

Risky Places

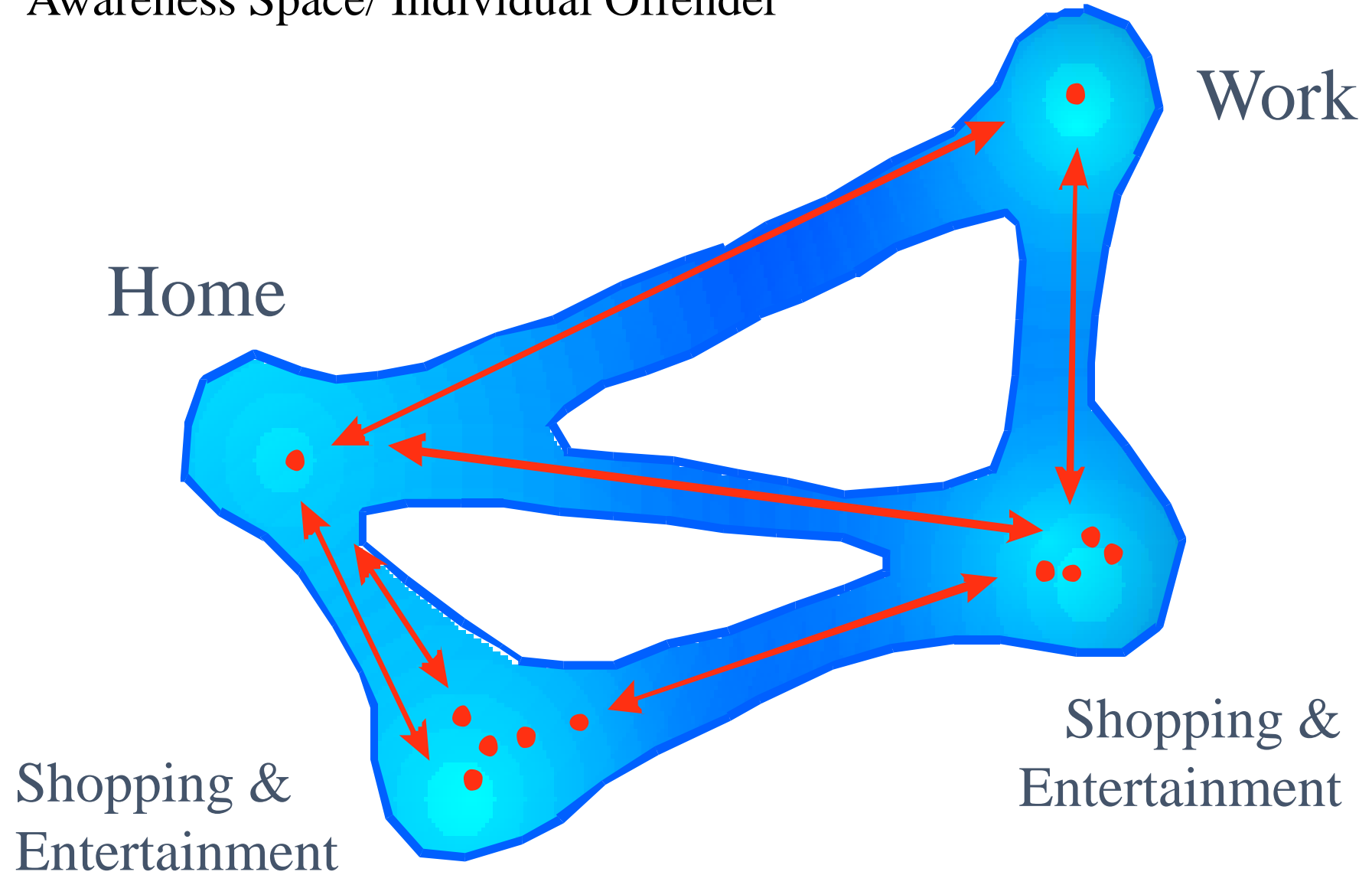
Beyond Crime Generators and Crime Attractors

- Patricia Brantingham
- Simon Fraser University
- Support: Paul Brantingham, Richard Frank, Valerie Spicer and Justin Song

Theory: Geometry of Crime/ Crime Pattern Theory

- Individual
 - Paths, nodes, edges
 - Activity Space
 - Awareness space
 - Target Space, suitable target space
-
- From individual to aggregate

