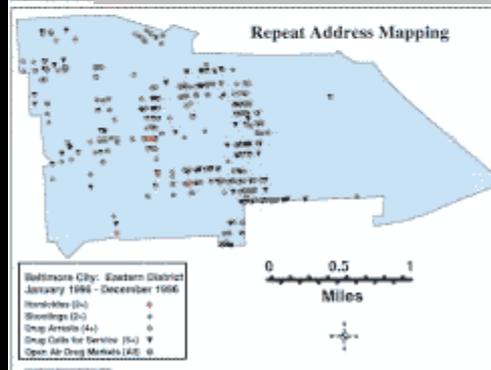


Figure 3.8

A map showing the RAM method applied to data for Baltimore, Maryland. The distinctive difference between the pattern for “all event mapping” and the pattern for “repeat address mapping.” Source: Eck, Gersh, and Taylor, in press. Reproduced by permission.

Places within areas



Illustrations from
K. Harries *Mapping Crime: Principle and Practice*
<http://www.ncjrs.org/html/nij/mapping/index.html>

DENS ARE HOT PLACES

Watch on pubs, clubs to find crime hot spots

By Chee Chee Leung,
Xavier La Canna
January 5, 2004

Fairfax Digital

<http://www.theage.com.au/articles/2004/01/04/1073151212371.html>

