IACP Byrne Criminal Justice Innovation (BCJI) Training and Technical Assistance (TTA) Webinar

**Developed by the IACP BCJI TTA
Team including TTA partner,
University of Cincinnati
April 2023**

Using Data To Develop and Assess Collaborative Crime Reduction Strategies

Nicholas Corsaro, Ph.D.

University of Cincinnati
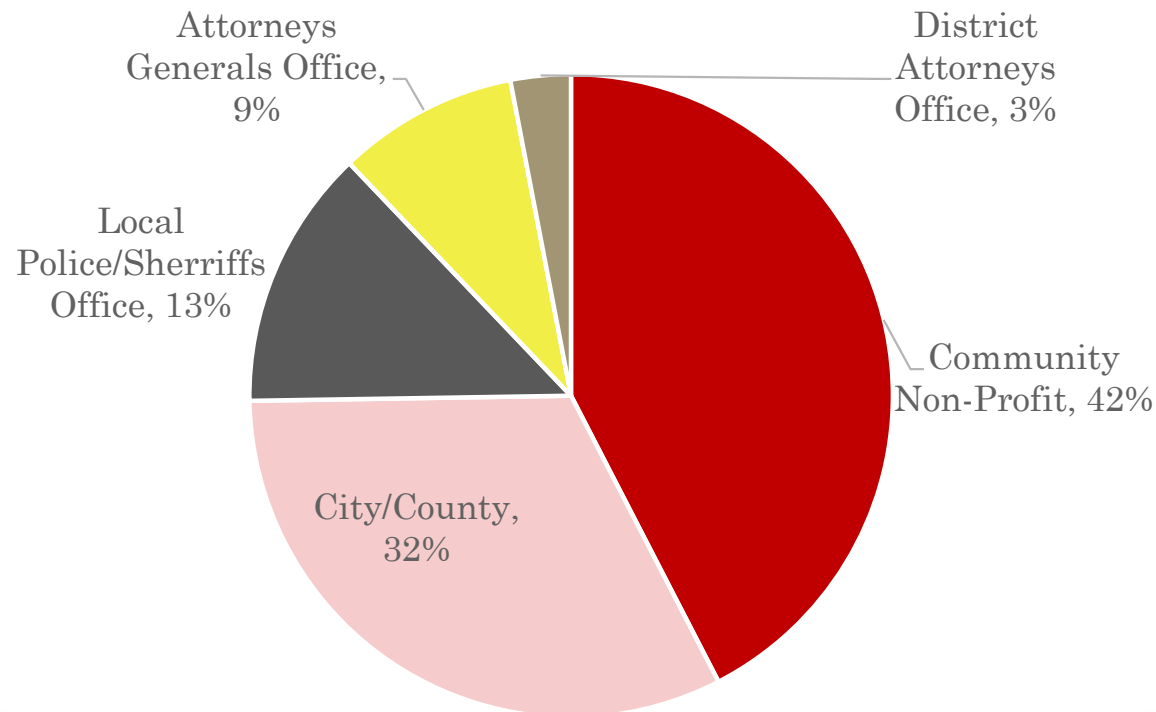
Why This Content Matters

- Successful initiatives have the following dimensions:
    - Interagency working groups with clearly defined roles
    - Use of diverse data structures to identify problems
    - Documentation of process to withstand change

Overview of this Presentation

- Review of data structures and focus area selection from recent BCJI grantee sites
- Analysis of the pros/cons of each data source
  – These lessons learned are valuable for the field at large
- Focus area identification compared with programmatic feedback
- Conclusion: There is a need to diversify outcomes and data structures

