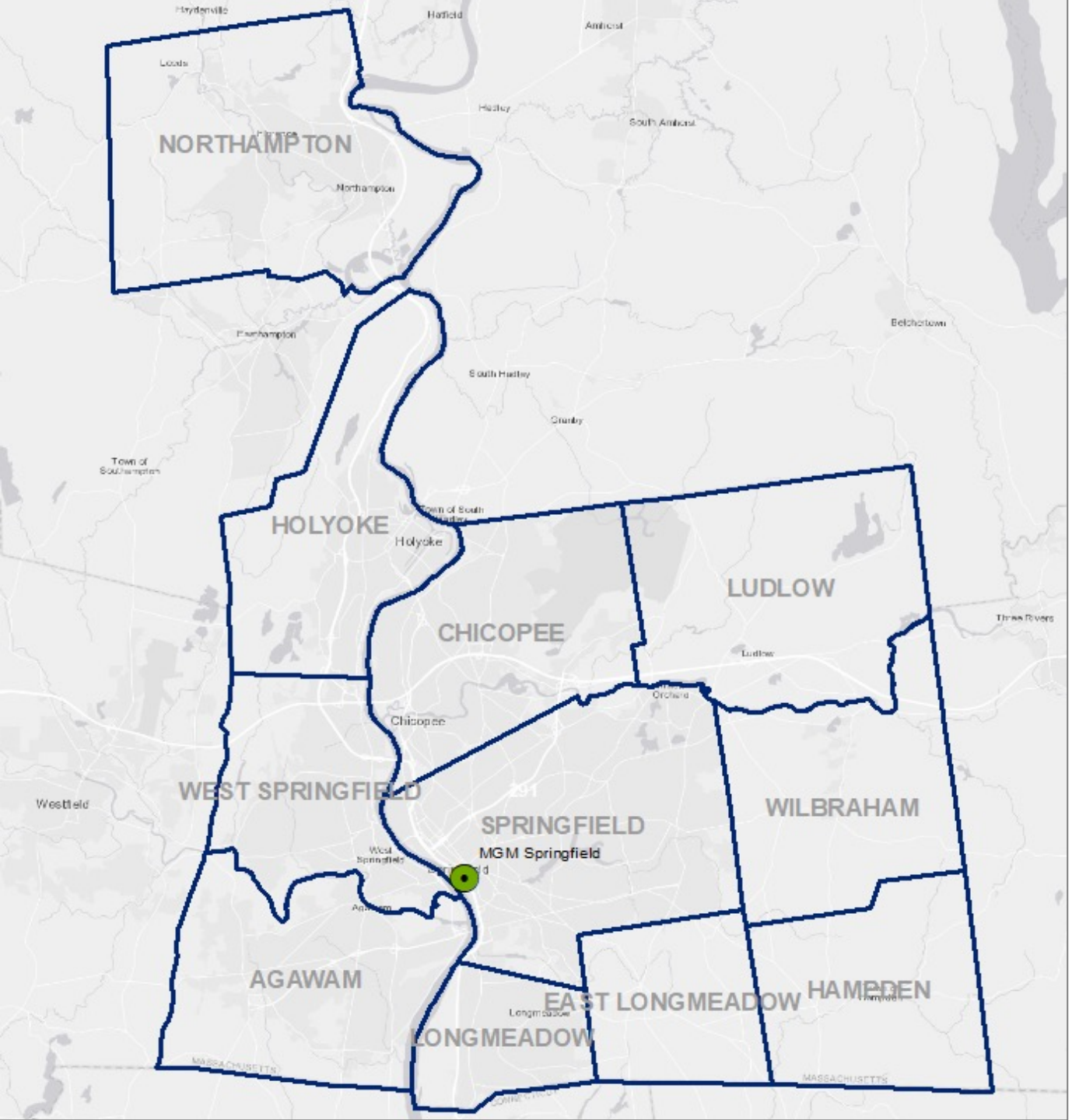
Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns

Analysis of the influence of MGM Springfield Casino on its surrounding community

Crime Comparison Analysis of Changes in the MGM Springfield Region
2013-2022

Research Funded by the Massachusetts Gaming Commission

The views presented here today are those of the authors of this report alone,
and do not represent the official point of view of Massachusetts Gaming Commission



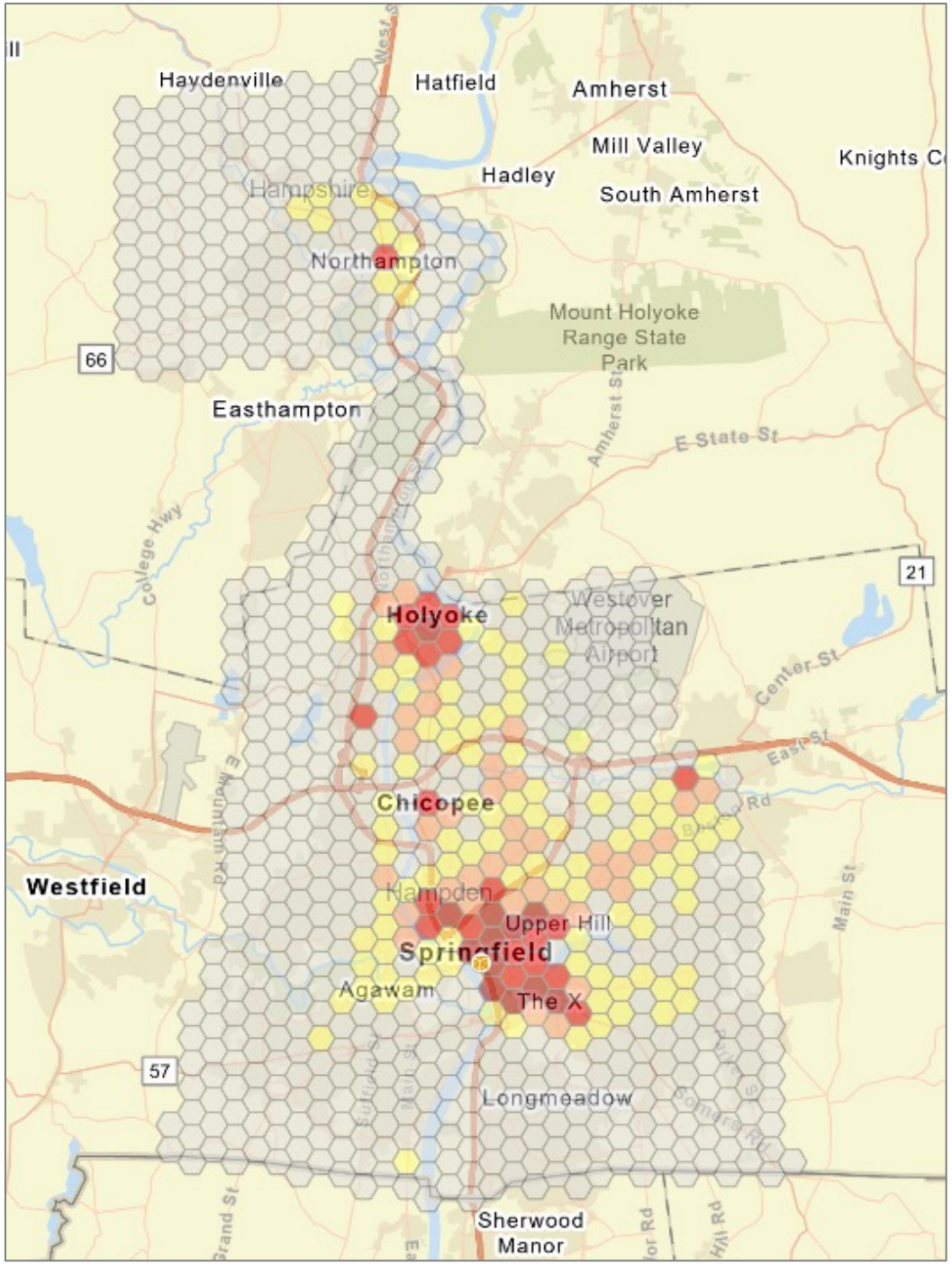
Welcome

- *Justice Research Associates*
  - Dr. Noah Fritz
  - Steven Hick
  - Christopher Bruce – Partnership
- CMAP – U.S. DOJ TA Program
- IACA & MACA
- Arizona State University, University of Denver, & George Mason University

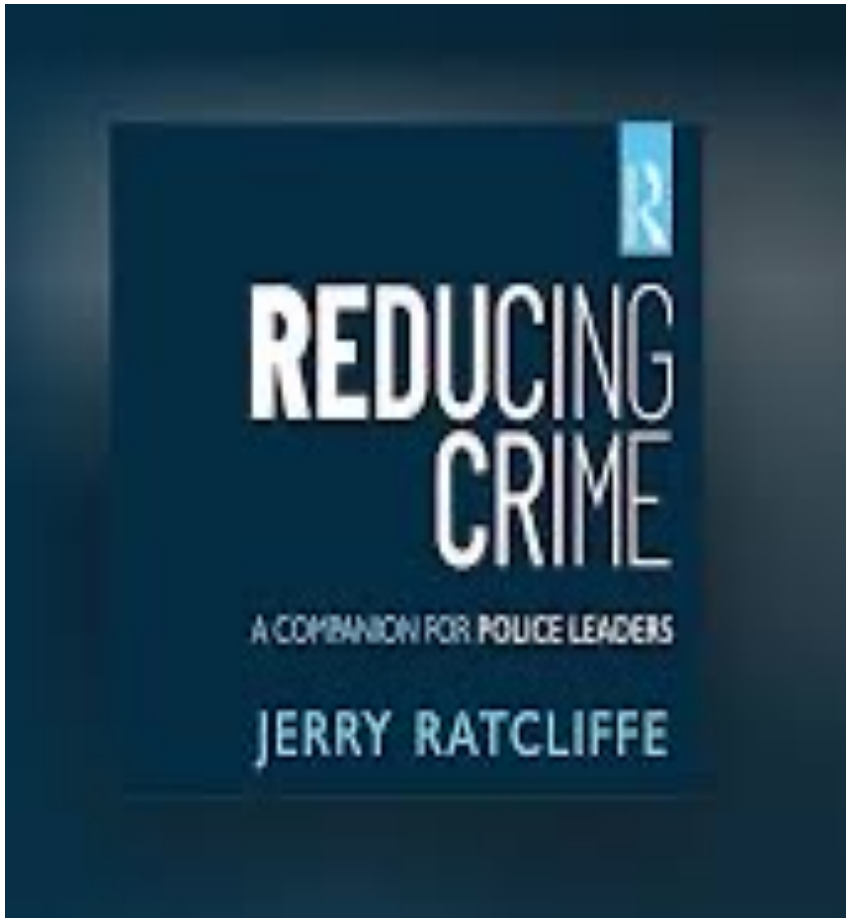
- Feedback today?