Alcohol-related crime in Melbourne's inner suburbs could be traced to specific venues, with a pilot program to identify problem areas and operators. While the \$110,000, one-year pilot program operates, hospitals will be encouraged to electronically transfer information to police when a patient is admitted after an incident in a nightclub precinct, to be investigated when police identify a pattern emerging from particular hotels or nightclubs.



RISKY FACILITY ANALYSIS FOCUS ON A SINGLE TYPE OF PLACE

BARS IN SHAWNEE (KS)
VARY IN THE TROUBLE THEY PRODUCE



A few are hot



Thanks to Susan Wernicke, Shawnee PD

80/20 RULE

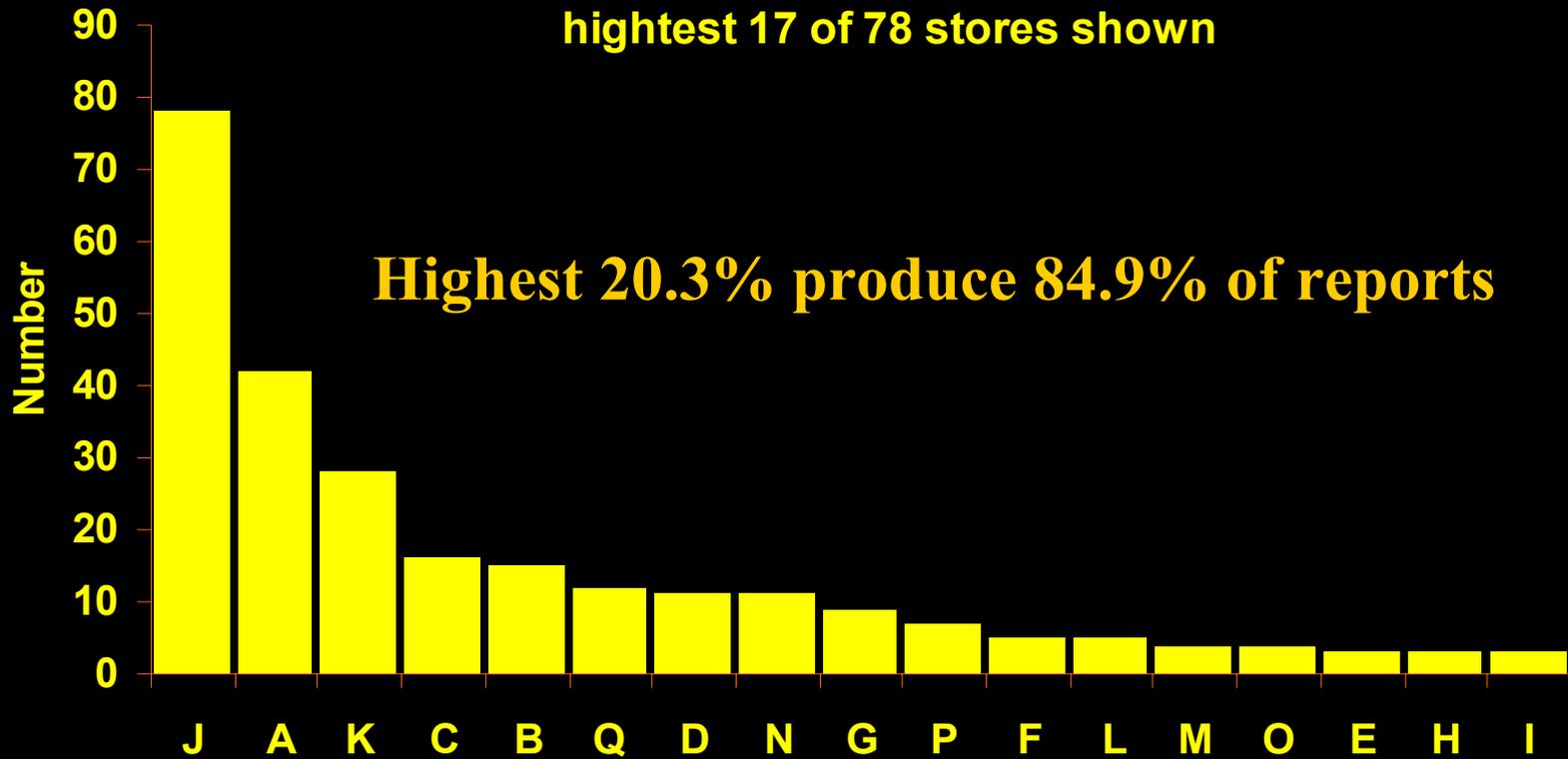
- **Applies to ANY Facility**
- **Seldom Exactly 80-20**
- **Most Facilities Are Cold - A Few Are Hot**
- **Most Bad Things Happen In A Few Facilities – Regardless Type**
- **This Is A Law of Thumb**