UNIVERSITY OF
Cincinnati

FY 2018 – FY 2021 Sites

- 59 BCJI Site Program/Proposals Reviewed by UC/UNLV Team

Pie chart:
- Community Non-Profit, 42%
- City/County, 32%
- Local Police/Sherriffs Office, 13%
- Attorneys Generals Office, 9%
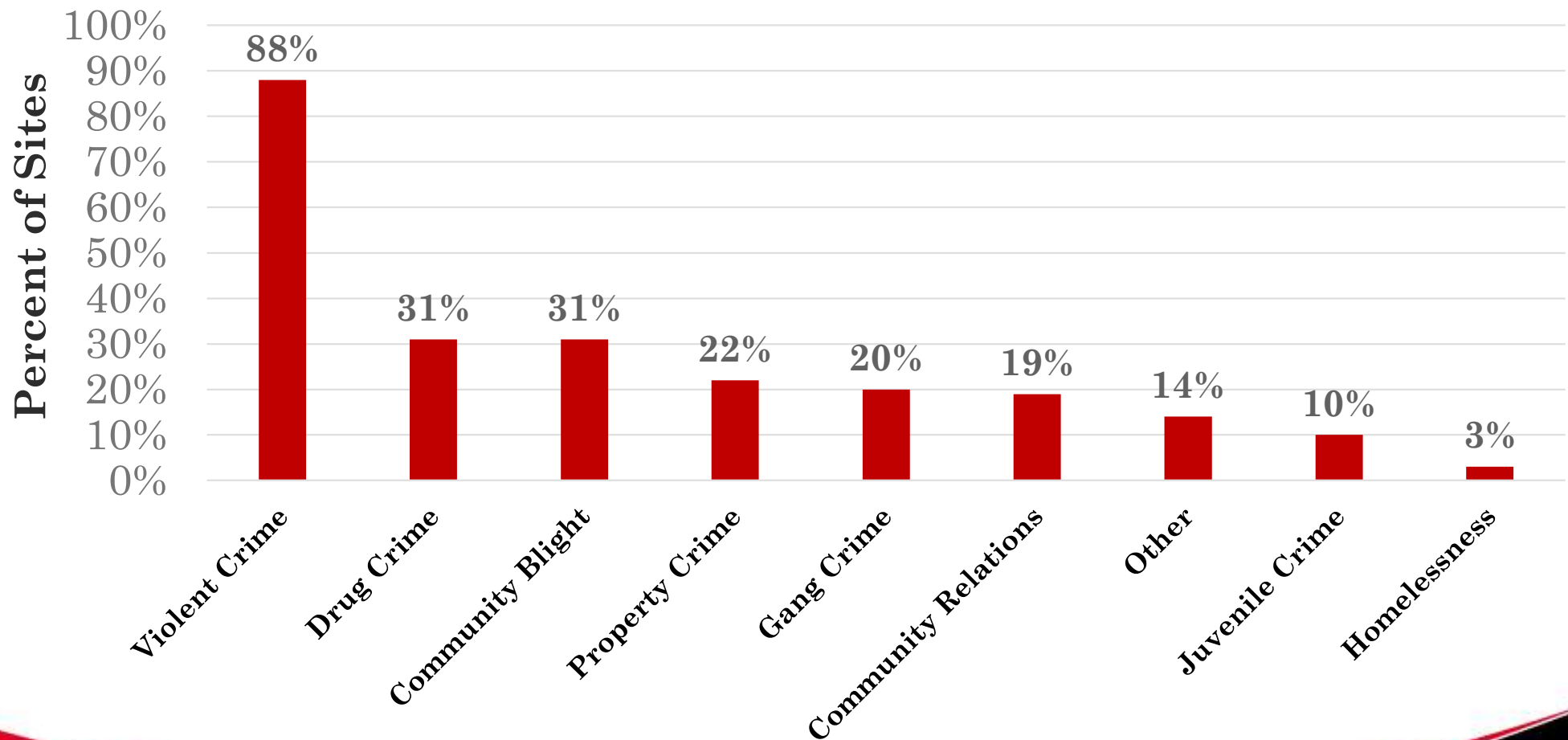- District Attorneys Office, 3%

Selecting a Focus Area

- Data sources:
  - Input from community members (81%)
  - Crime mapping (76%)
  - Input from police department (68%)
  - Input from community partners and stakeholders (63%)
  - Mapping of calls for service data (24%)
  - Asset mapping (14%)

UNIVERSITY OF Cincinnati

Selecting a Focus Area

- 57% of sites focusing on community member feedback used mapping

- 100% of sites that focused on community member feedback (without mapping) – used joint feedback (community partners and/or police)

