


# Analyzing Crime Displacement & Diffusion

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“We know that they (offenders) will go to other places to commit crime, but as long as it is outside of our jurisdiction, we don’t care.”

Police Officer

# Forms of Displacement

- **Crime displacement** - the shift of crime due to the preventive actions of the individual or society; five types:
  - Spatial
  - Temporal
  - Target
  - Tactical
  - Offense
  
- Sometimes a 6<sup>th</sup> is id.ed: Perpetrator or Offender

Source: Guerette and Bowers (2010).

**Table 1:  
The Extent of Displacement and Diffusion by Type**

Study N = 102		Displacement	Diffusion of Benefit
Type	Examinations Frequency (%)	Observed Frequency (%)	Observed Frequency (%) <sup>‡‡</sup>
Spatial	272 (47%)	62 (23%)	100 (37%)
Offense	140 (24%)	36 (26%)	22(16%)
Target	80 (14%)	26 (33%)	19 (24%)
Tactical	49 (9%)	11 (22%)	6 (12%)
Temporal	31 (5%)	11 (36%)	5 (16%)
Total	572	146 (26%)	152 (27%)

<sup>11</sup> Column percentages are reported (e.g., percent of the overall number of inspections (n = 572).

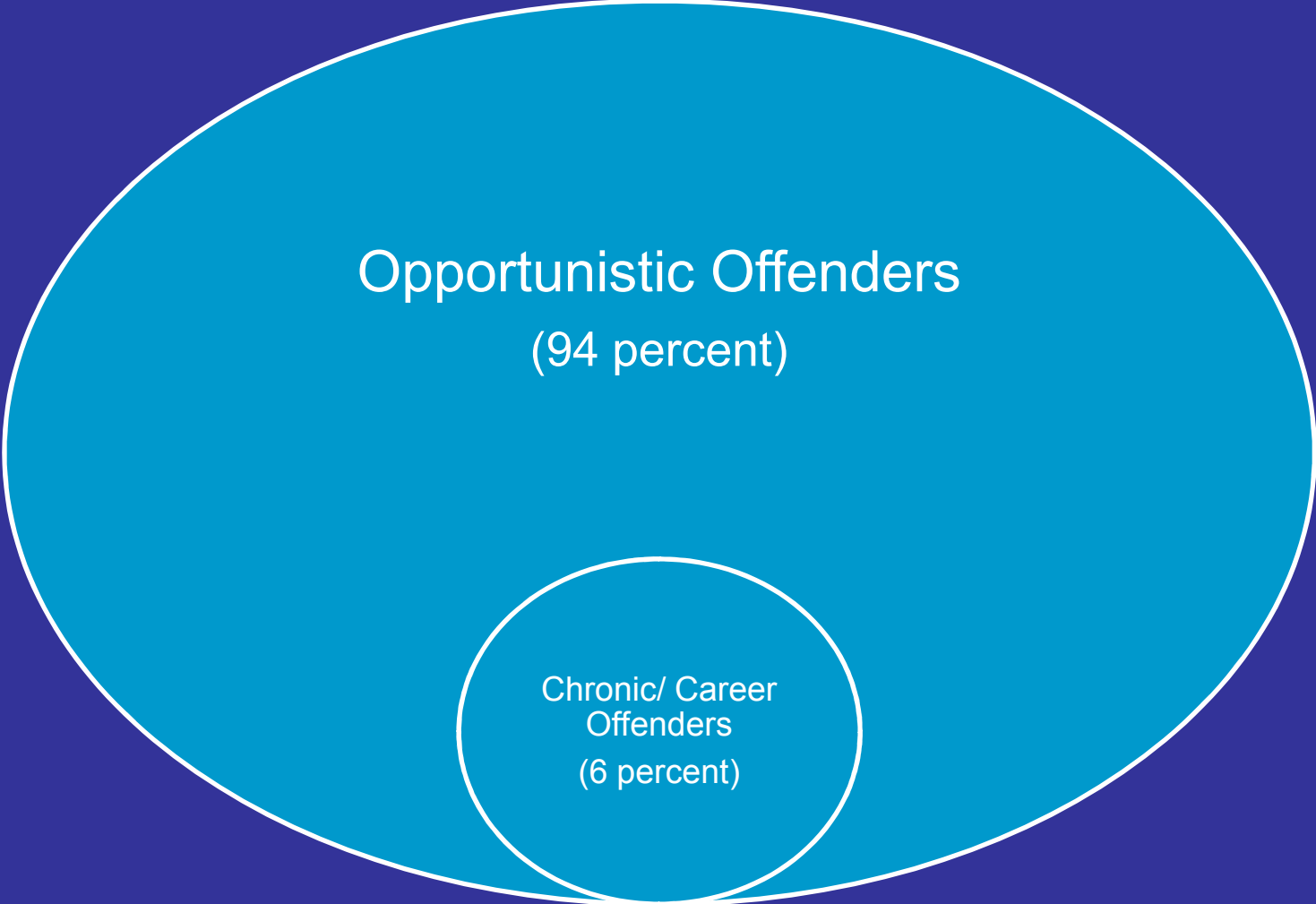
<sup>12</sup> Row percents are reported (e.g., percent of those inspections of specific displacement/diffusion type).