MGC Reports

- Purpose – eye to future
  - Conduct an analysis of the increases and decreases in criminal activity
  - Provide insights into the temporal and spatial patterns during COVID-19
    - Benchmarks
  - Provides the researchers the opportunity to explore methods
- Build a partnership with each of you and the agencies in the region
  - Provide technical assistance and collaborate on crime analysis
  - Past Reports online – www.massgaming.com
  - Build Knowledgebase



Our First Report:
A Benchmark for the Future



- Historical context
- Temporal context
- Spatial context

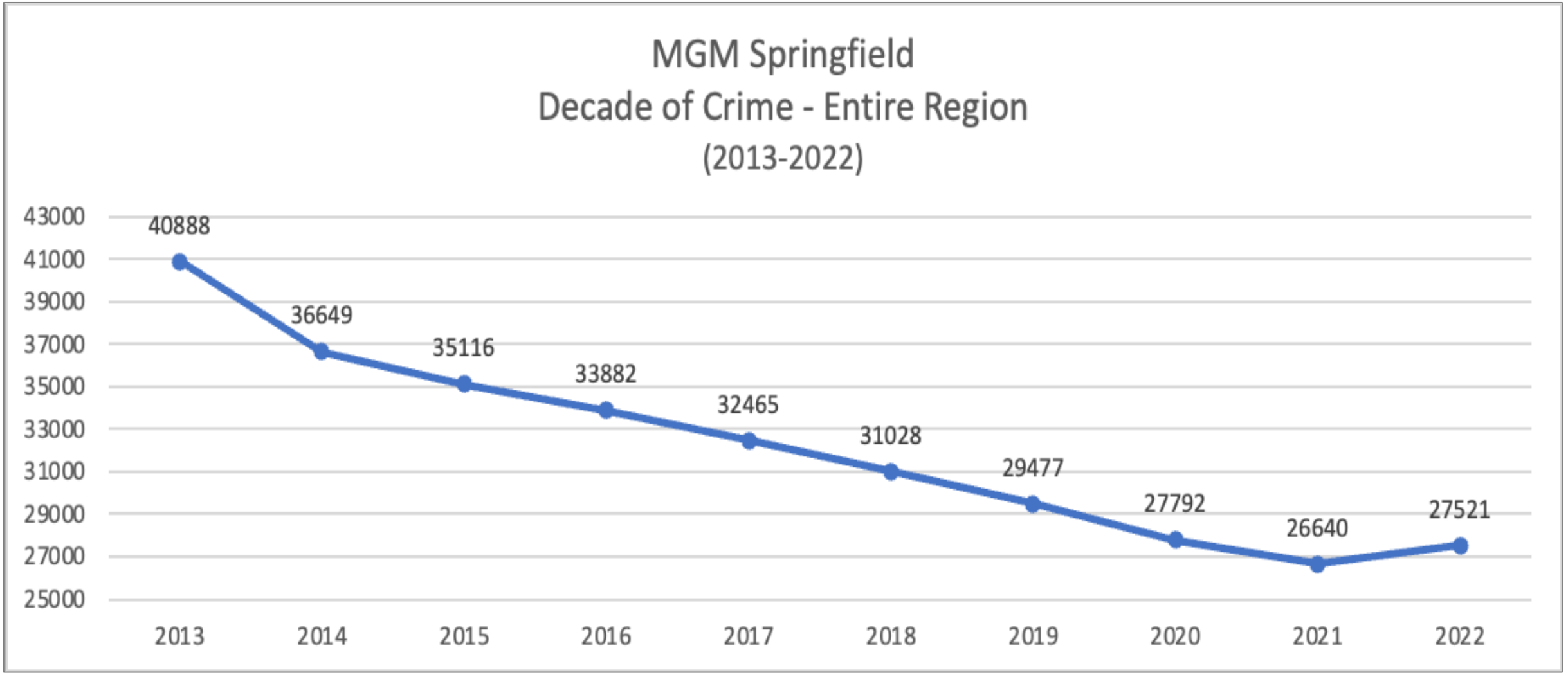
- Risk Terrain Model
- Crime Pattern Theory & Intelligence Led Policing
  - Reducing Crime – Area Commanders & Crime Analysis

Jerry Ratcliffe

- Prolific Offenders
- Hotspots

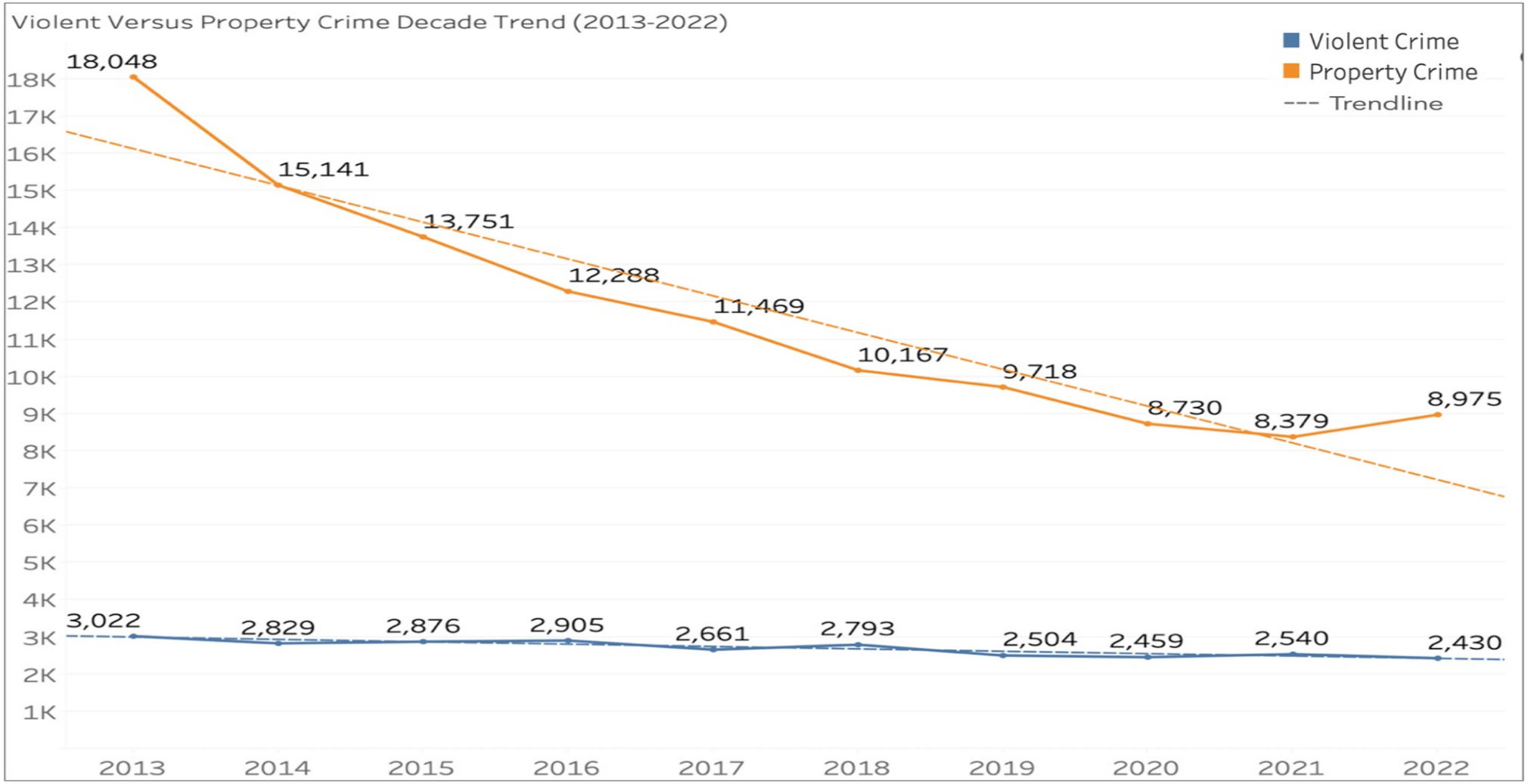
Good News

- Crime in the Springfield Region has gone down consistently over the past decade, with 2023 turning upward but still the 2nd best year.

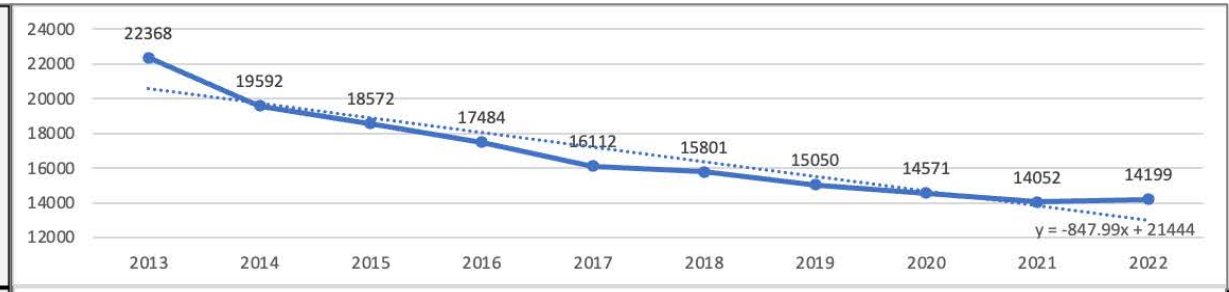


Bad News

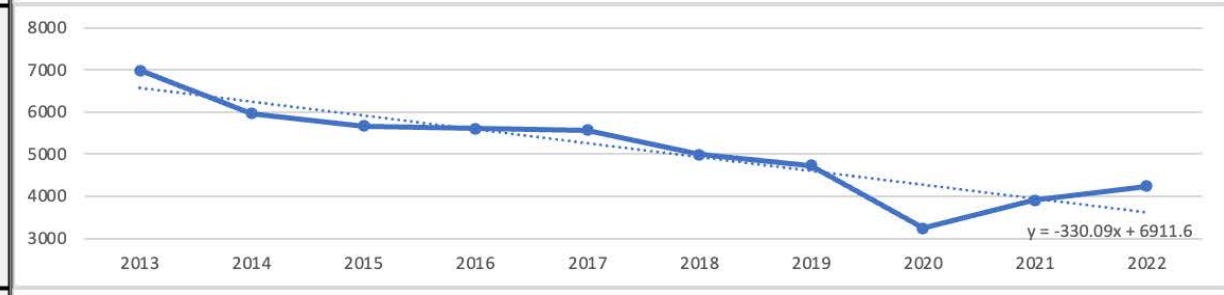
- Violent Crime has remained relatively flat over the past 10 years, still almost a 500-crime reduction since 2013.
- Property crime has carried the load for the decade long decline.