Worst 20% (3) of the bars account for 62% of reports

SHOPLIFTING REPORTS, DANVERS (CT) STORES

(October 1, 03 to Sept. 30, 04)

highest 17 of 78 stores shown



Thanks to Christopher Bruce, Danvers PD

Violent Crimes in Apartment Complexes with over 50 Units Jacksonville FL

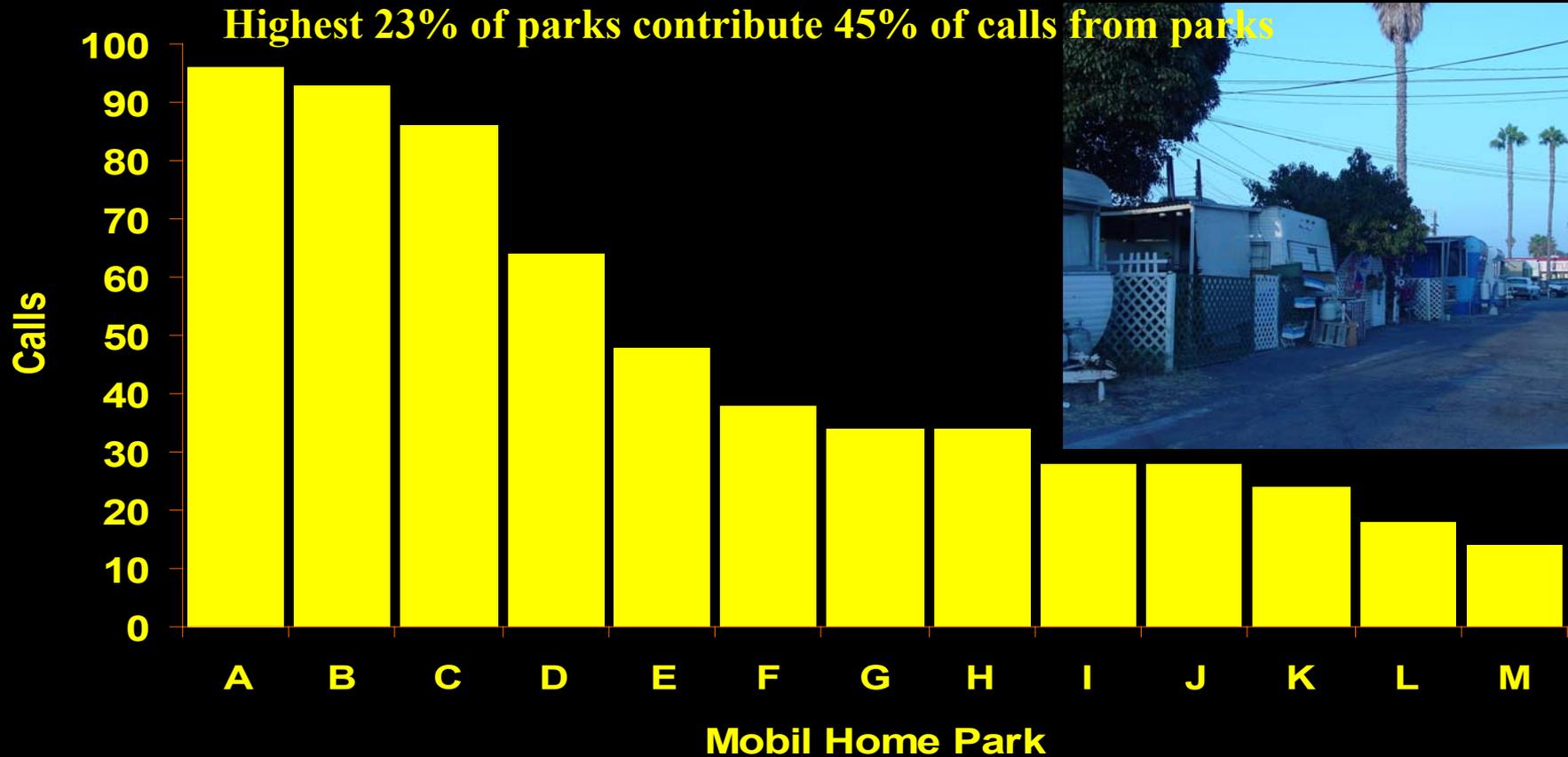


Most violent 20% account for 48% of incidents



Thanks to Stacy Belledin, Jacksonville-Duval SD

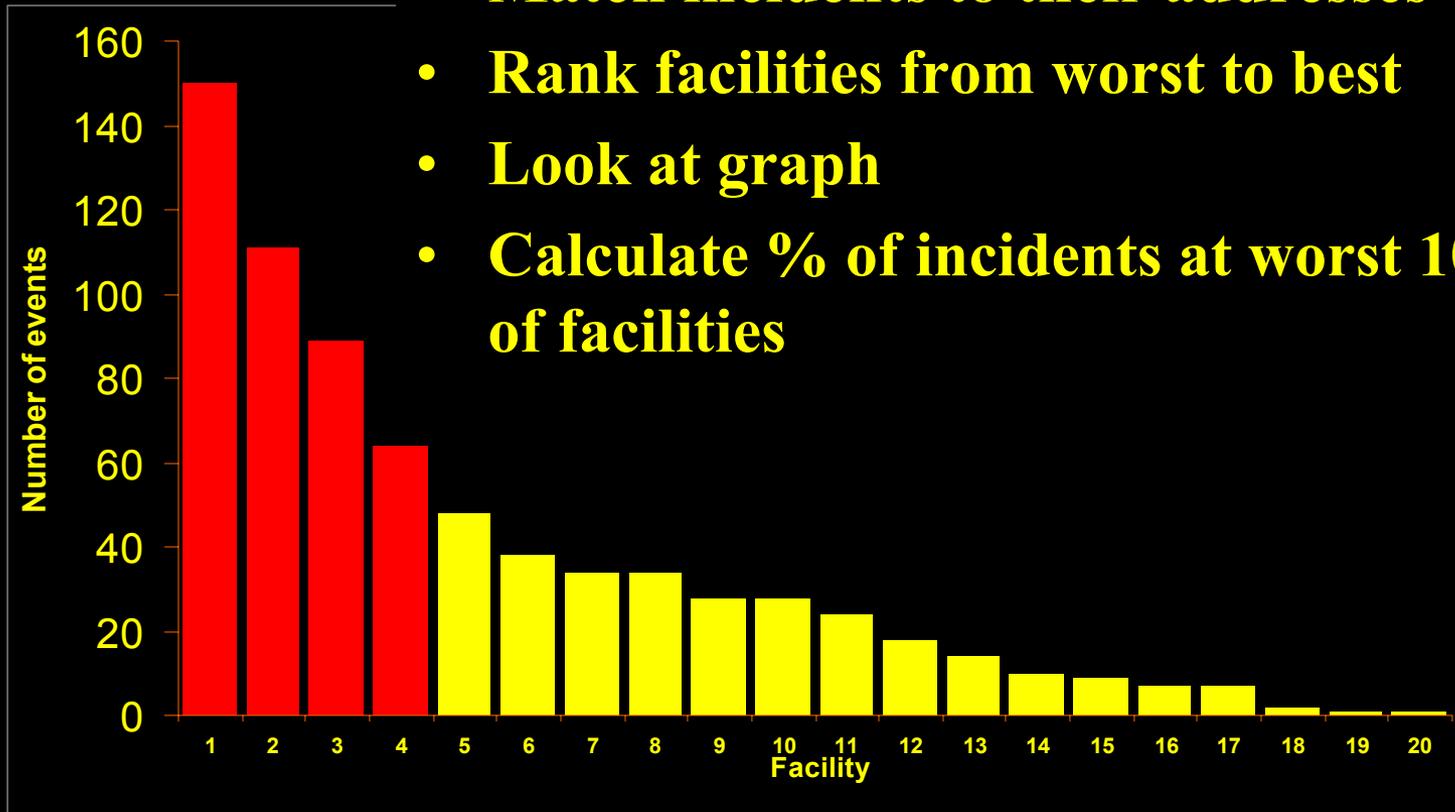
CALLS FROM MOBILE HOME PARKS IN CHULA VISTA CA July 30, 2003 through July 29, 2004



Thanks to Karin Schmerler and Aaron Anderson, Chula Vista PD

SCANNING FOR RISKY FACILITIES

- **Select a facility type important to your agency**
- **Get a list of everyone of them, with their addresses**
- **Match incidents to their addresses**
- **Rank facilities from worst to best**
- **Look at graph**
- **Calculate % of incidents at worst 10% or 20% of facilities**



THEORIES OF CAUSES

- **RANDOM VARIATION**
- **REPORTING**

- **MANY TARGETS/USERS**
 - **Crime generators***
- **LOTS OF OFFENDERS**
 - **Crime attractors***
- **POOR MANAGEMENT**
 - **Crime enablers****

* Brantingham & Brantingham (1995) “Criminality of Place...”

** Clarke & Eck (2003) *Becoming a Problem Solving Crime Analyst...*

RANDOM VARIATION

- **Possible to get concentration in a few places by some fluke of randomness**
- **Most likely when**
 - Few locations
 - Number of events is low
 - Time period examined is short
 - Concentration is low
- **Unlikely in most cases**
 - Statistical tests available
 - If persistently hot over time, probably not random

REPORTING

- Facilities are hot because of organizational reporting behavior, not crimes per se
- Organization controls reporting
 - Shoplifting
 - Thefts from hospital patients
 - Minor assaults in homeless shelters
 - Police arrest statistics
 - etc.
- Less likely when victims can report directly



