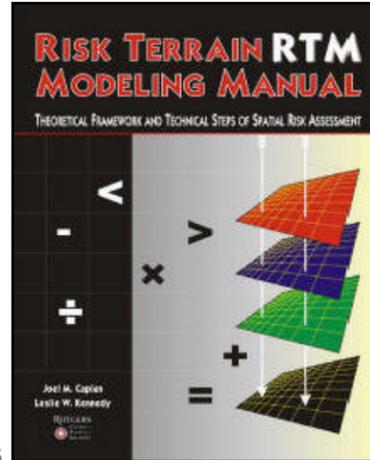
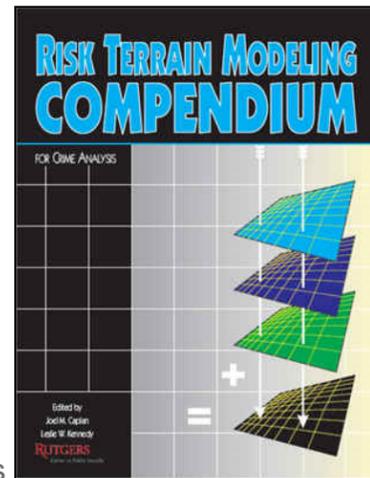


See also:

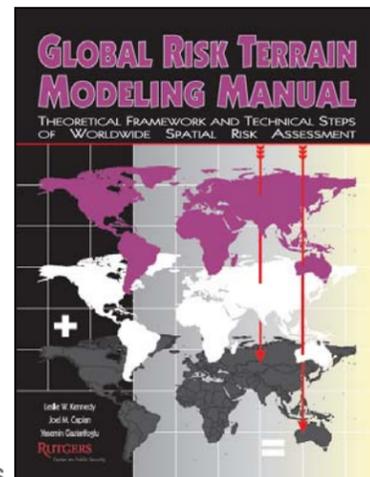


Theoretical framework and technical steps



Applications and risk factors for crime analysis

Coming Soon:



Theory and steps for global threat analysis

For more information and free resources:  
[www.riskterrainmodeling.com](http://www.riskterrainmodeling.com)

**RUTGERS**  
Center on Public Security



INTEGRATING  
SPATIAL  
CRIME  
ANALYSIS  
TECHNIQUES

Hotspot Mapping  
Risk Terrain Modeling  
Near Repeat Analysis



The Place for  
Spatial Risk Analysis  
Rutgers, The State University of New Jersey  
School of Criminal Justice  
Center for Law and Justice  
123 Washington Street  
Newark, NJ 07102  
[www.rutgerscps.org](http://www.rutgerscps.org)

# Integrating Spatial Crime Analysis Techniques

As illustrated to the right:

#1 **Hotspot analysis** to assess whether crimes cluster spatially in the jurisdiction. Crime hotspots suggest places for police to be deployed immediately to suppress existing crime problems with evidence-based practices.

#2 **Risk terrain modeling** to identify high-risk places for criminogenesis. Statistically valid risk terrain maps can be used to anticipate where new crimes are likely to emerge.

Information derived from #1 and #2 (Intersect A) helps determine if crime hotspots occur at high risk places or within high-risk clusters. This knowledge can help to explain the underlying environmental risk factors that may attract and generate hotspots. Individual risk factors can be prioritized for evidence-based mitigation activities directed at one or more of them.

#3 **Near repeat analysis** to assess the spatial-temporal nature of crimes.

Information derived from #1 and #3 (Intersect B) helps explain the event-dependent and temporal nature of crime hotspots in the jurisdiction.

Information derived from #2 and #3 (Intersect C) helps evaluate the propensity for new crime incidents to become instigators for near repeats based upon the proportion of high-risk places within the expected near repeat bandwidth.

Information products from each technique can be synthesized to **inform** short- and long-term **strategic planning** and at least three **tactical deployment decisions**:

- Information products from Intersect A: Respond immediately to places where crimes cluster and crime problems persist; Respond preemptively to high-risk places.
- Information products from Intersect B: Gives temporal window in which near repeat crimes are most likely to follow new crime events; Helps to reduce the costs of deploying extra resources for long or uncertain lengths of time following new crime incidents; Helps to reduce alert fatigue among patrol officers who are assigned to patrol certain places.
- Information products from Intersect C: Prioritize place-based deployments of resources by comparing new crime incidents relative to all others according to the surrounding environment's suitability for hosting new near repeat incidents; Prioritize new crime incidents that have more nearby high-risk places within the expected bandwidth.