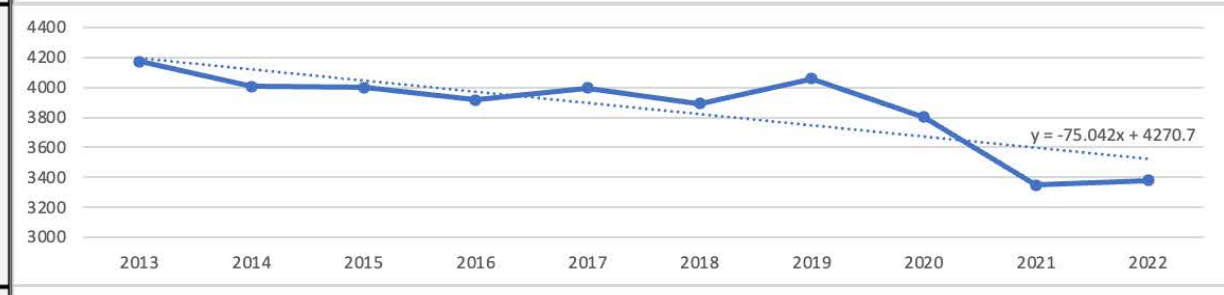
Springfield



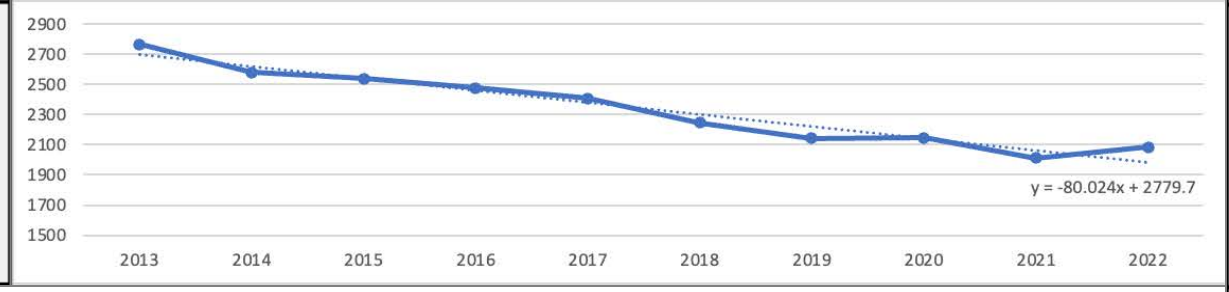
Holyoke



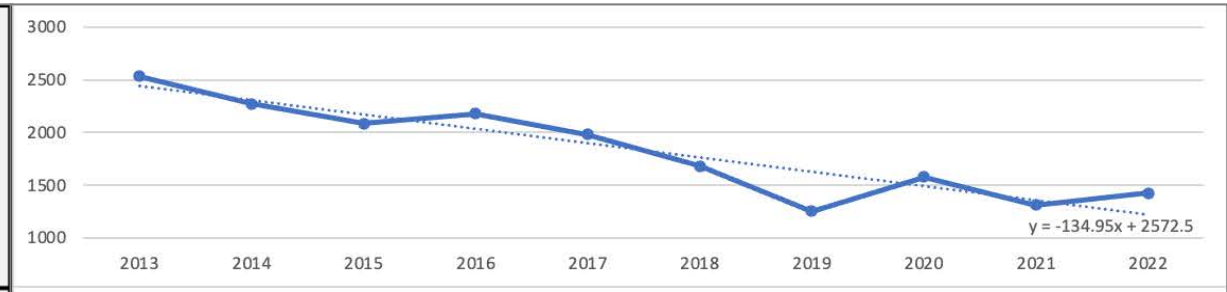
Chicopee



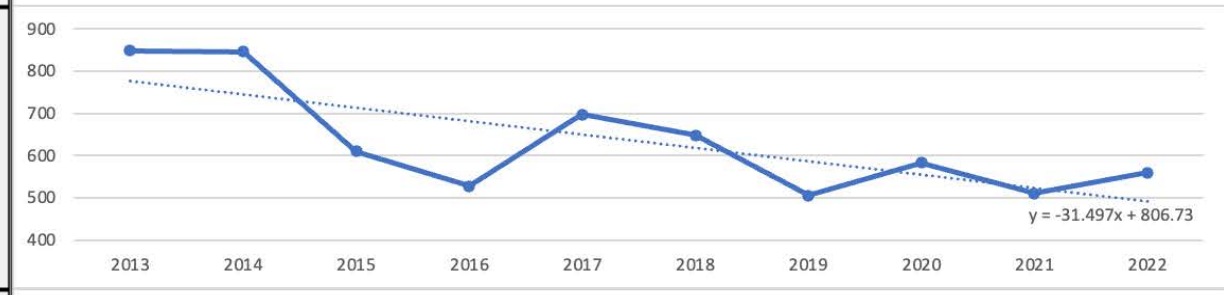
West Springfield



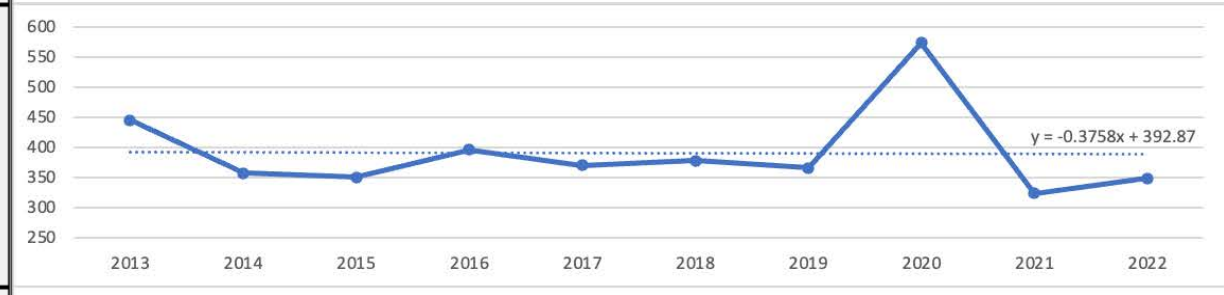