<sup>13</sup> Does not equal the number of studies in the review (i.e. 102) since several studies examined multiple forms and multiple inspections of displacement/diffusion.

# Predictors of Displacement

- Extent of displacement is determined by three factors:
  1. Offender motivation
  2. Offender familiarity
  3. Crime opportunity

# Offender Motivation

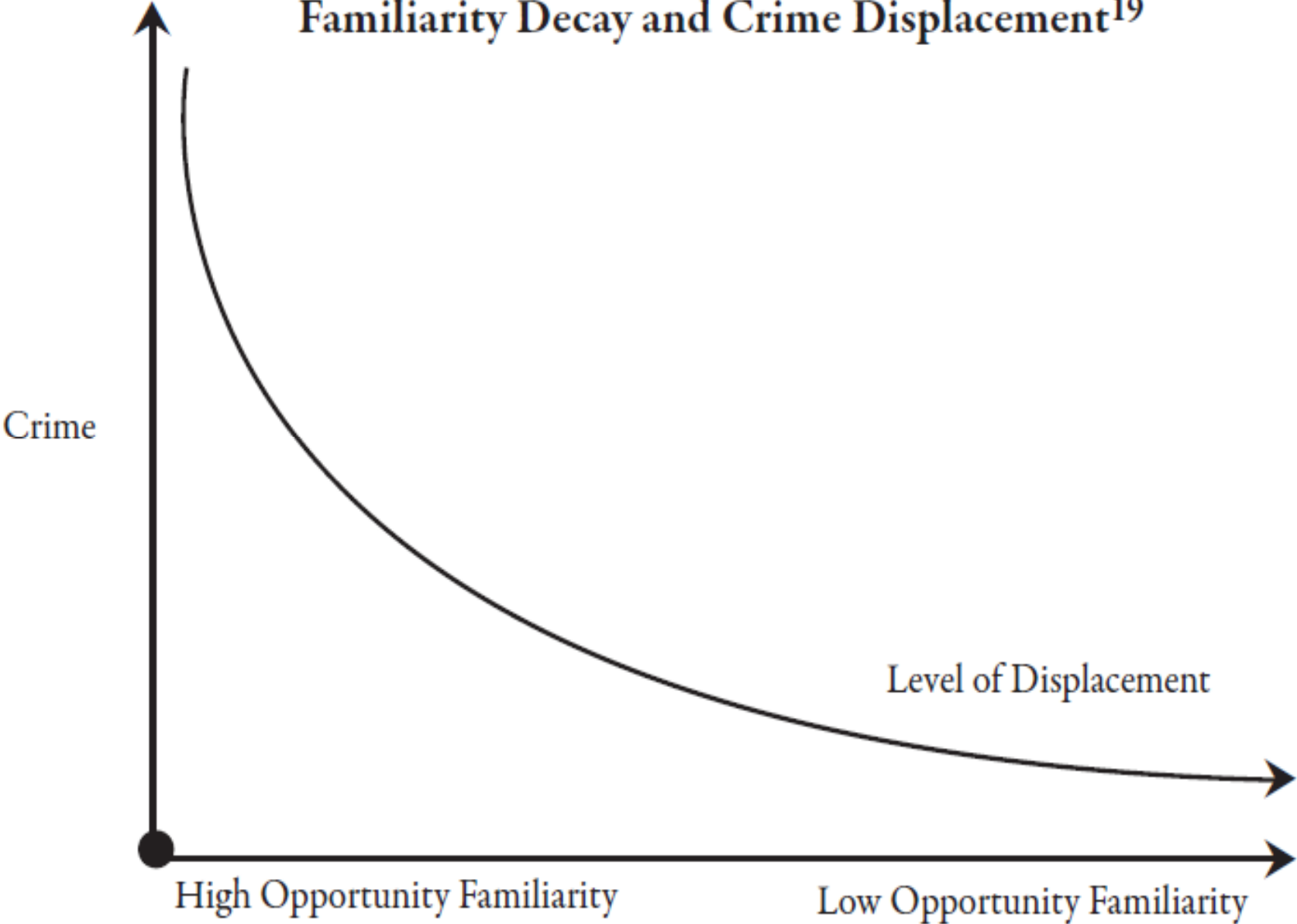


Opportunistic Offenders  
(94 percent)

Chronic/ Career  
Offenders  
(6 percent)

Figure 1:

Familiarity Decay and Crime Displacement<sup>19</sup>





# Thus, displacement may not occur since:

- Offenders “how to” knowledge is bounded.
- Offenders less likely to offend when unfamiliar conditions exist.
- Motivated offenders will have learning and search curve, that takes time.
- Opportunistic offenders are likely to desist from crime.
- Some offenders have “time windows” to commit crime.
- Illicit markets often informally regulated (i.e. turf zones).



# Types of Displacement

- Benign displacement –
  - the argument that changes from displacement may benefit society
- Malign displacement –
  - idea that efforts aimed at reducing crime may prompt an increase in offending or more serious