MANY TARGETS*

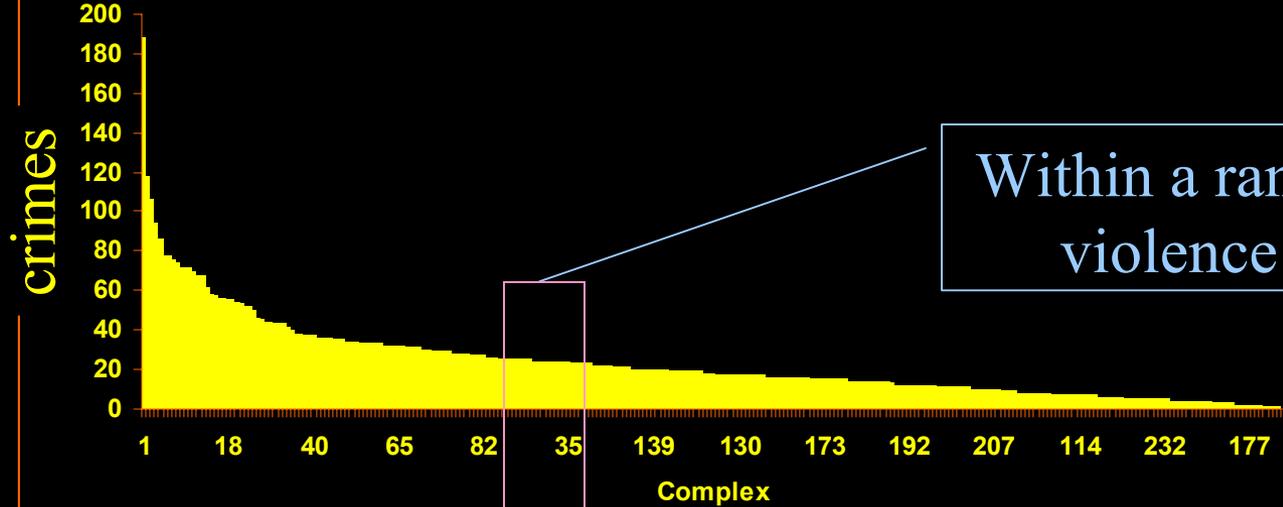
(crime generators)

- **Bigger facilities have more targets**
- **More targets mean more crime**
- **Testable by examining risk – events/size**
- **Watch for two things**
 - Change in shape of graph
 - Change in position of facilities on graph

* AKA the “Size Matters Thesis”

Jacksonville Apartment Complexes (>50 units)

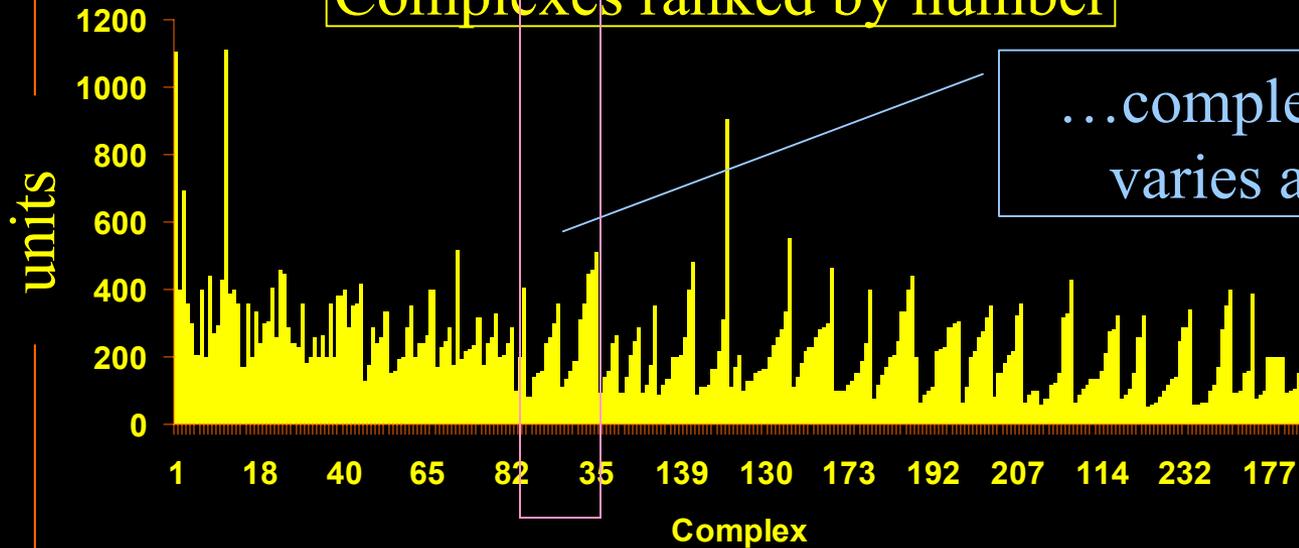
Complexes ranked by number



Within a range of violence...