Northampton



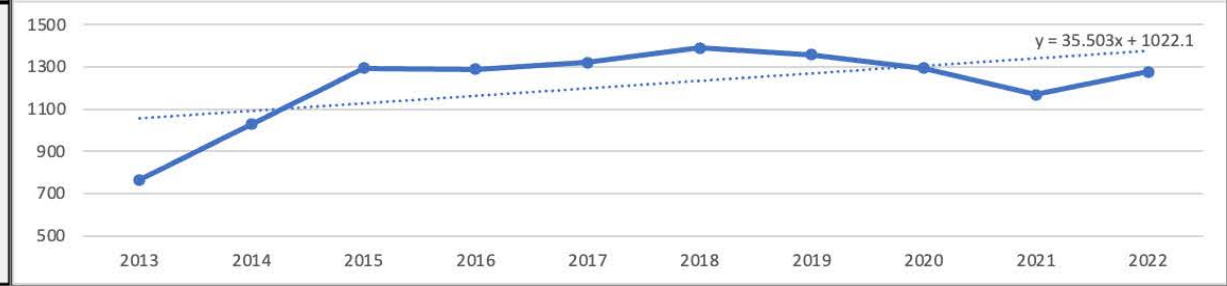
East Longmeadow



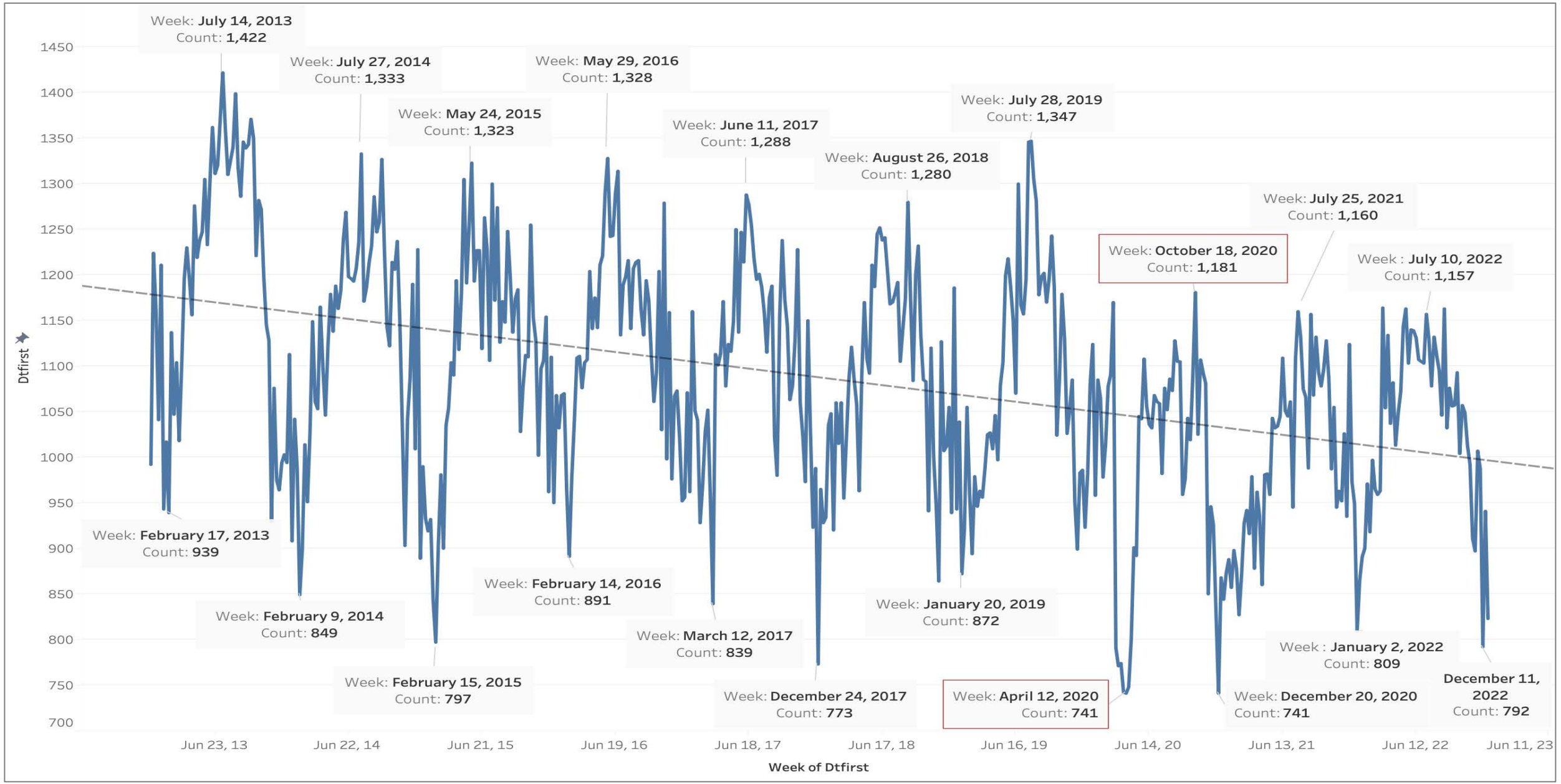
Longmeadow



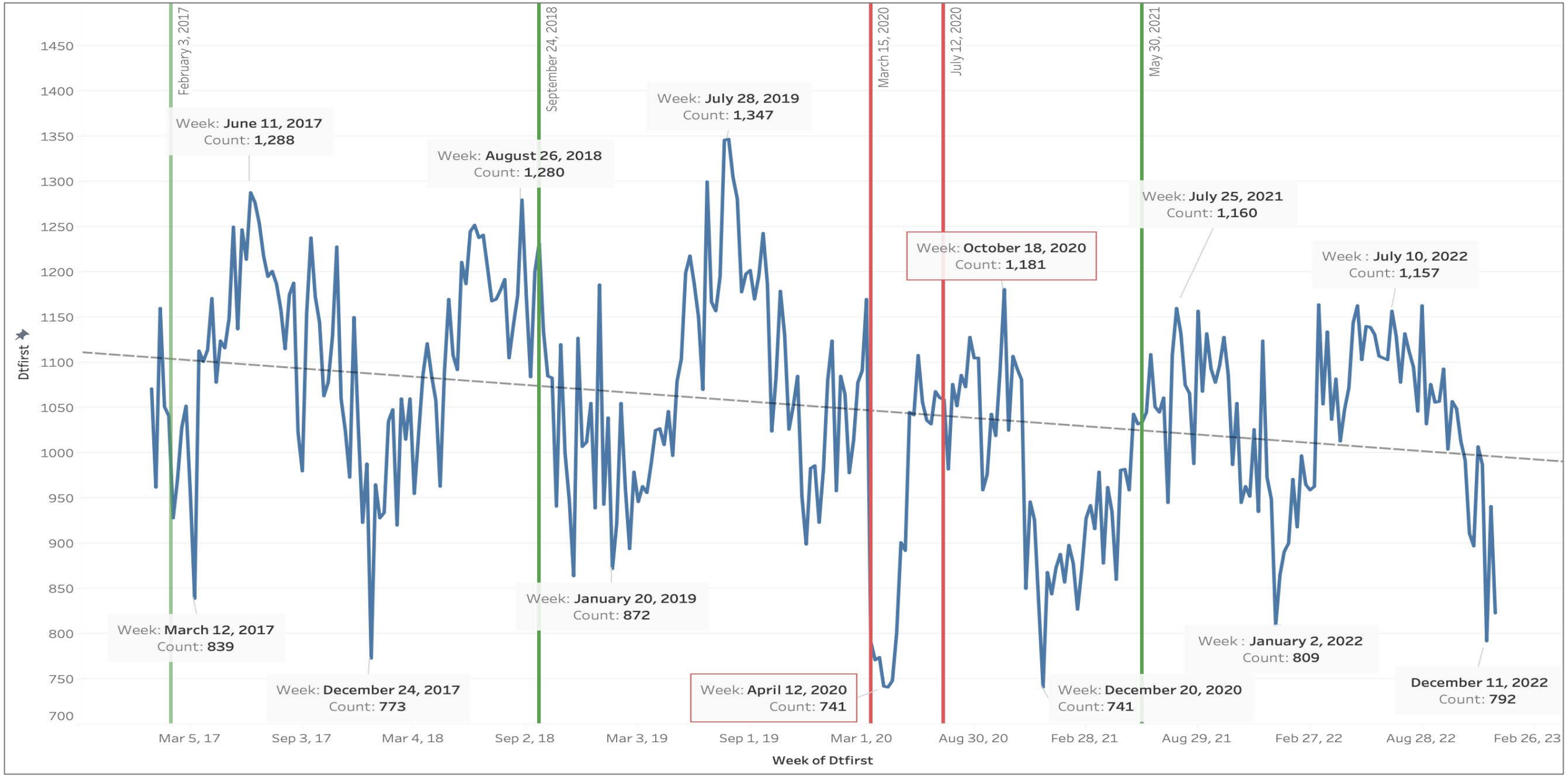
Agawam



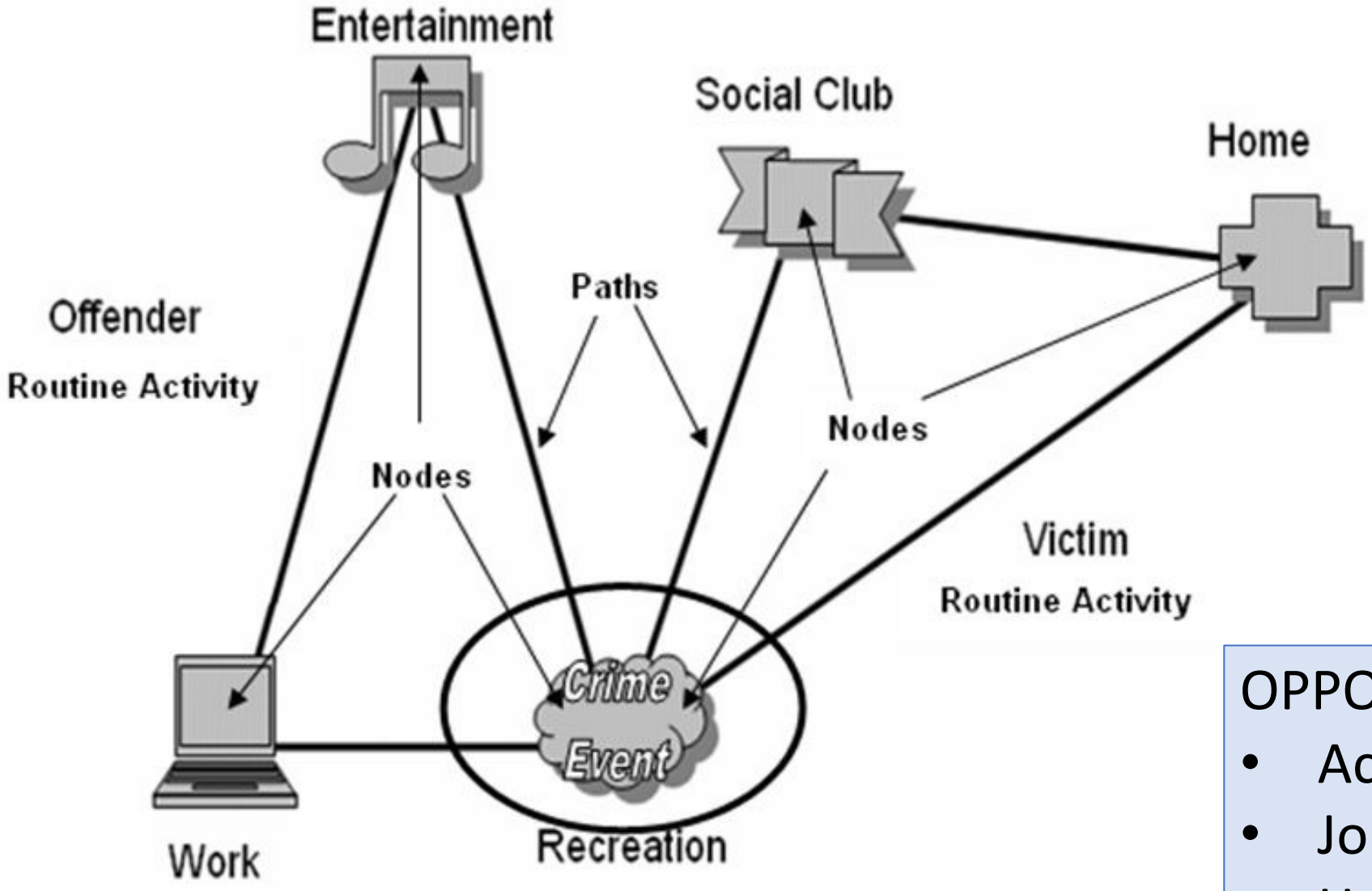
Distinct Seasonal Rhythmic Pattern – no surprise