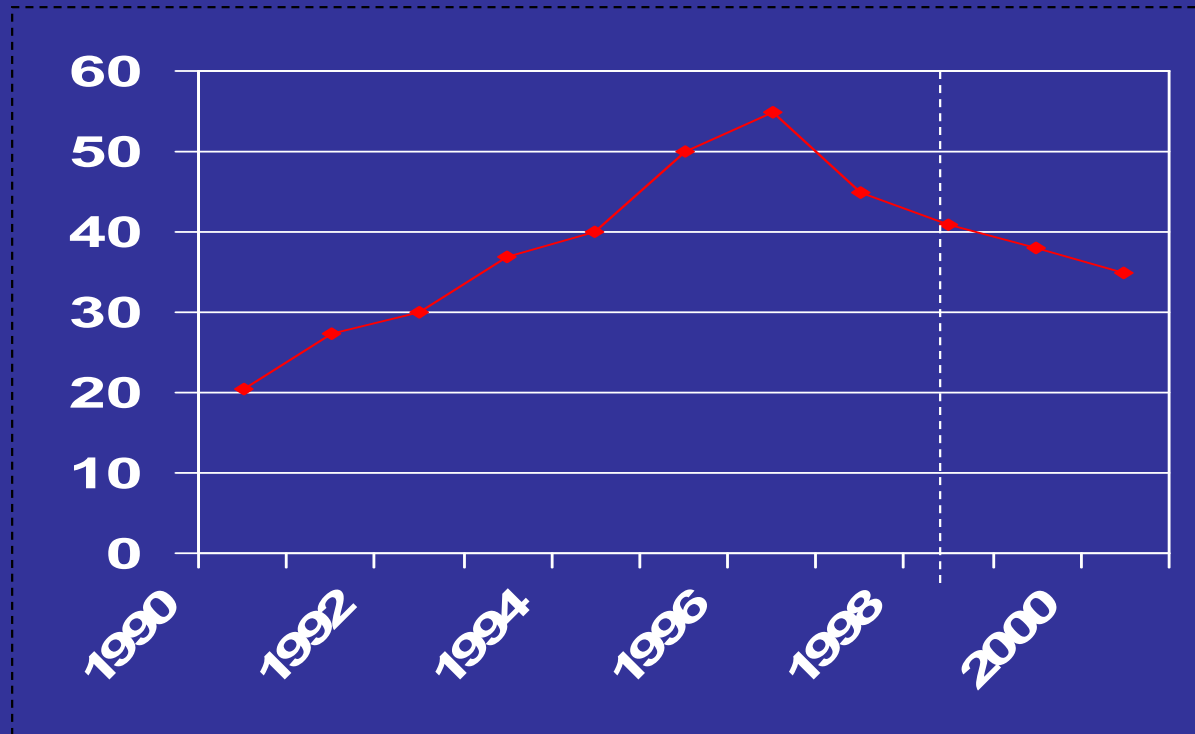
# Forms of Benign Displacement

- Crime shift is less *serious* (such as the shift to petty thefts from robbery).
- Crime shift is less *impactful* on the community, which can occur three ways:
  1. The concentration of crime is redistributed across a larger pool of *victims*.
  2. The crime is transferred away from more *vulnerable groups* of the population, such as children and the elderly.
  3. The crime is relocated to *places* where the community impact is less harmful.
- The crime shift is lower in volume.

# Displacement reversed

- **Diffusion of benefits** - the opposite of displacement.
  - “the spread of the beneficial influence of an intervention beyond the places which are directly targeted, the individuals who are the subject of control, the crimes which are the focus of intervention or the time periods in which an intervention is brought” (Clarke & Weisburd, 1994: 169).