Sizes of Jacksonville Apartment Complexes (>50 Units)

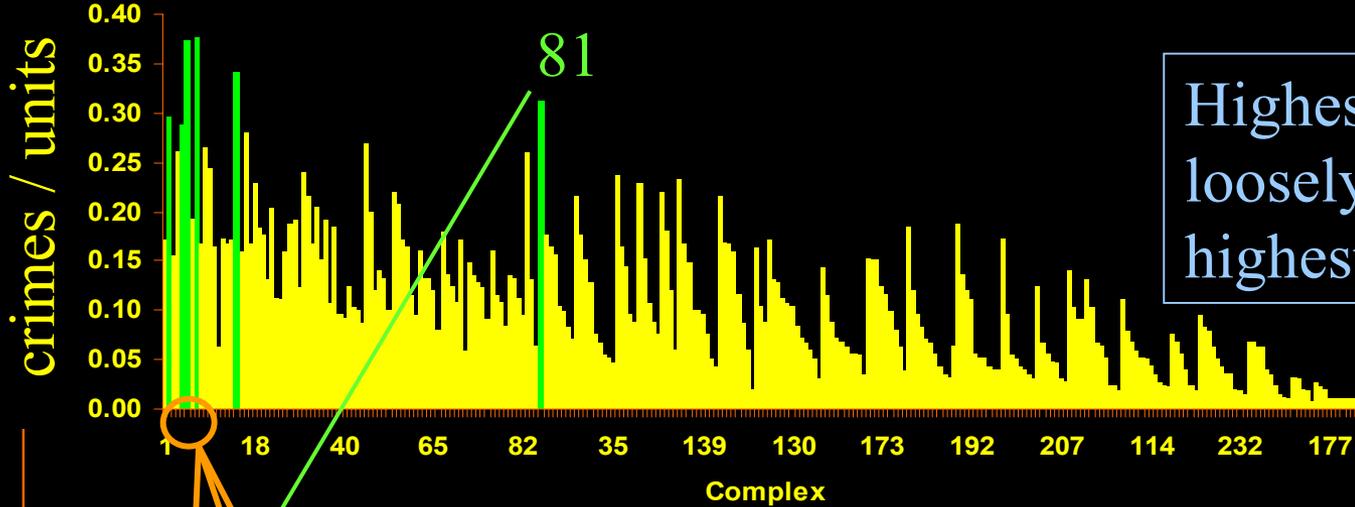
Complexes ranked by number



...complex size varies a lot.

Violent Crime Rate in Jacksonville Apartment Complexes (>50 Units)