COVID-19 Pattern Reflects the same as Encore



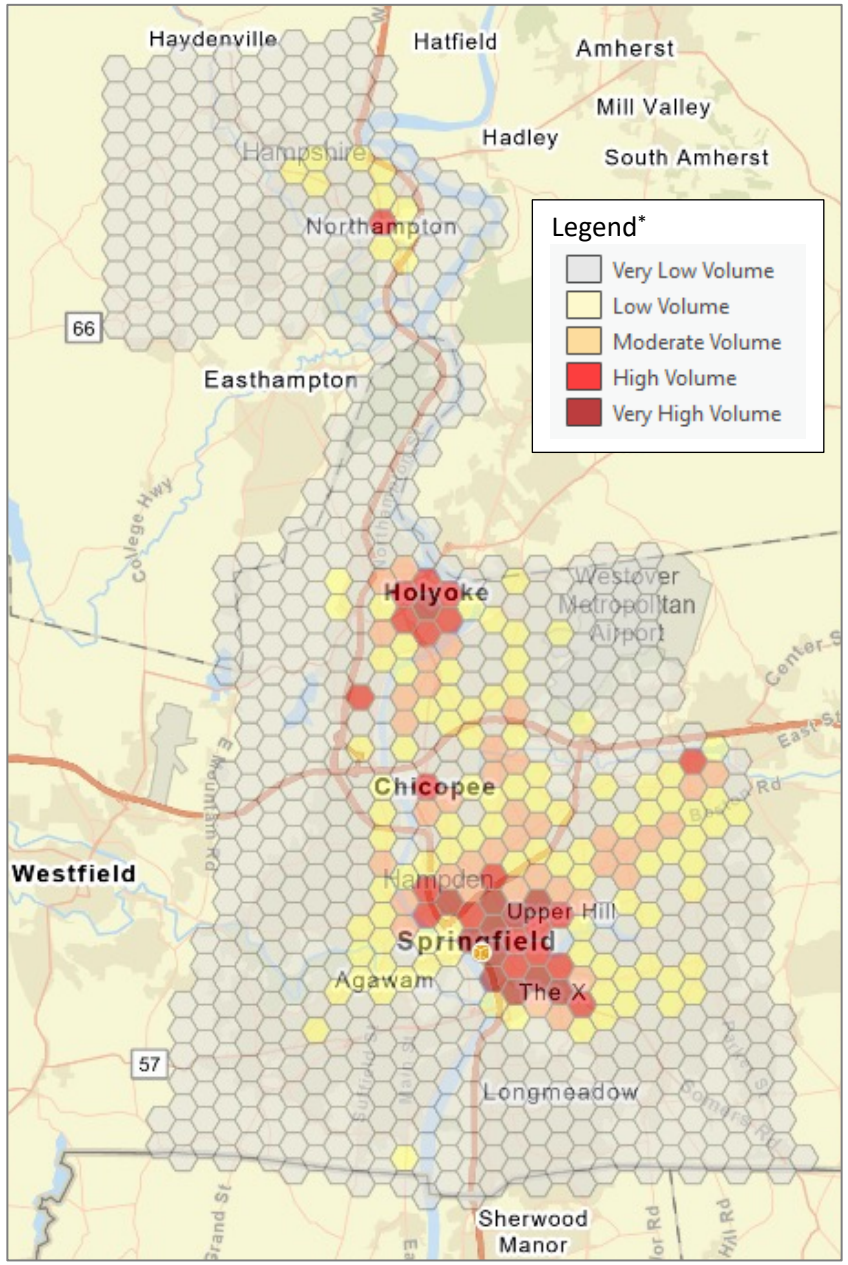
Crime Pattern Theory

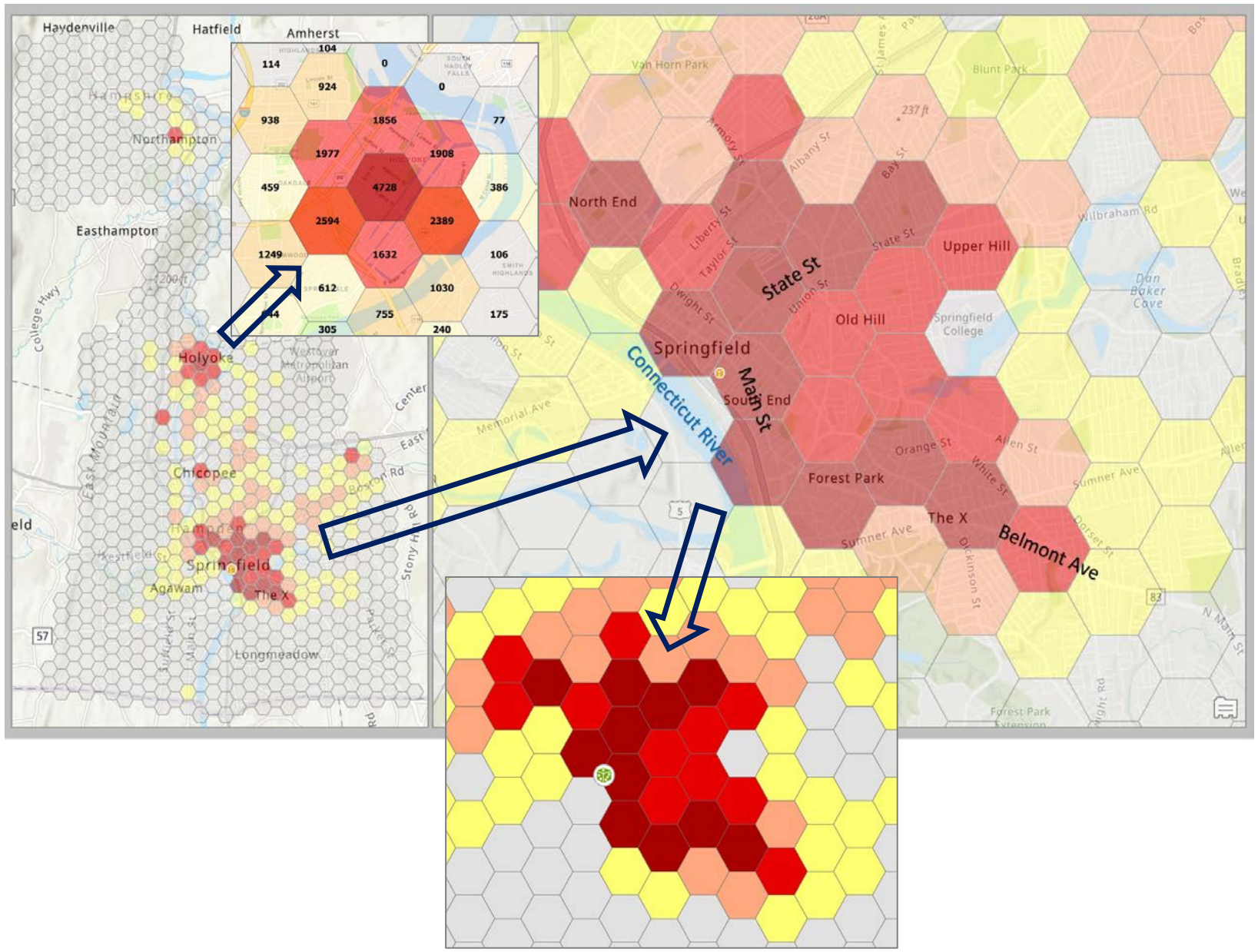


OPPORTUNITY FOR CRIME

- Activity Space
- Journey to Crime
- Hunting Grounds

Hexagon Distribution of Crime in the Region





Social Disorganization Theory of Crime

Shaw and McKay introduce SDT in 1942 as a criminological perspective that seeks to explain the occurrence of crime and deviance within certain communities or neighborhoods. The theory suggests that crime rates are influenced by the social and structural characteristics of a community rather than individual-level factors, primarily studying crime patterns in Chicago.

Concentric Zones and Central City

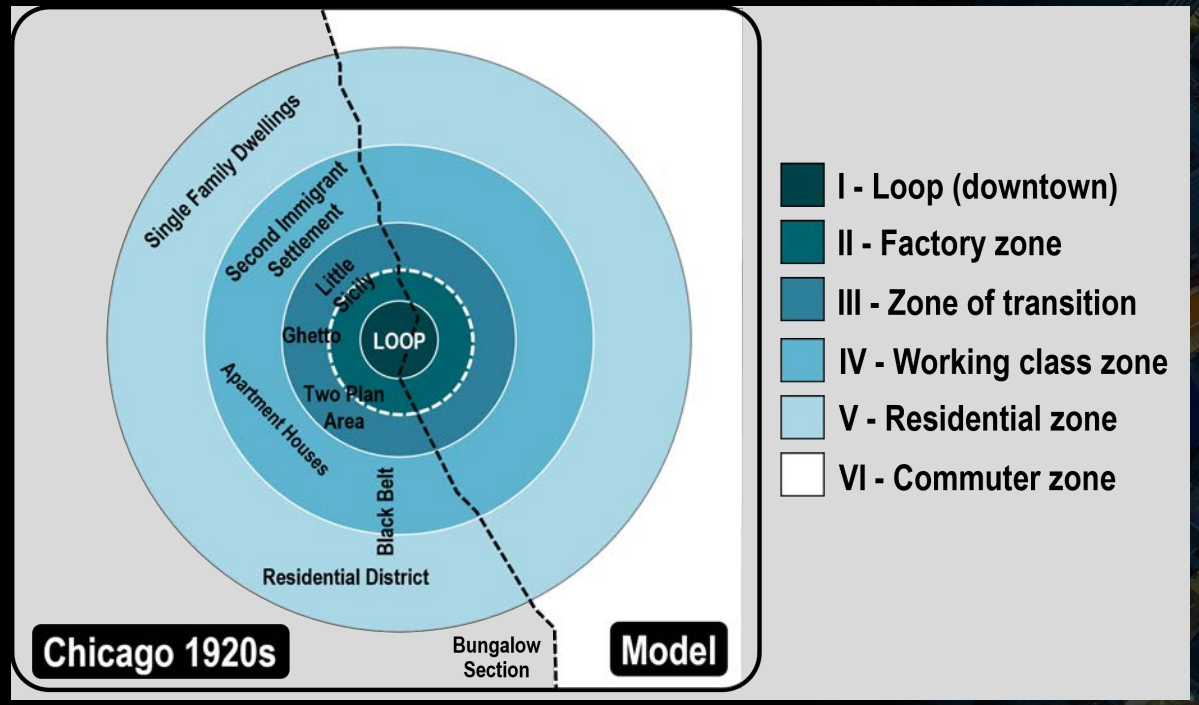


Figure 10: Hexagon Label and Crime Counts in the Central City Area

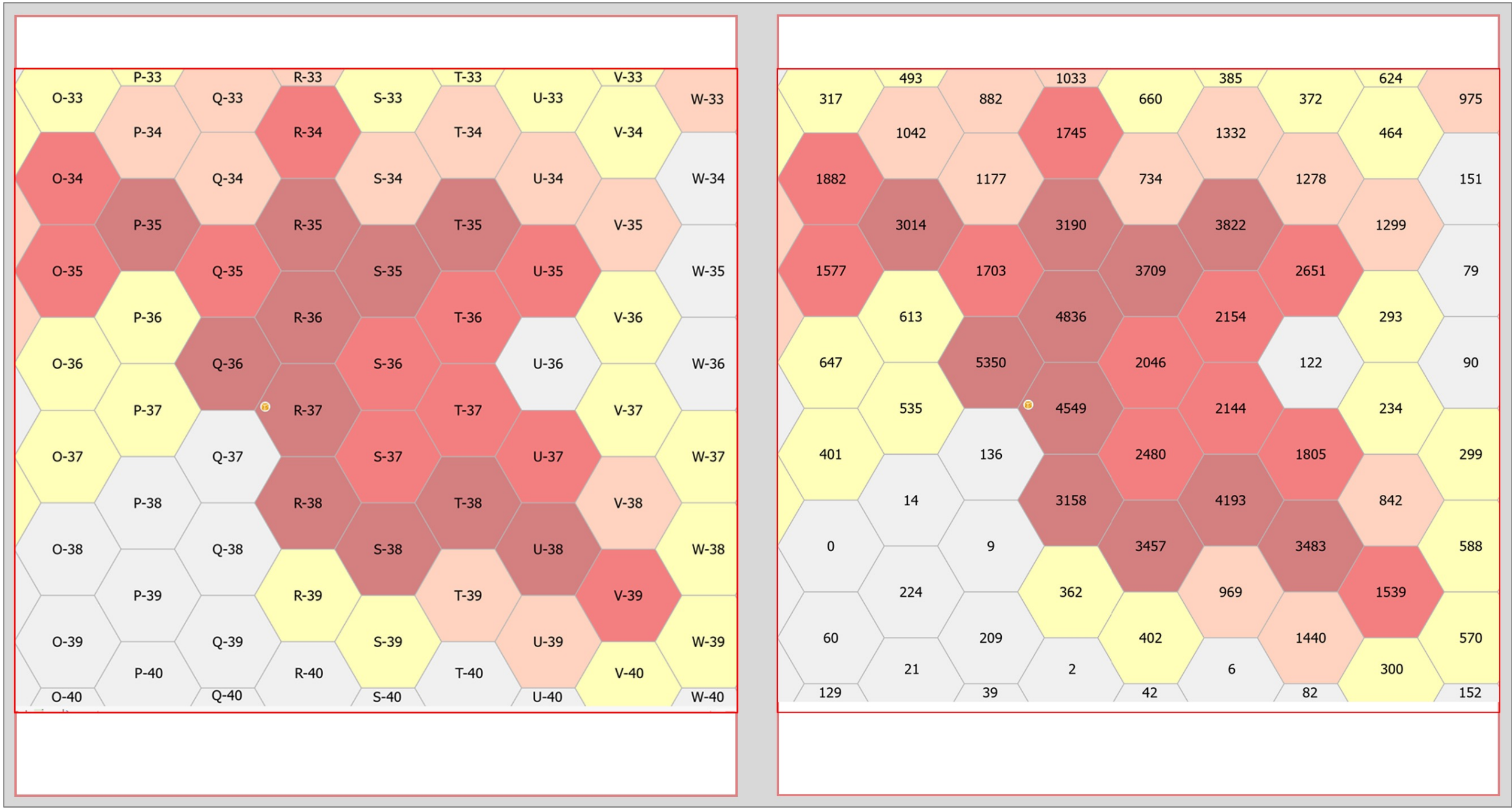


Table 3: ACS Population Census Summary Profile - U.S. Census Bureau Data Source

Rank	Hex-Num	Venues	Crime Rate per 1,000	# of Crimes	Popul	House Holds	% English Only	% <19	% >65	% Medicaid	% Below Poverty	% SNAP	% Disability
1	R-38**	Main & Locust South CBD	4821.4	3158	655	291	22%	29%	8%	78%	55%	60%	37%
2	Q-36***	MassMutual/Jazz-Blues	3254.3	5350	1644	1157	42%	12%	15%	36%	49%	63%	42%
3	S-35	State & St. James-Stebbins	1695.9	3709	2187	730	56%	35%	10%	65%	36%	52%	44%
4	R-36	High & School St	1622.8	4836	2980	1456	41%	24%	8%	56%	44%	66%	43%
5	R-37*	Casino - Hotel	1440.5	4549	3158	1392	30%	26%	12%	55%	39%	57%	44%
6	R-35	Federal & Worthington	1428.6	3190	2233	635	38%	44%	7%	72%	41%	53%	37%
7	T-35	State & Sherman-Andrews	1113.3	3822	3433	1252	54%	27%	11%	53%	49%	56%	49%
8	T-38	Belmont & Dickenson	1060.7	4193	3953	1401	41%	29%	5%	56%	37%	42%	39%
9	S-38	Belmont & Ft. Pleasant	1042.8	3457	3315	1413	52%	27%	15%	41%	38%	40%	36%
10	U-38	The X	845.0	3483	4122	1367	50%	27%	7%	60%	42%	39%	33%
5 -> 9	R-37*	Casino - Hotel	405.3	4549	11224	With Casino patron and worker population factored in to the population							
1 -> 10	R-38**	Main & Locust South CBD	368.8	3158	8564	5 Hotels, 17+ Restaurants & several Bars/Taverns							

*Hexagon where the Casino resides (15,000 daily patrons and 409 employees on any one shift)

**Hexagon makes up Main St South CBD of Casino (Some of the patrons and employees will frequent this area as well)

***Hexagon where MassMutual Center & popular jazz and blues venues and cuisine is located (Analysis did not extrapolate this population upward due to casino effect)