Awareness Space/ Individual Offender

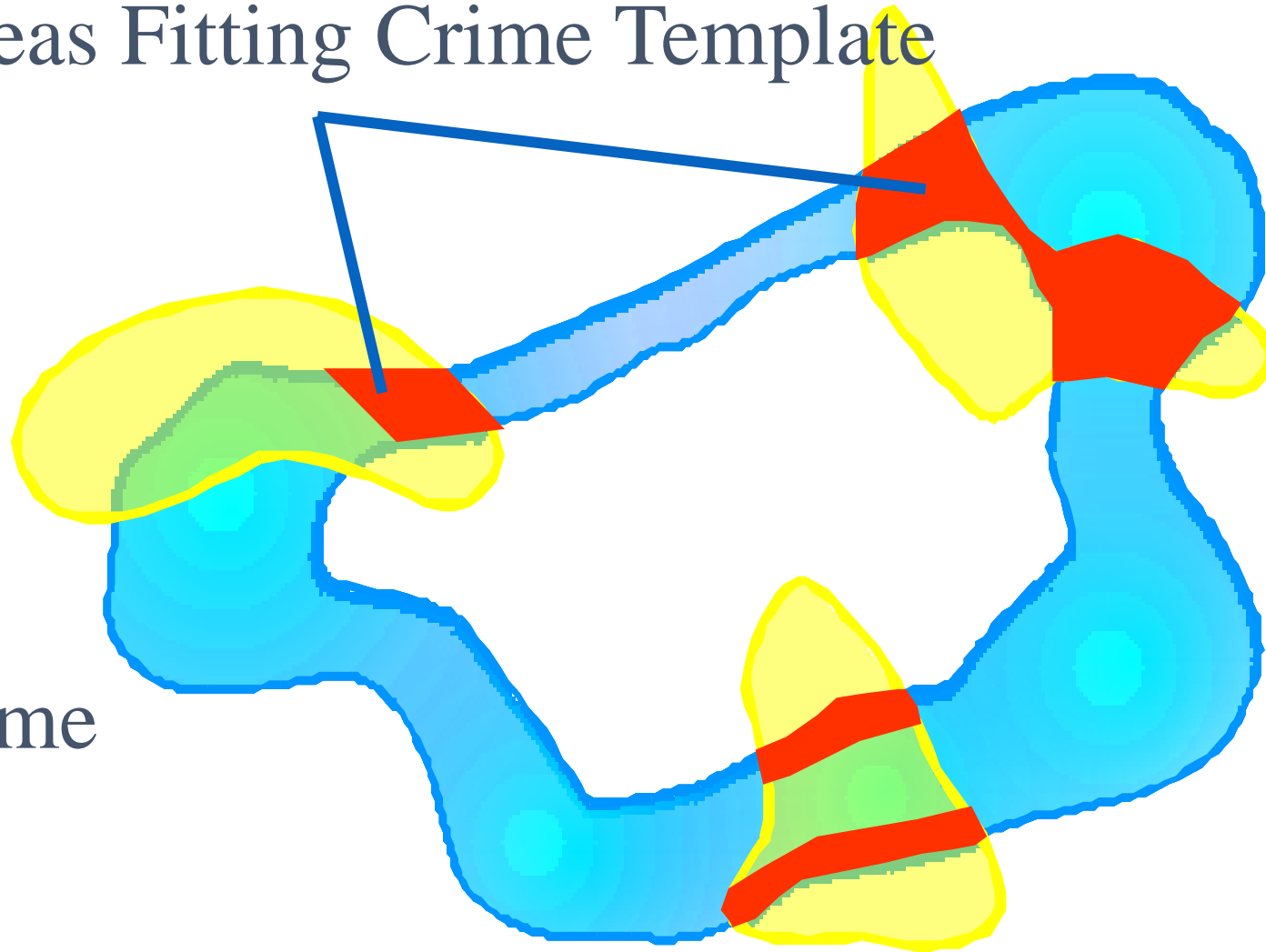


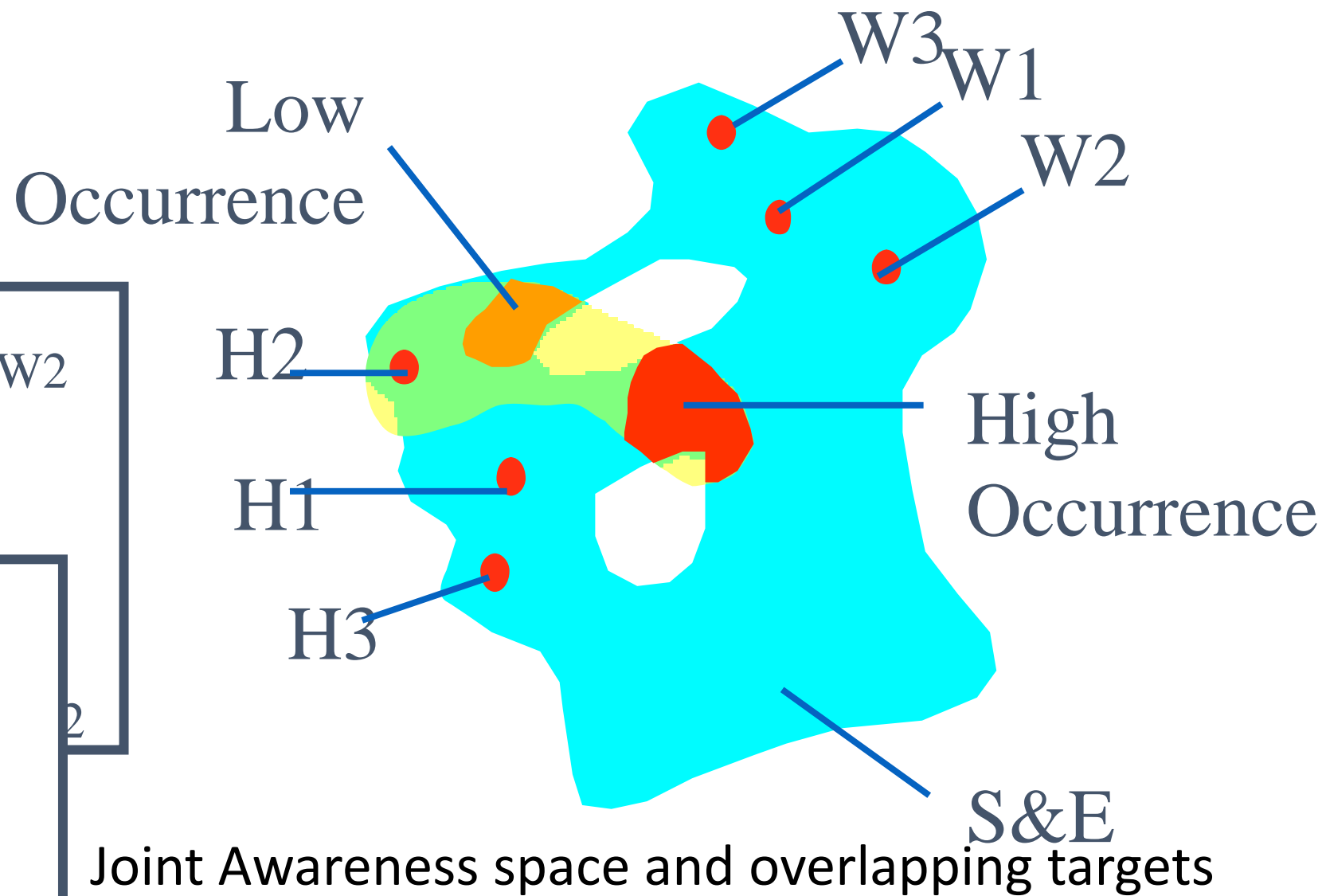
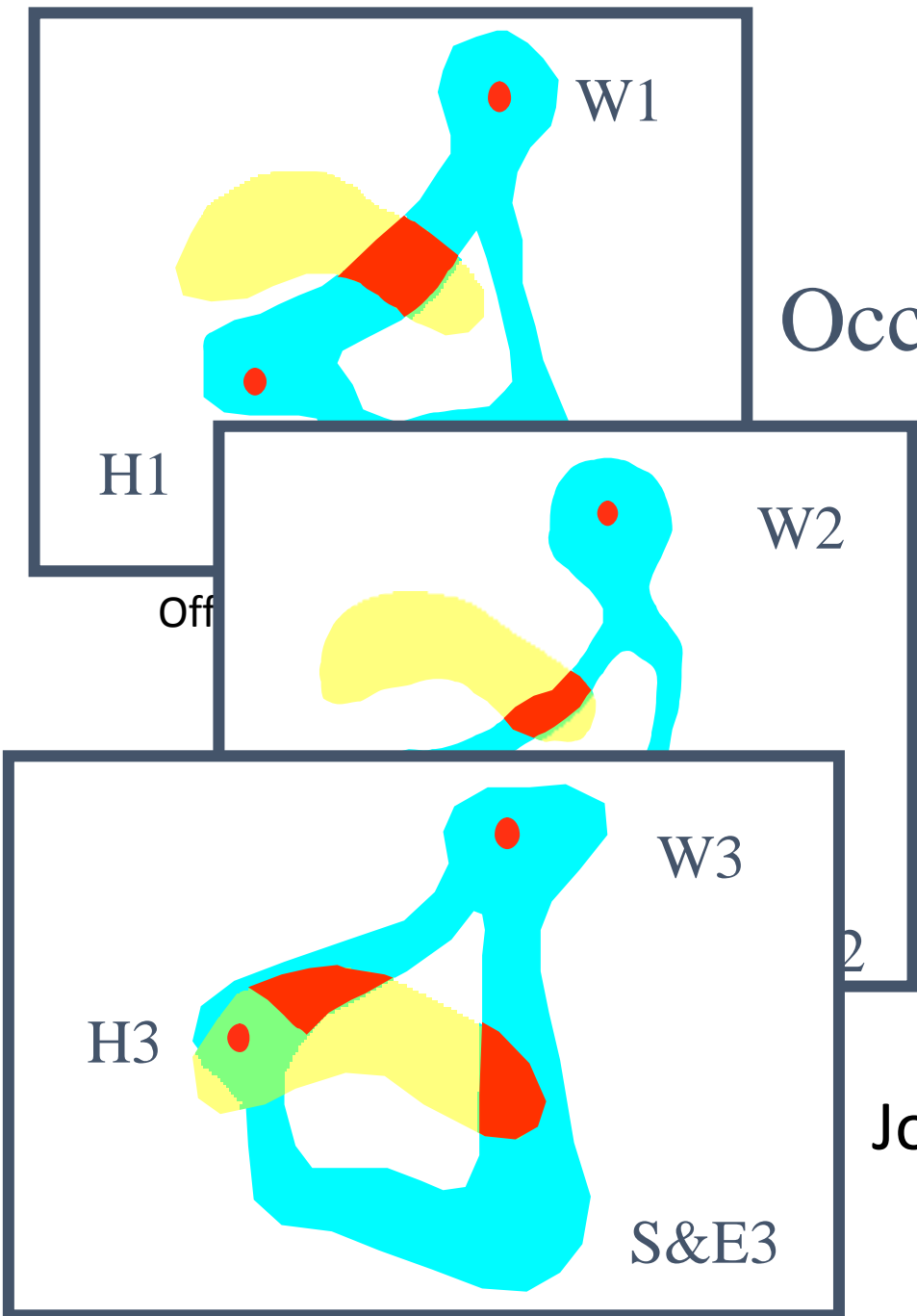
Areas Fitting Crime Template