# Anticipatory benefits



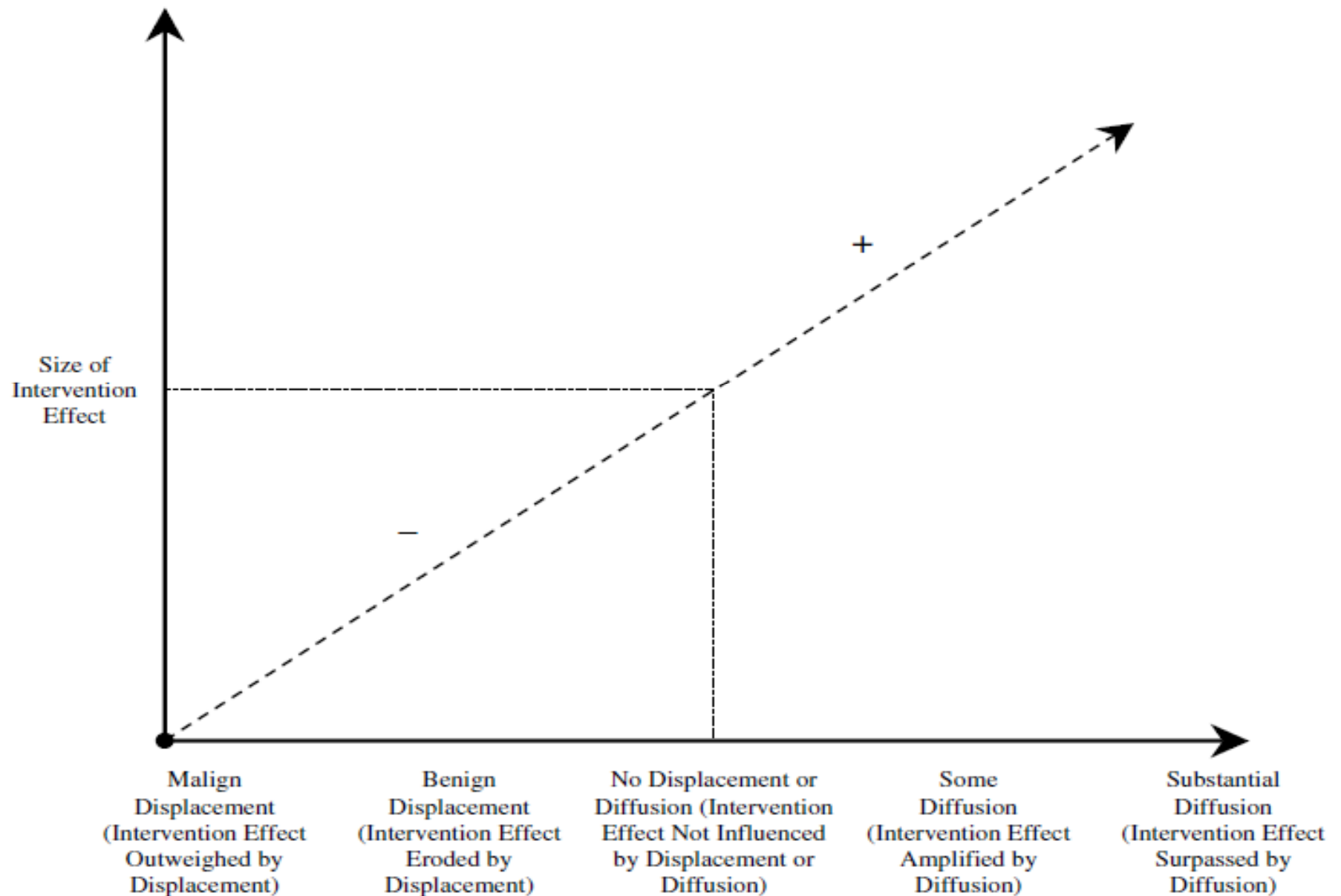
- the reduction of crime prior to the actual implementation of an intervention.



# What this means for you

- Managing Displacement
  - Reduce the harm of crime
  - Protect vulnerable populations
  - Shift the impact of crime
- Look for Diffusion Effects