- **NOTE**: Sites that focus on community feedback as a primary outcome also rely heavily on police data
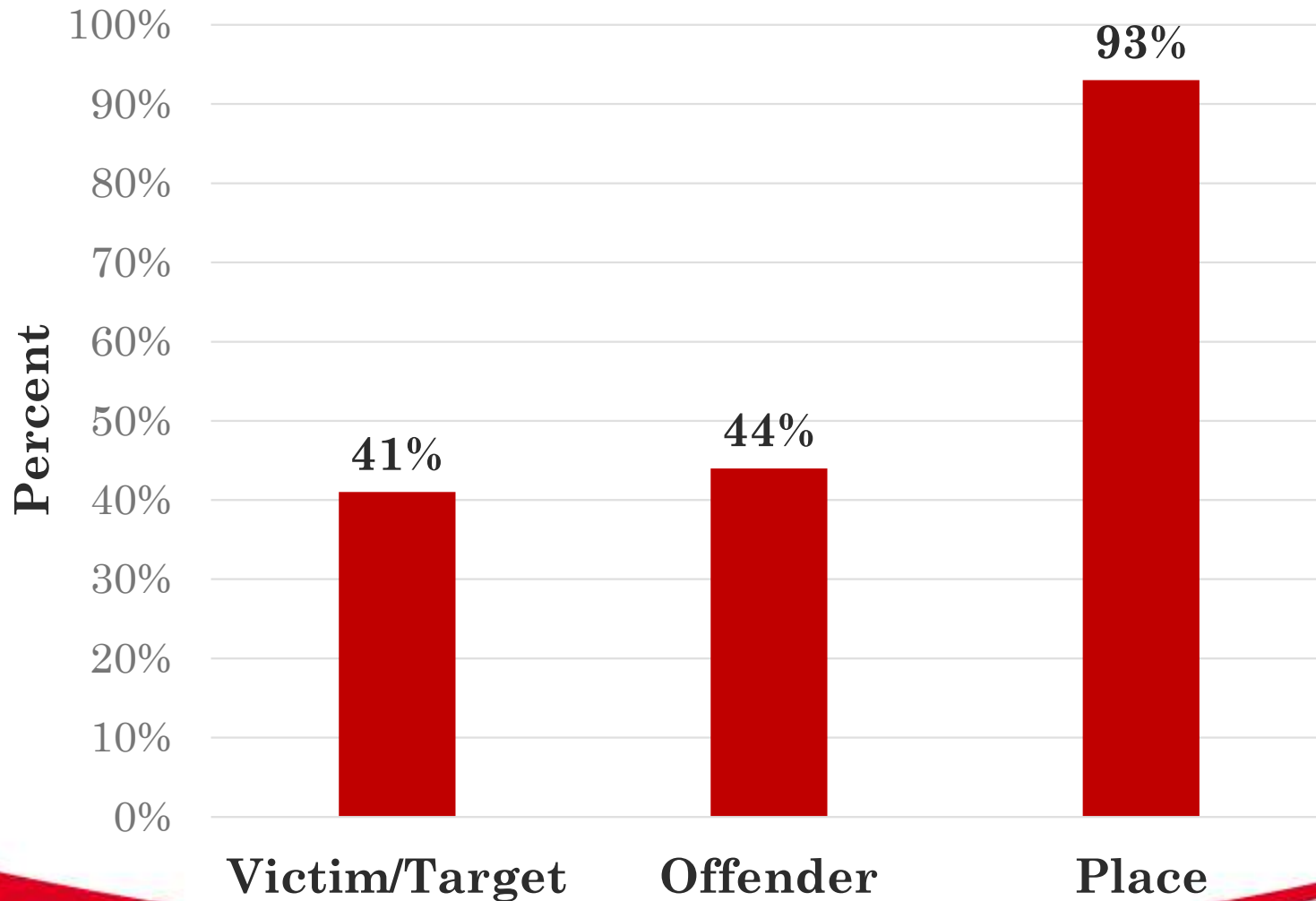
UNIVERSITY OF
Cincinnati

Selecting Crime Problems to Address

Selecting Crime Problems to Address

- Overlap among outcomes
  - Over 80% of the gang, drug, and community blight concentrations also focused on violence
  - For sites that focused on property crime, 60% focused on violence, while 62% focused on drug locations
  - **No one type of outcome mattered most**
  - Extreme overlap between drugs, guns, gangs, violent crime, and property crime focus across sites

UNIVERSITY OF Cincinnati

Victim, Offender, or Place

Crime Problem Data Sources

Data Type	Planning	Outcomes
Official crime data	100% (59)	100% (59)
Community survey	80% (47)	66% (39)
Calls for service	53% (31)	46% (30)
Focus groups with community residents	53% (31)	36% (21)
Arrest data	51% (30)	51% (30)
Property data/records	49% (29)	22% (13)
Community member interviews	42% (25)	36% (21)
Stakeholder focus groups	31% (18)	17% (10)
Gang/group audit	29% (17)	24% (14)
Socio-economic data	29% (17)	12% (7)
Stakeholder interviews	20% (12)	14% (8)
EMS data	20% (12)	9% (5)

UNIVERSITY OF Cincinnati

Key Data Requirements

Summary points:

- 100% of sites relied on official crime data (this includes community focused programs)

- 93% of sites used place-based focus

- 81% of sites relied on community-member feedback

- 66% used community surveys as outcomes (this includes many police-led initiatives)

- 51% relied on the use of arrest data

Offense Data

- NIBRS vs UCR data (change)
- Specific offenses vs. total offenses
- Demographics by offense (e.g., youth crimes)
- Long-term trends vs. latest trends
- Mapping coordinates vs. geocoding addresses