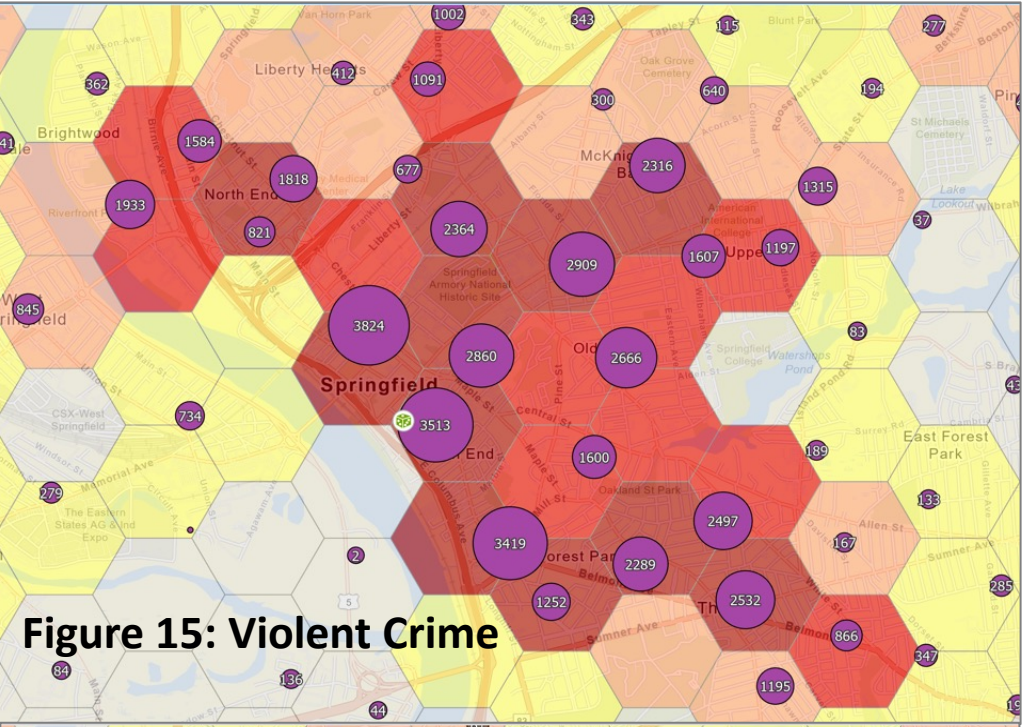


Figure 15: Violent Crime

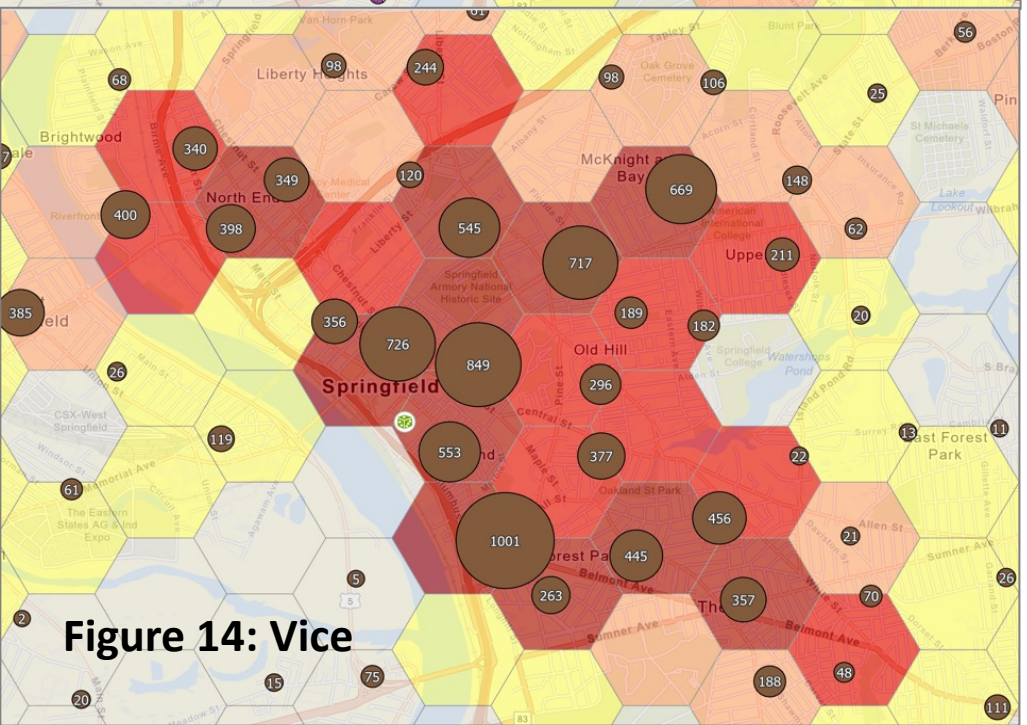


Figure 14: Vice

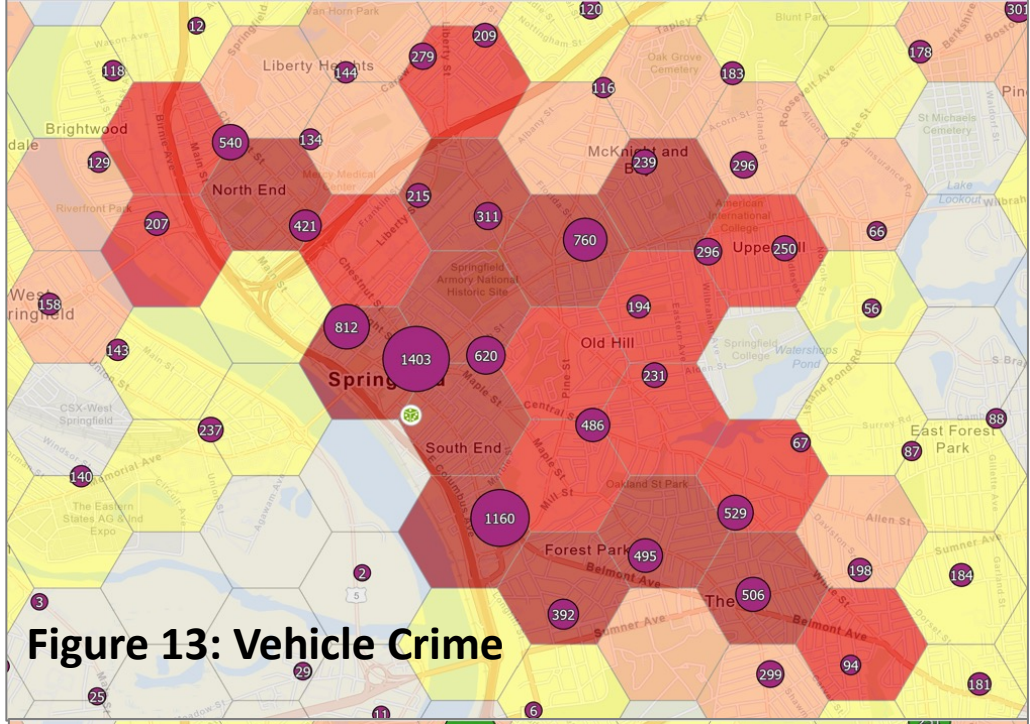


Figure 13: Vehicle Crime

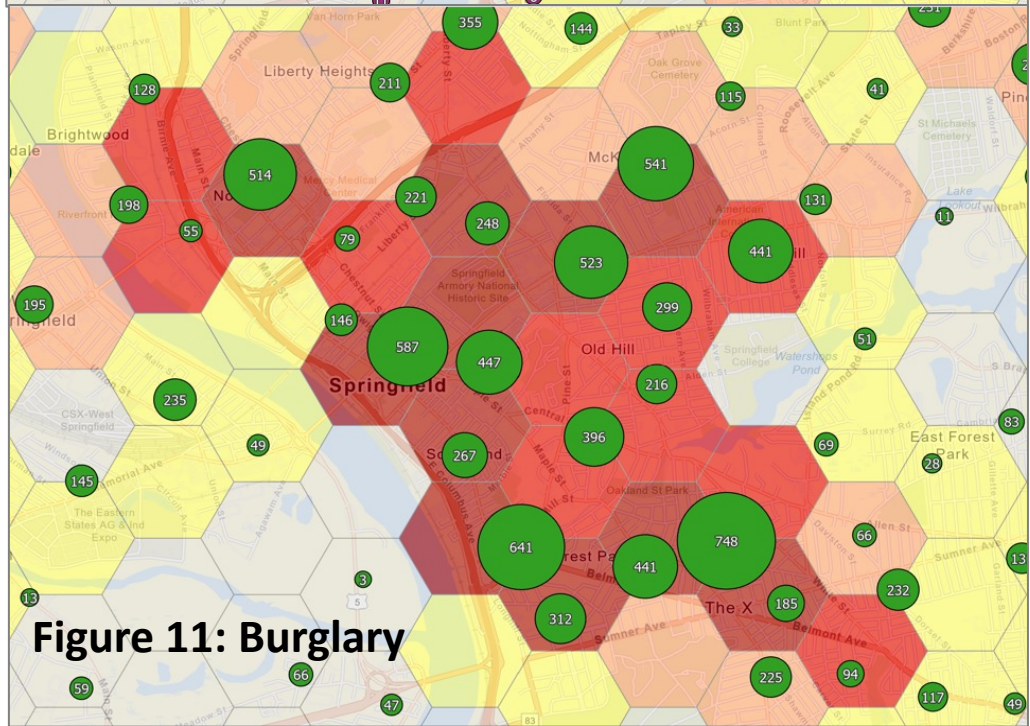


Figure 11: Burglary