**Figure 1. Relationship of Displacement and Diffusion to an Observed Intervention Effect**





# Understanding Your Displacement Potential

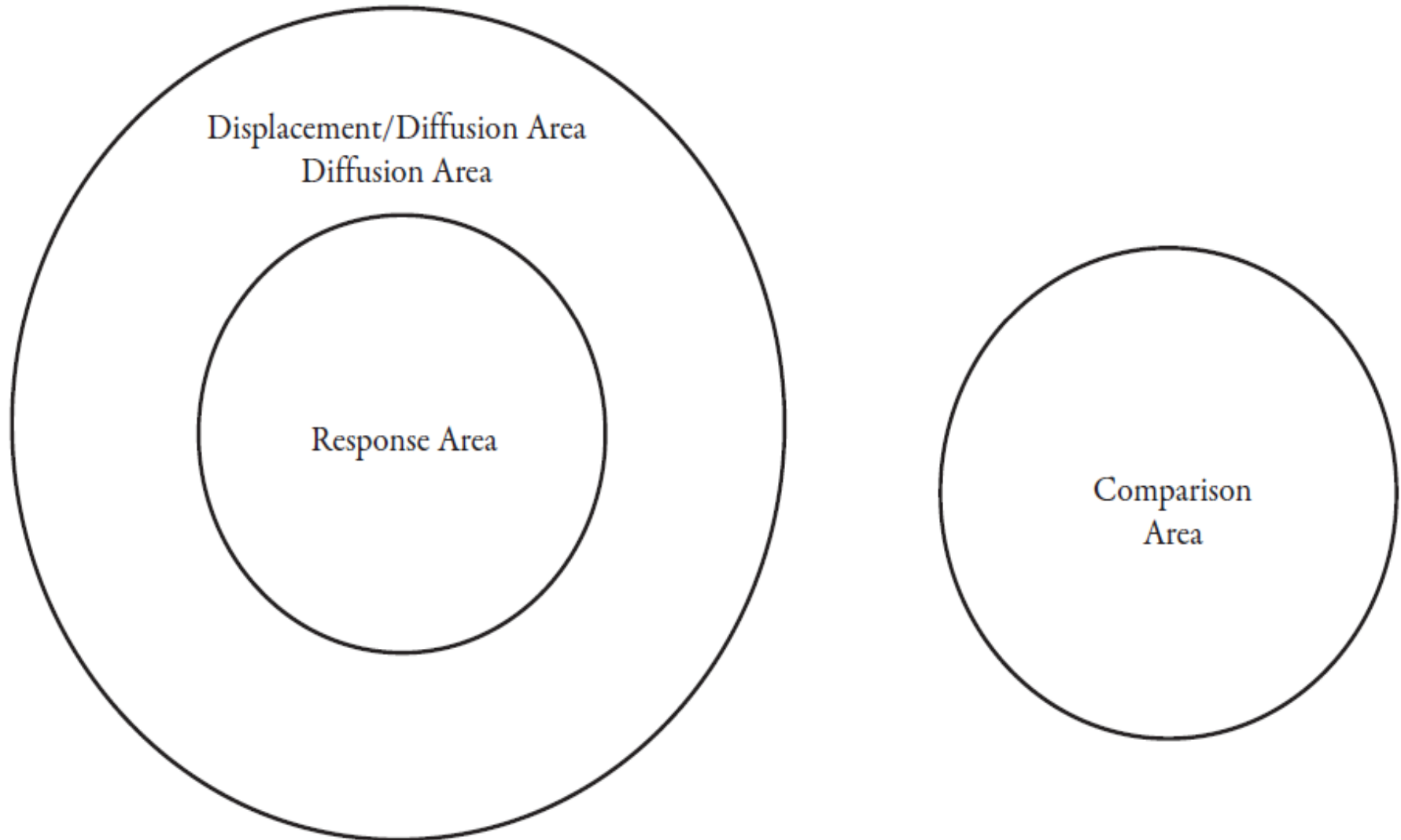
## Analyze

- Offenders
- Location
- Victims

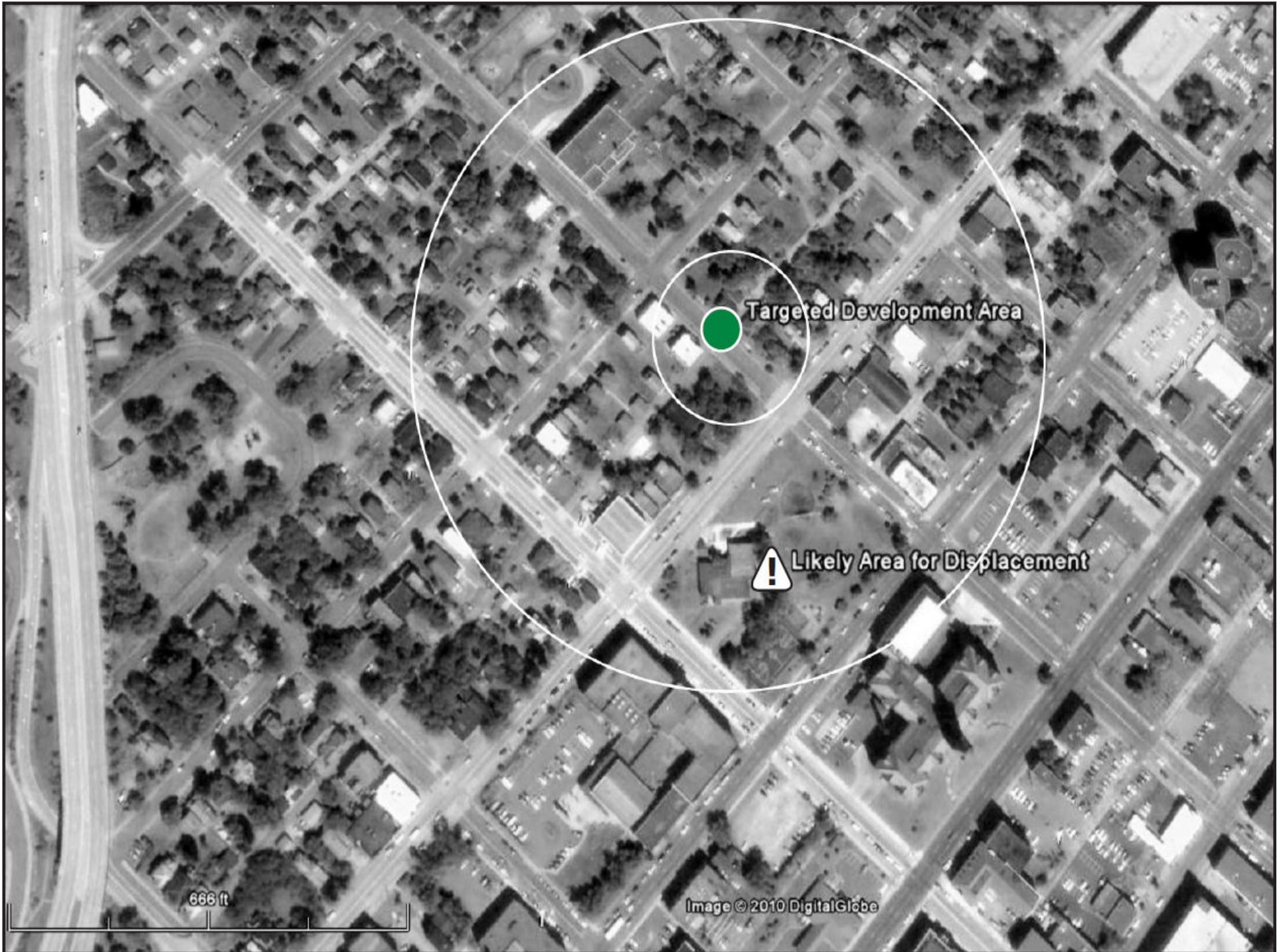
## Determine

- Volume of any crime shift
- Severity of that crime
- Level of harm incurred

**Figure 2:**  
**Illustration of Response, Displacement/Diffusion Area, and Control Area**  
**Used to Determine Spatial Displacement and Diffusion Effects**