UCR to NIBRS Changeover

Current UCR Reporting vs. NIBRS	UCR	NIBRS
Collects data on homicide, rape, robbery, aggravated assault, burglary, motor vehicle theft, larceny theft, and arson	X	X
Employs a Hierarchy Rule that only recognizes the most extreme crime within a particular incident	X	
Collects data on as many as 10 criminal offenses within a particular incident		X
Collects incident and arrest data on 52 Group A offenses and arrest data on 10 Group B offenses		X
Documents animal cruelty, extortion, and identity theft offenses		X
Has Crime Against Persons and Crime Against Property categories	X	X
Includes a Crime Against Society category		X
Gathers incident-related data, including the relationships between victims and offenders, types and quantities of drugs involved, and types of property that were damaged or stolen		X

Severity-Frequency Decision

- Parallel to domestic terrorism acts (study in Israel) – by Pizam et al. 2002

- Regardless of severity, events lead to serious problems that:
  - Occur at high frequency
  - Regular intervals

- Similar in addressing violence – consistent occurrence is primary
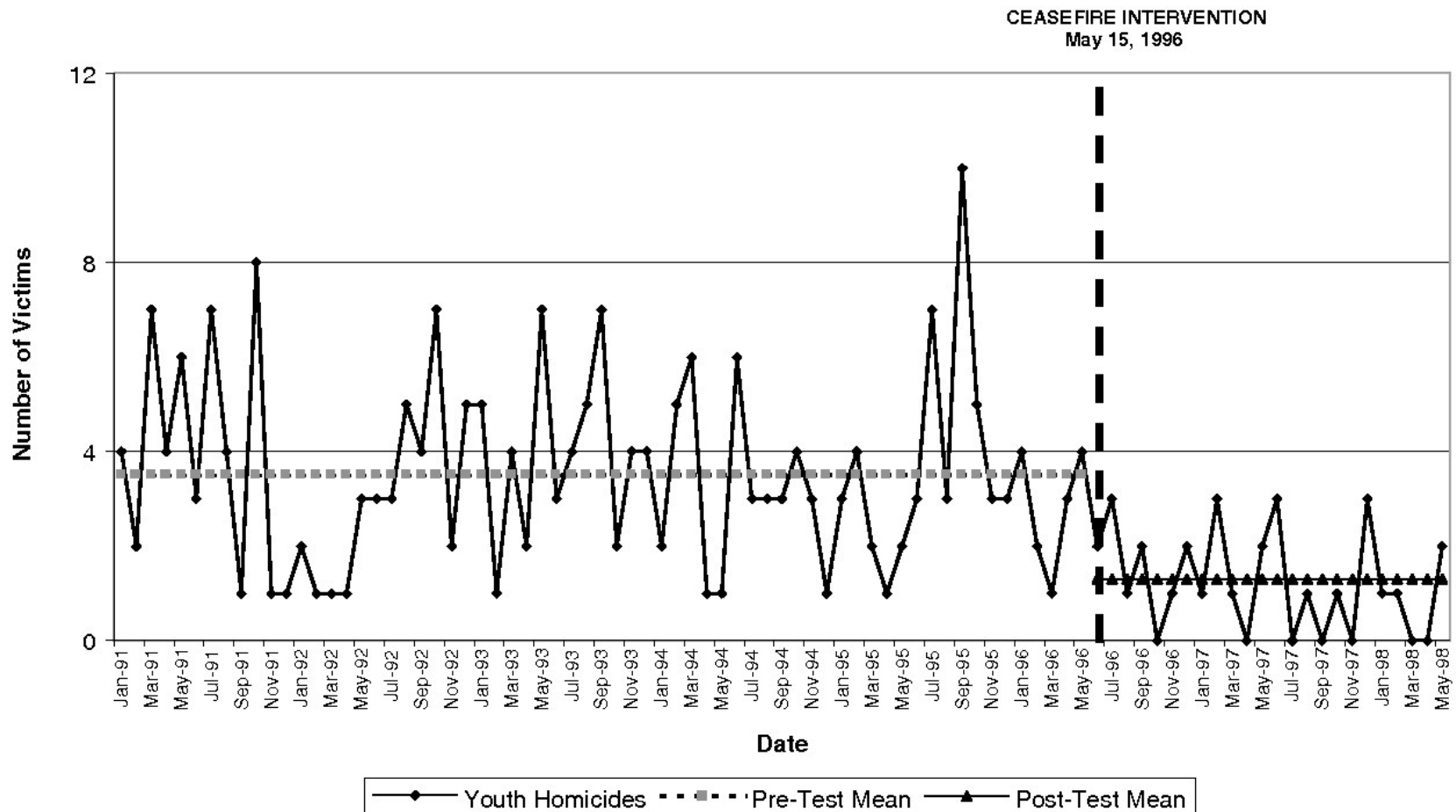
Severity-Frequency Decision