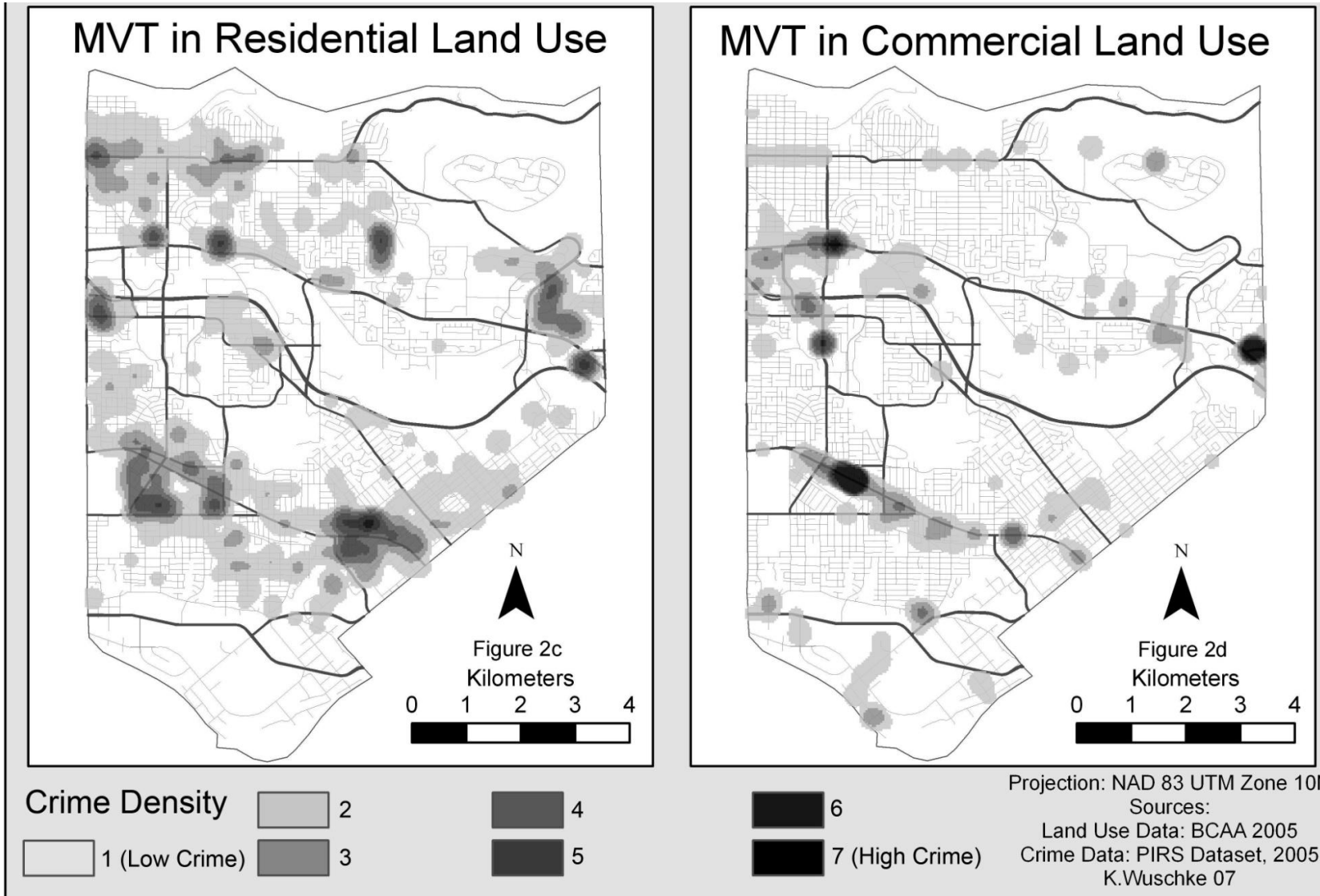
Work

Home

Shopping & Entertainment

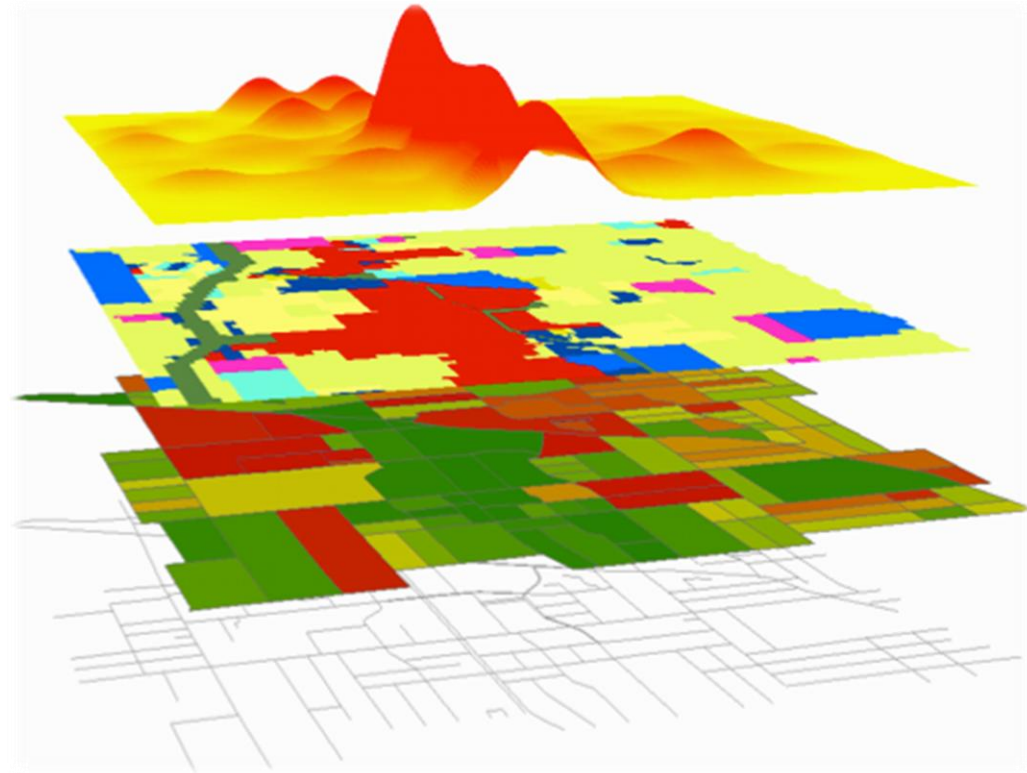




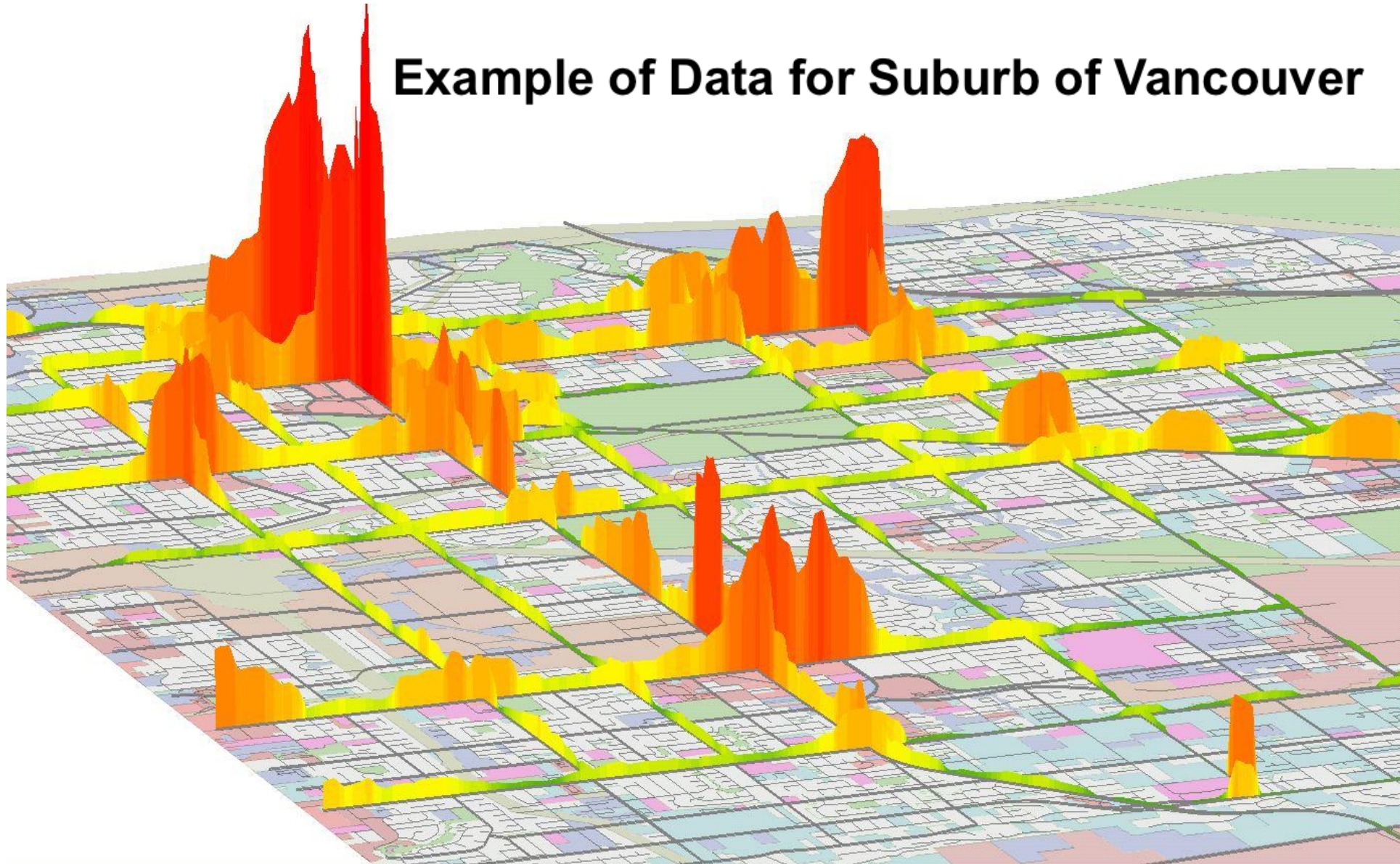


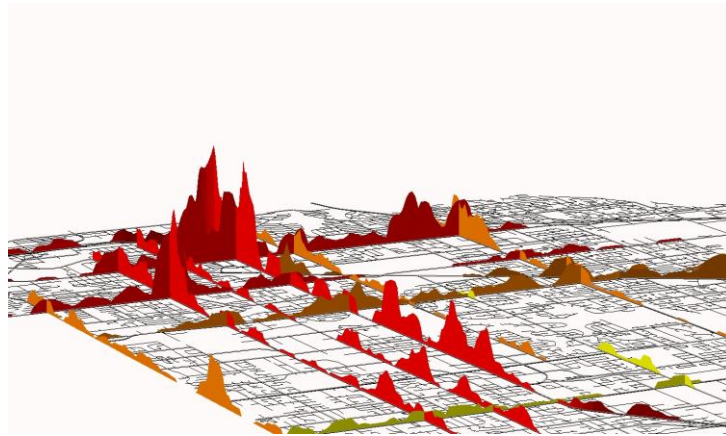
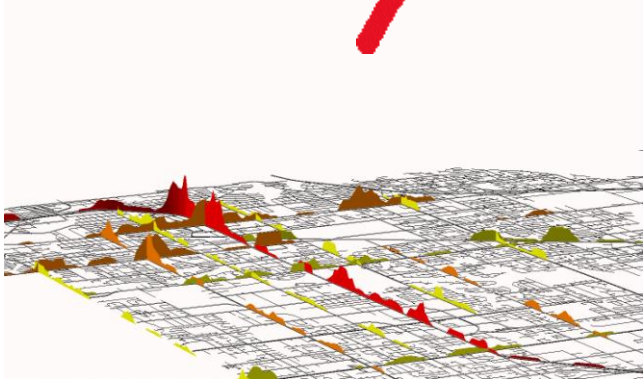
Multi- Dimensional Crime Patterns

- Road network/ Mass Transit
- Land use
- City infrastructure
- Pushes and pulls
- Paths – nodes – edges
- Attractors – generators