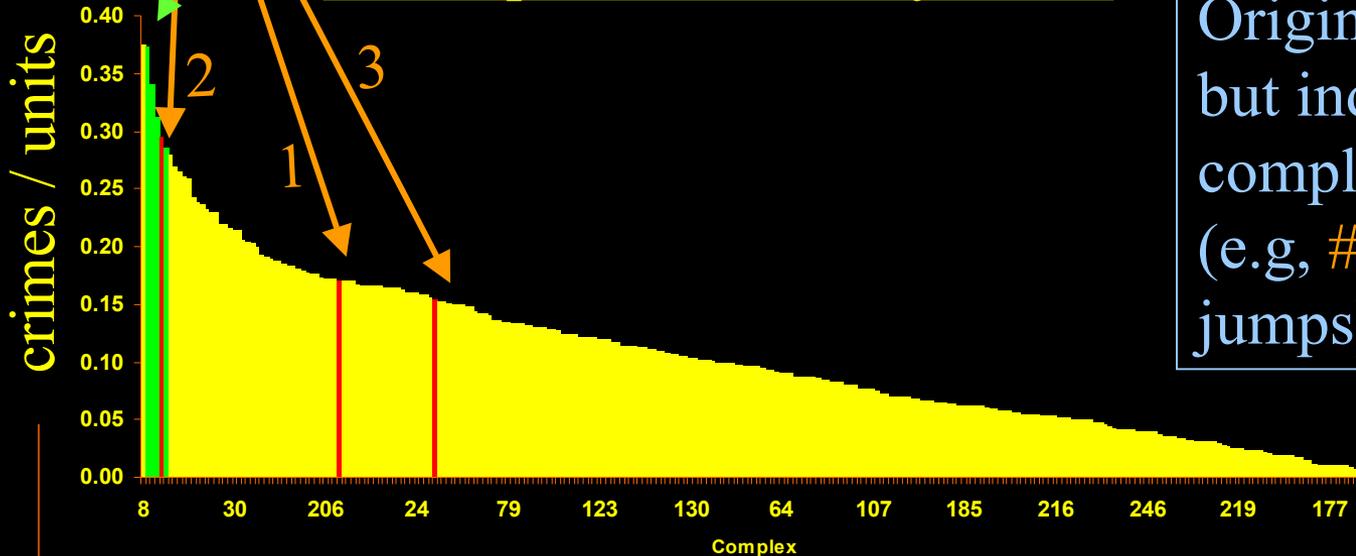
Complexes ranked by number



Highest rates only loosely correspond to highest ranks

Violent Crime Rates in Jacksonville Apartment Complexes (>50 Units)

Complexes ranked by rate



Original shape similar, but individual complexes shift rank (e.g. #3 declines, #81 jumps)

NOTE THE FAMILIAR SHAPE

CHULA VISTA CHAIN HOTELS Calls per Room



**Size is measured by number of rooms.
But there may be other measures you could use.**

Thanks to Karin Schmerler, Chula Vista PD

DOES SIZE MATTER?

- **Hard to tell - often difficult to get size data!**
 - Consistent records often unavailable
 - Measures are often less than ideal
- **Size is often over rated – seldom entire story**
 - Compare graphs of numbers and rates
- **Which to target – high numbers or rates?**
 - to reduce incidents and workload, number
 - to reduce risk, rate

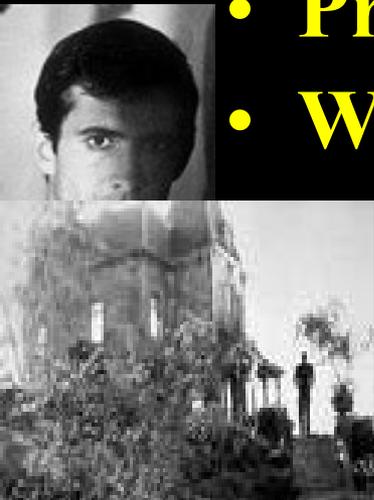
#@\$%
NO!



LOTS OF OFFENDERS*

(crime attractors)

- Common explanation
- Hard to verify
 - Many offenders, or
 - Few very active offenders
- Probably part of all risky facility problems
- Why do offenders come to these places?



*AKA “The Psycho hypothesis.”

POOR MANAGEMENT (crime enablers)

- Owners & employees fail to regulate behavior
- Reduces protection to targets
- Enables offenders
- Common examples include
 - Persistent drug dealing places
 - Violent drinking places
 - Student rental housing
 - Abandoned buildings



WHAT IS POOR MANAGEMENT?

The role of enablers.

- **Make offending less risky through lax guardianship**
- **Do little to reduce rewards for offending**
- **Reduce effort for offending**
- **Allow excuses for misbehavior**
- **Provide provocations for misbehavior**

RESPONDING

- **Randomness** – ignore it (it will go away by itself)
- **Reporting** – create consistent reporting across facilities (to get better picture)
- **Size** – work on biggest contributors to workload
- **Offenders** – work on attractive features
- **Management** – address ownership of problem