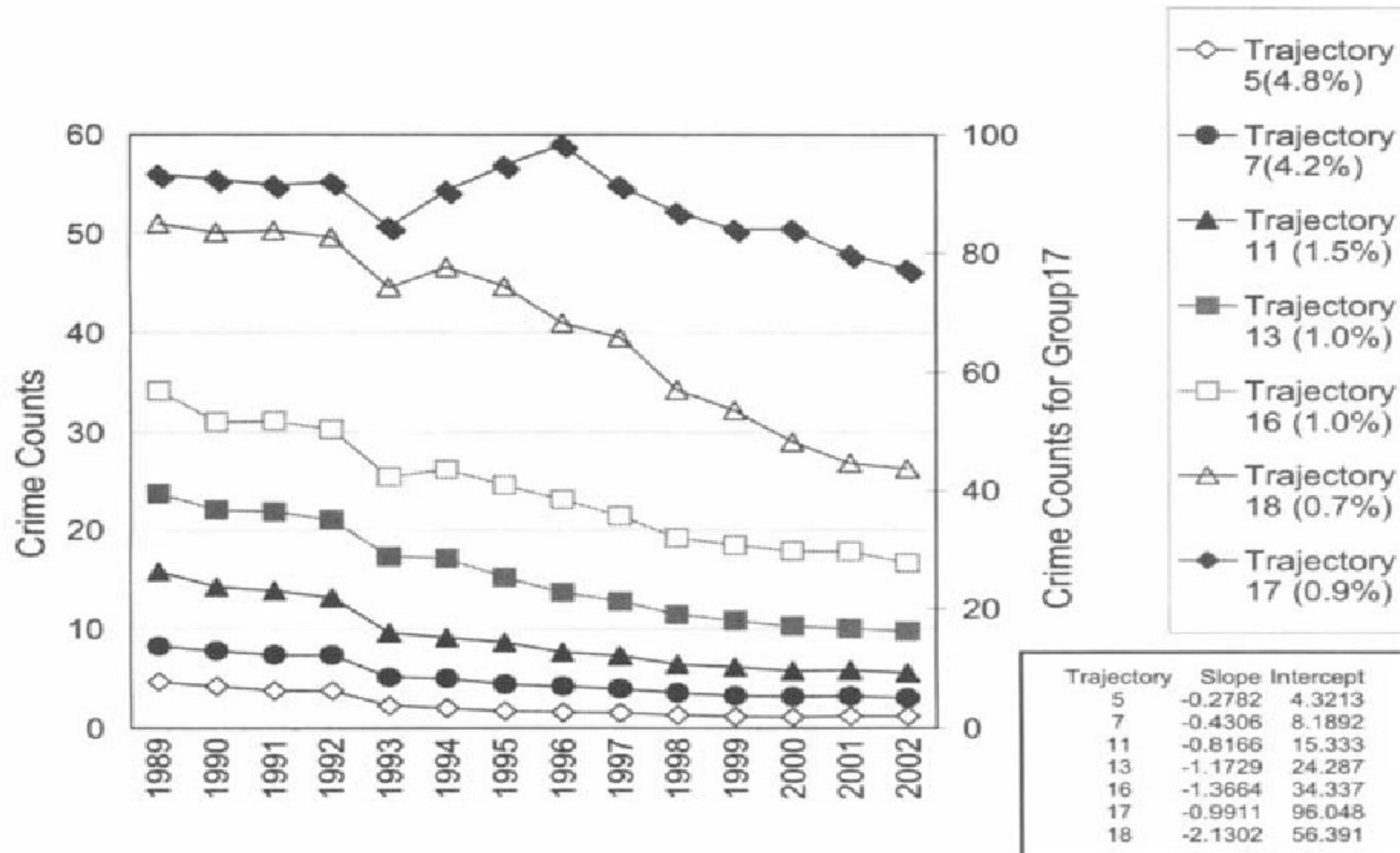|	
Low frequency Low severity Retain Risk	Low frequency High severity **Insurable Risk**
High frequency Low severity Budget for Risk	High frequency High severity Avoid Risk