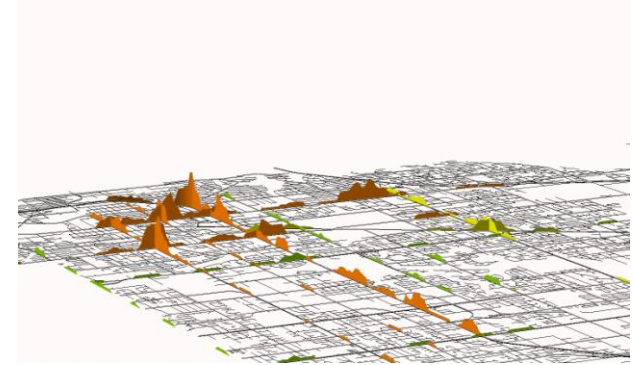


Example of Data for Suburb of Vancouver

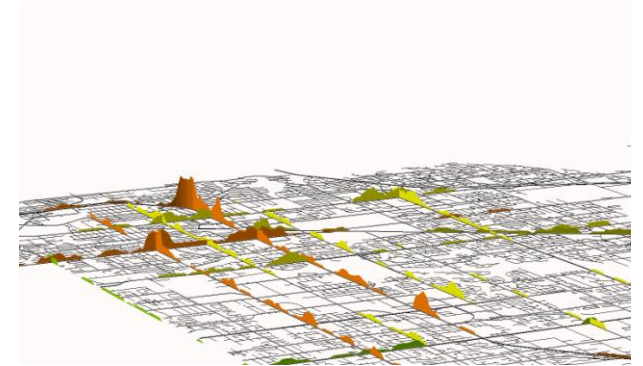




23-24



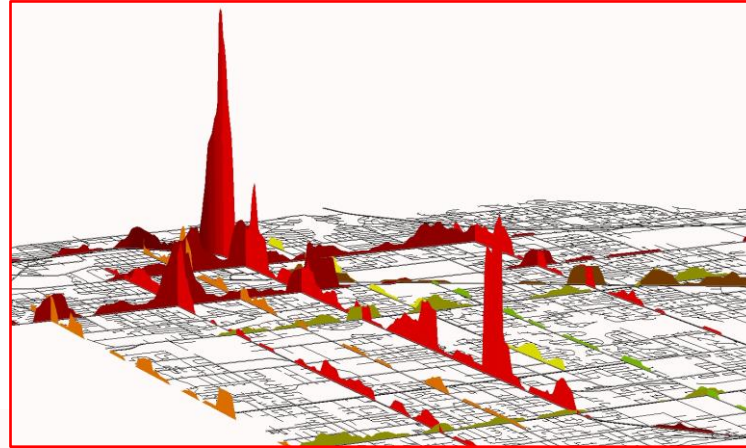
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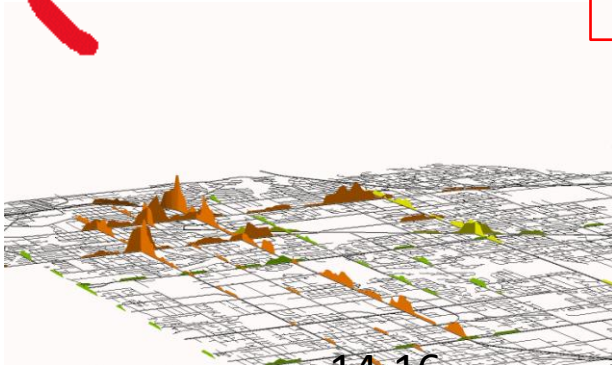
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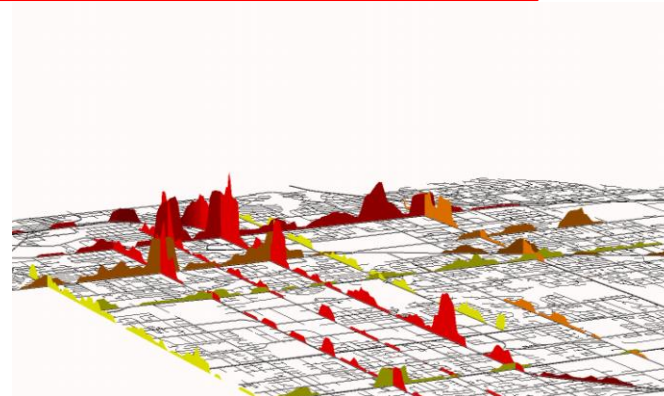
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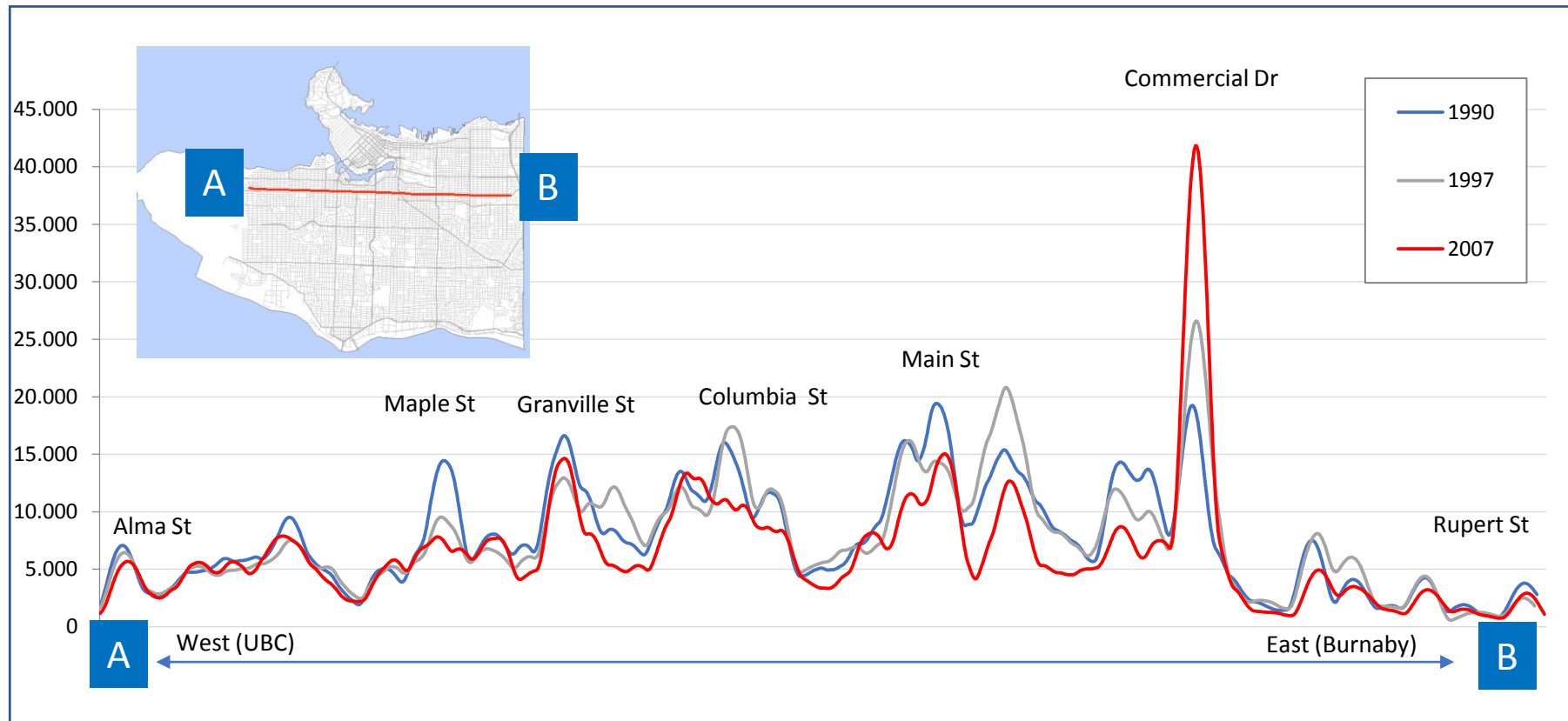


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14-16





Justin Song, Valerie Spicer

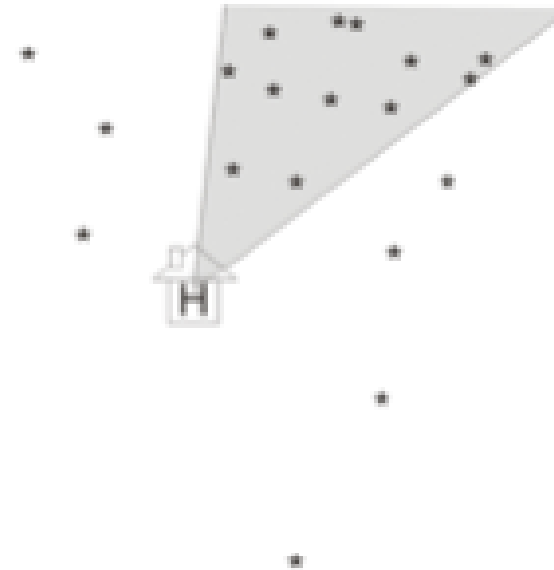
Directionality

- Awareness space
- Paths, nodes and edges
- Crime occurrences
- Directionality = towards