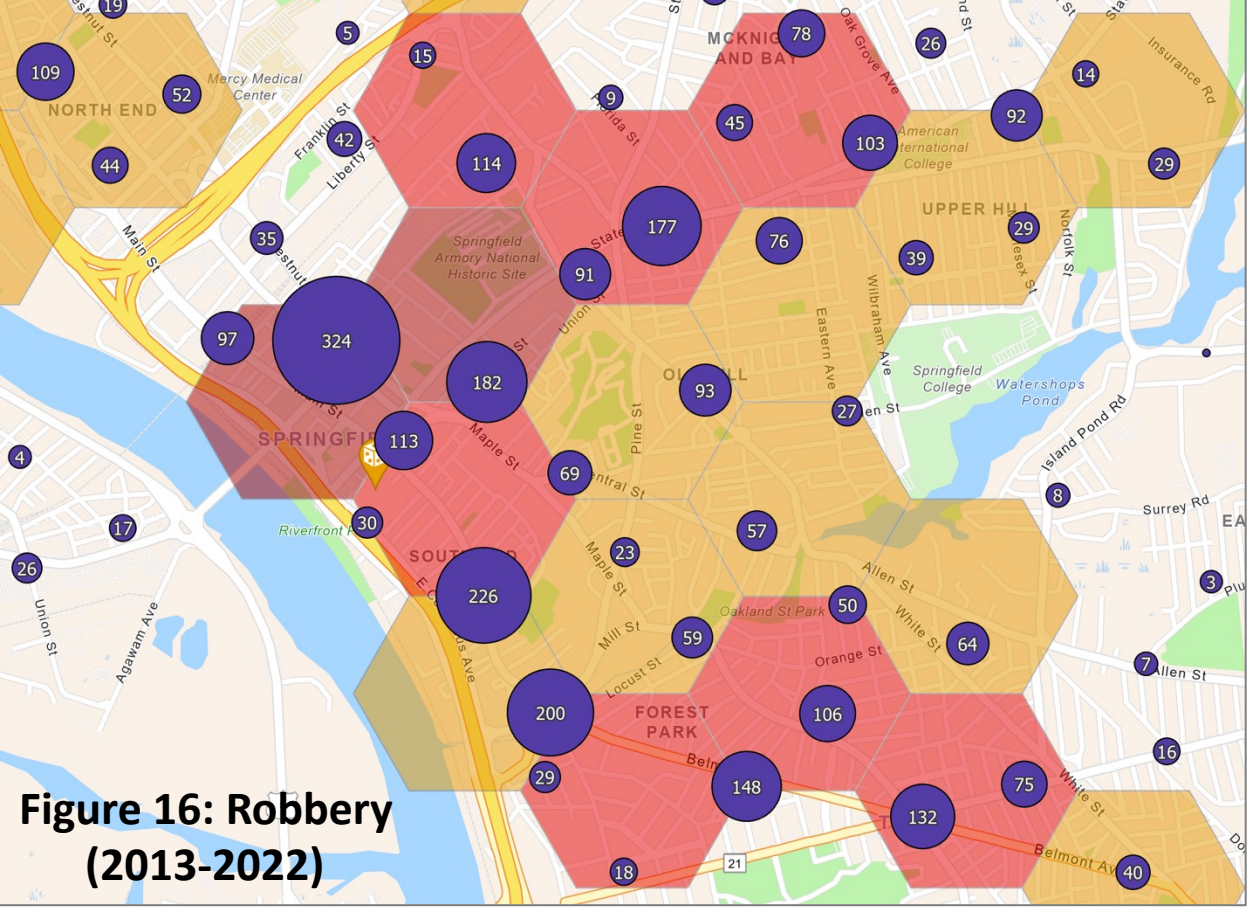
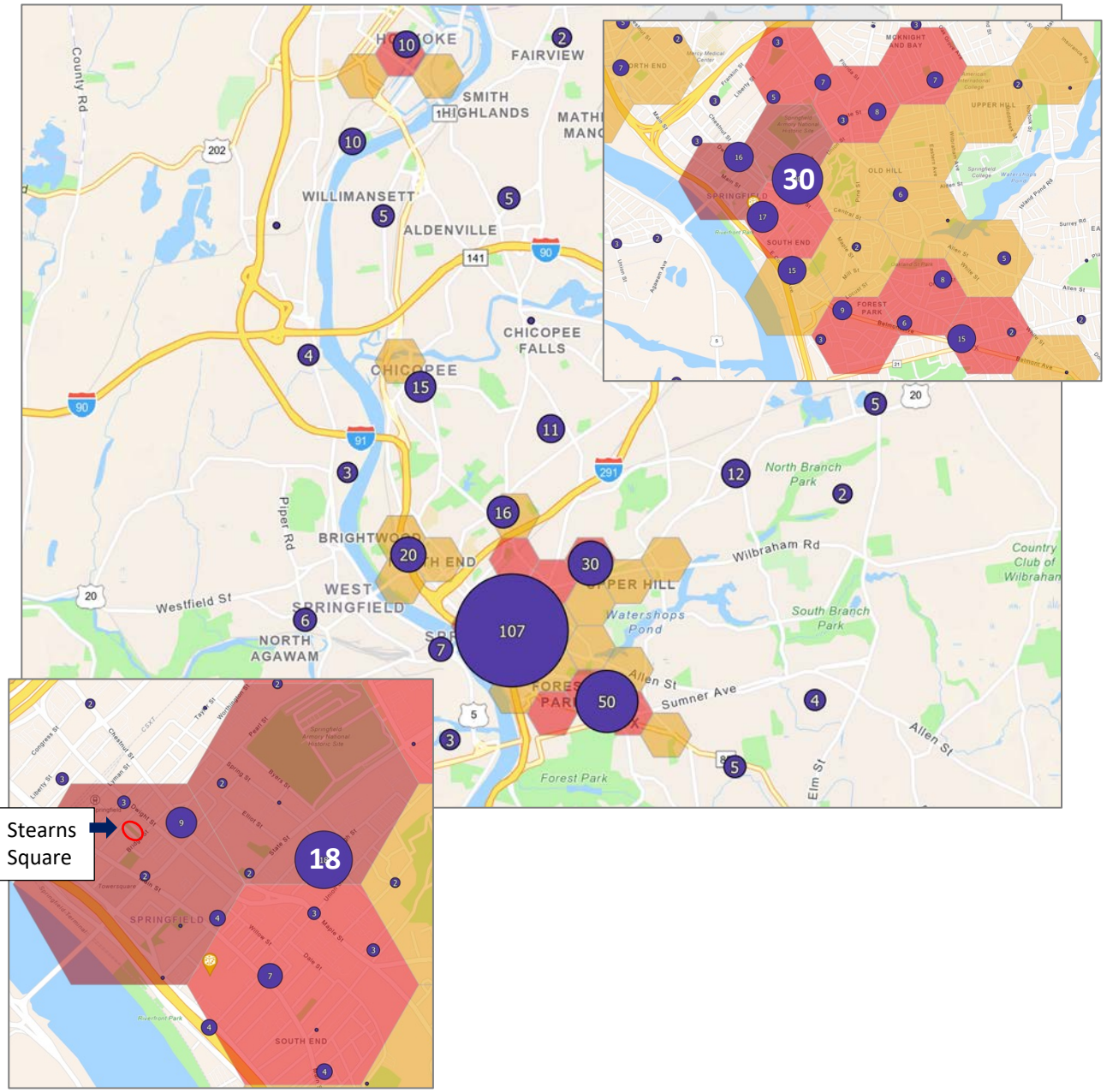


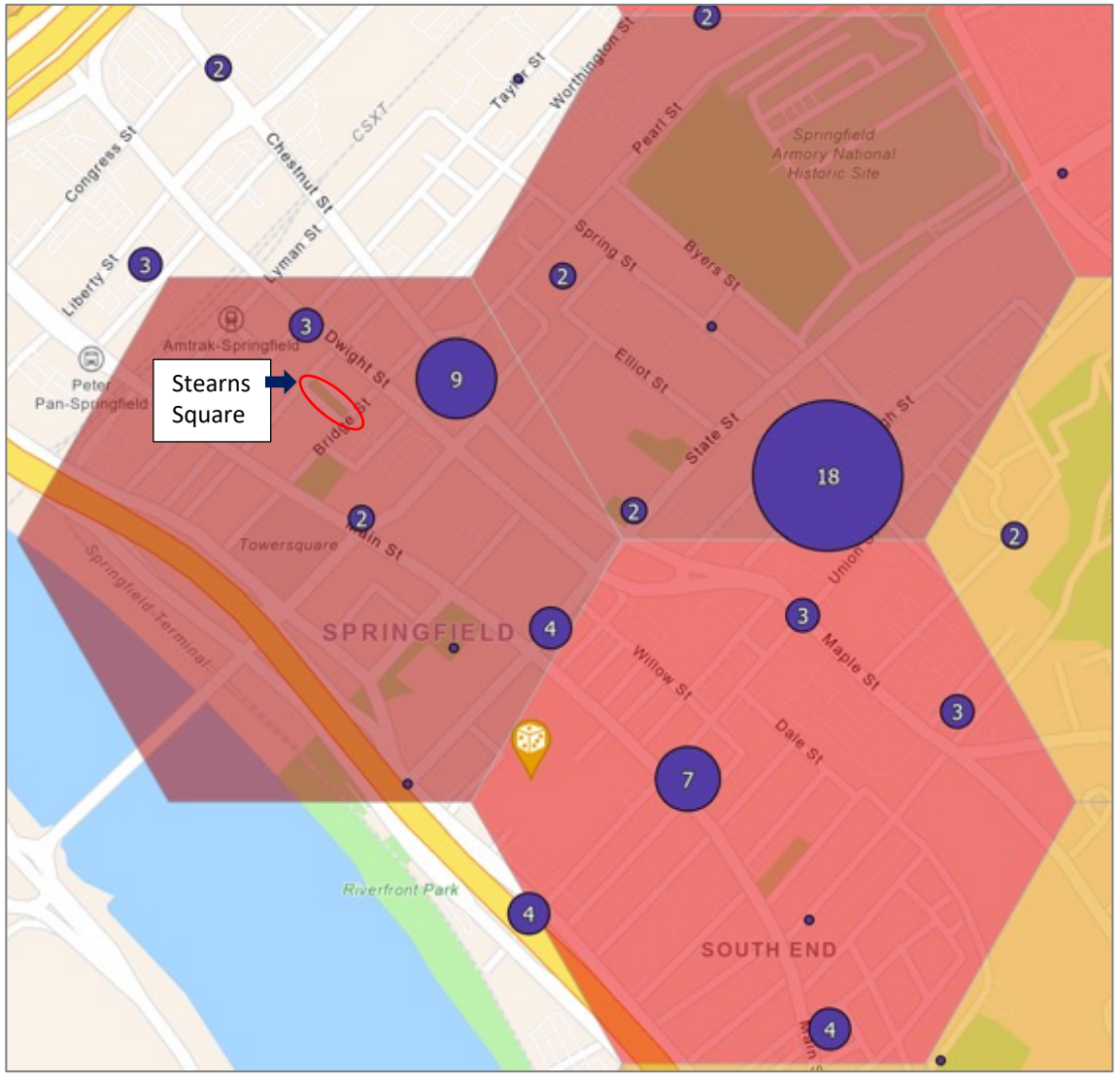
Figure 16: Robbery (2013-2022)

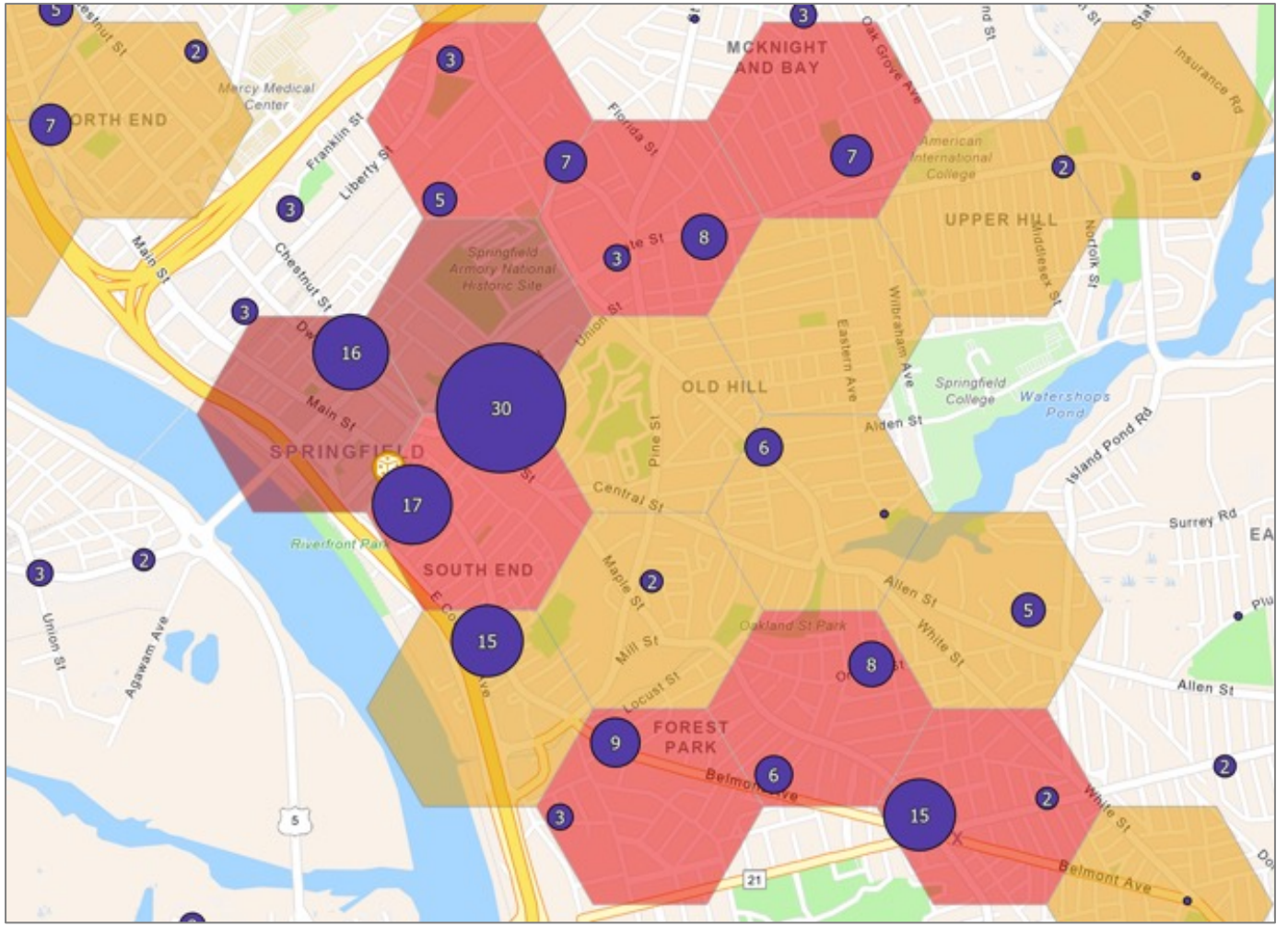
Dynamic Clustering

Figure 17: Robbery Distribution over Region and within Central City (2022)