UNIVERSITY OF
Cincinnati

Demographics by Offense

- Not all offenses are the primary focus of a strategy
  - Sometimes youth offenses are a focus
  - Time-based offenses (those that occur at certain segments in the day – e.g., hot spots policing)
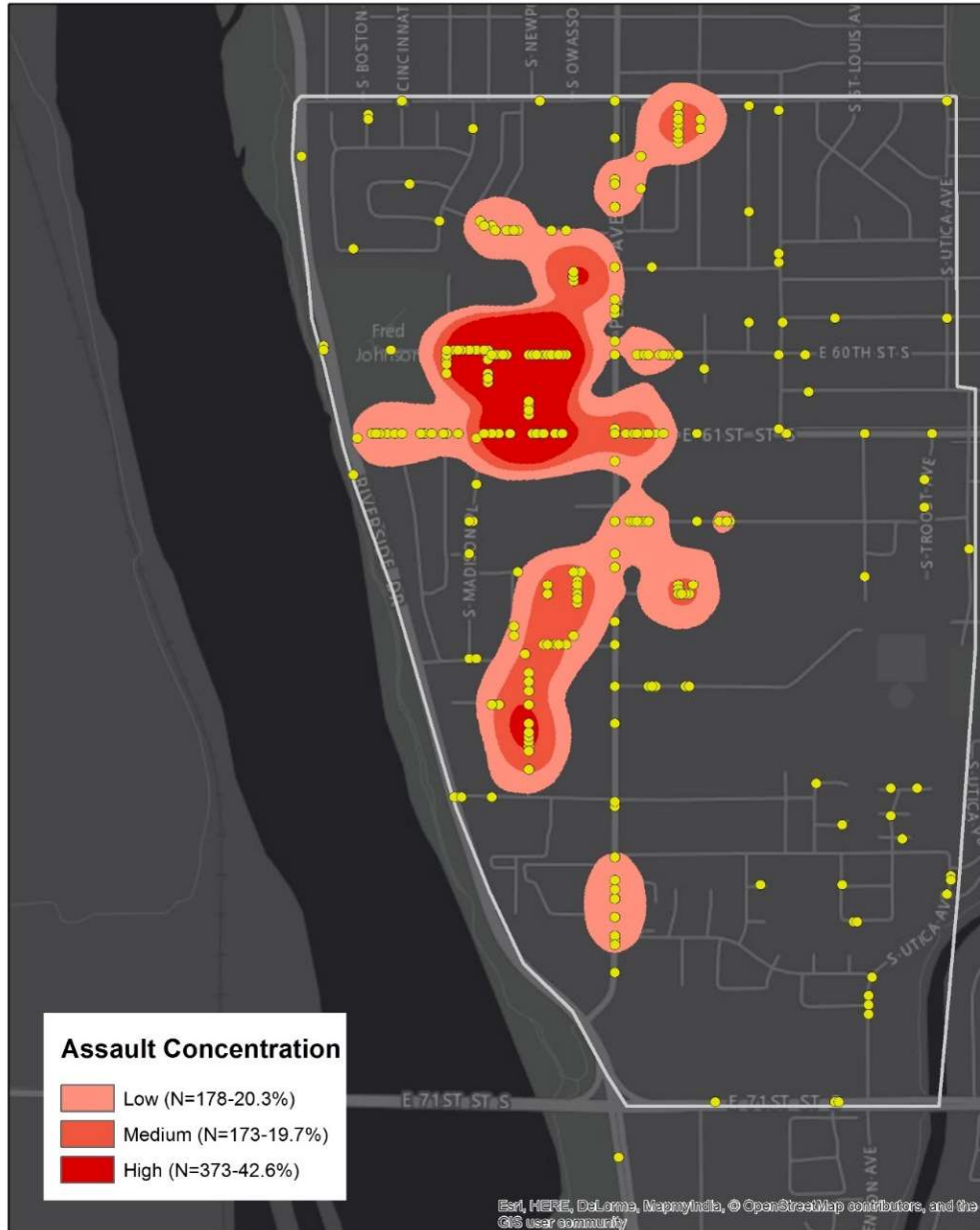 - Recidivism among high-risk offenders (prior arrests and age)