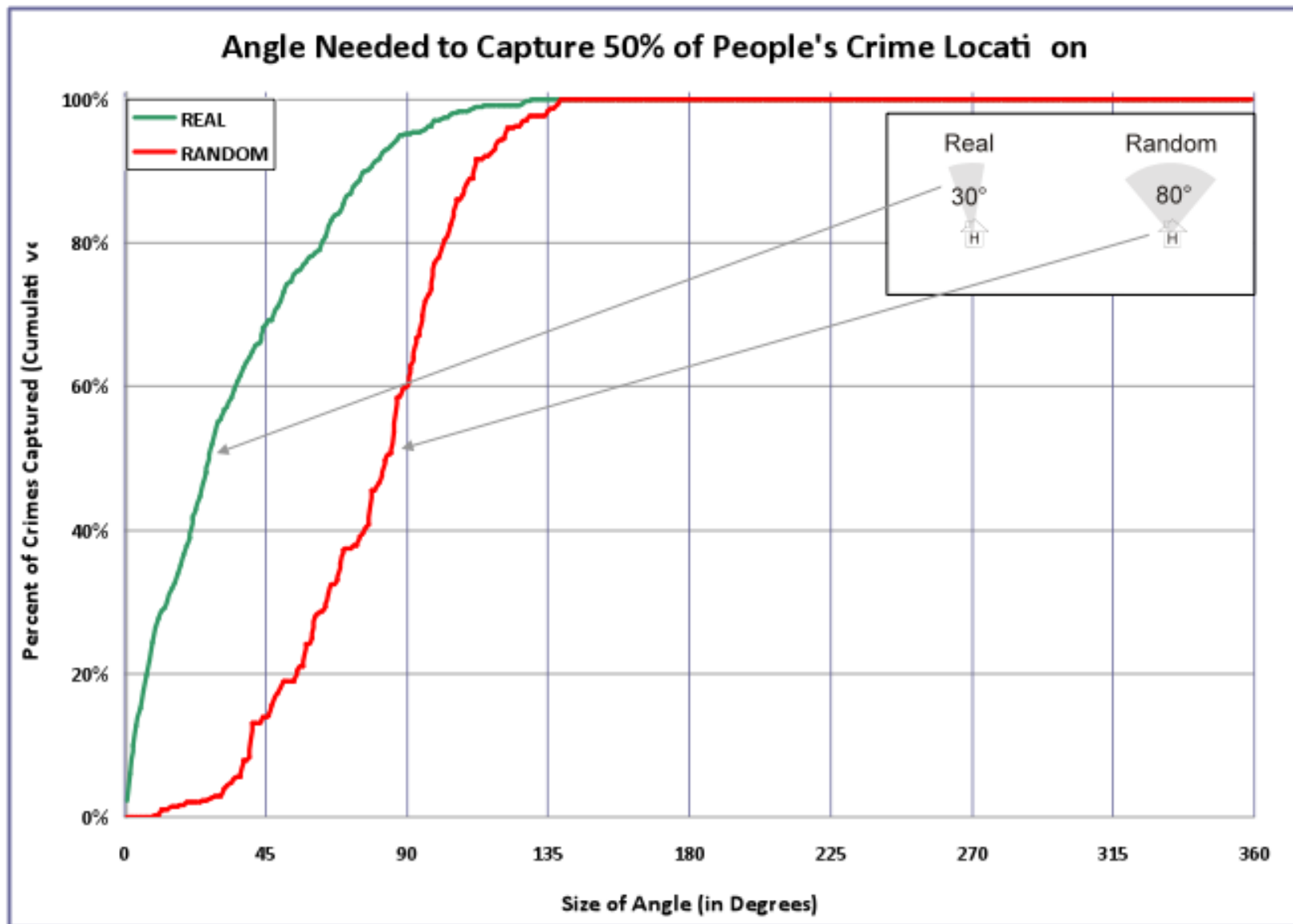
Crime Without Directionality

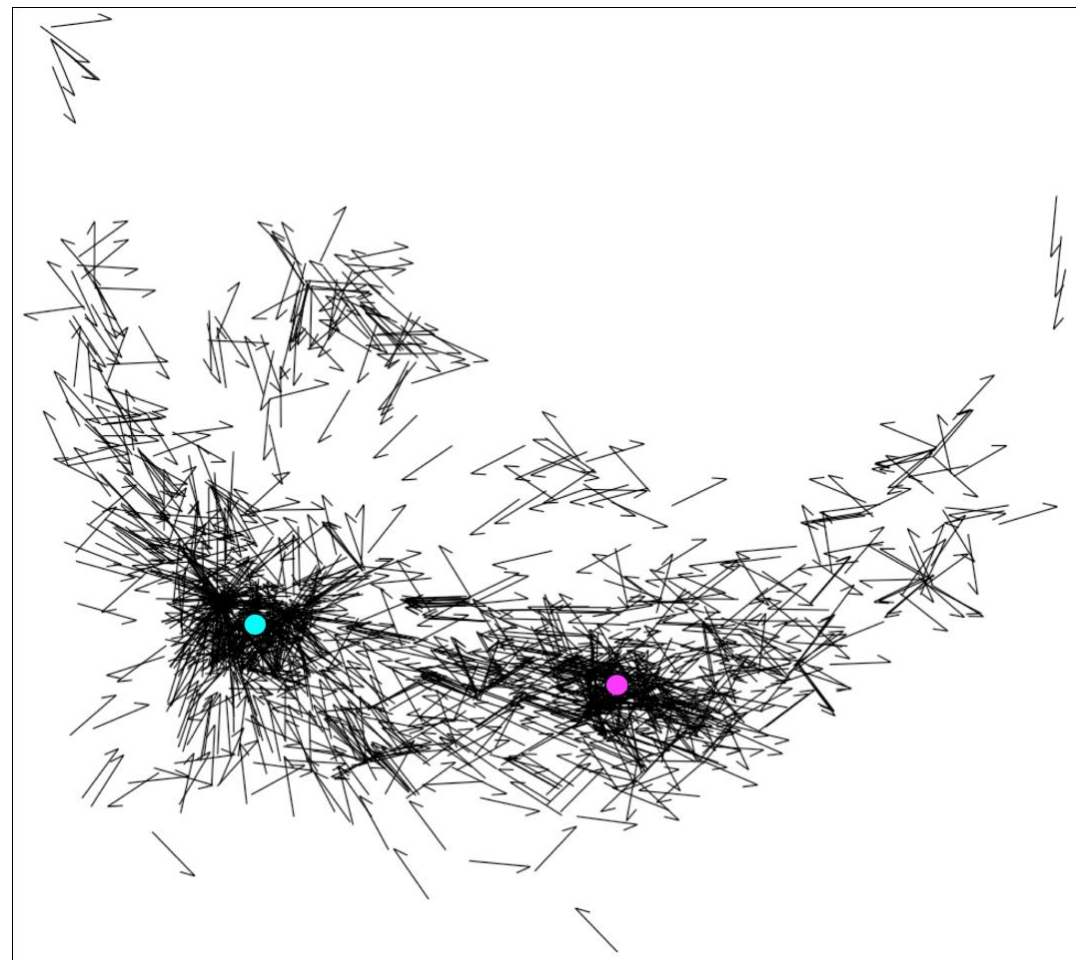
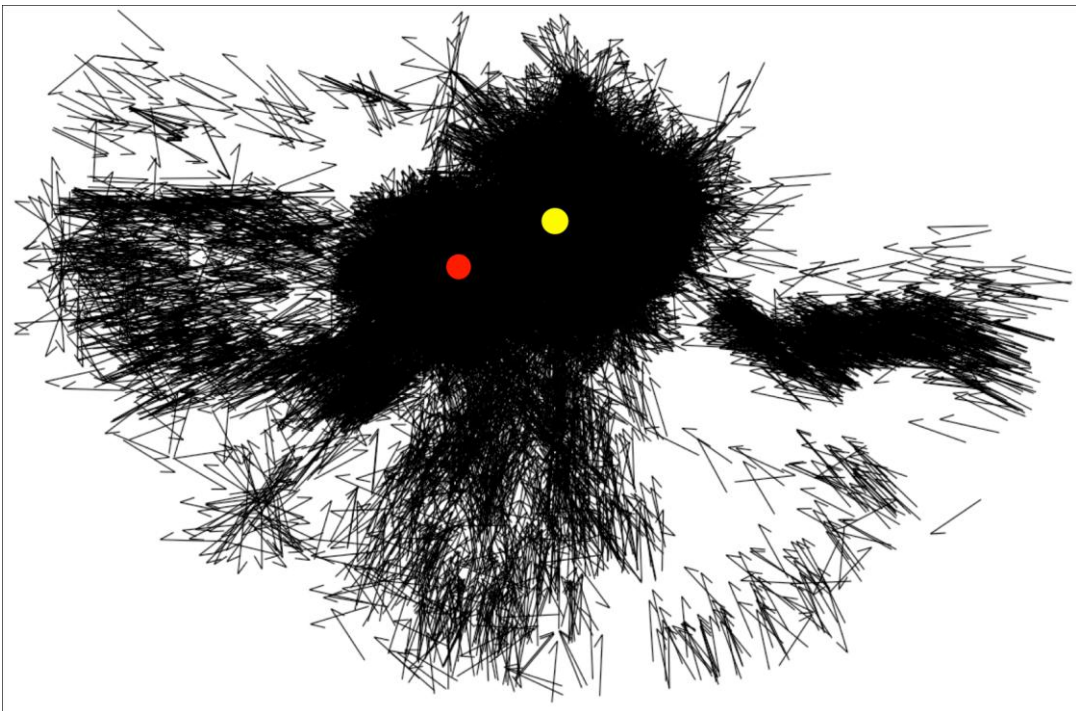


