

Q&A – Joe Caplan – 4 November 2021

1. **When building a Risk Terrain model to find our risky places, how do you take in consideration locations that are temporary? For example, Seasonal businesses are here for a short time and then later gone.**

You can limit the time period of the data you're analysing. E.g, You can test "farmers markets" during only the summer or fall months and see how they correlate with crime incident locations that occur during the same months. Below are some of the articles I mentioned about "time" during the webcast, as well as related recommended readings:

Blog on Time and RTM: <https://www.riskterrainmodeling.com/blog/incorporating-time-into-rtm>

Seasonality PDF:

<https://www.dropbox.com/s/ev7ffnb2rntlv2a/Risk%20Terrain%20Modeling-%20Seasonality%20and%20Predictive%20Validity%202021%20Skola%20Piza%20Drawve.pdf?dl=0>

Spatial-Temporal differences of risk terrains PDF:

https://www.dropbox.com/s/5usjr0dyf6rmsvm/2018_%20Unpacking%20Spatio-temporal%20Differences%20of%20risk%20for%20crime_%20An%20analysis%20in%20Little%20Rock%20AR_%20Chillar%20Drawve.pdf?dl=0

Tourism:

https://www.dropbox.com/s/wjua8b72brs18dp/RobberyRiskTouristDestinationRTMinAC_JPMD_2020.pdf?dl=0

2. **Does Risk terrain modeling split day and night-time into different models?**

>> Yes, you can do this. It's done frequently by the NPSC in Newark, NJ. Different risk terrains can exist for different time periods of the day or week. Nighttime and daytime are important considerations of the dynamic nature of risky places and opportunities for crime. For example, the influence of a bar at 10pm on a Friday can be very different than 10am on a Tuesday (even though the facility is a physical feature of the landscape at all times of the day/week). Other differences may exist based on peak/off-peak travel periods; in-school/out-of-school times, etc. And, these differences of "spatial influences" can vary for different crime types too (e.g. aggravated assault vs. bicycle theft vs. residential burglary). See the links in #1 above for some more details about this.

3. **Is it possible to assess the cumulative effects of risky features (convenience stores close to vacant buildings close to others) in different territories on specific types of crime? and how those cumulative effects interact with the surrounding environment? For example, having a convenience store close to a vacant building in a particular disadvantage area is different (riskier) than having the same features in a less disadvantage area. Thank you!**

That's what RTM does. It identifies the spatial influences of one or more place features co-located at micro places throughout the landscape. The interaction effects of particular place features creates unique behaviour settings for crime. See also the "Crime Risk Kaliedoscope": <https://www.riskterrainmodeling.com/overview.html>

See also the ANROC measure that Drawve et al. used to combine micro-level RTM analysis with more meso/macro level areas (and social disorganization/disadvantage): <https://doi.org/10.1016/j.jcrimjus.2015.12.002>

4. How can drones play a role in DICE without going against civil liberties? Data, response and surveillance

Drones present several concerns as well as potential benefits for public safety. I do not have direct experience with them or enough information about them to comment more than I already did in the webcast.

5. Building on previous questions of RTM spatial-temporal analysis, is there a possibility to include variables as Covid-19 related measures (lockdown, working hours, etc.) relating to those changes in routine activities during the pandemic? Thank you!

Yes. NPSC wrote a blog on this very topic: <https://newarkcollaborative.org/blog/the-impact-of-covid-19-on-crime-patterns>. And, here is the article I mentioned during the webcast: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0230725>

6. Are there comparative studies using RTM in different contexts? So the effects of place-based prevention activities can be distinguished from prevention based on social policy, which does not have that direct impact in spaces. (We focus on spatial aspect here a priory, so we tend not to see non-spatial factors affecting crime).

Below is the meta-analysis I mentioned during the webcast. Policy has also proven to have meaningful impacts on the spatial and temporal distributions of crime. In some jurisdictions, including in NJ, we've seen how focusing social policies and practices (e.g., social workers, outreach workers, job training programs, trauma-informed care) to people in the places needing this support the most can have positive impacts on crime, public safety and community-wellness.

Meta-Analysis: <https://link.springer.com/article/10.1186/s40163-021-00149-6>

Here is one of the articles I mentioned during the webcast: Closed vs open alcohol establishments (PDF):

https://www.dropbox.com/s/tyhd9ipkyd088bn/2017_Close%20only%20counts%20in%20alcohol%20and%20violence_%20Controlling%20violence%20near%20late-night%20alcohol%20establimishments%20Burgason%20Drawve%20Brown%20Eassey.pdf?dl=0