UNIVERSITY OF
Cincinnati

Youth Homicides
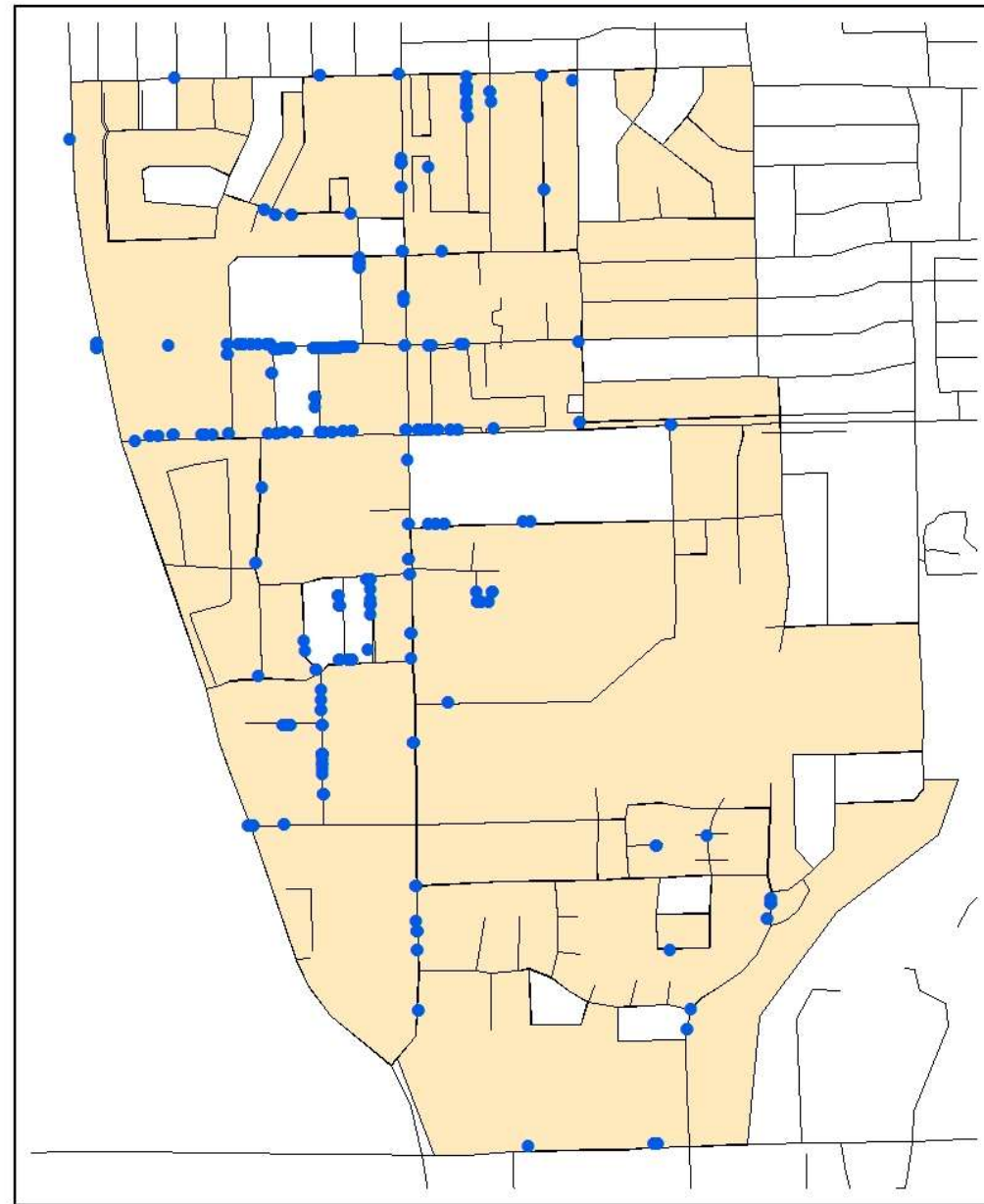
Long vs Short Term Trends

Mapping Hot Spots

Assault Hot Spots in 61 St and Peoria Area

Assault Concentration

Low (N=178-20.3%)

Medium (N=173-19.7%)

High (N=373-42.6%)

PLACES THAT HAVE MORE THAN TWO ASSAULTS

Survey Methodology

- Critical for police-community engagement (IACP, 2021)
- Phone, in-person, door-to-door
- If door-to-door, who is conducting?
- QR codes are available for online surveys (e.g., SurveyMonkey)
- Tulsa survey example

Survey Methodology

- Austin Rundberg Survey
  - Door-to-door solicitation of survey respondents (Springer et al., 2017)
    - Demographics
    - How long lived in community
    - List top 3 problems in your neighborhood
    - How safe feel in neighborhood
    - How often observe police presence
    - Do you know any neighborhood officers by name
    - Desire for police presence