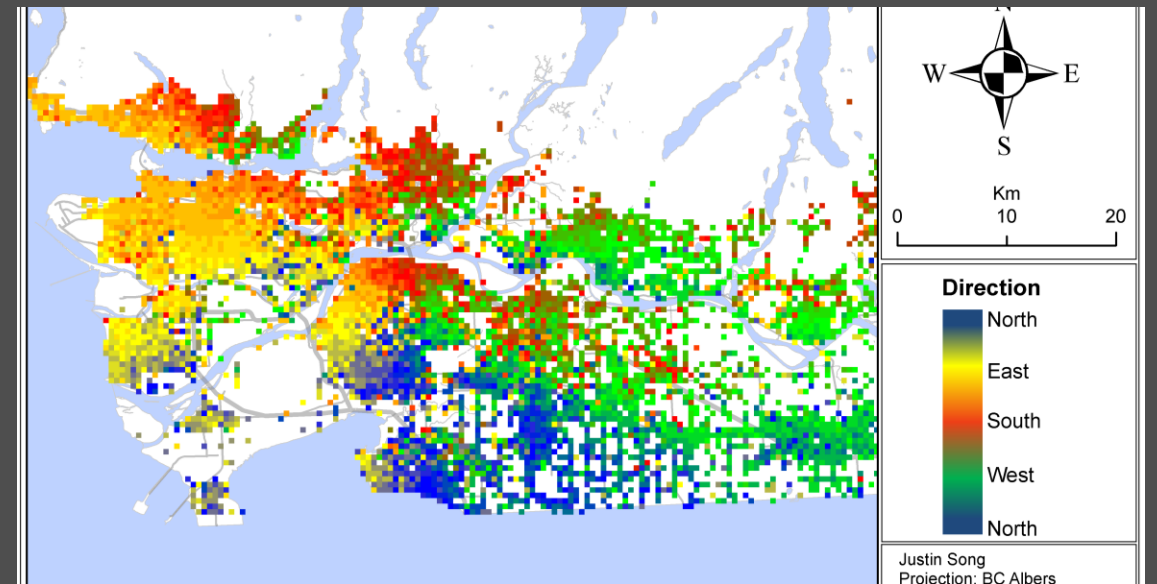
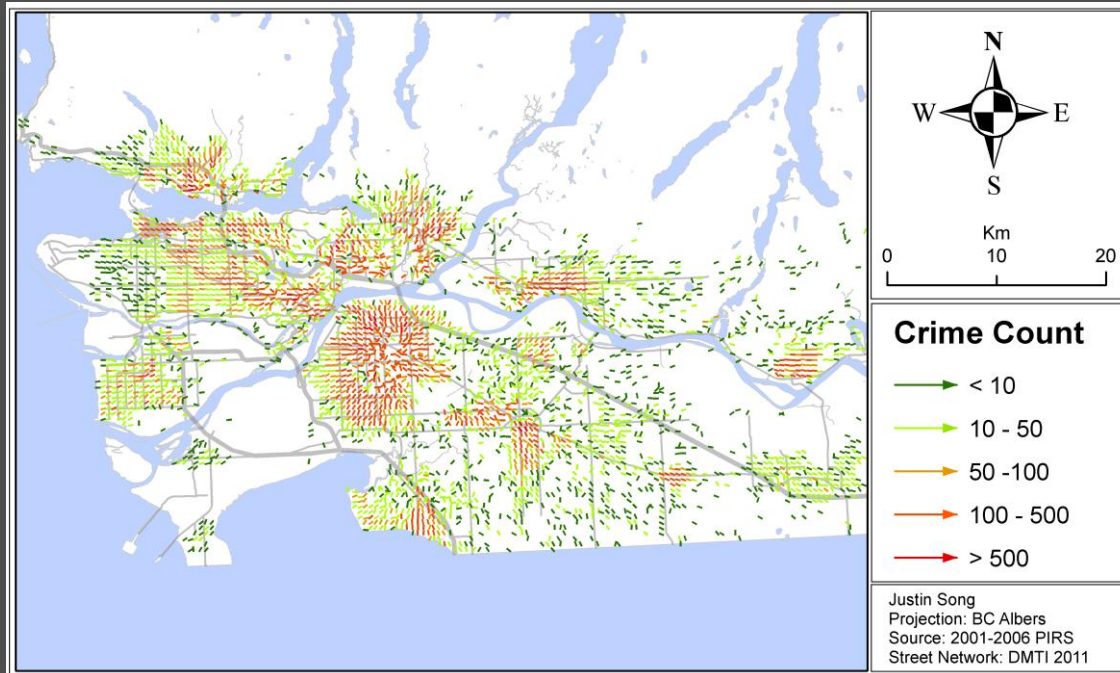
Crime With Directionality



Criminal Activity Vectors- Attractiveness of City Centres (2009)
Richard Frank and Patricia Brantingham







Examples: Micro and Meso Level

- Designing a town
- Designing mass transit
- Designing parks
- Addressing existing attractor-generators issues
 - Known repeat offenders-low risk nuisance behaviour
 - Known repeat offenders-high risk assaults
 - Consider fear issues- reducing fear can sometimes increase risk
 - Dark alleys/ laneways
 - Elevators