324 Robberies in the Stearn Square Area over the decade – 33 per year. In 2022, that number significantly dropped to under 10 in the vicinity - near Union Station

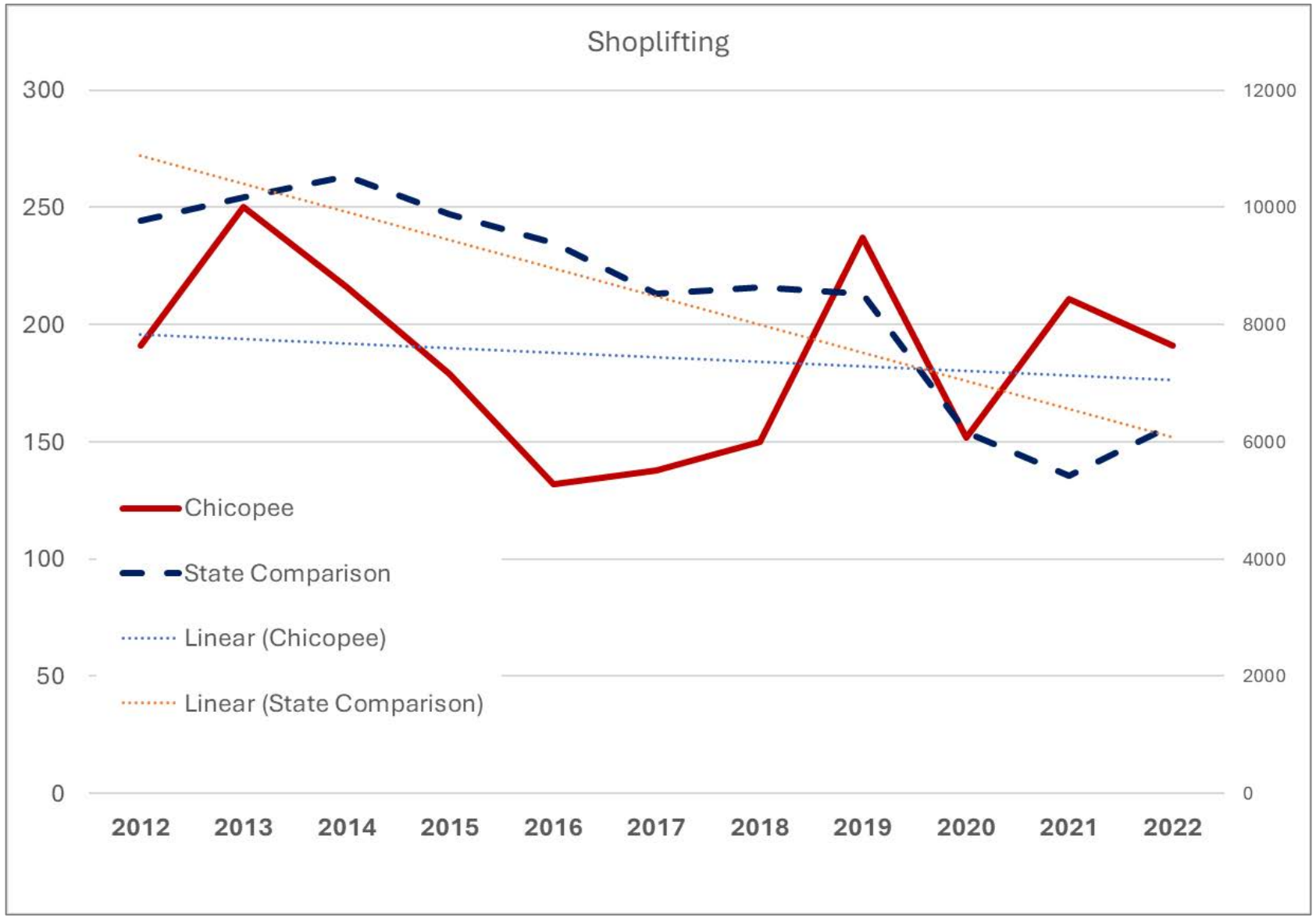




The 2023 Report talks about other hotspot hexagons that had more robberies than around the casino: High Street Convenience Store, The X, and even in the Holyoke downtown area. One area in Northampton downtown as well.

Microanalysis

Pages 61-80 of the 2023 Report goes into a microanalysis of change – won't delve into today, but you can look that data over for a comparison of expected increases and decreases in the region. It represents a new methodology for predicting expected values and assessing outliers.



Drunk Driving Analysis rounds out the Report

Drunk driving arrests by jurisdiction

While drunk driving arrests were down 8% in the MGM Springfield Region, the area did report a 10% increase in traffic collisions that resulted in a drunk driving charge. "Last Drink" reports attributed to MGM Springfield had a slight increase from the historical average of 5.8 per year to 7 in 2022.

Table 10: Arrests and summonses for drunk driving

Agency	2012–2018 Avg	2019	2020	2021	2022	2019–2022 Avg	Change
Springfield	57.0	54	49	48	66	54.3	-6%
Agawam	34.0	53	25	24	29	32.8	+5%
Chicopee	50.3	75	71	79	92	79.3	+70%
East Longmeadow	26.1	16	4	11	5	9.0	-67%
Holyoke	42.3	57	32	23	12	31	-23%
Longmeadow	20.1	12	16	16	18	15..5	-27%
Northampton	117.4	51	63	63	82	64.8	-49%
West Springfield	26.5	41	27	23	20	27.8	+14%
State Police*	313.1	406	356	268	207	309.3	+3%
Total	**686.9**	**765**	**643**	**555**	**531**	**623.5**	**-8%**

*MGM Springfield-area roadways only

Opportunity & Targets of Crime

- Auto Theft
- Theft From Auto
- Robbery
- Assaults – DV?
- Door Pushers?
- Tub Stealers?

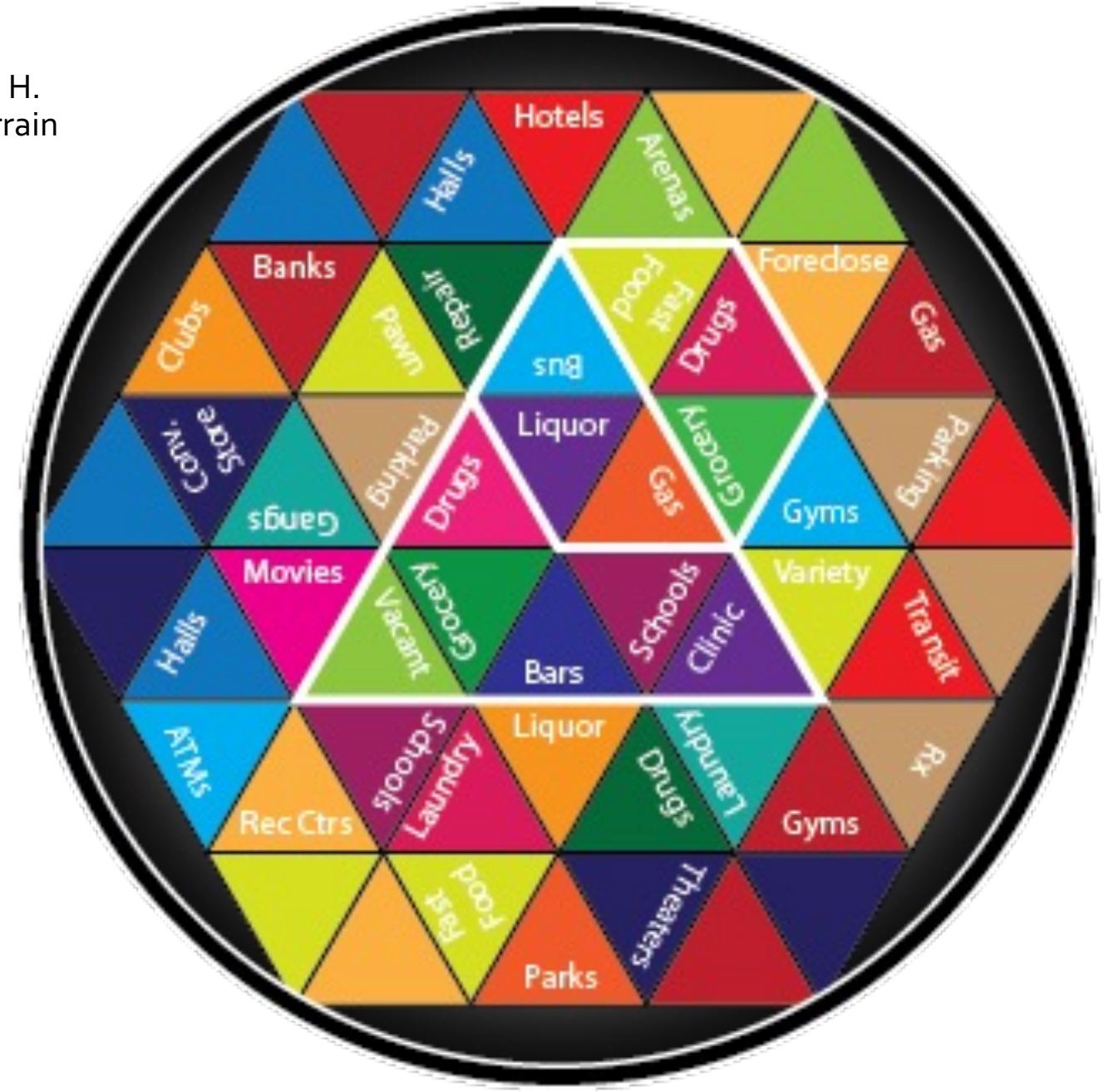
- Journey to Crime (Routes)
- Hotspots
  - Shuttles
  - Parking Structures

- Opportunities to target?
  - Human Trafficking?
  - Vehicle Crime

Risk Terrain Modeling

Kennedy, L. W., Caplan, J. M., Piza, E. L. & Buccine Schraeder, H. (2016). Vulnerability and Exposure to Crime: Applying Risk Terrain Modeling to the Study of Assault in Chicago. Applied Spatial Analysis and Policy. 9(4), 529-54.

Follow your Lead



ANY QUESTIONS

Thank you