Feedback Throughout

- Critical for researchers to provide or guide feedback process throughout project (not just at the beginning and end)
  - Collaborative research (engaged scholarship) requires participating in meetings, and detailing and managing processes
- Pre/post time between events; event count changes; violent crime score change; etc.
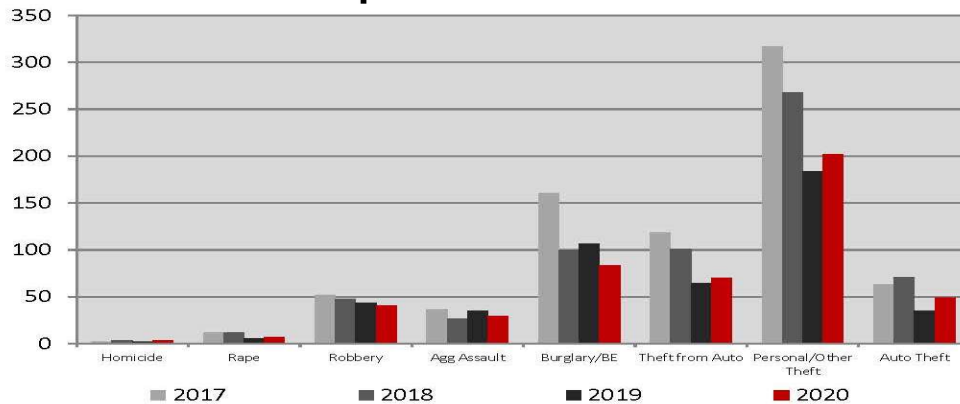
Data-Driven (Project Duration)
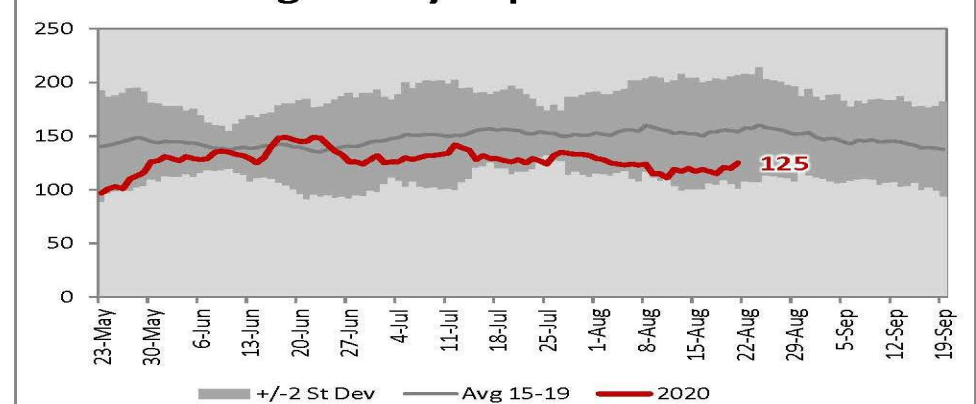
East Price Hill Neighborhood Report

East Price Hill					Year-to-Date: 22-Aug		
Part 1 Crime	2017	2018	2019	Avg: 2017-9	2020	% Change: Avg / 20	% Change: 2019 / 2020
Homicide	2	4	2	2.7	4	50.0%	100.0%
Rape	12	12	6	10.0	7	-30.0%	16.7%
Robbery	52	48	44	48.0	41	-14.6%	-6.8%
Agg Assault	37	27	35	33.0	30	-9.1%	-14.3%
Total P1 Violent Crime	103	91	87	93.7	82	-12.5%	-5.7%
Burglary/BE	161	100	107	122.7	84	-31.5%	-21.5%
Theft from Auto	119	101	65	95.0	70	-26.3%	7.7%
Personal/Other Theft	317	268	184	256.3	202	-21.2%	9.8%
Auto Theft	63	71	35	56.3	49	-13.0%	40.0%
Total P1 Property Crime	660	540	391	530.3	405	-23.6%	3.6%
Total P1 Crime	763	631	478	624.0	487	-22.0%	1.9%

East Price Hill					Rolling 28 ending: 8/22/2020		
	Period 4	Period 3	Period 2	Period 1		% Change:	
Part 1 Crime	05/03/20 - 5/30/20	05/31/20 - 6/27/20	06/28/20 - 7/25/20	07/26/20 - 8/22/20	P3-P1	P2-P1	
Homicide	0	1	1	2	100.0%	100.0%	
Rape	2	2	1	1	-50.0%	N/C	
Robbery	10	3	8	7	133.3%	-12.5%	
Agg Assault	3	7	4	4	-42.9%	N/C	
Total P1 Violent Crime	15	13	14	14	7.7%	N/C	
Burglary/BE	11	13	10	10	-23.1%	N/C	
Theft from Auto	8	1	8	5	400.0%	-37.5%	
Personal/Other Theft	21	39	27	21	-46.2%	-22.2%	
Auto Theft	7	4	6	8	100.0%	33.3%	
Total P1 Property Crime	47	57	51	44	-22.8%	-13.7%	
Total P1 Crime	62	70	65	58	-17.1%	-10.8%	

Part One Reported Offenses: 2016-19

Rolling 28 Day Reported Offenses

Project Sustainability

- Some projects receive direct funding to assist in the economics of personnel and resources
  - All funded projects end their funding at some point
  - To avoid the light switch "off/on/off" dimensions, long term sustainability requires a documented and involved process
  - Use of divergent data sources with clear operational goals is the key to sustainability for any projects (funded/unfunded/formerly funded)

Project Take-Aways

- Examine official crime data, see what the patterns are
- Use different data sources to unravel other patterns (do not rely only on one)
- Use data to develop both (equally important):
  – Process measures
  – Outcome measures
- Do not deviate heavily from the target, but allow other softer targets to come into view so long as they're in-line with the mission

Contact Information

Nicholas A. Corsaro, Ph.D.

University of Cincinnati

nicholas.corsaro@uc.edu

(513) 556-1967

UNIVERSITY OF
Cincinnati