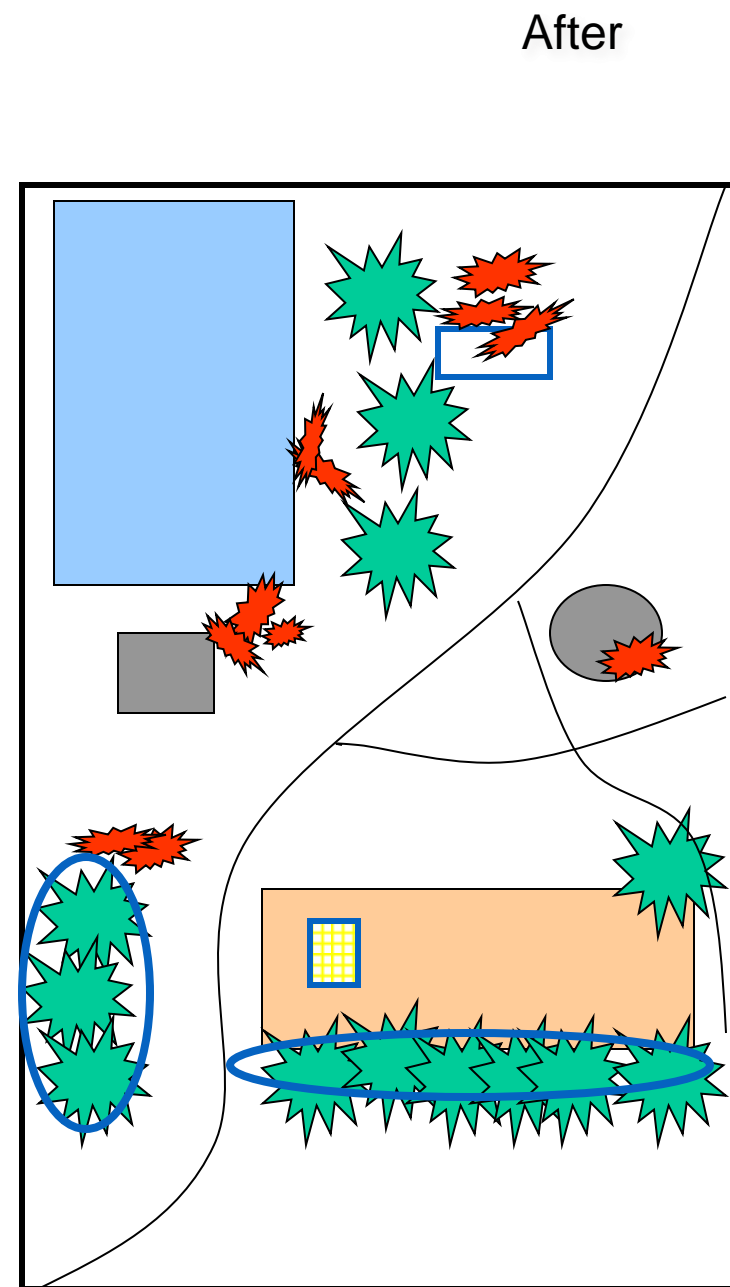
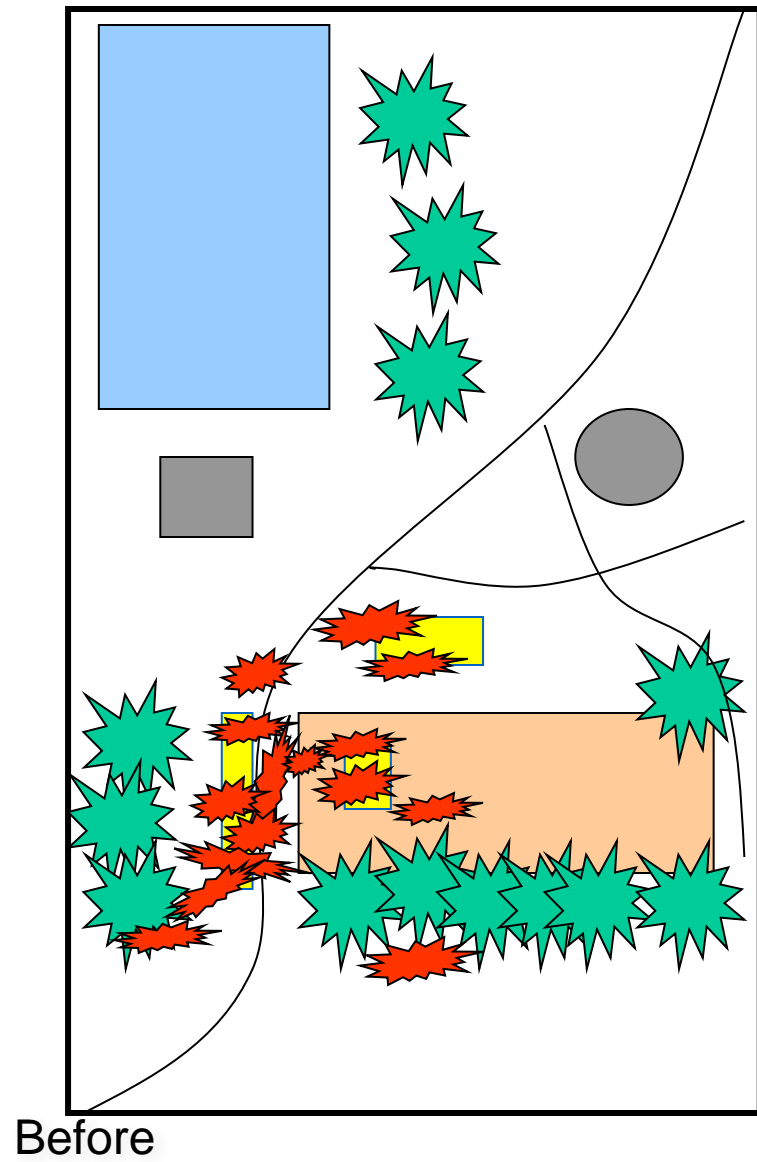
Tumbler Ridge

- Rural, Northern BC
- Was mining town (3); now resort area for northern Alberta
- Planning to reduce future risky places

Mass Transit



Park



Future

- Impact of Covid
 - Shopping/work- types of crimes and where
 - Gathering- bigger divide
- Impact of technology
 - Cell phone apps- info about crime attractors, planning crime
 - Social networks
 - Computer crime- large and small
 - Social networks
- To awareness space and crime attractors/generators
 - add web nodes, internet attractors, internet networks,.....
- Computational criminology

Refs: (summit/sfu.ca) enter Brantingham; pick crime attractors....

- Brantingham articles

(2020) Brantingham P. J., Brantingham, P. L., Song, J. and Spicer, V. Crime Hot Spots, Crime Corridors and the Journey to Crime: An Expanded Theoretical Model of the Generation of Crime Concentrations pp. 61-86 in K. M. Lersch and J. Chakraborty (eds.) *Geographies of Behavioural Health, Crime, and Disorder: The Intersection of Social Problems and Place*. Switzerland: Springer International Publishing.

(2020) Hewitt, Ashley, Andresen, Martin, Beauregard, Eric, and Patricia Brantingham. *Dangerous Times? A Routine Activities Examination of the Temporal Patterns of Sexual Offenses over Time*. Justice Quarterly

(2019) Song, Justin, Spicer, Valerie, Park, Andrew, Tsang, Herbert and Patricia Brantingham. *Computational Method for Identifying the Boundaries of Crime with Street Profile and Discrete Calculus*. 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)

(2017) [Justin Song](#), [Martin A. Andresen](#), [Patricia L. Brantingham](#) & [Valerie Spicer](#). *Crime on the edges: patterns of crime and land use change*. [Cartography and Geographic Information Science](#) Volume 44, 2017 - [Issue 1](#)

(2016) Spicer, Valerie, Song, Justin, Brantingham, Patricia, Park, Andrew and Martin Andresen. Street profile analysis: A new method for mapping crime on major roadways [Applied Geography Volume 69](#), April 2016, Pages 65-74

(2013) Song J, Spicer V, Brantingham P, Frank R. Crime Ridges: Exploring the Relationship between Crime Attractors and Offender Movement. *2013 European Intelligence and Security Informatics Conference*. IEEE; 2013:75-82.

(2013) Song, Justin, Spicer, Valerie, and Patricia Brantingham. *The edge effect: Exploring high crime zones near residential neighborhoods*. *Proceedings IEEE International Conference on Intelligence and Security Informatics*.

(2008) J. Bryan Kinney, Patricia L. Brantingham, Kathryn Wuschke, Michael G. Kirk and Paul J. Brantingham "Crime Attractors, Generators and Detractors: Land Use and Urban Crime Opportunities." *Built Environment* 34(1):62-74.

(1995) P. L. Brantingham and P. J. Brantingham, "Criminality of place: Crime generators and crime attractors," *European Journal on Criminal Policy and Research* 3: 5-26.

(1993) P.L. Brantingham and P.J. Brantingham, "Nodes, Paths and Edges: Considerations on the Complexity of Crime and the Physical Environment" [Journal of Environmental Psychology](#) 13:3-28.

(1993) P.L. Brantingham and P.J. Brantingham, "Environment, Routine and Situation: Toward a Pattern Theory of Crime," [Advances in Criminological Theory](#) 5:259-294

Thanks