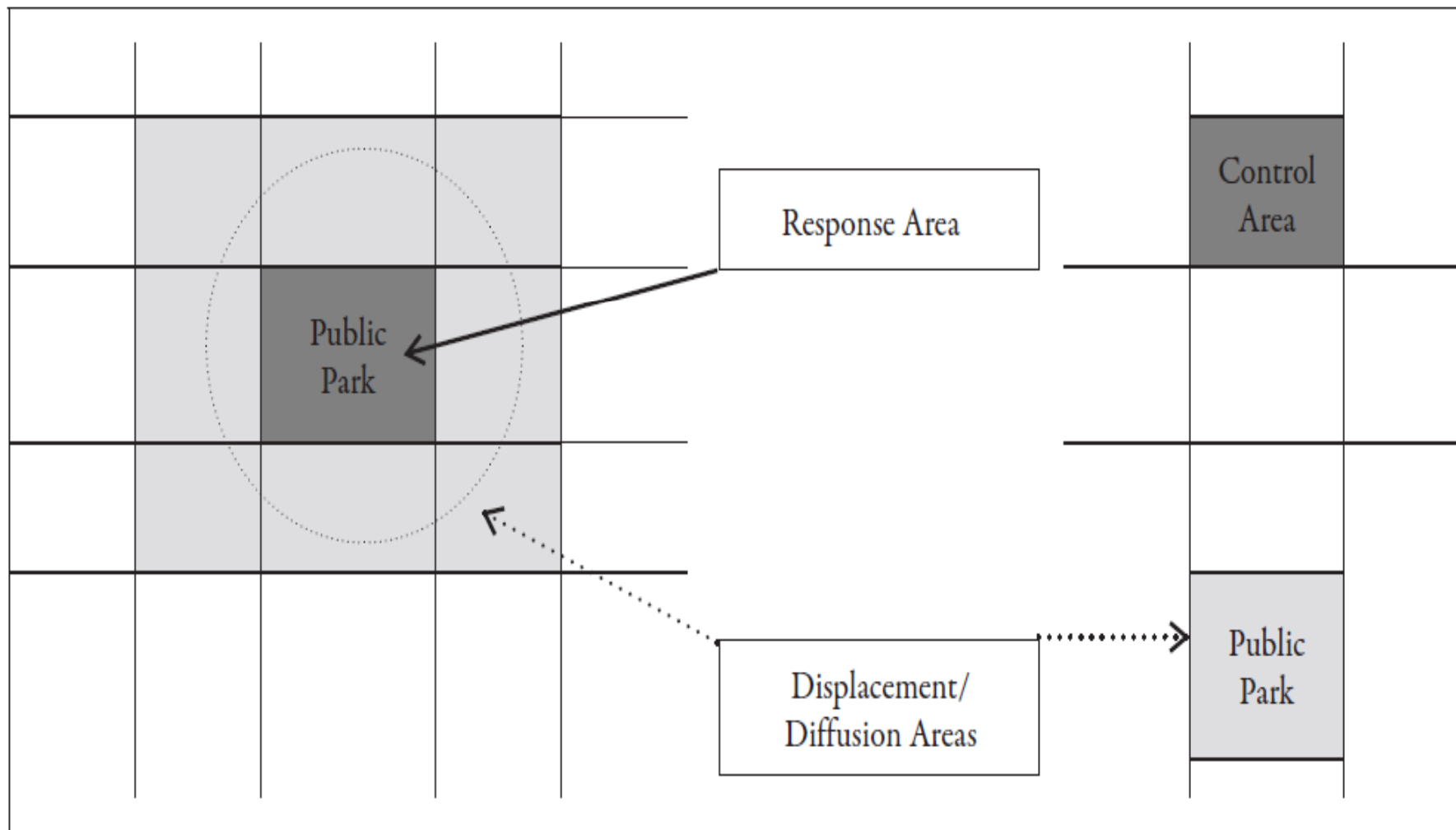
Targeted Development Area

! Likely Area for Displacement

666 ft

Image © 2010 DigitalGlobe

**Figure 3:**  
**Illustration of Response, Two Displacement/Diffusion Areas, and Control Area**  
**Used to Determine Spatial Displacement and Diffusion Effects in a Field Setting**



**Table 2:  
Criteria for Selecting Displacement / Diffusion Areas**

Criterion	Purpose	Rationale
Logical interrelatedness and/or proximity	To ensure the observation is valid.	Reduces risk of false conclusions.
Proportionate in size	To increase the accuracy of your measures.	Improves detectability.
Contamination Free (Exclusivity)	To help ensure the observation is an effect of the response.	Helps rule out other possible influences or causes.

# Measurement Design

	<u>Pre</u>		<u>Post</u>
Response area	O <sub>1</sub>	X	O <sub>2</sub>
Buffer area(s)	O <sub>1</sub>		O <sub>2</sub>
Control area	O <sub>1</sub>		O <sub>2</sub>

O = observation; X = intervention

# Calculating Displacement / Diffusion Effects

- Series of formulas to do this
  - Gross Effect (GE)
  - Net Effect (NE)
  - Weighted Displacement Quotient (WDQ)
  - Total Net Effect (TNE)
- <http://jratcliffe.net/ware/wdq.htm>





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